

as per Jen G, 10/5/05

- 1. Peak live cannot be used for 2 reasons
 - a. 2001 Data are Som
 - b. Some reaches are snorkeled others are not.
- 2. Redds are most reliable.

Coho Redds

Most Redds are assigned to chinook unless coho are present

Table 1 - 2002 Fall Chinook Spawning Survey results by date, actual surveyed reach, and surveyors - Klamath NF, Happy Camp and Ukonom Ranger Districts

Cooperative surveys between USFS, CDF&G, Karuk Tribe, Yurok Tribe							
	Reach	Date	Surveyors +	Survey	No. of	No. of live	No. of live
<u>Stream</u>	<u>Surveyed</u>	<u>Surveyed</u>	<u>Affiliation</u>	<u>Method</u>	<u>Chin Redds</u>	<u>adult Chin</u>	<u>jack Chin</u>
						(b)	(b)
Clear	Slippery RA - Mouth	10/10/2002	Alan Crockett-USFS, Micah Larson, Caryn Woelfel: AmeriCorps w/USFS	Snorkel	27	308	4
Clear	Slippery RA - Mouth	10/18/2002	Micah Larson, Caryn Woelfel: AmeriCorps w/USFS	Snorkel	26	399	1
Clear	Slippery RA - Mouth	10/25/2002	Alan Crockett-USFS; Micah Larson, Caryn Woelfel: AmeriCorps w/USFS	Snorkel	34	431	4
Clear	Slippery RA - Mouth	11/1/2002	Micah Larson, Caryn Woelfel: AmeriCorps w/USFS	Snorkel	8	317	7
Clear	Slippery RA - Mouth	11/15/2002	Alan Crockett, Jon Grunbaum: USFS	Snorkel	44	86	1
Clear	Slippery RA - Mouth	11/20/2002	Greg Bates, Richard Myers: Yurok Tribe	Snorkel	3		
Clear	Slippery RA - Mouth	11/26/2002	Micah Larson, Caryn Woelfel: AmeriCorps w/USFS	Snorkel	6	21	0
Clear	Slippery RA - Mouth	12/4/2002	Frankie Myers, Richard Myers: Yurok Tribe	Snorkel	4	0	0
Clear	Ten Mile Cr. -Slippery RA.	11/1/2002	Alan Crockett, Jon Grunbaum: USFS	Snorkel	8	9	0
			Totals		160		
Dillon	Mill Ck - mouth	10/18/2002	Alan Crockett, Jon Grunbaum: USFS	Snorkel	3	15	0
Dillon	2 mile to mill cr.	10/18/2002	Alan Crockett, Jon Grunbaum: USFS	Snorkel	0	0	0
Dillon	Mill Ck - mouth	10/30/2002	Greg Bates, Richard Myers: Yurok Tribe	Snorkel	8	17	0
Dillon	Mill Ck - mouth	11/20/2002	Micah Larson, Caryn Woelfel: AmeriCorps w/USFS	Snorkel	5	9	0
Dillon	Mill Ck - mouth	12/4/2002	Tuff Tims, Ken Brinks: Karuk ribe	Snorkel	0	1	0
			Totals		16		
Elk	5MB - water plant	10/16/2002	Greg Bates, Richard Myers: Yurok Tribe	Snorkel	31	a	a
Elk	5MB - water plant	10/30/2002	Micah Larson, Caryn Woelfel: AmeriCorps w/USFS	Snorkel	41	108	1
a = jacks or half-pounders lumped in with adult Chinook or adult steelhead, respectively							
b = Chinook between 10 and 15 inches long (FL) were classified as jacks or grilse; over 15 inches long (FL) were classified as adults.							

