

NPAFC
Doc. 391
Rev. ____

**RESEARCH PLAN FOR THE UNITED STATES RESEARCH CRUISE
IN THE EASTERN NORTH PACIFIC OCEAN
MAY, 1999**

by

H. Richard Carlson
Auke Bay Laboratory
Alaska Fisheries Science Center
11305 Glacier Hwy.
Juneau, AK 99801-8626 USA

Submitted to
The North Pacific Anadromous Fish Commission
by
THE UNITED STATES OF AMERICA

March, 1999

THIS PAPER MAY BE CITED IN THE FOLLOWING MANNER:

Carlson, H. Richard 1999. Research plan for the United States Research Cruise in the eastern North Pacific Ocean, May, 1999. (NPAFC Doc. 391) Auke Bay Laboratory, Alaska Fisheries Science Center, National Marine Fisheries Service, NOAA, 11305 Glacier Highway, Juneau, AK 99801-8626 USA, 4 p.

ABSTRACT

Plans for a research cruise to examine distribution of salmon in coastal and oceanic waters of the North Pacific Ocean during May, 1999 are described.

The F/V GREAT PACIFIC, a 38-m stern trawler, chartered by the U.S. National Oceanic and Atmospheric Administration, National Marine Fisheries Service, Alaska Fisheries Science Center, Auke Bay, Alaska Laboratory, will conduct a survey of salmon in the North Pacific Ocean during May, 1999.

Primary objectives of the cruise are: to locate and assess the distribution of young and maturing salmon during spring in the North Pacific and obtain information on identity of stocks, growth and condition, maturation levels, lipid content of tissues, incidence of thermal (hatchery) marks, food and feeding habits, and physical and biological environment of salmon and other co-occurring species.

The cruise will begin in Dutch Harbor, Alaska on May 3 and end in Dutch Harbor on May 27, 1999.

Geographical area of coverage: The survey will begin off Cape Cheerful, Unalaska Island, and continue off Cape Prominence, then run to 165° W longitude and work south along 165°W to 38°N latitude, then swing east to 145°W, and continue north along 145° W to 59°N, then run to Kodiak to disembark scientists, and run to Dutch Harbor to end the cruise.

Methodology: Salmon and other fishes and marine life will be sampled in near-surface waters by towing at 5 kts a 400/580 midwater rope trawl, which is 198 m in length and fishes with a 18 m vertical by 52 m horizontal opening, and has a 1.2 cm mesh liner in the codend. Catches will be sorted to species and salmon will be processed and samples preserved for laboratory studies. Oceanographic observations will be made following trawl hauls and will include CTD casts to 300-500 m depths.

Chief Scientist for the cruise will be Richard Carlson, NOAA, NMFS Laboratory, 11305 Glacier Hwy, Juneau, AK 99801 USA, Phone (907) 789-6050, Fax (907) 789-6094, contact for further information.

MAY 1999 PROPOSED CRUISE ITINERARY

Date	Location/Activity
M 3 May	Depart Dutch Harbor, run to Cape Cheerful, Bering Sea, fishing out to 50 nmi
Tu 4 May	Run to Cape Prominence, N. Pacific Ocean, begin fishing out to 50 nmi
W 5 May	Complete Cape Prominence transect, run to 165° W (40 nmi), begin fishing
Th 6 May	Underway South on 165° W line, begin fishing at 52° N, continue at 51° N
F 7 May	Underway S on 165° W line, fishing at 50-48° N
Sa 8 May	Underway S on 165° W line, fishing at 47-45° N
Su 9 May	Underway S on 165° W line, fishing at 44-42° N
M 10 May	Underway S on 165° W line, fishing at 41-39° N
Tu 11 May	Underway South on 165° W line, fishing at 38° N, underway East enroute 145° W
W 12 May	Underway E on 38° N line, fishing at 90 nmi intervals, enroute 145° W (960 nmi)
Th 13 May	Underway E on 38° N line, fishing every 90 nmi
F 14 May	Underway E on 38° N line, fishing every 90 nmi
Sa 15 May	Underway E on 38° N line, fishing every 90 nmi
Su 16 May	Arrive 38° N 145° W, underway North, fishing at 38, 39, 40° N
M 17 May	Underway N on 145° W line, fishing at 41-43° N
Tu 18 May	Underway N on 145° W line, fishing at 44-46° N
W 19 May	Underway N on 145° W line, fishing at 47-49° N
Th 20 May	Underway N on 145° W line, fishing at 50-52° N
F 21 May	Underway N on 145° W line, fishing at 53-55° N
Sa 22 May	Underway N on 145° W line, fishing at 56-58° N
Su 23 May	Underway N on 145° W line, fishing at 59° N, depart enroute Kodiak (240 nmi)
M 24 May	Arrive Kodiak, disembark scientists, underway enroute Dutch Harbor
Tu 25 May	Underway enroute Dutch Harbor (585 nmi)
W 26 May	Underway enroute Dutch Harbor
Th 27 May	Arrive Dutch Harbor, offload samples and gear, end cruise

