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ECONOMIC CONTRIBUTION AND MANAGEMENT OF SEA BASS ANGLING IN IRELAND

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Economic contribution and management of Sea Bass angling in Ireland[1]

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OVERVIEW

Sea bass (*Dicentrarchus labrax*) is a popular target species among Irish and UK recreational sea anglers. Stocks are vulnerable to overexploitation with harvesting of sea bass by recreational anglers prohibited for the 2018 season, though 'catch & release' fishing is permitted. There is a long standing moratorium on commercial fishing for sea bass around Ireland.

Sea bass are a prized target species. Based on prior Inland Fisheries research approximately 11,000 anglers in Ireland fish for sea bass and this research indicates that on average they fish 31 days per year. Additionally, the valuation of the sea bass fishery to anglers is in excess of €100 million per annum with anglers' spending in excess of €20 million per annum on fishing tackle, travel, accommodation, hostelries, etc. in pursuit of their recreational activities.

On average an extra day's fishing results in 4 additional fish caught, though this varies by angler specialisation. For example, compared to general sea anglers, specialised bass anglers catch 24 more sea bass per annum, on average. Higher catch rates also encourage more fishing trips, on average in a 2:1 ratio. These two findings underpin the importance of sea bass stock conservation. A vibrant and sustainable fishery leads to higher angler catches, which in turn leads to higher numbers of angling trips that contribute to the local economy.

BACKGROUND

The research was funded and undertaken in collaboration with Inland Fisheries Ireland (IFI). The survey data underpinning the analyses was collected by IFI in 2016 interviewing domestic and visiting anglers who fished for bass in Ireland during

[1] This Bulletin summarises the findings from: Grilli, G., Curtis, J., Hynes, S., O'Reilly, P., "Sea bass angling in Ireland: a structural equation model of catch and effort", *Ecological Economics* 149, 285–293. Time limited open-access hyperlink: https://authors.elsevier.com/a/1Wq~p3Hb~0Ek-T. Permanent hyperlink (paywall): https://doi.org/10.1016/j.ecolecon.2018.03.025

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2015. The majority of sea bass anglers interviewed were from the Republic of Ireland though a substantial minority, i.e. 31%, were tourist anglers primarily from the United Kingdom. On average, respondents fished 31 days during 2015 for sea bass, catching roughly one fish per trip, though catch varies substantially across anglers. Average expenditure per angling day is €48 covering items such as travel, food, bait, and angling guides.

POLICY AND MANAGEMENT IMPLICATIONS

The research paper confirms the importance of the sea bass fishery both to anglers, as well as its contribution to economic activity. It also demonstrates that continuing efforts to protect sea bass stocks and sustainably manage the fishery to improve recreational catch rates will deliver economic returns to coastal communities in terms of higher numbers of angler trips and associated expenditures.

Sea bass anglers are not particularly responsive to price, which reinforces the existing management approach that controls fishing effort through regulation (e.g. open seasons, bag limits), as any price controls via permits or licences are unlikely to be particularly effective.

The research findings also provide useful information for fishery biologists engaged in sea bass stock assessments. Even in the context of a full 'catch & release' fishery, angler catches have a direct impact on stocks through post-release mortality rates. Plus an understanding of how catch levels vary by angler type and proficiency can help refine estimates of the aggregate recreational catch, which is valuable information for stock assessment.

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