JC-97-16 Cruise Report 30 September 1997

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The Auke Bay Laboratory of the National Marine Fisheries Service, Alaska Fisheries Science Center, conducted a 12 day cruise aboard the NOAA Ship *John N. Cobb* in the central region of southeastern Alaska from 18 to 29 September 1997. The cruise objectives were to provide logistical support for foot surveys of pink salmon spawning streams in the lower Chatham Strait vicinity, and weather permitting, to additionally survey two streams in the outside coast of Baranof Island. A piggyback objective was to accomplish oceanographic sampling at nine stations on the outbound leg of the cruise.

Poor weather prevented accomplishing oceanographic sampling planned for the outbound leg of the trip and it also did not allow the ship to survey the outside coast of Baranof Island. However, the primary objective of providing logistical support for foot surveys of pink salmon streams was accomplished. Over 27,000 pink salmon carcasses were examined in the streams surveys (Table 1). Twenty heads were recovered from carcasses that had potential adipose fin clips (Table 2).

Chronology of Cruise:

17 Sept Wed.Departed NMFS Subport with Mark Carls and Lee Hulbert @ 2200. Forecasted poor weather conditions were not conducive to sampling oceanographic stations on the outbound leg as planned; sampling these stations could have significantly delayed the execution of the pink salmon stray surveys.

18 Sept Thr. Arrived Red Bluff Bay @ 0900. Began survey ~1000 and returned to the boat at 1600. Began raining heavily during survey and the creek was near flood stages at the end of the survey. Surveyed mid-intertidal and upstream to large gravel bar before creek forks. Encountered bear hunters on the way out.

Red Bluff Bay: Carcasses examined: 1,171 Possible adipose

clips: 3

19 Sept Fri. Pulled anchor @ 0600 and headed for Gut Bay. Too rough to enter Gut Bay so we headed across to Bay of Pillars. Quite rough going across--not a fun ride. Surveyed Kwatahein from low intertidal to fish pass, stream outflow still quite high from previous rainfall. Surveyed high intertidal at Kutlaku creek and other creek east of site. Encountered bear hunters that were upset at us ruining "their" hunt. I tried to calm them down and agreed to shorten our survey as a courtesy to them. Arrived back to Cobb at ~1500.

Kwatahein Creek: Carcasses examined: 247 Possible adipose

clips: 0

0 clips: Sat. Departed with both skiffs for Rowan Bay ~0700 from Bay of Pillars anchorage. 20 Sept Surveyed entire intertidal area of main creek in Rowan Bay, both forks. Encountered curious black bear near beach fringe. Surveyed creek on east side of Bay, few fish. Surveyed creek/slough on west side of bay at half tide. Another bear was encountered, but he was more willing to give way. Returned to Cobb @ 1530. Storm was approaching so we headed for Elena Bay. Anchored @ 1745. Possible adipose clips: **Rowan Bay:** Carcasses examined: 1,611 Probable adipose clips: 1 17 East: Carcasses examined: Possible adipose clips: 0 "West: **Carcasses examined:** 227 Possible adipose clips: 0 21 Sept Sun. Waited for tide to drop, then headed out for Elena Bay Creeks @ 0830. Surveyed Elena Bay NE & NW, and Alecks Creek at low tide. Surveyed "Strydr" (Elena Bay NWxW). Water too high at the larger creeks to survey extensively, Creek and the high discharge in these systems probably blew most carcasses beyond intertidal zone. Back to Cobb @ 1600. **NE Elena Bay: Carcasses examined:** 27 Possible adipose 0 clips: NW " **Carcasses examined:** 863 Possible adipose clips: 1 **Alecks Creek: Carcasses examined:** 42 Possible adipose clips: 0 Strydr Creek: 283 **Carcasses examined:** Probable adipose clips: 1 22 Sept Mon. Waited for tide to drop, then headed out for Elena Bay & Petrof Creeks @ 0900. Surveyed Elena Bay W, Petrof NE and Petrof E. Creeks at low tide. Encountered few fish so we headed back to the Cobb @ 1300 and ran over to Red Bluff Bay. Swells to 8' and we had to quarter them down and back up Chatham Strait. Anchored @ 1730. Shortly after we anchored, weather conditions deteriorated. W Elena Bay: **Carcasses examined:** Possible adipose 15 clips: 0 **NE Petrof (Lost): Carcasses examined:** 35 Possible adipose 3 clips: E Petrof (Elby): **Carcasses examined:** 29 Possible adipose clips: 0

Carcasses examined:

170

Possible adipose

Kutlaku Creek:

23 Sept Tue. Waited for tide to drop, then began survey of Red Bluff Creek @ 0900. Heavy rain at times and winds to 45 knots. Bear seen at opposite side of bay as we were

dropped off. Thousands of gulls! Surveyed intertidal area extensively at low tide, steadily hacking carcasses--long day. Headed back to Cobb @ ~1430.

Red Bluff Bay: Carcasses examined: 4,105 Probable adipose clips: 1

24 Sept Wed. Departed for LPW from Red Bluff Bay @0900. Arrived LPW @ 1730. Helped out at LPW, off loaded supplies, and picked up groceries. Dean Courtney replaced Mark Carls for the remainder of the trip.

25 Sept Thr. Departed LPW @ 0800 and arrived Bay of Pillars @ 1100. Departed for Rowan Bay with skiffs @ 1300 and arrived back to Cobb @ 1800. Heavy rain and wind.