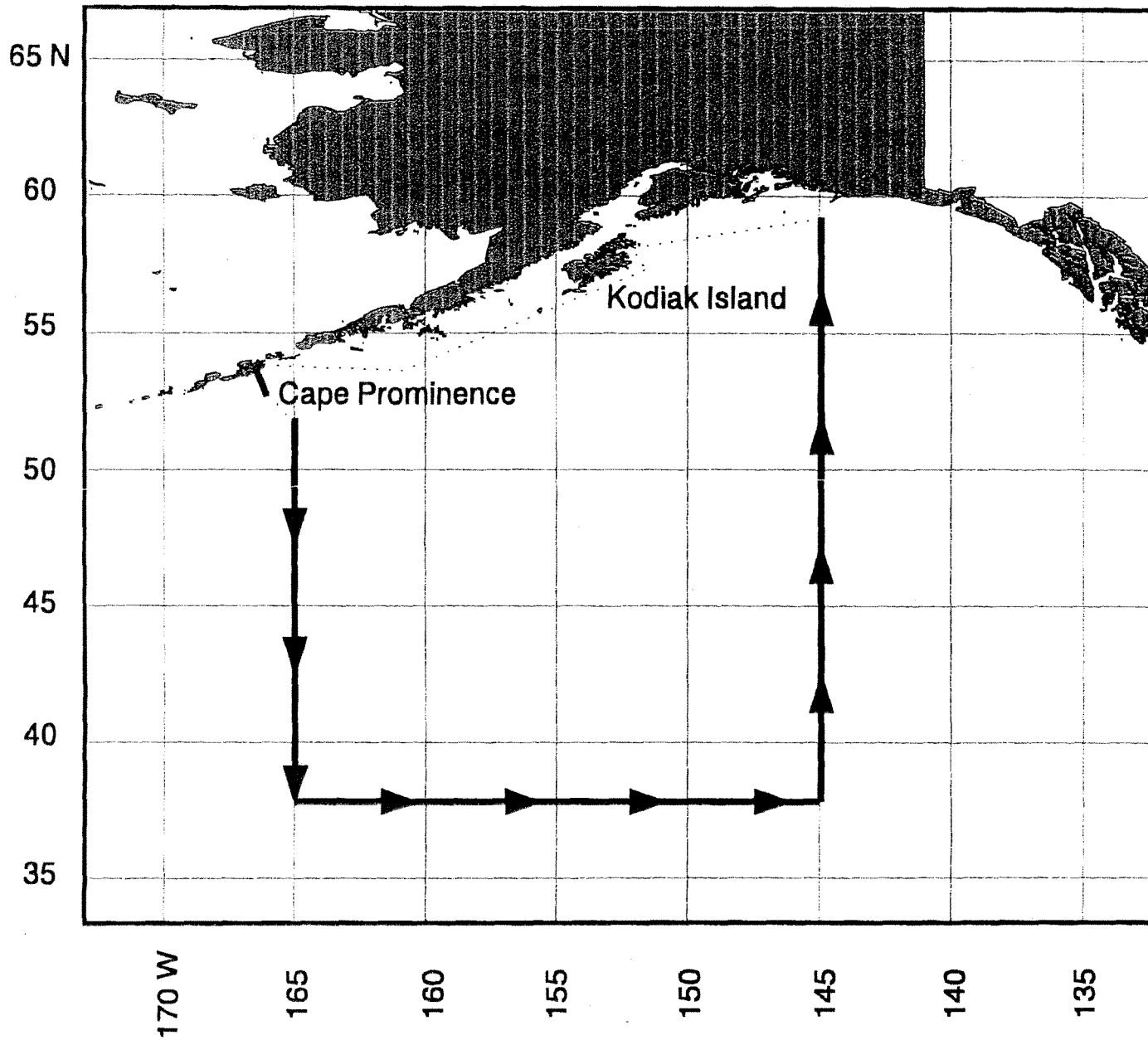


Figure 1. Planned cruise track for the May 1999 cruise.