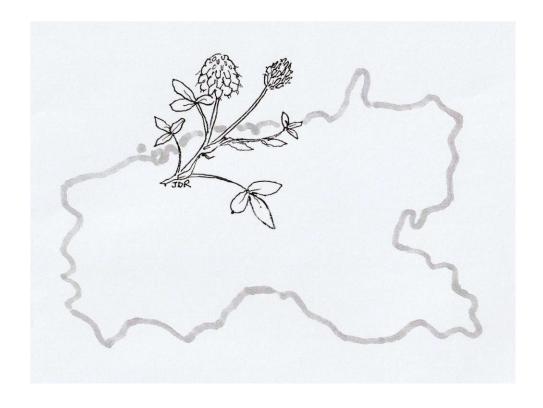
COUNTY LIMERICK RARE PLANT REGISTER

SYLVIA C.P. REYNOLDS

December 2021



Privately circulated and on BSBI Rare Plant Registers webpage

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Schoenoplectus triqueter (Triangular Club-rush)



Hordeum secalinum (Meadow Barley)

On title page: Trifolium fragiferum (Strawberry Clover)

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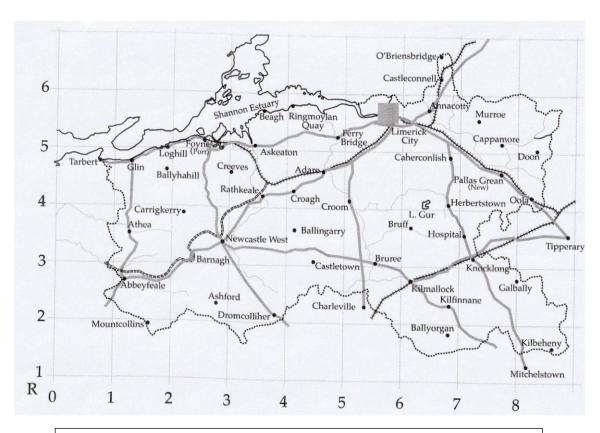


Figure 1. Sketch map of Co. Limerick showing selected towns, villages, roads and railways, including former railway; with 10 km grid squares. (From Reynolds 2013)

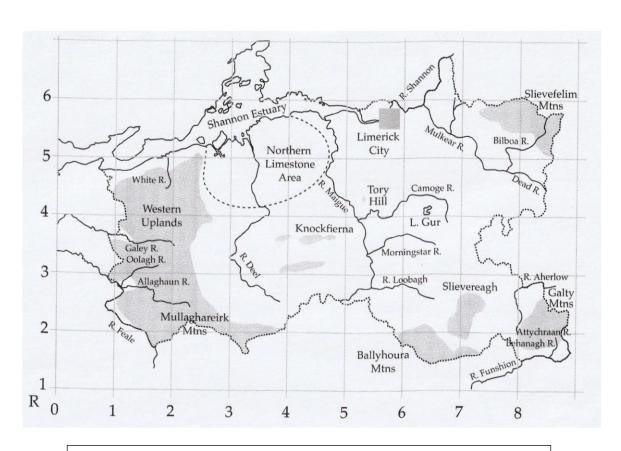


Figure 2. Sketch map of Co. Limerick showing simplified topography and main geographic areas; with 10 km grid squares. (From Reynolds 2013)

Background and Introduction

Rare and threatened vascular plant species in Britain and Ireland were first documented respectively in the *British Red Data Book* by Perring & Farrell published in 1977 and *The Irish Red Data Book* by Curtis & McGough in 1988. For the purposes of botanical recording, Britain and Ireland are divided into vice-counties which usually follow county boundaries, and some larger counties are sub-divided. There are 40 vice-counties in Ireland, each with a vice-county recorder or recorders appointed by the Botanical Society of Britain and Ireland. In about 1990, it was suggested by the BSBI that vice-county recorders should produce lists with defined criteria of locally rare species, later called County Rare Plant Registers.

Guidelines for Rare Plant Registers were updated by the BSBI in 2017. The reason for having such guidelines is to standardise Rare Plant Registers as much as possible and so make the information they contain comparable across the vice-counties and useful for conservation purposes and scientific research. Not all rare vascular plants - flowering plants, ferns and fern allies - are to be included. The emphasis is on native plants and archaeophytes, the latter considered honorary natives which were introduced before 1500 A.D. Neophytes, species introduced after 1500 A.D., are usually excluded in Rare Plant Registers, as are species deliberately planted and not found growing in the wild. Categories of rare plants in Rare Plant Registers include those that are Internationally Rare, Nationally Rare or Scarce, Locally Rare or Scarce and those legally protected.

To date Rare Plant Registers have been produced for five counties on the island of Ireland, a biogeographic unit: for Down (2004, updated 2008), Antrim (2006), Waterford (2008, in Excel format), Fermanagh (2014) and Armagh (2015) — and now for Limerick. Apart from records given in the individual accounts, brief statements include a summary of distribution in Ireland, distribution and main habitats in Limerick, possible threats and earliest records, thus summarising the plant's current standing in Limerick; see below for details. This Rare Plant Register is aimed primarily at those involved in conservation and planning in Limerick, including National Parks and Wildlife Service and Limerick County Council, botanical researchers and others interested in the county's flora and habitats.

Co. Limerick in the south-west of Ireland with an area of 2756 square kilometres is bordered along its northern edge by the River Shannon and Shannon Estuary, with low uplands in the west of the county, Slievefelim Mountains in the north-east, and Ballyhoura Mountains and Galty Mountains in the south-east (Fig. 1 and Fig. 2). Apart from the Shannon, there are three main river systems, the Deel, Maigue and Mulkear, and Lough Gur is the largest lake. The northern limestone area extends roughly from east of Foynes towards the River Maigue, and south to Shanagolden, Rathkeale and Adare. Semi-natural habitats include those along the estuary, fens and swamps, bogs and heaths, marshes, calcareous and other grasslands, woodlands, rock outcrops, rivers, lakes and other water-bodies. Many of the sites mentioned in the Limerick Rare Plant Register lie within Special Areas of Conservation or Natural Heritage Areas. Altogether some 1233 vascular plants have been recorded in Limerick, about 1119 between 1987 and 2021; accounts for some 335 are given in this Rare Plant Register (Table 1).

Excluding microspecies, about 27% of the 1070 species, subspecies and hybrids in the current Limerick flora since 1987 are listed in the Rare Plant Register and of those about 83% are natives and about 34% are Internationally Rare, Nationally Rare or Scarce and/or

assigned a National Threat Status (including protected species). Of some 43 'species' in the Register not refound since 1987 and considered Extinct, about half were rare arable weeds or casuals (mostly archaeophytes), a few were hybrids (often difficult to identify) and the remainder were natives, nearly all only found at single sites in Limerick in the past.

Table 1. Approximate numbers of 'species' (taxa) recorded in Co. Limerick and listed in the Rare Plant Register

	Total up to	Recorded
	2021	1987-2021
Species, subspecies, hybrids and microspecies in Limerick	1233	1119
Species, subspecies and hybrids in Limerick	1177	1070
Species, subspecies and hybrids in RPR	335	292
Native species, subspecies and hybrids in RPR	269	241

There was active botanising in Limerick in the late 1800s and early 1900s, then relatively little recording between then and 1983 when I became the BSBI vice-county recorder – and I have continued to carry out systematic recording until the end of 2019, and in a more targeted way in 2020 and 2021. The majority of records in the Rare Plant Register were made by me and by known colleagues in a voluntary capacity, also records by consultants and a few others which I can stand over. My *Flora of County Limerick* was published in 2013, a useful reference for the context of species in the county, as well as descriptions of habitats and their characteristic species, the history of plant recording in Limerick and historical records. Additional records and information since 2013 have been published in my annual reports in the BSBI's *Irish Botanical News*. More about the main sources of records is given below.

In 2020 I compiled an annotated *Inventory of County Limerick sites of botanical and habitat interest* listing over 160 sites, which was circulated privately to Wildlife Service and Limerick County Council personnel and others interested, and this Rare Plant Register is designed to be used in conjunction with that work. It is an ongoing dilemma as to whether plant species and their sites are better served by disclosing or not disclosing details of their whereabouts. On balance I think it is better to put information into the public domain with the expectation that the relevant authorities and landowners will use such information in a way to best protect and suitably manage semi-natural habitats and their flora, including species at risk. Records in the Rare Plant Register can also be used as a stimulus to further botanical work in Limerick and as a baseline against which future surveys of rare species can be compared.

Criteria for species included (and excluded) in Limerick Rare Plant Register

Instead of the more accurate term taxon (pl. taxa), 'species' is used in this Rare Plant Register in a broad sense to include subspecies, hybrids and microspecies, and all are vascular plants, i.e. flowering plants (including trees), ferns and fern allies. To give comparable data based on similar criteria for Rare Plant Registers across Ireland and Britain, BSBI Guidelines (2017) were followed when deciding which species to include and why. Species included are nearly

all natives or archaeophytes (honorary natives introduced into Ireland before 1500 A.D.) growing in the wild in Limerick which are Internationally Rare, Nationally Rare or Scarce on the island of Ireland, or Locally Rare or Scarce in the county as defined below, and assigned a National Threat Status and/or protected by law. Native and archaeophyte status follows Jebb (2019), with status uncertain for a few species. Although some hybrids and subspecies need specialist determination and their distribution in the county is not well known, I decided to err on the side of inclusion and draw attention to such plants. A number of species which are native in Ireland but only introductions in Limerick are also included with brief notes.

Species <u>excluded</u> from the Rare Plant Register include all neophytes (plants introduced into Ireland after 1500 A.D., e.g. many garden escapes, some of which have become invasive) and species which have been planted deliberately, or which grow near houses and gardens rather than in the wild, or where there has been reseeding. Unless Internationally Rare, also excluded are microspecies of *Euphrasia* (Eyebrights), *Rubus* (Brambles) and *Taraxacum* (Dandelions) which need determination by specialists and their true distribution in Limerick is not known. (Microspecies are narrowly defined variants, often producing seed without fertilisation).

'Internationally Rare' includes species which are endemic, i.e. known only to occur in Ireland or in Ireland and Britain; or species for which Ireland has international responsibility, either by legislation or they are on European or Global Red Lists, or because Ireland holds or possibly holds more than 25% of the European population.

'Nationally Rare' in Britain is defined as a species occurring in 15 or fewer hectads (10km squares) out of nearly 3000 hectads, and 'Nationally Scarce' in 16-100 hectads. Pro rata, an arbitrary decision was made to define 'Nationally Rare' in Ireland as a species occurring in 5 or fewer hectads out of just over 1000 on the whole island, and 'Nationally Scarce' as occurring in 6-35 hectads recorded between 1987 and 2019. Possibly indicating decline, some species are noted as Nationally Rare or Nationally Scarce since 2000. Following BSBI Guidelines (2017), species are 'Locally Rare' if found at 3 or fewer sites in Limerick and 'Locally Scarce' if found at 4-10 sites between those same years (with few exceptions, resulting from fieldwork in 2020 and 2021). The size of sites is quite variable. While the categories Locally Rare or Locally Scarce are based on the number of sites, they do not reflect the frequency of a species at the sites, which could be anything from rare to abundant.

The year 1987 was chosen as the earlier cut-off date as it coincided with systematic recording in Ireland by BSBI members for the Monitoring Scheme in 1987 and 1988, then recording towards *Atlas 2000* (Preston *et al.* 2002), and continuing from 2000 to 2019 towards *Atlas 2020* (in preparation) – giving a good chance that most native and archaeophyte species would have been found in Limerick over that period. Species <u>not</u> seen since 1987 are considered 'Extinct', but it is likely that some may be refound in the future. The major reason for extinction and decline is habitat loss due to, for example, agricultural intensification (including reseeding), drainage of marshy ground and bogs, arterial drainage, afforestation, and continuing urban spread and other construction works.

A few extra species not falling into the Locally Rare or Scarce categories have been included because they are characteristic of and confined to specific good quality semi-natural habitats in Limerick, and so are useful indicators as to where those habitats occur in the county, namely *Apium graveolens* (Wild Celery) in brackish ground by the Shannon Estuary,

Antennaria dioica (Mountain Everlasting) in calcareous grassland, Epipactis palustris (Marsh Helleborine orchid), Dactylorhiza incarnata (Early Marsh-orchid) and Parnassia palustris (Grass-of-Parnassus) in fens, Scutellaria galericulata (Skullcap) in swamps and Vaccinium oxycoccos (Cranberry) in wet bogs.

Apart from giving relevant rarity or scarcity, threat and protected status, when a species was last seen and detailed records since 1987 in the Rare Plant Register accounts, the text includes whether a species is native, an archaeophyte or of uncertain status; a summary of its distribution in Ireland; brief descriptions of its distribution and main habitats in Limerick; possible threats; and earliest records. Emphasis is on the current standing of each species in the county, based on records and personal knowledge from extensive fieldwork.

Protected Species, International Rarity and National Threat Status

Eleven species in Limerick are legally protected by Flora (Protection) Order 2015:

Colchicum autumnale (Meadow Saffron, = Autumn Crocus)

Groenlandia densa (Opposite-leaved Pondweed)

Hordeum secalinum (Meadow Barley)

Logfia minima (= Filago minima, Small Cudweed, = Slender Cudweed)

Pseudorchis albida (Small-white Orchid)

Roemeria hispida (= Papaver hybridum, Rough Poppy, = Round Prickly-headed Poppy)

Sanguisorba officinalis (Great Burnet)

Schoenoplectus triqueter (= *Scirpus triqueter*, Triangular Club-rush)

Scleranthus annuus (Annual Knawel)

Trichomanes speciosum (Killarney Fern)

Viola hirta (Hairy Violet).

With little overlap, 15 species found in Limerick are on the Wildlife (Northern Ireland) Order 1985, as amended by the Wildlife and Natural Environment Act (Northern Ireland) 2011.

Six species or subspecies listed in the *Ireland Red List* (Wyse Jackson *et al.* 2016) are endemic to Ireland, namely *Dactylorhiza kerryensis* (Irish Marsh-orchid), *Dryopteris affinis* subsp. *kerryensis* (= *D. kerryensis*, subspecies of Golden-scaled Male-fern), *Luzula multiflora* subsp. *hibernica* (subspecies of Heath Wood-rush), *Rubus hesperius* (a Bramble microspecies), *Sorbus hibernica* (Irish Whitebeam) and *Taraxacum amarellum* (a Dandelion microspecies). Stace (2019) added *Dactylorhiza fuchsii* x *D. kerryensis* (Common Spotted-orchid x Irish Marsh-orchid) as an Irish endemic and Rich (2020) has listed a further 27 species as endemic to Ireland and Britain (including 18 *Rubus*, Bramble microspecies).

Ireland holds or possibly holds more than 25% of the European population of 17 species which have been recorded in Limerick, including several endemic only to Ireland. Two species, *Baldellia ranunculoides* (Lesser Water-plantain) and *Sparganium natans* (Least Burreed) are on the European Red List, and *B. ranunculoides* also on the Global Red List.

The National Threat Status of native and archaeophyte species is given in the Rare Plant Register as assessed in the *Ireland Red List* (2016), which is based on International Union for the Conservation of Nature (IUCN) categories and criteria. The number of species in each

category is given below. Species in Limerick are considered of Least Concern unless otherwise indicated.

Regionally Extinct: Extinct in the wild in Ireland – not recorded between 1970 and 2014; or if recorded, then no longer at the recorded sites. (See *Roemeria hispida*, Rough Poppy and *Scandix pecten-veneris*, Shepherd's-needle)

Critically Endangered: More than 80% decline in area of occupancy etc. (on the island of Ireland) (*Valerianella rimosa*, Broad-leaved Cornsalad)

Endangered: 50-79% decline in area of occupancy etc. (protected species *Colchicum autumnale*, Meadow Saffron)

Vulnerable: 30-49% decline in area of occupancy etc. (12 species, including 5 protected species)

Near Threatened: 20-29% decline in area of occupancy or habitat quality (40 species, including 3 protected species)

Least Concern: No thresholds met

Waiting List: Insufficient distribution or population data, taxonomic uncertainties etc.

Four hybrids have their only known Irish sites in Limerick – *Carex aquatilis* x *C. elata* (a sedge hybrid), X *Elyhordeum langei* (an intergeneric grass hybrid), *Rorippa* x *erythrocaulis* (Thames Yellow-cress) and *Rosa corymbifera* x *R. agrestis* (a rose hybrid).

Designated conservation areas in Limerick

Many of the sites mentioned in records are either Special Areas of Conservation (SACs) or Natural Heritage Areas (NHAs), or are found within those areas. Some Proposed NHAs (not listed here) are awaiting designation.

Special Areas of Conservation in Limerick:

Askeaton Fen Complex

Ballyhoura Mountains

Barrigone

Blackwater River (only its tributaries in Limerick)

Carrigeenamronety Hill

Clare Glen

Curraghchase Woods

Galtee Mountains (Galty Mountains)

Glen Bog

Glenstal Wood

Tory Hill (including Lough Nagirra)

Lower River Shannon (including Shannon Estuary)

The four Natural Heritage Areas in Limerick are Carrigkerry Bogs (including Glenbaun-Knockfinnisk bog and Scotland Bog), Grageen Fen and Bog, Lough Gay Bog and Moyreen Bog.

Sources of plant records for Limerick Rare Plant Register

The BSBI vice-county Limerick (H8) does not encompass the whole county; it excludes the part north of the River Shannon at and near Limerick city which is assigned to vice-county Clare (H9). However, records in this Rare Plant Register are for <u>all</u> of Co. Limerick.

Records of native and archaeophyte species since 1987 were mainly made by myself Sylvia Reynolds, in recent years assisted by Julian Reynolds, and most were submitted to the BSBI for their database (DDb). Sites for rarer species, often with habitat information, were documented in the *Flora of County Limerick* (Reynolds 2013), but without grid references and exact dates. Further fieldwork and systematic recording up to the end of 2019 for *Atlas 2020* resulted in many more good records, including valuable input by three colleagues, Mike Quirke, Paul Murphy and Tom Harrington since 2016. Such records were usually also published in annual reports for Limerick in *Irish Botanical News* from 2014 to 2021. Additional records deemed reliable were extracted from the DDb in spring 2021, mostly from the work of consultants (including surveys of protected species) and also some 'citizen science' records.

Grid references for my records are nearly all at least four figures (i.e. sites fall within a 1km square) and more detailed grid references were extracted from my field notebooks, card files and unpublished reports: A survey of rare and scarce vascular plants in County Limerick for the Wildlife Service (Reynolds et al. 2006), BSBI's Threatened Plants Project (2008-2011) and BSBI's Irish Species Project (2014, 2015). Near duplicate records in the DDb are not included in Species Accounts, nor every date when a species was found at a particular site. For some species with numerous records, a summary is given or just records with the latest date – and that is so indicated. Details of pre-1987 records are given only for species considered Extinct, and it was often not possible to assign accurate grid references for them.

Although national and local rarity and scarcity is based mainly on the period 1987-2019, selected species at known sites were looked for in 2020 and 2021 and records updated if refound – and there were a few good new finds too. Even if there is still suitable habitat, there is no guarantee that a species will be refound, e.g. conditions can vary from year to year (such as under- or over-grazing), or a species may occur only sparingly at a site. Sites may also have become inaccessible since last visited.

Format of Species Accounts and Explanatory Notes

Species name Author

Common name

Internationally Rare
Nationally Rare/Nationally Scarce
National Threat Status
Protected Status

Limerick: Locally Rare/Locally Scarce/Extinct

Last seen: (year date)

Brief statements re status, distribution, habitats, threats, first record(s) etc.

Site	Grid Ref.	Date	Recorder(s)

Species (used here in a broad sense to include subspecies, hybrids and microspecies) are listed alphabetically. Scientific names with their authorities and common names follow Stace (2019) *New flora of the British Isles*, Fourth Edition. Some synonyms are included and cross-referenced to current Stace names.

Species included are mainly natives or archaeophytes (i.e. introduced into Ireland before 1500 A.D.) growing in the wild. Status is uncertain for some species and that is so indicated.

For completeness, a number of species (names <u>not</u> in bold) which are native elsewhere in Ireland but only introductions in Limerick are included, with brief comments.

- 'Internationally Rare' includes endemic species and species or subspecies for which Ireland holds or possibly holds more than 25% of the European population; two species are on the European and Global Red Lists. Endemic species are as listed in the *Ireland Red List* (Wyse Jackson *et al.* 2016) and by Rich (2020).
- 'Nationally Rare' means that a species has been recorded in 5 or fewer hectads (10km squares) in Ireland 1987-2019* (see below).
- 'Nationally Scarce' means that a species has been recorded in 6-35 hectads in Ireland 1987-2019*.
- 'Nationally Rare since 2000' or 'Nationally Scarce' since 2000' means that a species has been recorded in less than 5 hectads or 6-35 hectads respectively since 2000, usually indicating decline.
- 'National Threat Status' is the status given to a species in the *Ireland Red List* (2016), following IUCN categories and criteria, and summarised in descending order as follows (see p. 9 above): Regionally Extinct, Critically Endangered, Endangered, Vulnerable, Near Threatened, Least Concern and Waiting List (i.e. more information needed). Unless a status is given in the Rare Plant Register, it is assumed that the species is of 'Least Concern' or on the 'Waiting List'.

Plant species legally protected are listed in 'Flora (Protection) Order 2015' for the Republic of Ireland (see p. 8 above) or in Wildlife (Northern Ireland) Order 1985, as amended by the Wildlife and Natural Environment Act (Northern Ireland) 2011, the latter shortened to 'Wildlife (Northern Ireland) Order 1985, amended 2011' in Species Accounts.

- 'Locally Rare' means that a species has been found at 3 or fewer sites in Limerick 1987-2019*. Note that a site can be quite variable in size.
- 'Locally Scarce' means that a species has been found at 4-10 sites in Limerick 1987-2019*.
- 'Extinct' means that a species has not been found in Limerick since 1987.

Brief statements are given with the records for each species, including whether native, archaeophyte or status uncertain; annual, perennial etc.; summary of distribution in Ireland; summary of distribution and main habitats in Limerick; possible threats; first and other relevant pre-1987 records with year dates; any other comments. BSBI maps online can be checked for details of distribution in Ireland and Britain.

^{*1987-2019} with few exceptions, i.e. records added from fieldwork in 2020 and 2021.

Records since 1987 in the boxes are ordered by grid reference, usually in ascending order unless it makes sense to group records for a site; then ordered by date.

Site names are usually given as for the same record in the BSBI database (DDb), with clarifications where necessary; note that not all records in this Rare Plant Register are also in the DDb. Many of the sites fall within Special Areas of Conservation or Natural Heritage Areas, which are listed above for Limerick (p. 9).

Except for old records of species considered 'Extinct' in Limerick, most grid references are usually at least four figures (site within 1km square).

In most cases all records for a species since 1987 are given (showing continuity at a site), but sometimes it is clearer to give just selected dates for records at a site, but always including the latest date. Records sourced from the BSBI database can be checked; other detailed records have been entered as accurately as possible.

It is important to note that inclusion of a site in this Rare Plant Register does <u>not</u> imply public access.

Acknowledgements

The author would like to thank her husband Julian Reynolds for his invaluable help over the years; Mike Quirke, Paul Murphy and Tom Harrington for their very significant input of fieldwork and records since 2016; and all others whose recent records have been used in the Limerick Rare Plant Register; Andy Amphlett, Paul Green, Tom Humphrey and Jim McIntosh for advice and assistance with preparation of the Register; Matthew Jebb for providing the Excel lists, particularly for status of species in Ireland; and Mike Wyse Jackson for updated records of some protected species.

E&OE, Sylvia Reynolds, December 2021

SPECIES ACCOUNTS FOR RARE, SCARCE AND EXTINCT VASCULAR PLANTS IN COUNTY LIMERICK

Achillea ptarmica L.

Sneezewort

Limerick: Locally Scarce Last seen: 2019

Native; herbaceous perennial. Widespread across N of Ireland, also in W and scattered elsewhere. Apparently confined to W Limerick, usually sparingly in unimproved damp grasslands, including where rushy. First recorded in Limerick pre-1901, but no details.

Site	Grid Ref.	Date	Recorder(s)
Athea, W of	R0935	20 Oct 2019	Reynolds, S., Reynolds, J.
Acres, SSE of Mountcollins	R16881698	1 Sep 2013	Reynolds, S.
(on outcrop at edge of R. Feale)			
Abbeyfeale railway station, NW of	R108279	27 Aug 2015	Reynolds, S.
	R109279		
Abbeyfeale, former railway near	R1127	26 Jul 2007	Reynolds, S.
Knocknalaght, near	c.R136326	14 Aug 2016	Reynolds, S., Reynolds, J.
Athea, SE of	R1433	20 Oct 2019	Reynolds, S., Reynolds, J.
Athea, roadside bank NE of	R1536	23 Jul 2017	Reynolds, S., Reynolds, J.
Cloonoughter, SE of Glin	R148466	2004	Smith, G.
Toornafulla, W of	R22	23 Jul 1999	Reynolds, S.
Foynes Island	R2452	18 Aug 1987	Reynolds, S.
		22 Aug 1991	

Adiantum capillus-veneris L.

Maidenhair Fern

Native in Ireland, mainly in W; only an introduction in Limerick. Established in old cloister at St Nicholas Church in Adare and on some walls in Limerick city.

Agrimonia procera Wallr.

Fragrant Agrimony

National Threat Status: Near Threatened

Limerick: Locally Scarce Last seen: 2021

Native; herbaceous perennial. Widespread but not common in Ireland. Scattered in Limerick, mainly off the limestone; unimproved grasslands, roadside verges and a wood edge. First recorded in glen of Bilboa River N of Doon 1900.

Site	Grid Ref.	Date	Recorder(s)
Glin, NE of (lane near estuary)	R1548	15 Sep 2019	Reynolds, S., Reynolds, J.
Foynes Island	R2452	11 Aug 1988	Reynolds, S.
		16 Aug 1991	
Foynes Island, NE side	R2553	15 Jul 1992	Reynolds, S.

Corronoher, S of Ballingarry	R4031	25 Jul 1999	Reynolds, S.
Carrigogunnel Castle, near	R4954	2 Aug 2016	Reynolds, S., Reynolds, J.
Carrigogunnel Castle	R4955	6 Aug 1993	Reynolds, S.
Gooig, S of	R6763	26 Jul 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Pallasgrean, Old Bridge NNE of	R7747	11 Aug 1996	Reynolds, S.
Eyon Hill, just N of	R7350	11 Jul 2014	Reynolds, S.
		23 Jul 2020	
Gortnageragh R., NE of Bilboa Br.	R8252	22 Aug 2005	Reynolds, S.
Gortnageragh R., NE of Bilboa Br.	R8252	10 May 2017	Reynolds, S. et al.
Bilboa Bridge, roadside NE of	R826526	1 Sep 2021	Reynolds, S., Reynolds, J.

Agrostemma githago L.

Corncockle

Limerick: Extinct Last seen: c.1906

Archaeophyte; annual. Widely scattered in Ireland; formerly more widespread as an arable weed or casual. Recent Limerick records originate from wild flower seed mixtures, e.g. near O'Dwyer Bridge in Limerick city 2007, as is likely for most recent records in Ireland.

Site	Grid Ref.	Date	Recorder(s)
Barrigone, wheat fields	R25	Between 1903	Knowles, M.C., O'Brien, C.G.
		and 1906	
Limerick city, Carey's Road quarry	R5856	1904	Phillips, R.A.
Limerick city, field by Dock Road	R55	1904	Phillips, R.A.

Agrostis gigantea Roth

Black Bent

Limerick: Locally Rare Last seen: 2017

Native or Alien, status uncertain; rhizomatous perennial grass. Widely scattered in Ireland. In Limerick on a shaded bank and among uncut vegetation on roadside; also a casual at Foynes Port. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Ardagh, NNE of	R2841	17 Jul 2017	Reynolds, S., Reynolds, J.
Foynes Port	R2551	18 Jul 2010	Reynolds, S.
Duntryleague, just WNW of	R7728	6 Aug 2014	Reynolds, S.

Alchemilla glabra Neygenf.

Smooth Lady's-mantle

Limerick: Locally Rare Last seen: 2017

Native; herbaceous perennial. Widespread across N of Ireland, rare elsewhere. Sparingly in Limerick by a stream and at edge of pasture on NW side of Galty Mtns. Only earlier record is from Foynes 1903.

Site	Grid Ref.	Date	Recorder(s)
Lyraveg Glen, Galty Mtns	c.R839235	9 Oct 2010	Reynolds, S., Sweeney, P.
Ballygeana, lower slope of Galty	R8425	14 Jun 2017	Reynolds, S. et al.
Mtns			

Alisma lanceolatum With.

Narrow-leaved Water-plantain

Limerick: Locally Scarce Last seen: 2020

Native; herbaceous perennial. Scattered in Ireland, e.g. in rivers and lakes (including Shannon catchment), but absent from most of the S. Emergent at edge of River Shannon in Limerick. First recorded at Worldsend 2019; this species is similar to commonly occurring *Alisma plantago-aquatica* (Water-plantain) and was probably overlooked.

Site	Grid Ref.	Date	Recorder(s)
Ballyvollane, in River Shannon	R6359	3 Jun 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Prospect (townland) SW of	R6360	25 Jun 2020	Quirke, M., Murphy, P.,
Castleconnell, in River Shannon			Harrington, T.
Clareville Waterworks, River	R6361	25 Jun 2020	Quirke, M., Murphy, P.,
Shannon just SW of			Harrington, T.
Worldsend, in River Shannon	R658639	24 Jun 2019	Reynolds, S., Reynolds, J.
Worldsend, in River Shannon	R658639	23 Jul 2019	Reynolds, S., Reynolds, J.
	R658640		
Lacka, River Shannon N of	R6664	15 Aug 2020	Quirke, M., Murphy, P.,
Castleconnell			Harrington, T.

Althaea officinalis L.

Marsh-mallow

Nationally Scarce

National Threat Status: Near Threatened

Limerick: Extinct Last seen: c.1906

Archaeophyte; herbaceous perennial. Widely scattered by or near S and W coasts of Ireland. Formerly a rare relict of or escape from cultivation in Limerick.

Site	Grid Ref.	Date	Recorder(s)
Foynes	R25	1902	O'Brien, C.G.

Leahys (= Lehies) and Durnish	R25	Between 1903	Knowles, M.C., O'Brien, C.G.
(near Foynes)		and 1906	

Anacamptis morio (L.) R.M. Bateman, Pridgeon & M.W. Chase (*Orchis morio*)

Green-winged Orchid

This native orchid is found mainly in the centre of Ireland and in some coastal sites. The unlocalised 1952 record 'near Limerick' could be either in Co. Limerick or Co. Clare, so no confirmed records for Limerick.

Andromeda polifolia L.

Bog-rosemary

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Locally Scarce Last seen: 2021

Native; low-growing evergreen shrub. Mainly in lowland centre of Ireland. In NE Limerick in cut-over raised bogs (Ballynacourty, Castlconnell and Dromsallagh Bogs); also Slievefelim Mtns at Grageen Fen (sparingly in upland 'poor' fen) and in small areas of wet bog. First recorded in bog between Newport (Co. Tipperary) and Castleconnell c.1804, then Catleconnell Bog 1900.

Site	Grid Ref.	Date	Recorder(s)
Ballynacourty Bog, NE of	R6659	29 Nov 2018	Quirke, M., Murphy, P.,
Annacotty			Harrington, T.
Ballynacourty Bog	R664594	20 Jul 2020	Reynolds, S., Reynolds, J.,
			Quirke, M.
Castleconnell Bog, SW part	R6762	27 Jul 1998	Reynolds, S.
Castleconnell Bog, S of Gooig	R6763	26 Jul 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Castleconnell Bog	R6763 and	12 Aug 2002	Rippey, I.
	R6863	11 Sept 2003	
Castleconnell Bog	R6763	9 Jul 2013	Reynolds, S.
	R6863		
Castleconnell Bog, W side	R6863	8 Jul 1998	Reynolds, S.
Castleconnell Bog, W side	R6863	10 Jul 2020	Reynolds, S. <i>et al</i> .
Castleconnell Bog, W side	R68136350	6 Sep 2021	Reynolds, S., Reynolds, J.
	R68186342		
Castleconnell Bog, W side	R6864	22 Jul 2014	Reynolds, S.
Dromsallagh Bog, NW of	R75	4 Apr 1997	Reynolds, S., Quirke, M.
Cappamore			
Dromsallagh Bog	R7552	31 Jul 2005	Reynolds, S.
	R7652		
Dromsallagh Bog	R7552	4 May 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Toorlougher, Slievefelim Mtns	R7758	2 Jan 2019	Quirke, M.
Slievefelim Mtns, N slope	R7858	30 Dec 2018	Quirke, M.

Gleno, Slievefelim Mtns	R7858	23 May 2020	Quirke, M.
Grageen Fen, Slievefelim Mtns	R7957	14 Jul 2004	Reynolds, S.

Antennaria dioica (L.) Gaertn.

Mountain Everlasting

Last seen: 2021

Limerick: Not Locally Rare or Scarce (see below*)

Native; herbaceous perennial. Mainly in W, W centre and NW of Ireland; formerly more widespread. *Although not Locally Rare or Scarce in Limerick, this species is included because it occurs characteristically in unimproved dry calcareous grassland with outcropping limestone in northern limestone area of the county and sparingly elsewhere; recorded once on a conglomerate tor in Ballyhoura Mtns. First recorded at Askeaton 1882, also in dry pastures in Foynes area 1885/1886.

Site	Grid Ref.	Date	Recorder(s)
Mullagh, NW of Creeves Cross	R2846 or	3 Apr 1997	Reynolds, S.
	R2946		
Ellaha, NW of Creeves Cross (to E	R2848	28 Jun 1987	Reynolds, S., OBrien, M.V.
of road)			
Ellaha, NW of Creeves Cross (to E	R2848	2 Jul 2019	Reynolds, S., Reynolds, J.
of road)			
Ellaha, NW of Creeves Cross (W	R282482	14 Jun 2006	Reynolds, S., Conaghan, J.
side of road)			
Aughinish Island	<i>c</i> .R2852	6 Jun 2004	Reynolds, S.
Barrigone, near quarry	R2950	20 Jul 1990	Reynolds, S.
		16 May 2009	
Barrigone, Glenbane East	R2950	25 Jun 2010	Rippey, I.
Barrigone (E of roadway to quarry)	R295507	19 May 2021	Reynolds, S., Reynolds, J.
Barrigone, N of old schoolhouse	R2951	13 Jul 1989	Reynolds, S.
Morgans North, E of Poulaweala	R292529	19 May 2021	Reynolds, S., Reynolds, J.
Creek			
Bullaun, S of Askeaton	R3446	22 Jun 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Cragmore, SE of Askeaton	R3648	19 Jun 1988	Reynolds, S.
Clogh, W of Croagh	R3843	31 May 1987	Reynolds, S., Reynolds, J.
Ballinvirick Marsh, near	R3847	20 Jul 1987	Reynolds, S.
Ballynort, NE of Askeaton	R3652	23 May 2006	Reynolds, S.
Ballynakill, E of Kilfinny	R469405	1998	Curtis, T., Harrington, T.
Adare, railway cutting N of (cutting	R4647	6 Jun 2004	Reynolds, S.
through limestone)		8 Jun 2008	
Kilbreedy Loughs, beside	R4350	17 Jul 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Tory Hill, N end	R5343	19 Apr 2017	Quirke, M., Murphy, P.,
			Harrington, T.
Routagh fen, beside	R5952	28 Apr 2017	Quirke, M., Murphy, P.,
			Harrington, T.
Routagh fen, beside	R59645268	18 Jul 2017	Reynolds, S. <i>et al</i> .

Routagh fen, beside	R5952	10 Jun 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Black Rock, Ballyhoura Mtns (not	R6418	1989	Curtis, T., Harrington, T.
Seefin)			

Anthemis arvensis L.

Corn Chamomile

Nationally Scarce Limerick: Extinct

Limerick: Extinct Last seen: 1904

Archaeophyte; annual or biennial. Widely scattered in Ireland; a rare casual. Only one old Limerick record. *Anthemis austriaca* is a similar looking species originating from wild flower seed mixtures, e.g. at Kilmallock 1999 and waste ground near O'Dwyer Bridge in Limerick city 2007, 2008.

Site	Grid Ref.	Date	Recorder(s)
Limerick city, Carey's Road quarry	R5856	1904	Phillips, R.A.

Anthemis cotula L.

Stinking Chamomile

Nationally Scarce

Limerick: Locally Rare Last seen: 2006

Archaeophyte; annual or biennial. Widely scattered in Ireland; formerly somewhat more widespread as an arable weed. Rare casual in Limerick; few plants in a grass verge. First and only earlier records are from Limerick, Askeaton and Mullagh SE of Foynes 1900.

Site	Grid Ref.	Date	Recorder(s)
Plassey Bridge, near	R6158	30 Jul 2006	Reynolds, S.

Anthriscus caucalis M. Bieb.

Bur Chervil

Nationally Scarce

National Threat Status: Near Threatened

Limerick: Extinct Last seen: 1903

Native; annual. Sparingly near E coast of Ireland, rare elsewhere; formerly somewhat more widespread in open ground. Only one old Limerick record.

Site	Grid Ref.	Date	Recorder(s)
Askeaton	R35	1903	Praeger, R.L.

Apium graveolens L.

Wild Celery

Last seen: 2021

Limerick: Not Locally Rare or Scarce (see below*)

Native; usually biennial. Scattered around the coast and along estuaries in Ireland. *Although not Locally Rare or Scarce, *Apium graveolens* is included because it is a characteristic species by the Shannon Estuary in Limerick and by creeks and tidal rivers off the estuary; in saltmarshes and brackish marshes, also among rocks and on stone wall at Askeaton Abbey. First recorded by the Shannon Estuary 1885/1886 and noted as reaching inland to Patrickswell; Askeaton 1900 and Foynes area in early 1900s.

Site	Grid Ref.	Date	Recorder(s)
Long Rock, E of (NE of Glin)	R1549	15 Sep 2019	Reynolds, S., Reynolds, J.
Barrigone Holy Well, W of	R2849	19 Jul 2004	Reynolds, S.
Robertstown Castle, near	R269500	30 Jul 2006	Reynolds, S.
		27 Jul 2009	
White Island, at mouth of R. Deel	R3252	30 Jun 2011	Reynolds, S.
Askeaton Abbey, by River Deel	R3350	10 Aug 1996	Reynolds, S.
		20 Jul 2004	
Askeaton Abbey, by River Deel	R339506	30 Jun 2021	Reynolds, S., Reynolds, J.
Askeaton, by R. Deel N of by-pass	R3350	20 Jul 2005	Reynolds, S.
Askeaton, by River Deel NNW of	R3352	4 Jul 2005	Reynolds, S.
(both sides of Deel estuary)		13 Jun 2006	
Goleen Creek	R336529	20 Sep 2012	Green, P.R.
	R3353		
Goleen Bridge, near	R3353	9 Jul 1988	Rich, T.C.G., Taylor, N.
Goleen Bridge, near	R3353	15 Jul 1989	Reynolds, S., BSBI
Goleen Bridge, near	R3353	25 Jul 2006	Reynolds, S.
		16 Jun 2010	
Goleen Bridge (on both sides)	R335530	28 Aug 2021	Reynolds, S., Reynolds, J.
Ballynash W of Goleen Bridge to	R330531	21 Sep 2021	Quirke, M., Murphy, P.,
Courtbrown Point	R329533		Harrington, T.
	R329534		
	R329537		
	R327539		
	R324543		
Ballysteen, WNW of	R3455	12 Jul 2017	Reynolds, S., Reynolds, J.
Ballinvoher Point to Beagh Quay,	R3456/R3556	6 Sep 2021	Quirke, M., Murphy, P.,
by Shannon Estuary			Harrington, T.
Ringmoylan Quay, near	R4057	21 Jun 2005	Reynolds, S.
		24 Jun 2010	
Rinekirk Point, near	R4457	20 Sep 2005	Reynolds, S.
	R4557		
Ferry Bridge, by River Maigue	R468557	9 Jul 2001	Wann, J.
NNW of			
Ferry Bridge, by River Maigue NW	R4752	20 Jul 2005	Reynolds, S.
of (near castle)			

Apium inundatum, see Helosciadium inundatum

Apium x moorei; A. nodiflorum x A. inundatum, see **Helosciadium x moorei**

Aquilegia vulgaris L.

Columbine

Limerick: Locally Scarce Last seen: 2021

Native; herbaceous perennial. Fairly widespread in Ireland, but range as a native not clear as many records are of garden escapes. Confined as a native to northern limestone area of Limerick; in calcareous grassland, among shattered limestone and on limestone outcrop. Native plants have smaller and blue flowers compared to garden escapes or discards which have larger flowers and more varied colours. First recorded in Askeaton area 1884, also at Curragh Chase 1900, but considered a probable introduction there; known as a native at Barrigone since 1930s. Recent records from Curragh Chase include both native plants and escapes. A selection of records is given below.

Site	Grid Ref.	Date	Recorder(s)
Barrigone, near quarry	R2950	5 May 1990	Reynolds, S.
Barrigone, near quarry	R2950	25 Aug 1996	Reynolds, S., BSBI
Barrigone, near quarry	R2950	9 Jun 2008	Reynolds, S.
Glenbane East/Barrigone	R295507	22 Jun 2013	Mullen, A.
Barrigone, near quarry	R293506	23 Apr 2019	Reynolds, S., Reynolds, J.
Barrigone (E of roadway to quarry)	R2950	19 May 2021	Reynolds, S., Reynolds, J.
Barrigone, railway cutting	R2950	17 Jul 2004	Reynolds, S.
Graigues, SE of Askeaton	R3647	May 1988	OBrien, M.V.
Castle Hewson, ESE of Askeaton	R3749	30 Aug 1992	FitzGerald, R.
Ballydoo Bridge, near	R3551	20 Sep 2012	Green, P.R.
Ballydoo Bridge, near	R352526	20 Sep 2012	Green, P.R.
Ballynort, NE of Askeaton	R3652	6 Sep 1996	Reynolds, S.
Ballynort, NE of Askeaton	R3652	16 Apr 1997	Reynolds, S., Wiltshire, E.
Ballynort, NE of Askeaton	R3652	23 May 2006	Reynolds, S.
Curragh Chase, W of	R4049	14 May 2006	Reynolds, S.
Curragh Chase Forest Park	R409498	2 Jul 2007	Perrin, P., Power, E.,
			McNutt, K.
Curragh Chase	R4149	3 Jun 1989	Reynolds, S.
Curragh Chase Forest Park	R411497	14 May 2016	Cahill, M.
Curragh Chase	R4050	9 June 2008	Reynolds, S.
Curragh Chase	R4150	11 Jun 2005	Reynolds, S.
Curragh Chase	R4150	16 May 2015	Reynolds, S., BSBI
Castle Grey, near	R4151	29 Jun 2009	Reynolds, S.
Pallaskenry, scarp just SW of	R4154	c.1988	OBrien, M.V.

Arabis hirsuta (L.) Scop.

Hairy Rock-cress

Limerick: Locally Scarce Last seen: 2021

Native; herbaceous biennial or perennial. Scattered mainly in W half of Ireland, rare in E. In Limerick sparingly in dry calcareous grassland with limestone outcrop; and on fallen

stonework at Shanid Castle. First recorded in limestone quarry at Ringmoylan and on limestone rocks at Askeaton 1885/1886, also Lough Gur 1900.

Site	Grid Ref.	Date	Recorder(s)
Shanid Castle, SSW of Shanagolden	R2445	26 Jul 2007	Reynolds, S.
Shanid Castle	R24294516	1 Aug 2021	Reynolds, S., Reynolds, J.
Deelish, NW of Creeves Cross	R2847	19 May 2001	Reynolds, S.
Aughinish Island	R2852	4 Jun 2009	Reynolds, S.
Knocktwo	R5834	May 1998	Wann, J.
Athlacca, hill with castle E of	R580344	15 Jul 2015	Reynolds, S.
Tory Hill, N end	R5343	20 Jun 1990	Curtis, T., Harrington, T.
Tory Hill, N end	R5343	May 1997	Boohan, S.
Knockderc	R6538	8 Mar 1997	Reynolds, S.
Knockadoon, beside Lough Gur	R6440	24 Aug 1996	Reynolds, S., BSBI
Lough Gur, NE corner	R6441	4 Sep 2015	Reynolds, S.
Carraig Aille, near Lough Gur	R6540	10 May 2009	Reynolds, S.

Arenaria leptoclados (Rchb.) Guss. (A. serpyllifolia subsp. leptoclados)

Slender Sandwort

Limerick: Locally Scarce Last seen: 2021

Native; annual or biennial. Mainly in S half of Ireland, but more scattered towards W; perhaps under-recorded where not separated from more common *Arenaria serpyllifolia* s.s. (= *A. serpyllifolia* subsp. *serpyllifolia*). Few sites in Limerick; in short dry calcareous grassland, also on a stone bridge. First recorded on walls at Ferry Bridge (where still found) and limestone quarry SE of Foynes 1885/1886.

Site	Grid Ref.	Date	Recorder(s)
Mullagh, NW of Creeves Cross	R2846	29 Aug 1997	Reynolds, S.
Barrigone, near quarry	R2950	c.1987	Reynolds, S.
Killulta church, WNW of Kildimo	R4353	24 May 2011	Reynolds, S.
Ferry Bridge	R4852	20 Jul 1988	Reynolds, S.
(on top of stone bridge)		6 Jun 2008	
		28 May 2011	
		22 Jun 2021	
Athlacca, hill with castle E of	R580344	15 Jul 2015	Reynolds, S.

Arenaria serpyllifolia subsp. leptoclados, see Arenaria leptoclados

Armoracia rusticana P. Gaertn., B. Mey. & Scherb. Horse-radish

Limerick: Locally Scarce Last seen: 2021

Archaeophyte; herbaceous perennial. Widely scattered in Ireland, more common near E and S coasts. Relict of or discard from cultivation in Limerick; established clumps on W side of King's Island and roadsides E of Cappamore. Only one earlier unlocalised map record.

Site	Grid Ref.	Date	Recorder(s)
Rathkeale (waste ground)	R3641	8 Aug 2003	Reynolds, S.
Knockalisheen Marsh, edge of	R5658	4 Sep 2005	Reynolds, S.
King's Island, Limerick city	R5758	1 Oct 2005	Reynolds, S.
	R5858		
King's Island, W side	R57575821	31 Aug 2021	Reynolds, S., Reynolds, J.
Kilmallock (by old town wall)	R6027	14 Aug 2014	Reynolds, S.
Cappamore, E of	R792512	25 Jul 1990	Reynolds, S.
		22 Aug 2005	
		1 Sep 2009	
Ballycoshown, E of Cappamore	R7951	6 Jul 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Cappamore, E of (by Bilboa River)	R79825153	1 Sep 2021	Reynolds, S., Reynolds, J.

Artemisia maritima L. (Seriphidium maritimum)

Sea Wormwood

Last seen: 2021

Nationally Scarce

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Not Locally Rare or Scarce

Native; perennial with woody stems. Local on Irish coasts, e.g. in Dublin, Limerick and Galway. This aromatic plant occurs along the Shannon Estuary in Limerick intermittently from near Loghill to NE of Ballinvoher Point; mainly in upper part of saltmarshes, also on shale; locally abundant by Robertstown and Poulaweala Creeks. First noted near Foynes c.1883, and described as abundant on muddy flats by the shore above Foynes (= E of Foynes) 1884.

Site	Grid Ref.	Date	Recorder(s)
Hiphall Point, W of Loghill	R1749	11 Jul 2005	Reynolds, S.
Hiphall Point, W of Loghill	R178497	22 Sep 2008	Reynolds, S.
Hiphall Point, W of Loghill	R178498	30 Jul 2018	Hodd, R.L., Leyden, K.
Loghill, near	R185499	22 Sep 2008	Reynolds, S.
Hiphall Point, near Loghill	R185499	30 Jul 2018	Hodd, R.L., Leyden, K.
Illauncrearick, just NW of Loghill	R189503	22 Sep 2008	Reynolds, S.
Robertstown church, just N of	R2749	18 Jul 2004	Reynolds, S.
		30 Jul 2006	
Barrigone Holy Well, just W of	R2849	19 Jul 2004	Reynolds, S.
Barrigone Holy Well, near	R285500	1 Aug 2021	Reynolds, S., Reynolds, J.
Foynes Port (2 plants)	R2551	15 Aug 1997	Reynolds, S.
Foynes Island, at Stone Quay	R250521	7 May 1988	Reynolds, S.
(low shale cliff)		27 Jul 2014	
		30 May 2021	
Churchfield, just S of Aughinish I.	R2750	15 Jan 2019	Quirke, M., Murphy, P.,
			Harrington, T.
Robertstown Castle, near	R270501	30 Jul 2006	Reynolds, S.
Robertstown Creek, at railway	R2750	5 Aug 1993	Reynolds, S.
bridge		1 Aug 2005	
Robertstown Creek, E side	R271513	13 Aug 2006	Reynolds, S.

Robertstown Creek, E of	R2850	12 Sep 2015	Reynolds, S.
Fawnamore, E side Poulaweala	R2851	1 Aug 2021	Reynolds, S., Reynolds, J.
Creek			
Aughinish Island, E side	R2852	25 Aug 1996	Reynolds, S., BSBI
Aughinish Island, E side	R2852	16 Jun 2010	Reynolds, S.
Aughinish Island, E side	R2852	29 Jun 2021	Quirke, M., Murphy, P.,
			Harrington, T.
Poulaweala Creek, E side	R2952	9 Oct 1999	Reynolds, S.
Poulaweala Creek, E side	R292527	22 Aug 2008	Reynolds, S.
Poulaweala Creek, E side	R2952	12 Sep 2020	Reynolds, S., Reynolds, J.
Morgans, just N of Quayfield	R2952	12 Sep 2005	Reynolds, S.
Lough			
Trummera Big (islet in Estuary)	R2954	30 Aug 2008	Reynolds, S.
Moreena Point (low causeway)	R3053	6 Mar 2004	Reynolds, S.
Goleen Bridge, near	R3353	9 Jul 1988	Rich, T.C.G., Taylor, N.
Ballynash W of Goleen Bridge to	R330531	21 Sep 2021	Quirke, M., Murphy, P.,
Courtbrown Point	R329534		Harrington, T.
	R327539		
	R324543		
Illaunavoley Point, W of Ballysteen	R3355	c.2005	Ryan, C.
Ballysteen, W of	R3355	12 Jul 2017	Reynolds, S., Reynolds, J.
Ballysteen, WNW of	R3455	12 Jul 2017	Reynolds, S., Reynolds, J.
Ballycanauna Point, WNW of	R3456	12 Jul 2017	Reynolds, S., Reynolds, J.
Ballysteen			
Ballinvoher Point to Beagh Quay,	R3456/R3556	6 Sep 2021	Quirke, M., Murphy, P.,
by Shannon Estuary			Harrington, T.

Artemisia vulgaris L.

Mugwort

Limerick: Locally Scarce Last seen: 2016

Archaeophyte; aromatic herbaceous perennial. Fairly widespread in Ireland. Never a common plant in Limerick; sparingly in disturbed and waste ground. First recorded near Limerick city 1900.

Site	Grid Ref.	Date	Recorder(s)
Doohyle Lough, bridge NW of	R358450	17 May 2015	Reynolds, S.
Feeagh, S of Askeaton	R3545	15 Jun 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Limerick city, W side	R5556	9 Nov 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Limerick Docks, near	R5656	9 Nov 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Lough Gur, NE side	R6441	4 Oct 1987	Reynolds, S.
Castlefarm, N of Hospital	c.R707374	12 Sep 2008	Reynolds, S.
		11 Jul 2014	

Asplenium marinum L.

Sea Spleenwort

Limerick: Locally Rare Last seen: 2021

Native fern. Around the coast of Ireland, but more local on E coast. A maritime species found at two sites by the Shannon Estuary in Limerick. Established in the stonework of Glin Pier, but only one plant seen on the pier in 2021 probably due to re-mortaring of stonework; also in W-facing rock crevices on Bushy Island further up the estuary. Late 19th C record from Mount Trenchard sea wall and in shallow cave at Foynes 1902, but not refound at either place.

Site	Grid Ref.	Date	Recorder(s)
Glin Pier, Shannon Estuary	R130478	11 Jul 2005	Reynolds, S.
		1 Jun 2006	
		4 Jul 2008	
		18 Apr 2009	
		27 Apr 2015	
Glin Pier (W-facing wall)	R13034783	28 Aug 2021	Reynolds, S., Reynolds, J.
Bushy Island, NE of Ballysteen	R37225683	17 Aug 2021	Quirke, M., Murphy, P.,
(fertile fronds)			Harrington, T.

Asplenium onopteris L.

Irish Spleenwort

Nationally Scarce

National Threat Status: Vulnerable

Limerick: Extinct Last seen: 1902

Native fern. Scattered in S and SW of Ireland. This species, formerly part of the *Asplenium adiantum-nigrum* complex, needs specialist determination. Only Limerick site was a shallow cave by the Shannon Estuary at Foynes just W of the harbour (not its typical habitat) where first found in late 1800s; not refound there.

Site	Grid Ref.	Date	Recorder(s)
Foynes, cave on Shannon shore	<i>c</i> .R2452	Apr 1875	O'Brien, C.G.
Foynes	R25	1898	O'Brien, R.D.
Foynes, smuggler's cave	R25	Dec 1902	O'Brien, C.G.

Asplenium trichomanes subsp. trichomanes L.

Maidenhair Spleenwort, subspecies

Nationally Scarce

Limerick: Locally Scarce Last seen: 2019

Native fern. This subspecies is scattered in Ireland, mainly on non-calcareous rocks and walls; probably under-recorded and not separated from much more common *Asplenium trichomanes* subsp. *quadrivalens*. In Limerick mainly on siliceous rocks. Probably also on

other bluffs in Galty Mtns, e.g. in Blackrock River Valley and on Temple Hill, and likely too on tors in Slievefelim Mtns. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Cappercullen Glen, shaded rock	R75	8 Aug 1997	Reynolds, S.
face			
Kilbeheny, N of (on stone wall)	R8518	13 Aug 2019	Reynolds, S., Reynolds, J.
Assaroola Glen, Galty Mtns	R8322	7 Sep 2016	Reynolds, S., Quirke, M.,
	R8323		Murphy, P., Harrington, T.
Pigeonrock Glen, Galty Mtns	R8420	17 Aug 2008	Reynolds, S., BSBI

Asplenium viride Huds.

Green Spleenwort

Last seen: 2017

Nationally Scarce since 2000 Limerick: Locally Rare

Native fern. Mainly on mountains in W and NW of Ireland, also in SW. Currently only known in Limerick on bluffs in Blackrock River valley on S side of Galty Mtns. First recorded on Carrignabinnia and escarpment to Lyracappul in Galty Mtns 1944, and likely to be refound there.

Site	Grid Ref.	Date	Recorder(s)
Knockaterriff bluffs, Galty Mtns	R850217	c. July 2013	Barry, J.
Blackrock River valley	R82	July 2013	Quirke, M., Murphy, P.
Knockaterriff bluffs	R852219	8 Jun 2014	Reynolds, S., BSBI
Blackrock Glen, Galty Mtns	R850220	28 May 2015	Hodd, R.L.
Blackrock crags, Knockaterriff	R8522	17 Aug 2017	Quirke, M., Murphy, P.

Atriplex glabriuscula Edmondston

Babington's Orache

Limerick: Locally Rare?

Native; annual. Common all around the Irish coast, but distribution by the Shannon Estuary is not clear. Reliable Limerick records are lacking as it is difficult to separate this species from some plants by the estuary of closely related *Atriplex prostrata* (Spear-leaved Orache) and from *Atriplex* hybrids, in recent years also recorded around the coast of Ireland. In 2018 Paul Green identified the hybrids *A.* x *gustafssoniana* (*A. prostrata* x *A. longipes*), *A.* x *taschereaui* (*A. glabriuscula* x *A. longipes*) and *A. prostrata* x *A. glabriuscula* on stony and rocky shores along the Shannon Estuary at various sites from W of Glin to Ringmoylan Quay. Interestingly, plants close to *A. longipes* (Long-stalked Orache) were noted on Foynes Island and at Ringmoylan, otherwise a rare species found mainly in SE Ireland.

Baldellia ranunculoides (L.) Parl.

Lesser Water-plantain

Internationally Rare: Near Threatened on both European Red List and Global Red List Limerick: Not Locally Rare or Scarce Last seen: 2021

Native; perennial, usually aquatic. Widespread in Ireland, particularly in the midlands and W. In Limerick mainly in northern limestone area; in fens and drainage ditches, also lake margins, turlough areas and a wet field beside a tidal creek. First recorded in a tidal ditch at Longpavement on N side of Limerick city 1897.

