NOAA FISHERIES
Northeast Fisheries Science Center

Fishery Functional Groups

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Ecosystem Based Fishery Management Strategy Review

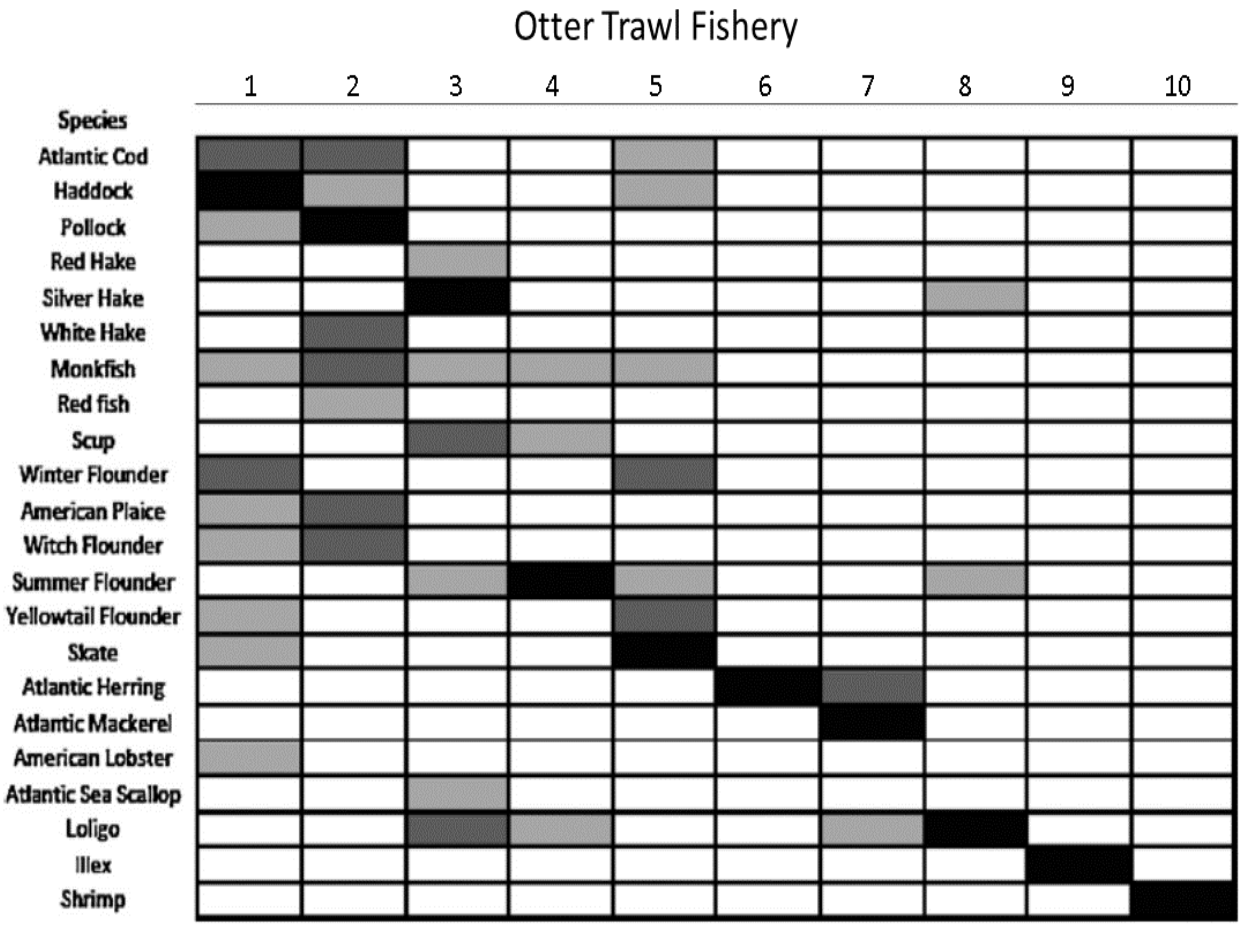
TOR 3: Evaluate the approach and rationale for specifying Fishery Functional Groups as proposed management units

April 30-May 2 ,2018
Woods Hole MA

Defining Fishery Functional Groups

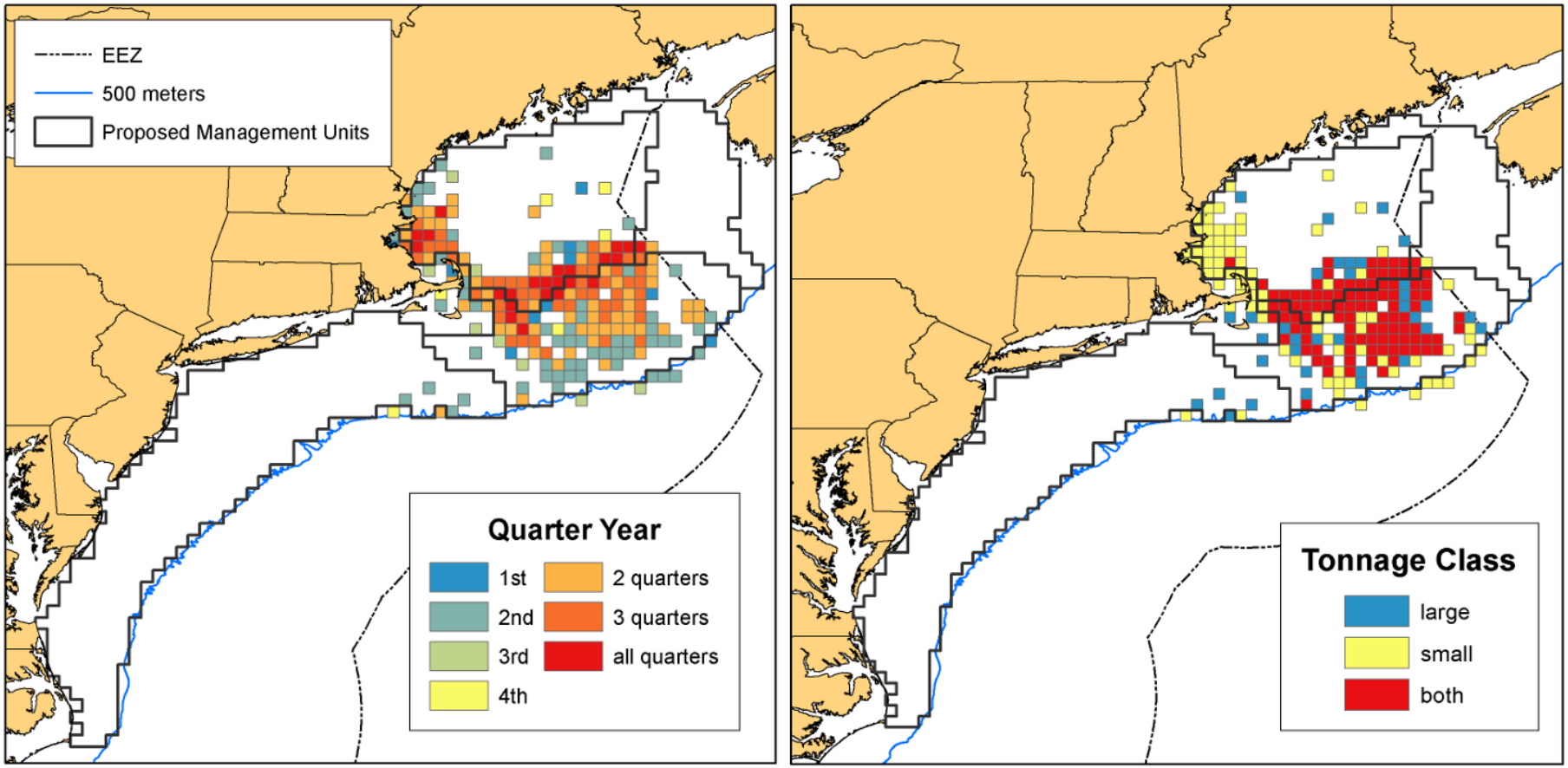
Fishery Functional Groups are species that are caught together, have similar life history characteristics, and play similar roles in the transfer of energy in the system

