

<b><u>Zone 27</u></b>									
<b>Shore</b>	south								Zone 27 is composed of Seldovia subzone 27.
<b>Total Surveys</b>	9								
<b>Start Point</b>	Kasitsna Bay								
<b>Start Lat/Long</b>									
<b>End Point</b>	west base of MacDonald Spit								
<b>End Lat/Long</b>									
<b>Dates Walked</b>	1987-89, 96, 2003								
<b>Spring Surveys</b>	8								
<b>Fall Surveys</b>	2								
<b>First Walked</b>	1987								
<b>Last Walked</b>	2003								
<b>Total Person-Hours</b>	66.25								
<b>Total Trash Bags Collected</b>	2								
<b>Total Estimated Weight of Trash Collected</b>	20								
<b><u>General Info</u></b>									
<b>Date</b>	25-Apr-87	28-Apr-88	8-May-88	29-Apr to 6	29-Apr to 6	29-Apr to 6	30-Apr-89	12-May-89	24-Sep-96
<b>Subzone</b>	27	27	27	27	27	27	27	27	27
<b>Start Time</b>	700						930	1100	1100
<b>End Time</b>	1015						1030	1400	1330
<b>Lowest Tide</b>									
<b>at time</b>									
<b>Temperature (F)</b>									60
<b>Sky</b>									sunny
<b>Vertical Zones Walked:</b>									
High		x							
Middle									x
Low	x								
<b># of Observers</b>	5	2	4	2	3	2	2	1	2
<b>Hours Spent</b>	3.25	3	1	4.5	2	4.5	1	3	2.5
<b>Person-Hours</b>	16.25	6	4	9	6	9	2	3	5
<b>Shoreline Walked (miles)</b>	3	3		1.5	2			3	1
<b>Total Trip Mileage</b>									
<b>Did Observers . . .</b>									
Hike?	x	x		x	x		x	x	x

Date	25-Apr-87	28-Apr-88	8-May-88	29-Apr to 6	29-Apr to 6	29-Apr to 6	30-Apr-89	12-May-89	24-Sep-96
Kayak?									
Other (specify)?						skiff			boat
<b>Trash Bags Collected</b>								1	
<b>Estimated Weight of Collected Trash</b>									
<b><u>Wildlife</u></b>									
<b><i>Birds</i></b>									
Loons		6	1				10	2	
Sea Ducks	30	162			30	70	46	90	
Other Ducks and Geese		6						7	
Bald Eagles									
Adults	7	1	1	2			3	2	
Immatures	2		4	3	2	2	2		
Nests								1	
Shorebirds								40	
Seabirds		24		4	20	22	4	75	
Crows and Ravens		4				12		40	
Others (see separate Bird list)	2	28		2		6	10	5	
<b><i>Domestic Mammals</i></b>									
Cattle									
Horses									
Dogs	1					4		3	2
Other									
<b><i>Land Mammals</i></b>									
Moose									
Adults									
Calves									
Black Bears									
Brown Bears									
Land/River Otters									
Red Squirrels									
Tracks Identified								river otter	dog
Other									
<b><i>Marine Mammals</i></b>									
Sea Otters	2					2		1	







<b>Date</b>	25-Apr-87	28-Apr-88	8-May-88	29-Apr to 6	29-Apr to 6	29-Apr to 6	30-Apr-89	12-May-89	24-Sep-96
<b>Crabs</b>		x				x			x
Dungeness Crab						x			
Black-clawed Cancer Crab									
Red Hermit Crab									
Striped Hermit Crab									
Decorator Crab									
Carapace Crab									
Red King Crab									
Northern Kelp Crab									
Helmet Crab									
<b>Shrimp</b>									
Broken-back Shrimp									
Coonstripe Shrimp									
Sand Shrimp									
<b>Isopods</b>									
Pillbug Isopod									
Rockweek Isopod									
<b>Amphipods</b>									
Skeleton Shrimp									
Small Beach Hopper									
<b>Echinoderms</b>									
<b>Sea Stars</b>		x				x			x
Little Six-rayed Star									
Red-banded Star (Rainbow Star)									
Ochre Star									
Sunflower Star									
Morning Sun Star									
Stimpson's Sun Star									
Rose Star									
Leather Star									
True Star (False Ochre Star, Mottled Star)									
Blood Star									
<b>Brittle Stars</b>									
Serpent Star									
Daisy Brittle Star									
<b>Sea Urchins</b>		x					x		x