d = only includes the number of observed carcasses from which scale samples were collected				
	Reach	Retrievable (d)		
<u>Stream</u>	<u>Surveyed</u>	<u>#Coho Carcasses</u>	<u>Stream</u>	<u>Comments</u>
Clear	Slippery RA - Mouth	0	Clear	Clear low flows;
Clear	Slippery RA - Mouth	0	Clear	Approx. 20% of steelhead observed were half-pounders.
Clear	Slippery RA - Mouth	0	Clear	Approx. 30% of steelhead were half-pounders.
Clear	Slippery RA - Mouth	0	Clear	
Clear	Slippery RA - Mouth	0	Clear	(Ran out of scale envelopes - an additional 16 KS carcasses were observed but not retrieved.) Visibility was good, but not great. About 30% of steelhead were half-pounders.)
Clear	Slippery RA - Mouth		Clear	Poor quality survey - surveyors lost en-route to put-in. Only redd data is good. - no live fish counts; no carcasses worked up.
Clear	Slippery RA - Mouth	0	Clear	
Clear	Slippery RA - Mouth	0	Clear	
Clear	Ten Mile Cr. - Slippery RA.	0	Clear	Approx. 30% of steelhead were half-pounders.
		0	Totals	
Dillon	Mill Ck - mouth	0	Dillon	Mother bear and cubs above Mill Ck. Good clarity & low flows.
Dillon	2 mile to mill cr.	0	Dillon	
Dillon	Mill Ck - mouth	0	Dillon	Redds spread evenly from mouth to Mill Cr.
Dillon	Mill Ck - mouth	0	Dillon	
Dillon	Mill Ck - mouth	0	Dillon	
		0	Totals	
Elk	5MB - water plant	0	Elk	Approx. 5% or less steelhead were half-pounders.
Elk	5MB - water plant	0	Elk	

	Reach	Total No.	No. of live	No. of live	Total No.	No. of live	No. of	Retrievable (d)
<u>Stream</u>	<u>Surveyed</u>	<u>Chinook</u>	<u>adult steelhead</u>	<u>half-pounders</u>	<u>steelhead</u>	<u>Adult Coho</u>	<u>Coho Redds</u>	<u>#Chin Carcasses</u>
Elk	SMB - water plant	35	a	a	123	0	0	0
Elk	SMB - water plant	2	a	a	74	0	0	4
Elk	EF Elk - 5MB	0	a	a	114	0	0	0
Elk	Twins Ck - 5MB	14	a	a	21	0	0	0
Elk	Twins Ck - 5MB	8	a	a	11	0	0	1
Elk	Twins Ck - 5MB	2	a	a	38	0	0	0
Elk	Twins Ck - EF Elk	0	151	6	157	0	0	0
Elk	Doolittle - Twins	9	a	a	20	0	0	0
Elk	Doolittle - Twins	14	a	a	10	0	0	0
Elk	Doolittle - Twins	0	0	0	0	0	0	0
Elk	Doolittle - Twins	0	217	43	260	0	0	0
Elk	Bear - Doolittle	0	a	a	49	0	0	0
Elk	Bear - Doolittle	0	a	a	50	0	0	0
Elk	Bear - Doolittle							
Elk	Bear - Doolittle	0	154	32	186	0	0	0
		246	522	81	1481	0	0	6
					413.00	30-Oct		
Grider	No Name - mouth	64	0	0	0	0	0	1
Grider	No Name - mouth	48	0	0	0	0	0	3
Grider	No Name - mouth	16	0	0	0	0	0	0
Grider	No Name - mouth	14	1	0	1	0	0	3
Grider	No Name - mouth	0	0	0	0	0	0	1
Grider	Bark Shanty - No Name	14	0	0	0	0	0	1
Grider	Bark Shanty - No Name	6	0	0	0	0	0	0
Grider	Bark Shanty - No Name	2	0	0	0	0	0	0
Grider	No Name - mouth	1	0	0	0	0	0	1
Grider	No Name - mouth	0	0	0	0	0	0	0
							0	10
a = jacks or half-pounders lumped in with adult Chinook or adult steelhead, respectively								
d = only includes the number of observed carcasses from which scale samples were collected								

