NOAA Fisheries
Untrawlable Habitat Strategic Initiative: On the road to new assessment surveys

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Untrawlable habitat sampling technologies
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Northeast FSC
Pacific Islands FSC
Southeast FSC
What are the crux issues preventing survey development?

• Video and photo analysis are time consuming and people intensive.

• The best sampling approach is unknown.
NMFS Office of Science and Technology
Strategic Initiatives

- Automatic image analysis SI
- Untrawlable habitat SI
Automating Image Processing
• Two looping videos of identifying fishes
UHSI experiments
Moving camera systems
The test bed
Optical target tracking
Questions to be addressed

• What are the stimuli most influential on fish behaviors toward moving camera systems?
• How does the volume of water sampled and the fish reaction to the camera system influence the variance of the relative abundance estimates?
• How do both of these things depend on habitat, depth, species composition, etc.?
Remaining issues

• No take means no otoliths or other biological information.

• Maintaining constant catchability in high tech surveys.

• Can survey catchability be estimated?