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Predicting Fisher Behavior under Changing Policies, Economics, and Environmental Conditions

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Abstract:

Commercial fishermen make decisions about where, when, and how to fish based on a diverse and dynamic set of incentives and constraints. This talk provides an overview of spatial analyses conducted at the United States NOAA Fisheries' Alaska Fisheries Science Center over the last decade that address how fishers and fish processors in different Alaska fisheries have been affected by changing incentives, including season lengths, markets, and environmental conditions. We also discuss the value and challenges of utilizing different data sources in these analyses and how different models are more effective at predicting the impacts of short- and long-range management changes. How can this type of research be used to improve the management of marine resources? Fisheries managers have a broad range of tools and models at their disposal. Ecosystem-based management, marine protected areas, and catch shares are all utilized to different degrees to achieve policy goals. Better incorporating our understanding of fisher behavior into management involves developing better predictive models and ensuring that we recognize that fishing in the future will be dependent on the evolving relationship among future fish distributions, markets, and management.

Keywords: fisher behavior, fleet dynamics, fisheries management, Bering Sea.

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