

Tri-State Weed Management Area 2009 End of Year Report

Introduction:

The Tri-State Cooperative Weed Management Area (Tri-State CWMA) is located at the convergence of Oregon, Washington, and Idaho. This area of over 250,000 acres encompasses an astonishing variety of terrain, vegetation, uses and weed problems. Tri-State cooperators came together in 1995 in order to develop an integrated weed management approach to the weed problems of the area. Since then, this diverse group of land management agencies, county weed control supervisors, state agencies, private landowners, and the Nez Perce Tribe has been working cooperatively to implement the plan.

Through this 14 year history, the group has seen numerous changes in staffing for the various cooperators, changes in budgets, and significant changes in the weed threats. As new faces come to the table, we are able to incorporate new ideas. We have learned many lessons through implementation of our yearly plans and are able to apply these lessons to our future efforts so we make the best use of the limited money, time, and workforce available to manage weeds in this valuable, yet rugged landscape.

Following our Strategic Weed Management Plan and recent meetings of the partners from Oregon, Washington and Idaho, it was determined that the top priority for the Tri-State CWMA is early detection and eradication of new invaders. Much of this accelerated treatment was successfully directed at early detection and eradication of highly invasive weeds like purple loosestrife, rush skeletonweed, toadflax, leafy spurge, orange hawkweed and knapweeds.

Knowledge is power, and we have significantly increased our awareness of where the weeds are located in the Tri-State CWMA through our inventory efforts. We have found numerous additional species within the boundaries, added them to our management plans and have been able to make adjustments in our activities to obtain the most efficient use of our time and money.

Yellow starthistle still ranks as our most prevalent noxious weed in total acreage and expanse. Over time, this plant has exhibited significant plasticity in being able to respond to climatic conditions as well as our implemented biological control program. We have seen it range from large stature to small and from high densities to low. The more closely we study this and other weeds, the more we have to acknowledge the tenacity of these exotic invaders and how the ecology of the plant community has been impacted by their spread. Along with this knowledge we have expanded our plans for treatment and modified our goals for treatment in line with achievable objectives. Recognition of spread pathways such as the major waterways of the Snake, Salmon and Grande Ronde rivers allows us to specifically target for weeds we know to be upstream. We have found new weeds such as purple loosestrife, perennial pepperweed and bugloss through this effort. We have also focused on weed threats we see in adjacent areas and have found more sites of rush skeletonweed and orange hawkweed reaching into the WMA from these sources.

Because we are utilizing the numerous tools available in the IPM toolbox, as well as monitoring results of our treatments, we are able to show results. Cooperators are becoming more aware of treatment outcomes and adjusting future plans in relation to this information. We are also making sure our employees are operating safely and effectively by conducting annual herbicide application and safety training which tunes up these skills and reminds them to be aware of the hazards associated with working in this rugged landscape.

Cooperators continue to utilize the combined talents of the group to formulate the best treatment plans as well as assist in completing mutual goals. These cooperative efforts take place both as an organized effort such as our yearly field workweeks as well as opportunistic, smaller scale activities where a couple of partners work together toward a common treatment goal.

TRI-STATE CWMA- MISSION STATEMENT

Reduce and/or attempt to eradicate existing weed infestations to where they will not have a significant economic or environmental impact; and to prevent establishment of new species and infestations in areas where they do not occur; and restore desirable vegetation where possible.

TRI-STATE CWMA-GOALS/OBJECTIVES

- 1) To facilitate cooperation among all land managers/owners/users to prevent the spread of weeds into and within the Tri-State CWMA with special emphasis on early detection and eradication where possible.
- 2) To aggressively control the rate of spread and or eradicate new weed species within the Tri-State CWMA.
- 3) To present a strategy that will facilitate restoration or maintenance of desired plant communities and healthy ecosystems as appropriate.
- 4) To promote public information, education and partnerships in management of invasive weeds to facilitate accomplishment of the Tri-State CWMA mission.

2009 Accomplishments:

Collectively in 2009, the U.S. Bureau of Land Management and the Idaho Department of Fish and Game (IDFG) treated 1,629 acres of noxious weeds using chemical or mechanical tools within the Tri-State CWMA area. Very few biochemical agents were released this year but we have agents currently established on all yellow starthistle populations in the Tri-State CWMA (estimated 5000 acres) and are actively monitoring these populations. Of these, approximately 1226 acres were aerially treated for whitetop. An attempt was made to digitally map 45,000 acres for noxious weeds from the air to increase our awareness of the noxious weed distribution and to plan for future control efforts that can more effectively control the spread of noxious weeds.

In addition, approximately 50 acres of grasslands that were associated with the 2007 Chimney Complex fire were over-seeded with native grasses. Chemical treatments were applied to seeded areas to reduce the competition from noxious weeds. Chemical and mechanical treatments continued along the Snake and Salmon Rivers as a first line of defense against new invaders.

Logging operations occurred on Craig Mountain as part of salvage timber sales following the 2007 Chimney Complex Fire and as part of a cooperative effort among private landowners, non-government organizations, and state and federal agencies to create Wildland-Urban Interface fire protection buffers by thinning forests around residential properties. Chemical treatments and habitat restoration efforts have and will continue to follow such large-scale disturbances. Diligence and chemical treatments are also required along roads open to motorized vehicles and areas where motor vehicles are driven illegally.

