

**Caswell Memorial State Park Rotary Screw Traps:
Preliminary Results
Lower Stanislaus River
April 20 – May 17, 2009**

The Caswell Memorial State Park (Caswell) rotary screw trap operated continuously throughout the reporting period; a total of 122 days have been sampled through the season. Flow levels were higher on average for the reporting period in 2009 (Table 1); average daily flows ranged from 857 cfs on May 13 to 1173 cfs on May 2, 2009 at Ripon (RIP). Instantaneous AM water temperatures recorded at the trap ranged from 12.9°C - 17.4°C (i.e., 55.2°F - 63.3°F) and dissolved oxygen ranged from 9.1 – 10.3 mg/L; turbidity ranged from 1.0 – 3.9 NTU (Table 1). Maximum hourly recorded in-river temperatures at Ripon (RPN) reached 18.9 °C (66.0 °F) on May 17 (<http://cdec.water.ca.gov/selectQuery.html>).

Table 1. Summary statistics of environmental conditions at Caswell for the period April 20 – May 17, 2009 (Ripon flow compared to April 20 – May 17, 2008).

	Ripon Flow (cfs)		AM Temperature (°C)	D.O. (mg/L)	Turbidity (NTU)
	2009	2008			
Min	857	658	12.9	9.1	1.0
Max	1173	1410	17.4	10.3	3.9
Mean	989	922	14.7	9.7	2.2
SD	105	233	1.3	0.4	0.7

In all, 128 juvenile Chinook salmon (i.e., 116 sub-yearling smolts; 12 fish plus-counted) were captured at Caswell during the reporting period; total catch for the season to date is 725 juvenile Chinook salmon (Figure 1 and 2; Table 2). For the reporting period, average fork length (FL) was 98.3 mm for sub-yearling smolts (Table 2 and Figure 3); no other life stages were captured.

Table 2. Summary of length for different juvenile Chinook salmon life stages captured at Caswell from April 20 – May 17, 2009.

	Fry	Parr	Smolt	
			Sub-yearling	Yearling
Minimum (mm)	-	-	83	-
Maximum (mm)	-	-	121	-
Mean ± 95% C.I. (mm)	-	-	98.3 ± 1.3	-
SD	-	-	7.1	-
n	0	0	116	0

No efficiency releases were conducted due to insufficient catch.

No *O. mykiss* were caught during the reporting period.

General fish condition appeared good, with no issues observed.

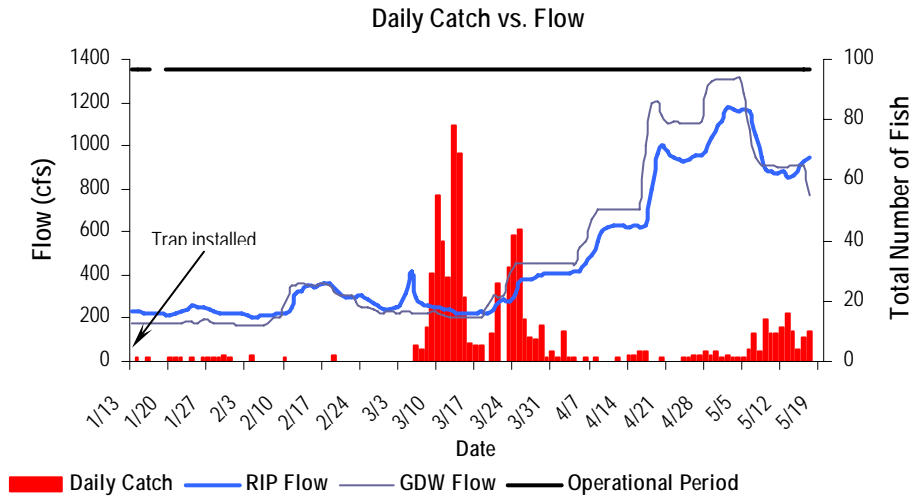


Figure 5. Daily Chinook salmon catch at Caswell and flow at Ripon (RIP) and Goodwin Dam (GDW) from January 13 – May 17, 2009.

Table 3. Weekly Chinook salmon catch summary at Caswell (January 14 – May 17, 2009).

