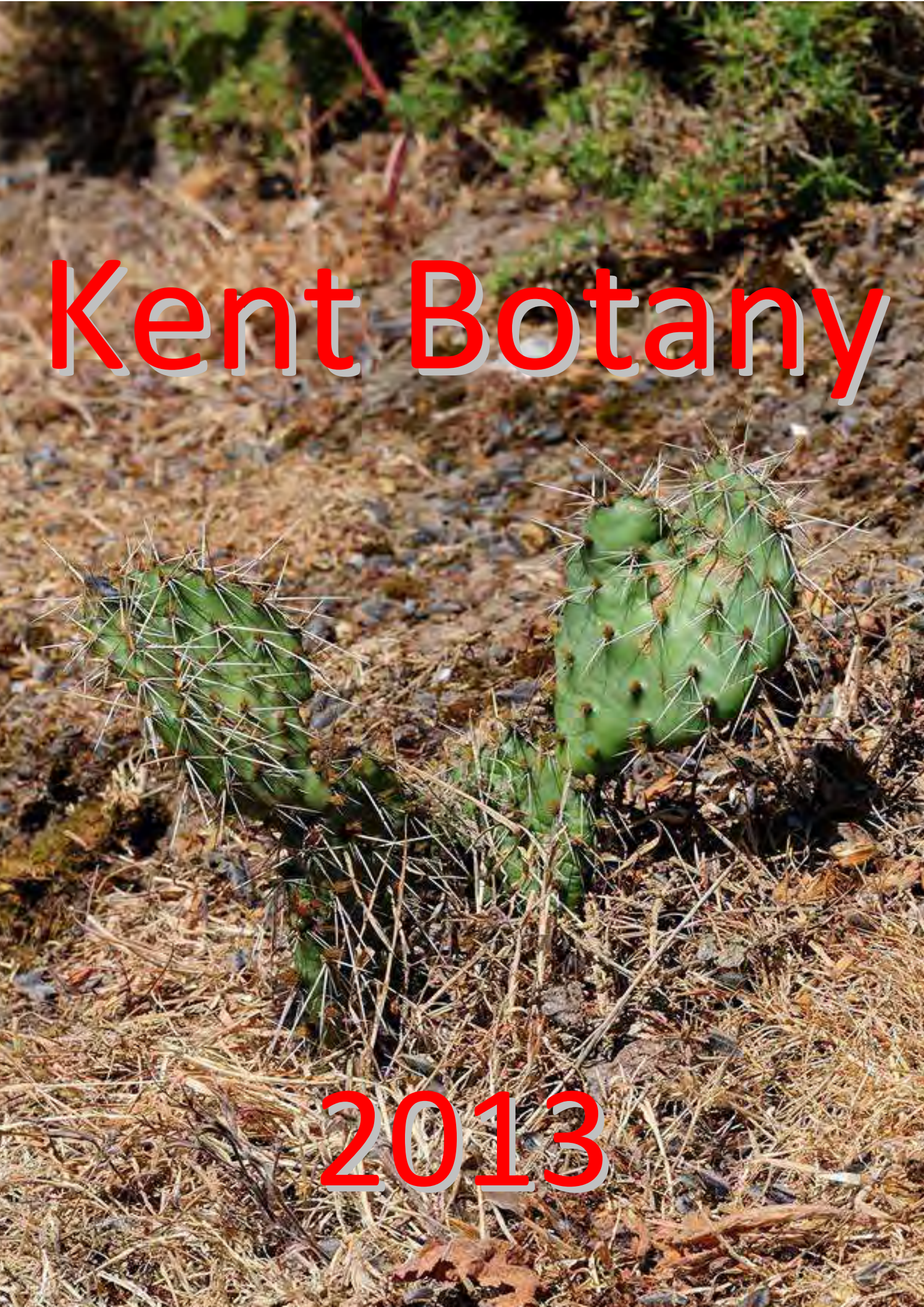
Kent Botany
2013

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Compiled by Geoffrey Kitchener
(February 2014, web version 1)

Front cover: *Opuntia phaeacantha* 'Albispina' (Desert Prickly Pear) at Eyhorne Street, 24 July 2013. Photo © Lliam Rooney (see East Kent plant records report).

Introduction

Kent Botany 2013 is the fourth in a series of annual reports of botanical developments in Kent each year. It is issued primarily as a web version, maintained on the Kent page of the Botanical Society of Britain and Ireland (BSBI) website, http://www.bsbi.org.uk/ and this should be regarded as the definitive version. A substantially similar hard copy version is also issued by the Kent Field Club, as part of its Bulletin (2014).

Botany in 2013

A prolonged winter and cold spring saw plant growth delayed by some three weeks, and so spring flowers had only a short period before being overtaken by normally later flowerers. At the other end of the season, however, the lack of frosts prolonged flowering/fruiting and botanical recording opportunities.

Highlights

The year was exceptionally fruitful for record data relating to sedges and sedge-allies, largely due to the work of Joyce Pitt and Stephen Lemon. Joyce has enlarged our knowledge of *Carex elongata* (Elongated Sedge), which had only one record in Philp (2010). Stephen has explored many locations along the Eden, Medway and Beult catchments, resulting in new finds, confirmation of historic records and, in some cases, confirmation of the absence of continued presence from historic records, which is also valuable information. He found a very large new population of *Carex vulpina* (True Fox-sedge), potentially of national significance in view of its size, in a fairly central part of Tonbridge; and he also rescued *Eleocharis uniglumis* (Slender Spike-rush) from the county 'probably extinct' list by finding it at Holborough, where it had not been seen for many years.

We have 14 new taxa for the East Kent list; and eight for West Kent. The most remarkable find was the presence of *Opuntia phaeacantha* 'Albispina' (Desert Prickly Pear) naturalized in East Kent – the first occurrence in the British Isles. Other notable discoveries include a specimen of *Dactylorhiza* x *kerneriorum* (the hybrid between Common Spotted-orchid and Early Marsh-orchid) at Holborough identified from a photograph taken by Daphne Mills; and several million plants of *Orobanche crenata* (Bean Broomrape) infesting fields of Broad Beans near Snodland and Upper Harvel.

Recording in Kent

Botanical meetings were undertaken by various organisations, and the Kent Botanical Recording Group held ten field meetings in the county, two of which extended across the borders, being held jointly with the Surrey

Botanical Society and the Sussex Botanical Recording Society. Reports were given in newsletter no. 6, published by email and on the KBRG webpage. Membership of the recording group increased from 79 to 90 during the year.

In January 2014, the number of records in the county database stood at c. 98,300. These records are made up of 20,100 for 2010; 26,700 for 2011; 24,000 for 2012; and 27,500 for 2013. The annual totals are subject to adjustment as back records continue to appear, and so are not directly comparable with totals given in earlier reports. In any event, the total for 2013 does not reflect some records which await input. But projecting forward, this rate of progress should give over 300,000 records for the BSBI date class 2010-2019 inclusive, which seems adequate. The issue in the later years of the current date class is more likely to be one of comprehensiveness of cover, in terms of both geography and taxa, than number of records. Records continue to be shared with the BSBI and Kent and Medway Biological Records Centre.

Kent rare plant register

A focus remains on recording the current status of plants on the county rare plant register (RPR). The list of RPR plants was modified in 2013 by the inclusion of *Eleocharis uniglumis* (Slender Spike-rush) and of *Hypericum maculatum* (Imperforate St John's-wort), both re-found in the county. *Hypericum x desetangsii* (*H. maculatum* x *perforatum*) has been removed, as the rationale for its inclusion was that it preserved the genes of a species (*H. maculatum*) which was supposed to be locally extinct. Updated versions of draft RPR Parts Ca and Ce-Cy went onto the website in February 2013, followed by Parts D and E in November 2013. Part F was supplied in draft to KBRG members in November 2013 for feedback before issue on the website. All parts from A to F have been updated in the light of records for 2013, for reissue on the website in February 2014. In some cases, the updating is significant, e,g. for *Arabis hirsuta* (Hairy Rock-cress), where it is now possible to deal with the principal Kent population, viewed by a KBRG meeting; and for *Centunculus minimus* (Chaffweed) and *Euphrasia confusa* (Confused Eyebright), whose accounts now include Kent photographs.

Out of the 27,500 records received for the year, 842 (3%) were in respect of RPR taxa. This is broadly in line with returns over the period 2010-2013, although better than the total for 2012 (657 records). The most frequently recorded RPR plant was *Poa infirma* (Early Meadow-grass, 31 records) which really only remains on the register because the national criteria for scarcity have probably not yet caught up with the spread of records through England south of a line drawn from the Severn through to the Wash. Although improved recognition and expectation of seeing the species may have increased records, it is difficult to avoid the conclusion that there has been a rapid and genuine spread from Cornwall, probably due to genetic or climate/environmental change and perhaps related to vehicles in view of its street presence. It is likely that there are factors in common with *Polycarpon tetraphyllum* (Four-leaved Allseed), another Cornish plant beginning to appear with us in coastal streets. The next most frequently recorded species was *Cephalanthera damasonium* (White Helleborine), with 29 records in 2013. We now already have a fuller distributional record for this orchid than appears in Philp (2010), for the total number of tetrad records in 2010-2013 is 54, against 45 in Philp (2010); and as we have been recording on a monad basis, we have more finely-grained data in any event (74 different monads).

The 2013 RPR records also contained relatively high numbers for saltmarsh plants such as *Chenopodium chenopodioides* (Saltmarsh Goosefoot, 18 records), *Chenopodium glaucum* (Oak-leaved Goosefoot, 14) and *Plantago major* subsp. *intermedia* (Greater Plantain, 10). This is probably a result of more thorough targeting of their north Kent habitats, assisted by suitable weather conditions for germination and growth. Improved recognition of the plantain subspecies has probably helped, as it was little noted in the county before 2010, when placed on the RPR.

A focus on numbers, however, might distract from the importance of finding any up-to-date records at all for the rarer RPR taxa. During 2013, there were sightings for the first time in our records for 2010 onwards, of the following species: *Centunculus minimus* (Chaffweed), which was successfully targeted by a KBRG field meeting at Hemsted Forest; *Eleocharis uniglumis* (Slender Spike-rush); *Euphrasia confusa* (Confused Eyebright), whose finding is described in the latest revision of Part E of the RPR; *Gentianella anglica* (Early Gentian), seen in both East and West Kent; *Hypericum maculatum* (Imperforate St John's-wort); *Lactuca saligna* (Least Lettuce), seen in both East (over 1,000 plants) and West Kent; *Misopates orontium* (Weasel's-snout); *Neotinea ustulata* (Burnt Orchid); *Orobanche rapum-genistae* (Greater Broomrape) in its traditional Eyhorne Street site; *Potamogeton friesii* (Flat-stalked Pondweed); *Potamogeton pusillus* (Lesser Pondweed); and *Serratula tinctoria* (Saw-wort), recorded from a roadside verge monitored for KWT.

BSBI threatened plant project surveys

The BSBI threatened plant project has involved investigating the current status of randomly selected threatened plant populations recorded in the past, and came to the end of its five year programme in 2012. However, surveys were undertaken in 2013 in order to sweep up any record selections which for any reason had not resulted in status reports in earlier years. There were 18 of these in vc15 and 11 in vc16. In East Kent, all selections bar one were surveyed by Sue Buckingham, with a 40% success rate. Elusive species included *Fallopia dumetorum* (Copse-bindweed), *Oenanthe fistulosa* (Tubular Water-dropwort) and, in half of the selections, *Ophrys insectifera* (Fly Orchid). In contrast, in West Kent, where all selections bar one were surveyed by Geoffrey and Sarah Kitchener with a 50% success rate, *Ophrys insectifera* (Fly Orchid) was found where sought. The *Hypopitys monotropa* (Yellow Bird's-nest) selections, however, could not be re-found in West Kent; and in both parts of the county, *Cephalanthera longifolia* (Narrow-leaved Helleborine) was untraceable (this is on the Kent 'probably extinct' plants list) and not found, too, was *Groenlandia densa* (Opposite-leaved Pondweed). As the *Groenlandia* is a RPR species, this looks to be a species worth targeting for rediscovery in 2014.

Other surveys

Other surveys carried out in the county included an investigation of arable plants in and near the Medway valley undertaken by Cath Shellswell for Plantlife, the results of which she kindly made available for the county database. A rare subspecies of *Valerianella dentata* (Narrow-fruited Cornsalad) was one of her discoveries, mentioned in the plant reports which follow, as also are many of the other 2013 records referred to above.

Plant records: selection criteria and recorders

Kent Botany 2013 covers Kent plant records made or reported in that year. 'Kent' for these purposes comprises botanical vice counties 15 (East Kent) and 16 (West Kent), and is a larger area than the administrative county of Kent with Medway Council unitary authority. The criteria for record selection are flexible, but they focus on plants which are unusual in Kent, or where the plant's location, habitat or population characteristics are unusual. Preference is given to new discoveries, particularly those which do not correspond with a tetrad recorded in Philp (2010). Finds which are new to vice county 15 or 16 are given in **bold**. Records of known populations of rare plant register species will usually be carried through for publication in the draft rare plant register, and not necessarily in these records. In West Kent, preference is generally given to records outside the metropolitan area, given that the London Natural History Society already publishes an annual botanical report in *The London Naturalist* for discoveries within its area of coverage.

Nomenclature follows the 3rd edition (first reprint) of Clive Stace's *New Flora of the British Isles* (Stace, 2011).

Recorders and other persons mentioned in reports

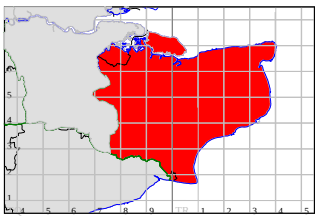
AG Alfred Gay	EB Enid Barrie	JRe Julian Reed	RG Bob Gomes
AL Alex Lockton	EC Edward Courtney	JRP John Palmer	RM Richard Moyse
A&MT Andy & Maggy Tebbs	EGP Eric Philp (dec'd)	KT Keith Turner	RMB Rodney Burton
BB Brian Banks	EJC Eric Clement	LR Lliam Rooney	SB Sue Buckingham
BL Brian Laney	FJR Fred Rumsey	MB Mervyn Brown	SC Steve Coates
BS Barry Stewart	GJ Dr. Geoff Joyce	MBi Margot Birkbeck	SK Sarah Kitchener
BW Barbara Welch (dec'd)	GK Geoffrey Kitchener	ML Mel Lloyd	SL Stephen Lemon
BWo Brian Woodhams	JA Jan Armishaw	MW Mike Wilcox	SP Sue Poyser
CB Caroline Bateman	JB John Badmin	OL Owen Leyshon	ST Stephen Taylor
CO Colin Osborne	JC Juliet Cairns	PDS Paul Stanley	SW Steve Weeks
CP Chris Preston	JE John Edgington	PG Phil Green	TC Tom Cope
CS Cath Shellswell	JLa Jacky Langton	PS Philip Sansum	TI Tim Inskipp
DG Doug Grant	JM Joumana Mobarak	PW Philip Wilson	TR Tim Rich
DJ David Johnson	JP Joyce Pitt	RB Richard Bateman	
DM Daphne Mills	JR Jeremy Roberts	RE Rosie Earwaker	

Thanks are due to all these; and to Charmian Clay for comments on the report presentation.

Other abbreviations or notation

BPS = British Pteridological Society	MOD = Ministry of Defence
BSBI = Botanical Society of Britain and Ireland (formerly Botanical Society of the British Isles)	NNR = National Nature Reserve
comm. = communicated by, or communication	pers. comm. = personal communication
det. = determined by	SBS = Surrey Botanical Society
KBRG= Kent Botanical Recording Group	sens. lat. = in a broad sense (where one plant name may cover others)
KFC = Kent Field Club	Plant records which are marked ^{R} represent plants on the current draft Kent rare plant register list
LNHS = London Natural History Society	

Plant records for East Kent (vice county 15)



Acanthus mollis (Bear's-breech). A plant was found by LR on 14 March 2013 growing amongst compost dumped at the end of an alleyway in the Upper Brents, Faversham, TR 01750 62095. Another plant was recorded by OL on 2 June 2013 amongst old rubble at the edge of a gravel pit, next to Dengemarsh Road, Lydd, TR 04690 18864. It is a species capable of developing a huge tap root system and is evidently capable of establishing despite ill-treatment.

