Alaska Beluga Whale Committee

Chairman Willie Goodwin, Kotzebue (Robert Suydam, North Slope Borough/ABWC) 2010 Open Water Meeting

Goals

- Maintain healthy populations of beluga whales in northern and western Alaskan waters
- Provide for adequate subsistence harvest of beluga whales and protect hunting privileges for Alaskan subsistence hunters

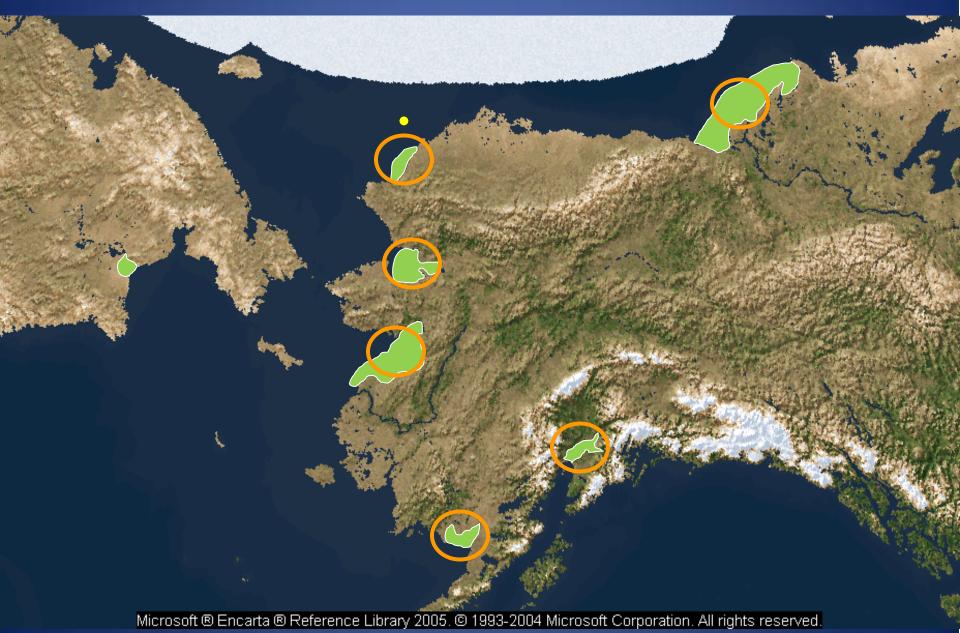
ABWC

- ABWC comprised of hunters, managers and scientists
- Management Plan adopted in 1995 and accepted by tribal organizations in 1996 and 1997
- Cooperative Agreement for the comanagement of the western Alaska Beluga Whales signed with NMFS in 1999

Science

- Genetic studies for clarification of stock structure
- Document harvest on an annual basis
- Bio-sampling for a variety of studies (e.g., health assessment, natural history, etc.)
- Population assessment
- Satellite tracking

Alaska Beluga Stocks



Beluga mtDNA haplotype frequencies – Kotzebue Sound June and July 2007 132 75 101 68 **n** = 100% -**90%** 80% -70% -60% -50% -40% -30% -20% -10% -0% **Cook Inlet Bristol Bay** Norton **Kotzebue** P. Hope Kasegaluk Mackenzie Kotzebue Snd Snd 2007 Lgn

Preliminary results

Harvest

- Beaufort Sea stock: Little Diomede, Point Hope, Barrow, Kaktovik
 - 2005 to 2009: average harvest = <u>25.8/year</u>
- Eastern Chukchi Sea: Kotzebue Sound(?), Point Lay and Wainwright
 - 2005 to 2009: average harvest = <u>94.2/year</u>
- Eastern Bering Sea: Norton Sound, Yukon & Kusko Deltas

— 2005 to 2009: average harvest = <u>181.2/year</u> (Kusko = 11.8/year)

