

Appendix 5.2

Review of the fish fauna and fish biodiversity zones in the river catchments in the Yorkshire Dales study area (from Environment Agency 1997, 1998, 1999, Hopkins 1988, Wilcock 1998).

(River Lune) This catchment supports the principal salmon and sea trout fisheries of the North-western Environment Agency region.

(River Swale) Fish populations of the upper Swale consist primarily of native brown trout in the main river and most of the tributaries. Grayling occur in the upper river but its main populations are outside the National Park, concentrated mainly between Richmond (NZ/1700) and Mounby (SE/3486). Coarse fish are found largely outside the National Park, occurring in numbers below Richmond (Environment Agency 1998).

(River Ure) Populations of brown trout are present in the river Ure and its tributaries upstream of West Tanfield (SE/2678). Natural recruitment maintains stocks in most of the tributaries though populations in the main river are supplemented by stocking of 'takable' fish to enhance angling catches predominantly around Hawes (SE/8790), Bainbridge (SE/9390), West Tanfield and Mickley (SE/2576). Electro-fishing surveys of brown trout populations at 49 sample sites in the main river and tributaries upstream of Aysgarth were undertaken between 1986 and 1988 and between 1988 and 1998 (Hopkins 1988, Wilcock 1998).

Salmon parr have previously been stocked into the River Ure as part of a rehabilitation project and recently naturally recruited juveniles have been recorded in a few tributaries and in the main river downstream of Aysgarth. Here, the falls act as an upstream barrier to migratory salmonids. Grayling are present in the Ure between Hawes and Ripon, occurring most abundantly in the Redmire (SE/0490) and Middleham (SE/1288) areas. The upstream limit of coarse fish species (mainly chub and barbel) is Redmire Force (SE/0490) become more numerous at Middleham and particularly downstream of West Tanfield. Bream, roach and perch become common well outside the study area below Ripon. Eels, the otter's preferred fish prey, become plentiful below Mickley, again well outside the study area (Environment Agency 1998).

(River Nidd) The headwaters and upper tributaries of the Nidd above Angram (SE/0476) are virtually fishless, possibly due to acidity. Trout stocks are poor below Scar House Reservoir (SE/0676) due to very low flows in dry periods but populations in these upper reaches and the upper tributaries are maintained by natural recruitment. Downstream of Pateley Bridge

APPENDIX 5.2 OTTER (*Lutra lutra* L.)

Review of the fish fauna and fish biodiversity in the Yorkshire Dales

(SE/1565) natural recruits are supplemented by angling interests, usually by fish of 'takable' size. From fish farms in the Glasshouses area (SE/1764) there have been significant escapes of rainbow trout into the main river. Downstream of Knaresborough (SE/3457) little successful breeding of brown trout occurs in the main river and most natural recruits derive from tributaries. Gouthwaite Reservoir (SE/1270) is noted for its Grayling which migrate into the upper reaches of the Nidd to spawn in spring. They inhabit the main river through its middle reaches down to Tockwith (SE/46540) (EA 1997). From Birstwith Weir (SE/2459), which acts as a significant barrier to upstream fish movement, coarse fish species including chub, dace, gudgeon and the occasional roach join the fauna and downstream of Knaresborough, bream, barbel, perch, pike and ruffe become common (Environment Agency 1997).

(River Wharfe) Trout occur from the upper reaches down to Wetherby (SE/40948) and Grayling continue further downstream to Tadcaster (SE/4843). Trout stocks, maintained by natural recruitment in the upper tributaries are poor in the rivers Skiffare and Washburn due to very low flows in dry periods but downstream of Kettlewell (SD/9672), natural recruits are supplemented by angling interests, usually by fish of 'takable' size. Downstream of Ilkley (SE/1148), little successful breeding occurs in the main river and most natural recruits derive from tributaries. The main river has good grayling populations, though there have been recent reports of declines in some stretches and few are found in the tributaries. Significant numbers of coarse fish are present up to Ilkley, though larger specimens are most abundant downstream of Otley (SE/2046) where barbel, chub, dace, gudgeon and roach are common and some bream are present. The otter's favoured prey, the eel was formerly abundant in the lower stretches but recent reports suggest a decline due to difficulties in ascending obstructions and few reach the upper reaches of the catchment. The greatest stocks are found well below the study region in the tidal river (below Tadcaster SE/4842) where they are exploited both by angling and commercial fyke netting (Environment Agency 1997).

(River Aire) In its headwaters downstream to Skipton, the fishery is predominantly of brown trout. The stretch from Skipton to Keighley represents the transition to the coarse fishery zone. Despite an improvement in water quality from grade D ('fair' water quality) in 1990 to grade B ('good') in 1995 and the introduction of the introduction of 11,520 coarse fish from 1995 to 1998, fishery surveys have revealed a poor fauna with poor recruitment a limiting factor being lack of appropriate aquatic habitats (Environment Agency 1999). The middle to lower reaches are predominantly coarse fisheries though some tributaries in the middle reaches (e.g. the River Worth and Harden Beck) support trout populations.