

Ecosystem Approaches Pollock Fishery Management in Russia

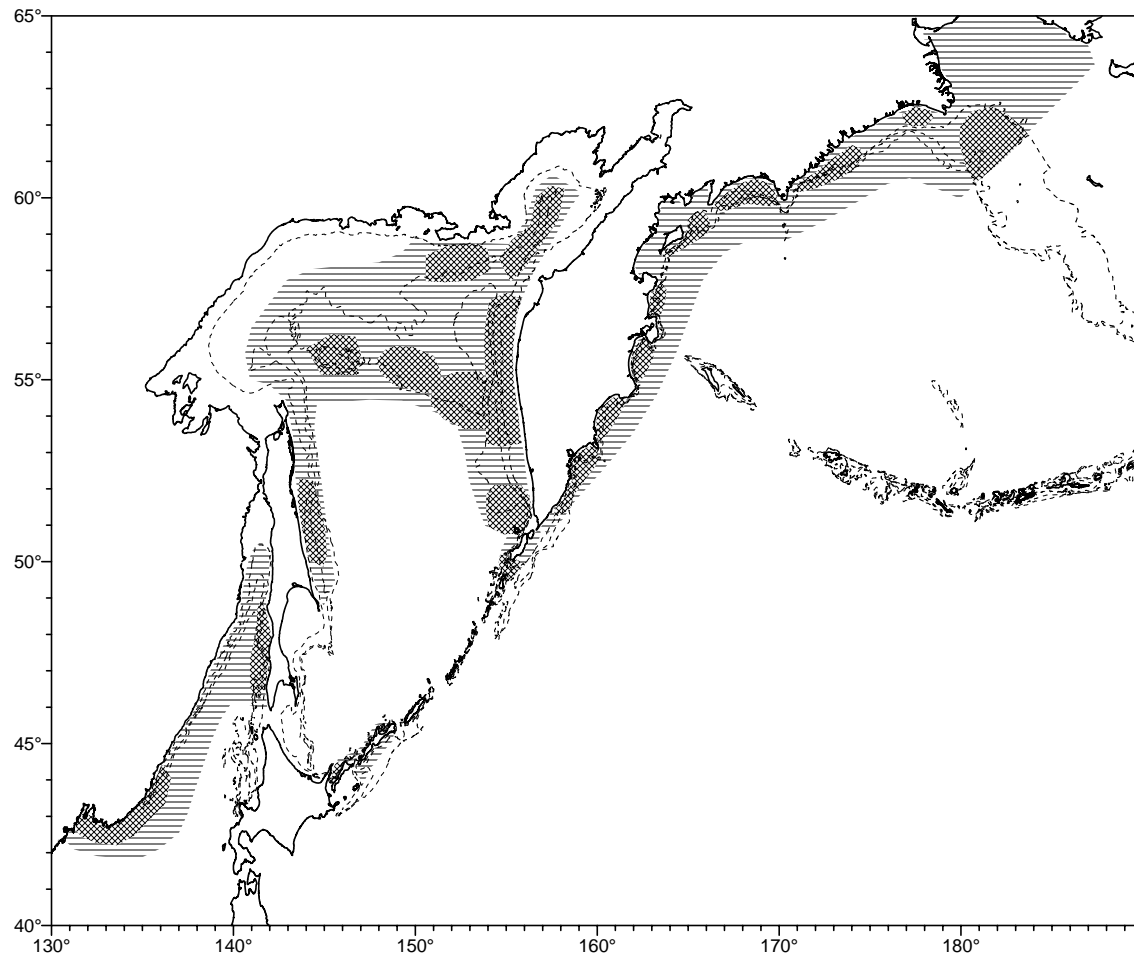