Defining Operational Fisheries

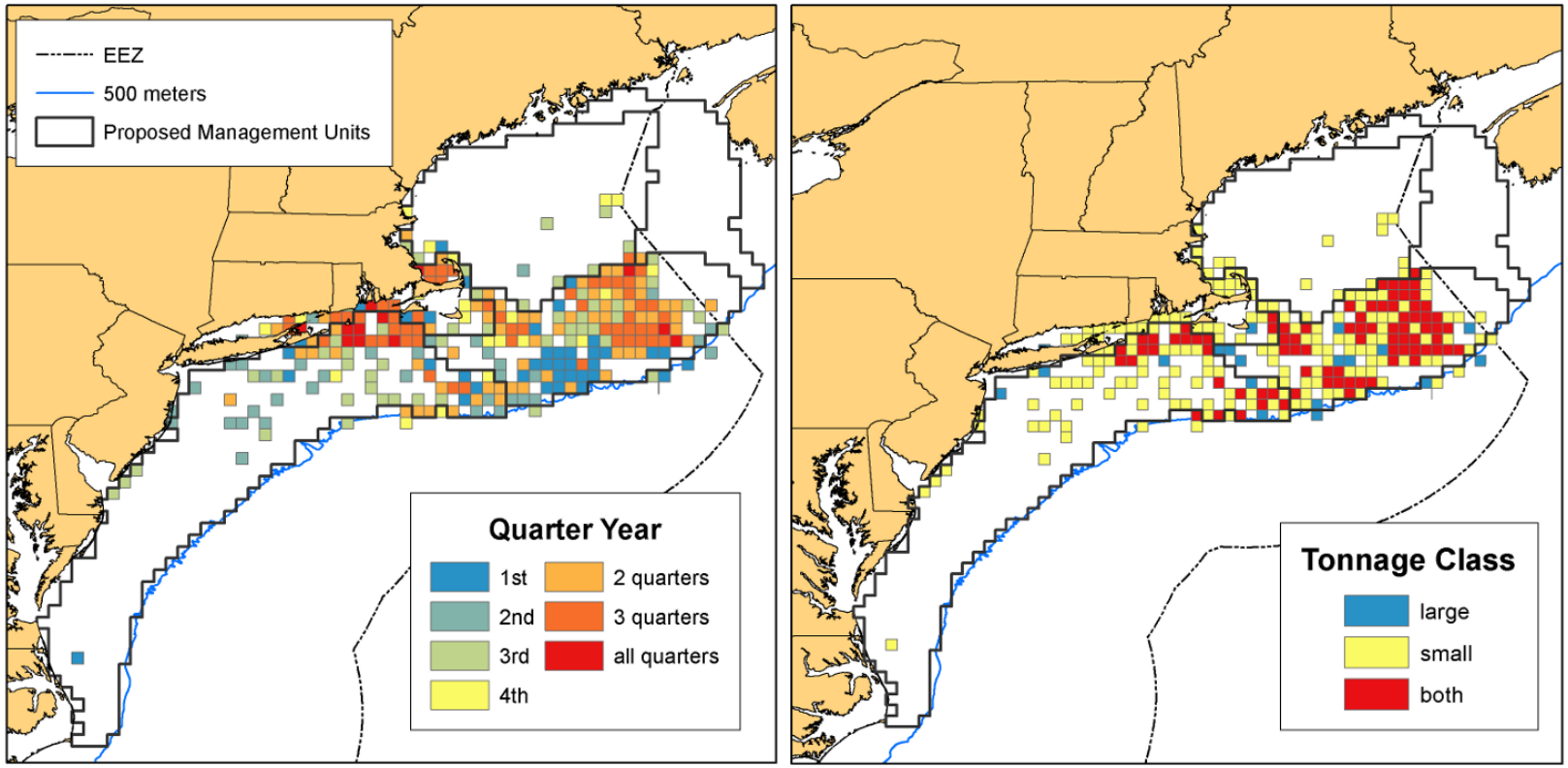


Lucey and Fogarty 2013)

