

## Cornish Hawkweeds made easy.

Hawkweeds (*Hieracium*) mostly reproduce apomictically and have developed into numerous microspecies. The main book needed for the identification of hawkweeds is Sell & Murrell's Flora of Great Britain and Ireland volume 4. However, anyone that has thought about tackling the group in Cornwall has probably looked at the 412 species given here and the not very easy to use key and thought "no thanks". However, there are only 15 species that have been recorded from the county and this makes the task a whole lot easier. Furthermore, only one of these, *Hieracium umbellatum*, occurs with any frequency and this is easy to identify.

Two features are of particular importance when narrowing down the species:

**Number of stem leaves:** These break down into 3 groups; leafy ones with 10 or more stem leaves (and usually no basal rosette), semi-leafy ones with 2-9 stem leaves (and usually some rosette leaves) and rosette species with only 1 or rarely two stem leaves.

**Hairs on the involucre bracts:** These may be of three types; dark coloured glands, simple hairs with usually dark bases and pale tips, and stellate hairs which form an appressed frosting particularly on the base and margins. The amounts of these hair types is a very useful character for separating within the stem-leaf number groups.

If you can identify *Hieracium umbellatum* you are well on your way and this is easy to do. Anything that is leafy (usually 15-30 stem leaves) and has yellow styles is going to be this. You can confirm this by looking at the involucre bracts which are pretty much glabrous and the outer ones are usually strongly outwardly curved (squamose). *H. umbellatum* has been divided into several subspecies and varieties. This is because it is the only sexually-reproducing hawkweed and there is a continuum of variation between these. So it is not particularly important to split these but populations with rather thick, narrow leaves are subspecies *umbellatum* while those with more flaccid, wider leaves are subspecies *bichlorophyllum*.

Anything that is not *H. umbellatum* is rare in Cornwall and it is worth collecting a sample as a voucher or for expert determination, if this does not endanger the population. You need to collect it from the stem base just below the rosette (if present) – like dandelions they are pretty good at regrowing from the tap root if this is not damaged.

If you want to go further with identification, the following table will help. It is part of a full dichotomous key that I am developing for Devon and Cornwall hawkweeds. If you would like a full copy of this please contact me at [nfstewart@freeuk.com](mailto:nfstewart@freeuk.com). I have highlighted the species currently known in Cornwall with an asterisk\*. Many of the others are restricted to Plymouth and present/former railways in south-west Devon.

If the plant is leafy and dark-styled it is likely to be *H. sabaudum*. In the semi-leafy group, the main candidates are *H. vulgatum* if the involucre bracts have more simple hairs than glands or *H. argillaceum* (formerly *H. acuminatum*) if there are more glands than simple hairs. Both of these also have quite a lot of stellate hairs on the involucre bracts, so if there isn't much of this it's probably something else.

The species with hardly any stem leaves are a difficult group that even hawkweed experts find a problem. All are very rare in Cornwall but based on Devon the most likely ones to be encountered are *H. grandidens* (with dark styles and leaves with big teeth) and *H. exotericum* (+/- yellow styles and only a few small teeth at the leaf bases). There are some, as yet, unnamed taxa in Devon and Cornwall which have to be placed as *H. exotericum* agg.. There

are, I think, 4 such taxa in the two counties of which one is present in Cornwall (Lanhydrock House which is close to *H. sublepistoides*).

If the leaves are spotted/marbled, then they are likely to be *H. spilophaeum* (formerly *H. maculatum*) if they are semi-leafy and *H. scotostictum* if they have 0-1 stem leaves.

	Stem leaves 10+	Stem leaves 2-9	Stem leaves 0-1
Inv. bracts with glands AND simple hairs 0 to very few	<b>Key A</b> umbellatum* vagum		
Inv. bracts with simple hairs 0 or very few	<b>Key B</b> (eminentiforme) sabaudum f. bladonii virgultorum	<b>Key C</b> daedalolepioides* anglorum argillaceum* cheriense* asperatum spilophaeum* (grandidens)* (sylvularum) (exotericum)*	<b>Key E</b> grandidens* sylvularum quadridentatum monstrosum medium sublepistoides* microspilum exotericum* exotericum agg.* patale glevense
Inv. bracts with simple hairs few to many	<b>Key B</b> eboracense trichocaulon* sabaudum f. sabaudum* eminentiforme dumosum*	<b>Key D</b> (trichocaulon)* orimeles eustomon vulgatum* lepidulum* diaphanum* erubescens* argillaceum* subamplifolium pollichiae*	<b>Key F</b> schmidtii stenophilidium eustomon scotostictum*

Brackets indicate that the species can occur in this section but it is not within its usual range.

### Where to look

Hawkweeds are primarily species of dry hedgebanks, walls and dry stony places. A particularly good place to look are bridges and clinkery areas on old railway lines as there are number of species that have a strong connection with railways. *H. vulgatum*, for example, is now known from half a dozen locations along the line from Tavistock to Launceston. It is now quite frequent around Launceston having probably spread from the old station. There are also several old records of various species in the Cornish records associated with railways. So it is well worth following up the old lines to see what you can find. For example, last summer a quick look between Calstock and Gunnislake produced *H. diaphanum* at Calstock new to Cornwall (the old record was probably *H. argillaceum*) and a strong colony of *H. exotericum* s.s. around Albaston.

Finally, I am happy to help if anyone wants to send me specimens. It would be best to email me first [nfstewart@freeuk.com](mailto:nfstewart@freeuk.com) as I may be moving house sometime this year. The national expert David McCosh is also extremely helpful.

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