

APPENDIX A

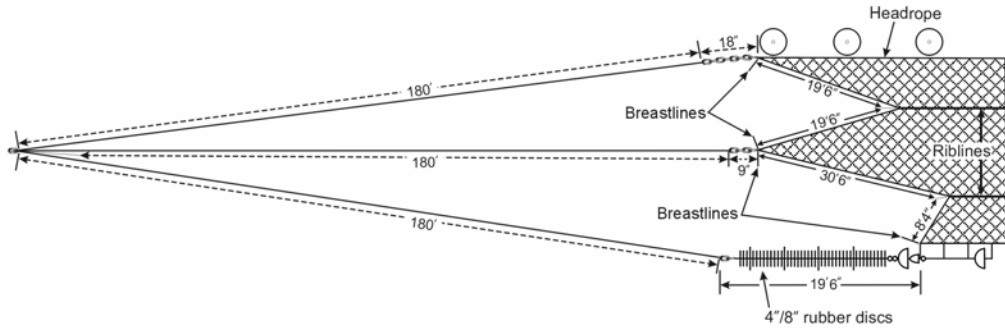
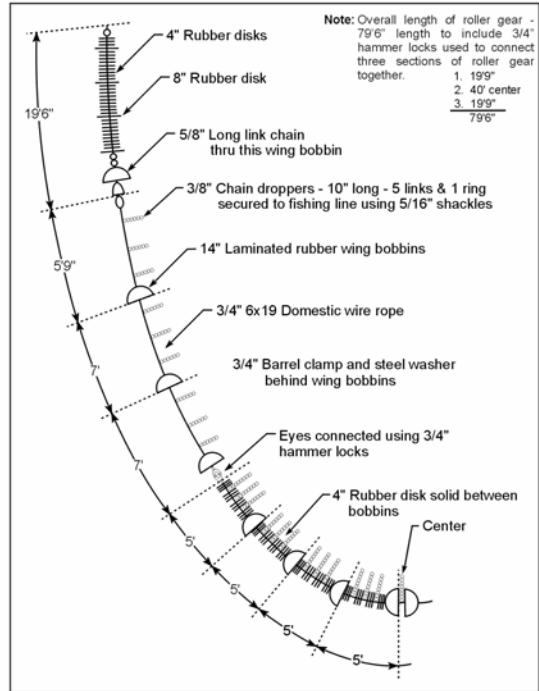
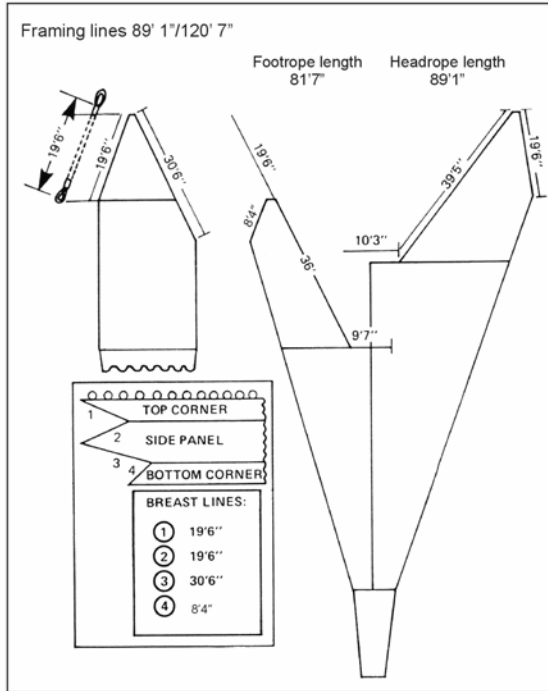
Description of Sampling Gear

Table A-1 summarizes specifications of the Poly-Nor'Eastern trawl and Figure A-1 is a schematic diagram of the trawl and accessories used during the 2002 Aleutian Islands bottom trawl survey.

Appendix Table A-1.--Specifications of the trawl, otter doors, and accessory gear used during the 2002 Aleutian Islands bottom trawl survey.

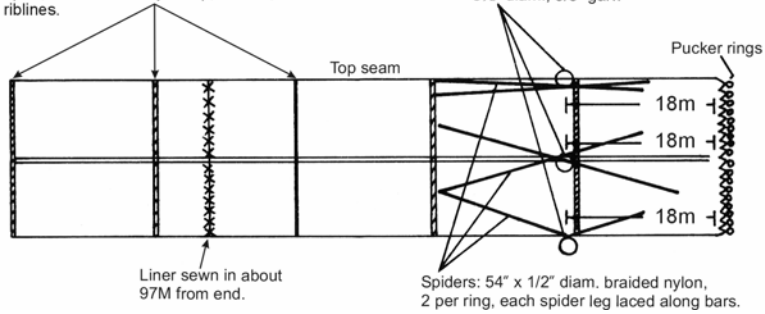
Equipment	Specifications
Netting -	Polyethylene, 12.7 cm (5 in), 4 & 5 millimeter (mm) twine.
Headrope -	27.2 m (89 ft-1 in), 1.3 cm (1/2 in) 6 x 19 gauge galvanized wire rope, wrapped with 1 cm (3/8 in) 3-strand polypropylene rope.
Footrope -	24.9 m (81 ft-7 in), 1 cm (3/8 in) 6 x 19 gauge galvanized wire rope wrapped with polypropylene rope.
Fishing line -	24.3 m (79 ft-7 in), shot-peened long-link chain. Safe working load 5.1 metric ton (t).
Roller gear -	24.2 m (79 ft-6 in), 1.9 cm (3/4 in) diameter, 6 x 19 gauge galvanized wire rope strung through 10.2 cm (4 in) diameter rubber disks, 16 rubber wing bobbins 35.6 cm (14 in) in diameter and 34 galvanized rings hung with 30.5 cm (12 in) long dropper chain.
Breastlines -	1 cm (3/8 in) 6 x 19 gauge galvanized wire rope wrapped with 1 cm polypropylene. Top corner 5.9 m (19 ft-6 in); bottom corner 2.6 m (8 ft-8 in); top side panel 5.9 m; bottom side panel 9.3 m (30 ft-6 in).
Riblines -	1.9 cm (3/4 in) Samson 2 & 1 Duralon. Top two 34.8 m (114.17 ft) and bottom two 31.8 m (104.45 ft), hung 98% of stretched seam length.
Flotation -	Cycolac trawl floats, 30.5 cm (12 in) diameter, 21 pieces. Buoyancy 10.2 kg (22.4 lb.) each and rated for 800 m (400 fm) depth.
Codend liner -	Nylon, no. 18, 3.2 cm (1-1/4 in) stretched mesh (M), 315 M circumference and 200 M deep, laced to inner bag. When stretched the liner protrudes 61-91 cm (2 to 3 ft) beyond codend.
Restrictors -	Polypropylene rope, 2.5 cm (1 in) diameter, 4.3 m (14 ft) circumference and secured loosely to codend at each ribline, 1.2 m (4 ft) apart, 5 pieces.
Splitting gear -	1.3 cm (1/2 in) diameter 6.4 m (21 ft) long galvanized wire rope is passed through 4 galvanized steel rings which are secured to the codend with 1.3 cm diameter braided nylon "spiders".
Side seams -	Panels are joined to each other gathering 3 M (4 knots) from each panel. Panels that are secured to framing lines have a selvaged edge created by gathering 3 M.
Rigging -	3 dandyines each side, 1.6 cm (5/8 in) diameter galvanized wire rope, 54.9 m (30 fm) long.
Doors -	1.8 m x 2.7 m (6 x 9 ft), steel V-doors, approximately 800 kg (1,800 lb) each.
Chafing gear -	Polypropylene 10 in M, 1 cm (3/8 in) polyrope hog-ringed (or interwoven) together, 46 M circumference and 21 M deep, laced to outer bag 68.5 M up from the pucker rings.

