

Do Food and Predators Play Inseparable Roles in the Decline of Prince William Sound Harbor Seals?

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Researchers generally have asked whether diminished resource abundance or increased predation have been major contributors to the declines of harbor seals and Steller sea lions in the Gulf of Alaska. An alternative possibility, however, is that resources and predators have inseparable effects on survival and reproduction. My talk will describe how my colleagues and I have integrated field studies and computer simulations in the search for synergistic effects of resources and predators on the harbor seal population of Prince William Sound. In addition to surveying our empirical data on the foraging ecology of harbor seals in Prince William Sound, I will address two related questions. Can declines in fish abundance indirectly increase predation rates on seals? And, given our huge ignorance of subsurface predator ecology, can we use the observed behaviour of seals to infer unmeasured characteristics of potential predators such as killer whales and sleeper sharks?

Marine Science in Alaska: 2006 Symposium

Book of Abstracts

- Monday, 23 January 2006

- Morning Keynote Address: Charles H. Peterson
- Gulf of Alaska - Climate & Oceanography
- Gulf of Alaska - Lower Trophic Levels
- Gulf of Alaska - Fish & Fish Habitat
- Gulf of Alaska - Seabirds & Marine Mammals
- Gulf of Alaska - Integrated Ecosystem Observing Systems and Sensors
- *Exxon Valdez* Oil Spill Restoration Process

- Tuesday, 24 January 2006

- Morning Keynote Address: John Piatt
- Bering Sea & Aleutian Islands - Climate & Oceanography
- Bering Sea & Aleutian Islands - Lower Trophic Levels
- Lunch Keynote Address: Susan Sugai
- Bering Sea & Aleutian Islands - Fish & Fish Habitat
- Bering Sea & Aleutian Islands - Seabirds
- Bering Sea & Aleutian Islands - Marine Mammals
- Bering Sea & Aleutian Islands - Integrated Ecosystem Observing Systems
- Ocean Policy, Resource Management and Governance

- Wednesday, 25 January 2006

- Arctic Ocean - Climate, Oceanography, & Lower Trophic Levels
- Gulf of Alaska - Living Marine Resources