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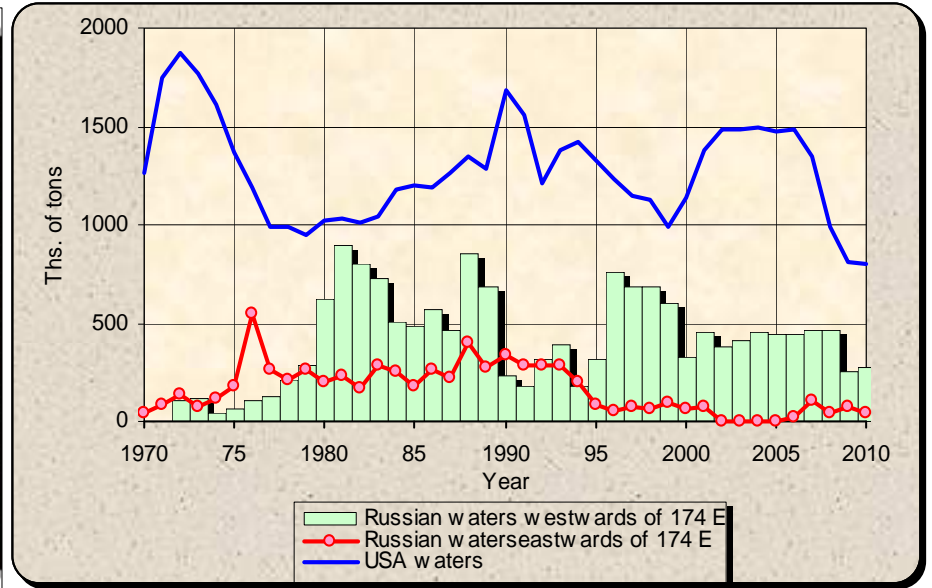
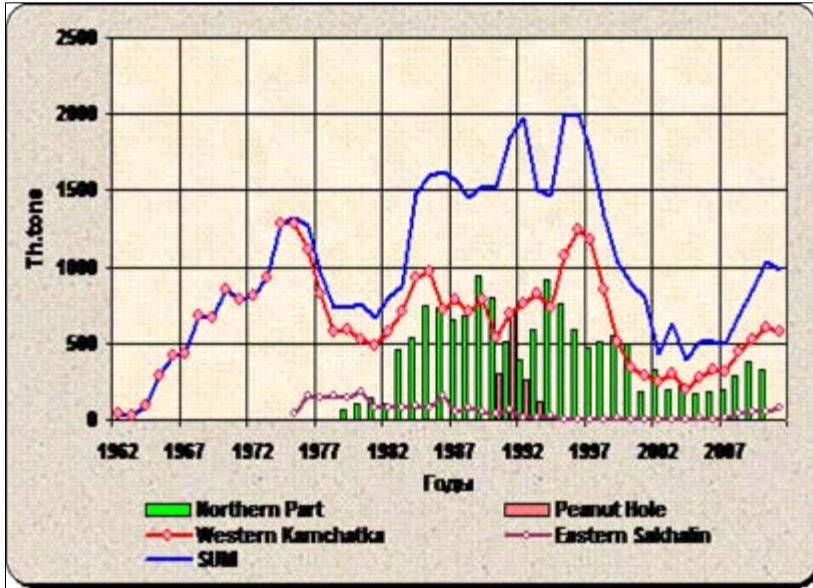
Key Questions:

