

Efforts to Save Beluga Whales in their Natural Habitat: A Systematic Review

Ana Noel

MAR 375

May 4th, 2020



(Animal Spot)

Background

- *Delphinapterus leucas*
- Least concern
- MMPA
- Highly social
- Pods of 2-25
- Feed on fish species and other organisms
- No dorsal fin
- Arctic and subarctic
- Migrate



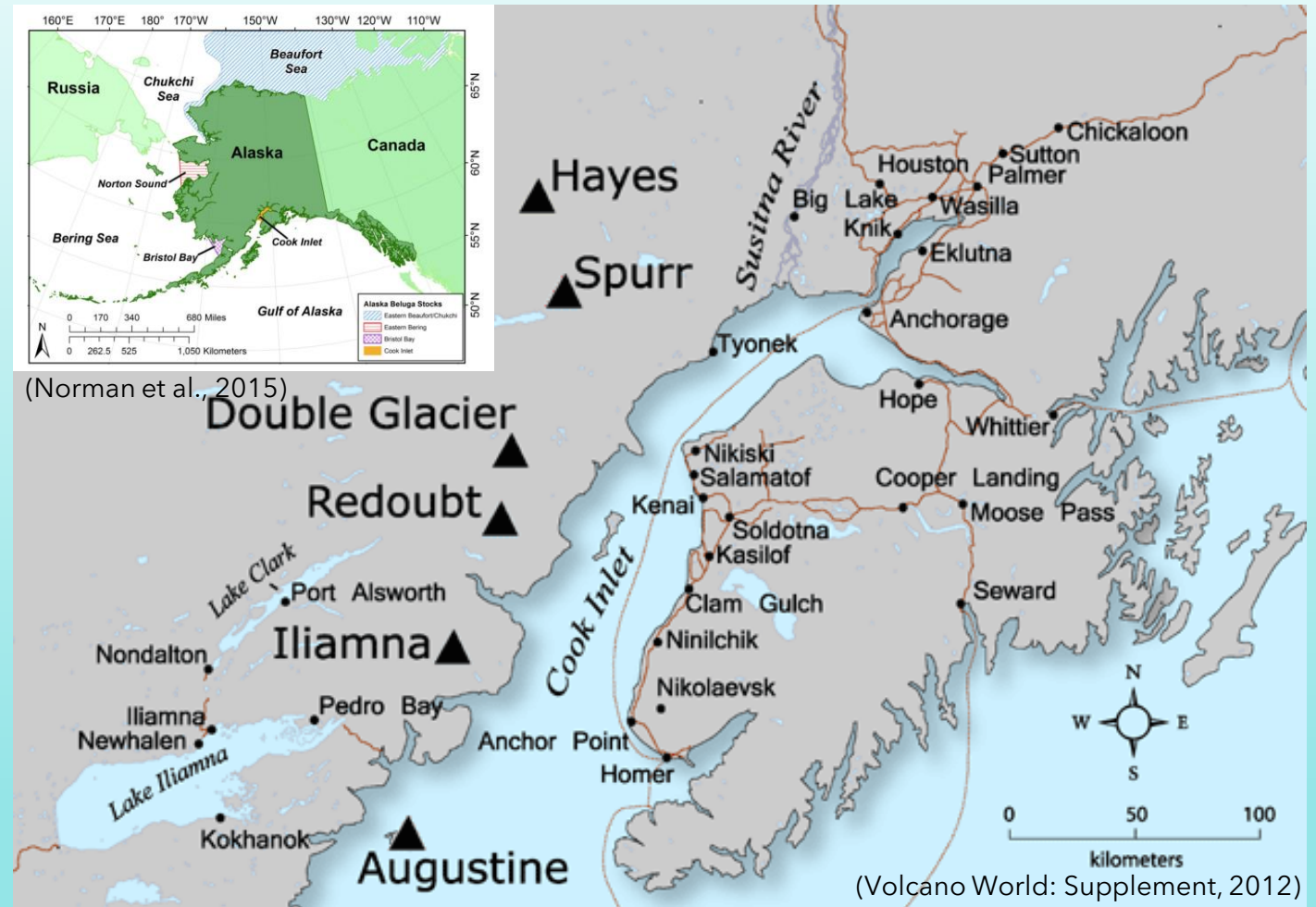
(Beckius, 2019)



