

Penobscot Estuarine Fish Community Survey

update Nov 2010



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Diadromous Fish in the Penobscot

- Atlantic Salmon
- Alewife
- Blueback Herring
- American Shad
- Rainbow Smelt
- Sea Lamprey
- Atlantic Sturgeon
- Shortnose Sturgeon
- Striped Bass
- Atlantic Tomcod
- American Eel



Objectives of the Penobscot Estuary project

- A multi-gear feasibility study
- Spatial and temporal behavior of fish in the estuary
- Environmental monitoring (DO, Temp. Salinity, etc.)
- Baseline data for future hypothesis testing



Coordination with Partners

- **MDMR initiated active river herring management in the Penobscot in 2010 by stocking 4 ponds**
- **Goal to Implement Beach Seine Survey for juvenile Alosines similar to 20 year effort in the Kennebec.**
- **Objectives: Establish 5 to 10 long term index sites to monitor:**
 - 1.) species assemblage in the lower Penobscot River (Veazie to Verona Island).
 - 2.) alosine relative abundance (pre and post dam removal)
 - 3.) annual juvenile alosine migration timing.
 - 4.) Collect biological data from juvenile alosines (50 samples/species) and other species (10 samples/species).



Penobscot Estuary



- Beach seines
- 3ft and 6ft fyke nets
- Investigative mid-water/pelagic trawling
- Hydro acoustics
- Environmental monitoring



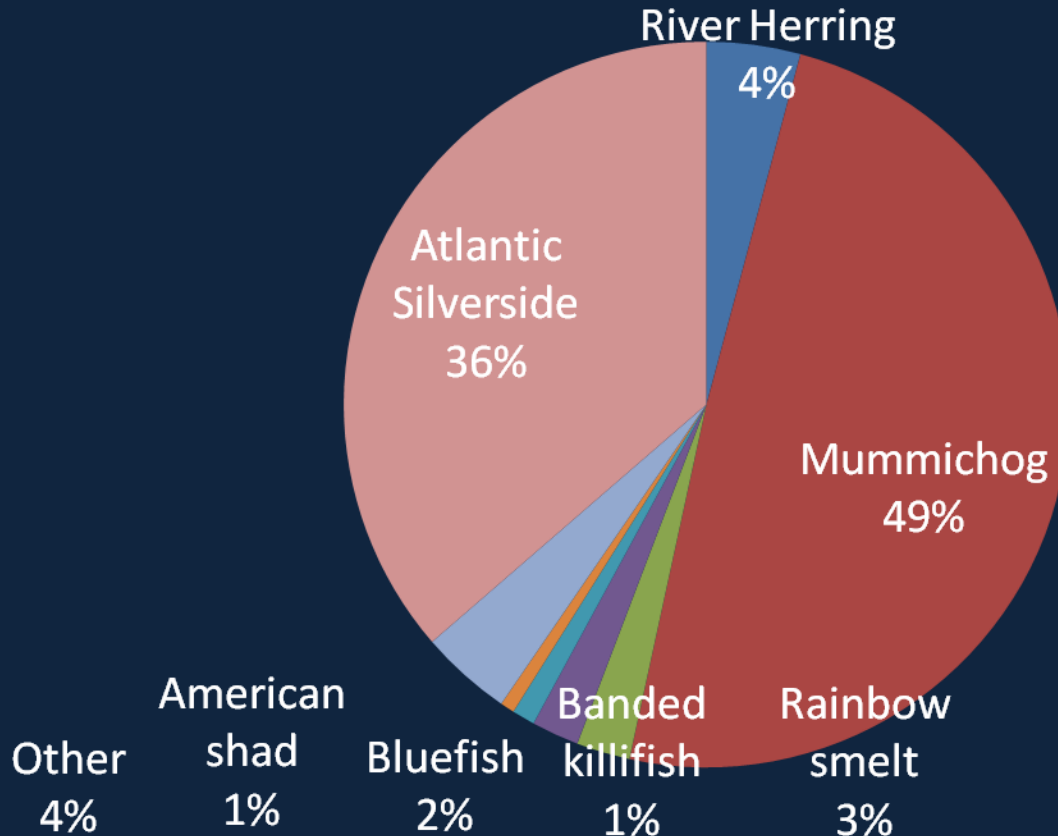
Beach Seining



Fyke Netting

Results

- 145 Beach Seine Hauls August – November
- Identified 45 fish and invert. Species
- 18,400 individuals (27% Crustacean)



Future

- Refine Sampling Methods
- Continue Beach seining and fyke netting
- Implement other gear types – mid water trawl, hydro acoustics, push nets, pop nets, pound nets, etc
- Continuous environmental monitoring stations would be useful
- Collaboration



Thank you!

- MDMR Richard Dill and Bangor staff for field work collaboration
- Gail Wipplehauser and Hallowell staff for technical support during proposal development