Rowan Bay: Carcasses examined: 1,734 Possible adipose

clips: 1

26 Sept Fri. Departed Cobb @ 0700 and sampled Kutlaku and Kwatahein Creeks. Returned to Cobb @ 1500 and ran across to Red Bluff Bay. Anchored @ 1830.

Kutlaku Creek: Carcasses examined: 1,991 Possible adipose

clips: 1

Kwatahein Creek: Carcasses examined: 287 Possible adipose

clips: 0

27 Sept Sat. Began survey at Red Bluff Bay @ ~0730. Medium water level conditions, rain, and wind. Saw one brown bear on other side of stream and scared it off with a cracker shell. Back to Cobb @~1630..

Red Bluff Bay: Carcasses examined: 5,583 Possible adipose clips: 0

28 Sept Sun. Began survey at Red Bluff Bay @ ~0730. Low stream height enabled us extensively survey both sides of creek upstream to the third gravel bar.

We also surveyed a smaller creek north of the main stream at the head of the Bay.

Sun, rain, and wind. Jumped three brown bears 50-75 yards ahead of us as we doubled back on our survey. Worked until 1900.

Red Bluff Bay: Carcasses examined: 6,775 Possible adipose clips: 3

Probable adipose clips: 1

29 Sept Mon.Departed Cobb @ 0700 and surveyed the low intertidal in Red Bluff Bay.

Clear weather nice morning. Back to the Cobb @ 1000. Pulled anchor and headed for Juneau. Arrived at NMFS Subport @ 2200.

Red Bluff Bay: Carcasses examined: 2,497 Possible adipose

clips: 2

Acknowledgements

Special thanks to Lee Hulbert, Mark Carls, and Dean Courtney who participated on the stream surveys and helped to individually examine over 27 thousand pink salmon carcasses, often in

less than ideal conditions. I would also like to complement the command and crew of the NOAA Ship *John N. Cobb* for support on the surveys, particularly the crew who took us into remote streams with skiffs and also participated on the stream surveys.

Table 1.--Number of pink salmon carcasses and potential adipose fin-clipped fish sampled in streams surveyed by the NOAA Ship *John N. Cobb* 18-29 September 1997.

		Number of pink		pose fin-clipped fish	
Stream locality	Date	salmon carcasses	possible	probable	
Red Bluff Bay	18 September	1,171	3	0	
Red Bluff Bay	23 September	4,105	0	1	
Red Bluff Bay	27 September	5,583	0	0	
Red Bluff Bay	28 September	6,775	3	1	
Red Bluff Bay	29 September	2,497	2	0	
Rowan Bay	20 September	1,851	2	1	
Rowan Bay	25 September	*	1	0	
Bay of Pillars	19 September	417	0	0	
Bay of Pillars	26 September		1	0	
Elena Bay	21 September	1,215	1	1	
Elena Bay	22 September	*	3	0	
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Total		27,418	16	4	

Table 2.--Potential recoveries of adipose clipped pink salmon from streams surveyed by the NOAA Ship *John N. Cobb* 18-29 September 1997.

					Recove	ery	Pelvic	Carcas	s # of	Ad clip
Tag#	Stream	Date	zor	ne ¹	Sex	clip	conditi	on	eyes quality	
1601	Red Bluff	Bay 18 Sept	I	F	0	Soft		0	Abraded	
1602	Red Bluff	Bay 18 Sept	I	M	0	Firm		0	Abraded	
1649	Red Bluff	Bay 18 Sept	I	M	0	Fresh		2	Abraded	
1648	Rowan Ba	ıy Main	20	Sept	I	F	0	Soft	0	Abraded
1603	Rowan Ba	ıy Main	20	Sept	I	F	R	Firm	0	Good
1604	Rowan Ba	ıy East	20	Sept	I	F	0	Soft	0	Abraded
1642	NW Elena	ı Bay	21	Sept	I	F	0	Soft	0	Abraded
1643	WxNM El	lena (Strydr Cr)	21	Sept	M	F	0	Firm	0	Good
1644	W Elena E	Bay (Lost Cr)	22	Sept	M	F	0	Soft	2	Abraded
1645	W Elena E	Bay (Lost Cr)	22	Sept	M	F	0	Soft	2	Abraded
1646	W Elena F	Bay (Lost Cr)	22	Sept	I	F	0	Firm	0	Abraded
1647	Red Bluff	Bay 23 Sept	I	F	0	Firm		0	Good	
1654	Rowan Ba	ıy Main	25	Sept	I	M	0	Soft	1	Fair
1653	Kutlaku C	reek 26 Sept	M	F	0	Soft		0	Poor	
1652	Red Bluff	Bay (Dean Cr)	28	Sept	I	F	0	Soft	0	Fair
1651	Red Bluff	Bay 28 Sept	M	F	0	Soft		0	Good	
1650	Red Bluff	Bay 28 Sept	M	M	0	Soft		0	Fair	
1655	Red Bluff	Bay 28 Sept	M	F	0	Soft		0	Abraded	
1656	Red Bluff	Bay 29 Sept	I	F	0	Soft		0	Fair	
1657	Red Bluff	Bay 29 Sept	I	F	0	Soft		0	Abraded	

¹I=intertidal, M=mainstem, T=tributary