

## **Summer 1999 Acoustic-Trawl Survey of the eastern Bering Sea**

Scientists of the Alaska Fisheries Science Center conducted an acoustic-trawl survey of walleye pollock (*Theragra chalcogramma*) on the eastern Bering Sea shelf from June 12 to July 29 aboard the NOAA ship *Miller Freeman*. The survey design consisted of north-south transects spaced 20 nmi apart (except in the “horseshoe” area where the spacing was 10 nmi) and proceeded from east to west starting at longitude 160° 20' W and ending at longitude 178° 55' W. Preliminary results show pollock acoustic backscatter (from 14 m below the surface to within 0.5 m of the bottom) absent or very low in the east, increasing around 165° W northwest of Unimak Island, becoming lower between 166° -167° W, then increasing once again and remaining relatively continuous from about 168° W westward to the U.S./Russia border (Figure 1). The highest pollock concentrations were at approximately 173° W and 177° W. Average weight of pollock captured in midwater trawls ranged from 138-1164 g, and was highest in the horseshoe area north of Akutan Is. and along the U.S./Russia border (Figure 2). Preliminary analysis indicates that 8.4% of total pollock acoustic backscatter was located in the Critical Habitat (CH) area, 17.5% was east of 170° W outside of the CH, and 74.1% was west of 170° W. Acoustic backscatter will be scaled with biological data from the trawl catches to provide estimates of abundance-at-length and age.

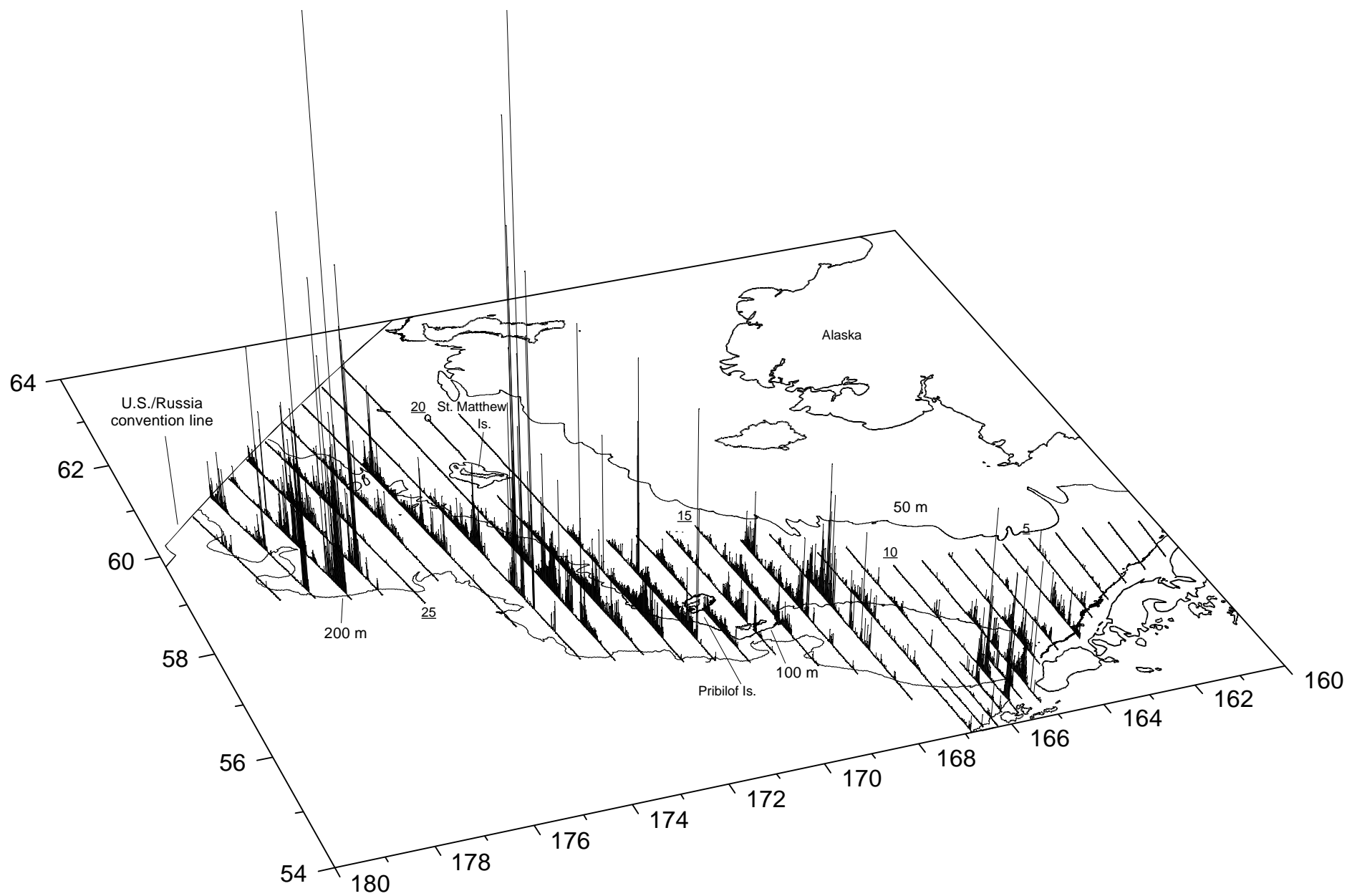


Figure 1. Pollock acoustic backscatter along trackline during the summer 1999 acoustic-trawl survey of the eastern Bering Sea shelf. Transect numbers are underlined.