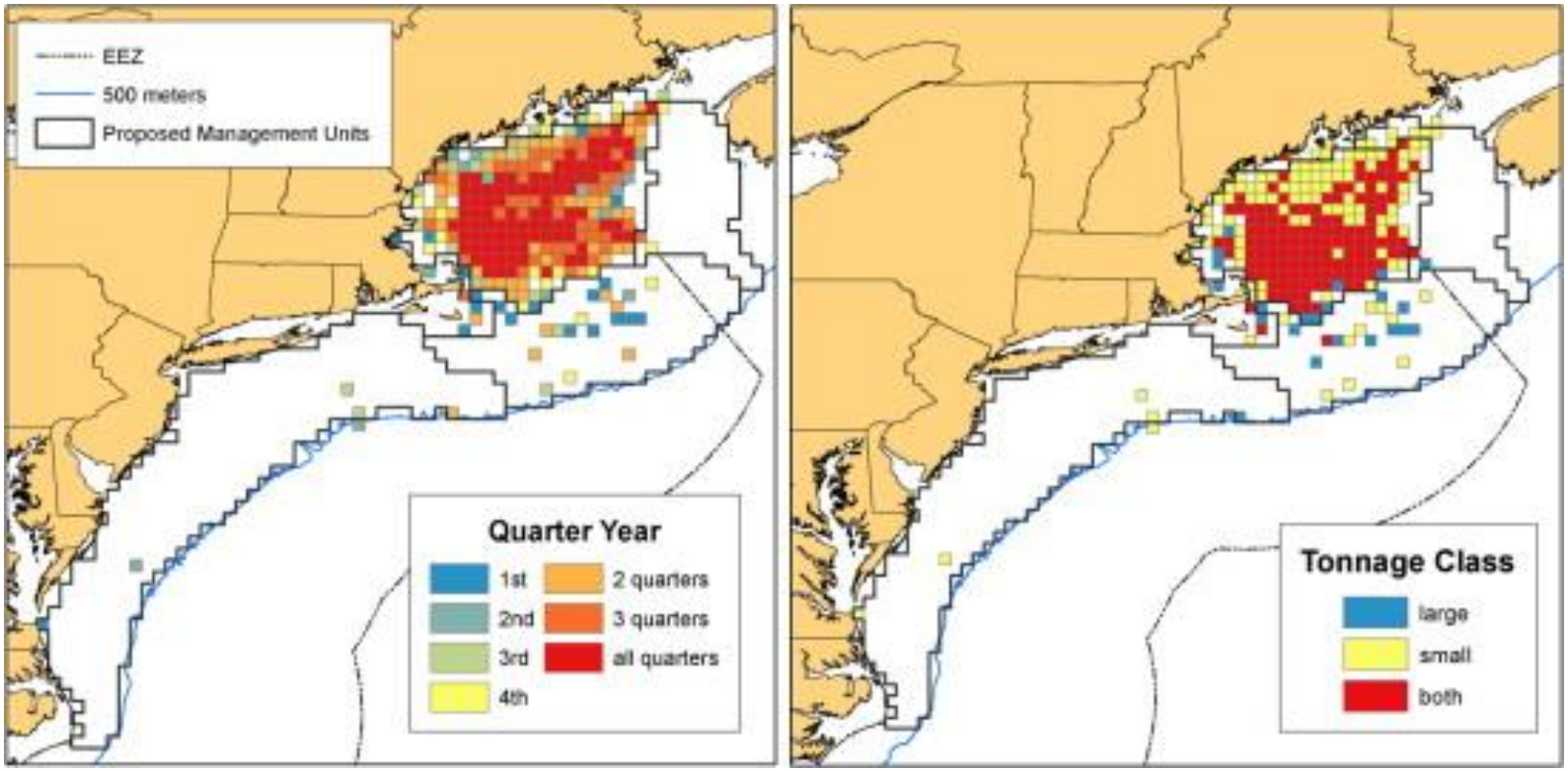
Otter Trawl Fishery 1 (Lucey and Fogarty, 2013)



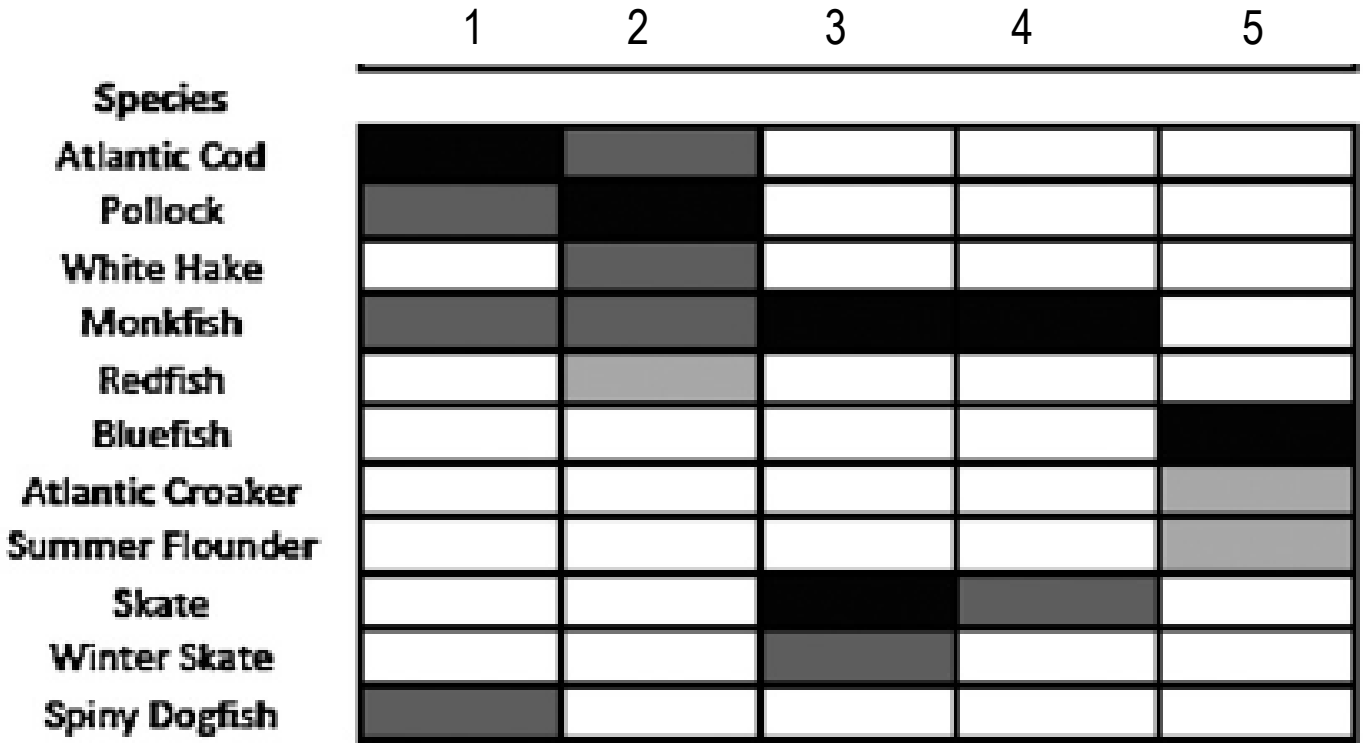
Otter Trawl Fishery 5 (Lucey and Fogarty 2013)



