Table 1. Sampling region, location, sampling day and time, times at low and high tide, and numbers of fish caught at stations with allopatric and sympatric aggregations of juvenile Pacific herring, Pacific sandlance, and pink salmon in PWS during July, 1996. Samples from stations C and F were collected outside survey sites. Gear abbreviations: BS = beach seine, PS = purse seine, Cast = cast net, Hand = hand dug, P = plankton net. Regions refer to map Figure 1.

										Catch per Species		
Fish Station	**Zoop. Station**	**Gear Type**	**Region**	**Location**	**Transect Leg**	**Day-Month**	**Sampl Time**	**High Tide**	**Low Tide**	**Herring**	**Sand-lance**	**Pink Salmon**
				Allopatric Aggregations								
14-1B	14-P	BS	SW	W of Pt. Countess	S1002	17-July	10:10	15:48	9:16	13	--	--
47-2S	60-P	Cast	NE	NE Bligh Island	N1703A	23-July	17:30	7:26	12:45	414	--	--
47-5U	60-P	PS	NE	NE Bligh Island	N1703A	23-July	16:15	7:26	12:45	176	--	--
54-1B	54-P	BS	NE	Galena Bay W. of Narrows	N1904	23-July	11:10	7:26	12:45	17	--	--
61-1B	61-P	BS	NE	W Landlocked Bay Bidarka Pt.	N1302	24-July	11:45	8:15	13:39	95	--	--
68-1B	68-P	BS	NE	E Porcupine Pt.	N0704	25-July	10:40	9:40	14:48	10	--	--
68-5U	68-P	PS	NE	Goose Island, off Porcupine Pt.	N0701B	26-July	19:00	11:00	16:09	234	--	--
79-1B	79-P	BS	NE	Knowles Bay	N0505	27-July	9:55	11:56	5:31	303	--	--
87-1B	87-P	BS	NE	Knowles Bay	N0505	28-July	4:40	12:52	6:24	88	--	--
C-?-15	48-P	BS	C	NW Naked Is., E Bob Day Bay	C070	22-July	----	12:12	18:47	90	--	--
49-1B	49-P	BS	C	S Storey Island	C0608	22-July	12:10	18:47	11:59	--	--	137
53-1B	53-P	BS	NE	N Galena Bay	N1908	23-July	9:00	7:26	12:45	--	--	67
58-2U	68-P	PS	NE	Outer Port Fidalgo, Porcupine Pt.	N0901A	25-July	13:30	9:40	14:48	--	--	61
11-2B	11-P	BS	SW	Bainbridge Pt.	S0806	16-July	17:40	15:18	8:43	--	33	--
11-2B	11-P	BS	SW	Bainbridge Pt.	S0806	16-July	17:40	15:18	8:43	--	33	--
47-1B	47-P	BS	C	S Cabin Bay	C0705	22-July	9:55	18:47	11:59	--	50	--
63-1B	63-P	BS	NE	Boulder Bay (inside Bidarka Pt.)	N1306	24-July	13:35	8:15	13:39	--	52	--
64-2B	64-P	BS	NE	Irish Cove, Port Fidalgo	N0905	24-July	15:20	8:15	13:39	--	579	--
66-1B	66-P	BS	NE	Port Fidalgo	N0909	24-July	18:05	8:15	13:39	--	127	--
80-1B	80-P	BS	NE	Knowles Bay/Red Head	N0506	27-July	11:10	11:56	5:31	--	11000	--
82-1B	82-P	BS	NE	West Bligh Island	N1507	27-July	15:00	11:56	17:21	--	11	--
88-1X	88-P	Hand	NE	Knowles Bay/Red Head	N0506	28-July	6:35	12:52	6:24	--	16	--

F-1-D8	47-P	BS	C	Cabin Bay, Fuel Cache, Naked Is.	C0704	21-July	19:55	18:02	11:33	--	12	--
F-1-D12	47-P	BS	C	Cabin Bay, Fuel Cache, Naked Is.	C0704	22-July	8:00	5:59	12:12	--	15	--
F-2-D13	47-P	BS	C	Cabin Bay, Fuel Cache, Naked Is.	C0704	22-July	12:10	5:59	12:12	--	17	--
F-1-D15	47-P	BS	C	Cabin Bay, Fuel Cache, Naked Is.	C0704	22-July	16:05	18:47	12:12	--	32	--
F-2-D16	47-P	BS	C	Cabin Bay, Fuel Cache, Naked Is.	C0704	22-July	20:15	18:47	0:07	--	15	--
				Sympatric Aggregations								
03-2U	10-P	PS	SW	Prince of Wales Passage	S0604	16-July	15:48	15:18	8:43	650	--	78
10-1B	10-P	BS	SW	Bainbridge Pt.	S0805	16-July	15:30	15:18	8:43	430	--	199
20-1B	20-P	BS	SW	Paddy Bay	S1609	17-July	18:42	15:48	9:16	56	--	46
24-1B	24-P	BS	SW	Italian Bay, SW Knight Is.	S2008	18-July	13:00	16:19	9:50	48	--	25
18-2U	29-P	PS	C	Bay of Isles, E Knight Is.	C0105B	19-July	12:30	16:50	10:20	1300	28	--
60-1B	60-P	BS	NE	West Bligh Island	N1507	24-July	9:50	8:15	13:39	32000	600	--
72-1B*	71-P	BS	NE	Knowles Bay/Red Head	N0505	25-July	15:20	9:40	14:48	595	13500	--
84-1B	84-P	BS	NE	Knowles Bay/Red Head	N0506	27-July	18:00	23:29	17:21	9	17	--
48-1B	48-P	BS	C	N Cabin Bay	C0701	22-July	10:50	18:47	11:59	--	151	64

*Stations 71-1B and 72-1B were virtually identical in time and space.

Table 2. Mean size and age (A.C.) of fish, preserved fork length (FL) and wet weight, numbers and weights of prey consumed, stomach fullness index, number of empty stomachs (Emp), and prey percent body weight for sets of allopatric and sympatric juvenile Pacific herring, Pacific sandlance and pink salmon at stations in PWS during July, 1996. Ten fish from each station were examined (*indicates exceptions of n = 9). Abbreviations: sem = standard error of the mean.