Aconitum napellus (Monk's-hood). Four plants were discovered by LR in 2011 on a wooded roadside at Nash Court, Boughton under Blean, TR 05043 60514, and confirmed as this species when revisited by LR with GK on 13 June 2013, when two additional plants nearby were seen. Also, a large patch, c.30 plants, was noted at the edge of woodland with chalk grassland at Hills Reservoir, Creteway Road West, Folkestone, TR 21424 38298, by OL on 19 June 2013, although known to have been present for a number of years. *Aconitum* x *stoerkianum* is the usual escaped Monk's-hood, but in both cases, these plants keyed out to the species instead.

Allium neapolitanum (Neapolitan Garlic). A small patch from garden waste, in grass outside a garden wall at Cliftonville, TR 3840 7131, was seen by SB on 14 May 2013; and several more plants of this hortal escape were reported by GJ from a roadside verge on the outskirts of Deal, TR 36733 52864, on 19 May 2013.

Allium nigrum (Broad-leaved Leek). Following the first East Kent record for this species in the previous year, OL on 2 June 2013 found two clumps/plants with multiple stems in the grass verge next to the perimeter fence on the west side of the Galloways Road, Lydd MOD ranges, TR 03988 18525.

Alopecurus x plettkei* (*A. bulbosus [R] **x *geniculatus*, the hybrid between Bulbous and Marsh Foxtails).** On 13 June 2013, RG,LR & GK found on the Seasalter Levels nature reserve a hybrid plant at TR 08630 64027, in a cattle-trampled dyke margin on the grazing marshes, at the edge of taller vegetation. Both parents were present within 1 metre. It was a tall, upright plant (with a 49cm culm), too robust for *A. bulbosus*, but it possessed clearly bulbous bases to the stems. Another plant was found elsewhere within monad TR0864 at the margin of a depression in the grazing marshes with both parents, possessing a geniculate habit but with a bulbous stem base (and a culm 64cm long). The quantity of *A. bulbosus* in the area was remarkable, with the neat dark spikelets visible in locations too numerous to record, in monads TR0764, TR0863, TR0864 and TR0964. It grew generally in the sward surrounding (and slightly higher than) less vegetated depressions which were subject to winter flooding and in which *A. geniculatus* was growing. The marginal habitats adjoining dykes and depressions where both species met appeared to afford hybridization opportunities. **This is a first record for vice county 15, East Kent.** A previous record for Wouldham on the BSBI's database is incorrect and has been amended.

***Amaranthus blitoides*. Photo ©Daphne Mills, 2013**

Amaranthus blitoides **(Prostrate Pigweed**). This sprawling weed turned up in a garden at Burham, TQ 7305 6189, looking somewhat un-amaranth-like due to its prostrate growth habit. It has fairly few records nationally, and in Kent there have been only a couple

of records in West Kent in the 1970s. It has been regarded as a characteristic impurity of bird seed from the Americas (Hanson & Mason, 1985), which appears to be the source of this occurrence, reported by DM as noted on 7 September 2013 and identified by GK. **This is a first record for vice county 15, East Kent.**

Amaranthus hybridus (Green Amaranth) was reported from the edge of a maize field near Staple, TR 27655 57786, on 3 March 2013 by JA; and as a street weed at Littlestone, TR 2108 5768, on 13 August 2013 by SB.

Amsinckia micrantha (Common Fiddleneck). Far from common in Kent, despite its name, this species was recorded as a single flowering plant in an old sand pit/quarry, at Cheriton, TR 17997 36959, by OL on 17 June 2013. This is a site owned by the MOD, to which only supervised access is possible.

Anemone apennina (Blue Anemone). On 18 April 2013, both white and blue forms of this garden Mediterranean species were found by LR and SB well established on a roadside bank near Bearsted, TQ 80199 54920.

Anemone pavonina var. *purpureo-violacea* (Boissier) Halacsy (Peacock Anemone). As a postscript to the report in Kent Botany 2012 of this garden species having been found by JA and LR at Littlestone, it is now possible to provide fuller details of its presence. OL investigated in April/May 2013 and found that the 2012 sighting was one of five neighbouring locations, the others being at TR 08450 24611 (three plants on the verge of Blenheim Road); TR 08442 24601 (a group of maybe three plants in a building plot off Blenheim Road); TR 08368 24571 (one small plant in the short grass verge of Madeira Road); and TR 08267 24493 (one small plant in the Madeira Road grass verge at the pedestrian entrance to a memorial garden). If there has been planting, this has been undertaken without an obvious scheme. If they have escaped, the most likely source appears to be a verge or grassed-over flower bed area at the edge of a property in Madeira Road (TR 08366 24542), where the present householder stated that plants had been present when he moved there, ten years before.

Anthemis cotula [R] (Stinking Chamomile). Records for 20 monads were made in 2013, of which 13 were in East Kent. Where noted, the habitat was arable, but the species is still turning up more on chalk soil than might be expected, although some of the locations could represent downwash of clay with flints from the top of slopes. It is possible that our recording has been skewed away from Wealden Clay, even recognising that arable may not be so frequent in many clay areas.

Arabis hirsuta [R] (Hairy Rock-cress). Whilst Philp (2010) gave this species as found only in small quantities at Stockbury and Kingsdown, it had still been known in the Dover area. A KBRG meeting on 11 June 2013 confirmed that Dover carries the largest Kent populations, and from 1500 to 2000 plants were recorded in TR3140 and TR3141 growing on steep northeastern and northwestern chalk slopes, particularly where management had created open areas of bare chalk.

***Atriplex sagittata* (Purple or Shining Orache).** Two or three plants of this eastern European orache (det. EJC), with shiny dentate leaves, were found by PDS and KT on 5 October 2013 by the old (superseded) A249 near Queenborough, Sheppey, TQ 920 718. It is very rare in the British Isles, known from near Grays in Essex alongside the A13 since 2006, so there may be a degree of similarity between the two sites. At any rate, it is another species to add to the many oraches and goosefoots which are present on Sheppey; and is **a first record for vice county 15, East Kent,** and indeed for Kent as a whole.

Bergenia x schmidtii (*B. crassifolia* x *ciliata*). The commonest Elephant-ears in cultivation, this hybrid warrants more identifications as an escape. A large well-established patch was seen at a KBRG meeting on 19 May 2013 at Fowlmead Country Park, at TR 36068 53793.

Bromus secalinus [R] (Rye Brome). See comments under vc 16 records. In vc 15 it was recorded on 6 August 2013 by AG by a wheat-field at Little Palmstead Farm, TR1647; on 12 August 2013, again by AG, in the corner of a wheat-field at Elham, TR1744; on 18 August 2013 by GK and SK near Eccles, being abundant in abandoned arable with some wheat present, from TQ 7204 6061 to TQ 7218 6059; and on 5 September 2013 by RG, LR and GK in a grassy field near Worth Minnis, TR 2343 5531.

Bromus x pseudothominei (Lesser Soft-brome). This somewhat delicate grass was seen in several lowland areas of flattish grassland: on 13 June 2013 by RG, LR and GK in quantity alongside a dyke on the Seasalter Levels grazing marshes, TR0864; on 4 August 2013 by a KBRG meeting on grazing land at Fairfield, Romney

Marsh, TQ9626 and TQ9726; and on 20 August 2013 by SB by a footpath beside the Royal Military Canal west of Hythe, TR 1129 3410.

Bupleurum tenuissimum [R] (Slender Hare's-ear). This nationally 'Vulnerable' plant was found in good quantity in several locations not included in Philp (2010), although very much in the core area of north Kent distribution. On 27 August 2013 it was recorded by RG, LR and GK on Sheppey at TQ 92622 67914 on the landward slope of the Swale sea wall; at TQ 92373 68965 on the top of the coastal (Swale) side of the wall; at TQ 92523 68859 in a grassy area between wall and the parallel dyke; at TQ 92567 68777 on the coastal side of the wall; at TQ 9282 6832 on a grassy track; and at locations too frequent to itemise along the coastal (Swale) margin of monad TQ9269. On 15 October 2013, LR and GK recorded the species on the opposite, mainland side of the Swale, near the mouth of Milton Creek: at TQ 92152 66152 in light grassland along about 14 metres of footpath above the creek; and at TQ 92105 66096, in a grassy patch on top of a vertical wall (perhaps a former landing bay) above the creek. This last location is unusual as comprising made ground, rather than a natural surface, although there is an element of artificiality in its normal Kent native occurrences, as involving man-made soil embankments or flattish tracks on their landward side kept open by occasional vehicle passage.

Calamagrostis epigejos (Wood Small-reed). On 29 August 2013, a large patch was seen by GK at the shaded edge of Heron Pond, Hatch Park, Mersham, TR 0668 4058. This appears to be a new hectad record.

Calystegia x *lucana* (*C. sepium* x *silvatica*, the hybrid between Hedge and Large Bindweeds). This cross was recorded at the KBRG meeting on 2 July 2013 alongside a coastal footpath near Cliffsend, TR 3430 63313, both parents being present in the vicinity.

Cardamine corymbosa (New Zealand Bitter-cress). Nationally, a fair proportion of records for this small weed are still from nurseries and garden centres, en route to infesting private gardens which are not yet generating the sightings that reflect full distribution. LR has contributed another such record, with the discovery on 22 April 2013 in a nursery at Macknade's, Faversham, TR 02472 60232, of a couple of pots bearing bonus Bitter-cresses.

Left to right: *Carduus x stangii, Carduus nutans* and *Carduus crispus*.
Photos © Lliam Rooney, 11 July 2013

Carduus x stangii (*C. crispus x nutans*, the hybrid between Welted and Musk Thistles). In July 2012, PG noticed, amidst a group of Musk Thistles by the North Downs Way at Cheriton Hill, Folkestone, plants which did not quite match the rest, having smaller flower-heads, more clustered, on shorter stems and with the flower-head being held more upright. On 11 July 2013 he revisited the site together with AG, LR and GK, and the hybrid was confirmed – a plant very rarely recorded in Kent. There was one plant at TR 20538 38213 and another about 5 metres away, both growing in a disturbed area on a chalk slope with parents present. The plants were

intermediate in capitula size, degree of winged spines at the top of the peduncle, and the extent of nodding of capitula. The underside of the involucral bracts was pale green (not purple as in *C. nutans*), and bracts were soft (not spiny as in *C. nutans*).

Carex acuta (Slender Tufted-sedge). This sedge was a close candidate for inclusion in the rare plant register, so it is gratifying to know that it is present further east than given in Philp (1982 and 2010), having been found by SB on 6 May 2013 lining the margins of a ditch on the Royal Cinque Ports golf course, Deal, at TR 3725 5431.

Carex disticha (Brown Sedge). Found by SB on 8 May 2013 in the Wickhambreaux Valley, TR2362, Philp (2010) perhaps understating the presence of this very local sedge in the lower reaches of the Stour.

Carex [R] *divisa* (Divided Sedge). This predominantly coastal or estuarial sedge has a few inland Kent localities, to which may be added Mount Ephraim Farm, Hernhill, from TR 06853 59896 to TR 06804 59952. On 16 May 2013, LR recorded an 18m wide swathe running through the bottom of a wet sheep pasture with an otherwise unexceptional flora of damp neutral grassland.

Carex elongata [R] (Elongated Sedge). Reduced to one location in Philp (2010), this sedge had been regarded as one of our rarest sedges. However, as a result of some discoveries by JP in vc15, and the checking of old localities by SL in vc16 (see vc16 plant records section), we can now consider this species as scarce, rather than rare. On 4 June 2013, JP came across at least five clumps in the far east of the Weald, at Norland Wood near Ruckinge, TR 022 353, where there is a series of wooded ponds. On 24 July 2013, she also saw at least four clumps in relict heavily shaded wet wood (with alder, ash, oak and service tree) south of Headcorn, at Waterman Quarter, TQ837426. There was also another clump in a similar scrap of nearby woodland at TQ 838 425.

Carex elongata **at Norland Wood. Photo © Joyce Pitt, 4 June 2013**

Carex extensa [R] (Long-bracted Sedge). An extension to this sedge's normally recorded range at Shell Ness, Sandwich was noted at the KBRG meeting on 2 July 2013, when 13 plants were found in a small saltmarsh by the Line of Pillars and KWT's Stonelees Reserve at TR 33949 62695.

Carex vesicaria [R] (Bladder-sedge). Including vc16 sightings (see vc16 plant records section), we now have records for nine monads since 2010, which perhaps casts doubt on the extent of decline shown between the two Kent Atlases (15 tetrads in Philp, 1982; four tetrads in Philp, 2010). In vc15, SL found the sedge in several places near Headcorn aerodrome on 14 July 2013. There were four patches by the River Beult, TQ 85772 43137

(in the open on the western side of river, some sheep-trampled); a clump at TQ 85770 43168 on the western side within an area dominated by *Schoenoplectus lacustris* (Common Club-rush); a small clump at TQ8579 743098, growing just below a footbridge, in light shade on the river's eastern side; and at TQ 85777 43163, growing along the eastern edge of the river in the open. On 24 July 2013, JP also found the sedge not far away, at Waterman Quarter, TQ8342.

Carex vulpina [R] (True Fox-sedge). On 17 July 2013, four tussocks were found by SL centred on TQ 70042 49792 in a 5 x 5 metre break in woodland canopy under power lines through damp hollow, in a small wooded area next to a sports field. The tussocks were not robust, but were competing with *Iris pseudacorus* (Yellow Iris), and their habitat was surrounded by trees and rank vegetation, mostly *Urtica dioica* (Common Nettle) and *Filipendula ulmaria* (Meadowsweet). This somewhat surprising location was discovered by PS in May 2012, but the then available material was inadequate for referee confirmation.

Cerastium diffusum (Sea Mouse-ear). This coastal species is known rarely on sandy ground inland, but has been encouraged onto sandy or gritty roadsides with the use of de-icing salt. On 25 April 2013 it was recorded by JB on the road edge outside the front entrance to Ashford (William Harvey) Hospital, from TR 039 421 to TR 040 421 (and so falling within two tetrads/monads).

***Cerinthe major* (Greater Honeywort).** On 19 May 2013 a KBRG meeting found a single plant by a pond in Fowlmead Country Park at TR 36162 54242. This garden escape has been found a couple of times in West Kent, but this appears to be **a first record for vice county 15, East Kent**.

Chenopodium chenopodioides [R] (Saltmarsh Goosefoot). Numerous records were made in 2013, perhaps reflecting that this species germinates late and so was not held up by the prolonged cold spring, and the long summer season lowered the water levels so as to expose its favoured muddy surfaces (in contrast to 2012, when rainfall inundated its habitats). The more interesting records included a sighting at Lydd Ranges on 9 August 2013 by GK, OL and TI, TR0117, where it was present on raised peat in dried-up areas subject to periodic saline inundation – it does not seem to have been seen in the Dungeness area before. Also, it was confirmed by OL at Fairfield on Romney Marsh, where it has been known in the past as part of a community of halophytes encouraged by the salinity of this inland location – here OL on 13 September 2013 saw two small plants in a dryish ditch in front of the church, TQ 96648 26474, and numerous plants in a muddy scrape in old saltmarsh north east of the church, TQ 96777 26721. SB found plants in several Sheppey monads, including, on 14 September 2013, many thousands of plants flowering, fruiting and newly germinated with *Chenopodium glaucum* [R] (Oak-leaved Goosefoot) along cattle-poached margins of brackish ditches from TQ956673 eastwards at Elmley Nature Reserve; and also on 16 September 2013, thousands of plants encircling and scattered across a large dried out saline pool near Windmill Creek at TQ 9785 6748 on bare mud with scattered *C. glaucum* and *C. rubrum* (Red Goosefoot). Perhaps the most surprising record was along the rim of the concrete gutter adjoining the A249, over 4km south of the Sheppey Crossing. Here, around TQ 8940 6546, PDS and KT found it on 5 October 2013 growing with *C. rubrum,* further more southerly plants occurring on the saline road verge towards the southbound slip road near Bobbing, to Milton Regis and Sittingbourne. This is not one of the species which we commonly see as roadside species encouraged by de-icing salt – but the A249 is already remarkable for the quantity of *Hordeum marinum* [R] (Sea Barley) which lines the verges.

