New Year Plant Hunt 2016: twice as many species as last year and three times as many botanists!

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BSBI's fifth New Year Plant Hunt was held between 1st and 4th January 2016 and both the number of species recorded in bloom, and the number of participants, surpassed all expectations.

A total of 653 different species was recorded in flower, compared to 308 last year; 865 people took part in the Hunt across Britain and Ireland compared to c.300 last year, and they submitted 432 lists comprising 9,256 records. They spent up to three hours hunting for wild plants blooming at New Year and we'd like to say a huge thank you to everyone, member and non-member alike, who contributed to these amazing results.

Analysing the records

As in 2015, the New Year Plant Hunt (NYPH) was coordinated by a small team of volunteers,

with Ryan Clark once again handling incoming records, assisted by Ian Denholm, Co-Chair of BSBI Meetings & Communications Committee and, until November 2015, BSBI President. This year we also welcomed Kevin Walker, BSBI Head of Science, to the team. Kevin checked that plant identifications were accurate, analysed the data, produced the Tables below and presented a clear overview of findings to our media contacts.

Kevin told them: "There does not seem to be any real indication of an early spring. Although spring-flowering specialists, such as Lesser Celandine, Cow Parsley and Sweet Violet, were widely recorded, they make up less than a fifth of the total (Table 1).

Table 1: The most frequently recorded species flowering early

Latin name	Common name	Lists	%lists	Months early
Ulex europaeus	Gorse	193	48.3	-3
Ranunculus ficaria	Lesser Celandine	157	39.3	-3
Corylus avellana	Hazel	126	31.5	-1
Petasites fragrans	Winter Heliotrope	96	24	-1
Anthriscus sylvestris	Cow Parsley	90	22.5	-4
Pentaglottis sempervirens	Green Alkanet	75	18.8	-5
Vinca major	Greater Periwinkle	70	17.5	-4
Mercurialis perennis	Dog's Mercury	49	12.3	-1
Viola odorata	Sweet Violet	36	9	-2
Galanthus nivalis	Snowdrop	33	8.3	-1
Smyrnium olusatrum	Alexanders	30	7.5	-4
Erophila verna	Common Whitlowgrass	29	7.3	-3
Fragaria vesca	Wild Strawberry	29	7.3	-4
Potentilla sterilis	Barren Strawberry	27	6.8	-2
Allium triquetrum	Three-cornered Garlic	23	5.8	-4
Prunus laurocerasus	Cherry Laurel	21	5.3	-4
Ranunculus bulbosus	Bulbous Buttercup	20	5	-3
Prunus spinosa	Blackthorn	20	5	-3
Crataegus monogyna	Hawthorn	17	4.3	-5
Vinca minor	Lesser Periwinkle	15	3.8	-3
Primula veris	Cowslip		3.8	-4

At least three quarters of the plants recorded were 'Autumn Stragglers' like Yarrow, Red Campion and Red Dead-nettle that had carried on flowering in the absence of a hard frost (Table 2). The two most commonly recorded plants were Daisy and Dandelion – which we would expect to be flowering at this time of year (Table 3 p. ##).