- 1. How environmentally friendly large-scale pollock fishery?
- Does the modern requirement of marine ecosystem existing legislation?

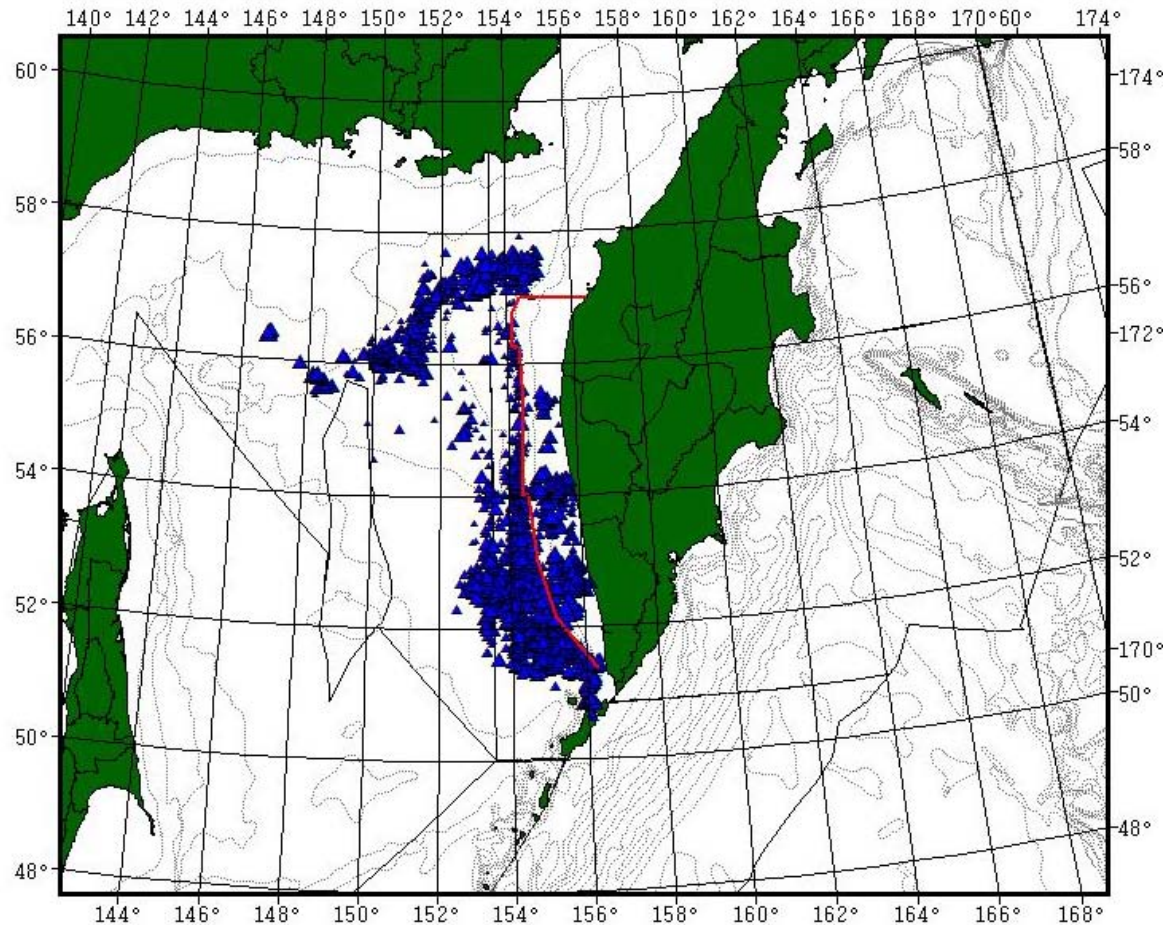
Walleye Pollock distribution area in Russian EEZ and the main areas of its fishing



