



Zander and other non-native fish species: Frequently Asked Questions

Defining the meaning of non-native species

How is a non-native species defined and does this differ between authorities?

Some organisations such as the [Great Britain Non-Native Species Secretariat](#) take the view that the cut-off point should be the last ice age as do Natural England. Other scientific authors (there was an interesting article in the Royal Society of Biology magazine in 2015 on this topic) prefer to use a date of around AD 1500 as a cut-off point, accepting that species introduced into the wild prior to this time should now be classified as native. [Common carp](#) and [crucian carp](#) would be classified as native under this definition. We are not currently aware of any nationally significant conservation organisation that would consider species introduced in the 19th century from overseas as native.

From a practical viewpoint, as you can see in our [KIFR site permit](#) listed in Annex 1 are species which cannot be kept unless specifically stated in the KIFR permit and listed in Annex 2 are species which can be kept without a KIFR permit.

What is the role of the Great Britain Non-Native Species Secretariat and does the Trust have any dealings with them?

[The secretariat](#) has responsibility for national co-ordination of response to non-native invasive species within Great Britain working with government, businesses, charities, and other groups. Ecologist Thomas King is the Trust's lead for Invasive Species and the key day to day contact with the GBNSS. The national Fisheries & Angling Team supported by the Trust's Fisheries & Angling Advisory Group provide technical support and specific knowledge around non-native fish species. The Trust is seen as a key partner in invasive species management and we attend various steering groups, working groups, and stakeholder meetings to discuss policy changes, coordinate action, increase awareness and drive new methods of invasive species control/science.

How are zander classified by the Great Britain Non-Native Species Secretariat?

The zander risk assessment was published during 2021. Zander are classified as an invasive non-native fish species of medium risk. It is likely that in some locations zander would be of lower than medium risk and in other environments such as narrow shallow turbid boated canals, they would be of higher than medium risk.

Where can I find out general information on the biology of various non-native fish species currently present in the UK?

Information on the non-native fish species can be found [here](#).



The spread of zander in the canal network

Were zander always naturally present in canals or were they introduced illegally?

Zander were illegally introduced to the canal network in the Coventry area early to mid-1970's without consent being issued by the relevant water authority. This was confirmed by Neville Fickling at the 2019 Hatton zander workshop. Zander had been legally introduced into the Great Ouse Relief Channel back in 1963 by the Great Ouse River Authority but could not have possibly made their way legally to the North [Oxford Canal](#) where they were first recorded by the Severn Trent water authority fisheries team in 1976.

Have zander or other non-native fish species been found in canals not currently owned by the Trust and if so, what is the status of these non-native fish species?

A few years ago, zander were reported in the [Sankey St Helens](#) canal. Most of which is not owned by the Trust. The Environment Agency North West undertook rapid response boom boat electric fishing to eradicate the individual fish and prevent a new illegally introduced population from establishing. More recently, an illegally introduced zander population was found to have been established in the Moira Canal and during the autumn of 2021 the Environment Agency undertook electric fishing to facilitate their removal.

Could the current range of zander expand further?

Yes, there is a high risk of this without ongoing management action. The Trent & Mersey is the gateway from the Midlands canals up to the north west canal network including the [Shropshire Union canal](#) and Llangollen canal and the Macclesfield canal links both to the north-west and north



east region canal network and connected river catchments. Natural England & the Environment Agency do not wish to see additional spread and Natural Resources Wales do not wish to see zander arrive in Wales.

What are the risks of further spread of other non-native species into new river catchments?

To expand on the answer to the previous question, some canals have overflows into rivers so when a non-native species is present there is always the potential for spread. Major canal breaches such as the event which happened at Middlewich in March 2018 and on the Ashby Canal in 2020 also offer a conduit for non-native invasive species to enter new river catchments. In the case of the Ashby Canal, zander were found just metres from the River Mease Site of Special Scientific Interest, a site designated for its assemblage of native fish species. Therefore, it is important that further populations of non-native species do not become established.

Is there any strong evidence of any recent illegal introductions of zander or other non-native fish species?