(NOAA Fisheries)

Cook Inlet

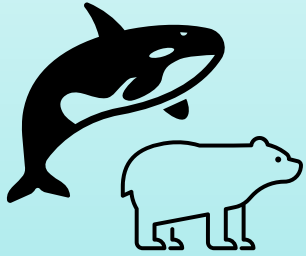
- Genetically distinct
- Endangered
- 1994-98 50% decrease in population
- 1998- hunting banned
- 279 as of 2018
- MMPA and ESA
- More vulnerable to threats
- Anthropogenic



Threats

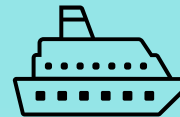
Natural

- Predation
 - Killer whales and polar bears
- Live stranding
 - Tides
- Disease
- Climate change
 - Shifting ice causes entrapment
 - Melting ice causes more access for ships



Human

- Competition with fisheries
 - Salmon
- Contaminants
 - Heavy metals
 - Persistent organic pollutants
- Vessel strikes
- Noise pollution
- Hunting
- Habitat loss

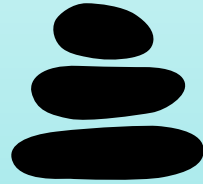


(World Wildlife Fund)

Stranding

Tides

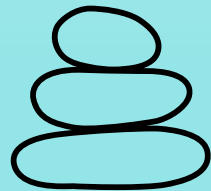
- Molting
- Predator avoidance
- Prey



Human intervention

- Injury
- Illness

- Alone
- Mass strandings



(Nicklin)



(National Geographic)

Human intervention

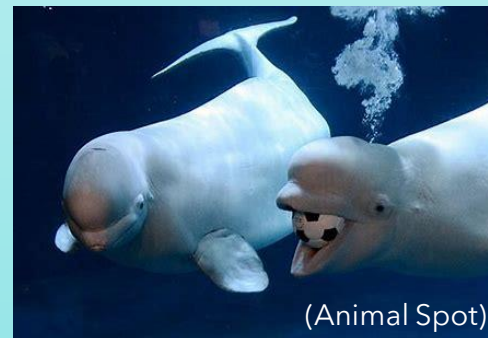


Alive

- National Marine Fisheries Services
- Monitor
- Care is given
- Make comfortable
- Samples taken
- Data is collected
- Euthanize if appropriate

Dead

- Necropsy is performed
- Carcass disposed of
 - Leave for scavengers
 - Tow out to sea
 - Bury

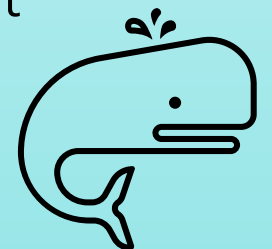


NY Marine Rescue Center

- Refloat
- Report
- Possible rehab
- Euthanize
- Necropsy
- Research

Rehab

- Rare
- Over 1,500 lbs
- Refloat on own
- Care given at sight





Future

- Cook Inlet
 - Low number
 - Anthropogenic threats
- Belugas
 - Climate change
 - Opens up more areas
 - Melting ice
 - Adapted to living near ice
 - Phytoplankton blooms
 - Environmental cues for migration
 - Oil drilling
 - Noise pollution
- Still time- Conservation

Education

Public responds to

- Facts
- Patience
- Sticking to belief

Programs

- Adopt a Beluga
- Signage
- Viewing in wild
- News



(save and preserve, 2011)

Did you know

- Only 279 whales left in Cook Inlet
- You can help!



(Baraniuk, 2018)



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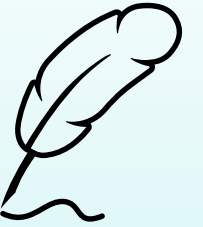
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