Chenopodium glaucum [R] (Oak-leaved Goosefoot). Recorded by SB in seven different Sheppey monads; its habitat and behaviour seem quite similar to those of *C. chenopodiodes*. It now appears that Philp (2010) may understate the position as regards the presence of this last species near the Swale. A different habitat was where found by PDS and KT on 5 October 2013 – on the highway verge south west of the Eastchurch main road roundabout joining Lower Road and High Street, c. TQ 9845 7147. Here it was growing with *C. rubrum* (Red Goosefoot) and *C. album* (Fat-hen). Whilst *C. glaucum* is not unfamiliar on gravelly tracks on the grazing marshes, it is surprising to find that this predilection is transferrable to main roads; and it will be worth bearing this in mind in botanising elsewhere.

Chenopodium hybridum (Maple-leaved Goosefoot). A single specimen of this scarce weed was found by CO on 26 August 2013 in bud by the roadside at Grays Farm, south of Reculver, TR 228 676.

Chenopodium murale [R] (Nettle-leaved Goosefoot). About 100 plants were seen on a large manure heap (many of the chenopods seem very nitrophilous) in a field just outside Lydd on Dengemarsh Road, TR0419, by TI in

August 2013. Also, on 21 September 2013, SB noted five flowering plants and 17 seedlings in a corner of cattle-grazed dune grassland at Sandwich, TR 36158 57288, in a heavily trampled area close to a cattle trough – presumably dung had increased the levels of nitrogen here as well.

Claytonia sibirica (Pink Purslane). One plant was recorded on 5 June 2013 by CO in a damp hedge line with trees opposite gardens at Stelling Minnis, TR1447.

Conyza floribunda (Bilbao's Fleabane). We are beginning to see this species more frequently (see also vc16 report), and it was noted by GK and SK on 23 September 2013 as a large plant in a garden at 62/64 Borstal Street, Rochester, TQ 732 668; and by GK on 1 October 2013 as plants at a disused sand quarry near Aylesford, with several seen at TQ 7261 5961, although it was more widespread than this, and *Conyza canadensis* (Canadian Fleabane) and *Conyza sumatrensis* (Guernsey Fleabane) were also widely present.

Coreopsis tinctoria (Garden Tickseed). The status of this discovery, on 24 July 2013 by AG, LR and OL at Bluebell Hill, TQ 74928 60733, is somewhat intriguing. It appears that it was at some time a constituent of a wildflower mix sown here (although presumably chosen for its colourful appearance rather than any relationship to the British flora). It had, however, become part of the seed-bank, as its germination and flowering had apparently been triggered by the scarification of the ground by a vehicle crashing into a road-sign. No other record for vc15 has been traced; but it is proposed not to treat this as a 'first', because it is possible that the origin is from seed originally sown and not previously germinated, rather than any population which may have established and reproduced on its own account, creating a seed-bank accordingly.

Crassula tillaea [R] (Mossy Stonecrop). This diminutive species was rediscovered in Kent in 2012 after over a century, but the new site was not generally accessible to the public, being within the security fencing of Lydd Ranges. Then on 3 June 2013, OL found what appears to be an associated population, or set of populations, outside the restricted area. He recorded thousands of plants on the dirt edge of Galloways Road, MOD Ranges, extending from (south) TR 03978 19758 for at least 450 metres to TR 04218 20178 (north towards Lydd), and present also in the fishermen's car park on the lake side (TR 04019 19794) of the road. At closest, the plants are some 140 metres from the 2012 site and so they appear to be associated.

Crocus x stellaris corm. **Photo © Lliam Rooney, 2013**

Crocus tommasinianus (Early Crocus). A readily seeding Crocus, of which a few established clumps were found by LR on 4 March 2013 in Hoades Wood, Sturry, TR 180 612; and a single clump by OL on 1 March 2013 in a thicket next to the footpath in Greatstone Dunes not far from houses, TR 08161 23234.

Crocus x *stellaris* (Yellow Crocus) was recorded by LR as established on the verge of a playing field at Poplar View, Boughton under Blean, TR 0541 5931, on 3 March 2013 and as two clumps in the edge of Hoades Wood, Sturry, TR180612 on 4 March 2013. In order to distinguish from yellow-flowered *Crocus chrysanthus* (Golden Crocus), the key in Stace (2011) asks for the corm to be examined, in order to see whether its covering splits horizontally or vertically. The vertical splitting on the *C.* x *stellaris* corm is shown in the accompanying photo from one of the recorded sightings.

Cyperus eragrostis (Pale Galingale). At least 60 plants scattered along the kerbs and pavements of Wear Bay Road and Wear Bay Crescent, Folkestone were recorded by OL on 8 November 2013. A sample grid reference is TR 23605 36336, but spread was over a couple of hundred metres, well established but potentially vulnerable to council herbicide spraying in the next spring. A capacity to get away was also shown by a wide spread from planting beside Bredgar village pond, TQ 8803 6045, seen by SB on 3 December 2013.

Cyperus longus (Galingale). A big patch of about ten clumps at the end of a private ditch, with arable on both sides, was seen by OL on 10 August 2013 at Greatstone, TR 07508 23409.

X Dactylodenia heinzeliana (Gymnadenia conopsea x Dactylorhiza fuchsii). This intergeneric hybrid between Fragrant Orchid and Common Spotted-orchid was seen on chalk grassland which forms the top of a buried reservoir off Crete Road west, Folkestone by PG, LR, AG and GK on 11 June 2013. One plant was located at TR 2135 3819, bearing a very long flowering spike; and at TR 21361 38221 there were four more spikes growing together very vigorously.

Dactylorhiza x *grandis* (*D. fuchsii* x *praetermissa*, the hybrid between Common Spotted-orchid and Southern Marsh-orchid). Hybrids were observed by the KBRG meeting on 2 July 2013 as being abundant in the KWT reserve at Stonelees, TR 3378 6269, in the presence of both parents. They grew in a dune slack with fen vegetation, but currently drying out. The KFC meeting on 13 July 2013 encountered a single plant at Ham Fen, TR 33600 54833.

Dactylorhiza x hallii (*D. maculata* x *praetermissa*, the hybrid between Heath Spotted-orchid and Southern Marsh-orchid). The KBRG meeting at Gibbin's Brook on 30 June 2013 came across a vigorous plant growing in the northern bog, TR 11609 38703, with *D. maculata* [R] and *D. praetermissa* scattered in the vicinity (identity confirmed by DJ from photographs). Recorded in Philp (2010) in this tetrad, one of only two locations in the county.

Dactylorhiza x hallii. **Photo © Lliam Rooney, 30 June 2013**

Dactylorhiza x *transiens* (*D. fuchsii* x *maculata,* the hybrid between Common and Heath Spotted-orchids). Also at the KBRG Gibbin's Brook meeting on 30 June 2013, but in the southern bog, TR 116 385, a vigorous orchid was seen with scattered *D. maculata* [R]. The lip shape suggested some *fuchsii* input and one plant of *D. fuchsii* was in vicinity. The hybrid was confirmed by DJ from a photograph.

Dactylorhiza x transiens. **Photo ©Lliam Rooney, 30 June 2013**

Dianthus deltoides [R] (Maiden Pink). Around 100 flowering shoots were found on 27 June 2013 by OL in three loose patches on the shingle behind Leonard Road, Greatstone, TR 08209 21177, next to other species of hortal origin, but the householder did not recognise the pink as emanating from the nearest garden.

Digitaria sanguinalis (Hairy Finger-grass). A large plant was recorded by BL on the tarmac path at the junction of Ness Road with Mill Road, TR 04548 20945. It did not seem a normal match for that species, but was so named by EJC on the basis that it was not the usual form.

Dorycnium hirsutum **(Canary Clover).** Two plants were found by EC in flower, in summer 2013, at Church Marshes Country Park, Sittingbourne, TQ 91445 65476 and TQ 91450 65476. It is a small peaflower shrub from the Mediterranean with relatively few British records, including one from East Kent and another from West Kent. It is unclear how it arrived at Sittingbourne; as, whilst it can be obtained as a garden plant, it is an unusual one.

Dracunculus vulgaris. **Photo © Owen Leyshon, June 2013**

Dracunculus vulgaris (Dragon Arum). Two plants (one big and one small) were reported by OL for 28 June 2013 at the edge of woodland, on what appeared to be very old tipped soil/sand at the end of Church Lane, New Romney, TR 07170 24109. They had first been seen in April when the distinctive mottled stems lengthen, and a smaller spike afterwards disappeared before flowering.

***Epilobium* x *aschersonianum* (*E. parviflorum x lanceolatum*, the hybrid between Hoary and Spear-leaved Willowherbs).** No confirmed records exist for this cross in the British Isles since 1901. On 1 October 2013, GK discovered one plant at bottom of a semi-bare gravelly bank in a disused sand quarry near Aylesford, TQ 72306 59371. Both parents were present, *E. lanceolatum* (uncommon in Kent) growing in quantity. The cross possessed a 4-lobed stigma (from both parents), and the flowers were pale when young, then darkening, as is characteristic of *E. lanceolatum*. It was sterile or virtually so. The leaves were lanceolate, pubescent above (from *E. parviflorum*), with short petioles and the stem hairs shared characteristics with both parents. **This is a first record for vice county 15, East Kent.**

Epilobium x *brevipilum* (*E. hirsutum* x *tetragonum,* the hybrid between Great and Square-stalked Willowherbs). On 18 August 2013, one plant was seen by GK and SK on semi-bare ground by a traffic-closed section of Old Church Road, Burham, TQ 714 624, with plentiful *E. tetragonum*.

Epilobium x floridulum (*E. parviflorum* x *ciliatum*, the hybrid between Hoary and American Willowherbs). A not infrequent cross due to the readiness of *E. ciliatum* to hybridise, a plant was found by GK on 9 August 2013 in an arable margin with various *Epilobium* species including the parents near New Romney, TR0624; and two plants on 1 October 2013 in a disused sand quarry near Aylesford, TQ7259, with *E. parviflorum* nearby (*E. ciliatum* was not seen, but presumed gone over by that date – indeed, hybrids can well outlast their parents through continued abortive flowering).

Epilobium x *mentiens* (*E. tetragonum* x *ciliatum*, the hybrid between Square-stalked and American Willowherbs). One plant was found by GK and SK on 18 August 2013 in a mixed population in old industrial workings near Eccles, TQ 719 608.

Epilobium x *palatinum* (*E. parviflorum* x *tetragonum*, the hybrid between Hoary and Square-stalked Willowherbs). On 5 September 2013, GK, LR and RG came across a plant in a grassy field near Worth Minnis, TR 2343 5531, with the parents. A further plant was seen on 1 October 2013 by GK in a disused sand quarry near Aylesford, TQ 7306 5915, with the parents.

Epilobium x *vicinum* (*E. obscurum* x *ciliatum*, the hybrid between Short-fruited and American Willowherbs). A fairly common cross, of which one specimen was seen by GK and SK on 4 July 2013 near the pond at Hole Park gardens near Rolvenden, TQ8332.

Erinus alpinus (Fairy Foxglove). Found to be well established on Dover Castle wall at TR 3239 4202 on 4 June 2013 by SB.

Erodium moschatum (Musk Stork's-bill). There were eight reports of this Stork's-bill (independently from SB, DG and CO) in 2013 which, added to 19 in 2010-12, reinforce the decision that, although Philp (2010) lists only nine tetrads, the species is not really scarce in Kent.

Eranthis hyemalis (Winter Aconite). Recorded by LR and JA on a roadside bank, Mountain Street, Chilham, TR 06840 52634 on 6 April 2013.

Euphorbia characias (Mediterranean Spurge). A garden plant which is capable of self-seeding outside its confines, three large specimens and numerous young plants were seen by OL on 1 March 2013 sprouting up amongst a *Populus alba* (White Poplar) thicket and on the edge of the pavement at Coast Drive, Greatstone Dunes, close to houses, TR 08150 23222. The KBRG meeting on 13 August 2013 also recorded it at Conyer, TQ9664.

Euphorbia platyphyllos (Broad-leaved Spurge). An arable weed which fell just short of being scarce enough for inclusion in the rare plant register, a single plant was found by SB on 12 August 2013 beside a public footpath across farmland near Warehorne at TQ 9810 3244; and on 20 August 2013, south of Ruckinge, she recorded two plants in the corner of an unkempt flax field, TR 0300 3223, and about 300 plants in a field entrance, TR 0327 3263. The species was also encountered by GK and SK on 18 August 2013 as fairly frequent at the edge of arable running from chalk towards clay from c. TQ 7285 6168 to c. TQ 7264 6146 alongside the footpath from the Bell Lane / Court Road junction, Burham. At times, it was accompanied by *E. exigua* [R] (Dwarf Spurge) – the

latter is much commoner in the county but is given rare plant register status in preference, due to its 'Near Threatened' national status.

Falcaria vulgaris (Longleaf). Seven mature plants were discovered by OL on 30 September 2013 in an arable field grass margin on shingle, dominated by *Helminthotheca echioides* (Bristly Oxtongue) and the odd *Malva moschata* (Musk-mallow), near Pigwell Farm, Lydd, TR 03214 20428. Always an introduced species, it was suspected to have arrived as part of a seed-mix in the field margins.

Fallopia sachalinensis (Giant Knotweed). A large patch at pedestrian crossing between end of Church Lane and sewage works, next to the Romney, Hythe & Dymchurch railway, TR 07187 24089, was reported for 22 June 2013 by OL. He states that it has been there for at least 15 years and gets hacked back regularly by way of railway maintenance, as it flops over onto the track.

Fatsia japonica (Fatsia). Apparently first recorded in East Kent by Eric Philp in 2006, this garden shrub is now the subject of a second record, by LR on 14 March 2013. One young seemingly unplanted specimen was seen growing from the base of a high wall at Faversham Reach, Faversham, TR 01743 61995. There was no sign of other plants nearby and nothing other than shrubs of *Mahonia* sp. on the other side of the wall, where the ground level was four feet higher.

***Forsythia* x *intermedia* (Forsythia).** For a plant which roots fairly readily from cuttings and therefore is capable of regenerating from garden waste, it is perhaps surprising that we appear to have no East Kent records for anything other than probably long established plantings. On 23 April 2013, however, OL noted two bushes in a *Populus alba* (White Poplar) thicket at Coast Drive, Greatstone Dunes, TR 08154 23222, presumed as being derived from garden material dumped some time ago. **This is a first record for vice county 15, East Kent.**

***Forsythia x intermedia*. Photo © Owen Leyshon, 23 April 2013**

Fumaria parviflora [R] (Fine-leaved Fumitory). On 29 August 2013, this nationally 'Vulnerable' fumitory was found by JLa at Westwell Down, TQ 9813 4808, in a wheat-field on one side of which sweet corn had been planted in July or early August, so disturbing the ground, which may have encouraged the fumitory. This is the same monad (but the best part of 100 metres distant from the site) as where recorded in Philp (2010), there given incorrectly as TQ94E. SB added some new finds with, on 29 July 2013, nine plants seen amongst thinly sown barley over chalk near Chartham, TR108541, on private farmland managed under the Higher Level Stewardship scheme benefiting notable arable plants. The next day at Ileden Farm, east of Kingston, TR 205 518, she saw two plants in the margin of a barley field.

Galium x *pomeranicum* (*G. verum* x *album*, the hybrid between Lady's and Hedge Bedstraws). A fine clump of this cream-flowered bedstraw was found away from both parents (although both were present in the general neighbourhood) on Cheriton Hill, near Folkestone, TR 207 380, by JA and LR on 22 July 2013. We have some recent records from the Sandwich area, but CO was able to add record of its presence in three additional monads on 16 July 2013: at TR3557, TR3558 and TR3658.

Gentianella anglica [R] (Early Gentian). The KBRG meeting on 11 June 2013 encountered two flowering plants and one probable non-flowering rosette at, on a steep slope at Dover, TR 31358 41025 and TR 31359 41015 with an associated rich chalk grassland flora. This is further west than previous records for the Dover area.

Geranium macrorrhizum (Rock Crane's-bill). This was recorded by OL on 13 July 2013 in three locations in the Greatstone/Dungeness area: two large(ish) clumps on the shingle at the end of Channon Road, TR 08031 21354; one big clump adjacent to the Romney, Hythe & Dymchurch Railway on the shingle near to the end of Roberts Road, TR 08034 22677; and a large clump on the shingle on the seaward side of The Parade, TR 08429 20996. It may be that the shingle especially suits a species which grows naturally on rocky ground in the Balkans, although it is accommodating in ordinary garden soils.