Unfortunately, yes. Several new isolated populations of zander have recently appeared at locations such as Stone and Barlaston on the Trent & Mersey Great Heywood on the Staffs & Worcester and on the Worcester & Birmingham around Stoke Prior. It should be noted that no zander were found upstream or downstream of the respective areas for several miles which effectively rules out the possibility of a more natural migration from further south. Zander also appeared in the Moira Canal in 2020 and other investigation work is ongoing to confirm some additional illegal introductions.

The ecological impacts & management of non-native invasive fish species

Is there any scientific evidence that zander damage heavily boat-trafficked canal fishery ecosystems?

This topic is covered in detail in [Phil Smith doctoral research](#). One of the key abiotic factors favouring zander is water turbidity. The fish species most negatively impacted are bullhead, a species with additional legal protection, gudgeon and roach. Gudgeon, which are an important component of the fish biota of the canal ecosystem, rapidly disappearing within a few years of the illegal introduction of zander. There is no published research illustrating the recovery of gudgeon population on canals following the illegal introduction of zander. Roach population tend to be come dominated by a few large individual fish were whole year classed virtually absent for the fish community. It has also been suggested that Zander also tend to outcompete the native pike in turbid waterways.

It is said that the zander population has balanced itself out on the Fenland drains where zander were first introduced in 1963. Won't it do the same on the canal network if left alone for a few decades?

Fenland drains and heavily boat trafficked canals are substantially different ecosystems and are therefore not useful comparators. Canals are typically turbid with consistently high suspended solid levels caused by boat traffic movement. This favours zander as they are very well adapted to feeding in low light intensity situations. It is believed that they outcompete the native European pike which feed more visually. There is probably a permanent change in the fish community with gudgeon eliminated and roach populations declining significantly and perhaps an increase in large bream. There is no scientific evidence published as yet of any canal with established zander populations returning to its balanced pre-zander introduction community dominated by roach and gudgeon. Many dozens of angling clubs have given up agreements for canal fishing once zander become established in their canal sections.

What are the reasons for the Trust current zander removal work? Is it aimed at eradication or a combination of aiding native fish stock recovery plus halting further migration and spread?

Currently our work is focussed on aiding native fish stock species recovery, halting the further migration, and spread of zander and the protection of SSSI's in unfavourable condition. This benefits the ecology of our waterways and is in line with the Trust [KIFR permit](#). Eradication, defined as the total removal of zander from the narrow canal network would be possible by systematic drain down but this would be quite expensive and logistically challenging. Whilst this is an option the Trust are not currently exploring, it cannot be ruled out as a future management option, particularly if ultimately required to by regulation.

Other reasons for undertaking our current work include:

- The reputation of the sport of angling matters to the Trust (we are the largest single owners of freshwater fishing rights in the UK), and we believe it's certainly not ideal for anglers to be considered as illegal fish spreaders.
- The Trust is at risk of legal action from negative impacts on third party owned fisheries if we allow these fisheries to be negatively impacted by the spread of invasive non-native fish species emanating from our property. There is case law around this principle, established in Williams verses Network Rail (2018).
- Loss of income. It is estimated in a paper presented at the IFM conference the loss of income due to the presence of zander on our waterways is in the range of £60,000 to £90,000 per annum. The current income from the two clubs with most interest in zander amounts to just £3000 per annum.
- The risk of the regulator undertaking the zander management work itself and recharging the Trust.

What does published research suggest regarding the frequency of management action that is needed to control further spread of zander?

Phil Smith concluded in the 1990's that electric fishing at the limits of the range of zander three times per annum would be sufficient to prevent further migration out of their existing range . With recent advances in design of boom boat electric fishing equipment, it is believed that twice per annum should now be sufficient to reduce zander biomass to the extent that it allows Cyprinid stocks to recover. According to Smith, at an electric fishing intensity of three times per annum, it's certainly possible that after a number of years, zander could be eradicated at the extremities of their current range.

Does the Trust receive feedback implying that they do too much or too little non-native invasive (fish?) species management work?

