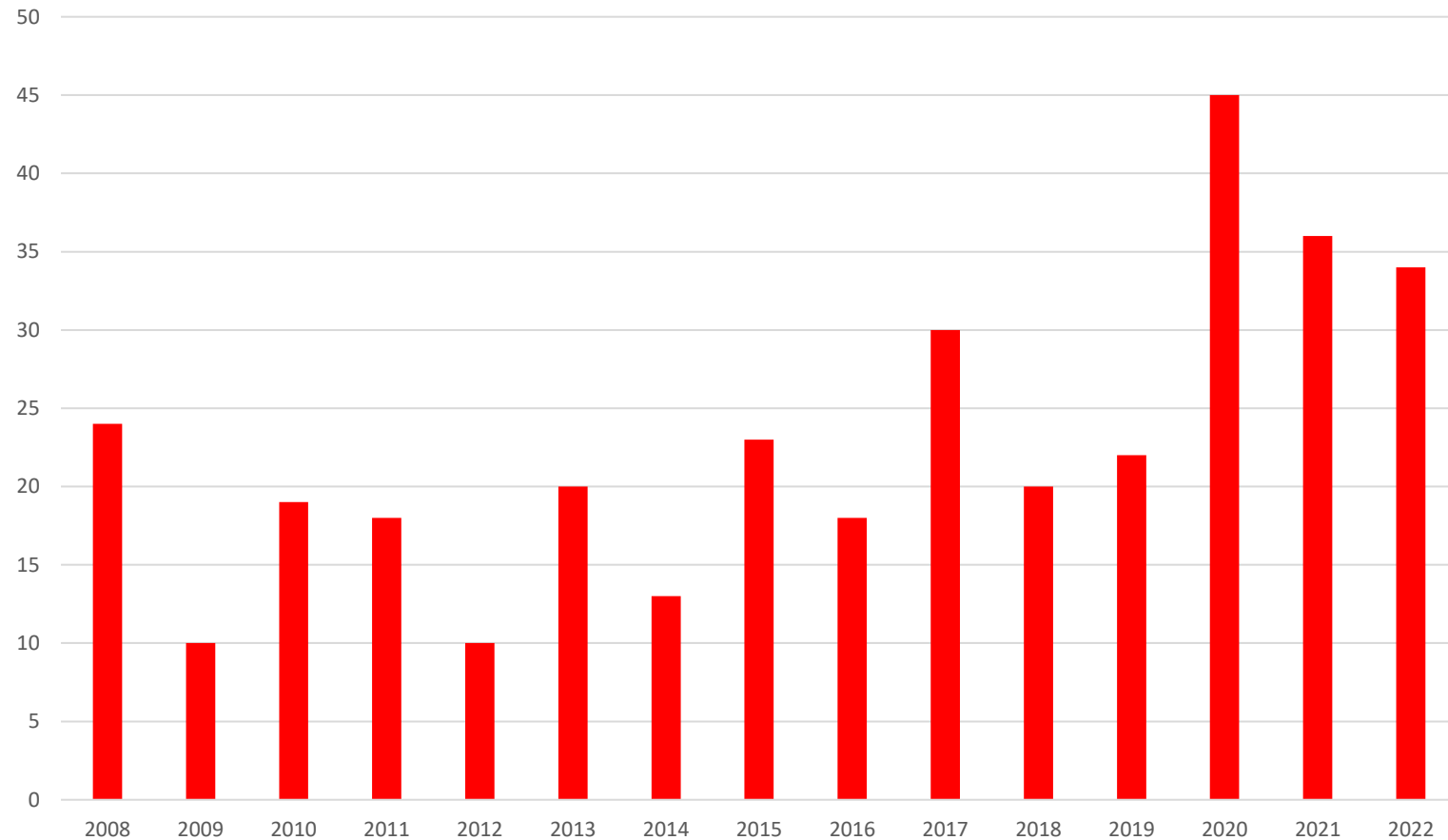


What are referees asked about orchids?

Ian Denholm

Number of substantive orchid queries dealt with by Ian D 2008-2022

(N = 332)



Some recurring themes

New kids on the block

Upton, near Didcot, March 2022



Himantoglossum robertianum, Giant Orchid



Himantoglossum robertianum, Giant Orchid



Serapias parviflora, Small-flowered Tongue-orchid



Penlee Point, Cornwall (2008)

Roof garden, Nomura building, London (2021)



Serapias parviflora, Small-flowered Tongue-orchid



Mark Patterson, Nomura

Scrubby grassland, Tiptree, Essex (2020)



Serapias lingua, Tongue-orchid, Tiptree 2020



Side of M20 motorway, Kent, 2021



Serapias vomeracea, Large-flowered Tongue-orchid



Mystery Serapias, Wyken, Suffolk (2021)



