

# *Neotinea ustulata* L.

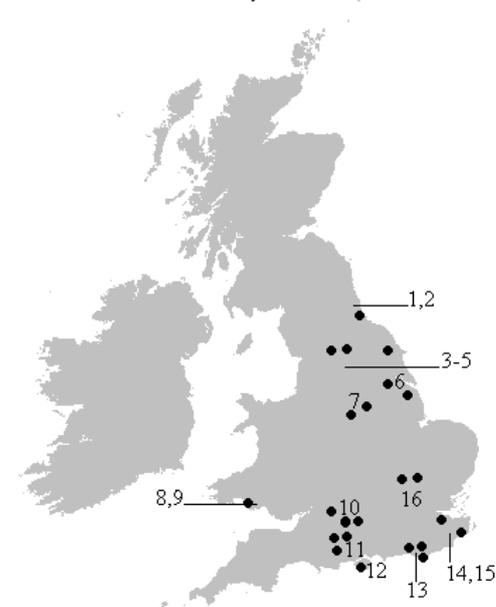
Formerly *Orchis ustulata* L.

Burnt Orchid

Key:

**Dots** refer to the native sites of the species

**Numbers** refer to the nearby Botanical Collections



## *Starting references*

### **Family**

Orchidaceae

### **IUCN category (2001)**

Endangered.

### **Habit**

Tuberous perennial herb.

### **Habitat**

Tightly grazed chalk and limestone grassland on S.-facing slopes; also on sandy and gravelly soils in river meadows and on sand dunes. Lowland. Requires warm, dry conditions.

### **Reasons for decline**

Changes in agricultural practices, such as ploughing and the cessation of grazing, and through habitat destruction by building and quarrying.

### **Distribution in wild**

Country	Locality & Vice County	Sites (10km <sup>2</sup> occurrences)	Population (plants)
England	Co. Durham	1	
	Yorkshire	7	
	Lincolnshire	3	
	Derbyshire	2	
	Wiltshire	18	
	Isle of Wight	1	
	Hampshire	5	
	Sussex	5	
	Kent	2	
	Berkshire	4	
	Hertfordshire	1	
	Bedfordshire	1	
	Gloucestershire	1	

## *Ex situ Collections*

### **Gardens close to the region of distribution of the species**

#### **Gardens with specialisation on family Orchidaceae**

- 1 Moor Bank Garden
- 2 University of Durham Botanic Garden
- 3 RHS Harlow Carr
- 4 Harewood House
- 5 Yorkshire Museum & Gardens
- 6 University of Hull Botanic & Exp. Garden
- 7 Sheffield Botanic Gardens
- 8 National Botanic Garden of Wales
- 9 Swansea Botanic Garden
- 10 University of Oxford Botanic Garden
- 11 Sir Harold Hillier Garden
- 12 Ventnor Botanic Garden
- 13 Newhaven Botanic Garden
- 14 Sissinghurst Castle
- 15 Bedgebury National Pinetum
- 16 University of Hertfordshire

## **Potential to grow the species in *ex situ* Collections**

From Plants For A Future

- **Propagation**

Seed - surface sow, preferably as soon as it is ripe, in the greenhouse and do not allow the compost to dry out. The seed of this species is extremely simple, it has a minute embryo surrounded by a single layer of protective cells. It contains very little food reserves and depends upon a symbiotic relationship with a species of soil-dwelling fungus. The fungal hyphae invade the seed and enter the cells of the embryo. The orchid soon begins to digest the fungal tissue and this acts as a food supply for the plant until it is able to obtain nutrients from decaying material in the soil. It is best to use some of the soil that is growing around established plants in order to introduce the fungus, or to sow the seed around a plant of the same species and allow the seedlings to grow on until they are large enough to move. Division of the tubers as the flowers fade. This species produces a new tuber towards the end of its growing season. If this is removed from the plant as its flowers are fading, the shock to the plant can stimulate new tubers to be formed. The tuber should be treated as being dormant, whilst the remaining plant should be encouraged to continue in growth in order to give it time to produce new tubers. Division can also be carried out when the plant has a fully developed rosette of leaves but before it comes into flower. The entire new growth is removed from the old tuber from which it has arisen and is potted up, the cut being made towards the bottom of the stem but leaving one or two roots still attached to the old tuber. This can often be done without digging up the plant. The old tuber should develop one or two new growths, whilst the new rosette should continue in growth and flower normally.

- **Cultivation**

Prefers a sunny position and a good limey loam soil. Requires a deep rich soil. Orchids are, in general, shallow-rooting plants of well-drained low-fertility soils. Their symbiotic relationship with a fungus in the soil allows them to obtain sufficient nutrients and be able to compete successfully with other plants. They are very sensitive to the addition of fertilizers or fungicides since these can harm the symbiotic fungus and thus kill the orchid. This symbiotic relationship makes them very difficult to cultivate, though they will sometimes appear uninvited in a garden and will then thrive. Transplanting can damage the relationship and plants might also thrive for a few years and then disappear, suggesting that they might be short-lived perennials. Plants can succeed in a lawn in various parts of the country. The lawn should not be mown early in the year before or immediately after flowering. Plant out bulbs whilst the plant is dormant, preferably in the autumn. Bulbs can also be transplanted with a large ball of soil around the roots when they are in leaf, they are impatient of root disturbance. Plants seem to be immune to the predations of rabbits. The flowers diffuse a powerful almond-like scent. Cultivated plants are very susceptible to the predation of slugs and snails.

### ***Conservation information***

#### **Linkages to BAPs**

A Local Biodiversity Action Plan For Swansea

Carmarthenshire Local Biodiversity Action Plan

Cotswold Water Park Biodiversity Action Plan

Glamorgan Biodiversity Advisory Group Strategic Guidance

The National Forest

#### **Habitat Management**

Protected sites with records for *Neotinea ustulata* are listed on <http://www.searchnbn.net>

#### **Conservation programmes**

Unknown

#### **Web References**

- NBN Gateway database: <http://www.searchnbn.net>
- Plants For A Future database: <http://www.pfaf.org/database/plants.php?Orchis+ustulata>