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Further Reading:

Deely, J., Hynes, S., & Curtis, J. (2018). Coarse angler site choice model with perceived site attributes. *Journal of Outdoor Recreation and Tourism*.

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Read More About: The [Socio-Economic Marine Research Unit Cluster \(SEMRU\)](#) within the Whitaker Institute for Innovation and Societal Change.

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Modelling coarse angler's decision-making behaviour using perceived site attributes

An angler's decision on which site to fish at can be a complex system of arithmetic calculations, weighing up the attractions and detractions of every feasible site they could visit. One site may have good access but poor fish quality, another may be teeming with fish but overcrowded with anglers. On any given choice occasion an angler will use both their perception of each site's attributes and their own preferences to decide where they will fish. When the management of coarse angling sites includes the onerous tasks of improving the sites for present users as well as inducing more people to participate in fishing, quantitative measurements of anglers' preferences can provide the building blocks for effective policy.

Research Findings

In this research the authors applied site choice models to a data set comprised of respondents who visited at least one of five key coarse angling sites in the Cavan and Leitrim area; Garadice, Killykeen Forest Park, Eonish, Dernaferst and Church Lake. The respondents were asked to report the number of trips they had taken to each of the five sites as well as their perception of the sites with regard to important site attributes. Using the revealed trip frequencies and site attribute ratings, angler preferences can be estimated.

The results indicate that accessibility, variety, and the size of fish are positive determinants of site selection for the sampled anglers. Local services were found to have a negative impact on site selection, whereas the quantity of fish and the level of encounters with other anglers does not appear to play a significant role. Willingness to pay estimates suggest that the average willingness to pay for an improvement in access to a site is €3.03 per angler per trip. However, policy scenarios estimates suggest that this figure is not evenly distributed for each site. The average sampled angler is estimated to have a willingness to pay of €1.80 for an increase in fish size at Killykeen, and €2.39 per trip for a marginal increase in size at Garadice.

Policy Implications

The model results support developing better access to sites that contain large fish away from areas with high levels of amenities. However, due care is needed when providing additional access as scenario estimates demonstrate that access is not uniformly appealing and, that, an improvement in access at the most visited sites will not necessarily benefit anglers the most. The results also indicate that stocking sites with large quantities of fish may not affect anglers, at least with respect to site choice. Policy should account for this by allowing for sites that vary with respect to important site attributes.

