

COUNTY: KENT      SITE NAME: RIVER BEULT

DISTRICT:

Status: Site of Special Scientific Interest (SSSI) notified under Section 28 of the Wildlife and Countryside Act 1981 as amended, Section 17 of the Water Resources Act 1991, Section 4 of the Water Industry Act 1991 and Section 13 of the Land Drainage Act 1991.

Local Planning Authorities: Maidstone Borough Council, Ashford Borough Council

National Grid Reference: TQ 865425 to      Length: 24.8km; 15.5 miles  
TQ 693502

Ordnance Survey Sheets: 1:50,000: 188, 189      1:10000: TQ 74 NW, NE, SE;  
TQ 84 SE; TQ 64 SE;  
TQ 65 SE

Date Notified (Under 1981 Act): 1994

Other Information:  
This is a new site.

Description:

The River Beult flows for most of its length over Wealden clay which influences its ecology. It is one of the few clay rivers in England which retains a characteristic flora and fauna. This type of river occurs predominantly in central England and has usually been canalised for land drainage purposes.

The Beult flows through an agricultural catchment with sheep and cattle pasture, orchards and arable land. River flows are dependent on surface run-off and weirs are placed in spring to maintain levels. In common with many lowland rivers, the Beult has suffered some enrichment with phosphate and nitrate from sewage effluent and agricultural run-off. The section of river being notified, from Smarden to the Medway confluence, excludes the upper river which is ditch-like with an impoverished fauna and flora.

*Vegetation*

The River Beult has a characteristically diverse clay-river flora, with many emergent (water edge) plant species and a smaller number of submerged or floating plants. The total for the river and banks approaches 100 species, including 11 mosses and liverworts.

The river channel is dominated by floating plants like yellow water-lily *Nuphar lutea*, arrowhead *Sagittaria sagittifolia*, and duckweeds, particularly *Spirodela polyrhiza* which can form a continuous cover over the water surface. Other common plants include white water-lily *Nymphaea alba*, flowering rush *Butomus umbellatus*, unbranched bur-reed *Sparganium emersum* and stands of bulrush *Schoenoplectus lacustris*. Submerged plants include five species of pondweed *Potamogeton berchtoldii*, *P. crispus*, *P. obtusifolius*, *P. pectinatus* and *P. natans* as well as rigid hornwort *Ceratophyllum demersum* and spiked water milfoil *Myriophyllum spicatum*.

Characteristic river-bank plants include water chickweed *Myosoton aquaticum*, amphibious bistort *Polygonum amphibium*, celery-leaved buttercup *Ranunculus sceleratus*, great yellow cress *Rorippa amphibia*, water plantain *Alisma plantago-aquatica*, and purple loosestrife *Lythrum salicaria*.

The adjacent agricultural land use significantly affects these riverside plant communities, which in turn influence the insect and bird life. The most diverse plant communities occur where the river bank is relatively shallow and grades into a shallow berm grazed by cattle. The cattle-poached water edge supports fool's water cress *Apium nodiflorum*, brook lime *Veronica beccabunga*, blue water-speedwell *Veronica anagallis-aquatica*, water figwort *Scrophularia auriculata* and water mint *Mentha aquatica*. Where the river bank is inaccessible to grazing animals, bulrush and branched bur-reed *Sparganium erectum*, reed canary grass *Phalaris arundinacea*, or reed sweet-grass *Glyceria maxima* become dominant.

The river bank next to arable fields has weedy vegetation of nettle *Urtica dioica* and thistles *Cirsium* spp, due to fertiliser run-off and pesticide spray drift.

#### *Animals*

Two nationally scarce invertebrates have been recorded from the River Beult; a water beetle *Haliphus laminatus* occurs in slow-flowing stretches of the river and the hairy dragonfly *Brachytron pratense* is found in sluggish, well vegetated areas. Sixteen species of dragonfly and damselfly have been recorded. The thick emergent fringes of vegetation on the banks are important for several of the scarce species such as the white-legged damselfly *Platycnemis pennipes* and the ruddy darter dragonfly *Sympetrum sanguineum*. The aquatic snail *Bithynia leachi*, is characteristic of species-rich sites.

Bare clay banks provide nesting sites for the kingfisher *Alcedo atthis* which occurs regularly along the river. Thick emergent fringes also provide cover and breeding sites for birds such as reed warbler *Acrocephalus scirpaceus* and reed bunting *Emberiza schoeniclus*.