Poly Nor' Eastern Bottom Trawl



Restrictors: 5 ea., 14" circumference, made of 1 1/4" poly rope spliced to form a ring, hung 4' apart, secured loosely at top, bottom, and at riblines.

Rings for splitting strap, 5 1/2" diam., 5/8" galv.



APPENDIX B

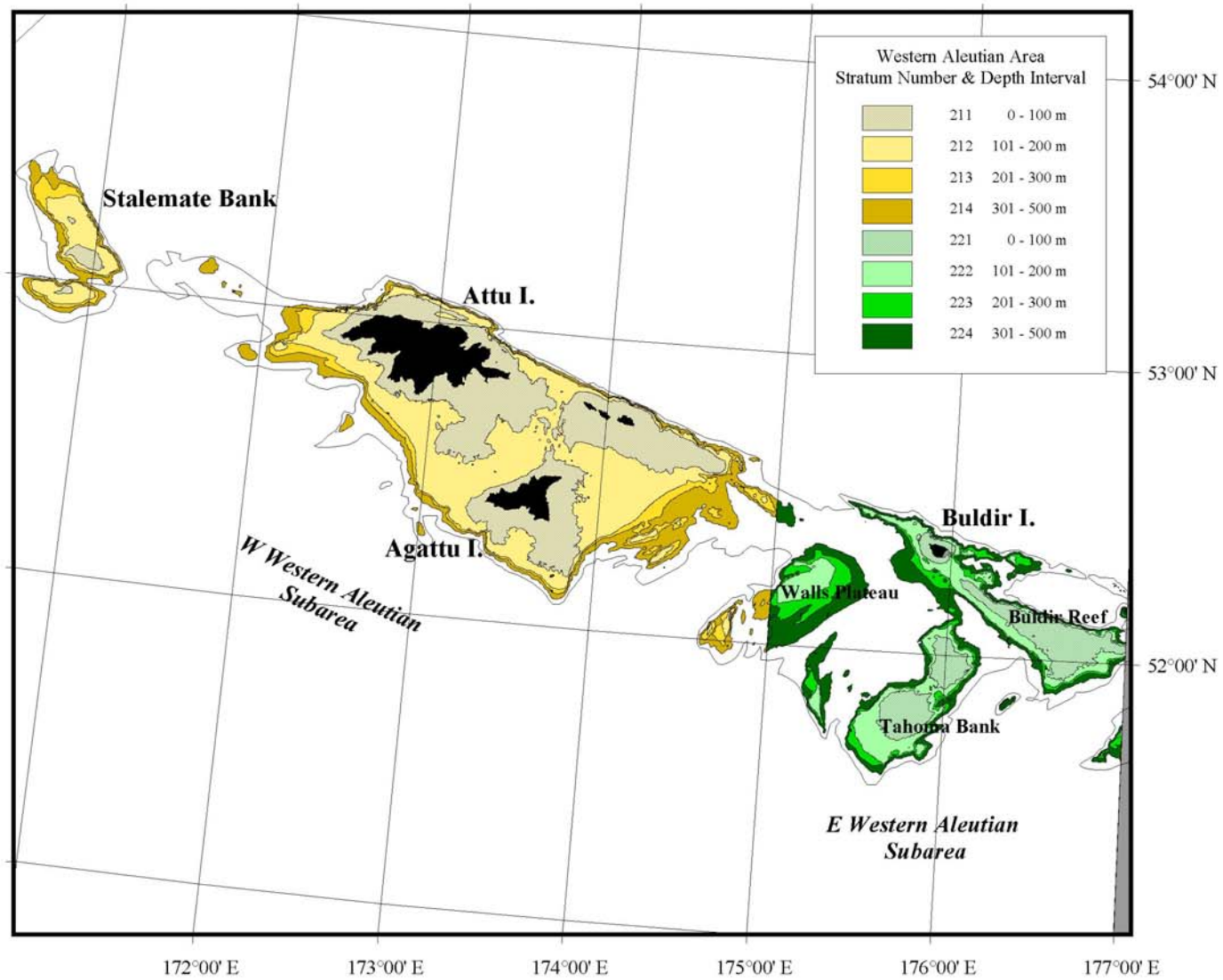
Description of the survey region and sampling subareas

Appendix Table B-1 summarizes the major sampling areas, subareas, stratum codes (see Appendix Figures B1 through B4), depth intervals, and areas in square kilometers.