Fish station	A. C.	FL (mm)		Body Weight (g)		Number of Prey		Prey Weight (mg)		Fullness Index		Emp	Prey % BW	
		mean	sem	mean	sem	mean	sem	mean	sem	mean	sem		mean	sem
Pacific Herring														
Allopatric														
14-1B	1	99.7	3.4	6.6	0.7	59.6	19.9	3.89	1.48	18	8	1	0.8	0.2
47-2S	0	55.1	0.7	0.9	0.0	2507.9	221.8	193.68	27.20	26	3	0	6.4	0.6
47-5U	1	115.3	1.7	13.3	0.6	5211.1	932.3	233.11	33.47	95	20	0	2.2	0.2
54-1B	0	30.4	0.6	0.1	0.0	28.1	44.5	0.70	0.34	23	15	2	0.0	0.0
61-1B	0	40.5	0.9	0.4	0.0	372.8	48.8	11.84	2.46	73	13	0	1.4	0.2
68-1B	0	49.3	1.0	0.5	0.1	532.4	278.9	39.22	6.45	68	8	0	2.1	0.3
68-5U	1	130.1	2.6	19.5	1.2	677.5	218.0	326.91	173.15	38	5	0	0.8	0.1
79-1B	0	44.8	0.9	0.5	0.0	606.9	114.4	95.23	37.79	98	8	0	2.3	0.4
87-1B	0	42.1	0.7	0.4	0.0	179.8	19.6	10.57	2.10	75	8	0	1.3	0.1
C-?-15	0	37.8	0.7	0.2	0.0	490.0	70.4	13.00	1.79	85	8	0	1.3	0.2
Sympatric with Pink Salmon														
03-2U	2	191.3	3.2	68.6	4.8	598.8	364.1	666.59	164.47	70	8	0	0.9	0.1
10-1B	0	38.2	1.4	0.2	0.0	22.0	27.3	0.97	0.61	20	13	1	0.1	0.1
20-1B	1	113.5	3.7	12.3	1.4	117.3	255.9	4.51	2.81	18	15	4	1.4	0.7
24-1B	0	105.9	2.3	9.0	0.7	31.9	63.9	6.53	2.95	18	5	3	0.2	0.1
Sympatric with Pacific Sandlance														
18-2U*	1	125.6	4.2	17.0	2.1	402.2	328.2	42.05	9.15	20	5	1	0.2	0.1
60-1B	0	47.6	1.4	0.5	0.1	343.3	194.6	11.82	2.12	80	8	0	2.9	0.4
72-1B	0	46.3	1.2	0.5	0.0	679.7	580.4	22.58	4.07	70	8	0	1.8	0.2
84-1B*	0	33.2	0.4	0.1	0.0	44.2	42.7	1.63	0.44	28	10	1	0.5	0.2
Pink Salmon														
Allopatric														
49-1B	0	83.3	1.6	4.7	0.3	443.4	53.3	19.71	2.51	55	5	0	1.3	0.1
53-1B	0	74.2	3.1	3.7	0.5	356.8	83.6	40.32	1.20	58	8	0	1.3	0.2
58-2U	0	98.1	2.0	7.1	0.5	46.9	7.0	847.50	123.27	20	8	0	2.8	0.4
Sympatric with Pacific Herring														
03-2U	0	102.8	1.8	8.7	0.5	178.0	78.2	78.21	20.86	38	8	0	0.6	0.1
03-2U	0	130.0	1.6	17.7	0.5	56.7	26.1	289.21	168.38	53	13	0	1.0	0.3
10-1B	0	64.1	1.7	2.3	0.2	379.9	64.7	59.34	15.17	5	8	0	1.7	0.4
10-1B	0	102.4	3.1	9.6	1.0	180.0	85.1	13.91	5.74	40	13	0	1.1	0.2

20-1B	0	90.3	3.0	6.6	0.6	821.9	298.7	24.80	10.01	55	13	0	1.4	0.3
24-1B	0	96.8	1.9	8.1	0.6	91.9	21.3	11.24	5.58	25	8	0	0.8	0.1
Sympatric with Pacific Sandlance														
48-1B	0	97.9	1.1	7.4	0.4	588.7	143.5	29.50	20.6	40	20	0	0.6	0.3
Pacific Sandlance														
Allopatric														
11-2B	0	72.3	2.6	1.3	0.1	971.4	69.7	51.24	4.42	70	3	0	2.2	0.2
11-2B	1	134.6	2.3	11.4	1.3	3244.8	473.2	355.77	80.60	78	3	0	2.2	0.4
47-1B	0	86.5	1.8	1.8	0.2	76.0	52.5	5.33	3.89	3	10	4	0.3	0.2
63-1B*	0	88.9	3.4	2.2	0.3	422.8	179.2	31.51	13.86	35	18	1	0.5	0.2
64-2B	0	65.8	1.1	0.7	0.0	1109.4	247.4	68.54	17.64	63	8	0	1.5	0.2
66-1B	0	95.9	2.0	2.8	0.2	2182.7	506.1	179.02	56.29	90	13	0	1.6	0.3
80-1B	0	75.5	2.7	1.2	0.1	31.1	13.6	0.85	0.37	13	5	0	0.3	0.1
82-1B	0	78.4	2.5	1.3	0.1	689.8	171.6	35.44	8.81	73	10	0	1.1	0.2
88-1X-	1	109.6	3.2	4.0	0.5	0.8	0.4	0.41	0.23	10	5	6	0.2	0.1
F-1-D8	0	68.9	2.2	0.9	0.0	313.4	195.1	15.56	10.91	15	15	4	0.6	0.4
F-1-D12	1	114.1	4.8	5.4	0.6	975.3	213.0	63.31	13.78	88	13	0	1.1	0.2
F-2-D13	0	61.1	2.1	0.7	0.1	616.2	547.9	30.04	5.06	83	10	0	1.2	0.3
F-1-D15	0	73.5	1.9	1.1	0.1	849.9	203.7	37.73	10.89	65	10	0	0.5	0.1
F-2-D16	0	72.4	2.3	1.1	0.2	78.1	58.9	3.34	2.49	8	10	1	0.2	0.0
Sympatric with Pacific Herring														
18-2U	1	111.8	2.0	5.5	0.3	2082.0	169.0	138.71	12.67	68	5	0	2.1	0.2
60-1B	0	71.6	1.8	0.9	0.1	71.2	32.9	5.45	2.91	20	13	1	0.7	0.2
71-1B	0	76.1	1.3	1.2	0.1	111.5	70.7	4.81	3.15	5	10	4	0.4	0.2
84-1B-	0	75.5	2.7	1.1	0.1	0.1	0.1	0.00	0.00	3	3	9	0.1	0.0
Sympatric with Pink Salmon														
48-1B	0	64.3	0.8	0.8	0.0	221.3	64.1	12.00	2.14	48	8	0.00	0.9	0.2

Table 3. Probability results from 2-way ANOVA on ranks of fish size and measures of total feeding in areas with different species aggregations. The two factors used were "fish species" (Pacific herring, pink salmon and Pacific sandlance) and "aggregation type" (allopatric\sympatric). Specific paired comparisons were performed when $P < 0.05$ for the interaction terms.

	Fish Species	**Allopatric\ Sympatric**	**Interaction Term**
Measures of Fish Size			
Length (mm FL)	<0.0001	0.0002	0.0538
Weight (mg)	<0.0001	0.0002	0.1050
Measures of Total Feeding			
Fullness Index	0.0068	<0.0001	0.0092
Prey Percent Body Weight	0.0004	0.0019	<0.0001
Total Weight of Prey	0.0002	0.0081	0.0020
Total Number of Prey	0.6525	0.0564	0.0003

Table 4. Fork lengths and measures of total feeding for three forage species in allopatric and sympatric aggregations in PWS during July, 1996. Probability (P) values are results of Rank Sum Tests comparing species values between aggregations. Abbreviations: md = median, sem = standard error of the mean, T = trace contents.

Species/ Aggregation type		Fork Length				% Fullness				Total Prey Number				Total Prey Biomass				Prey % Body			
	n	P	md	mean	sem	P	md	mea	se	P	md	mean	sem	P	md	mean	sem	P	md	mea	se
Pacific Herring																					
Allopatric	10	- - -	47.0	64.5	3.5	- - -	75	70	5	- - -	383.5	1066.	181.3	- - -	19.97	92.80	13.50	- - -	1.4	1.9	0.2
Sympatric with Pink	40	<0.0001	107.0	112.2	8.8	<0.0001	13	25	8	<0.0001	24.0	192.4	51.1	0.0035	1.68	169.7	60.60	<0.0001	0.4	0.7	0.2
Sympatric with Sandlance	38	0.8280	46.5	62.3	6.0	0.0143	50	50	5	0.0445	269.5	374.2	66.2	0.0158	11.95	19.40	3.38	0.2546	1.1	1.4	0.2
Pink Salmon																					
Allopatric	30	- - -	85.0	85.2	2.2	- - -	75	68	5	- - -	288.5	282.4	45.0	- - -	24.81	302.5	82.1	- - -	1.6	1.8	0.2
Sympatric with Herring	60	0.0031	98.0	97.7	2.7	0.0138	50	48	5	0.2550	123.0	284.7	62.4	0.0371	25.10	79.50	30.02	<0.0001	0.8	1.1	0.1
Sympatric with Sandlance	30	0.0033	98.0	97.9	1.2	0.0099	25	40	8	0.0378	412.5	588.7	143.5	0.3568	22.81	29.50	6.51	<0.0001	0.5	0.6	0.1
Pacific Sandlance																					
Allopatric	13	- - -	79.0	85.8	1.9	- - -	50	48	5	- - -	450.0	828.7	95.7	- - -	25.74	62.60	10.54	- - -	0.7	1.0	0.1
Sympatric with Herring	40	0.9287	76.5	83.8	2.8	<0.0001	T	20	8	0.0120	14.5	566.2	147.2	0.0172	0.67	37.20	9.92	0.3285	0.4	0.8	0.2
Sympatric with Pink	10	<0.0001	63.5	64.3	0.8	0.8565	50	48	8	0.4333	175.5	221.3	64.1	0.3560	11.72	12.00	2.14	0.6431	0.8	0.9	0.2