Wildflower garden, near Sheffield, 2021



Serapias cordigera, Heart-shaped Tongue-orchid



Some recurring themes

New kids on the block

Expanding natives

Side of gravel pit, St Albans, Herts (2016)



Side of gravel pit, St Albans, Herts (2016)



Orchis militaris, Military orchid



Orchis militaris, Military orchid



2016



2019



2020

The relentless march of *Himantoglossum hircinum*



Braughing 2020



Letchworth 2022



Baldock 2022

The relentless march of *Himantoglossum hircinum*



St Albans 2021

The relentless march of *Himantoglossum hircinum*



East Herts 2022

The relentless march of *Himantoglossum hircinum*



The genus *Dactylorhiza* on Anglesey



Ian Denholm

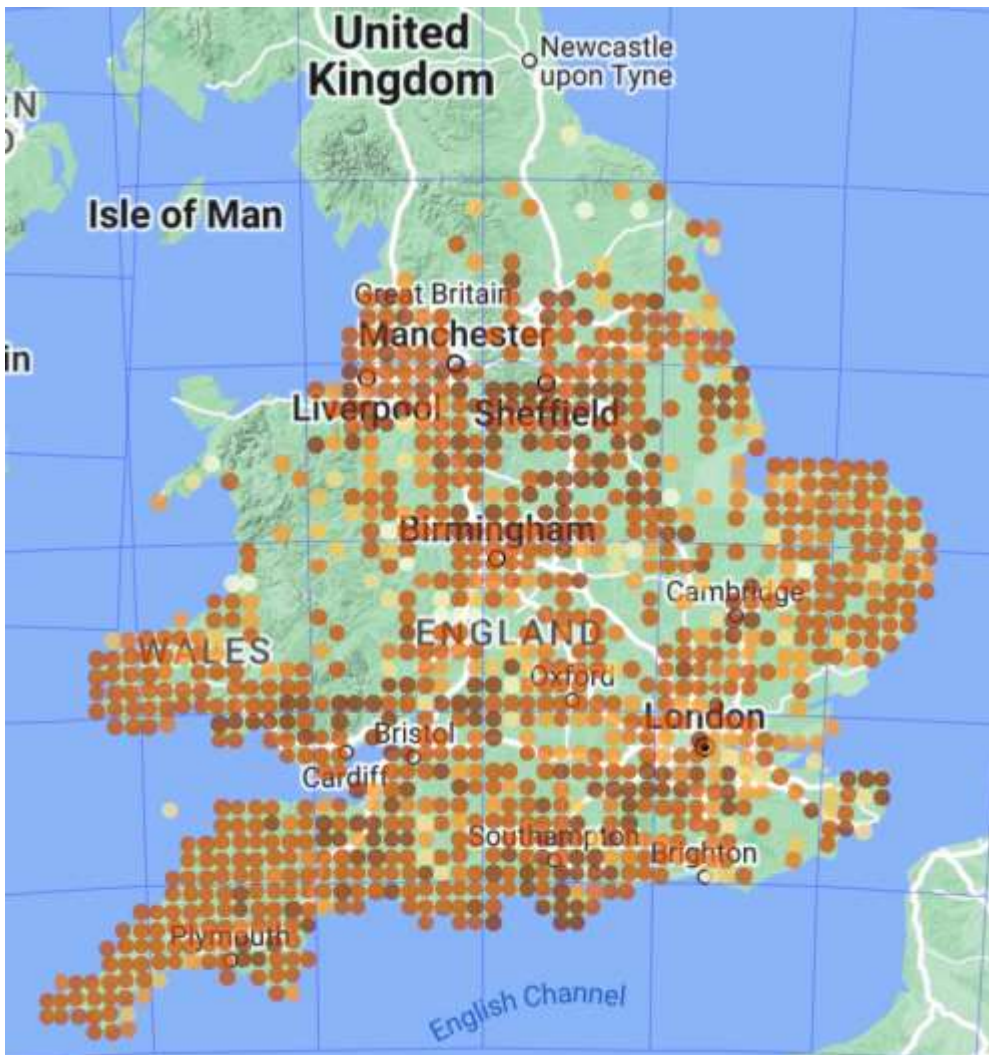


Dactylorhiza praetermissa
(Southern Marsh-orchid)
new to Anglesey in June
2013

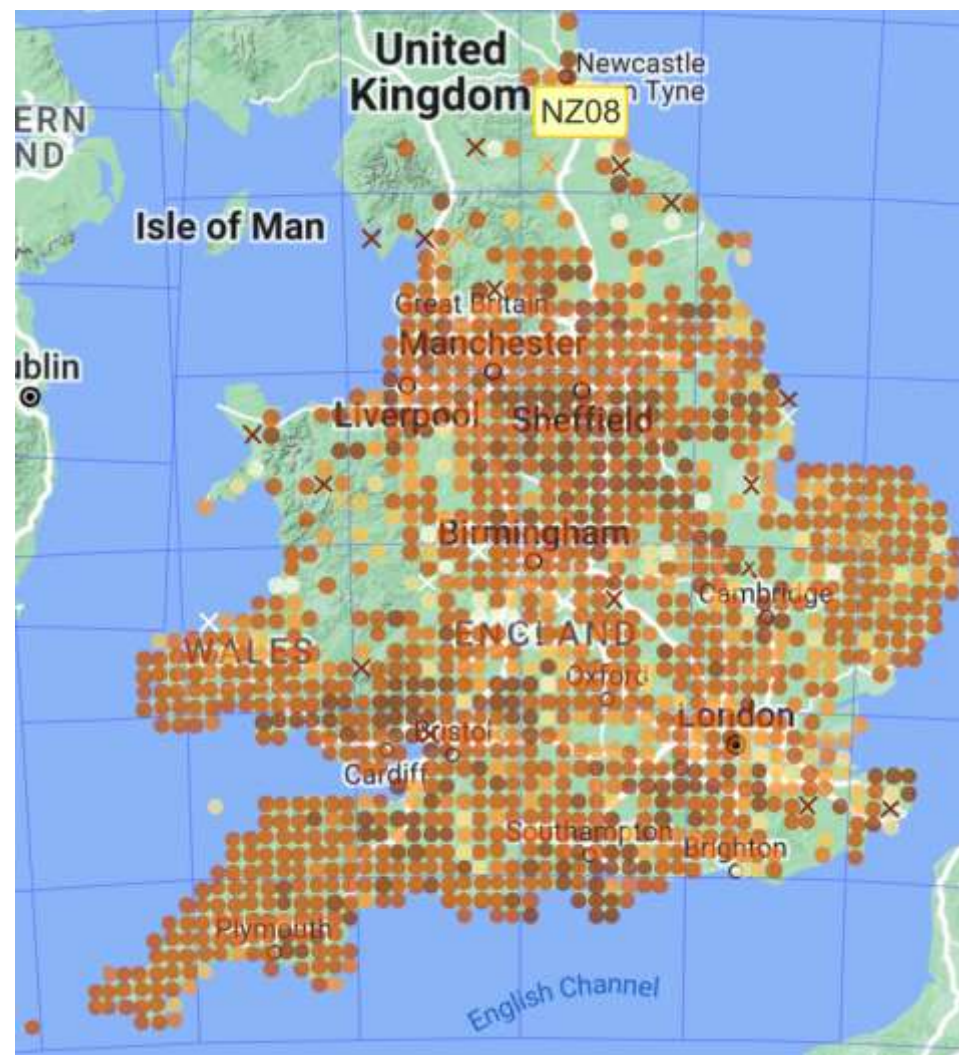
(Tim Rich/Ian Bonner)



Northward spread of *Dactylorhiza praetermissa*



2000



2020

Northward spread of *Dactylorhiza praetermissa*:
Genetic implications

Hi Ian,

Could you have a quick look at the attached? This is a problematic site near to here as there are plants that look like SMO, NMO and some puzzling hybrids with CSO. See what you think.

(Email from Kevin Walker, 2022)

Briscoe Rigg, North Yorkshire (former stronghold of NMO)