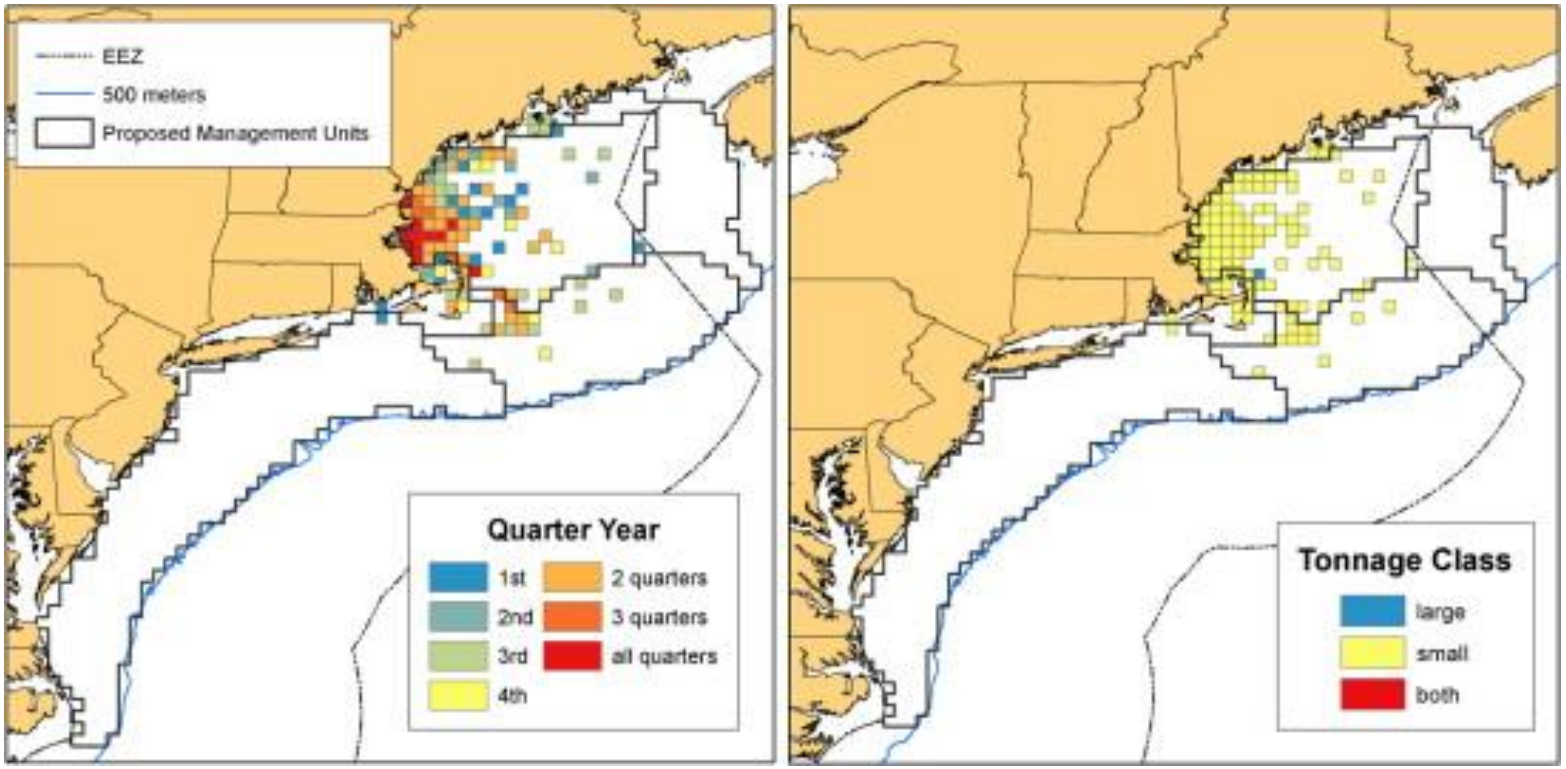
Otter Trawl Fishery 2 (Lucey and Fogarty 2013)



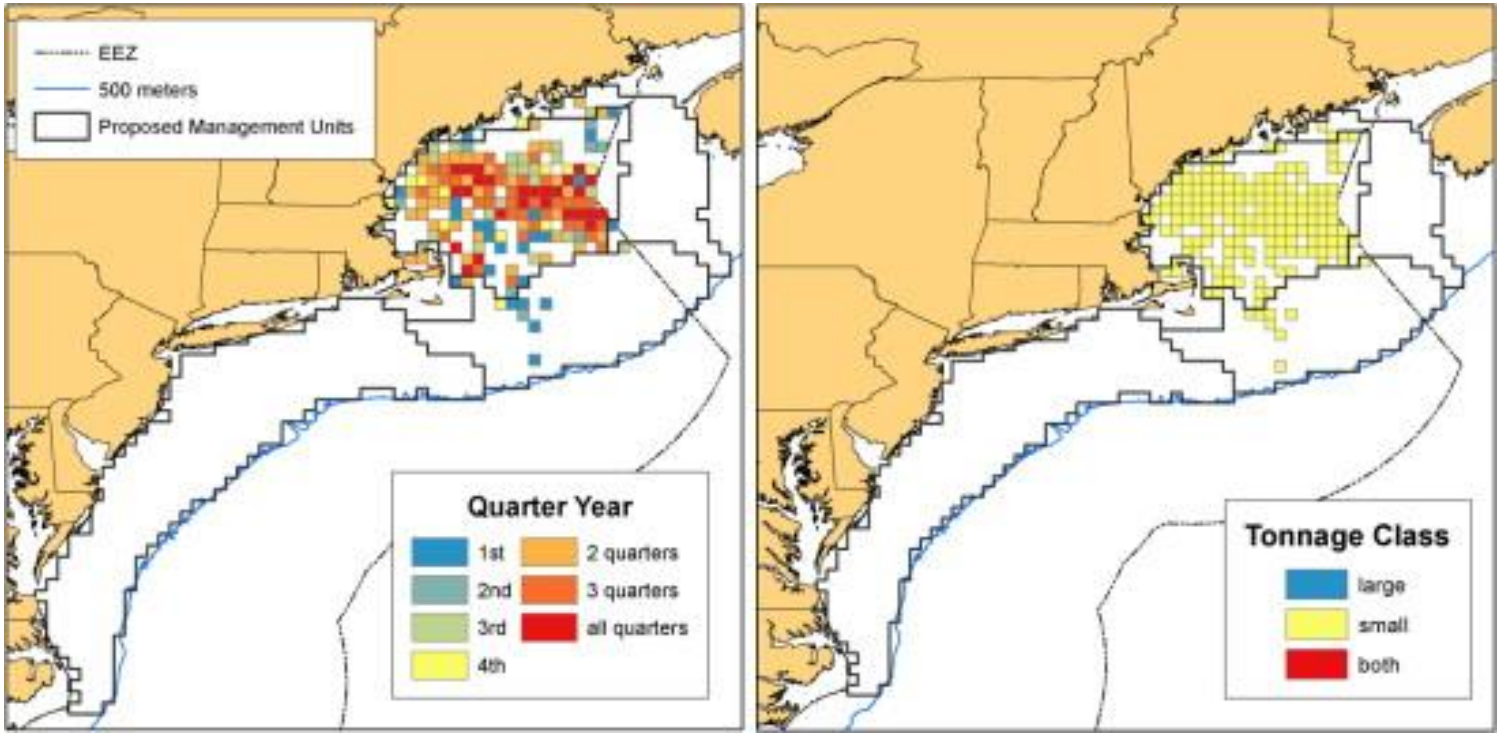
Gillnet Fisheries (Lucey and Fogarty 2013)



