

Inshore wrasse pot fishery

What are the issues?

Our Position - Summary

Devon Wildlife Trust is calling for the **immediate ban on live capture of all wrasse species** in the South West from within Marine Protected Areas.

Wrasse are being captured live from our coastline in very high numbers and transported to Scotland where they are used to control parasites in farmed salmon. Mortality during the storage and transportation of live wrasse can be very high, with cuckoo wrasse being the most susceptible of the five wrasse species used for this purpose.

Recent controls have been implemented by the Inshore Fisheries and Conservation Authority in Devon but the precautionary principle must be adopted as there is very little understanding of the longer term impacts on the health of this fascinating native species and the fragile reef environments the wrasse help to sustain.

Wrasse are long lived fish that thrive on the rocky shores across Devon, Dorset and Cornwall. They are highly territorial and reproduce slowly which means populations are very slow to recover after over-fishing.

There is no current estimate of local wrasse populations and little available research on the impacts of fishing on the species and their reef environments, so it is impossible to determine what is a safe level of fishing for this species.

In 2015, during an 18 week period, over 57,000 wrasse were captured between Weymouth and Lulworth. There are moves to significantly expand the wrasse pot fishery in Dorset, Devon and Cornwall where there are suitable rocky reef habitats. Fishing for wrasse is currently taking place within our most treasured marine environments, for example within Plymouth Sound Special Area of Conservation. Once commercially viable stocks of wrasse are exhausted from Plymouth our fear is this practice could move to ports throughout the southwest.

The number of traps (known as pots) has been limited to 480 in the area and no controls have been enforced on where these can be placed. This risks serious depletion of fish stocks in specific locations.

Impacts of commercial wrasse fishing could, potentially, be devastating to the species and to reef ecology. Until we have detailed knowledge of the impacts of fishing on this scale on these important species and their marine reef habitats, **an immediate and total ban on live capture is essential**, until the evidence enables and informs a sustainable fishery.

Background

Scottish salmon farms have an increasing problem with sea lice since intensive farming operations started 30-40 years ago. Sea lice are naturally occurring parasites which attach themselves to salmon and can reduce their health and growth. When fish are farmed in high densities the problem is magnified.

Sea lice are controlled in conventional fish farms through the use of chemicals and other techniques such as washing with warm water. Every three or four years, sea lice become resistant to chemical treatments and new ones need to be found.

Wrasse as a Biocontrol

In the 1990s salmon farms trialled the use of 'cleaner fish' to reduce the lice parasite problem. By using 'cleaner fish' salmon farms exploit natural tendencies of certain fish to remove and eat the parasites. This approach, however, never really took off as new chemical treatments were found instead. Currently there are no new chemical treatments on the horizon so there is an increased emphasis on use of 'cleaner fish'.

Wrasse have been targeted for use as 'cleaner fish' and have been live caught in very high numbers and transported to fish farms to reduce lice infections.

Wrasse and their ecology

Currently five species of wrasse are caught by the fish farms

- Goldsinney
- Rock cook
- Corkwing
- Ballen
- Cuckoo Wrasse

Wrasse are carnivorous and mostly feed on shellfish and live all around our rocky shores. They are very variable in size, ballan wrasse can grow up to an amazing 4kg in weight but most species are much smaller often weighing 0.5-1kg. The cuckoo wrasse is one of our most colourful UK fish and wouldn't be out of place in the Great Barrier Reef. Males have a bright blue head and tail and a mixture of orange and blue coloured body.



Cuckoo wrasse, Eddystone, Devon. Photo: Paul Naylor (www.marinephoto.org)

Wrasse have amazing life stories and play a very important role in the ecological health of our reef ecosystems – many of which have been designated as Marine Protected Areas due to the internationally important habitats and species which are found there.

Ballan wrasse are all born female, with some changing to males as they mature. Cuckoo wrasse can also change sex, with females changing to males if no males are present. Both ballan and corkwing wrasse make nests, with the males guarding the eggs until they hatch. Corkwing wrasse nests can sometimes be found in rock nooks and crannies at low tide on rocky shores. 5-20% of corkwing wrasse males are 'sneaker males'. Smaller and almost indistinguishable from females, they 'sneak' into nests where eggs have already been laid to try to fertilise them.