Site	Grid Ref.	Date	Recorder(s)
Ellaha fen, NW of Creeves Cross	R2848	2 Jul 2019	Reynolds, S., Reynolds, J.
Ahacronane Bridge, near (peaty	R2947	13 Aug 2006	Reynolds, S.
drainage ditch)			
Ballyellinan fen	R3149	27 Jul 2000	Reynolds, S.
Feeagh, ENE of Newbridge (drains)	R3445	3 Aug 2000	Reynolds, S.
Doohyle Lough, SW and W sides	R3643	7 Sep 2007	Reynolds, S.
		3 Sep 2015	
Doohyle Lough, SE corner	R3743	3 Sep 2015	Reynolds, S.
Graigues Lough (turlough)	R3647	28 Jul 1987	Reynolds, S.
Graigues Lough	R3647	12 Jun 2004	Reynolds, S.
	R3648	3 Aug 2013	
Graigues Lough	R366479	28 Aug 2021	Reynolds, S., Reynolds, J.
Clogh fen, NE of Rathkeale	R3843	9 Jun 2008	Reynolds, S.
Ballinvirick House, NW of	R3847	30 Aug 1992	FitzGerald, R.
Ballinvirick (ditch at swamp edge)	R3847	21 Sep 2009	Reynolds, S.
Goleen Bridge (beside tidal creek)	R3353	15 Jul 1989	Reynolds, S.
Ballydoo Bridge, near (ditch)	R352526	20 Sep 2012	Green, P.R.
Ballynort, NE of Askeaton	R361517	20 Sep 2012	Green, P.R.
Milltown Lake, S side	R3753	27 Jun 2005	Reynolds, S.
Deegerty/Ballyvogue fen	R3851	19 Aug 1996	Reynolds, S.
Mornane Lough, ENE of Askeaton	R3852	19 Aug 1996	Reynolds, S.
Mornane Lough	R38475232	13 Jul 2011	Reynolds, S.
	R38595236		
Curragh Chase (lake edge)	c.R4149	16 Jul 1989	Reynolds, S., BSBI
Glennameade fen, SE of	R4253	23 Jul 2004	Reynolds, S.
Pallaskenry			
Bleach Lough, NW end	R4454	11 Aug 1996	Reynolds, S.
Bleach Lough, NW end	R44185493	13 Jul 2011	Reynolds, S.
Bleach Lough, NW end	R4454	1 Aug 2021	Reynolds, S., Reynolds, J.
Rootiagh, ENE of Patrickswell	<i>c</i> .R549515	15 Jun 2021	Quirke, M., Murphy, P.,
(wet place in field on peaty soil)			Harrington, T.
Loughmore Common (near	<i>c</i> .R5452	1990	Goodwillie, R.N.
turlough)			
Ballynaclough River, near	R5654	25 Jul 2006	Reynolds, S.
(drainage ditch at Dooradoyle)			
Routagh fen, ESE of Ballysheedy	R5952	18 Jul 2017	Reynolds, S. <i>et al</i> .
Routagh fen	R5952	10 Jun 2020	Quirke, M., Murphy, P.,
			Harrington, T.

Ballota nigra L.

Black Horehound

Nationally Scarce

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 1997

Archaeophyte; herbaceous perennial. Mainly in E of Ireland; less widespread than formerly. One Limerick record from roadside at Knockderc where known since 1974, but not refound in recent years. First recorded at Plassey near Limerick city 1897, also Lough Gur 1903.

Site	Grid Ref.	Date	Recorder(s)
Knockderc, SE of Lough Gur	R6538	8 Mar 1997	Reynolds, S.

Betula pendula Roth

Silver Birch

Last seen: 2014

Limerick: Locally Rare as a native

Native tree. Widespread in Ireland, but uncommon as a native tree in semi-natural habitats; widely planted and self-sown, so not easy to determine the native range from mapped records. Also a rare native in Limerick, at the edge of and on raised bogs, with more common *Betula pubescens* (Downy Birch). Some records (not included here) refer to seedlings and saplings self-sown from planted trees. First recorded in a Birch thicket on boggy ground near Lisnagry 1901, not far from Castleconnell Bog.

Some Birch trees bordering the track on the W side of Casteconnell Bog show characters intermediate between *Betula pendula* (Silver Birch) and *B. pubescens* (Downy Birch, the common Birch species in Ireland and Limerick). F1 hybrids are apparently rare, but introgression from *B. pendula* into *B. pubescens* is considered widespread in Britain and may explain why it is not always easy to separate the species here.

Site	Grid Ref.	Date	Recorder(s)
Castleconnell Bog, beside	R6863	10 Jul 2014	Reynolds, S.
	R6864		
Cappamore, NW of (status uncertain)	R7553	4 May 2014	Reynolds, S.
Cooga Bog, E end (near Doon)	R8050	11 Jun 1998	Reynolds, S.

Bidens cernua L.

Nodding Bur-marigold

Limerick: Locally Scarce

Last seen: 2021

Native; annual or short-lived herbaceous perennial. Fairly widespread in Ireland, particularly in N half and in Shannon catchment. In E half of Limerick; beside and near River Shannon from O'Briensbridge to Limerick city, and scattered elsewhere in marshy and muddy places; locally abundant; with less frequent *Bidens tripartita* (Trifid Bur-marigold) at Lough Gur and O'Briensbridge. First recorded at Lough Gur 1897 and described as abundant there in 1900.

Site	Grid Ref.	Date	Recorder(s)
Westfields pond	R564569	4 Sep 2005	Reynolds, S.
Westfields pond	R565569	6 Sep 2021	Reynolds, S., Reynolds, J.
King's Island (E side), Limerick city	R5858	28 Aug 2008	Reynolds, S.
(including B. cernua var. radiata)			
Ballingaddy North, SE of Kilmallock	R6225	8 Sep 2006	Reynolds, S.
(field pond, near church)			
Lough Gur, SW corner	R6340	29 Aug 2017	Reynolds, S. et al.
Lough Gur, NW edge	R6341	16 Sep 2016	Reynolds, S., Reynolds, J.
Lough Gur, NW edge	R637411	1 Sep 2021	Reynolds, S., Reynolds, J.
Lough Gur	R641412	28 Jul 2006	Reynolds, S.
	R643414		
Lough Gur, N side	R6441	13 Sep 2007	Reynolds, S.
Lough Gur, NE corner	R6441	4 Oct 1987	Reynolds, S.
		4 Sep 2015	
Lough Gur, N side	R641413	1 Sep 2021	Reynolds, S., Reynolds, J.
	R642412		
Reboge, E of Limerick Canal	R6057	26 Aug 1997	Reynolds, S.
(floodplain lake)		23 Aug 2010	
Reboge (by lake)	R601576	31 Aug 2021	Reynolds, S., Reynolds, J.
Ballyvollane, WNW of Lisnagry	R6359	29 Aug 2010	Reynolds, S.
Lacka, N of Castleconnell	R6664	22 Sep 2009	Reynolds, S.
Lacka, N of Castleconnell	R6664	18 Jul 2018	Reynolds, S., Reynolds, J.
Lacka, N of Castleconnell (by R.	R6664	15 Aug 2020	Quirke, M., Murphy, P.,
Shannon)			Harrington, T.
Portcrusha, N of Castleconnell	R6664	17 Sep 2007	Reynolds, S.
O'Briensbridge (by R. Shannon)	R6666	12 Sep 2006	Reynolds, S.
O'Briensbridge-Montpelier	R665668	22 Jul 2017	Wilcox, M.P., Tregale, B.A.
Pallas Grean, NNW of	R7648	7 Sep 2017	Quirke, M., Murphy, P.,
			Harrington, T.
Pallas Grean, NE of	R7847	7 Sep 2017	Quirke, M., Murphy, P.,
			Harrington, T.
Glenstal Abbey, Murroe	R7356	8 Aug 1997	Reynolds, S., Quirke, M.
(by lake and pond)			
Glenstal Abbey (by lake and pond)	R7356	12 Sep 2008	Reynolds, S.
Glenstal Abbey (by lake)	R73145643	15 Sep 2021	Reynolds, S., Reynolds, J.,
			Quirke, M.

Bidens tripartita L.

Trifid Bur-marigold

Limerick: Locally Scarce Last seen: 2021

Native; annual or short-lived herbaceous perennial. Fairly widespread in Ireland. Mainly in NE Limerick and usually in muddy ground, locally common; with more frequent *Bidens cernua* (Nodding Bur-marigold) at Lough Gur and O'Briensbridge. Apparently an introduction at Abbeyfeale Town Park. First recorded at Lough Gur 1900, described as abundant there; also by River Deel at Newbridge 1904.

Site	Grid Ref.	Date	Recorder(s)
Abbeyfeale Town Park (by pond)	R1025	7 Sep 2006	Reynolds, S.
Callow, near Cappagh (by pond)	R380461	1 Sep 2021	Hunt, G.
Ferry Bridge, SW of	R471508	19 Sep 2012	Green, P.R.
Lough Gur, SW corner	R6340	29 Aug 2017	Reynolds, S. et al.
Lough Gur, NW edge	R6341	16 Sep 2016	Reynolds, S., Reynolds, J.
Lough Gur, N side	R6441	13 Sep 2007	Reynolds, S.
Lough Gur, NE corner	R6441	4 Oct 1987	Reynolds, S.
		4 Sep 2015	
Lough Gur, N side	R641413	1 Sep 2021	Reynolds, S., Reynolds, J.
	R642412		
Annacotty, NE of	R6759	8 Aug 1997	Reynolds, S., Quirke, M.
O'Briensbridge (by R. Shannon)	R6666	12 Sep 2006	Reynolds, S.
Abington, near (by Mulkear R.)	R7153	23 Jul 2014	Reynolds, S.
Doon, NW of (beside field pond)	R8151	22 Aug 2005	Reynolds, S.

Blitum bonus-henricus (L.) Rchb. (Chenopodium bonus-henricus)

Good-King-Henry

Nationally Scarce

National Threat Status: Vulnerable

Limerick: Extinct Last seen: 1903

Archaeophyte; rhizomatous perennial. Widely scattered in Ireland; relict of ancient cultivation as a potherb and formerly more common. Few old Limerick records.

Site	Grid Ref.	Date	Recorder(s)
Old Abbey, near (SE of Foynes)	R24	25 May 1903	O'Brien, C.G.
Patrickswell	R54	July 1898	Bentley, W.E.
Lough Gur area	R64	14 Aug 1900	Praeger, R.L.

Botrychium lunaria (L.) Sw.

Moonwort

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 2015

Native fern. Widely scattered in Ireland; less widespread than formerly. Currently only known in Limerick in the Galty Mtns; on rock outcrop on Temple Hill and tiny plants in sheep-grazed acid grassland near Knockaterriff bluffs in Blackrock River valley. First recorded at Glin pre-1860, also on limestone crags in Mullagh area SE of Foynes in early 1900s.

Site	Grid Ref.	Date	Recorder(s)
Shanaghaun Rock, Temple Hill	R83032152	26 May 2015	Hodd, R.L.
Blackrock River valley	R85232177	8 Jun 2014	Green, P.R., BSBI

$\boldsymbol{Brachypodium\ pinnatum\ (L.)\ P.\ Beauv.}$

Heath False-brome

Nationally Scarce

Limerick: Locally Rare Last seen: 2021

Native; rhizomatous grass. Widely scattered in Ireland. Dense stands on low roadside bank N of Rathkeale, not far from where seen in 1995; extensive patch by disused railway SW of Askeaton, with more common *Brachypodium sylvaticum* (False Brome); and in dry calcareous grassland beside a fen. First recorded near Patrickswell 1965.

Site	Grid Ref.	Date	Recorder(s)
Askeaton, disused railway SW of	R32774983	12 Sep 2015	Reynolds, S.
Doohyle Lough, just NW of (near	R34	1995	O'Mahony, T.
railway bridge)			
Rathkeale, N of (= just W of	R36704360	23 Jul 2015	Reynolds, S.
Doohyle Lough)	R36734368		
Rathkeale, N of	R36704360	6 Sep 2021	Reynolds, S., Reynolds, J.
Routagh fen, ESE of Ballysheedy	R59675252	18 Jul 2017	Reynolds, S. et al.

Bromopsis erecta (Huds.) Fourr. (*Bromus erectus*)

Upright Brome

National Threat Status: Near Threatened

Limerick: Locally Scarce Last seen: 2021

Native; tussock-forming perennial grass. Mainly across the middle of Ireland, from Limerick to Dublin. In dry calcareous grassland in Limerick, also on and beside disused railways. First recorded in limestone grassland near Hogan's Bridge N of Askeaton 1979.

Site	Grid Ref.	Date	Recorder(s)
	Grid Kei.	Date	` '
Barrigone, railway just W of old	R2950	17 Jul 2004	Reynolds, S.
schoolhouse			
Barrigone, N of old schoolhouse	R2951	13 Jul 1989	Reynolds, S.
Askeaton, railway SSW of (= just	R3349	31 May 1987	Reynolds, S.
NW of railway station)			
Doohyle Lough, NW of (near	R3545	17 May 2015	Reynolds, S.
railway crossing)			
Cragmore, SE of Askeaton	R3648	19 Jun 1988	Reynolds, S.
Cragmore, SE of Askeaton	R361487	3 Aug 2006	Reynolds, S.
Adare, roadside just SW of	R45254492	19 Jun 2011	Green, P.R.
Adare, railway cutting N of	R4647	21 Jul 2007	Reynolds, S.
(on limestone outcrop)		31 May 2010	
Adare, railway cutting N of	R467474	14 Jun 2021	Reynolds, S., Reynolds, J.

Bromus commutatus, see Bromus racemosus

Bromus erectus, see Bromopsis erecta

Bromus racemosus L. (including *B. commutatus*)

Smooth Brome

National Threat Status: Near Threatened

Limerick: Locally Scarce Last seen: 2017

Native; annual grass. Scattered in Ireland, mainly in W half, formerly more widespread. In Limerick in unimproved wet grassland, including meadows; also a casual at Foynes Port. First recorded in damp pastures at Foynes 1885/1886.

Site	Grid Ref.	Date	Recorder(s)
Foynes Port (casual)	R2551	18 Jul 2010	Reynolds, S.
Askeaton, NE of (near Ballydoo Br.)	R351526	20 Sep 2012	Green, P.R.
Ballymacsradeen, ESE of Croom	R5440	18 Jul 2017	Reynolds, S. et al.
Ballycummin, SW of Limerick City	R54955226	26 Jun 2006	Reynolds, S., Fuller, J.
Ballycummin/Raheen	R550522	1998	Goodwillie, R.N.
Castleconnell, SSW of (by River	R6561	31 May 2010	Reynolds, S.
Shannon)			
Lacka, N of Castlconnell	R6664	8 Jul 1998	Reynolds, S.
Lacka	R6664	10 Jul 1999	Reynolds, S., Wiltshire, E.
Lacka (by River Shannon)	R660643	26 Jul 2006	Reynolds, S., Fuller, J.
	R660644		

Bromus secalinus L.

Rye Brome

Nationally Scarce

Limerick: Extinct Last seen: 1904

Archaeophyte; annual grass. Widely scattered in Ireland, main in NE and SE. One old record as a casual in Limerick.

Site	Grid Ref.	Date	Recorder(s)
Limerick city, Carey's Road quarry	R5856	1904	Phillips, R.A.

Butomus umbellatus L.

Flowering-rush

Limerick: Locally Scarce Last seen: 2020

Native; aquatic perennial. Fairly widespread in Ireland, mainly in rivers, canals and lakes; sometimes an introduction. An emergent at edge of River Shannon in Limerick, also in a floodplain lake and Limerick Canal. First recorded 'in several places about the Shannon' pre-1804.

Site	Grid Ref.	Date	Recorder(s)
R. Shannon near Athlunkard Bridge	R5859	29 Jul 2010	Reynolds, S.
Limerick Canal	R5957	6 Sep 2006	Reynolds, S.
		13 Aug 2009	

R. Shannon at Shannon Fields	R5958	21 Jul 1992	Reynolds, S.
		12 Aug 2006	
		23 Aug 2010	
Reboge (floodplain lake)	R6057	2 Aug 2004	Reynolds, S.
		23 Aug 2010	
R. Shannon near Plassey Bridge	R6158	30 Jul 2006	Reynolds, S.
R. Shannon, Prospect townland	<i>c</i> .R634604	Jul 2011	Keegan, E.
R. Shannon, Prospect townland	R6360	25 Jun 2020	Quirke, M., Murphy, P.,
			Harrington, T.
R. Shannon, near waterworks	R6361	8 Jul 1998	Reynolds, S.
R. Shannon, just SW of Clareville/	R6361	25 Jun 2020	Quirke, M., Murphy, P.,
Castleconnell waterworks			Harrington, T.
R. Shannon, near waterworks	R6461	29 Jul 2010	Reynolds, S.
R. Shannon at Worldsend	R6563	26 Jul 1998	Reynolds, S.
R. Shannon at Worldsend	R658639	23 Jul 2019	Reynolds, S., Reynolds, J.
R. Shannon just N of Castleconnell	R6663	5 Jul 2010	Reynolds, S.
R. Shannon at Lacka	R6664	18 Jul 2018	Reynolds, S., Reynolds, J.
R. Shannon at Lacka	R6664	15 Aug 2020	Quirke, M., Murphy, P.,
			Harrington, T.
R. Shannon at O'Briensbridge	R6666	12 Sep 2006	Reynolds, S.

Callitriche brutia Petagna (including *C. hamulata*)

Water-starwort

Limerick: Extinct Last seen: 1885/1886

Native; aquatic annual (usually) or perennial. Apparently fairly widespread in SE, SW and N of Ireland, and absent from much of the midlands. Formerly a rare aquatic in Limerick, and perhaps overlooked more recently.

Site	Grid Ref.	Date	Recorder(s)
Rinekirk (in a ditch)	R45	1885/1886	Stewart, S.A.
Glenstal (near Murroe)	R75	1880	Hart, H.C.

Callitriche hamulata, see Callitriche brutia

Callitriche obtusangula Le Gall

Blunt-fruited Water-starwort

Limerick: Locally Scarce Last seen: 2019

Native; aquatic or terrestrial perennial. Fairly widespread in Ireland. As an aquatic in Limerick in drainage ditches, Limerick Canal, sparingly in River Shannon, and other open water; locally abundant. First recorded in a stream at Ballyclogh near Creeves Cross 1904.

Site	Grid Ref.	Date	Recorder(s)
Coolcappagh, quarry pond SSE of	R3140	12 Aug 1988	Reynolds, S.
Clogh fen, W of Croagh	R3843	12 Aug 1988	Reynolds, S.
Adare, ditch just NW of	R460466	26 Jun 2009	Reynolds, S.

Adare, ditch just NW of	R461466	26 Jun 2009	Reynolds, S.
Castlegrey, swamp near	R417519	29 Jun 2009	Reynolds, S.
Dooradoyle, ditch near	R5654	25 Jul 2006	Reynolds, S.
Ballynaclough River			
Limerick Canal	R5857	20 Sep 2008	Reynolds, S.
	R5957		
R. Shannon at Shannon Fields	R59265859	12 Aug 2006	Reynolds, S.
R. Shannon at Worldsend	R658639	24 Jun 2019	Reynolds, S., Reynolds, J.
Glenstal Abbey, Murroe	R735567	12 Sep 2008	Reynolds, S.
(in Chapel Lake)			

Calystegia x lucana (Ten.) G. Don (C. sepium x C. silvatica)

Hedge Bindweed x Large Bindweed

Limerick: Locally Rare Last seen: 2016

Hybrid between native and neophyte species; rhizomatous perennial. In SE of Ireland and widely scattered elsewhere where the hybrid has been recognised. This spontaneous hybrid is known at one site in Limerick, in open ground with both parents; likely to occur in other places where the two species grow together. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Castletroy, E of Limerick city	R6258	24 Aug 2016	Reynolds, S.
(near former Dell factory)			

Calystegia sepium subsp. roseata Brummitt

Hedge Bindweed

Internationally Rare: Ireland possibly holds more than 25% of the European population
Limerick: Not Locally Rare or Scarce

Last seen: 2019

Native; rhizomatous perennial. Mainly by and near S and W coasts of Ireland; more localised in Ireland than closely related white-flowered *Calystegia sepium* subsp. *sepium* which is widespread and common. In Limerick *C. sepium* subsp. *roseata* is most frequent near Glin and Loghill at the top of stony shores by the Shannon Estuary and roadsides on higher ground S of there; also by the upper Shannon Estuary and occasional elsewhere. There is a specimen of a 'pink flowered form' from near Foynes 1906.

Site	Grid Ref.	Date	Recorder(s)
Abbeyfeale railway station, E of	R1227 or	26 Jul 2007	Reynolds, S.
(by former railway)	R1327		
Athea, NE of	R1536	23 Jul 2017	Reynolds, S., Reynolds, J.
Glin, SW of	R1044	16 Jul 2017	Reynolds, S., Reynolds, J.
Ballyhoolahan Point, just E of	R1147	11 Jul 2005	Reynolds, S.
(by Shannon Estuary)			
Glin, W of (by Shannon Estuary)	R1147	16 Sep 2018	Reynolds, S.
Glin, SE of	R1446	18 Aug 2005	Reynolds, S.

Glin, SE of	R1446	23 Jul 2017	Reynolds, S., Reynolds, J.
Glin, NE of (by Shannon Estuary)	R1448	13 Jul 2005	Reynolds, S.
Long Rock, near (by Shannon	R1548	10 Sep 2005	Reynolds, S.
Estuary)			
Loghill, SW of	R1748	26 Aug 2015	Reynolds, S.
Ballyhahill, just E of	R1946	26 Jul 2004	Reynolds, S.
Loghill, by White River	R1949	18 Aug 1996	Reynolds, S.
Loghill, near (by Shannon Estuary)	R1950	27 Jul 2006	Reynolds, S.
Shanagolden, SW of	R2244	20 Jul 2017	Reynolds, S., Reynolds, J.
Foynes Island, near Monare	R2552	11 Aug 2009	Reynolds, S., Reynolds, J.
Rinekirk Point, at mouth of River	R4557	20 Sep 2005	Reynolds, S.
Maigue			
Ballykeeffe, NE of Mungret	R5455	11 Sep 1999	Reynolds, S.
Ballinacurra Creek, W side of	R5455 or	7 Sep 1996	Reynolds, S.
	R5555		
Clonmacken (by upper Shannon	R5556	12 Aug 2007	Reynolds, S.
Estuary)			
Shannon Bridge, W of (N side of	R5656	9 Oct 1999	Reynolds, S.
Shannon)			
Westfields, beside pond	R5656	4 Sep 2005	Reynolds, S.
University of Limerick, near River	R6158	23 Jul 2019	Reynolds, S., Reynolds, J.
Shannon			
University of Limerick, near River	R6258 or	11 Sep 2005	Reynolds, S.
Shannon E of	R6358		
Annacotty, bank of Mulkear River	R6457	26 Aug 2005	Reynolds, S.
Castleconnell, just S of	R6661	29 Aug 2018	Reynolds, S., Reynolds, J.

Camelina sativa (L.) Crantz

Gold-of-pleasure

Last seen: 1990

Nationally Rare since 2000 Limerick: Locally Rare

Archaeophyte; annual. Few scattered sites as a (neophyte) casual in Ireland; formerly a rare arable weed. Introduced with imported animal feed in Limerick; sparingly at Foynes Port and on roadsides, but not seen recently. First recorded in a field near Castleconnell 1804.

Site	Grid Ref.	Date	Recorder(s)
Glin, just W of	R1247	23 Jul 1989	Reynolds, S.
Foynes Port	R2551	20 Jul 1988	Reynolds, S.
		2 Aug 1988	
		19 Jul 1989	
Askeaton	R3350	Sep 1990	FitzGerald, R.
Limerick city, SW side	R5553	4 Nov 1989	Reynolds, S.

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$\ \, \textbf{Campanula rotundifolia} \ \, \textbf{L}.$

Harebell

Limerick: Locally Scarce Last seen: 2018

Native; herbaceous perennial. Coastal (e.g. sandhills) and on mountains in Ireland, mainly in W, NW and N, also SW. On bluffs and ridges in Galty Mtns in Limerick; and noted once in calcareous grassland beside Lough Gur. First recorded in Galty Mtns 1944.

Site	Grid Ref.	Date	Recorder(s)
Lough Gur, N side	R6341 or	c.1989	Harrington, T.
	R6441		
Temple Hill, outcrop SW of summit	R83042152	30 Aug 2010	Reynolds, S.
Shanaghaun Rock, Temple Hill	R83032152	26 May 2015	Hodd, R.L.
Lyracappul-Carrignabinnia ridge	R8423	25 Jul 2017	Quirke, M., Murphy, P.
Knockaterriff bluffs, Blackrock	R85232193	8 Jun 2014	Reynolds, S., BSBI
River valley			
Blackrock crags, Knockaterriff	R8522	17 Aug 2017	Quirke, M., Murphy, P.
Carrignabinnia and	R8523	10 Jul 2018	Quirke, M., Murphy, P.,
Slievecushnabinnia, between			Harrington, T.

Campanula trachelium L.

Nettle-leaved Bellflower

Native in SE of Ireland; only a rare garden escape in Limerick. No recent records.

Carduus crispus L. (including *C. acanthoides* in Ireland)

Welted Thistle

Nationally Scarce since 2000

Limerick: Extinct Last seen: 1903

Native; herbaceous biennial. Mainly in E of Ireland; formerly somewhat more widespread. Only two old Limerick records.

Site	Grid Ref.	Date	Recorder(s)
Limerick, near	R55	14 Aug 1900	Praeger, R.L.
Grange (NNW of Lough Gur)	R64	1903	Praeger, R.L.

Carduus tenuiflorus Curtis

Slender Thistle

National Threat Status: Near Threatened

Limerick: Extinct Last seen: 1903

Native; herbaceous biennial. Mainly in E half of Ireland; formerly somewhat more widespread. Only a few old Limerick records.

Site	Grid Ref.	Date	Recorder(s)
Limerick, about	R55	14 Aug 1900	Praeger, R.L.
Lough Gur	R64	c.1900	O'Brien, R.D.
Grange (NNW of Lough Gur)	R64	1903	Praeger, R.L.
Cahernarry, near (SE of Limerick	R65	1899	O'Brien, R.D.
city)			

Carex acuta L.

Slender Tufted-sedge

National Threat Status: Near Threatened

Limerick: Extinct Last seen: 1901

Native: herbaceous perennial. Mainly scattered across the middle of Ireland, e.g. in rivers and lakes. Recent Limerick records from Curragh Chase and River Shannon near Lisnagry were in error for *Carex acutiformis* (Lesser Pond-sedge), although *C. acuta* had previously been recorded in both these areas (no voucher specimens) and may be found again. Praeger later listed 'Hermitage' by River Shannon for Miss Armitage's record.

Site	Grid Ref.	Date	Recorder(s)
Curragh Chase	c.R4149	1900	Knowles, M.C.
Curragh Chase	c.R4149	1900	Praeger, R.L.
Lisnagry area (probably by River	R65 or R66	1901	Armitage, E.
Shannon)			

Carex aquatilis Wahlenb.

Water Sedge

Last seen: 2010

Nationally Scarce since 2000 Limerick: Locally Rare

Native; herbaceous perennial. Widely scattered in Ireland, e.g. in rivers and lakes. In Limerick only found in soft mud under Willows at edge of River Shannon near Corbally, where first found in 1904 and again in 1908.

Site	Grid Ref.	Date	Recorder(s)
River Shannon NW of Athlunkard	R585593	29 Jul 2010	Reynolds, S.
Bridge, Corbally			

Carex aquatilis Wahlenb. x C. elata All.

Water Sedge x Tufted-sedge

Nationally Rare

Limerick: Locally Rare Last seen: 2000

Native hybrid; herbaceous perennial. Only recorded at Ballyvollane by River Shannon in Limerick. Included in Stace's *Flora* (2019) for Co. Limerick; apparently no other Irish or British records.

Specimens from a hybrid sedge collected at Ballyvollane in 2000 were determined as *Carex* x *turfosa* Fr. (*C. nigra* x *C. elata*), and the record mapped in Stace, Preston & Pearman's *Hybrid Flora* (2015). However, Tony O'Mahony withdrew that record and it was redetermined as *C. aquatilis* x *C. elata* in 2016 following a long-term study of living material.

Site	Grid Ref.	Date	Recorder(s)
Ballyvollane, by River Shannon	R6359	6 Jun 2000	O'Mahony, T.
(NW of Lisnagry)			

Carex bigelowii Torr. ex Schwein.

Stiff Sedge

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Locally Rare Last seen: 2018

Native; herbaceous perennial. On mountains around Ireland. High in Galty Mtns in Limerick, in open peaty ground. First recorded in Galty Mtns 1944.

Site	Grid Ref.	Date	Recorder(s)
Temple Hill, summit	R83332183	26 May 2015	Hodd, R.L.
Carrignabinnia, near summit	R8523	21 Aug 2004	Reynolds, S., Reynolds, J.,
			Sweeney, P.
Carrignabinnia, summit	R85002366	28 May 2015	Hodd, R.L.
Galtymore, on and around summit	R82	c.1989	Curtis, T., Harrington, T.
Galtymore	R8723	27 Aug 2005	Reynolds, S.
Galtymore	R880238	15 Sep 2018	Hodd, R.L. et al.

Carex canescens L. (C. curta)

White Sedge

Limerick: Locally Rare Last seen: 2019

Native; herbaceous perennial. Widespread across N of Ireland, scattered elsewhere. In and at edge of raised bogs in Limerick; Cooga Bog drier in 2019 than in 1998, and with encroaching Birch etc. First and only earlier record is from Castleconnell Bog 1903.

Site	Grid Ref.	Date	Recorder(s)
Ballyvorheen Bog, NW of	R75	1991	Lockhart, N.D.
Cappamore			
Dromsallagh Bog, just NW of	R75	1991	Lockhart, N.D.
Cappamore			
Knocknacarriga Bog (= W end of	R7950 or	1991	Lockhart, N.D.
Cooga Bog)	R7951		

Cooga Bog, WNW of Doon (bog edge)	R799508	9 Jul 2019	Reynolds, S., Reynolds, J., Quirke, M., Murphy, P.
Cooga Bog, W end	R7951	23 May 1998	Reynolds, S., Quirke, M.
Cooga Bog, E end	R8050	11 Jun 1998	Reynolds, S.

Carex curta, see Carex canescens

Carex dioica L. Dioecious Sedge

Limerick: Locally Rare Last seen: 2018

Native; herbaceous perennial. Mainly W and N of Ireland, widely scattered elsewhere. Upland poor fen and a wet peaty slope in Limerick, in flushes. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Coolavehy, SE Coolfree Mtn	R681152	30 Aug 2018	Reynolds, S., Reynolds, J.
Grageen Fen, Slievefelim Mtns	R7956 or R7957	Sep 1996	Goodwillie, R.N.
Grageen Fen	<i>c</i> .R7956	27 Jul 2002	Reynolds, S., BSBI
Grageen Fen	R7956	31 Jul 2018	Reynolds, S. et al.

Carex x fulva Gooden. (C. hostiana x C. lepidocarpa)

Tawny Sedge x Long-stalked Yellow-sedge

Nationally Scarce since 2000

Limerick: Extinct Last seen: 1904

Native hybrid; herbaceous perennial. Although considered a common hybrid where the parent species overlap, there are relatively few Irish sites, mainly in N, also in W. Not recorded recently in Limerick, but likely to occur, for example, in fens in northern limestone area where both species are quite common. Locations for old records (based on specimens later checked by specialists) are rather vague, but there are fen areas near Ahacronane River and Ballyclogh House.

Site	Grid Ref.	Date	Recorder(s)
Ahacronane River (SE of Foynes)	R24	Jun 1904	Knowles, M.C.
Ahacronane River and crags near	c.R24	Jun 1904	Knowles, M.C.
Foynes (sic)			
Foynes	R24 or R25	Jun 1902	O'Brien, C.G.
(probably SE or E of Foynes)			
Ballyclogh House, near	R34	1904	Knowles, M.C.
(NNE of Creeves Cross)			

Carex lasiocarpa Ehrh.

Slender Sedge

Limerick: Locally Scarce Last seen: 2018

Native; herbaceous rhizomatous perennial. Mainly centre, W and NW of Ireland. Bordering lakes in northern limestone area of Limerick, also in upland poor fen. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Curragh Chase	R44	c.1987	Jones, E.
Curragh Chase (E side of path by more northerly lake)	R4149	9 Jul 2007	Reynolds, S.
Blue Lough, N end and E side	R4051 R4151	18 Jul 2018	Reynolds, S. et al.
Glenisca Lough, S end	R4150	16 Jun 2010	Reynolds, S.
Grageen Fen, Slievefelim Mtns	R791570	8 Jul 2002	Reynolds, S.
Grageen Fen	<i>c</i> .R7957	27 Jul 2002	Reynolds, S., BSBI

Carex limosa L. Bog-sedge

Limerick: Locally Scarce Last seen: 2021

Native; herbaceous perennial. Mainly SW, W and NW of Ireland, scattered elsewhere. In Limerick in and around small pools in two bogs in W uplands, in lowland fen in northern limestone area and in upland poor fen. First recorded at Knockfinnisk (same area as Glenbaun) 1904.

Site	Grid Ref.	Date	Recorder(s)
Glenbaun (= NE of Athea)	R1939	27 Jun 1987	Reynolds, S.
Glenbaun bog, WNW of	R1939	15 Jul 1989	Reynolds, S., BSBI
Carrigkerry			
Glenbaun bog	R19993927	22 Jul 2005	Reynolds, S.
	R199394		
Glenbaun bog	R1939	1 Jul 2011	Reynolds, S.
Moyreen Bog, S of Ballyhahill	R19864288	9 Aug 2011	Reynolds, S.
Moyreen Bog	R19864288	12 Jul 2021	Reynolds, S., Reynolds, J.
Cappagh village, N of (cut-away	R3745	28 Jul 1987	Jones, E., Reynolds, S.,
bog beside fen)			OBrien, M.V.
Grageen Fen, Slievefelim Mtns	<i>c</i> .R7956	7 Sep 1996	Reynolds, S.
Grageen Fen	<i>c</i> .R7956	8 Jul 2002	Reynolds, S.
Grageen Fen	R7956	31 Jul 2018	Reynolds, S. et al.

Carex oederi, see Carex viridula

Carex pallescens L.

Pale Sedge

Limerick: Locally Scarce Last seen: 2021

Native; low-growing tufted herbaceous perennial. Mainly across N of Ireland, scattered elsewhere. In two unimproved wet meadows bordering River Shannon in Limerick, also a rushy field and near a raised bog. First recorded in Castleconnell area 1905.

Site	Grid Ref.	Date	Recorder(s)
Lacka, N of Castleconnell	R6664	8 Jul 1998	Reynolds, S.
Lacka	R6664	26 Jun 2006	Reynolds, S., Fuller, J.
Lacka	R6664	5 Jul 2010	Reynolds, S.
Lacka	R6664	10 Jul 2014	Reynolds, S.
Lacka	R6664	24 Jun 2019	Reynolds, S., Reynolds, J.
Lacka	R6664	15 Aug 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Lacka	R660642	22 Jun 2021	Reynolds, S., Reynolds, J.
	R661642		
Coolready, SE of O'Briensbridge	R6764	31 May 2014	Reynolds, S.
Coolready (same rushy field)	R6864	10 Jul 2014	Reynolds, S.
Castleconnell Bog, track beside	R68136393	10 Jul 2014	Reynolds, S.
Bunkey Bridge, W of (by Newport	R6860	1991	Lockhart, N.D.
River)			

Carex pilulifera L.

Pill Sedge

Limerick: Locally Scarce Last seen: 2021

Native; low-growing tufted herbaceous perennial. Widespread in Ireland, except in some of the midlands. In heathy/acid grassland and on bluffs in Galty Mtns in Limerick; also at edge of cut-over forestry on former raised bog and with heathy species bordering wet grassland on peaty soil near Limerick city. First recorded in heath near Foynes 1904 (but not refound in that area), and Galty Mtns 1944.

Site	Grid Ref.	Date	Recorder(s)
Rootiagh, ENE of Patrickswell	R54895154	22 Jun 2021	Harrington, T. et al.
Cappamore, former bog NW of	R75805307	5 Jul 2015	Reynolds, S.
Pigeonrock Glen, bluffs	R8420	17 Aug 2008	Green, P.R., BSBI
Lyracappul-Carrignabinnia ridge	R8423	25 Jul 2017	Quirke, M., Murphy, P.
Ballygeana, NW Galty Mtns	R849249	28 Jun 2006	Reynolds, S.
		10 Jul 2007	
Ballygeana	R8424	14 Jun 2017	Reynolds, S. et al.
Ballygeana	c.R8425	28 Jun 1991	FitzGerald, R.
Blackrock River valley	R8520/R8521	8 Jun 2014	Reynolds, S., BSBI
Knocknagalty, SE slopes of	R8721	19 Jul 2008	Reynolds, S.

Carex x pseudoaxillaris K. Richt. (C. otrubae x C. remota)

False Fox-sedge x Remote Sedge

Nationally Scarce

Limerick: Extinct Last seen: c.1833

Native hybrid; herbaceous perennial. Few widely scattered sites in Ireland. Only one 19th century record for Limerick identified from a herbarium specimen in recent years, but lacking specific information. Both parents are widespread in the county, with overlap in some damp habitats.

Site	Grid Ref.	Date	Recorder(s)
Limerick	R55	c.1833	Harvey, W.H.

Carex pseudocyperus L.

Cyperus Sedge

Limerick: Locally Scarce Last seen: 2021

Native; loosely tufted herbaceous perennial. Mainly Shannon catchment and Lough Erne in Ireland, widely scattered elsewhere. Sparingly at edges of lakes in northern limestone area of Limerick, also in drainage ditches. First recorded near Limerick *c*.1833 and Curragh Chase 1900, where found by the lake below the ruined house in 1984 (R4149) and where it may still occur, but lake edge vegetation usually cut back.

Site	Grid Ref.	Date	Recorder(s)
Glenisca Lough, Curragh Chase	R4150	16 Jun 2010	Reynolds, S.
Glenisca Lough, SW side	R41095031	2 Aug 2014	Reynolds, S.
Glenisca Lough, E side	R411504	1 Aug 2021	Reynolds, S., Reynolds, J.
Dromore Lough, W side	R435541	14 Sep 2007	Reynolds, S.
(SE of Pallaskenry)			
Meelick Bridge, ditch just N of	R5459	12 Aug 2007	Reynolds, S.
Reboge, drainage ditches on E side of Groody River	R604578	30 Jul 2006	Reynolds, S.

Carex serotina, see Carex viridula

Carex spicata Huds.

Spiked Sedge

Nationally Scarce since 2000

National Threat Status: Near Threatened

Limerick: Locally Scarce Last seen: 2020

Native; densely tufted herbaceous perennial. Scattered in Ireland; formerly somewhat more widespread. Mainly in damp grasslands in Limerick, also grassy roadsides. First and only earlier record, 'Limerick' 1899.

Site	Grid Ref.	Date	Recorder(s)
Meelick Creek, E of (near	R537587	2007	Goodwillie, R.N.
Lansdowne Bridge)			
Ballycummin, roadside bank	R54785187	12 Aug 2007	Reynolds, S.
Ballycummin, just SW of Roche	<i>c</i> .R5452	Aug 1998	Goodwillie, R.N.
Castle			
Ballycummin, just W of Raheen	c.R550522	2011	Curtis, T., Harrington, T.
Business Park			
Derryknockane, just SW of	R55885112	1 Nov 2018	Quirke, M., Murphy, P.,
Limerick city			Harrington, T.
Routagh fen, near	R5952	10 Jun 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Ballysimon, near (rough grassland)	R61085561	29 Sep 2014	Reynolds, S.
Annacotty Industrial Estate	R6556	8 Aug 1997	Reynolds, S., Quirke, M.
Glenroe, SE of (roadside)	R74271835	22 Sep 2014	Reynolds, S.

Carex strigosa Huds.

Thin-spiked Wood-sedge

Last seen: 2021

Limerick: Locally Rare

Native; densely tufted herbaceous perennial. Mainly in N and S of Ireland, widely scattered elsewhere. In two woodlands and damp shaded roadside ditches in Limerick. First recorded in woods near Foynes and at Mount Trenchard 1903, but not refound there.

Site	Grid Ref.	Date	Recorder(s)
Castle Demesne, Newcastle West	R26993376	16 May 2015	Reynolds, S.
(woodland)	R27023377		
	R27063379		
Castle Demesne, Newcastle West	R269338	12 Jul 2021	Reynolds, S., Reynolds, J.
	R27063376		
Newcastle West, S of (roadside	R281318	1 June 1999	Reynolds, S.
ditches)	R281320		
Newcastle West, S of (ditches)	R2831	23 Jun 2010	Reynolds, S.
	R2832		
Newcastle West, S of (ditches on E	R28113193	12 Jul 2021	Reynolds, S., Reynolds, J.
side of road)	to		
	R28133203		
Newcastle West, S of (woodland	R2832	23 Jun 2010	Reynolds, S.
on E side of road)			

Carex x turfosa (C. $nigra \times C.$ elata) see comment with **Carex aquatilis** x **C. elata** above

Carex vesicaria L. Bladder-sedge

Limerick: Locally Scarce Last seen: 2021

Native; slightly tufted herbaceous perennial. Fairly widespread in Ireland, particularly in N. Margins of rivers and lakes in Limerick, also in a wet meadow and in wet woodland. First recorded at Rinekirk 1885/1886.

Site	Grid Ref.	Date	Recorder(s)
Lough Nagirra	R5343	2015	Conaghan, J.
Mountrussell (wet woodland)	R6119	13 Jun 2003	Reynolds, S.
Lisnagry, WNW of (by R. Shannon)	R6359	9 Jul 1998	Reynolds, S.
Lisnagry, WNW of (by R. Shannon)	R6359	6 Jun 2000	O'Mahony, T.
Lisnagry, WNW of (by R. Shannon)	R63475962	29 Aug 2010	Reynolds, S.
Lacka, N of Castleconnell (wet	R6664	8 Jul 1998	Reynolds, S.
meadow by River Shannon)		23 May 2006	
Lacka	R66016422	22 Jun 2021	Reynolds, S., Reynolds, J.
Pallas Grean, NE of (by Dead R.)	R74	1991	Lockhart, N.D.
Glenstal Abbey, Murroe	R7456	31 Jul 2005	Reynolds, S.
(Boating Lake)			

Carex viridula Michx. (C. oederi, C. viridula subsp. viridula, C. serotina)

Small-fruited Yellow-sedge

Limerick: Locally Scarce Last seen: 2021

Native; herbaceous perennial. Fairly widespread in W and NW of Ireland, widely scattered elsewhere. In northern limestone area of Limerick, in fens and beside limestone lakes; in wet grassland on peaty soil at Lough Nagirra and near Limerick city. First recorded pre-1934, but no details; also pond near Poulaweala Creek and Loughmore turlough 1974.

Site	Grid Ref.	Date	Recorder(s)
Ellaha fen, NW of Creeves Cross	R2848	2 Jul 2019	Reynolds, S., Reynolds, J.
Clogh fen, NE of Rathkeale	R3843	10 Jul 2005	Reynolds, S.
Mornane Lough, ENE of Askeaton	R3852	19 Aug 1996	Reynolds, S.
Mornane Lough	R38475232	13 Jul 2011	Reynolds, S.
Mornane Lough, W side	R3852	10 Oct 2016	Reynolds, S., Reynolds, J.
Bleach Lough, NW end	R4454	11 Aug 1996	Reynolds, S.
Lough Nagirra, W side	R5343	25 Aug 2007	Reynolds, S.
Rootiagh, ENE of Patrickswell	R549515	22 Jun 2021	Reynolds, S. et al.

Carex viridula subsp. viridula, see Carex viridula

Carum carvi L. Caraway

Nationally Scarce

Limerick: Extinct Last seen: 1904

Archaeophyte; biennial. A rare casual in Ireland and formerly a rare casual in Limerick.

Site	Grid Ref.	Date	Recorder(s)
Foynes, at Ardanoir	R2452	25 May 1903	O'Brien, C.G.
Limerick city, Carey's Road quarry	R5856	1904	Phillips, R.A.

Catabrosa aquatica (L.) P. Beauv.

Whorl-grass

Limerick: Locally Scarce Last seen: 2019

Native; perennial grass. Fairly widespread in Ireland, except in SW and W. Mainly in E half of Limerick, in marshy and wet places, and in drainage ditches. First recorded in Lisnagry area 1901, also Lough Gur and stream at Foynes 1903.

Site	Grid Ref.	Date	Recorder(s)
Carrigkerry (seepage area)	R2238	2 Aug 2006	Reynolds, S.
Knockaderry, NW of	R3336	13 Jun 2019	Quirke, M., Murphy, P.,
			Harrington, T.
Castletown, just SW of (near Holy	R4429	1 Jul 1990	Reynolds, S., BSBI
Well)			
Routagh fen, near	R596525	18 Jul 2017	Reynolds, S. et al.
Ballyorgan, SE of (near Keale River)	R6917	22 Jul 1999	Reynolds, S., Lynch, R.
	R7017		
Red Bog, just S of Lough Gur	R6439	31 May 1997	Reynolds, S., Nash, D.W.
(drainage ditch)			
Cahirguillamore, W of Lough Gur	R6140	15 Jul 1987	Reynolds, S.
Old Pallas Grean, SW of	R7342	28 Jul 1999	Reynolds, S.
Knockseefin (in flush on hill)	R7545	2 Jul 2016	Reynolds, S., Reynolds, J.
Cappamore, E of (by Bilboa River)	R7951	22 Aug 2005	Reynolds, S.
Doon, WNW of (drainage ditch in	R8050	11 Jun 1998	Reynolds, S.
marshy field)	R8051		

Catapodium marinum (L.) C.E. Hubb. (Desmazeria marina) Sea Fern-grass

Limerick: Locally Rare Last seen: 2021

Native; annual grass. All around the coast of Ireland. This maritime species in Limerick is found only on Glin Pier by the Shannon Estuary, between the paving stones; known there since 2005.

Site	Grid Ref.	Date	Recorder(s)
Glin Pier, by Shannon Estuary	R130478	11 Jul 2005	Reynolds, S.

Glin Pier	R130478	1 Jun 2006 4 Jul 2008 27 May 2011	Reynolds, S.
Glin Pier	R13034783 R13034786	19 May 2021	Reynolds, S., Reynolds, J.

Centaurea cyanus L.

Cornflower

Limerick: Locally Rare Last seen: 2010

Archaeophyte; annual. Mainly E of Ireland, widely scattered elsewhere; formerly an arable weed, now most occurrences originate from wild flower seed mixtures. In Limerick few records (given below) may be of plants from long-buried seed or casuals; others are from seed mixtures, e.g. on Aughinish Island 2008 and waste ground at O'Dwyer Bridge in Limerick city 2007. First and only earlier record is from railway at Foynes 1903.

Site	Grid Ref.	Date	Recorder(s)
Barrigone (casual on roadside)	R2950	4 Sep 2010	Reynolds, S.
Ballykeeffe, NE of Mungret (weedy	R548552	11 Sep 1999	Reynolds, S., Gabbett, M.
field)			
Ballinacurra Creek, near bridge	R56035478	9 Aug 2001	Waldren, S., Lynn, D.

Centaurea scabiosa L.

Greater Knapweed

National Threat Status: Near Threatened

Limerick: Locally Scarce Last seen: 2016

Native; herbaceous perennial. Mainly across the middle of Ireland, rare in N and SW, and usually in calcareous soils. In Limerick only in northern limestone area; sparingly in dry calcareous grassland, on a roadside bank and in a limestone railway cutting. First found between Adare and Ballingarrane on railway banks and near Askeaton 1885/1886.

Site	Grid Ref.	Date	Recorder(s)
Aughinish Island	R25	Jul 1991	D'Arcy, G.
Robertstown Creek, E of (beside old railway)	R2750	1 Aug 2005	Reynolds, S.
Barrigone quarry, just W of (= Glenbane East)	R2950	23 Jun 2000	Rippey, I.
Barrigone, near quarry	R2950	8 Nov 2011 21 Sep 2012	Reynolds, S.
Barrigone quarry	R293502	27 Jul 2015	Daunt, R.
Bullaun, S of Askeaton	R3446	22 Jun 2016	Quirke, M., Murphy, P., Harrington, T.
Cragmore, SE of Askeaton	R3648	20 Jul 1987	Reynolds, S.
Cappagh, SSW of (railway cutting)	R3844	3 Aug 2000	Reynolds, S.
Ballinvirick House, NW of	R3847	30 Aug 1992	FitzGerald, R.

Tomdeely South, W of Askeaton	R3150	20 Jul 1996	Reynolds, S.
(roadside bank at railway bridge)		9 Aug 2015	

Cerastium semidecandrum L.

Little Mouse-ear

Limerick: Locally Rare Last seen: 2008

Native; annual. Scattered around the coast of Ireland, rare inland. In Limerick only found at Limerick railway station where it persisted for a few years, and is likely to have been affected by use of herbicide there. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Limerick railway station	R5756	May 2001	Wyse Jackson, M.
Limerick railway station	R578565	8 Jun 2008	Reynolds, S.

Ceratophyllum demersum L.

Rigid Hornwort

Limerick: Locally Scarce Last seen: 2021

Native; aquatic perennial. Patchy distribution in Ireland, mainly in N half. Locally abundant in Limerick, including in eutrophic Lough Gur, where it has been known for over a century; in tall-herb swamp near Herbertstown; also edge of River Shannon, Limerick Canal and smaller water-bodies on N side of Limerick city. First recorded at Lough Gur 1900, in shallow water at lake edge and choking a broad drain near the old castle.

Additional detailed records made by the Environmental Protection Agency at Lough Gur between 2009 and 2018 are in the BSBI database.

Site	Grid Ref.	Date	Recorder(s)
Westfields, pond on N side of road	R5656	9 Oct 1999	Reynolds, S.
		4 Sep 2005	
		28 Aug 2008	
Westfields, pond on N side of road	R56575695	6 Sep 2021	Reynolds, S., Reynolds, J.
Westfields, pond on S side of road	R5656	4 Sep 2005	Reynolds, S.
Limerick Canal, W of Park Bridge	R5857	20 Sep 2008	Reynolds, S.
		13 Aug 2009	
Corbally Baths (disused pool by	R584596	3 Oct 2005	Reynolds, S.
River Shannon)		29 Jul 2010	
Corbally Baths	R584596	13 Jul 2021	Reynolds, S., Reynolds, J.
River Shannon near Corbally Baths	R5859	29 Jul 2010	Reynolds, S.
Herbertstown	R6839	7 Jul 1989	Reynolds, S. Curtis, T.,
(pools in tall-herb swamp)			Harrington, T.
Lough Gur, SW corner	R6340	29 Aug 2017	Reynolds, S. et al.
Lough Gur, NW side	R638410	28 Jul 2009	Environmental Protection
		11 Jul 2018	Agency (= EPA)
Lough Gur, S side	R6440	9 Jul 2005	Reynolds, S.
Lough Gur, S side	R642404	11 Jul 2018	EPA

Lough Gur, NE side	R6441	29 May 1987	Reynolds, S., Reynolds, J.
		22 Jul 2019	

Chaerophyllum temulum L.

Rough Chervil

Nationally Scarce

National Threat Status: Vulnerable

Limerick: Locally Rare Last seen: 1989

Native or Alien, status uncertain; biennial. Widely scattered in Ireland, formerly somewhat more widespread. Only known at Lough Gur in Limerick. First recorded on a rocky limestone hill by Lough Gur 1900.

Site	Grid Ref.	Date	Recorder(s)
Lough Gur (near outcrop N of	R6441	Jul 1989	Curtis, T., Harrington, T.
Visitor Centre)			

Chamaemelum nobile (L.) All.

Chamomile

Native in Ireland, mainly in SW; only an introduction in Limerick. No recent records.

Cheiranthus cheiri, see Erysimum cheiri

Chelidonium majus L.

Greater Celandine

Limerick: Locally Rare Last seen: 2018

Archaeophyte; herbaceous perennial. Widespread in E half of Ireland, rare in W; relict of cultivation or garden escape; formerly a medicinal plant. In Limerick on walls of a ruin and a probable garden escape in the city. First recorded at Glenstal (near Murroe) 1880, and several other old records.

Site	Grid Ref.	Date	Recorder(s)
Tervoe, NW of Mungret (on ruin)	R5155	11 Apr 2017	Reynolds, S. et al.
Limerick city (probable garden	R5857	1 Nov 2016	Quirke, M., Murphy, P.,
escape)			Harrington, T.
Boher church, near	R6852	16 Nov 2018	Quirke, M., Murphy, P.,
			Harrington, T.

Chenopodium bonus-henricus, see Blitum bonus-henricus

Chrysanthemum segetum, see Glebionis segetum

Cichorium intybus L.

Chicory

Limerick: Locally Rare Last seen: 2014

Archaeophyte; herbaceous perennial. Mainly in E of Ireland, widely scattered elsewhere; usually a relict of or escape from cultivation. In Limerick only recent record was from a grass verge. First recorded at Glenstal (near Murroe) 1880, and several other old records.

Site	Grid Ref.	Date	Recorder(s)
Barrigone (grass verge)	c.R288504	6 Sep 2014	Reynolds, S.

Cirsium x celakovskianum Knaf (*C. palustre* x *C. arvense*)

Marsh Thistle x Creeping Thistle

Nationally Scarce

Limerick: Locally Rare Last seen: 2017

Native hybrid; herbaceous perennial. In Co. Sligo and few other widely scattered sites in Ireland where the hybrid has been recognised; first recorded in mid-1980s. Only known at one site in Limerick. Both parents are widespread and common in the county and this hybrid may occur in other places where the parents overlap.

Site	Grid Ref.	Date	Recorder(s)
Ringmoylan (near the quay)	R40595784	22 Jul 2017	Wilcox, M.P., Tregale, B.A.

Cirsium dissectum (L.) Hill

Meadow Thistle

Internationally Rare: Ireland possibly holds more than 25% of the European population
Limerick: Not Locally Rare or Scarce

Last seen: 2021

Native; herbaceous perennial. Widespread in Ireland, except in E and S. Mainly in N half of Limerick; characteristically in fens in northern limestone area and other fens, including upland poor fen in Slievefelim Mtns; also in unimproved wet grasslands, sedge meadows, peaty ground and seepage areas. First recorded in moist meadows near Limerick *c*.1833.

The following records indicate the range of sites with good quality habitats where *Cirsium dissectum* is found in the county, with latest dates.

Site	Grid Ref.	Date	Recorder(s)
Cloonlahard Bridge, just SE of (wet	R1844	23 Jul 2007	Reynolds, S.
meadow)			
Ellaha fen, NW of Creeves Cross	R2848	2 Jul 2019	Reynolds, S., Reynolds, J.
Barrigone Holy Well, W of	R2849	19 Jul 2004	Reynolds, S.
Barrigone, wet ground near quarry	R2950	9 Jun 2008	Reynolds, S.
Ballyellinan fen	R3149	27 Jul 2000	Reynolds, S.
Graigues Lough (turlough)	R3647	3 Aug 2013	Reynolds, S.

Doohyle Lough	R3743	3 Sep 2015	Reynolds, S.
Gorteenamrock fen	R3748	13 Jul 2005	Reynolds, S.
Clogh fen, NE of Rathkeale	R3843	10 Jul 2005	Reynolds, S.
Ballinvirick fen	R3847	4 Jun 2009	Reynolds, S.
Ballyvogue fen	R385513	14 Jun 2006	Reynolds, S.
Deegerty fen	R3851	20 Sep 2008	Reynolds, S.
Mornane Lough, ENE of Askeaton	R3852	4 Sep 2014	Reynolds, S.
Curragh Chase, just S of	R4148	28 Jun 2009	Reynolds, S.
Blue Lough, N end of	R4051	18 Jul 2018	Reynolds, S. et al.
Glennameade fen	R4253	21 Jun 2005	Reynolds, S.
Kilbreedy Loughs	R4350	17 Jul 2020	Quirke, M., Murphy, P., Harrington, T.
Dromore Lough, just E of	R4354	12 Jul 2005	Reynolds, S.
Bleach Lough, NW end	R4454	12 Jul 2005	Reynolds, S.
Lough Nagirra	R5343	12 Oct 2016	Quirke, M., Murphy, P., Harrington, T.
Friarstown, W of (fen)	R5749	22 Jul 2014	Reynolds, S.
Mungret, SSW of	R5252	24 Oct 2019	Quirke, M., Murphy, P., Harrington, T.
Rootiagh, ENE of Patrickswell	R549515	5 Jun 2021	Murphy, P.
(wet grassland on peaty soil)			
Loughmore Common	R5452	9 Jul 2021	Quirke, M., Murphy, P., Harrington, T.
Routagh fen, ESE of Ballysheedy	R5952	10 Jun 2020	Quirke, M., Murphy, P., Harrington, T.
Coolavehy, SE Coolfree Mtn (peaty slope)	R6815	30 Aug 2018	Reynolds, S., Reynolds, J.
Herbertstown fen/swamp	R6839	7 Jul 1989	Reynolds, S., Curtis, T., Harrington, T.
Ballynacourty, NE of Annacotty (raised bog)	R665593	20 Jul 2020	Reynolds, S., Reynolds, J., Quirke, M.
Lacka, N of Castleconnell (wet meadow by River Shannon)	R6664	26 Jul 2016	Quirke, M., Murphy, P., Harrington, T.
Coolready, SE of O'Briensbridge	R6764 R6864	10 Jul 2014	Reynolds, S.
Clare Glens, top of (flush)	R741589	20 Jul 2007	Reynolds, S.
Grageen Fen, Slievefelim Mtns	R7956	31 Jul 2018	Reynolds, S. et al.

