National Trout & Grayling Fisheries Strategy
New rules to protect wild brown trout

Information Leaflet **Issued**: July 2009

What has changed?

We have introduced new rules to protect wild brown trout. Following extensive consultation with the angling world, we have changed the rules on the type of brown trout that can be stocked into rivers. The new policy is:

Brown trout stocking into all but totally enclosed waters with no significant natural brown trout production will be with non-fertile, all female (triploid) brown trout or brown trout from breeding programmes using locally sourced brood-stock.

The change is broadly supported by anglers, fishery owners and accepted by trout farmers.

(NB. Local brood-stock schemes are difficult, risky and more suitable for restoration or compensation stocking. We anticipate that stocking to support angling will be with triploids).

Why is there a need for change?

Every year more than 700,000 farmed fertile brown trout are stocked into English and Welsh rivers, to support angling. Research by the Game Conservancy Trust showed no apparent impact of stocked fish on wild fish due to competition or predation. However, evidence from over 300 scientific studies across Europe concluded that wild brown trout are at risk from inter-breeding with farmed fish. This can result in their offspring having a lower ability to survive and reproduce successfully. Continued stocking could threaten the survival of local populations and the evolutionary potential of the species. The new policy aims to remove this risk.

Putting the Policy into Practice

We are phasing in the Policy to give anglers, fisheries and fish farms time to adapt.

By: **2010 – we would like to see 30% fewer farm-strain brown trout stocked into rivers.**

2013 – we would like to see 50% fewer.

2015 – we will cease to allow farm strain fertile brown trout to be stocked into rivers.

What is the difference between farm strain and wild trout?

Farmed trout are domesticated and genetically very similar to each other. As a result, they are less likely to survive and breed in the wild. The different strains of native brown trout are the product of thousands of years of evolution and are therefore fine-tuned to flourish in our rivers. Their genetic diversity means that populations are more likely to cope with environmental challenges, such as climate change.

Is it not too late to preserve our wild trout populations in rivers that have been heavily stocked?

No, it is not. Even though many of our rivers have been stocked for hundreds of years, the evidence we have gathered shows that in most cases introgression (the proportion of farm genes in a wild population) is less than 25%. The evidence also suggests that wild populations can recover when stocking is stopped.

Don't stocked fertile (diploid) farm-strain trout spawn and thereby support wild stocks?

Our research evidence indicates that stocked diploid trout have very low survival in the wild and are less successful at breeding, when compared with wild fish. If they do breed with wild trout, their offspring are less fit. Even if they are stocked as fry and are subject to natural selection until maturity, their potential to breed is still limited.

What is a triploid?

Non-fertile trout are produced by a process known as triploiding. This involves the benign heat or pressure treatment of fertilised trout eggs which causes them to retain an extra (a third) set of chromosomes. This makes them sterile. Triploids occur naturally in wild and farmed trout stocks, but in low numbers. By inducing triploidy, the frequency can be increased to almost 100%. Triploid rainbow trout have been produced in this way for many years for restocking stillwater fisheries. Because tripoids do not put energy into egg production and spawning they maintain condition and are likely to survive for longer.

Aren't triploid trout less good to fish for?

Investigations by the Game Conservancy Trust revealed no significant difference in performance between triploid and diploid trout. The use of triploid brown trout in fisheries is increasing voluntarily.

Further information can be found at our web: site WWW.environment-agency.gov.uk or via email: enquiries@environment-agency.gov.uk