Through cooperative management agreements with the BLM and the Idaho Department of Lands, IDFG has succeeded in removing cattle grazing from over 98% of the public lands associated with Craig Mountain. However, in cooperation with the Nez Perce Tribe and area ranchers, IDFG has continued with a grazing project on approximately 1480 acres (of which 840 is IDFG land). This project uses cattle grazing for a short duration of the growing season as an experimental attempt to restore a mountain meadow to a condition more similar to historic conditions.

Through community outreach activities such as county fairs, jet-boat tourists stopping at The Nature Conservancy's Garden Creek Ranch, presentations to educational forums, and impromptu visits with private citizens, an estimated 1500 public contacts were made in 2009.

CONTROL ACTIVITIES:

Weed Control Treatments (Idaho Department of Fish and Game):

New invaders are designated with an asterisk (*).

<u>Species</u>	<u>Type of treatment</u>	<u>Acres of each treatment type</u>
Rush Skeletonweed	Herbicide-ATV/Backpack	28.43
Dalmation Toadflax	Herbicide-ATV/Backpack	27.67
Whitetop	Herbicide- Aerial, ATV/Backpack	1,226 33.11
Yellow Starthistle	ATV/Backpack	8.31
Spotted knapweed	Herbicide-ATV/Backpack	14.96
Diffuse knapweed	Herbicide-ATV/Backpack	0.91

Scotch Thistle	Herbicide-ATV/Backpack	65.64
Scotch Thistle	Mechanical	13.76
Perennial Pepperweed	Herbicide-ATV/Backpack	8.23
Orange Hawkweed	Herbicide-ATV/Backpack	1.09
Meadow Hawkweed	Herbicide-Backpack	0.00
Yellow Hawkweed*	Herbicide-Backpack	0.11
Mediterranean Sage*	Herbicide-Backpack	0.57
Yellow Toadflax*	Herbicide-Backpack	0.02
Dalmation Toadflax	Herbicide-Backpack	27.67
Leafy Spurge	Herbicide-Backpack	0.00
Japanese Knotweed		0.00
Common Bugloss	Herbicide-Backpack	3.68

Chemical purchased with grant funds 2009:

<u>Chemical</u>	<u>Quantity</u>	<u>Purpose</u>
Hi-Light Blue Dye	13 gallons	Marking spray areas
2,4-D "Weedestroy"	60 gallons	Broadleaf weed treatment
Surfactant "Inlet"	40 gallons	Chemical application
Milestone	13 gallons	Broadleaf weed treatment
MSM (Telar equivalent)	816 ounces	Whitetop and perennial pepperweed

Biocontrol Treatments:

Bio-agent species	Number of releases	Target weed species
<i>Larinus minutus</i>	1	Spotted knapweed

Acres of inventory: 45,000, Acres of rehabilitation: 100 (Billy Creek)

Prevention Activities:

Tri-State CWMA members try to practice what they preach when it comes to safe transportation of off-road vehicles by insisting that field crews wash motorized vehicles thoroughly on a regular basis to limit transfer of seeds. Craig Mountain is popular horse-back riding destination and IDFG posts, requires, and enforces the use of Certified Weed-Free hay only. There is a wide diversity of property owners and land uses associated with the Craig Mountain area. IDFG maintains over 80 miles of fence on Craig Mountain that is needed to contain livestock and thereby reducing the spread of noxious weeds. IDFG maintains 77 access points that are gated, bermed, and/or signed on Craig Mountain to restrict the use of motorized vehicles on over 93 miles of secondary roads.

Approximately 5.5 miles of trail is seasonally open to ATV traffic down Redbird Canyon and another 11 miles of secondary roads are open to mobility impaired sportsmen and women and are these routes are therefore monitored annually for noxious weed outbreaks.

Education Activities:

Community outreach activities continued at regional events such as county fairs, jet-boat tourists often stop at The Nature Conservancy's Garden Creek Ranch are treated a lesson in weed history and current progress on control efforts. IDFG employees ensure sufficient educational signs are posted regarding the required use of certified weed-free hay on Craig Mountain. John Nelson (IDFG) presented a talk on the restoration efforts following the Chimney Complex fire of 2007 to the 8th Annual Idaho Weed Conference in Nampa, Idaho.

