

# Adaptive Agent-based Modeling of Gulf of Maine Fisheries

Peter Hayes, James Wilson  
School of Marine Sciences  
University of Maine  
Orono, Maine  
[peter.hayes@maine.edu](mailto:peter.hayes@maine.edu)

Clare Bates Congdon  
Department of Computer Science  
University of Southern Maine  
Portland, Maine

This paper describes a simulation of human behavior developed during exploitation of fisheries resources in the Gulf of Maine. A modified Learning Classifier System provides agents with adaptive capabilities when exploiting resources and participating in interactions serving to reduce the cost of information acquisition. Analyses of the existing model and guidance for creating its successor are discussed.