



Blue Gems: in search of Marsh Gentians

Found one!" I shouted to the small team of volunteer botanists scouting the Airman's Grave area of Ashdown Forest. We were looking for the vivid blue flowers of Marsh Gentian (*Gentiana pneumonanthe*) and I had just spotted the first one of the day. We carefully recorded the exact location, how many flowers were on the stem and looked around for other plants nearby. That first plant was a lonesome outlier but we soon found a small clump some 100m away, and then several more. We crossed a wide, open ride and found a few more plants, typically tucked away in small open areas between Bracken, Gorse and Cross-leaved Heath. They'd be impossible to spot were it not for the unmistakable bright blue flowers. The flowers close overnight and in cold and cloudy weather. Ideal Marsh Gentian spotting conditions are sunny days in late August and September.

The native range of Marsh Gentians includes much of Europe, from southern Scandinavia to the mountains of Spain, Italy and the Balkans, and extends eastwards into central Asia. In the UK it is Nationally Scarce, with good populations only in the New Forest. Marsh Gentians grow in damp acid grassland and heathland, now an extremely scarce habitat. The plants don't like very wet places, but they need damp locations. They were first recorded in West Sussex in 1791 in St. Leonard's forest, but are now locally extinct in West Sussex and found only on Ashdown Forest and Chailey Common in East Sussex.

The survey and monitoring project

Marsh Gentians have been known on Ashdown Forest since at least 1835, but current numbers are much lower than the "thousands of plants" recorded in the 1950s. Without grazing, Purple Moor-grass (*Molinia caerulea*) tends to take over, crowding out the Gentians. The last extensive survey, in 2000, recorded around 700 flowering spikes across 13 locations in the Forest.

The Sussex Botanical Recording Society has set up a small project to ascertain the current status of Marsh Gentian in Sussex, as a baseline for long-term monitoring and observing the impact of management changes.

Teams of volunteer botanists, including Jacqui Hutson and myself, will survey all the sites where Marsh Gentians have been recorded since 1992. At each site, we will record whether we find any gentians, the number of plants and the extent of the area they occupy, habitat details, particularly the presence of areas of bare open ground where seedlings might establish, and associated species.

Next year, we hope to revisit sites where they were found prior to 1992. Even if we don't find any Marsh Gentians at these historical sites, we may find some clues as to why they were lost from locations where they previously thrived.

Conservation

Across their distribution range, Marsh Gentian populations are threatened by habitat destruction (e.g. by ploughing, drainage or afforestation) and by the reduction of grazing or of other physical disturbance. Uncontrolled and excessive burning is also a threat.

Marsh Gentian plants are long-lived perennials, with a mean life expectancy of about 20 years, but individual plants may not flower every year, with plants in more open areas flowering more regularly than those that are shaded. Similarly, seedling establishment is poor in dense vegetation. Previous observations have shown that plant numbers increase in sites where associated vegetation is low and non-shading, and where there is bare ground for seedling establishment. The ideal management for conservation of Marsh Gentians is thus thought to be a combination of light grazing, to reduce competition from vigorous plants such as purple moor-grass, and small-scale turf-cutting or controlled winter burning, to remove the surface vegetation around the plants and provide sites for germination.

Annual Photography competition

Have you taken any photos of birds, butterflies, bluebells, bugs or other wildlife that you are particularly proud of? We'd also love to see images of the different wildlife habitats – woodlands, hedgerows, unimproved calcareous grassland, marshy grassland, semi-improved grassland, ponds and streams - found in our parishes. You may enter up to three images. Photos must have been taken in Plumpton or East Chiltington parishes. The winning entry will be announced at our AGM on Nov 8th. Email your photos to plumptonwildlifephotos@gmail.com by 31st October 2021.

Browse previous year's entries here:

<https://plumptonwildlifegroup.weebly.com/annual-wildlife-photo-competition.html>