

**Federal Agency of Fisheries Russian Federation**  
**Pacific Research Fisheries Centre (TINRO-centre)**

**WESTERN BERING SEA POLLOCK CATCH AND FISHERY  
DATA**

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Conservation and Management of Pollock Resources in the Central Bering Sea)

By  
Stepanenko M.A., Gritsay E.V.

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In 2004 pattern pollock fisheries in the western Bering Sea shows concentrations of catch basically at outer shelf placed between Cape Navarin and Convention line and at shallow waters of Anadyr Bay (Fig. 1).

The Navarin area (Western Bering Sea placed to east from 174° 00 E) pollock catch was significant and CPUE stable in period from 1980 until 1989. The catch has declined rapidly in 1990-1995, again grew in 1996-1999 and interannual variations were related basically with fishing activity (Fig. 2). The CPUE has declined sharply in 1998-2001 and has historical minimum in 2001 (42.4 t/day) but began stable increasing since 2002.

Historically directed pollock fisheries in the Bering Sea began by the end of 1950-s. Pollock were harvested basically in the eastern Bering Sea. Catch increased rapidly and reached a peak in 1972 (about 2.0 mln.t).

Pollock fisheries in the western Bering Sea began early 1970-s at first in the Olutorskiy and Karaginskiy Bays. Since the advent the EEZs in 1977, pollock fisheries extended into northern Bering Sea. Pollock fishing in the Olutorskiy and Karaginskiy Bays were relatively stable in period between 1976-1994 with peaks in 1976 (549 ths.t) and in 1988 (408 ths.t) and in 1995 catch was 62-73 % less than the catch in 1993-1994 and fishing moratorium was enacted since 2002.

Pollock catch in the Bering Sea reached maximum in 1988, about 4.07 mln.t including in the US waters 33.1%, in the Russian EEZ 32.6% (Navarin area 20.9%) and in the Aleutian Basin (donut hole) 34.3% (Fig. 3).

Pollock fishing in the central Bering Sea began in the middle 1980-s and harvested basically extremely abundant 1978 year class. By 1992 the central Bering Sea pollock catch declined at 10.0 ths.t and moratorium was enacted in 1993.

The pattern of modern pollock factory trawlers fisheries in the Navarin area in 2000-2004 has been in winter (January-February) and postspawning time (May 15-December) and CPUE have maximum in winter period (Fig. 4a), fishing activity (Fig. 4б) and catch (Fig. 4в) in June-October.

Seasonal variation of pollock CPUE and catch in the Navarin area depends from seasonal migrations, abundance and distribution of pollock in the northwestern Bering Sea.

The length frequency data for 2004 shows high mode of fish at 31-34 cm, 37-42 cm. This is indications of the 2001 year class (50.2%), 2000 year class (23.5%) and 1999 year class (11.5%). The 1999-2001 year classes predominated in catch in the 2004. The 2002 year class consisted just 2.3% of the total catch.

The average pollock CPUE in 2004 was at 18.9% higher compare 2003 and it reflects increasing scale of distribution pollock into northwestern Bering Sea and higher abundance of pollock in the Navarin area in feeding period.

