

## Zone 19

Shore	south	
Total Surveys	6	
Start Point	Halibut Cove (Right Beach Campsite)	
End Point	Peterson Point	
Dates Walked	1988, 91, 2000-01, 2003-06	
Spring Surveys	3	
Fall Surveys	7	
First Walked	1988	
Last Walked	2006	
Total Person-Hours	102.25	
Total Trash Bags Collected	11	
Total Estimated Weight of Trash Collected	285	

### General Info

					halit
Date	30-Apr-88	4-May-91	9-May-91	17-Sep-00	8-Oct-01
Start Time			1400		1330
End Time			1545		1500
Lowest Tide					5
	at time				1230
Temperature (F)				40+	42
Sky				sunny	cloudy
Vertical Zones Walked:					
	High				
	Middle				x
	Low	x		x	
# of Observers	2	2	1	2	2
Hours Spent	2	4	1.75	2	1.5
Person-Hours	4	8	1.75	4	3
Shoreline Walked (miles)			1.75	3	1.5
Total Trip Mileage					
Did Observers . . .					
	Hike?		x		x
	Kayak?	x		x	
	Other (specify)?		boat	rowboat	
Trash Bags Collected					
Estimated Weight of Collected Trash					

### Wildlife Birds

Loons		
Sea Ducks		17
Other Ducks and Geese	6	
Bald Eagles		
	Adults	2      4      1      1
	Immatures	1      2      1
	Nests	1      1
Shorebirds		2

Seabirds	4	300	21	14	6
Crows and Ravens			15		
Others (see separate Bird list)			5		

***Domestic Mammals***

Cattle					
Horses					
Dogs		2		1	
Other					

***Land Mammals***

Moose					
		Adults			
		Calves			
Black Bears					
Brown Bears					
Land/River Otters					
Red Squirrels			2		
Tracks Identified			moose		
Other					

***Marine Mammals***

Sea Otters			1		
Harbor Seals	2			1	
Steller's Sea Lions	1				
Harbor Porpoises					
Whales					
		Beluga			
		Orca			
		Minke			
		Humpback			
		Gray			
		Unknown	1		
Other/Unidentified					

***Please note any unusual wildlife sightings***

**Invertebrates**

(from the Intertidal Biodiversity Checklist) did not

***Please note any interesting observations or changes in abundance here***     1 dead octopus     Sea stars can be sign ; 2 dead lion'

***Sponges***

Breadcrumb Sponge  
Purple Sponge

***Cnidarians***

<b><i>Anemones</i></b>			x		x
Burrowing Green Anemone					
Orange Colonial Anemone					
Frilled (Plumose) Anemone					
Christmas Anemone					

***Sea Jellies***

Moon Jelly  
 Many-ribbed Hydromedusa  
 Compass Jelly  
 Lion's Mane Jelly

**Worms**

Giant Flatworm  
**Nemerteans**  
 Amphiporus (Two-spotted) Ribbon Worm  
 Red Ribbon Worm  
**Echiurans**  
 Fat Innkeeper (Alaskan Spoonworm)  
**Sipunculids**  
 Peanut Worm  
**Annelids**  
 Mussel Worm (Clam Worm)  
 Northern Feather Duster Worm (Carpet Worm)  
 Cone Worm  
 Calcareous Tube Worm  
 Spiral Tube Worm  
 Scaleworm

**Brachiopods**

Transverse Lampshell

**Mollusks**

<b>Chitons</b>	x	x	
Gumboot Chiton			
Black Katy Chiton			
Brick Chiton			
Mossy Chiton			
Tiger Chiton			
Lined Chiton			
<b>Limpets</b>		x	x
Dunce Cap Limpet			
Plate Limpet			
<b>Snails</b>		x	x
Hairy Triton			
Sitka Periwinkle			
Helicina Margarite			
Puppet Margarite			
Aleutian Moonsnail			
Ridged Neptune			
Channeled Dogwinkle			
Emarginate Dogwinkle			
Frilled Dogwinkle			
File Dogwinkle			
Big-mouth Whelk	x		
<b>Nudibranchs</b>			
Maned Nudibranch			
False Sea Lemon (False Lemon Peel)			
Orange-tipped Nudibranch			
Opalescent Nudibranch			
Bushy-backed Nudibranch			
<b>Clams</b>		x	x

