

*Continental Divide
Cooperative Weed Management Area*

2009 End of Year Report



Goats in Middle Creek Canyon

The partners of the CDCWMA wish to thank the Idaho Legislature, the Idaho Department of Agriculture and the Cost-Share Review Committee for their support.

Partners in the Continental Divide Cooperative Weed Management Area

Clark County Weed Control	Dubois District, USFS	Idaho Falls District, BLM
Idaho Department of Lands	USSES, ARS	Jefferson County Weed Control
Butte County Weed Control	Lemhi County CWMA	Camas National Wildlife Refuge
Idaho Department of Fish and Game	High Country RC&D	INL, Department of Energy
Natural Resource Conservation Service	Union Pacific Railroad	Clark County Stockgrowers' Assn.
UI Cooperative Extension System	Mud Lake Water Users	Clark/Jefferson Landowners
Idaho Department of Transportation	Clark County SCD	Mud Lake SWCD
Rocky Mountain Power	Montana/Idaho Interstate Weed Committee	

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Cover Photo: The leafy spurge grazing with goats was a major project for the Continental Divide CWMA. The goats are well adapted for grazing the steep rocky terrain that make up the Middle Creek Canyon complex.

Lemhi Mountain Range. Thirty-one percent is private land, 25% is forest, 31% is BLM, 6% is state lands, and 7% is other federal lands, including the Camas National Wildlife Refuge, the US Sheep Experiment Station, and a portion of INL.

The partners in the Continental Divide CWMA, including the Dubois Ranger District-USFS, the Idaho Falls District-BLM, Clark County Weed Control, Jefferson County Weed Control, Lemhi County Weed Control, the Camas Wildlife Refuge, the Mud Lake Wildlife Management Area-IDF&G, and many private landowners are committed to the weed control priority objectives set forth in the CWMA strategic plan, which are: 1) Locate and eradicate small and/or new infestations of noxious weeds currently found within the CWMA with special emphasis on eradicating noxious weeds along right-of-ways and waterways; 2) Prevent the invasion of alien invasive weeds currently not found in the CWMA; 3) Locate and eradicate infestations of new invaders; 4) Control and contain large infestations of noxious weeds; and 5) Control or eradicate small infestations of less competitive noxious weed found in the CWMA

The CWMA partners are also committed to participating in the operations that make the weed control efforts possible. Those operations are: 1) Maintain an active and well informed steering committee; 2) Secure significant amounts of outside funding through grants, donations, and in-kind contributions to make cooperative projects possible; 3) Inform the public of the noxious weed problems in the CWMA; 4) Encourage public and landowner participation in weed infestation prevention and control; 5) Build and maintain an accurate and current weed inventory using GPS/GIS technology; and 6) Use an integrated approach to prevention, control, and eradication of noxious weed infestations through cooperative efforts across jurisdiction and ownership boundaries.

Introduction

Planning meetings

Two planning meetings were held, with the first one being held in November of 2008. The steering committee met on November 25, 2008 to develop a priority listing of projects for 2009 based on the results of the 2008 season and the need to tackle some old problems that had not been dealt with, and deal with some emerging problems. Another steering committee meeting was held on March 25, 2009 to schedule and plan cooperative activities. The 2009 season was planned as a continuation of most of the 2008 priorities and projects with the addition of goat grazing on leafy spurge in Middle Creek and the release of bio-control insects and spraying with herbicide on spotted knapweed south of China Point.

. Spotted knapweed, leafy spurge, Russian knapweed, Canada thistle, yellow toadflax, Dalmation toadflax, houndstongue, and dyer's woad continued to be the high priority weeds for 2009. These weeds are the most invasive in our area. While we are trying to control or eradicate the toadflaxes, and dyer's woad, the other weeds, particularly spotted knapweed, Canada thistle, and houndstongue, are aggressively

spreading into non-infested areas. Leafy spurge, although continuing to be very serious problem, is showing the effects of fifteen years of intense high priority attention. Fewer new infestations are being found and large areas previously infested with leafy spurge are getting much smaller, such as the Spencer area, and the Medicine Lodge Sinks. The last serious large infestations were tackled for the first time in 2009, namely the Medicine Lodge canyon complex and grazing ground just below the mouth of the canyons.