Date	25-Apr-87	28-Apr-88	8-May-88	29-Apr to 6	29-Apr to 6	29-Apr to 6	30-Apr-89	12-May-89	24-Sep-96
Signs of									
Actual observation									
Harvesting (specify)									
Signs of									
Actual observation									
Other (specify)		Subsistence activity.	Subsistenc	Living.	Subsistenc	1 boat--cat	Subsistence activity.		
<b><u>Vehicle Use</u></b>									
Cars/Trucks									
Sets of tracks									
Actual observation							1		
ATVs/Motorcycles									
Sets of tracks		1					1		1
Actual observation								2	
Bicycles									
Sets of tracks									
Actual observation									
Aircraft									
Sets of tracks		1							
Actual observation	1						6	1	
Other (specify)									
<b><u>Structures on the Beach</u></b>									
Buildings	37	many					30		45
Docks									
Driftwood Structures									
Riprapped Areas		1							
Erosion Control Structures									
Abandoned Vehicles							2		
Abandoned Boats	2	1	2					2	1
Boat Parts									
<b><u>Archaeological Sites</u></b>									
Shell Middens	1	5	1 new						
Other (specify)		4 washing away							





<b>Date</b>	25-Apr-87	28-Apr-88	8-May-88	29-Apr to 6	29-Apr to 6	29-Apr to 6	30-Apr-89	12-May-89	24-Sep-96
Form of Entangling Debris									
Comments									
<b><i>Most Peculiar Item Collected?</i></b>									
<b><i>Comments</i></b>		Glass, met	We didn't f	Styrofoam	Glass and	1 piece esc	Chunks of	Lots of styre	Buoys com
<b><u>Additional Observations and Comments</u></b>		Covered M	A midden exposed in spring of '87 by a fallen tree has n				Covered bo	Overall cor	

<b><u>Zone 27</u></b>									
<b>Shore</b>									
<b>Total Surveys</b>									
<b>Start Point</b>									
<b>Start Lat/Long</b>									
<b>End Point</b>									
<b>End Lat/Long</b>									
<b>Dates Walked</b>									
<b>Spring Surveys</b>									
<b>Fall Surveys</b>									
<b>First Walked</b>									
<b>Last Walked</b>									
<b>Total Person-Hours</b>									
<b>Total Trash Bags Collected</b>									
<b>Total Estimated Weight of Trash Collected</b>									
<b><u>General Info</u></b>									
<b>Date</b>	06.09.03								
<b>Subzone</b>	27								
<b>Start Time</b>	1100								
<b>End Time</b>	1400								
<b>Lowest Tide</b>									
	<b>at time</b>								
<b>Temperature (F)</b>	50								
<b>Sky</b>	sunny								
<b>Vertical Zones Walked:</b>									
	High	x							
	Middle								
	Low								
<b># of Observers</b>	2								
<b>Hours Spent</b>	3								
<b>Person-Hours</b>	6	0	0	0	0	0	0	0	0
<b>Shoreline Walked (miles)</b>	1								
<b>Total Trip Mileage</b>	1.5								
<b>Did Observers . . .</b>									
	Hike?	x							

<b>Date</b>	06.09.03								
	Kayak?								
	Other (specify)?								
<b>Trash Bags Collected</b>	1								
<b>Estimated Weight of Collected Trash</b>	20								
<b><u>Wildlife</u></b>									
<b><i>Birds</i></b>									
Loons	2								
Sea Ducks	60								
Other Ducks and Geese									
Bald Eagles									
	Adults	1							
	Immatures								
	Nests								
Shorebirds									
Seabirds	400								
Crows and Ravens	25								
Others (see separate Bird list)									
<b><i>Domestic Mammals</i></b>									
Cattle	0								
Horses	0								
Dogs	0								
Other									
<b><i>Land Mammals</i></b>									
Moose									
	Adults	0							
	Calves	0							
Black Bears	0								
Brown Bears	0								
Land/River Otters	0								
Red Squirrels	1								
Tracks Identified	0								
Other	0								
<b><i>Marine Mammals</i></b>									
Sea Otters	5								