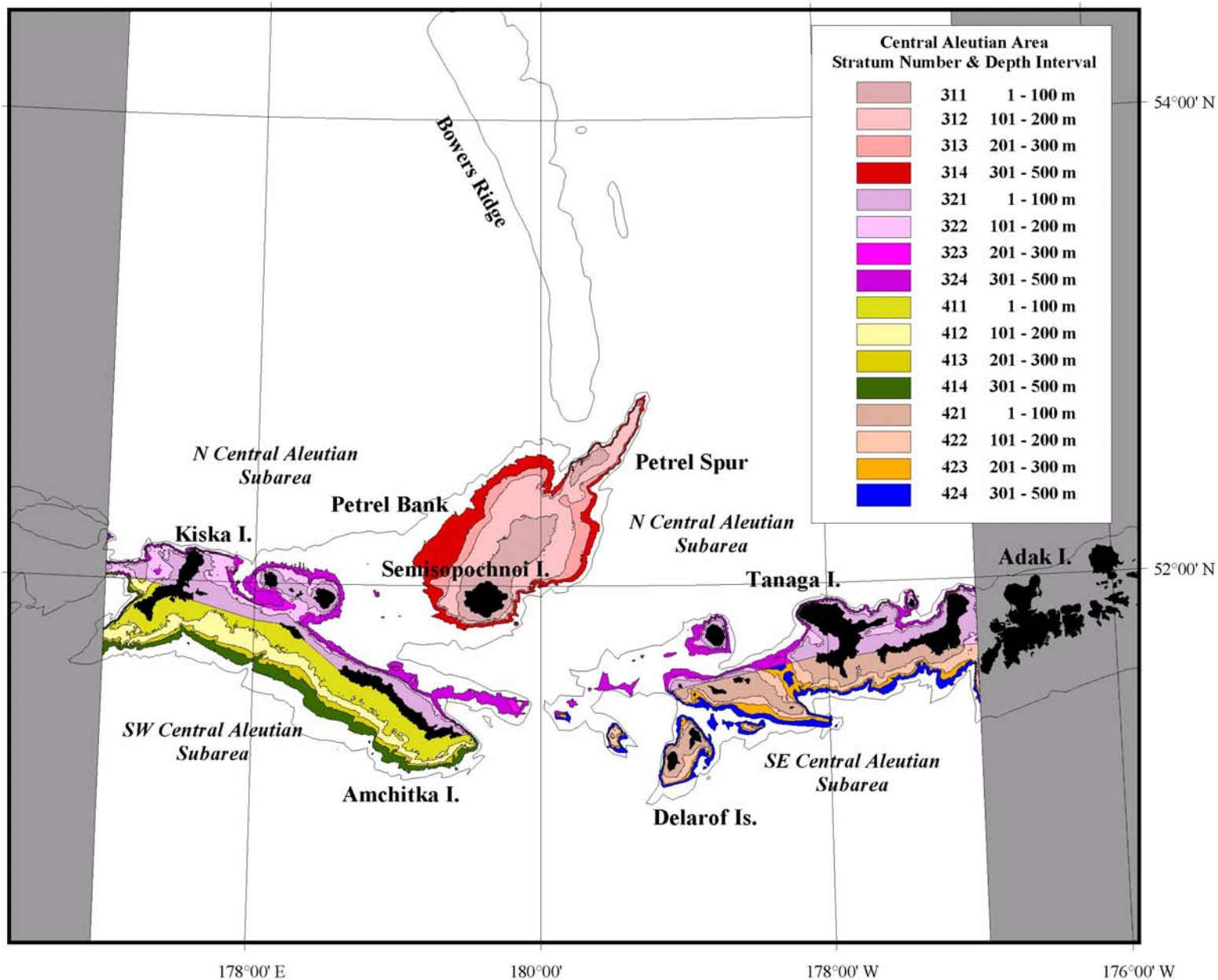
Appendix Figures B1 – B4 show geographic features, stratum isobaths, area, subarea, and stratum boundaries.

Appendix Table B-1.--Survey sampling areas, subareas, stratum codes, depth intervals, and areas.

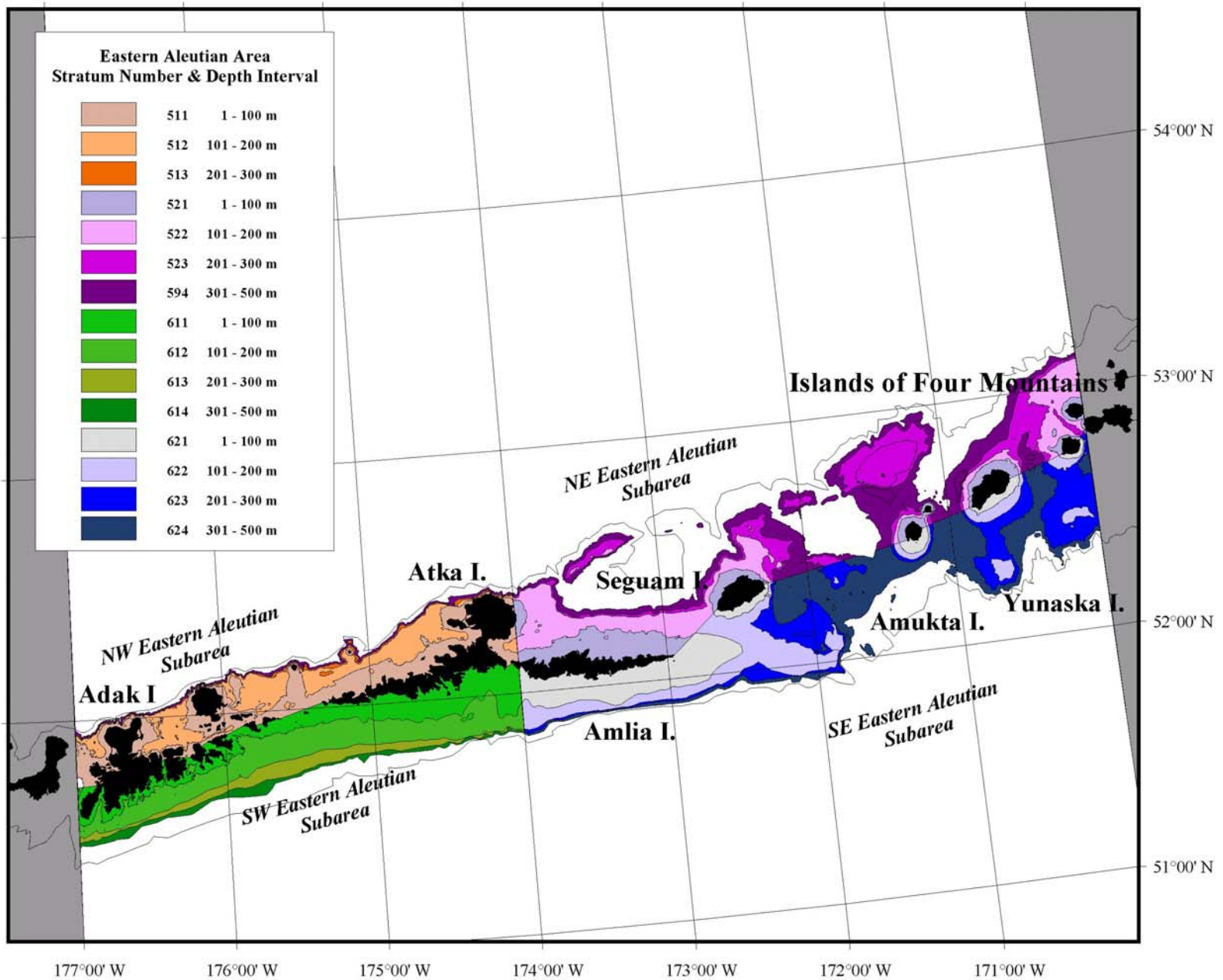
NPFMC Area	Subarea Description	Stratum code	Depth interval (m)	Area (km²)	
Western Aleutian	W Western Aleutian	211	1 - 100	3,693	
	W Western Aleutian	212	101 - 200	4,065	
	W Western Aleutian	213	201 - 300	940	
	W Western Aleutian	214	301 - 500	1,711	
	E Western Aleutian	221	1 - 100	1,183	
	E Western Aleutian	222	101 - 200	1,252	
	E Western Aleutian	223	201 - 300	783	
	E Western Aleutian	224	301 - 500	1,561	
Central Aleutian	Petrel Bank	311	1 - 100	960	
	Petrel Bank	312	101 - 200	1,736	
	Petrel Bank	313	201 - 300	766	
	Petrel Bank	314	301 - 500	1,237	
	N Central Aleutian	321	1 - 100	2,106	
	N Central Aleutian	322	101 - 200	1,066	
	N Central Aleutian	323	201 - 300	439	
	N Central Aleutian	324	301 - 500	1,240	
	SW Central Aleutian	411	1 - 100	1,618	
	SW Central Aleutian	412	101 - 200	1,052	
	SW Central Aleutian	413	201 - 300	426	
	SW Central Aleutian	414	301 - 500	789	
	SE Central Aleutian	421	1 - 100	1,164	
	SE Central Aleutian	422	101 - 200	752	
	SE Central Aleutian	423	201 - 300	477	
	SE Central Aleutian	424	301 - 500	714	
	Eastern Aleutian	NW Eastern Aleutian	511	1 - 100	1,932
		NW Eastern Aleutian	512	101 - 200	1,594
NW Eastern Aleutian		513	201 - 300	156	
NE Eastern Aleutian		521	1 - 100	1,268	
NE Eastern Aleutian		522	101 - 200	2,013	
NE Eastern Aleutian		523	201 - 300	1,969	
Combined Eastern AI		594	301 - 500	2,670	
SW Eastern Aleutian		611	1 - 100	1,907	
SW Eastern Aleutian		612	101 - 200	2,261	
SW Eastern Aleutian		613	201 - 300	716	
SW Eastern Aleutian		614	301 - 500	438	
SE Eastern Aleutian		621	1 - 100	1,741	
SE Eastern Aleutian		622	101 - 200	1,900	
SE Eastern Aleutian		623	201 - 300	2,061	
SE Eastern Aleutian		624	301 - 500	2,575	
Southern Bering Sea		W Southern Bering Sea	711	1 - 100	1,586
	W Southern Bering Sea	712	101 - 200	670	
	E Southern Bering Sea	721	1 - 100	2,440	
	E Southern Bering Sea	722	101 - 200	1,179	
	Combined S. Bering Sea	793	201 - 300	564	
	Combined S. Bering Sea	794	301 - 500	1,043	