SMO



SMO



Prob SMO x CSO

Likely introgression between NMO and SMO at a site near Hull



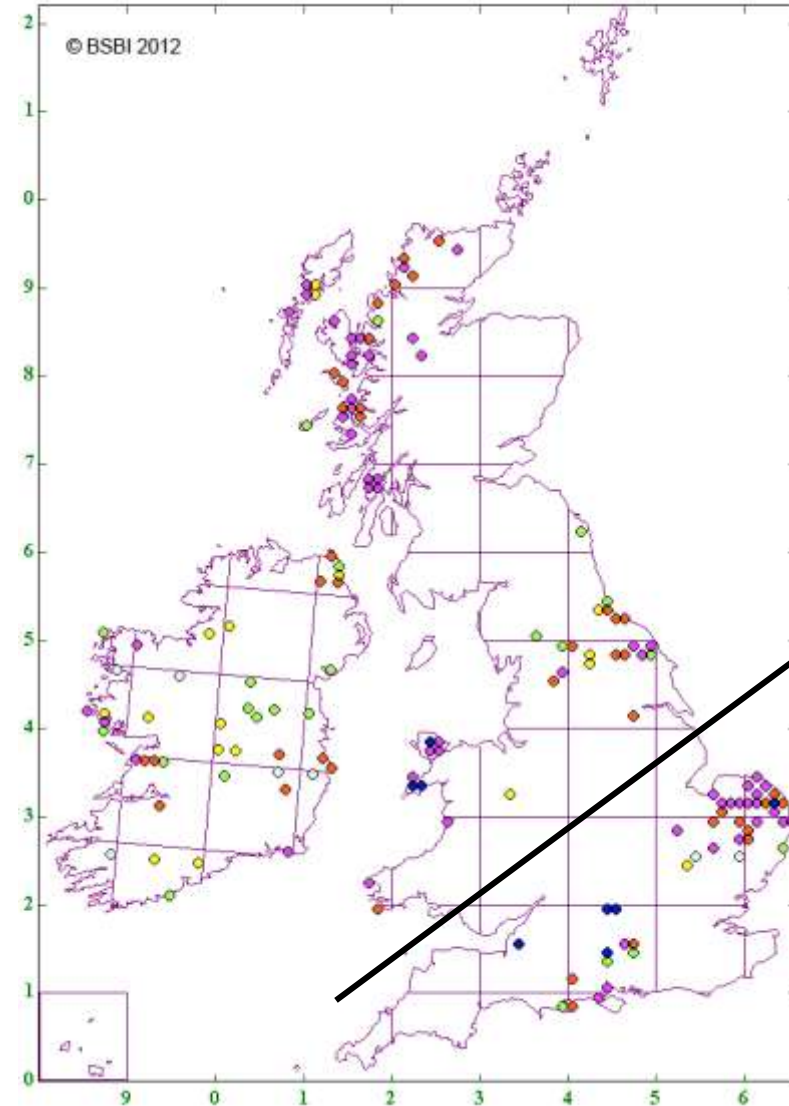
Some recurring themes

New kids on the block

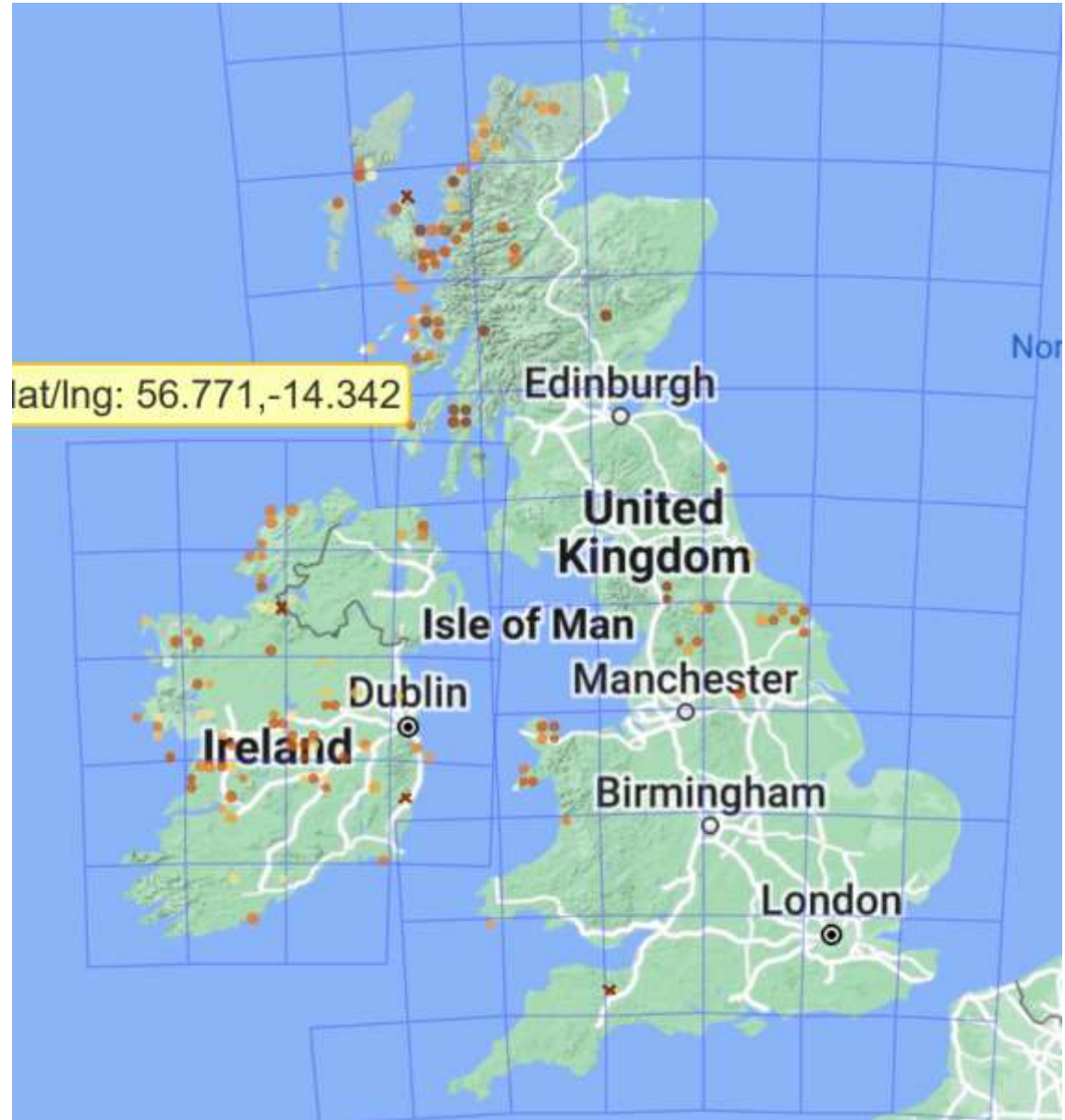
Expanding natives and genetic implications