Table 5. Probability results from 2-way ANOVA on ranks of density (numbers*m^{-3}) and percent density of zooplankton by taxonomic category using the factors "fish species" (Pacific herring, pink salmon and Pacific sandlance) and "aggregation type" (allopatric or sympatric). Specific paired comparisons were performed when the $P < 0.05$ for the interaction terms.

	Density			**Percent Density**		
Zooplankton Category	Fish Species	Allopatric \ Sympatric	Interaction term	Fish Species	Allopatric\ Sympatric	Interaction term
Barnacle Larvae	0.6705	0.6096	0.4426	0.8421	0.7064	0.2858
Large Calanoids	0.2709	0.0177	0.3425	0.0573	0.0374	0.3856
Small Calanoids	0.0150	0.0826	0.8585	0.2750	0.1408	0.4668
Chaetognaths	0.3096	0.0083	0.1593	0.4983	0.0036	0.2250
Cladocerans	0.7411	0.1004	0.0264	0.9273	0.0315	0.0306
Cyphonautes	0.0227	0.9943	0.6602	0.0333	0.9709	0.6346
Decapods	0.4710	0.0027	0.4969	0.8982	0.0100	0.7344
Euphausiids	0.4994	0.2415	0.0545	0.5449	0.3383	0.0544
Fish	0.7206	0.1523	0.2485	0.7241	0.1810	0.2548
Gastropods	0.6415	0.0001	0.8880	0.7575	0.0002	0.9938
Hyperiid Amphipods	0.9511	0.4460	0.6932	0.9353	0.8400	0.7619
Cnidarians\Ctenophores	0.0277	0.2998	0.4271	0.0058	0.1444	0.6064
Larvaceans	0.1626	0.2380	0.4300	0.0060	0.5237	0.0206
Other	0.6989	0.0712	0.6261	0.7641	0.4043	0.3934
Total Zooplankters	0.0615	0.1120	0.9611			

Table 6. Zooplankton mean density (numbers*m^{-3}) and biomass (mg*m^{-3} wet weight) available to juvenile Pacific herring, Pacific sandlance and pink salmon at stations corresponding to allopatric and sympatric aggregations sampled in PWS during July, 1996. Replicate zooplankton samples were collected in vertical hauls at each station using a 0.5 m diameter ring net with 243 µm mesh. Abbreviations: sem = standard error of the mean.

Zooplankton Station	Total Density		Total Biomass		Gear Depth	Day	Time
	mean	sem	mean	sem			
Pacific Herring							
Allopatric							
14-P	3723.3	408.6	300.7	44.3	20	July 17	10:40
48-P	3642.0	265.9	223.1	54.1	20	July 22	11:00
54-P	1680.2	45.1	389.4	227.8	20	July 23	11:30
60-P	1989.2	128.7	168.9	2.1	20	July 24	10:10
61-P	2406.4	227.4	345.7	34.4	20	July 24	12:00
68-P	6641.5	191.3	526.0	7.1	8	July 25	10:55
79-P	3432.7	162.5	358.2	24.7	10	July 27	10:20
87-P	645.0	19.6	93.0	1.4	20	July 28	05:30
Grand mean	3020.0		300.6				
Sympatric with Pink Salmon							
10-P	2501.0	140.4	239.5	38.9	20	July 16	16:20
20-P	3242.9	1017.3	166.1	32.3	20	July 17	18:55
24-P	3099.1	577.8	221.7	48.0	20	July 18	13:30
Grand mean	2947.7		209.1				
Sympatric with Pacific Sandlance							
29-P	2907.2	330.4	238.6	0.8	20	July 19	16:55
60-P	1989.2	128.7	168.9	2.1	20	July 24	10:10
71-P	950.9	113.6	94.9	6.2	20	July 25	15:35
84-P	1359.9	93.3	87.6	1.5	20	July 27	18:38
Grand mean	1801.8		147.5				
Pink Salmon							
Allopatric							
49-P	4029.0	602.8	372.0	167.3	20	July 22	12:20
53-P	1918.0	285.7	189.0	43.1	20	July 23	10:30
68-P	6641.5	191.3	526.0	7.1	8	July 25	10:55
Grand mean	4196.2		362.3				
Sympatric with Pacific Herring							
10-P	2501.0	140.4	239.5	38.9	20	July 16	16:20
20-P	3242.9	1017.0	166.1	32.3	20	July 17	18:55
24-P	3099.1	577.8	221.7	48.0	20	July 18	13:30
Grand mean	2947.7		209.1				

Sympatric with Pacific Sandlance							
48-P	3642.0	265.9	223.1	54.1	20	July 20	11:05

Pacific Sandlance

Allopatric							
11-P	2481.2	200.3	198.7	37.5	20	July 16	18:15
47-P	2798.2	326.6	229.0	70.1	20	July 22	10:10
63-P	3042.5	334.1	264.9	2.3	20	July 24	13:50
64-P	3046.9	170.9	412.5	81.5	20	July 24	15:30
66-P	2742.1	180.0	311.2	33.1	20	July 24	18:20
80-P	3163.1	433.3	226.3	9.8	20	July 27	11:55
82-P	1084.0	216.5	138.9	50.3	20	July 27	15:15
88-P	774.6	79.4	101.5	31.9	20	July 28	06:58
Grand mean	2391.6		235.4				
Sympatric with Pacific Herring							
29-P	2907.2	330.4	238.6	0.8	20	July 19	16:55
60-P	1989.2	128.7	168.9	2.1	20	July 24	10:10
71-P	950.9	113.6	94.9	6.2	20	July 25	15:35
84-P	1359.9	93.3	87.6	1.5	20	July 27	18:38
Grand mean	1801.8		147.5				
Sympatric with Pink Salmon							
48-P	3642.0	265.9	223.1	54.1	20	July 22	11:05

Table 7a. Zooplankton density (number* m^{-3}) and percent density by taxonomic group and total organisms at areas of allopatric and sympatric aggregations of Pacific herring (H). SL = Pacific Sandlance, PS = Pink Salmon, md= median, sem = standard error of the mean.