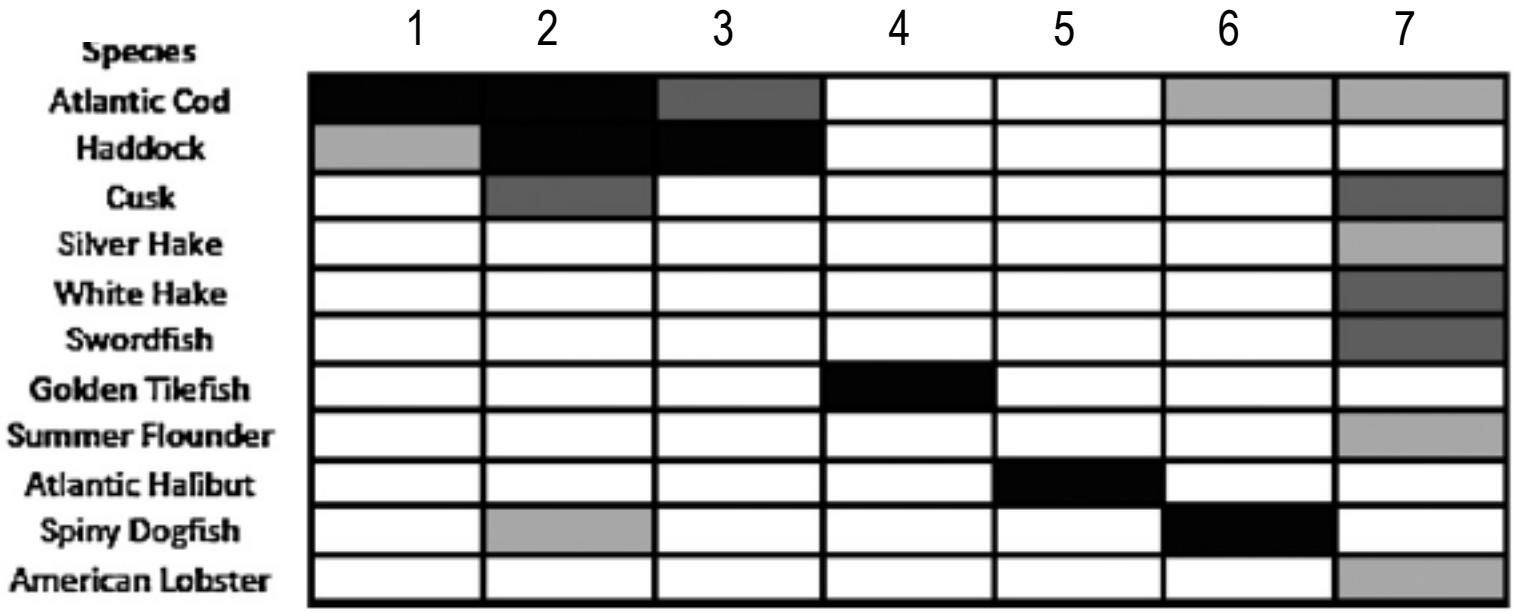
Gillnet Fishery1 (Lucey and Fogarty 2013)



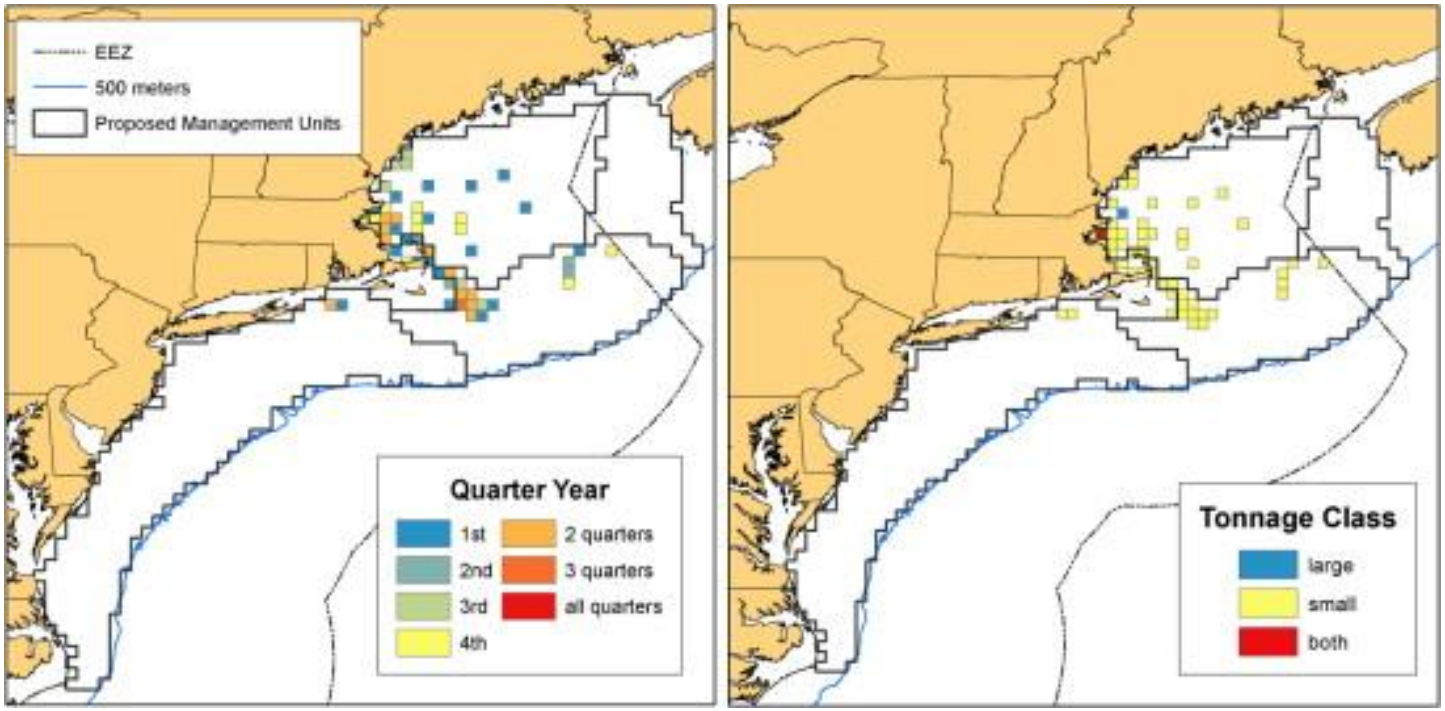
Gillnet Fishery 2 (Lucey and Fogarty 2013)



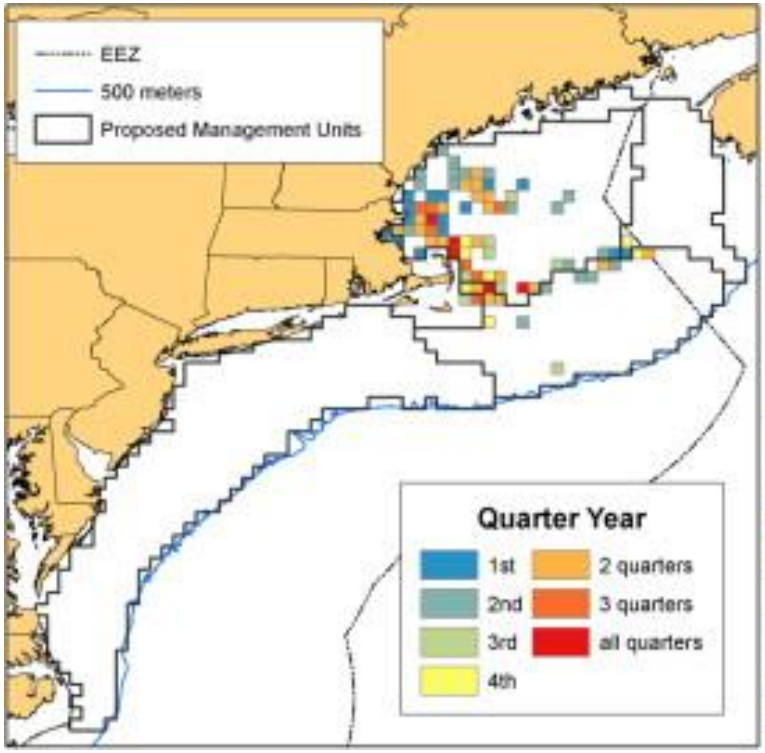
Longline Fisheries (Fogarty and Lucey, 2013)

