The Wild Trout Trust is a practical group of enthusiasts that strives for the improvement of wild trout stocks through the protection and improvement of their habitat. That's what we do and we largely stick to our knitting. As a group who daily give advice and support to large numbers of fishery owners, angling clubs and individuals with an interest in trout, we obviously have a view on a wide range of issues. Water abstraction, predation, pollution, diffuse and point source pollution, as well as actions taken under the fisheries management banner are just a few of the topics we are routinely faced with. Trout stocking (and its effects on wild fish) is one that crops up time and time again. Just to nail our colours to the mast, the WTT position is that some fisheries interests are perfectly happy with using them and haven’t noticed any difference since moving from fertile stocks. This state of affairs is supported by some research that has been done into triploid use and angler satisfaction. However, others have reported concerns over certain behavioural traits, which has prompted further research and trials; indeed a PhD has recently started at the University of Stirling looking at aspects of production and management of triploid brown trout for restocking.

Triploids would seem like the sensible option for those fisheries simply wanting to boost the numbers of catchable trout for anglers. Stocking with adult, takeable-sized fish will ensure that the juveniles have a suitable rearing environment. At the time of writing, the EA have yet to publish guidance on what will be conditions attached to programmes which will protect wild stocks and ensure that any stock produced is fit for purpose. From my travels and discussions with clubs it seems that many believe that wild broodstock schemes are potentially the answer to their prayers. But before we all get too excited let’s just explore the options.

Over the last few years we have debated the issues concerning the definitions of wild and native fish, loss of genetic diversity and fitness, natural selection processes, the use of sterile fish and a myriad of other stocking related topics. I’m sure we will continue to do so as further research is carried out, but we now need to make some tough decisions about how our fisheries are to be managed in the lead up to and beyond 2015. Where does the policy leave the fishing clubs or syndicates where wild trout production is poor? Or fisheries where angling pressure is high and jobs and incomes are at stake? It’s hardly surprising that the EA’s policy has caused such a brouhaha.

The stocking policy, as it stands offers two alternatives for introducing brown trout into waters where there is already natural trout production. The first and simplest is to stock with non-breeding, all-female triploids, which some clubs and fishery owners have been using for many years. There isn’t sufficient space in this article to go into the issues surrounding triploid production and use. The reality is that some fishery interests are perfectly happy with using them and haven’t noticed any difference since moving from fertile stocks. This state of affairs is supported by some research that has been done into triploid use and angler satisfaction. However, others have reported concerns over certain behavioural traits, which has prompted further research and trials; indeed a PhD has recently started at the University of Stirling looking at aspects of production and management of triploid brown trout for restocking.

Triploids would seem like the sensible option for those fisheries simply wanting to boost the numbers of catchable trout for anglers. Stocking with adult, takeable-sized fish will ensure that the juveniles have a suitable rearing environment. At the time of writing, the EA have yet to publish guidance on what will be conditions attached to programmes which will protect wild stocks and ensure that any stock produced is fit for purpose. From my travels and discussions with clubs it seems that many believe that wild broodstock schemes are potentially the answer to their prayers. But before we all get too excited let’s just explore the options.

Over the last few years we have debated the issues concerning the definitions of wild and native fish, loss of genetic diversity and fitness, natural selection processes, the use of sterile fish and a myriad of other stocking related topics. I’m sure we will continue to do so as further research is carried out, but we now need to make some tough decisions about how our fisheries are to be managed in the lead up to and beyond 2015. Where does the policy leave the fishing clubs or syndicates where wild trout production is poor? Or fisheries where angling pressure is high and jobs and incomes are at stake? It’s hardly surprising that the EA’s policy has caused such a brouhaha.

The stocking policy, as it stands offers two alternatives for introducing brown trout into waters where there is already natural trout production. The first and simplest is to stock with non-breeding, all-female triploids, which some clubs and fishery owners have been using for many years. There isn’t sufficient space in this article to go into the issues surrounding triploid production and use. The reality is that some fishery interests are perfectly happy with using them and haven’t noticed any difference since moving from fertile stocks. This state of affairs is supported by some research that has been done into triploid use and angler satisfaction. However, others have reported concerns over certain behavioural traits, which has prompted further research and trials; indeed a PhD has recently started at the University of Stirling looking at aspects of production and management of triploid brown trout for restocking.