Clinopodium ascendens (Jord.) Samp.

Common Calamint

Last seen: 2020

Limerick: Locally Scarce

Native; herbaceous perennial. Mainly in S of Ireland, widely scattered elsewhere. In Limerick on limestone outcrops, in short turf with outcropping limestone and around ruined churches. First recorded on river banks at Askeaton 1900 (and still growing on outcrop beside the road near River Deel there); also on limestone 'cliffs' near quarry at Foynes 1902.

Site	Grid Ref.	Date	Recorder(s)
Askeaton (on outcrop E of R. Deel)	R3450	25 Aug 1996	Reynolds, S., BSBI
Askeaton (on outcrop E of R. Deel)	c.R341505	19 Jul 2004	Reynolds, S.
		21 Jul 2010	
		4 Sep 2014	
Askeaton	R3450	Aug 2020	Hunt, G.
Croagh (in and around ruined	R4042	Aug 1998	Wann, J.
church)			
Croagh (ruined church, including	R4042	4 Sep 2015	Reynolds, S.
boundary wall)			
Killulta church, WNW of Kildimo (in	R434533	24 May 2011	Reynolds, S.
short turf with outcrop)			
Castleconnell (limestone outcrop	R6662	19 Sept 2020	Quirke, M.
below castle)			

Cochlearia danica L.

Danish Scurvygrass

Limerick: Locally Rare Last seen: 2021

Native; annual or biennial. A coastal species in Ireland, mainly on E and S coasts; more rarely inland. In Limerick only on Kilteery Pier and adjacent rocks by the Shannon Estuary. First recorded from the same area in early 1900s.

Flowering *Cochlearia danica* was noted as abundant along the M7 motorway just E of Castleconnell April 2021 by Paul Green. This species is well-known on salt-treated roads in Britain, but less so in Ireland to date.

Site	Grid Ref.	Date	Recorder(s)
Kilteery Pier, by Shannon Estuary	R1749	16 April 1997	Reynolds, S.
		13 Jun 2006	
		12 Apr 2010	
		27 Apr 2015	
Kilteery Pier	R170499	19 May 2021	Reynolds, S., Reynolds, J.

Cochlearia officinalis L.

Common Scurvygrass

Limerick: Locally Rare Last seen: 2021

Native; herbaceous biennial to perennial. All around the coast of Ireland. This maritime species just gets into Limerick by the Shannon Estuary at Glin.

Some growth forms of *Cochlearia anglica* (English Scurvygrass) along the Shannon Estuary to Ringmoylan Quay were previously mistaken for *C. officinalis* s.s. Typical *C. anglica* is common in the upper part of the Shannon Estuary and along tidal rivers and creeks. The hybrid *C.* x hollandica (*C. anglica* x *C. officinalis*) has been recorded in Limerick in the past, but the variation within the parent species along the estuary is not fully understood, nor the

extent of hybridisation between them. First confirmed record for *C. officinalis* s.s. is from Glin 2009.

Site	Grid Ref.	Date	Recorder(s)
Glin Pier, just W of (along inside of	R129477	18 Apr 2009	Reynolds, S.
low wall reached by highest tides)		27 May 2011	
		27 Apr 2015	
Glin Pier, just W of	R12874770	19 May 2021	Reynolds, S., Reynolds, J.
	to		
	R12984777		

$\pmb{Coeloglossum\ viride\ (L.)\ Hartm.}$

Frog Orchid

National Threat Status: Near Threatened

Limerick: Locally Scarce Last seen: 2018

Native; herbaceous perennial. Widely scattered in Ireland, mainly in W and NW. In northern limestone area of Limerick, usually in small numbers in dry calcareous grassland; also in upland poor fen and wet heath. First recorded at Foynes (probably Barrigone area) 1885/1886, also Barrigone 1903, crags at Mullagh SE of Foynes and Aughinish Island 1904.

Site	Grid Ref.	Date	Recorder(s)
Ellaha, NW of Creeves Cross (to E	R2848	28 Jun 1987	Reynolds, S.
of road)			
Ellaha (W side of road)	R2848	20 Sep 2008	Reynolds, S.
Rincullia, just SW of Barrigone	R2849	26 Jul 2000	Reynolds, S.
Creeves Cross, just NNW of	R2946	Jun 2010	Rippey, I.
(disused quarry, Ballylin townland)			
Aughinish Island	R2852	15 Aug 2008	Reynolds, S.
		5 Jun 2009	
Aughinish Island	R28845281	26 Jun 2009	Reynolds, S., Reynolds, J.
Aughinish Island	R288529	21 Aug 2014	O'Sullivan, J.
Barrigone, near quarry	R2950	20 Jul 1992	Reynolds, S.
Barrigone, near quarry	R2950	25 Aug 1996	Reynolds, S., BSBI
Barrigone (= Glenbane East)	R2950	23 Jun 2000	Rippey, I.
Barrigone, near quarry	R2950	Jul 2005	Hunt, G.
Barrigone, near quarry	R2950	22 Aug 2008	Reynolds, S.
		9 Aug 2011	
		2 Aug 2014	
Barrigone	R295507	1 Jul 2009	Crushell, P.
Barrgone, N of old schoolhouse	R2951	13 Jul 1989	Reynolds, S.
Tory Hill	R5343	28 Jul 2006	Dwyer, R., Crowley, W.,
			Wilson, F.
Grageen Fen, Slievefelim Mtns	R7957	7 Sep 1996	Reynolds, S., Reynolds, J.,
(upland poor fen)			Quirke, M., Keane, A.
Grageen Fen	R7957	27 Jul 2002	Reynolds, S., BSBI
Grageen Fen	R7957	14 Jul 2004	Reynolds, S.
Grageen Fen	R7957	31 Jul 2018	Reynolds, S. et al.
Knockastanna (wet heath)	<i>c</i> .R8556	23 Jun 2001	Penn, G.

Colchicum autumnale L.

Meadow Saffron

Nationally Rare

National Threat Status: Endangered Flora (Protection) Order 2015

Limerick: Locally Rare Last seen: *c*.1995

Native; herbaceous perennial with corms. Few sites in Ireland for this protected species, mainly in SE; decline probably due to habitat loss. In Limerick at only one recently known site, with grassland periodically flooded from an underground source; first found in 1972 and described as abundant in 1974; site apparently degraded since mid-1990s and *Colchicum autumnale* not refound (NPWS has details).

Site	Grid Ref.	Date	Recorder(s)
Kilfinny, SSE of	c.R4538	c.1995	Allott, H.L.

Cornus sanguinea L.

Dogwood

Last seen: 2021

Limerick: Locally Scarce

Native: woody perennial. Widely scattered in Ireland. In northern limestone area of Limerick; a shrub at wood edges, in thickets and hedgerows; also in calcareous grassland with outcropping limestone. First recorded on river bank at Askeaton and limestone rocks at Mullagh SE of Foynes 1900; and near Ahacronane River and at Curragh Chase in early 1900s.

Site	Grid Ref.	Date	Recorder(s)
Mullagh, NW of Creeves Cross	c.R2846	2005	O'Mahony, T.
Ellaha, NW of Creeves Cross (to E	R2848	28 Jun 1987	Reynolds, S.
of road)			
Ellaha (to E of road)	R2848	16 Jul 1989	Reynolds, S., BSBI
Ellaha (to E of road)	R2848	21 May 1999	Reynolds, S.
Ellaha (roadside hedgerow)	R2848	14 Jun 2006	Reynolds, S., Conaghan, J.
Ellaha (roadside hedgerow)	R2848	20 Sep 2008	Reynolds, S.
Creeves Cross, just NNW of	R2946	22 Jul 1999	Reynolds, S.
Ahacronane Bridge, near	R2947	19 May 2001	Reynolds, S.
Ahacronane Bridge, near	R291474	10 Oct 2016	Reynolds, S., Reynolds, J.
Craggs wood, SE of Barrigone	R2948	8 Aug 2003	Rippey, I.
(beside Lough Selleher turlough)		9 Sep 2006	
Craggs, SE of Barrigone (wood	R2948	12 Jun 2004	Reynolds, S.
edge beside Lough Selleher)		1 Jun 2009	
Lough Selleher	R298486	21 May 2008	Goodwillie, R.N.
Barrigone, near quarry	R2950	21 May 1999	Reynolds, S.
Barrigone (= Glenbane East)	R2950	8 Aug 2003	Rippey, I.
		Jun 2010	
Barrigone, near quarry	R2950	3 May 2014	Reynolds, S.
Poulaweala Creek, just E of	R2952	11 Sep 1999	Reynolds, S.
(hedgerow by lane)		2 Aug 2006	

Curragh Chase (N end of more	R4149	9 Jul 2007	Reynolds, S.
northerly lake, wood edge)		28 Jun 2009	Ney 110100, 51
Curragh Chase	R414493	30 Jun 2021	Reynolds, S., Reynolds, J.
Glenisca Lough, Curragh Chase	R4150	16 Jun 2010	Reynolds, S.

Cuscuta epithymum (L.) L.

Dodder

Nationally Scarce

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Locally Rare Last seen: 2021

Native; annual parasitic plant, sometimes perennating. In W of Ireland (e.g. Aran Islands and Burren), also few coastal sites in SW and elsewhere. Abundant at one site in Limerick, in calcareous grassland and on ant hills at Barrigone near the quarry (particularly to W of roadway to quarry); also found on an ant hill at Ballinvirick. Known in 'west Limerick' since 1963 and found at road end on E side of Poulaweala Creek 1974; considered a probable introduction at Curragh Chase 1900.

Site	Grid Ref.	Date	Recorder(s)
Barrigone, near quarry	R2950	10 Aug 1996	Reynolds, S.
		21 May 1999	
Barrigone (= Glenbane East)	R2950	11 Aug 2000	Rippey, I.
		8 Aug 2003	
Barrigone, near quarry	R29075053	22 May 2006	Reynolds, S.
Barrigone	R2950	2 Jul 2006	Dwyer, R., Crowley, W.,
			Wilson, F.
Barrigone, near quarry	R2950	9 Jun 2008	Reynolds, S.
		27 Jul 2009	
Barrigone, near quarry	R290504	9 Aug 2011	Reynolds, S.
	R291505		
	R291506		
	R292504		
	R295507		
	R296507		
Barrigone, near quarry	R2950	3 May 2014	Reynolds, S.
Barrigone, near quarry	R292506	26 Jun 2021	Reynolds, S., Reynolds, J.
	R293506		
Ballinvirick (near swamp)	R3847	20 Jul 1987	Reynolds, S.

Cystopteris fragilis (L.) Bernh.

Brittle Bladder-fern

Limerick: Locally Scarce Last seen: 2018

Native fern. Mainly in W and NW of Ireland, scattered elsewhere. In SE Limerick in Ballyhoura Mtns on conglomerate tors and in crevices, and high in Galty Mtns. First recorded

from lowland Limerick at Ferry Bridge, Boher and Bruree pre-1924 (not refound), and in Galty Mtns 1944.

Site	Grid Ref.	Date	Recorder(s)
Black Rock, Ballyhoura Mtns	R6418	Jul 1989	Curtis, T., Harrington, T.
Black Rock, Ballyhoura Mtns	R644185	16 Aug 2005	Reynolds, S.
Black Rock, Ballyhoura Mtns	R6418	16 Aug 2008	Reynolds, S., BSBI
Black Rock, bluffs below	R643188	24 Aug 2010	Reynolds, S.
Lyracappul, Galty Mtns (N-facing	R845233	28 May 2015	Hodd, R.L.
rocky slope)			
Lyracappul-Carrignabinnia ridge	R8423	25 Jul 2017	Quirke, M., Murphy, P.
Knockaterriff bluffs, Blackrock	R8521	8 Jun 2014	Reynolds, S., BSBI
River glen (= Black Rocks)			
Blackrock Glen, Galty Mtns (bluffs)	R850220	28 May 2015	Hodd, R.L.
Blackrock crags, Knockaterriff	R8522	17 Aug 2017	Quirke, M., Murphy, P.
Carrignabinnia and	R8523	10 Jul 2018	Quirke, M., Murphy, P.,
Slievecushnabinnia, between			Harrington, T.

Dactylorhiza x carnea (E.G. Camus) Soó (D. maculata x D. incarnata)

Heath Spotted-orchid x Early Marsh-orchid

Nationally Scarce

Limerick: Locally Rare Last seen: 2009

Native hybrid; perennial orchid. Few widely scattered sites in Ireland, mainly in W. Only one known site in Limerick; sparingly with both parents in a fen bordering swamp. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Ballinvirick fen, N of Cappagh	R386477	5 Jun 2009	Denholm, I., Bateman, R.

Dactylorhiza fuchsii (Druce) Soó x D. kerryensis (Wilmott) P.F. Hunt & Summerh. Common Spotted-orchid x Irish Marsh-orchid

Internationally Rare: Endemic to Ireland (Stace 2019)

Nationally Scarce

Limerick: Locally Rare Last seen: 2019

Native hybrid; perennial orchid. Few widely scattered sites in Ireland. Two known sites in Limerick; at Aughinish Island forming a hybrid swarm with parent species in short calcareous grassland and among broken limestone; and near Pallas Grean with both parents on low roadside bank by the main road. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Aughinish Island	R28395282	5 Jun 2009	Denholm, I., Bateman, R.

Aughinish Island	R28855305	5 Jun 2009	Denholm, I., Bateman, R.
Aughinish Island	R283526	Jun 2013	Denholm, I., Bateman, R.
	R288528		
Pallas Grean, SE of (by main road)	R77954521	Jun 2013	Denholm, I., Bateman, R.
Pallas Grean, SE of	R77964522	29 May 2019	Fogarty, J.

Dactylorhiza incarnata (L.) Soó

Early Marsh-orchid

Last seen: 2021

Limerick: Not Locally Rare or Scarce (see below*)

Native; perennial orchid. Fairly widespread in Ireland, particularly in the centre and W. *Although not Locally Rare or Scarce in Limerick, this species is an indicator of good seminatural habitats vulnerable to drainage or other disturbance. Mainly in northern limestone area; in fens, including upland poor fen, also in sedge meadow and wet grasslands. First recorded at Curragh Chase 1899.

For hybrids with *Dactylorhiza incarnata*, see *D.* x *carnea* above and *D.* x *kernerorum* below; and see below for two internationally rare subspecies of *D. incarnata*.

Site	Grid Ref.	Date	Recorder(s)
Palatine Bridge, E of (wet meadow,	R354394	29 May 2013	Reynolds, S., Reynolds, J.
SW of Rathkeale)	R355394	28 May 2017	
Doohyle Lough, NE of Rathkeale	R37494359	30 Jun 2010	Crushell, P.
Clogh fen, NE of Rathkeale	R3843	10 Jul 2005	Reynolds, S.
		9 Jun 2008	
Clogh fen, NE of Rathkeale	R3843	5 Jun 2009	Denholm, I., Bateman, R.
Ballinvirick fen, N of Cappagh	R3847	5 Jun 2009	Denholm, I., Bateman, R.
Ballinvirick (as 'Rathkeale' in DDb)	R386475	1 Jul 2009	Crushell, P.
Ballynort, NE of Askeaton (sedge meadow)	R361526	23 May 2006	Reynolds, S.
Deegerty fen, ENE of Askeaton	R3851	6 Jun 2008	Reynolds, S.
Deegerty fen	R3851	5 Jun 2009	Denholm, I., Bateman, R.
Bleach Lough, NW end	R4454	12 Jul 2005	Reynolds, S.
Lough Nagirra	R5343	20 Jun 1990	Curtis, T., Harrington, T.
Lough Nagirra	R5343	2015	Conaghan, J.
Raheen Industrial Estate, S of (near	c.R5451	1998	Goodwillie, R.N.
railway)			
Rootiagh, ENE of Patrickswell	R549515	5 Jun 2021	Murphy, P.
Loughmore Common, SE of	c.R5452	1990	Goodwillie, R.N.
Mungret (wet grassland)			
Loughmore Common	R5452	26 Jun 2006	Reynolds, S.
Loughmore Common	R5452	14 Jul 2010	Curtis, T.
Routagh fen, ESE of Ballysheedy	R5952	10 Jun 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Grageen Fen, Slievefelim Mtns	R7956 or	Jun 1997	Quirke, M.
	R7957		
Grageen Fen	R7957	27 Jul 2002	Reynolds, S., BSBI
Grageen Fen	R791570	14 Jul 2004	Reynolds, S.

Dactylorhiza incarnata subsp. coccinea (Pugsley) Soó

Early Marsh-orchid, subspecies

Internationally Rare: Endemic to Ireland and Britain (Rich 2020); Ireland holds more than

25% of the European population

Limerick: Locally Rare Last seen: 2010

Native; perennial orchid. Widely scattered in Ireland. Currently only known in Limerick at one site with wet grassland bordering a small turlough. Previously recorded at Doohyle Lough 1978 and plants approaching this subspecies in colour were seen at Clogh fen, NE of Rathkeale 2009.

Site	Grid Ref.	Date	Recorder(s)
Loughmore Common, NE of	R5452	14 Jul 2010	Curtis, T.
Patrickswell			

Dactylorhiza incarnata subsp. pulchella (Druce) Soó

Early Marsh-orchid, subspecies

Internationally Rare: Endemic to Ireland and Britain (Rich 2020); Ireland holds more than

25% of the European population

Limerick: Locally Scarce Last seen: 2021

Native; perennial orchid. Widely scattered in Ireland, mainly in W half. In fens in Limerick, including upland poor fen; also in wet grasslands. Previously recorded at Doohyle Lough 1978.

Site	Grid Ref.	Date	Recorder(s)
Palatine Bridge, E of (wet meadow,	R354394	28 May 2017	Reynolds, S., Reynolds, J.
SW of Rathkeale)	R355394		
Clogh fen, NE of Rathkeale	R3843	5 Jun 2009	Denholm, I., Bateman, R.
Ballinvirick fen, N of Cappagh	R3847	5 Jun 2009	Denholm, I., Bateman, R.
Rootiagh, ENE of Patrickswell	R549515	22 Jun 2021	Reynolds, S. et al.
(wet grassland on peaty soil)			
Loughmore Common, NE of	R5452	14 Jul 2010	Curtis, T.
Patrickswell			
Loughmore Common	c.R544529	9 Jul 2021	Quirke, M., Murphy, P.,
			Harrington, T.
Grageen Fen, Slievefelim Mtns	R791570	14 Jul 2004	Reynolds, S.

Dactylorhiza x kernerorum (Soó) Soó (*D. fuchsii x D. incarnata*)

Common Spotted-orchid x Early Marsh-orchid

Nationally Scarce

Limerick: Locally Scarce Last seen: 2010

Native hybrid; perennial orchid. Widely scattered in Ireland. At three fen sites in northern limestone area of Limerick, also in wet grassland bordering turlough at Loughmore Common near Limerick city; in all places with both parents. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Clogh fen, NE of Rathkeale	R3843	5 Jun 2009	Denholm, I., Bateman, R.
Ballinvirick fen, N of Cappagh	R3847	5 Jun 2009	Denholm, I., Bateman, R.
Deegerty fen, ENE of Askeaton	R3851	5 Jun 2009	Denholm, I., Bateman, R.
Loughmore Common, NE of	R5452	14 Jul 2010	Curtis, T.
Patrickswell			

Dactylorhiza kerryensis (Wilmott) P.F. Hunt & Summerh. (*D. majalis* subsp.

occidentalis, D. occidentalis)

Irish Marsh-orchid

Internationally Rare: Endemic to Ireland

Limerick: Locally Scarce

Last seen: 2021

Native; perennial orchid. Mainly in S and W of Ireland, widely scattered elsewhere. Scattered in Limerick in a variety of habitats including calcareous grassland, unimproved wet meadow by River Shannon, rushy field, wet slope with *Equisetum palustre* (Marsh Horsetail) and low roadside bank with other orchids. Earlier Limerick records cannot be equated reliably with this species.

See above for Limerick records of *Dactylorhiza fuchsii* (Common Spotted-orchid) x *D. kerryensis* (Irish Marsh-orchid).

Site	Grid Ref.	Date	Recorder(s)
Cloonlahard Bridge, just S of	R183442	29 May 2017	Reynolds, S., Reynolds, J.
(unimproved grass verge)			
Aughinish Island (calcareous	R283528	5 Jun 2009	Denholm, I., Bateman, R.
grassland and in broken limestone)	R288528		
Aughinish Island	R283526	Jun 2013	Denholm, I., Bateman, R.
	R288528		
Barrigone, near quarry (wet	R2950	Jun 2013	Denholm, I., Bateman, R.
depression)			
Lacka, N of Castleconnell	R6664	May 2021	Hardiman, J.
(unimproved wet meadow)			
Coolready, SE of O'Briensbridge	R67976482	31 May 2014	Reynolds, S.
(rushy field)			
Pallas Grean, SE of (low bank by	R779452	25 May 2009	Reynolds, S.
main road)			
Pallas Grean, SE of (over 250	R77954521	Jun 2013	Denholm, I., Bateman, R.
plants)			
Pallas Grean, SE of (c.80 plants)	R77964522	29 May 2019	Fogarty, J.
Doon, NW of (wet slope)	R80235374	31 May 2014	Reynolds, S.

Dactylorhiza majalis subsp. occidentalis, see Dactylorhiza kerryensis

Dactylorhiza majalis subsp. traunsteinerioides,

see Dactylorhiza traunsteinerioides

Dactylorhiza occidentalis, see Dactylorhiza kerryensis

Dactylorhiza traunsteineri, see Dactylorhiza traunsteinerioides

Dactylorhiza traunsteinerioides (Pugsley) R.M. Bateman & Denholm

(D. traunsteineri, D. majalis subsp. traunsteinerioides) Narrow-leaved Marsh-orchid

Internationally Rare: Endemic to Ireland and Britain (Rich 2020)

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Locally Rare Last seen: 1998

Native; perennial orchid. Widely scattered in Ireland, mainly across the middle, also in W and NW. In fens in Limerick; vulnerable due to drainage works. Possibly also in upland poor fen in Slievefelim Mtns, at Grageen Fen. Only earlier record is from fen at Deegerty/Ballyvogue 1974.

Site	Grid Ref.	Date	Recorder(s)
Ballyvogue, ENE of Askeaton	R3851	17 Jun 1988	Reynolds, S.
Ballynakill, E of Kilfinny	R469405	1998	Curtis, T., Harrington, T.

Descurainia sophia (L.) Webb ex Prantl

Flixweed

Last seen: 1996

Nationally Rare since 2000 Limerick: Locally Scarce

Archaeophyte; annual or biennial. Scattered sites mainly in S of Ireland pre-2000. Originating from imported animal feed (including grain) in Limerick, this species occurred as a casual from late 1980s to mid-1990s mainly at Foynes Port and along roadsides leading away from Foynes where feed had spilled from trucks. Records elsewhere in Ireland during this period had a similar origin. First recorded at a quarry in Limerick city 1897.

A summary of records is given below.

Site	Grid Ref.	Date	Recorder(s)
Foynes, roadsides W of	R14, R25	1989, 1991	Reynolds, S.
Foynes Port	R2551	1988-1996	Reynolds, S.
Foynes, roadsides S and E of	R24, R25	1989-1996	Reynolds, S.
Askeaton/near Askeaton	R3450	1990	Reynolds, S.
	R3550		
Castletown, NE of	R4632	1990	Reynolds, S.
Bruree, W of	R5031	1990, 1995	Reynolds, S.
Limerick city, SW side	R5553	1990	Reynolds, S.
Limerick city, Dock Road	R5656	1989	Reynolds, S.
Herbertstown, S of	R6840	1989	Reynolds, S.

Desmazeria marina, see Catapodium marinum

Drosera anglica Huds.

Great Sundew

Limerick: Locally Rare Last seen: 2021

Native; insectivorous perennial. Widespread in boggy ground in the midlands, W and NW of Ireland, also in SW and NE. In wet bogs in western uplands of Limerick and raised bog in NE Limerick. First recorded at Castleconnell Bog 1900, also Lisnagry 1901 and mountain bog at Knockfinnisk 1904.

Site	Grid Ref.	Date	Recorder(s)
Glenbaun-Knockfinnisk bog, WNW	R1939	12 Aug 1988	Reynolds, S.
of Carrigkerry			
Glenbaun bog	R1939	15 Jul 1989	Reynolds, S., BSBI
Glenbaun bog	R1939	18 Aug 1997	Reynolds, S.
Glenbaun bog	R199394	22 Jul 2005	Reynolds, S.
Glenbaun bog	R1939	1 Jul 2011	Reynolds, S.
Glenbaun bog	R19933945	12 Jul 2021	Reynolds, S., Reynolds, J.
	R19943946		
Scotland Bog, NE of Carrigkerry	R22483948	9 Aug 2011	Reynolds, S.
Castleconnell Bog	R6762	9 Jul 2013	Reynolds, S.
(raised bog)	R6763		
Castleconnell Bog, S of Gooig	R6763	26 Jun 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Castleconnell Bog, W side	R6863	12 Aug 2002	Rippey, I.
Castleconnell Bog, W side	R68126366	10 Jul 2014	Reynolds, S.

Drosera intermedia Hayne

Oblong-leaved Sundew

Limerick: Locally Rare Last seen: 2021

Native; insectivorous perennial. Widespread in boggy ground in SW and W of Ireland, also in NW and widely scattered elsewhere. In a wet bog in western uplands of Limerick and raised bog in NE Limerick. First recorded at Castleconnell Bog near county boundary with Tipperary 1944/1945.

Site	Grid Ref.	Date	Recorder(s)
Moyreen Bog, S of Ballyhahill	R1942	29 Jun 2006	Reynolds, S.
Moyreen Bog	R19854288	9 Aug 2011	Reynolds, S.
Castleconnell Bog, W side	R6863	8 Jul 1998	Reynolds, S.
Castleconnell Bog, W side	R6864	22 Jul 2014	Reynolds, S.
Castleconnell Bog, W side	R68246412	6 Sep 2021	Reynolds, S., Reynolds, J.
(wet peat cuttings)	R68256411		

Drymochloa sylvatica (Pollich) Holub (*Festuca altissima*)

Wood Fescue

Limerick: Extinct Last seen: 1905

Native; perennial grass. Mainly across N of Ireland, also scattered in E and S. Formerly known in woodland at Glenstal (near Murroe) in E Limerick, where looked for and not refound. Apparently also at Mount Trenchard in W Limerick, but no details for that old record.

Site	Grid Ref.	Date	Recorder(s)
Glenstal, in the glen	R75	12 Jun 1905	Phillips, R.A.

Dryopteris aemula (Aiton) Kuntze

Hay-scented Buckler-fern

Internationally Rare: Ireland holds more than 25% of the European population

Limerick: Not Locally Rare or Scarce

Last seen: 2020

Native fern. Widespread across S, W and N of Ireland, absent from much of the middle. Mainly on higher ground in SE and NE of Limerick; on conglomerate tors and in crevices, also on damp rock faces, banks in woodland and other well-shaded banks. First recorded in Bilboa River glen and a copse near Doon 1900.

The following records indicate the range of sites where *Dryopteris aemula* is found in the county, with latest dates.

Site	Grid Ref.	Date	Recorder(s)
Acres, SSE of Mountcollins (wood	R169170	1 Sep 2013	Reynolds, S.
by River Feale)			
Templeglentan West	R193248	15 Aug 2007	Power, E., Perrin, P.
Barnagh Hill, N of	R2232	18 Apr 2017	Reynolds, S., Reynolds, J.
Ballinruane, W of Castletown	R3930	20 Jun 2005	Reynolds, S.
Mountrussell Wood (N side	R614193	2 Aug 2007	Perrin, P., Moran, P.
Ballyhoura Mtns)			
Ballintlea Wood (S side Ballyhoura	R638150	6 Sep 2007	Perrin, P., Moran, P.
Mtns)			
Flynn's Rock, Ballyhoura Mtns	R637188	6 Oct 2012	Reynolds, S.
Black Rock (S of), Ballyhoura Mtns	R6417	16 Aug 2008	Reynolds, S., BSBI
Black Rock, Ballyhoura Mtns	R644185	16 Aug 2005	Reynolds, S.
Black Rock, bluffs below	R643188	24 Aug 2010	Reynolds, S.
Long Mtn, N end	R6517	8 Sep 2007	Reynolds, S.
Greenwood/Glenosheen	R6518	31 Aug 2009	Reynolds, S.
Coolfree Mtn, W side	R6615	13 Oct 2008	Reynolds, S.
Carrigeenamronety	R6915	28 Jun 2006	Reynolds, S., Conaghan, J.
Carrighenry, N side	R7216	13 Sep 2007	Reynolds, S.
Kilfinnane, E of (S side Slievereagh)	R709232	29 Aug 2005	Reynolds, S.
Cappercullen Glen, Glenstal Abbey	R7356	25 Apr 2016	Quirke, M., Murphy, P.,
			Harrington, T.

Cappencullen Glen	R7357	11 Nov 1995	Kingston, N.
Clare Glens	R738593	16 May 2007	Barron, S., Delaney, A.
Clare Glens (bank by path in wood)	<i>c</i> .R739590	29 Aug 2010	Reynolds, S.
Clare Glens	R7459	11 Nov 1995	Kingston, N.
Slievefelim Mtns, W end	R7657	23 Oct 2005	Reynolds, S,
Glenstal townland, NE of Murroe	R7657	12 May 2020	Quirke, M.
Slievefelim Mtns	R7757	May 2020	Quirke, M.
	R7859		
	R7959		
Glenacurrane, N of Mitchelstown	R808171	24 Jul 2007	McNutt, K., Power, E.
Glenacurrane (woodland)	R8116	4 May 2017	Reynolds, S., Reynolds, J.
Combaun Wood, SW Galty Mtns	R8218	8 Sep 2014	Reynolds, S.
Kilbeheny, NNE of (near Behanagh	R8619	8 Jun 2014	Reynolds, S., BSBI
River)			
Kilbeheny, NE of (near Attychraan	R8818	2 Sep 2005	Reynolds, S.
River)			
Pigeonrock River, S side Galty Mtns	R8520	17 Aug 2008	Reynolds, S., BSBI

Dryopteris affinis subsp. **kerryensis** (Fraser-Jenk.) Fraser-Jenk. (*D. kerryensis*)

Golden-scaled Male-fern, subspecies

Internationally Rare: Endemic to Ireland and Britain (Rich 2020); Ireland holds more than

25% of the European population

Nationally Scarce

Limerick: Locally Rare Last seen: 2018

Native fern. Currently known only in SW Ireland. Confirmed Limerick records are from woodland at Curragh Chase.

This subspecies is listed in Stace's *Flora* (2010) 3rd edition and in the *Ireland Red List* (Wyse Jackson *et al.* 2016) as an endemic, but it is included in much more common and widespread *Dryopteris affinis* subsp. *affinis* in Stace's *Flora* (2019) 4th edition. It may well be reevaluated and re-assigned again.

Site	Grid Ref.	Date	Recorder(s)
Curragh Chase	R4150	2017	Dennison, J.
(woodland just SSE of crossroads)		28 Oct 2018	

Dryopteris carthusiana (Vill.) H.P. Fuchs

Narrow Buckler-fern

Limerick: Locally Scarce Last seen: 2019

Native fern. Widespread in the midlands and N of Ireland, widely scattered elsewhere. Mainly in E Limerick; sparingly in raised bogs and other boggy ground. Vulnerable to habitat loss due to drainage and peat cutting. First recorded in large bog between Cappamore and Doon (Cooga Bog) 1900 (and still there), also Castleconnell Bog 1904 (not refound).

Site	Grid Ref.	Date	Recorder(s)
Knockdown, E of (wet bog)	R1740	29 Jun 2019	Reynolds, S., Reynolds, J.
Clooncunna North, SE of	R647539	23 Jul 2019	Reynolds, S. et al.
Ballysimon (boggy ground)			
Griston Bog, SSW of Ballylanders	R7523	19 Aug 1998	Reynolds, S.
		6 Sep 2005	
Cappanahanagh, NNW of Murroe	R707578	6 Jul 2007	Perrin, P. et al.
	R708580		
Dromsallagh Bog, just NW of	R7552	4 Apr 1997	Reynolds, S., Quirke, M.
Cappamore	R7652		
Dromsallagh Bog	R7552	31 Jul 2005	Reynolds, S.
	R7652		
Cooga Bog, WNW of Doon	R8050	11 Jun 1998	Reynolds, S.
Cooga Bog	R7950	9 Jul 2019	Reynolds, S., Reynolds, J.,
	R8050		Quirke, M., Murphy, P.

Dryopteris kerryensis, see Dryopteris affinis subsp. kerryensis

Echium vulgare L.

Viper's-bugloss

Native in Ireland, mainly in E; only a rare garden escape or casual in Limerick.

Eleocharis acicularis (L.) Roem. & Schult.

Needle Spike-rush

Limerick: Extinct Last seen: 1959

Native; rhizomatous perennial, at water's edge or aquatic. Across the middle of Ireland, in Shannon catchment, Lough Erne and more local elsewhere. First recorded in Limerick Canal 1904, but there has been much disturbance in recent years due to clearing of vegetation and it has not been refound. Last seen at O'Briensbridge 1959, probably at edge of River Shannon. This species was noted for sale as an oxygenating or pond plant in a Limerick garden centre.

Site	Grid Ref.	Date	Recorder(s)
Limerick Canal (abundant)	R55	Jul 1904	Phillips, R.A.
Castleconnell (in or by River	R66	Jul 1905	Phillips, R.A.
Shannon?)			
O'Briensbridge (in or by River	R66	1959	Unknown
Shannon?)			

Eleocharis multicaulis (Sm.) Desv.

Many-stalked Spike-rush

Limerick: Locally Rare Last seen: 2018

Native; tufted perennial. Widespread in peaty ground particularly in SW, W and NW of Ireland, and absent from much of the centre. Praeger put this species on the 'wanted list' for Limerick in 1901, but it was not recorded until 2005 in cut-over blanket bog in the western uplands; also found on a wet peaty slope in SE Limerick.

Site	Grid Ref.	Date	Recorder(s)
Dromreask bog, S of Glin (wet cutting)	R12353970	21 Jul 2005	Reynolds, S.
Dromreask bog (on peat)	R11963959	20 Sep 2009	Reynolds, S.
Dromreask bog	R12333973	19 Jul 2010	Reynolds, S.
Coolavehy, SE Coolfree Mtn	R680153	30 Aug 2018	Reynolds, S., Reynolds, J.

Eleocharis quinqueflora (Hartmann) O. Schwarz

Few-flowered Spike-rush

Limerick: Locally Rare Last seen: 2011

Native; perennial. Fairly widespread in N half of Ireland and rare in S, in a variety of habitats from base-rich fens to upper part of saltmarshes. In Limerick in peaty ground bordering a swamp and at edge of a limestone lake. Only reliable earlier record is from brackish marsh by pond near Poulaweala Creek 1974.

Site	Grid Ref.	Date	Recorder(s)
Ballinvirick fen, N of Cappagh	R3847	20 Jul 1987	Reynolds, S.
(just SE of crossroads)			
Bleach Lough, NW end (dry fen	R4454	12 Jul 2005	Reynolds, S.
near lake edge)			
Bleach Lough, NW end (marl lake	R4454	13 Jul 2011	Reynolds, S.
edge)			

Eleocharis uniglumis (Link) Schult.

Slender Spike-rush

Limerick: Locally Scarce Last seen: 2021

Native; perennial. Scattered around the coast of Ireland, more rarely inland. In Limerick mainly by and near the Shannon Estuary; in brackish habitats including a pond and stony-muddy shores by the upper Shannon Estuary, also in a turlough area. First recorded at Limerick 1899 and on tidal foreshore of Shannon near Limerick city in early 1900s; also margin of brackish pond near Poulaweala Creek 1974 and saltmarsh on Foynes Island 1984.

Site	Grid Ref.	Date	Recorder(s)
Poulaweala Creek, just E of (pond)	R291524	20 Jul 2010	Reynolds, S.
Goleen Bridge, E side	R3353	15 Jul 1989	Reynolds, S., BSBI
Loughmore Common	c.R5452	1990	Goodwillie, R.N.

Loughmore Common (near turlough)	R5452	26 Jul 2006	Reynolds, S.
Loughmore Common	<i>c</i> .R544529	9 Jul 2021	Quirke, M., Murphy, P., Harrington, T.
Barrington's Pier, beside	R557565	25 Jul 2010	Reynolds, S.
Barrington's Pier, beside	R557565	13 Jul 2021	Reynolds, S., Reynolds, J.
Shannon Bridge, Limerick city	R5656	12 Aug 2006 25 Jul 2010	Reynolds, S.
Clancy's Strand, Limerick city (by tidal River Shannon)	R5757	12 Aug 2006	Reynolds, S.

Eleogiton fluitans (L.) Link (*Isolepis fluitans*)

Floating Club-rush

Limerick: Locally Rare Last seen: 2019

Native; stoloniferous perennial, stems usually floating. Mainly SW, W and NW of Ireland, scattered elsewhere. In Limerick at edge of shallow water in a fen and in a deep channel in former gravel works. First recorded in swamp near Loghill 1904, and described as frequent off the limestone in Barony of Shanid in early 1900s, but not found recently in bog drains in western uplands.

Site	Grid Ref.	Date	Recorder(s)
Mornane Lough, ENE of Askeaton	R3852	19 Aug 1996	Reynolds, S.
(fen area)			
Clooncunna North, SE of	R648537	23 Jul 2019	Reynolds, S. et al.
Ballysimon (in deep channel)			

X Elyhordeum langei (K. Richt.) Melderis (Elymus repens x Hordeum secalinum;

X Elytrordeum langei)

Common Couch x Meadow Barley

Nationally Rare

Limerick: Locally Rare Last seen: 2017

Native; intergeneric grass hybrid. First noticed near Ringmoylan Quay by the Shannon Estuary in 1988, growing in grassland at edge of saltmarsh with parents *Elymus repens* (Common Couch) and protected species *Hordeum secalinum* (Meadow Barley); specimen collected in 1990 was confirmed by T.A. Cope at Kew; and refound 2017. Ringmoylan remains the only site for this rare hybrid in Ireland.

Site	Grid Ref.	Date	Recorder(s)
Ringmoylan Quay, W of	R4057	24 Sep 1988	Reynolds, S.
Ringmoylan Quay, W of	R4057	1 Sep 1990	Reynolds, S., Rich, T.C.G., Brady, C.M.
Ringmoylan Quay, W of	R40475765	22 Jul 2017	Wilcox, M.P., Tregale, B.A.
(as 'Ballymacdonnell')	R40505766		

Elymus athericus (Link) Kerguélen (Elytrigia atherica)

Sea Couch

Limerick: Locally Scarce Last seen: 2021

Native; perennial grass. Mainly along E and S coasts of Ireland, and widely scattered on W coast. Locally common in Limerick on and near Aughinish Island by the Shannon Estuary and creeks off the estuary; usually forming dense stands in upper part of saltmarshes; also further up the estuary at mouth of River Deel and Ringmoylan Quay. This species can be confused with robust *Elymus repens* (Common Couch) at the top of stony shores. First recorded on Shannon shore near Foynes 1903 and at Robertstown pre-1907.

Site	Grid Ref.	Date	Recorder(s)
Robertstown Creek, E side	R2751	13 Aug 2006	Reynolds, S.
Aughinish Island, E side (saltmarsh)	R2852	25 Aug 1996	Reynolds, S., BSBI
Aughinish Island, E side	R283523	16 Jun 2010	Reynolds, S.
Aughinish Island, E side	R2852	29 Jun 2021	Quirke, M., Murphy, P.,
			Harrington, T.
Aughinish Island near Hunt's Lough	R2953	17 Jul 2004	Reynolds, S.
(at edge of estuary)		4 Sep 2010	
Aughinish island near Hunt's Lough	R290531	15 Sep 2011	Reynolds, S.
Aughinish Island near Hunt's Lough	R290530	8 Nov 2011	Reynolds, S.
(in grassland by path)		29 Jun 2021	
Poulaweala Creek, E side	R2952	9 Oct 1999	Reynolds, S.
		13 Apr 2010	
		15 Sep 2011	
Poulaweala Creek, E side	R2952	15 Sep 2019	Reynolds, S., Reynolds, J.
Poulaweala Creek, E side (near	R2953	13 Jul 2012	Reynolds, S.
mouth of creek)			
Ballynash W and WNW of Goleen	R330531	21 Sep 2021	Quirke, M., Murphy, P.,
Bridge	R329533		Harrington, T.
Ringmoylan Quay	R40145770	22 Jul 2017	Wilcox, M.P., Tregale, B.A.

Elymus caninus (L.) L.

Bearded Couch

Limerick: Locally Rare Last seen: 2021

Native; perennial grass. Mainly in NE of Ireland, scattered elsewhere. Only found sparingly at two Limerick sites, at edges of woodland in Newcastle West and by River Shannon on N side of Limerick city. An early 1900s record from Poultallin Point near Foynes is doubtful.

Site	Grid Ref.	Date	Recorder(s)
Castle Demesne, Newcastle West	R27073379	19 Aug 2007	Reynolds, S.
Castle Demesne, Newcastle West	R27063376	12 Jul 2021	Reynolds, S., Reynolds, J.
(on old tree stump at ditch edge)			
Athlunkard Bridge, NW of (on old	R58605928	13 Jul 2021	Reynolds, S., Reynolds, J.
tree stump by River Shannon)			

Elymus farctus, see Elymus junceiformis

Elymus junceiformis (Á. & D. Löve) Hand & Buttler (E. farctus; Elytrigia juncea)

Sand Couch

This native grass species is characteristically found on sandy seashores around Ireland. Although there is a 1907 record from Sturamus Island, off Foynes Island in the Shannon Estuary, it is now considered doubtful.

Elytrigia atherica, see Elymus athericus

Elytrigia juncea, see Elymus junceiformis

X Elytrordeum langei, see X Elyhordeum langei

Empetrum nigrum L

Crowberry

Last seen: 2020

Limerick: Locally Scarce

Native; low-growing evergreen shrub. Mainly on mountains in W and N of Ireland, scattered elsewhere. Ballyhoura, Slievefelim and Galty Mtns in Limerick; in blanket bog, heathy

ground and on eroded peat, also in upland poor fen; occurring sparingly or in denser patches. First recorded in Galty Mtns 1944, as abundant between Lyracappul and Carrignabinnia.

The most recent record for each site is given below.

Site	Grid Ref.	Date	Recorder(s)
Carron Mtn, Ballyhoura Mtns	R6217	15 Jul 2020	Hodd, R.L.
Black Rock, Ballyhoura Mtns	R6318	7 Jul 2020	Hodd, R.L.
Seefin Mtn, in saddle just W of	R6417	8 Sep 2007	Reynolds, S.
Slievefelim Mtns	R784575	29 Sep 2015	Quirke, M.
Slievefelim Mtns, N slope	R7858	30 Dec 2018	Quirke, M.
Grageen Bog, Slievefelim Mtns	R7856	31 Jul 2018	Reynolds, S. et al.
(just W of Grageen Fen)			
Grageen Fen (upland poor fen)	R7956	31 Jul 2018	Reynolds, S. et al.
Grageen Bog (just S of fen)	R7956	19 Sep 2009	Reynolds, S.
Temple Hill, Galty Mtns	R8321	30 Aug 2010	Reynolds, S.
Lyracappul-Carrignabinnia ridge	R8423	25 Jul 2017	Quirke, M., Murphy, P.
Blackrock crags, Knockaterriff	R8522	17 Aug 2017	Quirke, M., Murphy, P.
Carrignabinnia	R8522	21 Aug 2004	Reynolds, S., Reynolds, J.,
(SE shoulder and summit)	R8523		Sweeney, P.
Slievecushnabinnia, S side	R8524	10 Jul 2018	Quirke, M., Murphy, P.,
	R8624		Harrington, T.
Galtymore	R8723	27 Aug 2005	Reynolds, S., Reynolds, J.
(summit and saddle E of summit)	R8823		

Epipactis helleborine (L.) Crantz

Broad-leaved Helleborine

Limerick: Locally Scarce Last seen: 2021

Native; perennial orchid. Fairly widespread in Ireland, particularly in W, NW and NE. Mainly in broad-leaved woodlands in Limerick, in small numbers. First recorded in woods at Foynes 1885/1886, also Curragh Chase 1899, Mount Trenchard W of Foynes 1903 and Foynes Island 1953.

Site	Grid Ref.	Date	Recorder(s)
Foynes Island	R2453	13 Aug 1987	Reynolds, S.
Loughmore Common, NE of	R5452	14 Jul 2010	Curtis, T.
Patrickswell			
Shannon Fields, near (hedgerow)	R5958	26 Aug 1997	Reynolds, S.
University of Limerick (wood by	R6158	11 Sep 2005	Reynolds, S.
millrace)			
Newgarden North (SW of	R647613	5 Jul 2007	Perrin, P., Moran, P.
Castleconnell)			
Bilboa Bridge, near	R8151	25 Jul 1990	Reynolds, S.
Bilboa Bridge, wood edge just E of	R8151	28 Jun 2007	Reynolds, S.
Gortnageragh River, near	c.R826526	c. Aug 2014	Rippey, I.
(near entrance to quarry, NE of			
Bilboa Bridge)			
Bilboa Bridge, NE of	R82625267	1 Sep 2021	Reynolds, S., Reynolds, J.
(grass verge and roadside bank)	R82645269		
Gortnageragh River valley	R830537	18 Sep 2007	McNutt, K., Moran, P.
(Bilboa River valley? See grid ref.)			

Epipactis palustris (L.) Crantz

Marsh Helleborine

Last seen: 2021

Wildlife (Northern Ireland) Order 1985, amended 2011 Limerick: Not Locally Rare or Scarce (see below*)

Native; perennial orchid. Widespread across the middle of Ireland, more local elsewhere. *Although not Locally Rare or Scarce in Limerick, this species is usually an indicator of good semi-natural habitats. In northern limestone area of Limerick in fens and by limestone lakes, also in unimproved wet grasslands; occasional elsewhere. Vulnerable due to degradation of habitat, particularly drainage works. First recorded at Castleconnell 1897 and 'Foynes' 1902, probably Barrigone area just E of Foynes.

A selection of the better sites is given here, with latest date when *Epipactis palustris* found.

Site	Grid Ref.	Date	Recorder(s)
Barrigone, N of old schoolhouse	R2951	13 Jul 1989	Reynolds, S.
Doohyle Lough, W side	R370435	10 Aug 2015	Hunt, G.
Doohyle Lough, N side	R37274376	5 Jul 2015	Reynolds, S.
Cappagh village, fen N of	R3745	28 Jul 1987	Jones, E., Reynolds, S.,
			OBrien, M.V.
Gorteenamrock fen, N end	R3748	13 Jul 2005	Reynolds, S.

Clogh fen, NE of Rathkeale	R3843	10 Jul 2005	Reynolds, S.
Ballinvirick fen, N of Cappagh	R3847	4 Jun 2009	Reynolds, S.
Mornane Lough, ENE of Askeaton	R3852	21 Jul 2019	Reynolds, S., Reynolds, J.
Blue Lough, N end	R4051	18 Jul 2018	Reynolds, S. et al.
Glennameade fen, SE of	R4253	23 Jul 2004	Reynolds, S.
Pallaskenry			
Kilbreedy Loughs, N end of more	R4250	7 Sep 2007	Reynolds, S.
westerly lake	R4350		
Kilbreedy Loughs (not N end)	R4350	17 Jul 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Dromore Lough, just E of	R4354	12 Jul 2005	Reynolds, S.
Bleach Lough, NW end	R4454	12 Jul 2005	Reynolds, S.
Lough Nagirra	R5343	2015	Conaghan, J.
Friarstown, W of (fen)	R572499	22 Jul 2014	Reynolds, S.
Rootiagh, ENE of Patrickswell	R545513	2 Jul 2019	Reynolds, S., Reynolds, J.
(wet grassland on peaty soil)			
Loughmore Common	<i>c</i> .R544529	9 Jul 2021	Quirke, M., Murphy, P.,
			Harringon, T.
Routagh fen, ESE of Ballysheedy	R59745273	18 Jul 2017	Reynolds, S. et al.
Routagh fen	R5952	10 Jun 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Red Bog, just S of Lough Gur	R6439	29 Aug 2017	Reynolds, S. et al.
(swamp)			

Equisetum hyemale L.

Rough Horsetail

Limerick: Locally Rare Last seen: 2015

Native; rhizomatous perennial. Mainly across N of Ireland, scattered elsewhere. Only known at one site in Limerick, on bank by River Shannon. One plant noted 1998, and several stands along the hedgerow and one in woodland 2015. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Ballyvollane, WNW of Lisnagry (by	R6359	9 Jul 1998	Reynolds, S.
River Shannon)			
Ballyvollane	R6359	25 Mar 2015	Goodwillie, R.N.

Equisetum x litorale Kühlew. ex Rupr. (*E. fluviatile x E. arvense*) **Shore Horsetail**

Limerick: Locally Scarce Last seen: 2010

Native hybrid; perennial. Fairly widespread in Ireland. Scattered sites in Limerick, usually in damp habitats; likely to occur more widely as both parents are common in the county. This hybrid can be found in the absence of one or both parents. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Broadford, N of	R3322	3 Jul 2005	O'Mahony, T.
(along a roadside ditch)			

Ballinleeny	R4933	1 Jul 2010	O'Mahony, T.
(swampy hollow in old quarry)			
Lough Nagirra, beside	R5343	1993	O'Mahony, T.
King's Island, Limerick city	R5758	2007	Goodwillie, R.N.
(edge of drainage ditches)			
Lisnagry, NW of	R6359	6 Jun 2000	O'Mahony, T.
(bank of River Shannon)			

Equisetum variegatum Schleich. ex F. Weber & D. Mohr Variegated Horsetail

Limerick: Locally Scarce Last seen: 2021

Native; rhizomatous perennial. Fairly widespread across the middle of Ireland and towards NW, widely scattered elsewhere. In fens and damp grassland in northern limestone area of Limerick; also in a sand quarry. First and only earlier record is from Barrigone 'Bog' 1903.

Site	Grid Ref.	Date	Recorder(s)
Barrigone, N of old schoolhouse	R2951	13 Jul 1989	Reynolds, S.
(damp field)			
Clogh fen, NE of Rathkeale	R3843	9 Jun 2008	Reynolds, S.
Clogh fen (at poached edge)	R38304317	31 Aug 2021	Reynolds, S., Reynolds, J.
Deegerty fen, ENE of Askeaton	R3851	6 Jun 2008	Reynolds, S.
Mornane Lough, ENE of Askeaton	R38505235	1 Sep 2021	Reynolds, S., Reynolds, J.
Dereen quarry, S of	R666661	24 Jul 2012	Goodwillie, R.N.
O'Briensbridge-Montpelier			

Eriophorum latifolium Hoppe

Broad-leaved Cottongrass

Limerick: Locally Rare Last seen: 2017

Native; loosely tufted perennial. Scattered across the middle and parts of W of Ireland, absent from S. Only one known site in Limerick, in a fen just S of Limerick city. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Routagh fen, ESE of Ballysheedy	R5952	18 Jul 2017	Reynolds, S., Reynolds, J.,
			Quirke, M., Murphy, P.,
			Harrington, T.

Erodium cicutarium (L.) L'Hér.

Common Stork's-bill

Limerick: Locally Rare Last seen: 2021

Native; annual. Scattered around the Irish coast, more rarely inland. A rare casual in Limerick. First and only earlier record is from Carey's Road, Limerick city 1897, considered a probable introduction there.

Site	Grid Ref.	Date	Recorder(s)
Foynes Port	R2551	25 Aug 1991	Reynolds, S.
Ballykeeffe, NE of Mungret (weedy field)	R548552	11 Sep 1999	Reynolds, S., Gabbett, M.
Raheen, SW of Limerick city (pavement edge)	R559521	22 Jun 2021	Murphy, P.

Erophila glabrescens Jord.

Glabrous Whitlowgrass

Limerick: Locally Rare Last seen: 2019

Native; early-flowering annual. Widely scattered in Ireland; some records of *Erophila verna* s.l. may refer to this species, not separated from more widespread *E. verna* s.s. (Common Whitlowgrass). In Limerick in short grassland and open ground, sometimes forming dense patches and occurring with *E. verna* s.s. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Aughinish Island (calcareous grassland)	c.R2852	8 Mar 1997	Reynolds, S.
Knockderc, SE of Lough Gur	R6537	8 Mar 1997	Reynolds, S.
(roadside and track to quarry)	R6538		
Knockderc (track to quarry)	R6537	19 Apr 2019	Reynolds, S., Reynolds, J.
Knockderc (gravel quarry floor)	R6538	19 Apr 2019	Reynolds, S., Reynolds, J.
Lough Gur, near NE corner (short	R6441	8 Mar 1997	Reynolds, S.
grassland)			

Ervilia sylvatica (L.) Schur (Vicia sylvatica)

Wood Vetch

Nationally Scarce since 2000

Limerick: Extinct Last seen: 1902

Native; scrambling or climbing perennial. Scattered across N of Ireland, rare elsewhere. Not refound at its one woodland site near the Shannon Estuary.

Site	Grid Ref.	Date	Recorder(s)
Ringmoylan Wood	<i>c</i> .R4057	1885/1886	Stewart, S.A.
Ringmoylan (wood)	<i>c</i> .R4057	24 Jul 1902	O'Brien, R.D.

Erysimum cheiri (L.) Crantz (Cheiranthus cheiri)

Wallflower

Limerick: Locally Rare Last seen: 2020

Archaeophyte; usually perennial. Fairly widespread in Ireland, except towards NW. A relict of cultivation (usually yellow-flowered) on old stone walls and ruins in Limerick; long

established on city walls on King's Island in Limerick city. First recorded at Englishtown on King's Island 1898. Modern varieties tend to have larger flowers and more varied colours; records of such plants are not included here.

Site	Grid Ref.	Date	Recorder(s)
Rathkeale (ruined priory/abbey)	R3641	13 Jul 2005	Reynolds, S.
Rathkeale Abbey (ruin)	R3641	12 Apr 2019	Quirke, M., Murphy, P.,
			Harrington, T.
Askeaton	R3450	21 Mar 2019	Quirke, M., Murphy, P.,
			Harrington, T.
King's Island	R5757	17 Jun 2007	Reynolds, S.
King's Island, near King John's	R5757	19 Oct 2016	Quirke, M., Murphy, P.,
Castle			Harrington, T.
King's Island (old walls)	R5757	4 Aug 2020	Reynolds, S., Reynolds, J.,
			Quirke, M., Murphy, P.
King's Island	R5857	21 Jul 1992	Reynolds, S.

Euphorbia exigua L.

Dwarf Spurge

Nationally Scarce since 2000

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 2019

Archaeophyte; annual. Patchy distribution in Ireland; formerly more widespread in arable land in E half and midlands. A rare casual in Limerick, appearing where sandy soil had been disturbed beside former railway. First recorded at Foynes 1899, also in ploughed fields at Hollypark near Askeaton 1900.

Site	Grid Ref.	Date	Recorder(s)
Robertstown Creek, E of (shallow	R2850	1 Aug 2005	Reynolds, S.
limestone railway cutting)			
Robertstown Creek, E of	R2850	15 Jan 2019	Quirke, M., Murphy, P.,
			Harrington, T.
Askeaton, SW of (disused railway)	R3249	12 Sep 2015	Reynolds, S.
Askeaton, S of (disused railway)	R3349	12 Sep 2015	Reynolds, S.
Doohyle Lough, NW of (disused	R35354551	4 Sep 2015	Reynolds, S.
railway)	R35464541		

Euphrasia anglica, see Euphrasia officinalis subp. anglica

Euphrasia officinalis subsp. **anglica** (Pugsley) Silverside (*E. anglica*)

English Eyebright

Internationally Rare: Endemic to Ireland and Britain (Rich 2020)

Limerick: Extinct Last seen: 1903

Native; annual. Scattered in Ireland. This species needs specialist identification. Only one reliable old record for Limerick.

Site	Grid Ref.	Date	Recorder(s)
White River, W of Foynes	R1949	1 Jun 1903	Knowles, M.C.
(= Loghill)			

Euphrasia pseudokerneri Pugsley

Chalk Eyebright

Internationally Rare: Endemic to Ireland and Britain (Rich 2020)

Nationally Rare

Limerick: Extinct Last seen: 1900

Native; annual. Few sites in Ireland. This species needs specialist identification. Only one reliable old record for Limerick, probably in calcareous grassland with outcropping limestone at Mullagh SE of Foynes.

Site	Grid Ref.	Date	Recorder(s)
Mullagh (NW of Creeves Cross; SE	R2846 or	16 Aug 1900	Praeger, R.L.
of Foynes)	R2946		

Euphrasia salisburgensis Funck

Irish Eyebright

Limerick: Locally Scarce Last seen: 2021

Native; annual. Mainly in W and NW of Ireland. In Limerick only in northern limestone area; in dry calcareous grassland, also around and on outcropping limestone; locally abundant. First recorded at Askeaton Abbey 1900, abundant along rocky bank of River Deel there, and abundant on crags at Mullagh SE of Foynes 1900.