***Geranium* x *magnificum* (Purple Crane's-bill)**. One big clump was found by OL on 13 June 2013 adjacent to the Romney, Hythe & Dymchurch Railway on the shingle near to the end of Roberts Road, Greatstone, TR 08029 22705. Probably not really wanted on the Dungeness NNR, where it was growing, it is (although commonly cultivated in gardens and capable of being ejected from them) **a first record for vice county 15, East Kent.**

Geranium x magnificum. **Photo © Owen Leyshon, June 2013**

Glyceria maxima (Reed Sweet-grass).
The variegated form, var. *variegata*, was noted by OL on 20 June 2013 along a 20 metre stretch of private ditch between the railway line and arable fields at Greatstone, TR 07507 23431, with numerous plants presumably originating from material dumped from nearby gardens. It is not amongst the commonest cultivated variegated grasses, as it requires wet ground to grow at its best.

Hedera helix (Common Ivy). The ivy present in various places along the east side of the A274 between Headcorn and Biddenden attracted the attention of LR and JA on 9 June 2013 by virtue of the exceptionally deep lobed leaves. Such plants have received various cultivar names. Some of what was seen, in particular at TQ 84700 41947, strongly resembled cv. 'Ritterkreuz', which has an element of secondary lobing; other growth resembled cv. 'Caenwoodiana' (with which some authorities have equated cv. 'Pedata' and cv. 'Sagittifolia'). There is perhaps limited point in seeking to assign cultivar names to a range of variation in ivies found wild; but in practical terms, such plants are most conveniently regarded as 'bird's foot ivies', the long central lobe representing a projecting toe, accompanied by two spread laterals on each side (ignoring that birds have only four toes).

Helleborus orientalis (Lenten-rose). An established plant was seen by LR on 20 February 2013 on a bank by a footpath near Boughton Church, TR 048 586, appearing most likely a garden throw-out, but not known to occupants of nearest house.

Himantoglossum hircinum [R] (Lizard Orchid). A single flowering plant appeared in short grassland towards the top of the main bank of Queendown Warren KWT reserve, TQ 83114 63087, noted on 30 June 2013 by the warden, SD, who reports the last record for the reserve as being in 1966. The species has done well in 2013, the KWT count for the Sandwich area population being 4,725 plants, and the North Foreland population (DJ), counted from the pathways, 116 plants, a record number. These two populations probably represent two of the three best in the British Isles. A plant with three flowering spikes was also spotted by OL and SB at Hythe MOD Ranges, TR15377 33999 on 29 June 2013, a new location.

Hippuris vulgaris [R] (Mare's-tail). Records were made for five monads in 2013, of which two are not part of tetrads given in Philp (2010); indeed that publication gives none for south east Kent. The KBRG meeting at Fairfield on 4 August 2013 found it in a dyke running north-south in the grazing marshes, in several places between TQ 9704 2718 and Brack pumping station (TQ 9695 2740), and extending into the dyke system beyond.

Hyacinthus orientalis (Hyacinth). OL on 13 April 2013 noted this species on the shingle behind the houses of Merrit Road, (part of the Dungeness NNR), TR 07992 22775, clearly unplanted and derived originally from fly-tipped garden waste material.

Hyoscyamus niger [R] (Henbane). Two plants were discovered by SB on 20 August 2013 south of Ruckinge, TR 0289 3248, growing (unusually) as field weeds in an unkempt flax field. She also saw on 29 July 2013 a single plant on an arable field margin by a public footpath south of Shalmsford Street, TR 1019 5377.

Hypochaeris glabra [R] (Smooth Cat's-ear). For a species believed to have been gone from Kent between 1954 and 1982, we now have an increasing accumulation of records, with a question as to whether this is a result of any expansion of range or population size, or whether we have been fortunate in spotting the plants, which are difficult to find. On 11 June 2013, OL noted around 40 plants along two old shingle ridges adjacent to the approach road to Lydd, TR 05071 21845. It is understood that this is a site found by Eric Philp and that a few plants were seen there about ten years ago. OL on 13 June 2013 also came across around 60 plants along old shingle ridges near to a footpath adjacent to a conifer plantation and near to populations found in August 2012 within the Lydd MOD Ranges, TR 03869 19599.

***Isolepis cernua*. Photo © Bob Gomes, 5 September 2013**

Isolepis cernua [R] (Slender Club-rush). Reported in Philp (2010) as a single plant found at Worth Minnis in 2006 (and also encountered by RG in 2011 as a single tussock), the presence of this species was investigated by RG, LR and GK on 5 September 2013. It was found in some quantity along an internal ditch system in fields south west of Great Wood, mostly in TR3455, but extending also into TR3456. The fields lack public access and are cattle-grazed, the Club-rush favouring muddy tussocks where cattle have access to both sides of the ditches and the margins have been poached. Part of the system included steeper-sided banks limiting cattle access, and it was evident that the Club-rush did not fare so well there. The location remains the only one where the species has been found in Kent. The accompanying photograph shows the smooth nuts, which are diagnostic for distinguishing from *Isolepis setacea* (Bristle Club-rush), which has ridged nuts.

***Juncus ranarius* (Frog Rush)**. A small specimen exists at the National Museum of Wales, apparently collected by BW (who died in 1986, and was in the 1940s a Surrey-based botanist) in 1947 at Sandwich Bay. It has, however, only recently been identified as probably this species by MW and confirmed as such by TR. So it is being added to the county 'probably extinct' plant list, albeit that it is capable of being overlooked for *Juncus bufonius* (Toad Rush); and the find is treated as **the first record for vice county 15, East Kent.**

Kniphofia x *praecox* (Greater Red-hot-poker). A complex hortal hybrid, recognised by well-exserted stamens when in flower, found on 20 June 2013 as an established clump in rough vegetation on a streamside bank next to Warden Bay Road, Warden, Sheppey, TR 0242 7130, by JA, LR and OL. Also recorded on 17 July 2013 by the KBRG meeting at St Margaret's at Cliffe, where a large patch was seen at TR 35132 42791; and on 15 October 2013 by GK and LR north of East Hall Wood, Murston, TQ9265.

***Lactuca saligna* and habitat. Photo © Bob Gomes, 27 August 2013.**

Lactuca saligna [R] (Least Lettuce).
An attempt was made to update knowledge of the county status of this nationally 'Endangered' species, and it transpires that in East and West Kent, we retain significant populations, in spite of Philp (2010) giving only one (West Kent) site, with doubt cast on its status.
On 27 August 2013 RG, LR and GK explored the Sheppey coast south east of the Sheppey Crossing, counting 1028 plants, with individuals ranging from 3cm to 70cm high. The colony extended along about 190 metres of shoreline, scattered from TQ 92229 69095 to

TQ 92434 69116. Plants were growing on the coastal (Swale) side of the sea wall, facing south and south-west. None was seen on the landward side, where vegetation was probably too dense. The lower parts of the seawall slope were stone, covered with concrete; the upper parts were vegetated London Clay. Most plants were centred at the junction of the clay upper slope with the lower concrete batter, and in cracks in the concrete. Some of the plants in the concrete descended well down the slope towards the area of marine influence. The species was also growing scattered on the upper clay slopes which were only lightly vegetated and where there was some cracking and crumbling - partly due to the angle of slope and the drying out of the clay, but also due to cattle-trampling. The count was made before 11 a.m., after which the flowers tend to close and plants are harder to spot.

Lathyrus aphaca [R] (Yellow Vetchling). Surprisingly absent from East Kent in Philp (2010), this nationally 'Vulnerable' species was recorded in several places near the east coast in Philp (1982); but there appear to be no previous records for hectad TR1667, where CO noted it on 4 August 2013. It had gone over, with dead leaves only, on the edge of the pavement and fence-line by the entrance to Herne Bay High School, TR 16856701, but had also been seen by CO in 2012.

Lathyrus japonicus [R] (Sea Pea). CO has filled in a distributional gap along the north coast, west of Reculver, with several sightings. On 25 June 2013 at Swalecliffe he found a 2 x 2 metres patch in full flower on the middle beach at c.TR 145 677; and on the same day a 1 x 1 metre patch on the beach at Herne Bay, TR 1615 6825. At Beltinge, c.TR 198 686, in the eastern of three bays containing sea defence boulders he noted a patch extending over 1 x 1 metre, sparse and well eaten but apparently including six plantlets, whereas when first found by him in 2009 there were only one or two small plants.

[***Linaria maroccana* (Annual Toadflax).** The 2009 record for this taxon (det. EGP) from Lade, TR 085 204, published in Kent Botany 2011 as a **first vc15 record**, is withdrawn. See below.]

Linaria x *sepium* (*L. repens* x *vulgaris*, the hybrid between Pale and Common Toadflaxes). The shingle population of Toadflax opposite 123-124 Coast Drive, Lade mentioned above was viewed by BS in 2012, who suggested *L.* x *sepium* as its identity, which is entirely persuasive, especially as over the 2012/13 winter, OL verified that the plants were perennial (*Linaria maroccana* is an annual). There is a range of variation within the population suggesting a hybrid swarm (the cross is fertile); and the mystery remaining is as regards the presumed former presence of *L. repens*, which is very rare in Kent. This is the first East Kent record for the hybrid since 1948.

Lolium x *boucheanum* (*L. perenne* x *multiflorum*, the hybrid between Perennial and Italian Rye-grasses). Probably widespread as a sown agricultural grass, but not easy to identify, it was encountered by the KBRG meeting near Dover, TR3442, on 17 July 2013.

Mahonia japonica. This species, not native in Japan (despite its name), is much used in amenity plantings as an impressive ornamental shrub requiring little maintenance. Whilst it often produces berries, there are few UK records of it as an escape, and none previously for East Kent. On 29 November 2013, LR and SB found a large established shrub (det. SB) in a disused chalk pit at Badlesmere, TR 00300 54715, considered to be a garden throw-out rather than deliberately planted or self-sown. **This is a first record for vc15, East Kent**.

Medicago polymorpha [R] (Toothed Medick). This uncommon coastal medick was seen by LR on the shingle at Seasalter, TR 07517 65035, on 21 March 2013, being identified by the old fruits. It was confirmed on 27 June 2013 and comprised a 4 x 5 metres patch growing intermixed with *Medicago arabica* (Spotted Medick), *Medicago lupulina* (Black Medick) and *Trifolium scabrum* (Rough Clover). One plant was also seen by CO on 21 May 2013, in a grassy car-park behind the beach at Sandwich Bay, c. TR 357 591; and by SB on 4 June 2013 on the broken tarmac and gravel of an old barracks area at Dover, TR33736 42236.

Mentha x *verticillata* (Whorled Mint, *M. aquatica* x *arvensis*). Recorded by the KBRG meeting on 25 July 2013 at Hemsted Forest, TQ8336; and also encountered by SB on 17 October 2013 in a ride at Mintching Wood, near Milstead, TQ9158, in the absence of the parents.

Misopates orontium [R] (Weasel's-snout). A nationally 'Vulnerable' species, rare in Kent, 40 to 50 plants were recorded by SB on 29 July 2013 near Shalmsford Street, mostly at TR 107 534 in an untreated corner of an

arable field of light soil over chalk alongside a public footpath across private farmland. There were also further scattered plants along the margin of the field which was being operated under a Higher Level Stewardship scheme to encourage notable arable species.

Myosotis secunda [R] (Creeping Forget-me-not). No previous Gibbin's Brook records could be traced for this species, scarce in Kent, (other than a BSBI record for the same hectad without any supporting detail); but it is an appropriate location, and the KBRG meeting of 30 June found a small patch in the bog south of the road crossing Gibbin's Brook, at TR 11594 38586, and a larger one at c. TR 1158 3851.

Nardus stricta [R] (Mat-grass). Feared lost to Hothfield (Philp, 2010), it was rediscovered by SB with a botany class on 9 July 2013, when they saw scattered mats of plants on a path of bare peat from TQ 96905 45857 to a cross-path at TQ 96884 45838, continuing for a further 30 metres of path to TQ96912 45816.

Neotinea ustulata. **Photo © Lliam Rooney, 11 June 2013**

Neotinea ustulata [R] (Burnt Orchid). This orchid had not been seen in Kent since 2009, and searches of most known localities in 2011 had failed, so it is gratifying to know that it is still present. A single flowering plant was discovered by A&MT on 10 June 2013 at the Lydden reserve, TR 27659 45469, and visited the next day by a KBRG meeting. It was growing on a south-facing slope, mostly of *Brachypodium pinnatum* agg. (Tor-grass) with an associated good chalk grassland flora. A second flowering plant at TR 2762 4548 (about 45 metres from the previously recorded plant) was found by AG on 14 June 2013.

Neottia nidus-avis [R] (Bird's-nest Orchid). Twelve 2013 records for East Kent were received, from Larkey Valley Wood (AG), Oxney Wood (AG), Fall Wood (AG), Fryarne Wood (AG), Barfreston (SB), King's Acre Wood (JP) and Covet Wood (DJ and AG); but the most spectacular was SB's sighting on 10 June 2013 of an estimated 250 flowering spikes at TR 234 502 at the north eastern end of a triangle of woodland, where the North Downs Way passes through the wood. This large scattered population under beech was accompanied by abundant *Cephalanthera damasonium* (White Helleborine). Also of interest is AG's find at Trenleypark Wood, TR 1923 5898, on 4 July 2013 in the presence of a calcicole flora reflecting that the underlying strata in this part of the wood are calcareous clays, rather than the acidic sands which are the substrate in most of the wood.

Oenothera x *fallax* (*O. glazioviana* x *biennis*, Intermediate Evening-primrose). A stable hybrid which does not require the parents to be present, it was seen by CO on 5 October 2013 by the west bank of Milton Creek, TQ9164.

Opuntia phaeacantha. **Photo © Lliam Rooney, 19 August 2013**

***Opuntia phaeacantha* Englem. 'Albispina' (Desert Prickly Pear).**

An extraordinary discovery by AG, OL and LR on 24 July 2013, of two plants growing wild on a steep, sandy embankment in the vicinity of the junction of the A20 and M20 near Eyhorne Street (TQ8254), with no houses within 400 metres. The plants were on a bare, south-facing slope sheltered from north and east winds and so benefiting from sun and a free-draining substrate. It is a location long known for *Orobanche rapum-genistae* (Greater Broomrape). No other hortal species were noted,

the embankment being dominated by *Ulex europaeus* (Gorse). The cactus was named by Tony Roberts of The British Cactus & Succulent Plant Society, who knew the species from cultivating it outdoors in Kent, where it has survived for about seven years, being frost hardy and producing the occasional adventitious seedling. Accordingly, it is not impossible that the species could escape from cultivation as bird sown where found. This is a **first vice county 15 record**, new to Kent and apparently to the British Isles. Whilst *Opuntia* spp. may be found in southern Europe, there are apparently no naturalized cactus records in Belgium, Denmark, Finland, Hungary, Ireland, Luxembourg, Netherlands, Norway, Poland, Slovakia, Slovenia, Sweden and, until now, the UK. There is, however, a recorded occurrence of this species on a rock in eastern Austria, surviving cold central European winters and setting viable seed. A fuller account of this Kent find is given in Gay et al. (2014).

Orchis purpurea [R] (Lady Orchid). Twenty-three 2013 Kent records were received, mainly from East Kent. These included the very rare straw-hooded form of *O. purpurea* var. *albiflora* at Yockletts, TR 1270 4800, a handsome specimen, 52cm tall, seen by DJ on 5 June 2013. Alas, when the recorder returned on 7 June, all that remained was a deep (and deeply disappointing) hole.

Orobanche caryophyllacea [R] (Bedstraw Broomrape). A single plant was noted by SB on 24 June 2013 at Creteway Down, Folkestone, TR 22999 38031, on a south-facing chalk grassland slope beside a public footpath. This is in a different tetrad from that given in Philp (2010), but we lack recent sightings in this area to show carry-forward from the many historic records.

Papaver argemone [R] (Prickly Poppy). Treated as nationally 'Vulnerable', this poppy was found in five monads without records in Philp (2010), but all broadly within the distribution pattern shown by that work. Finds were at East Studdal (arable margin at TR 327 495, SB, 26 July 2013); Walmer (cornfield margin at TR 365 494, SB, 26 July 2013); Wouldham (arable margin in TQ7263, CS, 28 July 2013); Chartham (arable margin at TR 110 538, SB, 29 July 2013): and Shalmsford Street (wheat-field margin at TR 107 539, SB, 29 July 2013).