Triploids would seem like the sensible option for those fisheries simply wanting to boost the numbers of catchable trout for anglers. Stocking with adult, takeable-sized fish will ensure that the juveniles have a suitable rearing environment. At the time of writing, the EA have yet to publish guidance on what will be conditions attached to programmes which will protect wild stocks and ensure that any stock produced is fit for purpose. From my travels and discussions with clubs it seems that many believe that wild broodstock schemes are potentially the answer to their prayers. But before we all get too excited let’s just explore the options.

Over the last few years we have debated the issues concerning the definitions of wild and native fish, loss of genetic diversity and fitness, natural selection processes, the use of sterile fish and a myriad of other stocking related topics. I’m sure we will continue to do so as further research is carried out, but we now need to make some tough decisions about how our fisheries are to be managed in the lead up to and beyond 2015. Where does the policy leave the fishing clubs or syndicates where wild trout production is poor? Or fisheries where angling pressure is high and jobs and incomes are at stake? It’s hardly surprising that the EA’s policy has caused such a brouhaha.

The stocking policy, as it stands offers two alternatives for introducing brown trout into waters where there is already natural trout production. The first and simplest is to stock with non-breeding, all-female triploids, which some clubs and fishery owners have been using for many years. There isn’t sufficient space in this article to go into the issues surrounding triploid production and use. The reality is that some fishery interests are perfectly happy with using them and haven’t noticed any difference since moving from fertile stocks. This state of affairs is supported by some research that has been done into triploid use and angler satisfaction. However, others have reported concerns over certain behavioural traits, which has prompted further research and trials; indeed a PhD has recently started at the University of Stirling looking at aspects of production and management of triploid brown trout for restocking.

Triploids would seem like the sensible option for those fisheries simply wanting to boost the numbers of catchable trout for anglers. Stocking with adult, takeable-sized fish will ensure that the juveniles have a suitable rearing environment. At the time of writing, the EA have yet to publish guidance on what will be conditions attached to programmes which will protect wild stocks and ensure that any stock produced is fit for purpose. From my travels and discussions with clubs it seems that many believe that wild broodstock schemes are potentially the answer to their prayers. But before we all get too excited let’s just explore the options.

Over the last few years we have debated the issues concerning the definitions of wild and native fish, loss of genetic diversity and fitness, natural selection processes, the use of sterile fish and a myriad of other stocking related topics. I’m sure we will continue to do so as further research is carried out, but we now need to make some tough decisions about how our fisheries are to be managed in the lead up to and beyond 2015. Where does the policy leave the fishing clubs or syndicates where wild trout production is poor? Or fisheries where angling pressure is high and jobs and incomes are at stake? It’s hardly surprising that the EA’s policy has caused such a brouhaha.

The stocking policy, as it stands offers two alternatives for introducing brown trout into waters where there is already natural trout production. The first and simplest is to stock with non-breeding, all-female triploids, which some clubs and fishery owners have been using for many years. There isn’t sufficient space in this article to go into the issues surrounding triploid production and use. The reality is that some fishery interests are perfectly happy with using them and haven’t noticed any difference since moving from fertile stocks. This state of affairs is supported by some research that has been done into triploid use and angler satisfaction. However, others have reported concerns over certain behavioural traits, which has prompted further research and trials; indeed a PhD has recently started at the University of Stirling looking at aspects of production and management of triploid brown trout for restocking.

Triploids would seem like the sensible option for those fisheries simply wanting to boost the numbers of catchable trout for anglers. Stocking with adult, takeable-sized fish will ensure that the juveniles have a suitable rearing environment. At the time of writing, the EA have yet to publish guidance on what will be conditions attached to programmes which will protect wild stocks and ensure that any stock produced is fit for purpose. From my travels and discussions with clubs it seems that many believe that wild broodstock schemes are potentially the answer to their prayers. But before we all get too excited let’s just explore the options.

