

## **27 PASQUEFLOWER SPECIES ACTION PLAN**

### **27.1 INTRODUCTION**

Pasqueflower *Pulsatilla vulgaris* is an erect perennial herb with stems between 10-30 cm. Basal leaves form a rosette and are long stalked, feathery and twice-pinnate. Stem leaves are also hairy, but are sessile and deeply divided into long linear segments. The flowers consist of 6 petaloid sepals which are large (5-8 cm across), solitary and bell shaped. They are deep purple on the inside and paler violet and silky on the outside, with many golden anthers, making it one of the most attractive native flowers. The species flowers for a short period only in April and May. It occurs only on dry unimproved calcareous grasslands, usually on south or south-west facing slopes, where it favours a short sward.

### **27.2 CURRENT STATUS**

This species is very local in central and eastern England, found from Gloucestershire to Essex and north Lincolnshire.

In Hertfordshire, it is now confined to one site, Therfield Heath, which is one of the largest colonies in the country. However, it was never abundant and has only been recorded from four other sites in the past. These include Aldbury Nowers, where it became extinct in the 1970's, the slope below Tingley Wood and Ravensburgh Castle (Dony, 1967).

### **27.3 CURRENT FACTORS CAUSING LOSS OR DECLINE**

#### **27.3.1 Habitat Deterioration**

A decline in habitat quality was responsible for the loss of this species from most of its Hertfordshire locations. With the decline of sheep farming in the chalkland areas followed by the crash in rabbit numbers in the 1950's, due to myxomatosis, remaining chalk grassland sites became ranker and scrub invaded. Under these conditions the low growing Pasqueflower becomes out-competed by taller growing grasses and herbs. A lack of open ground in such conditions may also prevent germination of Pasqueflower seedlings.

#### **27.3.2 Fragmentation and Isolation of Remaining Habitat**

The loss of chalk grassland this century to arable cultivation, has resulted in the fragmentation and isolation of remaining sites. Under such conditions, when a species is lost from one site it is less likely to re-colonise.

## **27.4 CURRENT ACTION**

The remaining colony on Church Hill, Therfield Heath has been intensively managed for over 15 years, with scrub removed and the grassland initially cut and raked. Since the mid 1980's Church Hill has been regularly grazed to maintain the desired short sward and the numbers of Pasqueflowers are reported to have increased.

The requirements of Pasqueflower have been researched by English Nature and this information is available to aid management and re-introduction programmes.

## **27.5 PASQUEFLOWER ACTION PLAN OBJECTIVES**

To maintain a stable or increasing colony of Pasqueflower on Church Hill and Pen Hills, Therfield Heath.

To encourage the spread of Pasqueflower to other areas of Therfield Heath.

To re-introduce Pasqueflower to 2 former sites by 2010.

## **27.6 PROPOSED ACTIONS**

### **27.6.1 Policy and Legislation**

No action proposed.

### **27.6.2 Site Safeguard and Management**

**P1.** Continue grazing management of Therfield Heath to at least maintain population on Church Hill and Pen Hills and encourage spread of species to other areas of the Heath.

**Action: Therfield Conservators, CMS (n), EN, HMWT.**

**P2.** Ensure management of Aldbury Nowers (by 2001) and other potential re-introduction site(s) (by 2007) creates suitable conditions for the Pasqueflower without compromising other conservation objectives.

**Action: HMWT.**

### **27.6.3 Species Management and Protection**

**P3.** Investigate re-introduction of Pasqueflower to Aldbury Nowers using accepted scientific criteria. Produce a report by 2001.

**Action: HMWT, EN.**

**P4.** Investigate other possible sites for the re-introduction of Pasqueflower. Produce a report by 2004.

**Action: HMWT, HERC, HNHS.**

### **27.6.4 Advisory**

**P5.** Advise landowners of potential re-introduction sites on appropriate management, by 2007.

**Action: HMWT, HERC.**

### **27.6.5 Research and Monitoring**

**P6.** Continue annual monitoring of existing population at Therfield Heath.

**Action: Therfield Conservators, HMWT.**

**P7.** Monitor newly established populations as necessary.

**Action:** HERC, HMWT, HNHS.

#### **27.6.6 Communications and Publicity**

**P8.** Continue to publicise Therfield Heath colony through interpretative information and guided walks.

**Action:** CMS, HMWT.