

R/V KAIYO MARU (JAPAN)

The R/V *Kaiyo maru* (2,630 gross tonnes), belonging to the Fisheries Agency of Japan, conducted intensive BASIS surveys with a trawl net in the Bering Sea basin and the adjacent North Pacific Ocean during June-September 2002, June-September 2003, and June-July 2004. Many overseas scientists were invited on board for the cooperative BASIS program. The R/V *Kaiyo maru* was also closely operated with the R/V *Wakatake maru* in order to calibrate the catch efficiencies of trawl net and drift gillnets. Data obtained by the *Kaiyo maru* included hydrographic information, nutrient, chlorophyll, zooplankton, salmon abundance, and genetic stock identification of salmon. These data highly contributed to the BASIS program of participating countries.

T. Azumaya



***T/V WAKATAKE MARU* (JAPAN)**

Since 1991 the *Wakatake maru* (666 gross tonnes), owned by the Hokkaido Education Committee, Bureau of Training Ships and chartered by the Japan Fisheries Research Agency, has returned annually to the same transects in the central North Pacific and Bering Sea to monitor salmon abundance, conduct tagging experiments, and collect oceanographic and plankton information. In 2002-2006 her contributions to BASIS included 11 cooperative inter-calibration operations comparing catch efficiencies of her research gillnet to the research trawl of the *Kaiyo maru*. In addition, she is equipped with surface longline gear making her uniquely suited to catch live salmon for tag-and-release experiments.

M. Fukuwaka & N. Davis



R/V TINRO (RUSSIA)

The Research Vessel "*TINRO*" of Pacific Scientific Research Fisheries Center (TINRO-Center), Vladivostok, Russia, conducted the total of 6 BASIS surveys during summer-autumn 2002-2006 period. The RV "*TINRO*" sampled at 100-120 stations during every individual survey. These surveys utilized extensive working knowledge of TINRO-Center high-seas Pacific salmon research, which was initiated by this research organization in mid 1980-s as an integral part of comprehensive ecosystem research. The comprehensive ecosystem approach was utilized during the RV "*TINRO*" BASIS surveys by means of standard set of techniques developed by TINRO-Center.

V. Sviridov



F/V SEA STORM (USA)

The Fishing Vessel “*Sea Storm*” has been contracted by the Alaska Fisheries Science Center (AFSC) to sample the epipelagic environment of the eastern Bering Sea since 2001. Research activities on the *Sea Storm* were expanded during 2002 to include BASIS stations (approx. 150 stations per year) covering a broad area of the eastern Bering Sea shelf. The *Sea Storm* is a commercial trawler; the ability of her crew to add other scientific components to this platform made the US BASIS research the premier fisheries and oceanographic research effort for the AFSC that it is today.

E. Farley



F/V NORTHWEST EXPLORER (USA)

The Fishing Vessel “*Northwest Explorer*” was first contracted by the Alaska Fisheries Science Center (AFSC) for BASIS research during fall of 2002. Fisheries and oceanographic stations were conducted within the Bering Sea Basin, slope and shelf areas. Paired trawls with the R/V *TINRO* and the R/V *Kaiyo maru* were also conducted to determine differences in sample gear catch per unit effort between the US, Russian, and Japanese research vessels. The *Northwest Explorer* was contracted again during 2006 to sample stations in the Bristol Bay region of the US BASIS survey area. The crew was outstanding and their contributions to US BASIS research effort helped propel this research to the forefront of AFSC ecosystem research.

E. Farley