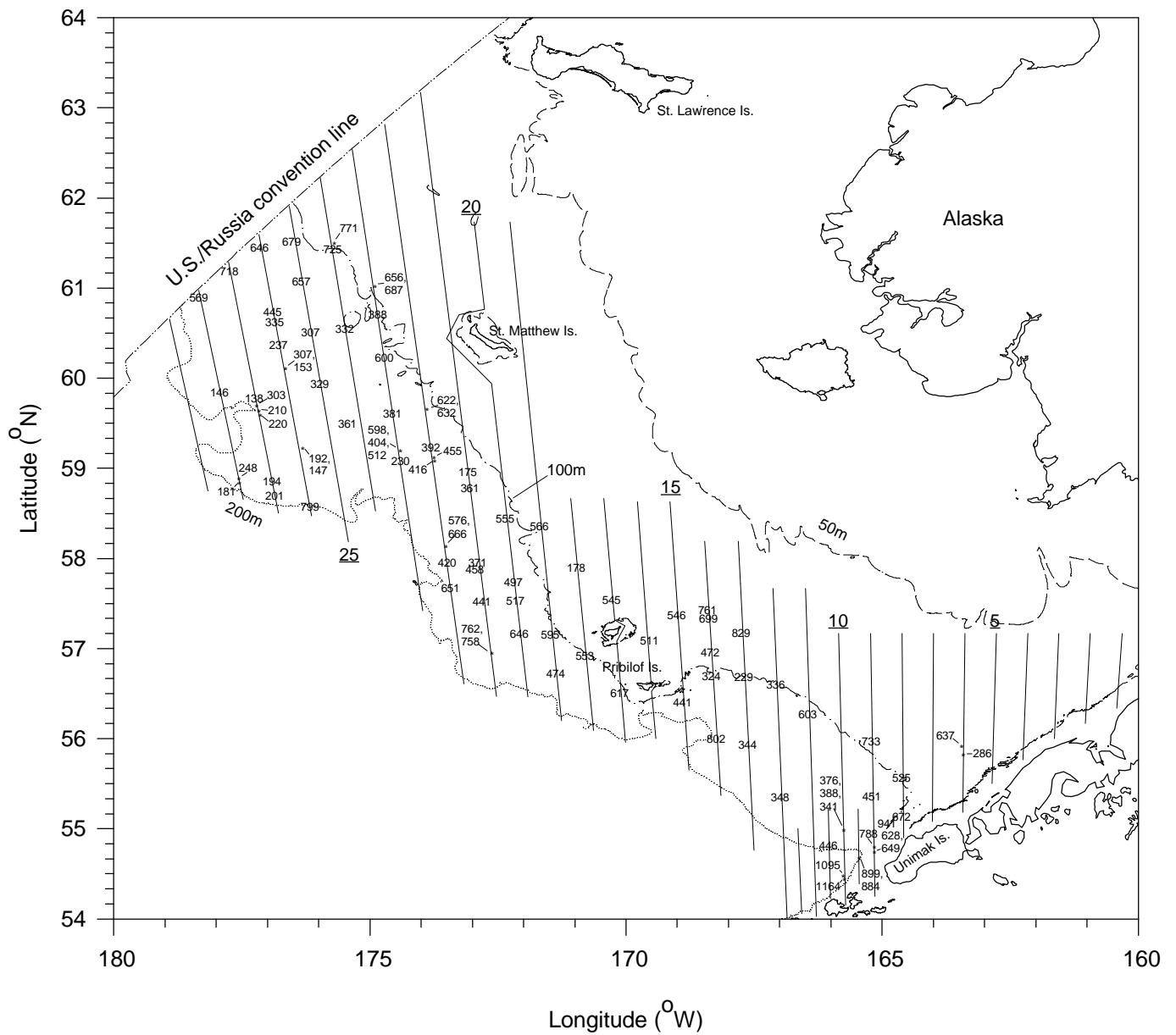


Figure 2. Average pollock weight (g) caught at midwater trawl haul locations during the summer 1999 acoustic-trawl survey of the eastern Bering Sea shelf. Haul locations where pollock numbered less than 50 were excluded. Transect numbers are underlined.