

ATLANTIC SALMON

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MOST RECENT UPDATE: August 2004

➤ CURRENT STATUS

The Atlantic Salmon (*Salmo salar*) is listed on the IUCN Red List of threatened species.

The River Trent and its tributaries historically sustained a native population of many thousands of salmon, with net fisheries reporting catches from the River Trent of around 3000 fish. As recently as the mid 1800's, Glovers' *"History of the County of Derby Vol. 1"* Pub. 1829 states that *"Rapid and stony rivers, such as the Derwent, the Dove, the Wye, and the Lathkill, where the water is free from mud, are the favourite places for most of the salmon tribe"*.

Salmon had completely disappeared from the Trent River system by about the mid 1930s due to a combination of factors. These were: denial of access to the upper reaches of the River Derwent because of weirs; gross pollution of the River Trent from sewage and industrial processes; and high water temperatures caused by power station cooling water discharges to the river.

Over the last fifteen years, investment in improved sewage treatment facilities, closer regulation of all discharges, and the closure of a number of coal-fired power stations have all contributed to a gradual improvement in river water quality. For the past five years, the water quality in the River Trent has been such that once again salmon could survive in the river on their passage to the cleaner waters of the tributary breeding streams. A major factor, however, has been the construction of the canoe slalom course at Holme Pierrepont by-passing the Colwick Sluices, which previously formed an impenetrable barrier to migrating fish. Passage up the River Derwent is still prevented by the large weirs at Derby, Darley Abbey and Belper. However at times of high river flow returning salmon have reached as high as Hartington on the River Dove.

This has been achieved by the introduction of about 150,000 young salmon to the River Dove each year since 1998. This program has resulted in the first observation for 70 years of returning breeding adult fish in the River Dove in October 2001.

The Trent Rivers Trust (TRT) is the lead organization for salmon in Nottinghamshire. Current Legislation affecting salmon includes the following: Atlantic Salmon are protected under the Salmon and Freshwater Fisheries Act 1975, supplemented by the Salmon Act 1986, and the species is listed under the EC Habitats Directive Annex 11a.

➤ **THREATS**

The main factors currently affecting the successful re-establishment of salmon in Nottinghamshire are:

- Inability of fish to pass over the weirs on the River Trent during periods of low flow.
- Pollution incidents affecting water quality.
- Threat of over-abstraction of water from the river, thereby reducing flows.
- Lack of effective fish passes on the weirs.

➤ **CURRENT INITIATIVES – EXAMPLES**

- Annual stocking of the River Dove with 150,000 salmon parr by the Trent Rivers Trust (TRT).
- Raising sufficient finance to design and construct three fish passes on the River Trent weirs in Nottinghamshire through the TRT and Environment Agency (EA).
- Installing fish counters at key points to monitor increase in salmon population in the river (EA).
- Raising finance for habitat improvement work.
- A number of large-scale initiatives affecting the River Trent are currently under way. These include:

OnTrent – comprises a partnership of public, private and voluntary agencies along the River Trent between Stoke on Trent and the Humber. The prime objectives are to conserve and enhance the biodiversity, landscape and historic heritage of the river and its environs and increase their value to local communities, businesses and visitors.

East Midlands Strategic River Corridors Project – aims to bring a holistic approach to the management and enhancement of the natural, cultural and historic environment of the region's strategic river corridors and their regeneration and economic development to the benefit of people, wildlife, landscape, townscape and the management of flood risk.

The East Midlands Large Rivers Habitat Action Plan – contains objectives that will benefit the Atlantic salmon, including restoring modified rivers to a natural state and conserving and enhancing natural features.

➤ **TARGETS**

- Restore a self-sustaining run of salmon to the River Trent by 2028.
- Undertake electro-fishing in the headwaters each summer to monitor the increase in smolt production.
- Implement an ongoing programme of habitat improvement along river courses.
- Create fenced-off protective buffer zones alongside the river, to stabilise river banks and provide wildlife corridors.

➤ PROPOSED ACTION

Policy and Legislation

1 Prepare Salmon Action Plan for the Trent Catchment.

ACTION: EA.

Site safeguard and management

2 Ensure that the requirements of the salmon are met within the CAMS (Catchment Action Management Plans) assessment for the Lower Trent. Comment on any future abstraction applications that will affect water flows.

ACTION: EA, TRT, British Waterways (BW), Severn Trent Water (STW), RSPB, English Nature (EN), National Farmer's Union (NFU).

3 Monitor all applications for hydropower generation schemes for effects on salmon migration.

ACTION: Local Authorities (LAs), EA, BW, TRT

4 Ensure that all abstraction points are fitted with suitably sized fish grills to protect salmon smolts and other species.

ACTION: EA, TRT.

5 Impose discharge conditions on new or renewed applications that reflect the presence of salmonid species in the river.

ACTION: EA.

Species Management and Protection

6 Continue to take actions necessary to facilitate the movement of salmon through the Lower Trent in Nottinghamshire.

ACTION: TRT, EA, BW, ST.

7 Monitor the incidence of poaching and other instances of illegal fishing for salmon.

ACTION: EA.

8 Monitor numbers of adult fish entering the river system to breed.

ACTION: EA, TRT.

Advisory

9 Ensure that liaison is maintained with fishing clubs and riparian owners to explain the importance of allowing mature salmon to pass through the Lower Trent unimpeded.

ACTION: TRT.

10 Maintain representation on various environmental groups to provide advice on salmon requirements.

ACTION: TRT, Biodiversity Action Group (BAG).

Future Research and Monitoring

11 Continue to sample water quality parameters.

ACTION: EA.

12 Implement programme of research into suitable habitat improvement schemes.

ACTION: TRT.

Communications and Publicity

13 Use the presence of Salmon in the River Trent to increase awareness of the improvements in water quality.

ACTION: BAG, All.

14 Use leaping salmon as a flagship PR species.

ACTION: TRT, EA, BAG.

➤ WHAT YOU CAN DO

- Report all pollution incidents on EA hotline as soon as observed.
- Report salmon sightings, making a note of numbers, date, time and place with an estimate of size (e.g. to TRT, NBGRC)
- Collect any dead or distressed fish and pass on to the Environment Agency for post-mortem analysis.
- Follow good fishing practice; any accidentally caught salmon should be handled as little as possible and carefully returned to the water. Scales from the rear of the fish below the median line if available should be forwarded to the Environment Agency as they provide valuable information on the fish's life history.