Prey Category	Aggregation Type	Density			Percent Density		
		md	mean	sem	md	mean	sem
Barnacle Larvae	H	8.2	9.8	2.7	0.3	0.2	0.1
	H+PS	16.3	13.2	3.4	0.6	0.4	0.1
	H+SL	6.1	4.8	25.8	0.4	1.5	0.8
Large Calanoids	H	4.2	21.6	11.1	0.2	0.8	0.3
	H+PS	12.5	11.2	3.0	0.4	0.4	0.1
	H+SL	24.6	34.7	8.2	1.5	2.4	0.7
Small Calanoids	H	2236.8	2518.8	353.6	78.7	74.4	3.3
	H+PS	2149.2	2264.3	192.3	81.6	80.1	1.9
	H+SL	1295.8	1291.0	155.0	77.2	75.1	4.6
Chaetognaths	H	0.0	1.5	0.7	0.0	0.0	0.0
	H+PS	2.3	1.8	0.5	0.1	0.1	0.0
	H+SL	0.0	1.3	1.1	0.0	0.1	0.1
Cladocerans	H	28.5	35.3	5.8	0.9	1.7	0.4
	H+PS	65.2	81.0	13.1	2.8	2.9	0.3
	H+SL	17.3	75.6	43.0	1.2	2.9	1.4
Cyphonautes	H	1.0	14.0	6.9	0.1	0.3	0.1
	H+PS	4.1	10.0	4.2	0.1	0.4	0.2
	H+SL	0.0	1.4	1.0	0.0	0.1	0.1
Decapods	H	9.9	11.9	2.6	0.5	0.5	0.1
	H+PS	1.2	4.8	2.6	0.0	0.2	0.1
	H+SL	0.9	4.1	2.3	0.1	0.2	0.1
Euphausiids	H	4.1	22.8	8.2	0.2	0.5	0.1
	H+PS	0.1	2.1	1.3	0.0	0.1	0.0
	H+SL	1.2	6.6	4.5	0.1	0.7	0.5
Fish	H	0.0	0.2	0.2	0.0	0.0	0.0
	H+PS	0.0	0.1	0.1	0.0	0.0	0.0
	H+SL	0.0	0.0	0.0	0.0	0.0	0.0
Gastropods	H	158.9	330.7	71.6	7.0	11.7	2.5
	H+PS	85.6	96.3	21.0	3.2	3.3	0.4
	H+SL	36.7	103.9	43.7	3.1	4.6	1.3
Hyperiid Amphipods	H	0.6	1.0	0.2	0.0	0.1	0.0
	H+PS	0.0	2.4	1.4	0.0	0.1	0.1
	H+SL	1.0	0.9	0.3	0.1	0.1	0.0

Larvaceans	H	130.4	190.9	36.5	5.7	5.5	0.6
	H+PS	209.8	207.3	23.1	8.2	7.4	0.7
	H+SL	105.9	153.0	44.7	7.0	7.8	1.4
Other	H	59.1	103.5	24.2	2.5	3.3	0.7
	H+PS	61.1	127.4	53.9	2.3	4.3	1.6
	H+SL	48.9	69.0	23.4	3.3	3.2	0.6
Total	H	2952.0	3279.1	441.1			
	H+PS	2581.4	2836.0	258.3			
	H+SL	1656.9	1801.8	288.1			

Table 7b. Zooplankton density (number* m^3) and percent density by taxonomic group and total at aggregations of allopatric and sympatric pink salmon (PS). H = Herring, SL = Sandlance, md = median, sem = standard error of the mean.

Prey Category	Aggregation Type	Density			Percent Density		
		md	mean	sem	md	mean	sem
Barnacle Larvae	PS	18.3	17.7	6.0	0.4	0.5	0.2
	PS+H	16.3	11.6	2.7	0.6	0.4	0.1
	PS+SL	4.1	4.1	4.1	0.1	0.1	0.1
Large Calanoids	PS	1.5	13.0	8.2	0.1	0.3	0.2
	PS+H	12.5	9.7	2.3	0.4	0.3	0.1
	PS+SL	2.0	2.0	2.0	0.1	0.1	0.1
Small Calanoids	PS	3292.1	3271.7	642.6	78.5	79.3	2.1
	PS+H	2149.2	2207.6	130.7	81.8	81.3	1.4
	PS+SL	3074.1	3074.1	181.3	84.5	84.5	1.2
Chaetognaths	PS	0.0	0.3	0.2	0.0	0.0	0.0
	PS+H	2.3	2.0	0.4	0.1	0.1	0.0
	PS+SL	0.5	0.5	0.3	0.0	0.0	0.0
Cladocerans	PS	26.5	36.7	13.0	0.7	1.0	0.3
	PS+H	65.2	75.7	8.8	2.8	2.8	0.2
	PS+SL	44.8	44.8	12.2	1.3	1.3	0.4
Cyphonautes	PS	4.1	21.7	16.4	0.2	0.4	0.3
	PS+H	4.1	10.8	3.5	0.1	0.5	0.2
	PS+SL	2.0	2.0	2.0	0.1	0.1	0.1
Decapods	PS	18.7	18.9	8.3	0.5	0.6	0.2
	PS+H	1.2	3.6	1.8	0.0	0.1	0.1
	PS+SL	8.3	8.3	8.3	0.2	0.2	0.2
Euphausiids	PS	24.6	38.9	18.7	0.5	0.6	0.3
	PS+H	0.3	1.4	0.9	0.0	0.0	0.0
	PS+SL	4.1	4.1	4.1	0.1	0.1	0.1
Fish	PS	0.0	0.0	0.0	0.0	0.0	0.0
	PS+H	0.0	0.1	0.0	0.0	0.0	0.0
	PS+SL	0.0	0.0	0.0	0.0	0.0	0.0
Gastropods	PS	146.7	328.8	134.1	5.4	6.6	1.6
	PS+H	85.6	87.3	14.7	3.2	3.1	0.3
	PS+SL	142.6	142.6	12.2	3.9	3.9	0.1
Hyperiid Amphipods	PS	0.5	1.4	0.7	0.0	0.1	0.0
	PS+H	0.0	3.1	1.3	0.0	0.1	0.1
	PS+SL	0.0	0.0	0.0	0.0	0.0	0.0

Larvaceans	PS	362.6	300.1	85.6	7.0	6.3	1.4
	PS+H	209.8	193.9	17.7	8.3	7.2	0.6
	PS+SL	297.4	297.4	53.0	8.1	8.1	0.9
Other	PS	105.9	144.6	47.5	3.3	4.3	1.7
	PS+H	61.1	103.9	36.6	2.3	3.6	1.1
	PS+SL	50.9	50.9	26.5	1.4	1.4	0.6
Total	PS	4029.0	4196.2	882.4			
	PS+H	2581.4	2836.0	258.8			
	PS+SL	3642.0	3642.0	265.9			

Table 7c. Zooplankton density (number * m^3) and percent density by taxonomic group and total at aggregations of allopatric and sympatric sandlance (SL). H = Herring, PS = Pink Salmon, md = median, sem = standard error of the mean.

Prey Category	Aggregation Type	Density			Percent Density		
		md	mean	sem	md	mean	sem
Barnacle Larvae	SL	12.2	12.4	2.6	0.5	0.6	0.2
	SL+H	41.8	25.8	6.1	0.4	1.5	0.8
	SL+PS	4.1	4.1	4.1	0.1	0.1	0.1
Large Calanoids	SL	8.4	17.8	5.5	0.5	0.7	0.2
	SL+H	24.6	34.7	8.2	1.5	2.4	0.7
	SL+PS	2.0	2.0	2.0	0.1	0.1	0.1
Small Calanoids	SL	2086.8	1891.3	115.7	72.5	73.4	1.5
	SL+H	1295.8	1291.0	155.0	77.2	75.1	4.6
	SL+PS	3074.1	3074.1	181.3	84.5	84.5	1.2
Chaetognaths	SL	0.0	0.2	0.0	0.0	0.0	0.0
	SL+H	0.0	1.3	1.1	0.0	0.1	0.1
	SL+PS	0.5	0.5	0.3	0.0	0.0	0.0
Cladocerans	SL	44.8	79.4	13.5	1.8	2.9	0.5
	SL+H	17.3	75.6	43.0	1.2	2.9	1.4
	SL+PS	44.8	44.8	12.2	1.3	1.3	0.4
Cyphonautes	SL	0.0	0.9	0.5	0.0	0.0	0.0
	SL+H	0.0	1.4	1.0	0.0	0.1	0.1
	SL+PS	2.0	2.0	2.0	0.1	0.0	0.0
Decapods	SL	6.9	12.7	2.6	0.5	0.6	0.1
	SL+H	0.9	4.1	2.3	0.1	0.2	0.1
	SL+PS	8.3	8.3	8.3	0.2	0.2	0.2
Euphausiids	SL	0.0	8.9	4.9	0.0	0.4	0.2
	SL+H	1.2	6.6	4.5	0.1	0.7	0.5
	SL+PS	4.1	4.1	4.1	0.1	0.1	0.1
Fish	SL	0.0	0.6	0.6	0.0	0.0	0.0
	SL+H	0.0	0.0	0.0	0.0	0.0	0.0
	SL+PS	0.0	0.0	0.0	0.0	0.0	0.0
Gastropods	SL	130.4	181.0	21.8	5.3	7.5	0.9
	SL+H	36.7	103.9	43.7	3.1	4.6	1.3
	SL+PS	142.6	142.6	12.2	3.9	3.9	0.1
Hyperiid Amphipods	SL	0.3	0.6	0.1	0.0	0.0	0.0
	SL+H	1.0	0.9	0.3	0.1	0.1	0.0
	SL+PS	0.0	0.0	0.0	0.0	0.0	0.0