Over the last few years we have debated the issues concerning the definitions of wild and native fish, loss of genetic diversity and fitness, natural selection processes, the use of sterile fish and a myriad of other stocking related topics. I’m sure we will continue to do so as further research is carried out, but we now need to make some tough decisions about how our fisheries are to be managed in the lead up to and beyond 2015. Where does the policy leave the fishing clubs or syndicates where wild trout production is poor? Or fisheries where angling pressure is high and jobs and incomes are at stake? It’s hardly surprising that the EA’s policy has caused such a brouhaha.
ALTERNATIVE STOCKING

Gopsall Fishing Club stocking experiences

Mark Owen

The River Sence is a lowland river running off in North West, Leicestershire, part of the Trent catchment. Gopsall Fishing Club have trout fishing on about five and three miles of the river. The earliest record of stocking on this part of the Sence in the book ‘By Dancing Streams’ by Douglas McCraith who, writing in 1926, states that in 1925 the river was netted of coarse fish and stocked with two and three-year-old brown trout to augment known wild trout populations. McCraith then states that Gopsall keep a similar stock in 1928 and that in the preceding two years a total of 750 trout were stocked. The river then was very different to today as in the late 1920s the river has been degraded by being straightened and dredged to drain agricultural land and prevent flooding. Club stocking and catch returns are patchy and show little consistency over the years between the 1920s and the beginning of the 21st century. Some of the stocking practices were in response to severe pollution incidents from a number of sources including a sewage treatment works, an open cast mine, a brickworks and farm slurry incidents. By 2000 it was commonly thought that the river harboured no wild trout at all, but in recent years water quality has greatly improved. In addition, the club began habitat improvement works in 2000 and, aided by WTT and Environment Agency advice and support, in the last five years these have accelerated and become more focused.

The river suffered from livestock damage to banks and a lack of in-stream habitat, the legacy of land drainage works. Extensive fencing has been completed, large amounts of large woody debris retained and flow deflectors and gravels have been installed. This has resulted in a decrease in refuge sites from predation and flood events. Pollution incidents have decreased and the river now clears quickly following flood events as banks have become stabilised due to fencing off live stock access. As well as stocking adult fish the club has previously stocked fry and used incubation boxes (both using farmed fish) but this practice ceased in 2008 as efforts were concentrated on habitat improvements. Although it is still early days, results from 2010 are very encouraging. The number of 12-inch plus fish caught remained at a level comparable with preceding years even though the numbers introduced were around 50% lower. In addition, numbers of brown trout 12-inches (less than 12-inches) contributed to the catch. Wild trout are probably as a result of the habitat improvements. The club now plan to keep to this lower stocking level resulting in significant cost savings which will be used for further habitat improvement.

FISH HAVE BEEN LOST AND THERE IS A NEED TO STOCK WITH FISH TO BUILD THE POPULATION?

There are undoubtedly examples where stocking with fertile, farm-reared trout has successfully kick-started a population where the wild stocks have died out, usually following catastrophic pollution or drought. If a stream has recovered and efforts of high quality habitat, but it is not surprising that a population can be re-established, particularly if the re-stocking area has some wild eggs seeded into in-stream incubators. The progeny can at least some selection pressures put upon them, as they seek to grow, avoid being eaten by predators and eventually survive to spawn. It will only require one or two redds and a new population can begin. Researchers have shown however, that in some circumstances, hatchery smolts or fingerling stocked may have very little impact. A one-off stocking is carried out with fish derived from local wild broodstock. This is presumably because hatchery fish have more selective pressure for growth and the hatchery might be appropriate in some circumstances.

The question of whether a hatchery programme will increase fish numbers is influenced by where the bottleneck in wild fish production exists?

