



Figure 1. Distribution of purse-seine sets and presence of small cetaceans during 2002.

References

- Arias-Schreiber, M. (1996). Informe sobre el estado de conocimiento y conservación de los mamíferos marinos en el Perú. Informe progresivo N° 68. Instituto del Mar del Perú. Pp. 3-30.
- Pauly, D., Trites, A. W., Capuli, E., and Christensen, V. 1998. Diet composition and trophic levels of marine mammals. – ICES Journal of Marine Science, 55. (pp 467–481).
- Hall, M. 1998. An ecological view of the tuna-dolphin problem: impacts and trade-offs. Reviews in Fish Biology and Fisheries. Vol. 8, N° 1. (pp. 1 - 34.).

HCS213 - Database on Ukrainian research of Chilean jack mackerel *Trachurus murphyi* in the high seas of the Southern Pacific

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Chilean jack mackerel *Trachurus murphyi* is one of the most important species in the world fisheries. Total catch of this species quickly increased in 1970-1977 from 100000 t to 800000 t fluctuated than at the level of 1 billion t to 5 billion t in 1978-2001 (FAO, 2006). Starting from the 1978 till early 1990-ies this species supported large-scale distant water fisheries of the USSR with total catch more than 1 billion t in 1989-1990 (FAO, 2006). Catch of coastal countries, generally Chilean and Peruvian coastal fleet fluctuated at the level (0.5-4.5 and 0.1-0.7 billion t respectively). Recently, late 1990-ies or early 2000-ies this species also target of distant-water Chinese fisheries (catches unreported to FAO). Despite enormous research effort by former USSR (more that 200 research cruises, according to Elizarov et al., 1992) and numerous Soviet and Russian publications (Elizarov et al., 1992, Grechina, 1998, others...), Chilean research (Serra, 1991; Arcos et al., 2001) and other studies (Bailey, 1989, Parrish, 1989) many aspects of distribution, biology, and life history of this species is unclear, which allow many interpretations of this species status (highly migratory/straddling/oceanic/neritic). Uncertainties in knowledge led to including this at least straddling or even highly migratory species as neritic species in FAO analysis (Garibaldi, Limongelli, 2003), incorrect description of species area and biology at FAO web-site (FIGIS, 2006) misreporting of more than 100000 t of Soviet catch of this species in the Western Pacific as catch New Zealand greenback horse mackerel *Trachurus declivis* (errors originated from fisheries statistical office, which submitted data). The purpose of this presentation is to describe principal results obtained during data rescue project for 40 Ukrainian scouting expeditions to the Southern Pacific, and present general review of available biological information. Database was created in 1999-2003 during YugNIRO/NMFS data rescue project aimed to protect data which were available on paper only and involve these data into analysis using modern technology. Data from 40 scouting/searching cruises to the Southern Pacific Ocean (SPO), which consists a total of 7221 trawl hauls and 6681 positive trawl haul. Total catch from these cruises aggregated by 1-degree squares is presented at the Fig. 1. A total catch in the sampled hauls is 66071 t of fish, cephalopods and other animals. A total of 294 species or higher taxa were recorded in the catches. Chilean jack mackerel is the principal species in the catch: 62197 t (more than 94% of total catch). Together with two other principal species South American pilchard (*Sardinops sagax*) and chub mackerel (*Scomber japonicus*) these three species accounted more than 99% of the catch. Database consists of more than 165000 individual measurements, weighing and biological analysis for Chilean jack mackerel and more than 2700 bulk size frequency samples. These values for South American pilchard and chub mackerel are 4214/87 and 7400/116 respectively. This database is stored in the YugNIRO and could be available for joint analysis within frameworks of cooperative bilateral or/and multilateral research programs.

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