

## Two distinctive hybrids new to Dumfriesshire

Two distinctive hybrids were found this year that are new to Dumfriesshire.

### ***Dactylorhiza maculata* x *Gymnadenia borealis* = X *Dactylodenia evansii***

On 14 July in a fenced off flush in the Black Hope valley in the Moffat Hills there were acid loving species like **Bog Asphodel** *Narthecium ossifragum* and **Heath Spotted-orchid** *Dactylorhiza maculata* but also species enjoying mineral enrichment like **Flea Sedge** *Carex pulicaris*, **Tawney Sedge** *Carex hostiana* and **Heath Fragrant-orchid** *Gymnadenia borealis*.



Flush with many *Dactylorhiza maculata* and hybrid (closest spike)  
Black Hope 14 July 2021



*Gymnadenia borealis* in same flush  
Black Hope 14 July 2021

Such flushes are very important oases of species richness in the Southern Uplands. Amongst the orchids two spikes stood out as unusual and closer observation suggested they may be the hybrid between the two orchids mentioned. The specimen illustrated was confirmed by Prof R. Bateman as the hybrid x *Dactylodenia evansii*.

The hybrid shares features from *D. maculata* in its broad faintly spotted labellum and faint spotting on the leaves and from *G. borealis* it has near horizontally spreading lateral sepals, a longer narrower spur and a sweet scent.

The Hybrid Flora of the British Isles maps all *G. conopsea sensu lato* x *D. maculata* though notes that most of these are likely to refer to *G. borealis* crosses with *D. maculata*. In the main *G. borealis* is much more likely to grow in close proximity to *D. maculata* than the other two *Gymnadenia* species. In the DDb there are 27 hectads where this hybrid has been recorded. However the mapping of

hybrids between these two genera are made more difficult by the inconsistent treatment of *Gymnadenia* species over the years.



*X Dactylodenia evansii* note long slender spur Black Hope 14  
July 2021

## **Cirsium heterophyllum x C. palustre = Cirsium x wankelii**

Walking along a track beside the Garwald Water north of Eskdalemuir on 1 August I noticed a thistle among a steep bank of **Meadowsweet** *Filipendula ulmaria* and **Common Valerian** *Valeriana officinalis* and **Wild Angelica** *Angelica sylvestris* that had been left uncut in a silage field. Locally the valley has a good population of *Cirsium heterophyllum* **Melancholy Thistle** but it was unlike that species. It quickly became apparent that it was the hybrid between *Cirsium heterophyllum* and **Marsh Thistle** *Cirsium palustre*.



*Cirsium x wankelii* Garwald Water 1 August 2021

The hybrid is distinctive when seen. It shares the grey felted under leaf (see photo below) and soft spines of *C. heterophyllum*. The flowers are intermediate in size between the two though they tend to be solitary and on long peduncles. They have the lobed or pinnatifid leaves and purple bracts of *C. palustre* (see photo below). This was a single large plant which, according to the Hybrid Flora of the British Isles, is how it is often found.

The Hybrid Flora of the British Isles map shows the large overlap of both parents in northern Britain extending from the north of Scotland down the Pennines. Both parents favour damp grassy habitats along river corridors or in field margins and both flower at the same time of year. It is perhaps surprising therefore that there are only 55 hectads with this hybrid recorded in the DDb and only about a fifth of these records are from south of the central belt of Scotland.



*Cirsium x wankelii* capitulum showing purple bracts Garwald Water 1 August 2021



*Cirsium x wankelii* details of leaf showing grey felting below Garwald Water 1 August 2021