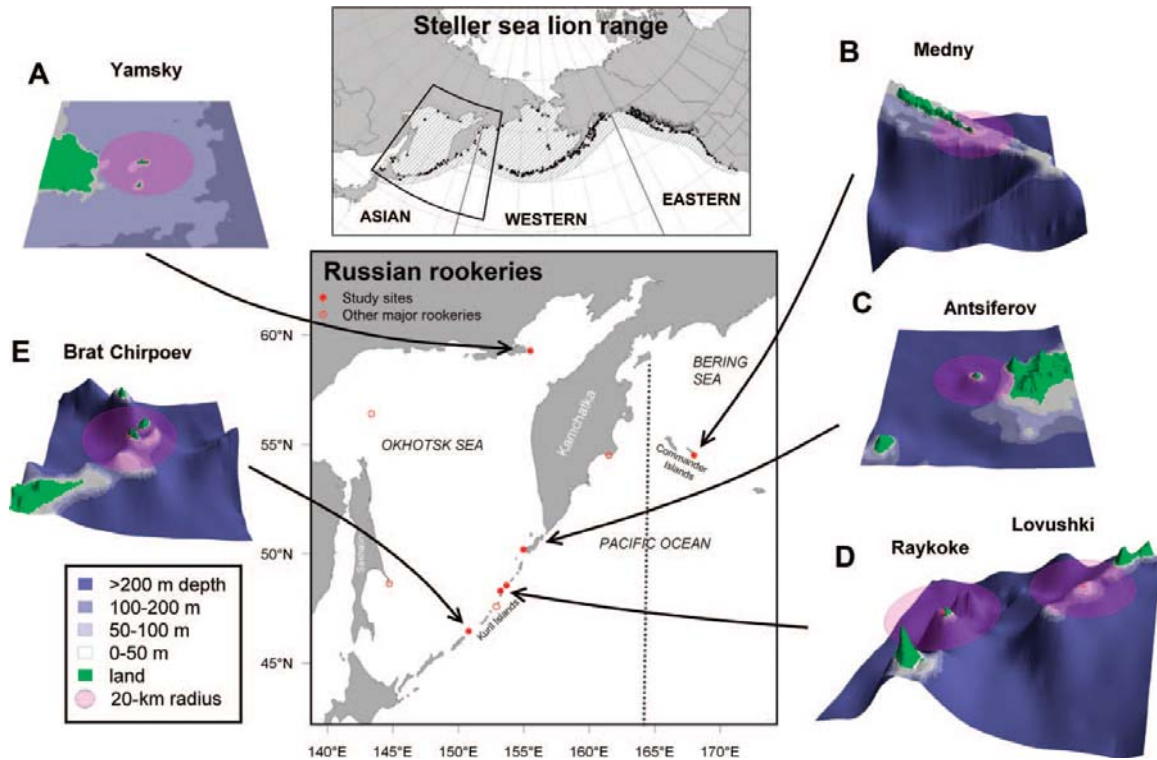
Catch of pollock in the Sea of Okhotsk and the Bering Sea since the beginning of the active fishing to present time



The distribution of the Pollock fishery vessels in the Sea of Okhotsk (January – April 2010, Season "A")