<b>Date</b>	06.09.03								
<b><u>Outfalls or Pipes</u></b>									
Number									
Comments									
<b><u>Toxic Pollution</u></b>									
Fuel (oil, gas, etc.)									
Lubricating Oil									
Paint									
Batteries									
<b><u>Trash &amp; Debris</u></b>									
(from International Coastal Cleanup Data Card)									
<b><i>Shoreline and Recreational Activities</i></b>									
Bags/Food Wrappers	0			0					
Balloons	0			0					
Beverage Bottles, plastic, 2-liter or less	6			22					
Beverage Bottles, glass	0			4					
Beverage Cans	0			21					
Caps, Lids	0			0					
Clothing, Cloth	2			4					
Cups, Plates, Forks, Knives, Spoons	0			0					
Diapers	0			0					
Fast-food Containers	0			0					
6-pack Holders	0			0					
Pull Tabs	0			0					
Shotgun Shells/Wadding	10			10					
Straws, Stirrers	0			0					
Toys	2			2					
				0					
<b><i>Ocean/Waterway Activities</i></b>									
Bait Containers/Packaging	0			0					
Bleach/Cleaner Bottles	2			2					
Buoys/Floats	0			5					
Crab/Lobster/Fish Traps	0			3					



<b>Date</b>	06.09.03								
Form of Entangling Debris									
Comments									
<b><i>Most Peculiar Item Collected?</i></b>									
<b><i>Comments</i></b>	mon. All other trash rare.								
<b><u>Additional Observations and Comments</u></b>	dition okay.								

<b><u>Zone 27</u></b>									
Shore									
Total Surveys									
Start Point									
Start Lat/Long									
End Point									
End Lat/Long									
Dates Walked									
Spring Surveys									
Fall Surveys									
First Walked									
Last Walked									
Total Person-Hours									
Total Trash Bags Collected									
Total Estimated Weight of Trash Collected									
<b><u>General Info</u></b>									
Date									
Subzone									
Start Time									
End Time									
Lowest Tide									
at time									
Temperature (F)									
Sky									
Vertical Zones Walked:									
High									
Middle									
Low									
# of Observers									
Hours Spent									
Person-Hours									
	0	0	0	0	0	0	0	0	0
Shoreline Walked (miles)									
Total Trip Mileage									
Did Observers . . .									
Hike?									























<b><u>Zone 27</u></b>									
Shore									
Total Surveys									
Start Point									
Start Lat/Long									
End Point									
End Lat/Long									
Dates Walked									
Spring Surveys									
Fall Surveys									
First Walked									
Last Walked									
Total Person-Hours									
Total Trash Bags Collected									
Total Estimated Weight of Trash Collected									
<b><u>General Info</u></b>									
Date									
Subzone									
Start Time									
End Time									
Lowest Tide									
at time									
Temperature (F)									
Sky									
Vertical Zones Walked:									
High									
Middle									
Low									
# of Observers									
Hours Spent									
Person-Hours									
Shoreline Walked (miles)									
Total Trip Mileage									
Did Observers . . .									
Hike?									























<b><u>Zone 27</u></b>							
<b>Shore</b>							
<b>Total Surveys</b>							
<b>Start Point</b>							
<b>Start Lat/Long</b>							
<b>End Point</b>							
<b>End Lat/Long</b>							
<b>Dates Walked</b>							
<b>Spring Surveys</b>							
<b>Fall Surveys</b>							
<b>First Walked</b>							
<b>Last Walked</b>							
<b>Total Person-Hours</b>							
<b>Total Trash Bags Collected</b>							
<b>Total Estimated Weight of Trash Collected</b>							
<b><u>General Info</u></b>							
<b>Date</b>							
<b>Subzone</b>							
<b>Start Time</b>							
<b>End Time</b>							
<b>Lowest Tide</b>							
<b>at time</b>							
<b>Temperature (F)</b>							
<b>Sky</b>							
<b>Vertical Zones Walked:</b>							
High							
Middle							
Low							
<b># of Observers</b>							
<b>Hours Spent</b>							
<b>Person-Hours</b>							
<b>Shoreline Walked (miles)</b>							
<b>Total Trip Mileage</b>							
<b>Did Observers . . .</b>							
Hike?							

