

COUNTY: DORSET      SITE NAME: BERE STREAM

DISTRICT: PURBECK

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981

Local Planning Authority: PURBECK DISTRICT COUNCIL

National Grid Reference: SY 860926      Area: 11.2 (ha.) 27.7 (ac.)

Ordnance Survey Sheet 1:50,000: 194      1:10,000: SY 89 SE

Date Notified (Under 1949 Act): 1977      Date of Last Revision: –

Date Notified (Under 1981 Act): 1984      Date of Last Revision: –

Other Information:

Research site for the Freshwater Biological Association River Laboratory. One of the few river sites with estimates for biomass production and throughput of organic matter.

Reasons for Notification:

A length of chalk-stream with marshland and woodland. The Bere stream is a very typical permanent chalk-stream which has been maintained almost without management in recent years. The adjacent woodland and grassland have a rich flora and fauna.

In the stream the dominant higher plants are Chalk-stream Water-crowfoot *Ranunculus pencillatus* var. *calcareus* and Water-cress *Nasturtium officinale*. Whorl-grass *Catabrosa aquatica* and Horned Pondweed *Zannichellia palustris* are other components. Many of the characteristic algal communities of chalk-streams occur including the spring diatom community with *Diatoma vulgare*, the lime encrusted epilithic community including *Homeothrix* spp. and filamentous algae, especially *Vaucheria* spp. The invertebrates vary greatly according to micro-habitat but are again very typical, including Freshwater Shrimp *Gammarus pulex*, Mayfly *Ephemera danica*, Blue-winged Olive *Ephemerella ignita*, many species of *Simulium* and Chironomids, *Limodrilus hoffmeisteri* and *Stylodrilus heringianus* (tubificid worms). Bullhead *Cottus gobio* and Minnow *Phoxinus phoxinus* are the most abundant fish, but Brown Trout *Salmo trutta* in the deeper sections and young Salmon *Salmo salar* are present. Kingfisher *Alcedo atthis* occurs and Otter *Lutra lutra* is regularly recorded.

The wet grassland which is dominated by Soft Rush *Juncus effusus* and Hard Rush *Juncus inflexus*, being subject to calcareous influences from the stream and acid ground water from the adjacent Bagshot Beds, has a diverse flora. There are at least fifteen grasses and ten sedges and herbs include local species such as Marsh Cinquefoil *Potentilla palustris*, Bogbean *Menyanthes trifoliata* and Bog

Pimpernel *Anagallis tenella*. Hollows in this grassland contain acid mire communities dominated by *Sphagnum compactum* with Cross-leaved Heath *Erica tetralix*, Cotton Grass *Eriophorum angustifolium*, Bog Asphodel *Narthecium ossifragum* and several other typical 'bog' species. In certain areas, especially near the stream, taller sedges form dense stands with Hemlock Water-Dropwort *Oenanthe crocata*. In these areas the scarce Scarlet Tiger Moth *Calamorpha dominula* is frequent.

The woodland is varied ranging from Oak *Quercus*/Ash *Fraxinus* with Hazel *Corylus* shrub layer in the dryer areas to Alder *Alnus*/Sallow *Salix* carr in the lower-lying wetter parts.