targeted rockfish. For some vessels more than 10% of the hauls were designated as sablefish-targeted hauls. In 1994 the Pacific ocean perch fishery was closed to directed fishing, and few hauls fell within this target relative to the other years.

To explore sablefish bycatch and targeting, we analyzed rockfish and sablefish catch from individual vessels, especially those assigned either sablefish or rockfish targets. Individual vessel hauls in July were sorted by date and haul number. For illustrative purposes, the annual haul information from a single vessel is provided in Figures 4–6 for the years 1994–1996. The proportions of sablefish catch to total rockfish catch in each haul indicated whether adjacent hauls had similar sablefish-to-rockfish ratios. Hauls targeting rockfish with a high natural incidental catch of sablefish (as is the case in shortraker–rougheye rockfish or shortspine thornyhead hauls) would be expected to have a relatively high sablefish percentage under the rockfish target.

In 1994 the vessel targeted primarily northern rockfish in the first half of July, other slope rockfish or pelagic shelf rockfish in the second half of July, and sablefish in a sporadic pattern (Figure 4). The northern rockfish hauls in the first half of the month were followed by hauls for shortraker–rougheye rockfish. These hauls had some sablefish bycatch, as would be expected, and were followed by 2 hauls with enough sablefish to assign sablefish as the haul target. Sablefish hauls were associated with other slope rockfish or shortraker–rougheye rockfish and shortspine thornyhead hauls in the second half of the month. We cannot determine whether the targeting of sablefish was intended or was due to targeting of rockfish with

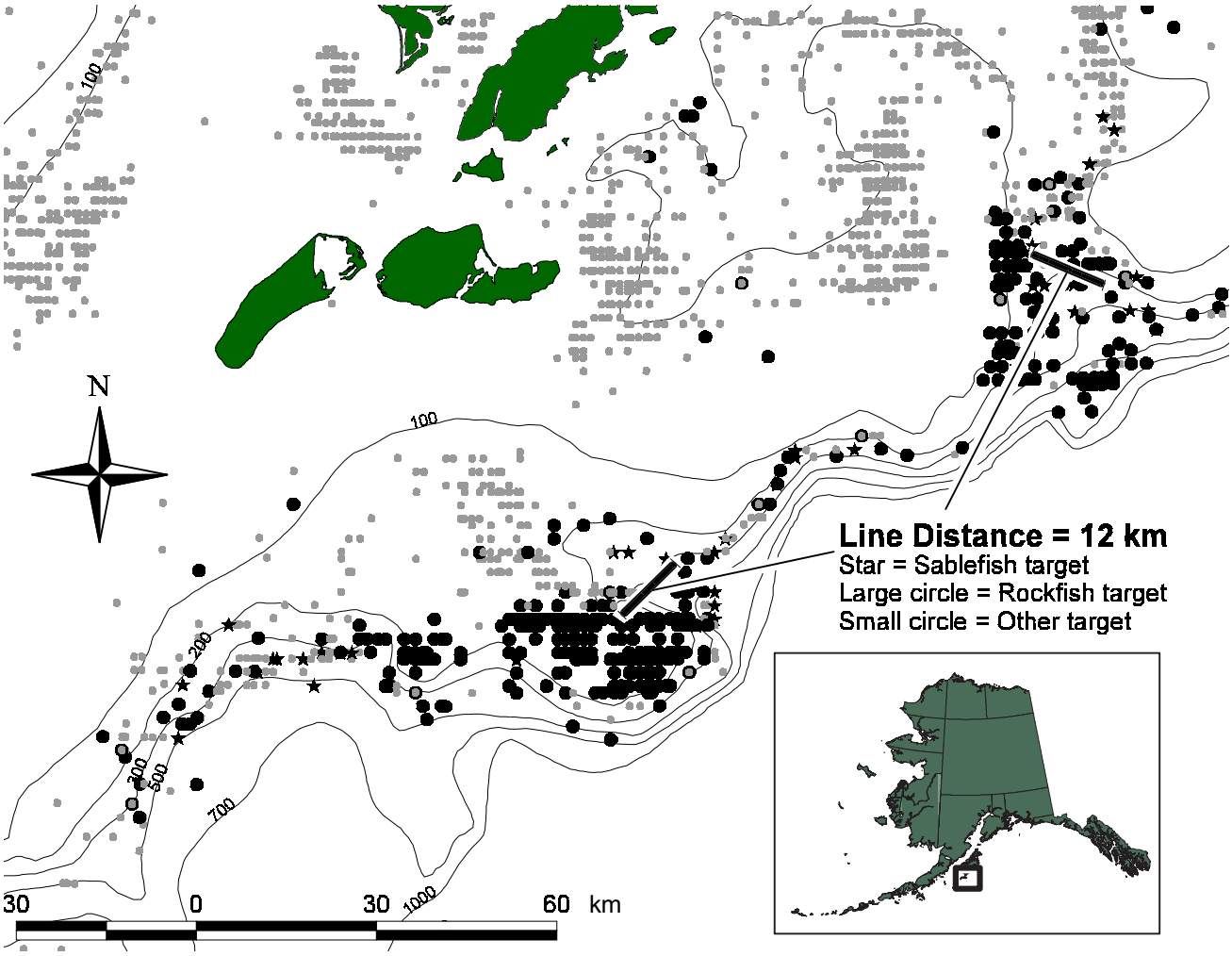

Figure 7. Location of all observed trawl hauls to the south of Kodiak Island during the years 1994–1996. Stars indicate hauls with sablefish as the dominant catch, and large circles denote hauls with rockfish as the dominant catch.