Yes, we receive feedback urging us to do both far more and conversely, we also receive feedback urging us to do much less or nothing to control zander. It is fair to say that the latter group tend to be more vociferous on social media.

Have any conservation organisations ever complained to the Trust regarding its management of invasive non-native species?

We are not aware of any such complaints or comments to date.

What does Angling Trust say regarding zander in the canal network?

The following is an extract from the Angling Trust website 'In canals and enclosed stillwaters, riparian owners have the right, subject to obtaining regulatory approvals, to manage their fish stocks as they see fit. This is a principle supported by the Angling Trust and applies as much to the establishment of bespoke waters for crucians and tench by removing and reducing the impact of unwanted species as it does to zander removal in favour of native silver fish stocks and their subsequent recovery and protection.

Does the presence of non-native invasive species present a risk to Trust commercial activities such as future water transfer?

Potentially yes, the presence of non-native species and the risk of transfer of these species into new catchment could be a show-stopper for water transfer projects such as the proposed transfer of water from the Midlands to the south east currently being explored. This matters because the Trust needs to optimise commercial income to help maintain our 225-year-old historic network of waterways for future generations.

Funding for non-native invasive species work

How much of a financial issue is the management of the various non-native invasive species to the Trust, and what proportion of this is fish related?

The Trust invests up to £1 million per annum on the management of non-native invasive species. That compared to around £1.7 billion in the UK. Around 6% of the Trust annual total budget for invasive non-native species is invested on non-native fish species management in an average year.

With reports of illegal introduction of non-native fish species, assumedly by misguided anglers, on the increase, this expenditure figure around zander is probably likely to rise over time. Some of this budget is also allocated for the concurrent removal of wels catfish, another non-native fish species which are appearing in increasing numbers on sections of the Grand Union Canal.

How are priorities decided by the Trust when making management decisions around non-native fish?

Over the past few years, the Trust have focussed its efforts on preventing as follows

- Preventing the establishment of new illegally introduced populations as and when they are reported to us.
- Protecting the Ashby and Kilby/Foxton Sites of Special Scientific Interest, both of which are in unfavourable condition.
- To prevent further spread from the current known range including into new river catchments.
- Work to enable some recovery of roach stocks at locations such as the southern Grand Union, Grand Union Leicester Line, Ashby, Coventry, and South Oxford canals.

Other reasons for undertaking our current work include:

- The reputation of the sport of angling matters to the Trust (we are the largest single owners of freshwater fishing rights in the UK), and we believe it's certainly not ideal for anglers to be considered as illegal fish spreaders.

- The Trust is at risk of legal action from negative impacts on third party owned fisheries if we allow these fisheries to be negatively impacted by the spread of invasive non-native fish species emanating from our property. There is case law around this principle, established in Williams verses Network Rail (2018).
- Loss of income. It is estimated in a paper presented at the IFM conference the loss of income due to the presence of zander on our waterways is in the range of £60,000 to £90,000 per annum. The current income from the two clubs with most interest in zander amounts to just £3000 per annum.
- The risk of the regulator undertaking the zander management work itself and recharging the Trust.

Why not just leave the illegally introduced zander population to 'balance itself out'?

If the canal network was a total enclosed stillwater, then this could perhaps be a potential option. However the canal network is an open system with numerous connections to adjacent waterbodies. It also connects river catchments was under or not currently present and why no one wishes to see zander present.

The 'do nothing' option does not prevent ongoing spread and there is no per reviewed published scientific papers suggesting populations of the species most impacted by zander (bullhead, gudgeon and roach) ever recover to that which existed prior to the illegal introduction. Many observers, including our own Fisheries & Angling Advisory Group members believe that not acting when fish are illegally introduced will encourage yet more illegal fish movement.

Is it true that there are two club waters in the Midlands where illegally introduced zander populations will never be managed?

No, this is not true. The regulators have the power to insist that management of non-native invasive fish is undertaken at any time. Indeed they have the power to enter private property, which could include the canal network and undertake the removal of invasive non-native fish species themselves and recharge the Trust accordingly. An example of the Environment Agency undertaking management of invasive non-native fish species can be found [here](#).

