
Woods Hole Oceanographic Institution
Marine Policy Center Seminar



Tuesday, March 29, 2022 10:30 am

Registration Required:

<https://who->

[edu.zoom.us/meeting/register/tJlvduusrTwsGtaFwn4pVn205HfxjJLJcx2i](https://who-edu.zoom.us/meeting/register/tJlvduusrTwsGtaFwn4pVn205HfxjJLJcx2i)

*Another Plaice and Time: The Effects of
Catch Shares on Targeting and Timing
Decisions in the New England Groundfish
Fishery.*

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A growing body of work to evaluate the impact of catch share/quota programs and other fisheries policy interventions relies on treatment effects models, which typically identify the net effects of policy changes but not the underlying mechanisms driving those effects. To shed new light on mechanisms, we develop and estimate a structural discrete choice model of individual vessel behavior. This work seeks to improve our understanding of how catch shares—and the policies that they replace—influence species targets, timing of fishing activity, and the value generated from the resource. We implement our model using fine-scale commercial groundfish fishing data from before and after the start of the Northeast Multispecies Sector Program, which transitioned economically important species like cod, haddock, pollock, and flounders to quota management. Controlling for weather, costs, and prices, we recover structural parameters characterizing vessel-level targeting decisions and use them to simulate a counterfactual in which days-at-sea management remained in place. We find that, under catch share management, the groundfish fleet experienced longer fishing seasons, somewhat higher groundfish revenues, fewer fishery closures, fewer non-fishing days, and a broader mix of target species than it would have under continued days-at-sea management.