Morpho-mimics: the problem with Pugsley's

Narrow-leaved or Pugsley's Marsh-orchid,
D. traunsteinerioides



*Dactylorhiza
traunsteinerioides*
distribution as depicted in
Atlas 2020



Max Bog, North Somerset: Meadow 1



Max Bog, North Somerset: Meadow 2



Max Bog, North Somerset: Meadow 3



Some recurring themes

New kids on the block

Expanding natives and genetic implications

Morpho-mimics: the problem with Pugsley's

Morphological oddities



Dactylorhiza fuchsii var. *rhodochila*
(Telford 2010)



Analagous un-named variant of
Dactylorhiza praetermissa (Tony Mundell)

Is this a Ghost orchid?



Epipactis helleborine var. *monotropoides*

Some recurring themes

New kids on the block

Expanding natives and genetic implications

Morpho-mimics: the problem with Pugsley's

Morphological oddities

Nomenclatural conundra(ums)

Irish Marsh-orchid: '*occidentalis*' morphology



Ballyheige, Co. Kerry (2013)

Irish Marsh-orchid: 'kerryensis' morphology



Barleycove, Co. Cork (2009)

(1939) Proposal to conserve the name *Orchis occidentalis* against *O. kerryensis* (*Orchidaceae*)

Richard M. Bateman,¹ Mark W. Chase,¹ Ian Denholm,² Michael F. Fay,¹ Mikael Hedrén,³
Henrik Æ. Pedersen⁴ & Brendan Sayers^{1,5}

¹ Jodrell Laboratory, Royal Botanic Gardens Kew, Richmond, Surrey, TW9 3DS, U.K.

² Department of Plant and Invertebrate Ecology, Rothamsted Research, Harpenden, Hertfordshire, AL5 2JQ, U.K.

³ Plant Ecology and Systematics, Department of Biology, Lund University, Sölvegatan 37, 223 62 Lund, Sweden

⁴ Botanical Garden and Museum, Natural History Museum of Denmark, University of Copenhagen, Gothersgade 130, 1123, Copenhagen K, Denmark