	Reach	Retrievable (d)		
<u>Stream</u>	<u>Surveyed</u>	<u>#Coho Carcasses</u>	<u>Stream</u>	<u>Comments</u>
Elk	5MB - water plant	0	Elk	* = Dove, but poor water clarity.
Elk	5MB - water plant	0	Elk	About 20% of steelhead were half-pounders.
Elk	EF Elk - 5MB	0	Elk	About 20% of steelhead were half-pounders.
Elk	Twins Ck - 5MB	0	Elk	Most redds had only 1 fish on them.
Elk	Twins Ck - 5MB	0	Elk	
Elk	Twins Ck - 5MB	0	Elk	Walked, not dove.
Elk	Twins Ck - EF Elk	0	Elk	
Elk	Doolittle - Twins	0	Elk	
Elk	Doolittle - Twins	0	Elk	
Elk	Doolittle - Twins	0	Elk	Walked, not dove.
Elk	Doolittle - Twins	0	Elk	
Elk	Bear - Doolittle	0	Elk	
Elk	Bear - Doolittle	0	Elk	
Elk	Bear - Doolittle		Elk	Incomplete survey - stopped at Stanza Creek
Elk	Bear - Doolittle	0	Elk	
		0	Totals	
Grider	No Name - mouth	0	Grider	walked
Grider	No Name - mouth	0	Grider	Three more carcasses too mangled to measure.
Grider	No Name - mouth	1	Grider	walked
Grider	No Name - mouth	0	Grider	Eight more carcasses seen but were too mangled to measure.
Grider	No Name - mouth	0	Grider	
Grider	Bark Shanty - No Nan	0	Grider	Most pools were snorkeled. Coho juveniles observed throughout reach.
Grider	Bark Shanty - No Nan	0	Grider	walked
Grider	Bark Shanty - No Nan	0	Grider	walked
Grider	No Name - mouth	0	Grider	
Grider	No Name - mouth	0	Grider	
		1	Totals	walked
d = only includes the number of observed carcasses from which scale samples were collected				

	Reach	Total No.	No. of live	No. of live	Total No.	No. of live	No. of	Retrievable (d)
<u>Stream</u>	<u>Surveyed</u>	<u>Chinook</u>	<u>adult steelhead</u>	<u>half-pounders</u>	<u>steelhead</u>	<u>Adult Coho</u>	<u>Coho Redds</u>	<u>#Chin Carcasses</u>
Indian	WBC - to private property	2	2	0	2	0	0	0
							0	0
MS Salmon R	Wooley - mouth	741	a	a	1152	0	0	0
MS Salmon R	Wooley - mouth	764	1589	210	1799	0	0	2
MS Salmon R	Wooley - mouth	275	a	a	760	0	0	5
MS Salmon R	Wooley - mouth	195	a	a	1632	0	0	2
MS Salmon R	Wooley - mouth	131	a	a	1036	0	0	5
MS Salmon R	Wooley - mouth	42	a	a	483	0	0	16
MS Salmon R	Wooley - mouth	1	a	a	509	0	0	4
MS Salmon R	Grants - Wooley	246	5	0	5	0	0	0
MS Salmon R	Grants - Wooley	129	a	a	13	0	0	1
MS Salmon R	Grants - Wooley	125	a	a	28	0	0	17
MS Salmon R	Grants - Wooley	74	a	a	22	0	0	16
MS Salmon R	Grants - Wooley	40	a	a	23	0	0	12
MS Salmon R	Grants - Wooley	32	a	a	127	0	0	1
MS Salmon R	Grants - Wooley	1	a	a	119	0	0	6
15-Oct	Nordheimer - Grants	633	73	90	163	0	0	0
MS Salmon R	Nordheimer - Grants	542	a	a	209	0	0	7
MS Salmon R	Nordheimer - Grants	378	a	a	112	0	0	22
MS Salmon R	Nordheimer - Grants	242	a	a	278	0	0	32
MS Salmon R	Nordheimer - Grants	210	a	a	193	0	0	33
MS Salmon R	Nordheimer - Grants	92	a	a	258	0	0	6
MS Salmon R	Nordheimer - Grants	10	a	a	503	0	0	0
							0	187
a = jacks or half-pounders lumped in with adult Chinook or adult steelhead, respectively								
d = only includes the number of observed carcasses from which scale samples were collected								

