

## CRUISE REPORT

Cruise Number: OS0304

FOCI Number: 1OM04

**Ship:**

Japanese Research Vessel Oshoro Maru

**Area of Operations:**

Eastern Bering Sea

**Itinerary:**

**Date depart / port:** August 28, 2004 / Dutch Harbor, AK

**Date arrive / port:** August 6, 2004 / Dutch Harbor, AK

**Participating organizations:**

NOAA - Alaska Fisheries Science Center (AFSC)

**Chief Scientist:**

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**Personnel:**

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**Cruise Objectives:**

The objective of this cruise was to continue the long-term acquisition of biological and physical data relating to the summer abundance of walleye pollock (*Theragra chalcogramma*) larvae and juveniles in the eastern Bering sea shelf region. This is a continuing cooperative research effort between FOCI and the scientists at Hokkaido University in Hakodate, Japan.

**Summary of Operations:**

Operation	Tows
20cm bongo (20Bon)	6
60cm bongo (60Bon)	7
CalCOFI vertical egg tow net (CalVET)	6
Methot net on Japanese trawl frame (MBT)	25

**Samples Collected**

	Tows	Number
Microzooplankton samples preserved in formalin (MZ)	12	12
Quantitative tow preserved in formalin (QTowF)	43	55
Rough count of pollock juveniles (RCountJ)	25	6624

## **Summary of Cruise:**

### **Narrative:**

We were able to complete all of our station objectives during the course of this cruise. Pollock juveniles were found at all but 3 stations and at considerably higher abundances than the 2003 cruise. The gear used, a Methot inner and outer net attached to a Japanese rigid frame, worked as expected with few exceptions. We also used 20/60 cm bongos and CalVETs. Much other physical and biological data were collected by the Japanese scientists on board using CTDs, water bottles, bongos, Norpac, Secchi discs and other gears.

### **Days Lost to Weather:**

None

### **Days Lost to Equipment Failure:**

None

### **Recommendations:**

None

### **Attachments:**

[Table 1. Cruise Summary](#)

[Figure 1. Station Map](#)

[Figure 2. 10M03 Juvenile Rough Count \(#/10m2\)](#)

Table 1- Cruise Summary For FOCI Cruise 10M04 (OS0304)