Larvaceans	SL	248.5	229.8	12.8	9.4	10.0	0.7
	SL+H	105.9	153.0	44.7	7.0	7.8	1.4
	SL+PS	297.4	297.4	53.0	8.1	8.1	0.9
Other	SL	97.8	91.6	9.7	4.0	3.6	0.4
	SL+H	48.9	69.0	23.4	3.3	3.2	0.6
	SL+PS	50.9	50.9	26.5	1.4	1.4	0.6
Total	SL	2681.4	2473.7	175.9			
	SL+H	1656.9	1801.8	288.1			
	SL+PS	3642.0	3642.0	265.9			

Table 8. Diet similarity (PSI) by percent number and percent biomass of prey species within and between forage species in allopatric and sympatric aggregations in PWS during July, 1996. Diet similarity > 60% is significant.

(a) Diet similarity between species in allopatric aggregations

allopatric aggregation	allopatric aggregation	Percent Number	Percent Biomass
pink salmon	Pacific sandlance	15.3	11.0
pink salmon	Pacific herring	25.6	17.1
Pacific sandlance	Pacific herring	**73.1**	51.3

(b) Diet similarity between species in sympatric aggregations

sympatric aggregation	sympatric aggregation	Percent Number	Percent Biomass
pink salmon with Pacific sandlance	Pacific sandlance with pink salmon	0.5	3.2
pink salmon with Pacific herring	Pacific herring with pink salmon	36.2	37.8
Pacific herring with Pacific sandlance	Pacific sandlance with Pacific herring	46.1	53.5

(c) Diet similarity within species between allopatric and sympatric aggregations

allopatric aggregation	sympatric aggregation	Percent Number	Percent Biomass
pink salmon	pink salmon with Pacific sandlance	**66.5**	56.1
pink salmon	pink salmon with Pacific herring	**69.1**	**61.0**
Pacific sandlance	Pacific sandlance with pink salmon	42.8	54.9
Pacific sandlance	Pacific sandlance with Pacific herring	55.6	**60.5**
Pacific herring	Pacific herring with pink salmon	**62.9**	38.2
Pacific herring	Pacific herring with Pacific sandlance	**72.7**	**70.2**

Table 9. Probability results from 2-way ANOVA on ranks of prey number and percent number, prey biomass and percent biomass, and prey selection by taxonomic category in areas with different fish species aggregations. The two factors used were “fish species” (Pacific herring, pink salmon and Pacific sandlance) and “aggregation type” (allopatric\sympatric). Specific paired comparisons were performed when the P < 0.05 for the interaction terms. Abbreviations: Allo. = Allopatric, Symp. = Sympatric, DNT = Do Not Test.

	Number of Prey			**Percent Number of Prey**			**Biomass of Prey**			**Percent Biomass of Prey**			**Selection of Prey**		
Prey Category	Species	Allo.\ Symp.	Interaction Term	Species	Allo.\ Symp.	Interaction Term	Species	Allo.\ Symp.	Interaction Term	Species	Allo.\ Symp.	Interaction Term	Species	Allo.\ Symp.	Interaction Term
Barnacle Larvae	<0.0001	0.1724	0.4698	<0.0001	0.0513	0.5265	<0.0001	0.1199	0.3662	<0.0001	0.0434	0.4832	<0.0001	0.2957	<0.0001
Small calanoids	<0.0001	0.0163	0.0113	<0.0001	0.1766	0.0821	<0.0001	0.0381	0.0100	<0.0001	0.2572	0.0673	<0.0001	0.0097	0.2609
Large Calanoids	0.0030	0.4403	0.0302	0.0002	0.5948	0.0459	0.0019	0.4892	0.0317	0.0041	0.9088	0.0144	<0.0001	0.0062	0.0004
Chaetognath	<0.0001	<0.0001	0.0056	<0.0001	<0.0001	0.0050	<0.0001	< 0.0001	0.0056	<0.0001	<0.0001	0.0072	0.0104	0.0007	0.0010
Cladoceran	< 0.0001	0.1969	0.5251	<0.0001	0.8531	0.6917	<0.0001	0.1969	0.5251	<0.0001	0.4750	0.8991	0.0072	<0.0001	<0.0001
Cyphonautes	0.8475	0.4019	0.8475	0.8469	0.4017	0.8469	0.8475	0.4019	0.8475	0.8480	0.4020	0.8480	<0.0001	0.0007	0.4770
Decapod	<0.0001	<0.0001	0.0036	<0.0001	<0.0001	0.0013	<0.0001	<0.0001	0.0061	<0.0001	<0.0001	0.0125	<0.0001	<0.0001	0.5431
Euphausiid	0.7794	0.0886	0.9509	0.8408	0.0736	0.9353	0.7886	0.0672	0.9231	0.7998	0.0686	0.9076	0.2539	0.0040	<0.0001
Fish	<0.0001	0.0005	0.0002	<0.0001	0.0004	0.0002	<0.0001	0.0005	0.0002	<0.0001	0.0005	0.0002	<0.0001	<0.0001	<0.0001
Gammarid Amphipod	0.9310	0.5149	0.2584	0.9317	0.5123	0.2560	0.9338	0.5172	0.2561	0.9267	0.5064	0.2589	DNT*	DNT*	DNT*
Gastropod	0.7501	0.2957	0.3700	0.7803	0.6247	0.2145	0.5452	0.2780	0.3274	0.7833	0.4778	0.2229	DNT*	DNT*	DNT*
Hyperiid Amphipods	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	0.0001	<0.0001	<0.0001	0.0002	<0.0001	<0.0001	0.0002	0.4366	0.0313	0.0032
Insect	0.2372	<0.0001	0.1454	<0.0001	0.2471	0.1566	<0.0001	0.2475	0.1548	<0.0001	0.2520	0.1583	DNT*	DNT*	DNT*
Cnidarian\Ctenophore	0.0098	0.0043	0.0098	0.0096	0.0043	0.0096	0.0369	0.0438	0.0369	0.0369	0.0438	0.0369	DNT*	DNT*	DNT*
Larvacean	<0.0001	0.0030	<0.0001	<0.0001	0.5352	<0.0001	<0.0001	0.0030	<0.0001	<0.0001	0.1412	0.0006	<0.0001	0.4006	0.0022
Malocostraca	0.0007	0.0520	0.2945	0.0007	0.0494	0.2812	0.0007	0.0418	0.2784	0.0008	0.0399	0.2766	DNT*	DNT*	DNT*
Other	<0.0001	0.3725	0.0490	<0.0001	0.2567	0.1542	<0.0001	0.1111	0.1430	<0.0001	0.4864	0.4255	0.0036	<0.0001	0.0198

Table 10a. Prey utilization and selection for Pacific herring (H). Probability (P) values refer to paired comparisons between allopatric and sympatric aggregations. Abbreviations: PS = Pink Salmon, SL = Sandlance, md = median, sem = standard error of the mean, DNT = Do Not Test.