	Reach	Retrievable (d)		
<u>Stream</u>	<u>Surveyed</u>	<u>#Coho Carcasses</u>	<u>Stream</u>	<u>Comments</u>
Indian	WBC - to private prop	0	Indian	
		0	Totals	
MS Salmon R	Wooley - mouth	0	MS Salmon R	Approx. 40% of steelhead were half-pounders, and about 15% of Chinook were jacks.
MS Salmon R	Wooley - mouth	0	MS Salmon R	
MS Salmon R	Wooley - mouth	0	MS Salmon R	
MS Salmon R	Wooley - mouth	0	MS Salmon R	
MS Salmon R	Wooley - mouth	0	MS Salmon R	
MS Salmon R	Wooley - mouth	0	MS Salmon R	An additional 15 KS carcasses were observed at the bottom of deep holes and were not retrieved. Two female pre-spawn mortalities were among carcasses. About 30% or less of steelhead were half-pounders. Visibility was just "OK" - some live steelhead were undoubtedly missed but there are definitely fewer steelhead in this reach than were here earlier in fall surveys (late October / early November).
MS Salmon R	Wooley - mouth	??	MS Salmon R	Found a chum salmon carcass which was a female pre-spawn mortality with eggs in her.
MS Salmon R	Grants - Wooley	0	MS Salmon R	
MS Salmon R	Grants - Wooley	0	MS Salmon R	Carcass was a female pre-spawn mortality - appeared to have columnaris.
MS Salmon R	Grants - Wooley	0	MS Salmon R	
MS Salmon R	Grants - Wooley	0	MS Salmon R	
MS Salmon R	Grants - Wooley	0	MS Salmon R	
MS Salmon R	Grants - Wooley	0	MS Salmon R	Visibility just "OK".
MS Salmon R	Grants - Wooley	0	MS Salmon R	
15-Oct	Nordheimer - Grants	0	MS Salmon R	
MS Salmon R	Nordheimer - Grants	0	MS Salmon R	The two female pre-spawn mortalities that were among the carcasses had badly eroded gills. Approx. 10% or less of Chinook were jacks, and about 10 - 30% of steelhead were half-pounders
MS Salmon R	Nordheimer - Grants	0	MS Salmon R	Approx. 5% or less of Chinook were jacks, and about 20% of steelhead were half-pounders.
MS Salmon R	Nordheimer - Grants	0	MS Salmon R	
MS Salmon R	Nordheimer - Grants	0	MS Salmon R	
MS Salmon R	Nordheimer - Grants	0	MS Salmon R	
MS Salmon R	Nordheimer - Grants	0	MS Salmon R	About 10% of sthd were half-pounder size.
		0	Totals	
d = only includes the number of observed carcasses from which scale samples were collected				

