

1997 Noxious Weed Suppression Crew End of the Year Report

Andrew Klimek and Genesis Peters were the members of the Middle Fork Ranger District Weed Crew for 1997. The Weed Crew was stationed out of Little Creek Guard Station and was in the field from July 9, 1997 until September 8, 1997. The crew worked primarily in the Wild and Scenic River Corridor from Little Creek down the Middle Fork to Loon Creek. The crew also floated the Middle Fork from Boundary Creek to Cache Bar with the Boat Crew and documented and treated noxious weeds in boater camps. Most documentation and mapping was completed by Andrew Klimek, and Genesis Peters relentlessly attacked the weed sites.

The identified target noxious weed species that the crew sought and documented were rush skeletonweed, spotted knapweed, Canada thistle, and sulfur cinquefoil. These species were chosen because of their particular invasive qualities. While other weed species are found on the Middle Fork District, particularly common mullein and bull thistle, these other species were neither documented nor treated.

Notes about the Documentation Process

Throughout the course of the season, the crew came to question the reliability of Item #39 on the FC-RONR Wilderness Campsite & Weed Inventory Form, "Average Density of Predominant Species in Plants per Square Yard." The requested information can be highly subjective and a wide range of density may occur at one site. Its value as decision-making tool should be highly suspect. For this reason, we have chosen not to compare Average Density data from 1996 and 1997.

The "Total # of Plants" figures are often only a very rough estimate. At sites with fewer than 1000 plants, the 1997 crew counted plants as they were pulled. This allows for an accurate figure. However, at larger sites or at sites where weed whips were employed this figure should only be considered a very rough estimate. The crew also supposes that the 96 Weed Crew consistently underestimated the total number of plants. For these reasons, this data should be considered of limited value and reliability.

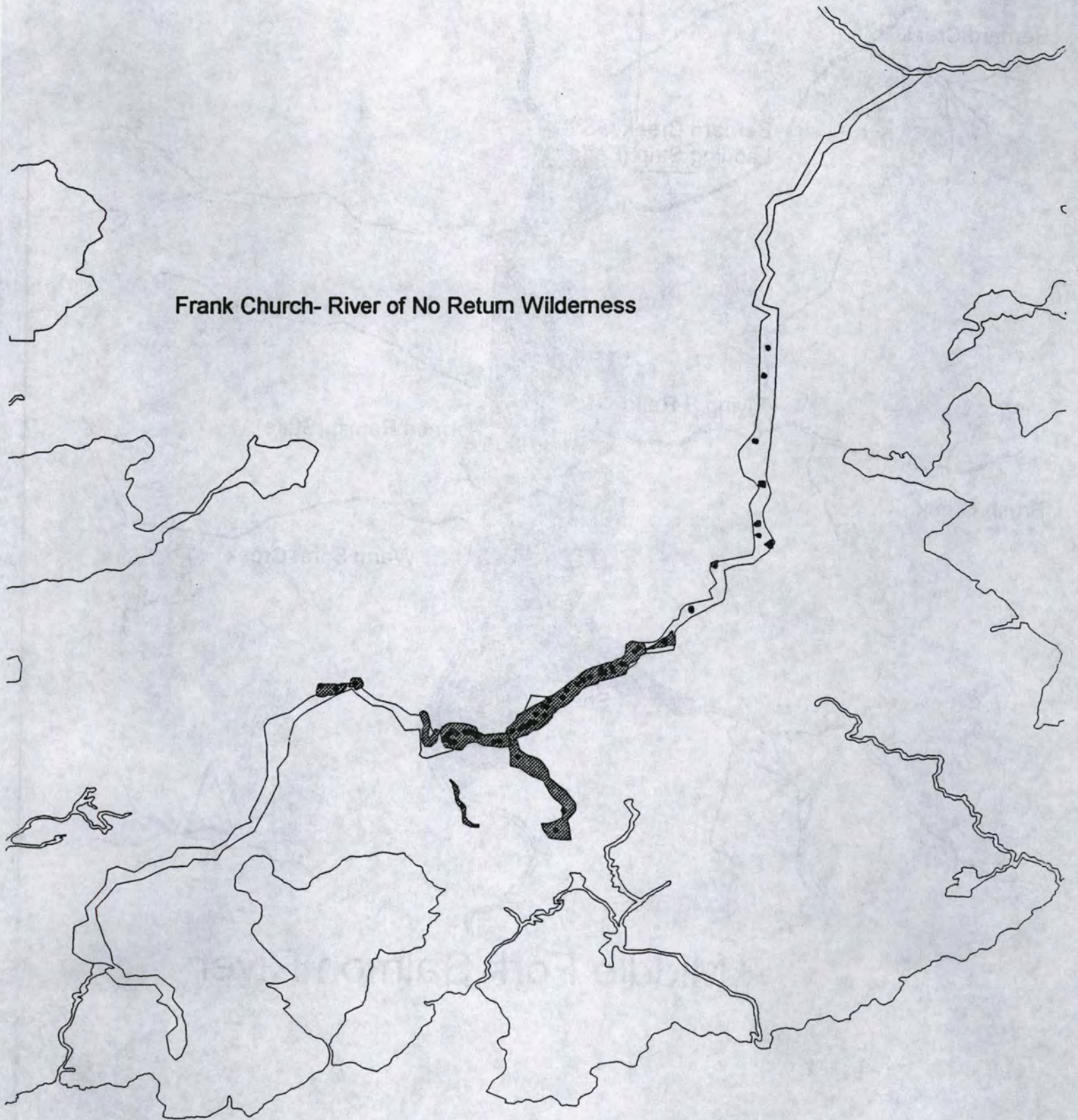
Because of the limitations involved in dealing with the Average Density and Total Plants figures, any comparisons we draw between 1996 data and 1997 data will deal only with the area (in square yards or acres) of the noxious weed sites.