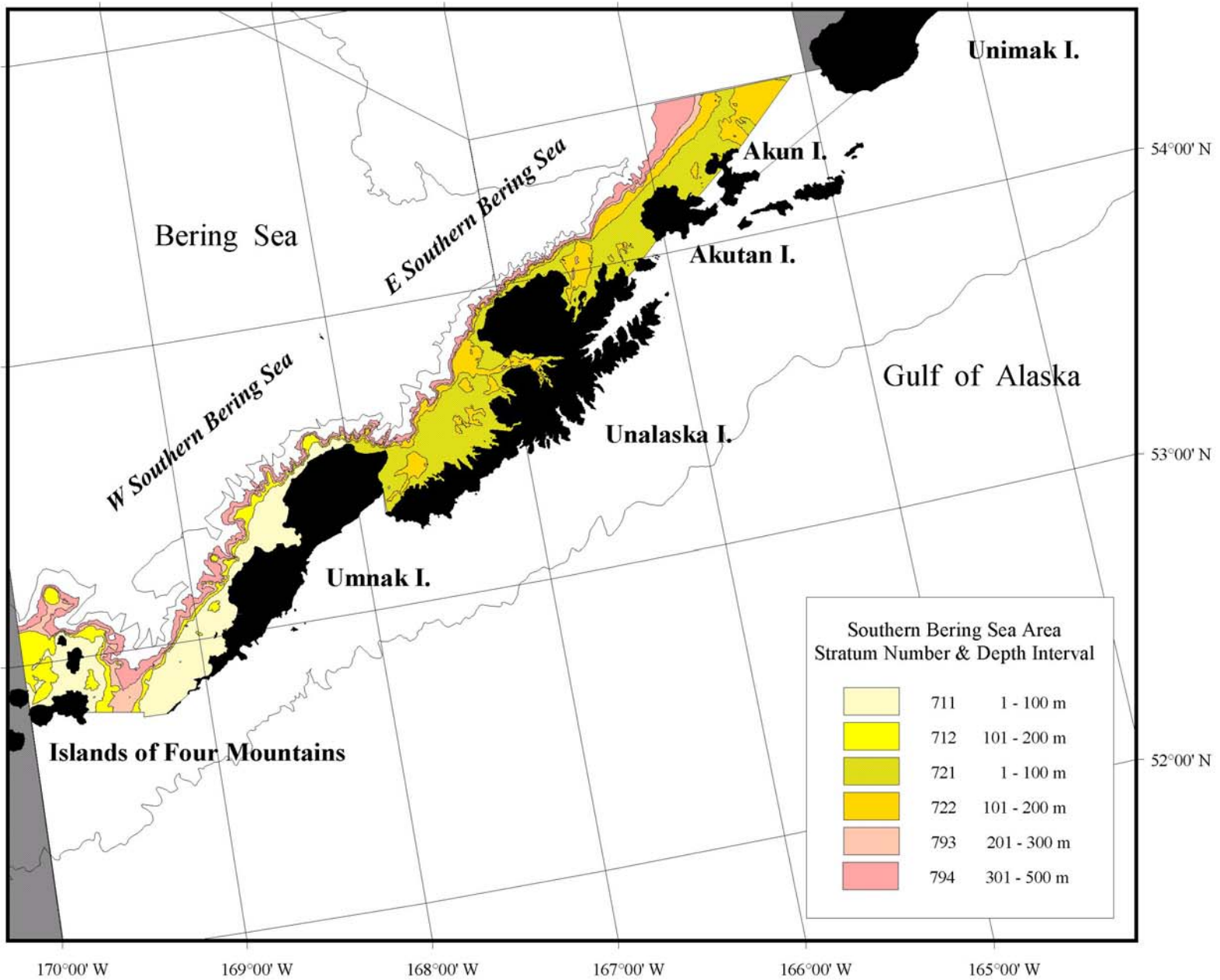
Appendix Figure B-1.--Strata sampled during the Aleutian Islands groundfish trawl survey, by NPFMC management area and sampling subarea.



Appendix Figure B-2.--Strata sampled during the Aleutian Islands groundfish trawl survey, by NPFMC management area and sampling subarea.



Appendix Figure B-3.--Strata sampled during the Aleutian Islands groundfish trawl survey, by NPFMC management area and sampling subarea.