Parapholis incurva [R] (Curved Hard-grass). On 25 May 2013, SB recorded this grass growing along the base of the concrete sea wall at Broadstairs, TR 39797 67151, within reach of high tide spray, and also along a chalk cliff foot at TR 39800 67162.

Phlomis fruticosa (Jerusalem Sage). The KBRG meeting on 13 August 2013 at Conyer found four plants self-seeded from garden throw-outs on waste ground at TQ9615 6491.

Picea abies (Norway Spruce). A young tree was seen by LR, ML and SC on 29 March 2013 by a footpath through Perry Wood, Selling, TR0455; nine saplings were noted by LR on 7 April 2013 at Court Wood, Oversland, TR 0711 5311; and seedlings were seen by SP and DG on 14 April 2013 at Westfield Sole, TQ7761.

Pinus nigra subsp. *nigra* (Austrian Pine). A widely planted tree, but with seedlings seldom recorded in Kent. Both seedlings and saplings, self-sown, were recorded by LR on 27 March 2013, dotted around the bank on Palmars Cross Hill, Rough Common, TR1258.

Plantago major subsp. *intermedia* [R] (Greater Plantain). Nine East Kent records were furnished for 2013, mostly along the south side of Sheppey, where on 27 August 2013 RG, LR and GK saw it in TQ9267, TQ9268, and TQ9269; and, further west, on 14 September 2013 SB came across it in TQ9369, TQ9567, TQ9667 and TQ9767. Its characteristic habitat was on low saline ground subject to inundation, so it is not surprising that in a couple of cases it was accompanied by *Chenopodium chenopodioides* (Saltmarsh Goosefoot) and *C. glaucum* (Oak-leaved Goosefoot).

Poa bulbosa [R] (Bulbous Meadow-grass). Many thousands of small plants were seen by PDS and KT on 5 October 2013 on the open broken highway verge, north of the Eastchurch main road roundabout joining Lower Road and High Street, c. TQ 9848 7147. It was especially frequent around a raised manhole cover. This is a first record for Sheppey, and suggests that it is worth looking at inland roadsides generally for this species, where the soil is of sand or other fine particles.

Poa infirma [R] (Early Meadow-grass). Our understanding of the status of this plant over Kent as a whole continues to expand, and both East and West Kent records are considered here. More and more occurrences are being noted: there were 29 reports for 2013, bringing our total for 2010-13 up to 152 records. There is

increasing evidence of an extended flowering period – 'Early' Meadow-grass may be a misnomer. The first reported sighting in the year was on 5 March (by SB at Highbourne, TQ9152); but the cold winter and spring will have delayed flowering (the mild winter of 2013/14 has resulted in mid-January flowering). The latest sightings were on 20 August (by MB at Shoreham Station forecourt, TQ5261); on 11 September (by GK at Sevenoaks, TQ5254); and on 23 September (by GK and SK at Rochester, vc15, TQ7468). So, the species is beginning to show the same potential as *Poa annua* (Annual Meadow-grass) for all year round flowering. MB also reports (e.g. from Conyer, TQ9664, on 19 April 2013) plants which appear fairly intermediate between the species, although evidence of hybridity (e.g. sterility) has yet to be found. A close approach between the species is unsurprising, given the plasticity of *P. annua* and its probable evolutionary origins from a hybrid of *P. infirma* with a non-British species, *P. supina*. For recording purposes, however, only plants with anthers less than 0.5mm have been taken as *P. infirma*. A caryopsis measuring less than 2mm also seems to be satisfactory for determining *P. infirma*; but not all *Poa* plants are necessarily found in nameable condition (per MB). Whilst most of our records are coastal, the grass continues to turn up inland, e.g. at Sevenoaks, Shoreham, Tonbridge and Woodchurch. The favoured habitats remain pavements, roadsides and car parks – there seems a strong possibility that much spread is by seed on vehicle tyres. A new habitat, however, appears to be that remarked by LR at Boughton under Blean, TR0559, on 30 April 2013, when it was found in great quantity well established as the dominant species on the bare soil under trees in an orchard. There may be a relationship with the herbicide regime in such locations, providing a window of the absence of competition. This could also be relevant to many urban sites by road kerbs or street furniture.

Polycarpon tetraphyllum [R] (Four-leaved Allseed). After the first Kent discovery in 2012, in Lydd, this has also been found there in Poplar Lane (TR 04598 21270, by SB and AG on 28 August 2013). However, it is now being seen more extensively. RMB came across it on 14 September 2013 at Sheerness, at the foot of the dockyard wall in the east part of High Street, TQ 913 751. The species was also present at Dover, TR3241, where CO on 8 October 2013 found a large plant at the western end of East Cliff, near Eastern Docks, low on a north-facing wall, with two smaller plants further east down the road on the opposite side by some bins.

Polygonatum multiflorum (Solomon's-seal). Apparently a declining species in Kent, it was on 25 May 2013 found by AG to be abundant on the southern edge of Asholt Wood (private land leased to the MOD), TR 178 377.

Polypogon viridis (Water Bent). This grass continues to be found over more of Kent as it spreads, and there are now street (or similar) weed records for 2013 from Boughton under Blean (pub car park, TR 055 595, seen by LR on 31 October); from Canterbury (Broad Street, TR 152 580, seen by LR on 8; Rheims Way, TR 141 580, seen by LR on 2 October; and waste ground at TR1457, seen by EB on 17 August); from Faversham (Newton Road, TR 168 611, seen by LR on 12 July); from Littlestone (school grounds and derelict land, TR0724 and TR0624, seen by OL on 25 July); and from Walmer (TR 377 515, seen by SB on 6 August).

Populus x canadensis (Hybrid Black-poplar). Normally this tree is found planted, although it may be seen 'wild' as a result of rooted twigs. On 12 May 2013, however, LR found an apparently self-sown tree by an arable margin at Brickfield Lane, Boughton under Blean, TR 0595 5855. This is possible where, as here, a mixture of male and female clones was present in the vicinity (different cultivars each tend to be of a particular sex); but a complicating factor was the presence of a tree bearing both male and female flowers. The potential for this is not generally recognised, although the *eFlora of North America* in its general account of *Populus* does refer to the existence of rare individuals in the genus with mixed catkins or hermaphroditic flowers, which may also carry other anomalies.

Potamogeton friesii [R] (Flat-stalked Pondweed). Nationally 'Near Threatened', this pondweed was found by AL and JM on 10 July 2013 (conf. CP) at Stodmarsh, TR 2314 6198, within its core Kent area, but in a tetrad given in Philp (1982) and not in Philp (2010).

Potentilla recta (Sulphur Cinquefoil). A readily seeding garden plant, one specimen was seen at the back of the houses of Coast Drive, Lydd on sea, TR 08913 19060 at a KFC meeting on 22 June 2013 (per OL).

Prunus x *fruticans* (*P. domestica* x *spinosa*, the hybrid between Wild Plum and Blackthorn). Trees were recorded by RG, LR and GK at Great Wood, Worth, TR3456 on 5 September 2013, the fruits being smaller than those of *P. domestica,* but possessing its flattened stones.

Pseudosasa japonica (Arrow Bamboo). The most widely planted bamboo in the UK, it is not an easy plant to dispose of, but a large clump by a pool in the northern part of Perry Wood, Selling, at TR 04509 55853, recorded by LR on 20 March 2013 had the appearance of a garden throw-out. It was established and spreading, and another small clump was noted further along the nearby footpath.

Puccinellia fasciculata [R] (Borrer's Saltmarsh-grass). We have several 2013 records for this nationally 'Vulnerable' species, generally duplicating locations in Philp (2010), but additionally it was seen on 27 August 2013 by RG, LR and GK scattered along the footway of Kingsferry Bridge between the mainland and Sheppey.

Pulmonaria officinalis (Lungwort). Escaped garden plants by Garden Close, Rough Common, TR1258, were observed by LR on 27 March 2013 spreading into the grass verge; and with JA on 6 April 2013 several more plants were recorded on a roadside bank at Chilham, TR0652.

Ranunculus aquatilis (Common Water-crowfoot). This not-so-common (in terms of Kent) Water-crowfoot was recorded by SP and DG on 5 July 2013 near Burham, TQ7162.

Ranunculus parviflorus [R] (Small-flowered Buttercup). A species of disturbed ground with low competition, plants were found by SB and OL on 29 June 2013 spread along 30 metres of shingle within the secured MOD ranges at Hythe, TR 150 810, where a pipe had been recently buried.

Ranunculus peltatus [R] (Pond Water-crowfoot). A site known to CO comprised a pond at Herne Common, TR 172 652, which some time before 2010 was covered with flowers of this species, the petals bearing pear-shaped nectar-pits; but when revisited by him on 31 May 2013 only five inaccessible flowers were visible there - it seems fair to assume that the same species is involved.

Rosmarinus officinalis (Rosemary). One shrub amongst long grasses by Oare Creek, TR 00847 62952, was recorded by LR on 27 April 2013, well away from houses and seemingly unplanted.

Rubus laciniatus (Cut-leaved Blackberry). A bramble which is not so often cultivated now, but still gets around; noted by LR as a small clump at Hothfield Common, TQ 96941 45846, on 5 July 2013; also, a single plant was seen by the KBRG meeting on 2 July 2013 at the old hoverport site, Pegwell Bay, TR 35146 64242.

Rumex maritimus [R] (Golden Dock). First found on Sheppey in 2012, it was located in two further monads by RG, LR and GK on 27 August 2013, between Kingsferry and Elmley, on the margin of a waterbody at the edge of grazing marshes at TQ 92495 68856 and in grassland between the seawall and a parallel dyke at TQ 924 690.

Rumex x abortivus (*R. conglomeratus* x *obtusifolius*, the hybrid between Clustered and Broad-leaved Docks). One plant was found by GK and SK on 31 August 2013 in rough grazing near the Medway at Wouldham Marshes, TQ 707 638, the parents being present.

Rumex x fallacinus.
Photos © Lliam Rooney, 27 August 2013

Rumex x fallacinus (*R. crispus* x *maritimus*, the hybrid between Curled and Golden Docks). A very rare cross with scarcely any records in the British Isles, first confirmed from Kent (in 1995) albeit previously reported from

Essex, two plants were found on 27 August 2013 by RG, LR and GK north of Iwade: one at the margin of a brackish lagoon, TQ 88774 69353; and the other nearby at TQ 88749 69375. The parents were present in the vicinity.

Rumex x *lousleyi* (*R. cristatus* x *obtusifolius*, the hybrid between Greek and Broad-leaved Docks). One plant was recorded by PG, AG, LR and GK on 11 July 2013 near a reservoir off Crete Road West, Folkestone Downs, TR 21379 38182, in coarse vegetation with both parents in the vicinity.

Rumex x *sagorskii* (*R. crispus* x s*anguineus,* the hybrid between Curled and Wood Docks). This cross was found with the parents, and other docks, on disturbed ground around a cattle trough at Folkestone Downs, TR 2061 3817 by LR and GK on 11 June 2013.

Rumex x *schulzei* (*R. crispus* x *conglomeratus*, the hybrid between Curled and Clustered Docks). This cross was found by GK and SK on 18 August 2013 in grassland with the parents near Eccles, TQ 7215 6048; by RG, LR and GK on 27 August 2013 near a brackish waterbody north of Iwade, TQ 98749 69376, and in rough grassland near Elmley Hills, Sheppey, TQ960679, where the parent docks were the only ones in the general vicinity.

Ruppia cirrhosa [R] (Spiral Tasselweed). The sightings listed in Kent Botany 2012, which substantially enlarged the limited known distribution given in Philp (2010), were further extended through more records at Lydd Ranges in an additional monad. It was seen by OL, TI and GK in shallow saline lagoons at TR 00761 17944 and TR 00882 17972.

Ruppia maritima (Beaked Tasselweed). This species was reported in 2013 from locations given in Philp (2010), but this work does not show any finds along the north coast east of Sheppey, whereas Philp (1982) showed a series of tetrads there. It may well be waiting there to be found, and CO reported, a little further east near Reculver, TR2369, the tasselweed growing in a dyke behind the seawall just to the west of a private gate onto an oyster farm, with fruits showing well on 12 October 2013.

Salicornia pusilla x *ramosissima* (Hybrid Glasswort). Several plants were found by LR and GK on 15 October 2013 in the upper saltmarsh by Milton Creek at TQ 9203 6599 and one at TQ 9205 6598. All bore flowers in clusters of one, two or three, reflecting intermediacy between the single flowers of *S. pusilla* [R] and the groups of three characteristic of *S. ramosissima*. Single flowers were in some cases present on spikes above and below multiple flowers, which ruled out any possibility that upper single flowers might just be slow to develop a full complement of three, rather than demonstrating hybridity. The find was unusual because *S. ramosissima* was present in the general vicinity, but neither *S. pusilla* nor suitable habitat for it was seen. The likelihood is such suitable habitat has disappeared, leaving the hybrid behind, or that seed has drifted from elsewhere; but in either case, it is probable that the plants found were not first generation hybrids. Dalby (1975) has said that when open-pollinated in the field, putative hybrids set fertile seed, so a hybrid population could be self-sustaining.

***Salix* x *multinervis* (*S. aurita* x *cinerea*, the hybrid between Eared and Grey Willows).** This cross was found by the KBRG meeting of 25 July 2013 at Hemsted Forest, TQ 822 364, in what is very much *S. aurita* territory and a hybrid should have been no surprise, looking somewhat like *S. cinerea* but with twisted leaves. What is a surprise is that there appears to have been no formal record before and this is to be taken as **the first record for vice county 15, East Kent.**

Sasa palmata (Broad-leaved Bamboo). A very large established and spreading clump of this species, listed by the Royal Horticultural Society as a 'garden thug', was recorded by LR covering about 15 x 25 metres of a shaded stream-side bank east of Upper Harbledown, TR 12282 58157. It was taken to have originated as a garden throw-out, being present in a garden opposite.

Scandix pecten-veneris [R] (Shepherd's-needle). Nationally a 'Critically Endangered' plant, this species now carries seven county records from 2010 onwards after the addition by SB on 26 July 2013 of two plants near Walmer, TR 365 495, in a wide corn field margin managed under a Higher Level Stewardship scheme.

***Scilla forbesii* (Glory-of-the-snow).** Bearing bright blue flowers with white eyes, several plants were observed by OL on 17 April 2013 growing as garden escapes or rejects on shingle at the end of Derville Road, Greatstone, TR 08051 21301. A claimed occurrence elsewhere in 2012 could not be verified, so this find would appear to stand as **the first record for vice county 15, East Kent.**

***Scilla forbesii*. Photo © Owen Leyshon, 17 April 2013.**

Senecio inaequidens (Narrow-leaved Ragwort). There were 16 reports of this species across the county in 2013, and it is becoming increasingly widespread. The accompanying distribution map for 2010-2013 demonstrates this; and, while there may be some direct arrivals from the Continent for easternmost records, there are concentrations which show spread from two likely points of introduction: one from Rainham in Essex and the other from around Sheerness. In Philp (1982), only one tetrad record is given for the entire county.

Senecio inaequidens distribution 2010-2013.

Setaria viridis (Green Bristle-grass). This introduced annual was noted by BL at Lydd, at the base of a low wall in Eastern Road, TR 04411 20992, and in a similar location at Ness Road, TR 04527 20953.

Silene noctiflora [R] (Night-flowering Catchfly). What had appeared to be a catastrophic decline for this nationally 'Vulnerable' species, from 14 tetrads across the county in Philp (1982) to one in Philp (2010), is not so sweeping after all. In 2013, there were three records in East Kent, although only one corresponds to a Philp (1982) tetrad. On 17 July 2013, the KBRG meeting at St Margaret's at Cliffe recorded a single plant in a National Trust arable reversion field at TR 35862 43206; on 31 July 2013, SB found many thousands of plants in a set-aside arable headland area of 40 x 50 metres at Church Farm, Barfreston, TR 262 508, in private ownership but being managed under a Higher Level Stewardship scheme; and on 15 September 2013, RM saw several plants near Doddington, TQ 9432 5712, in an arable margin on chalk.