Prey Category	Aggre-gation	Number of Prey				Percent Number of Prey				Biomass of Prey				Percent Biomass of Prey				Strauss Linear Selection			
		md	mean	sem	P	md	mean	sem	P	md	mean	sem	P	md	mean	sem	P	md	mean	sem	P
Barnacle Larvae	H	0.0	0.9	0.3	- - -	0.0	0.3	0.2	- - -	0.00	0.22	0.07	- - -	0.0	1.4	0.7	- - -	-0.1	+0.1	0.2	- - -
	H+PS	0.0	0.0	0.0	DNT	0.0	0.0	0.0	DNT	0.00	0.00	0.00	DNT	0.0	0.0	0.0	DNT	-0.4	-0.4	0.0	0.00
	w/SL	0.0	1.9	0.5	DNT	0.0	0.4	0.1	DNT	0.00	0.46	0.12	DNT	0.0	2.4	0.7	DNT	-0.2	-0.9	0.3	0.89
Large Calanoids	H	0.0	1.2	0.4	- - -	0.0	0.3	0.2	- - -	0.00	1.91	0.76	- - -	0.0	0.8	0.3	- - -	-0.2	-0.5	0.2	- - -
	H+PS	0.0	75.0	27.8	0.08	0.0	12.3	3.6	0.06	0.00	136.60	51.60	0.08	0.0	24.0	5.8	0.05	-0.3	+12.0	3.7	0.02
	H+SL	0.0	1.2	0.1	0.28	0.0	0.0	0.0	0.22	0.00	0.13	0.09	0.29	0.0	0.7	0.5	0.32	-2.2	-2.4	0.3	0.00
Small Calanoids	H	214.5	484.4	68.7	- - -	77.4	61.8	3.8	- - -	7.65	34.97	6.39	- - -	65.6	53.7	3.9	- - -	+5.7	-12.6	4.3	- - -
	H+PS	6.5	67.6	19.2	0.00	44.3	44.2	6.3	0.03	0.24	4.82	1.45	0.00	5.2	30.4	6.5	0.01	-38.1	-35.9	5.9	DNT
	H+SL	142.5	280.1	59.4	0.33	80.3	68.2	4.8	0.88	6.80	10.41	1.82	0.29	66.6	60.6	4.9	0.75	+0.3	-7.4	4.2	DNT
Chaeto-gnaths	H	0.0	0.0	0.0	- - -	0.0	0.0	0.0	- - -	0.00	0.00	0.00	- - -	0.0	0.0	0.0	- - -	-0.0	-0.0	0.0	- - -
	H+PS	0.0	0.6	0.2	0.01	0.0	0.1	0.0	0.01	0.00	0.26	0.09	0.01	0.0	1.0	0.1	0.00	-0.1	+0.1	0.0	0.87
	H+SL	0.0	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.00	0.00	0.00	1.00	0.0	0.0	0.0	1.00	-0.0	-0.1	0.0	0.57
Cladocerans	H	2.0	6.4	1.4	- - -	0.2	2.1	0.8	- - -	0.08	0.25	0.05	- - -	0.1	2.7	1.0	- - -	-0.5	+0.4	0.7	- - -
	H+PS	0.0	0.8	0.4	DNT	0.0	0.6	0.3	DNT	0.00	0.03	0.01	DNT	0.0	0.7	0.4	DNT	-2.6	-2.3	0.3	0.00
	H+SL	3.0	5.0	1.2	DNT	1.1	1.5	0.3	DNT	0.12	0.20	0.05	DNT	1.0	1.2	0.2	DNT	-0.6	-1.3	0.6	0.46
Decapods	H	0.0	7.9	2.2	- - -	0.0	2.2	0.9	- - -	0.00	32.27	9.58	- - -	0.0	10.7	2.5	- - -	-0.2	+1.8	1.0	- - -
	H+PS	0.0	0.5	0.3	0.12	0.0	0.1	0.0	0.20	0.00	1.93	1.03	0.11	0.0	0.4	0.2	0.11	-0.1	-0.1	0.1	DNT
	H+SL	0.0	0.9	0.4	0.21	0.0	0.4	0.3	0.36	0.00	3.79	1.67	0.20	0.0	6.4	2.6	0.37	-0.2	+0.2	0.3	DNT
Euphausiids	H	0.0	0.1	0.0	- - -	0.0	0.0	0.0	- - -	0.00	0.02	0.01	- - -	0.0	0.1	0.0	- - -	-0.2	-0.5	0.1	- - -
	H+PS	0.0	0.3	0.1	DNT	0.0	0.0	0.1	DNT	0.00	2.16	1.01	DNT	0.0	0.4	0.2	DNT	-0.1	-0.0	0.0	0.00
	H+SL	0.0	0.1	0.1	DNT	0.0	0.2	0.2	DNT	0.00	0.02	0.02	DNT	0.0	0.2	0.2	DNT	-0.2	-0.7	0.2	0.89
Fish	H	0.0	0.0	0.0	- - -	0.0	0.0	0.0	- - -	0.00	0.00	0.00	- - -	0.0	0.0	0.0	- - -	+0.0	-0.0	0.0	- - -
	H+PS	0.0	0.0	0.0	1.00	0.0	0.0	0.0	1.00	0.00	0.00	0.00	1.00	0.0	0.0	0.0	1.00	-0.0	-0.0	0.0	0.00
	H+SL	0.0	0.1	0.1	0.81	0.0	0.0	0.0	0.81	0.00	0.35	0.35	0.81	0.0	0.5	0.5	0.81	+0.0	+0.1	0.1	0.05
Hyperiid Amphipods	H	0.0	0.1	0.1	- - -	0.0	0.0	0.0	- - -	0.00	1.23	0.67	- - -	0.0	1.2	0.7	- - -	-0.0	-0.0	0.0	- - -
	H+PS	0.0	1.9	1.0	0.05	0.0	0.4	0.2	0.05	0.00	20.24	13.31	0.05	0.0	3.3	1.4	0.06	+0.0	+0.3	0.2	0.01
	H+SL	0.0	0.2	0.1	0.73	0.0	0.5	0.4	0.71	0.00	0.86	0.83	0.78	0.0	3.0	2.1	0.75	+0.1	+0.4	0.4	0.28
Larvaceans	H	17.0	544.9	172.2	- - -	7.3	23.2	3.3	- - -	0.57	18.14	5.73	- - -	2.4	16.0	2.7	- - -	+1.3	+17.6	3.4	- - -
	H+PS	0.5	42.8	20.1	0.00	0.4	16.8	4.8	0.03	0.02	1.42	0.67	0.00	0.0	11.8	4.3	0.00	-6.4	+9.4	4.8	0.00
	H+SL	16.0	66.0	23.9	0.49	7.3	18.2	3.7	0.77	0.53	2.20	0.79	0.49	4.6	12.4	2.5	0.28	+0.2	+10.4	3.5	0.59
Other	H	4.0	15.8	2.3	- - -	0.6	6.2	1.2	- - -	0.09	0.56	0.12	- - -	0.2	5.5	1.3	- - -	-2.9	+3.0	1.3	- - -
	H+PS	0.0	1.2	0.3	0.00	0.0	3.8	1.4	DNT	0.00	0.06	0.03	DNT	0.0	1.3	0.7	DNT	-1.8	-0.5	1.5	0.78
	H+SL	6.0	14.8	3.2	0.84	2.6	4.2	0.9	DNT	0.06	0.18	0.04	DNT	0.3	2.3	0.9	DNT	1.5	+1.2	1.0	0.08

Table 10b. Prey utilization and selection for Pink salmon (PS). Probability (P) values refer to comparisons paired between allopatric and sympatric aggregations. Abbreviations: H = Herring, SL = Sandlance, md = median, sem = standard error of the mean, DNT = Do Not Test.