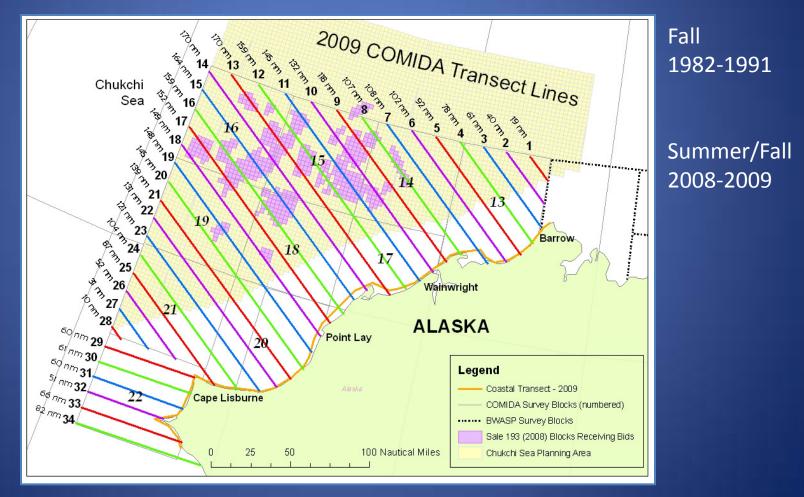
- Bristol Bay
 - 2005 to 2009: average harvest = <u>20.8/year</u>
- Total = <u>320/year</u>

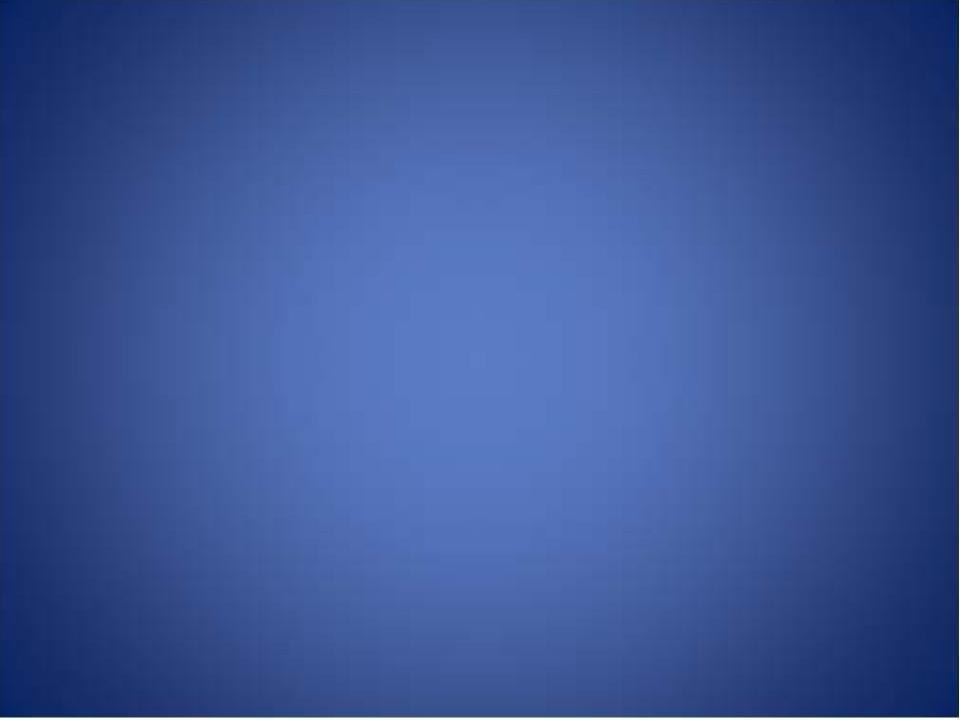
Bio-sampling

- Health Assessment
 - Body Condition
 - Exposure to disease
 - Immune function
 - Hearing?
 - Contaminants?
- Age, growth and reproduction
- Diet

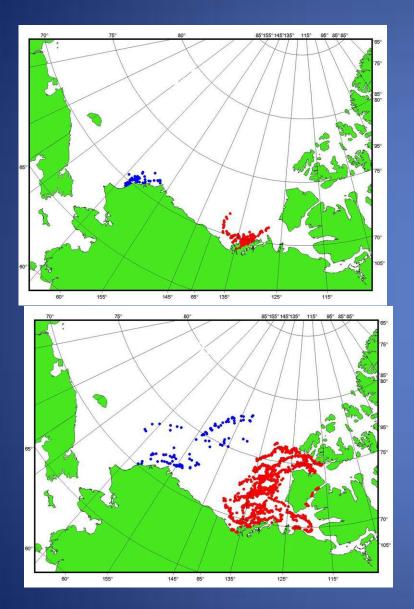
Chukchi Sea Aerial Surveys

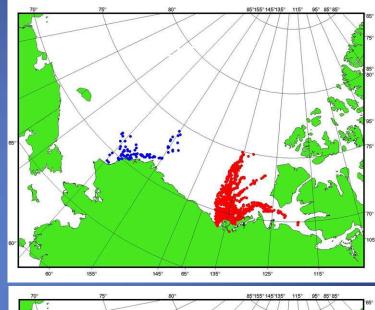
COMIDA: Chukchi Offshore Monitoring in Drilling Area