Silybum marianum (Milk Thistle). Twenty-four plants were counted by LR on a footpath leading to the Creek between Faversham and Oare, from TR 01918 62144 to TR 01975 62053, on 14 March 2013.

Sium latifolium [R] (Greater Water-parsnip). The Kent distribution of this umbellifer of ditches is restricted to ditch-filled Romney Marsh, and we received eleven 2013 records, mostly relating to tetrads covered by Philp (2010) or to monads already recorded since 2010. However, there were additional sightings by SB on 12 August 2013 south of Kenardington (three clumps of plants in a ditch on grazing marshes at TQ 9797 3208) and on 20 August 2013 on the north bank of the Royal Military Canal (three large patches at TR 0379 3381 and TR 0375 3379, plus others at TR 0320 3361 and TR 0365 3379).

Spiranthes spiralis [R] (Autumn Lady's-tresses). 2013 was a better year for this orchid than the two preceding years – perhaps helped by the prolonged summer – and 18 records were forthcoming, all (bar one) from East Kent. Perhaps the most interesting of these was a rare appearance in the Weald, well away from chalk. At Benenden, SB on 11 September 2013 counted 344 flowering spikes in scattered colonies in close mown grassland of hospital grounds particularly at TQ 835 353 & TQ 834 351. Philp (2010) shows little in the way of

Wealden records, whereas Philp (1982) has several, including for this tetrad, so there is a question as to whether we have a real decline off the chalk or more to be re-found.

Stachys arvensis [R] (Field Woundwort). A nationally 'Near Threatened' arable weed, for which we have few very recent records, this was seen by SB at Stubb's Cross, TQ9838, on 13 May 2013.

Stachys x *ambigua* (Hybrid Woundwort (*S. palustris* x *sylvatica*)). The KBRG meeting on 2 July 2013 found a large patch at TR 34058 63207, near Cliffsend. We have very few East Kent records; it may or may not be coincidence that the same cross was found in 2012 by SB not far away, in TR3362.

Suaeda vera [R] (Shrubby Sea-blite). The Reculver plant (TR 2227 6919) was washed away by the storm of 10 October 2013, CO reports.

Symphytum x *hidcotense* 'Hidcote Blue' (Hidcote Comfrey). A patch of this triple hybrid hortal comfrey was seen by LR and GK on 7 May 2013 near Crundale, TR 0727 4859, measuring about 3 x 4 metres and spreading through roadside woodland, down a steep bank. It was not near houses, and was likely to be of dumped origin. On 27 May 2013, SB also saw a large patch at the edge of Olantigh Road, Wye, TR 0565 4710.

Tamarix gallica (Tamarisk). A small plant was recorded by GK and SK on 23 September 2013 at the base of a wall alongside the riverside path at Rochester, TQ 73831 68290, the parent bushes being in the nearby gardens of Hathaway Court. It was also found independently by SP and DG.

Trifolium glomeratum [R] (Clustered Clover). Absent from this part of Kent in Philp (2010), albeit that a TR13 record exists in Philp (1982), this species was found by OL and SB growing as a patch of plants on a sandy bank on MOD land at Hythe Ranges, TR 15099 34142, with *Cerastium* spp. (Mouse-ears), *Trifolium scabrum* (Rough Clover) and *Trisetum flavescens* (Yellow Oat-grass). Another south east Kent find by SB was near Sandgate on 1 July 2013, where plants were densely covering two 1 x 1 metre squares at TR 19439 35229 and TR 19434 35228, on a closely mown sandy slope below a Martello tower. CO also reported a site near works at Sturry, on sandy grassland north of loading bays, TR 182 605, where frequent on 22 May 2013 and known since 2009.

Triglochin palustris [R] (Marsh Arrowgrass). Down to four Kent tetrads in Philp (2010), this species should still be present in other locations; and RG, LR and GK found it on the Seasalter Levels on 13 June 2013 at the wet edge of cattle-trampled dyke margin vegetation, TR0764. Then a KFC meeting on 20 July 2013 met with it in a ditch on the Levels at TR 08128 63847; and BB came across it in late August 2013 in the cattle-trampled mud of three ditches, being rare at TR 08075 64045 and frequent at TR 08115 63821. So the Seasalter Levels could be quite an important area for this species in Kent, readily overlooked but apparently without previous record here, although the BSBI database holds a couple of unlocalised records for the same hectad. Other locations for this species were at Gibbin's Brook, where the KBRG meeting of 30 June 2013 saw a couple of spikes in the northern bog at TR1138; and at Faversham Creek, where a KFC meeting on 11 August 2013 discovered one flowering plant at TR 02753 62554 and three flowering plants at TR 02979 62812, along the marshy grazed edge of a large dyke lined with *Phragmites australis* (Common Reed) and running parallel to the seawall – about 5km west of the Seasalter Levels.

Typha x *glauca* (*T. angustifolia* x *latifolia*, the hybrid between Bulrush and Lesser Bulrush). A putative hybrid was found with both parents at the RSPB reserve, Seasalter, TR0860 6400, in the course of a KFC meeting on 20 July 2013.

Valerianella dentata [R] var. *eriosperma* (Narrow-fruited Cornsalad). This very rare variety (also treated as a subspecies, subsp. *eriosperma* (Wallr.) Holub) is characterised by having bristly fruits with rather larger calyx teeth than normal for *V. dentata*, although considerably smaller and more unequal than the teeth of *V. eriocarpa* (Hairy-fruited Cornsalad), which form a crown at the apex. It might easily, however, be taken for *V. eriocarpa*. On 28 July 2013, CS in the course of an arable plant survey found 50-100 plants with a couple of outliers on the margin of private farmland near Wouldham, TQ7263, alongside a chalky wheat-field. The

variety was identified by PW from fruits gathered subsequently by GK. Normal *V. dentata* was present nearby.

Valerianella dentata var. eriosperma. **Photo of flowers © Cath Shellswell, 28 July 2013. Photo of seeds © Lliam Rooney, August 2013.**

Verbascum speciosum (Hungarian Mullein). One large plant was noted at Dungeness, TR 09548 17919, by OL on 9 July 2013 on shingle near fishing boats amongst an old dumped patch of garden material - basal rosettes of this biennial were first noticed the year before.

Verbascum virgatum (Twiggy Mullein). A casual plant was recorded by LR and SB by a footpath at Badlesmere, TR 008 541, on 29 November 2013.

Verbena bonariensis (Argentinian Vervain). A large straggly plant was seen by JA on 8 August 2013 growing on the base of the sea wall at Minnis Bay, TR 274 695.

***Viburnum x rhytidophylloides* (*V. lantana* x *rhytidophyllum*, Hybrid Wayfaring-tree).** On 14 March 2013, LR recorded five saplings of varying sizes in a thicket on a bank above a flint wall bounding St. Augustine's Abbey grounds, Canterbury, TR 1553 5767. This is a fairly inaccessible area, with no indication that they could be part of any planting. The natural assumption would be that they are bird-sown; but the problem with this hypothesis, as with any find of this hybrid, is that (as with many Viburnums) this taxon is considered to be self-sterile, and would require pollination by a different cultivar of the same hybrid, or by one of the parent species. We do not have evidence of the co-location of such Viburnums in the immediate vicinity, although presumed planted and well established *V.* x *rhytidophylloides* is present elsewhere in the Abbey grounds; but any fertile berries transported by bird do not need to have had nearby origins. However, given the circumstances of the habitat and appearance of the plants, it is proposed **to treat this record as a first one for East Kent, vice county 15**.

Vicia lutea [R] (Yellow-vetch). Philp (2010) gives its Kent native range as severely contracted at Dungeness/Lydd from the six tetrads given there in Philp (1982), but the decline may be overstated. At any rate, OL on 2 June 2013 found a couple of patches on the west side of Galloways Road (restricted access), Lydd MOD Ranges, at TR 04068 17802 and at TR 04068 17867.

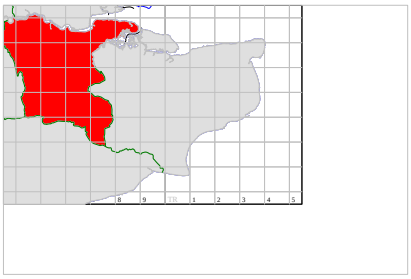
Vinca major var. *oxyloba* (Greater Periwinkle). This variety, with narrow pointed corolla-lobes producing an overall star-shaped flower, was seen by LR on 27 March 2013 growing by a stream by Roman Road, Upper Harbledown, TR 11263 58409.

Viola x bavarica (*V. reichenbachiana x riviniana*, the hybrid between Early and Common Dog-violets). KFC meetings (aided by identifications by BWo) recognised this cross at Horish Wood, TQ 78811 57555, on 11 May 2013 where there were three or four plants, with plenty of *V. riviniana*, but no 'good' *V. reichenbachiana*; and at Asholt Wood on 3 November 2013 where there was one plant in a coppice at TR 17571 38042. The latter plant attracted attention through the very late fruiting which, coupled with the translucent and hence sterile seeds, and with the mixed sepal appendage types, pointed to hybridity – probably F_1.

Wolffia arrhiza [R] (Rootless Duckweed). In Kent, we have two main population clusters – in Romney Marsh and in the north east of the county. CO added to the latter on 1 October 2013 with a sighting from a duckweed-covered dyke in a wet grazing meadow south of Reculver, TR22658 68363, which has been managed under Countryside Stewardship. The *Wolffia* was extensive where found.

Yucca gloriosa (Spanish-dagger). On 29 June 2013, SB and OL recorded a single plant on the MOD Hythe Ranges, TR15236 34032. Numerous plants of varying sizes were also seen by OL, TI and GK on 9 August 2013 spreading on the shingle away from presumed plantings outside an enclosed military 'village' on the MOD Lydd Ranges, TQ 9981 1834 – this location is within administrative East Sussex, but is part of botanical East Kent.

Plant records for West Kent (vice county 16)



Acaena novae-zelandiae (Pirri-pirri-bur). Abundant on rabbit-scuffed sandy ground near the motorway north east of Allington, around TQ 7410 5813, this was found by GK and SK on 23 June 2013. It may be that it spreads by the seeds attaching to rabbits.

Arctium x *nothum* (*A. lappa* x *minus*, the hybrid between Greater and Lesser Burdocks). A hybrid swarm was seen by RMB on 26 August 2013 at Barnes Cray, TQ5274, with the parent burdocks, the cross being more frequent than *A. minus*. Hybrids are seldom recorded, but may well contribute to occasional difficulties in distinguishing species – Sell & Murrell (2006) tackle some of the issues of intermediacy by treating *minus*, *nemorosum*, *pubens* and *lappa* as all subspecies of an enlarged species, *A. lappa*, but recognising a range of fertile intermediates between *lappa* and *minus*. Stace (2011) refers to *A. x nothum* as being infrequent, but there is not much information on this score. The BSBI database holds only one, or possibly two, records for West Kent, referring to TQ57 and TQ57H. The latter, if not the same location as RMB's find, is remarkably close; but as these BSBI database records lack any supporting detail by which their validity and precise location may be ascertained, RMB's record appears to have the best status for the occurrence of this taxon in vc16, West Kent.

Bolboschoenus maritimus (Sea Club-rush). Not often seen inland; but noted by SL as at least three separate creeping patches along the western edge of a silt dump near Hale Street, TQ678495, on 12 October 2013; and as a c.3 metre long patch at high water mark of the north lake of Bough Beech Reservoir, TQ 496 492, on 8 December 2013.

Bromopsis benekenii (Lesser Hairy-brome). This species, if indeed it is a species, has been supposed to have been extremely rare in Kent, known at Shoreham 1973-86 but having disappeared with effect of falling trees in October 1987. It has been on the 'probably extinct' county list. As a result of work undertaken by MB during 2013, it appears that intermediates with *Bromopsis ramosa* (Hairy-brome) are not uncommon in appropriate habitats, especially steep shaded banks of minor roads on chalk or greensand. Material of *B. benekenii* has yet to be formally confirmed, but it seems highly probable that this will be achieved. Whilst Cope & Gray (2009) state that the only wholly reliable character for separating the two is chromosome number, we now have a reasonable understanding of the morphological characters which TC, as referee, uses in identification. This was achieved at a Surrey botanists' meeting attended by MB and GK at which he was present, and at which the approach adopted so far in relation to Kent material was endorsed (looking for short, narrow panicles drooping to one side), subject to the proviso that the scale at the base of the panicle should not carry any fringing hairs at all. This last character appears more critical than we had envisaged, given that it has not been difficult to find plants which appear to fulfil all other requirements for *B. benekenii*, but which may have one or two hairs fringing the scale (in contrast to *B. ramosa*, which has plentiful long cilia). The extent of intermediacy is such that it is not surprising that Cope & Gray (2009) give subspecific, rather than specific, status to the two taxa, as *Bromus ramosus* subsp. *ramosus* and subsp. *benekenii.* It might also be questioned how far division into subspecies is worthwhile.

Bromus secalinus [R] (Rye Brome). Records for this grass of arable margins continue to be made widely, confirming expectations voiced in the relevant part of the rare plant register that this species would prove not to be scarce in the county, albeit 'Vulnerable' in Great Britain overall. In 2013, it was found by CS in the course of a Plantlife weeds survey on 26 July near Upper Halling, TQ6963 and TQ6964; by GK on 23 July near Keston (TQ 4128 6312, four plants in corner of chalky arable field); and by GK and SK on 17 August as scattered, sometimes plentiful, at the edge of a wheat-field alongside Winfield Lane, Crouch, at least between TQ 6109 5512 and TQ 6115 5518.

Bromus x pseudothominei (Lesser Soft-brome) was noted by GK on 23 July 2013 on an arable margin south of Keston, TR4163.

Callitriche brutia sens. lat. (includes Pedunculate and Intermediate Water-starworts). This aquatic was recorded by RMB and JC in Rush Pond at Chislehurst Common (TQ4470), overcoming a dearth in our records for the current date class (2010-2019). There are very few records in Philp (2010) and many in Philp (1982), and this is likely to have little to do with population changes, but a lot to do with the extra hurdle of distinguishing between the two taxa which was necessary when they were treated as separate species (viz. after the second edition of Clapham, Tutin & Warburg's *Flora* and before the third edition of Stace's *New Flora*). *C. brutia* was not included in the rare plant register on the basis that the lack of records was probably an indication of identification difficulties rather than scarcity of plants.

Cardamine impatiens [R] (Narrow-leaved Bitter-cress). A focus on monad recording has brought a clearer understanding of the presence of this species in the Eden valley. Whereas Philp (2010) refers to it at Chiddingstone TQ54C, it is now apparent that this corresponds to populations well spread along the Eden, with SL having added finds in TQ5144 and TQ5045 to his 2011 discovery in TQ5145. On 1 June 2013, he with RE found plants spread along the Eden bank west of Penshurst in association with *Allium ursinum* (Ramsons) at TQ 51596 44107. On 5 June 2013 further upstream near Chiddingstone he recorded 11 plants at TQ 50453 45649, 20+ plants at TQ 50456 45632 and two more at TQ 50462 45631 in a (now dry) oxbow lake at the river edge. It was just coming into flower in three patches along the edge of the wooded core of the ox-bow and the river edge, in what seems a characteristic habitat, on barer ground with little competition from other plants, some in areas of erosion.

Carex acuta (Slender Tufted-sedge). Not shown in the Eden catchment in Philp (2010), this sedge was recorded there by SL on 28 May 2013 near Penshurst, TQ 52109 43955; and on 5 June 2013 in the river near Chiddingstone, TQ 515 457.

Carex caryophyllea (Spring-sedge). More frequently found on chalk grassland in the county, this sedge was noted in a Wealden context by SL on 28 April 2013 near Chiddingstone, at TQ 5110 4700, TQ 5111 4711 and TQ 5097 4714. The plants mostly occupied free-draining areas slightly elevated from the surrounding land and seemed to prefer growing directly on clay, avoiding the more enriched soil. The last mentioned population was quite small and probably represented recent natural spread. On 5 May 2013, SL also saw this species in two fields on Weald clay at Polebrook SSSI, mostly at TQ 507 476 and including a patch at least 8 metres in diameter. Associated species included *Silaum silaus* (Pepper-saxifrage), *Ophioglossum vulgatum* (Adder's-tongue) and *Anacamptis morio* (Green-winged Orchid).

