HOKKAIDO UNIVERSITY

Title	7 THE "OSHORO MARU" CRUISE 004 TO IBURI OFF IN SEPTEMBER - OCTOBER 2014
Citation	海洋調査漁業試験要報, 58, 38-44
Issue Date	2017-03-31
Doc URL	https://hdl.handle.net/2115/64979
Type	dataset
File Information	Data.Rec.Oceanogr.Obs.Expl.Fish.58.42.pdf

Hokkaido University Collection of Scholarly and Academic Papers : HUSCAP

7

THE "OSHORO MARU" CRUISE 004
TO IBURI OFF

IN SEPTEMBER - OCTOBER 2014

1. Cruise Itinerary

Cruise 004

Departure from Hakodate	September	30	2014
Surface-trawl research (OSST1401-1402)	October	1	
Return at Hakodate		2	
Departure from Hakodate		3	
Mid-trawl research (OSMT1401)		4	
Return to Hakodate		5	
Departure from Hakodate		6	
Start hydrographic research (OS14122)		7	
Bottom-trawl (OST1401-1402)		8	
Finish hydrographic research (OS14123)		9	
Return to Hakodate		10	

Total coverage 582.0 miles

2. Vessel Personnel

Crew: Captain: Associate Professor Shogo Takagi

And 30 persons

Research Staff: Leg1

Professor (Laboratory of Fishing Production Engineering, Hokkaido University)
Tsutomu Takagi

Professor (Laboratory of Marine Environment and Resource Sensing, Hokkaido University)
Yasuzumi Fujimori

Associate Professor (Field Science Center for Northern Biosphere, Hokkaido University)
Yoko Mitani

Technical Staff: 22 persons

Graduate Students: 3 persons

Leg2

Professor (Laboratory of Marine Environment and Resource Sensing, Hokkaido University)
Yasuzumi Fujimori

Associate Professor (Laboratory of Marine Environment and Resource Sensing, Hokkaido University)
Toru Mukai

Associate Professor (Laboratory of Marine Bioresources Ecology, Hokkaido University)
Takashi Matsuishi

Specially Appointed Associate Professor (School of Fisheries Sciences, Hokkaido University)
Mituhiro Nakaya

Technical Staff: 24 persons

Graduate Students: 6 persons

Leg3

Professor (Department of Marine and Earth Science, Tokai University)
Hisashi Narita

Professor (Laboratory of Marine Environmental and Resource Sensing, Hokkaido University)
Koji Iida

Professor (Laboratory of Marine Biodiversity, Hokkaido University)
Mamoru Yabe

Associate Professor (Laboratory of Marine Biodiversity, Hokkaido University)
Hisashi Imamura

Associate Professor (Laboratory of Marine Environment and Resource Sensing, Hokkaido University)	
	Toru Mukai
Technical Staff:	23 persons
raduate Students:	6 persons

3. Items of Research

Hydrographic observations: (Observation of Temperature, Salinity, and Computed Dynamic Depth Anomaly)

Hydrographic work on deck and the data processing were made by the Science officer, the deck officers, crews, research staff and cadets of the “Oshoro maru”. Temperature and salinity were measured by CTD (Seabird SBE-9Plus) and XCTD.

