

Vision for Essex Reedbeds

Safeguarded, improved and extended habitats appreciated for their wealth of wetland wildlife.

Water levels are managed to benefit wildlife at all seasons and sites restored and used to hold water in the landscape and benefit wildlife.

Populations of key national and Essex species have increased and are spread more widely throughout the county.



Reedbeds

National Description

Reedbeds are wetlands dominated by stands of the common reed *Phragmites australis*, wherein the water table is at or above ground level for most of the year. They tend to incorporate areas of open water and ditches, and small areas of wet grassland and carr woodland may be associated with them.

The majority are freshwater, but reedbeds are also found in brackish and tidal waters. Common reed is an active coloniser of wet ground or open water and reedbeds form a transition stage in the eventual succession to woodland. In tidal areas or sites which are subject to regular freshwater flooding, a reedbed may persist in a relatively stable state unless there is heavy siltation. Elsewhere, the accumulation of dead vegetation and litter will result in the gradual drying of the bed, allowing invasion of carr, scrub or woodland species.

Reedbeds are amongst the most important habitats for birds in the UK. They support a distinctive breeding bird assemblage including 6 nationally rare Red Data Birds the bittern *Botaurus stellaris*, marsh harrier, *Circus aeruginosus*, crane *Grus grus*, Cetti's warbler *Cettia cetti*, Savi's warbler *Locustella luscinioides* and bearded tit *Panurus biarmicus*, provide roosting and feeding sites for migratory species (including the globally threatened aquatic warbler *Acrocephalus paludicola*) and are used as roost sites for several raptor species in winter.

All stages in reedbed development provide important habitats for invertebrates; the areas of lowest invertebrate interest being those of open water. Five British Red Data Book invertebrates are closely associated with reedbeds including Reed leopard moth (*Phragmataecia castanaea*) and a rove beetle *Lathrobium rufipenne*. In East Anglia, more than 700 species of invertebrate have been recorded from reedbeds, 23 of them Red Data Book.

40 species in four Orders - Hemiptera, Lepidoptera (moths only), Coleoptera & Diptera - are known to feed only on reed, with a further 24 insects feeding partly on reed during their life cycle. A wide range of invertebrates are also associated with reed even if they do not feed directly on it. These include predators (mainly beetles and spiders) and parasites of the reed-feeding invertebrates, which live in the stems, including gall-forming flies and solitary wasps. The solitary bee *Hylaeus pectoralis* nests in vacated cigar galls on reed.

Status in Essex

Reedbed is a rare habitat in Essex, generally occurring as small fragments and largely concentrated in coastal areas or other areas of wetland. The 1993 RSPB Reedbed Inventory suggests there are around 134 ha in Essex, although this is thought to be an underestimate. Using 1993 Inventory data and reedbed definitions, Essex holds approximately 2.75 % of the resource in England (2% in Great Britain). The 2006 survey indicates there are currently 26 significant sites identified in Essex, covering 121ha (EECOS 2006).

A number of bird species in Essex are either wholly or partly dependent on reedbeds. Bearded Tit, Cetti's Warbler and Marsh Harriers are all Red Data book species breeding in Essex reedbeds. The Bittern is also a Red Data book species which last bred in the county in 1944 and could be expected to breed once again in Essex given a suitable quality and extent of habitat.

Of the five Red Data Book invertebrates that are closely associated with reedbeds nationally, one, the Flame Wainscot *Senta flammea*, occurs in Essex. Other notable or very local invertebrates associated with *Phragmites* that occur in Essex are Obscure Wainscot *Mythimna obsoleta*, Twin-spot Wainscot *Archanara geminipunctata*, Reed Dagger *Simyra albovenosa*, *Cosmopterix liengiella* and *Schoenobius gigantella* (all Lepidoptera) and *Plateumaris braccata* (Coleoptera). Also *Clubiona juvenis* and *Hypomma fulvum* (Arachnids) and *Passaloecus clypealis* (Hymenoptera).

Reedbeds continue to be subject to a number of factors across the county.

Lack of appropriate water level management resulting in drying out of reedbeds with ensuing scrub encroachment and natural succession to woodland. This can include too frequent harvesting/cutting cycle, of existing reedbeds.

Sea-level rise due to climate change is predicted to result in the loss of significant reedbed habitat in coastal areas through coastal erosion and increasing saline incursion on coastal sites. Reed is tolerant of limited saline conditions but cannot tolerate prolonged immersion in salt water.

Pollution of freshwater supplies to reedbeds through siltation, toxic chemicals and nutrient enrichment (eutrophication).

Land drainage and conversion to intensive agriculture have significantly contributed to loss of reedbed in the past.

Lack of biological information, particularly concerning reedbed invertebrates, is preventing the successful protection of important sites.

Lack of knowledge of the physical state of reedbeds with respect to design management, pollution, hydrology etc.

Loss and damage by **excessive water abstraction** and in the past, land drainage and conversion to intensive agriculture.

The **small and fragmented** nature of many sites - especially reedbeds associated with borrow-dykes.

Lack of coordinated approach to survey and management - especially reedbeds associated with borrow-dykes.

Lack of SSSI designation of some sites, especially in the Thames Estuary.

Targets

| National Targets Reedbeds | | target date |
|----------------------------------|--|--------------------|
| 1 | No net loss of area. There are 6530ha in the UK. There are 926 sites but only 15 sites exceed 40ha (RSPB 1994) | ongoing |
| 2 | Create 1,200 ha of new reedbed on land of low nature conservation interest | ongoing |
| 3 | All reedbed to be favourable/recovering status | ongoing |

| East of England Targets Reedbeds | | target date |
|---|---|--------------------|
| 1 | Create 3000ha of reedbed national target is only 1,200 ha on land of low nature conservation interest | 2015 |

| Essex Targets Reedbeds | | target date |
|-------------------------------|--|--------------------|
| 1 | No net loss of area. There are currently 26 significant sites identified covering 121ha (EECOS 2006) | 2020 |
| 2 | Undertake restoration on 75% of the existing habitat = 90ha | 2020 |
| 3 | Create 100ha (5x 20ha) | 2020 |