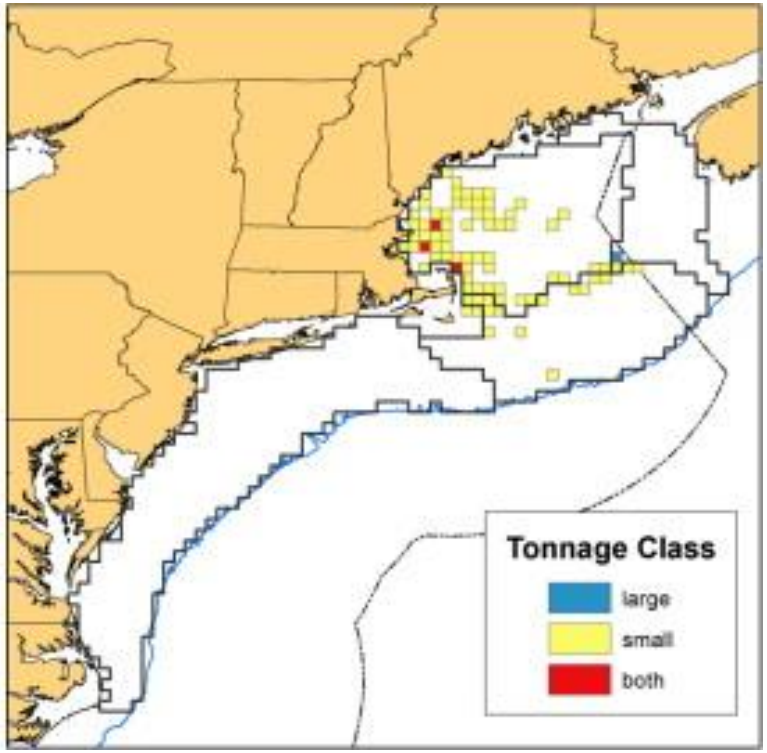


Longline Fishery 1 (Lucey and Fogarty 2013)

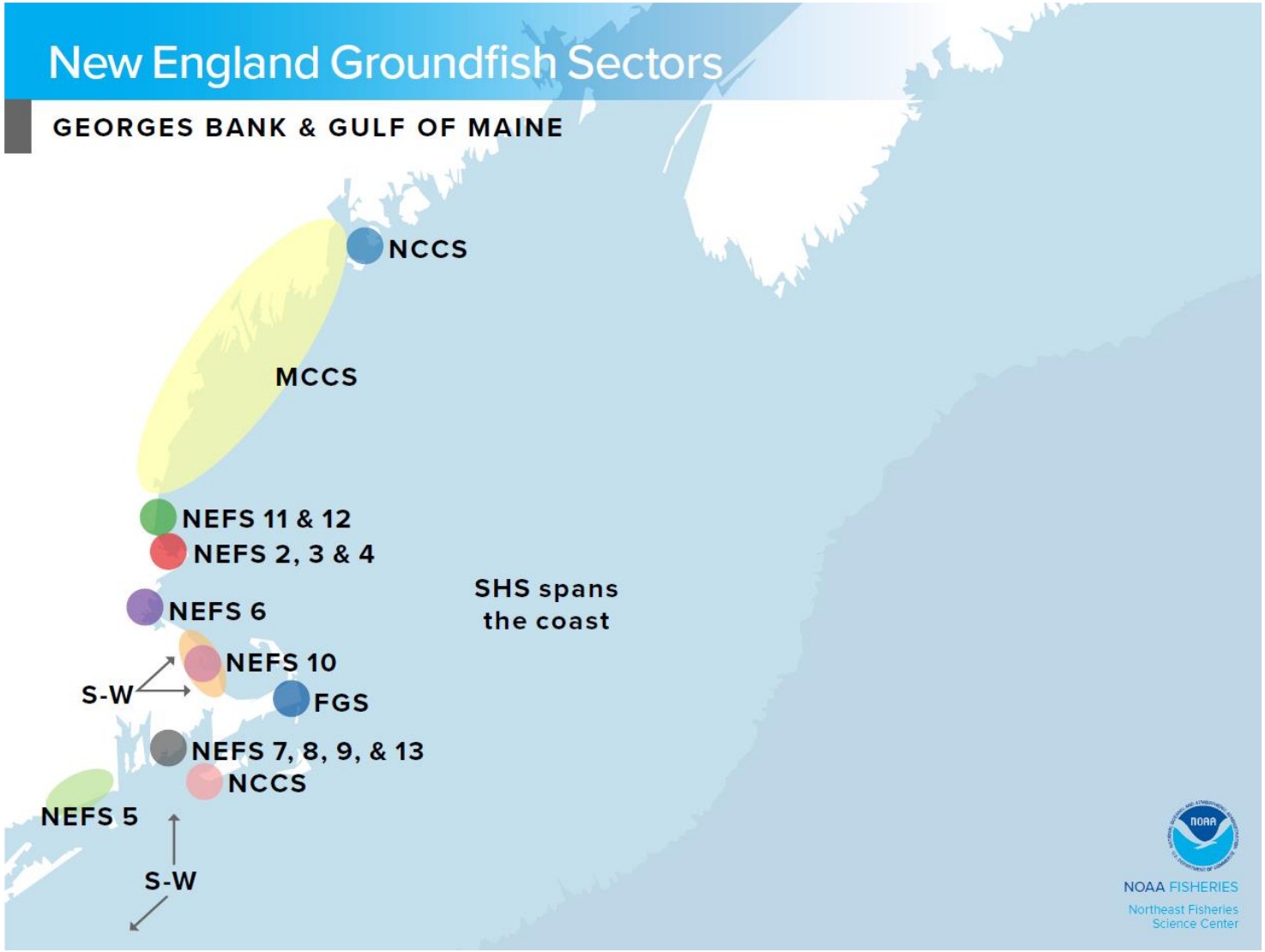


Longline Fishery 2 (Lucey and Fogarty 2013)

