

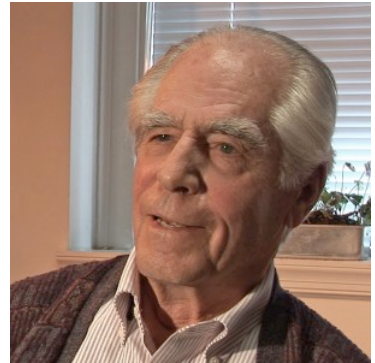
## Geophysical Institute Seminar

# Seascape as an Organizing Principle for Evaluating Sea-Ice as Habitat in Beringia: Consequences for Conservation and Management

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**Wednesday October 10, 3:30pm**

**Elvey Auditorium**

The term “seascape” relates the natural history of ice-dependent pinnipeds to their sea-ice environments, following concepts of landscape ecology. Seascape habitats are characterized by heterogeneous but repeatable structures of sea ice. Demonstrable habitat partitioning among the five species of Beringian pinnipeds is important for understanding and projecting species’ responses to change under current climate-change scenarios. The seascape approach also calls for a revised research agenda. The Marine Mammal Protection Act of 1972 required a science-based ecosystem approach for conservation and management. The MMPA established the concept of *optimum sustainable population* (OSP) for marine mammals as significant functioning elements of ecosystems and placed *ecosystem health* as a first priority.

It also adopted a *precautionary approach* by shifting the burden of proof to the user, thereby restricting human intervention where such actions might otherwise disadvantageously affect species or populations of marine mammals. How these policies might be carried out under a scenario of climate change will be critical for future conservation of Beringian pinnipeds and their ecological role in the Beringian ecosystem.