Have the Trust or individual clubs ever applied for funding through the AT Angling Improvement Fund in to manage non- native invasive species work?

Yes, we have done on two separate occasions, with neither application being successful. For reasons not currently understood, funding for reducing the impacts that non-native fish species cause to native fish species cannot currently be accessed through this route.

Non-native fish species and the law

Who owns the fish in canals and stillwaters and is permission needed to keep these fish, introduce new fish, or remove certain fish?

Fish in the enclosed canal network and in Trust owned stillwaters are the property of Canal & River Trust. Fish in rivers are deemed to be wild. The Trust is permitted to keep and stock those species of fish listed on our [KIFR permits](#).

What exactly is a KIFR permit and what do the permits issued to the Trust state regarding zander in particular?

A KIFR site permit, issued by the EA in England and NRW in Wales is a legal permit which allows you to keep and introduce fish into your fishery.

What is the Trust's current understanding of the law on returning zander and other non-native species to the canal network? Is it really an offence for anglers to put them back into the canal, and is it the same or is it different to rivers?

It is our current understanding that it's an offence under part 1 of schedule 9 of the Wildlife & Countryside Act (1981) (as amended) and section 14 of this Act.

- Section 14 W&CA prohibits introduction into the wild of any animal which is not ordinarily resident in, and is not a regular visitor to, Great Britain in a wild state, or any species of animal or plant listed in Schedule 9 to the Act.
- Schedule 9 lists non-native species already established in the wild, which continue to pose a conservation threat to native biodiversity and habitats. **Zander are listed as Schedule 9 species.**

Additionally, the terms and conditions of our [KIFR permits](#) do not currently permit the return of zander.

Is the above interpretation shared by the regulators and government?

Yes, there is a link to a joint statement agreed by the Environment Agency, Natural England, Canal & River Trust and signed off by DEFRA [here](#).

Some people claim there is a 'Midlands canal zone' where zander can legally be returned. Is this true?

No, according to Natural England, the Environment Agency and DEFRA, there are currently no locations where the Wildlife & Countryside Act does not apply. Consequently, there are no [locations on the canal network where zander can be legally returned](#).

What is the situation regarding keeping and returning non-native fish on stillwaters, is it the same or is it different to canals and rivers?

The situation on stillwaters is the same as on canals, except where they are totally enclosed. In the latter case, non-native invasive species may in principle be kept depending on the conditions of the EA KIFR permit. However, it will still be an offence to return zander caught on rod and line under the Wildlife & Countryside Act, even on totally enclosed stillwaters. This applied even where zander are kept legally under the terms and conditions of the fishery KIFR permit, an anomaly that Canal & River Trust believe does need to be addressed by the regulators. We understand this may possibly happen during 2021.

Anglers do not want to inadvertently break the law. What are the options if you catch a zander or other non-native fish species on a canal?

It is not currently lawful, as stated in the Wildlife & Countryside Act 1981 to return the zander. Unless you possess a valid KIFR permit, you cannot legally introduce it into another fishery. If you or your club do have a valid KIFR permit e.g. to enable transfer to a totally enclosed stillwater, you could need a valid Live Fish supplier permit to be allowed to transport a non-native fish species.

These are issued by the Environment Agency. The other option is to euthanise the fish in the same manner as trout anglers do with their catch that they choose to take home for personal consumption.

Has the Trust ever applied to the EA to be permitted to legally keep zander in any parts of the canal network? Would the Trust consider reapplication?

Yes, back in 2015 when KIFR permits were being introduced, the Trust applied for a small 'Midlands canal zander zone'. The Environment Agency did not grant this application. However, as the law currently stands this is not legally possible. One potential short term option would be for a for a time limited license issued for independent bona fida scientific research reasons with an area within the Midlands canal network acting as the control. Significant funding would be required to undertake scientifically rigorous research. One potential funding source is that segment of the tackle industry with a commercial interest in invasive non-native species. To date, the Trust has had not been seriously approach by anyone with the financial means to fund such research.