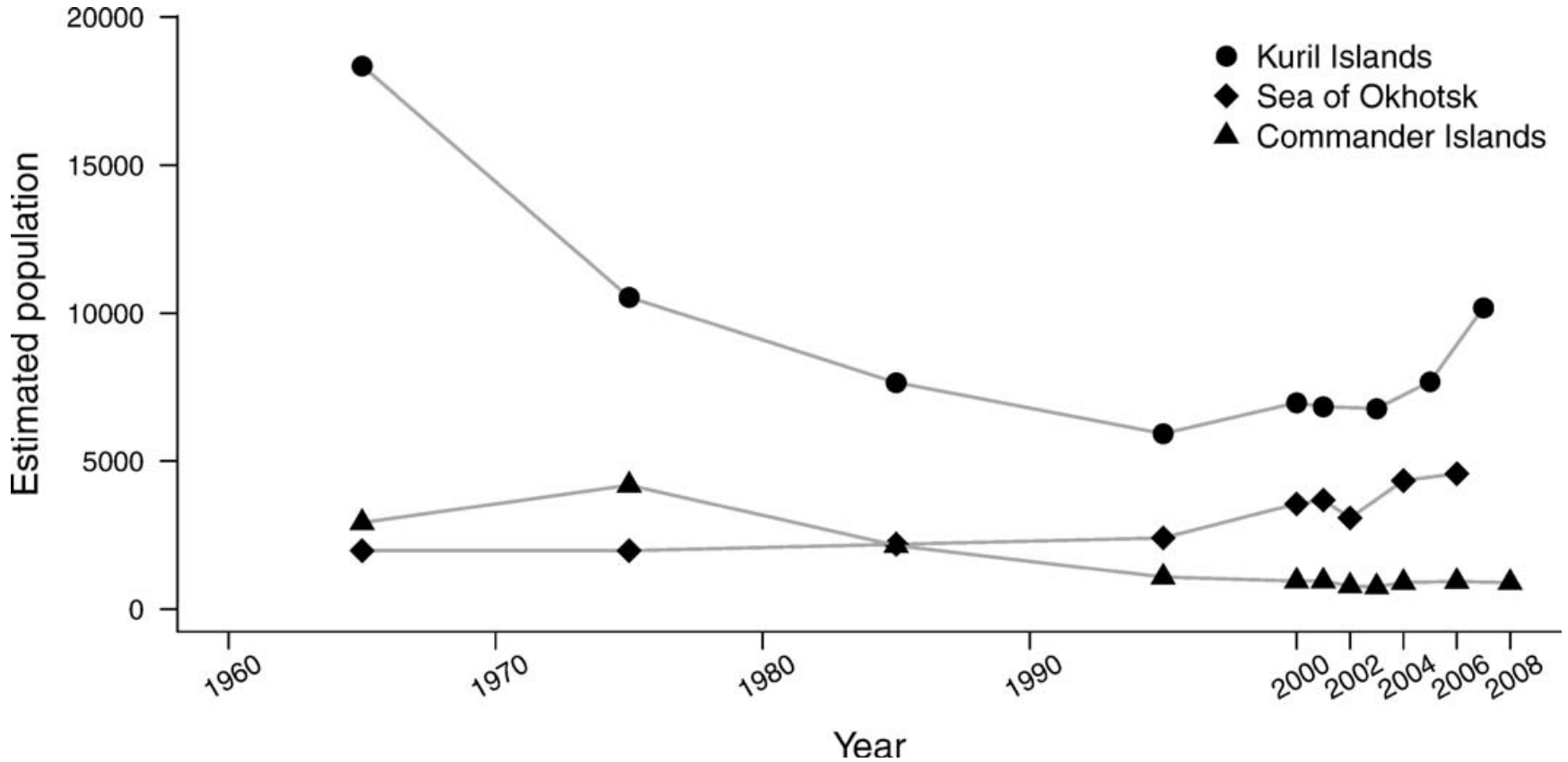


Map of Steller sea lion rookeries in Russia.