2009, much like 2008, began cool and wet. With an average winter snow pack and spring rains, all vegetation did well after it warmed up, especially spotted knapweed. We also had several summer rains that kept the vegetation fresh into early August. The 2009 spraying season was lengthened in comparison with 2007 and a lot of work was accomplished. One negative factor did, however, occur. For some unknown reason, the *Aphthona* flea beetles feeding on leafy spurge could only be found in small numbers. We did not have any populations large enough to be collectible.

Priority Projects

Priority 1: Leafy Spurge, Spotted Knapweed, and Canada Thistle Control and Containment

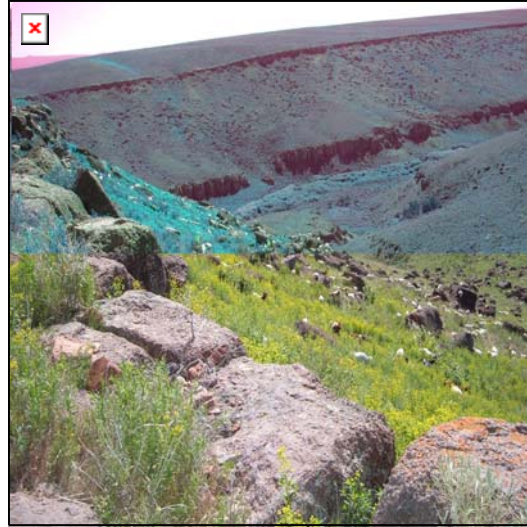
Each of the above aforementioned weeds will be discussed separately as outlined below:

Leafy Spurge: Major inroads into large infested areas were made in 2009. The largest was the goat-grazing project in the Middle Creek canyon complex. The complex is made up of the main canyon and several deep narrow gulches that drop into the canyon. These gulches only have water in them during the spring run-off, if there is any, and are dry the rest of the year. Middle Creek itself, a tributary of Medicine Lodge Creek, is fed by springs located in the upper reaches of the drainage. The lower Middle Creek canyon has almost vertical rock cliffs with steep rocky foot-slopes between the canyon floor and the rocky cliffs. Additional steep rocky slopes extend from the top of the cliffs to the rim of the canyon. Such conditions make it impossible to aerially spray due to updrafts and down drafts. The steepness and the rocky conditions make groundwork almost impossible except on the canyon floor. For the last few years, the steering committee has been considering a grazing project in Middle Creek, and then expanding into the Medicine Lodge canyon itself. At our November 2008 meeting, a goat-grazing ranch gave a presentation and the decision was made to secure funding and implement leafy spurge grazing.

The goat-grazing project was let out for bids. Stan and Bonnie Jensen of Goats 2000 submitted the lowest bid for the specifications of the project. Other bids were close but did not follow the protocol. The first 500 goats, including kids, arrived June 15th. An additional 500 head were added when it was determined that first group would be inadequate to accomplish the 2009 objective, which was to graze the lower 5 miles of the Middle Creek canyon and then work up Rocky Creek as far as possible in the remaining time. Ninety days were allowed for the project, placing the end of the grazing in the middle of September. By then, the spurge would start going dormant.



Grazed and un-grazed leafy spurge



Goats above cliff and below rim

The leafy spurge grazing went extremely well and our objectives for the year were met. The goats did an excellent job of cleaning out the leafy spurge while leaving desirable grasses and the willows along the creek. The goats grazed approximately 1,480 acres in 2009, at a cost of about \$13.00 per acre, which is very reasonable when compared to using herbicide even under ideal conditions. It is anticipated that the leafy spurge will be back with a vengeance next year and then start to diminish as it is grazed for another four to five years. We are planning to establish several colonies of *Aphthona* flea beetles in the grazing area so the bugs and the goats can work in concert. We hope that the spurge in the entire Medicine Lodge canyon complex will be greatly reduced and controlled within ten years.

Private landowners made a terrific effort to reduce the leafy spurge acreage in the lower Medicine Lodge below the mouth of the canyon. Egan Land and Cattle treated 457 acres on the flatland below the mouth of the canyon in the area where the spurge first infested the area. Medicine Lodge Grazing, using the S.W.A.T. team, treated 116 acres of small patches on the uplands and canyon of Indian Creek, another tributary of Medicine Lodge. Ashcraft Farms also treated 12 acres of infestations on CRP ground, the areas bordering their fields, and the slopes along the bottomlands of Indian Creek below their hay and grain fields. Tod Shenton treated 90 acres adjacent to the Egan property. Lynn Hoggan treated 13 acres in the mid-section of Medicine Lodge canyon. BLM also treated lands in the Medicine Lodge complex.