Gross infected acres:

Common Name	Scientific Name	Gross Acres	% of Gross Acres Infested	Average Density (%)
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Example:

1. Black Henbane	<i>Hyoscyamus niger</i>	10,000	40%	60%
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1. Black Henbane	<i>Hyoscyamus niger</i>	0		
2. Bohemian Knotweed	<i>Polygonum bohemicum</i>	0		
3. Brazilian Elodea	<i>Egeria densa P.</i>	0		
4. Buffalobur	<i>Solanum rostratum</i>	0		
5. Canada Thistle	<i>Cirsium arvense</i>	10,000	20%	70.00%
6. Common Crupina	<i>Crupina vulgaris</i>	15,000	40%	30.00%
7. Dalmatian Toadflax	<i>Linaria genistifolia ssp. dalmatica</i>	50,000	10%	10.00%

8. Diffuse Knapweed	<i>Centaurea diffusa</i>	10,000	3%	10.00%
9. Dyer's Woad	<i>Isatis tinctoria</i>	0		
10. Eurasian Watermilfoil	<i>Myriophyllum spicatum</i>	0		
11. Field Bindweed	<i>Convolvulus arvensis</i>	150,000	5%	30.00%
12. Giant Hogweed	<i>Heracleum mantegazzianum</i>	0		
13. Giant Knotweed	<i>Polygonum sachalinense</i>	0		
14. Hoary Alyssum	<i>Berteroa incana</i>	0		
15. Houndstongue	<i>Cynoglossum officinale</i>	150,000	1%	20.00%
16. Hydrilla	<i>Hydrilla verticillata</i>	0		
17. Japanese Knotweed	<i>Polygonum cuspidatum</i>	10	1%	70.00%
18. Johnsongrass	<i>Sorghum halepense</i>	0		
19. Jointed Goatgrass	<i>Aegilops cylindrica</i>	10,000	10%	50.00%
20. Leafy Spurge	<i>Euphorbia esula</i>	7	50%	50.00%
21. Matgrass	<i>Nardus stricta</i>	0		
22. Meadow Knapweed	<i>Centaurea pratensis</i>	0		
23. Mediterranean Sage	<i>Salvia aethiopsis</i>	1.5	20%	10.00%
24. Milium	<i>Milium vernale</i>	0		
25. Musk Thistle	<i>Carduus nutans</i>	0		
26. Orange Hawkweed	<i>Hieracium aurantiacum</i>	10,000	40%	50.00%
27. Oxeye Daisy	<i>Chrysanthemum leucanthemum</i>	40,000	20%	20.00%
28. Parrotfeather Milfoil	<i>Myriophyllum aquaticum</i>	0		
29. Perennial Pepperweed	<i>Lepidium latifolium</i>	500	30%	50.00%
30. Perennial Sowthistle	<i>Sonchus arvensis</i>	0		
31. Plumeless Thistle	<i>Carduus acanthoides</i>	0		
32. Poison Hemlock	<i>Conium maculatum</i>	3,000	50%	40.00%
33. Policeman's Helmet	<i>Impatiens glandulifera</i>	0		
34. Puncturevine	<i>Tribulus terrestris</i>	2,000	10%	50.00%
35. Purple Loosestrife	<i>Lythrum salicaria</i>	10	50%	50.00%
36. Rush Skeletonweed	<i>Chondrilla juncea</i>	75,000	10%	10.00%
37. Russian Knapweed	<i>Acroptilon repens</i>	10	5%	10.00%
38. Saltcedar	<i>Tamarix</i>	0		
39. Scotch Broom	<i>Cytisus scoparius</i>	0		
40. Scotch Thistle	<i>Onopordum acanthium</i>	75,000	10%	50.00%
41. Silverleaf Nightshade	<i>Solanum elaeagnifolium</i>	0		
42. Skeletonleaf Bursage	<i>Ambrosia tomentosa</i>	0		
43. Small Bugloss	<i>Anchusa arvensis</i>	0		
44. Spotted Knapweed	<i>Centaurea maculosa</i>	20,000	40%	40.00%
45. Squarrose Knapweed	<i>Centaurea squarrosa</i>	0		
46. Syrian Beancaper	<i>Zygophyllum fabago</i>	0		
47. Tall Hawkweed	<i>Hieracium piloselloides</i>	0		
48. Tansy Ragwort	<i>Senecio jacobaea</i>	0		
49. Toothed Spurge	<i>Euphorbia dentata</i>	0		
50. Vipers Bugloss	<i>Echium vulgare</i>	1000	10%	5.00%
51. Water Hyacinth	<i>Eichhornia crassipes M.</i>	0		
52. White Bryony	<i>Bryonia alba</i>	100	10%	5.00%
53. Whitetop	<i>Cardaria draba</i>	75,000	10%	60.00%
54. Yellow Devil Hawkweed	<i>Hieracium glomeratum</i>	0		
55. Yellow Hawkweed	<i>Hieracium caespitosum</i>	20	10%	10.00%
56. Yellow Starthistle	<i>Centaurea solstitialis</i>	100,000	50%	50.00%
57. Yellow Toadflax	<i>Linaria vulgaris</i>	1	10%	50.00%

Cumulative Match Summary:

Tri-State CWMA Financial Contributions

Dates Covered By This Summary: **From March 16 To December 31**

Amount Contributed	Contribution Category	Cooperator	Contact	Contact Phone
\$36,767	Federal Govt.	BLM	Lynn Danly	208-962-3797
\$155,971	Non-Federal Govt.	IDFG	Justin Barrett	208-799-5010
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\$192,738	Grand Total			

SIGNATURE

DATE

Contribution Category	Grand Totals
Federal Government	\$36,767
Landowner/Private	
Non-Federal Government	\$155,971