Carex echinata [R] (Star Sedge). Two good discoveries of this sedge, scarce in Kent, were made by SL. On 15 June 2013 he found it at TQ 69276 40933, a plant with three spikes on a small patch of sphagnum in a boggy area of the Shirrenden estate, perhaps benefiting from recent coppicing. This probably corresponds to a 1954 record by Francis Rose in a sphagnum bog near Furnace Pond. On 21 June 2013, he also found a cluster of plants with a few singles nearby at Pembury Walks, TQ 6211 4235, in sphagnum bog in an open area surrounded by re-generating birch, on a valley slope above a stream.

Carex elongata [R] (Elongated Sedge). Having checked the currency of this species at its known Leigh and Yalding sites, SL went on to search for it near Benover, where recorded in 1987. It was not quite where expected (the original habitat may have changed); but at TQ 71025 47627, on the western side of Benover Road, SL found three tussocks, close to each other along the edge of a shady ditch and near the entrance of a culvert connected to a pond and ditch on the other (eastern) side of road, where the sedge was recorded in 1987.

Carex strigosa (Thin-spiked Wood-sedge). There were several records for this sedge of damp clay woodland, in addition to those in Philp (2010). The KBRG/SBS meeting of 6 June 2013 near Cowden passed by a couple of plants at the side of a path through damp woodland on clay, one of them at TQ 44022 41786; the similar species *Carex sylvatica* (Wood-sedge) was, however, much more plentiful. SL on 7 July noted the sedge growing in good numbers under the shade of trees next to Hale Oak Road, north of Chiddingstone, between TQ 5092 4715 and TQ 5091 4719, at the top of a ditch running along the eastern side of the road, with some plants in the ditch and a few outliers on the western roadside. Again, *Carex sylvatica* was also present. On 18 July 2013, RMB and JC saw at least 40 tufts beside a board-walk, centred on TQ 4518 7010 or thereabouts, at Scadbury nature

reserve. Additionally, SL on 24 November 2013 recorded large patches by the footpath through Redleaf Wood, near Moorden, TQ 526 458.

Carex vesicaria [R] (Bladder-sedge). On 8 June 2013 SL found a 10 x 15 metres open area dominated by *C. vesicaria* between Penshurst and Haysden at TQ 54270 44730. It was close to the River Medway on river alluvium, beside a wooded hillside on the Ashdown Beds fed by a spring running off the slope. He also visited several sites with previous records, improving the data held in the county rare plant register.

Carex vulpina [R] (True Fox-sedge). The Kent populations of this species are of national significance, and we have a much better idea of their current status, following investigations by SL in 2013. The most exciting discovery has been his find on 21 June 2013 of a major new population in a well-frequented area of Tonbridge. This comprises at least 120 plants (the precise number being unascertainable due to tussocks growing bunched together) in a ditch at the Racecourse Sportsground near the Medway. The location is from TQ 58460 46472 to TQ 58618 46276, roughly from a sports building to the mouth of a brick-lined ditch by the river. Most plants were growing along the ditch-side with a hawthorn hedge above and presumably gaining protection from this; only a few plants were on the other, mown side of the ditch, which feeds into the Medway via a connecting drain. Plants dominated where the ditch floor is damp to water-filled, being reduced to just a couple of plants where bank becomes brick-lined. Tonbridge & Malling Council have agreed to take the sedge into account in their management plan.

***Carex vulpina* at Tonbridge Racecourse Sportsground. Photo © Stephen Lemon, 2013**

SL also recorded near Penshurst on 28 May 2013 two clumps close to each other, straddling the monad boundary – TQ 52112 43997 and TQ 52112 44000. Both grew around a small pool which is part of a flooded ditch system running along the back of a field and mostly is heavily shaded by trees. Having updated our rare plant register data for the Leigh/Haysden area, SL on 13 and 14 July 2013 explored an area of gravel working near Hale Street for which a 1998 *C. vulpina* record existed, but where the landscape has been completely changed. He located a single plant in the vicinity of the earlier record, growing in a damp strip of land used as silt dump, at TQ 67945 49531. Two further tussocks were near the edge of the silt dump area, one next to the very similar species, *Carex otrubae* (False Fox-sedge), at TQ 67855 49562 and TQ 67914 49487.

Carex x *boenninghausiana* (*C. paniculata* x *remota*, the hybrid between Greater Tussock-sedge and Remote Sedge). Philp (2010) refers to the last Kent record for this cross as dating back to 1954 (Bedgebury), but there is a more recent one (albeit still a long time ago), in 1979, at Groombridge Place. In view of the long gap, it is surprising that two finds occurred on the same day on 22 May 2013. Both were by GK and CB in the course of a reconnaissance for a KBRG meeting west of Cowden. The first was at TQ 4394 4015, comprising one small tussock in a *Carex paniculata* swamp alongside the Kent Water, whose culms bore a long interrupted inflorescence with a long lowest bract. The second was at TQ 4425 4132, where one tussock in a small shallow field pond looked distinctly intermediate against two adjoining *C. paniculata* tussocks and surrounding *C. remota* – again, with an interrupted inflorescence and long lowest bract. When the KBRG meeting took place on 6 June 2013, the first cross could no longer be located, but a large neighbouring plant was found.

Carex x *pseudoaxillaris* (*C. otrubae* x *remota*, the hybrid between False Fox-sedge and Remote Sedge). This is a slightly less uncommon cross in Kent than the last, the parents being in proximity more frequently. One plant was found on 1 June 2013 by a KFC meeting north of Chiddingstone, at TQ 51040 47070, in a marshy area cleared of trees in recent years, next to the parents.

Carex x pseudoaxillaris. **Photos © Stephen Lemon, June 2013**

Cerastium brachypetalum (Grey Mouse-ear) at Longfield is well-studied in Kent, as a consequence, after its discovery at Longfield in 1978, of its locality having been affected by the development in the 1990s of the then Channel Tunnel Rail Link to Waterloo, which was expected to result in the extinction of 85% of the population. The area was visited by GK, LR & OL on 4 June 2013, finding the species, as expected, in Longfield Chalk Bank KWT reserve. One plant was seen on an anthill in chalk grassland, TQ 59612 69091, and some 12 to 20 plants crowded together in a similar habitat at TQ 59621 69095. Other old locations were explored without success, but at TQ 59933 69835 there were thousands of plants on the semi-bare southern support slope from the railway line to the B255, being the dominant species over significant areas, and a few plants extended from there onto the adjoining roadside (and hence were accessible). The likelihood is that this is a site of introduction, to mitigate the effect of the railway works, but if so, not only has the species thriven, but it has also expanded its area.

Chenopodium vulvaria [R] (Stinking Goosefoot). About 20 large plants were found by GK on 3 September 2013 on ground which had been disturbed by services works at junction of Peat Way and West Lane, Isle of Grain, TQ 87076 77038. This Endangered species had previously been found in the two monads further north, so this find reinforces the importance of Grain (with Sheppey) as regards its distribution.

Conyza floribunda (Bilbao's Fleabane). This fleabane has now been identified as widely scattered across the county in ruderal habitats and is probably awaiting recognition in many other places. On 7 August 2013, GK found it scattered at the entrance to a tyre-fitters at London Road, Sevenoaks, TQ 52155 55438. On 29 September 2013, GK and SK came across a plant on disturbed ground between railway and river near Nettlestead, TQ 6865 5210, and then a little further south, several more were found on a pathway overlooking Hampstead Lock, TQ 68624 50362, and it became apparent that it was present in enormous numbers on inaccessible waste ground south of Hampstead Lane, near Yalding, TQ 6867 5029. On 5 December 2013 they also recorded it as abundant on the sandy ground of a sand/aggregates works at Cliffe, at TQ 719 755 and from TQ 720 754 to TQ 720 755.

Cordyline australis **(Cabbage-palm**). Stace (2011) notes the occasional production of seedlings in climatically favourable parts of the British Isles, but not in Kent. An LNHS meeting on 3 August 2013, however, found a self-sown seedling against a fence on the road side of the garden of 46 Hazel Drive, Slade Green, TQ 5252 768723, some 30 metres from the putative parent, (comm. RMB). No other record having been traced yet, this is taken to be the **first record for vice county 16, West Kent**.

Cotoneaster ignotus **(Black-grape Cotoneaster)**. Near Park Gate, Lullingstone, TQ 50699 64658, a tree over 4 metres high was seen by GK and SK on 13 November 2013 in a field hedgerow by a track, with many smaller plants alongside the track. They have been here for many years and were known to JRP as *C. hissaricus*, appearing under this name in Clement & Foster's *Alien Plants of the British Isles*. The same name has been applied to *C. ignotus* but current usage (and, indeed, usage in Clement & Foster) separates them. Our plant is

clearly *C. ignotus*, not least from the size of the plants and their leaves; so that this species should be treated as now **recorded for vice county 16, West Kent**.

Cuscuta epithymum (Dodder). On 4 October 2013 MBi reported this species as parasitic on four *Aster* sp. plants on the Chipstead allotments at TQ498 564. The *Aster* plants were raised from seed in the owner's greenhouse and subsequently planted out on the allotment where the Dodder appeared. This is not the only such occurrence – the *Telegraph* (gardening advice, 9 October 2012) reported at least two similar experiences with cultivation of annual *Aster* sp., and it may be that seed contamination is involved.

Cyclamen repandum (Spring Sowbread). This seldom-recorded plant was noted by RMB and JC on 9 May 2013 as a small established patch, spreading by seed on the north east side of Camden Park Road, Chislehurst, TQ4370.

Cyperus eragrostis (Pale Galingale). Normally seen as a garden escape pavement weed, the species was found by SL on 12 October 2013 in gravel workings near Hale Street. There were widely scattered plants in flower, noted along the western edge of a silt dump at TQ 678 495, and also along the established southern edge of a working pit at TQ 679 493.

***Dactylorhiza* x *kerneriorum* (*D. fuchsii* x *R* *incarnata*, the hybrid between Common Spotted-orchid and Early Marsh-orchid).** A photograph of an orchid with heavily barred leaf markings was taken by DM at Holborough Marshes KWT reserve, TQ7069 6236 on 27 May 2013 and sent for identification to DJ, who shared it with RB. It was confirmed by both as this hybrid taxon, the latter remarking that 'this particular hybrid combination does tend to be especially vigorous and characterised by over-expressed barred leaf markings, and although the flower resembles *fuchsii* more closely than *incarnata*, the wide spur and relatively robust bracts speak of marsh orchid genes'. The plant has, according to SW, probably been present for at least the previous two years. Both parents grow in the vicinity, in marshy grassland of marshes, with wetland species such as *Potentilla anserina* (Silverweed) and *Equisetum palustre* (Marsh Horsetail) present. **This is a first record for vice county 16, West Kent.**

***Dactylorhiza* x *kerneriorum*.**
Photo © Daphne Mills, May 2013

Digitaria sanguinalis (Hairy Finger-grass). A grass of southern Europe and south west Asia, it was encountered by an LNHS meeting on 3 August 2013 as a casual on a pavement at Hazel Road, Slade Green, TQ5276.

Dipsacus pilosus *R* (Small Teasel). On 16 February 2013, three plants were found by GK and SK near Nettlestead at TQ 68705 52295 and another a few metres away, in a tree-shaded area by the path on the west bank of the Medway. This location is upstream of the well-known Teston populations.

***Dittrichia graveolens* (Stinking Fleabane).** This south European yellow composite has already been found in East Kent by the A299; but on 5 October 2013, PDS and KT sighted many hundreds of plants on the centre reservation of the M20 between the overbridges carrying Old School Lane and Roughetts Lane, Ryarsh, TQ6659. Clearly this is not a location where identity may be confirmed by close examination (although Google Earth street view shows yellow flowers lining the centre reservation at this stretch of the M20!), but PDS is familiar with the plant in comparable circumstances in Surrey, Berkshire and Oxfordshire; and it is also a roadside plant in Hampshire. Given its discovery as a roadside plant in vc15 (see Kent Botany 2012), it may be in the course of significant spread. This is a **first record for vice county 16, West Kent**.

Dryopteris aemula [R] (Hay-scented Buckler-fern). Only six tetrads are given for this species in Philp (2010), but a further site was found by PS in 2009, at Avery's Wood, Langton Green. Its status was brought up to date by GK and SK on 28 February 2013, when one plant was re-found on (unusually) flattish, slightly sloping ground by a trackway in gill woodland at TQ 54111 40673. There were three more plants further south at TQ 54103 40643, in the more conventional habitat of a shaded vertical mossy west-facing bank alongside the trackway. The status of this species in Angley Wood, Cranbrook was also updated by SB, LR and JA on 8 March 2013, with the recording of about 100 plants in scattered groups around TQ 76110 35850, on banks under oak around the confluence of two gill streams.

Eleocharis uniglumis [R] (Slender Spike-rush). This species has been transferred from the county 'probably extinct' list to the rare plant register (where a full account may be seen) following its (re)discovery by SL on 15 June 2013 at Holborough Marshes KWT reserve. Nine patches (the number depends on how one interprets discontinuities) were found along the edges of the shallow dry ditches in an old drainage system in the centre of a damp field, usually where the ground was bare and less dominated by *Juncus* spp. The field is subject to increasingly brackish influence where it approaches the tidal Medway flood banks to the west. *Eleocharis palustris* (Common Spike-rush) was also present in the field, generally in and beside the wet dykes rather than the shallow dry ditches. However, there was one dried-out ditch with both Slender and Common Spike-rushes present, including some plants of unusual vigour seen by GK and LR on 25 June 2013; but no signs of hybridity were identified by JR (BSBI referee) in material examined by him. It seems possible that this was a site studied in the 1940s by Max Waters and from which he obtained material which included a probable hybrid. Knowledge of the currency of *E. uniglumis* here had receded, so all credit is due to SL for restoring its Kent status. The accompanying photograph shows the encircling lowest glume characteristic of this species and the (often) tilted inflorescence.

Eleocharis uniglumis. **Photo © Lliam Rooney, 25 June 2013**

Epilobium palustre [R] (Marsh Willowherb). On 24 August 2013, SL recorded this species in good numbers in winter-flooded grassland and around the edges of ponds in two separate areas on Chiddingstone reserve, with plants at TQ 51128 46983, TQ 51097 46992, TQ 51055 47083 and TQ 51057 47077. They were found amidst *Juncus* app. and also *Salix* re-growth, sometimes with other *Epilobium* species nearby. Whilst there is record from this locality in 1982, sightings in West Kent as a whole have tailed off in recent years.

Epilobium roseum (Pale Willowherb). Occasional plants were seen on 21 July 2013 by GK and SK, scattered for about 30 metres by a path at Scathes Wood, Ivy Hatch, TQ5954, where coppicing had taken place. *Epilobium* x *palatinum* (*E. parviflorum* x *tetragonum*, the hybrid between Hoary and Square-stalked Willowherbs) was also seen here on the same occasion.

Euphorbia oblongata (Balkan Spurge). RMB recorded two sightings on 25 July 2013 of this garden spurge: first, on the east side of the byway from Priory Lane, Eynsford to Beesfield Farm, Farningham, TQ 550 660; and secondly, on a bank in front of Applegarth, Priory Lane, TQ 546 660 – the parent being 8 metres away.

Ferula communis (Giant Fennel). Surprisingly, this Mediterranean species has persisted where seen by RMB in 2006, showing five flowering stems on 1 August 2013, whereas there were only two on first sighting. The location is at TQ 529 680 on steep bank below the sliproad from M25 south-bound to the Swanley roundabout, visible only from a tall vehicle such as a coach.

Fumaria vaillantii [R] (Few-flowered Fumitory). A nationally 'Vulnerable' species with only two tetrad records in Philp (2010), this has now been shown to have a firm presence in the Farningham area, with RMB having made records in three monads on 25 July 2013. It was seen on the east side of a byway from Priory Lane, Eynsford to Beesfield Farm at TQ 548 660, TQ 549 660, TQ 550 660 and TQ 551 660; and at a field border on a slope south west of Beesfield Farm, TQ 552 659.

Gentianella anglica [R] (Early Gentian). On 26 May 2013, FJR recorded two plants on a chalk downland slope at Magpie Bottom, TQ 5440 6120 & TQ 5441 6119 at the same location as is well-known for *Polygala amarella* [R]. (Dwarf or Kentish Milkwort). It was originally found here by FJR in 2009 as a result of the accidental inclusion of a capsule in a photograph of the *Polygala*.

