

Method for Assessing the Heritage Value of Net Fisheries

Science Summary SC030212/S

A study was undertaken in March/April 2004 to develop a method for evaluating the heritage value of net fisheries. The study identified preliminary estimates of the heritage value of the salmon fisheries under consideration.

The contingent valuation technique was utilised in this instance to establish the general public's willingness to pay (WTP) to:

- a) maintain the minimum level of traditional fishing methods; and
- b) maintain the current level of traditional fishing methods on the River Severn estuary and the Welsh coracle fisheries on the R. Tywi, R. Taf and R. Teifi.

392 interviews were conducted with members of the general public in 3 location categories:

- a) Category 1, close to the river estuary: Carmarthen, Cardigan, Lydney and Sharpness;
- b) Category 2, near to the river, but away from the estuary: Shrewsbury, Tewkesbury, Newtown and Lampeter; and
- c) Category 3, away from the rivers: Birmingham, North Wales, Chester and Reading/Slough.

Awareness of the River Severn was high. The majority of the total sample (95%) had heard of the River Severn, whilst 68% had visited (or at least travelled through) the area between Gloucester and the M4 bridge near Bristol i.e. the area in which the fishery is located. Awareness of the Welsh rivers was substantially lower than that for the River Severn. The Welsh rivers that generated the greatest awareness were the Tywi (58%) and the Taf (55%). The Teifi (42%) was the least well known. Between 25% and 28% of the total sample had visited each of the Welsh rivers.

Although the majority of respondents could not name any traditional fishing method without prompting over one third actually did so. 15% of all those interviewed mentioned lave nets, 11% draft or seine netting and

11% coracles. The proportion aware of any method rose from 37% to 63% on prompting with a list of traditional fishing methods. Prompted awareness of coracles was recorded at 45%, followed by draft or seine netting at 28%.

Only small proportions of the sample had seen the traditional fishing methods on the Severn or the Welsh rivers (approximately 10% in each case). Awareness was generally greater in locations close to the estuaries.

24% of the total sample indicated that they were willing to contribute an amount to maintain the minimum level of traditional fishing on the River Severn estuary and the 3 Welsh rivers.

The willingness to pay (WTP) fell from 37% in category 1, to 26% in category 2 and to 18% in category 3. There was no significant difference in the proportion of respondents willing to contribute between location categories 1 (close to the estuary) and 2 (away from the estuary but near to the river). There was however a significant difference between location category 3 (away from the rivers) and category 1 (close to the estuary). There does therefore appear to be some relationship between WTP and distance away from the river. Larger sample sizes may have shown a clearer relationship.

Although 24% of the total sample were willing to donate to maintain the minimum level of traditional fishing methods just 3% were willing to donate an amount in addition to this to maintain the current level.

The average WTP for the minimum level was approx. £12, whilst the average for the additional amount was approx. £8. These are the respective consumer surplus amounts for the minimum level, and additional utility for the current level of traditional fishing, for the relevant sub-sets of respondents. It is the utility that these respondents derive from knowing that traditional fishing methods are used on the Severn and the three Welsh rivers. It represents the benefit that they currently derive, but for which they currently do not have to pay; and it is the amount that they would be willing to pay rather than see traditional fishing disappear on these rivers. Please note that WTP is based on a one-off donation.

The low level of WTP an additional amount to maintain the fisheries at the current level, suggests that the preservation of the fishing methods on the rivers is the issue and not the level at which they are operating.

Respondents were asked to allocate points out of ten to the River Severn estuary and the Welsh coracle fisheries according to how they wished their donation to be allocated. The majority of respondents allocated equal points to the Welsh rivers and the River Severn, suggesting they valued them equally. The average score for the River Severn was 5.1, compared to an average of 4.9 for the Welsh rivers. There was no significant difference between the two means. Although base sizes are small there is evidence to suggest that respondents living close to a particular river valued that fishery more highly.

The estimated heritage value for the Welsh coracle fisheries within Environment Agency Wales (based on a one-off donation to maintain the minimum level of traditional fishing methods) is £1.5m. The estimated value for the River Severn estuary fishery amongst households within the Midlands region, North Wessex area and Thames West area is £5.3m.

On the whole there was a reasonable level of interest in visiting the River Severn to see the traditional fishing methods (38%).

Interest in visiting was higher amongst respondents who fished or had someone in the household who fished compared to those who did not. Members of an environmental group were more interested than non-members.

Interest in visiting the Welsh rivers to see the traditional fishing methods (37%) was similar to that for the River Severn. The ABC1s were more interested in visiting the Welsh rivers than the C2DEs, which bodes well for the level of income likely to be generated through tourism.

Interest in seeing the fishing methods was generally greater in areas close to the estuary and higher amongst those WTP to maintain the minimum level.

On the whole respondents believed it was important that traditional materials were used to maintain the coracles and putcher ranks (27% very important, 30% fairly important). Again perceived importance was greatest amongst those closest to the rivers.

There is thus an opportunity to maximise the value associated with the fisheries by enabling locals and day visitors particularly, to see demonstrations and examples of the traditional methods both on the rivers and in visitor centres. The use of traditional materials is likely to add to the authenticity and level of interest. There is also potential for a local educational role through schools for example, given the high level of local interest in the fishing methods. Higher interest amongst anglers and members of environmental groups offers opportunities for promoting the fisheries through the rod licence database and via other conservation and environment related organisations.

This Science Summary relates to information from Science Project SC030212 reported in detail in the following output:

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