Date (GMT)	Time (GMT)	Station	Haul	FOCI Grid	Alternat Station	Depth (m)	Latitude	Longitude	Gear	SamplesCollected	HaulComments
28-Jul-04	22:54	1	1	B4		137	54 58.90 N	166 01.10 W	MBT	QTowF, RCountJ	0.876 kg jellyfish discarded.
29-Jul-04	5:26	2	1	C4		119	55 29.66 N	166 00.42 W	MBT	QTowF, RCountJ	
29-Jul-04	9:20	3	1	D4		116	55 59.70 N	166 01.81 W	MBT	QTowF, RCountJ	8.4 kg of jellyfish discarded.
29-Jul-04	13:45	4	1	E4		86	56 29.01 N	166 01.87 W	MBT	QTowF, RCountJ	17.6 kg jellyfish discarded.
29-Jul-04	14:43	4	2	E4		84	56 30.00 N	165 59.40 W	CalVET	MZ	Nets 1 and 2 combined.
29-Jul-04	14:59	4	3	E4		84	56 30.16 N	165 59.07 W	60Bon	Discard	Wrong wire-out for depth. Redone.
29-Jul-04	15:13	4	4	E4		84	56 30.54 N	165 59.42 W	20Bon	QTowF	Wire out and retrieval rate the same.
29-Jul-04	15:13	4	4	E4		84	56 30.54 N	165 59.42 W	60Bon	QTowF	Wire out and retrieval rate the same.
29-Jul-04	17:48	5	1	F4		70	56 58.56 N	166 01.80 W	MBT	QTowF, RCountJ	1.5 kg jellyfish discarded.
29-Jul-04	19:17	5	2	F4		69	57 00.13 N	166 00.53 W	CalVET	MZ	Nets 1 and 2 combined.
29-Jul-04	19:27	5	3	F4		69	57 00.29 N	166 00.85 W	20Bon	QTowF	Wire out and retrieval rate was the same.
29-Jul-04	19:27	5	3	F4		69	57 00.29 N	166 00.85 W	60Bon	QTowF	Wire out and retrieval rate was the same.
29-Jul-04	23:53	6	1	G4		66	57 29.14 N	166 01.13 W	MBT	QTowF, RCountJ	6.9 kg jellyfish discarded.
30-Jul-04	3:36	7	1	H4		55	57 58.93 N	165 59.61 W	MBT	QTowF, RCountJ	Large quantity of very small jellyfish; 500ml of sample preserved and 3600ml discarded. All fish larvae preserved. 2.2kg of larger jellyfish discarded.
30-Jul-04	9:13	8	1	G5		68	57 31.19 N	166 57.05 W	MBT	QTowF, RCountJ	3.83 kg jellyfish discarded.
30-Jul-04	13:59	9	1	F5		74	57 00.91 N	166 57.60 W	MBT	QTowF, RCountJ	10.7 kg jellyfish discarded.
30-Jul-04	17:32	10	1	E5		102	56 29.93 N	166 59.38 W	MBT	QTowF, RCountJ	1.8 kg jellyfish discarded.
30-Jul-04	18:45	10	2	E5		101	56 29.90 N	167 00.13 W	CalVET	MZ	Nets 1 and 2 combined.
30-Jul-04	19:09	10	3	E5		101	56 29.98 N	167 00.56 W	20Bon	QTowF	
30-Jul-04	19:09	10	3	E5		101	56 29.98 N	167 00.56 W	60Bon	QTowF	
31-Jul-04	0:20	11	1	D5		134	56 00.69 N	166 59.60 W	MBT	QTowF, RCountJ	0.635 kg jellyfish discarded.
31-Jul-04	1:03	11	2	D5		134	56 00.07 N	167 00.06 W	CalVET	MZ	Nets 1 and 2 combined.
31-Jul-04	2:25	11	3	D5		134	56 01.12 N	166 58.30 W	20Bon	QTowF	
31-Jul-04	2:25	11	3	D5		134	56 01.12 N	166 58.30 W	60Bon	QTowF	
31-Jul-04	5:19	12	1	C5		134	55 31.08 N	167 00.11 W	MBT	QTowF, RCountJ	0.159 kg jellyfish discarded.
31-Jul-04	6:34	12	2	C5		135	55 30.15 N	166 59.86 W	CalVET	MZ	Nets 1 and 2 combined.
31-Jul-04	6:42	12	3	C5		135	55 30.17 N	167 00.00 W	20Bon	QTowF	
31-Jul-04	6:42	12	3	C5		135	55 30.17 N	167 00.00 W	60Bon	QTowF	
31-Jul-04	9:57	13	1	C6		143	55 30.03 N	167 58.44 W	MBT	QTowF, RCountJ	7.5 kg jellyfish discarded.
31-Jul-04	14:10	14	1	D6		136	55 58.73 N	167 59.89 W	MBT	QTowF, RCountJ	Watch stopped during tow. Time estimated from avg. wireout/tow time. 0.507 kg jellyfish discarded.
31-Jul-04	14:41	14	2	D6		136	55 59.93 N	167 59.86 W	CalVET	MZ	Nets 1 and 2 combined.
31-Jul-04	15:18	14	3	D6		136	56 00.23 N	167 59.92 W	20Bon	QTowF	
31-Jul-04	15:18	14	3	D6		136	56 00.23 N	167 59.92 W	60Bon	QTowF	
31-Jul-04	21:18	15	1	E6		118	56 29.13 N	167 57.24 W	MBT	QTowF, RCountJ	26 kg of jellyfish discarded.
01-Aug-04	1:04	16	1	F6		79	56 57.69 N	167 59.52 W	MBT	QTowF, RCountJ	7.7 kg jellyfish discarded.