⁵ National Botanic Gardens, Glasnevin, Dublin 9, Ireland

Author for correspondence: Richard M. Bateman, r.bateman@kew.org

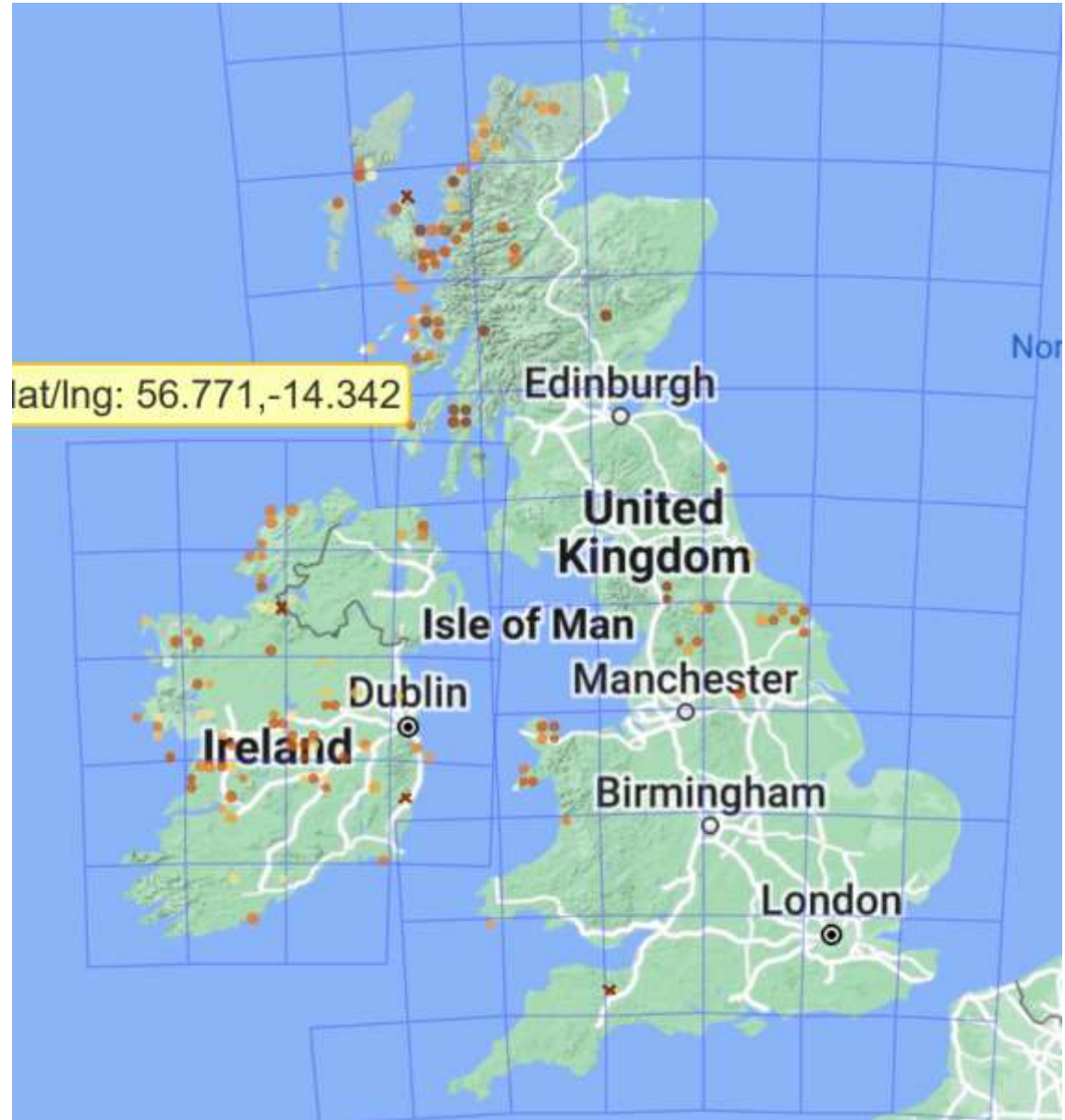
- (1939) *Orchis occidentalis* (Pugsley) Wilmott in Rep. Bot. Exch. Club Brit. Isles 11: 448, 551. 1937 (*Orchis majalis* Rchb. var. *occidentalis* Pugsley in J. Linn. Soc., Bot. 49: 586. 1935), nom. cons. prop.
Typus: Ireland, Lisdoonvarna (Co. Clare), May 1933, *H.W. Pugsley 514*, BM.
- (=) *Orchis kerryensis* Wilmott in Proc. Linn. Soc. London 148: 126, 1936, nom. rej. prop.
Typus: Ireland, Co. Kerry; near Dingle, 23 June 1934, *A.J. Wilmott*, BM.

The genus *Dactylorhiza* Necker ex Nevski in general, and the allopolyploids of the *D. majalis* (Rchb.) P.F. Hunt & Summerh. aggregate in particular, have long been an exceptional focus for both taxonomic and nomenclatural controversy within *Orchidaceae* subtribe *Orchidinae*; indeed, *D. majalis* itself was the subject of a recent successful proposal to conserve against three earlier, but less well-known, species names (Pedersen & al. in *Taxon* 52: 633–634. 2003). The many epithets generated within the *D. majalis* aggregate represent entities that are at best only subtly morphologically distinct

formal description of *Orchis majalis* Rchb. var. *occidentalis* Pugsley, based on five populations examined by him in western Ireland in May 1933. Eleven months later, Pugsley raised *occidentalis* to subspecific status as *O. majalis* subsp. *occidentalis* (Pugsley) Pugsley (in Proc. Linn. Soc. 148: 124. 1936). Pugsley's paper immediately preceded an article by his arch-rival in the study of dactylorchids, A.J. Wilmott, who described a single small *Dactylorhiza* found by him in June 1934 on the Dingle Peninsula of Co. Kerry, W. Ireland as a full species, *Orchis kerryensis* Wilmott (in Proc. Linn. Soc. London 148: 126. 1936). After providing a significantly less detailed description than Pugsley, Wilmott stated (pp. 127–128) that “Mr. Pugsley would probably place the plant as a subspecies of *O. majalis* Reichb. ... I have not yet seen alive the plant named by Mr. Pugsley as *O. majalis* var. *occidentalis*, and these forms are notoriously difficult to understand from dried specimens [sic], but that is described as having constantly heavily spotted leaves whereas *O. kerryensis* is quite unspotted”, thereby overlooking the statement in Pugsley's diagnosis of *O. occidentalis* that its leaves are “usually heavily spotted” (our emphasis).