The Trust owns many Sites of Special Scientific Interest. What is the advice from Natural England in respect of the management of non-native invasive fish species at these locations?

[Natural England's advice is set out in this document.](#)

Are there any zander or other non-native fish species present in canals in Wales? What is the position of Natural Resources Wales regarding the capture and return of non-native invasive fish species.

There are currently no zander in the Welsh canals. NRW are keen to ensure that non-native invasive fish species do not cross the border into Welsh fisheries. The Welsh government take the same view. The same laws regarding non-native fish species apply in Wales as in England.

What representations can individuals make if they believe the current legislation concerning non-native species is wrong and should be changed?

In the UK, making and amendment of law is a matter for the democratic parliamentary system. If you believe that law around invasive non-native species makes no sense then one obvious option is to lobby your elected representatives for change in the national approach to invasive non-native species.

Why were the Trust required to drain Engine Pool Earlswood in around 2017 by the Environment Agency? Was this related to non-native invasive fish species?

Yes, the Environment Agency produced evidence that [wels catfish](#) had been illegally introduced to the fishery. As the Engine pool connects to the River Blythe (a Site of Special Scientific Interest) the reservoir is classified as not being totally enclosed. Therefore, it's not possible to be authorised to keep non-native fish species as listed in annex 1 of the KIFR permit in the fishery. We agreed a timetable for these works with the local Environment Agency fisheries officer.

What does the Trust's standard angling agreement for fishing rights say regarding zander and other non-native species?

The agreement for fishing rights that angling clubs sign up to is subject to adherence of 'The byelaws of the Environment Agency and of the Trust and to the provisions of the Salmon and Freshwater Fisheries Act 1975' and 'The KIFR site permit associated with the permitted length and the conditions of any statutory SSSI or SAC designation.'

All relevant health, safety, and environmental legislation, (which includes the Wildlife & Countryside Act (1981)

A link to the Trust's standard angling agreement document is [here](#).

In the event that a club decided to refuse to adhere to the terms of their agreement for fishing rights, Canal & River Trust would ultimately have no option but to terminate the arrangement.

Who in the angling club would be liable in the event of the club being called to account around non-native invasive species?

Only a court of law would provide a definite answer to this question, but it may well be that club officers and (where a club has limited liability status) the board members of the club may be accountable for the actions of their members.

What information is the Trust required to communicate with licensee clubs relating to the KIFR permit that covers their rented fishery?

The Trust will share both the [joint statement](#) and relevant KIFR permits with its licensee clubs and bring to its attention the terms and conditions. The club then needs to do what is reasonable to bring the terms and conditions to the attention of its members. It is suggested that clubs include relevant information in their constitutions, on their website, membership books, day permits and on social media sites. By undertaking these actions, it may well be considered they have endeavoured to have done all they reasonably can to point out the legal position to their members and permitted users.

What do the Trust fisheries and angling action plans state regarding non-native species? Who were these plans written by?

An example of a fisheries and angling action plan is [here](#).

Theme 8 covers predation and non-native invasive species. These plans were produced in a partnership between the Trust and stakeholder angling clubs.

Can a club renting canal fishing object to the Trust carrying out work to remove non-native invasive fish and other non-native invasive species such as floating pennywort?

Whilst we will endeavour to work with a club around mutually convenient timetables, the fishery and the fish stocks do belong the Trust and we have a right to manage accordingly for the purposes of our undertaking.

Are angling club officials invited to attend when the Trust undertakes non-native invasive fish species management work?

Yes, we much prefer a small number of representatives (one or two) from the controlling club to be present where possible so that our work is witnessed.

Is there any evidence that clubs have given up fishing rights because of the presence of non-native invasive species?

Yes, we estimate that at least 40 clubs have given up fishing rights predominately because of the decline in native fish stocks especially of roach and gudgeon associated with the presence of zander. In many other cases, where clubs have not terminated entirely, rental income to the Trust has declined.