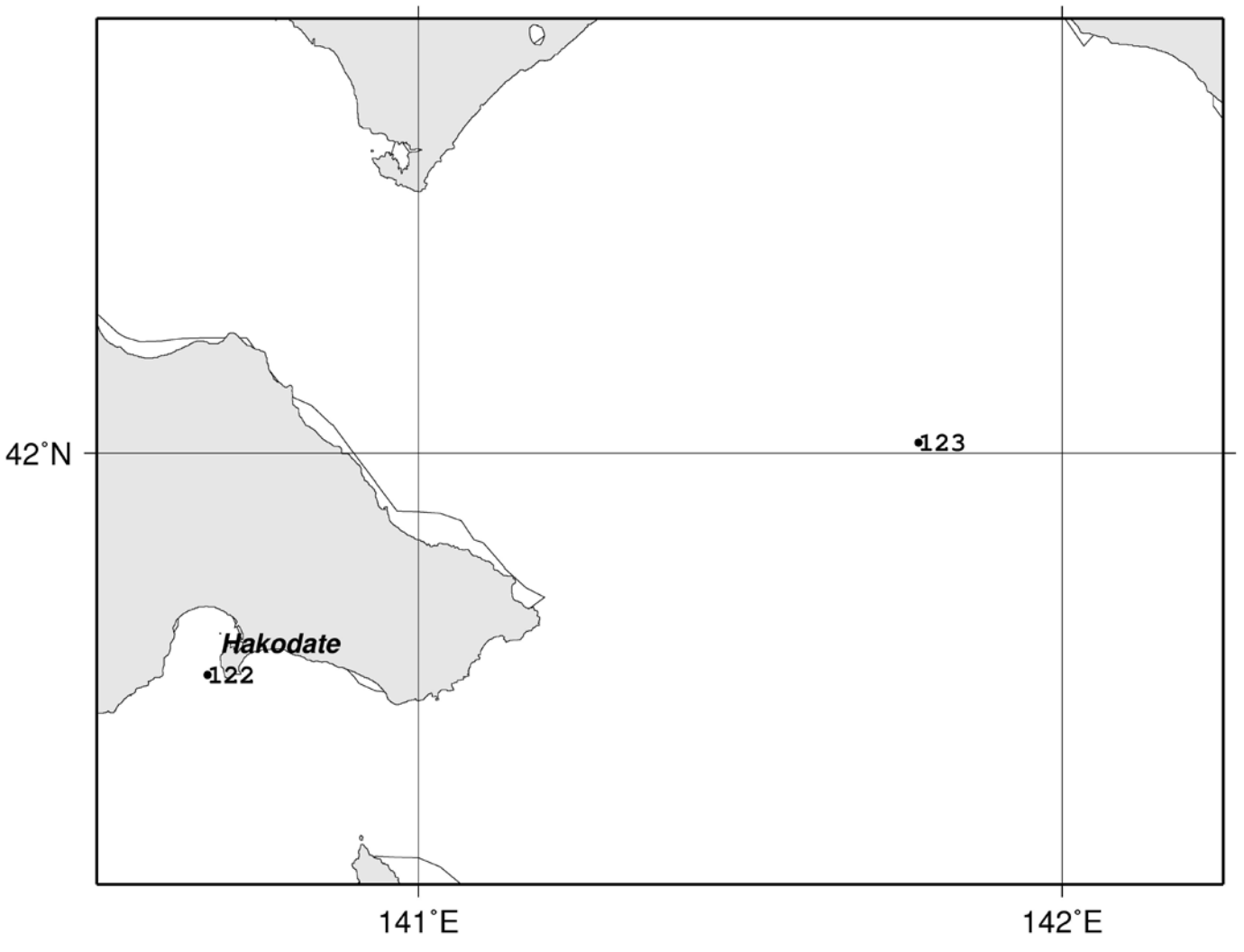

Table 1. List of Oceanographic station

Station	Lat.	Long.	Date (GMT)	Hour (GMT)	T.Z.	Depth	Col.	Tr.	SST	Wr.	Gear
OS14122	41 44.60 N	140 40.32 E	10/6	23:05	9	57	-	-	-	bc	19p-4636
OS14123	42 00.72 N	141 46.59 E	10/9	5:29	9	901	-	-	17.7	b	9p-1171

T.Z.: Time Difference between G.M.T and S.M.T.

Col.: Water color in Forel-Ule scale

Tr.: Transparency in meters with Secchi disc

SST: Surface temperature

Wr.: Weather in WMO Code 4501

Table 2. Oceanographic data

Station	OS14122		
Latitude	41-44.60N		
Longitude	140-40.31E		
Depth(m)	57		
Press.	Temp.	Sal.	SIG-T
10	19.922	33.691	23.784
20	19.123	33.842	24.105
30	18.889	33.874	24.189

Station	OS14123		
Latitude	42-0.72N		
Longitude	141-46.59E		
Depth(m)	901		
Press.	Temp.	Sal.	SIG-T
5	17.269	33.798	24.528
10	17.127	33.781	24.549
20	17.052	33.839	24.611
30	16.716	33.961	24.784
40	15.683	34.087	25.117
50	13.963	34.152	25.539
75	12.728	34.241	25.859
100	11.114	34.087	26.044
125	9.687	34.006	26.228
150	7.102	33.730	26.404
175	4.237	33.425	26.509
200	3.503	33.436	26.590
250	2.947	33.523	26.711
300	2.866	33.644	26.815
400	3.087	33.781	26.904
500	3.336	33.964	27.027
600	3.464	34.126	27.144
700	3.302	34.236	27.247
800	3.147	34.299	27.312

Bottom Trawl Research

2 operations of the stern otter bottom trawl were carried out.