<b>Date</b>								
	Kayak?							
	Other (specify)?							
<b>Trash Bags Collected</b>								
<b>Estimated Weight of Collected Trash</b>								
	<b><u>Wildlife</u></b>							
	<b><i>Birds</i></b>							
Loons								
Sea Ducks								
Other Ducks and Geese								
Bald Eagles								
	Adults							
	Immatures							
	Nests							
Shorebirds								
Seabirds								
Crows and Ravens								
Others (see separate Bird list)								
	<b><i>Domestic Mammals</i></b>							
Cattle								
Horses								
Dogs								
Other								
	<b><i>Land Mammals</i></b>							
Moose								
	Adults							
	Calves							
Black Bears								
Brown Bears								
Land/River Otters								
Red Squirrels								
Tracks Identified								
Other								
	<b><i>Marine Mammals</i></b>							
Sea Otters								



<b>Date</b>							
Giant Flatworm							
<b>Nemerteans</b>							
Amphiporus (Two-spotted) Ribbon Worm							
Red Ribbon Worm							
<b>Echiurans</b>							
Fat Innkeeper (Alaskan Spoonworm)							
<b>Sipunculids</b>							
Peanut Worm							
<b>Annelids</b>							
Mussel Worm (Clam Worm)							
Northern Feather Duster Worm (Carpet Worm)							
Cone Worm							
Calcareous Tube Worm							
Spiral Tube Worm							
Scaleworm							
<b>Brachiopods</b>							
Transverse Lampshell							
<b>Mollusks</b>							
<b>Chitons</b>							
Gumboot Chiton							
Black Katy Chiton							
Brick Chiton							
Mossy Chiton							
Tiger Chiton							
Lined Chiton							
<b>Limpets</b>							
Dunce Cap Limpet							
Plate Limpet							
<b>Snails</b>							
Hairy Triton							
Sitka Periwinkle							
Helicina Margarite							
Puppet Margarite							
Aleutian Moonsnail							
Ridged Neptune							
Channeled Dogwinkle							

<b>Date</b>							
Emarginate Dogwinkle							
Frilled Dogwinkle							
File Dogwinkle							
Big-mouth Whelk							
<b><i>Nudibranchs</i></b>							
Maned Nudibranch							
False Sea Lemon (False Lemon Peel)							
Orange-tipped Nudibranch							
Opalescent Nudibranch							
Bushy-backed Nudibranch							
<b><i>Clams</i></b>							
Nuttal's Cockle							
Northwest Ugly Clam							
Arctic Rock Borer							
Baltic Macoma							
Stained Macoma							
Pacific Surf Clam							
Truncated Mya							
Steamer Clam (Pacific Littleneck Clam)							
Butter Clam							
Razor Clam							
<b><i>Mussels</i></b>							
Horse Mussel							
Pacific Blue Mussel							
<b><i>Scallops</i></b>							
Pink Scallop							
<b><i>Jingles</i></b>							
Rock Jingle							
<b><i>Cephalopods</i></b>							
Giant Pacific Octopus							
Stubby Squid							
<b><i>Arthropods</i></b>							
<b><i>Barnacles</i></b>							
Acorn Barnacle							
Pelagic Gooseneck Barnacle							
Thatched Acorn Barnacle							

<b>Date</b>							
<b>Crabs</b>							
Dungeness Crab							
Black-clawed Cancer Crab							
Red Hermit Crab							
Striped Hermit Crab							
Decorator Crab							
Carapace Crab							
Red King Crab							
Northern Kelp Crab							
Helmet Crab							
<b>Shrimp</b>							
Broken-back Shrimp							
Coonstripe Shrimp							
Sand Shrimp							
<b>Isopods</b>							
Pillbug Isopod							
Rockweek Isopod							
<b>Amphipods</b>							
Skeleton Shrimp							
Small Beach Hopper							
<b>Echinoderms</b>							
<b>Sea Stars</b>							
Little Six-rayed Star							
Red-banded Star (Rainbow Star)							
Ochre Star							
Sunflower Star							
Morning Sun Star							
Stimpson's Sun Star							
Rose Star							
Leather Star							
True Star (False Ochre Star, Mottled Star)							
Blood Star							
<b>Brittle Stars</b>							
Serpent Star							
Daisy Brittle Star							
<b>Sea Urchins</b>							