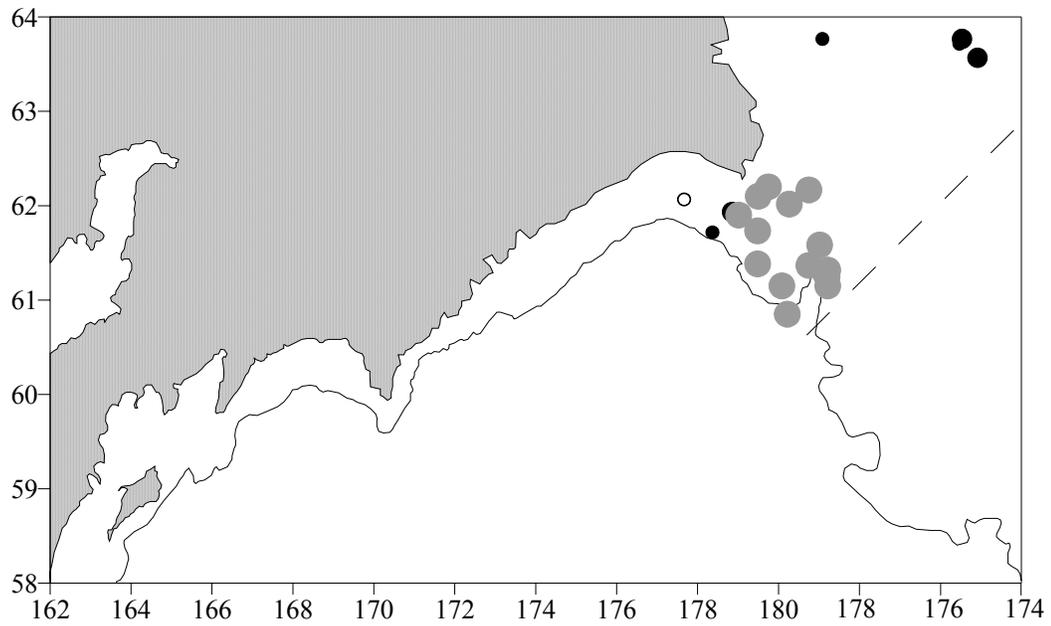


Fig. 1. Concentrations of pollock fishery 2004, May-December on the northwestern Bering Sea.

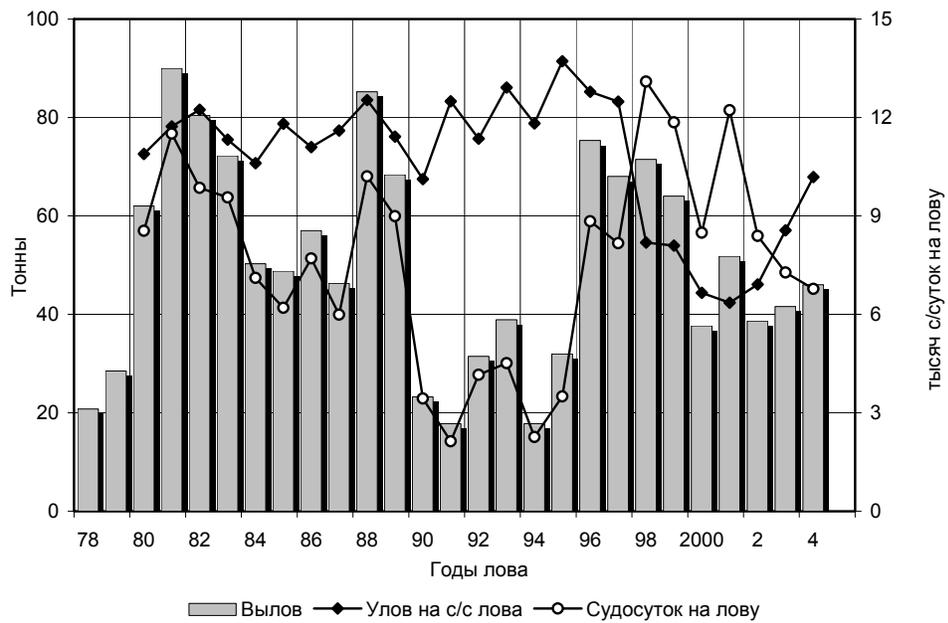


Fig. 2. Pollock catch ( $\times 10^4$  t) CPUE and number of days (ths.) used for active fishing in the Navarin area in 2004

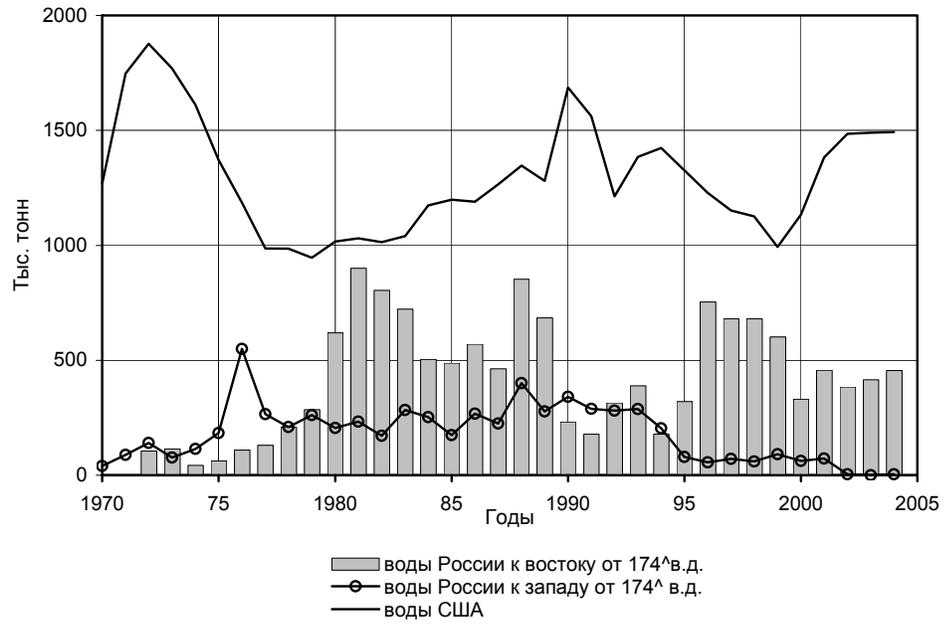


Fig. 3. Pollock catch in the western Bering Sea (Russian EEZ, areas to east and to west from 174° 00 E) and in the eastern Bering Sea (US EEZ)