How many lure fishing clubs rent fishing rights from the Trust?

We believe that all clubs can and do cater for various forms of anglers. Clubs are rarely made up exclusively of one type of angler. There are currently two clubs with a significant interest in lure fishing and whose membership is predominantly (although not exclusively) lure fishing based who rent fishing rights from the Trust. These are the Lure Anglers Canal Club and Tusses Angling Club.

It has been suggested by critics that the Trust is anti-lure fishing. How would you respond to this claim?

It is important not to mix up issues around invasive non-native fish species with a fishing method which is successfully used to capture many species, especially perch, pike, chub and occasionally other species too. What the Trust and we believe most of its stakeholders are not in favour of is the continued spread of non-native invasive species and the subsequent impact that this has on fish stocks and on the wider canal ecology etc.

About electric fishing and the fate of non-native invasive fish species removed from our waterways

Who issues the Trust with authorisation to carry out electrofishing to remove zander and other non-native fish species?

Authorisations to use electric fishing is issued under the Salmon & Freshwater Fisheries Act 1975 (as amended) by the Environment Agency in England and Natural Resources Wales in Wales.

Can a club who rent fishing rights from the Trust carry out its own electrofishing for non-native invasive species?

Very few if any clubs have access to the necessary boom boat electric fishing equipment. Some clubs do however make an additional financial contribution towards the Trust work around non-native invasive species.

Are zander removed from offline marinas connected to the canal network and who pays for this?

These fish are covered under the Trust's site permit and are owned by the Trust. It is the Trust's responsibility to manage them in line with legislation.

Can electrofishing do any harm to non-target fish species?

Electric fishing is a technique used widely throughout the fisheries world both in Europe and globally. The Trust are not aware of any significant evidence of damage to fish. If the technique was deemed to be damaging, we reasonably assume that the regulators (EA and NRW) would not issue consent for the use of this equipment or indeed use electric fishing themselves for fish population surveys and other essential fisheries management work. Most of our fisheries management work is carried out between September and April. We only use electric fishing in the warmest summer months if required in emergency situations.

If electric fishing is more effective in capturing large rather than small fish, what does the Trust do to ensure that as many small zander as possible are removed during management work?

Zander are one of the more susceptible species and are relatively easily captured using boom boat electric fishing equipment. The use of a collection back boat which works anywhere from 10 to perhaps 50 metres behind the main boat improves removal rate by up to 50% and zander of around 15 cm and under are often retrieved by the operative on the back boat. As resources permit, will we also consider undertaking seine netting as an additional fisheries management technique to remove an even greater proportion of the smaller zander.

Why not restock impacted canal fisheries with zander proof coarse fish to replace those that zander consume rather than reducing the biomass of zander?

This would be a more expensive option and iconic canal species such as gudgeon are not available in commercial fish restocking market and would quickly be predated if the zander population was not managed. This option does not address the issue around preventing the further spread of zander into new catchments, the protection of SSSI's in unfavourable condition nor does it address the various other reasons for our work outlined elsewhere in these FAQ's.

It has been suggested that why illegal relocation should be condemned, the Trust should not act to prevent establishment and hence mitigate the damage that further spread would cause. We believe that failing to show proactive management will further encourage the small minority of irresponsible anglers who wish to see the spread zander far and wide.

What happens to most zander captured during removal exercises? Have you ever taken advice from the Fisheries & Angling Advisory Group (FAAG) on the disposal of zander?

There are five options potentially available to the Trust

- Translocation to a fishery with a valid KIFR permit for zander
- Academic research
- For use as fertilizer
- Incineration
- Introduction to the food chain

In our current fisheries management national term contract, the responsibility for the destination of the captured zander is delegated to the contractor at no expense to the Trust. We understand that smaller fish are incinerated, and larger fish enter the food chain or are used as animal food at zoo's. The result of this is that there is currently no net cost to the Trust. As well as our internal procurement team, our [National Angling Advisory Group](#) have endorsed this approach believing, as do the Trust, that it is currently the greenest option available.