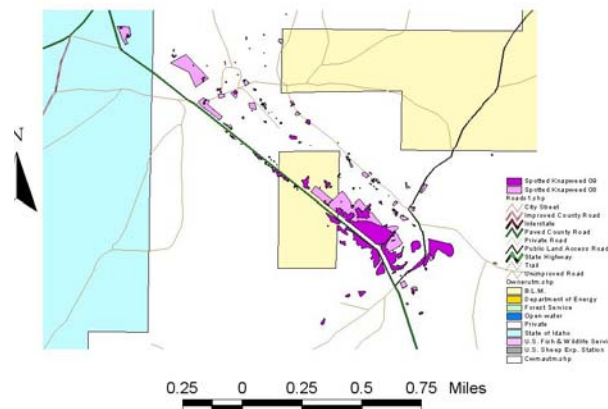
In addition, a spray day was held in Medicine Lodge on September 21. Five private landowners and 7 agency personnel participated. Just over 100 acres of leafy spurge were treated on the spray day near the mouth of Medicine Lodge canyon and on lower Indian Creek.

A total of 2,268 acres of leafy spurge were treated in 2009.

Spotted knapweed: The wet springs of the last two seasons provide ideal conditions for spotted knapweed germination. Spotted knapweed showed up where it had never been seen before and in older infestations, it came in much denser than in the past. The area of most concern lies south of Spencer in a triangular area starting at China Point and running southwest about 4 miles between the old Butte highway and Interstate 15. Bio-control insects were purchased and distributed in the dense stands to control about 1,000 acres on BLM ground. 100 acres of private land was treated with herbicide aerially and approximately 30 acres were treated with ATV's by the S.W.A.T. team with Forefront.

The second critical area is located on the 18-Mile Ranch near the junction of the Kilgore Road and the Red Road, southwest of Kilgore. Spotted knapweed has been found in only a few locations in the Camas management zone. Our goal is to eradicate it in that area. Unfortunately, we are fighting a difficult battle. The S.W.A.T. team treated 73 acres of spotted knapweed on the ranch in 2009. The map below shows the difference in treated areas in 2009 (in purple) compared to 2008 (in pink). Note the reduction in size of the infested areas. This map illustrated both the effectiveness of the herbicide and the need for perseverance to eradicate a weed infestation.

18 Mile Ranch Spotted Knapweed 08-09 Comparison



Another 30 acres were treated between Dubois and the Spencer-Idmon Road on the Kilgore Road. The weed has also been found and treated in small isolated infestations on the Camas Wildlife Refuge in the Mud Lake management zone and in the Medicine Lodge management zone.

The third critical area is along the Spencer-Idmon Road between Spencer and the Kilgore Road. Spotted knapweed can be found on both sides of the road for about 12 miles. Although 60 feet on both sides of the road were treated with Transline 3 years ago, the knapweed is still there only in smaller infestations. Ranch land, mostly private, has small infestations within ¼ mile of the road. The S.W.A.T. team with the cooperation of the landowners has treated most of these infestations. Approximately 350 acres of spotted knapweed were treated herbicide in 2009.

Canada thistle: The largest area infested with Canada thistle is the Sheridan Creek management zone, much of it owned by Riverbend Ranches. 650 total acres were treated with 467 acres being treated aerially and the remainder with ATV's. Both the S.W.A.T.

team and employees of the ranch did the ATV work. Hagenbarth Livestock also treated several acres of Canada thistle in the Sheridan Creek area and in the Camas Creek area. The Camas Wildlife Refuge treated approximately 100 acres with bio-control insects and a release was made on about 10 acres along Beaver Creek on state land north of Spencer. Approximately 110 acres were treated with herbicide on the Camas Wildlife Refuge and the Mud Lake Wildlife Management Area. Another 28 acres were treated in the mid-section of Medicine Lodge Canyon. Isolated small patches were also treated throughout the rest of the CWMA. Approximately 780 acres of Canada thistle were treated.

Measurable Outcomes/Objectives

Number of Acres Chemically Treated: 3,398

Number of Acres Grazed: 1480

Number of Acres Inventoried: 250

Number of Contacts: 10,063

Number of Bio-Releases: 3.

