

FISH DON'T LOOK AFTER THEMSELVES

by
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African plains and British rivers do not appear to have much in common, but they are just two examples of environments which require careful, directed management if they are to continue to support their own distinct flora and fauna. On the great wildlife reserves of Africa, it may be necessary to cull some animal species to ensure that the great majority survive; in this country, a number of fish may need to be removed from a fishery if those that remain are to flourish.

Nowadays, there are very few still or running waters in Britain which can be regarded as totally 'natural'. At one time or another, most have been influenced by man, often with deleterious effects. Pollution can eliminate fish and invertebrate animal populations within minutes, and land drainage schemes can destroy complex habitats which have been formed over hundreds of years.

While the concept of fish 'looking after themselves' may be appealing, it ignores the realities of modern life. To maintain healthy fish stocks, it is necessary to counter these outside pressures, in addition to correcting the imbalances which are sometimes caused by natural but nevertheless undesirable biological fluctuations.

Wildlife management is carried out by those with an active interest in ensuring its survival. Who, then, cares for fish? Fish live in an entirely different medium from our own, are difficult to observe and don't have the immediate appeal of many other forms of wildlife: most people who came across a wriggling eel would probably squirm, or they would feel an instinctive impulse to kill a pike purely on account of its exceptional array of teeth and a facial expression which suggests a readiness to use them.

On most of our fisheries, the management role is undertaken by owners or by angling clubs which lease the waters. The first priority is to protect water quality. The Environment Agency (EA) is charged with responsibility for safeguarding all waters against pollution, a task which it is finding increasingly difficult to undertake satisfactorily. The number of pollution incidents from all sources is on the increase, and anglers' organisations sometimes need to take legal action to maintain the water quality.

The physical nature of a fishery must also be protected - for example, from flood alleviation works - and management effort may be directed towards minimising the adverse effects of dredging rivers by creating 'instream' features that break up the homogeneity of the river bed and provide habitat suitable for fish and their food organisms.

In some situations, fish are incapable of forming self-sustaining populations. The fishery manager must then introduce stock fish and control over-predation, as well as directing effort into improving conditions for fish reproduction and fry survival. Hundreds of thousands of pounds are spent annually on stock fish to help maintain good angling waters.

Once fish life is encouraged, this in itself provides food for birds such as terns, herons, kingfishers and grebes, and enables the fishery to support richer and more diverse flora and fauna.

Fish which are highly valued for food, such as salmon, require special protection to prevent over-fishing by commercial fishermen and poachers. Fishery management may entail enforcing the legislation designed to reduce such over-exploitation, as well as rearing young fish in hatcheries before releasing them into the headwaters of suitable rivers, thereby ensuring that sufficient adult fish return in later years to maintain the population. On the River Thames, for instance, such measures have resulted in the successful re-establishment of salmon decades after the former population had been entirely eliminated by pollution.

Fisheries management is equally important on still waters. On estate lakes, often formed by the damming of river valleys, siltation poses a threat which must be countered if the lakes are to survive as open water. The installation of silt traps and the mechanical removal of silt deposits are expensive operations, but anglers willingly fund these exercises.

Similarly, through the introduction of aquatic weeds and the 'seeding' of recently created fisheries with invertebrate animals, the aquatic plants and creatures are enabled to colonise their new environment quickly, providing the basis of the food chain for fish and all other animals. In short, what benefits the angler and the fish population ultimately benefits other forms of wildlife.

There is another side to fisheries management work, of a more scientific nature. Many EA regional fisheries departments undertake scientific surveys of rivers and lakes, to monitor the fish populations. The results can give warning of environmental problems caused by industry and agriculture, enabling remedial measures to be carried out.

Prior survey data can also be extremely useful if, later, the fish are killed by pollution. This detailed and precise information is clearly valuable when compensation claims are filed and restocking costs calculated.

Monitoring may also detect the presence of potentially dangerous diseases and parasites which, if uncontrolled, might cause serious fish mortalities. Equally important, a clean bill of health is needed before fish are transferred from one fishery to another, as it prevents unsuitable and heavily diseased fish being stocked.

Funding for fisheries management exercises such as these is derived from anglers, not from the water rates. Traditionally, anglers have prided themselves that budgets of water authority, river authority and – latterly - EA fisheries departments have come almost entirely from the money provided by anglers' rod licence fees.

The forerunner of the present rod licence system was set up by anglers to generate revenue for purchasing stock fish to replace those killed by pollution during the Industrial Revolution. Today, it is a legal requirement in England and Wales that every freshwater angler aged 12 or older is in possession of a valid rod licence, irrespective of where he or she fishes.

Only rarely do fisheries look after themselves. Nearly always, the flora and fauna they support are reliant on sensible, careful management for their survival. In this respect, anglers do not merely care for fish - they readily meet the cost of managing all the other aquatic resources as well.