Table 2: The most frequently recorded species flowering late

Latin name	Common name	Lists	ists %lists Month	
Lamium purpureum	Red Dead-nettle	163	40.8	2
Geranium robertianum	Herb-Robert	159	39.8	3
Senecio jacobaea	Common Ragwort	159	39.8	2
Euphorbia peplus	Petty Spurge	158	39.5	1
Heracleum sphondylium	Hogweed	157	39.3	3
Achillea millefolium	Yarrow	141	35.3	4
Lapsana communis	Nipplewort	127	31.8	3
Ranunculus repens	Creeping Buttercup	121	30.3	2
Silene dioica	Red Campion	118	29.5	3
Rubus fruticosus agg.	Bramble	115	28.8	3
Cymbalaria muralis	Ivy-leaved Toadflax	114	28.5	3
Cardamine hirsuta	Hairy Bitter-cress	111	27.8	4
Geum urbanum	Wood Avens	111	27.8	4
Dactylis glomerata	Cock's-foot	104	26	3
Hedera helix	Common Ivy	98	24.5	1
Cerastium fontanum	Common Mouse-ear	96	24	3
Tripleurospermum inodorum	Scentless Mayweed	75	18.8	2
Crepis capillaris	Smooth Hawk's-beard	73	18.3	3
Leucanthemum vulgare	Oxeye Daisy	69	17.3	4
Arrhenatherum elatius	False Oat-grass	67	16.8	1
Sonchus asper	Prickly Sow-thistle	62	15.5	2
Hypochaeris radicata	Cat's-ear	60	15	3
Trifolium pratense	Red Clover	59	14.8	3
Centranthus ruber	Red Valerian	59	14.8	4
Cardamine flexuosa	Wavy Bitter-cress	58	14.5	3
Ilex aquifolium	Holly	56	14	4
Ranunculus acris	Meadow Buttercup	51	12.8	2
Mercurialis annua	Annual Mercury	51	12.8	2
Tanacetum parthenium	Feverfew	50	12.5	4
Conyza canadensis	Canadian Fleabane	48	12	3
Euphorbia helioscopia	Sun Spurge	45	11.3	2
Geranium molle	Dove's-foot Crane's-bill	43	10.8	3
Matricaria discoidea Pineappleweed		42	10.5	5

Table 3: 1	19 sneci	es recorded	I that are	expected to	flower	on New	Year's Dav
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Latin name	Common name	Lists	%lists
Bellis perennis	Daisy	296	74
Taraxacum	Dandelion	261	65.3
Senecio vulgaris	Groundsel	223	55.8
Poa annua	Annual Meadow-grass	217	54.3
Sonchus oleraceus	Smooth Sow-thistle	171	42.8
Lamium album	White Dead-nettle	164	41
Capsella bursa-pastoris	Shepherd's-purse	157	39.3
Veronica persica	Common Field-speedwell	113	28.3
Primula vulgaris	Primrose	109	27.3
Stellaria media	Common Chickweed	96	24
Sisymbrium officinale	Hedge Mustard	54	13.5
Arabidopsis thaliana	Thale Cress	51	12.8
Senecio squalidus	Oxford Ragwort	31	7.8
Campanula portenschlagiana	Adria Bellflower	29	7.3
Sinapis arvensis	Charlock	21	5.3
Veronica polita	Grey Field-speedwell	7	1.8
Sisymbrium orientale	Eastern-rocket	4	1
Veronica agrestis	Green Field-speedwell	4	1
Arbutus unedo	Strawberry Tree	3	0.8

653 species in flower represents about a quarter of the species that occur regularly in Britain and Ireland. Around a third of these 653 species are alien plants from warmer climates that may have escaped from gardens or cultivation and are able to continue flowering until winter frosts knock them back. As in previous years, urban areas tended to have more species in flower than rural areas. This is to be expected: there are more sheltered and disturbed areas with warm microclimates where both native and alien plants can thrive.

According to textbooks and keys which indicate likely flowering times, there "should" only be 20-30 species in bloom at New Year (Table 4 p. ##). Kevin said "Conventional wisdom on what should flower when is clearly out of date, and for many alien plants we simply don't have good data on peak flowering times. The New Year Plant Hunt results will help us build up a clearer, up-to-date picture of what's going on".

Record-breaking number of participants

We had almost three times as many participants (Table 5 p. ##) this year (865) as last (c.300). They submitted more than 400 lists and ranged from eminent botanists such as Dr Sandy Knapp of the Natural History Museum (who recently joined BSBI) and Prof. Mick Crawley (who had the longest list, with 154 species recorded in bloom at Ascot, v.c.22), to children who went out plant hunting with parents and grand-parents. Our youngest participant was just three years old! Three past BSBI Presidents joined in the Plant Hunt (David Pearman in Cornwall. Braithwaite in Berwickshire and Ian Denholm in Herts.) and current president John Faulkner was out hunting in Armagh.

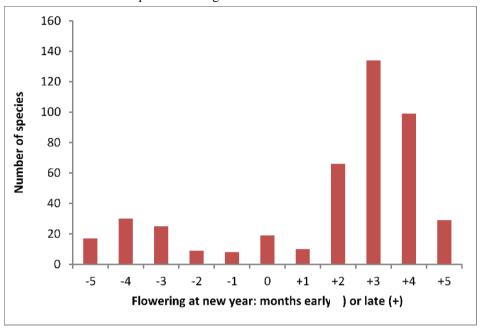


Table 4: Deviation from peak flowering time

Table 5: How participation in the New Year Plant Hunt has increased over time and status of plants recorded.