Date	Number of Days	Weekly Catch					Plus Count
		Total	Fry	Parr	Smolt	Yearling	
13-Jan to 18-Jan	3	2	2	0	0	0	0
19-Jan to 25-Jan	7	4	4	0	0	0	0
26-Jan to 1-Feb	7	7	6	0	0	0	1
2-Feb to 8-Feb	7	2	2	0	0	0	0
9-Feb to 15-Feb	7	1	1	0	0	0	0
16-Feb to 22-Feb	7	2	2	0	0	0	0
23-Feb to 1-Mar	7	0	0	0	0	0	0
2-Mar to 8-Mar	7	20	12	6	1	1	0
9-Mar to 15-Mar	7	320	8	156	52	4	100
16-Mar to 22-Mar	7	51	0	28	22	0	1
23-Mar to 29-Mar	7	158	0	4	133	1	20
30-Mar to 5-Apr	7	17	0	1	15	0	1
6-Apr to 12-Apr	7	3	0	0	3	0	0
13-Apr to 19-Apr	7	10	0	0	10	0	0
20-Apr to 26-Apr	7	5	0	0	5	0	0
27-Apr to 3-May	7	14	0	0	14	0	0
4-May to 10-May	7	41	0	0	30	0	11
11-May to 17-May	7	68	0	0	67	0	1
13-Jan to 17-May	122	725	37	195	352	6	135

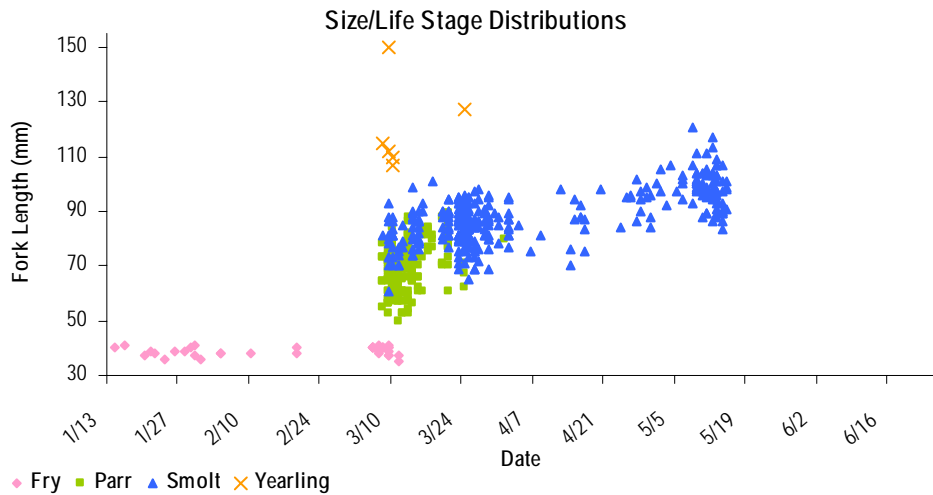


Figure 6. Distribution of size by life stage for Chinook salmon captured at Caswell (January 14 – May 17, 2009).

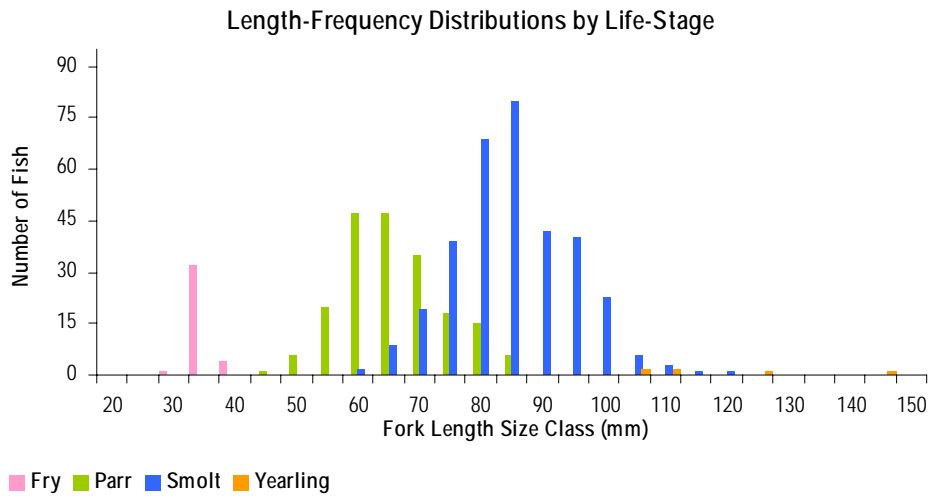


Figure 7. Length-frequency distribution of Chinook salmon captured at Caswell (January 14 – May 17, 2009).

Disclaimer

The data presented herein are preliminary and subject to revision until a final report and raw data are made public. Cramer Fish Sciences is not liable for data not properly cited as preliminary. Expressed consent may be obtained to cite this preliminary data by contacting clarkw@fishsciences.net.