Why doesn't the Trust transport the zander and other non-native species it removes from its fisheries to other fisheries where the species can be kept lawfully?

Following communication with the Environment Agency, we have been informed that an application to introduce zander to rivers in the Great Ouse catchment would be refused. The number of totally enclosed stillwater fisheries with the requisite KIFR permits for zander is tiny and it is unlikely that owners or occupiers would want the volume of available zander introduced to their fisheries. We remain happy to work with any organisations or individuals that have the necessary KIFR permit in place for legally keeping zander.

Have you done any research as to whether zander may be helpful in consuming non-native invasive crayfish species?

We are not aware of any published research which proves this hypothesis.

Does the Trust receive any income or sale of zander carcasses or pay any costs from the incineration of zander carcasses?

No, any net income that the contractor earns from wholesaling the zander balances out their costs associated with the incineration of the fish that are too small for consumption. We support the principle of the establishment of new totally enclosed zander fisheries and are happy to talk to any fishery owner who would like to receive zander from the Trust's canal network.

Are there any food standards issues associated with putting non-native invasive fish species into the food chain?

The Trust is not aware of any such issues but in any event, these would be the responsibility of the fish wholesalers and not the Trust.

Could the Trust work with academic institutions to use non-native fish species carcasses for research purposes?

Yes, the Trust occasionally do this, we have worked with Bournemouth University investigating zander diet and would be happy to work with other academic institutions or similar bodies who approached us.

Internal Trust staff undertake small-scale in-house fish rescues within the confined of lock chambers etc. What training do they receive regarding non-native invasive fish species?

The Trust have three e-learning fisheries modules. Any staff involved with fish rescue on the ground are required to complete the fish rescue module and then pass the end of module test. Therefore, the chances of a Trust employee making an error and inadvertently returning a non-native species is significantly reduced.

Seagulls take the opportunity to snatch stunned fish while electro fishing takes place. How is this right?

Seagulls are notoriously adaptable and opportunistic birds. In urban areas they live closely alongside people taking advantage of both goodwill in feeding the birds or the waste people leave behind. Many people have been the victim of a snatched chip or ice cream from these birds. They are comfortable getting in close proximity of people.

Most fish that are stunned are below water level and quickly recover safely. Some fish do come to the surface, and it is inevitable that where present, gulls will take opportunity of this, and a small number of fish will be eaten before they fully recover. Our priority remains the protection of our native fish stocks from the impacts of illegally introduced invasive non-native fish species and the risk of spread to new catchments

Non-native invasive species and Let's Fish

Where can I find information about the Trust's Let's Fish campaign?

The Trust are a significant delivery partner in the Environment Agency strategic services contract. There is plenty of information about our Let's Fish campaign [here](#).

What possible impact could non-native invasive fish species have on the Trust's Let's Fish work?

Our Let's fish events are predominantly aimed at newcomers to fishing. With 8 million people living within 1000 meters of one of our fisheries, there are many tens of thousands of potential anglers to be introduced to fishing on our waterways. One of our [twelve Let's Fish principles](#) the fishing journey as a ladder to be climbed. Our philosophy is that you should start off learning basic bait presentation and developing skills to catch fish such as gudgeon, roach, rudd, perch and skimmers. Other fishing ambitions can come later, once the basics have been instilled. One of our key objectives is for as many participants as possible to catch a fish at the first time of asking. We believe that initial success in that first session is vitally important for retaining long term interest. Where non-native invasive species impact on the key species targeted at Let's Fish events, it hampers our ability to hold successful Let's fish events.

What part does lure fishing play in the Let's Fish campaign?

Lure fishing is an important component of the Angling Trust CAST award and can be an important part of an ongoing angling participation pathway. It is a branch of the sport that as many people who wish to should be exposed to and encouraged to perfect their skills. However, it is not our preferred technique for initial taster sessions at Let's Fish events. Significantly more coaching resource and hence budget is required compared to traditional Let's Fish introduction activity and the chances of large numbers of pupils all catching at least one and ideally several fish including two or three different species in an introductory session are, on balance, quite low.