Flowering plants of the shores of the Fleet

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S. M. Eden, West Bexington, Dorchester, Dorset

A detailed survey of the flowering plants along the Chesil Bank and the inland shores of the Fleet has been started. There are several plants, common round the Fleet, which are scarce in Britain and this, combined with earlier records of rare plants, indicated that an up-to-date appraisal of the flora would be of great value, especially in assessing the conservation needs of the plants of the area.

Some of the rare plants, such as the Wild Asparagus (*Asparagus officinalis* subsp. *prostratus*) must now be presumed extinct: but only recently three National Red Data Book Species (species occurring in fewer than sixteen 10 km squares nation-wide) have been rediscovered in the area. The rarest of these, Four-leaved Allseed (*Polycarpon tetraphyllum*) had been known at the Fleet for almost 250 years and was rediscovered after a gap of about 10 years; it is only known, as a native plant, from two other mainland sites.

There are numerous records for Nationally Scarce Species (species occurring in sixteen to one hundred 10 km squares nation-wide). Over twenty of these have been seen recently. Plants of the area also include species rare in Dorset: for example Sea Holly (*Eryngium maritimum*) is only known in Dorset from the Chesil Bank.

The Chesil Bank is one of the most outstanding gravel beaches in Europe. The bank on the seaward side of the Fleet is botanically impoverished, as it is distant from outside sources of seed, and it is much disturbed by storms. There are few stabilised areas where anything other than maritime pioneer species occur, and these have been much reduced in recent years, especially by the storm in December 1989. The most botanically important stabilised gravel is at Ferry bridge, where it is under considerable pressure from human trampling.

Sea Campion (*Silene uniflora*) is the predominant coloniser along this section of the Chesil Bank. All other maritime colonisers occur as scattered individuals or isolated colonies. Among these plants are the Nationally Scarce Species, Sea Pea (*Lathyrus japonicus*), Sea Kale (*Crambe maritima*), Sea Spurge (*Euphorbia paralias*) and Portland Spurge (*Euphorbia portlandica*).

Salt marsh forms an important habitat round the Fleet. There is a narrow band round most of the Fleet, but it is best developed in the inlets and bays on the landward side. Several Nationally Scarce Plants are found here, including the locally abundant Shrubby Sea-blite (*Suaeda vera*) and Marsh Mallow (*Althaea officinalis*).

The shores on the inland side also include a wide range of habitats, from freshwater marsh, to grassland, to eroding cliffs. Nationally Scarce Species here include, Yellow Vetchling (*Lathyrus aphaca*), Bithynian Vetch (*Vicia bithynica*), Yellow Vetch (*Vicia lutea*) and Slender Tare (*Vicia parviflora*). The majority of these species seem to be associated with somewhat open habitats, a result of trampling, arable cultivation or the erosion of the cliffs.

Provisional list of rare plants that have been found on the Chesil Beach and the shores of the Fleet

NATIONAL RED DATA SPECIES (occurring in fewer than sixteen 10 km squares nation-wide)

Allium ampeloprasum Babington's Leek
Asparagus officinalis subsp. *prostratus*, Wild Asparagus. Extinct, not seen since early 1970s
Orobanche purpurea, Purple Broomrape. Last seen in 1992
Polycarpon tetraphyllum, Four-leaved Allseed
Valerianella eriocarpa, Hairy-fruited Corn Salad

NATIONALLY SCARCE SPECIES (occurring in sixteen to one hundred 10 km squares nation-wide)

Alopecurus bulbosus, Bulbous Foxtail
Althaea officinalis, Marsh Mallow
Atriplex longipes, Long-stalked Orache
Bupleurum tenuissimum, Slender Hare's-ear
Carex divisa, Divided Sedge
Crambe maritima, Sea Kale
Euphorbia paralias, Sea Spurge
Euphorbia portlandica, Portland Spurge
Hordeum marinum, Sea Barley Not seen recently, may be extinct
Lathyrus aphaca, Yellow Vetchling
Lathyrus japonicus, Sea Pea
Lavatera arborea, Tree Mallow. Impossible to distinguish between native plants and those which have escaped
Limonium binervosum, Rock Sea-lavender. Form found is *L. dodartiforme*
Puccinellia rupestris, Stiff Saltmarsh-grass
Suaeda vera, Shrubby Sea-blite
Trifolium squamosum, Sea Clover
Vicia bithynica, Bithynian Vetch
Vicia lutea, Yellow Vetch
Vicia parviflora, Slender Tare
Vulpia ciliata, Bearded Fescue
Vulpia fasciculata, Dune Fescue

DORSET SCARCE SPECIES (not in above categories, but occurring in three or fewer sites in the county)

Eryngium maritimum, Sea Holly
Falcaria vulgaris, Long Leaf