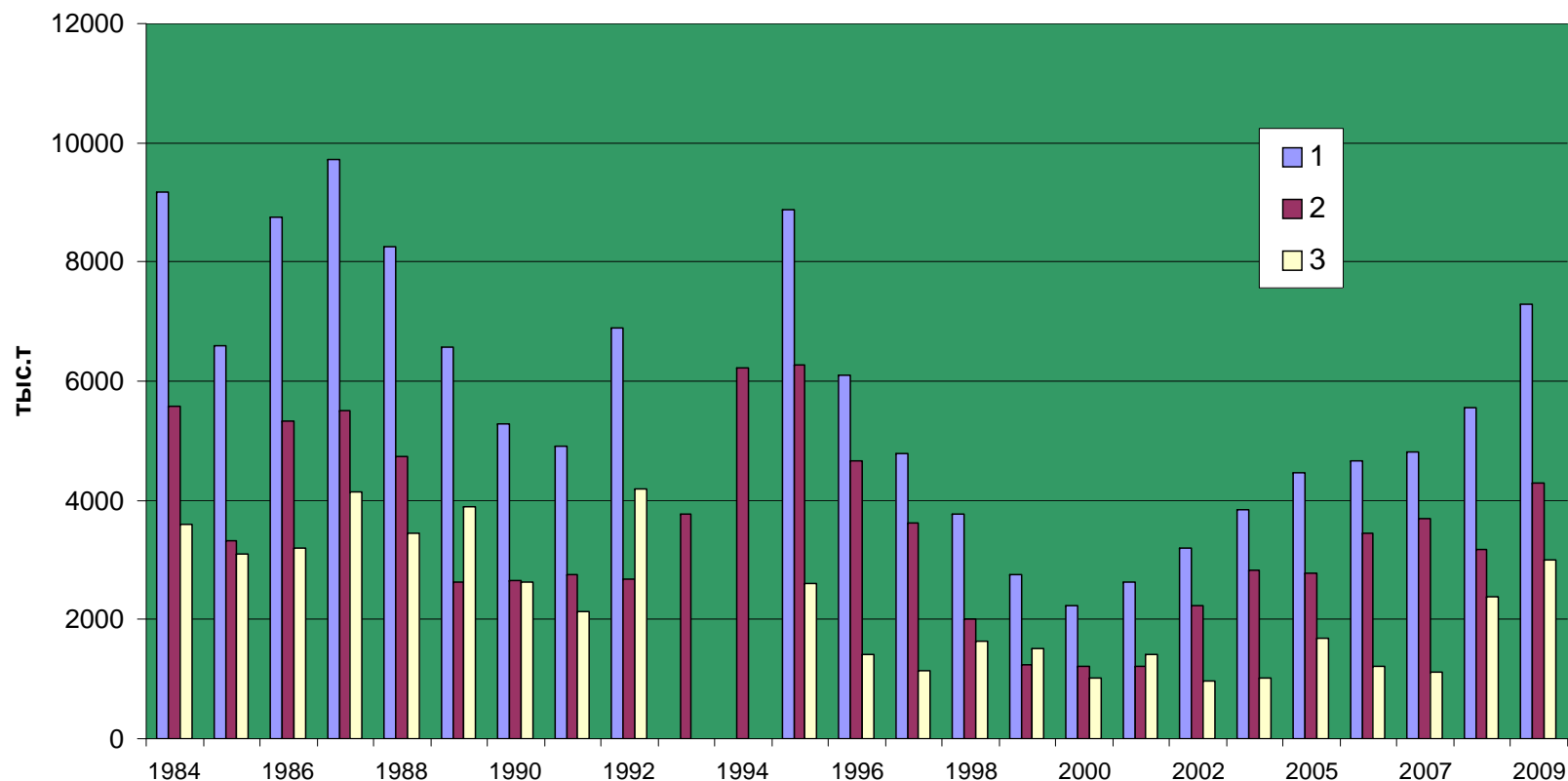
The local bathymetry of the study sites is presented in the 3-dimensional plots, with increasingly darker blue representing increasingly deeper waters as per the legend in lower left. The translucent purple circles represent a 20-km foraging radius typical of Stellar sea lion females. (VLADIMIR BURKANOV ET AL., 2011)

Population estimates and trends of Steller sea lions in Russian waters (all ages and sexes) in 3 regions: the Kuril Islands; Commander Islands, including Medny rookery; and the Sea of Okhotsk, including Yamsky rookery. Data prior to 2000 are based on reconstructed decadal abundance estimates (Burkanov and Loughlin 2005). Data since 2000 are based on survey results (Burkanov 2009; Burkanov et al. 2002, 2003, 2008).

