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# RECREATIONAL ANGLING DEMAND IN A MIXED RESOURCE FISHERY

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# Recreational angling demand in a mixed resource fishery <sup>1</sup>

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## OVERVIEW

Recreational anglers targeting pike or brown trout regularly share fishing locations but often have different attitudes and objectives for fishery management due to the interactions between the species (i.e. pike prey on trout). The primary objective of this research is to establish whether anglers targeting pike and trout in Ireland differ in terms of their preferences, angling effort and benefits obtained from angling.

In a study of almost 200 anglers that only fished for pike and/or trout, pike and trout anglers have similar expenditures, similar sensitivity to the cost of fishing and undertake a comparable number of fishing trips. Using a long established 'travel cost' methodology, on average, the estimated benefit of a day's fishing in excess of expenses is between €71-204, depending on whether an angler targets trout or pike, or if they are a member of an angling club. The anglers in the study fished on a regular basis, with an average of 51 daytrips per annum, so the total annual value of their recreational activity is substantial.

The most substantive difference among the anglers in the study is not related to target species (i.e. pike or trout) but to angling club membership. Club members are less sensitive to the costs of angling, particularly so in the case of anglers targeting trout. Among trout anglers, the mean number of fishing days is 30% higher for club members versus non-members. Non-club trout anglers, analogous to tourist anglers, are quite sensitive to the cost of angling and the value to them of a day's fishing in excess of their expenses is €71, less than half that of club members. This is not the case for pike anglers, where differences associated with club membership are relatively minor.

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<sup>1</sup> This Bulletin summarizes the findings from: Grilli, G., Mukhopadhyay, S., Curtis, J., and Hynes, S. (2020) "Recreational angling demand in a mixed resource fishery", Fisheries Management and Ecology, Available online: <https://doi.org/10.1111/fme.12443>

## **METHODS**

This research is based on survey data collected in 2016. The survey was administered to pike and trout angler members of a voluntary angler research panel managed by the ESRI. Given the nature of the panel, the sample is considered representative of the most avid anglers, an important stakeholder group within recreational angling. Statistical techniques were used to investigate demand for recreational angling (i.e. number of angling trips per annum) as a function of cost of angling and other attributes, such as target species or angling club membership.

## **POLICY IMPLICATIONS**

The most substantive difference uncovered in the research is not associated with target species, trout or pike, but whether an angler is a member of an angling club. Club members are less sensitive to prices (i.e. cost of fishing) and particularly so in the case of anglers targeting trout. From an economic perspective, the difference between what fishing is worth to anglers compared to the money spent on angling is substantially greater for angling club members versus anglers that are not members of angling clubs. In the context of public investment in the protection and enhancement of fishery resources there is a reasonable argument to be made that club anglers that enjoy greater benefit for the fishery resource contribute to such investment.

Recreational angling resources are often earmarked as a tourist attraction and a means to encourage local economic development. Tourist anglers targeting trout are the most price sensitive and likely to curtail activity in the face of increased costs, whether direct angling costs (e.g. guide fees, permits) or associated trip costs (e.g. transport, food, accommodation). The challenge for those seeking to boost local economic activity via trout angling tourism is to find a way to expand the tourist angler client base rather than focusing on increasing expenditures among existing tourist anglers.

In some designated wild trout fisheries, pike stocks are actively managed (i.e. culled) to enhance the trout fisheries due to predation on trout. The research suggests that pike control should be grounded on an ecological and not economic basis, as there is no evidence from this study that the contribution to the economy of a trout angler, on average, is larger compared with a pike angler.

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