The crew was pleasantly surprised by how accurately the Global Positioning System and ArcView program mapped the weed sites. This means that the computer-printed map which accompanies this report can be considered reliable to give a general overview of where the weed sites are located.

The "% Pulled or Whipped" notation which appears on the weed forms serves two functions. In the first place, it denotes the area of the site which was treated. Secondly, it specifies what type of treatment was performed, either pulling or whipping. In general, we only whipped at very dense and/or large sites (larger than 5000 square yards) and only before the plants were in flower. We made this distinction in the hope that crews in the future could differentiate the effectiveness between the two treatment methods.

Summary of Weed Site Locations (See attached map.)

Frank Church- River of No Return Wilderness



- Noxious Weed Sites Recorded by 1997 MFRD Weedcrew
- Area Treated for Noxious Weed Suppression 1997 MFRD Weedcre
- Wilderness Boundary

Total Noxious Weed Sites located: 71 (39 of these sites were previously undocumented.)
Sites within the Wild & Scenic River Corridor: 66
Sites outside the Wild & Scenic River Corridor: 5

Boundary Creek to Pistol Creek (21.4 River miles-Crew only floated this stretch.)

No noxious weed sites located.

Pistol Creek to Marble Creek (10.3 miles-Crew only floated this stretch.)

1 Canada Thistle site
2 Spotted Knapweed sites
1 Rush Skeletonweed site

Marble Creek to Little Loon Creek (7.4 miles-Crew hiked this entire stretch.)

2 Canada Thistle sites
2 Spotted Knapweed sites
19 Rush Skeletonweed sites
2 Sulfur Cinquefoil sites

Little Loon Creek to Loon Creek (10.2 miles-Crew hiked this entire stretch.)

1 Canada Thistle site
1 Spotted Knapweed site
27 Rush Skeletonweed sites

Loon Creek to Big Creek (28.8 miles-Crew only floated this stretch.)