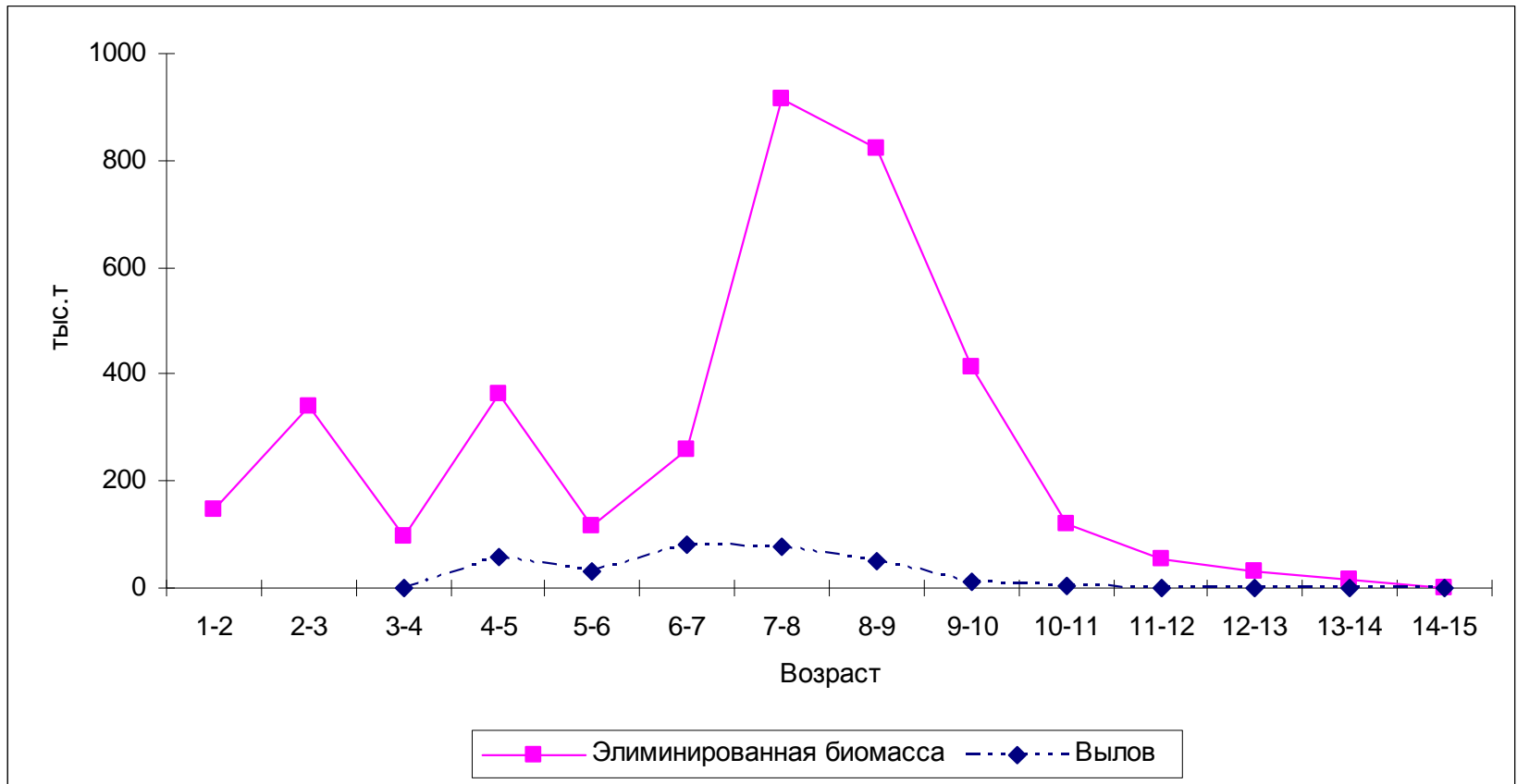


Pollock spawning (fishing) biomass in the Sea of Okhotsk in 1984-2009-s.

(1- Total, 2 –Western Kamtchatka, 2 – Northern part)



The total value of eliminating biomass and catch of pollock (on year classes) in the western Kamchatka shelf in 2007 (Dulepova, Ovsyannikov, 2010)



The main items of fishing regulations:

- 1. The close on fishing during the spawning period
- 2. A complete close on fishing during the year on the spawning grounds
- 3. Limitation of fishing measures - minimum fish size is 37 cm (fishing allowed fish age 5 and older)
- 4. Precautionary Approach to Assessment of total Allowable Catch (TAC)

The main items of fishing regulations conducive to the maintenance of benthic biocenosis and marine mammals:

1. No bottom trawls fisheries pollock
2. No pollock fisheries within marine mammals habitats
3. No pollock fisheries in all areas at depths less than 100 m