	2012	2013	2014	2015	2016
lists	1	7	48	143	432
records	63	224	1180	2908	9265
species	63	105	222	368	653
Vice-counties	1	7	34	68	108
No. of botanists	2	35	70	c.300	865
% alien taxa	20.60%	29.50%	27%	33%	49%
% spring flowers (native)	3%	8.50%	3.60%	5%	<20%

Plant hunters were out across Britain and Ireland – from West Cork to Norfolk, the Channel Islands to Shetland and Kent to Donegal. As expected, the milder south and west of Britain had the highest numbers of species in flower, but we also had more than 60 species reported blooming in Edinburgh, where an organised Hunt was augmented by multiple lists from individuals or groups of friends and families. Gus from Edinburgh, who received his first wildflower ID key on Christmas Day

2015, enjoyed his first Hunt on New Year's Day 2016 so much that he went out four more times! Ecologist James, travelling over the New Year holiday from Devon up to his Lincolnshire home, also sent us five lists from stopping points across the country (see back cover and next page). Both were awarded the "prize" of a chance to write up their experiences of the New Year Plant Hunt for the BSBI News & Views blog, where you can read twelve different posts about the Hunt.

NYPH 2016 in the media

Coverage of the Plant Hunt appeared in national broadsheets including The Telegraph, The Observer, The Independent and The Daily Mail; we were mentioned on BBC Radio 4's Today programme and only a last-minute change of schedule prevented a planned feature on BBC Television's 'The One Show'. An interview about the Plant Hunt for BBC Radio Scotland's 'Out for the Weekend' programme led to an offer of a regular BSBI 'Wildflower of the Month' slot. The first took place in March and featured Sweet Violets. Bluebells (Scottish, English, Spanish and hybrids) and Bird's-foot Trefoil are planned for future months. If you have any suggestions for wildflowers that you think we should be telling listeners in Scotland about, please email me at the address above.

List of species for the Grantham hunt (back cover)

Have fun working out which name goes with which photo

Daisy (Bellis perennis)
Annual Meadow-grass (Poa annua)
Lesser celandine (Ficaria verna)
Cock's-foot (Dactylis glomerata)
Winter Heliotrope (Petasites fragrans)
Primrose (Primula vulgaris)
Petty Spurge (Euphorbia peplus)
Groundsel (Senecio vulgaris)
Ivy-leaved Toadflax (Cymbalaria muralis)
Nipplewort (Lapsana communis)

Prickly Sow-thistle (Sonchus asper) Canadian Fleabane (Conyza canadensis) Yarrow (Achillea millefolium) Dandelion (*Taraxacum officinale* agg.) Herb-Robert (Geranium robertianum) Hazel (Corylus avellana) Hogweed (*Heracleum sphondylium*) Ox-eye Daisy (Leucanthemum vulgare) Red Campion (Silene dioica) Periwinkle (Vinca major) Bramble (Rubus fruticosus agg.) White Dead-nettle (*Lamium album*) Oregon-grape (Mahonia spp.) Common Ragwort (Senecio jacobaea) Dove's-foot Cranesbill (Geranium mollis) Common Mouse-ear (Cerastium fontanum) Perennial Sowthistle (Sonchus arvensis) Common Field-speedwell (Veronica persica) Wood Avens (Geum urbanum) Shephard's-purse (Capsella bursa-pastoris) Green Alkanet (Pentaglottis sempervirens) Red Deadnettle (*Lamium purpureum*) Feverfew (Tanacetum parthenium) Pineappleweed (*Matricaria discoidea*) White Campion (Silene latifolia) Cow Parsley (Anthriscus sylvestris) Blackthorn (Prunus spinosa) Wall Barley (Hordeum murinum) Holly (*Ilex aquifolium*) Wavy Bitter-cress (Cardamine flexuosa) Wood Spurge (Euphorbia amygdaloides)

Gorse (*Ulex europaeus*)

Dogwood (Cornus sanguinea)

Smooth Hawk's-beard (Crepis capillaris)