Appendix Figure B-4.--Strata sampled during the Aleutian Islands groundfish trawl survey, by NPFMC management area and sampling subarea.

APPENDIX C

Species Encountered

Appendix Tables C-1 and C-2 list fish and invertebrate taxa encountered and identified during the 2002 Aleutian Islands bottom trawl survey. Most common and scientific names are from Robins *et al.* (1991). Order of listings and common names used are for convenience and do not imply adherence to a particular phylogenetic system.

Appendix Table C-1.--Fish species encountered and identified during the 2002 Aleutian bottom trawl survey.

Family	Species name	Common name
Petromyzontidae	<i>Lampetra tridentata</i>	Pacific lamprey
Lamnidae	<i>Lamna ditropis</i>	salmon shark
Squalidae	<i>Somniosus pacificus</i>	Pacific sleeper shark
Rajidae	<i>Raja binoculata</i>	big skate
	<i>Bathyraja interrupta</i>	Bering skate
	<i>Bathyraja taranetzi</i>	mud skate
	<i>Bathyraja parmifera</i>	Alaska skate
	<i>Bathyraja aleutica</i>	Aleutian skate
	<i>Bathyraja lindbergi</i>	commander skate
	<i>Bathyraja maculata</i>	whiteblotched skate
	<i>Bathyraja minispinosa</i>	whitebrow skate
Pleuronectidae	<i>Atheresthes stomias</i>	arrowtooth flounder
	<i>Atheresthes evermanni</i>	Kamchatka flounder
	<i>Reinhardtius hippoglossoides</i>	Greenland turbot
	<i>Hippoglossus stenolepis</i>	Pacific halibut
	<i>Hippoglossoides elassodon</i>	flathead sole
	<i>Parophrys vetulus</i>	English sole
	<i>Microstomus pacificus</i>	Dover sole
	<i>Glyptocephalus zachirus</i>	rex sole
	<i>Limanda aspera</i>	yellowfin sole
	<i>Platichthys stellatus</i>	starry flounder
	<i>Lepidopsetta polyxystra</i>	northern rock sole
	<i>Lepidopsetta bilineata</i>	southern rock sole
	<i>Isopsetta isolepis</i>	butter sole
Agonidae	<i>Sarritor leptorhynchus</i>	longnose poacher
	<i>Sarritor frenatus</i>	sawback poacher
	<i>Bathyagonus alascanus</i>	gray starsnout
	<i>Bathyagonus infraspinatus</i>	spinycheek starsnout
	<i>Bathyagonus nigripinnis</i>	blackfin poacher
	<i>Podothecus acipenserinus</i>	sturgeon poacher
	<i>Aspidophoroides bartoni</i>	Aleutian alligatorfish
	<i>Hypsagonus quadricornis</i>	fourhorn poacher
Ammodytidae	<i>Ammodytes hexapterus</i>	Pacific sand lance
Anoplopomatidae	<i>Anoplopoma fimbria</i>	sablefish
Bathylagidae	<i>Bathylagus pacificus</i>	Pacific blacksmelt
	<i>Bathylagus milleri</i>	robust blacksmelt
	<i>Leuroglossus schmidti</i>	northern smoothtongue
	<i>Leuroglossus stilbius</i>	California smoothtongue
Bathymasteridae	<i>Bathymaster caeruleofasciatus</i>	Alaskan ronquil
	<i>Bathymaster leurolepis</i>	smallmouth ronquil
	<i>Bathymaster signatus</i>	searcher
Chauliodontidae	<i>Chauliodus macouni</i>	Pacific viperfish

Appendix Table C-1.--Continued.

Family	Species name	Common name	
Macrouridae	<i>Albatrossia pectoralis</i>	giant grenadier	
Cottidae	<i>Thyriscus anoplus</i>	sponge sculpin	
	<i>Gymnocanthus galeatus</i>	armorhead sculpin	
	<i>Bolinia euryptera</i>		
	<i>Malacocottus kincaidi</i>	blackfin sculpin	
	<i>Malacocottus zonurus</i>	darkfin sculpin	
	<i>Hemilepidotus gilberti</i>	banded Irish lord	
	<i>Hemilepidotus zapus</i>	longfin Irish lord	
	<i>Hemilepidotus jordani</i>	yellow Irish lord	
	<i>Triglops forficata</i>	scissortail sculpin	
	<i>Triglops metopias</i>	crescent-tail sculpin	
	<i>Triglops szepticus</i>	spectacled sculpin	
	<i>Triglops pingeli</i>	ribbed sculpin	
	<i>Triglops macellus</i>	roughspine sculpin	
	<i>Myoxocephalus polyacanthocephalus</i>	great sculpin	
	<i>Myoxocephalus jaok</i>	plain sculpin	
	<i>Enophrys diceraus</i>	antlered sculpin	
	<i>Dasycottus setiger</i>	spinyhead sculpin	
	<i>Nautichthys pribilovius</i>	eyeshade sculpin	
	<i>Nautichthys oculofasciatus</i>	sailfin sculpin	
	<i>Rhamphocottus richardsoni</i>	grunt sculpin	
	<i>Hemitripterus bolini</i>	bigmouth sculpin	
	<i>Icelus spiniger</i>	thorny sculpin	
		<i>Icelus euryops</i>	
		<i>Icelus uncinialis</i>	
		<i>Ratrinus scutiger</i>	
		<i>Jordania zonope</i>	longfin sculpin
	Trichodontidae	<i>Trichodon trichodon</i>	Pacific sandfish
Gadidae	<i>Gadus macrocephalus</i>	Pacific cod	
	<i>Theragra chalcogramma</i>	walleye pollock	
Hexagrammidae	<i>Pleurogrammus monoptyerygius</i>	Atka mackerel	
	<i>Hexagrammos decagrammus</i>	kelp greenling	
Cyclopteridae	<i>Aptocyclus ventricosus</i>	smooth lumpsucker	
	<i>Lethotremus muticus</i>		
	<i>Eumicrotremus birulai</i>	round lumpsucker	
	<i>Eumicrotremus orbis</i>	Pacific spiny lumpsucker	
	<i>Eumicrotremus derjugini</i>	leatherfin lumpsucker	
	<i>Liparis gibbus</i>	dusky snailfish	
	<i>Liparis ochotensis</i>		
	<i>Crystallichthys cyclospilus</i>	blotched snailfish	
	<i>Elassodiscus tremebundus</i>		
	<i>Allocareproctus jordani</i>		
	<i>Careproctus melanurus</i>	blacktail snailfish	