These operations were supervised by the captain, Deck officer, Science officer, crew and research staff were engaged in the work.

Table 3: Data on Bottom trawl research during the Oshoromaru Cruise#004

No. of research	Date and time of net tow (S.M.T.*1)	Position Lat. (N)	Position Long. (E)	T.D.*2	D.S.*3	Speed of tow (K't)	Bottom depth (m)	Wr.*4	Wind	S.T.*5 (℃)
OST1401	Oct. 8 0937-1010	41-56.0	141-42.1	+9h	310	3.5	880-900	c	WSW-4	17.5
OST1402	Oct. 8 1409-1440	42-03.5	141-36.8	+9h	350	3.5	740-755	c	WSW-3	17.1

*1 S.M.T. : Ship's Mean Time.

*2 T.D. : Time Difference between Greenwich Mean Time (G.M.T.) and Ship's Mean Time (S.M.T.).

*3 D.S. : Direction of tow.

*4 Wr. : Weather (bc: 25-75% clouded, c: over 75-99% clouded).

*5 S.T. : Surface temperature

Japanese name	Scientific Name	OST1401		OST1402	
		Number	Weight (kg)	Number	Weight (kg)
Gangiei rui	Rajidae sp.	-	1.35	-	-
Shigiunagi	*Nemichthys scolopaceus*	-	-	1	0.08
Irakoanago	*Synaphobranchus kaupii*	-	2.45	2	0.25
Togariichimonjiiwashi	*Leuroglossus schmidtii*	-	-	-	0.01
Sokoiwashi rui	Bathylagidae	-	0.65	-	0.97
Houraieso rui	Chauliodus sp.	-	-	2	0.08
Hadakaiwashi rui	Myctophidae	17	0.45	-	0.83
Karasudara	*Halargyreus johnsonii*	-	1.8	2	0.33
Kanadadara	*Antimora microlepis*	-	10.1	1	0.55
Itohikidara	*Laemonema longipes*	-	6.7	2	1.15
Karafutosokodara	*Coryphaenoides cinereus*	-	37.2	-	-
Munedara	*Coryphaenoides pectoralis*	-	2.35	-	-
Ibarahige	*Coryphaenoides acrolepis*	-	7.7	-	-
Futasuzinamehadaka	*Lestrolepis intermedia*	-	-	2	0.2
Nezumiginpo	*Lumpenella longirostris*	-	3.95	-	0.53
Shirogenge	*Bothrocara zestum*	-	7.7	-	8.9
Kichiji	*Sebastolobus macrochir*	-	6.7	12	1.45
Nyuudoukajika	*Psychrolutes phrictus*	-	0.3	-	-
Ganko	*Dasycottus setiger*	-	-	2	0.3
Kabutouo	*Poromitra crassiceps*	-	0.1	-	-
Ezobai spp.	Buccinidae spp.	-	2.45	-	-
Benizuwaigani	*Chionoecetes japonicus*	-	2.25	-	-
Ika-rui	Squids	-	-	-	0.1
Dosuika	*Berrytenthis magister*	-	1.25	-	0.95
Yanagidako		-	5.15	-	6.05
Mendako	*Opishoteuthis depressa*	-	0.1	1	0.55
Uncategorized		8baskets		1basket	

Drift Gillnet Research

Three gillnet researches were performed during this cruise.

The captain supervised the operations, and were conducted by deck officers, crews, research staff.

Table 4 Data on floating gill net research during the "Oshoro Maru" Cruise #004

No. of research		OSG1402	OSG1403	OSG1404	OSG1405
Date		30-Oct	30-Oct	31-Oct	31-Oct
position of	Lat. (N)	41-29.0	41-29.7	41-27.9	41-30.0
net set	Long. (E)	142-47.8	142-26.4	143-49.8	144-44.2
Time(S.M.T.)	net set	0940-0945	1305-1308	0652-0656	1332-1335
	net haul	1015-1025	1415-1422	0800-0810	1445-1455
Surface temp. (°C)		17.3	17.5	12.8	11.1
Weather		b	bc	bc	bc
Wind (force)		WNW-3	WNW-4	WNW-3	West-4
Pacific saury		90	12	55	10
Japanese sardine		-	25	1	-
Mackerels		-	-	1	-

S.T. : Surface temperature

Wr.: Weather (r: rain, o: 100% clouded, c:75-99%clouded, bc: 25-75% clouded)

Table 5 Composition of drift Gillnet

Mesh size(mm)	29	33	37	42	48	Total
Number of tan	half	2	2	half	2	7