Prey Category	Aggre-gation	Number of Prey				Percent Number of Prey				Biomass of Prey				Percent Biomass of Prey				Strauss Linear Selection			
		md	mea	sem	P	md	mean	sem	P	md	mean	sem	P	md	mean	sem	P	md	mean	sem	P
Barnacle Larvae	PS	0.0	0.0	0.0	- - -	0.0	0.0	0.0	- - -	0.00	0.00	0.00	- - -	0.0	0.0	0.0	- - -	-0.5	+0.5	0.0	- - -
	PS+H	0.0	1.2	0.0	DNT	0.0	0.4	0.2	DNT	0.00	1.20	0.69	DNT	0.0	3.4	1.5	DNT	-0.3	-0.0	0.2	0.06
	PS+SL	0.0	0.9	0.8	DNT	0.0	0.1	0.1	DNT	0.00	0.59	0.40	DNT	0.0	1.8	1.4	DNT	-0.1	-0.1	0.0	0.00
Large Calanoids	PS	0.0	1.2	0.4	- - -	0.0	2.3	0.8	- - -	0.00	2.21	0.74	- - -	0.0	1.1	0.8	- - -	-0.1	+1.9	0.8	- - -
	PS+H	0.0	3.5	1.4	0.47	0.0	3.9	1.6	0.58	0.00	5.33	1.77	0.45	0.0	10.0	2.8	0.14	-0.3	+3.6	1.6	0.75
	PS+SL	0.0	0.0	0.0	0.16	0.0	0.0	0.0	0.16	0.00	0.00	0.00	0.16	0.0	0.0	0.0	0.16	-0.1	-0.1	0.0	0.12
Small Calanoids	PS	0.0	1.1	0.5	- - -	0.0	1.1	0.6	- - -	0.00	0.08	0.04	- - -	0.0	0.2	0.1	- - -	-81.3	-78.2	0.9	- - -
	PS+H	1.0	7.5	3.6	0.04	0.5	4.2	1.4	0.04	0.07	0.42	0.17	0.02	0.2	2.4	1.1	0.01	-80.6	-77.0	1.4	DNT
	PS+SL	0.5	2.3	1.6	0.42	0.2	0.3	0.1	0.81	0.04	0.07	0.02	0.45	0.1	0.3	0.1	0.32	-84.3	-84.2	0.1	DNT
Chaetognaths	PS	0.0	0.1	0.1	- - -	0.0	0.0	0.0	- - -	0.00	0.04	0.02	- - -	0.0	0.2	0.1	- - -	+0.0	+0.0	0.0	- - -
	PS+H	0.0	0.8	0.3	0.13	0.0	2.6	1.0	0.10	0.00	0.35	0.13	0.13	0.0	2.4	1.6	0.17	-0.1	+2.5	0.0	0.04
	PS+SL	0.0	0.3	0.2	0.61	0.0	0.0	0.0	0.65	0.00	0.13	0.09	0.61	0.0	0.3	0.2	0.67	-0.0	+0.0	0.0	0.10
Cladocerans	PS	0.0	0.3	0.1	- - -	0.0	0.1	0.0	- - -	0.00	0.01	0.00	- - -	0.0	0.1	0.0	- - -	-1.0	-0.9	0.1	- - -
	PS+H	0.0	1.1	0.5	DNT	0.0	0.7	0.3	DNT	0.00	0.04	0.02	DNT	0.0	0.1	0.0	DNT	-2.6	-2.1	0.3	0.00
	PS+SL	0.0	0.0	0.0	DNT	0.0	0.0	0.0	DNT	0.00	0.00	0.00	DNT	0.0	0.0	0.0	DNT	-1.3	-1.3	0.0	0.06
Decapods	PS	0.0	5.8	1.7	- - -	0.0	12.6	3.6	- - -	0.00	18.14	6.38	- - -	0.0	7.3	2.8	- - -	-0.5	+12.1	3.7	- - -
	PS+H	0.0	0.1	0.1	0.00	0.0	0.8	0.6	0.00	0.00	0.66	0.30	0.00	0.0	2.3	1.7	0.00	-0.1	+0.6	0.5	DNT
	PS+SL	0.0	0.1	0.1	0.06	0.0	0.1	0.1	0.07	0.00	0.47	0.47	0.07	0.0	2.3	2.3	0.11	-0.2	-0.1	0.1	DNT
Euphausiids	PS	0.0	0.1	0.1	- - -	0.0	0.2	0.2	- - -	0.00	0.36	0.36	- - -	0.0	0.0	0.0	- - -	-0.5	-0.4	0.2	- - -
	PS+H	0.0	0.1	0.1	DNT	0.0	0.4	0.3	DNT	0.00	0.38	0.14	DNT	0.0	0.7	0.3	DNT	+0.0	+0.4	0.3	0.00
	PS+SL	0.0	0.0	0.0	DNT	0.0	0.0	0.0	DNT	0.00	0.00	0.00	DNT	0.0	0.0	0.0	DNT	-0.1	-0.1	0.0	0.22
Fish	PS	0.0	6.1	1.8	- - -	0.0	20.4	5.7	- - -	0.00	271.63	77.70	- - -	0.0	37.4	8.5	- - -	+0.0	+20.3	5.7	- - -
	PS+H	0.0	1.0	0.5	0.05	0.0	2.4	1.2	0.04	0.00	50.07	29.83	0.05	0.0	14.2	4.0	0.06	+0.0	+2.4	1.2	0.00
	PS+SL	0.0	0.1	0.1	0.12	0.0	0.0	0.0	0.11	0.00	5.00	5.00	0.12	0.0	7.0	7.0	0.11	+0.0	+0.0	0.0	0.11
Hyperiid Amphipods	PS	0.0	0.0	0.0	- - -	0.0	0.0	0.0	- - -	0.00	0.00	0.00	- - -	0.0	0.0	0.0	- - -	-0.0	-0.1	0.0	- - -
	PS+H	0.0	1.8	0.5	0.00	0.0	3.5	1.1	0.00	0.00	8.55	3.03	0.00	0.0	13.1	3.2	0.00	+0.0	+3.3	1.1	0.07
	PS+SL	0.0	0.1	0.1	0.65	0.0	0.1	0.1	0.65	0.00	0.79	0.79	0.65	0.0	3.8	3.8	0.65	+0.0	+0.1	0.1	0.00
Larvaceans	PS	27	261.	47.1	- - -	96.9	58.8	8.9	- - -	9.21	8.71	1.57	- - -	55.5	48.7	8.0	- - -	+87.9	+52.5	8.9	- - -
	PS+H	85.	233.	61.1	0.81	88.3	70.6	4.4	0.89	2.83	7.76	2.03	0.81	18.8	41.2	5.4	0.49	+80.8	+63.3	4.4	0.93
	PS+SL	39	569.	142.3	0.06	96.8	94.8	1.7	0.45	13.30	18.98	4.74	0.06	85.1	70.8	9.5	0.20	+88.7	+86.7	1.7	0.44
Other	PS	0.0	1.0	0.4	- - -	0.0	0.3	0.1	- - -	0.00	0.11	0.06	- - -	0.0	0.5	0.3	- - -	-3.2	-4.0	0.5	- - -
	PS+H	0.0	29.8	18.9	0.44	0.0	6.9	2.2	DNT	0.00	0.50	0.21	DNT	0.0	1.6	1.0	DNT	-1.9	+3.3	2.2	0.00
	PS+SL	1.5	1.8	0.7	0.18	0.4	0.4	0.1	DNT	0.01	0.01	0.00	DNT	0.0	0.0	0.0	DNT	1.0	1.0	0.1	<0.0

Table 10c. Prey utilization and selection for Sandlance (SL). Probability (P) values refer to paired comparisons between allopatric and sympatric aggregations. Abbreviations: H = Herring, PS = Pink Salmon, md = median, sem = standard error of the mean, DNT = Do Not Test.