How are Wrasse Caught?

All wrasse species are targeted using baited pots. These are typically set in reef areas of depths up to 10m (to prevent mortality resulting from fish being brought up from depth). Some salmon farms and their agents are providing fisheries with pots and holding tanks, reducing set-up costs and helping to increase local fishing effort.

The fish are then transferred to 'consolidation tanks' to increase numbers before it is economically viable to transport them to Scotland. High numbers of fish can die during this

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storage and transportation process. The fish are then treated with a range of chemicals before they are released into salmon farms.

Fish farms are investigating breeding wrasse, however due to the slow development and breeding rates, this is not currently viable. This means there is an increased emphasis on collecting from the wild which is damaging local reef ecosystems.

Until recently, cleaner fish have been sourced from west-coast Scottish fishers, but 2015 saw the first use of pots for collecting wrasse in the south-west, with a small number of boats from Weymouth taking part in the new fishery. There are moves to significantly expand the wrasse pot fishery in Dorset, Devon and Cornwall where there are suitable rocky reef habitats. In 2015 during an 18 week period over 57,000 wrasse were captured between Weymouth and Lulworth. Fishing for wrasse is currently taking place within our most treasured marine environments, for example within Plymouth Sound Special Area of Conservation.

Based on discussions between Devon and Severn Inshore Fisheries and Conservation Authority and salmon farms and agents we could see up to 480 pots in the D&SIFCA area.

What is the impact?

Catching live wrasse in high numbers will cause significant local impacts on their populations and the ecology of the sea:

- **sustainability of harvest** – most wrasse species are slow growing and don't reproduce very quickly making them highly susceptible to overfishing
- **local populations** – wrasse species are also highly territorial so local populations are easily targeted and very slow to recover
- **impact on reef ecology** Nobody yet knows what impacts wholesale removal of wrasse will have on our fragile marine reef ecosystems and the natural balance could be thrown into chaos. This could be devastating for not only the wrasse but habitats and species which depend on them for their survival. As wrasse function as 'cleaner fish', their removal from the reef environment could result in loss of this 'service' to reef ecology. Ultimately, wrasse are an integral part of reef ecosystems and more work is needed to fully understand the potential impacts of their loss on these special, and fragile, habitats.
- **marine protected areas** – most reefs in the south-west are protected within European Marine Sites (EMS) or Marine Conservation Zones (MCZ) so impacts on reef ecology will affect measures to meet conservation objectives

Surrounding this whole issue is a lack of knowledge of a whole range of factors including local populations, reproduction rates and the ecological role played by wrasse, all of which make the development of management measures more difficult. **Impacts of commercial wrasse fishing on this scale could, potentially, be devastating to the species and to reef ecology.** Until we fully understand what the range and scale of impacts and how to mitigate against them, we need **an immediate total ban on the live capture of all wrasse species with MPAs.**

Who manages the fisheries?

Inshore fisheries in Devon are managed by the Devon and Severn Inshore Fisheries and Conservation Authority. The IFCA have a responsibility to implement measures required to ensure fisheries are sustainable and do not have a significant impact on MPAs. Natural England are the conservation advisors to the IFCA where fisheries have potential impacts on Marine Protected Areas.

Until June 2017 there were no controls governing the wrasse fishery and very limited data available to guide decisions. Since the 15th June controls have been agreed, to be implemented soon after they were announced. Controls include:

- Fully documented fishery (on-board surveys from IFCA officers as well as all landings to be recorded)
- All wrasse pots need to be marked
- Maximum number of pots is 120 per boat
- Closed season for wrasse fishing will be 1 April to 30 June
- Minimum and maximum conservation reference sizes will be enforced

Since DWT's wrasse campaign launch, the IFCA has implemented additional management measures, including voluntary unfished refuge areas for wrasse. These can be viewed online at <https://secure.toolkitfiles.co.uk/clients/15340/sitedata/Wrasse/Guidance-for-Live-Wrasse-Fishery.pdf>

This still means that significant numbers of wrasse can therefore be taken from within MPAs without evidence to inform decisions on the likely impacts to the reef ecology. We are urging for this troubling situation to change and for a precautionary approach to be adopted: **an immediate halt to all live wrasse caught within Devon MPAs.**