Notes

CAUCALIS PLATYCARPOS– A VANISHED ARCHAEOPHYTE

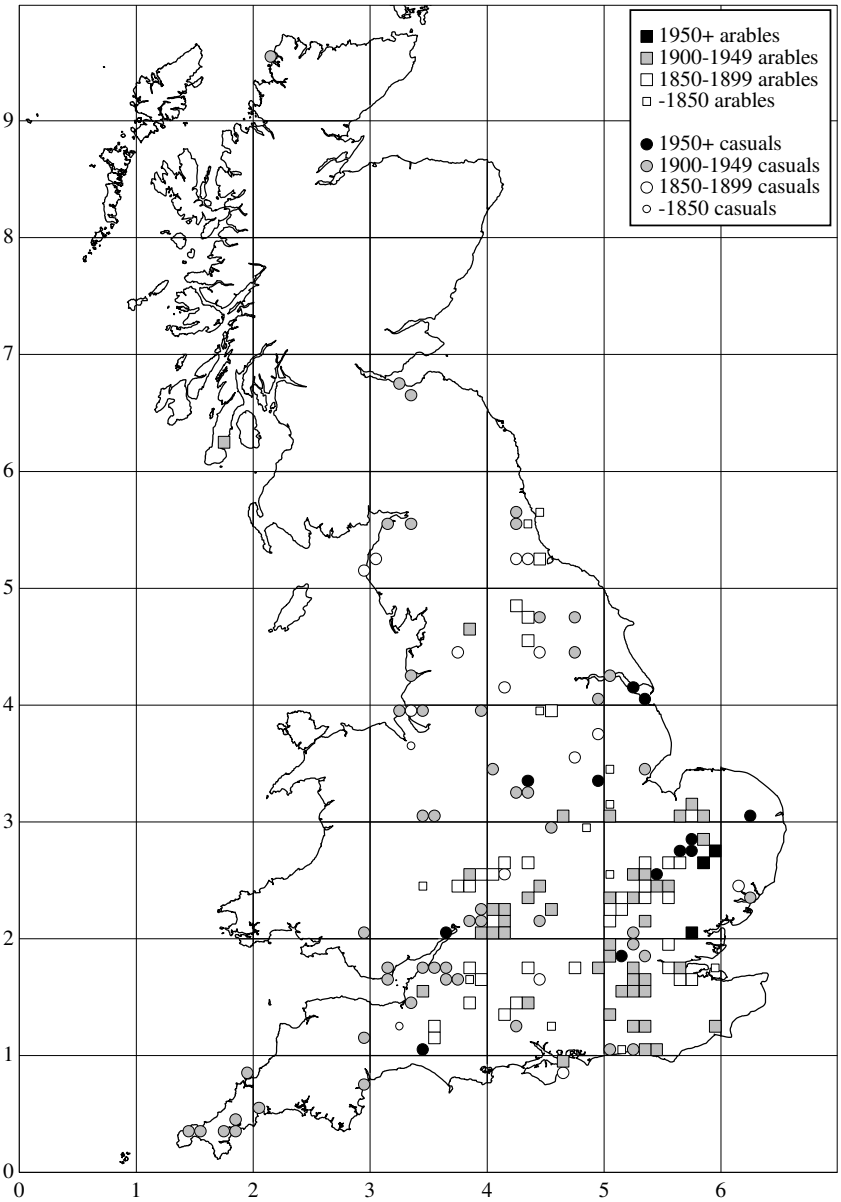
Caucalis platycarpos L., a crop weed and a casual, principally with imported grain, has a long history in Britain. It was almost confined to England, with only a very few records from Wales and Scotland, and with one erroneous record from Ireland (Reynolds 2002). It is an archaeophyte (Preston *et al*. 2004), centred on the Mediterranean, but formerly widely distributed over N.W. Europe and in decline everywhere in that area. It is one of a very distinct group of umbellifers, which have prominent broad-based spines on the ridges, yet are difficult to tell apart and often confused (see Leslie 1977 for a superb little exposition). *Turgenia latifolia*, *Orlaya daucoides* and *O. grandiflora* are others in that group, and Smith (1824) thinks it was probably the last that was recorded in Johnson's 1633 edition of Gerard. But Johnson also recorded '*Caucalis Apii foliis, floribus rubris*, Ger emac., Hedgehogge Parsley, in the cornfields about Bathe' in his Mercurius Botanicus of 1634. There are in fact two illustrations in Johnson's Gerard, one of *Caucalis albis floribus*, Bastard Parsley with white floures, and another of *Caucalis Apii foliis flore rubro*, Bastard Parsley with red floures, and a later indexer and interpreter of Gerard, John Harvey (1997) calls the first *Caucalis platycarpa* and the second *Turgenia* (*Caucalis*) *latifolia*. Confusion indeed!