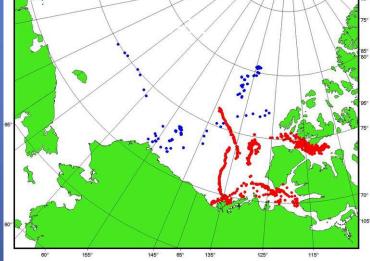




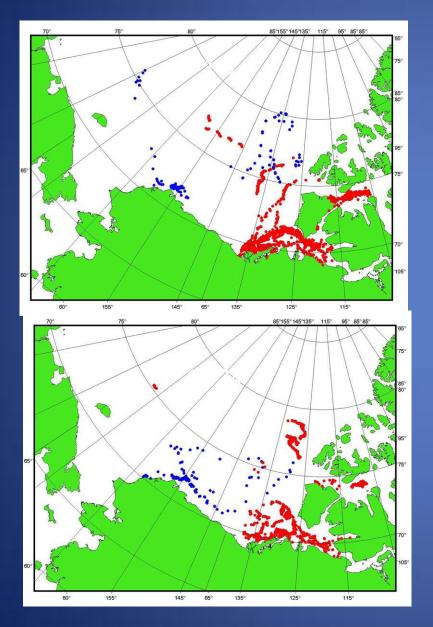
July locations of tagged beluga whales (blue – Chukchi; red – Beaufort)

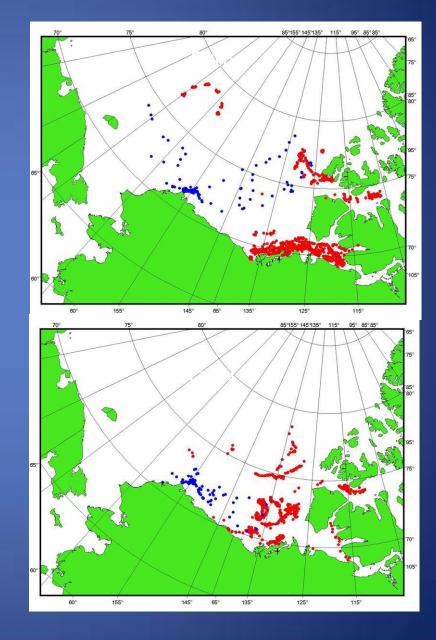




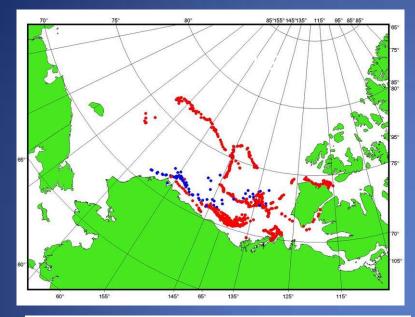


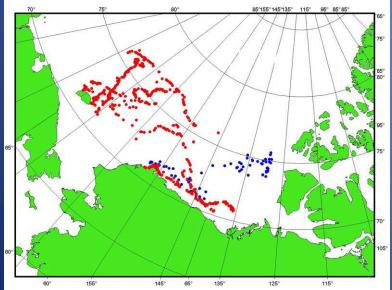
August locations of tagged beluga whales (blue –Chukchi; red –Beaufort)