Irish plants are referable to the endemic var. *hibernica* (Wyse Jackson *et al.* 2016).

Site	Grid Ref.	Date	Recorder(s)
Mullagh, NW of Creeves Cross	R2846	29 Aug 1997	Reynolds, S.
Mullagh	R2847	14 Aug 2006	Reynolds, S.
Ellaha, NW of Creeves Cross	R2848	28 Jun 1987	Reynolds, S.
(to E of road)			
Ellaha	R2848	16 Jul 1989	Reynolds, S., BSBI
Ellaha	R2848	10 Aug 2009	Reynolds, S.
Ardaneer, near Foynes	R2650	18 Jul 2004	Reynolds, S.
Robertstown Creek (shallow	R2850	1 Aug 2005	Reynolds, S.
railway cutting)			
Aughinish Island	R2852	22 Jul 2008	Seawright, J.
Barrigone, near quarry	R2950	25 Aug 1996	Reynolds, S., BSBI
Barrigone, near quarry	R2950	2 Aug 2014	Reynolds, S.
Barrigone, N of old schoolhouse	R2951	13 Jul 1989	Reynolds, S.

Morgans North (E of Poulaweala	R2952	10 Aug 2009	Reynolds, S.
Creek)			
Morgans North	R2952	29 Jun 2021	Quirke, M., Murphy, P.,
			Harrington, T.
Morgans North	R2953	22 Aug 2008	Reynolds, S.
Cragmore, SE of Askeaton	R3648	20 Jul 1987	Reynolds, S.
Ballinvirick House, NW of (old	R3847	30 Aug 1992	FitzGerald, R.
quarry ledges)			
Ballynort, NE of Askeaton	R3652	6 Sep 1996	Reynolds, S.
Kilbreedy Loughs (N end of more	R4350	10 Aug 2004	Reynolds, S.
westerly lake, on outcrop)			

Festuca altissima, see Drymochloa sylvatica

Festuca rubra subsp. litoralis (G. Mey.) Auquier

Red Fescue, subspecies

Nationally Rare

Limerick: Locally Rare Last seen: 1988

Native grass subspecies; perennial. Few sites in Ireland, including in Cork and Donegal; this subspecies is scattered around the coast of Britain. Only one known site in Limerick; in saltmarsh by the Shannon Estuary W of Ringmoylan Quay, and likely to occur elsewhere along the estuary. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Ringmoylan Quay, W of	R4057	19 Jun 1988	Reynolds, S.

Festuca vivipara (L.) Sm.

Viviparous Sheep's-fescue

Limerick: Locally Scarce Last seen: 2018

Native; perennial grass. Mainly on mountains in SW, W and NW of Ireland, also in E and S. Locally common in Limerick part of Galty Mtns; in heathy and open acid grassland, also in peaty ground and on rock ledges. There is a pre-1962 map record from the same area and this species was noted as common over 450 m in Galty Mtns in Limerick and Tipperary 1989/1990 (T. Curtis and T. Harrington).

Site	Grid Ref.	Date	Recorder(s)
Temple Hill	R8321	30 Aug 2010	Reynolds, S., Reynolds, J.
Galtee Mtns	R8323	11 Nov 2006	Dwyer, R., Crowley, W.,
			Wilson, F.
Lyracappul-Carrignabinnia ridge	R8423	25 Jul 2017	Quirke, M., Murphy, P.
Lyraveg Glen	R8423	9 Oct 2010	Reynolds, S., Sweeney, P.
Galtee Mtns	R8424	11 Nov 2006	Dwyer, R., Crowley, W.,
	R8521		Wilson, F.

Galty Mtns, W side of Blackrock	R8521	21 Aug 2004	Reynolds, S., Reynolds, J.,
River			Sweeney, P.
Carrignabinnia, shoulder on SE side	R8522	21 Aug 2004	Reynolds, S., Reynolds, J.,
and near top	R8523		Sweeney, P.
Carrignabinnia and	R8523	10 Jul 2018	Quirke, M., Murphy, P.,
Slievecushnabinnia, between			Harrington, T.
Slievecushnabinnia (in Limerick)	R8524	10 Jul 2018	Quirke, M., Murphy, P.,
	R8624		Harrington, T.
Galtymore	R8723	27 Aug 2005	Reynolds, S., Reynolds, J.
Galtymore, saddle just E of	R8823	27 Aug 2005	Reynolds, S., Reynolds, J.

Filago minima, see Logfia minima

Foeniculum vulgare Mill.

Fennel

Limerick: Locally Scarce Last seen: 2020

Archaeophyte or Neophyte, status uncertain; aromatic herbaceous perennial. Mainly near E and S coasts of Ireland, widely scattered elsewhere. Relict of cultivation or more usually a garden escape or discard in Limerick, sometimes persisting on roadsides; long established at Askeaton, and thriving on and around limestone outcrop there. First recorded on railway bank near Foynes 1885/1886, also from Askeaton 1900.

Site	Grid Ref.	Date	Recorder(s)
Dromreask bog, S of Glin (discard)	R118395	21 Jul 2005	Reynolds, S.
		20 Sep 2009	
Ballyhahill, SW of (roadside near	R1844	5 Aug 2014	Reynolds, S.
Cloonlahard Bridge)			
Shanagolden, just N of (by main	R2547	17 Aug 1995	Reynolds, S.
road)		2005	
Barrigone (established on	<i>c</i> .R286499	17 Jun 1988	Reynolds, S.
roadside)		30 May 2009	
Askeaton, E of River Deel (on and	R3450	25 Aug 1996	Reynolds, S., BSBI
by limestone outcrop)			
Askeaton, E of River Deel	c.R341505	19 Jul 2004	Reynolds, S.
		21 Jul 2010	
		4 Sep 2014	
Askeaton	R3450	21 Mar 2019	Quirke, M., Murphy, P.,
			Harrington, T.
Adare, S side (disturbed ground)	R4645	8 Jun 2008	Reynolds, S.
Limerick city, Shannon Bridge (self-	R5756	4 Aug 2020	Reynolds, S., Reynolds, J.,
sown)			Quirke, M., Murphy, P.

Fumaria capreolata subsp. babingtonii (Pugsley) P.D. Sell

White Ramping-fumitory

Internationally Rare: Endemic to Ireland and Britain (Rich 2020)

Limerick: Locally Rare Last seen: 2016

Native or Alien, status uncertain; annual. *Fumaria capreolata* occurs mainly in N, E and SE of Ireland and all records probably refer to the subspecies which was less frequently recorded. Only one recent record in Limerick, sparingly among outcrop at top of steep slope on Knockfennell beside Lough Gur. First recorded in gravel pits at Foynes 1902, also in a garden and fields in early 1900s.

Site	Grid Ref.	Date	Recorder(s)
Knockfennell, E side	R6441	17 Jun 2016	Reynolds, S., Reynolds, J.

Fumaria purpurea Pugsley

Purple Ramping-fumitory

Internationally Rare: Endemic to Ireland and Britain (Rich 2020)

Limerick: Locally Rare Last seen: 2017

Native or Alien, status uncertain; annual. Mainly in E and SE of Ireland, widely scattered elsewhere. Only found at one site in Limerick, in rough pasture and at a pavement edge. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Annacotty, near	R6356	11 Apr 2017	Reynolds, S., Reynolds, J.

Galeopsis bifida Boenn.

Bifid Hemp-nettle

Limerick: Locally Rare Last seen: 2016

Native; annual. Mainly in N and SE of Ireland, scattered elsewhere. Sometimes difficult to separate from more frequent *Galeopsis tetrahit* (Common Hemp-nettle). In and near farmyards in Limerick, also in disturbed ground. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Dromtrasna Bridge SW of	R1622	27 Aug 2015	Reynolds, S.
(farmyard in W Limerick)			
Effin, just S of (disturbed ground)	R5822	29 Jul 1999	Reynolds, S.
Assaroola Bridge, near	R8223	7 Sep 2016	Reynolds, S., Quirke, M.,
(at farm gate in SE Limerick)			Murphy, P., Harrington, T.

Galeopsis speciosa Mill.

Large-flowered Hemp-nettle

Nationally Scarce since 2000

National Threat Status: Near Threatened

Limerick: Extinct Last seen: c.1906

Archaeophyte; annual. In N of Ireland, rare elsewhere; usually an arable weed. Always rare in Limerick, including once found in a potato field. A record from Limerick city area 1968 lacks details and is doubtful.

Site	Grid Ref.	Date	Recorder(s)
Cahirmoyle, near Ardagh	R24	Sep 1902	O'Brien, C.G.
Foynes (potato field)	R25	Between 1903	Knowles, M.C., O'Brien, C.G.
		and 1906	

Galium boreale L.

Northern Bedstraw

Limerick: Extinct Last seen: 1904

Native; herbaceous perennial. Mainly in W of Ireland, e.g. on lake shores, occasional elsewhere. Only known sparingly on rocks in River Shannon 'about 1 mile (c.1.6 km) below Castleconnell', the same record as 'Castleconnell and Doonass'. Looked for near Castleconnell Waterworks opposite Doonass, but not refound.

Site	Grid Ref.	Date	Recorder(s)
Castleconnell, near	R66	Jul 1904	Phillips, R.A.

Galium uliginosum L.

Fen Bedstraw

Limerick: Locally Scarce Last seen: 2018

Native; herbaceous perennial. Mainly found across the middle of Ireland, scattered elsewhere. Noted several times in upland poor fen in Slievefelim Mtns in Limerick; also in a variety of other habitats including swampy edge of raised bog, a fen-like site, sedge-dominated wet fields and damp patch in a disused shale quarry. First recorded from swamp at Red Bog just S of Lough Gur 1978.

Site	Grid Ref.	Date	Recorder(s)
Dromdeeveen, WSW of Broadford	R28582020	3 Sep 2018	Reynolds, S., Reynolds, J.
(disused shale quarry)			
Roxborough, S of Limerick City	R59225177	1 Nov 2018	Quirke, M., Murphy, P.,
(fen-like)			Harrington, T.
Boher, near (wet fields)	R65	1991	Lockhart, N.D.
Dromsallagh Bog (swampy edge of	R7552	4 Apr 1997	Reynolds, S., Quirke, M.
raised bog)			
Grageen Fen, Slievefelim Mtns	<i>c</i> .R7957	Sep 1996	Goodwillie, R.N.
Grageen Fen	R7957	3 Aug 1998	Quirke, M.

Grageen Fen	R7956 or	27 Jul 2002	Reynolds, S., BSBI
	R7957		
Grageen Fen	R7956	31 Jul 2018	Reynolds, S. et al.

Gentianella amarella (L.) Börner

Autumn Gentian

National Threat Status: Near Threatened

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Locally Scarce Last seen: 2020

Native; annual or biennial. Mainly across the middle of Ireland and towards NW. Only known at a few sites in northern limestone area of Limerick, usually in dry calcareous grassland; also on Tory Hill at former limestone quarry; sometimes growing with *Gentianella campestris* (Field Gentian), e.g. at Morgans North; pink-flowered plants on Aughinish Island. First recorded from Mullagh SE of Foynes and Askeaton 1900; known at Barrigone since at least 1974.

Irish plants are referable to the endemic subsp. *hibernica* (Wyse Jackson *et al.* 2016), but that endemic subspecies is possibly not worth separation from subsp. *amarella* (Stace 2019). *Gentianella amarella* subsp. *amarella* is mapped for 10 km square R25 in Rich & McVeigh (2019) *Gentians of Britain and Ireland*.

Site	Grid Ref.	Date	Recorder(s)
Carrowclogh, just N of Mullagh	R287472	6 Sep 2005	O'Mahony, T.
Aughinish Island	R2852	9 Sep 2006	Rippey, I.
Aughinish Island	R2852	15 Aug 2008	Reynolds, S.
Aughinish Island	R288527	22 Aug 2008	Reynolds, S.
Aughinish Island	R2852	Sep 2008	Rich, T.C.G.
Aughinish Island	R2852	4 Sep 2010	Reynolds, S.
Aughinish Island	R288529	20 Aug 2014	O'Sullivan, J.
Aughinish Island near Hunt's Lough	R290531	22 Aug 2008	Reynolds, S.
Aughinish Island near Hunt's Lough	R2953	4 Sep 2010	Reynolds, S.
Barrigone, near quarry	R29365066	22 Aug 2008	Reynolds, S.
Barrigone, near quarry	R2950	21 Sep 2008	Reynolds, S.
		4 Sep 2010	
		9 Aug 2011	
Barrigone, near quarry	R29105049	2 Aug 2014	Reynolds, S.
Barrigone, near quarry	R2950	12 Sep 2020	Reynolds, S., Reynolds, J.
Morgans North, E of Poulaweala	R2952	22 Aug 2008	Reynolds, S.
Creek	R2953		
Morgans North	R292529	4 Sep 2014	Reynolds, S.
	R293530		
Morgans North, near Poulaweala	R2952	12 Sep 2020	Reynolds, S., Reynolds, J.
Creek			
Tory Hill, N end	R53324314	2015	Conaghan, J.

Gentianella campestris (L.) Börner

Field Gentian

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 2020

Native; annual or biennial. Mainly in W and NW of Ireland. Only known in a small part of northern limestone area of Limerick, usually in dry calcareous grassland. First recorded in dry pasture at Mullagh SE of Foynes 1900; known at Barrigone since at least 1985.

Detailed records given in the BSBI database (not included here) were made during a survey of this species at Morgans North in 2008, where numerous plants grow intermingled with *Gentianella amarella* (Autumn Gentian).

Site	Grid Ref.	Date	Recorder(s)
Barrigone, near quarry	R2950	4 Sep 2010	Reynolds, S.
		9 Aug 2011	
Morgans North, E of Poulaweala	R2952	11 Sep 1999	Reynolds, S.
Creek			
Morgans North	R2952	12 Sep 2005	Reynolds, S.
	R2953		
Morgans North	R2952	22 Aug 2008	Reynolds, S., Reynolds, J.
	R2953		
Poulaweala Creek, near	R2952	12 Sep 2020	Reynolds, S., Reynolds, J.
(= Morgans North)			
Morgans North	R2953	4 Sep 2014	Reynolds, S.
Poulaweala (E of Creek)	R294530	29 Sep 2019	Gabbett, E.

Geranium pratense L.

Meadow Crane's-bill

Rare native on N coast of Ireland, and a garden escape or relict of cultivation elsewhere, as in Limerick.

$Geranium\ pusillum\ L.$

Small-flowered Crane's-bill

Limerick: Locally Rare Last seen: 2004

Native or Alien, status uncertain; annual. Mainly in E and SE of Ireland, widely scattered elsewhere; apparently becoming more common in recent years. One Limerick record as a casual at Foynes Port. First and only earlier record is from waste ground at Charter School near Pallaskenry 1885/1886.

Site	Grid Ref.	Date	Recorder(s)
Foynes Port	R2551	2 Sep 2004	Reynolds, S.

Wood Crane's-bill

Geranium sylvaticum L.

Rare native in NE of Ireland; a garden escape or relict of cultivation in Limerick. No recent records.

Geum x intermedium Ehrh. (G. rivale x G. urbanum) Water Avens x Wood Avens

Limerick: Locally Rare Last seen: 2005

Native hybrid; herbaceous perennial. Mainly in N of Ireland and scattered elsewhere where *Geum rivale* (Water Avens) overlaps with much more common *G. urbanum* (Wood Avens). Only occurring in small numbers at a few sites in Limerick; presumably *G. rivale* grows near Bilboa River site too, but not recorded. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Glenastar, W of Ardagh (valley	R2338	14 May 1998	Reynolds, S., Wiltshire, E.
below waterfall)			
Curragh Chase Forest Park (to E of	R4149	24 May 1997	Reynolds, S., Reynolds, J.
roadway)	R4150		
Curragh Chase, N of Glenisca	R410507	11 Jun 2005	Reynolds, S.
Lough			
Curragh Chase, S of Glenisca Lough	R4150	12 Jun 2005	Reynolds, S.
Doon, NNW of (by Bilboa River)	R826529	23 May 1998	Reynolds, S., Quirke, M.

Geum rivale L. Water Avens

Limerick: Locally Scarce Last seen: 2021

Native; herbaceous perennial. Widespread in Ireland, but less common in parts of E, S and W. Scattered sites in Limerick, in open and shaded damp habitats, usually in small numbers. First recorded at Mullagh SE of Foynes 1900, also Glenastar river bank 1906.

Site	Grid Ref.	Date	Recorder(s)
Scotland Bog, near (grass verge	R2239	29 Apr 2007	Hunt, G.
and ditch edge)			
Scotland Bog, near	R2239	15 May 2009	Reynolds, S.
Glenastar, W of Ardagh (valley	R2338	13 Jul 1989	Reynolds, S.
near waterfall)			
Glenastar wood, near Ardagh	R2439	11 Aug 2000	Rippey, I.
Feenagh, just W of (base of hedge)	R3926	24 May 2013	Reynolds, S.
Feenagh, just W of	R3926	30 Apr 2018	Reynolds, S., Reynolds, J.
	R3927		
Curragh Chase (damp depression	R4049	3 May 2009	Reynolds, S.
in arboretum)			
Curragh Chase, SE part	R4148	16 May 2015	Reynolds, S., BSBI
Curragh Chase (by lake)	R4149	16 Jul 1989	Reynolds, S., BSBI
Curragh Chase (by lake)	R4149	2 Jul 2006	Reynolds, S.
		3 May 2009	
		24 Jun 2010	

Curragh Chase (by lakes)	R411490	30 Jun 2021	Reynolds, S., Reynolds, J.
	R414492		
Glenisca Lough, Curragh Chase	R411503	31 May 2010	Reynolds, S.
Curragh Chase, near Glenisca	R4150	16 May 2015	Reynolds, S., BSBI
Lough			
Graigue wood, SSW of Adare	R455440	24 May 2007	Power, E., Perrin, P.
	R456442		
Herbertstown, SW of (edge of	R6740	15 May 2016	Reynolds, S.
drainage ditch)			
Lacka, N of Castleconnell (wet	R6664	23 May 2006	Reynolds, J.
meadow by River Shannon)			
Toorlougher, Slievefelim Mtns	R7759	9 Jun 2020	Quirke, M.

Glebionis segetum (L.) Fourr. (Chrysanthemum segetum) Corn Marigold

National Threat Status: Near Threatened

Limerick: Locally Scarce Last seen: 2019

Archaeophyte; annual. Mainly NE, E and S of Ireland; formerly more widespread as an arable weed; now a common constituent of wild flower seed mixtures. A rare arable weed in Limerick, including arising from long-buried seed on Foynes Island; also found as a casual in small numbers on roadsides and open ground; and from wild flower seed mixtures, e.g. near O'Dwyer Bridge at Corbally, where it apparently continued to self-seed. First recorded from a roadside on outskirts of Limerick city 1897.

Site	Grid Ref.	Date	Recorder(s)
Dromada Mtn (in western uplands)	R1732	6 Sep 2007	Reynolds, S.
Gortadroma, SW of Shanagolden	R2243	c.1997	Madden, B.
(landfill site)			
Foynes, W side	R2451	26 Aug 2015	Reynolds, S.
Foynes Island (from long-buried	R2452	16 Aug 1991	Reynolds, S.
seed)			
Foynes Port	R2551	19 Jul 1989	Reynolds, S.
Foynes, SE side	R2551	21 Jul 1989	Reynolds, S.
Rathkeale, SE of	R3838	21 Oct 2019	Reynolds, S., Reynolds, J.
Creeves Cross, S of (arable weed)	R3044	21 Oct 2019	Reynolds, S., Reynolds, J.
O'Dwyer Bridge, near (Limerick	R583578	30 Apr 2007	Reynolds, S.
city, from wild flower seed		17 Jun 2007	
mixture)		28 Aug 2008	
Limerick city (O'Dwyer Bridge site)	R5857	1 Jan 2019	Quirke, M., Murphy, P.,
			Harrington, T.
Kilmallock (from wild flower seed	R6127	28 Jul 1999	Reynolds, S.
mixture)			

Groenlandia densa (L.) Fourr.

Opposite-leaved Pondweed

Nationally Scarce

National Threat Status: Near Threatened

Flora (Protection) Order 2015

Limerick: Not Locally Rare or Scarce

Last seen: 2021

Native; aquatic rhizomatous perennial. Local in Ireland, mainly in S half. This protected species is locally abundant around Limerick city, near River Maigue at Adare and near Ferry Bridge; rare elsewhere in the county. Mainly in drainage ditches where *Groenlandia densa* seems to survive some clearance of vegetation; also in Limerick Canal, at edge of tidal rivers and on tidal mud by the upper Shannon Estuary. First recorded as not infrequent 'about Limerick' *c*.1833 and from Ferry Bridge to Rinekirk 1885/1886 'in great abundance' by River Maigue. Not refound in W Limerick in Ahacronane River or stream near Ballyclogh House (1904 records).

There have been commissioned surveys of this species (including Reynolds *et al.* 2006) and detailed records are held by NPWS and are in the BSBI database. A summary of sites and records is given here.

Site	Grid Ref.	Date	Recorder(s)
Doohyle Lough, W side (in shallow ditch)	R36874334	7 Sep 2007	Reynolds, S.
Adare, just NW of (drainage ditch near River Maigue)	R45874677	14 Jun 2006	Reynolds, S., Conaghan, J.
Adare, just NW of	R458467	3 May 2008 3 Jul 2010	Reynolds, S.
Adare, just NW of (N of River Maigue, E of railway bridge)	R4646	2000	Goodwillie, R.N.
Adare, just NW of (drainage ditch)	R46054668 to R46234667	14 Jun 2006	Reynolds, S., Conaghan, J.
Adare, just NW of (drainage ditch)	R46074668 R46124667	26 Jun 2009	Reynolds, S., Reynolds, J.
Adare, N of (drainage ditch)	R46484737	14 Sep 2007	Reynolds, S.
Ferry Bridge area	R474509	19 Sep 2012	Green, P.R.
(drainage ditches)	R482513		
	R482517		
	R481520		
Ferry Bridge, WNW and just W of (same drainage ditch)	R475524 to R480523	16 Aug 2006	Reynolds, S., Reynolds, J.
Ferry Bridge, S of (drainage ditch)	483517	12 Aug 2006	Reynolds, S., Reynolds, J.
Patrickswell, NE of (ditch)	R54465165	6 Sep 2006	Reynolds, S.
Loughmore Common (drain	c.R5452	1990	Goodwillie, R.N.
through turlough area)			
Loughmore Common	R5452	7 Sep 1996	Reynolds, S.
Loughmore Common (wide drain)	R542528 to R546528	26 Jun 2006	Reynolds, S., Fuller, J.
Ballykeeffe, NE of Mungret (drainage ditches)	R5554 R5555	2006-2010	BEC Consultants

Portland Park (drainage ditch)	R56585480	9 Sep 2006	Reynolds, S., Reynolds, J.
Ballynaclough River, tributary and	R564546 to	Jul, Sep 2006	Reynolds, S., Reynolds, J.
drainage ditches	R569545 &		
	R571545 to		
	R573548		
Dooradoyle, near (tributary and	R57265473	28 Aug 2009	Reynolds, S., Reynolds, J.
drainage ditches)	R57295484		
	R57315478		
Rossbrien, in Ballynaclough River	R5754	2006-2010	BEC Consultants
and drainage ditches			
Ballynaclough River, tributary of	R57175467	25 Sep 2021	Reynolds, S., Reynolds, J.
	R57295484		
Shannon Bridge (N side of	R5756	1993	Curtis, T., FitzGerald, R.,
Shannon, hundreds of plants)			Meskell, E.
Shannon Bridge (N side of	R57005698	12 Aug 2006	Reynolds, S., Reynolds, J.
Shannon, on tidal mud)			
King's Island, Limerick City	R57385870	1 Apr 2017	Denyer, J.
	R57395852		
Abbey River	R5857	1996	Goodwillie, R.N.
Limerick Canal	R5857	17 Aug 1987	Reynolds, S.
Limerick Canal (at road bridge)	R58965764	16 Aug 2006	Reynolds, S.
Limerick Canal (many patches)	R582574 to	6 Sep 2006	Reynolds, S., Reynolds, J.
	R595578		
Groody Bridge, just W of	R60455710	23 Aug 2003	Morgan, G.
Groody Bridge, near (ditch)	R6057	22 Oct 2005	Reynolds, S.
Reboge, E side of Groody River	R60495786	30 Jul 2006	Reynolds, S., Reynolds, J.
(drainage ditch across field)			

Gymnadenia conopsea subsp. densiflora, see Gymnadenia densiflora

Gymnadenia densiflora (Wahlenb.) A. Dietr. (G. conopsea subsp. densiflora)

Marsh Fragrant-orchid

Limerick: Locally Rare Last seen: 2009

Native; perennial orchid. Scattered in Ireland, mainly across the middle and in NW. Known in two fens in Limerick, but possibly also at some other sites where *Gymnadenia conopsea* s.l. (Fragrant Orchids) has been recorded in the past, particularly in northern limestone area. *G. densiflora* has only been recognised as a separate species in recent years and it is considered the commonest species of *Gymnadenia* in Ireland. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Ballinvirick fen, N of Cappagh	R3847	5 Jun 2009	Denholm, I., Bateman, R.
Deegerty fen, ENE of Askeaton	R3851	5 Jun 2009	Denholm, I., Bateman, R.

Helminthotheca echioides (L.) Holub (*Picris echioides*)

Bristly Oxtongue

Limerick: Locally Scarce Last seen: 2021

Archaeophyte; annual or biennial. Mainly in E, SE and S of Ireland, widely scattered elsewhere. Established in open ground on King's Island, Limerick city; a rare casual elsewhere in the county in disturbed and open ground. First recorded in 2004.

Site	Grid Ref.	Date	Recorder(s)
Tooraree Lower, SW of Ballyhahill	R1642	29 Oct 2019	Reynolds, S., Reynolds, J., Quirke, M., Murphy, P.
Aughinish Island, W side	R2652	7 Jul 2005	Reynolds, S., NPWS
Aughinish Island	R2852	2004	Goodwillie, R.N.
Clarina, just W of	R5053	4 Sep 2010	Reynolds, S.
Limerick docks, near	R5656	9 Nov 2016	Quirke, M., Murphy, P., Harrington, T.
Limerick railway station	R5756	2 Jul 2021	Quirke, M., Murphy, P.
Island Road, King's Island	R5757	17 Jun 2007	Reynolds, S.
King's Island, near King John's Castle	R5757	19 Oct 2016	Quirke, M., Murphy, P., Harrington, T.
King's Island	R5757	4 Aug 2020	Reynolds, S., Reynolds, J., Quirke, M., Murphy, P.
Limerick city	R5857	1 Nov 2016	Quirke, M., Murphy, P., Harrington, T.
Reboge, E side of Limerick city	R5957	2009	Goodwillie, R.N.
Killeenavera, WSW of Pallas Grean	R7345	15 Sep 2017	Quirke, M., Murphy, P., Harrington, T.

Helosciadium inundatum (L.) W.D.J. Koch (Apium inundatum) Lesser Marshwort

Limerick: Locally Scarce Last seen: 2021

Native; usually perennial. Widespread across much of Ireland, but apparently less so than formerly. Mainly in N Limerick; in ponds, and in shallow water and at muddy edges of lakes and a river; also in turloughs and a small reservoir. First recorded in canal at Park (= Limerick Canal) 1897, also River Deel at Newbridge 1904 and Glenstal (near Murroe) 1958.

Site	Grid Ref.	Date	Recorder(s)
Foynes reservoir	R2451	15 Aug 2005	Reynolds, S.
		10 Jul 2007	
Graigues Lough, SE of Askeaton	R3647	12 Jun 2004	Reynolds, S.
(turlough)	R3648	3 Aug 2013	
Graigues Lough	R366479	28 Aug 2021	Reynolds, S., Reynolds, J.
Mornane Lough, ENE of Askeaton	R3852	19 Aug 1996	Reynolds, S.
Glennameade, SE of Pallaskenry	R4253	23 Jul 2004	Reynolds, S.
(pond near swamp)			
Attyflin, SW of Patrickswell (pond)	R5148	Sep 1990	Goodwillie, R.N.
Loughmore Common (turlough)	c.R5452	1990	Goodwillie, R.N.
Loughmore Common	R5452	20 Sep 2005	Reynolds, S.

Lough Gur	R642404	11 Jul 2018	Environmental Protection
			Agency
Reboge, E of Limerick Canal	R6057	26 Aug 1997	Reynolds, S.
(floodplain lake)		9 Jul 1998	
Reboge (floodplain lake)	R6057	13 Aug 2009	Reynolds, S., Reynolds, J.
Reboge (by lake and in nearby	R601576	31 Aug 2021	Reynolds, S., Reynolds, J.
drainage ditches)	R603576		
Portcrusha, N of Castleconnell	R6664	17 Sep 2007	Reynolds, S.
(muddy edge of R. Shannon)			
Glenstal Abbey, Murroe	R7356	8 Aug 1997	Reynolds, S., Quirke, M.
(lake near main avenue)			
Glenstal Abbey (pond near lake)	R732565	12 Sep 2008	Reynolds, S.
Glenstal Abbey, Boating Lake	R7456	31 Jul 2005	Reynolds, S.

Helosciadium x moorei (Syme) Warren (*H. nodiflorum* x *H. inundatum*; *Apium* x *moorei*; *A. nodiflorum* x *A. inundatum*) **Fool's-water-cress x Lesser Marshwort**

Nationally Rare since 2000 Limerick: Locally Rare

Native hybrid; usually perennial. Scattered in Ireland. One record for Limerick; beside floodplain lake near River Shannon on E side of Limerick city. *Helosciadium nodiflorum* (Fool's-water-cress) is very common in Limerick, while *H. inundatum* (Lesser Marshwort) is found occasionally across N of the county and is a less conspicuous plant found in or at the edge of ponds and other shallow water bodies; this hybrid may have been overlooked where the parents occur together. First and only earlier record is from River Shannon at Castleconnell 1903.

Site	Grid Ref.	Date	Recorder(s)
Reboge, E of Limerick Canal	R6057	25 Sep 2004	O'Mahony, T.

Hieracium L. Hawkweeds

Hieracium exotericum agg., H. sabaudum and H. vulgatum are native in parts of Ireland, but all are considered only introductions in Limerick.

Holcus x hybridus Wein (H. lanatus x H. mollis)

Yorkshire-fog x Creeping Soft-grass

Nationally Rare

Limerick: Locally Rare Last seen: 2013

Last seen: 2004

Native hybrid; perennial grass. Few sites in Ireland, but it may be overlooked. At edge of two unpaved forestry roads on higher ground in Limerick and in marshy ground between a strip of woodland and River Feale. This hybrid more closely resembles *Holcus mollis* (Creeping Soft-grass) than widespread *H. lanatus* (Yorkshire-fog). First recorded in 2005.

Site	Grid Ref.	Date	Recorder(s)
Acres, SSE of Mountcollins	R169170	1 Sep 2013	Reynolds, S.
(near River Feale)			
Lough Gay, W of	R2720	3 Aug 2005	Reynolds, S.
(Mullaghareirk Mtns)			
Slievereagh, S side	R7123	8 Sep 2006	Reynolds, S.

Hordeum murinum L.

Wall Barley

Limerick: Locally Rare Last seen: 2008

Archaeophyte or Neophyte, status uncertain; annual grass. Common in greater Dublin area, widely scattered elsewhere. A rare casual in Limerick, which has not become established in the city as it has in Dublin. First and only earlier records are from Limerick city and on railway waste there 1897.

Site	Grid Ref.	Date	Recorder(s)
Foynes, W side (waste ground)	R2451	20 May 2008	Seawright, J.
Dock Road, Limerick city (grass	R5555	17 Aug 1994	Reynolds, S.
verge)			

Hordeum secalinum Schreb.

Meadow Barley

Nationally Scarce

National Threat Status: Vulnerable Flora (Protection) Order 2015

Limerick: Not Locally Rare or Scarce

Last seen: 2021

Native; tufted perennial grass. Shannon Estuary, also near Dublin and rare elsewhere in Ireland. This protected species is locally common in Limerick by and near the Shannon Estuary, and by creeks and tidal River Maigue off the estuary; in unimproved damp grasslands, including where they border saltmarshes (= estuarine grassland), embankments and pastures, e.g. inland at Ballycummin and Loughmore Common on SW side of Limerick city. Habitats are vulnerable, e.g. due to disturbance, under- or over-grazing. First recorded in meadows near Limerick pre-1872, and as abundant in 'saltmarsh' at Ringmoylan 1884 and 1885.

To allow further development on part of Aughinish Island and Limerick Tunnel works at Coonagh, *Hordeum secalinum* was transplanted to new sites. More detailed records are held by NPWS and are in the BSBI database.

Site	Grid Ref.	Date	Recorder(s)
Island MacTeige/Glenbane West	R2750	2005, 2006	BEC Consultants
(near S end of Aughinish Island)			
Island MacTeige	R280510	2004	Goodwillie, R.N.
Island MacTeige	R2851	7 Jul 2005	Reynolds, S., NPWS
Aughinish Island, NW side	c.R273527	7 Jul 2005	Reynolds, J.
Aughinish Island, NW side	R272526	2005, 2007	BEC Consultants
(including translocated plants)			
Aughinish Island	R2752	Jul 2015	Barron, S., D'Arcy, D. (BEC)
(translocation site)			
Fawnmore, just E of Aughinish	R284518	2007-2009	BEC Consultants
Island (translocation sites)	R287519		
Fawnamore (translocation sites)	R2851	Jul 2015	Barron, S., D'Arcy, D. (BEC)
Courtbrown Point, SSE of	R32975374	21 Sep 2021	Quirke, M., Murphy, P.,
			Harrington, T.
Goleen Bridge, near (N of	R3353	9 Jul 1988	Rich, T.C.G., Taylor, N.
Askeaton)			
Goleen Bridge, near	R3353	15 Jul 1989	Reynolds, S., BSBI
Goleen Bridge	R334530	25 Jul 2006	Reynolds, S., Reynolds, J.
(hundreds of plants)	R335530		
Goleen Bridge, E side	R3353	26 Jul 2010	Reynolds, S.
Goleen Bridge, W side	R33525304	28 Aug 2021	Reynolds, S., Reynolds, J.
Ballinvoher Point, near	R34865619	6 Sep 2021	Quirke, M., Murphy, P.,
,		'	Harrington, T.
Bushyisland, NE of Ballysteen	R37565670	17 Aug 2021	Quirke, M., Murphy, P.,
,			Harrington, T.
Ballymartin, ENE of Ballysteen	R39585688	17 Aug 2021	Quirke, M., Murphy, P.,
			Harrington, T.
Pigott's Island, ENE of Ballysteen	R389570	2005	Ryan, C. (for NPWS)
	R390570		
Ringmoylan Quay, W of	R4057	24 Sep 1988	Reynolds, S., OBrien, M.V.
Ringmoylan Quay, W of	R4057	1 Sep 1990	Reynolds, S., Rich, T.C.G.,
, ,,		·	Brady, C.M.
Ringmoylan Quay, W of	R4057	11 Sep 2005	Reynolds, S.
Ringmoylan Quay, W of	R402577	25 Jul 2006	Reynolds, S., Reynolds, J.
(hundreds of plants)	R403577		
	R404576		
Ringmoylan Quay, W of	R4057	21 Sep 2012	Reynolds, S.
Rinekirk Point, just W of	R44805784	20 Sep 2005	Reynolds, S.
Ferry Bridge, banks by River	R4852	6 Sep 1996	Reynolds, S.
Maigue (N and S of bridge)		2 Aug 2004	
Ferry Bridge, S side	R48255225	10 Sep 2001	Waldren, S., Lynn, D.
Ferry Bridge, just S of	R48265226	24 Jun 2005	Holyoak, D.T.
Ferry Bridge, S side	R48255225	26 Jul 2006	Reynolds, S., Reynolds, J.
	R48255226		
Coonagh West (N side of upper	R5256	2005-2007	BEC Consultants
Shannon Estuary; including			
translocated plants)			
Coonagh West	R531564	8 Sep 2005	BEC Consultants

Loughmore Common, SE of	R54515288	26 Jun 2006	Reynolds, S., Fuller, J.
Mungret (many plants)			
Loughmore Common	R54515288	8 Aug 2019	NPWS
Loughmore Common	c.R544529	9 Jul 2021	Quirke, M., Murphy, P.,
			Harrington, T.
Roche Castle and Raheen	R5452	1997, 1998	Goodwillie, R.N.
Industrial Estate, near	R5552		
Raheen Industrial Estate, just W of	<i>c</i> .R5452	2011	Curtis, T., Harrington, T.
Ballycummin/Raheen	R5452	Jun 2018	Slattery, T.
Ballycummin/Raheen	R548523	20 Jul 2018	Slattery, T.
Ballycummin/Raheen	R5452	17 Jul 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Ballycummin/Raheen	R55015225	26 Jun 2006	Reynolds, S., Fuller, J.

Hydrocharis morsus-ranae L.

Frogbit

Last seen: 2021

Limerick: Locally Scarce

Native; aquatic perennial, usually floating. Mainly in E and midlands of Ireland, including Shannon catchment. In Limerick at sheltered margins of River Shannon, in Limerick Canal and drainage ditches on W side of Limerick city near where first found at Primrose Bank c.1897.

Site	Grid Ref.	Date	Recorder(s)
Ballinacurra Creek, just W of	R5455 or	7 Sept 1996	Reynolds, S.
(drainage ditch to N of road)	R5555		
Ballinacurra Creek, near	R55	c.1997	Goodwillie, R.N.
Ballinacurra Creek, W of (drainage	R540560	10 Sep 2001	Waldren, S., Lynn, D.
ditch; that site since lost)			
River Shannon NW of Athlunkard	R586595	29 Jul 2010	Reynolds, S.
Bridge			
Limerick Canal (mouth of canal	R5957	6 Sep 2006	Reynolds, S.
near River Shannon)		20 Sep 2008	
Limerick Canal	R589576	13 Jul 2021	Reynolds, S., Reynolds, J.
	R5957		
River Shannon at Reboge	R60275773	31 Aug 2021	Reynolds, S., Reynolds, J.
River Shannon near Castleconnell	R639612	29 Jul 2010	Reynolds, S.
Waterworks	R640614		
	R643615		
River Shannon near Castleconnell	R6461	29 Aug 2018	Reynolds, S., Reynolds, J.,
Waterworks, pond and channel off			Quirke, M., Murphy, P.,
river			Harrington, T.
River Shannon at Castleconnell	R6562	24 Jun 2019	Reynolds, S., Reynolds, J.
River Shannon just N of	R661632	5 Jul 2010	Reynolds, S.
Castleconnell			

Hymenophyllum tunbrigense (L.) Sm.

Tunbridge Filmy-fern

Internationally Rare: Ireland holds more than 25% of the European population

Limerick: Locally Scarce Last seen: 2020

Native fern. In S, SW, W and NW of Ireland, mainly on mountains. In Limerick on Ballyhoura Mtns, W end of Slievefelim Mtns and in wooded Cappercullen Glen; on shaded damp rock faces and in crevices; with *Hymenophyllum wilsonii* (Wilson's Filmy-fern) on conglomerate tor just S of Black Rock. First recorded by Clare River on Limerick/Tipperary boundary pre-1860, also Cappercullen, Glenstal 1880.

Site	Grid Ref.	Date	Recorder(s)
Ballyhoura Mtns, near Black Rock	R64491795	16 Aug 2005	Reynolds, S.
Ballyhoura Mtns, near Black Rock	R6417	16 Aug 2008	Reynolds, S., BSBI
(on conglomerate tors)	R6418		
Cappercullen Glen	R7356 or	8 Aug 1997	Reynolds, S., Quirke, M.
(at Glenstal Abbey, Murroe)	R7357		
Cappercullen Glen	R7356	31 Jul 2005	Reynolds, S.
	R7357		
Cappercullen Glen, lower part	R7356	25 Apr 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Glenstal Wood	R740573	10 Sep 2007	Perrin, P., Delaney, A.
(= top of Cappercullen Glen)			
Glenstal Abbey, NE of	R7557	17 May 2020	Quirke, M.
Glenstal Forest/townland, NE of	R7657	20 Apr 2020	Quirke, M.
Murroe		12 May 2020	

Hymenophyllum wilsonii Hook.

Wilson's Filmy-fern

Internationally Rare: Ireland probably holds more than 25% of the European population
Limerick: Locally Scarce

Last seen: 2020

Native fern. Mainly in SW, W and NW of Ireland on mountains, also in E and S. On Galty Mtns and Ballyhoura Mtns in SE Limerick; shaded damp rock faces and in crevices; with *Hymenophyllum tunbrigense* (Tunbridge Filmy-fern) on conglomerate tor just S of Black Rock. First recorded in Galty Mtns 1944.

Site	Grid Ref.	Date	Recorder(s)
Ballyhoura Mtns, near Black Rock	R6417	16 Aug 2008	Reynolds, S., BSBI
(on conglomerate tors)	R6418		
Ballyhoura Mtns, near Black Rock	R64001828	6 Oct 2012	Reynolds, S.
Seefin Mtn	R642182	15 Jul 2020	Hodd, R.L.
Pigeonrock Glen, S side Galty Mtns	R84602025	21 Aug 2004	Reynolds, S., Reynolds, J.,
(on siliceous bluff)			Sweeney, P.
Pigeonrock Glen (dense patches)	R8420	17 Aug 2008	Reynolds, S., BSBI
Lyraveg Glen, NW side Galty Mtns	R84122338	9 Oct 2010	Reynolds, S., Sweeney, P.
Lyracappul-Carrignabinnia ridge	R8423	25 Jul 2017	Quirke, M., Murphy, P.
Black Rocks, Knockaterriff	R8521	8 Jun 2014	Reynolds, S., BSBI

Carrignabinnia and	R8523	10 Jul 2018	Quirke, M., Murphy, P.,
Slievecushnabinnia, between			Harrington, T.
Glounreagh, S side Galty Mtns	R86852183	16 Oct 2010	Reynolds, J.

Hyoscyamus niger L.

Henbane

Considered a rare native in Ireland; only an introduction in Limerick. No recent records.

Hypericum elodes L.

Marsh St John's-wort

Limerick: Locally Rare Last seen: 2018

Native; stoloniferous herbaceous perennial. Widespread in S, SW and W of Ireland, also NW, NE and SE, and absent from the midlands. Currently only known at two sites in Limerick; Coolfree Mtn in SE Limerick on a wet peaty slope, and near Broadford in S Limerick in a shallow peat-edged ditch by a forestry road. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Broadford, SW of	R31801943	1 Sep 2008	Reynolds, S.
Coolavehy, SE Coolfree Mtn	R6815	10 Sep 2000	Lynch, R.
Coolavehy, SE Coolfree Mtn	R681152	30 Aug 2018	Reynolds, S., Reynolds, J.

Hypopitys monotropa Crantz (*Monotropa hypopitys*)

Yellow Bird's-nest

Nationally Scarce

National Threat Status: Near Threatened

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Locally Rare Last seen: 2009

Native; saprophytic (lacking chlorophyll) herbaceous perennial. Local in NW of Ireland (e.g. Lough Erne basin), rare elsewhere. Only known at Curragh Chase in Limerick, under a Beech tree on wooded rocky limestone knoll (that tree fell in 2011); number of flowering and fruiting spikes varied from year to year. There is some Hazel on the knoll, a native tree with which *Hypopitys monotropa* is also associated, indicating that it may be native here rather than an introduction. First recorded on the same knoll with memorial cross at Curragh Chase 1897.

Site	Grid Ref.	Date	Recorder(s)
Curragh Chase	R413491	18 Sep 2004	Reynolds, S., OBrien, M.V.
Curragh Chase	R413491	8 Aug 2005 11 Oct 2005	Reynolds, S.
Curragh Chase	R41424911	11 Sep 2006	Reynolds, S., Conaghan, J.
Curragh Chase	R413491	31 Aug 2008	Reynolds, S., Reynolds, J.
Curragh Chase	R4149	8 Aug 2009	Reynolds, S.

Inula helenium L. Elecampane

Limerick: Locally Rare Last seen: 2019

Archaeophyte; herbaceous perennial. Widely scattered in Ireland; formerly grown for medicinal use. In Limerick a rare relict of or escape from cultivation on roadsides. First recorded as plentiful among Willows beside the river at Ballyhahill 1902, but not refound in that area.

Site	Grid Ref.	Date	Recorder(s)
Feenagh, E of (roadside bank)	R416263	Aug 2011	O'Mahony, T.
Feenagh, E of	R415263	10 Jul 2019	Reynolds, S., Reynolds, J.
Castletown, SSW of (near garden)	R4429	27 Jul 2014	Sweeney, E., Sweeney, P.
Annaslinga Cross Roads, near (S of	c.R799186	29 Aug 2010	Reynolds, S.
Anglesborough; wide grass verge)		4 May 2017	

Iris foetidissima L. Stinking Iris

Limerick: Locally Scarce Last seen: 2021

Archaeophyte; rhizomatous perennial. Scattered in Ireland, mainly in E half. A relict of or escape from cultivation in Limerick. On wooded rocky limestone knoll with memorial cross at Curragh Chase; also near an old cottage, on hedgebanks and roadside. First recorded at Curragh Chase 1899 and noted on Foynes Island in early 1900s.

Site	Grid Ref.	Date	Recorder(s)
Meenkilly, NW of Mountcollins (on	R1321	30 Mar 2018	Reynolds, S., Reynolds, J.
hedgebank)			
Barneen cottage, Foynes Island	R2452	6 April 2013	Reynolds, S.
		Aug 2020	
Incha, W of Ballyagran (roadside	R436276	16 Sep 2011	O'Mahony, T.
ditch)			
Curragh Chase (in arboretum)	R4049	3 May 2009	Reynolds, S.
Curragh Chase (on rocky knoll)	R4149	8 Mar 1997	Reynolds, S.
		3 May 2009	
		18 Apr 2014	
Curragh Chase (on rocky knoll)	R413490	28 Aug 2021	Reynolds, S., Reynolds, J.
Tory Hill (on hedgebank)	R5343	2015	Conaghan, J.
Tory Hill	R5343	12 Oct 2016	Quirke, M., Murphy, P.,
			Harrington, T.

Isatis tinctoria L. Woad

Nationally Rare

Limerick: Extinct Last seen: 1804

Archaeophyte; biennial or perennial. A single record in Ireland since 1987 (Co. Armagh) and none since 2000; formerly cultivated as a dye plant, also an arable weed. Only one old record for Limerick.

Site	Grid Ref.	Date	Recorder(s)
Castleconnell, field near	R66	1804	Mackay, J.T.

Isolepis cernua (Vahl) Roem. & Schult. (Scirpus cernuus)

Slender Club-rush

Limerick: Locally Rare Last seen: 2021

Native; tufted perennial. Mainly around the coast of Ireland, less common on E and parts of W coasts. By the Shannon Estuary in Limerick, in marshy/brackish ground; this small plant with filiform stems could be overlooked. First and only earlier record is from Foynes 1885/1886, described as very rarely beyond tidal influence.

Site	Grid Ref.	Date	Recorder(s)
Kilteery Pier, near	R170498	28 Aug 2021	Reynolds, S., Reynolds, J.
(lower poached edge of field)			
Ringmoylan Quay, W of	R4057	1 Sep 1990	Reynolds, S., Rich, T.C.G.,
			Brady, C.M.

Isolepis fluitans, see Eleogiton fluitans

Juncus ambiguus, see Juncus ranarius

Juncus x **diffusus** Hoppe (*J. inflexus* x *J. effusus*)

Hard Rush x Soft-rush

Nationally Scarce

Limerick: Locally Rare Last seen: 2011

Native hybrid; rhizomatous perennial. Widely scattered sites in Ireland. In a marshy meadow and at edge of pasture in Limerick. This hybrid needs specialist determination and may occur elsewhere in the county where the parents grow together; both *Juncus inflexus* (Hard Rush) and *J. effusus* (Soft-rush) are widespread and common in lowland Limerick. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Cragbrack Y-junction, NE of (SE of	R4223	15 Sep 2011	O'Mahony, T.
Feenagh; marshy meadow)			
Granagh, ESE of Ballingarry	R4834	8 Sep 2011	O'Mahony, T.

Juncus foliosus Desf.

Limerick: Locally Rare Last seen: 2017

Native; annual. Fairly widespread in Ireland, except in the midlands. In muddy seepage on Foynes Island, a wet depression (flush) on top of Knockseefin, and at muddy edge of pasture at Ballygeana. No earlier records. Closely related *Juncus bufonius* (Toad Rush) is common and widespread in damp habitats in Limerick.

Site	Grid Ref.	Date	Recorder(s)
Foynes Island	R2452	28 Jun 1987	Reynolds, S.
Knockseefin, SW of Pallas Grean	R7545	2 Jul 2016	Reynolds, S., Reynolds, J.
Ballygeana, NW side of Galty Mtns	R8425	14 Jun 2017	Reynolds, S. <i>et al</i> .

Juncus ranarius Songeon & E.P. Perrier (*J. ambiguus*)

Frog Rush

Leafy Rush

Limerick: Locally Scarce Last seen: 2021

Native; annual. Scattered around the coast of Ireland. In brackish marsh by and near the Shannon Estuary in Limerick, also by a brackish pond; this inconspicuous plant is likely to occur elsewhere along the estuary in suitable habitat. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Glin, NE of	R154491	28 Aug 2021	Reynolds, S., Reynolds, J.
(by upper edge of saltmarsh)			
Kilteery Pier, near	R1749	26 Jul 2004	Reynolds, S.
Kilteery Pier, near	R170498	28 Aug 2021	Reynolds, S., Reynolds, J.
(lower poached edge of field)			
Poulaweala Creek, pond just E of	R291524	20 Jul 2010	Reynolds, S.
Goleen Bridge, E side (near tidal	R3353	20 Jul 2010	Reynolds, S.
creek)			
Ferry Bridge, just N of (by tidal	R4852	20 Jul 2010	Reynolds, S.
River Maigue)			

Juniperus communis L.

Common Juniper

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Locally Scarce Last seen: 2021

Native; evergreen shrub. Mainly in W and NW of Ireland, also SW; rare elsewhere. In northern limestone area of Limerick and long known at Barrigone W of Askeaton; in calcareous grassland with shattered limestone and outcrop; bushes growing erectly and prostrately. One of the reasons for designation of Barrigone SAC is the presence of 'Juniper Scrub'. Limerick plants are *Juniperus communis* subsp. *communis*. First recorded near Barrigone 'Bog' 1903; also one place in Mullagh area SE of Foynes in early 1900s, but not refound there.

Site	Grid Ref.	Date	Recorder(s)
Barrigone Holy Well, W of	R2849	19 Jul 2004	Reynolds, S.
Aughinish Island	R2852	21 May 2008	Seawright, J.
Aughinish Island	R2852	6 June 2008	Reynolds, S.
Aughinish Island	R281517	21 Aug 2014	O'Sullivan, J.
	R288527		
Aughinish Island	R282524	2 Jun 2019	Thong, G.
Barrigone, near quarry (including	R2950	1996-2014	Reynolds, S.
to E of roadway to quarry)			
Glenbane East (= Barrigone, near	R2950	15 Jan 2019	Quirke, M., Murphy, P.,
quarry)			Harrington, T.
Barrigone, near quarry	R2950	19 May 2021	Reynolds, S., Reynolds, J.
Barrigone, limestone railway	R2950	17 Jul 2004	Reynolds, S.
cutting behind old schoolhouse			
Barrigone, N of old schoolhouse	R2951	13 Jul 1989	Reynolds, S.
Morgans South, near Barrigone	R301506	2002	Rippey, I.
Morgans South, NE of Barrigone	R3050	15 Jan 2019	Quirke, M., Murphy, P.,
			Harrington, T.
Ballynort, NE of Askeaton (site	R3652	Jul 2002	Hunt, G.
since degraded or lost)			

Kickxia elatine (L.) Dumort.

Sharp-leaved Fluellen

Limerick: Extinct Last seen: pre-1825

Archaeophyte; annual. Mainly in SE and S of Ireland, a rare arable weed. Only Limerick record is from cornfields near Rathkeale in early 19th century.

Site	Grid Ref.	Date	Recorder(s)
Rathkeale, near	R34	Pre-1825	Hardy, H.

Lamium album L.

White Dead-nettle

Limerick: Locally Rare Last seen: 2021

Archaeophyte; herbaceous rhizomatous or stoloniferous perennial. Mainly in E half of Ireland; formerly used in traditional medicine. Only Limerick record is from ruined church on hill at Ardpatrick, possibly a relict of ancient cultivation.

Site	Grid Ref.	Date	Recorder(s)
Ardpatrick, at ruined church	R6320	30 Jul 1997	Reynolds, S.
Ardpatrick, at ruined church	R6320	5 Jun 2016	Reynolds, S., Reynolds, J.
Ardpatrick, at ruined church	R63782083	15 Sep 2021	Reynolds, S., Reynolds, J.

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Lamium amplexicaule L.

Henbit Dead-nettle

Limerick: Extinct Last seen: 1905

Archaeophyte; annual. Mainly towards E coast of Ireland, rare elsewhere; arable weed or casual. Only one old Limerick record, from cultivated fields at Ardagh in W of the county.

Site	Grid Ref.	Date	Recorder(s)
Ardagh	R23	1905	Knowles, M.C.

Lamium confertum Fr. (*L. molucellifolium*)

Northern Dead-nettle

Nationally Scarce since 2000

National Threat Status: Near Threatened

Limerick: Extinct Last seen: c.1899

Archaeophyte; annual. Mainly near E coast of Ireland, rare elsewhere; arable weed or casual. Only a few old records for Limerick.

Site	Grid Ref.	Date	Recorder(s)
Foynes	R25	1899	Somerville, A.
Mungret	R55	Jul 1897	O'Brien, R.D.
Corbally (as L. intermedium)	R55	Pre-1901	Irish Topographical Botany
Doonass (as L. intermedium)	R66	Pre-1901	Irish Topographical Botany

Lamium hybridum Vill.

Cut-leaved Dead-nettle

Limerick: Locally Rare Last seen: 1999

Archaeophyte; annual. Fairly widespread in Ireland; usually an arable weed. Only one recent record for Limerick, in a weedy field (formerly cultivated) near Mungret with other arable weeds. First recorded in cultivated fields near and W of Ardagh 1905.

Site	Grid Ref.	Date	Recorder(s)
Ballykeeffe, NE of Mungret	R548552	11 Sep 1999	Reynolds, S., Gabbett, M.

Lamium molucellifolium see Lamium confertum

Lathraea squamaria L.

Toothwort

Limerick: Locally Scarce Last seen: 2021

Native; parasitic rhizomatous perennial. Mainly across N of Ireland, scattered elsewhere. In Hazel wood and broad-leaved woodlands in Limerick, parasitic on roots of trees and shrubs. Under Horse-chestnut and Cherry Laurel near ruined house at Curragh Chase, also in

woodland at N end of Curragh Chase near entrance barrier, near Monaster and in Cappercullen Glen. Reported from other estate woodlands between Curragh Chase and Rathkeale, but no details. First recorded near Limerick city, probably early 1830s and at Mount Trenchard W of Foynes 1875.

Site	Grid Ref.	Date	Recorder(s)
Ballyclogh, NNE of Creeves Cross	c.R3048	25 Apr 2004	Reynolds, S., O'Connell, L.
(Hazel wood)			et al.
Curragh Chase	R44	c.1989	Jones, E.
Curragh Chase, near ruined house	R4049	16 Apr 1997	Reynolds, S., Wiltshire, E.
Curragh Chase, near ruined house	R409490	2 May 2010	Reynolds, S.
Curragh Chase, near ruined house	R40994906	18 Apr 2014	Reynolds, S.
Curragh Chase, near ruined house	R409490	16 May 2015	Reynolds, S., BSBI
Curragh Chase, near ruined house	R40944909	19 May 2021	Reynolds, S., Reynolds, J.
Curragh Chase	R4150	17 Apr 1997	Reynolds, S., Wiltshire, E.
(woodland just SSE of crossroads)			
Curragh Chase	R410507	2 May 2010	Reynolds, S.
(woodland just SSE of crossroads)		24 May 2011	
Curragh Chase	R41045076	18 Apr 2014	Reynolds, S.
(woodland just SSE of crossroads)			
Monaster, just SW of (under Ash)	R54224087	12 Apr 2021	Harrington, T.
Castleconnell, SW of	R64516145	7 May 2021	Quirke, M., Murphy, P.,
(woodland by riverside path)			Harrington, T.
Cappercullen Glen, Glenstal Abbey	R7457	May 2010	Kelly, M., Lyons, M.
(near top of glen)			

Lathyrus palustris L.

Marsh Pea

Last seen: pre-1924

Nationally Scarce Limerick: Extinct

Native; herbaceous climbing perennial. Mainly centre of Ireland, e.g. Shannon catchment and Upper Lough Erne; in wet meadows and marshy ground. Not refound in Limerick where there appears to be suitable habitat by River Shannon above and below Castleconnell.

