

Narberth – Canaston Bridge

About Sustrans

Sustrans is the charity making it easier for people to walk and cycle. We are engineers and educators, experts and advocates. We connect people and places, create liveable neighbourhoods, transform the school run and deliver a happier, healthier commute. Sustrans works in partnership, bringing people together to find the right solutions. We make the case for walking and cycling by using robust evidence and showing what can be done. We are grounded in communities and believe that grassroots support combined with political leadership drives real change, fast.

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Executive Summary

Sustrans have undertaken a series of surveys to inform the creation of a new traffic-free path between Narberth and Canaston Bridge in Pembrokeshire, Wales. The route measures approximately 7.1km in length and is located along a mixture of adopted highways, stone and earth access tracks and footpaths. This appraisal and the studies which underpin it focus on two discrete off-road sections of the wider route (Section A and Section B).

In order to provide an initial assessment of the likely ecological constraints of this proposal, a Preliminary Ecological Appraisal (PEA) has been conducted. The field work which underpins this PEA comprises of two separate visits completed on 17-18 April and 13 June 2018. The PEA provides a summary of the assessments completed to date and as such an assessment of nature conservation sites, habitats and protected and notable species identified along the route and details mitigation, where required to address the potential ecological impacts identified.

Following the initial site visit, further survey in respect of great crested newts, otter and hazel dormouse has been undertaken. Some informal consultation with local ecological stakeholders has also been completed.

Current planning policy requires that development projects not only minimise their ecological impacts but include enhancements wherever possible in proportion to their scale. The Local Authority and NRW should be consulted to determine appropriate measures. Recommendations included with this report include the development of a woodland management plan for Plas Wood, as well as the construction or implementation of a series of micro-features to benefit bats, birds, invertebrates and dormouse.

1.2 Ecological Assessment

In order to provide an initial assessment of the likely ecological constraints of this proposal, a

This included any badger setts, worn pathways in vegetation and/or across field boundaries, footprints, hairs, dung pits/latrines, bedding and evidence of foraging activity including snuffle holes.

Evidence was recorded in accordance with a standard approach as in 'The history, distribution, status and habitat requirements of the Badger in Britain, (1990)'.

Particular attention was paid to habitats of suitable topography or supporting suitable vegetation for sett-building as well as to those features particularly favoured by badgers including hedgerows, areas of dense scrub, woodland, ditches and banks.

All holes of an identified sett were examined closely and the number of active and inactive entrances

The second visit was timed to coincide with the peak emergence period for flowering plants associated with the open areas of grassland near the northern boundary of Canaston Wood. It should be noted that the purpose of the botanical assessment as part of this PEA was to classify the habitats and the dominant species within and therefore does not represent a full inventory of the higher and lower plant species present.

The HSI, eDNA and box trapping surveys were completed as per the agreed protocols. Full access around the pond was available and therefore no significant co

2 Baseline Information

2.1 Landscape

The route is situated within the Milford Haven National Landscape Character Areas (NLCA48). This is a very diverse landscape supporting deep water harbours and several key estuaries including those linked to the Eastern and Western Cleddau Rivers which run along the western edge of the route. The principal habitats inland comprise a mixture of agricultural fields bound by mature hedgerows and a number of large and ex

Figure 2.1.1 – Map extract showing interface between proposed route and SSSI Unit 1017, East Cleddau / part of Cleddau Rivers SAC. Central NGR: SN095144. Map source: Natural Resources Wales

The primary reason for the award of the SAC designation is that the site supports a series of Annex II species, including brook lamprey *Lampetra planeri*, river lamprey *Lampetra fluviatilis*, bullhead *Cottus gobio* and otter *Lutra lutra*. All of these species are considered to be common and widespread throughout the catchment, but have historically suffered significant and sustained

the route near Blackpool Mill is located inside the core sustenance zone² for bats roosting at Sleback Park.

Secondary qualifying features for the SAC include the presence of lesser horseshoe bats and otter (both Annex II species).

Pembrokeshire Marine

The Pembrokeshire Marine SAC is the third largest marine SAC in the UK, covering an area of 138,069 ha. The site extends from near Aberiddy in north Pembrokeshire all the way round to Manorbier in south Pembrokeshire. The SAC incorporates Milford Haven Waterway. The boundary of the SAC extends along the Cleddau River and terminates adjacent to Blackpool Mill.

Primary reasons for designation of the site include the presence of Annex I habitats:

1130 Estuaries – The SAC includes the Daugleddau estuary which is one of the best examples of a ria³ in the UK. The estuary supports a wide diversity of different plant and animal communities including an exceptional assemblage of tide-swept sponges. The mudflat, particularly in the upper reaches are also rich in wildlife and include produce invertebrate communities.

