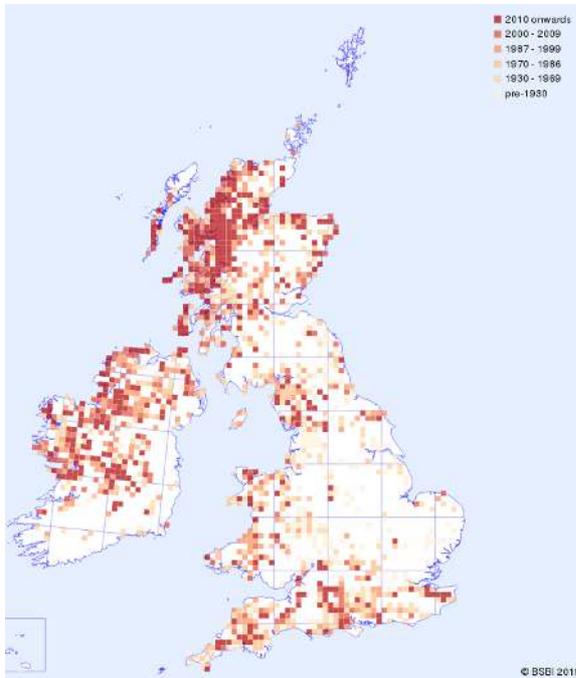


Lesser Butterfly-orchid

Platanthera bifolia



Lesser Butterfly-orchid distribution across Britain and Ireland.

The data used to create this map has been provided under license from the Botanical Society of Britain and Ireland (BSBI) and accessed from the Society's online database.

Description

Lesser Butterfly-orchid is a delicate-looking, white-flowered orchid. It grows to between 15 and 30cm in height. Two shiny, spreading tongue-shaped leaves grow opposite one another at the base of the stem, (hence the Latin name *bifolia*). From these emerges the stem, which bears 1-3, narrow, sheathing and erect leaves. The inflorescence is formed of up to 25 flowers, each with a distinctive strap-like lip, lateral wings and a long nectar-bearing spur.

Lesser Butterfly-orchid is very similar to Greater Butterfly-orchid - the key difference between the two is the position of the pollen sacs. In Lesser Butterfly-orchid these are 1-2mm long and are parallel to each other forming an II shape. Those of Greater Butterfly-orchid are 3-4mm and converge above to form an inverted V. Greater Butterfly-orchid also tends to be larger, with a longer spur.

Lifecycle

Lesser Butterfly-orchid is a perennial plant that overwinters as an underground tuber, from which the two basal leaves emerge in spring. A second tuber develops over the summer, from which a plant may grow the following year (although the plant can persist as a tuber for several years). The flowers appear around early June and release a sweet, nocturnal fragrance that entices night-flying moths to sip the nectar from the spur and, in passing, to transfer sticky pollen between flowers on its proboscis. The Elephant Hawkmoth *Deilephila elpenor* is a key pollinator. The fruits form from mid-July, taking 6-8 weeks to ripen. Each contains 35-85,000 seeds. As with most orchid species, these are tiny and very light weight and are dispersed by

wind. Young plants are thought not to flower for several years.

Habitat

Unlike many orchids, Lesser Butterfly-orchid is able to flourish in a remarkably wide range of habitats. It is found heaths and grasslands, often where the soil fertility is naturally a little elevated. It can also be found in calcareous fens, scrub and woodland glades, provided it is free from competition from more vigorous species. It occurs from sea-level up to 365m.

Distribution

Formerly widespread, Lesser Butterfly-orchid has disappeared from 75% of its recorded range in England and is now considered to be one of the fastest declining plant species in the UK. In England, losses have been most severe in the east, but the species has also declined in its strongholds in Cumbria, Dartmoor, Exmoor and Wessex. It is widely scattered in Wales although the majority of sites are in Cardiganshire, and is most frequent in lowland areas of the Highlands and Islands of Scotland.

GB status and rarity

Lesser Butterfly-orchid is classified as Endangered in England (facing a very high risk of extinction in the wild in the near future).

Protection under the law

Listed as of "principal importance for the purpose of conserving biodiversity" under Section 41 of the Natural Environment and Rural Communities Act 2006

Survey method

At some sites, Lesser Butterfly-orchid occurs at great density; in such cases, the number within a sample quadrat should be counted and multiplied up to account for the total area covered. For smaller populations, individual flowering spikes (and non-flowering rosettes if required) can be counted. As the number of flowering plants can vary markedly between years, annual counts are best.

Reasons for decline

Lesser Butterfly-orchid is long-lived and can tolerate sub-optimal conditions for a period, but seed production over many years is needed if populations are to remain stable or increase - many have been declining slowly for decades. The reason for population loss or decline has often been a reduction in the quality of the habitat, for example through drainage, reseeding, tree planting, inappropriate grazing and atmospheric nutrient deposition. Lesser Butterfly-orchid relies on a mycorrhizal fungus in order to germinate and for seedlings to develop. The fungus is very sensitive to fertilisers and fungicides, which therefore impact on the orchid populations.

Habitat management

Little is currently known about the germination requirements for Lesser Butterfly-orchid. However, it produces abundant seed and the appropriate management of nearby areas may allow populations to expand, as it readily colonises open areas. Management should allow the plant to flower and set seed but keep more competitive vegetation under control: many sites with large populations, such as in the New Forest and on Dartmoor, are close-grazed year round, while on some sites, swaling (controlled burning) is used to limit tussocky vegetation.

In woodlands, glades should be kept open and, if cut, material should be removed to prevent a build up of litter. Rotational management such as coppicing may encourage populations to expand.



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Sources and further information

[Lesser Butterfly-orchid factsheet](#), Plantlife

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