

# CLIMATE CHANGE: Observations from Region 7

## Pacific Walrus, Bering and Chukchi Seas

Pacific walrus mainly inhabit the shallow continental shelf waters of the Bering and Chukchi Sea where they feed primarily on bivalves and to a lesser extent on sea cucumbers, crabs, and segmented worms.

As pack ice recedes northward during the summer months, most of the population migrates into the Chukchi Sea, returning to southern habitats including coastal haul outs as pack ice develops in the fall.

Walruses, particularly females with dependent calves, are poorly adapted to life in the open sea, and rely on broken pack ice as a platform for resting between feeding bouts, for nursing dependent young, and for shelter.

When suitable pack ice is not available, walruses come ashore to rest, often in large groups where they are sensitive to disturbances.



Average Arctic sea ice extent for the month of September 2007. The magenta line indicates the long-term median September sea-ice coverage from 1979 to 2000.

The shallow continental-shelf waters of the Chukchi Sea experienced a rapid and complete retreat of sea ice during the summer of 2007. Arctic sea ice during the 2007 melt season reached its lowest levels since satellite measurements began in 1979.

At 1.65 million square miles, sea ice extent for the month of September 2007 was 23 percent lower than the previous September record set in 2005, and 39 percent below the long-term average from 1979 to 2000.

There was less ice and thinner ice at the onset of spring 2007, factors that contributed to the accelerated decline. Changes in sea ice timing suggest that spring melt is initiating earlier and autumn freeze-up is beginning later.

Open water conditions are anticipated to persist in the Chukchi Sea until early November, and prolonged open water seasons are predicted to become increasingly common.

Pacific walrus which are normally associated with drifting pack ice in the offshore environment during the summer months began coming to shore in late July as the sea ice retreated from the continental shelf.

Large aggregations of walruses in the near shore environment may result in local depletion of food resources, increased interactions with humans, and increased vulnerability to predation and disturbance. The Service has been working closely with the Eskimo Walrus Commission, the North Slope Borough, the Federal Aviation Administration, and local media outlets to address walrus conservation issues and ways to minimize disturbances of walruses at coastal haul outs.