Site	Grid Ref.	Date	Recorder(s)
Limerick (city), above	R65 or R66	Pre-1924	Phillips, R.A.
(meadow by River Shannon)			

Lavatera arborea, see Malva arborea

Lemna gibba L. Fat Duckweed

Limerick: Locally Scarce Last seen: 2021

Native; floating aquatic perennial. Scattered across Ireland, but absent from much of SW, NW and midlands. In drainage ditches in Limerick, including where some brackish influence; locally abundant and often with other Duckweeds. First recorded near Limerick city early 1830s, also Limerick 1899, and in Limerick Canal and nearby ditches 1904.

Site	Grid Ref.	Date	Recorder(s)
Durnish, just E of Foynes	R26125112	30 Jul 2006	Reynolds, S.
		28 Oct 2006	
		12 Aug 2009	
Durnish	R2651	23 Jun 2010	Reynolds, S.
Durnish	R261511	29 Jun 2021	Reynolds, S., Reynolds, J.
Robertstown Creek, W side	R27525049	11 Sep 2006	Reynolds, S., Conaghan, J.
(drainage ditch S of railway)			
King's Island, E side (Limerick city)	R58085822	1 Oct 2005	Reynolds, S.
King's Island, E side	R5858	2007	Goodwillie, R.N.
King's Island, E side	R5858	28 Aug 2008	Reynolds, S.
King's Island, E side	R58075823	25 Sep 2021	Reynolds, S., Reynolds, J.
Caherconlish, S of	R68564779	3 Aug 2006	Reynolds, S.

Leontodon hispidus L.

Rough Hawkbit

Limerick: Locally Scarce Last seen: 2020

Native; herbaceous perennial. Widespread across the middle of Ireland, scattered elsewhere; in calcareous grassland and on eskers. In northern limestone area of Limerick, characteristically in dry calcareous grassland; also in disused limestone quarries and beside a fen S of Limerick city. First recorded at Mullagh SE of Foynes 1900.

Site	Grid Ref.	Date	Recorder(s)
Mullagh, NW of Creeves Cross	R2847	29 Aug 1997	Reynolds, S.
Mullagh	R286470	23 May 2006	Reynolds, S., Reynolds, J.
Carrowclogh (bordering Mullagh;	R2847	2005	O'Mahony, T.
disused quarry)			
Ellaha, NW of Creeves Cross (to E	R2848	16 Jul 1989	Reynolds, S.
of road)			
Ellaha (W side of road)	R282482	23 May 2006	Reynolds, S., Reynolds, J.
Ellaha (W side of road)	R282482	14 Jun 2006	Reynolds, S., Conaghan, J.
Rincullia, just SW of Barrigone	R2849	26 Jul 2000	Reynolds, S.
Barrigone Holy Well, W of	R2849	19 Jul 2004	Reynolds, S.
Creeves Cross, just NNW of	R2946	22 Jul 1999	Reynolds, S.
(disused quarry)			
Ahacronane Bridge, near	R2947	19 May 2001	Reynolds, S.
Craggs, SSE of Barrigone	R2948	19 Jun 2005	Reynolds, S.
Ardaneer, just SE of Foynes	R2650	21 Aug 1995	Reynolds, S.
Aughinish Island	c.R2852	6 Jun 2004	Reynolds, S.

Barrigone, near quarry	R2950	25 Aug 1996	Reynolds, S.
Barrigone, near quarry	R292506	22 May 2006	Reynolds, S., Conaghan, J.
Barrigone, near quarry	R2950	9 Jun 2008	Reynolds, S.
		9 Aug 2011	
		3 May 2014	
Barrigone, near quarry	R2950	12 Sep 2020	Reynolds, S., Reynolds, J.
Routagh, ESE of Ballysheedy	R5952	18 Jul 2017	Reynolds, S. et al.
(beside fen)			
Routagh	R5952	10 Jun 2020	Quirke, M., Murphy, P.,
			Harrington, T.

Lepidium heterophyllum Benth.

Smith's Pepperwort

Limerick: Locally Rare Last seen: 1996

Native; herbaceous perennial. Mainly NE, SE and SW of Ireland, preferring acid soils and missing from most of the centre and W of Ireland. Only one recent record in Limerick, by Dead River near Pallas Grean. First recorded in a quarry in Limerick city 1897, also at Doon 1900.

Site	Grid Ref.	Date	Recorder(s)
Pallas Grean, NNE of (by Dead	R7747	11 Aug 1996	Reynolds, S.
River near Old Bridge)			

Dittander

Nationally Scarce

National Threat Status: Vulnerable

Limerick: Locally Rare Last seen: 2019

Archaeophyte or Neophyte, status uncertain; rhizomatous perennial. Few scattered sites in Ireland. Established in one place by tidal River Maigue in Limerick, at base of embankment. First recorded near docks and in disused quarry in Limerick city 1900, also near docks 1920.

Site	Grid Ref.	Date	Recorder(s)
Ballynacarriga	R46025633	19 Jul 2019	Quirke, M., Murphy, P.,
(near mouth of River Maigue)			Harrington, T.

Leucojum aestivum L.

Summer Snowflake

Limerick: Locally Scarce Last seen: 2020

Native; perennial with bulbs. Scattered in Ireland and not common; also a garden plant. This attractive spring-flowering and well-recorded plant is locally common around Limerick city,

at and near Ballinacurra Creek, on N side of the upper Shannon Estuary between Meelick Creek and Shannon Bridge on muddy banks and stony-muddy shores, by tidal River Shannon at Clancy's Strand and by King John's Castle, on King's Island, by Abbey River and in wet Willow woodland by River Shannon at Corbally. Rare elsewhere in Limerick, by Greanagh River near Adare and by River Shannon SW of Castleconnell. First recorded on N side of Limerick city 'above railway bridge' (Corbally) 1904 and below Adare rectory 1904.

There is ongoing debate as to whether this species is native or introduced in Ireland. Parnell & Curtis (2012) consider it native along the Shannon and in SE of Ireland. All Limerick plants examined were *Leucojum aestivum* subsp. *aestivum*.

Site	Grid Ref.	Date	Recorder(s)
Curragh Bridge, NW of Adare	R4447	23 Apr 2005	Reynolds, S., OBrien, M.V.
(by Greanagh River)			
Bunlicky lake (W of Ballinacurra	R5455	Mar 2002	Goodwillie, R.N.
Creek)			
Ballinacurra Creek, mouth of	R5456	7 May 1987	OBrien, M.V.
Ballinacurra Creek, mouth of	R5456	15 Jun 1996	Reynolds, S.
Meelick Creek to Coonagh	R55	2012	Quirke, M., Murphy, P.
(by Shanon Estuary)			
Barrington's Pier, W of	R55	2005	Quirke, M.
(by Shannon Estuary)			
Barrington's Pier and Shannon	R5656	Jun 2006	Hunt, G.
Bridge, between			
King John's Castle, River Shannon	R5757	21 Apr 2011	Reynolds, S., Reynolds, J.
King John's Castle, River Shannon	R5757	19 Oct 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Clancy's Strand, River Shannon	R5757	Jun 1987	Wyse Jackson, P.
Clancy's Strand	R574574	20 Apr 2016	Lynch, M.
Clancy's Strand	R574575	15 Apr 2017	O'Donoghue, P.
Clancy's Strand	R575576	29 May 2018	Lysaght, L.
Thomond Bridge, N side	R5757	21 Apr 2011	Reynolds, J.
King's Island	R5758	21 Jul 1992	Reynolds, S.
King's Island	R5758	2007	Goodwillie, R.N.
King's Island	R5758	28 Oct 2016	Quirke, M., Murphy, P.,
			Harrington, T.
King's Island	R579586	1 Apr 2017	Denyer, J.
NW Corbally	R5759	21 April 2011	Reynolds, S., Reynolds, J.
(by tidal River Shannon)			
Abbey River	R5857	1996	Goodwillie, R.N.
O'Dwyer Bridge, Abbey River near	R5857	30 Apr 2007	Reynolds, S.
Abbey River	R5857	12 Apr 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Lisnagry, NW of	R6359	6 Jun 2000	O'Mahony, T.
(pond near River Shannon)			
Castleconnell, SW of	R638609	2014	Harrington, T.
(meadow near River Shannon)			
Prospect (townland), SW of	R637609	25 Jun 2020	Quirke, M., Murphy, P.,
Castleconnell (by River Shannon)			Harrington, T.

Lyme-grass

Leymus arenarius (L.) Hochst.

Native in Ireland, mainly on N and E coasts; only an introduction in Limerick. Planted by the Shannon Estuary at Glin and apparently establishing itself there.

Limonium humile Mill.

Lax-flowered Sea-lavender

Internationally Rare: Ireland holds more than 25% of the European population

Limerick: Not Locally Rare or Scarce

Last seen: 2021

Native; herbaceous perennial. Around the coast of Ireland, but distribution not continuous. Fairly common along the Shannon Estuary from W of Glin to Ringmoylan Quay, and by Robertstown and Poulaweala Creeks; mainly in saltmarshes. First recorded at Ringmoylan and mud flats above Foynes 1885/1886.

A summary of sites with latest dates of records is given below.

Site	Grid Ref.	Date	Recorder(s)
Ballyhoolahan Point, just E of	R1147	11 Jul 2005	Reynolds, S.
Long Rock, NE of Glin	R1548	23 Jun 2010	Reynolds, S.
Long Rock, just E of	R1549	15 Sep 2019	Reynolds, S., Reynolds, J.
Kilteery Pier, near	R1749	11 Aug 2009	Reynolds, S.
Loghill, near	R1849	22 Sep 2008	Reynolds, S.
	R1850		
Loghill, near	R1950	27 Jul 2006	Reynolds, S.
Foynes Island	R2452	27 Jul 2014	Reynolds, S.
Foynes Island	R2553	8 Aug 2003	Reynolds, S.
Sturamus Island (off Foynes Island)	R2553	24 Jul 2007	Reynolds, S.
Churchfield, just S of Aughinish	R2750	15 Jan 2019	Quirke, M., Murphy, P.,
Island (by Robertstown Creek)			Harrington, T.
Robertstown Creek	R2751	13 Aug 2006	Reynolds, S.
Fawnamore, E side Poulaweala	R285518	1 Aug 2021	Reynolds, S., Reynolds, J.
Creek			
Aughinish Island, E side (W side of	R2852	29 Jun 2021	Quirke, M., Murphy, P.,
Poulaweala Creek)			Harrington, T.
Poulaweala Creek, E side	R2952	11 Sep 1999	Reynolds, S.
Morgans North (E of Poulaweala	R2952	4 Jun 2016	Quirke, M., Murphy, P.
Creek)			
Trummera Big (islet off Aughinish	R2954	30 Aug 2008	Reynolds, S.
Island)			
Courtbrown Point	R324543	21 Sep 2021	Quirke, M., Murphy, P.,
			Harrington, T.
Ballysteen, W of	R3355	12 Jul 2017	Reynolds, S., Reynolds, J.
	R3455		
Beagh Castle, just E of	R3556	28 May 2011	Reynolds, S.
Beagh Castle, SE of	R3656	25 Sep 2018	Reynolds, S., Reynolds, J.
Ringmoylan Quay, just W of	R4057	22 Jul 2017	Wilcox, M.P., Tregale, B.A.

Linum bienne Mill. Pale Flax

National Threat Status: Near Threatened

Limerick: Locally Scarce Last seen: 2021

Native; biennial or perennial. Mainly in E, SE and S of Ireland, widely distributed elsewhere. Scattered sites in Limerick; in unimproved grasslands, including on banks. First recorded at Loghill 1902, also Askeaton 1903.

Site	Grid Ref.	Date	Recorder(s)
Kilteery Pier, beside	R1749	16 Jul 1997	Reynolds, S.
		3 Jun 2006	
Kilteery Pier, beside	R17064988	29 May 2021	Reynolds, S., Reynolds, J.
Loghill	R1949	18 Aug 1996	Reynolds, S.
(field near bridge)		29 Aug 2008	
Tomdeely Point, just SE of	R3252	30 Jun 2011	Reynolds, S.
(N of Askeaton; on low bank)		15 Sep 2011	
Curragh Chase (near lake)	R4149	20 Jul 2003	Reynolds, S.
Kilbreedy Loughs, just N of	R4251	10 Aug 2004	Reynolds, S.
(meadow)		27 Jun 2005	
		7 Sep 2007	
Kilbreedy Loughs, near	R4251	17 Jul 2020	Quirke, M., Murphy, P.,
			Harrington, T.

Listera cordata, see Neottia cordata

Lithospermum officinale L.

Common Gromwell

Nationally Scarce since 2000

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 2020

Native; herbaceous perennial. Scattered across the middle of Ireland; formerly more widespread. One recently discovered site in Limerick; found sparingly at wood edge near more easterly of Kilbreedy Loughs. Only earlier records are from Mullagh SE of Foynes 1899 and Foynes 1902.

Site	Grid Ref.	Date	Recorder(s)
Kilbreedy Loughs, near	R43255109	17 Jul 2020	Quirke, M., Murphy, P.,
			Harrington, T.

Littorella uniflora (L.) Asch.

Shoreweed

Limerick: Locally Scarce Last seen: 2021

Native; stoloniferous perennial. Widespread in SW, W and N half of Ireland, also in Wicklow area. Few scattered sites in Limerick; in shallow water or at water's edge, including turloughs and Lough Gur. There is an old record from 'bog' near Foynes 1902, but neither location nor habitat are clear.

Site	Grid Ref.	Date	Recorder(s)
Graigues Lough, SE of Askeaton	R3647	12 Jun 2004	Reynolds, S.
Graigues Lough (turlough)	R366479	10 Oct 2016	Reynolds, S., Reynolds, J.
		28 Aug 2021	
Glennameade, SE of Pallaskenry	R4253	23 Jul 2004	Reynolds, S.
(pond in fen near swamp)			
Loughmore Common, SE of	R5452	Aug 1998	Goodwillie, R.N.
Mungret (turlough)			
Lough Gur, S side	R64274046	2015	Environmental Protection
			Agency
Lough Gur (below Visitor Centre)	R6441	24 Aug 1996	Reynolds, S., BSBI

Logfia minima (Sm.) Dumort. (*Filago minima*)

Small Cudweed

National Threat Status: Near Threatened

Flora (Protection) Order 2015

Limerick: Locally Rare Last seen: 2020

Native; annual. In N of Ireland, also SE and S, rare elsewhere. One recently discovered site for this protected species in Limerick; in open ground in disused gravel/sand pit at Gooig.

Site	Grid Ref.	Date	Recorder(s)
Gooig gravel/sand pit	R675639	10 Jul 2020	Reynolds, S., Reynolds, J.
(NE of Castleconnell)			

Luzula multiflora subsp. hibernica Kirschner & T.C.G. Rich

Heath Wood-rush, subspecies

Internationally Rare: Endemic to Ireland

Limerick: Locally Rare Last seen: 2017

Native; perennial. Widely scattered in Ireland, more frequent in W half. Few sites in Limerick in damp habitats, including wet grassland bordering fen by Kilbreedy Loughs and unimproved wet meadow by River Shannon N of Castleconnell. This Irish endemic subspecies, which needs careful determination, was first described in 1990s and is likely to be more widespread in the county. The species *Luzula multiflora* is fairly widespread and common, particularly off the limestone in Limerick.

Site	Grid Ref.	Date	Recorder(s)
Kilkinlea, SW of Abbeyfeale	R09702355	11 Jun 2017	Green, P.R.
Kilbreedy Loughs, N end of more westerly lake	R430509	11 Aug 2004	Reynolds, S.
Lacka, N of Castleconnell	R6664	23 May 2006	Reynolds, S.

Luzula pilosa (L.) Willd.

Hairy Wood-rush

Limerick: Locally Scarce Last seen: 2017

Native; perennial. Widespread across N of Ireland, also in SE and scattered elsewhere. In E Limerick, and one site in SW; in woodlands off the limestone with *Quercus petraea* (Sessile Oak) and on banks. No confirmed earlier records.

Site	Grid Ref.	Date	Recorder(s)
Acres, SSE of Mountcollins	R16951699	1 Sep 2013	Reynolds, S.
	R169170		
Ballyorgan, just NW of	R6719	6 May 1988	Reynolds, S.
(roadside, under trees)			
Ballyorgan, SE of (by Keale River)	R7017	25 Apr 1999	Lynch, R.
Ballyorgan, SE of	R7017	22 Jul 1999	Reynolds, S., Lynch, R.
Glenroe, NNW of	R71742030	29 Apr 2013	Reynolds, S.
(heathy roadside bank)			
Glenstal Abbey, Murroe	R731563	12 Sep 2008	Reynolds, S.
(under Oaks)			
Bilboa Bridge, NE of	R8252	10 May 2017	Reynolds, S. et al.
(roadside bank at wood edge)			
Knockastanna, SW of	R849546	2006	Goodwillie, R.N.

Lysimachia nummularia L.

Creeping-Jenny

Last seen: 2021

Limerick: Locally Scarce as a native

Native; herbaceous perennial with creeping stems. Fairly widespread in Ireland; also a garden plant, so some records may refer to garden escapes or discards. Quite common around Limerick city, occasional elsewhere in Limerick. As a native in swamps (locally abundant); muddy and marshy ground by and near River Shannon, and tidal marsh by the upper Shannon Estuary; unimproved wet meadow and sparingly by a lake in northern limestone area. Probably an introduction at Curragh Chase. First recorded in Limerick city area pre-1962 (no details), also near Ballinacurra Creek 1974.

Site	Grid Ref.	Date	Recorder(s)
Palatine Bridge, near	R354396	29 May 2013	Reynolds, S.
(SW of Rathkeale; wet meadow)		5 Jul 2015	
Milltown Lake, S side	R3753	20 Sep 2005	Reynolds, S.
(NE of Askeaton)			

		·	,
Curragh Chase arboretum	R4049	3 May 2009	Reynolds, S.
(probably introduced here)		18 Apr 2014	
Curragh Chase (near car park)	R4149	16 May 2015	Reynolds, S.
Clonmacken (at edge of upper	R5456	12 Aug 2007	Reynolds, S.
Shannon Estuary)			
Knockalisheen Marsh (swamp)	R5659	4 Sep 2005	Reynolds, S.
Ballynaclough River, near	R5754	28 Aug 2009	Reynolds, S.
(Dooradoyle; drainage ditch edge)			
King's Island, Limerick city	c.R5758	2007	Goodwillie, R.N.
(drainage ditches, wet ground)			
Corablly swamp	R5858	18 Sep 1997	Heery, S.
Corbally swamp	R5858	28 Aug 2008	Reynolds, S.
Ballyvoughella Hill, S of Kilfinnane	R6821	15 Jun 2017	Reynolds, S., Reynolds, J.
(garden discard)			
Reboge, E side Limerick city (by	R6057	9 Jul 1998	Reynolds, S.
floodplain lake near R. Shannon)		15 Aug 2004	
		13 Aug 2009	
Reboge (by lake)	R601576	31 Aug 2021	Reynolds, S., Reynolds, J.
Ballyvollane, WNW of Lisnagry	R6359	9 Jul 1998	Reynolds, S.
(by River Shannon)			
Lisnagry, NW of (by River Shannon)	R6359	6 Jun 2000	O'Mahony, T.
Portcrusha, N of Castleconnell	R6664	17 Sep 2007	Reynolds, S.
(by River Shannon)			

Malva arborea (L.) Webb & Berthel. (*Lavatera arborea*)

Tree-mallow

Native by the coast in Ireland; only a casual or garden escape in Limerick.

Malva neglecta Wallr.

Dwarf Mallow

Nationally Scarce

National Threat Status: Near Threatened

Limerick: Extinct Last seen: 1880

Archaeophyte; annual. Widely scattered in Ireland. Only one old record for Limerick, in waste ground.

Site	Grid Ref.	Date	Recorder(s)
Glenstal, near gate lodge (Murroe)	R75	1880	Barrington, C.B., Hart, H.C.

Marrubium vulgare L.

White Horehound

Nationally Rare

Limerick: Extinct Last seen: 1906

Archaeophyte; herbaceous perennial. Only two records in Ireland since 1987; formerly cultivated for medicinal use. Old records in Limerick from rough ground and a roadside.

Site	Grid Ref.	Date	Recorder(s)
Mullagh, SE of Foynes	R24	Aug 1906	Knowles, M.C.
Barrigone, near (E of Foynes)	R25	Between 1903	Knowles, M.C., O'Brien, C.G.
		and 1906	

Meconopis cambrica, see Papaver cambricum

Melampyrum pratense L.

Common Cow-wheat

Last seen: 2021

Limerick: Locally Scarce

Native; hemiparasitic annual. Widespread in Ireland, but a few large gaps in its distribution. Occasional on higher ground in Limerick, including Ballyhoura Mtns and nearby hills; in heathy ground and on conglomerate tors, usually sparingly. First recorded in wood at Ringmoylan 1885/1886, also near Doon 1900.

Site	Grid Ref.	Date	Recorder(s)
Flynn's Rock, Ballyhoura Mtns	R637188	15 Aug 1987	Reynolds, S., Reynolds, J.
Black Rock, near	R6318	7 Jul 2020	Hodd, R.L.
(Ballyhoura Mtns)			
Black Rock area	R6418	16 Aug 2005	Reynolds, S.
		18 Jul 2008	
Black Rock, just S of	R6418	16 Aug 2008	Reynolds, S., BSBI
Seefin Mtn	R6517	8 Sep 2007	Reynolds, J.
Seefin Mtn	R6517	18 Jul 2008	Reynolds, S.
Carrigeenamronety	R699158	28 Jun 2006	Reynolds, S., Conaghan, J.
Carrigeenamronety	R7015	16 Aug 2005	Reynolds, S.
Ballyroe Hill, S side	R6821	29 Jul 1999	Reynolds, S.
(S of Kilfinnane)			
Clare Glens	R7359	20 Jul 2007	Reynolds, S.
		29 Aug 2010	
Slievefelim Mtns	R7858	6 Jun 2021	Quirke, M.
Knockastanna	<i>c</i> .R8556	23 Jun 2001	Penn, G.

Melica uniflora Retz.

Wood Melick

Limerick: Locally Scarce

Last seen: 2021

Native; perennial grass. Mainly in N, across the middle and SE Ireland. In northern limestone area of Limerick (locally abundant), at Ringmoylan and on Tory Hill; in woods and scrub, often with outcropping limestone. First recorded in woods at Foynes 1885/1886.

Site	Grid Ref.	Date	Recorder(s)
Mullagh, NW of Creeves Cross	R2846	18 Apr 2009	Reynolds, S.

Ellaha, NW of Creeves Cross	R2848	28 Jun 1987	Reynolds, S.
(to E of road)			
Ellaha/Deelish (to E of road)	R2848	16 Jul 1989	Reynolds, S., BSBI
Ahacronane Bridge, near	R2947	2 Jun 2001	Reynolds, S.
Craggs, SE of Barrigone	R2948	12 Jun 2004	Reynolds, S.
(woodland beside turlough)			
Craggs	R299486	26 Jul 2007	McNutt, K., Power, E.
Ardrageen Bridge, near	R3748	17 Aug 1991	Reynolds, S.
(SE of Askeaton; roadside)			
Curragh Chase Forest Park	R409498	20 Jul 2007	Perrin, P. <i>et al</i> .
Curragh Chase, road W of	R4049	24 May 2009	Reynolds, S.
(wood edge)			
Curragh Chase, SE part	R41454851	27 Apr 2015	Reynolds, S.
Curragh Chase, SE part	R4148	16 May 2015	Reynolds, S., BSBI
Curragh Chase	R4149	22 Aug 1997	Reynolds, S.
(rocky knoll with memorial cross)		18 Sep 2004	
Curragh Chase (rocky knoll)	R413490	30 Jun 2021	Reynolds, S., Reynolds, J.
Curragh Chase	R410510	11 Jun 2005	Reynolds, S.
(woodland near crossroads)			
Graigue wood, SSW of Adare	R456442	24 May 2007	Power, E., Perrin, P.
Ringmoylan Quay, near	R4057	12 Jul 1989	Reynolds, S.
		7 Jul 2008	
Bleach Lough, NW end	R4454	11 Aug 1996	Reynolds, S.
(rocky knoll)			
Tory Hill (woodland)	R54	1993	O'Mahony, T.
Tory Hill	R530427	24 Aug 2007	McNutt, K., Delaney, A.
	R532426		

Mentha arvensis L. Corn Mint

Limerick: Locally Scarce Last seen: 2017

Native: aromatic herbaceous perennial. Widespread in Ireland, but less so than formerly. Scattered sites in Limerick, usually in grassy habitats including wet grassland. First recorded at Ballysimon on outskirts of Limerick city c.1900, also in O'Briensbridge area 1959 where it was refound.

Mentha arvensis hybridises with more common *M. aquatica* (Water Mint), the hybrid occurring with both parents or on its own; e.g. hybrid abundant at Mullagh 2008, 2021.

Site	Grid Ref.	Date	Recorder(s)
Loghill-Ballyhahill road	R14	24 Jun 2005	O'Mahony, T.
Mullagh, NW of Creeves Cross	R2847	22 Aug 2008	Reynolds, S.
(in wet depression)			
Ellaha, NW of Creeves Cross (grass	R2848	2 Oct 2005	Reynolds, S.
verge by track; weedy gateway)			
Foynes Port, E end	R2551	22 Sep 1994	Reynolds, S.
Castle Hewson, ESE of Askeaton	R3749	30 Aug 1992	FitzGerald, R.
Clogh, W of Croagh (beside fen)	R3843	2 Oct 1987	Reynolds, S.

Kilbreedy Loughs, near (field edge)	<i>c</i> .R4250	10 Aug 2004	Reynolds, S.
O'Briensbridge (by River Shannon)	R66506685	12 Sep 2006	Reynolds, S.
O'Briensbridge-Montpelier	R6666	22 Jul 2017	Wilcox, M.P., Tregale, B.A.

Mentha pulegium L.

Pennyroyal

Rare native in Ireland, included on Flora (Protection) Order 2015; only an introduction in Limerick. No recent records.

Micranthes stellaris (L.) Galasso, Banfi & Soldano (Saxifraga stellaris)

Starry Saxifrage

Limerick: Locally Scarce Last seen: 2018

Native; herbaceous perennial. On mountains in Ireland, mainly in E, S, SW, W and NW. Sparingly in Galty Mtns in Limerick; by a stream, on ridges, and on bluffs above Blackrock River. First recorded in Galty Mtns 1880, 'on the way up' to Carrignabinnia.

Site	Grid Ref.	Date	Recorder(s)
Barna, NW Galty Mtns (gully below	R84532381	9 Oct 2010	Reynolds, S., Sweeney, P.
Carrignabinnia)			
Lyracappul-Carrignabinnia ridge	R8423	25 Jul 2017	Quirke, M., Murphy, P.
Blackrock River valley (bluffs)	c.R8522	Jul 2013	Quirke, M., Murphy, P.
Blackrock crags, Knockaterriff	R8522	17 Aug 2017	Quirke, M., Murphy, P.
Carrignabinnia and	R8523	10 Jul 2018	Quirke, M., Murphy, P.,
Slievecushnabinnia, between			Harrington. T.

Milium effusum L. Wood Millet

Limerick: Locally Rare Last seen: 2008

Native; tufted perennial grass. Scattered in Ireland, not common. Currently only known in Limerick in woodland at Mount Trenchard, where first found in 1903; previously also recorded near Tarbert 1904.

Site	Grid Ref.	Date	Recorder(s)
Mount Trenchard, W of Foynes	c.R214509	4 Jul 2008	Reynolds, S.

Moehringia trinervia (L.) Clairv.

Three-nerved Sandwort

Limerick: Locally Scarce Last seen: 2020

Native; annual. Widespread in Ireland, except in parts of W. Scattered sites in Limerick; mainly in and at edges of broad-leaved woodlands, also on shaded banks or tracks. First recorded at Castleconnell 1904.

Site	Grid Ref.	Date	Recorder(s)
Foynes Island	R2452	2007	Reynolds, S.
Foynes Island	R249524	3 Jul 2020	Reynolds, S.
(shaded muddy track)	R250524		
Curragh Chase	R4150	2 May 2010	Reynolds, S.
(woodland just SSE of crossroads)			
Curragh Chase	R4150	16 May 2015	Reynolds, S., BSBI
Ballingaddy, SSE of Kilmallock	R6225	11 May 2017	Reynolds, S., Reynolds, J.
(shaded hedgebank)			
Skoolhill, NW of Grange	R6244	7 Jul 1989	Reynolds, S., Curtis, T.,
			Harrington, T.
Nicker, NW of (woodland near	R7546	30 Apr 1999	Reynolds, S.
basalt columns)			
Murroe, SW of	R7254	7 Sep 1996	Reynolds, S.
(shaded roadside bank)			
Ballyvorheen House, ESE of	R7554	4 Apr 1997	Reynolds S., Quirke, M.
Murroe			
Ballyvorheen House	R7554	29 Mar 2016	Reynolds, S. et al.
Stagdale Bridge, ENE of Galbally	R8428	31 Jul 1997	Reynolds, S.
Knockouragh, near	R8247	15 May 2016	Reynolds, S.
(S of Doon; roadside bank)			

$Monotropa\ hypopitys,$ see $Hypopitys\ monotropa$

Myosotis ramosissima Rochel

Early Forget-me-not

Limerick: Extinct Last seen: 1903

Native; annual. Mainly a coastal species in Ireland, on E and N coasts; more rarely inland. Although looked for in dry calcareous grassland with outcrop and not found, this species may still occur in the county. Formerly found on walls and near Old Abbey House on limestone crags.

Site	Grid Ref.	Date	Recorder(s)
Cahirmoyle, near Ardagh (walls)	<i>c</i> .R2840	1902	O'Brien, C.G.
Old Abbey, near (E of	c.R2747	25 May 1903	O'Brien, C.G.
Shanagolden; limestone crags)			

Myriophyllum alterniflorum DC.

Alternate Water-milfoil

Limerick: Locally Rare Last: 2016

Native; aquatic perennial. Widespread in SW, W and N of Ireland, occasional elsewhere. In two rather different habitats in Limerick; drainage ditches in a fen with *Potamogeton coloratus* (Fen Pondweed) and in peaty water on stony bottom at edge of fast-flowing River Feale. First confirmed record is from Barrigone 'Bog' (swamp) 1903; record for Curragh Chase 1900 may be in error for *Myriophyllum verticillatum* (Whorled Water-milfoil) which is known there.

Site	Grid Ref.	Date	Recorder(s)
Acres, SSE of Mountcollins	R169169	21 Sep 2008	Reynolds, S.
(River Feale near county boundary)			
Deegerty, ENE of Askeaton	R3851	4 Jun 2009	Reynolds, S.
(peaty ditches in fen)		24 Jul 2009	
Deegerty, ENE of Askeaton	R3851	10 Oct 2016	Reynolds, S., Reynolds, J.

Neotinea intacta, see Neotinea maculata

Neotinea maculata (Desf.) Stearn (*N. intacta*)

Dense-flowered Orchid

Nationally Scarce

National Threat Status: Near Threatened

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Locally Rare Last seen: 2009

Native; perennial orchid. Burren area and rare elsewhere in Ireland. Only known at Barrigone beside Roadstone Quarry in Limerick; in dry calcareous grassland around shattered and outcropping limestone, similar to its habitat in Burren; usually in small numbers. First recorded at Barrigone 1979.

Site	Grid Ref.	Date	Recorder(s)
Barrigone, near quarry	R2950	21 May 1999	Reynolds, J.
(to E of roadway to quarry)			
Barrigone (= Glenbane East)	R29525077	22 May 2006	Reynolds, S., Reynolds, J.,
	R29535076	and	Conaghan, J.
	R29595078	23 May 2006	
Barrigone, near quarry	R2950	3 May 2009	Reynolds, S.

Neottia cordata (L.) Rich. (*Listera cordata*)

Lesser Twayblade

Limerick: Locally Rare Last seen: 2021

Native; perennial orchid. Mainly across N of Ireland, also in SW and widely scattered elsewhere. Recently found in W Limerick, in dry heath with dominant *Calluna vulgaris*

(Heather). An earlier mapped record from lowland mid-S Limerick was probably in error for *Neottia ovata* (= *Listera ovata*, Common Twayblade).

Site	Grid Ref.	Date	Recorder(s)
Grouselodge townland, NW of	R2541	25 Aug 2021	Conaghan, J.
Ardagh			

Neottia nidus-avis (L.) Rich.

Bird's-nest Orchid

Limerick: Locally Scarce Last seen: 2019

Native; perennial saprophytic orchid. Scattered in Ireland, mainly in W and N. Fairly common at and near Curragh Chase in Limerick, rare elsewhere; in broad-leaved woodlands, often under Beech, and on shaded roadsides at wood edges. First recorded at Mount Trenchard W of Foynes 1898, also Curragh Chase 1900; known on Foynes Island since at least 1983.

Site	Grid Ref.	Date	Recorder(s)
Craggs, SE of Barrigone	R299486	26 Jul 2007	McNutt, K., Power, E.
(woodland beside turlough)			
Foynes Island (Beech wood near	R2552	13 June 2005	Reynolds, S.
Monare)			
Foynes Island	R2552	30 Jun 2019	Reynolds, S., Reynolds, J.
Curragh Chase, W of	R3948	26 Jun 1987	Reynolds, E.
(just N of crossroads)			
Curragh Chase, W of	R3948	12 Jun 2005	Reynolds, S.
(just N of crossroads)			
Curragh Chase, W of	R3948	27 May 2006	Reynolds, S.
(just S of crossroads)			
Curragh Chase, W side	R4049	24 May 2009	Reynolds, S.
(road/wood edge)			
Curragh Chase, caravan park	R4049	14 May 2006	Reynolds, S.
		29 May 2010	
Curragh Chase, arboretum	R4049	16 Apr 1997	Reynolds, S., Wiltshire, E.
Curragh Chase (near car park)	R4149	1989	Jones, E.
Curragh Chase	R4149	1 Jun 1997	Reynolds, S., Dublin
(near wooded limestone knoll)			Naturalists' Field Club
Curragh Chase	R4149	3 May 2009	Reynolds, S.
(wooded limestone knoll)			
Curragh Chase (top of wooded	R4149	16 May 2009	Reynolds, S.
limestone knoll)			
Curragh Chase Forest Park	R41074925	3 Jun 2010	Crushell, P.
Curragh Chase, N of Glenisca	R41045091	11 Jun 2005	Reynolds, S.
Lough			

Nymphaea alba L.

White Water-lily

Limerick: Locally Scarce Last seen: 2021

Native; aquatic perennial with floating leaves. Widespread in SW, W and N of Ireland, scattered elsewhere. Mainly in northern limestone area of Limerick in lakes; also Lough Nagirra and Limerick Canal. First recorded between Askeaton and Foynes 1885/1886 'in several places, but not common'.

Site	Grid Ref.	Date	Recorder(s)
Doohyle Lough, channel on SW	R369434	3 Sep 2015	Reynolds, S.
side to old swimming pool			
Doohyle Lough, in channel	R369434	6 Sep 2021	Reynolds, S., Reynolds, J.
Doohyle Lough, W side	R3743	7 Sep 2007	Reynolds, S.
Doohyle Lough	R3743	6 Aug 2015	Hunt, G.
Milltown Lake, S side	R3753	27 Jun 2005	Reynolds, S.
Deegerty, ENE of Askeaton	R3851	6 Jun 2008	Reynolds, S.
(drainage ditch in fen)		4 Jun 2009	
Curragh Chase, lakes	R4149	16 Jul 1989	Reynolds, S., BSBI
Curragh Chase, lakes	R4149	30 Jul 1998	Reynolds, S.
		12 Jun 2005	
		2 Jul 2006	
Curragh Chase	R4149	20 Aug 2008	Seawright, J.
Curragh Chase Forest Park	R413493	26 Aug 2017	Cahill, M.
Blue Lough, just NW of	R4052	13 Sep 2008	Reynolds, S.
Kilbreedy Loughs	R45	2004	Mrs Downes
Kilbreedy Loughs	R4350	17 Jul 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Dromore Lough, W side	R4354	14 Sep 2007	Reynolds, S.
Bleach Lough, NW end	R4454	1 Jul 2007	Reynolds, S.
Bleach Lough	R442545	2009, 2012,	Environmental Protection
		2015, 2018	Agency
Lough Nagirra	R5343	20 Jun 1990	Curtis, T., Harrington, T.
Lough Nagirra	R5343	25 Aug 2007	Reynolds, S.
Limerick Canal	R5957	13 Aug 2009	Reynolds, S.
Limerick Canal near River Shannon	R5957	22 Sep 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Glenstal Abbey, Murroe	R7356	12 Sep 2008	Reynolds, S.
(Chapel Lake; possibly introduced)			

Oenanthe aquatica (L.) Poir.

Fine-leaved Water-dropwort

Limerick: Locally Scarce Last seen: 2021

Native; annual to biennial, in water or at water's edge. Widespread in lowland water-bodies across the middle of Ireland, less common elsewhere. In Limerick mainly in River Shannon and around Limerick city, including in Limerick Canal, a floodplain lake and large artificial

pond; also in drainage ditches. First recorded at Plassey E of Limerick city c.1833, probably in River Shannon.

Site	Grid Ref.	Date	Recorder(s)
Carrigclogher Point, E of (ditch)	R4757	16 Sep 2016	Reynolds, S.
Ferry Bridge, S of	R48215120	19 Sep 2012	Green, P.R.
(drainage ditch near River Maigue)			
Bunlicky, W of Ballinacurra Creek	R5455	15 Jun 1996	Reynolds, S.
(large artificial pond)			
Bunlicky lake (large pond)	R5455	Mar 2002	Goodwille, R.N.
Ballinacurra Creek, W side	R5455 or	7 Sep 1996	Reynolds, S.
	R5555		
Limerick Canal	R5957	16 Aug 2006	Reynolds, S.
		6 Sep 2006	
		20 Sep 2008	
		23 Aug 2010	
Limerick Canal	R5957	13 Jul 2021	Reynolds, S., Reynolds, J.
Reboge, E of Limerick Canal	R6057	26 Aug 1997	Reynolds, S.
(small floodplain lake)		9 Jul 1998	
Reboge, E side of Groody River	R604578	30 Jul 2006	Reynolds, S.
(drainage ditch)			
River Shannon, NW of Lisnagry	R6359	6 Jun 2000	O'Mahony, T.
River Shannon, Ballyvollane	R6359	3 Jun 2020	Quirke, M., Murphy, P.,
			Harrington, T.
River Shannon, Prospect, SW of	R6360	25 Jun 2020	Quirke, M., Murphy, P.,
Castleconnell			Harrington, T.
River Shannon, Castleconnell	R6562	27 Jul 2009	Reynolds, S.
River Shannon, Castleconnell	R6562	24 Jun 2019	Reynolds, S., Reynolds, J.
River Shannon, N of Castleconnell	R66	8 Jul 1998	Reynolds, S.
River Shannon, Lacka, N of	R6664	26 Jun 2006	Reynolds, S., Fuller, J.
Castleconnell			
River Shannon, Lacka	R6664	22 Jun 2021	Reynolds, S., Reynolds, J.
River Shannon, Portcrusha	R6664	17 Sep 2007	Reynolds, S.
River Shannon, O'Briensbridge	R6666	12 Sep 2006	Reynolds, S.

Oenanthe fistulosa L.

Tubular Water-dropwort

National Threat Status: Near Threatened

Limerick: Locally Scarce Last seen: 2021

Native; herbaceous stoloniferous perennial. Scattered in Ireland, usually associated with rivers, lakes and canals. Mainly around Limerick city in wet habitats, also by River Shannon; with emergent vegetation at edges of two small lakes and an artificial pond; also in a swamp, marshy ground and wet grassland. First found in ditches near the canal in Limerick c.1833.

Site	Grid Ref.	Date	Recorder(s)
Loughmore Common, SE of	R5452	1990, 1998	Goodwillie, R.N.
Mungret (turlough area)			

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R5452	24 Aug 2002	Quirke, M., Murphy, P.
R5452	20 Sep 2005	Reynolds, S.
	26 Jul 2006	
c.R544529	9 Jul 2021	Quirke, M., Murphy, P.,
		Harrington, T.
R5758	21 Jul 1992	Reynolds, S.
R5758	2007	Goodwillie, R.N.
R583578	Jul 2018	Harrington, T.
R5857	2 Aug 2004	Reynolds, S.
R5858	1997	Heery, S.
R5958	2 Jun 1997	Reynolds, S., Dublin
		Naturalists' Field Club
R592582	12 Aug 2006	Reynolds, S.
R59335821	13 Aug 2009	Reynolds, S., Reynolds, J.
R594581	6 Sep 2006	Reynolds, S.
R6057	26 Aug 1997	Reynolds, S.
	9 Jul 1998	
	2,15 Aug 2004	
R60085763	13 Aug 2009	Reynolds, S., Reynolds, J.
R60225762		
R601576	31 Aug 2021	Reynolds, S., Reynolds, J.
R6359	9 Jul 1998	Reynolds, S.
R6360	25 Jun 2020	Quirke, M., Murphy, P.,
		Harrington, T.
	R5452 c.R544529 R5758 R5758 R5758 R5857 R5858 R5958 R592582 R59335821 R594581 R6057 R60085763 R60225762 R601576 R6359	R5452 20 Sep 2005 26 Jul 2006 c.R544529 9 Jul 2021 R5758 21 Jul 1992 R5758 2007 R583578 Jul 2018 R5857 2 Aug 2004 R5858 1997 R5958 2 Jun 1997 R592582 12 Aug 2006 R59335821 13 Aug 2009 R594581 6 Sep 2006 R6057 26 Aug 1997 9 Jul 1998 2,15 Aug 2004 R60085763 13 Aug 2009 R60225762 R601576 31 Aug 2021 R6359 9 Jul 1998

Oenanthe lachenalii C.C. Gmel.

Parsley Water-dropwort

Last seen: 2021

Limerick: Locally Scarce

Native; herbaceous perennial. Scattered around the coast of Ireland, including estuaries. In Limerick by the Shannon Estuary, and by creeks and tidal River Maigue off the estuary; mainly in saltmarshes, also in brackish marsh. First recorded in saltmarshes at Foynes 1885/1886.

Site	Grid Ref.	Date	Recorder(s)
Barrigone Holy Well, W of (by tidal creek)	R2849	19 Jul 2004	Reynolds, S.
Goleen Bridge, near (tidal creek)	R336529	20 Sep 2012	Green, P.R.
Goleen Bridge, near	R3353	9 Jul 1988	Rich, T.C.G., Taylor, N.
Goleen Bridge, E and W sides	R3353	22 Jul 1988	Reynolds, S.
Goleen Bridge, near	R3353	15 Jul 1989	Reynolds, S., BSBI
Goleen Bridge, W side	R335530	25 Jul 2006	Reynolds, S., Reynolds, J.
Goleen Bridge, E side	R3353	26 Jul 2010	Reynolds, S.
Goleen Bridge, near	R3353	20 Sep 2012	Green, P.R.
Ballinvoher Point to Beagh Quay,	R3456/R3556	6 Sep 2021	Quirke, M., Murphy, P.,
by Shannon Estuary			Harrington, T.

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Ballymartin, ENE of Ballysteen	R3956	17 Aug 2021	Quirke, M., Murphy, P.,
			Harrington, T.
Ringmoylan Quay, W of	R404576	25 Jul 2006	Reynolds, S., Reynolds, J.
Ringmoylan Quay	R40245769	22 Jul 2017	Wilcox, M.P., Tregale, B.A.
Ballynacarriga	R468557	9 Jul 2001	Wann, J.
(by tidal River Maigue)			
Ballynacarriga (embankment by	R4656	19 Jul 2019	Quirke, M., Murphy, P.,
tidal River Maigue)			Harrington, T.

Ononis repens L.

Common Restharrow

Limerick: Locally Scarce Last seen: 2020

Native; herbaceous rhizomatous perennial. Mainly in E and S of Ireland, particularly along the coast. In northern limestone area of Limerick, also on Tory Hill and near Limerick city; by disused railways, in dry calcareous grassland and on banks. First recorded by railway at Patrickswell 1897, also Curragh Chase 1900 and railway bank near Foynes 1903.

Site	Grid Ref.	Date	Recorder(s)
Robertstown Creek, disused	R2750	1 Aug 2005	Reynolds, S.
railway near bridge			
Barrigone, bank by disused railway	R2950	7 Jul 2005	Reynolds, S.
Askeaton, SW of (by railway)	R3249	12 Sep 2015	Reynolds, S.
Askeaton, S of (by railway)	R3349	26 Jul 2009	Reynolds, S.
Tomdeely South, W of Askeaton	R3150	20 Jul 1996	Reynolds, S.
(road bank near railway bridge)			
Cloonoul, W of Adare (railway)	R4145	12 Jul 2018	Quirke, M., Murphy, P.,
			Harrington, T.
Clonshire Beg, W of (disused	R4245	20 Jul 2016	Quirke, M., Murphy, P.
railway W of Adare)			
Adare, N of (railway near cutting)	R4647	21 Jul 2007	Reynolds, S.
Kilbreedy Loughs, beside	R4350	17 Jul 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Tory Hill, N end	R5343	20 Jun 1990	Curtis, T., Harrington, T.
Tory Hill, N end	R5343	1993	O'Mahony, T.
Tory Hill, N end	R5343	22 Jul 2014	Reynolds, S.
Limerick city, SW of (= NE of	<i>c</i> .R5452	1998	Goodwillie, R.N.
Patrickswell)			

$\label{lem:continuous} Ophioglossum\ vulgatum\ L.$

Adder's-tongue

Limerick: Locally Scarce Last seen: 2021

Native fern. Scattered throughout Ireland. Also scattered in Limerick; in damp grasslands, at edge of two turloughs, and tiny plants in grazed acid grassland on Galty Mtns. First recorded near Foynes (probably at Mullagh) and Lough Gur 1900.

Site	Grid Ref.	Date	Recorder(s)
Craggs, SE of Barrigone (beside	R2948	12 Jun 2004	Reynolds, S.
Lough Selleher turlough)		1 Jun 2009	
Barrigone (E of roadway to quarry)	R2950	Pre-1999	Allott, H.L.
Graigues Lough, SE of Askeaton (N	R3648	12 Jun 2004	Reynolds, S., Reynolds, J.
end of turlough among Bracken)			
Graigues Lough (N end of turlough	R36654807	28 Aug 2021	Reynolds, S., Reynolds, J.
by low stone wall)			
Kilbreedy Loughs (N end of more	R4350	10 Aug 2004	Reynolds, S., Reynolds, J.
westerly lake)			
Raheen Industral Estate, SW of	R5551	Jul 1998	Goodwillie, R.N.
(wet ground near disused railway)			
Blackrock River valley (Galty Mtns)	R85412104	8 Jun 2014	Green, P.R., BSBI
Curraghafoil, SE of Rear Cross	c.R8557	May 2000	Penn, G.
(by Bilboa River)			

Ophrys insectifer a ${\sf L}.$

Fly Orchid

Nationally Scarce

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 2021

Native; perennial orchid. Mainly W of Ireland (e.g. Burren), rare elsewhere. Only known at two sites in Limerick, in fen near Askeaton (now degraded) and calcareous grassland at Barrigone. First recorded at Deegerty 'Bog' pre-1961 and at same site, Deegerty/Ballyvogue fen 1974.

Site	Grid Ref.	Date	Recorder(s)
Barrigone, near quarry	R2950	11 Jun 2000	Penn, G.
(E of roadway to quarry)			
Barrigone	R2950	24 May 2011	Reynolds, J., Reynolds, S.
Barrigone	R29625076	9 Aug 2011	Reynolds, S.
Barrigone	R2950	Jun 2013	Denholm, I., Bateman, R.
Barrigone (E side of roadway to	R29475072	19 May 2021	Reynolds, S., Reynolds, J.
quarry)	R29485072		
Ballyvogue, ENE of Askeaton	R3851	c.1987	Jones, E.
Ballyvogue	R3851	17 Jun 1988	Reynolds, S.

Orchis morio, see Anacamptis morio

Oreopteris limbosperma (All.) Holub

Lemon-scented Fern

Limerick: Extinct Last seen: 1900

Native fern, with scented glands. Mainly on higher ground and mountains in SW, W, NW and E of Ireland. No current sites in Limerick, but likely still to occur in Bilboa River valley

or be found by streams on S side of Galty Mtns. First recorded in glen of Bilboa River 1900; a record from 'Rear Cross' 1969 lacks details and could be Limerick or N Tipperary.

Site	Grid Ref.	Date	Recorder(s)
Bilboa River, near Doon	R85	15 Aug 1900	Praeger, R.L.

Oxyria digyna (L.) Hill

Mountain Sorrel

Nationally Scarce

Limerick: Locally Rare Last seen: 2018

Native; herbaceous perennial. On mountains in SW, W and NW of Ireland, also Galty Mtns. On and near Carrignabinnia in Limerick, including a N-facing rocky slope. First recorded in Galty Mtns 1944, on escarpment between Lyracappul and Carrignabinnia.

Site	Grid Ref.	Date	Recorder(s)
Carrignabinnia (rocky slope)	R84972389	28 May 2015	Hodd, R.L.
Carrignabinnia and	R8523	10 Jul 2018	Quirke, M., Murphy, P.,
Slievecushnabinnia, between			Harrington, T.

Papaver argemone, see Roemeria argemone

Papaver cambricum L. (*Meconopsis cambrica*)

Welsh Poppy

Limerick: Locally Scarce Last seen: 2017

Native; perennial. Mainly across N of Ireland, also in E and scattered elsewhere; native on mountains, also a garden escape or discard. In Galty Mtns in Limerick, by mountain streams and on rocky bluffs. First recorded as a garden escape on shore at Foynes 1906, and as a native on stream bank on county boundary with Tipperary N of Carrignabinnia 1943.

Site	Grid Ref.	Date	Recorder(s)
Lyraveg Glen, NW side Galty Mtns	R841234	Jul 1999	Sweeney, P.
Lyraveg Glen	R84032345	9 Oct 2010	Reynolds, S., Sweeney, P.
	R84282331		
Pigeonrock River, S side Galty Mtns	R85462014	17 Aug 2008	Conaghan, J., BSBI
Blackrock crags, Blackrock River	R8522	Jul 2013	Quirke, M., Murphy, P.
valley			
Black Rocks, Knockaterriff	R85132202	8 Jun 2014	Reynolds, S., BSBI
Blackrock crags, Knockaterriff	R8522	17 Aug 2017	Quirke, M., Murphy, P.
Ballygeana, NW side Galty Mtns	c.R8524	2012	Quirke, M., Murphy, P.
Ballygeana	R852246	14 June 2017	Reynolds, S. et al.

Papaver hybridum, see Roemeria hispida

Papaver somniferum L.

Opium Poppy

Limerick: Locally Scarce Last seen: 2019

Archaeophyte; annual. Mainly in N, E and SE of Ireland, scattered elsewhere. Infrequent casual or garden escape in Limerick; usually in disturbed or open ground, including on roadsides. First recorded at Castleconnell 1900, also fields 'quite gay with it' at Barrigone 1903.

Site	Grid Ref.	Date	Recorder(s)
Dromreask, S of Glin (dumped	R1239	16 Jul 1997	Reynolds, S.
garden waste at bog edge)			
Barrigone, near	R2849	26 Jul 2000	Reynolds, S.
Aughinish Island	c.R2852	21 Jul 2008	Seawright, J.
Doohyle Lough, near	R3743	5 Jul 2015	Reynolds, S.
Ballydoo Bridge, near	R352526	20 Sep 2012	Green, P.R.
Ballymackeamore, WSW of Croom	R4840	19 Jun 2018	Quirke, M., Murphy, P.
Raheen Business Park	R5551	8 Oct 2005	Reynolds, S.
Dooradoyle	R563528	9 Jun 2019	Reilly, G.
Limerick city	R5757	19 Oct 2016	Quirke, M., Murphy, P.,
(at/near King John's Castle)			Harrington, T.
Pallas Grean	R7746	3 Sep 2014	Reynolds, S.

Parapholis strigosa (Dumort.) C.E. Hubb.

Hard-grass

Limerick: Locally Scarce Last seen: 2021

Native; annual grass. Occasional around the coast of Ireland, also in estuaries. By the Shannon Estuary in Limerick as far as Ringmoylan Quay, and by creeks off the estuary; mainly in upper part of saltmarshes, locally abundant. First recorded at Ringmoylan 1902, also Robertstown Creek 1903.

Site	Grid Ref.	Date	Recorder(s)
Glin (path just W of pier)	R1247	11 Jul 2005	Reynolds, S.
Glin (just W of pier)	R129477	28 Aug 2021	Reynolds, S., Reynolds, J.
Glin, NE of	R1549	24 Aug 1997	Reynolds, S., Reynolds, J.
		28 Aug 2021	
Robertstown, near ruined church	c.R272499	30 Jul 2006	Reynolds, S.
(grassy edge of creek)			
Barrigone Holy Well	R2849	19 Jul 2004	Reynolds, S.
(gravel floor of disused quarry)		27 Jul 2009	
Barrigone Holy Well (on gravel)	R285499	1 Aug 2021	Reynolds, S., Reynolds, J.
Foynes Port	R2551	3 Aug 1995	Reynolds, S.
(site since filled in)			
Robertstown Creek	R2750	5 Aug 1993	Reynolds, S.
(near railway bridge)		13 Aug 2006	
Goleen Bridge, near	R3353	22 Jul 1988	Reynolds, S.
(by creek N of Askeaton)			
Goleen Bridge, near	R3353	15 Jul 1989	Reynolds, S., BSBI

Ringmoylan Quay, W of	R4057	19 Jun 1988	Reynolds, S.
		11 Sep 2005	

Parnassia palustris L.

Grass-of-Parnassus

Last seen: 2021

Limerick: Not Locally Rare or Scarce (see below*)

Native; herbaceous perennial. Mainly in W and W centre of Ireland, absent from much of NE and S. *Although not Locally Rare or Scarce in Limerick, this species is usually an indicator of good semi-natural habitats. A characteristic plant of fens and wet grassland, often on peaty soil; in northern limestone area and rare elsewhere in Limerick; vulnerable to drainage or any other disturbance of its habitat. First recorded at 'Red Bog' near Foynes 1897, also Mullagh area SE of Foynes 1900 (probably same area as Red Bog) and outskirts of Limerick city c.1897, 1901.

A selection of the better sites is given here, with latest date when *Parnassia palustris* found.

Site	Grid Ref.	Date	Recorder(s)
Ellaha, NW of Creeves Cross	R2848	10 Aug 2009	Reynolds, S.
(to E of road)			
Ballyellinan, E of Barrigone	R3149	27 Jul 2000	Reynolds, S.
Doohyle Lough, around	R3643	3 Sep 2015	Reynolds, S.
	R3743		
Cappagh, fen N of	R3745	28 Jul 1987	Jones, E., Reynolds, S.,
			OBrien, M.V.
Gorteenamrock fen, SE of	R3748	13 Jul 2005	Reynolds, S.
Askeaton			
Ballyvockoge	R377482	4 Sep 2021	Hunt, G.
(= Gorteenamrock fen)			
Clogh fen (= W of Croagh)	R3843	2 Oct 1987	Reynolds, S., Wiltshire, E.
Ballinvirick, N of Cappagh	R3847	20 Jul 1987	Reynolds, S.
Milltown Lake	R3754	9 Aug 2007	Rippey, I.
Ballyvogue, ENE of Askeaton	R3851	6 Jun 2008	Reynolds, S.
Mornane Lough, ENE of Askeaton	R3852	4 Sep 2014	Reynolds, S.
Ballylin, SSW of Croagh	R4040	10 Aug 2017	Reynolds, S., Reynolds, J.
Ballynakill, E of Kilfinny (fen)	R469405	1998	Curtis, T., Harrington, T.
Kilbreedy Loughs, N end of more	R4250	7 Sep 2007	Reynolds, S.
westerly lake	R4350		
Kilbreedy Loughs	R4350	17 Jul 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Bleach Lough, NW end	R4454	1 Jul 2007	Reynolds, S.
Lough Nagirra	R5343	2015	Conaghan, J.
Rootiagh, S of Raheen Industrial	R55	c.1994	Anon. (EIS report)
Estate (calcareous marsh)			
Routagh, ESE of Ballysheedy	R5952	10 Jun 2020	Quirke, M., Murphy, P.,
			Harrington, T.

Pedicularis sylvatica subsp. hibernica D.A. Webb

Lousewort, subspecies

Internationally Rare: Ireland holds more than 25% of the European population

Limerick: Locally Scarce Last seen: 2016

Native; usually perennial. Widespread in S, SW, W and NW of Ireland, occasional elsewhere. Scattered records in Limerick; in boggy ground, on mountains and rocky bluffs. First recorded in Mullaghareirk Mtns 1990. Probably under-recorded; not always clearly separable from *Pedicularis sylvatica* subsp. *sylvatica*, apparently the more common subspecies.