Geranium macrorrhizum (Rock Crane's-bill). Recorded as a casual by RMB and JC on 9 May 2013 near Chislehurst, TQ4370; and by an LNHS meeting in an access to garages off Lansdown Road, Sidcup, TQ 466 722.

Gnaphalium sylvaticum [R] (Heath Cudweed). There were nine Kent records for this nationally Endangered species in 2013, mostly in East Kent where tetrad records are given in Philp (2010); but in West Kent, JP found it as late as 26 December 2013 on high ground in Farningham Wood, TQ5368, where working had taken place and bare ground created.

Hypericum maculatum subsp. *obtusiusculum* (Imperforate St John's-wort). This taxon has been on the county 'probably extinct' list, and recent finds have been only of the hybrid with *H. perforatum* (Perforate St John's-wort), which is persistent in the absence of the parents. However, RMB on 27 June 2013 recorded three clumps, with 11 stems, of *H. maculatum* at Preston Hill Country Park, TQ 532 634, by the path where it climbs into woodland. It had last been seen by him in 1994, and last seen in flower much longer ago. The species is accordingly being transferred from the county 'probably extinct' plant list to the rare plant register; and the hybrid is being removed from the register, as its inclusion was based on the carrying forward of *H. maculatum* genes in the absence of that parent.

Laburnum alpinum (Scottish Laburnum). On 3 August 2013 an LNHS meeting saw a 2 metre high bush above the Darent Industrial Estate, Crayford Ness, TQ 536 781, a species whose records generally appear more frequent, as its name suggests, in Scotland, albeit a native of the southern Alps.

Lactuca saligna [R] (Least Lettuce). Following the Sheppey survey (see vc15 records), on 3 September 2013 GK investigated populations on the Isle of Grain by Yantlet Creek, where plants were spread over two monads. In TQ8678, there were 34 plants, a singleton and three groups in locations between TQ 86440 78480 and TQ 86602 78201, all on the inland upper (south facing) slopes of the Thames estuary seawall, on cattle-poached clay. In TQ8578, there were 107 plants, a couple of singletons and four groups or associated scatterings. All were on the Yantlet creek seawall, mostly between TQ 85833 78078 and TQ 85830 78092 on the west-facing coastal slope, although a few were further north on both sides of the creek seawall. The habitat indicates reliance upon cattle trampling to create broken semi-bare ground for seedling establishment. Unlike at Sheppey, the plant did not extend to any concrete or stone parts of the wall slope – these were north-facing along the Thames and strongly affected by tides.

Lathyrus aphaca (Yellow Vetchling). Apparently more frequent in the north west of the vice county, but whether as a native or a repeated casual introduction is not clear, this vetchling was noted by RMB as a small patch by the path to the Thames near the north end of Norman Road, Belvedere, TQ 497 804.

Lavandula angustifolia (Garden Lavender). An occasional escape on pavements, as at Hemmings Close, Sidcup, TQ 468 725, where seen by an LNHS meeting on 18 May 2013; and by 44 Barnes Cray Road, Crayford, TQ5275, where seen by RMB on 26 August 2013 as a 3cm seedling, 1.5 metres from the cultivated parent.

Lonicera pileata (Box-leaved Honeysuckle). A plant was recorded by GK on 11 May 2013 in a crack on steps near Frobisher Way, Greenhithe, TQ 5876 7521, apparently seeded from a nearby planted shrub.

***Malva alcea* (Greater Musk-mallow)**. Distinguished from *Malva moschata* (Musk-mallow) by the stellate hairs on vegetative parts, this species was recorded by an LNHS meeting on 3 August 2013 on the landward side of a track alongside the Darent at Crayford Marshes, TQ536769. No other vc16 record has yet been traced, so this may well be a **first record for vice county 16, West Kent**.

Mimulus x robertsii (Hybrid Monkeyflower, *M. guttatus* x *luteus*). Frequent in wetter parts of the British Isles, but almost unknown – or any rate almost unrecorded – in Kent, this garden escape was found thoroughly naturalized in the course of a KFC meeting at Moorden, Chiddingstone, present in TQ5145, TQ5245 and TQ5246.

Myriophyllum aquaticum (Parrot's-feather). This invasive aquatic is a regrettable find anywhere; the more so at a location such as the Marden Meadow pond, TQ 761 445, where JA and LR saw it on 23 May 2013 with *Hottonia palustris* (Water-violet), which it should not be permitted to smother.

Oenanthe lachenalii (Parsley Water-dropwort). A predominantly coastal plant, but remarkably seen at a KFC meeting (det. RMB) in cow-trodden marshy ground by a field edge near Chiddingstone at TQ516459, where there were several tufts of radical leaves but only one flowering stem. This is a new hectad record.

***Orobanche crenata* (Bean Broomrape)**. This is a rare broomrape of Mediterranean origins, with the only persistent occurrences hitherto being in South Essex. It made a dramatic appearance in 2013 in bean fields near Snodland and Upper Harvel, with one field alone carrying an estimated 11.4 million plants (FJR, pers. comm.). Reports of problems in cultivation of *Vicia faba* (Broad Bean) in Suffolk and Kent reached FJR who, with representatives of various organisations with concerns over agricultural weeds, attended the Kent sites. On 23 August 2013, he saw a severe infestation by *O. crenata* of fields at Austens Farm, Snodland, with a peak density of c. 130 plants per acre. Affected fields were at TQ 6910 6117 and TQ 6909 6109, both of which extend into monad TQ6861. At Upper Harvel, *O. crenata* was scattered at moderate density in a field crop at TQ 6478 6245, although when seen by GK and SK on 29 August 2013 there were areas where each bean plant seemed to have its own parasite, up to 75cm high. It was also scattered at lower density in a field to the north at TQ 6484 6271.The occurrences have been described in Rumsey (2014). FJR suggests the possibility that contaminated crop seed may have given rise to small-scale infestations which have gone unnoticed but that a halo of seed spread from each broomrape could be spread further by ploughing until the seed-bank is sufficiently extensive that a major outbreak would occur when the area is next laid to legumes. Some evidence of earlier occurrence was provided by *O. crenata* present on *V. faba*, apparently a crop residue, presumably from the previous year, seen by GK and SK on 29 August 2013 scattered along c. 60 metres of a flax field margin, including at TQ 69280 61304.

Orobanche crenata. **Photo © Geoffrey Kitchener, 29 August 2013**

Plantago major subsp. *intermedia* [R] (Greater Plantain). There are relatively few cases where this generally coastal subspecies has been distinguished in vc16, but RMB noted it on 20 July 2013 at West Paddock, Crossness, TQ 495 805 on bare mud.

Poa infirma [R] (Early Meadow-grass). See East Kent report.

Polygala amarella [R] (Dwarf or Kentish Milkwort). The Magpie Bottom site (TQ 544 612, first recorded by the Toynbee Natural History Society in 1897) was viewed by FJR on 26 May 2013, with 61 plants found (cf. 30 in 2012, 46 in 2009). He observes that most plants were just above a small bare scrape and that the neighbouring area, extending along the slope for another 30 metres or so, appears different in character to the rest of the downland slope, in that the turf is of finer grasses lacking the coarser *Bromopsis erecta* (Upright Brome) and it carries more low rosette-leaved herbs, e.g. *Pilosella officinarum* (Mouse-ear-hawkweed), *Cirsium acaule* (Dwarf Thistle), with some small bits of bare ground between them. He suggests the possibility that a very long time ago, chalk spoil may have been dumped there from workings, whereas the rest of the site has the original downland turf.

Polygonatum multiflorum (Solomon's-seal). Were it not for a concentration of records in the north west of our area, including metropolitan vc16, this species would have been on the county rare plant register. Within that

concentration, RMB and JC saw on 9 May 2013 at Chislehurst Common a thin patch of about 10 square metres north of the Prince Imperial Monument, TQ 4394 7004; and at TQ 4384 7007, a patch of less than one square metre. In Joyden's Wood on 16 May 2013, they also recorded it on the north side of a sunken path at TQ 499 722.

Polypogon monspeliensis [R] (Annual Beard-grass). Well distant from the main area of occurrence, by brackish ditches around the Medway estuary and the Swale, this species was recorded by SL on 13 July 2013 spread widely over a sandy silt dump east of Hale Street, at TQ 67985 49504 and elsewhere.

Polypogon viridis (Water Bent). As with other parts of the British Isles, new records for this grass are emerging, and in West Kent it was recorded by an LNHS meeting at New Eltham, TQ4433, on 27 July 2013; by RMB on 2 July 2013 on the pavement at Faraday Avenue, Sidcup, TQ4772; by GK on 7 September 2013 as a Sevenoaks street weed at TQ 527 550; and by SB on 3 October 2013 at the base of a wall near Tonbridge station, TQ 58831 45949. It is very much an urban plant with us.

***Polystichum x bicknellii* (Hybrid between Hard and Soft Shield-ferns).** A large, vigorous plant found by JRe on 31 October 2010, albeit with identity then unconfirmed, and demonstrated to a BPS meeting on 26 October

2013. It was growing in woodland shade on the south-facing chalk slope of the Downs escarpment (TQ 5452 5974, Rowdow Wood near Kemsing). *P. aculeatum* (Hard Shield-fern) was present within a few metres and elsewhere in the vicinity. The other putative parent, *P. setiferum* (Soft shield-fern), was not seen, other than several hundred metres away.

***Polystichum x bicknellii.* Photo and scan © Geoffrey Kitchener, September 2013**

The frond texture was a little less leathery than with *P. aculeatum*, but more so than with *P. setiferum*; at least the pinnules nearest the rhachis were stalked and obtuse-angled at the base (as with *P. seriferum*); their basal lobe was strongly aristate (as with *P. aculeatum*); the pinnae at the base of the frond were significantly shorter than those at the middle (whereas they are more or less equal, in *P. setiferum*). Identity was confirmed (October 2013) by JE, who stated that sori had very few sporangia and those which had formed (one or two, or

none, in each sorus) and had dehisced produced only a few large, white, obviously abortive spores. No good spores were seen. This is a **first vice county 16 (West Kent) record**.

Potamogeton pusillus [R] (Lesser Pondweed). One of the narrow-leaved pondweeds which is not easily identified, material was found by RMB on 20 July 2013 in a small pond east of Crossness Nature Reserve gate, TQ 492 802, echoing 19th century records from Plumstead Marshes.

Potentilla anglica [R] (Trailing Tormentil). Perversely scarcer than its hybrid, *P.* x *mixta*, this species was noted in Bedgebury Forest, TQ7333, by JP on 29 July 2013.

Potentilla x mixta (Hybrid Cinquefoil, *P. anglica* x *reptans*). A large patch was seen by RMB and JC on 18 July 2013 in a meadow at Chislehurst, TQ 4597 7060.

Prunus x *fruticans* (*P. domestica* x *spinosa*, the hybrid between Wild Plum and Blackthorn). Hybrid bushes or small trees were recorded on 14 November 2013 by GK and SK by the path alongside the disused Thames and Medway canal by Shorne Marshes, TQ6873 and TQ6973. The record in Philp (2010) is for a more westerly section of the same canal (in TQ67R), so these are not likely to be one-off occurrences.

Puccinellia fasciculata [R] (Borrer's Saltmarsh-grass). A roadside, rather than saltmarsh, sighting was made by RMB on 20 July 2013 by Norman Road, Belvedere, at the tip of the junction north of Eastern Way, TQ 497 799.

Rhododendron luteum (Yellow Azalea). One shrub was found by GK on 7 June 2013 in a clearly unplanted location in birch woodland, Stanhope Wood, Brasted Chart, TQ 4660 5295, not particularly near gardens.

***Rumex obtusifolius* var. *transiens* (Broad-leaved Dock variety).** A central European taxon with short teeth to the tepals sometimes given subspecific status, present along the Thames in west London, but not hitherto found in Kent, one plant was seen by GK and LR on 4 June 2013 on the inland side of an estuarial defence embankment north east of the Ingress Park development at Greenhithe, TQ5975. It may have arrived with birds or as a result of embankment works, and is a **first record for vc16, West Kent**.

Rumex palustris [R] (Marsh Dock). Seen on 20 July 2013 by RMB at the Island Field, Crossness, west of a bund at TQ 492 801. There are historic records for this general area, from Tripcock Ness through to Erith, so this record demonstrates a level of continuity.

Rumex x *sagorskii* (*R. crispus* x *sanguineus,* the hybrid between Curled and Wood Docks). At least two plants were found by GK and SK on 6 July 2013 in a mixed population of the parents, growing in grassland in the grounds of Marle Place, TQ 6803 3964.

Saxifraga granulata [R] (Meadow Saxifrage). This species appears under-represented in the Darent valley in Philp (2010), whereas there are many records in Philp (1982). These probably included a location where a patch in leaf was seen by GK and SK on 18 April 2013: on gravelly ground at the edge of a footpath intersecting two (former gravel pit) lakes between Sutton at Hone and Darenth, TQ 55840 70968.

Scutellaria x *hybrida* (*S. galericulata* x *minor*, the hybrid between Skullcap and Lesser Skullcap). Two large patches were seen by SB on 4 August 2013 at Tudeley Woods, TQ 6183 4403 and TQ6175 4402, alongside a damp path in chestnut coppice. In neither case were the parents present, but the plants are evidently intermediate, the flowers being pale blue (*S. minor* is pale pinkish-purple; *S. galericulata* is blue) and their length within the hybrid range. Their vigorous vegetative growth has presumably enabled them to outlive their parents.

Scutellaria x hybrida. **Photo © Sue Buckingham, 4 August 2013**

Silybum marianum (Milk Thistle). A thistle with white marbled leaves, seen on 3 February 2013 by MB between Chalk and Lower Higham, TQ 6844 7318.

Solanum nigrum subsp. *schultesii* (Black Nightshade). This glandular-haired introduced subspecies was found by an LNHS meeting on 27 July 2013 near New Eltham, TQ4473. In Kent, it appears confined to the northern part of the county.

Stachys arvensis [R] (Field Woundwort). Apparently an increasingly scarce arable weed with an enormous reduction in sites between Philp (1982) and Philp (2010), apparently borne out by the infrequency of our post-2010 records, this was noted by GK and SK on 21 November 2013 as plentiful in orchards south of Horsmonden, where a herbicidal regime along the rows of trees provides bare earth for opportunist species, around TQ 700 395, and extending into the adjoining monad TQ6939.

Symphytum tuberosum (Tuberous Comfrey). Extensive patches of this pale yellow flowered comfrey were recorded by SB on 16 May 2013 in wet woodland opposite Pembury waterworks at TQ 6263 4254.

Thuja plicata (Western Red-cedar). Present as a sapling in a plantation at Stonewall Park, TQ5042, seen by GK and SK on 5 May 2013; but more convincingly away on its own, distant from any planted trees, when seen as a seedling in the course of a BPS meeting on 26 October 2013 on the wooded downs escarpment at Rowdow, Kemsing, TQ5459.

Tilia cordata [R] (Small-leaved Lime). On 16 May 2013, RMB and JC saw numerous seedlings and saplings at Joyden's Wood, TQ496719, within metropolitan vc16; many seedlings and saplings of various sizes were also present in TQ4972, which may have been administratively Kent or London.

Tragopogon x *mirabilis* (*T. porrifolius* x *pratensis*, the hybrid between Salsify and Goat's-beard). Twenty to thirty plants, perhaps outnumbering the parents were noted by ST on 12 June 2013 at Cooling Street, TQ 747 740, along c.50 metres of open roadside bank, with ditch, alongside a field which had been 'set-aside' for about ten years, roughly on the border of clayey soil turning to sandy alluvial silt. Flowers were a wide range of different colour combinations: from mainly yellow with just purple edges on the outer florets, to inflorescences much like the purple-flowered Salsify, but having bright yellow stamens and anthers.

Trifolium scabrum (Rough Clover). This coastal clover was found by SB on 9 June 2013 on sand at the site of old gravel works, Haysden Country Park, TQ 563 456, about as far inland as one can get, in Kent. It is a new hectad record.

Verbena bonariensis (Argentinian Vervain). A single plant of this garden escape was seen by GK and SK on 14 December 2013 outside the churchyard wall at Goudhurst, TQ7237.

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