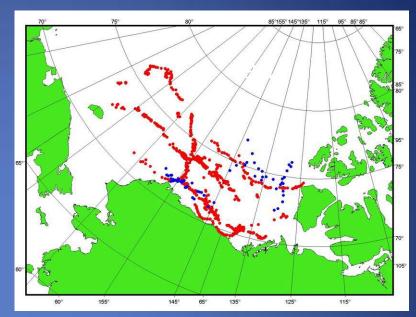


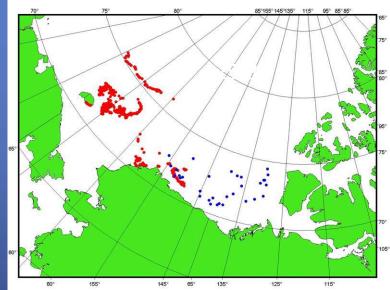


September locations of tagged beluga whales (blue – Chukchi; red – Beaufort)

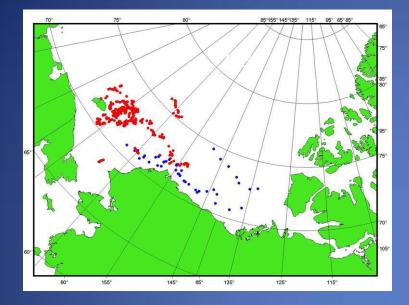


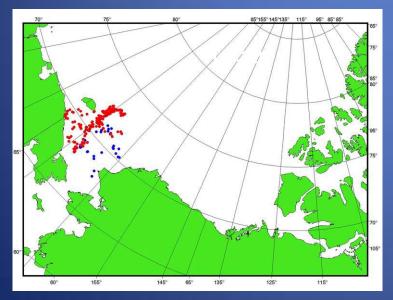


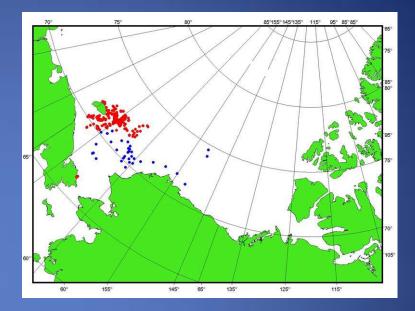


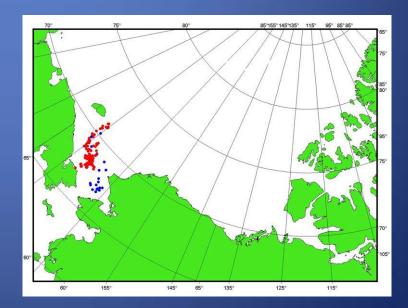


October locations of tagged beluga whales (blue – Chukchi; red – Beaufort)

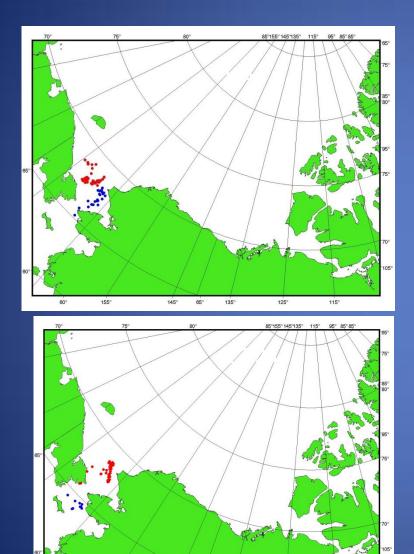








November locations of tagged beluga whales (blue – Chukchi; red – Beaufort)



155°

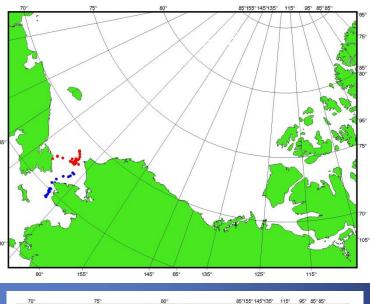
145°

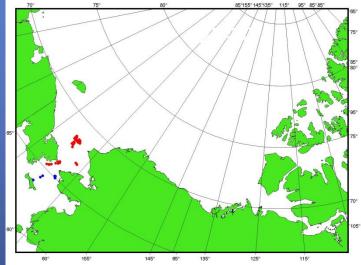
65

135

125°

115





Concerns about Offshore Industrial Activity

- Point Lay hunt occurs in late June or first two weeks in July
- Wainwright hunt occurs in late July or early August
- Deflection away for coastal areas

 Wainwright-Industry vessels interrupted a beluga hunt in 2007 and 2009

Impacts on beluga health or prey items