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>Mussels</b>	x	x	x	x
Horse Mussel				
Pacific Blue Mussel				
<b>Scallops</b>				
Pink Scallop				
<b>Jingles</b>				
Rock Jingle				
<b>Cephalopods</b>				
Giant Pacific Octopus				
Stubby Squid				
<b>Arthropods</b>				
<b>Barnacles</b>		x	x	x
Acorn Barnacle				
Pelagic Gooseneck Barnacle				
Thatched Acorn Barnacle				
<b>Crabs</b>		x	x	
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>	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  
**Brittle Stars**  
 Serpent Star  
 Daisy Brittle Star  
**Sea Urchins**  
 Green Sea Urchin  
 Red Sea Urchin  
**Sea Cucumbers**  
 Silky Burrowing Cucumber  
 Orange Cucumber (Red Cucumber)  
 Tar-spot Cucumber (Black Cucumber)  
**Sand Dollars**  
 Green-spined Sand Dollar (Northern Sand Dollar)

x x x

**Chordates**

**Tunicates**  
 Colonial Tunicate (Sea Pork)  
 Sea Peach

codfish, sea b:

**Seaweeds**

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

x x

x

x

**Beach Substrate**

Type rocky, pebb rocky, pebbt pebbles

**Bluff and Cliff Erosion**

Erosion present

Comments slight moderate moderate 2 areas 12'

**Human Activities**

Walking	Signs of Actual observation				2
Camping	Signs of Actual observation	1			
Partying	Signs of Actual observation				
Fire Pits	Signs of Actual observation				1
Trash Accumulations	Signs of Actual observation				
Clamming	Signs of Actual observation		1		
Fishing	Signs of Actual observation				2
Coaling	Signs of Actual observation	2	1		20
Picnicking	Signs of Actual observation				
Horseback Riding	Signs of Actual observation				1
Harvesting (specify)	Signs of Actual observation				
Other (specify)	Signs of Actual observation				

**Vehicle Use**

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)	Sets of tracks Actual observation				20 boats docked

**Structures on the Beach**

Buildings	homes	yes	11		
Docks		yes	10		
Driftwood Structures					
Riprapped Areas					
Erosion Control Structures					
Abandoned Vehicles					
Abandoned Boats			3		
	Boat Parts			1	1

**Archaeological Sites**

Shell Middens	1 in Halibut Cove				
Other (specify)					1 cave by E

**Outfalls or Pipes**

Number			7		
Comments					untreated to primary treatment

**Toxic Pollution**

- Fuel (oil, gas, etc.)
- Lubricating Oil
- Paint
- Batteries

**Trash & Debris**

(from International Coastal Cleanup Data Card)

***Shoreline and Recreational Activities***

Bags (Paper & Plastic)			1		1
Balloons					
Beverage Bottles, plastic, 2-liter or less			1		
Beverage Bottles, glass					1
Beverage Cans					
Caps, Lids					
Clothing, Cloth					
Cups, Plates, Forks, Knives, Spoons					
Food Wrappers/Containers					
6-pack Holders					
Pull Tabs					
Shotgun Shells/Wadding					
Straws, Stirrers					
Toys					

***Ocean/Waterway Activities***

Bait Containers/Packaging					
Bleach/Cleaner Bottles					
Buoys/Floats					2
Crab/Lobster/Fish Traps					1
Crates					
Fishing Line					
Fishing Lures					

Fishing Nets	
Light Bulbs/Tubes	1
Oil/Lube Bottles	1
Pallets	
Plastic Sheeting/Tarps	
Rope/cable	
Strapping Bands	

***Smoking-Related Activities***

Cigarettes/Cigarette Filters  
 Cigarette Lighters  
 Cigar Tips  
 Tobacco Packaging/Wrappers

***Dumping Activities***

Appliances (refrigerators, washers, etc.)		1
Batteries		
Building Materials	1	
Cars/Car Parts		
55-gallon Drums		
Tires		

***Medical/Personal Hygiene***

Condoms  
 Diapers  
 Syringes  
 Tampons/Tampon Applicators

***Debris Items of Local Concern***

Fireworks		lot:
Plastic pieces		

***Entangled Animals***

Type of Animal  
 Form of Entangling Debris  
 Comments

***Most Peculiar Item Collected?***

<b><i>Comments</i></b>	Glass, metal, plastic, fi Glass, met Good condition. Little t
------------------------	---

<b><u>Additional Observations and Comments</u></b>	Viewed froi Subsistenc Subsistenc Lots of was Many cut tr
--	---





65	68	65	78	24	645
0		1	1	12	29
	8		1		14
0	0				0
9	7			1	17
1	0	1	2	1	8
0	0	6			6
0	0				0
0	0				0
0	0				0
0	0	1			1
0	1				3
0	0		coyote		0
	0				0
0	0	2			3
5	0		11	1	20
0	0				1
0	0				0
0	0				0
0	3				3
0	0				0
0	0				0
0	0				0
	0				1
		dead sand lance & dead herring			0

t go out at low tide

's mane jellies.