## Cruise Summary For FOCI Cruise 10M04 (OS0304)

Date (GMT)	Time (GMT)	Station	Haul	FOCI Grid	Alternat Station	Depth (m)	Latitude	Longitude	Gear	SamplesCollected	HaulComments
01-Aug-04	6:02	17	1	G6		68	57 29.79 N	167 59.99 W	MBT	QTowF, RCountJ	10.75 kg jellyfish discarded.
01-Aug-04	10:19	18	1	G7		70	57 30.10 N	168 57.89 W	MBT	QTowF, RCountJ	Frame rotated several times on launch. Was hauled back on deck and cod-end not rinsed before relaunching. 6.9kg jellyfish
01-Aug-04	13:43	19	1	G8		69	57 30.43 N	169 58.37 W	MBT	QTowF, RCountJ	8.6 kg jellyfish discarded.
01-Aug-04	17:32	20	1	F8		58	57 00.43 N	169 40.76 W	MBT	QTowF, RCountJ	6.8 kg jellyfish discarded.
01-Aug-04	20:25	21	1	F7		78	57 00.21 N	169 02.82 W	MBT	QTowF, RCountJ	11.8 kg jellyfish discarded.
02-Aug-04	4:23	22	1	E8		106	56 31.60 N	170 10.92 W	MBT	QTowF, RCountJ	Max depth not recorded; estimated from similar tows. Net was upside down on retrieval. Many pollock were mangeld. 1.55 kg jellyfish discarded.
03-Aug-04	11:18	23	1	D8		180	56 00.33 N	170 00.56 W	MBT	QTowF, RCountJ	
04-Aug-04	16:02	24	1	E7		103	56 28.96 N	169 01.80 W	MBT	QTowF, RCountJ	8.1 kg jellyfish removed.
04-Aug-04	21:17	25	1	D7		1300	56 01.98 N	169 00.29 W	MBT	QTowF, RCountJ	0.15 kg jellyfish discarded.

Figure 1.

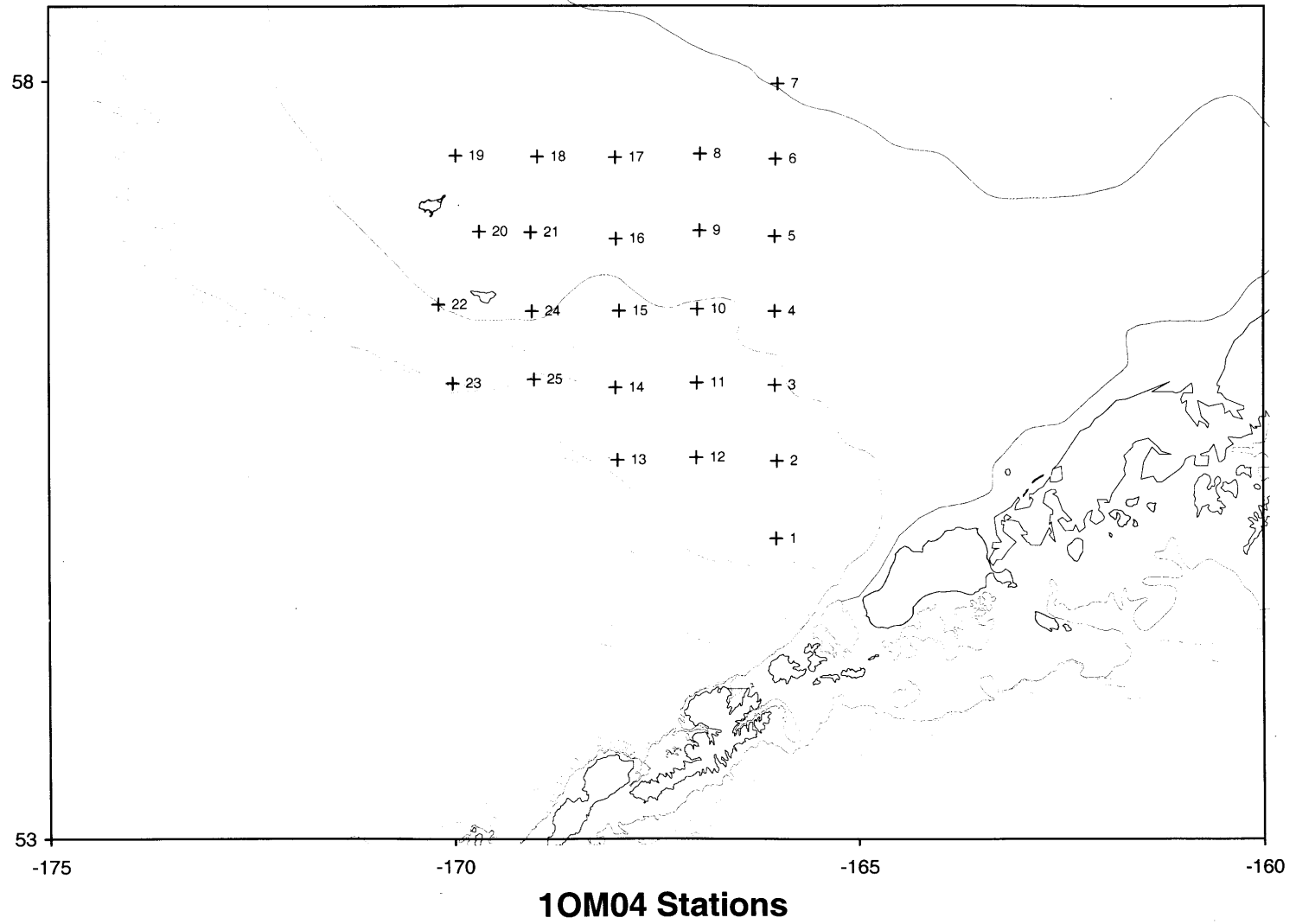


Figure 1- Station Map

Figure 2.