However, the first reasonably certain record for Britain was by John Ray from Cambridgeshire in 1660, as '*Caucalis tenuifolia flosculis subrubentibus*, Fine leaved bastard Parsley with reddish or blush-coloured flowers. In the corn about Kingston wood, and elsewhere.' (Ray 1660). For the next 250 years it was recorded fairly consistently. Smith (1824) gave quite a few localities, saying it was frequent in the counties of Oxfordshire and Cambridgeshire. Watson (1847) gave an estimate of 15 counties, and the database from the Biological Records Centre, which I have greatly expanded, has records from 62, though probably only 35 of these counties have records from arable sites, and the numbers of counties with records at any one time would be even lower (Table 1). The individual records for arable plants are fairly consistent up the first half of the 20th century, tailing off very fast after 1950, whereas the records from docks and other non-arable sites show an enormous concentration either side of 1900, presumably from both better recording of aliens and possibly increased grain imports (Table 1). Of course the occurrences in arable sites might just as easily be casual occurrences in cornfields.

There is no general flora published in the early 20th century that might have updated Watson's comments, though Druce (1927) had noted that the extra care taken in cleaning seed-wheat had 'almost extirpated' this weed. In the first edition of Clapham, Tutin & Warburg (1952) it was described as 'a casual or +/- naturalized in arable fields and waste places particularly on chalky soils; rather rare and less frequent than formerly.' Yet by that time it had almost gone – I can only trace a dozen or so records after that date, of which only one or possibly two is from an arable habitat – all the others are from docks and dumps. The first Red Data Book (Perring & Farrell 1977) did, at last, realise the seriousness of the decline, relating that it had been recorded from only 11 10-km squares in the period 1930–1960, with no records since 1962. The 2nd edition (Perring & Farrell 1983) had exactly the same wording, and it was omitted entirely in the 3rd edition (Wiggington 1999). The BSBI Umbellifer

TABLE 1. SUMMARY OF *CAUCALIS PLATYCARPA* RECORDS

	Assumed Arable - number of records	Assumed Arable - number of VCs	Assumed non-arable - number of records	Assumed non-arable - number of VCs
Up to 1850	43	24	1	1
1851–1900	40	19	17	13
1901–1950	37	18	65	35
1951 onwards	2	2	10	8
Total	122		93	



10-km distribution of all British *Caucalis platycarpa* records. Round: casual, Square: arable.

Handbook (Tutin 1980) notes its disappearance from arable habitats. The New Atlas (Preston *et al*. 2002) covered only the taxa fully described by Stace (1997) and as he merely dealt with it as a note, saying it was now an extremely rare casual, formerly more common, it was omitted from our compilation. In fact it had gone, with the last record from a building site in Cambridge in 1971, and the last apparently arable site from Stanton Chair, Suffolk in 1968.

I have no evidence that it was 'formerly a long-persistent weed' , as it is so described in Clement & Foster (1994), rather than a species that was not-infrequently encountered, but here is a species with a long cultural history, which has vanished, completely unmourned.

ACKNOWLEDGEMENTS

I would like to thank Keith Spurgin, Alex Lockton and Chris Preston for help and information towards this note, Mark Spencer, Alison Lean and Tim Rich for extraction of herbarium records and many vice-county recorders for responding to requests. I very much appreciate Martin Sanford's perceptive comments on an earlier draft.

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D. A. PEARMAN
Algiers, Feock, Truro, Cornwall TR3 6RA

A CHROMOSOME NUMBER FOR *COCHLEARIA ATLANTICA* POBED.

In July 2002 a rather curious small *Cochlearia* was found growing on shingle at the head of a salt marsh near Laxford Bridge (VC 108, West Sutherland) at NC220467. Its identification best fitted *Cochlearia atlantica* Pobed. as described by Dalby (in Rich 1992). Ripe seeds were collected and planted in pots; the resulting plants were seen to retain their form in cultivation over several years. As there does not appear to be a published chromosome number for this species it was decided to make a chromosome count from these plants.

Growing root tips were collected in the early afternoon, pre-treated in a saturated solution of 8-hydroxquinoline at 4 degrees C for 4 hours then fixed overnight in 3:1 alcohol/glacial acetic acid. After maceration for 1 hr in cold 10% HCL, the roots were stained for 1 hr in lacto-propionic orcein, their tips excised and squashed in 45% acetic acid.

