The Environment Agency Rescues Stranded Fish at Port Meadow, Oxford

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Summary

Thousands of healthy fish that faced certain death as flood-waters receded from Port Meadow, were rescued by the fisheries department of the Environment Agency on the 8th June 2000. The agency had been alerted to the problem by a member of the public. This stretch of the Thames is a valuable fishery and the Agency has a responsibility to protect the fish populations within it.

Discussion

The Thames frequently floods Port Meadow and, as the river level drops, floodwater can be left on tens of acres of grassland for several weeks, thereby trapping many fish in dwindling temporary ponds. Flooding usually occurs early in the year when it does not present a problem. Most of the fish which usually remain, are small and get eaten by fish-eating birds such as herons. By the time the levels have receded enough to make a fish rescue possible there are usually too few fish remaining to make it worthwhile, partly because it is very difficult to rescue the small fish and many would die in the process.

On this occasion, late flooding coincided with the time when coarse fish were looking for areas to spawn in. Large numbers of fish found likely channels and remained in the warm shallow water after river levels had dropped too low for them to escape. By the time the water had declined to a manageable area a number of large fish and tens of thousands of small ones (less than 2 inches long) were stranded on the Meadow in the floodwater. Environment Agency rescuers were faced with an area of water the size of a football pitch, full of fish. Over the course of 6 hours, they netted over half a tonne of fish. The bulk of these were large bream and tench, but vast numbers of small roach, gudgeon, chub and pike were also caught. All in all between 5,000 and 10,000 fish were returned to the Thames.The fish which were trapped in Port Meadow were all natives, except the carp which are considered 'naturalised'. Carp are normally found in still waters as opposed to rivers but will live in large rivers quite happily. Historically, fish spawn in flood-meadows where the water flow is slower than the river and the temperature warmer. These conditions give any juvenile fish a greater chance of survival. As rivers have become more managed, straightened and dredged there is often a lack of suitable habitat for juvenile fish. Shallow areas with lots of cover are ideal but are often limited. Flood-meadows/plains are thus extremely important habitats. Normally, pike will enter flood-plains to spawn in early spring. Juvenile pike are large enough by summer to eat other juvenile species such as roach and bream fry. Very few large pike were found during the rescue, indicating that most had already returned to the river after spawning. The presence of so many bream and other coarse fish was likely to be a result of the floodwater still being present so late in the year. Again, these species would normally spawn and then return to the river but the warm conditions had probably tempted them to remain for too long. Ideally any stranded fish would be able to escape through drainage channels but in this case

the channels were no longer deep enough; perhaps the water level in the flood-meadow had gone down before the fish realised they were trapped!

The Thames contains 'standard' coarse fish species which have generally healthy populations. Survey results often highlight problem areas, sometimes due to poor water quality but more often as a result of poor habitat. Fishery surveys of selected fish populations aim to monitor river quality, and to gain a greater understanding of freshwater ecosystems. From this follows the recommendation of techniques to restore or rehabilitate rivers or stretches of river. Commonly used methods include creation of gravel beds for species such as trout, barbel and dace to spawn on, addition of flow diverters to increase/reduce flow velocity and encourage natural scouring of silt to provide clean gravel and deeper areas, and the creation of ORSUs (off river support units). ORSUs are areas of slack water such as back channels connected to the main river which provide ideal conditions for juvenile fish until they are large enough to cope with life in the main river.

Fish rescues are often necessary after flooding but most rescues arise from there being too little water, when lakes and rivers dry up in summer droughts, or following pollution incidents. Across the country, Agency fishery officers carry out over 400 emergency fish rescues and save over one million fish each year.

The Thames has become cleaner in recent years and latest figures indicate that 118 different species of fish now live in the river. Many of these species are marine/estuarine fish found in the lower reaches, for example the Thames is now considered to be the most important river in Europe for juvenile bass recruitment. Alien species such as catfish are also occasionally found along with Chinese mitten crabs and alien crayfish species. On the whole the Thames is a healthy river though there is plenty of room for improvement in the future.

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