Fish Assemblages in Nearshore Waters of Chukchi and Beaufort Seas, Alaska



S.W. Johnson¹, J.F. Thedinga¹, A.D. Neff¹, and J.C. George²

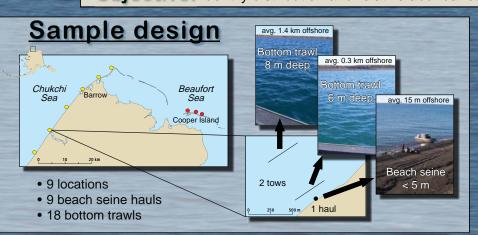
¹NOAA Fisheries, Auke Bay Laboratories, Juneau, Alaska and ²North Slope Borough, Barrow, Alaska

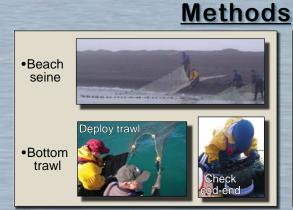


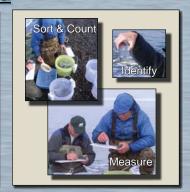
Arctic is vulnerable to climate change and increased demand for oil and gas exploration

Problem: Limited and outdated information on use of nearshore habitats by fish in the Chukchi and Beaufort Seas

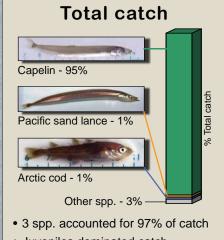
Objective: Identify distribution and relative abundance of fish in nearshore waters





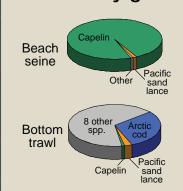


Results



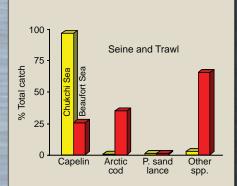
· Juveniles dominated catch

Catch by gear



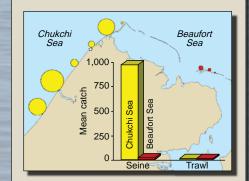
- Capelin most abundant in seine
- Arctic cod most abundant in trawl

Species distribution



- · Capelin most abundant in Chukchi
- Arctic cod most abundant in Beaufort

Catch by area



- Catch greatest in Chukchi Sea
- · Catch greatest with beach seine

Conclusions

- * Arctic nearshore waters used by forage fish, especially capelin
- ★ Catch & composition differed with gear type/water depth
- ★ Catch & composition differed between Chukchi and Beaufort Seas

Future plans

 Resample sites in 2008 and 2009 to establish a baseline for long-term monitoring of nearshore fish in the Arctic