Site	Grid Ref.	Date	Recorder(s)
Mullaghareirk Mtns, SE of	R12	15 May 1990	Reynolds, S.
Dromtrasna Bridge			
Dromada Mtn, NE of (wet slope)	R1834	12 May 1998	Reynolds, S., Wiltshire, E.
Scotland Bog, just NE of	R2239	15 May 2009	Reynolds, S.
Carrigkerry			
Cush ring forts, near	R699258	5 Jun 2016	Reynolds, S., Reynolds, J.
(lower slope of Slievereagh)			
Pigeonrock Glen (bluffs above;	R8420	17 Aug 2008	Green, P.R., BSBI
S side Galty Mtns)			
Black Rocks, Knockaterriff	R8521	8 Jun 2014	Reynolds, S., BSBI
(Blackrock River valley)			

Persicaria mitis (Schrank) Assenov (P. dubia; Polygonum mite)

Tasteless Water-pepper

Nationally Scarce since 2000

Limerick: Locally Scarce Last seen: 2021

Native; annual. Mainly N of Ireland (e.g. Lough Neagh, Lough Erne), rare elsewhere. Around Limerick city and behind embankment by River Maigue just downstream of Ferry Bridge; usually in muddy and marshy places, sometimes growing with similar-looking and more common *Persicaria hydropipe*r (Water-pepper). First recorded on bank of River Shannon at Corbally 1904, also by Abbey River 1905.

Site	Grid Ref.	Date	Recorder(s)
Ferry Bridge (near River Maigue)	R4852	6 Sep 1996	Reynolds, S.
Coonagh, by upper Shannon	R5256	3 Oct 2005	Reynolds, S.
Estuary (marshy ground)			
King's Island, Limerick city	R5758	28 Oct 2016	Quirke, M., Murphy, P.,
			Harrington, T.
King's Island (edge of ditch, near	R5858	1 Oct 2005	Reynolds, S.
Abbey River)			
Reboge, E of Limerick Canal (wet	R6057	26 Aug 1997	Reynolds, S.
ground near River Shannon)			
Reboge, W side of Groody River	R6057	2 Aug 2004	Reynolds, S.
(shallow ditch across pasture)			
Reboge (edge of floodplain lake)	R6057	15 Aug 2004	Reynolds, S.

Reboge (ditch between lake and	R60385763	31 Aug 2021	Reynolds, S., Reynolds, J.
Groody River)			

Petroselinum crispum (Mill.) Fuss

Garden Parsley

Last seen: 2021

Limerick: Locally Rare as an archaeophyte

Archaeophyte; biennial. Widely scattered in Ireland; relict of former cultivation, e.g. on ruins; also a garden escape or discard. Long known in Limerick on ruins of Askeaton Castle; sparingly on King's Island, Limerick city; in both places plants with flat (not crisped) leaves. First recorded on walls of St Mary's Church (= Cathedral), Limerick pre-1866 and on castle ruins at Askeaton 1897.

Site	Grid Ref.	Date	Recorder(s)
Askeaton Castle (also beside castle on stone bridge over River Deel)	R3450	3, 20 Jul 2004	Reynolds, S.
Askeaton Castle	R340502	14 Jun 2006 18 Jul 2007	Reynolds, S.
Askeaton Castle	R3450	30 May 2009 4 Sep 2014	Reynolds, S.
Askeaton Castle	R3450	30 Jun 2021	Reynolds, S., Reynolds, J.
King John's Castle, beside (garden escape in sandy ground)	R5757	17 Jul 1992	Reynolds S.
Athlunkard Street, King's Island (wall near St Mary's Cathedral)	R5757	2 Jan 2016	Reynolds, S., Reynolds, J.
King's Island (near St Mary's Cathedral; open ground beside walls of ruined townhouse)	R5757	4 Aug 2020	Reynolds, S., Reynolds, J., Quirke, M., Murphy, P.

Phleum bertolonii DC.

Smaller Cat's-tail

Last seen: 2016

Limerick: Locally Rare

Native; perennial grass. Mainly in NE and SE of Ireland, scattered elsewhere. Only three current sites in Limerick - in old pasture, at a field gateway and beside a farm track; probably under-recorded in unimproved grasslands in Limerick as elsewhere because plants with small inflorescences need careful measurements to separate this species from more common and widespread *Phleum pratense* (Timothy). First and only earlier record is from near Foynes 1905.

Site	Grid Ref.	Date	Recorder(s)
Foynes, just E of (field gateway)	c.R2551	Sep 1990	FitzGerald, R.
Knockfennell, W side	R6341	16 Sep 2016	Reynolds, S., Reynolds, J.
(near old farm track at Lough Gur)			
Glenstal Abbey, Murroe	R7456	31 Jul 2005	Reynolds, S.
(old pasture)			

Picris echioides, see Helminthotheca echioides

Pinguicula grandiflora Lam.

Large-flowered Butterwort

Limerick: Locally Rare Last seen: 2021 for native population; 2020 for introduction

Native; insectivorous perennial. Widespread in SW of Ireland, rare elsewhere. Scattered patches on wet bog WNW of Carrigkerry in western uplands of Limerick, where first recorded in 1935; this site is at the edge of its native range in Ireland.

Also an accidental introduction on N side of Ballyhoura Mtns and apparently established along and near the forestry road there, which is part of the Ballyhoura Way.

Site	Grid Ref.	Date	Recorder(s)
Glenbaun, WNW of Carrigkerry	R1939	22 May 1988	Reynolds, S., Wiltshire, E.,
(= Glenbaun-Knockfinnisk bog)			OBrien, M.V.
Glenbaun bog	R1939	12 Aug 1988	Reynolds, S.
		18 Aug 1997	
		1 Jul 2011	
Glenbaun bog	R19913946	22 Jul 2005	Reynolds, S.
	R20073931		
Glenbaun bog	R2039	5 Aug 2014	Reynolds, S.
Glenbaun bog	R19923947	12 Jul 2021	Reynolds, S., Reynolds, J.
	R19953945		
Ballyhoura Mtns, below Black Rock	R6318	30 May 1997	McGuirk, M., McGuirk, S.
(wet area near car park)			
Black Rock, near (forestry road,	R6318	2005	Hunt, G.
part of Ballyhoura Way)			
Black Rock, near (forestry road)	R6318	16 Aug 2005	Reynolds, S.
	R6319		
Black Rock, near (car park)	R640182	5 May 2007	Hunt, G.
Black Rock, near (forestry road and	R6318	18 Jul 2008	Reynolds, S.
track)	R6319		
	R6419		
Flynn's Rock, near (forestry road)	R6318	6 Oct 2012	Reynolds, S.
	R6319		
Black Rock, near	R6318	7 Jul 2020	Hodd, R.L.

Pinguicula lusitanica L.

Pale Butterwort

Limerick: Locally Rare Last seen: 2016

Native; insectivorous perennial. Widespread in SW, W and NW of Ireland, also in E and scattered elsewhere. In Limerick sparingly at one fen site SE of Foynes in northern limestone area; growing on peaty sides of *Schoenus nigricans* (Black Bog-rush) tussocks. First and only earlier record is from Foynes area 1899.

Site	Grid Ref.	Date	Recorder(s)
Ellaha fen, NW of Creeves Cross	R2848	28 Jun 1987	Reynolds, S.
(= SE of Foynes)			
Ellaha fen	R284486	10 Aug 2009	Reynolds, S.
Ellaha fen	R28424854	10 Oct 2016	Reynolds, S., Reynolds, J.

Pinguicula vulgaris L.

Common Butterwort

Limerick: Locally Scarce Last seen: 2020

Native; insectivorous perennial. Widespread in Ireland, particularly in W and NW. In northern limestone area of Limerick in peaty ground, including fens; also in peaty firebreak in blanket bog at edge of Grageen Fen in Slievefelim Mtns. First recorded at 'Glenstal' 1880, probably at W end of Slievefelim Mtns; also Barrigone 'Bog' near Foynes 1903.

Site	Grid Ref.	Date	Recorder(s)
Ellaha fen, NW of Creeves Cross	R2848	28 Jun 1987	Reynolds, S.
Ellaha fen	R284486	10 Aug 2009	Reynolds, S.
Ellaha fen	R2848	2 Jul 2019	Reynolds, S., Reynolds, J.
Barrigone, N of old schoolhouse	R2951	17 Jul 2004	Reynolds, S.
(peaty field)			
Feeagh, S of Askeaton	R3545	15 Jun 2016	Quirke, M., Murphy, P.,
(peaty field)			Harrington, T.
Ballinvirick 'Marsh', near	R3847	20 Jul 1987	Reynolds, S.
(peaty field near fen/swamp)			
Ballyvogue fen, ENE of Askeaton	R3851	17 Jun 1988	Reynolds, S.
Ballyvogue	R385513	14 Jun 2006	Reynolds, S.
Curragh Chase, N of	R44/R45	3 Jun 1989	Reynolds, S.
(open peaty area with ditches)			
Routagh fen, ESE of Ballysheedy	R5952	28 Apr 2017	Quirke, M., Murphy, P.,
			Harrington, T.
Routagh fen	R5952	18 Jul 2017	Reynolds, S. et al.
Routagh fen	R5952	10 Jun 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Grageen Fen, N edge	R7957	7 Sep 1996	Reynolds, S., Quirke, M.
(Slievefelim Mtns; firebreak)			
Grageen Fen, N edge	R7957	29 Jun 1997	Quirke, M.
Grageen Fen, N edge	R7957	8 Jul 2002	Reynolds, S.
Grageen Fen, N edge	R7957	31 Jul 2018	Reynolds, S. et al.

Platanthera bifolia (L.) Rich.

Lesser Butterfly-orchid

Limerick: Locally Scarce Last seen: 2021

Native; perennial orchid. Widespread in W, N and centre of Ireland, rare in E and S; less widespread than formerly. Mainly in northern limestone area of Limerick in calcareous

grassland, also at edge of fens; in wet grassland on peaty soil on outskirts of Limerick city and at edge of blanket bog in western uplands S of Glin. First recorded at Curragh Chase and Foynes area 1899.

Site	Grid Ref.	Date	Recorder(s)
Dromreask, S of Glin	R1239	16 Jul 1997	Reynolds, S.
(edge of blanket bog)			
Ellaha, NW of Creeves Cross	R2848	28 Jun 1987	Reynolds, S.
(edge of fen)		31 May 1999	
Ellaha	R2848	2 Jul 2019	Reynolds, S., Reynolds, J.
Robertstown, E of	R2849	Jun 2000	Rippey, I.
Rincullia (E of Robertstown)	R2849	Jun 2010	Rippey, I.
Aughinish Island	R288527	Jun 2000	Rippey, I.
Barrigone, near quarry	R2950	30 May 1999	Reynolds, S.
(E of roadway to quarry)		9 Jun 2008	
		26 Jun 2009	
Barrigone	R295507	1 Jul 2009	Crushell, P.
Glenbane East (= Barrigone)	R295507	22 Jun 2013	Mullen, A.
Barrigone, N of old schoolhouse (peaty field)	R2951	13 Jul 1989	Reynolds, S.
Morgans North, E of Poulaweala	c.R2952	c.2006	Hunt, G.
Creek (by path to bird-hide)			
Cragmore, SE of Askeaton	R3648	19 Jun 1988	Reynolds, S.
Ballyvogue, ENE of Askeaton	R3851	17 Jun 1988	Reynolds, S.
(grassy slope beside fen)			
Rootiagh, ENE of Patrickswell	R549515	5 Jun 2021	Murphy, P.

Platanthera chlorantha (Custer) Rchb.

Greater Butterfly-orchid

Last seen: 2018

Limerick: Locally Scarce

Native; perennial orchid. Mainly across N of Ireland, widely distributed elsewhere; less widespread than formerly. Scattered sites in Limerick; in unimproved grasslands, a dry fen and heathy ground, usually in small numbers. First recorded at Foynes 1903.

Site	Grid Ref.	Date	Recorder(s)
Shanid Castle, SSW of Shanagolden	R2445	23 Jul 1987	Reynolds, S.
(grassy slope below ruin)			
Foynes Island (rough pasture)	R2452	14 Jul 1987	Reynolds, S.
Bleach Lough, NW end (dry fen)	R4454	12 Jul 2005	Reynolds, S.
Knockseefin, SW of Pallas Grean	R7545	2 Jul 2016	Reynolds, S., Reynolds, J.
Gannavane, S of Rear Cross	R8356	21 Jun 2018	Nash, D.W.
Knockastanna (heathy ground)	c.R8556	23 Jun 2001	Penn, G.

Polygonum mite, see Persicaria mitis

Polypodium x shivasiae Rothm. (*P. interjectum x P. cambricum*)

Intermediate Polypody x Southern Polypody

Nationally Scarce

Limerick: Locally Rare Last seen: 2021

Native; hybrid fern. Few sites in Ireland, mainly across the N. Only one known site in Limerick; conspicuously large fronds on high wall at graveyard near Clarina. This hybrid could occur in other places where the parent species overlap.

Site	Grid Ref.	Date	Recorder(s)
Kilkeedy graveyard, NW of Clarina	R5054	31 May 2010	Reynolds, S.
Kilkeedy graveyard	c.R500542	22 Jun 2021	Reynolds, S., Reynolds, J.

Polystichum aculeatum (L.) Roth

Hard Shield-fern

Limerick: Locally Rare Last seen: 2018

Native fern. Widespread across N of Ireland, scattered elsewhere. Only two sites known in Limerick, in woodland in SE, and shaded roadsides and on stone bridge in SW of the county. No confirmed earlier records.

Site	Grid Ref.	Date	Recorder(s)
Seeconglass, NW of	R193203	4 Sep 2018	Reynolds, S., Reynolds, J.
(roadsides and stone bridge)			
Green Wood area	R61	3 Jul 1989	Curtis, T., Harrington, T.
(woodland below Ballyhoura Mtns)			

Populus tremula L.

Aspen

Native in Ireland; widespread but some records may refer to planted trees. Apparently only an introduction in Limerick. Usually planted and spreading by suckers; mainly in hedgerows and on roadsides.

Potamogeton alpinus Balb.

Red Pondweed

Limerick: Extinct as a native; Locally Rare as an introduction

Last seen: 1900 as a native; 2010 as an introduction

Native; aquatic perennial. Mainly in N of Ireland and widely scattered in W. Formerly in ditches near Limerick *c*.1833, but not common; also near Limerick 1900.

More recently introduced into an artificial pond beside Griston Bog near Ballylanders, probably accidentally with non-native invasive *Lagarosiphon major* (Curly Waterweed) to discourage herons from taking fish there.

Site	Grid Ref.	Date	Recorder(s)
Limerick (city), near (in ditches)	<i>c</i> .R55	c.1833	Harvey, W.H.
Limerick, near	R55	15 Aug 1900	Praeger, R.L.
Griston Bog, pond beside	R758231	6 Sep 2005	Reynolds, S.
(SSW of Ballylanders; introduction)		28 Jun 2006	
		13 Sep 2007	
		24 Oct 2010	

Potamogeton x angustifolius J. Presl (P. lucens x P. gramineus; P. x zizii)

Long-leaved Pondweed

Limerick: Locally Rare Last seen: 2019

Native hybrid; aquatic perennial. Scattered in Ireland, but rare in S and not in SW. In River Shannon in Limerick above and below Castleconnell (where both parents occur) and in a limestone lake. First recorded in mill dam at Askeaton 1886; a specimen from River Shannon at Castleconnell 1905 may be of this hybrid.

Site	Grid Ref.	Date	Recorder(s)
Bleach Lough	R446543	28 Jul 2009	Environmental Protection
		12 Jul 2018	Agency
River Shannon, near Castleconnell (Clareville) Waterworks	R643615	29 Jul 2010	Reynolds, S.
River Shannon, Worldsend, N of	R658639	24 Jun 2019	Reynolds, S., Reynolds, J.
Castleconnell			
River Shannon, Worldsend	R658640	23 Jul 2019	Reynolds, S., Reynolds, J.

Potamogeton friesii Rupr.

Flat-stalked Pondweed

Limerick: Locally Rare Last seen: 2019

Native; aquatic perennial. Scattered in Ireland, rare in E and S. In River Shannon in Limerick and in Lough Gur, forming dense patches at latter site in 2019. First recorded at Lough Gur 1974; an earlier record from Foynes 1884 is unreliable.

Site	Grid Ref.	Date	Recorder(s)
Lough Gur	R638410	2015	Environmental Protection
	R642404		Agency (= EPA)
	R643410		
Lough Gur	R644411	28 Jul 2009	EPA
Lough Gur, NE side	R6441	22 Jul 2019	Reynolds, S., Reynolds, J.
	e.g. R646413		
River Shannon, Ballyvollane,	R6359	9 Jul 1998	Reynolds, S.
WNW of Lisnagry			
River Shannon, Worldsend,	R6563	8 Jul 1998	Reynolds, S.
N of Castleconnell			
River Shannon, Worldsend	R658640	23 Jul 2019	Reynolds, S., Reynolds, J.

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Potamogeton gramineus L.

Various-leaved Pondweed

Limerick: Locally Scarce Last seen: 2019

Native; aquatic perennial. Fairly widespread in Ireland, mainly in midlands, W and NW. In rivers and lakes in Limerick, also in a millrace and shallow ditch. First recorded in River Shannon at Hermitage 1901, also in River Shannon near Limerick 1904.

Site	Grid Ref.	Date	Recorder(s)
River Deel, Kilcool Bridge	R3343	19 Sep 2005	Reynolds, S.
River Maigue, Adare Bridge	R4646	18 Sep 2005	Reynolds, S.
Bleach Lough, NW end	R4454	11 Aug 1996	Reynolds, S.
Ballinacurra Creek, W side	R5555	7 Sep 1996	Reynolds, S.
(shallow ditch)			
Corbally millrace (off R. Shannon)	R5859	3 Oct 2005	Reynolds, S.
River Shannon, Shannon Fields	R5958	12 Aug 2006	Reynolds, S.
Reboge, E of Limerick Canal	R6057	26 Aug 1997	Reynolds, S.
(floodplain lake)			
River Shannon, just W of	R6057	9 Jul 1998	Reynolds, S.
University of Limerick			
River Shannon, near Castleconnell	R6361	30 Sep 2005	Reynolds, S.
(Clareville) Waterworks			
River Shannon, near Castleconnell	R642614	29 Jul 2010	Reynolds, S.
(Clareville) Waterworks	R643615		
River Shannon, Castleconnell	R6562	30 Sep 2005	Reynolds, S.
River Shannon, Castleconnell	R6562	24 Jun 2019	Reynolds, S.

Potamogeton lucens L.

Shining Pondweed

Limerick: Locally Scarce Last seen: 2021

Native; aquatic perennial. Fairly widespread in Ireland, except in S. In Limerick in River Shannon, Limerick Canal and a small lake near the river. First recorded in River Shannon near Limerick 1892, also Park 1897 at head of canal, River Shannon near Limerick 1904 and at O'Briensbridge 1959.

Site	Grid Ref.	Date	Recorder(s)
Corbally Baths and River Shannon	R584596	13 Jul 2021	Reynolds, S., Reynolds, J.
Limerick Canal	R589576	13 Jul 2021	Reynolds, S., Reynolds, J.
(E side of road bridge)			
Limerick Canal	<i>c</i> .R5957	1996	Goodwillie, R.N.
Limerick Canal	R5957	13 Aug 2009	Reynolds, S.
(deep water E of railway bridge)		1 Jul 2011	
Lucas' Lough, Shannon Fields	R5958	2 Jun 1997	Reynolds, S., Dublin
			Naturalists' Field Club
Lucas' Lough, N end	R592582	12 Aug 2006	Reynolds, S.
Lucas' Lough, S end	R594581	6 Sep 2006	Reynolds, S.
River Shannon, Worldsend, N of	R6563	8 Jul 1998	Reynolds, S.
Castleconnell			

River Shannon, Worldsend	R658639	24 Jun 2019	Reynolds, S., Reynolds, J.
River Shannon, Worldsend	R6564	17 Sep 2007	Reynolds, S.
River Shannon, Worldsend	R658640	23 Jul 2019	Reynolds, S., Reynolds, J.
River Shannon, O'Briensbridge	R6666	12 Sep 2006	Reynolds, S.

Potamogeton x nitens Weber (P. gramineus x P. perfoliatus)

Bright-leaved Pondweed

Limerick: Locally Rare Last seen: 1989

Native hybrid; aquatic perennial. Widely scattered in Ireland. Only recorded in River Shannon in Limerick. First recorded in River Shannon at Plassey E of Limerick City c.1804, also Castleconnell 1904.

Potamogeton x *nitens* is considered the most frequent Pondweed hybrid in Britain and Ireland, and may occur elsewhere in River Shannon.

Site	Grid Ref.	Date	Recorder(s)
River Shannon, Limerick	R55	10 Jun 1989	Stewart, O.M.
River Shannon, Castleconnell	R66	10 Jun 1989	Stewart, O.M.

Potamogeton obtusifolius Mert. & W.D.J. Koch

Blunt-leaved Pondweed

Limerick: Locally Scarce Last seen: 2018

Native; aquatic perennial. Mainly in N of Ireland, scattered elsewhere. Also scattered in Limerick; in lakes, ponds and drainage ditches. First recorded in pools in worked-out bog S of Lough Gur 1900, also Glenstal 1958.

Site	Grid Ref.	Date	Recorder(s)
Raheenagh, SW side (pond)	R2825	8 Jul 2013	Reynolds, S.
Ballinvirick, N of Cappagh	R386477	21 Sep 2009	Reynolds, S.
(ditch near fen/swamp)			
Ballyculhane, NNW of Ferry Bridge	R470545	16 Aug 2006	Reynolds, S.
(deep drainage ditch)			
Knocktwo, just NW of (pond)	R581343	1998	Wann, J.
Lough Gur	R636400	24 Jul 2012	Environmental Protection
	R638410		Agency (= EPA)
Lough Gur	R642404	24 Jul 2012	EPA
		11 Jul 2018	
Lough Gur	R643411	11 Jul 2018	EPA
Glenstal Abbey, Murroe	R7356	8 Aug 1997	Reynolds, S., Quirke, M.
(lake near avenue)			
Glenstal Abbey (lake near avenue)	R731563	31 Jul 2005	Reynolds, S.
		12 Sep 2008	
Glenstal Abbey (lake)	R7356	1 Oct 2015	Norton, M.
Glenstal Abbey, Boating Lake	R7456	31 July 2005	Reynolds, S.

Potamogeton praelongus Wulfen

Long-stalked Pondweed

Limerick: Locally Rare Last seen: 2016

Native; aquatic perennial. Mainly in N half of Ireland, rare elsewhere. Currently only known at one site in Limerick, in deep channel cut through marly soil from Doohyle Lough to former marina and lido; among dense charophytes. First recorded at Castleconnell and Plassey 1834.

Site	Grid Ref.	Date	Recorder(s)
Doohyle Lough, channel on W side	R370435	7 Sep 2007	Reynolds, S.
Doohyle Lough, channel on W side	R37014350	10 Oct 2016	Reynolds, S., Reynolds, J.

Potamogeton pusillus L.

Lesser Pondweed

Limerick: Locally Scarce Last seen: 2019

Native; aquatic perennial. Mainly in N of Ireland, widely distributed elsewhere. Scattered sites in Limerick; in a lake, ponds, canal and river. No confirmed earlier records; formerly this species was confused with more common *Potamogeton berchtoldii* (Small Pondweed).

Site	Grid Ref.	Date	Recorder(s)
Bunlicky, W side Limerick City	R5355 or	23 Jun 2000	Sweeney, P.
(pond)	R5455		
Bunlicky (pond)	R5455	Mar 2002	Goodwillie, R.N.
Limerick Canal, near lock at W end	R5857	6 Sep 2006	Reynolds, S.
Limerick Canal, E of railway bridge	R5957	13 Aug 2009	Reynolds, S.
Clooncunna North, SE of	R6453	23 Jul 2019	Reynolds, S., Reynolds, J.,
Ballysimon (open water in former			Quirke, M., Murphy, P.,
gravel workings)			Harrington, T.
River Shannon, O'Briensbridge	R6666	12 Sep 2006	Reynolds, S.
Glenstal Abbey, Murroe	R7356	8 Aug 1997	Reynolds, S., Quirke, M.
(lake by avenue)			
Glenstal Abbey (lake by avenue)	R731563	31 Jul 2005	Reynolds, S.

Potamogeton x zizii, see Potamogeton x angustifolius

Potentilla x suberecta Zimmeter (*P. erecta x P. anglica*)

Tormentil x Trailing Tormentil

Limerick: Locally Rare Last seen: 2009

Native hybrid; herbaceous perennial. Mainly in S of Ireland and scattered elsewhere where this hybrid has been recognised – both parents are widespread. Only one known site in

Limerick, on gravel edge of a forestry road, but likely to occur in other places where the parents grow together. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Coolfree, W side (forestry road)	R6615	31 Aug 2009	Reynolds, S.

Prunus cerasus L.

Dwarf Cherry

Last seen: 2021

Limerick: Locally Rare

Archaeophyte; deciduous shrub or small tree. Widespread in Ireland, except across the middle. Only known at two sites in Limerick; established in roadside hedgerows by suckering. First recorded in Doon area 1900, but record possibly muddled with more common *Prunus avium* (Wild Cherry).

Site	Grid Ref.	Date	Recorder(s)
Cragbrack Y-junction, near	R4123	15 Sep 2011	O'Mahony, T.
(SSE of Feenagh)			
Castlegarde, SE of Cappamore	R7949	30 Apr 1999	Reynolds, S.
		27 Jun 2009	
		2 May 2010	
Castlegarde, SE of Cappamore	R796497	15 Sep 2021	Reynolds, S., Reynolds, J.
	R797497		

Prunus padus L.

Bird Cherry

Last seen: 2020

Limerick: Locally Scarce

Native and planted; deciduous shrub or tree. Widespread across N of Ireland, scattered elsewhere. In Limerick usually in or at edge of estate woodlands where originally planted. First recorded at Glenstal 1880 and considered a probable introduction there, also in an orchard near Morgans Point E of Aughinish Island 1906, with annotation 'Planted?'

Site	Grid Ref.	Date	Recorder(s)
Curragh Chase (woodland)	R41045065	16 May 2015	Reynolds, S., BSBI
Dromore/Curraheen, SE of	R4354	28 Apr 2017	Quirke, M., Murphy, P.,
Pallaskenry (woodland)			Harrington, T.
Tervoe, NW of Mungret	R5156	11 Apr 2017	Reynolds, S. et al.
(woodland near ruined house)			
Ballyvollane, WNW of Lisnagry	R6359	3 Jun 2020	Quirke, M., Murphy, P.,
(near River Shannon; not obviously			Harrington, T.
planted)			
Glenstal Abbey, Murroe	R736568	19 May 2006	Reynolds, S., Reynolds, J.
Cappamore, NW of (woodland	R7553	4 May 2014	Reynolds, S.
edge and roadside)		17 May 2015	

Pseudorchis albida (L.) Á. & D. Löve

Small-white Orchid

Nationally Scarce

National Threat Status: Vulnerable Flora (Protection) Order 2015

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Locally Rare Last seen: 2018

Native; perennial orchid. In parts of NW of Ireland (e.g. Sligo, Fermanagh), rare elsewhere. A single site for this protected species in Limerick, in unimproved heathy grassland on NW slope of Galty Mtns. First found at Ballygeana (locally called Ballyanna) near county boundary with Tipperary in 1991 (c.18 flowering spikes); searched for in 2006, 2007 and 2017 without success, and found in same area 2018 (one flowering spike); this site is vulnerable to under- or over-grazing. No earlier Limerick records, but there is a 1945 record for 'Slieve Cushnabinnia' on Tipperary side of county boundary.

Site	Grid Ref.	Date	Recorder(s)
Ballygeana (= Ballyanna), NW side	R8425	28 Jun 1991	FitzGerald, R.
Galty Mtns			
Ballygeana (= Ballyanna)	R84682504	17 Jun 2018	Burke, L., Lloyd, A.,
			Fogarty, J.

Ranunculus aquatilis L.

Common Water-crowfoot

Limerick: Locally Rare Last seen: 2020

Native; tufted or sub-aquatic annual or perennial. Fairly widespread in Ireland. Few sites in Limerick, in shallow water or muddy ground at lake or pond margins; likely to occur elsewhere in suitable habitat. First reliable record is from Lough Gur 1974.

Site	Grid Ref.	Date	Recorder(s)
Raheenagh, just N of	R289258	20 May 2020	Hunt, G.
(lagoon/pond)			
Lough Gur, S side	R6440	28 Jun 2007	Reynolds, S.
Reboge, E of Limerick Canal	R6057	9 Jul 1998	Reynolds, S.
(floodplain lake)			

Ranunculus auricomus L.

Goldilocks Buttercup

Limerick: Locally Scarce Last seen: 2019

Native; herbaceous perennial. Across N and middle of Ireland, in SE and scattered elsewhere. Mainly in northern limestone area of Limerick in broad-leaved woodlands, also on Tory Hill; usually in small numbers. First recorded near Mullagh Mills at Creeves Cross 1904, also near Foynes 1906 and Glenastar W of Ardagh between 1903 and 1906.

Ranunculus auricomus includes many apomictic species which produce seeds without fertilisation, but none have been identified yet in Limerick.

Site	Grid Ref.	Date	Recorder(s)
Newcastle West, S of	R2832	23 Jun 2010	Reynolds, S.
(strip of woodland)			
Mullagh, NW of Creeves Cross	R2846	18 Apr 2009	Reynolds, S.
(Hazel wood)			
Craggs, SE of Barrigone	R2948	12 Jun 2004	Reynolds, S.
(woodland beside turlough)			
Foynes, just SE of (under Hazel)	R259506	18 Apr 2009	Reynolds, S.
		23 Apr 2019	
Askeaton, SE of (near Castle	R37694925	19 Apr 2009	Reynolds, S.
Hewson; roadside at wood edge)			
Curragh Chase, just W of caravan	R4049	14 May 2006	Reynolds, S.
park (under Beech)		16 Apr 2009	
		3 Apr 2010	
Adare, just NW of	R4546	15 Apr 2009	Reynolds, S.
(grassy roadside bank)			
Tory Hill (woodland)	c.R5342	1993	O'Mahony, T.
Tory Hill, S end (under Hazel)	R5342	24 May 1997	Reynolds, S.

Ranunculus baudotii Godr.

Brackish Water-crowfoot

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 2017

Native; procumbent or subaquatic annual or perennial. Occasional around the coast of Ireland. One current site in Limerick, at brackish Quayfield Lough near the Shannon Estuary. First and only reliable earlier record is from pond by railway near Foynes 1903.

Site	Grid Ref.	Date	Recorder(s)
Quayfield Lough, E of Poulaweala	R296526	26 May 2017	Roden, C.
Creek (E of Foynes)			

Ranunculus circinatus Sibth.

Fan-leaved Water-crowfoot

Limerick: Locally Scarce Last seen: 2015

Native; subaquatic annual to perennial. Mainly across the middle and in N of Ireland, in rivers, canals and lakes. Few sites in Limerick in slow-flowing water at river edges, in Limerick Canal and a lake; sometimes found among aquatic vegetation dragged up from deeper water. First recorded near Limerick pre-1866, also Limerick Canal 1899 and Lough Gur 1900.

Site	Grid Ref.	Date	Recorder(s)
Abbey River, Limerick City	R5857 or	1996	Goodwillie, R.N.
	R5858		
Limerick Canal	R5957	23 May 2010	Reynolds, S.
(E of railway bridge)			
River Shannon, Shannon Fields	R59525837	12 Aug 2006	Reynolds, S.
Glenstal Abbey, Murroe	R7356	8 Aug 1997	Reynolds, S., Quirke, M.
(lake by main avenue)			
Glenstal Abbey (lake)	R731563	31 Jul 2005	Reynolds, S.
		12 Sep 2008	
Glenstal Abbey (lake)	R7356	1 Oct 2015	Norton, M.

Ranunculus lingua L.

Greater Spearwort

Limerick: Locally Rare Last seen: 2021

Native; herbaceous stoloniferous or rhizomatous perennial. Mainly in centre of Ireland, scattered elsewhere. Only known at Lough Gur in Limerick; intermittent around the lake, abundant in swamp and marshy ground in NE corner. First recorded at Lough Gur 1906.

Site	Grid Ref.	Date	Recorder(s)
Lough Gur, SW corner	R6340	29 Aug 2017	Reynolds, S. <i>et al</i> .
Lough Gur, NW edge	R6341	16 Sep 2016	Reynolds, S., Reynolds, J.
Lough Gur, S side	R6440	29 Aug 2017	Reynolds, S. et al.
Lough Gur, N side	R643414	28 Jul 2006	Reynolds, S.
Lough Gur, NE corner	R6441	28 Aug 2009	Reynolds, S.
(abundant in swamp/marsh)		4 Sep 2015	
Lough Gur, N side	R64014116	1 Sep 2021	Reynolds, S., Reynolds, J.
	to		
	R64104123		

Rhamnus cathartica L.

Buckthorn

Limerick: Locally Scarce Last seen: 2021

Native; deciduous shrub. Widespread from W across the middle of Ireland, rare elsewhere. Scattered sites in Limerick, mainly in northern limestone area; usually single or few bushes, but many bushes and regenerating well between turlough and woodland SE of Barrigone. First recorded in hedges W of Adare towards Curragh Chase 1903, also by River Shannon at Castleconnell 1904 and Mountshannon 1905.

Site	Grid Ref.	Date	Recorder(s)
Craggs, SE of Barrigone	R298485	23 Jun 2000	Rippey, I.
(beside turlough)		9 Sep 2006	
Craggs, SE of Barrigone	R2948	12 Jun 2004	Reynolds, S.
		22 Sep 2008	

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Craggs	R2948	1 Jun 2009	Reynolds, S.
Craggs	R299486	26 Jul 2007	McNutt, K., Power, E.
Craggs (beside turlough)	R298486	20 May 2008	Goodwillie, R.N.
Barrigone, near quarry (edge of	R2950	26 Jun 2009	Reynolds, S., Reynolds, J.
thicket E of roadway to quarry)			
Graigues Lough, SE of Askeaton	R36614788	3 Aug 2013	Reynolds, S., Reynolds, J.
	R36704801		
Clogh, W of Croagh (one bush	R3843	31 May 1987	Reynolds, S., Reynolds, J.
between road and fen)			
Callow, near Cappagh (by pond)	R380461	1 Sep 2021	Hunt, G.
Curragh Chase Forest Park	R409498	20 Jul 2007	Perrin, P. et al.
Curragh Chase, N of	R40595192	12 Sep 2015	Reynolds, S.
(small bush at wood edge)			
Mullanmosheen Bridge, near	R4348	25 Jul 2018	Quirke, M., Murphy, P.,
(NW of Adare)			Harrington, T.
Attyflin, SW of Patrickswell	R5148	Sep 1990	Goodwillie, R.N.
Friarstown, W of (one tree	R571499	30 Aug 1997	Reynolds, S.
between fen and road)		22 Jul 2014	

Rhodiola rosea L. (Sedum rosea)

Roseroot

Limerick: Locally Rare Last seen: 2017

Native; herbaceous rhizomatous perennial. Mainly in SW, W and NW of Ireland, on mountains and sea cliffs. Only known in Limerick on Lyracappul-Carrignabinnia ridge in Galty Mtns, where healthy populations with hundreds of plants were noted in 2017. First recorded on same ridge in Galty Mtns 1944.

Site	Grid Ref.	Date	Recorder(s)
Carrignabinnia, near top (towards	R8423	21 Aug 2004	Reynolds, S., Reynolds, J.,
Lyracappul)			Sweeney, P.
Lyracappul (N-facing rocky slope)	R845233	28 May 2015	Hodd, R.L.
Lyracappul-Carrignabinnia ridge	R8423	25 Jul 2017	Quirke, M., Murphy, P.
	e.g. R847234		

Rhynchospora fusca (L.) W.T. Aiton

Brown Beak-sedge

National Threat Status: Near Threatened

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Locally Rare Last seen: 2020

Native; rhizomatous perennial. Mainly in SW, W and W centre of Ireland, in wet peaty ground. Only known at Castleconnell Bog in Limerick; sparingly in raised bog, including in and at edge of small pools with more common *Rhynchospora alba* (White Beak-sedge); vulnerable to further cutting and drying out of the bog. First recorded at Castleconnell Bog 1902.

Site	Grid Ref.	Date	Recorder(s)
Castleconnell Bog	R683627	27 Jul 1998	Reynolds, S., Reynolds, J.
Castleconnell Bog	R68006303	9 Jul 2013	Reynolds, S., Reynolds, J.
	R68026302		
Castleconnell Bog	R68006303	10 Jul 2020	Reynolds, S. et al.
	R68026301		

Roemeria argemone (L.) C. Morales, R. Mend. & Romero García (*Papaver argemone*)

Prickly Poppy

Nationally Rare since 2000

National Threat Status: Vulnerable

Limerick: Extinct Last seen: 1903

Archaeophyte; annual. Few sites in E of Ireland; formerly more widespread, but never common. A rare arable weed or casual in Limerick in early 1900s.

Site	Grid Ref.	Date	Recorder(s)
Robertstown, field near	R24	Jun 1903	Knowles, M.C.
Foynes, gravel pit	R25	22 Jul 1902	O'Brien, C.G.

Roemeria hispida (Lam.) Stace (Papaver hybridum)

Rough Poppy

Nationally Rare

National Threat Status: Regionally Extinct (but see below*)

Flora (Protection) Order 2015

Limerick: Extinct Last seen: 1906

Archaeophyte; annual. *Two recent records in E of Ireland; formerly common near N Dublin coast in 19th century. A rare arable weed or casual in Limerick in early 1900s.

Site	Grid Ref.	Date	Recorder(s)
Foynes area / railway near	R25	Jul 1906	Miss Briscoe
Barrigone (same record)			
Askeaton (roadside)	R35	16 Aug 1900	Praeger, R.L.

Rorippa amphibia (L.) Besser

Great Yellow-cress

Limerick: Locally Scarce Last seen: 2021

Native; herbaceous perennial. Fairly widespread in the lowlands of Ireland. In Limerick mainly around Limerick city; by River Shannon (including where tidal), banks of Limerick Canal and edge of a floodplain lake; also in and by drainage ditches. First recorded at Limerick 1900, common by River Shannon.

Site	Grid Ref.	Date	Recorder(s)
Clancy's Strand, Limerick city,	R5757	24 Jul 2006	Reynolds, S.
by tidal River Shannon			
Clancy's Strand	R575575	6 Sep 2021	Reynolds, S., Reynolds, J.
King's Island, Limerick city	<i>c</i> .R5758	2007	Goodwillie, R.N.
(drainage ditches)			
King's Island	R579585	1 Apr 2017	Denyer, J.
Limerick Canal	R5857	1996	Goodwillie, R.N.
Limerick Canal	R5857	2 Aug 2004	Reynolds, S.
	R5957		
Corbally Baths (overgrown pool by	R584596	3 Oct 2005	Reynolds, S.
River Shannon)			
Corbally Baths, beside	R584596	31 Aug 2021	Reynolds, S., Reynolds, J.
Shannon Fields, by River Shannon	R5958	2 Jun 1997	Reynolds, S., Dublin
			Naturalists' Field Club
Reboge, E of Limerick Canal,	R6057	26 Aug 1997	Reynolds, S.
by River Shannon			
Reboge (edge of floodplain lake)	R6057	9 Jul 1998	Reynolds, S.
Reboge (shallow ditch near lake)	R603576	31 Aug 2021	Reynolds, S., Reynolds, J.
Plassey, by River Shannon	R6158	9 Jul 1988	Rich, T.C.G., Taylor, N.
Ballyvollane, WNW of Lisnagry,	R6359	9 Jul 1998	Reynolds, S.
by River Shannon			
LIsnagry, NW (by River Shannon)	R6359	6 Jun 2000	O'Mahony, T.

Rorippa x anceps (Wahlenb.) Rchb. (R. sylvestris x R. amphibia)

Hybrid Yellow-cress

Nationally Scarce

Limerick: Locally Scarce Last seen: 2021

Native hybrid; herbaceous perennial. Widely scattered in Ireland. By the upper Shannon Estuary and River Shannon in Limerick. First recorded at Limerick 1894, also on riverside wall at Corbally 1897 and King's Island 1905; old voucher specimens were determined by Tim Rich 1989.

As well as *Rorippa* x *anceps*, a plant close to the *R. sylvestris* (Creeping Yellow-cress) parent was found on Barrington's Pier in 2021, but not typically that species.

Site	Grid Ref.	Date	Recorder(s)
Tervoe	R5255	9 Jul 1988	Rich, T.C.G., Taylor, N.
(creek off upper Shannon Estuary)			
Tervoe (creek off estuary)	R525559	8 Aug 1990	Reynolds, S.
Barrington's Pier (on stone pier by	R5556	12 Aug 2007	Reynolds, S.
upper Shannon Estuary)		13 Aug 2009	
Barrington's Pier	R557565	25 Sep 2021	Reynolds, S., Reynolds, J.
Clancy's Strand, Limerick city	R5757	12 Aug 2006	Reynolds, S.
(by tidal River Shannon)			
King's Island, W side	R57635808	31 Aug 2021	Reynolds, S., Reynolds, J.

(by tidal River Shannon)			
Ballyvollane, WNW of Lisnagry	R6359	9 Jul 1998	Reynolds, S.
(muddy edge of River Shannon)			

Rorippa x erythrocaulis Borbás (R. palustris x R. amphibia) Thames Yellow-cress

Nationally Rare

Limerick: Locally Rare Last seen: 1998

Native hybrid; vigorous herbaceous perennial. First and only Irish record; *Rorippa* x *erythrocaulis* was found in shallow water at edge of the floodplain lake near River Shannon on E side of Limerick city 1998; both parents grow in the same area. A rare hybrid in Britain, where it occurs with parents or in their absence.

Site	Grid Ref.	Date	Recorder(s)
Reboge, E of Limerick Canal	R6057	9 Jul 1998	Reynolds, S.
(edge of floodplain lake)			

Rorippa islandica (Oeder ex Gunnerus) Borbás

Northern Yellow-cress

Limerick: Locally Rare Last seen: 2018

Native; annual or short-lived perennial. Scattered in Ireland, mainly in W and N. Only known at a single site in Limerick; first recorded in 2018 at one place in a damp field, that place cut on a return visit and those plants not refound; then seen nearby in a rushy patch which had remained uncut.

Site	Grid Ref.	Date	Recorder(s)
Newtown (townland), NW of	R48545718	14 Aug 2018	Murphy, P., Harrington, T.
Clarina			
Newtown (townland)	R48395727	30 Aug 2018	Murphy, P., Quirke, M.

Rorippa sylvestris (L.) Besser

Creeping Yellow-cress

Limerick: Locally Scarce Last seen: 2016

Native; herbaceous perennial, spreading by underground stems. Fairly widespread in Ireland, except in parts of the midlands and W. Scattered sites in Limerick; in and by rivers, including on gravel, banks and stonework inundated at high tide; at Lough Gur; also at edge of an urban grassed area. First recorded at Lough Gur 1900 and on muddy foreshore of Shannon just below Limerick Docks 1900.

Site	Grid Ref.	Date	Recorder(s)
Adare, just NW of	R459466	18 Sep 2005	Reynolds, S.
(on stone pillars of railway bridge		16 Aug 2006	
in tidal River Maigue)		2 Aug 2010	
Adare Bridge (bank of tidal River	R4646	26 Aug 1997	Reynolds, S.
Maigue and gravel bar in river)		18 Sep 2005	
		5 Jul 2008	
		31 Jul 2010	
Ferry Bridge, SW of	R471508	19 Sep 2012	Green, P.R.
Bruree, near old mill	R5430	1 Jul 1990	Reynolds, S., BSBI
(on rocks in River Maigue)			
Limerick (N side of Shannon)	R5556	14 Aug 2006	Green, P.R., Stevenson, A.
Limerick city, near Carey's Road	R5756	24 Jul 2006	Reynolds, S.
(edge of grassed area)			
King's Island, N end	R5758	21 Jul 1992	Reynolds, S.
(by tidal River Shannon)			
Lough Gur, NW edge	R6341	17 Jun 2016	Reynolds, S., Reynolds, J.
Lough Gur, NE side	R6441	4 Oct 1987	Reynolds, S.
		4 Sep 2015	

Rosa agrestis Savi

Small-leaved Sweet-briar

Last seen: 2021

Nationally Scarce since 2000 Limerick: Locally Scarce

Native; deciduous shrub. Mainly in midlands of Ireland, rare elsewhere. Scattered sites in Limerick, including on calcareous soils; roadside hedgebanks and hedgerows, on Tory Hill and a stone bridge; usually in small numbers, but forming a thicket beside Doohyle Lough. No confirmed earlier records.

Site	Grid Ref.	Date	Recorder(s)
Accrour Bridge, N of Dromcolliher	R3825	16 Sep 2019	Reynolds, S., Reynolds, J.
(on stone bridge)		12 Jul 2021	
Doohyle Lough, beside	R3743	25 Apr 1995	O'Mahony, T.
(NE of Rathkeale)		24 Jun 1995	
Beagh Castle, SE of (hedgerow)	R360567	25 Sep 2018	Reynolds, S., Reynolds, J.
Granagh and E of	R482345	Sep 2011	O'Mahony, T.
(NW of Bruree)	R495345		
Ballinleeny, just W of	R496337	Aug 2010	O'Mahony, T.
(NW of Bruree)		Aug 2011	
Tory Hill	c.R5342	May 1993	O'Mahony, T.
	R5343	Aug 1994	

Rosa x avrayensis Rouy (*R. tomentosa* x *R. rubiginosa*)

Harsh Downy-rose x Sweet Briar

Nationally Rare

Limerick: Locally Rare Last seen: 2011

Native hybrid; deciduous shrub. Only recorded in Ireland in Cos Cork and Limerick. A single site in Limerick; two or three bushes on hedgebank S of Croom; neither parent common in the county. Rose hybrids need determination by a specialist. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Ballymacrory crossroads, S of	R5237	12 Aug 2010	O'Mahony, T.
Croom (W arm of crossroads)		Jun 2011	

Rosa corymbifera Borkh. (R. canina 'group Pubescentes') x R. agrestis Savi Hairy Dog-rose x Small-leaved Sweet-briar

Nationally Rare

Limerick: Locally Rare Last seen: 1995

Native hybrid; deciduous shrub. Only recorded near Doohyle Lough in Limerick; single bush beside *Rosa agrestis* thicket at fen edge and second bush in hedgerow. Included in Stace's *Flora* (2019) for Co. Limerick; apparently no other Irish or British records.

Site	Grid Ref.	Date	Recorder(s)
Doohyle Lough, near	R3743	1995	O'Mahony, T.
(NE of Rathkeale)			

Rosa x dumalis Bechst. (R. squarrosa x R. vosagiaca; R. canina x R. caesia)

Glandular Dog-rose x Glaucous Dog-rose

Limerick: Extinct Last seen: 1906

Native hybrid; deciduous shrub. Fairly widespread in NE and E of Ireland, rare elsewhere. In Limerick only early 20th century records from W of the county.

Site	Grid Ref.	Date	Recorder(s)
'Mullough River' (Ahacronane	R24	Jun 1904	Knowles, M.C.
River or Mullagh stream?)			
Cahirmoyle, near (near Ardagh)	R24	Aug 1906	Knowles, M.C.; O'Brien, R.D.
Mount Trenchard, W of Foynes	R25	Jun 1903	Knowles, M.C.
Foynes, wood below Ardanoir	R25	Sep 1905	Knowles, M.C.
Foynes, above Ardanoir	R25	Jun 1906	Knowles, M.C.
Foynes, Shannon shore near	R25	Aug 1906	Knowles, M.C.
Ardanoir			
Newbridge, by River Deel	R34	Jun 1904	Knowles, M.C.

Rosa x involuta Sm. (R. spinosissima x R. sherardii)

Burnet Rose x Sherard's Downy-rose

Nationally Scarce

Limerick: Extinct Last seen: 1905

Native hybrid; deciduous shrub. Scattered mainly in N and E of Ireland. Only one old record for Limerick.

Site	Grid Ref.	Date	Recorder(s)
Loghill, above (by White River)	R14	Sep 1905	Knowles, M.C.; O'Brien, R.D.

Rosa micrantha Borrer ex Sm.

Small-flowered Sweet-brian

Limerick: Locally Rare Last seen: 2010

Native; deciduous shrub. Mainly S of Ireland in Cos Cork, Waterford and Wexford. Only known at one site in Limerick; hedgebank by path up the hill at Ardpatrick. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Ardpatrick	R641211	6 Jun 2004	O'Mahony, T.
		Aug 2010	

Rosa x rothschildii Druce (*R. canina* x *R. sherardii*)

Dog-rose x Sherard's Downy-rose

Limerick: Locally Rare Last seen: 2011

Native hybrid; deciduous shrub. Scattered mainly in E half of Ireland, not common. One known site in Limerick; in hedgerow near Castleconnell by River Shannon. First and only earlier record is from near Loghill 1905.

Site	Grid Ref.	Date	Recorder(s)
Worldsend, N of Castleconnell	R6563	14 Sep 2011	Reynolds, S.

Rosa rubiginosa L.

Sweet-briar

Limerick: Locally Rare Last seen: 1993

Native; deciduous shrub. Widely scattered in Ireland, favouring calcareous soils. Only one known site in Limerick; few bushes on Tory Hill, in former limestone quarry area and in grassland among Blackthorn thickets. First recorded at Castleconnell 1900; also on limestone

crags near Foynes 1902 and Ballyclogh near Creeves Cross 1906, but later there was some doubt about specimens from the latter two sites.

Site	Grid Ref.	Date	Recorder(s)
Tory Hill	c.R5342	May 1993	O'Mahony, T.
	R5343		

Rosa x scabriuscula Sm. (*R. canina x R. tomentosa*)

Dog-rose x Harsh Downy-rose

Limerick: Locally Rare Last seen: 2010

Native hybrid; deciduous shrub. Mainly in E and S of Ireland, not common. Only one known site in Limerick, on roadside hedgebank. No earlier records.

Site	Grid Ref.	Date	Recorder(s)	
Coolrus Bridge, just N of	R5032	Jul 2010	O'Mahony, T.	
(E-W road SE of Granagh)				

Rosa sherardii Davies

Sherard's Downy-rose

Limerick: Locally Scarce Last seen: 2021

Native; deciduous shrub. Widespread in Ireland. Scattered sites in Limerick; roadside hedgerows, also wood edges and a roadside bank. No earlier records, although those of *Rosa tomentosa* (Harsh Downy-rose) in W Limerick in early 1900s may refer to this species.

Site	Grid Ref.	Date	Recorder(s)
Cloonlahard Bridge, SSW of	R18014327	29 Jun 2011	Reynolds, S.
(SSW of Ballyhahill; roadside bank)			
Toornafulla, E of (roadside)	R2424	26 Jul 2016	Reynolds, S., Reynolds, J.
Knockaderry, just N of (roadside)	R3435	5 Sep 2014	Reynolds, S.
Feenagh, N of	R4028	20 Aug 1999	Reynolds, S.
(roadside hedgerow)			
Longford Bridge, WSW of	R8245	31 Aug 2016	Reynolds, S., Reynolds, J.
(S of Doon; roadside hedgerow)			
Bilboa Bridge, just upstream of	R8151	28 Jun 2007	Reynolds, S.
(NW of Doon; wood edge)			
Bilboa Bridge, NE of	R826526	10 May 2017	Reynolds, S. <i>et al</i> .
(near entrance to old quarry)			
Bilboa Bridge, NE of	R826526	1 Sep 2021	Reynolds, S., Reynolds, J.
Gowlagh Bridge, E of	R8657	25 Sep 2019	Reynolds, S., Reynolds, J.
(roadside SE of Rear Cross)			

Rosa stylosa Desv.

Short-styled Field-rose

Nationally Scarce

Limerick: Locally Rare Last seen: 2011

Native; deciduous shrub. Mainly in S half of Ireland, not common. Two known sites in Limerick; single bushes on roadside hedgebanks. First recorded at and near Foynes 1906.

The hybrid with *Rosa canina* (Dog-rose) is more common than this species in the county, and *R.* x *andegavensis* almost totally replaces *R. stylosa* in parts of Limerick.

Site	Grid Ref.	Date	Recorder(s)
Ballyhahill, near	R14	6 Oct 2004	O'Mahony, T.
(= between Loghill and Ballyhahill)	c.R1846	24 Jun 2005	
Ballinleeny, E of	R516336	9 Sep 2011	O'Mahony, T.
(NW of Bruree)			

Rosa tomentosa Sm.

Harsh Downy-rose

Limerick: Locally Scarce Last seen: 2011

Native; deciduous shrub. Mainly in S of Ireland, particularly in Co. Cork; formerly considered widespread across N of Ireland and most records now referable to *Rosa sherardii* (Sherard's Downy-rose). Scattered sites in mid-south of Limerick, and between Loghill and Ballyhahill in W Limerick; roadside hedgerows and hedgebanks, also in woodland.

The identity and distribution of R. tomentosa and R. sherardii in Limerick needs checking.

Site	Grid Ref.	Date	Recorder(s)
Ballyhahill, near	<i>c</i> .R1846	24 Jun 2005	O'Mahony, T.
(= between Loghill and Ballyhahill)			
Incha, W of Ballyagran	R4327	Sep 2011	O'Mahony, T.
Drewscourt Bridge, NW of	R4726	Sep 2011	O'Mahony, T.
(S of Ballyagran)			
Derraulin, NE of Ballyagran	R4930	2010	O'Mahony, T.
Granagh, E of (near T-junction)	R4934	Sep 2011	O'Mahony, T.
Garryfine crossroads, just S of	R5028	Jul 2010	O'Mahony, T.
Charleville, NW of	R5225	2003, 2011	O'Mahony, T.
Garroose Bridge, S of	R551268	10 Aug 2007	O'Mahony, T.
(NNE of Charleville)			
Ballyteige Lower, WNW of Bruree	R5031	Oct 2010	O'Mahony, T.
		Aug 2011	
Croom, SSE of	R537385	Sep 2004	O'Mahony, T.
Tory Hill (woodland)	c.R5342	1993	O'Mahony, T.

Rubus caesius L. Dewberry

Limerick: Locally Rare Last seen: 2021

Native; scrambling perennial. Fairly widespread in S half of Ireland except in SW, widely scattered elsewhere. Currently known at three sites in Limerick, in hedgerows and in an old city garden. First recorded at Castleconnell, Plassey and Corbally 1904.

Site	Grid Ref.	Date	Recorder(s)
Knockaderry, NNE of (hedgerow)	R355377	5 Sep 2014	Reynolds, S.
Friarstown, W of (hedgerow	R5749	30 Aug 1997	Reynolds, S.
between fen and road to W of fen)			
Friarstown, W of (same hedgerow)	R5749	22 Jul 2014	Reynolds, S.
Friarstown, W of (roadside	R56954983	22 Jul 2014	Reynolds, S.
bank/hedgerow near T-junction)			
Friarstown, W of (roadside)	R56934983	31 Aug 2021	Reynolds, S., Reynolds, J.
	to		
	R56964983		
Limerick city (garden off South	R5655	25 Aug 1996	Breen, J.
Circular Road)			

Rubus fruticosus L. agg.

Brambles

The following is a provisional list of microspecies in this aggregate recorded in Limerick which are considered endemic to Ireland. For that reason they are designated as Internationally Rare. They need identification by specialists and there is insufficient information about their distribution, habitats and frequency to give details in this Rare Plant Register. Only one, *Rubus hesperius*, was included on the list of endemics in the *Ireland Red List* (Wyse Jackson *et al.* 2016). More recently it and 18 other *Rubus* microspecies were included by Rich (2020) on a list of vascular plants endemic to Britain, Ireland, the Channel Islands and Isle of Man. Two considered Extinct in Limerick are so indicated. **Rubus norvicensis* is probably an introduction in Ireland, accidentally introduced with forestry saplings.

Name	Where endemic	
Rubus albionis W.C.R.Watson	Ireland, Britain	
Rubus altiarcuatus W.C. Barton & Riddelsd.	Ireland, Britain, Channel Isles	
Rubus amplificatus Lees	Ireland, Britain	
Rubus boudiccae A. L. Bull & Edees	Ireland, Britain	Extinct 1904
Rubus calvatus Lees ex Bloxam	Ireland, Britain	
Rubus errabundus W.C.R. Watson	Ireland, Britain	
Rubus griffithianus Rogers	Ireland, Britain	
Rubus hebridensis Edees	Ireland, Britain	
Rubus hesperius Rogers	Ireland, Isle of Man	
Rubus hibernicus (Rogers) Rogers	Ireland, Britain	Extinct 1906
Rubus hylocharis W.C.R. Watson	Ireland, Britain	
Rubus iricus Rogers	Ireland, Britain, Channel Isles	
Rubus largificus W.C.R. Watson	Ireland, Britain	

Rubus lentiginosus Lees	Ireland, Britain
Rubus mucronatiformis (Sudre) W.C.R. Watson	Ireland, Britain
*Rubus norvicensis A.L. Bull & Edees	Ireland, Britain, Channel Isles
Rubus pydarensis Rilstone	Ireland, England, Channel Isles
Rubus silurum (Ley) Ley	Ireland, Britain
Rubus villicauliformis Newton	Ireland, Britain, Channel Isles

Rubus saxatilis L. Stone Bramble

Limerick: Locally Scarce Last seen: 2021

Native; stoloniferous perennial. In parts of W, N and centre of Ireland, rare elsewhere. In northern limestone area of Limerick, mainly between Creeves Cross and Barrigone; among outcrop in calcareous grassland, also at edges of woodland and of a turlough. First reliable record is from Mullagh SE of Foynes 1900, also from limestone crags there 1904, and by River Shannon below Castleconnell 1904/1905, but not refound in latter area.