Prey	Aggre-gation	Number of Prey				Percent Number of Prey				Biomass of Prey				Percent Biomass of Prey				Strauss Linear Selection			
		md	mean	sem	P	md	mean	sem	P	md	mean	sem	P	md	mean	sem	P	md	mea	sem	P
Barnacle Larvae	SL	1.0	8.2	1.5	- - -	0.2	3.5	1.3	- - -	0.29	2.34	0.43	- - -	0.6	7.4	1.6	- - -	+0.0	+3.0	1.2	- - -
	SL+H	0.0	20.4	7.7	DNT	0.0	6.5	3.5	DNT	0.00	4.38	1.57	DNT	0.0	10.6	3.6	DNT	-0.0	+5.5	3.5	0.89
	SL+PS	4.0	4.2	1.0	DNT	2.2	2.5	0.7	DNT	1.10	1.48	0.47	DNT	8.6	14.8	5.7	DNT	+2.1	+2.4	0.6	0.00
Large Calanoids	SL	0.0	5.1	1.8	- - -	0.0	0.2	0.1	- - -	0.00	9.10	3.50	- - -	0.0	3.2	0.8	- - -	-0.4	-0.5	0.1	- - -
	SL+H	0.0	0.1	0.0	0.11	0.0	0.0	0.0	0.12	0.00	0.09	0.07	0.11	0.0	1.1	1.1	0.13	-2.2	-2.4	0.3	0.00
	SL+PS	0.0	0.0	0.0	0.27	0.0	0.0	0.0	0.27	0.00	0.00	0.00	0.27	0.0	0.0	0.0	0.27	-0.1	-0.1	0.0	0
Small Calanoids	SL	147.0	592.8	71.6	- - -	76.0	60.6	3.2	- - -	5.39	41.01	7.00	- - -	70.2	56.9	3.2	- - -	+0.7	-12.	3.0	- - -
	SL+H	8.0	435.6	115.1	0.03	48.8	41.6	6.0	0.00	0.40	28.99	7.91	0.04	36.0	39.8	6.1	0.01	-31.4	-33.	6.9	DNT
	SL+PS	164.0	194.1	65.1	0.77	94.8	81.7	9.0	0.03	10.65	10.07	2.12	0.94	86.1	78.8.	7.8	0.08	+10.3	-2.8	9.0	DNT
Chaetognaths	SL	0.0	0.1	0.0	- - -	0.0	0.0	0.0	- - -	0.00	0.00	0.00	- - -	0.0	0.0	0.0	- - -	+0.0	+0.0	0.0	- - -
	SL+H	0.0	0.0	0.0	0.97	0.0	0.0	0.0	0.95	0.00	0.00	0.00	0.95	0.0	0.0	0.0	0.95	-0.0	-0.1	0.0	0.03
	SL+PS	0.0	0.0	0.0	0.95	0.0	0.0	0.0	0.97	0.00	0.00	0.00	0.97	0.0	0.0	0.0	0.97	-0.0	-0.0	0.0	0.00
Cladocerans	SL	0.0	4.3	0.7	- - -	0.0	0.8	0.2	- - -	0.00	0.17	0.03	- - -	0.0	0.8	0.3	- - -	-1.4	-2.1	0.3	- - -
	SL+H	0.0	15.6	5.1	DNT	0.0	2.0	0.6	DNT	0.00	0.61	0.20	DNT	0.0	1.2	0.3	DNT	-0.8	-1.0	0.7	0.17
	SL+PS	0.0	0.3	0.3	DNT	0.0	0.0	0.0	DNT	0.00	0.01	0.01	DNT	0.0	0.1	0.1	DNT	-1.3	-1.2	0.0	0.37
Decapods	SL	0.0	0.5	0.2	- - -	0.0	0.1	0.1	- - -	0.00	1.90	0.72	- - -	0.0	2.7	1.0	- - -	-0.7	-0.5	0.1	- - -
	SL+H	0.0	0.0	0.0	0.49	0.0	0.0	0.0	0.49	0.00	0.00	0.00	0.49	0.0	0.0	0.0	0.49	-0.2	-0.2	0.0	DNT
	SL+PS	0.0	0.0	0.0	0.71	0.0	0.0	0.0	0.71	0.00	0.00	0.00	0.71	0.0	0.0	0.0	0.71	-0.2	-0.2	0.0	DNT
Euphausiids	SL	0.0	0.2	0.1	- - -	0.0	0.0	0.0	- - -	0.00	0.01	0.01	- - -	0.0	0.0	0.0	- - -	+0.0	-0.4	0.1	- - -
	SL+H	0.0	6.2	3.8	DNT	0.0	0.3	0.2	DNT	0.00	0.12	0.07	DNT	0.0	0.0	0.0	DNT	-0.2	-0.4	0.2	0.01
	SL+PS	0.0	0.0	0.0	DNT	0.0	0.0	0.0	DNT	0.00	0.00	0.00	DNT	0.0	0.1	0.1	DNT	-0.1	-0.1	0.0	0.03
Fish	SL	0.0	0.0	0.0	- - -	0.0	0.0	0.0	- - -	0.00	0.54	0.37	- - -	0.0	0.7	0.4	- - -	+0.0	-0.0	0.0	- - -
	SL+H	0.0	0.0	0.0	0.78	0.0	0.0	0.0	0.78	0.00	0.00	0.00	0.78	0.0	0.0	0.0	0.78	+0.0	+0.0	0.0	0.27
	SL+PS	0.0	0.0	0.0	0.88	0.0	0.0	0.0	0.88	0.00	0.00	0.00	0.88	0.0	0.0	0.0	0.88	+0.0	+0.0	0.0	0.55
Hyperiid Amphipods	SL	0.0	0.0	0.0	- - -	0.0	0.0	0.0	- - -	0.00	0.06	0.06	- - -	0.0	0.1	0.1	- - -	-0.0	-0.0	0.0	- - -
	SL+H	0.0	0.0	0.0	0.86	0.0	0.0	0.0	0.86	0.00	0.20	0.20	0.86	0.0	0.7	0.7	0.86	-0.0	-0.1	0.0	0.00
	SL+PS	0.0	0.0	0.0	0.97	0.0	0.0	0.0	0.97	0.00	0.00	0.00	0.97	0.0	0.0	0.0	0.97	+0.0	+0.0	0.0	0.00
Larvaceans	SL	6.0	189.1	36.2	- - -	3.2	14.7	2.1	- - -	0.20	6.30	1.20	- - -	1.6	9.2	1.5	- - -	-5.6	+5.0	2.1	- - -
	SL+H	0.0	6.3	2.6	0.00	0.0	5.2	1.6	0.00	0.00	0.21	0.08	0.00	0.0	3.0	1.0	0.00	-7.2	-2.7	1.8	0.27
	SL+PS	0.0	2.3	2.2	0.01	0.0	0.3	0.3	0.00	0.00	0.08	0.08	0.01	0.0	0.3	0.3	0.00	-8.1	-7.8	0.3	0.13
Other	SL	4.0	25.1	4.5	- - -	1.2	5.8	1.3	- - -	0.07	0.90	0.27	- - -	0.4	3.7	1.1	- - -	-1.3	+2.2	1.3	- - -
	SL+H	1.0	75.4	24.3	0.16	1.6	8.0	2.7	DNT	0.00	1.94	0.83	DNT	0.2	4.4	2.5	DNT	-1.5	+4.6	2.7	0.01
	SL+PS	3.0	19.9	13.3	0.72	2.7	15.0	8.6	DNT	0.10	0.29	0.14	DNT	0.8	5.4	2.9	DNT	+1.3	+13.	8.6	0.00