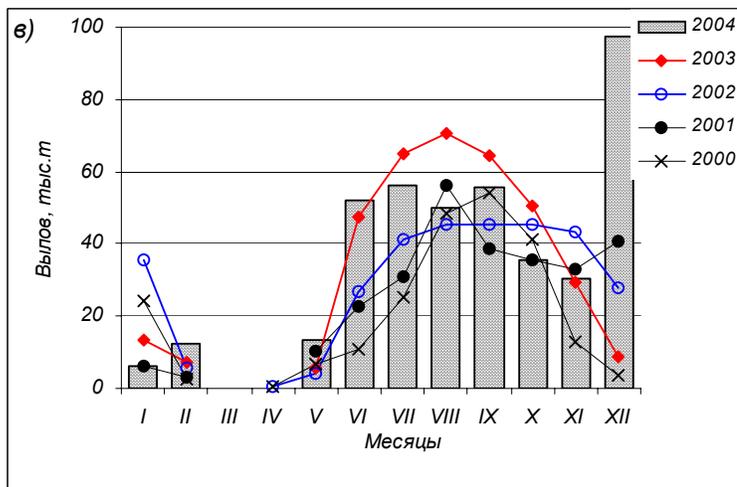
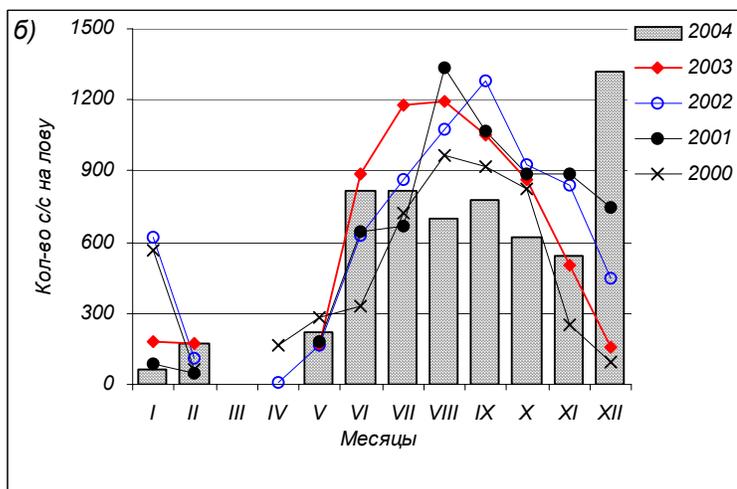
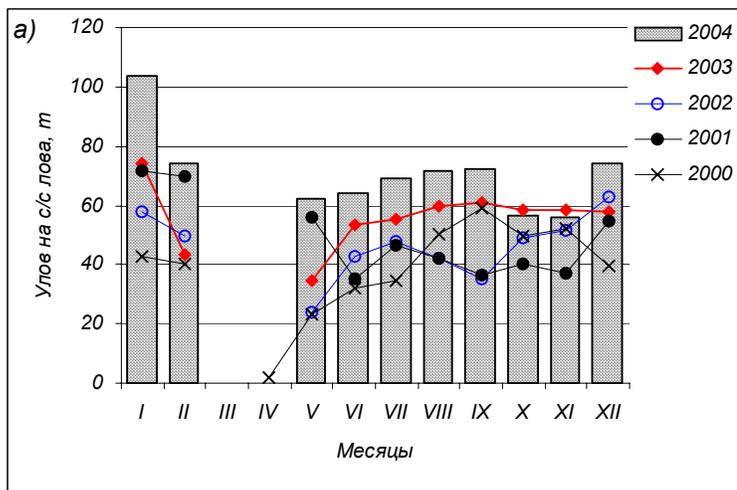


Fig. 4. Pollock CPUE (a), number of days used for active fishing (б) and estimated catch at month (в) of Russian factory trawlers in the Navarin area in 2000-2004