Walleye pollock research in the open waters of the Okhotsk Sea

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Abstract

Research was carried out in the central part of the Okhotsk Sea on the R/V Professor Kaganovsky in the spring of 2007. A total of 22 pelagic trawls were performed across a network of stations on 8 acoustic boards and 23 ichthyoplankton and hydrological stations.

The results of numerous studies done throughout the 1980s and 1990s suggest that there is no pollock spawning in the open waters of the Okhotsk Sea. The maximum catch of pollock eggs was 7 eggs per catch. Pollock of 32–43 cm in length (4- to 6-year olds) dominated the catches. Among the mature females, the dominant group were females with after-spawning gonad maturity – 95%. There were no spawning females.

Despite sightings of walleye pollock at all the trawl stations, there were no dense concentrations in the observed area. Pollock catches per trawl hour accounted for an average of only 162 kg, or 711 individuals. The maximal pollock catches per trawl hour (695 kg, or 7,623 individuals) was in the northern part of the observation are near the economic zone of Russia. This can be explained by pollock migration from the northern shelf of the Okhotsk Sea. Thus, walleye pollock migrating to feed were caught during the surveys. They spawned in the shelf of the northern part of the Sea.