Priority 2: Mud Lake Russian Knapweed Initiative

The Camas Wildlife Refuge and the IDF&G Mud Lake Wildlife Management Area treated most of the Russian knapweed in the CWMA in the Mud Lake management zone. In addition, a spray day was held on July 23, 2009, using ATV's. The spray day work was done mostly on private lands adjacent to the Mud Lake Wildlife Management Area. Fifteen people participated, with one private landowner and the rest being county, state, and federal personnel. A total of 658 acres of Russian knapweed were treated with herbicide in the Mud Lake management zone. A total of perhaps 5 acres were treated in other areas of the CWMA, with most of it being in Medicine Lodge and a few scattered plants being on Blue Creek in the Crooked Creek management zone. Forty acres were seeded on the Mud Lake Wildlife Management Area.

Measurable Outcomes/Objectives

Number of Acres Treated: 663

Number of Contacts: 30

Number of Acres Inventoried: 120

Number of Bio-Releases: none

Number of Acres re-vegetated: 40

Priority 3: Search and Destroy Invading Species

Musk thistle, Scotch thistle, yellow toadflax, Dalmation toadflax, dyer's woad, and houndstongue could be considered our invading species, although most of them have been around for several years. Approximately 12 acres of the toadflaxes, 5 acres of dyer's woad, and 10 acres of houndstongue were treated by the S.W.A.T. team, the USFS, and private landowners combined.

Measurable Outcomes/Objectives

Number of Acres Treated: 27

Number of Contacts: 14

Number of Acres Inventoried: .5

Number of Bio-Releases: None

Priority 4: Maintenance of Private Landowner Cost Share Partnerships

Because of the active cooperation and participation of private landowners in priorities 1 and 2, and 3, this priority was dropped.

Priority 5: Wash Station and Weed Free Hay-Education and Awareness Supplement

When the undercarriage wash station was charged with water at the beginning of the season, the high-pressure pump was making some serious noise. Small slivers of metal could be found wherever the handgun water was draining from the concrete pad. When the pump was dismantled, it was obvious that the pump had been run without water or with inadequate water. Thanks to a fast response with funds from ISDA, we were able to replace the pump and make some modifications to prevent such an occurrence in the future. The lack of water had to be caused by the pump being turned on with an empty storage tank, or more likely, someone used the handgun and failed to shut off the switch that turns on the pump and opens the valves to the handgun line. Only a minimal flow of water goes through a bypass line to keep the pump cool when the handgun is used intermittently. If the handgun is not used within 30 minutes, permanent damage is done to the pump. A timer was installed in the handgun circuitry allowing 15 minutes of operation before an automatic shutdown. Those individuals needing more time can simply turn off the switch and then turn it back on. In addition, a warning sign was installed to remind users to shut off the system when they are finished. The undercarriage wash station had no more problems through the rest of the season and was used regularly by the BLM, the Forest Service, and Clark County Weed Control. Several private citizens also used the wash station.

As per our Education and Awareness plans, signs are being made to advertise the wash station and the weed free hay. Because of the difficulties we had with the wash station last spring, we did not get the signs until December and they are on order. A large sign is being made to place on the south side of the wash station shed so people would know from a distance what it is. Directional signs are being made to place on Main Street on both sides of the street going to the wash station. Two of the big signs are being made, one to be located near the Interstate at the west end of main street and the other located near the east end of Main Street in Dubois. Below are the proofs for the four signs.



Measurable Outcomes/Objectives

Usage: Approximately 150

Contacts: Approximately 175

Summary of Work Accomplished in 2009

This year was perhaps the best year we have had in terms of how much was accomplished. The work was done by USF&W personnel at the Camas Refuge and on spray days, IDF&G personnel on the Mud Lake Wildlife Management Area and on spray days, and USFS personnel on the forest and on spray days, and IDT on the Monida Spray Days. The CWMA S.W.A.T. team, who are employees of Clark County, worked throughout the CWMA and on spray days. And, we had many private landowners participate on their lands and some on the spray days. 28 private landowners participated in the cost share programs, up from 25 the previous year. The private landowners contributed more in 2009 in CWMA activities than in any previous year at \$62,612.