Appendix Table C-1.--Continued

Family	Species name	Common name
Cyclopteridae - (cont.)	<i>Careproctus furcellus</i>	forktail snailfish
	<i>Careproctus gilberti</i>	smalldisk snailfish
	<i>Careproctus rastrinus</i>	salmon snailfish
	<i>Paraliparis cephalus</i>	swellhead snailfish
	<i>Paraliparis</i> sp.	unidentified snailfish
	<i>Nectoliparis pelagicus</i>	tadpole snailfish
Melamphaeidae	<i>Poromitra crassiceps</i>	crested bigscale
Myctophidae	<i>Stenobranchius leucopsarus</i>	northern lampfish
	<i>Stenobranchius nannochir</i>	garnet lampfish
	<i>Diaphus theta</i>	California headlightfish
	<i>Lampanyctus jordani</i>	brokenline lampfish
Osmeridae	<i>Protomyctophum thompsoni</i>	northern flashlightfish
	<i>Thaleichthys pacificus</i>	eulachon
	<i>Mallotus villosus</i>	capelin
Salmonidae	<i>Oncorhynchus tshawytscha</i>	chinook salmon
	<i>Oncorhynchus keta</i>	chum salmon
Cryptacanthodidae	<i>Lyconectes aleutensis</i>	dwarf wrymouth
Stichaeidae	<i>Lumpenus sagitta</i>	snake prickleback
	<i>Lumpenella longirostris</i>	longsnout prickleback
	<i>Chirolophis decoratus</i>	decorated warbonnet
	<i>Poroclinus rothrocki</i>	whitebarred prickleback
	<i>Bryozoichthys lysimus</i>	nutcracker prickleback
	<i>Bryozoichthys marjorius</i>	pearly prickleback
Zaproridae	<i>Zaprora silenus</i>	prowfish
Zoarcidae	<i>Bothrocara pusillum</i>	Alaska eelpout
	<i>Lycodes palearis</i>	wattled eelpout
	<i>Lycodes concolor</i>	ebony eelpout
	<i>Lycodes diapterus</i>	black eelpout
	<i>Lycodes brevipes</i>	shortfin eelpout
Scorpaenidae	<i>Sebastolobus alascanus</i>	shortspine thornyhead
	<i>Sebastes aleutianus</i>	rougeye rockfish
	<i>Sebastes alutus</i>	Pacific ocean perch
	<i>Sebastes brevispinis</i>	silvergrey rockfish
	<i>Sebastes ciliatus</i>	dark rockfish
	<i>Sebastes variabilis</i>	dusky rockfish
	<i>Sebastes polyspinis</i>	northern rockfish
	<i>Sebastes borealis</i>	shortraker rockfish

Appendix Table C-2.--Invertebrate species encountered during the 2002 Aleutian bottom trawl survey.

Phylum	Species/Taxon name	Common name
Cnidaria	Hydrozoa (Class)	unidentified hydroid
	Scyphozoa (Class)	unidentified jellyfish
	<i>Periphylla periphylla</i>	
	<i>Chrysoara melanaster</i>	
	<i>Chrysaora</i> sp.	chrysaora jellyfish
	<i>Atolla</i> sp.	
	<i>Aurelia labiata</i>	
	<i>Aurelia</i> sp.	
	<i>Cyanea</i> sp.	
	<i>Alcyonaria</i> sp.	unidentified octocoral
	<i>Alcyonium</i> sp.	
	<i>Anthomastus</i> sp. A (red)	
	<i>Anthomastus</i> sp. B (gray)	
	<i>Anthomastus</i> sp.	
	Gorgonacea (Order)	unidentified coral
	<i>Primnoa willeyi</i>	red tree coral
	<i>Primnoa</i> sp.	
	<i>Swiftia</i> sp.	
	<i>Paragorgia arborea</i>	Kamchatka coral
	<i>Paragorgi</i> sp.	
	<i>Euplexaura marki</i>	
	<i>Euplexaura</i> sp.	
	<i>Callogorgia</i> sp.	
	<i>Calcigorgia spiculifera</i>	
	<i>Calcigorgia</i> sp.	
	Pennatulacea (Order)	sea pens and sea whips
	<i>Halipterus californica</i>	
	<i>Ptilosarcus gurneyi</i>	orange sea pen
	Actiniaria (Order)	sea anemones
	<i>Actinauge verrillii</i>	
	<i>Metridium giganteum</i>	
<i>Metridium</i> sp.		
<i>Stomphia</i> sp.		
<i>Tealia crassicornis</i>		
<i>Cribrinopsis fernaldi</i>		
<i>Liponemis brevicornis</i>		

Appendix Table C-2.--Continued.

Phylum	Species/Taxon name	Common name
Cnidaria - (continued)	Scleractinia (Order)	unidentified stony coral
	<i>Javania borealia</i>	
	<i>Caryophyllia alaskensis</i>	Alaska cup coral
	<i>Caryophyllia</i> sp.	
	<i>Stylaster brochi</i>	
	<i>Stylaster polyorchis</i>	
	<i>Stylaster</i> sp.	
	Stylasterina (Order)	unidentified hydrocoral
	<i>Crypthelia trophostega</i>	
	<i>Cyclohelix lancellata</i>	
	<i>Distichopora borealis</i>	
	<i>Distichopora</i> sp.	
	<i>Errinopora nanneca</i>	
	<i>Errinopora</i> sp.	
	<i>Plumarella</i> sp.	
	<i>Thouarella</i> sp.	
	<i>Keratoisis</i> sp.	bamboo coral
	<i>Fanellia compressa</i>	
	<i>Fanellia</i> sp.	
	<i>Muriceides</i> sp.	
	<i>Amphilaphis</i> sp. 1	
	<i>Amphilaphis</i> sp. 2	
	<i>Amphilaphis</i> sp. 3	
<i>Arthrogorgia</i> sp.		
Ctenophora	Various unidentified species	unidentified comb jellies
Annelida	Polychaeta (Class)	unidentified polychaete worms
	Aphroditidae (Family).	unidentified sea mouse
	<i>Aphrodita</i> sp.	sea mouse
	Polynoidae (Family)	unidentified scale worm
	<i>Eunoe</i> sp.	
	<i>Eunoe nodosa</i>	giant scale worm
	<i>Eunoe depressa</i>	depressed scale worm
	Hirudinea (Class)	unidentified leech
	<i>Carcinobdella cyclostomum</i>	striped sea leech
	Arthropoda	Gammaridae (Family)
<i>Caprella</i> sp.		unident. caprellid amphipod
Isopoda (Order)		unidentified isopod

Appendix Table C-2.--Continued.