8 Spotted Knapweed sites
4 Rush Skeletonweed sites
1 Sulfur Cinquefoil site

Big Creek to Confluence with Main Salmon (18.3 miles-Crew only floated this stretch.)

No noxious weed sites located.

As the preceding summary shows, the majority of the documented noxious weed sites occurs in the 17.6 mile stretch of Wild and Scenic River Corridor between Marble Creek and Loon Creek. 54 of the 71 documented sites (76%) are located in this area. Not coincidentally, this is the area in which the crew spent most of its time. The crew feels confident that most, if not all, noxious weed sites along the Middle Fork in this section were located and documented. (The one exception is the one mile trailless stretch on river left from a half mile below the White Creek Pack Bridge to Loon Creek.)

For those river sections which the crew only floated, a thorough inventorying should not be assumed. The crew was directed by Tom Gionet to inspect certain boater camps for noxious weeds and the crew inspected all other camps at which the Boat Crew had reason to stop. No areas between boater camps were inspected. A summary of the findings from this float trip follows at the end of this report.

Location	Map ID #	Species	Size of Infestation*	% Treated 1997	% Change in Area	% Change in Density	% Change in # Plants	New Site Recorded 97 Crew
Foundation Cr.	73MX6.2	Rush	1050	2	100			*
Foundation Cr.	73MX7	Rush	73212	5	266	416	1500	
Foundation Cr.	73MX8	Rush	3250	100	712	-50	445	
Hospital Bar	73MX9	Rush	425	100				*
Lower Loon Airfield	73MX9.1	Rush	20	100				*
Pine Cr.	74MX10	Rush	2500	100	-37.5	-30	550	
Cougar Cr. Ranch	74MX10.1	Rush	10	100				*
Mahoney Cr.	74MX11	Rush	2300	0	-54	0	220	
Bacon Cr.	74MX6	Rush	250	100	-37.5	-50	140	
Bacon Cr.	74MX6.2	Rush	1400	100				*
Bacon Cr.	74MX7	Rush	600	100	100	50	433	
Pine Cr.	74MX8	Rush	2000	100	-9	-50	-6	
Pine Cr.	74MX9	Rush	100	100	-80	100	125	
Indian Cr. Airstrip	75MX1A	Rush	3	100	-25	0	0	
Mahoney Airstrip	83MX1	Rush	10300	100	587	-50	140	
Cougar Cr. Ranch	83MX1.1	Rush	270	0				*
Little Cr.	83MX11	Rush	1200	100	-62	0	228	
Little Cr.	83MX12	Rush	300	100	-33	400	215	
Little Cr.	83MX13	Rush	64	100	-74	0	-33	
Little Cr.	83MX15	Rush	2220	100	0	-80	200	
Little Cr.	83MX15.1	Rush	1575	100				*
Range Cr.	83MX16	Rush	800	100	100	-79	400	
Jackass Rapid	83MX16.1	Rush	160	100				*
Cameron Cr.	83MX17	Rush	0.5	100	0	140	140	
Cameron Cr.	83MX18	Rush	162	1	-19	-50	75	
Mahoney Airfield	83MX2	Rush	3850	50	92	0	-50	
Cameron CR.	83MX3	Rush	1500	100	0	-70	13	
Cameron CR.	83MX4	Rush	34 Acres	90	1033	150		
Cameron CR.	83MX4.1	Rush	1500	100				*
Cameron CR.	83MX4.2	Rush	100	100				*
Cameron CR.	83MX5	Rush	3300	100	50	-70	125	
Sunflower Cr.	83MX6	Rush	28000	90	86	0	50	
Sunflower Cr.	83MX6.1	Rush	190	100				*
Sunflower Cr.	83MX6.2	Rush	50	100				*
Whitey Cox	83MX6.3	Rush	70	100				*
Sunflower Cr.	83MX7	Rush	7000	100	40	-66	75	
Sunflower Cr.	83MX7.1	Rush	90	100				*
Range Cr.	83MX9	Rush	1800	100	260	-98	-44	
Range Cr.	83MX9.1	Rush	88	100				*
Range Cr.	83MX9.15	Rush	4	100				*
Range Cr.	83MX9.16	Rush	4	100				*
Range Cr.	83MX9.2	Rush	2	100				*