1160 Large shallow inlets and bays – The sediment including sandy embayment of St Brides Bay provide optimal conditions for a range of internationally notable plant communities including extensive beds of narrow-leaved eelgrass *Zostera angustifolia*. The geomorphology of the inlets and bays also accommodate a wide range of subtidal and intertidal rocky habitats.

1170 Reefs – Extensive areas of sublittoral rock reef stretch offshore and through Milford Haven. The variety of coastal land forms, slope, aspect and topography and the high water quality within the SAC produce conditions for a wide diversity and abundance of biological communities. More sheltered reefs, inland support a number of important sponge and ascidian (sea squirt) communities.

A series of Annex II species are present in sufficient numbers to also qualify as a primary reason for qualification as a SAC these include:

1364 Grey seals *Halichoerus grypus* - Habitats within the SAC provide nationally important breeding grounds for grey seal, supporting 2% of the annual UK pup production.

1441 Shore dock *Rumex rupestris* – The upper shores and wet hollows of sand dunes along the coast support this critically endangered species

Other qualifying features which are of high ecological importance, but not represent a primary reason for designation include:

A series of additional Annex I habitats:

- 1110 Sandbanks which are slightly covered by sea water all the time
- 1140 Mudflats and sandflats not covered by seawater at low tide
- 1150 Coastal lagoons
- 1330 Atlantic salt meadows *Glauco-Puccinellietalia maritimae*
- 8330 Submerged or partially submerged sea caves

² BCT (2016) Section 3.7, Table 3.5

³ A ria is a coastal inlet formed by the partial submergence of an unglaciated river valley

A series of additional Annex II species:

- Sea lamprey
- River lamprey
- Allis shad *Alosa alosa*
- Twaite shad *Alosa fallax*
- Otter

The two joint closest SSSIs unit within the SAC are Mildford Haven and Minwear Wood SSSI. w9

Notable Bird Species

28 records relating to 15 different locally and nationally notable bird species were returned for habitats within 1km of the route. Species reported by the search were principally those associated with woodland and parkland habitats including wood warbler *Phylloscopus sibilatrix*

Notable Habitats

Plas Wood and Canaston Wood are listed on the Ancient Woodland Inventory (AWI) for Wales.

The balance of Plas Wood, north of the existing route and to a limited extent to the south is listed as a 'Restored Ancient Woodland Site' (**Figure 2.3.8.1**). The remaining part of the wood is not listed on the inventory, even though the habitats are contiguous and based on the surveyor's opinion of similar quality.

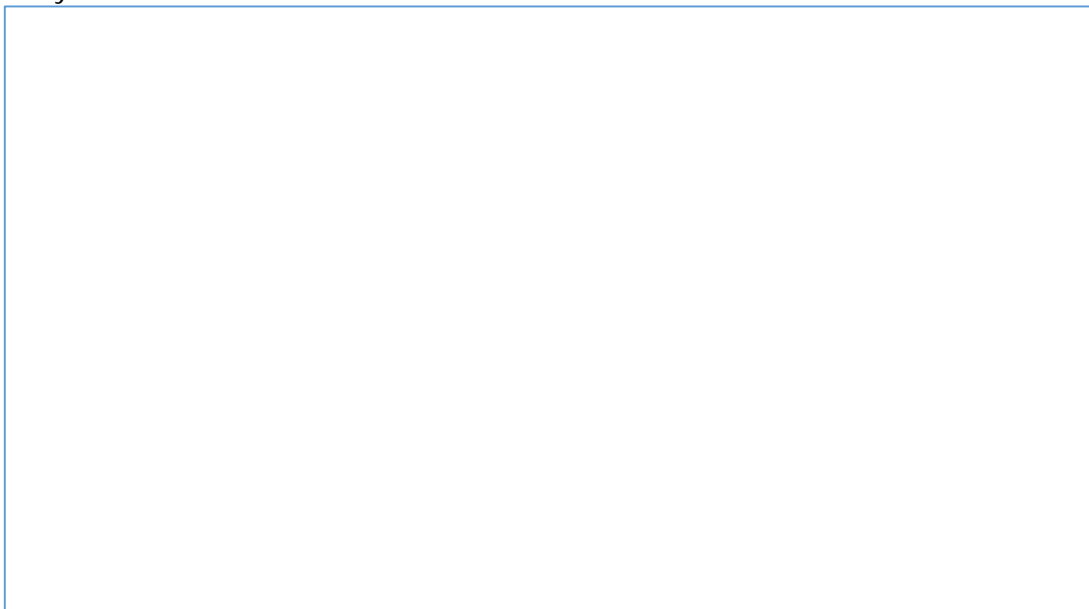


Figure 2.3.8.1 – Extract from Ancient Woodland Inventory – Plas Wood, Narberth. Source: NRW

As shown on Figure 2.3.8.2 below, all of the woodland compartments along the proposed access route are listed as either Ancient Semi-Natural Woodland (ASNW), or Plantation on Ancient Woodland Soils (PAWS).



