

HYBRID HOGWEEDS

Giant Hogweed *Heracleum mantegazzianum* was introduced to Britain as a spectacular garden plant and was first recorded naturalised in 1828. Hybrids with native Hogweed *H. sphondylium* were first recorded in County Dublin in 1951 (Stace, Preston, & Pearman, 2015). When botanists have a 'search image' for it, the hybrid can be found at many sites where the species co-occur (Grace & Stewart, 1978) so the 56 hectads in Britain and Ireland where *H. sphondylium x mantegazzianum* has been recorded are probably a substantial underestimate compared to the (at least) 1223 hectads where both parents occur (Stace et al., 2015). The hybrid is intermediate in size and, as for most *Apiaceae*, fruits are important for identification. These characters are observable from the start of fruiting in July until winter storms scatter last year's fruits, sometimes as late as February/March in sheltered sites. Wear gloves when investigating hogweeds.

Well, that sounds straightforward..

Does it? I'm sorry, I misled you. Like many hybrids, identification of hybrid Hogweed is a little murky. Although there are some clearly intermediate specimens, native Hogweed is so variable that it overlaps considerably in morphology with the hybrid: some may be indistinguishable. If grazed or mown, Giant Hogweed will be shorter and slimmer with fewer inflorescence rays; however, fruits should secure a correct differentiation of Giant and hybrid.

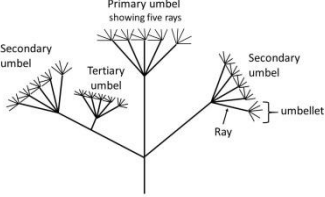
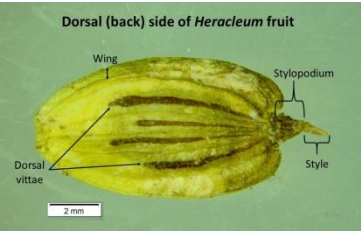



Although the hybrid has limited fertility, backcrossing with native Hogweed is possible so any intermediate genotype might also be present in a population. Additional characteristics of fruit, leaves and stems can also be used to differentiate the three taxa, most of them less easy to observe in the field.

If you look too closely, even the parent species may not be all that clear-cut. After all, if one of the Giant Hogweed species can be introduced as a horticultural showstopper, why not any of them? Historical catalogues and gardeners' notes suggest that this was indeed the case (Armitage, *pers. comm.*) and a study of *Heracleum* taxa in the UK indicates that five are present (Denness, Armitage, & Culham, 2013).

Such is the joy of wild flower identification: it becomes curiouser and curiouser as we delve deeper, from our familiarity with discrete species to the recognition that plants respect no such boundaries. And whether alien taxa enrich, complicate or contaminate our flora is, to some extent, a matter of opinion.

I am grateful to the Wild Flower Society for a grant supporting investigations into the abundance of hybrid Hogweed.

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	Common Hogweed	Hybrid Hogweed	Giant Hogweed
Height	1.3 - 2 m	1.5 - 2.6 m	>2 m and usually >3 m
Flowering stem at base	10 - 25 mm diameter	19 - 45 mm diameter	> 35mm diameter with purplish-red spots or blotches
Primary umbel 	14 - 18 cm diameter, 10 - 29 rays. Usually flat-topped but can be concave or slightly domed.	(16) 20 - 25 cm diameter, 30 - 60 rays. Slightly dome-shaped or more-or-less flat-topped.	At least 55 cm (usually more) in diameter, 50-120 rays. Dome-shaped and often with lower rays curving downwards.
Fruit    	6 – 10 mm in length. Dorsal vittae (oil ducts) < 0.4mm wide at widest point.	9.5 – 11 mm or more in length. Dorsal vittae 0.3 - 0.6 mm wide at widest point.	9 – 14 mm in length. Dorsal vittae > 0.7 mm wide at widest point.