Area (in acres) of Noxious Weed Sites Documented by 1997 Weed Crew

	RS	SK	CT	SC	Total
# of Documented Sites	51	13	4	3	71
Infestation Area	72.30 acres	4.72 acres	.17 acres	.71 acres	77.90 acres
Area Treated by 97 Crew	47.07 acres	.59 acres	.02 acres	0 acres	47.68 acres
% Treated	65.1%	12.5%*	11.8%	0%	61.2%

RS: Rush Skeletonweed

SK: Spotted Knapweed

CT: Canada Thistle

SC: Sulfur Cinquefoil

*: The Salmon, ID Youth Employment Program treated the vast majority of the remaining spotted knapweed area. Including the area treated by YEP, the percent treated for spotted knapweed would be 97.2%.

The 1997 Weed Crew documented 71 noxious weed sites. The total infested area which was documented was 77.90 acres. This total is comprised of 72.30 acres of rush skeletonweed, 4.72 acres of spotted knapweed, .17 acres of Canada thistle, and .71 acres of sulfur cinquefoil.

The 1997 Weed Crew treated 47.68 acres. This is 61.2 % of the total area documented. Refer to individual forms for specific site information.

Comparison of 96 and 97 Data

In order to make accurate comparisons between the 96 and 97 data, we will only compare those sites which were documented by both crews. (There is no 96 data to compare Canada Thistle and Sulfur Cinquefoil sites.) Additionally, we have decided to eliminate two sites (73MX2 and 83MX4) from the comparison because the 1996 crew substantially underestimated the area of these sites. Using the accurate 1997 figures for these sites would unrepresentatively skew the data.

The 1996 crew inventoried 36 sites. We were unable to locate four (4) of these sites. (67MX1b, 67MX2, 83MX10, and 83MX14) For a variety of reasons, we believe that these unlocated sites no longer exist. First, the 96 crew's descriptions were thorough and we spent a fair amount of time attempting to locate the sites. Second, each of these sites was small in size and the 96 crew treated 100% of each of these sites.

This leaves 30 sites which the 1996 and 1997 Weed Crews both documented. The following figures are the total area of these 30 sites.

As described above, all rush skeletonweed sites, regardless of their size, warrant treatment. The small to medium sized sites appear to be containable with repetitive, aggressive pulling and the risk is taken that the large sites will rapidly overrun more area if they are not treated. If one had to choose between treating several small rush skeletonweed sites and one large rush skeletonweed site, we would recommend treating the smaller sites. This will prevent sites from growing together and there is the possibility that, after several years of treatment, the small sites will no longer exist.

Any site which can be fully pulled (as opposed to whipped), should be pulled.. Pulling is a much more effective treatment than whipping. (See "Notes made throughout the Season" below for comments on pulling vs. whipping.)

The spotted knapweed sites also warrant continued treatment. The area colonized by spotted knapweed has essentially remained the same and one could hope that with continued treatment these sites can also be contained.

The Salmon Youth Employment Program was contracted this year to treat the spotted knapweed at Sheep Creek (67MX1a). We would recommend that this take place again in 1998. Possible sites for further use of YEP would be 73MX2 (White Creek Pack Bridge), 73MX7 (Foundation Creek), and 83MX4 (Cameron Creek). We believe there would be great value in starting a native, dry land grasses re-seeding program at these sites as well.

Due to the extraordinary size and/or present location of weeds, we have a concern that the noxious weeds may be climbing out of the river corridor at certain sites. These sites are listed below. We would strongly recommend that the possible upward spread at these sites be surveyed and treated.

