

## **25 CORNFLOWER SPECIES ACTION PLAN**

### **25.1 INTRODUCTION**

The Cornflower *Centaurea cyanus* is an annual plant of arable fields, on dry, friable soils, both calcareous and acidic. The seeds, which are believed to remain viable for several years, generally germinate during the following spring with a second flush in late summer. It flowers between May and August.

### **25.2 CURRENT STATUS**

Cornflower once occurred throughout the UK and was a troublesome weed of arable land. Between 1930 and 1960 it was recorded from 264 10 km grid squares but by 1985 had declined to fewer than 50. Today, self sustaining populations are thought to be confined to single sites in Suffolk, the Isle of Wight and Lincolnshire. Isolated plants still occur over a large area of south and east England but many are due to introductions from wild flower seed mixtures. In Europe as a whole, Cornflower is not threatened and is still widely distributed but has declined in most of the north-west. In the UK it is now classified as *Endangered*.

In Hertfordshire it was apparently frequent as a cornfield weed especially on the chalk (Dony 1967). In the 1950s it still occurred regularly in a few fields to the east of Baldock. In recent years an irregular population has been recorded from a small area of arable fields in the London Colney area. This population is suspected to be native. Other scattered records are all thought to result from introduced seed, although some may result from chance germination of buried seed.

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

#### **25.3.1 Agricultural changes**

The following agricultural changes were largely responsible for the decline in the Cornflower and are now providing constraints on its recovery.

- Increased use of herbicides and fertilisers.
- The development of highly competitive crop varieties.
- The destruction of field edge refugia.
- The demise of traditional crop rotations.

## **25.4 CURRENT ACTION**

Nationally, research is underway to determine the ideal conservation management. In addition, Cornflower is being re-introduced to a number of locations.

No action is currently being undertaken in Hertfordshire.

## **25.5 CORNFLOWER ACTION PLAN OBJECTIVES**

To develop and maintain a viable population at its only known local location.

To facilitate the re-introduction of self-sustaining populations at other sites.

## **25.6 PROPOSED ACTIONS**

### **25.6.1 Policy and Legislation**

**C1.** Ensure the development of the pilot Arable Stewardship scheme as a means of benefiting Cornflower and other arable species. Seek to ensure success in Hertfordshire, thus assisting its establishment as a national scheme.

**Action:** FRCA, HMWT, CMS, RSPB.

**C2.** Ensure that any seed of Cornflower in wildflower seed mixtures is of UK origin, by 2000.

**Action:** MAFF, Seed merchants, Users of seed.

**C3.** Include Cornflower within the targeting policy for Countryside Stewardship in Hertfordshire, by 1998.

**Action:** MAFF.

### **25.6.2 Site Safeguard and Management**

**C4.** Seek to maintain and enhance appropriate conditions at, and around, the currently known site, particularly through the use of the Countryside Stewardship Scheme, by 1998.

**Action:** CMS, HMWT, FRCA.

**C5.** Seek to establish an arable weeds nature reserve in the East Anglian Chalk or East Anglian Plain countryside character areas, by 2002, and if the ecology is suitable, establish a seedbank of Cornflower from Hertfordshire stock.

**Action:** HMWT.

### **25.6.3 Species Management and Protection**

**C6.** By 2001, seek to implement experimental management at a minimum of one historic site, preferably within the pilot Arable Incentive Scheme area, with the aim of regenerating Cornflower from the seedbank. Should regeneration not take place, consider re-introduction of Hertfordshire stock if the donor population recovers.

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

### **25.6.4 Advisory**

**C7.** Seek to advise landowners within the current known range of the presence and importance of the species, specific management for its conservation and potentially damaging operations, by 2000.

**Action:** HMWT, CMS.

**C8.** Prepare an advisory leaflet on managing land for rare arable weeds by 2000.

**Action:** HMWT, HERC.

#### **25.6.5 Research and Monitoring**

**C9.** Implement monitoring programme for current known location from 1998. Feedback information to assist in advising landowner(s) of best possible conservation management.

**Action:** HERC, HMWT.

**C10.** Collate information on the ecological requirements of the species, by 1998.

**Action:** HERC, HMWT.

#### **25.6.6 Communication and Publicity**

**C11.** Publicise the plight of this and other threatened arable species. Articles to be written for relevant conservation and farming magazines. Target: at least 1 annually for 3 years.

**Action:** HMWT, EN.

**C12.** Encourage botanists and landowners to report any new records.

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