Unfortunately, Wilmott's widely acknowledged enthusiasm for immediately recognising at species level poorly known taxa per-

*Dactylorhiza
traunsteinerioides*
distribution as depicted in
Atlas 2020

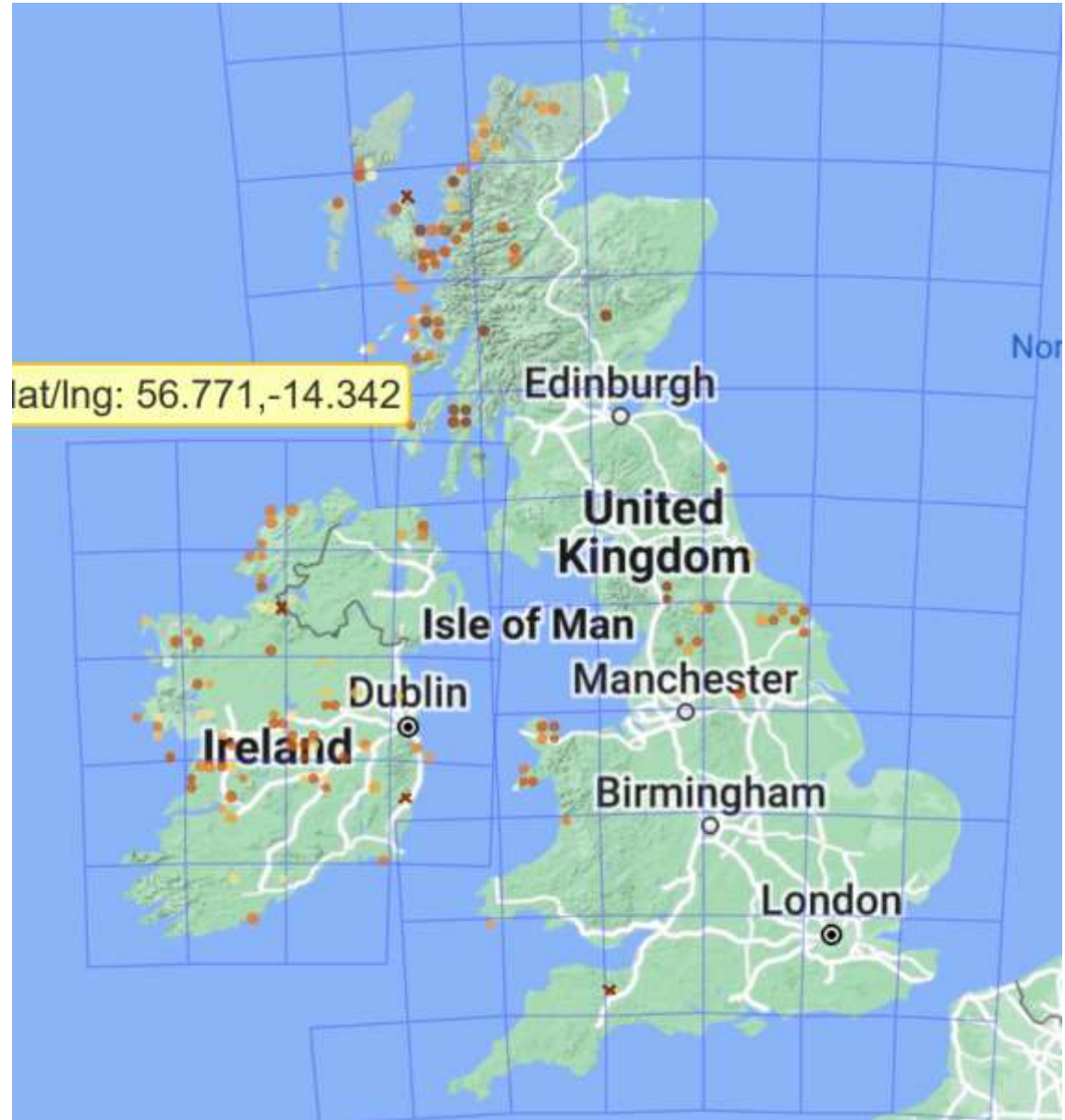


Dactylorhiza traunsteinerioides subsp. *traunsteinerioides*



Juggerhawe, N. Yorks (2014)

