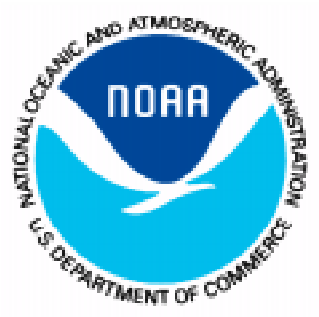
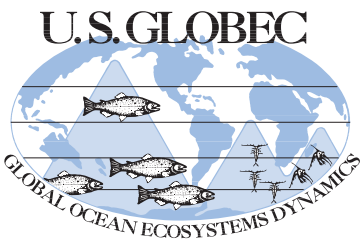
GLOBEC Northeast Pacific, Coastal Gulf of Alaska

Cruise Report, R/V *Pandalus* (G02-3)
(Alternate Cruise ID: PA0203)

1 - 7 October, 2002





GLOBEC Northeast Pacific, Gulf of Alaska
Cruise Report, R/V *Pandalus* (G02-3)
(Alternative Cruise ID: PA0203)

October 1 - 7, 2002

Chief Scientist:

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Port of Departure: Seward, Alaska
Port of Return: Seward, Alaska

Cruise Objectives

1. Determine distribution and abundance of fish along the Seward hydrographic transect and preserve samples for laboratory analysis (surface trawl (Trawl)).
2. Determine the distribution and species composition of net zooplankton in surface waters along the Seward hydrographic transect (Tucker).
3. Determine the temperature, salinity, density, and fluorescence of the water column along the Seward hydrographic transect (CTD).

Summaries of each of the GLOBEC projects may be found at the web site: http://globec.coas.oregonstate/edu/groups/nep/projs.html.

Table 1. GLOBEC Cruise Participants

Jennifer Boldt	Juneau Center School of Fishery Ocean Sciences
Mikhail Blikshteyn	Juneau Center School of Fishery Ocean Sciences
Alison Cross	School of Aquatic and Fishery Sciences, University of Washington

Summary of Gear Deployments

See Appendix 1 (Event Log).

Daily Cruise Summary (Narrative)

1 October. Scientists arrived in Seward.

2 October. Sorted gear and prepared for cruise.

3 October. Loaded gear on R/V *Pandalus* at Seward Marine Station.

3-4 October. Sampled fish, surface plankton, and measured temperature during the day along the Seward transect using the surface trawl, the NIO net, and a CTD. Starboard warp parted.

5-6 October. Fixed surface trawl.

7 October. Offloaded gear at the Seward Marine Station, scientists left Seward

Summary of Sampling Operations

A surface trawl was used to sample fish at GAK stations 1i-5. Fish caught included juvenile pink, chum, sock-eye, and coho salmon. The catches of pink salmon were small and greatly outnumbered by jellyfish at GAK stations 1i and 2. Fish were identified, sorted to species, and counted. Fish were measured and frozen in seawater. The starboard warp (wire) parted during a surface trawl at GAK 6 on the evening of October 4. The net and wire were repaired October 5-6.

Surface plankton was sampled at each station, using an NIO net ($1m^2$ mouth, 505 u mesh) equipped with a flowmeter. The NIO net was towed for 5 minutes parallel to the surface trawl track. Three replicate samples were collected at each station. Plankton samples were preserved in 5% buffered formalin.

A Seabird Seacat SBE-19 CTD was used to measure temperature, salinity, and fluorescence to 100 m depth at each station where surface trawls, and NIO trawls were conducted. Light measurements were taken with Hobo light meters and water samples were collected for turbidity measurements at all stations.

APPENDIX I

PA0203 EVENT LOG

EVENT LOG CONTENTS

Column Label	Description
Event#	Unique identifier for each line of event log.
Instrument (Instr)	Trawl: Surface Rope Trawl; 198-m long; 25-m wide; 35-m deep, 1.2 cm mesh liner in cod end; usually towed 30 minutes at surface. Tucker: NIO/Tucker Trawl; 1-m2 mouth opening; 0.505-mm mesh; equipped with flowmeter; towed 5 minutes at surface. CTD: Seabird Seacat SBE-19, with pump and Wetlabs fluorometer; lowered to 100-m depth at all fish stations.
Cast	Sequence # for gear deployed at current station
Station (Sta)	Sequence # for station occupied
Station Standard (Sta std)	
Day	Local time basis
Month (Mos)	Local time basis
Time	Local time
Start/End (S/E) flag	S=Start of event; E=End of event
Latitude (Lat)	Decimal degrees; north is positive
Longitude (Long)	Decimal degrees; east is positive
Water Depth	Depth of bottom
Cast Depth	Maximum depth of deployment
Haul	Cruise sequence number for a particular gear deployment
Comments	

