

72 Monitoring recreational fishing activities: anglers' attitudes towards a national catch reporting program

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Recreational fishing activities have been facing a decline in participation rates throughout industrialized countries in recent years (Arlinghaus et al., 2015). However, many countries are now seeing a considerable increase in recreational fishing license sales as a response to the restrictions on many indoor sports and leisure activities caused by the Covid-19 pandemic (Cooke et al., 2021). Recreational fishing activities have the potential to affect fish populations worldwide, but data about actual fishing pressure is lacking in many countries. Despite the European Commission's recent call for monitoring all fishing activities (including recreational efforts), the development of monitoring programs is still moving slowly. Increased understanding of potential ecological impacts of recreational fishing, combined with the current positive participation rates, emphasize a demand for monitoring recreational fishing catches and effort.

A potential solution to this problem, that has been gaining popularity in recent years, is the use of angler-generated data in fish stock assessments. Involving the public in this type of ecological data collection, often referred to as "citizen science", presents numerous benefits, such as the improvement of scientific literacy, cost efficiency, and environmental educational opportunities (Bonney et al., 2009). Additionally, these monitoring programs specifically allow for the collection of data on the human dimensions of recreational fisheries (Gundelund et al., 2020).

Several countries are already using such collaborative monitoring programs on a national scale, for example in the Netherlands and Denmark. The Swedish government also intends to develop a catch reporting program for recreational fisheries. In order to ensure successful adoption of such a program, there is a need to understand anglers' perceptions on reporting catches. In this study we distributed an online survey among members of the Swedish Angling Association to assess that. Moreover, we accounted for angler heterogeneity

dimensions by assessing the effects of different consumptive orientations and environmental attitudes on the anglers' perspectives on catch reporting.

Our study revealed that most anglers supported the involvement of anglers in fish stock monitoring through the reporting of recreational catches. Considering the effect of environmental attitudes, significant positive relationships were found between support for a catch reporting program and the sense of responsibility towards conservation issues. A similar effect was found for anglers with a strong orientation towards catching big fish. On the other hand, consumptive orientations related to either keeping the caught fish or catching large numbers of fish had a significant negative relationship with catch reporting support. Despite the predominantly positive attitude towards a potential catch reporting program, consumptive orientation and environmental attitudes were proven to play an important role in the anglers' preferences towards a collaborative monitoring approach to data collection. This result supports the notion that one size does not fit all when it comes to recreational fisheries management (e.g. Johnston et al., 2010).

Compliance with environmental management regulations, such as a catch reporting obligation, is a result of complex interactions between a person's attitudes and beliefs (Winter & May, 2001). Our study suggests that a better understanding of the diversity of attitudes and preferences towards recreational fisheries management, and their relationship with consumptive orientation and environmental perspectives, is vital to the successful implementation of collaborative monitoring regulations.

References

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