*Dactylorhiza
traunsteinerioides*
distribution as depicted in
Atlas 2020

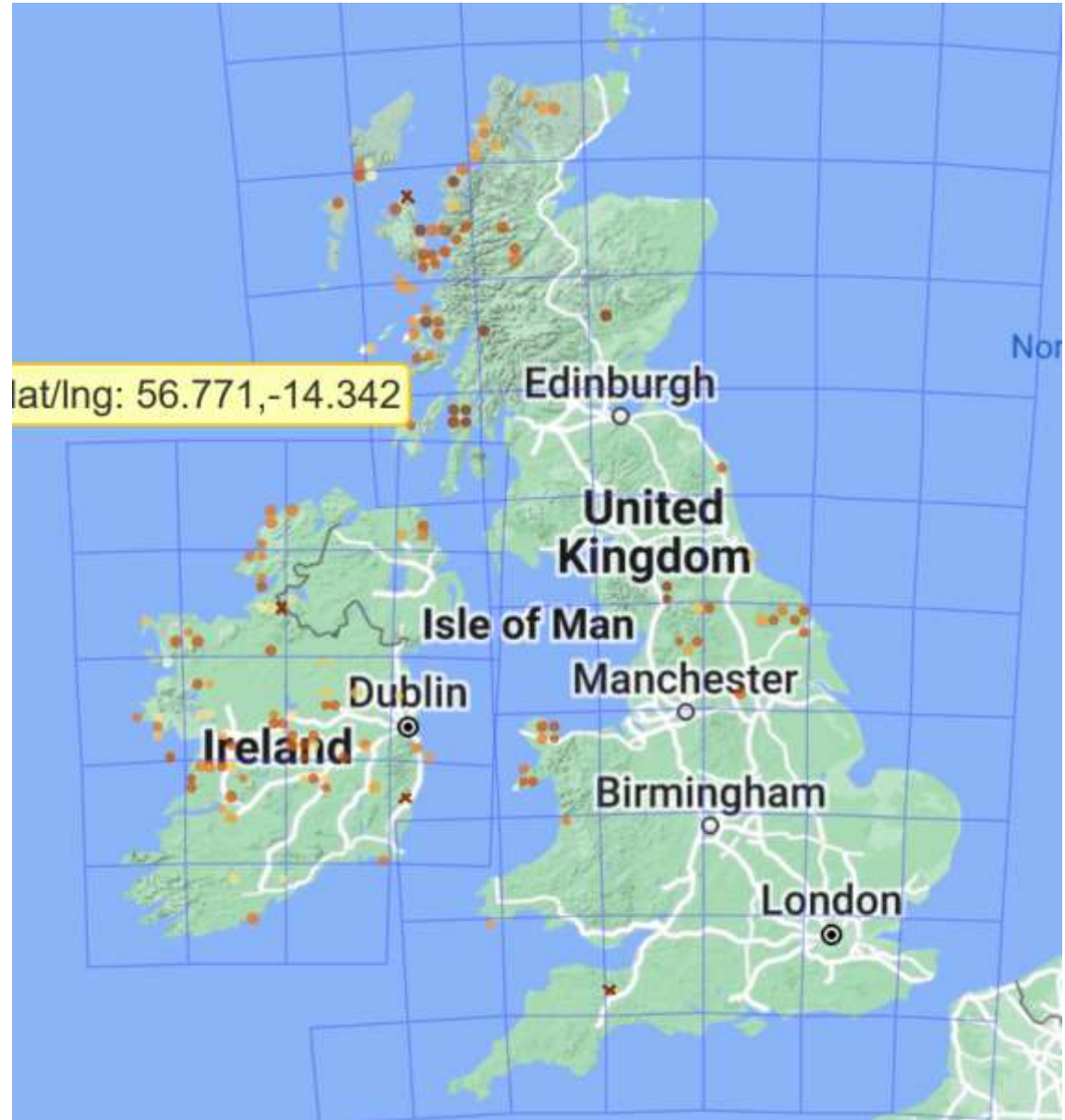


Dactylorhiza traunsteinerioides subsp. *francis-drucei*



Luskentyre, Harris (2013)

*Dactylorhiza
traunsteinerioides*
distribution as depicted in
Atlas 2020



Dactylorhiza traunsteinerioides subsp. *francis-drucei* var. *ebudensis*



North Uist (2007)



Narrow-leaved (or Pugsley's) Marsh-orchid

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

Subsp. *traunsteinerioides*

Subsp. *francis-drucei*

Var. *francis-drucei*

Var. *ebudensis*

Narrow-leaved (or Pugsley's) Marsh-orchid

Dactylorhiza francis-drucei (Wilmott) Averyanov

Subsp. *francis-drucei*

Var. *francis-drucei*

Var. *ebudensis*

Subsp. *traunsteinerioides* R.M. Bateman & Denholm **comb. nov.**

Some recurring themes

New kids on the block

Expanding natives and genetic implications

Morpho-mimics: the problem with Pugsley's

Morphological oddities

Nomenclatural conundra(ums)

I'm sorry I haven't a clue

Aughinish, Co. Limerick (2009)



Co. Offaly (2022) (Fiona Devery)



'offaly' difficult to identify!