67MX1a	Sheep Creek
73MX2	White Creek Pack Bridge
73MX6.2-7	Foundation Creek
75MX2	Indian Creek Airfield
83MX1-5	Cameron Creek to Mahoney Airfield
83MX15.1	Little Creek
83MX19-22	Fur Farm on Little Loon Creek

The trails radiating out from the Fur Farm (83MX19 to 21) on Little Loon Creek should be surveyed. Large areas of spotted knapweed, Canada thistle, and sulfur cinquefoil are located in this drainage. The possibility exists that these noxious weeds will spread along the trail system.

We believe a high priority should be placed on treating weed sites in boater camps. These camps see an immense amount of use through the float season and seeds can easily be spread downriver by float boaters. We are particularly concerned that spotted knapweed sites will continue to be found in the boater camps downriver from the Big Loon (73MX1) and Sheep Creek (67MX1a) Boater Camps. Spotted knapweed has already been located in the Lower Grouse, Camas Creek, Johnny Walker, Funston, Grassy Flat I, Woolard, and Stoddard Bar Boater Camps. All boater camps should be monitored for noxious weeds and treated as necessary.

Notes made throughout the Season

Approximately 10 to 15% of the total rush skeletonweed plants we saw showed evidence

.25 mile below Airstrip - 200 sq yds spotted knapweed; 75% treated
Aquinaldo Flat - 55 sq yds Canada Thistle; 100% treated
Little Soldier - 0
Lower Jackass - 0
Shelf Camp - 0
Big Loon - Retreated 300 sq yds spotted knapweed
Lower Loon Airstrip - 20 sq yds rush skeletonweed; 100% treated
Cow Camp - 0
Hospital Bar - 425 sq yds rush skeletonweed; 100 % treated
Lower Grouse - 40 sq yds spotted knapweed; 100% treated
4 sq yds sulfur cinquefoil; 0% treated
Tappan Ranch Cabin and Pasture - 0
Camas Creek - 80 sq yds spotted knapweed; 100% treated
Johnny Walker - 1 sq yd spotted knapweed; 1 plant; 100% treated
Funston - 70 sq yds spotted knapweed; 100% treated
Trail Camp - 0
Sheep Creek - 4 acres spotted knapweed; 1% treated
Flying B Camp - 0
FB Airstrip Camp - 0
Bernard - 2 sq yds rush skeletonweed; 100% treated
4 small patches of field bindweed on airstrip
Wilson Creek - 0
Grassy Flat I - 150 sq yds spotted knapweed; 90% treated
1 sq yd rush skeletonweed; 12 plants; 100% treated
Woolard - 16 sq yds spotted knapweed; 100% treated
Elk Bar - 0
Lightning Strike - 0
Parrot Cabin - 0
Stoddard Bar - Undocumented spotted knapweed infestation?
Otter Bar - 0
Goat Creek - 0

73mx5	-114.8535	44.7831
73mx6	-114.8548	44.7861
73mx6.1	-114.8615	44.7826
73mx6.2	-114.8644	44.7846
73mx6.3	-114.8613	44.7817
73mx7	-114.8647	44.7816
73mx8	-114.8737	44.7779
73mx9	-114.7873	44.8348
73mx9.1	-114.8096	44.8093
74mx10	-114.9080	44.7576
74mx10.1	-114.9101	44.7521
74mx11	-114.9138	44.7531
74mx6	-114.8794	44.7756
74mx6.1	-114.8801	44.7754
74mx6.2	-114.9950	44.7295
74mx7	-114.8842	44.7715
74mx8	-114.8930	44.7666
74mx9	-114.8970	44.7605
75mx1	-115.1007	44.7511
75mx2	-115.0936	44.7680
75mx3	-115.0768	44.7725
83mx9.16	-114.9777	44.7315