<b>Date</b>							
Green Sea Urchin							
Red Sea Urchin							
<b>Sea Cucumbers</b>							
Silky Burrowing Cucumber							
Orange Cucumber (Red Cucumber)							
Tar-spot Cucumber (Black Cucumber)							
<b>Sand Dollars</b>							
Green-spined Sand Dollar (Northern Sand Dollar)							
<b><u>Chordates</u></b>							
<b><i>Tunicates</i></b>							
Colonial Tunicate (Sea Pork)							
Sea Peach							
<b><u>Seaweeds</u></b>							
Green Seaweed							
Band							
Attached							
Washed Up							
Red Seaweed							
Band							
Attached							
Washed Up							
Rockweed							
Band							
Attached							
Washed Up							
Kelps							
Band							
Attached							
Washed Up							
Eelgrass							
Band							
Attached							
Washed Up							
<b><u>Beach Substrate</u></b>							

<b>Date</b>							
Type							
<b><u>Bluff and Cliff Erosion</u></b>							
Comments							
<b><u>Human Activities</u></b>							
Walking							
	Signs of						
	Actual observation						
Camping							
	Signs of						
	Actual observation						
Partying							
	Signs of						
	Actual observation						
Fire Pits							
	Signs of						
	Actual observation						
Trash Accumulations							
	Signs of						
	Actual observation						
Clamming							
	Signs of						
	Actual observation						
Fishing							
	Signs of						
	Actual observation						
Coaling							
	Signs of						
	Actual observation						
Picnicking							
	Signs of						
	Actual observation						
Horseback Riding							

<b>Date</b>								
	Signs of							
	Actual observation							
Harvesting (specify)								
	Signs of							
	Actual observation							
Other (specify)								
	<b><u>Vehicle Use</u></b>							
Cars/Trucks								
	Sets of tracks							
	Actual observation							
ATVs/Motorcycles								
	Sets of tracks							
	Actual observation							
Bicycles								
	Sets of tracks							
	Actual observation							
Aircraft								
	Sets of tracks							
	Actual observation							
Other (specify)								
	<b><u>Structures on the Beach</u></b>							
Buildings								
Docks								
Driftwood Structures								
Riprapped Areas								
Erosion Control Structures								
Abandoned Vehicles								
Abandoned Boats								
	Boat Parts							
	<b><u>Archaeological Sites</u></b>							
Shell Middens								
Other (specify)								

<b>Date</b>							
<b><u>Outfalls or Pipes</u></b>							
Number							
Comments							
<b><u>Toxic Pollution</u></b>							
Fuel (oil, gas, etc.)							
Lubricating Oil							
Paint							
Batteries							
<b><u>Trash &amp; Debris</u></b>							
(from International Coastal Cleanup Data Card)							
<b><i>Shoreline and Recreational Activities</i></b>							
Bags/Food Wrappers							
Balloons							
Beverage Bottles, plastic, 2-liter or less							
Beverage Bottles, glass							
Beverage Cans							
Caps, Lids							
Clothing, Cloth							
Cups, Plates, Forks, Knives, Spoons							
Diapers							
Fast-food Containers							
6-pack Holders							
Pull Tabs							
Shotgun Shells/Wadding							
Straws, Stirrers							
Toys							
<b><i>Ocean/Waterway Activities</i></b>							
Bait Containers/Packaging							
Bleach/Cleaner Bottles							
Buoys/Floats							
Crab/Lobster/Fish Traps							

<b>Date</b>							
Crates							
Fishing Line							
Fishing Lures							
Fishing Nets							
Light Bulbs/Tubes							
Oil/Lube Bottles							
Pallets							
Plastic Sheeting/Tarps							
Rope							
Strapping Bands							
<b><i>Smoking-Related Activities</i></b>							
Cigarettes/Cigarette Filters							
Cigarette Lighters							
Cigar Tips							
Tobacco Packaging/Wrappers							
<b><i>Dumping Activities</i></b>							
Appliances (refrigerators, washers, etc.)							
Batteries							
Cars/Car Parts							
Construction Materials							
55-gallon Drums							
Tires							
<b><i>Medical/Personal Hygiene</i></b>							
Syringes							
Condoms							
Tampons/Tampon Applicators							
<b><i>Debris Items of Local Concern</i></b>							
<b><i>Entangled Animals</i></b>							
Type of Animal							

<b>Date</b>							
Form of Entangling Debris							
Comments							
<b><i>Most Peculiar Item Collected?</i></b>							
<b><i>Comments</i></b>							
<b><u>Additional Observations and Comments</u></b>							