Figure 2.3.8.2 - Extract from Ancient Woodland Inventory – Canaston Wood, Narberth. Source: NRW

A second block of broadleaved woodland (W2) is located along the route and straddles Narberth Brook – NGR: SN 09594 14485 to SN 09621 14413 (**Plate 2.6**). This woodland is located within East Cleddau River SSSI (Unit 1017).

A second block of mature (0.3-0.4m diameter at breast height (dbh)) broadleaved woodland comprising relatively widely spaced mature beech trees (5-10m spacing) was mapped to the west of the track between NGR: SN 08225 14241 to SN 08111 14016. Underwoodi0.6

Plate 2.11: Deteriorating tarmac path leading west from Narberth

Plate 2.12: Rolled stone path between Narberth Brook and Valley Road

Plate 2.13: Bridge over Narberth Brook

Section B

The route is located along a mixture of existing stone paths and tracks. The stone paths are approximately 1-2m in width, with the tracks associated with the forestry operations within Canaston Wood 2-3 (occasionally 4m) in width (**Plate 2.14**). An access gate is present at the junction with Valley Road at the northern end, with a high pressure gas line crossing the route along a clearing within the wood (NGR: SN 08237 14245).

Plate 2.

Dense Continuous and Scattered Scrub

Section A

A single bank of dense scrub was located close to the public car park near Narberth. This bank of

A cluster of dwarf shrubs typical of upland, heath habitat were mapped to the south-east of the track near the northern entrance to Canaston Wood (**Plate 2.17, D1 Figure 3.1.2**). This habitat was characterised by clumps of common heather *Calluna vulgaris* and bilberry *Vaccinium myrtillus* growing on the face and across the top of an existing bank punctuated by a mixture of self-set birch and mature conifer.

Other acid indicators recorded growing within this habitat included remote sedge, sheeps fescue and hard fern *Blechnum spicant*.

The grassland immediately to the west between the toe of the slope and the existing path (c.2m

growing on the outer face of the hedge. H2 also supported a number of mature oak and ash trees, with a dense and continuous line of ash and sycamore recorded to the west.

The ground flora beneath the two hedgerows was exceptional and indicative of an ancient hedgerow

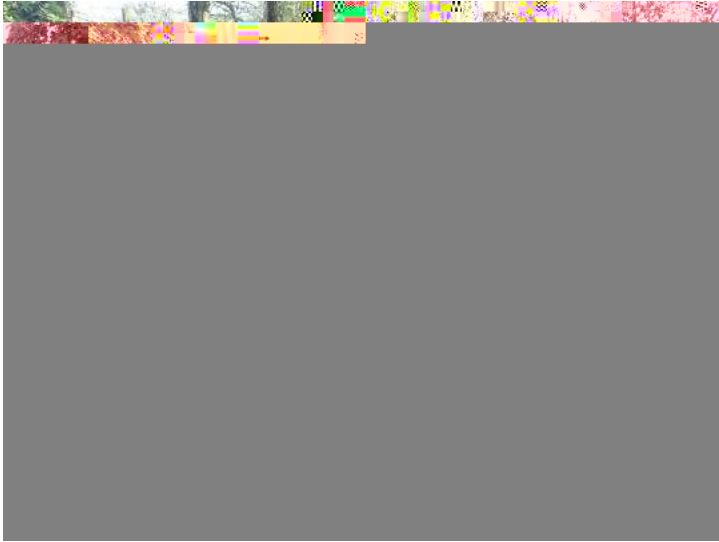


Plate 2.23 – H5 and H6, Section B

Plate 2.30: 'V' shaped ditch

Section B

No running water was identified.

Scattered Trees

Section A

A large number of scattered trees were present throughout the survey area.

Individual horse chestnut and naturalised tree species line the existing path leading west from Narberth. A further cluster of mature sessile oak located on a bank and adjacent to a ditch 25m north of the proposed route near the entrance to Plas Wood.