Phylum	Species/Taxon name	Common name
Arthropoda - (continued)	<i>Lironeca</i> sp.	
	<i>Gnathophausia ingens</i>	
	Thoracica (Order)	barnacles
	<i>Balanus evermanni</i>	giant barnacle
	<i>Balanus rostratus</i>	beaked barnacle
	<i>Scalpellum cornutum</i>	eared barnacle
	<i>Sergestes</i> sp.	
	<i>Pandalus jordani</i>	ocean shrimp
	<i>Pandalus borealis</i>	northern shrimp
	<i>Pandalus tridens</i>	yellowleg pandalid
	<i>Pandalus hypsinotus</i>	coonstripe shrimp
	<i>Pandalus</i> sp.	unidentified pandalid shrimp
	<i>Pandalopsis dispar</i>	sidestripe shrimp
	<i>Pandalopsis ampla</i>	
	<i>Eualus</i> sp.	
	<i>Lebbeus groenlandicus</i>	
	<i>Lebbeus</i> sp.	
	<i>Crangon communis</i>	twospine crangon
	<i>Crangon</i> sp.	unidentified crangonid shrimp
	<i>Argis dentata</i>	Arctic argid
	<i>Argis lar</i>	kuro argid
	<i>Argis</i> sp.	unidentified argid shrimp
	<i>Sclerocrangon boreas</i>	sculptured shrimp
	<i>Pasiphaea pacifica</i>	Pacific glass shrimp
	<i>Pasiphaea tarda</i>	crimson pasiphaeid
	<i>Cancer oregonensis</i>	Oregon rock crab
	<i>Oregonia gracilis</i>	graceful decorator crab
	<i>Chorilia longipes</i>	longhorned decorator crab
	<i>Chionoecetes bairdi</i>	Tanner crab
	<i>Hyas lyratus</i>	Pacific lyre crab
	<i>Chionoecetes opilio</i>	narrow snow crab
	<i>Pagurus brandti</i>	sponge hermit crab
	<i>Pagurus aleuticus</i>	Aleutian hermit crab
	<i>Labidochirus splendescens</i>	splendid hermit crab
	<i>Pagurus confragosus</i>	knobbyhand hermit crab
	<i>Pagurus dalli</i>	whiteknee hermit crab
<i>Pagurus kennerlyi</i>	bluespine hermit crab	

Appendix Table C-2.--Continued.

Phylum	Species/Taxon name	Common name	
Arthropoda - (continued)	<i>Pagurus trigonocheirus</i>	fuzzy hermit crab	
	<i>Pagurus ochotensis</i>	Alaskan hermit crab	
	<i>Pagurus tanneri</i>	longhand hermit crab	
	<i>Elassochirus tenuimanus</i>	widehand hermit crab	
	<i>Elassochirus cavimanus</i>	purple hermit	
	<i>Elassochirus</i> sp.		
	Lithodidae (Family)	unidentified stone crab	
	<i>Lopholithodes mandtii</i>		
	<i>Acantholithodes hispidus</i>	fuzzy crab	
	<i>Lithodes aequispina</i>	golden king crab	
	<i>Hapalogaster grebnitzkii</i>		
	<i>Hapalogaster</i> sp.		
	<i>Rhinolithodes wosnessenskii</i>	rhinoceros crab	
	<i>Paralithodes camtschaticus</i>	red king crab	
	<i>Paralithodes brevipes</i>	brown king crab	
	<i>Placetrion wosnessenskii</i>	scaled crab	
	<i>Erimacrus isenbeckii</i>	horsehair crab	
	<i>Hyas</i> sp.		
	Pycnogonida (Class)	unidentified sea spiders	
	<i>Colossendeis dofleini</i>		
	Mollusca	<i>Placiphorella pacifica</i>	
		<i>Placiphorella</i> sp.	
		Onchidoridae (Family)	unidentified nudibranch
<i>Tochuina tetraquetra</i>		giant orange tochui	
<i>Dendronotus</i> sp.			
<i>Tritonia diomedea</i>		rosy triton	
<i>Tritonia</i> sp.			
<i>Chlamylla</i> sp.			
Doridae (Family)		dorid nudibranch	
<i>Cranopsis major</i>			
<i>Bulbus fragilis</i>		fragile moonsnail	
<i>Natica clausa</i>		Arctic moonsnail	
<i>Natica</i> sp.		unidentified moonsnail	
<i>Crepidula grandis</i>		great slippersnail	
<i>Colus periscelidus</i>		garter whelk	
<i>Colus jordani</i>			
<i>Colus</i> sp.			

Appendix Table C-2.--Continued.

Phylum	Species/Taxon name	Common name
Mollusca - (continued)	<i>Pyrulofusus dexius</i>	
	<i>Volutopsius harpa</i>	left-hand whelk
	<i>Volutopsius middendorffi</i>	tulip whelk
	<i>Volutopsius melonis</i>	
	<i>Volutopsius</i> sp.	
	<i>Beringius kennicottii</i>	
	<i>Beringius undatus</i>	
	<i>Beringius</i> sp.	
	<i>Neptunea amianta</i>	
	<i>Neptunea lyrata</i>	lyre whelk
	<i>Neptunea</i> sp.	whelk
	<i>Volutopsius callorhinus</i>	
	<i>Torellia ammonia</i>	
	<i>Boreotrophon</i> sp.	
	<i>Fusitriton oregonensis</i>	Oregon triton
	<i>Buccinum picturatum</i>	
	<i>Buccinum castaneum</i>	chestnut whelk
	<i>Buccinum</i> sp.	
	<i>Bathybuccinum clarki</i>	Roger's buccinum
	<i>Bathybuccinum ovulum</i>	
	<i>Arctomelon stearnsii</i>	Alaska volute
	Bivalvia (Class)	unidentified bivalve
	<i>Modiolus modiolus</i>	northern horsemussel
	<i>Mytilus</i> sp.	
	<i>Chlamys behringiana</i>	Iceland scallop
	<i>Chlamys rubida</i>	reddish scallop
	<i>Chlamys</i> sp.	
	<i>Patinopecten caurinus</i>	weathervane scallop
	<i>Parvamussium alaskensis</i>	
	<i>Hiatella arctica</i>	Arctic hiatella
	<i>Yoldia</i> sp.	
	<i>Musculus discors</i>	discordant mussel
	<i>Clinocardium nuttallii</i>	Nuttall cockle
<i>Clinocardium ciliatum</i>	hairy cockle	
<i>Serripes groenlandicus</i>	Greenland cockle	
<i>Serripes</i> sp.		
<i>Mya</i> sp.		

Appendix Table C-2.--Continued.