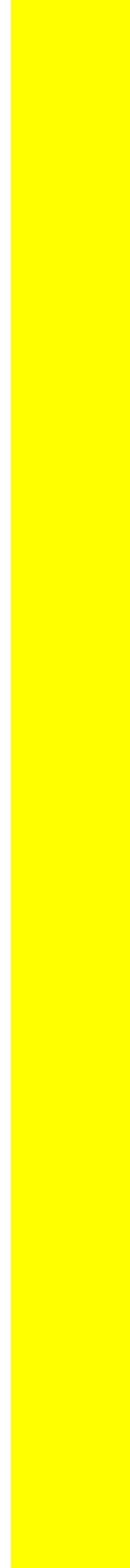
x

x x x x  
x x x x  
x x x x  
x x x x

x

x

shells



x

x

x  
x

x

x

x

x

x

x

x

x

x

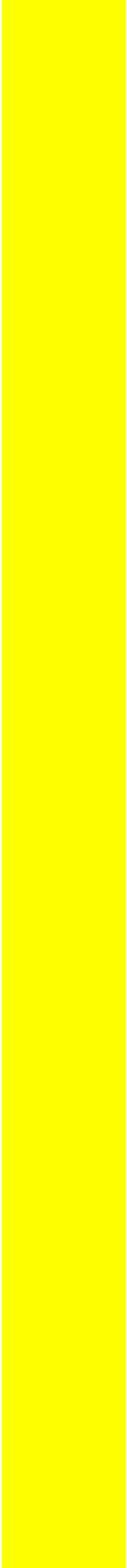
x  
x

x

x

x

x



x

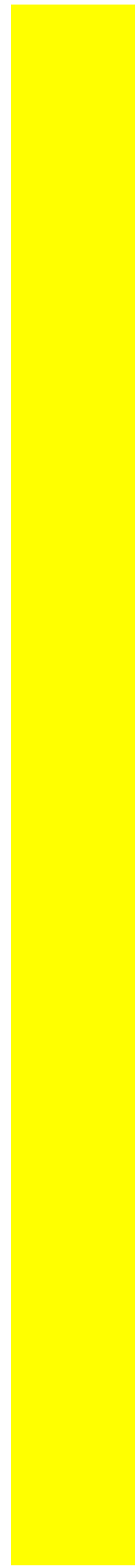
x

ss, halibut seen swimming

			x	
x			x	
x	x			
x	x			
x				
x				
	x	x	x	x
x		x	x	
			x	
	x	x	x	
x			x	
			x	

rocky                      rocky, pebble    cobble    man made

none                                      yes  
see notes

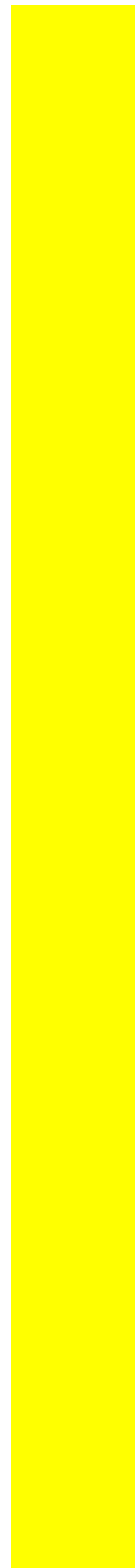


x		x		
x	2	2	4	x
x	1		1	
x	1			
x	1		3	
	1			

x				
x		2		
x				
x	3	x		x
x	1	x		x
x				

oysters

	2			
	2			
	1	1		
1	1			x
		2		
1	2			
	2			
		2		
3				
3	1			



Halibut Cove

		yes		x
1		yes	2	x
1	1		1	
1		yes		
	12	no		crab pots w/ gravel
				x

1  
Boy Scout Island

2

3	3	2	1		11
0					0
0	3	6	1	1	12
0		1	1		3
4	3	2			9
1		3			4
0			1		1
2	2				4
1	1	2	8		12
0					0
1		1			2
0		1	1		2
0			2		2
2			1		3
					0
					0
0	1				1
0	1	1			2
0	1	60	4		67
0	43			6	50
0	1		1		2
1	1				2
1		1	1		3

0			1	
0	1			
1				
0	1			
0		3	3	
2	7		9	x
0	1		1	

0  
0  
0  
0

0				
0				
0	17		12	1
0				
0				
0				

0				
0	2			
0				
0				

s of styrofoam

			1	
			9	

1
2
2
1
6
18
2
0
0
0
0
0
0
0
0
1
0
31
0
0
0
0
0
0
0
2
0
0
1
9

massive dc Large orange styrofoam a nose to a fireworks rocket

rash in park.

ees all along beach--ones chainsawed and probably dumped into bay--more than 2 dozen. By Scout Isl



0 0 0 0 0 0 0 0 0













and: one tree partially chainsawed up.



0

0

0