The two hedgerows leading west from Plas Wood (H1 and H2) also supported a number of very mature oak and ash trees, several of which had potential for nesting birds and bats (see **Fig 3.1.1**). A particularly notable sessile oak (**Target Note 1, Fig 3.1.1**) was recorded near to the homestead west of Narberth (NGR: SN 09847 14479). This tree supported a girth in-

Plate 2.31 – Narberth Brook

Standing water

Section A

A single pond located within the grounds of an adjoining property, to the north-east of Narberth Brook was identified and assessed (**Plate 2.34, P1**). This pond forms part of East Cleddau River SSSI, Unit 1017.

This rain and groundwater fed pond supported a notable assemblage of submerged and floating leaved species including stoneworts *Chara* spp., potamogeton *Potamogeton* sp., lesser spearwort *Ranunculus flammula*, water lily *Nymphaea* sp., yellow flag *Iris pseudacorus* and abundant marsh marigold. Several comm



along the route including Plas Wood and the plantation and semi-natural compartments at Canaston Wood.

A variety of bird species were noted incidentally as part of the assessment, these observations are detailed in the table below.

Table 3.2.1: List of bird species recorded incidentally in April and June 2018 along Sections A and B of proposed new traffic free route between Narberth and Canaston Woods

A large variety of different habitats are present near the route, most of which could be used by foraging, nesting and roosting birds. Habitats of particular note for nesting birds along this route are the dense scrub, scattered trees and woodland.

Fish

WWBIC provided records for Atlantic salmon along Narberth Brook, with corresponding citations for Cleddau River SAC and accompanying SSSI also making reference to brook lamprey, river lamprey and bullhead.

The presence of silts and gravels within the Narberth Brook provide suitable spawning grounds and nursery sites for river and brook lamprey⁷

Narberth Brook and the corresponding ditches and streams which link to this (

H1 and H2 are of a suitable age, diversity and size to provide a suitable potential dispersal route for dormouse. The presence of a mixture of spring, summer and autumn fruiting wood species would provide foraging opportunities through-out the active dormouse period.

The wet woodland straddling Narberth Brook is mature, characterised by a dense closed canopy and supports a patchy distribution of fruiting and flowering understorey species attractive to dormouse. Several specimen trees within the wood support hollows and cavities, suitable for hibernating dormouse. The nut search confirmed that squirrel, wood mouse and bank voles actively feed on hazel nuts.

H5 and H6 are intact hedgerows with a reasonable assemblage of woody species of importance to dormouse, although appeared to be less productive than H1 and H2 owing to heavy shading by mature hedgerow and free standing trees on either side.

Compartment W5, which was the mature high beech woodland was found to be open and lacking in understorey diversity and cover. This habitat was considered to be of lower suitability for dormouse.

Compartment W8, in contrast, supported suitable habitat for foraging and hibernating dormouse. Although hazel cover was low, this was compensated for by the presence of other fruiting shrub and understorey species known⁹ to be of value to dormouse including bramble, honeysuckle and ivy.

Bats

All of the habitats along the route supported linear and point features of value to foraging bats. Likely hotspots of bat activity were associated with:

W1 - Plas Wood

W2 - wet woodland

Narberth Brook

Pond 1

W5 - Mixed plantation

Connectivity across the landscape and between these hotspots was good, with a lack of street lighting, or other artificial lighting sources providing suitable conditions for rarer, light sensitive species including lesser and greater horseshoe to forage.

Trees with bat roosting potential were identified along both routes, with concentrations within Plas Wood, along H5 and H6 and within the wet woodland near Narberth Brook. The locations and relative suitability as bat roosting sites are indicated on Figures 3.1.1. and 3.1.2.

⁹ PTES (2006) Hazel Dormouse: Conservation Handbook, Table 1, pg 12

4 Discussion and Assessment of Likely Impacts

4.1 Proposed Works

The proposal is to widen the existing path to 2.5-3m with an all-weather surface where possible, with minimum head clearance of 5m. Re-surfacing will need to consider dual use and so sections of flexipav as well as tarmac are proposed. It is anticipated that the minimum work footprint to create this path would be 5m

Cleddau Rivers SAC / Afonydd
Cleddau – **Qualifying Features**

4.4 Fauna

This section discusses the likelihood of protected or notable fauna occurring at the site and assesses the potential for impacts to occur from the proposed works. This assessment takes into account species with statutory protection and species afforded protection through the Environment (Wales) Act, 2017

Discussion with local stakeholders confirmed that dormouse had not been previously recorded, although the absence of records should not be taken as an indication that the species is not present.

Where there is uncertainty as to the presence of a protected species the 'precautionary principle' applies, this means that you should assume the presence of a protected species until you have convincing evidence to the contrary. As the proposed extent of vegetation removal likely to affect suitable dormouse

5 Conclusions and Recommendations

The proposed route is approximately 7.1km in length

Appendix 1 - eDNA results