<u>Stream</u>	<u>Reach Surveyed</u>	<u>Date Surveyed</u>	<u>Surveyors + Affiliation</u>	<u>Survey Method</u>	<u>No. of Chin Redds</u>	<u>No. of live adult Chin</u>	<u>No. of live jack Chin</u>
Wooley	Gates - mouth	11/6/2002	Alan Crockett, Jon Grunbaum: USFS	Snorkel	54	70	4
Wooley	Bridge - Gates	11/14/2002	Steve Robinson-USFS; Micah Larson-AmeriCorps w/USFS	Snorkel	8	0	0
Wooley	Hancock - Bridge	11/14/2002	Erik Paulson, Caryn Woelfel: AmeriCorps w/USFS	Snorkel	3	0	0
Wooley	North Fork - Hancock	11/14/2002	Fred Farr-USFS; Chris Hutton-AmeriCorps w/USFS	Snorkel	1	0	0
			Totals		66		
S.F. Clear	lower 0.5 mi below barrier	11/7/2002	Micah Larson, Caryn Woelfel: Americorps	Walk	0	0	0
S.F. Clear	lower 0.5 mi below barrier	11/21/2002	Micah Larson, Caryn Woelfel: Americorps	Walk	0	0	0
			Totals		0		
Thompson	2.0 Mi. - mouth	10/17/2002	Alan Crockett-USFS, Micah Larson-AmeriCorps w/USFS	Snorkel	5	11	0
Thompson	2.0 Mi. - mouth	11/6/2002	Greg Bates, Richard Myers: Yurok Tribe	Snorkel	19	15	0
Thompson	2.0 Mi. - mouth	11/21/2002	Caryn Woelfel, Micah Larson: AmeriCorps w/USFS	Spot Dove	3	0	0
Thompson	2.0 Mi. - mouth	12/4/2002	Caryn Woelfel, Micah Larson: AmeriCorps w/USFS	Spot Dove	0	0	0
					27		
Ti	lower 1/2 mile	11/6/2002	Alex Corum: Karuk Tribe	Walk	0	0	0
Ti	lower 1/2 mile	11/20/2002	Ken Brink, Tuff Tims: Karuk Tribe	Walk	0	0	0
			Totals		0		
Irving	0.5 mile above HWY 96	11/20/2002	Ken Brink, Tuff Tims: Karuk Tribe	Walk	0	0	0
Independence	lower 1/2 mile	10/16/2002	Micah Larson, Caryn Woelfel: Americorps	Walk	2	0	0
Independence	lower 1/2 mile	11/7/2002	Micah Larson, Caryn Woelfel: Americorps	Walk	0	0	0
			Totals		2		
Draft 1 fall survey results table prepared by Jon Grunbaum, KNF Fisheries Biologist, on December 2, 2002.							
The first rain storm of the season began on Nov 7th and the streams came up slightly and became turbid for about 5 days. Some of the fall surveys were suspended during this time but were resumed on November 14th.							

<u>Stream</u>	<u>Reach</u> <u>Surveyed</u>	<u>Retrievable (d)</u> <u>#Coho Carcasses</u>	<u>Stream</u>	<u>Comments</u>
Wooley	Gates - mouth	0	Wooley	About 10% - 30% of sthd were half-pounders.
Wooley	Bridge - Gates	0	Wooley	
Wooley	Hancock - Bridge	0	Wooley	About 10% of sthd were half-pounders.
Wooley	North Fork - Hancock	0	Wooley	
		0	Totals	
S.F. Clear	lower 0.5 mi below b	0	S.F. Clear	
S.F. Clear	lower 0.5 mi below b	0	S.F. Clear	
		0	Totals	
Thompson	2.0 Mi. - mouth	0	Thompson	Dove reach. No fish seen until private property saw 4 bears!
Thompson	2.0 Mi. - mouth	0	Thompson	lots of vacant redds first 1/2 of the reach. Not much activity until private property\.
Thompson	2.0 Mi. - mouth	0	Thompson	All carcasses found at or below Thompson Ck Lodge.
Thompson	2.0 Mi. - mouth	0	Thompson	
		0	Totals	
Ti	lower 1/2 mile	0	Ti	
Ti	lower 1/2 mile	0	Ti	
		0	Totals	
Irving	0.5 mile above HWY 9	0	Irving	
Independence	lower 1/2 mile	0	Independence	
Independence	lower 1/2 mile	0	Independence	
		0	Totals	
d = only includes the number of observed carcasses from which scale samples were collected				
Draft 1 fall survey results table prepared by Jon Grunbaum, KNF Fisheries Biologist, on December 2, 2002.				
The first rain storm of the season began on Nov 7th and the streams came up slightly and became turbid for about 5 days. Some of the fall surveys were suspended during this time but were resumed on Novemehr 14th.				