By Dancing Streams

“whether a hatchery programme will increase fish numbers is influenced by where the bottleneck in wild fish production exists”

25 pairs of wild spawners taken from a river might represent 100% of the spawning stock on some rivers. Even if wild production is low, it’s rarely non-existent and if it were, then there would be no wild broodstock to take in the first place. In this scenario I think I might be tempted to address the lack of wild spawning success by either improving the sites that exist or creating some new ones. OK, so you have electro-fished 50 wild broodstock – what are the chances of them being 25% male to female? You’ve guessed it – get the gear out, we need to find some more! Now it may be OK to home labradors in your kitchen but don’t try with wolves. I know this analogy is a bit extreme but the real truth is that wild fish are wild and not domesticated and then you pop them into holding facilities. They don’t behave like farm stock. They became stressed, often to the point where keeping them alive is an enormous challenge. Cock fish especially are hugely prone to infection from fungus which may kill them and practical treatment options are non-existent. So you lose a few (if you’re lucky!). Don’t forget that these are precious broodstock, the ones that have survived to maturity and are on the brink of spawning. You can always get the gear out and catch a few more, but how much do you ever want to do that? You need to breed enough fish to meet the demand.

In the wild, fish often spawn over an extended period, so the case that some fish will be ready to spawn much earlier than others. This diversity in spawning time makes it really hard to disentangle a hatchery from a wild stock. If you simply have to breed the fish, then it should be with adult triploids or broodfish. Even so, the initial broodfish – what are the chances of them to be taken if they are not 25:25 male to female? Y ou’ve guessed it: they’re not. “whether a hatchery programme will increase fish numbers is influenced by where the bottleneck in wild fish production exists”

There are undoubtedly examples where stocking with fertile, farm-reared trout has successfully kick-started a population where the wild stocks have died out, usually following catastrophic pollution or drought. If a stream has recovered and efforts of high quality habitat, but it is not surprising that a population can be re-established, particularly if the re-stocking area has some wild eggs seeded into in-stream incubators. The progeny can at least some selection pressures put upon them, as they seek to grow, avoid being eaten by predators and eventually survive to spawn. It will only require one or two redds and a new population can begin. Researchers have shown however, that in some circumstances, hatchery fish have very little impact. A one-off stocking is carried out with fish derived from local wild broodstock. This is presumably because hatchery fish have more selective pressure for growth and the hatchery might be appropriate in some circumstances. 

The question of whether a hatchery programme will increase fish numbers is influenced by where the bottleneck in wild fish production exists?

“whether a hatchery programme will increase fish numbers is influenced by where the bottleneck in wild fish production exists”

In the wild, fish often spawn over an extended period, so the case that some fish will be ready to spawn much earlier than others. This diversity in spawning time makes it really hard to disentangle a hatchery from a wild stock. If you simply have to breed the fish, then it should be with adult triploids or broodfish. Even so, the initial broodfish – what are the chances of them to be taken if they are not 25:25 male to female? Y ou’ve guessed it: they’re not. 

Even so, the initial broodfish – what are the chances of them to be taken if they are not 25:25 male to female? Y ou’ve guessed it: they’re not. 

25 pairs of wild spawners taken from a river might represent 100% of the spawning stock on some rivers. Even if wild production is low, it’s rarely non-existent and if it were, then there would be no wild broodstock to take in the first place. In this scenario I think I might be tempted to address the lack of wild spawning success by either improving the sites that exist or creating some new ones. OK, so you have electro-fished 50 wild broodstock – what are the chances of them being 25% male to female? You’ve guessed it – get the gear out, we need to find some more! Now it may be OK to home labradors in your kitchen but don’t try with wolves. I know this analogy is a bit extreme but the real truth is that wild fish are wild and not domesticated and then you pop them into holding facilities. They don’t behave like farm stock. They became stressed, often to the point where keeping them alive is an enormous challenge. Cock fish especially are hugely prone to infection from fungus which may kill them and practical treatment options are non-existent. So you lose a few (if you’re lucky!). Don’t forget that these are precious broodstock, the ones that have survived to maturity and are on the brink of spawning. You can always get the gear out and catch a few more, but how much do you ever want to do that? You need to breed enough fish to meet the demand.

In the wild, fish often spawn over an extended period, so the case that some fish will be ready to spawn much earlier than others. This diversity in spawning time makes it really hard to disentangle a hatchery from a wild stock. If you simply have to breed the fish, then it should be with adult triploids or broodfish. Even so, the initial broodfish – what are the chances of them to be taken if they are not 25:25 male to female? Y ou’ve guessed it: they’re not. 

Even so, the initial broodfish – what are the chances of them to be taken if they are not 25:25 male to female? Y ou’ve guessed it: they’re not.