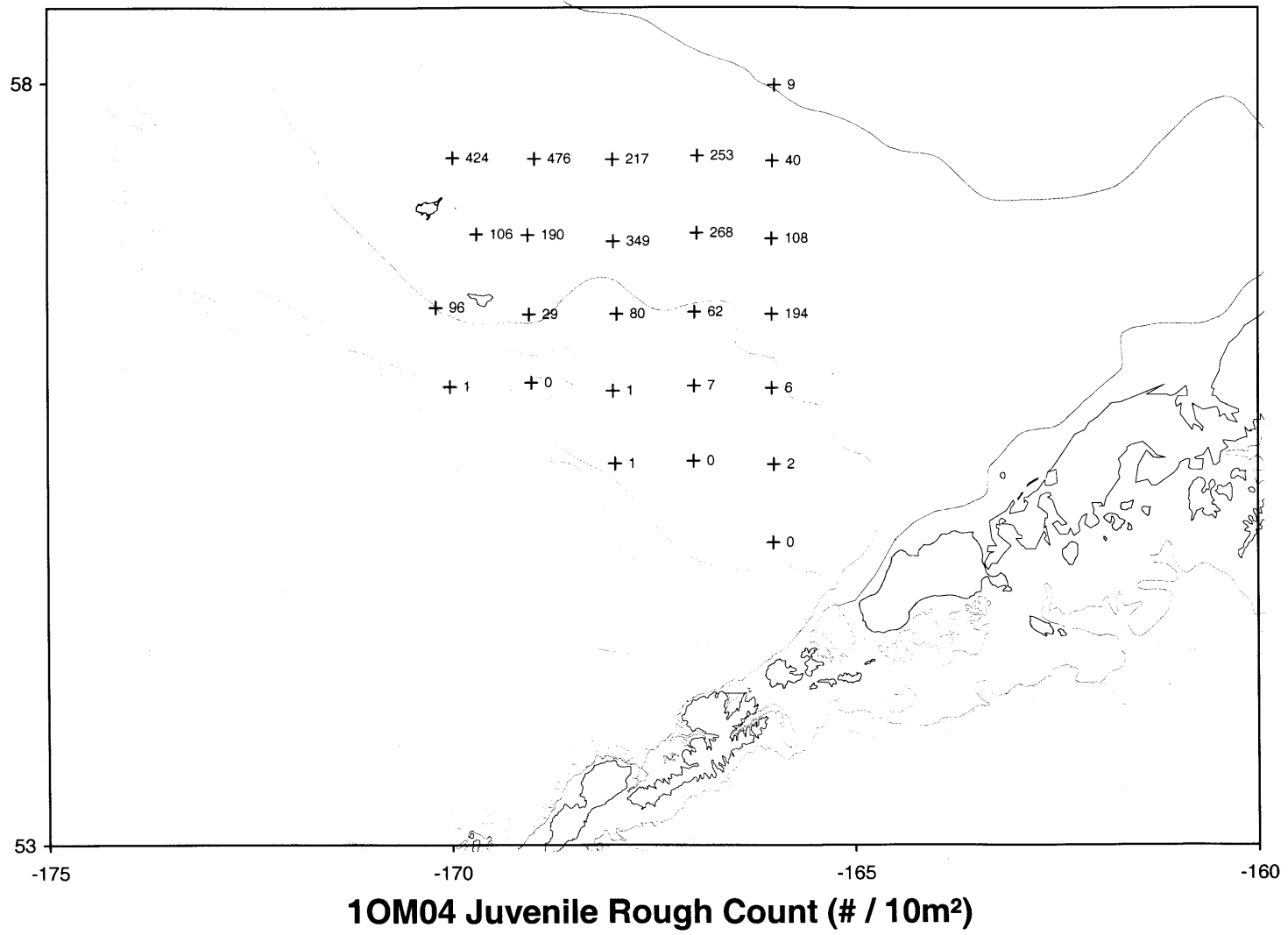


Figure 2- Juvenile Rough Count