Site	Grid Ref.	Date	Recorder(s)
Mullagh, NW of Creeves Cross	R2846	29 Aug 1997	Reynolds, S.
Mullagh (under powerline)	R2847	23 May 2006	Reynolds, S.
Creeves Cross, near (wood edge)	R2946	2 Oct 2005	Reynolds, J.
Deelish, NW of Creeves Cross	R2847/R2848	16 Jul 1989	Reynolds, S., BSBI
(on limestone crag)			
Craggs, SE of Barrigone	R2948	12 Jun 2004	Reynolds, S.
(turlough/wood edge)		22 Sep 2008	
		1 Jun 2009	
Craggs	R299486	26 Jul 2007	McNutt, K., Power, E.
Barrigone, near quarry	R2950	20 Jul 1992	Reynolds, S.
(W side of roadway to quarry)			
Barrigone, near quarry	R2950	25 Aug 1996	Reynolds, S., BSBI
Barrigone, near quarry	R2950	22 Aug 2008	Reynolds, S.
		3 May 2014	
Barrigone (E of roadway to quarry)	R29625075	19 May 2021	Reynolds, S., Reynolds, J.

Rumex x abortivus Ruhmer (*R. conglomeratus* x *R. obtusifolius*)

Clustered Dock x Broad-leaved Dock

Nationally Scarce

Limerick: Locally Rare Last seen: 2017

Native hybrid; herbaceous perennial. Widely scattered in Ireland, mainly in S half. Only recorded from one site in Limerick, but as both parents are widespread and common in the county, this hybrid is likely to occur elsewhere.

Site	Grid Ref.	Date	Recorder(s)
O'Briensbridge-Montpelier	R66556687	22 Jul 2017	Wilcox, M.P., Tregale, B.A.
(field by River Shannon)			

Rumex crispus subsp. uliginosus (Le Gall) Akeroyd

Curled Dock, subspecies

Internationally Rare: Probably endemic to north-west Europe (see Wyse Jackson et al. 2016)

Nationally Scarce

Limerick: Not Locally Rare or Scarce

Last seen: 2021

Native; herbaceous perennial. In Ireland mainly by and near the Shannon Estuary and in SE, rare elsewhere. By the upper Shannon Estuary in Limerick, and by tidal rivers and creeks off the estuary; on tidal mud, in brackish marshy ground, and on river and creek banks. First found near jetty on N side of Shannon below Limerick 1937 (probably near Barrington's Pier), also River Shannon in Limerick city 1979 and Ferry Bridge 1979 - and refound at all these sites.

Site	Grid Ref.	Date	Recorder(s)
Adare, just NW of (by River Maigue	R4546	8 Jun 2008	Reynolds, S.
u/s and d/s of old railway bridge)	R4646	15 Aug 2008	
Adare, just NW of (u/s of bridge)	c.R459466	11 Oct 2008	Reynolds, S.
Adare, between railway bridge and Adare Bridge	R4646	31 Aug 2021	Reynolds, S., Reynolds, J.
Clorhane, NNW of Adare (by River Maigue)	R4749	18 Apr 2014	Reynolds, S.
Ferry Bridge (by River Maigue;	R4852	6 Sep 1996	Reynolds, S.
u/s and d/s of bridge)		2 Aug 2004	
		18 Apr 2014	
Ferry Bridge, near	R4852	20 Jun 2005	Holyoak, D.T.
Barnakyle River, WSW of Clarina	R4953	24 Jul 2009	Reynolds, S.
Tervoe, by upper Shannon Estuary	R5255	8 Aug 1990	Reynolds, S.
Coonagh, upper Shannon Estuary	R5256	3 Oct 2005	Reynolds, S.
Coonagh	R5257	1 Sep 1990	Brady, C.M., Rich, T.C.G.
Clonmacken, by upper Shannon	R5456	12 Aug 2007	Reynolds, S.
Estuary			
Barrington's Pier, near	R5556	14 Aug 2006	Green, P.R., Stevenson, A.
Barrington's Pier, beside	R557565	13 Jul 2021	Reynolds, S., Reynolds, J.
Ballinacurra Creek, W side	R5455 or	7 Sep 1996	Reynolds, S.
	R5555		
Ballinacurra Creek, mouth of	R5456	15 Jun 1996	Reynolds, S.
Dooradoyle, N of	R5654	24 Jun 2005	Holyoak, D.T.
(by Ballynaclough River)			
Ballynaclough River, near	R5654	24 Jul 2006	Reynolds, S.
Dooradoyle			
Clancy's Strand, Limerick city	R5757	24 Jul 2006	Reynolds, S.
(by tidal River Shannon)			

Rumex hydrolapathum Huds.

Water Dock

Limerick: Locally Scarce Last seen: 2021

Native; perennial. Fairly widespread in Ireland, including Shannon catchment. In Limerick mainly in Lough Gur area and near River Shannon around Limerick city; in swampy ground, an emergent at lake edges, also in drainage ditches. First recorded at Castleconnell *c*.1804, also between O'Briensbridge and Castleconnell 1880 and Lough Gur 1900.

Site	Grid Ref.	Date	Recorder(s)
Bleach Lough, just SE of	R4554	22 Aug 2018	Quirke, M., Murphy, P.,
(drainage ditch)			Harrington, T.
Longpavement Road, just W of	R5759	29 Oct 2006	Reynolds, S.
(NNW side of Limerick city)			
Lucas' Lough, Shannon Fields	R5958	1997	Reynolds, S.
		12 Aug 2006	
		13 Aug 2009	
Lucas' Lough, S end	R594581	6 Sep 2006	Reynolds, S.
Lucas' Lough	c.R594581	31 Aug 2021	Reynolds, S., Reynolds, J.
Red Bog, just S of Lough Gur (swamp)	R6439	31 May 1997	Reynolds, S., Nash, D.W.
Red Bog	R6439	29 Aug 2017	Reynolds, S. et al.
Herbertstown (tall-herb swamp)	R6839	7 Jul 1989	Reynolds, S., Curtis, T.,
			Harrington, T.
Herbertstown (swamp)	R6839	14 Sep 2016	Quirke, M., Murphy, P.,
	R6940		Harrington, T.
Grange, W of (near Camoge River)	R6143	31 Aug 2016	Quirke, M., Harrington, T.
Lough Gur, SW corner	R6340	29 Aug 2017	Reynolds, S., et al.
Lough Gur, NW edge	R6341	17 Jun 2016	Reynolds, S., Reynolds, J.
Lough Gur	R644403	12 Aug 2000	Rippey, I.
Lough Gur, S side	R6440	9 Jul 2005	Reynolds, S.
Lough Gur, N side/NE corner	R6441	1987, 1996	Reynolds, S. et al.
		28 Jul 2006	
		4 Sep 2015	
Lough Gur	R647412	Jun 2000	Rippey, I.
Lough Gur, N side	R6441	1 Sep 2021	Reynolds, S., Reynolds, J.
Lake Bog, near Lough Gur	R651407	28 Jul 2006	Reynolds, S.
(where quaking and peaty)			
Reboge, E of Limerick Canal	R6057	1997, 2004	Reynolds, S.
(floodplain lake near R. Shannon)		13 Aug 2009	
		23 Aug 2010	
Reboge (lake)	R601576	31 Aug 2021	Reynolds, S., Reynolds, J.
Lacka, N of Castleconnell	R6564	8 Jul 1998	Reynolds, S.
(drainage ditch near R. Shannon)		23 May 2006	
Lacka (drainage ditch)	R659642	22 Jun 2021	Reynolds, S., Reynolds, J.

Rumex maritimus L. Golden Dock

Nationally Scarce

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 2015

Native; herbaceous annual to perennial. Widely scattered in Ireland, mainly in S half. Only at Lough Gur in Limerick; on N and NE sides in muddy or marshy ground when water level lower during the summer; numbers vary from year to year; golden-yellow colour of this Dock is most distinctive in late summer and autumn. Some grazing or poaching at the lake edge favours this species. First recorded at Lough Gur 1900.

Site	Grid Ref.	Date	Recorder(s)
Lough Gur	R6441	4 Oct 1987	Reynolds, S.
Lough Gur	R645415	30 Sep 1993	FitzGerald, R.
Lough Gur	R6441	24 Aug 1996	Reynolds, S., BSBI
Lough Gur, N side (one plant)	R64194129	28 Jul 2006	Reynolds, S., Reynolds, J.
Lough Gur, NE side (many plants)	R6441	4 Sep 2015	Reynolds, S.

Ruppia maritima L.

Beaked Tasselweed

Limerick: Locally Rare Last seen: 2018

Native; aquatic perennial. Scattered around and near the coast of Ireland. Only known in one area in Limerick near the Shannon Estuary E of Foynes; in brackish ponds. First recorded in brackish ditches at Foynes 1884, also much later in pond by lane and in muddy depression on E side of Poulaweala Creek 1985.

Site	Grid Ref.	Date	Recorder(s)
Poulaweala Creek, just E of	R291524	11 Sep 1999	Reynolds, S.
(brackish pond by lane)			
Quayfield Lough, E of Poulaweala	R296526	11 Sep 1999	Reynolds, S.
Creek			
Quayfield Lough	R2952	12 Sep 2005	Reynolds, S.
		15 Sep 2011	
Quayfield Lough	R296526	26 May 2017	Roden, C.
Quayfield Lough	R296527	30 Jul 2018	Hodd, R.L, Leyden, K.

Sagina maritima Don

Sea Pearlwort

Limerick: Locally Scarce Last seen: 2021

Native; annual. All around the coast of Ireland. By the Shannon Estuary in Limerick as far as Ringmoylan Quay; on stone piers, stone wall, concrete slipway and gravel roadside. First recorded on sea wall at Mount Trenchard and at Glin between 1903 and 1906.

Site	Grid Ref.	Date	Recorder(s)
Ballyhoolahan Point, just E of	R1147	11 Jul 2005	Reynolds, S.
(concrete slipway)		27 May 2011	
Glin Pier	R1347	2005, 2006	Reynolds, S.
		4 Jul 2008	
		19 May 2021	
Kilteery Pier	R1749	1997, 2006	Reynolds, S.
		27 May 2011	
		27 Apr 2015	
		19 May 2021	
Mount Trenchard (stone wall and	R2151	1991, 1992	Reynolds, S.
gravel roadside by estuary)		1 Aug 1995	
		15 May 2009	
Mount Trenchard	R2151	24 Apr 2018	Reynolds, S., Reynolds, J.
Beagh Quay, beside	R35855698	19 May 2021	Reynolds, S., Reynolds, J.
Ringmoylan Quay	R4057	2005, 2008	Reynolds, S.
		28 May 2011	
Ringmoylan Quay	R4057	16 Sep 2017	Reynolds, S., Reynolds, J.
		19 May 2021	

Sagittaria sagittifolia L.

Arrowhead

Limerick: Locally Scarce Last seen: 2021

Native; aquatic perennial. Mainly in the centre of Ireland, in lakes, rivers and canals; rare elsewhere. In Limerick as an emergent in River Shannon, two floodplain lakes near the river and in Limerick Canal. First recorded in the Shannon near Limerick pre-1866, also Shannon Fields 1902 and canal 1904.

Site	Grid Ref.	Date	Recorder(s)
Corbally Baths (overgrown pool by	R584596	3 Oct 2005	Reynolds, S.
River Shannon)		29 Jul 2010	
River Shannon near Corbally Baths	R5859	29 Jul 2010	Reynolds, S.
Corbally Baths and River Shannon	R584596	13 Jul 2021	Reynolds, S., Reynolds, J.
River Shannon just NW of	R5859	3 Oct 2005	Reynolds, S.
Athlunkard Bridge			
River Shannon, Shannon Fields	R5958	21 Jul 1992	Reynolds, S.
		12 Aug 2006	
Lucas' Lough, Shannon Fields	R5958	12 Aug 2006	Reynolds, S.
		23 Aug 2010	
Limerick Canal	R5857	2004-2011	Reynolds, S.
	R5957		
River Shannon near Limerick Canal	R5957	26 Jul 2006	Reynolds, S.
Reboge, E of Limerick Canal	R6057	9 Jul 1998	Reynolds, S.
(floodplain lake)		15 Aug 2004	
River Shannon, Prospect	R6360	25 Jun 2020	Quirke, M., Murphy, P.,
(townland), SW of Castleconnell			Harrington, T.
River Shannon, O'Briensbridge	R6666	12 Sep 2006	Reynolds S.

Salicornia agg. Glassworts

Most *Salicornia* species need identification by specialists, so the species listed here are probably more common in Limerick than the records indicate.

First recorded at Foynes 1885/1886.

Salicornia disarticulata Moss (S. pusilla)

One-flowered Glasswort

Nationally Scarce

Limerick: Locally Rare Last seen: 1997

Native; annual. On E and SE coasts of Ireland, very rare elsewhere. One known site in Limerick, in saltmarsh by the Shannon Estuary; not refound in 2008 or 2019, but likely to still occur there. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Glin, NE of (E of Long Rock and end	R1549	24 Aug 1997	Reynolds, S.
of lane)			

Salicornia dolichostachya Moss

Long-spiked Glasswort

Nationally Scarce

Limerick: Locally Rare Last seen: 2019

Native; annual. Widely scattered around the coast of Ireland, mainly in E and S. One known site in Limerick, in saltmarsh by creek off the Shannon Estuary E of Foynes. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Poulaweala Creek, E side	R291528	15 Sep 2019	Reynolds, S., Reynolds, J.

Salicornia europaea L.

Common Glasswort

Limerick: Locally Scarce Last seen: 2019

Native; annual. Scattered around the coast of Ireland, the most common of the *Salicornia* species. By the Shannon Estuary in Limerick from NE of Glin to N of Askeaton, and by a creek off the estuary; in saltmarshes, also on muddy shingle and at edge of a brackish lagoon. No confirmed earlier records of *S. europaea* s.s.

Site	Grid Ref.	Date	Recorder(s)
Glin, NE of (near Long Rock)	R1548	10 Sep 2005	Reynolds, S.
Glin, NE of (E of Long Rock)	R1549	24 Aug 1997	Reynolds, S.
Loghill	R1950	27 Jul 2006	Reynolds, S.

Foynes Island	R2452	24 Aug 1991	Reynolds, S.
Poulaweala Creek, E side	R2952	9 Oct 1999	Reynolds, S.
Poulaweala Creek, E side	R2952	Sep 2008	Rich, T.C.G.
Poulaweala Creek, E side	R291528	15 Sep 2019	Reynolds, S., Reynolds, J.
Tomdeely Point, just SE of	R3252	30 Jun 2011	Reynolds, S.
		15 Sep 2011	

Salicornia fragilis P.W. Ball & Tutin

Yellow Glasswort

Nationally Scarce

Limerick: Locally Rare Last seen: 1999

Native; annual. Widely scattered around the coast of Ireland, mainly in E and S. Only one current site in Limerick, in saltmarsh by a creek off the Shannon Estuary. The site of an earlier record on Foynes Island 1984 has since been washed away.

Site	Grid Ref.	Date	Recorder(s)
Poulaweala Creek, E side	R2952	9 Oct 1999	Reynolds, S.

Salicornia pusilla, see Salicornia disarticulata

Salicornia ramosissima (Hook. f.) J. Woods ex W.A. Clarke & E.S. Marshall

Purple Glasswort

Limerick: Locally Rare Last seen: 2019

Native; annual. Widely scattered around the coast of Ireland. One known site in Limerick, in saltmarsh by the Shannon Estuary. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Glin, NE of (E of Long Rock)	R1549	15 Sep 2019	Reynolds, S., Reynolds, J.

Salix species Willows

As well as two native and one archaeophyte species, seven *Salix* hybrids are included here. Willow hybrids can be difficult to identify and their distribution in Limerick is incompletely known; voucher specimens were determined by R.D. Meikle.

Salix x alopecuroides Tausch ex Opiz (S. euxina x S. alba x S. triandra; S. fragilis x S. triandra; S. x speciosa) Eastern Crack-willow x White Willow x Almond Willow

Nationally Rare

Limerick: Locally Rare Last seen: 2021

Triple hybrid between archaeophyte species; shrub or small tree. In Ireland confirmed records apparently only from Limerick at present; formerly recorded at least in Wexford. Several small trees on low bank by River Deel at Accrour Bridge in Limerick, not obviously planted and probably spread from originally cultivated material; also well established on bank by River Maigue near Adare Bridge where it may originally have been planted. An earlier record is doubtful.

Site	Grid Ref.	Date	Recorder(s)
Accrour Bridge, N of Dromcolliher	R38352510	19 Sep 2005	Reynolds, S.
(by River Deel)		30 Apr 2006	
		14 Aug 2006	
		22 Aug 2010	
Accrour Bridge, by River Deel	R3825	12 Jul 2021	Reynolds, S., Reynolds, J.
Adare Bridge, near	R46854657	3 May 2010	Reynolds, S.
(by River Maigue)		2 Aug 2010	

Salix x calodendron Wimm. (S. viminalis x S. caprea x S. cinerea) Holme Willow

Nationally Scarce

Limerick: Locally Rare Last seen: 2007

Triple hybrid between archaeophyte and two native species; shrub or small tree. Scattered across N of Ireland, also in E. One known site in Limerick at Shannon Fields on edge of Limerick city; several small trees with other Willows. Considered by R.D. Meikle as not typical *Salix* x *calodendron* and probably derived from cultivated material or planted. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Shannon Fields, NE side of Limerick	R5958	12 Aug 2006	Reynolds, S.
city (near Lucas' Lough)		30 Apr 2007	

Salix x fruticosa Döll (S. viminalis x S. aurita)

Shrubby Osier

Limerick: Locally Scarce Last seen: 2014

Hybrid between archaeophyte and native species; shrub. Scattered across N of Ireland, rare elsewhere. Persisting at a few sites in Limerick, mainly on roadsides; formerly planted for basket-making. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Abbeyfeale, SE of	R1423	23 Jul 1999	Reynolds, S.
(planted at edge of forestry)			
Knockaclugga, SE of (roadside)	R2039	18 Aug 1997	Reynolds, S.
Dromcolliher/Broadford, N of	R32	19 Sep 1998	Reynolds, S.
(roadside)			
Feohanagh, E of (by lane on W	R3526	6 Sep 2014	Reynolds, S.
side of Broken Bridge)			
Cappamore, NW of (roadside)	R7553	23 Jul 2014	Reynolds, S.

Salix herbacea L. Dwarf Willow

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 2018

Native; dwarf shrub. Mainly on mountains in SW, W and NW of Ireland, also in E. In Limerick only found high on Galty Mtns. First reliable record is from small cliff below summit of Carrignabinnia 1944.

Site	Grid Ref.	Date	Recorder(s)
Lyracappul-Carrignabinnia ridge	R8423	25 Jul 2017	Quirke, M., Murphy, P.
Carrignabinnia, just NE of summit	R8523	1989	Curtis, T., Harrington, T.
Carrignabinnia	R85012388	16 Aug 2011	Daly, O.
Carrignabinnia and	R8523	10 July 2018	Quirke, M., Murphy, P.,
Slievecushnabinnia, between			Harrington, T.

Salix x holosericea Willd. (*S. viminalis x S. cinerea*; *S. x smithiana* auct.)

Silky-leaved Osier

Limerick: Locally Rare Last seen: 2018

Hybrid between archaeophyte and native species; shrub or small tree. Across N of Ireland, scattered elsewhere. Three known sites in Limerick, but not considered typical by R.D. Meikle at one site. First recorded by White River near Loghill 1904.

Site	Grid Ref.	Date	Recorder(s)
Raheenagh, just E of (roadside; not	R2925	20 Aug 1999	Reynolds, S.
typical here)			
Vein Bridge, SSW of Broadford	R3218	3 Sep 2018	Reynolds, S., Reynolds, J.
(near stream)			
King's Island, Limerick city	R5858	28 Aug 2008	Reynolds, S.
(bank of Abbey River)			

Salix x mollissima Hoffm. ex Elwert (*S. triandra x S. viminalis*)

Sharp-stipuled Willow

Limerick: Locally Rare Last seen: 1988

Archaeophyte hybrid; shrub. In N of Ireland, rare elsewhere. Only known at one site in Limerick, at edge of forestry. Formerly planted for basket-making. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Carrigkerry, WNW of	R1939	15 Aug 1988	Reynolds, S.

Salix pentandra L.

Bay Willow

Native in Ireland, mainly in N; only an introduction in Limerick. Trees persisting on roadsides in western uplands of the county where originally planted.

Salix x pontederiana Willd. (S. purpurea x S. cinerea)

Purple Willow x Grey Willow

Nationally Rare

Limerick: Locally Rare Last seen: 2007

Hybrid between neophyte and native species; shrub or small tree. In Ireland only recorded in Antrim and Limerick; very scattered in Britain. A single shrub in young Sitka Spruce plantation on relatively poorly-drained peat in foothills of Mullaghareirk Mtns; considered a spontaneous hybrid there.

Site	Grid Ref.	Date	Recorder(s)
Glengort, SE of Abbeyfeale	R19272172	2 Jul 2007	Coote, L., Moore, K.

Salix x reichardtii A. Kern. (S. caprea x S. cinerea) Goat Willow x Grey Willow

Limerick: Locally Scarce Last seen: 2018

Native hybrid; shrub or small tree. Fairly widespread in Ireland. Scattered sites in Limerick; mainly on roadsides, also at field and wood edges. An unbroken series of intermediates links the parent species, so this hybrid can be difficult to identify and it is probably more common in the county. No earlier records than 1996.

Site	Grid Ref.	Date	Recorder(s)
Killilagh Cross, SSW of	R3020	20 Aug 1999	Reynolds, S.
Bunoke Bridge, E of (field edge)	R3228	17 Jul 2017	Reynolds, S., Reynolds, J.
Adare, SSW of (wood edge)	R4544	12 Jun 2005	Reynolds, S.
Ringmoylan Quay, near	R4057	16 Sep 2017	Reynolds, S., Reynolds, J.
Croom, N of	R5044	24 Sep 2018	Reynolds, S., Reynolds, J.

Coolfree Mtn (by forestry road)	R6716	30 Aug 2018	Reynolds, S., Reynolds, J.
High Bridge, N of Kilfinnane	R6824	23 Sep 2008	Reynolds, S.
Kilmallock, NE of	R6330	22 Sep 2014	Reynolds, S.
Knockderc, near road	R6538	24 Aug 1996	Reynolds, S., BSBI
Knockderc, near road	R6538	29 Aug 2017	Reynolds, S.
Bilboa River valley	R8252	22 Aug 2005	Reynolds, S.
Bilboa Bridge, NE of	R8252	10 May 2017	Reynolds, S. et al.
(near confluence of rivers)			

Salix repens L.

Creeping Willow

Limerick: Extinct Last seen: 1904

Native; procumbent or low-growing shrub. Widespread in Ireland, particularly in SW, W and NW, but with some large gaps in its distribution. Formerly found at two sites by the Shannon Estuary in W Limerick, the records supported by good voucher specimens; other early records have not been confirmed. There seems to be suitable habitat for *Salix repens* near Kilteery Pier, in the same area as Rock Hall, and it may yet be refound.

Site	Grid Ref.	Date	Recorder(s)
Tarbert, shore near	R04	Jul 1904	Knowles, M.C.
(near county boundary)			
Rock Hall, W of Loghill	R14	Jun 1904	Knowles, M.C.
(Shannon shore)			

Salix x smithiana, see Salix x holosericea

Salix x speciosa, see Salix x alopecuroides

Salix triandra L. Almond Willow

Limerick: Locally Scarce Last seen: 2021

Archaeophyte; small tree or shrub. Mainly in SE of Ireland, scattered elsewhere. Around Limerick city, including on river banks and embankment by the upper Shannon Estuary; rare elsewhere in Limerick and sometimes definitely planted. This is one of the most important Willows for basket-making. First recorded near Limerick 1904, also on bank of Abbey River at Corbally 1912.

Site	Grid Ref.	Date	Recorder(s)
Abbeyfeale, SE of	R1423	23 Jul 1999	Reynolds, S.
(edge of forestry; planted)			
Ferry Bridge, SW of	R474508	19 Sep 2012	Green, P.R.
(by River Maigue)			
Bruree, by River Maigue	R5430	15 Aug 2008	Reynolds, S.
(d/s of mill; possibly planted)			

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Bunlicky lake	R5455	Mar 2002	Goodwillie, R.N.
(near Ballinacurra Creek)			
Ballinacurra Creek, W side	R5455 or	7 Sep 1996	Reynolds, S.
	R5555		
Ballinacurra Creek (at Dock Road)	R5555	20 Sep 2008	Reynolds, S.
Clonmacken, W of Barrington's	R5556	12 Aug 2007	Reynolds, S.
Pier (on embankment, by estuary)		28 Aug 2008	
Clonmacken (embankment side)	R55375664	25 Sep 2021	Reynolds, S., Reynolds, J.
Shannon Bridge, W of	R5656	28 Aug 2008	Reynolds, S.
(by upper Shannon Estuary)			
Abbey River, beside	R5758 or	1996	Goodwillie, R.N.
	R5858		
King's Island (by Abbey River and	R5758	2007	Goodwillie, R.N.
drainage ditches)	R5858		
King's Island, E side	R5858	28 Aug 2008	Reynolds, S.
King's Island, E side	R580582	25 Sep 2021	Reynolds, S., Reynolds, J.
	R580584		
University of Limerick, E of	c.R6258	11 Sep 2005	Reynolds, S.
(near River Shannon; planted)			

Salvia verbenaca L. Wild Clary

Nationally Scarce

Limerick: Locally Rare Last seen: 2007

Native; somewhat aromatic herbaceous perennial. Widely scattered in Ireland, mainly in E and S. Only known at one site in Limerick, beside Askeaton Castle on a dry grassy bank with limestone outcrop. This species is vulnerable to grass cutting and use of herbicides. First recorded at Askeaton 1830, also noted on a dry bank there 1897, and between the ruins and river 1900.

Site	Grid Ref.	Date	Recorder(s)
Askeaton Castle, beside	R340502	3, 20 Jul 2004 18 Jul 2007	Reynolds, S.

Sanguisorba officinalis L.

Great Burnet

Nationally Scarce

National Threat Status: Vulnerable Flora (Protection) Order 2015

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Locally Rare Last seen: 2015 (at translocation sites)

Native; herbaceous perennial. Few widely scattered sites in Ireland. This protected species is currently only known in Limerick on Aughinish Island where it has been translocated;

previously also known near the old schoolhouse at Barrigone, but not refound there. No earlier records.

Because of site expansion works by Aughinish Alumina, this species was transplanted from its two original sites in unimproved grassland at S end of Aughinish Island to somewhat similar habitat on NW side of the island. Plants of *Sanguisorba officinalis* were reported as thriving at the new sites, with numerous flower heads and self-seeding. Detailed records of the original and translocation sites are held by NPWS.

Site	Grid Ref.	Date	Recorder(s)
Aughinish Island, S end	R27585134	23 Jul 2003	Roden, C.
Aughinish Island, S end	R2751	2004	Goodwillie, R.N.
Aughinish Island, S end	R27565134	7 Jul 2005	Reynolds, S., NPWS
(two original grassland sites)	R27665136		
Aughinish Island, NW side	R272527	2005-2009	BEC Consultants
(translocation sites)	R273526		
Aughinish Island	R273526	2010, 2011	Barron, S. (BEC)
(translocation sites)			
Aughinish Island	R272527	July 2015	Barron, S., D'Arcy, D. (BEC)
(translocation sites)	R273526		
Barrigone, near old national school	R295508	Between 1990	Ryall, T.
(along wall by former railway)		and 1996	

Saxifraga granulata L.

Meadow Saxifrage

Rare native in Ireland, included on Flora (Protection) Order 2015; only a relict of or escape from cultivation in Limerick. No recent records.

Saxifraga hypnoides L.

Mossy Saxifrage

Limerick: Locally Rare Last seen: 2017

Native; herbaceous stoloniferous perennial. Mainly in W (e.g. Burren) and NW of Ireland, also in N and rare elsewhere. In Limerick only in Galty Mtns; on wet rock faces and on outcrop in a stream. First recorded in Galty Mtns pre-1950.

Site	Grid Ref.	Date	Recorder(s)
Pigeonrock Glen, S side Galty Mtns	R8420	17 Aug 2008	Conaghan, J., BSBI
(on siliceous bluffs)			
Black Rocks/Knockaterriff bluffs	R85082199	8 Jun 2014	Reynolds, S., BSBI
(in Blackrock River valley)	R85082200		
Blackrock Glen	R850220	28 May 2015	Hodd, R.L.
Blackrock crags, Knockaterriff	R8522	17 Aug 2017	Quirke, M., Murphy, P.
Ballygeana, NW side Galty Mtns	R852245	14 Jun 2017	Reynolds, S. et al.
(stream near county boundary)			

Saxifraga rosacea Moench

Irish Saxifrage

Nationally Scarce

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 2018

Native; herbaceous stoloniferous perennial. Mainly in SW, W and NW of Ireland, mountains and rocky ground on the coast. In Limerick only in Galty Mtns; in steep rocky gullies, including by streams, and on ridges; locally common. First recorded in Galty Mtns 1944.

Site	Grid Ref.	Date	Recorder(s)
Lyraveg Glen	R841234	Jul 1999	Sweeney, P.
Lyraveg Glen and rocky gullies on	R83982351	9 Oct 2010	Reynolds, S., Sweeney, P.
NW side of Galty Mtns	R84282331		
	R84532381		
	R84602366		
Lyracappul	R846234	28 May 2015	Hodd, R.L.
(N-facing rock slope)			
Lyracappul-Carrignabinnia ridge	R8423	25 Jul 2017	Quirke, M., Murphy, P.
Carrignabinnia and	R8523	10 Jul 2018	Quirke, M., Murphy, P.,
Slievecushnabinnia, between			Harrington, T.

Saxifraga stellaris, see Micranthes stellaris

Scandix pecten-veneris L.

Shepherd's-needle

Nationally Rare

National Threat Status: Regionally Extinct (but see below*)

Limerick: Extinct Last seen: 1906

Archaeophyte; annual. *One recent record in Ireland, in Co. Waterford in a newly-sown verge; formerly quite widespread in cultivated ground. In arable land in Limerick in late 1800s and early 1900s, including ploughed and potato fields.

Site	Grid Ref.	Date	Recorder(s)
Barracks, near Foynes	c.R2549	Sep 1903	O'Brien, C.G.
Foynes	R25	Jun 1903	Knowles, M.C.
Morgans, field near	R25 or R35	29 May 1906	Knowles, M.C.
(E of Aughinish Island)			
Askeaton	R35	1885/1886	Stewart, S.A.
Hollypark, E of Askeaton	R45	1900	O'Brien, R.D.

Schoenoplectus tabernaemontani (C.C. Gmel.) Palla

Grey Club-rush

Limerick: Locally Scarce Last seen: 2021

Native; strongly rhizomatous perennial. Widespread around and near the coast of Ireland in brackish water. By and near the Shannon Estuary in Limerick; on tidal mud by the upper Shannon Estuary (often forming dense stands), in tidal creeks and lower stretches of tidal River Maigue; also in brackish ditches, marsh and pond. First reliable record is from Rinekirk at mouth of River Maigue 1885/1886, also Robertstown near Foynes 1903.

Site	Grid Ref.	Date	Recorder(s)
Durnish, just E of Foynes	R2651	2 Aug 2006	Reynolds, S.
(brackish drainage ditch)		12 Aug 2009	
Aughinish Island (drainage ditch)	R25	c.2004	Goodwillie, R.N.
Hunt's Lough, Aughinish Island	R290531	17 Jul 2004	Reynolds, S.
Hunt's Lough, Aughinish Island	R289531	29 Jun 2021	Reynolds, S., Reynolds, J.
	R290531		
Quayfield Lough	R296526	26 May 2017	Roden, C.
(E of Poulaweala Creek)			
Goleen Bridge, near	R3353	9 Jul 1988	Rich, T.C.G., Taylor, N.
(tidal creek N of Askeaton)			
Goleen Bridge, near	R3353	15 Jul 1989	Reynolds, S., BSBI
Goleen Bridge, E side	R3353	25 Jul 2006	Reynolds, S.
		16 Jun 2010	
Goleen Creek	R336529	20 Sep 2012	Green, P.R.
	R3353		
Rinekirk Point, near	R4457	20 Sep 2005	Reynolds, S.
(mouth of River Maigue)			
Ferry Bridge, NW of (by R. Maigue)	R4752	20 Jul 2005	Reynolds, S.
Ferry Bridge (by tidal R. Maigue)	R4852	6 Sep 1996	Reynolds, S.
Ferry Bridge, near	R4852	20 Jun 2005	Holyoak, D.T.
Newtown, NNW of Clarina	R4857	14 Aug 2018	Murphy, P., Harrington, T.
(near upper Shannon Estuary)			
Tervoe (creek off Shannon Estuary)	R524559	8 Aug 1990	Reynolds, S.
		23 Aug 2010	
Ballinacurra Creek, W side	R5455 or	7 Sep 1996	Reynolds, S.
	R5555		
Ballinacurra Creek, mouth of	R5456	15 Jun 1996	Reynolds, S.
Coonagh West	R5257	1 Sep 1990	Brady, C.M., Rich, T.C.G.
(by upper Shannon Estuary)			
Coonagh Point, just E of	R53675640	15 Jun 2006	Unknown
Coonagh Point, E of	R544565	25 Jul 2010	Reynolds, S.

Schoenoplectus triqueter (L.) Palla (Scirpus triqueter) Triangular Club-rush

Nationally Rare

National Threat Status: Near Threatened

Flora (Protection) Order 2015

Limerick: Not Locally Rare or Scarce

Last seen: 2021

Native; strongly rhizomatous perennial. In Ireland mainly by and near the upper Shannon Estuary in Co. Limerick, also in adjoining Co. Clare. This protected species is locally common in Limerick - by the estuary below Limerick city to near Muckinish Point on S side and Meelick Creek on N side; by tidal rivers and creeks off the estuary, including intermittently by tidal River Maigue from below Ferry Bridge nearly to Adare; also by tidal River Shannon in Limerick city. Usually on tidal mud, in muddy tidal channels or on stonymuddy shores.

First reliable record is from the Shannon just below Limerick Docks 1900, found by R.D. O'Brien, although it was possibly found by him the year before. O'Brien then found it growing profusely on both sides of the Shannon as far as Tervoe and Coonagh, and he expected it might also be in River Maigue. In 1904 R.A. Phillips described it forming the outer fringe of vegetation along the muddy banks from King's Island to below Limerick city, but currently it is not nearly so common along the city stretch of the Shannon due to various works in the river bed.

Schoenoplectus triqueter is probably the most important species in the county. It is now very rare in England, and Limerick holds the largest populations in Ireland and Britain. Also as a protected species in Ireland, it has been well surveyed by consultants, e.g. before construction of the Limerick Tunnel, and numerous records are held in the BSBI database and by NPWS. A summary of sites and records is given below, including latest dates when found.

Site	Grid Ref.	Date	Recorder(s)
Adare, just NW of (River Maigue	R459466	11 Oct 2008	Cawley, A., Reynolds, S.
just d/s of old railway bridge)			
Adare, just NW of	R459466	25 Jul 2009	O'Connor, Á., Wyse
			Jackson, M.
Adare, just NW of	R459466	Last seen 2019	(NPWS)
Clorhane (River Maigue)	R4749	Last seen 2000	(NPWS)
Ferry Bridge, S of (River Maigue)	R4851	2 Jul 2006	Reynolds, S.
Ferry Bridge (River Maigue, u/s	R482522	6 Sep 1996	Reynolds, S.
side of bridge)		2 Jul 2006	
Ferry Bridge, just d/s of	R4752	Last seen 2000	(NPWS)
Barnakyle River and tributary	R4852	2001	Ecofact
	R4951		
	R4952		
Muckinish Point, just W of	R509580	2004	(NPWS)
Cooperhill, S side Shannon Estuary	R5256	1993	Curtis, T., FitzGerald, R.
Tervoe, creek off Shannon Estuary	R5255	9 Jul 1988	Rich, T.C.G., Taylor, N.
Tervoe, creek off Shannon Estuary	R524559	23 Aug 2010	Reynolds, S.
Shannon Estuary, W of Ballinacurra	R5355	Last seen 2014	BEC Consultants
Creek			
Bunlicky lake	R5455	Mar 2002	Goodwillie, R.N.

Ballinacurra Creek, near mouth of	R5456	15 Jun 1996	Reynolds, S.
Ballinacurra Creek, near mouth of	R5456	Last seen 2006	(NPWS)
Ballinacurra Creek, near Bawney's	R5555	15 Jun 1996	Reynolds, S.
Bridge		11 Aug 2011	
Ballinacurra Creek	R5554	Last seen 2014	BEC Consultants
	R5555		
Meelick Creek	R5258	Last seen 2006	(NPWS)
	R5358		
Coonagh West, N side of Shannon	R528564	1994	Curtis, T., FitzGerald, R.
Estuary			
Coonagh West	R5256	Last seen 2006	(NPWS)
	R5356		
Clonmacken, N side of Shannon	R550563	1993	Curtis, T., FitzGerald, R.
Estuary			
Clonmacken	R54835652	12 Aug 2007	Reynolds, S.
	R55115656		
Clonmacken	R5456	25 Jul 2010	Reynolds, S.
Barrington's Pier, beside	R557565	13 Jul 2021	Reynolds, S., Reynolds, J.
Shannon Bridge, just d/s of N end	R5656	12 Aug 2006	Reynolds, S.
	R570569		
Shannon Bridge, just d/s of N end	R5656	4 Aug 2020	Reynolds, S. et al.
Clancy's Strand, Limerick city	R5757	1 Jul 1993	FitzGerald, R., Curtis, T.
(tidal River Shannon)			
Clancy's Strand	R575575	24 Jun 2010	Reynolds, S.
Clancy's Strand	R575575	6 Sep 2021	Reynolds, S., Reynolds, J.
King's Island, W side	R5758	21 Jul 1992	Reynolds, S.
King's Island, W side	R5758	Last seen 2001	Ecofact

Scirpus cernuus, see Isolepis cernua

Scirpus sylvaticus L.

Wood Club-rush

Nationally Scarce since 2000

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 2019

Native; rhizomatous perennial. Mainly in N of Ireland and rare in SW; less widespread than formerly. Only known at three sites by two rivers in Limerick. With *Phalaris arundinacea* (Reed Canary-grass) on low bank by tidal River Maigue; among tall riverside vegetation by River Shannon at Plassey Bridge, and at river/wood edge of islet upstream of Plassey Bridge. This species may occur elsewhere by these two rivers or by River Deel where previously found, but it is vulnerable to drainage works. First recorded by River Shannon at Plassey *c*.1833, also by River Deel near Askeaton 1903 and Newbridge 1904.

Site	Grid Ref.	Date	Recorder(s)
River Maigue, just NW of Adare	R459466	14 Jun 2003	Reynolds, S.
(just d/s of old railway bridge)		29 Jun 2003	
River Maigue, just NW of Adare	R459466	14 Jun 2006	Reynolds, S., Conaghan, J.

River Shannon, d/s side of Plassey	R609586	23 Jul 2019	Reynolds, S., Reynolds, J.
Bridge			
River Shannon, near University of	c.R619584	Jun 2010	Harrington, T.
Limerick (u/s of Plassey Bridge)			

Scirpus triqueter, see Schoenoplectus triqueter

Scleranthus annuus L.

Annual Knawel

Nationally Scarce

National Threat Status: Vulnerable Flora (Protection) Order 2015

Limerick: Extinct Last seen: 1902

Native or Alien, status uncertain; annual or biennial. Few places in N and SE of Ireland; formerly somewhat more widespread. First found at Castleconnell in Limerick 1900, and in gravel pit at Castleconnell 1902. Not refound, but there is still suitable sandy and gravelly habitat in that area.

Site	Grid Ref.	Date	Recorder(s)
Castleconnell	R66	1900	O'Brien, R.D.
Castleconnell, gravel pit	R66	Aug 1902	O'Brien, R.D.

Scrophularia umbrosa Dumort.

Green Figwort

Nationally Scarce

National Threat Status: Near Threatened

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Extinct Last seen: 1848

Native; herbaceous perennial. Only in catchment of River Liffey and one area of Co. Derry. The Limerick record is based on a specimen in British Museum, labelled 'near Limerick' 1848. This species, otherwise not known anywhere near Limerick, has been looked for on river banks in and near Limerick city, but not refound; *Scrophularia auriculata* (Water Figwort) and *S. nodosa* (Common Figwort) are the two common species there.

Site	Grid Ref.	Date	Recorder(s)
Limerick, near	R55 or R65	1848	Carroll, I.

Scutellaria galericulata L.

Skullcap

Last seen: 2021

Limerick: Not Locally Rare or Scarce (see below*)

Native; herbaceous perennial. Fairly widespread in Ireland. *Although at a few more sites than allowed for Locally Rare or Scarce in Limerick, this species is included because it often occurs only sparingly where known. Scattered sites in the county; mainly in swamps and marshy ground, including by lakes. First recorded in Limerick 1833, also at Mountshannon 1905, Glenstal 1958 and by lake below ruined house at Curragh Chase 1984.

Site	Grid Ref.	Date	Recorder(s)
Ballynort, NE of Askeaton	R3652	6 Sep 1996	Reynolds, S.
(ditches in marshy field)			
Curragh Chase Forest Park	R409498	20 Jul 2007	Perrin, P. et al.
	R409514		
Lough Nagirra, beside	R5343	1993	O'Mahony, T.
Lough Nagirra, beside	R5343	2015	Conaghan, J.
Knockalisheen Marsh, NNW side of	R5659	4 Sep 2005	Reynolds, S.
Limerick city (swamp)			
Ballingaddy, SE of Kilmallock	R627259	27 Jun 2017	Hunt, G.
(swampy ground by field pond)			
Herbertstown	R6839	7 Jul 1989	Reynolds, S., Curtis, T.,
(tall-herb swamp)			Harrington, T.
Herbertstown (swamp)	R6839	9 Jul 2005	Reynolds, S.
Lough Gur, SW corner	R6340	29 Aug 2017	Reynolds, S. et al.
Lough Gur, NW edge	R6341	16 Sep 2016	Reynolds, S., Reynolds, J.
Lough Gur	R6440	24 Aug 1996	Reynolds, S., BSBI
Lough Gur, S side	R6440	29 Aug 2017	Reynolds, S. et al.
Lough Gur, NE part	R6441	4 Sep 2015	Reynolds, S., Reynolds, J.
		16 Sep 2016	
Clooncunna North, SE of	R64755394	23 Jul 2019	Reynolds, S. et al.
Ballysimon (swampy ground)			
Pallas Grean, NNW of	R7648	7 Sep 2017	Quirke, M., Murphy, P.,
			Harrington, T.
Glenstal Abbey, Murroe	R7356	Jul 2005	Quirke, M.
(lake by avenue)			
Glenstal Abbey (lake by avenue)	R7356	31 Jul 2005	Reynolds, S., Quirke, M.
Glenstal Woods car park, near	R759571	11 Jul 2021	Jackson, M.
(by the stream)			
Dromsallagh Bog. NW of	R76155248	31 Jul 2005	Reynolds, S., Quirke, M.
Cappamore (swampy edge)			

Scutellaria minor Huds.

Lesser Skullcap

Limerick: Locally Rare Last seen: 2018

Native; herbaceous perennial. In SE, S, SW and mid-W of Ireland in boggy or marshy ground, rare elsewhere. Only one known site in SE Limerick, at edge of its range in SW Ireland; peaty wet slope on side of Coolfree Mtn. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Coolavehy, SE Coolfree Mtn	R682158	10 Sep 2000	Lynch, R.
Coolavehy, SE Coolfree Mtn	R681152	30 Aug 2018	Reynolds, S., Reynolds, J.

Sedum rosea, see Rhodiola rosea

Selaginella selaginoides (L.) P. Beauv.

Lesser Clubmoss

Limerick: Extinct Last seen: 1974

Native; perennial with prostrate stems and fertile erect stems. Widespread in W and NW of Ireland, rare in S. Formerly only known at one site in Limerick, in grassland over limestone in a fen area near Askeaton. Not yet refound at this site, and it may turn up elsewhere in the county.

Site	Grid Ref.	Date	Recorder(s)
Ballyvogue, ENE of Askeaton	R3851	19 Jul 1974	Scannell, M.J.P., BSBI

Senecio sylvaticus L.

Heath Groundsel

Limerick: Locally Scarce Last seen: 2019

Native; sticky annual with a distinctive smell. Fairly widespread in E half of Ireland, occasional elsewhere. Scattered sites in Limerick; on hills, including volcanic hills, and in heathy ground; also on shale and in disturbed ground; usually in small numbers. First recorded on waste ground at Askeaton and from Foynes to Glin 1885/1886, but not common.

Site	Grid Ref.	Date	Recorder(s)
Knocknalaght, near	R1332	14 Aug 2016	Reynolds, S., Reynolds, J.
(S of Athea; disturbed ground)			
Shanagolden, SW of	R2244	20 Jul 2017	Reynolds, S., Reynolds, J.
(cut-over forestry)			
Foynes Island	R2452	19 Jul 1996	Reynolds, S.
		10 Jul 1999	
		6 Aug 2003	
		3 Aug 2014	
		1 Jul 2019	
Foynes Island	R2552	16 Nov 2019	Reynolds, S., Reynolds, J.
Lough Aguole, ridge above	R3936	4 Aug 2013	Reynolds, S.
(W of Ballingarry)			
Corronoher (edge of forestry road)	R4030	13 Oct 2008	Reynolds, S.
Knockderc, SE of Lough Gur	R6538	19 Apr 2019	Reynolds, S., Reynolds, J.
Knockroe, SW of Caherconlish	R6547	17 May 2015	Reynolds, S.
Kilteely Hill	R7240	28 Mar 1999	Reynolds. S.
		2 Jul 2016	
Derk Hill, S of Old Pallas Grean	R7541	28 Jul 1999	Reynolds, S.

Derk Hill, E side	R7641	9 Aug 2017	Quirke, M., Murphy, P.
Oola, just SE of	R829416	11 Aug 2011	Reynolds, S.
(edge of wet field)			

Seriphidium maritimum, see Artemisia maritima

Silene alba, see Silene latifolia

Silene dioica (L.) Clairv.

Red Campion

Last seen: 2021

Limerick: Locally Scarce

Native; herbaceous perennial. Widespread in N of Ireland, also in E and S, and widely scattered elsewhere. Few sites in Limerick, including in three valley woodlands with *Quercus petraea* (Sessile Oak); also persisting where originally planted or self-seeding from wild flower seed mixtures. First recorded at Thornfields near Annacotty 1901, also in glen at Glenstal (= Cappercullen Glen) 1904/1905.

Site	Grid Ref.	Date	Recorder(s)
O'Dwyer Bridge, near (Limerick	R5857	30 Apr 2007	Reynolds, S.
city; from wild flower mixture)		28 Aug 2008	
		26 Jul 2009	
Mountrussell, N side Ballyhoura	R6119	13 Jun 2003	Reynolds, S., Lynch, R.
Mtns (wooded valley)			
Murroe (woodland garden; origin	R7255	11 May 2021	Quirke, M.
not known)			
Murroe	R7355	10 May 2018	Quirke, M., Murphy, P.,
(amenity park)			Harrington, T.
Cappercullen Glen, Glenstal Abbey,	<i>c</i> .R7356	8 Aug 1997	Reynolds, S., Quirke, M.
Murroe (wooded glen)			
Cappercullen Glen	R7356	31 Jul 2005	Reynolds, S.
	R7357	7 Jul 2008	
Glenstal Wood	R738570	10 Sep 2007	Perrin, P., Delaney, A.
(= Cappercullen Glen)	R740573		
Cappercullen Glen, lower part	R7356	25 Apr 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Cappercullen Glen	R7356	11 May 2021	Quirke, M.
	R7357		
Ballyvorheen House, ESE of	R7554	29 Mar 2016	Reynolds, S. et al.
Murroe (woodland)			
Glenacurrane, N of Mitchelstown	R808171	24 Jul 2007	McNutt, K., Power, E.
(valley woodland)			

Silene latifolia Poir. (*S. alba*)

White Campion

Limerick: Locally Rare Last seen: 2010

Archaeophyte; usually perennial. Mainly in E of Ireland, scattered elsewhere; formerly more widespread. A rare casual in Limerick; also self-seeding or persisting where originally planted in a wild flower seed mixture. First recorded in Limerick city 1905, also disturbed ground by railway at Foynes 1985.

Site	Grid Ref.	Date	Recorder(s)
Rossbrien, S side Limerick city	R5754	27 Jun 2009	Reynolds, S.
(grassy roadside bank)			
Rossbrien (weedy roadside)	R5854	24 Jul 2010	Reynolds, S.
O'Dwyer Bridge, near (Limerick	R5857	17 Jun 2007	Reynolds, S.
city; from wild flower mixture)		28 Aug 2008	
		26 Jul 2009	

Silene uniflora Roth (*S. vulgaris* subsp. *maritima*)

Sea Campion

Limerick: Locally Scarce

Last seen: 2021

Native; herbaceous perennial. In Ireland all around the coast. By the Shannon Estuary in Limerick from Glin to Beagh Castle N of Askeaton; sparingly on low shale cliffs and stony shores, also on limestone outcrop and castle wall. First recorded on banks of the Shannon at Foynes 1884, and by the Shannon 1885/1886, but not abundant.

Site	Grid Ref.	Date	Recorder(s)
Glin Pier, beside (stony shore)	R1347	10 Oct 1999	Reynolds, S.
		11 Jul 2005	
Glin Pier, beside	R13034781	28 Aug 2021	Reynolds, S., Reynolds, J.
Long Rock, E of (NE of Glin)	R1549	15 Sep 2019	Reynolds, S., Reynolds, J.
Loghill and Coalhill Point, between	R1950	27 Jul 2006	Reynolds, S.
Poultallin Point, just W of	R2352	16 Jul 2004	Reynolds, S.
(W of Foynes; low shale cliff)		30 May 2010	
Poulaweala Creek, E side	R2952	30 Aug 2008	Reynolds, S.
(near lane end)			
Morgans North	R2952	4 Jun 2016	Quirke, M., Murphy, P.
(E of Poulaweala Creek)			
Poulaweala Creek, E side	R2953	13 Jul 2012	Reynolds, S.
(on limestone outcrop)			
Trummera Big	R2954	30 Aug 2008	Reynolds, S.
(islet NE of Aughinish Island)			
Courtbrown Point	R324543	21 Sep 2021	Quirke, M., Murphy, P.,
			Harrington, T.
Ballysteen, W and WNW of	R3355	12 Jul 2017	Reynolds, S., Reynolds, J.
	R3455		
Beagh Castle, N of Askeaton	R3556	2 Aug 1988	Reynolds, S.
(castle wall and limestone outcrop)		1 Jul 2007	
		28 Jun 2009	

Silene vulgaris subsp. maritima, see Silene uniflora

Silene vulgaris subsp. vulgaris (Moench) Garcke

Bladder Campion

Limerick: Locally Rare Last seen: 2017

Native; herbaceous perennial. Scattered in Ireland; formerly more widespread. In Limerick sparingly on roadside banks and in a railway cutting. First recorded near Limerick city 1900.

Site	Grid Ref.	Date	Recorder(s)
Cappagh, SSW of	R3844	3 Aug 2000	Reynolds, S.
(limestone railway cutting)			
Askeaton, ESE of	R389489	31 May 2003	Reynolds, S.
(grassy roadside bank)		5 Jul 2008	
Askeaton, WNW of (low roadside	R3150	18 Jul 2017	Reynolds, S., Reynolds, J.
bank just N of railway bridge)			

Silybum marianum (L.) Gaertn.

Milk Thistle

Nationally Scarce

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 1999

Archaeophyte; annual to biennial, spiny leaves usually with distinctive white veins. Widely scattered in Ireland; formerly somewhat more widespread. Only two known sites in Limerick, including beside a ruined castle; a rare relict of ancient cultivation. First recorded on waste ground at Askeaton 1885/1886 and around ruins of Askeaton Abbey 1901, also in great abundance at Shanid Castle S of Foynes 1906 – it may yet re-appear at these sites.

Site	Grid Ref.	Date	Recorder(s)
Dysert Castle, ESE of Foynes	R2850	12 Jul 1999	O'Brien, N., Reynolds, S.
(in pasture beside castle)			
Grange (near Lough Gur)	R64	Jul 1989	Harrington, T.

Sinapis alba L.

White Mustard

Limerick: Locally Scarce Last seen: 2018

Archaeophyte; annual. Mainly in SE and S of Ireland, widely scattered elsewhere; formerly more widespread in cultivated ground. Usually only a casual in small numbers in Limerick, but many plants found in a field of *Miscanthus* (Silver-grass). First recorded at Singland on outskirts of Limerick city 1897.

Site	Grid Ref.	Date	Recorder(s)
Foynes Port	R2551	22 Jul 1990	Reynolds, S.

Foynes Port	R2551	2 Sep 2004	Reynolds, S.
		10 Oct 2015	
Foynes and Robertstown, between	R24 or R25	1 Sep 1992	Wiltshire, E.
(roadside)			
Ferry Bridge (edge of car park)	R4852	6 Sep 1996	Reynolds, S.
Fedamore, N of	R590458	11 Oct 2018	Quirke, M., Murphy, P.,
(in field of <i>Miscanthus</i> crop)			Harrington, T.
Castleconnell, just S of	R6661	29 Aug 2018	Reynolds, S., Reynolds, J.
(possible contaminant with wild			
flower seed mixture)			

Sisyrinchium bermudiana L.

Blue-eyed-grass

Internationally Rare: Ireland holds more than 25% of the European population

Wildlife (Northern Ireland) Order 1985, amended 2011

Limerick: Locally Scarce Last seen: 2020

Native (see below*); herbaceous perennial. In parts of SW, W and NW of Ireland, rare elsewhere. The largest known population in Limerick is in an unimproved wet meadow by River Shannon N of Castleconnell (with *Carex pallescens* Pale Sedge), but it is vulnerable to over- or under-grazing or any disturbance; also at edge of boggy ground and in rushy field SE of O'Briensbridge; single patches found in disused sand pit on W side of Castleconnell Bog and in gravel/sand pit at Gooig. First recorded in boggy ground by main Limerick-Nenagh road *c*.1939 (in Castleconnell Bog area), but apparently gone from there in 1940s when bog was cut.

*There is ongoing discussion whether this species is native in Ireland or possibly introduced; it is otherwise known only as native in North America.

Site	Grid Ref.	Date	Recorder(s)
Lacka, N of Castleconnell	R6664	8 Jul 1998	Reynolds, J., Reynolds, S.
(unimproved wet meadow)			
Lacka	R6664	10 Jul 1999	Reynolds, S., Wiltshire, E.
Lacka	R66086423	10 Jul 2014	Reynolds, S., Reynolds, J.
	R66086424		
Coolready, SE of O'Briensbridge	R67346525	10 Jul 2014	Reynolds, S., Reynolds, J.
(bordering boggy ground)			
Coolready, SE of O'Briensbridge	R68006478	10 Jul 2014	Reynolds, S., Reynolds, J.
(rushy field)	R68006480		
	R68016480		
Castleconnell Bog, sand pit on W	R67916353	10 Jul 2020	Reynolds, J., Reynolds, S.,
side			Quirke, M., Murphy, P.,
			Harrington, T.
Gooig gravel/sand pit	R676638	10 Jul 2020	Reynolds, J., Reynolds, S.

Sium latifolium L.

Greater Water-parsnip

Limerick: Locally Rare Last seen: 2021

Native; herbaceous perennial. Localised in Ireland, e.g. Shannon catchment and by Lough Erne, rare elsewhere. In Limerick only known near River Shannon on outskirts of Limerick city; in emergent vegetation at edges of two small floodplain lakes. First recorded as plentiful by banks of the Shannon c.1804, also by River Shannon at Shannon Fields 1897 and near Plassey 1904.

Site	Grid Ref.	Date	Recorder(s)
Lucas' Lough, Shannon Fields	R5958	26 Aug 1997	Reynolds, S.
Lucas' Lough	R592582	12 Aug 2006	Reynolds, S.
Lucas' Lough	R59325823	23 Aug 2010	Reynolds, S., Reynolds, J.
Lucas' Lough	<i>c</i> .R594581	31 Aug 2021	Reynolds, S., Reynolds, J.
Reboge, E of Limerick Canal	R6057	26 Aug 1997	Reynolds, S.
(floodplain lake)		2, 15 Aug 2004	
Reboge (floodplain lake)	R60175761	23 Aug 2010	Reynolds, S., Reynolds, J.
	R60195761		
Reboge (lake)	R601576	31 Aug 2021	Reynolds, S., Reynolds, J.

Solanum nigrum L.