The following is a listing of several totals reflecting the accomplishments in 2009:

- ❑ Total acres treated—Chemical: 2,608
- ❑ Total acres treated—Mechanical: none
- ❑ Total acres treated—Grazing: 1480
- ❑ Total acres treated—Bio-control: 50 releases on spotted knapweed
- ❑ Total acres inventoried: 370
- ❑ Total acres re-vegetated: 40
- ❑ Total acres for new invaders: 27
- ❑ Total number of public contacts: 10,357

While we did not reach the target amounts set forth in the 2009 Annual Operating Plan, we came closer than we ever had before. We also did everything we planned to do with the exception of collecting and distributing Aphthona flea beetles on leafy spurge due to the lack of collectible number of bugs. Hopefully, they will be collectible in 2010. If not, we will travel to where they are plentiful and restock our leafy spurge bio-control insects.

Although the Range and Roadside seminar was not held this year due to our University of Idaho Extension Educator being swamped with paperwork preparing for his review for tenure, several individuals attended the Idaho Weed Conference in Nampa and the Eastern Idaho Weed Association conference held in November in Pocatello.

Chemicals Purchased with Grant Funds

<u>Chemical/Description</u>	<u>Quantity</u>	<u>Purpose</u>
Forefront	390 gal.	All thistles, spotted knapweed
Syltac	64 gal.	Surfactant
Roundup Pro Max	20 gal.	Roadside, all noxious weeds
Krovar	50 lbs.	Roadside, all noxious weeds
Outpost 22K	90 gal.	Leafy spurge, spotted knapweed
2,4-D	60 gal.	Leafy Spurge, spotted knapweed
Highlight dye	16 gal.	Spray marker
Tordon 22K	25 gal.	Leafy Spurge, Spotted knapweed
Bullseye dye	45 gal.	Spray marker
Plateau	36 gal.	Fall Leafy spurge and Russian knapweed
Super Spread MSO	100 gal.	Surfactant/carrier for Plateau
Milestone	10 gal.	Russian knapweed

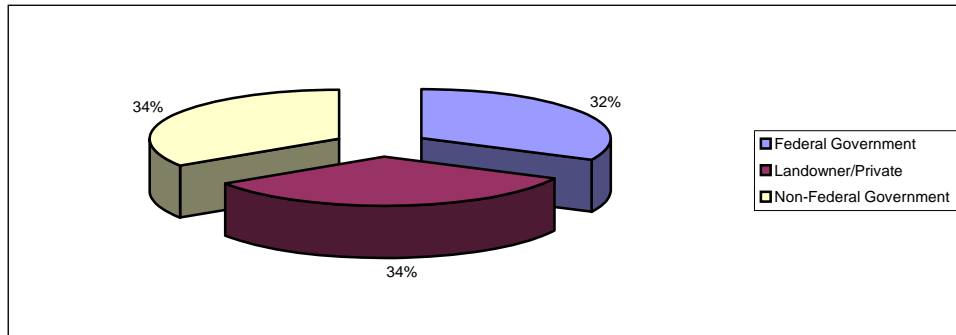
Gross Infested Acres in the Entire CWMA

Common Name	Scientific Name	Gross Acres	Percent of Gross Acres Infested	Average Density (%)
1. Black Henbane	<i>Hyoscyamus niger</i>	200	100%	30%
2. Bohemian Knotweed	<i>Polygonum bohemicum</i>	0		
3. Brazilian Elodea	<i>Egeria densa P.</i>	0		
4. Buffalobur	<i>Solanum rostratum</i>			
5. Canada Thistle	<i>Cirsium arvense</i>	10,000	80%	20%
6. Common Crupina	<i>Crupina vulgaris</i>	0		
7. Dalmatian Toadflax	<i>Linaria genistifolia ssp. dalmatica</i>	200	80%	60%
8. Diffuse Knapweed	<i>Centaurea diffusa</i>	0		
9. Dyer's Woad	<i>Isatis tinctoria</i>	10	100%	10%
10. Eurasian Watermilfoil	<i>Myriophyllum spicatum</i>	0		
11. Field Bindweed	<i>Convolvulus arvensis</i>	100	30%	80%
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>	2,000	50%	20%
16. Hydrilla	<i>Hydrilla verticillata</i>	0		
17. Japanese Knotweed	<i>Polygonum cuspidatum</i>	0		
18. Johnsongrass	<i>Sorghum halepense</i>	0		
19. Jointed Goatgrass	<i>Aegilops cylindrica</i>	0		
20. Leafy Spurge	<i>Euphorbia esula</i>	40,000	50%	80%
21. Matgrass	<i>Nardus stricta</i>	0		
Meadow Knapweed	<i>Centaurea pratensis</i>	0		
23. Mediterranean Sage	<i>Salvia aethiopsis</i>	0		
24. Milium	<i>Milium vernale</i>	0		
25. Musk Thistle	<i>Carduus nutans</i>	500	50%	10%
26. Orange Hawkweed	<i>Hieracium aurantiacum</i>	0		
27. Oxeye Daisy	<i>Chrysanthemum leucanthemum</i>	0		
28. Parrotfeather Milfoil	<i>Myriophyllum aquaticum</i>	0		
29. Perennial Pepperweed	<i>Lepidium latifolium</i>	0		
30. Perennial Sowthistle	<i>Sonchus arvensis</i>	500	50%	20%
31. Plumeless Thistle	<i>Carduus acanthoides</i>	0		