Clear metaphase figures were produced with small dark staining chromosomes. The majority gave a count of 2n=24, a common number for this genus, but a few plants had 2n=12 which is unusual but is known for other members of the genus such as *C. pyrenaica* DC (reported in Rich 1992).

ACKNOWLEDGEMENT

I am grateful to Dr Tim Rich for comments on this result.

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M. F. GODFREY
6 Darnford Close, Parkside, Stafford, ST16 1LR

CONSERVATION OF BRITAIN'S BIODIVERSITY: STATUS OF *HIERACIUM THALASSINUM* (ASTERACEAE), HAIRY-BRACTED HAWKWEED

Hieracium thalassinum P. D. Sell (Asteraceae), Hairy-bracted Hawkweed, is a member of *Hieracium* section *Subalpina* Pugsley which was described recently in Sell & Murrell (2006). It is a rare endemic known from only two sites in South-west Scotland, the Pass of Melfort in v.c. 98 Argyll and Ballygroggan in v.c. 101 Kintyre. In this note, its conservation status is assessed based on field work in 2006 and 2008.

Hieracium thalassinum is a distinct species, with green to weakly glaucous, rather hairy stems and foliage, a few basal leaves and 1-3 stem leaves which are mostly elliptical and taper into a broad petiole, medium-sized capitula with dense simple eglandular hairs on the involucral bracts and discoloured styles. At first glance it resembles some species in section *Cerinthoidea* Monnier but as it has microglands on the leaf margins is included in section *Subalpina* (Sell & Murrell 2006).

PASS OF MELFORT

Hieracium thalassinum was collected from a rock wall by the River Oude in the Pass of Melfort, near Kilmelford, Argyll (Sell & Murrell 2006) on 9 June 1966 by A. G. Kenneth, and again by A. G. Kenneth, P. D. Sell and C. West on 24 June 1968 at NM848158 (**CGE**).

The site was searched from Fearnach Bay to Blàran on 16 July 2008 by T. Rich without success. The grid reference on the specimen suggests that the plant was found under what is now the Oude Reservoir, but the dam was built in the 1950s and the grid reference is probably slightly inaccurate (P. D. Sell does not now remember the exact location, pers. comm. 2009). The most likely place it occurred was on the west-facing, basalt rock wall by the footpath below the dam (this path was cut to run the pipes for the hydroelectric scheme) between NM846156 and NM845155, which has four other *Hieracium* species, *Arabis hirsuta* (L.) Scop., *Crepis paludosa* (L.) Moench, *Saxifraga aizoides* L., *S. hypnoides* L. and *Vicia sylvatica* L. This rock face is now overgrown with trees in some places but some areas remain open and suitable. Other hawkweeds recorded from the Pass of Melfort include *H. breadalbanense* F. Hanb., *H. cravoniense* (F. Hanb.) Roffey, *H. dicella* P. D. Sell & C. West, *H. oenophyllum* P. D. Sell, *H. pictorum* E. F. Linton, *H. rhomboides* (Senstr.) Johanss. and *H. subhirtum* (F. Hanb.) Pugsley.

Searches of the surrounding area were equally unsuccessful. Above the dam, the banks of the reservoir are largely overgrown and unsuitable. At the north end of the reservoir towards the road bridge (NM853164) there is a series of small, inaccessible cliffs above the stream with a *Hieracium* species, and the river above this to Blàran (NM858172) is slow-flowing without rocks. Below the dam, the River Oude is densely shaded with moss-covered rocks and an occasional patch of *Crepis paludosa*. Immediately upstream of the power station (NM841145), the Oude is fairly slow flowing and largely shaded by dense woodland, and at Melfort Bridge (NM837142) the river is slow flowing between fields with no rocks. *Hieracium thalassinum* might still occur at the Pass of Melfort, but if so in very small quantity.

BALLYGROGGAN

Hieracium thalassinum was first found at Ballygroggan by A. G. Kenneth on 16 June 1965 (**CGE**, **E**). It was collected again the following year by A. G. Kenneth and C. West, and plants were provisionally allocated to *H. petrocharis* (E. F. Linton) W. R. Linton (hence the comment 'looks rather unusual' in Cunningham & Kenneth 1979). P. D. Sell visited the site and collected further plants on 28 June 1968, and one specimen from this second collection was designated as the holotype of *H. thalassinum* (Sell no. 68/369, **CGE**). The limestone at Ballygroggan has been known as a good *Hieracium* site for many years, with *H. anglicum* Fr., *H. britanniciforme* Pugsley, *H. eucallum* P. D. Sell & C. West, *H. rubicundiforme* (Zahn) Roffey and *H. hebridense* Pugsley amongst the species recorded.

