

Smith River Summer Fish Count 2009

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This report provides a concise summary of the 2009 Summer Fish Count on the Smith River hosted by the Smith River Alliance in partnership with the USFS Smith River National Recreation Area. For details on background for this annual survey and methods, please refer to previous reports available at www.smithriveralliance.org.



Fish Count Training Day at Rock Creek Ranch. (www.thomasbdunklin.com/gallery/FishCount)

Survey Dates: All fish counting activities in summer 2009 occurred on July 25.

Survey Crews: A total of 36 volunteers, including 11 team leaders, participated in the survey. All surveyors had received in-water training the day prior or during previous fish counts in addition to training by video and supplemental discussion. Less experienced surveyors were placed as duplicates on larger teams to maintain consistency of skill and effort.

Survey Extent: A total of 22.6 miles of the South Fork were surveyed as eleven contiguous reaches from Buck Creek to confluence with the Middle Fork. No surveys were completed in the Middle Fork or North Fork.

Visibility: Water clarity in the South Fork enabled identification of fish at distances of up to 30 feet. Several measurements of visibility – determined by ability to identify parr marks on a large lure – indicated that typical and functional visibility due to variable light conditions may more typically 15-20 feet.

Water Temperature: A temperature logger was used to record hourly temperature of the South Fork at Rock Creek Ranch (RM 8). The average temperature on July 25th was 64.7° F. Maximum and minimum temperatures were only a degree higher and lower, respectively, on that day. A handheld thermometer was taken to the top of the upper most reach (Buck Creek) where the South Fork was measured to be 63°F.

Results: Total counts by each category of fish are provided in Table 1. No Chinook were observed in 2009. The majority of steelhead and resident rainbow trout were found in the upper most two reaches. Nine of the 10 steelhead and 58 of the 47 resident rainbow trout seen were counted in the upper most 5 miles surveyed. A range of 18 to 41 total cutthroat trout were counted per mile with no clear trend of relative abundance in the upstream or downstream direction.

Table 1: Total fish by type counted in Smith River, July 25, 2009

Fish Category	Species	Size	South Fork (22.6 mi)	Middle Fk, Lower (0.0 mi)	Middle Fk, Upper (0.0 mi)
Cutthroat, large	<i>O. clarki clarki</i>	12 – 20"	171	NA	NA
Cutthroat, medium	<i>O. clarki clarki</i>	10 – 12"	251	NA	NA
Cutthroat, small	<i>O. clarki clarki</i>	7 – 10"	243	NA	NA
Resident Rainbow	<i>O. mykiss</i>	10 – 12"	58	NA	NA
Steelhead	<i>O. mykiss</i>	16 – 28"	10	NA	NA
Half-pounder	<i>O. mykiss</i>	12 -- 16"	0	NA	NA
Chinook	<i>O. tshawytscha</i>	18 – 42"	0	NA	NA
Sucker	<i>C. rimiculus</i>	8 – 20"	0	NA	NA

Appendix Table A provides number of fish counted by each reach in 2009. Appendix Table B provides a summary of fish count results from 2009 and all prior years.

Quality Assurance Notes:

Follow-up interviews with team leaders identified no data quality problems. Counts per reach were immediately compared to “normal” ranges of trout per mile and ratios of large to small trout. This quality assurance step indicated no need for resurveys.

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APPENDIX TABLE A

Fish observed by survey segment in the Smith River, summer 2009. All survey segments in 2009 were in the South Fork.
CTT = Coastal cutthroat trout; RBT = Resident rainbow trout; SHT = Steelhead trout; 1/2 lb'r = Half-pounder steelhead.

Fork	Segment Top	Segment Bottom	Miles	DATE	CTT<10"	CTT10-12"	CTT>12"	RBT	SHT	1/2 lb'r	Chinook	Suckers
SF	Buck Creek	McClendon Ford	2.2	25-Jul	16	18	15	6	7	0	0	0
SF	McClendon Ford	Indian Bar	2.7	25-Jul	32	26	28	41	2	0	0	2
SF	Indian Bar	Hurdygurdy Cr	3.0	25-Jul	35	39	20	2	0	0	0	0
SF	Hurdygurdy Cr	Steven Bridge	1.2	25-Jul	25	14	10	0	0	0	0	0
SF	Steven Bridge	Rattlesnake Slide	1.1	25-Jul	11	17	10	0	0	0	0	0
SF	Rattlesnake Slide	Rock Cr Ranch	3.5	25-Jul	52	55	20	0	1	0	2	1
SF	Rock Cr Ranch	Sand Camp	1.2	25-Jul	18	20	21	1	0	0	0	0
SF	Sand Camp	Carter Falls	2.4	25-Jul	15	17	13	1	0	0	2	1
SF	Carter Falls	Above Surprise	3.2	25-Jul	24	20	19	2	0	0	1	1
SF	Above Surprise	Craigs Beach	1.0	25-Jul	5	13	2	2	0	0	0	0
SF	Craigs Beach	Middle Fork	1.1	25-Jul	10	12	13	3	0	0	0	1

APPENDIX Table B

Summary of previous summer adult fish surveys in the main forks of the Smith River with total counts in the South Fork.

Year	SF Date	Start	End	Miles	Chinook	CTT>12"	SHT	RBT	Other Forks	Surveyors
1982	7/26-8/27	Eightmile	Middle Fork	25	11	91	5	NA	MF, NF	William T. Mitchell
1989	8/28	GO Road	Craigs Cr	13.2	2	125	5	NA		USFS?
1990	9/11	GO Road	Craigs Cr	13.2	0	138	7	NA		USFS?
1991	9/9-12	GO Road	Craigs Cr	13.2	1	51	8	NA	MF	Wood/Rogers (CDFG)
1992	9/3-5	Rattlesnake	Scaling Stat.	11	1	120	8	NA	MF, NF	USFS/Reedy
1993	9/7-9	Hurdygurdy	Middle Fork	15.2	17	111	4	NA	MF, NF	USFS/Reedy
1994	8/10 - 9/5	Harrington	Scaling Stat.	27	8	190	7	13	MF, NF	USFS/Reedy
1995	8/2-3	Hurdygurdy	Middle Fork	15.2	21	161	4	19	MF, NF	USFS/Reedy
2000	8/19	Hurdygurdy	Lower Concrete Br	8	1	101	2	2		SRA/Reedy
2001	8/18	Hurdygurdy	Scaling Stat.	13.2	2	235	1	6		SRA/Reedy
2002	8/24	Indian Bar	Gorge	15	14	283	4	17		SRA/Reedy
2003	8/6-14	Eightmile	Middle Fork	25	17	290	2	29	MF	SRA/Reedy
2004	8/15	Hurdygurdy	Scaling Stat.	13.2	12	126	8	39	MF	SRA/Reedy
2005	7/23-8/16	Buck Cr	Middle Fork	23	2	216	13	46	MF	SRA/Reedy
2006	7/29-8/3	Eightmile Creek	Middle Fork	25	11	336	11	43	MF, NF	SRA/Reedy
2007	7/28	Indian Bar	Middle Fork	15	3	156	9	17	MF	SRA/Reedy
2008	7/26	Indian Bar	Middle Fork	15	2	214	1	12	MF	SRA/Reedy
2009	7/25	Buck Creek	Middle Fork	22.6	0	171	10	58		SRA/Reedy

Note: The above table lists all known surveys. The Middle Fork and North Fork were not surveyed in any year when the South Fork was not surveyed. Data prior to 1992 was not provided with complete descriptions of data collection methods or personnel.

Smith River Adult Fish Counts, Summer 2009