Appendix I: Event Log

Event#	Instr	Cast	Sta	Sta std	Day	Mos	Time	S/E flag	Lat	Long	Water Depth	Cast Depth	Haul	Comments
PA02276.01	Trawl	1	1	GAK1i	3	10	1307	S	59.7611	-149..4012	265	0	1	Heading 332 deg; sunny,calm; 125 Fa wire out for all surface trawls; 2 pinks, many jellies!
PA02276.02	Trawl	1	1	GAK1i	3	10	1337	E	59.7760	-149.4165	nd	0	1	
PA02276.03	Tucker	2	1	GAK1i	3	10	1418	S	59.7747	-149.4212	271	0	1	Heading 186 deg.
PA02276.04	Tucker	2	1	GAK1i	3	10	1423	E	59.7695	-149.4165	nd	0	1	
PA02276.05	Tucker	3	1	GAK1i	3	10	1426	S	59.7673	-149.4142	267	0	2	Heading 180 deg.
PA02276.06	Tucker	3	1	GAK1i	3	10	1431	E	59.7628	-149.4092	nd	0	2	
PA02276.07	Tucker	4	1	GAK1i	3	10	1433	S	59.7612	-149.4063	264	0	3	Heading 145 deg.
PA02276.08	Tucker	4	1	GAK1i	3	10	1438	E	59.7577	-149.4013	nd	0	3	
PA02276.09	CTD	5	1	GAK1i	3	10	1452	S	59.7532	-149.3998	262	100	1	Cast 01 (cast 00 = turned CTD on and off once before it went in water).
PA02276.10	Trawl	1	2	GAK2	3	10	1546	S	59.6838	-149.3156	225	0	2	2 pink, 1 coho, 1 sablefish, JELLIES!
PA02276.11	Trawl	1	2	GAK2	3	10	1616	E	59.6934	-149.3562	nd	0	2	
PA02276.12	Tucker	2	2	GAK2	3	10	1649	S	59.6920	-149.3820	210	0	4	Heading 132 deg.
PA02276.13	Tucker	2	2	GAK2	3	10	1654	E	59.6895	-149.3765	nd	0	4	
PA02276.14	Tucker	3	2	GAK2	3	10	1657	S	59.6887	-149.3738	221	0	5	Heading 133 deg.
PA02276.15	Tucker	3	2	GAK2	3	10	1702	E	59.6865	-149.3692	nd	0	5	
PA02276.16	Tucker	4	2	GAK2	3	10	1704	S	59.6858	-149.3673	226	0	6	Heading 132 deg.
PA02276.17	Tucker	4	2	GAK2	3	10	1709	E	59.6838	-149.3630	nd	0	6	
PA02276.18	CTD	5	2	GAK2	3	10	1725	S	59.6838	-149.3630	230	100	2	Cast 02 (100 m).
PA02277.01	Trawl	1	3	GAK3	4	10	0912	S	59.5480	-149.1918	215	0	3	36 minute tow.
PA02277.02	Trawl	1	3	GAK3	4	10	0948	E	59.5695	-149.2258	nd	0	3	
PA02277.03	Tucker	2	3	GAK3	4	10	1013	S	59.5658	-149.2277	220	0	7	Heading 147 deg.
PA02277.04	Tucker	2	3	GAK3	4	10	1018	E	59.5630	-149.2240	nd	0	7	
PA02277.05	Tucker	3	3	GAK3	4	10	1020	S	59.5617	-149.2220	219	0	8	1 stickleback thrown back.
PA02277.06	Tucker	3	3	GAK3	4	10	1025	E	59.5587	-149.2180	nd	0	8	
PA02277.07	Tucker	4	3	GAK3	4	10	1027	S	59.5577	-149.2160	218	0	9	4 sticklebacks thrown back.
PA02277.08	Tucker	4	3	GAK3	4	10	1032	E	59.5550	-149.2122	nd	0	9	
PA02277.09	CTD	5	3	GAK3	4	10	1039	S	59.5550	-149.2122	219	100	3	Cast 00.
PA02277.10	Trawl	1	4	GAK4	4	10	1215	S	59.4127	-149.0460	201	0	4	35 minute tow; 2 pink, 6 sockeye, 3 chum, 7 coho, 1 unk.
PA02277.11	Trawl	1	4	GAK4	4	10	1250	E	59.3925	-149.0185	nd	0	4	
PA02277.12	Tucker	2	4	GAK4	4	10	1319	S	59.4073	-149.0437	201	0	10	Heading 138 deg.
PA02277.13	Tucker	2	4	GAK4	4	10	1324	E	59.4045	-149.0387	nd	0	10	
PA02277.14	Tucker	3	4	GAK4	4	10	1326	S	59.4033	-149.0367	201	0	11	Heading 148 deg.
PA02277.15	Tucker	3	4	GAK4	4	10	1331	E	59.4000	-149.0327	nd	0	11	
PA02277.16	Tucker	4	4	GAK4	4	10	1333	S	59.3988	-149.0308	200	0	12	Heading at 146 deg.
PA02277.17	Tucker	4	4	GAK4	4	10	1338	E	59.3957	-149.0267	nd	0	12	
PA02277.18	CTD	5	4	GAK4	4	10	1346	S	59.3943	-149.0235	200	100	4	Cast 01.
PA02277.19	Trawl	1	5	GAK5	4	10	1505	S	59.2639	-148..9000	165	0	5	Heading 162 deg.
PA02277.20	Trawl	1	5	GAK5	4	10	1540	E	59.2393	-148..8847	nd	0	5	
PA02277.21	Tucker	2	5	GAK5	4	10	1606	S	59.2475	-148..8870	163	0	13	Heading 158 deg.
PA02277.22	Tucker	2	5	GAK5	4	10	1611	E	59.2437	-148..8838	nd	0	13	
PA02277.23	Tucker	3	5	GAK5	4	10	1614	S	59.2415	-148.8823	159	0	14	Heading 162 deg.
PA02277.24	Tucker	3	5	GAK5	4	10	1619	E	59.2375	-148.8797	nd	0	14	
PA02277.25	Tucker	4	5	GAK5	4	10	1621	S	59.2362	-148.8785	155	0	15	Heading 162 deg.
PA02277.26	Tucker	4	5	GAK5	4	10	1626	E	59.2318	-148.8757	nd	0	15	
PA02277.27	CTD	5	5	GAK5	4	10	1632	S	59.2303	-148.8737	156	100	5	Cast 02 (100 m)
PA02277.28	Trawl	1	6	GAK6	4	10	1749	S	59.1025	-148.7534	156	0	6	Starboard winch wire broke; no sample.