Black Nightshade

Limerick: Locally Rare Last seen: 2008

Archaeophyte; annual. Mainly in E and S of Ireland, widely scattered elsewhere. Only two recent records as a casual in Limerick. First and only earlier record is from Limerick Docks 1903.

Site	Grid Ref.	Date	Recorder(s)
Foynes (harbour area)	c.R2551	20 Aug 2008	Seawright, J.
Bruree, W of (roadside)	R43	23 Aug 1991	Reynolds S.

Sorbus hibernica E.F. Warb.

Irish Whitebeam

Last seen: 2018

Internationally Rare: Endemic to Ireland National Threat Status: Vulnerable Limerick: Not Locally Rare or Scarce

Native; shrub or small tree. Widely scattered across Ireland; usually small populations, but occasionally large. Scattered sites in Limerick, mainly in northern limestone area; solitary or few small trees in hedgerows and on roadside banks, also in calcareous grassland with outcropping limestone and in a limestone railway cutting. A specimen from a hillside at Pallas Grean 1897 was determined in 2001 as this species, the first Limerick record.

Site	Grid Ref.	Date	Recorder(s)
Barrigone, near quarry (E of road	R2950	3 May 2009	Reynolds, S.
to quarry, in calcareous grassland)		3 May 2014	
Bullaun, S of Askeaton	R3446	22 Jun 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Doohyle Lough, NW of (field edge	R354452	17 May 2015	Reynolds, S.
and by old railway line)			
Feeagh, S of Askeaton	R3545	15 Jun 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Cappagh, WSW of	R3744	3 Aug 2000	Reynolds, S.
(= Ballyadam townland)			
Cappagh, SSW of (roadside and	R3844	3 Aug 2000	Reynolds, S.
limestone railway cutting)		21 Jul 2003	
Ballynort, NE of Askeaton	R3652	23 May 2006	Reynolds, S.
Castletown, SW of (wood edge and	R4429	22 Sep 2011	Reynolds, S.
roadside near Holy Well)			
Castletown, N of (roadside bank)	R4431	20 Jun 2005	Reynolds, S.
		10 Jul 2007	
Castletown, N of	R4431	30 May 2017	Reynolds, S., Reynolds, J.
Cloonoul, W of Adare	R4145	12 Jul 2018	Quirke, M., Murphy, P.,
			Harrington, T.
Ballynagool, W of Adare	R4146	12 Jul 2018	Quirke, M., Murphy, P.,
			Harrington, T.
Clonshire Beg, W of (W of Adare)	R4245	20 Jul 2016	Quirke, M., Murphy, P.
Castlegrey, near (E of Kilcornan)	R4151	23 May 2009	Reynolds, S.
Blue Lough, E side	R4151	18 Jul 2018	Reynolds, S. et al.
Patrickswell, near	R54	Sep 1990	Goodwillie, R.N.
(by disused railway)			

$Sparganium\ natans\ L.$

Least Bur-reed

Internationally Rare: Near Threatened on European Red List

National Threat Status: Near Threatened

Limerick: Locally Scarce Last seen: 2018

Native; aquatic perennial. Widely scattered in Ireland, but rare in parts of N, E and S; formerly more widespread. Mainly in northern limestone area of Limerick; in shallow water in lakes, ponds and a stream; also in drainage ditches. First recorded at Curragh Chase and nearby Blue Lough 1885/1886.

Site	Grid Ref.	Date	Recorder(s)
Graigues Lough, SE of Askeaton	R3647	12 Jun 2004	Reynolds, S.
Graigues Lough	R3647	3 Aug 2013	Reynolds, S.
	R3648		
Doohyle Lough, N side	R3743	3 Sep 2015	Reynolds, S.
Deegerty/Ballyvogue, ENE of	R3851	19 Aug 1996	Reynolds, S.
Askeaton		24 Jul 2009	
Deegerty (drainage ditches in fen)	R3851	10 Oct 2016	Reynolds, S., Reynolds, J.

Mornane Lough, ENE of Askeaton	R3852	19 Aug 1996	Reynolds, S.
Mornane Lough	R38595236	13 Jul 2011	Reynolds, S.
Curragh Chase	R4149	16 Jul 1989	Reynolds, S., BSBi
(lake below ruined house)			
Curragh Chase, lake	R4149	30 Jul 1998	Reynolds, S.
Adare Town Park (shallow stream)	R4646	8 Jun 2008	Reynolds, S.
		24 Jun 2010	
Blue Lough, just NW of	R406521	13 Sep 2008	Reynolds, S.
Blue Lough, just N of	R4052	18 Jul 2018	Reynolds, S. et al.
Ballynaclough River, near	R5654	25 Jul 2006	Reynolds, S.
(Dooradoyle; drainage ditch)			

Spergularia rubra (L.) J. & C. Presl

Sand Spurrey

Limerick: Locally Scarce Last seen: 2018

Native; annual or biennial. In SE and parts of N of Ireland, widely scattered elsewhere. Few sites in Limerick off the limestone; on unpaved forestry roads on gravel or shale chippings, also in a shale quarry. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Dromdeeveen, WSW of Broadford	R28382030	3 Sep 2018	Reynolds, S., Reynolds, J.
(near entrance to forestry)			
Moyreen, SSE of Ballyhahill	R202428	29 Jun 2006	Reynolds, S.
(small shale quarry)			
Bauraneag, NW of Carrigkerry	R2141	10 Jun 2005	Reynolds, S.
(forestry road with shale)			
Bauraneag (forestry road)	R21154139	11 Jul 2005	Reynolds, S.
Temple Hill, SW of	R825214	30 Aug 2010	Reynolds, S.
(gravel forestry road)			

Spergularia rupicola Lebel ex Le Jol.

Rock Sea-spurrey

This native perennial maritime species was recorded from the shore of the Shannon Estuary at Loghill in early 1900s and on the roadside near Glin in 1990, but it was almost certainly mistaken for *Spergularia media* (Greater Sea-spurrey) with similar size flowers and which is common by the estuary. Since *S. rupicola* does not seem to occur by the Shannon Estuary closer to the sea in adjoining Co. Kerry and has not been found (despite searches) in Limerick in recent years, this species is now removed from the Limerick flora.

Spiranthes spiralis (L.) Chevall.

Autumn Lady's-tresses

National Threat Status: Near Threatened

Limerick: Locally Rare Last seen: 2021

Native; perennial orchid. In W of Ireland, also S, rare or absent elsewhere; formerly somewhat more widespread. Only known in Limerick near Foynes and on Aughinish Island; sparingly in calcareous grassland. First recorded on river banks at Askeaton 1900, also on crags in Mullagh area SE of Foynes in early 1900s.

Site	Grid Ref.	Date	Recorder(s)
Ardaneer, just SE of Foynes	R2650	1 Sep 1992	Wiltshire, E.
(grassy slope with outcrop)			
Ardaneer, just SE of Foynes	R2650	21 Aug 1995	Reynolds, S.
Ardaneer, just SE of Foynes	R26095043	10 Sep 2006	Reynolds, S.
Aughinish Island	c.R288527	Sep 2008	Rich, T.C.G.
Aughinish Island	c.R288527	20 Sep 2008	Reynolds, J.
Aughinish Island	R288528	20 Aug 2014	O'Sullivan, J.
Aughinish Island	R288527	23 Aug 2021	Hunt, G.

Stachys arvensis (L.) L.

Field Woundwort

Limerick: Locally Rare Last seen: 1987

Archaeophyte; annual. Mainly in SE and S of Ireland, also NE and widely scattered elsewhere. Only found once in recent times in Limerick, a few plants on Foynes Island. First recorded at Foynes 1903 in a cultivated field and as a weed in a garden, and considered frequent about Foynes. This species may turn up again in arable land off the limestone.

Site	Grid Ref.	Date	Recorder(s)	
Foynes Island, W side	R2453	4 Oct 1987	Reynolds, S.	
(in disturbed ground)				

Stellaria palustris Ehrh. ex Hoffm.

Marsh Stitchwort

Limerick: Locally Rare Last seen: 2020

Native; herbaceous perennial. Mainly in the centre of Ireland, including catchment of River Shannon. Three sites currently known in Limerick; by River Shannon N of Castleconnell and in swamps near and in Limerick city close to River Shannon. Only earlier records are from Worldsend N of Castleconnell by River Shannon 1905 and near Castleconnell 1906.

Site	Grid Ref.	Date	Recorder(s)
Knockalisheen Marsh	R5659	4 Sep 2005	Reynolds, S.
(swamp on county boundary)			
Corbally swamp, Limerick city	R5858	18 Sep 1997	Heery, S.

Corbally swamp	R582580	28 Aug 2008	Reynolds, S., Reynolds, J.
	R582581		
Lacka, N of Castleconnell	R65996465	15 Aug 2020	Quirke, M., Murphy, P.,
(by River Shannon)			Harrington, T.

Symphytum officinale L.

Common Comfrey

Limerick: Locally Scarce Last seen: 2020

Native; herbaceous perennial. Widely scattered in Ireland. Mainly by rivers in Limerick; probably also a relict of cultivation in a few places, although closely related *Symphytum* x *uplandicum* (Russian Comfrey) was more usually grown and persists on roadsides. First recorded on river bank at Corbally 1897, also by River Deel at Askeaton 1985.

Site	Grid Ref.	Date	Recorder(s)
Mountcollins	R1619	30 Jun 1990	Reynolds, S., BSBI
(by tributary of River Feale)			
Abbeyfeale (by River Feale)	R1126	18 Aug 2005	Reynolds, S.
Goulburn Bridge, E of Abbeyfeale	R1626	15 May 1990	Reynolds, S., Scannell, M.J.P.
Knockaderry, WNW of	R3236	14 Aug 1999	Reynolds, S.
(in and near overgrown garden)		9 Aug 2009	
Newbridge, near (by River Deel)	R3345	1 Aug 2004	Reynolds, S.
Feenagh, NE of (roadside)	R4228	16 Sep 2019	Reynolds, S., Reynolds, J.
Ballyvollane, near River Shannon	R6359	3 Jun 2020	Quirke, M., Murphy, P.,
			Harrington, T.
Bunkey Bridge, near (roadside)	R681605	22 Jul 2014	Reynolds, S.
	R682604		

Taraxacum F.H. Wigg.

Dandelions

Three microspecies in this aggregate which have been recorded in Limerick are considered endemic to Ireland. For that reason they are designated as Internationally Rare. They need identification by specialists and there is insufficient information about their distribution, habitats and frequency to give details in this Rare Plant Register.

Taraxacum amarellum J. Kirschner & Stěpánek (Extinct in Limerick) is included on the list of endemics in the *Ireland Red List* (Wyse Jackson *et al.* 2016).

Taraxacum aesculosum A.J. Richards and **Taraxacum sahlinianum** Dudman & A.J. Richards, both with recent records for Limerick, are listed as endemic to Ireland and Britain in Rich (2020).

Little work has been done on *Taraxacum* in Limerick and no doubt there are many more microspecies to be found in the county.

Taxus baccata L. Yew

Limerick: Locally Scarce as a native

Native; large bush or tree. Widespread in Ireland except in parts of W; rather rare as a native, also originating from planted trees. In Limerick native at Curragh Chase and on Tory Hill; otherwise hard to tell if occasional trees in northern limestone area are native or self-sown from planted trees. Elsewhere in the county self-sown Yew from planted trees are quite widely distributed. First published record is from Tory Hill 1990.

Curragh Chase Woods SAC is designated for its 'Alluvial Forests' and 'Yew Woodlands'. The Yew wood on the E side of Glenisca Lough contains some very old large trees (up to 300-400 years old) and smaller trees of various sizes, forming a fairly pure stand on the limestone ridge and low cliff; also scattered Yew trees on outcrop in adjacent mixed woodland. At least one large old tree and also many bushes and young trees in rockier areas on limestone Tory Hill, which could develop into Yew woodland if left undisturbed.

The following is a selection of *Taxus baccata* records from the northern limestone area and Tory Hill.

Site	Grid Ref.	Date	Recorder(s)
Mullagh, NW of Creeves Cross	R2846	3 Apr 1997	Reynolds, S.
(in Hazel scrub)			
Deelish, NW of Creeves Cross	R2847	19 May 2001	Reynolds, S.
(on limestone pavement)			
Rincullia, just SW of Barrigone	R2849	Jun 2010	Rippey, I.
Ballyellinan (hedgerow beside fen)	R3149	27 Jul 2000	Reynolds, S.
Adare, railway cutting N of	R4647	6 Jun 2004	Reynolds, S.
(on limestone outcrop)			
Adare, railway cutting N of	R466474	14 Jun 2021	Reynolds, S., Reynolds, J.
Adare, ESE of (Oak-Ash woodland)	R4845	12 Jun 2005	Reynolds, S.
Knockanes, E of Adare	R485455	3 Jul 2007	McNutt, K., Power, E.
Curragh Chase, W of caravan park	R4049	29 May 2010	Reynolds, S.
(in woodland)			
Curragh Chase Forest Park	R409498	20 Jul 2007	Perrin, P. et al.
Curragh Chase Forest Park	<i>c</i> .R4150	2 Oct 1992	Harrington, T.
Curragh Chase, Yew wood	R4150	17 Apr 1997	Reynolds, S., Wiltshire, E.
(E side of Glenisca Lough)			
Curragh Chase, Yew wood	R411505	12 Jun 2005	Reynolds, S.
Curragh Chase Forest Park	R410505	18 Jul 2007	Perrin, P., Power, E.
Curragh Chase, Yew wood	R410505	31 May 2010	Reynolds, S.
Curragh Chase, Yew wood	R4150	16 May 2015	Reynolds, S., BSBI
Curragh Chase, Yew wood	R410506	19 May 2021	Reynolds, S., Reynolds, J.
Curragh Chase (mixed woodland	R411506	11 Jun 2005	Reynolds, S.
near Yew wood)	R411508		
Tory Hill (wood on limestone hill)	R5342	20 Jun 1990	Curtis, T., Harrington, T.
	R5343		
Tory Hill, S end (large old tree)	R5342	May 1997	Quinn, K., Boohan, S.
Tory Hill, N end (young bushes)	R5343	1993	O'Mahony, T.

Last seen: 2021

Teucrium scordium L.

Water Germander

Nationally Scarce Limerick: Extinct

Limerick: Extinct Last seen: 1905

Native; herbaceous perennial. River Shannon lakes and catchment, rare elsewhere in Ireland. One of the earliest Limerick plant records, on banks of the Shannon pre-1735; also by River Shannon opposite Doonass near Castleconnell in early 1900s. This species was looked for below Castleconnell in recent years, but not yet refound.

Site	Grid Ref.	Date	Recorder(s)
Limerick, River Shannon near	<i>c</i> .R66	Pre-1735	(K'Eogh, J.)
(probably near Castleconnell)			
Castleconnell, near	R66	1904	Phillips, R.A.
(by Shannon opposite Doonass)			
Castelconnell, near	R66	Jun 1905	Phillips, R.A.
Castleconnell, banks of Shannon	R66	1905	Waddell, C.H.
Castleconnell, rapids below	R66	c.1905	Waddell, C.H.

Thalictrum flavum L.

Common Meadow-rue

Limerick: Locally Scarce Last seen: 2021

Native; herbaceous rhizomatous perennial. Fairly widespread in the centre of Ireland, occasional elsewhere. Mainly in northern limestone area of Limerick, also on outskirts of Limerick city and near Castleconnell; in unimproved damp grasslands, including where bordering lakes and turloughs. First recorded at Curragh Chase 1898.

Site	Grid Ref.	Date	Recorder(s)
Craggs, SE of Barrigone	R2948	12 Jun 2004	Reynolds, S.
(beside turlough)			
Craggs, SE of Barrigone	R298486	20 May 2008	Goodwillie, R.N.
Feeagh, S of Askeaton	R3545	15 Jun 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Doohyle Lough, NW of	R35514534	4 Sep 2015	Reynolds, S.
(damp patch by former railway)			
Doohyle Lough	R3743	1995	O'Mahony, T.
Doohyle Lough	R3743	9 Sep 2006	Rippey, I.
Doohyle Lough, just W of	R3643	23 Jul 2015	Reynolds, S.
Doohyle Lough, W side	R3743	7 Sep 2007	Reynolds, S.
Doohyle Lough, W side	R37044356	23 Jul 2015	Reynolds, S.
Doohyle Lough, W side	R37044363	5 Jul 2015	Reynolds, S.
Doohyle Lough, S side	R3743	3 Sep 2015	Reynolds, S.
Doohyle Lough	R3743	6 Aug 2015	Hunt, G.
Doohyle Lough, by channel on W	R37044352	6 Sep 2021	Reynolds, S., Reynolds, J.
side			
Graigues Lough, SE of Askeaton	R3647	12 Jun 2004	Reynolds, S.
(E side of turlough)			

Graigues Lough	R366479	3 Aug 2013	Reynolds, S.
Graigues Lough, E side	R3647	10 Oct 2016	Reynolds, S., Reynolds, J.
Graigues Lough	R366479	28 Aug 2021	Reynolds, S., Reynolds, J.
	R366480		
Ballydoo Bridge, near	R35245267	20 Sep 2012	Green, P.R.
(NE of Askeaton)			
Curragh Chase, near lake	R414492	9 Jul 2007	Reynolds, S.
Blue Lough, N end	R4051	18 Jul 2018	Reynolds, S. et al.
	R4052		
Rootiagh, ENE of Patrickswell	R545515	15 Jun 2021	Quirke, M., Murphy, P.,
			Harrington, T.
Loughmore Common, SE of	R5452	1990	Goodwillie, R.N.
Mungret (near turlough)		1998	
Raheen Industrial Estate, S of	c.R5551	1998	Goodwillie, R.N.
(near old railway line)			
Lacka, N of Castleconnell	R6664	18 Jul 2018	Reynolds, S., Reynolds, J.
(edge of meadow by R. Shannon)		24 Jun 2019	
Lacka, N of Castleconnell	R66006421	15 Aug 2020	Quirke, M., Murphy, P.,
			Harrington, T.

Torilis nodosa (L.) Gaertn.

Knotted Hedge-parsley

Nationally Scarce

National Threat Status: Near Threatened

Limerick: Extinct Last seen: 1906

Native; annual. Widely scattered in Ireland; formerly somewhat more widespread. Only three old records for Limerick.

Site	Grid Ref.	Date	Recorder(s)
Morgans	R25 or R35	Jun 1906	Knowles, M.C.
(E of Aughinish Island; roadside)			
Askeaton	R35	16 Aug 1900	Praeger, R.L.
Lough Gur (dry bank)	R64	14 Aug 1900	Praeger, R.L.

Trichomanes speciosum Willd.

Killarney Fern

Internationally Rare: Ireland holds more than 25% of the European population

Listed on Annex II of the EU Habitats Directive

Nationally Scarce

Flora (Protection) Order 2015

Limerick: Locally Rare Last seen: 2020

Native; rhizomatous fern. Mainly in SW of Ireland, widely scattered elsewhere; sporophyte plants with leaves are somewhat less widespread than the inconspicuous filamentous gametophyte. This protected species has long been known in NE and SE Limerick; on shaded

damp rock faces and damp crevices in conglomerate tors. First recorded at Glenstal 'near Keeper Mountain' *c*.1852, and under a shelf of rocks near summit of 'Carrigeena' 1852; the independently-living gametophyte was first found in Slievefelim Mtns area in 1993. *Trichomanes speciosum* also occurs on Tipperary side of Clare River on the county boundary in Clare Glens.

Selected records are given below. NPWS holds more exact details of all Limerick records.

Site	Grid Ref.	Date	Recorder(s)
Carrigeenamronety	c.R6915	Pre-1995	Curtis, T., Harrington, T.
(E of Ballyhoura Mtns)			
Carrigeenamronety	R6915	16 Aug 2005	Reynolds, S.
Carrigeenamronety	R6915	28 Jun 2006	Reynolds, S., Conaghan, J.
Carrigeenamronety	R6915	1 Dec 2020	Quirke, M., Murhphy, P.,
			Harrington, T.
Cappercullen Glen, Glenstal Abbey,	R7357	11 Nov 1995	Kingston, N.
Murroe			
Cappercullen Glen	R7357	8 Aug 1997	Quirke, M., Reynolds, S.
Cappercullen Glen	R7357	31 Jul 2005	Reynolds, S.
Cappercullen Glen	<i>c</i> .R7357	May 2006	Quirke, M.
Cappercullen Glen	R7357	25 Apr 2016	Quirke, M., Murhphy, P.,
			Harrington, T.
Slievefelim Mtns area	R75	May 1993	Rumsey, F.J., Headley, A.D.
(gametophyte in two places)			
Slievefelim Mtns (gametophyte)	R7657	3 Aug 2016	Keegan, E.

Trichophorum cespitosum (L.) Hartm. (*T. cespitosum* subsp. *cespitosum*)

Northern Deergrass

Nationally Scarce

Limerick: Locally Rare Last seen: 2014

Native; tufted perennial. Mainly in the centre of Ireland in bogs. *Trichophorum cespitosum* s.s. was only fairly recently separated from common and widespread *T. germanicum* (= *T. cespitosum* subsp. *germanicum*, Common Deergrass). One known site in Limerick, Castlconnell Bog where it grows with *T. germanicum*; vulnerable to further cutting, disturbance and drying out of this raised bog. *T. cespitosum* is likely to occur in other raised bogs in the county. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Castleconnell Bog	R67916302	9 Jul 2013	Reynolds, S.
Castleconnell Bog	R6863	10 Jul 2014	Reynolds, S.

Trichophorum x **foersteri** (Swan) D.A. Simpson (*T. cespitosum* x *T. germanicum*)

Northern Deergrass x Common Deergrass

Limerick: Locally Rare Last seen: 2014

Native hybrid; tufted perennial. Fairly widespread in W half of Ireland, and more widespread than the rarer parent *Trichophorum cespitosum* s.s. (Northern Deergrass). Only known at one site in western uplands of Limerick; in wet bog with *T. germanicum* which is common there. This hybrid is likely to occur on Castleconnell Bog where the parent species grow together. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Glenbaun bog, WNW of	R19613945	5 Aug 2014	Reynolds, S.
Carrigkerry			

Trifolium fragiferum L.

Strawberry Clover

Nationally Scarce

Limerick: Locally Scarce Last seen: 2021

Native; herbaceous perennial. Mainly on and near E, SE and W coasts of Ireland. By the Shannon Estuary in Limerick, also by a tidal creek and tidal river off the estuary; in grassland bordering saltmarsh, in brackish marsh, and in marshy ground on terrace of embankment by tidal River Maigue reached by highest tides; abundant in places and sometimes growing with protected species *Hordeum secalinum* (Meadow Barley). This species is most easily seen when in fruit in late summer or early autumn. First and only earlier record is from Ringmoylan Quay 1959.

Site	Grid Ref.	Date	Recorder(s)
Glin, NE of (low grassy bank at	R1549	24 Aug 1997	Reynolds, S.
edge of saltmarsh E of Long Rock)			
Glin, NE of (poached ground at	R15474915	28 Aug 2021	Reynolds, S., Reynolds, J.
edge of saltmarsh)			
Goleen Bridge, N of Askeaton	R3353	22 Jul 1988	Reynolds, S.
(= Mantlehill; beside tidal creek)		21 Aug 1988	
Goleen Bridge, near	R3353	24 Sep 1988	Reynolds, S., OBrien, M.V.
Goleen Bridge, near	R3353	15 Jul 1989	Reynolds, S., BSBI
Goleen Bridge, near	R335530	25 Jul 2006	Reynolds, S., Reynolds, J.
Goleen Bridge, near	R3353	26 Jul 2010	Reynolds, S.
Goleen Bridge, near	R33525304	28 Aug 2021	Reynolds, S., Reynolds, J.
Ballinvoher Point, NW of	<i>c</i> .R345565	6 Sep 2021	Quirke, M., Murphy, P.,
Ballysteen			Harrington, T.
Ballymartin, ENE of Ballysteen	R39585688	17 Aug 2021	Quirke, M., Murphy, P.,
			Harrington, T.
Ringmoylan Quay, W of	R4057	1 Sep 1990	Reynolds, S., Rich, T.C.G.,
(grassland bordering saltmarsh)			Brady, C.M.
Ringmoylan Quay, W of	R404576	25 Jul 2006	Reynolds, S., Reynolds, J.
Rinekirk Point, just W and S of	R4457	20 Sep 2005	Reynolds, S.

(at mouth of River Maigue)	R4557		
Ferry Bridge, just NW of	R4752	20 Jul 2005	Reynolds, S.
(by tidal River Maigue)			
Ferry Bridge (d/s side of Bridge)	R4852	6 Sep 1996	Reynolds, S.
		2 Aug 2004	
		26 Jul 2010	
Newtown Point, near	R4958	14 Aug 2018	Quirke, M., Murphy, P.,
			Harrington, T.

Trifolium medium L.

Zigzag Clover

Limerick: Locally Rare Last seen: 2021

Native; herbaceous rhizomatous perennial. Mainly in NW, NE and centre of Ireland, and widely scattered elsewhere; formerly more widespread. Only known at two sites in Limerick; in northern limestone area, sparingly in pasture and nearby damp hollow; also in NE Limerick, probably in heathy ground. Only earlier record is from near Ardagh 1902.

Site	Grid Ref.	Date	Recorder(s)
Mullagh, NW of Creeves Cross	R288470	Jun 2005	O'Mahony, T.
Mullagh, N end	R28744702	22 Aug 2008	Reynolds, S.
Mullagh, N end	R28744701	1 Aug 2021	Reynolds, S., Reynolds, J.
	R28754701		
Gannavane, S of Rear Cross	R8356	21 Jun 2018	Nash, D.W.

Trifolium micranthum Viv.

Slender Trefoil

Limerick: Locally Rare Last seen: 2015

Native; annual. Occasional in E of Ireland, rare elsewhere. At one site in Limerick; in short grass beside a ruined church, but not clear whether native or an introduction here. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Nantinan, NW of Doohyle Lough	c.R354457	17 May 2015	Reynolds, S.

Typha angustifolia L.

Lesser Bulrush

Limerick: Locally Scarce Last seen: 2021

Native; rhizomatous perennial. Widely scattered in Ireland; also planted by ponds in parks and other amenity areas. In Limerick mainly by and near the upper Shannon Estuary and near Limerick city; on tidal mud by the estuary, also in swampy ground and a large pond; often forming extensive stands and sometimes growing with *Typha latifolia* (Bulrush); most likely

originally planted by a lake at Glenstal Abbey (Murroe) and now well established there. First recorded on tidal foreshore of the Shannon a little below Limerick Docks 1908.

Site	Grid Ref.	Date	Recorder(s)
Coonagh, by Shannon Estuary	R5257	1 Sep 1990	Brady, C.M., Rich. T.C.G.
Coonagh and Coonagh Point	R5256	3 Oct 2005	Reynolds, S.
	R5356		
Clonmacken, by Shannon Estuary	R5456	12 Aug 2007	Reynolds, S.
Clonmacken, by Shannon Estuary	c.R546565	13 Jul 2021	Reynolds, S., Reynolds, J.
Barrington's Pier, W of	R5556	25 Jul 2010	Reynolds, S.
Westfields pond (N side of road)	R5656	21 Aug 2005	Reynolds, S.
Westfields pond	R566569	6 Sep 2021	Reynolds, S., Reynolds, J.
Knockalisheen Marsh,	R5658	4 Sep 2005	Reynolds, S.
S end at Ballynanty			
Ballycummin, SW of Limerick city	R5452	26 Jun 2006	Reynolds, S.
(dried-out pools in field)			
Bunlicky lake	R5455	Mar 2002	Goodwillie, R.N.
(just W of Ballinacurra Creek)			
Ballinacurra Creek, W side of	R5555	7 Sep 1996	Reynolds, S.
Glenstal Abbey, Boating Lake	R740560	31 Jul 2005	Reynolds, S.

Urtica urens L. Small Nettle

Limerick: Locally Scarce Last seen: 2016

Archaeophyte; annual. Widely scattered in Ireland; formerly more widespread in waste places and cultivated ground. Usually only a casual in Limerick in disturbed ground, also found in a weedy vegetable field; self-seeding for several years in same place on roadside at Barrigone W of Askeaton. First recorded as abundant between Askeaton and Foynes 1885/1886.

Site	Grid Ref.	Date	Recorder(s)
Foynes Port	R2551	15 Aug 1997	Reynolds, S.
		12 Aug 2000	
		2 Sep 2004	
		18 Jul 2010	
		10 Oct 2015	
Barrigone (roadside nearly	R2950	14 Jul 1989	Reynolds, S.
opposite entrance to quarry)		22 Sep 1994	
		22 Aug 2008	
Ballysteen, N of Askeaton	R3555	9 Sep 2006	Reynolds, S.
(vegetable field)			
Limerick Docks, near	R5656	9 Nov 2016	Quirke, M., Murphy, P.,
			Harrington, T.

Utricularia australis R. Br.

Bladderwort

Nationally Scarce since 2000

Limerick: Locally Rare Last seen: 2018

Native; insectivorous perennial. Widely scattered in Ireland. Only one known site in Limerick; at edge of swamp bordering Blue Lough near Kilcornan. Flowers are needed to separate this species from *Utricularia vulgaris* (Greater Bladderwort). A specimen from a swamp near railway at Barrigone 1904 is too poor to confirm.

Site	Grid Ref.	Date	Recorder(s)
Blue Lough, just N of	R4052	18 Jul 2018	Reynolds, S. et al.

Utricularia minor L.

Lesser Bladderwort

Limerick: Locally Scarce Last seen: 2021

Native; insectivorous perennial. Fairly widespread in Ireland except in parts of SE and S. Few scattered sites in Limerick; in pools and cuttings in raised bogs and other wet bogs, also in a fen S of Limerick city. First recorded at Castleconnell Bog 1900 and wet 'marsh' at Mullagh 1900, in northern limestone area SE of Foynes.

Site	Grid Ref.	Date	Recorder(s)
Knockaclugga, WNW of Carrigkerry	R1838	5 Jul 2013	Hunt, G.
Tooraree Lower, SW of Ballyhahill	R1642	29 Oct 2019	Reynolds, S., Reynolds, J.,
			Quirke, M., Murphy, P.
Glenastar bog, W of Ardagh	R247397	26 Jul 2013	Hunt, G.
Glenastar bog	R24693972	11 Sep 2013	Reynolds, S.
	R24763957	5 Sep 2014	
Routagh fen, ESE of Ballysheedy	R5952	18 Jul 2017	Reynolds, S., et al.
Castleconnell Bog, S of Gooig	R6763	26 Jul 2016	Quirke, M., Murphy, P.,
(raised bog)			Harrington, T.
Castleconnell Bog, W side	R6763	9 Jul 2013	Reynolds, S.
	R6863		
Castleconnell Bog	R6863	12 Aug 2002	Rippey, I.
Castleconnell Bog	R68156336	11 Sep 2003	Rippey, I.
Castleconnell Bog	R6863	10 Jul 2014	Reynolds, S.
Castleconnell Bog	R68116347	6 Sep 2021	Reynolds, S., Reynolds, J.
Castleconnell Bog	R68166385	1 Sep 2021	Reynolds, S., Reynolds, J.
Dromsallagh Bog, NW of	R7552 or	1991	Lockhart, N.D.
Cappamore (raised bog)	R7652		

Utricularia vulgaris L.

Greater Bladderwort

Last seen: 1989

Limerick: Locally Rare (see below*)

Native; insectivorous perennial. Widely scattered in Ireland, preferring base-rich aquatic habitats. *Only two definite records for Limerick because most *Utricularia* encountered in the northern limestone area lacked flowers which are needed to separate this species from *Utricularia australis* (Bladderwort); such non-flowering plants were found, e.g. at Deegerty E of Askeaton (drainage ditch in fen), Mornane Lough, Doohyle Lough, Clogh fen, Glenisca Lough, Curragh Chase and Bleach Lough. *Utricularia vulgaris* agg. was first recorded in wet 'marsh' at Mullagh SE of Foynes 1900.

Site	Grid Ref.	Date	Recorder(s)
Cappagh, N of	R3745	28 Jul 1987	Jones, E., Reynolds, S.,
(open water in fen)			OBrien, M.V.
Herbertstown	R6839	7 Jul 1989	Reynolds, S., Curtis, T.,
(pools in tall-herb swamp)			Harrington, T.

Vaccinium oxycoccos L.

Cranberry

Last seen: 2020

Limerick: Not Locally Rare or Scarce (see below*)

Native; procumbent evergreen shrub. Widespread in Ireland except in parts of N and much of S. *Although not Locally Rare or Scarce in Limerick, this species is usually an indicator of good semi-natural habitats; mainly in wet bogs in western uplands and raised bogs in NE of the county, also in upland poor fen and adjacent bog in Slievefelim Mtns. In some less disturbed sites *Vaccinium oxycoccos* is thriving, whereas it is just hanging on in others; vulnerable to further cutting and drainage of bogs, and afforestation. First recorded at Castleconnell Bog 1903.

Site	Grid Ref.	Date	Recorder(s)
Glenbaun, WNW of Carrigkerry	R1939	15 Jul 1989	Reynolds, S., BSBI
(= Glenbaun-Knockfinnisk bog)			
Glenbaun (wet bog)	R1939	18 Aug 1997	Reynolds, S.
	R2039	22 Jul 2005	
Glenbaun (wet bog)	R1939, e.g.	1 Jul 2011	Reynolds, S.
	R19923944		
Glenbaun (wet bog)	R196393	5 Aug 2014	Reynolds, S.
	R196394		
	R197393		
	R198393		
Glashapullagh, NE of Blane Bridge	R14824065	27 Jul 2010	Reynolds, S.
Lough Gay, bog just N of	R2720	20 Aug 1999	Reynolds, S.
Lough Gay, bog just W of	R2720	3 Aug 2005	Reynolds, S.
Glenastar bog, W of Ardagh	R24693972	11 Sep 2013	Reynolds, S.
	R24733970		
Glenastar bog	R245397	5 Sep 2014	Reynolds, S.
	R245398		

Glenastar bog	R246397	5 Sep 2014	Reynolds, S.
Bauraneag bog, NW of Carrigkerry	R2141	10 Jun 2005	Reynolds, S.
Lisnagry Bog, NE of Annacotty	R6659	Aug 2001	Goodwillie, R.N.
Ballynacourty Bog, NE of	R6659	29 Nov 2018	Quirke, M., Murphy, P.,
Annacotty (= Lisnagry Bog)			Harrington, T.
Ballynacourty Bog	R66455946	20 Jul 2020	Reynolds, S., Reynolds, J.,
	R66595942		Quirke, M.
Castleconnell Bog, S of Gooig	R6763	26 Jul 2016	Quirke, M., Murphy, P.,
(W side of track)			Harrington, T.
Castleconnell Bog	R681633	11 Sep 2003	Rippey, I.
Castleconnell Bog	R6863	9 Jul 2013	Reynolds, S.
		10 Jul 2014	
Castleconnell Bog	R680634	22 Jul 2014	Reynolds, S.
Castleconnell Bog	R6863	10 Jul 2020	Reynolds, S. et al.
Boarmanshill, NNE of Murroe	R7458	3 Jul 2020	Quirke, M., Murphy, P.,
(remnant of bog)			Harrington, T.
Ballyvorheen Bog, NW of	R7453	1991	Lockhart, N.D.
Cappamore (cut-away bog)	R7553		
Ballyvorheen Bog	R7453	23 Jul 2020	Reynolds, S. et al.
(abundant in places)	R7553		
Dromsallagh Bog, NW of	R7552	1991	Lockhart, N.D.
Cappamore (cut-away bog)	R7652		
Dromsallagh Bog	R7552	4 April 1997	Reynolds, S., Quirke, M.
	R7652		
Dromsallagh Bog	R7552	31 Jul 2005	Reynolds, S.
	R7652		
Dromsallagh Bog	R7552	4 May 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Slievefelim Mtns	R784575	29 Sep 2015	Quirke, M.
Slievefelim Mtns	R7857	25 May 2020	Quirke, M.
Slievefelim Mtns, N slope	R7858	30 Dec 2018	Quirke, M.
Grageen Bog (just W of fen)	R7856	31 Jul 2018	Reynolds, S. <i>et al</i> .
Grageen Fen, Slievefelim Mtns	R7956	7 Sep 1996	Reynolds, S., Reynolds, J.,
			Quirke, M., Keane, A.
Grageen Fen	R7956	27 Jul 2002	Reynolds, S., BSBI
Grageen Fen	R7956	19 Sep 2009	Reynolds, S.
Grageen Fen	R7956	31 Jul 2018	Reynolds, S. et al.
Cooga Bog, WNW of Doon	R7950	9 Jul 2019	Reynolds, S., Reynolds, J.,
	R8050		Quirke, M., Murphy, P.

Vaccinium vitis-idaea L.

Cowberry

Last seen: 2018

Limerick: Locally Rare

Native; erect to decumbent evergreen shrub. Scattered across N of Ireland and rare elsewhere on mountains. In Limerick only found high in Galty Mtns, on rocky bluffs. First recorded in Galty Mtns 1944, on cliff below summit of Carrignabinnia and on escarpment between Lyracappul and Carribnabinnia; also on Temple Hill 1966.

Site	Grid Ref.	Date	Recorder(s)
Temple Hill, just SW of summit	R83042152	30 Aug 2010	Reynolds, S.
(rocky outcrop)			
Shanaghaun Rock, Temple Hill	R83032152	26 May 2015	Hodd, R.L.
Lyracappul-Carrignabinnia ridge	R848238	25 Jul 2017	Quirke, M., Murphy, P.
Carrignabinnia	R85012388	16 Aug 2011	Daly, O.
Carrignabinnia and	R8523	10 Jul 2018	Quirke, M., Murphy, P.,
Slievecushnabinnia, between			Harrington, T.

Valerianella dentata (L.) Pollich

Narrow-fruited Cornsalad

Nationally Scarce

National Threat Status: Vulnerable

Limerick: Extinct Last seen: 1904

Archaeophyte; annual. In SE of Ireland, rare elsewhere; formerly more widespread as an arable weed. Only a rare casual in Limerick and not seen for over a century.

Site	Grid Ref.	Date	Recorder(s)
Askeaton, railway near	R34 or R35	Jun 1904	O'Brien, R.D.
Limerick	R55	1899	Somerville, A.

Valerianella locusta (L.) Laterr.

Common Cornsalad

Limerick: Locally Rare Last seen: 2021

Native; annual. Mainly around the coast of Ireland, also scattered inland. In one place near the Shannon Estuary in Limerick, also on gravel roadside at Askeaton and many plants on coarse limestone chippings near railway at Elton. First recorded at Askeaton 1897, also at Lough Gur and Askeaton 1903, and roadside at Foynes 1906.

Site	Grid Ref.	Date	Recorder(s)
Poulaweala Creek, E side	R291529	22 May 2006	Reynolds, S.
(near end of lane)		19 Apr 2009	
		3 May 2009	
Poulaweala Creek, E side	R29195293	19 May 2021	Reynolds, S., Reynolds, J.
Askeaton (e.g. roadside near turn-	R340506	3 May 2009	Reynolds, S.
off to abbey)			
Askeaton	R340506	12 May 2019	Reynolds, S., Reynolds, J.
Elton, just S of (near railway)	R6830	5 June 2016	Reynolds, S., Reynolds, J.

Valerianella rimosa Bastard

Broad-fruited Cornsalad

Nationally Rare

National Threat Status: Critically Endangered

Limerick: Locally Rare Last seen: 2015

Archaeophyte; annual. Sparingly in SE of Ireland, also Limerick; formerly more widespread as an arable weed. In Limerick only one fruiting plant found in sandy soil on low limestone outcrop by disused railway where vegetation had been cleared back earlier in the year, with another rare arable weed *Euphorbia exigua* (Dwarf Spurge). No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Doohyle Lough, railway NW of	R35324563	4 Sep 2015	Reynolds, S.

Verbena officinalis L.

Vervain

National Threat Status: Near Threatened

Limerick: Locally Scarce Last seen: 2021

Archaeophyte; herbaceous perennial. Scattered in S and W of Ireland, rare elsewhere; relict of former cultivation. Only found in northern limestone area of Limerick; on roadsides and in open ground; in rough grassland between Askeaton Abbey and River Deel. First recorded as plentiful on waste ground at Askeaton 1886, also described as frequent by roads on the limestone in Barony of Shanid in early 1900s.

Site	Grid Ref.	Date	Recorder(s)
Ahacronane Bridge, near	R2947	13 Jul 1989	Reynolds, S.
(NNW of Creeves Cross)			
Ahacronane Bridge, near	R2947	16 Jul 1989	Reynolds, S., BSBI
Creeves Cross, just NW of	R298465	8 Aug 2003	Rippey, I.
(at entrance to wood)			
Creeves Cross, just NW of (by track	R2946	5 Oct 2007	Reynolds, S.
through Hazel scrub)			
Creeves Cross, NE of (roadside)	R317470	15 Aug 2006	Reynolds, S.
Dysert Castle, roadside near	R2850	12 Jul 1999	Reynolds, S.
(N of Barrigone)			
Barrigone, N of (field edge)	R2851	2 Aug 2016	Reynolds, S., Reynolds, J.
Ardrageen Bridge, SE of Askeaton	R3748	17 Aug 1991	Reynolds, S.
(roadside)		13 Jul 2005	
Askeaton (N side of by-pass)	c.R337507	20 Jul 2005	Reynolds, S.
Askeaton Abbey	R3350	10 Aug 1996	Reynolds, S.
Askeaton Abbey	R3350	25 Aug 1996	Reynolds, S., BSBI
Askeaton Abbey	R3350	20 Jul 2004	Reynolds, S.
		11 Aug 2011	
Askeaton Abbey	R3350	20 Aug 2008	Seawright, J.
Askeaton Abbey	R33965067	30 Jun 2021	Reynolds, S., Reynolds, J.
Ballynort, NE of Askeaton	R3652	6 Sep 1996	Reynolds, S.

Veronica agrestis L.

Green Field-speedwell

Last seen: 2021

National Threat Status: Near Threatened Limerick: Not Locally Rare or Scarce

Archaeophyte or Neophyte, status uncertain; annual. Mainly in NE and SE of Ireland, widely scattered elsewhere; formerly more widespread. Also scattered sites in Limerick; on roadsides and in open ground, more rarely a weed in cultivated ground. First recorded by railway at Rossbrien on S side of Limerick city 1897.

Site	Grid Ref.	Date	Recorder(s)
Ardagh, S of	R2837	19 Apr 2019	Quirke, M., Murphy, P.,
			Harrington, T.
Ardagh	R2838	19 Apr 2019	Quirke, M., Murphy, P.,
			Harrington, T.
Mullagh, NW of Creeves Cross	R285472	1 Aug 2021	Reynolds, S., Reynolds, J.
(edge of weedy field)			
Mount Trenchard, W of Foynes	R2151	25 Aug 1997	Reynolds, S.
Foynes Island	R2452	22 Aug 1991	Reynolds, S.
Poulaweala Creek, E side (lane)	R2952	12 Sep 2005	Reynolds, S.
Rathkeale	R358418	4 Aug 2013	Reynolds, S.
(path near Palatine Museum)			
Bleach Lough, NW end	R4454	29 Aug 2009	Reynolds, S.
Bruree	R5430	5 Sep 2005	Reynolds, S.
		6 Aug 2014	
Ballinacurra, Limerick city	R5655	16 Nov 2016	Quirke, M., Murphy, P.,
			Harrington, T.
Knockderc, near	R6538	29 Aug 2017	Reynolds, S., Reynolds, J.
Carrigmartin, NW of Ballyneety	R6150	8 Nov 2018	Quirke, M., Murphy, P.,
			Harrington, T.
Knockbrack East, ENE of Annacotty	R6758	29 Nov 2018	Quirke, M., Murphy, P.,
			Harrington, T.
Galbally, just N of (nursery)	R7928	30 Jul 1997	Reynolds, S.
Pallas Grean	R7746	3 Sep 2014	Reynolds, S.

Vicia sativa subsp. nigra (L.) Ehrh.

Common Vetch, subspecies

Last seen: 2021

Limerick: Locally Scarce

Native subspecies; annual. Mainly NE, E and SW of Ireland, scattered elsewhere; formerly somewhat more widespread. By the Shannon Estuary in Limerick, in short turf on shale promontories; and several inland sites - in calcareous grassland with outcrop near Lough Gur, also in short turf, open ground and outcrop on or at volcanic hills. Non-native *Vicia sativa* subsp. *segetalis* is more robust and usually found in disturbed and waste ground, and on roadsides. *V. sativa* subsp. *nigra* was first recorded at Askeaton 1900, also on Trummera Big near Aughinish Island in the Shannon Estuary 1906.

Site	Grid Ref.	Date	Recorder(s)
Poultallin Point, E side	R24055215	30 May 2010	Reynolds, S.
(W of Foynes)			
Foynes Island, Barneen Point	R2452	7 May 1988	Reynolds, S.
		19 Jul 1996	
		2008-2018	
		20 Apr 2019	
Foynes Island, Barneen Point	R249521	30 May 2021	Reynolds, S.
Knockderc, SE of Lough Gur	R6537	19 Apr 2019	Reynolds, S., Reynolds, J.
(open ground by road and floor of	R6538		
former quarry)			
Carraig Aille, near Lough Gur	R6540	10 May 2009	Reynolds, S.
(limestone grassland at ring forts)			
Knockroe, SW of Caherconlish	R65754765	17 May 2015	Reynolds, S.
(short turf and on outcrop)	R6647		
Knockseefin (top of hill, outcrop)	R75394506	30 Apr 2013	Reynolds, S.

Vicia sylvatica, see Ervilia sylvatica

Viola arvensis Murray

Field Pansy

Last seen: 2021

Limerick: Locally Scarce

Archaeophyte; annual. Widespread in E half of Ireland, now rare in much of W. Sparingly as an arable weed in Limerick; also in gravel/sand pits and on roadsides. First recorded in cornfields near Limerick c.1833, and on waste ground at Askeaton 1884.

Site	Grid Ref.	Date	Recorder(s)
Foynes Island	R2452	16 Aug 1991	Reynolds, S.
(in formerly cultivated ground)			
Curragh Chase, SW of	R3948	27 Jul 2009	Reynolds, S.
(weedy roadside)			
Ballykeeffe, NE of Mungret	R5455	11 Sep 1999	Reynolds, S., Gabbett, M.
(weedy field, formerly arable)			
Kilmallock, SE side (roadside)	R6127	19 Aug 1998	Reynolds, S.
Kilfinnane, near (disused sand pit)	c.R6824	c.1989	Curtis, T., Harrington, T.
Castleconnell Bog, W side	R6763	21 Jul 2010	Reynolds, S.
(disused sand pit)			
Cappamore, E of (gravel/sand	R79805154	1 Sep 2021	Reynolds, S., Reynolds, J.
mound by Bilboa River)			
Bilboa Bridge, W of	R8051	11 Jul 2010	Reynolds, S.
(weedy roadside)			
Bilboa Bridge, W of	R806521	28 Jun 2007	Reynolds, S.
(gravel/sand pit)			

Limerick: Locally Rare Last seen: 2008

Native; herbaceous perennial. Mainly in W and NW of Ireland, widely scattered elsewhere; formerly more widespread. Only one known site in Limerick, at seasonally flooded edge of a turlough. First recorded in a marshy place 'overflowed in winter' near Ballyclogh House 1904, also in 'bog' near Old Abbey 1906, both places in northern limestone area. Lough Selleher turlough is only about 1km W of Ballyclogh House, so probably the same site as that of the first record.

Site	Grid Ref.	Date	Recorder(s)
Craggs, SE of Barrigone	R298486	20 May 2008	Goodwillie, R.N.
(beside Lough Selleher turlough)			

Viola hirta L. Hairy Violet

Nationally Scarce

National Threat Status: Vulnerable Flora (Protection) Order 2015

Limerick: Not Locally Rare or Scarce

Last seen: 2020

Native; herbaceous perennial. Currently only known in Burren, Aran Islands, Cos Limerick and Dublin in Ireland. This protected species is common in W part of northern limestone area in Limerick; usually in unimproved species-rich dry calcareous grassland, including under Blackthorn and Hawthorn in such grassland, at scrub edge and around outcrops; locally abundant. Light grazing suits this species, but it is vulnerable to over- or under-grazing, changes in land use or any disturbance of its habitat.

First recorded as plentiful on limestone rocks at Askeaton and in quarries SE of Foynes 1885/1886, also on river bank at Askeaton 1900 and described as abundant at Mullagh SE of Foynes 1900; and other sites in northern limestone area in early 1900s.

Selected records are given below for most, if not all, currently known *Viola hirta* sites in Limerick. More details are in the BSBI database and are held by NPWS, including for the 2006 survey (Reynolds *et al.* 2006).

Site	Grid Ref.	Date	Recorder(s)
Mullagh, NW of Creeves Cross	R2846	3 Apr 1997	Reynolds, S.
		2004, 2009	
Mullagh	R286469	23 May 2006	Reynolds, S., Reynolds, J.
	R287469		
	R286470		
	R286471		
Ahacronane Bridge, just N of	R2947	2001	Reynolds, S.
(on both sides of river)			
Deelish, NW of Creeves Cross	R2847	19 May 2001	Reynolds, S.
(limestone pavment, E of road)			
Ellaha, NW of Creeves Cross	R2848	1999	Breen, J.

(W side of road)			
Ellaha	R282482	23 May 2006	Reynolds, S., Reynolds, J.
Ellaha (W side of road)	R282481	14 Jun 2006	Reynolds, S., Conaghan, J.
,	R282482		
	R283481		
	R283482		
Ellaha	R282481	29 Apr 2014	(NPWS)
Rincullia, just SW of Barrigone	R2849	26 Jul 2000	Reynolds, S.
Craggs, SSE of Barrigone	R29264891	13 Aug 2006	O'Connell, L., Reynolds, S.
Craggs, SSE of Barrigone	R295486	19 Jun 2005	Reynolds, S.
Craggs, SE of Barrigone	R298486	20 May 2008	Goodwillie, R.N.
(beside Lough Selleher turlough)			
Craggs, beside turlough	R298486	22 Sep 2008	Reynolds, S.
Robertstown Creek, E of	R2850	1 Aug 2005	Reynolds, S.
(limestone railway cutting)			
Aughinish Island	R2852	3 Jul 2004	Reynolds, S.
Aughinish Island	R28215244	22 May 2006	Reynolds, S., Conaghan, J.
	R28935292		
Barrigone, near quarry	R2950	5 May 1990	Reynolds, S.
(= Glenbane East)		1996, 1999,	
		2008, 2011	
		3 May 2014	
Barrigone, near quarry	R291505	22 May 2006	Reynolds, S., Conaghan, J.
	R292506		
	R294506		
	R294507		
	R295507		
Morgans North, E of Poulaweala	R2952	11 Sep 1999	Reynolds, S.
Creek		3 May 2009	
Morgans North, at bird-hide	R2953	19 May 2000	Reynolds, S.
		4 Sep 2014	
Morgans North	R293528	22 May 2006	Reynolds, S., Conaghan, J.
	R294529		
	R293530		
	R293531		
	R294530		
	R294531		
Morgans North	R2952	12 Sep 2020	Reynolds, S., Reynolds, J.
Poulaweala Creek, near mouth of	R2953	13 Jul 2012	Reynolds, S.
(outcrop on E side of creek)			
Cappagh, W of (small patch)	R3545	3 Aug 2000	Reynolds, S.
Graigues Lough, SE of Askeaton	R36594784	3 Aug 2013	Reynolds, J., Reynolds, S.
	R36694806		
Cragmore SE at Ackaston	R3648	20 Jul 1987	Reynolds, S.
Cragmore, SE of Askeaton		17 Jun 1988	
Cragmore, SE of Askeaton Cragmore	R361487	3 Aug 2006	Reynolds, S., Reynolds, J.
	R361487		Reynolds, S., Reynolds, J. Reynolds, S., Wiltshire, E.
Cragmore		3 Aug 2006	

Ballynort	R362520	23 May 2006	Reynolds, S., Reynolds, J.
	R363520		
	R363521		
	R365520		
Kilbreedy Loughs, near	c.R4251	27 Jun 2005	Reynolds, S.
(small patch in wood)			
Kilbreedy Loughs, N end of more	R430509	10 Aug 2004	Reynolds, S.
westerly lake (on outcrop)		27 Jun 2005	

Viola odorata L. Sweet Violet

Native in parts of Ireland, also a garden escape; only a relict of or escape from cultivation in Limerick. Established mainly in broad-leaved woodlands, including in or near former estates.

Viola tricolor subsp. tricolor L.

Wild Pansy

Limerick: Locally Rare Last seen: 2007

Archaeophyte; annual. In SE of Ireland, widely scattered elsewhere. Only two recent sites in Limerick; in dry calcareous grassland. First recorded at Newcastle Hill on outskirts of Limerick city 1833, also at Lough Gur 1897 and Stoneville near Rathkeale 1906.

Site	Grid Ref.	Date	Recorder(s)
Bleach Lough, NW end	R4454	11 Aug 1996	Reynolds, S.
Lough Gur, below Knockadoon	R6440	24 Aug 1996	Reynolds, S., BSBI
Knockfennell, beside Lough Gur	R6441	29 May 1987	Reynolds, J.
Knockfennell	R6441	10 Aug 2007	Rippey, I.

Vulpia myuros (L.) C.C. Gmel.

Rat's-tail Fescue

Limerick: Locally Scarce Last seen: 2021

Archaeophyte; annual grass. Mainly in E and S of Ireland, widely scattered elsewhere. In Limerick city and scattered sites across the county; in disturbed and waste ground, at pavement edges and on walls; also in a disused sand pit, on a gravel track and in a resown grass verge. First recorded at Glin c.1890, also Adare 1899 and on old walls in Askeaton 1900; still on a high wall near the castle in Askeaton.

Site	Grid Ref.	Date	Recorder(s)
Newcastle West (open ground)	R2833	9 Jul 2019	Reynolds, S., Reynolds, J.
Ellaha, NW of Creeves Cross	R2848	2 Jul 2019	Reynolds, S., Reynolds, J.
(gravel track)			
Foynes, W side (on gravel)	R2451	14 May 2019	Reynolds, S.
		4 Jul 2020	

Askeaton	R33995031	26 Jul 2009	Reynolds, S.
(on and at base of high wall)			
Askeaton	R33995031	30 Jun 2021	Reynolds, S., Reynolds, J.
	R34005031		
Limerick city, NW side	R546583	2008	Nash, D.W.
Limerick city	R5757	22 Jul 2019	Reynolds, S., Reynolds, J.
King's Island, Limerick city	R5757	4 Aug 2020	Reynolds, S., Reynolds, J.,
			Quirke, M., Murphy, P.
King's Island	R5857	17 Jun 2007	Reynolds, S.
O'Dwyer Bridge, near	R5858	28 Aug 2008	Reynolds, S.
(waste ground)			
Bruff (high wall by church)	R6236	15 Jul 2015	Reynolds, S.
Annacotty, NE of (resown verge)	R6558	17 Jul 2010	Reynolds, S.
Castleconnell, just S of (on gravel)	R6661	29 Aug 2018	Reynolds, S., Reynolds, J.
Castleconnell Bog, W side of	R6763	21 Jul 2010	Reynolds, S.
(disused sand pit)			
Castleconnell Bog, W side of	R6763	4 Aug 2020	Reynolds, S. et al.
(disused sand pit)			

Zostera angustifolia, see Zostera marina

Zostera marina L. (including *Z. angustifolia*)

Eelgrass

Last seen: 2018

Limerick: Locally Rare

Native; marine perennial. Scattered around the coast of Ireland. Floating plants found in the Shannon Estuary in Limerick at pontoons on Foynes Island (with *Zostera noltei* Dwarf Eelgrass) and on mainland at Foynes, detached from where they grow on mud flats in this area. Floating plants were previously found at mouth of nearby Robertstown Creek 1984 and growing on mud flats below Monare on Foynes Island 1985, possible sources of the floating plants found since 2000. More recent searches of the mud flats were unsuccessful, but sticky tidal mud is not easy to traverse. *Zostera marina* was first recorded on the shore at Foynes 1903, also in Robertstown Creek in early 1900s.

Site	Grid Ref.	Date	Recorder(s)
Shannon Estuary, Foynes	R25	4 Sep 2018	Reynolds, S.
(floating plants at pontoon)	(at R2451)		
Shannon Estuary, Foynes Island	R25 (at	11 Oct 2005	Reynolds, S., Reynolds, J.
(floating plants at pontoon)	R249521)	11 Sep 2006	

Zostera noltei Hornem.

Dwarf Eelgrass

Nationally Scarce

Limerick: Locally Rare Last seen: 2018

Native; marine perennial. Occasional around the coast of Ireland. Floating plants found in the Shannon Estuary in Limerick at the pontoon on Foynes Island (with *Zostera marina* Eelgrass), detached from where it grows on tidal mud flats in this area. Recent searches for growing plants of the two *Zostera* species at Robertstown Creek and on Foynes Island where there is suitable habitat were unsuccessful. No earlier records.

Site	Grid Ref.	Date	Recorder(s)
Shannon Estuary, Foynes Island	R25 (at	11 Oct 2005	Reynolds, S., Reynolds, J.
(floating plants at pontoon)	R249521)	7 Sep 2006	
		16 Sep 2018	

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