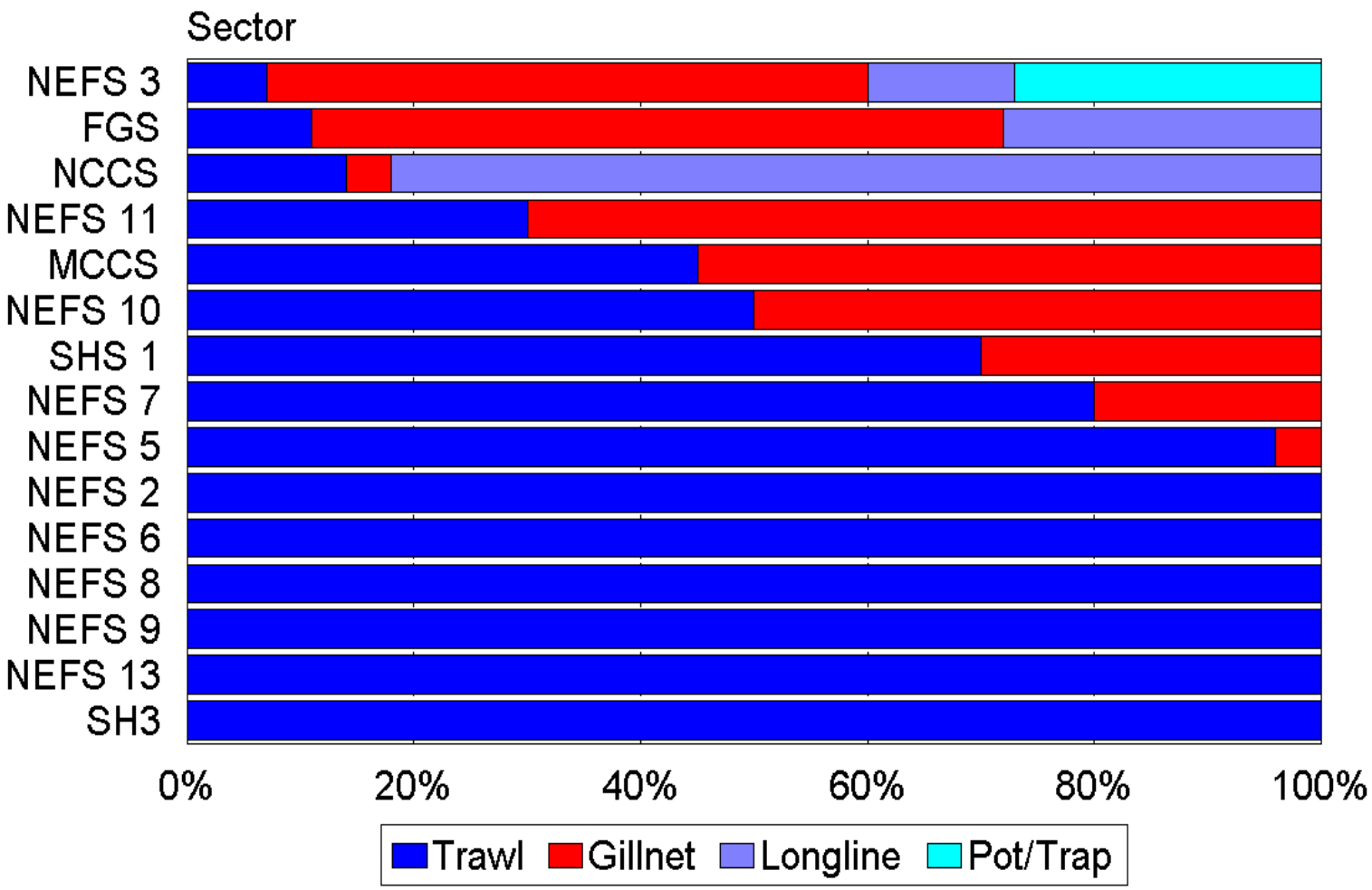




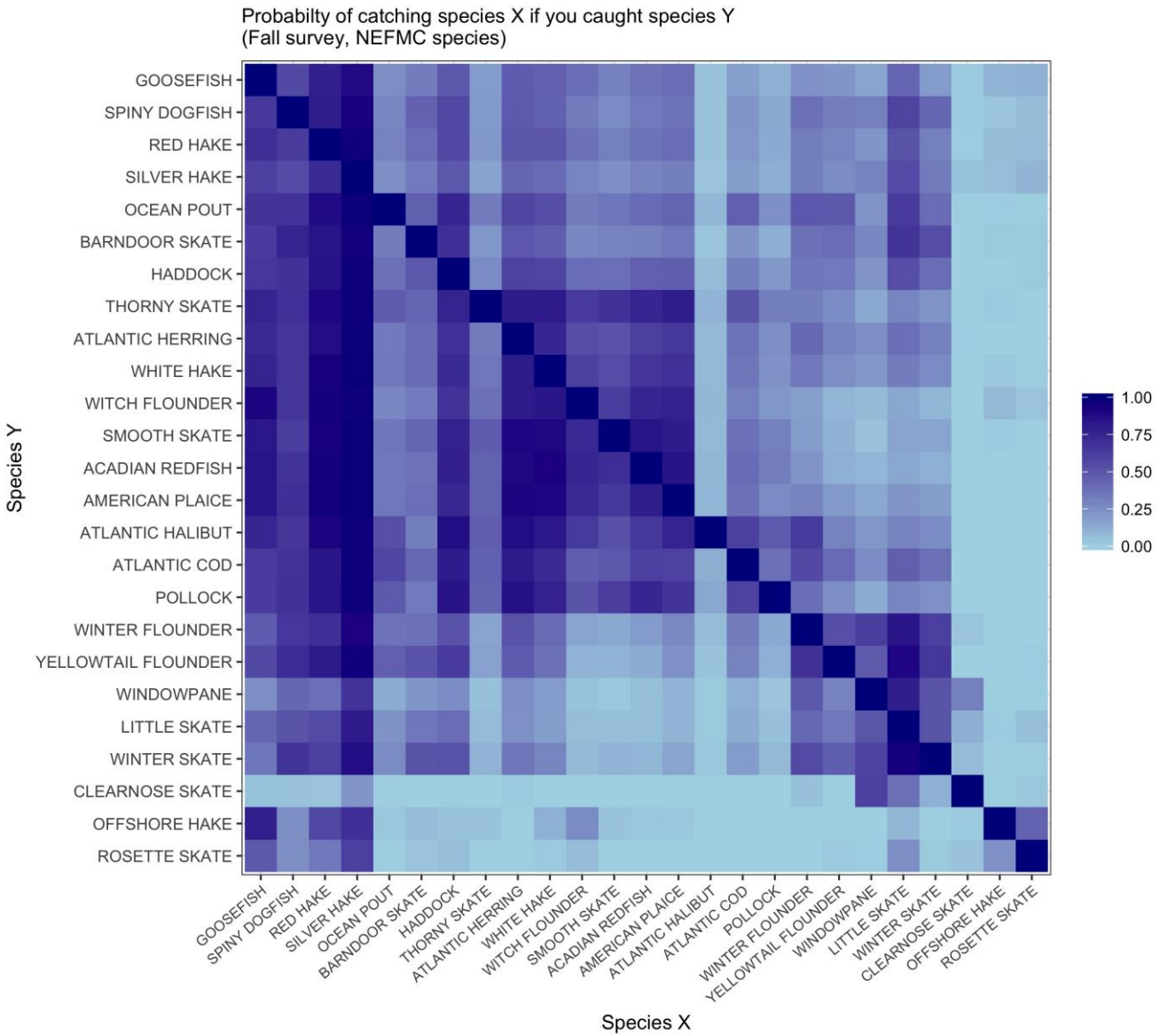
Groundfish Sector Management



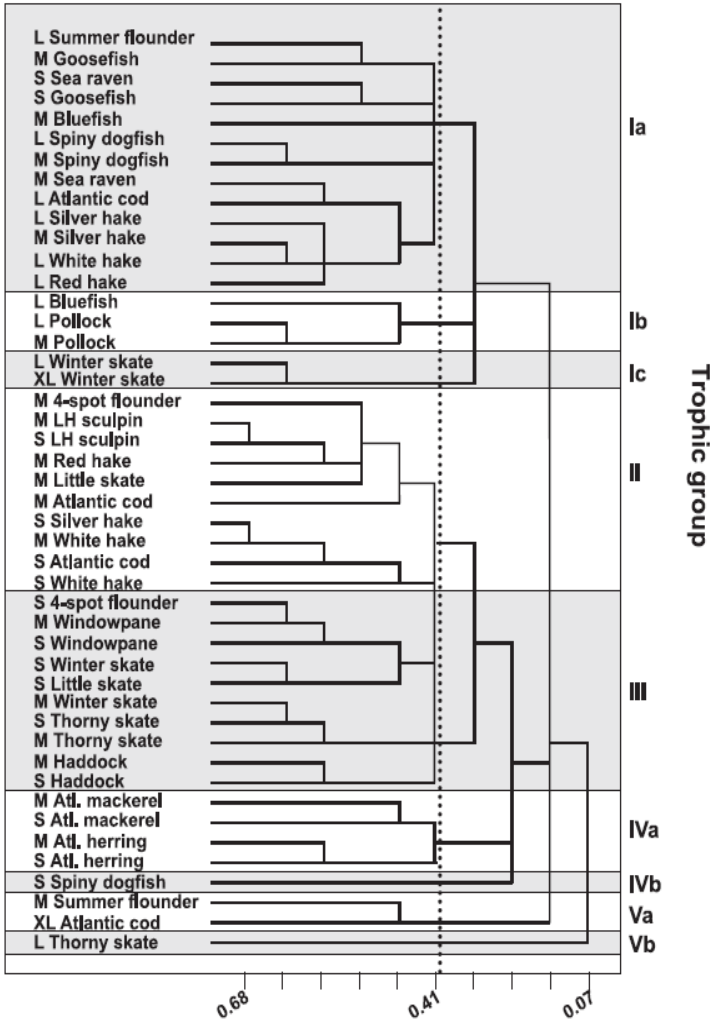
Groundfish Sector Management



Probability of Co-Occurrence in Survey Catches



Defining Feeding Guilds (Garrison 2000)

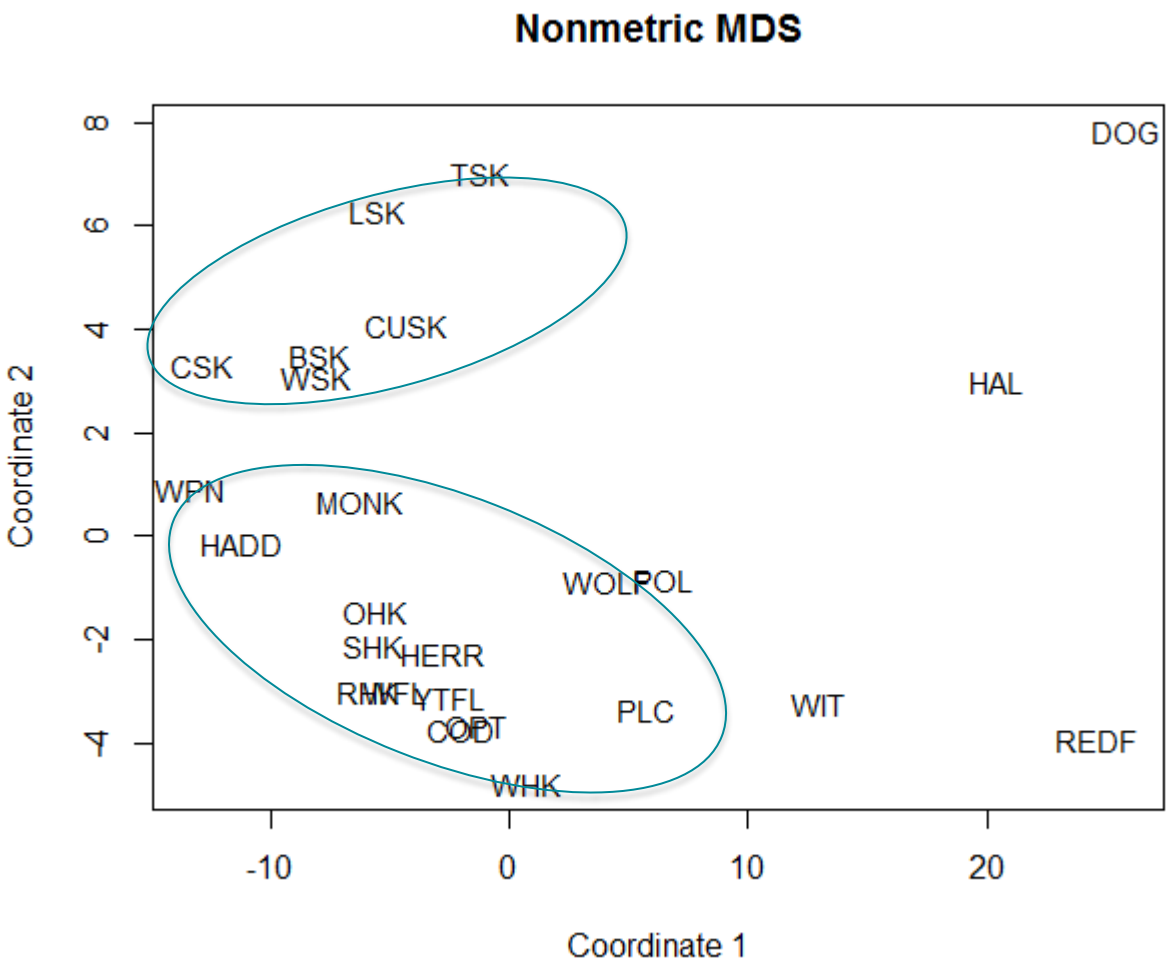


- Benthivores
- Planktivores
  - Mesoplanktivores
  - Macroplanktivores
- Piscivores
  - Piscivores
  - Macrozoo-Piscivores

Life History Traits and Species Vulnerability

- Mean Trophic Level
- Intrinsic rate of increase
- Individual growth rate (k)
- Age at Maturity
- Longevity
- Maximum size

Life History Traits and Species Vulnerability



DOG Dogfish
TSK Thorny Skate
LSK Little Skate
CSK Clearnose Skate
BSK Barndoor Skate
WSK Winter Skate
CUS K Cusk
WPN Windowpane Fl
HADD Haddock
MONK Monkfish
OHK Offshore Hake
SHK Silver Hake
HERR Herring
WOLF Wolffish
POL Pollock
YTFL Yellowtail Flounder
COD Cod
RHK Red Hake
WHK White Hake
WIT Witch Flounder
HAL Halibut
RED Redfish