The Ballygroggan area was searched briefly on 14 July 2006 by T. Rich and D. McCosh, and in more detail on 16 July 2008 by T. Rich and I. Teesdale. At least 127 plants of *H. thalassinum* occurred on six separate sections of the north-facing cliffs at the top of the slope at the south end of the bay known locally as The Galdrans or Gauldrons. It grew on damp or

dry calcareous rocks, usually toward the top of the rocks which were sheltered from salt spray, at altitudes of c. 20-30 m. Most of the plants were finishing flowering and some had been grazed by goats and were not easy to see, so this is a minimum population estimate for this site, with the possibility of at least another 50 plants being present. It was absent from the larger, west-facing limestone cliffs and basalt dykes to the north. Voucher specimens have been deposited in **BM**, **E** and **NMW**.

The associated species included *Angelica sylvestris* L., *Arrhenatherum elatius* (L.) J. & C. Presl, *Brachypodium sylvaticum* (Huds.) P. Beauv., *Crepis paludosa, Dactylis glomerata* L., *Festuca rubra* L., *Frullania tamarisci* (L.) Dum., *Galium verum* L., *Geum rivale* L., *Hieracium britanniciforme, H. hebridense, Holcus lanatus* L., *Hypochaeris radicata* L., *Isothecium myosuroides* Brid., *Parnassia palustris* L., *Petasites hybridus* (L.) P. Gaertn., B. Mey & Scherb., *Plagiochila porelloides* (Torrey ex Nees) Lindenb., *Plantago lanceolata* L., *P. maritima* L., *Primula vulgaris* Huds., *Prunella vulgaris* L., *Pteridium aquilinum* (L.) Kuhn, *Senecio jacobaea* L., *Solidago virgaurea* L., *Succisa pratensis* Moench, *Thymus polytrichus* Borbás, *Vicia sylvatica* and *Viola riviniana* Rchb. A soil sample taken from around the roots was measured as pH 6.7.

Thus *H. thalassinum* is currently only known from one of its two sites, and is assessed as IUCN (2001) threat category: 'Endangered' on the basis of the small population size. It seems under little direct threat, the only thing likely to affect it in the short term being scrub invasion or over-grazing. Seed from one plant has been deposited at the Millennium Seed Bank.

ACKNOWLEDGEMENTS

We would like to thank Peter Sell for his help, and the Keepers of the Herbaria for access to material at **BM**, **CGE** and **E**.

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T. C. G. RICH
Department of Biodiversity and Systematic Biology, National Museum of Wales, Cathays Park, Cardiff CF10 3NP

D. J. MCCOSH
Baconsthorpe Old Rectory, Holt, Norfolk NR25 6LU

I. TEESDALE
Ardbeg, High Askomil, Campbeltown, Kintyre PA28 6EN

LECTOTYPIFICATION OF *HIERACIUM SCULLYI* E. F. LINTON (ASTERACEAE)

Hieracium scullyi, Scully's Hawkweed, was described as a new species in W. R. Linton's (1905) *An account of the British Hieracia* and was cited from 'Rocks by the R. Roughty (discovered by Mr. Reginald Scully)' but no type specimen was indicated. Sell & Murrell (2006) cite the authority as E. F. Linton as new taxa in W. R. Linton (1905) marked 'Linton' were named by his brother E. F. Linton, whilst taxa marked 'mihi', 'nov. var.', 'n. sp.', etc. were named by the author W. R. Linton.

Pugsley (1948) noted that Linton's description of *H. scullyi* was based on specimens collected in 1901 by R. W. Scully, and from amongst the material in herb. E. F. Linton in **BM** a lectotype was chosen by C. West in 1957; however, this selection has never been published. We agree with this selection, and hereby designate the lectotype of *H. scullyi* E. F. Linton as 'Rocks by R. Roughty, Morley's Br., Kerry, R. W. Scully, 5.7.1901' (**BM**).

For details of the current status of *H. scullyi*, see Rich *et al*. (2008).

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T. C. G. RICH
Department of Biodiversity and Systematic Biology, National Museum of Wales, Cardiff CF10 3NP, U.K.

M. B. WYSE JACKSON
National Parks and Wildlife Service, Department of the Environment, Heritage and Local Government, 7 Ely Place, Dublin 2, Ireland