Phylum	Species/Taxon name	Common name	
Mollusca - (continued)	<i>Pododesmus macroschisma</i>	Alaska falsejingle	
	<i>Pododesmus</i> sp.		
	Octopodidae (Family)		
	<i>Opisthoteuthis californiana</i>	flapjack devilfish	
	<i>Octopus dofleini</i>	giant octopus	
	<i>Octopus leioderma</i>	smoothskin octopus	
	<i>Rossia pacifica</i>	eastern Pacific bobtail squid	
	<i>Gonatus</i> sp.		
	<i>Berryteuthis magister</i>	magistrate armhook squid	
	<i>Gonatopsis</i> sp.		
	<i>Gonatopsis borealis</i>		
	<i>Chiroteuthis calyx</i>		
	Echinodermata	<i>Evasterias echinosoma</i>	
		<i>Evasterias trochelii</i>	
		<i>Evasterias</i> sp.	
		<i>Orthasterias koehleri</i>	
		<i>Orthasterias</i> sp.	
<i>Leptasterias hylodes</i>			
<i>Leptasterias coei</i>			
<i>Pycnopodia helianthoides</i>			
<i>Lethasterias nanimensis</i>			
<i>Pedicellaster magister</i>			
<i>Stephanasterias albula</i>			
<i>Pisaster</i> sp.			
<i>Henricia sanguinolenta</i>			
<i>Henricia aspera</i>			
<i>Henricia leviuscula</i>			
<i>Henricia asthenactis</i>			
<i>Henricia longispina</i>			
<i>Henricia</i> sp.			
<i>Leptasterias polaris</i>			
<i>Leptasterias arctica</i>			
<i>Leptasterias</i> sp.			
<i>Gephyreaster swifti</i>			
<i>Hippasteria spinosa</i>			
<i>Hippasteria</i> sp.			
<i>Pseudarchaster parelii</i>			

Appendix Table C-2.--Continued.

Phylum	Species/Taxon name	Common name
Echinodermata – (cont.)	<i>Pseudarchaster</i> sp.	
	<i>Mediaster aequalis</i>	
	<i>Ceramaster japonicus</i>	red bat star
	<i>Ceramaster patagonicus</i>	orange bat star
	<i>Ceramaster arcticus</i>	
	<i>Ceramaster clarki</i>	
	<i>Ceramaster</i> sp.	
	<i>Solaster endeca</i>	
	<i>Solaster hypothrissus</i>	
	<i>Solaster dawsoni</i>	
	<i>Solaster paxillatus</i>	
	<i>Solaster</i> sp.	
	<i>Crossaster borealis</i>	
	<i>Crossaster papposus</i>	rose sea star
	<i>Crossaster</i> sp.	
	<i>Lophaster furcilliger</i>	
	<i>Pteraster tessellatus</i>	
	<i>Pteraster militaris</i>	
	<i>Pteraster temnochiton</i>	
	<i>Pteraster pulvillus</i>	
	<i>Pteraster</i> sp.	
	<i>Diplopteraster multipes</i>	
	<i>Asterias amurensis</i>	purple-orange seastar
	<i>Ctenodiscus crispatus</i>	common mud star
	<i>Leptychaster arcticus</i>	
	<i>Leptychaster</i> sp.	
	<i>Cladaster validus</i>	
	<i>Dipsacaster borealis</i>	
	<i>Luidiaster dawsoni</i>	
	<i>Anteliaster</i> sp.	
	<i>Strongylocentrotus droebachiensis</i>	green sea urchin
	<i>Strongylocentrotus polyacanthus</i>	
	<i>Strongylocentrotus purpuratus</i>	
<i>Strongylocentrotus pallidus</i>		
<i>Strongylocentrotus</i> sp.		
<i>Alloccentrotus fragilis</i>		
<i>Echinarachnius parma</i>	Parma sand dollar	

Appendix Table C-2.--Continued.

Phylum	Species/Taxon name	Common name
Echinodermata – (cont.)	<i>Florometra serratissima</i>	featherstar crinoid
	<i>Florometra asperima</i>	
	<i>Florometra</i> sp.	
	Ophiuridae (Family)	unidentified brittlestar
	<i>Gorgonocephalus eucnemis</i>	
	<i>Asteronyx loveni</i>	
	<i>Asteronyx</i> sp.	
	<i>Ophiura sarsi</i>	
	<i>Amphiophiura ponderosa</i>	
	<i>Ophiacantha</i> sp.	
	<i>Ophiopholis aculeata</i>	
	<i>Ophiopholis longispina</i>	
	<i>Ophiopholis</i> sp.	
	Holothuroidea (Class)	unidentified sea cucumber
	<i>Molpadia</i> sp.	
	<i>Pentamera lissoplaca</i>	
	<i>Bathyploetes</i> sp.	
	<i>Cucumaria</i> sp.	
	<i>Cucumaria fallax</i>	
	<i>Psolus fabricii</i>	
	<i>Psolus japonicus</i>	
	<i>Psolus squamatus</i>	
	<i>Psolus</i> sp.	
Porifera	Porifera (Phylum)	unidentified sponge
	<i>Suberites ficus</i>	hermit sponge
	<i>Suberites</i> sp.	
	<i>Aphrocallistes vastus</i>	clay pipe sponge
	<i>Mycale loveni</i>	tree sponge
	<i>Rhabdocalyptus</i> sp.	
	<i>Halichondria panicea</i>	barrel sponge
	<i>Halichondria</i> sp.	
	<i>Leucandra</i> sp.	cloud sponge
	<i>Mycale bellabellensis</i>	lampshade sponge
	<i>Myxilla incrustans</i>	scallop sponge
	<i>Polymastia</i> sp.	spud sponge
	<i>Stylissa</i> sp.	club sponge
<i>Leucosolenia blanca</i>	yellow leafy sponge	

Appendix Table C-2.--Continued.

Phylum	Species/Taxon name	Common name
Porifera – (continued)	<i>Tethya</i> sp.	ball sponge
	<i>Hylonema</i> sp.	fiberoptic sponge
	<i>Polymastia pachymastia</i>	black-orange spud sponge
	<i>Halichondria sitiens</i>	black papillate sponge
	<i>Halichondria cf. sitiens</i>	yellow green papillate sponge
	<i>Asbestopluma lycopodium</i>	drumstick sponge
	<i>Neoesperiopsis rigida</i>	
	Hexactinellida (Class)	glass sponges
Nemertea	Nemertea (Phylum)	unidentified nemertean worm
Nematoda	Nematoda (Phylum)	unidentified nematode worm
Sipuncula	Sipuncula (Phylum)	unidentified sipunculid worm
Bryozoa	Bryozoa (Phylum)	unidentified bryozoan
	<i>Eucratea loricata</i>	feathery bryozoan
	<i>Flustra serrulata</i>	leafy bryozoan
	<i>Porella compressa</i>	flattened bryozoan
	<i>Rhamphostomella costata</i>	ribbed bryozoan
	<i>Laqueus californianus</i>	
Brachiopoda		
Chordata	Acidiacea (Class)	unidentified ascidian
	<i>Thaliacea</i> sp.	unidentified salps
	<i>Styela rustica</i>	sea potato
	<i>Halocynthia aurantium</i>	sea peach
	<i>Halocynthia</i> sp.	
	<i>Aplidium</i> sp.	