Common Name	Scientific Name	Gross Acres	Percent of Gross Acres Infested	Average Density (%)
32. Poison Hemlock	<i>Conium maculatum</i>	40	30%	80%
33. Policeman's Helmet	<i>Impatiens glandulifera</i>	0		
34. Puncturevine	<i>Tribulus terrestris</i>	200	60%	80%
35. Purple Loosestrife	<i>Lythrum salicaria</i>	0		
36. Rush Skeletonweed	<i>Chondrilla juncea</i>	0		
37. Russian Knapweed	<i>Acroptilon repens</i>	5,000	40%	90%
38. Saltcedar	<i>Tamarix</i>	1	.000001%	10%
39. Scotch Broom	<i>Cytisus scoparius</i>	0		
40. Scotch Thistle	<i>Onopordum acanthium</i>	200	20%	80%
41. Silverleaf Nightshade	<i>Solanum elaeagnifolium</i>	100	30%	60%
42. Skeletonleaf Bursage	<i>Ambrosia tomentosa</i>	0		
43. Small Bugloss	<i>Anchusa arvensis</i>	0		
44. Spotted Knapweed	<i>Centaurea maculosa</i>	30,000	40%	50%
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 dentate</i>	0		
50. Vipers Bugloss	<i>Echium vulgare</i>	0		
51. Water Hyacinth	<i>Eichhornia crassipes M</i>	0		
52. White Bryony	<i>Bryonia alba</i>	?		
53. Whitetop	<i>Cardaria draba</i>	200	25%	75%
54. Yellow Devil Hawkweed	<i>Hieracium glomeratum</i>	0		
55. Yellow Hawkweed	<i>Hieracium caespitosum</i>	0		
56. Yellow Starthistle	<i>Centaurea solstitialis</i>	0		
57. Yellow Toadflax	<i>Linaria vulgaris</i>	250	20%	80%

Contributions To The Continental Divide CWMA

The pie chart below shows the contributions/participation made to the CWMA efforts to carry out its 2009 Annual Operating plan. It includes both cash contributions or purchases and in-kind contributions of labor, equipment, and herbicide from federal sources, nonfederal government sources, and private landowners.



Total Cash and In-Kind Contributions

Contribution Category	Grand Totals
Federal Government	\$59,898
Landowner/Private	\$62,613
Non-Federal Government	\$63,585
Other	
Grand Total	\$186,098

Summary of Plans for 2010

The partners in the Continental Divide CWMA are committed to the weed control priorities set forth in the CWMA strategic plan, which are: 1) Locate and eradicate small and/or new infestations of noxious weeds currently found within the CWMA with special emphasis on eradicating noxious weeds along right-of-ways and waterways; 2) Prevent the invasion of noxious weeds currently not found in the CWMA; 3) Locate and eradicate infestations of new invaders; 4) Control and contain large infestations of noxious weeds; and 5) Control or eradicate small infestations of less competitive noxious weed found in the CWMA. These priorities are met through an integrated approach to the weed problem including prevention, education, inventory and mapping, containment, control, eradication, and restoration. The 2010 Continental Divide CWMA AOP, while addressing the above priorities, outlines specific activities or projects in anticipation of solving some long standing problems. While these activities carry on from the success of past years, they are more specific in scope than in past years. The following is an outline of the planned activities.

- **Prevention**—The undercarriage wash station will continue to be an important means of halting the spread of noxious weeds. A promotional campaign will be launched when spring breaks to encourage everyone going off road to use the station. Now that the station is fully operational and easy to use, the Clark county commissioners will be encouraged to require all excavation equipment entering the county to be cleaned at the wash station. The noxious weed free hay exchange program will also be promoted. The signage purchased in 2009 will be installed at strategic locations and the wash station and certified weed-free hay usage will be monitored.

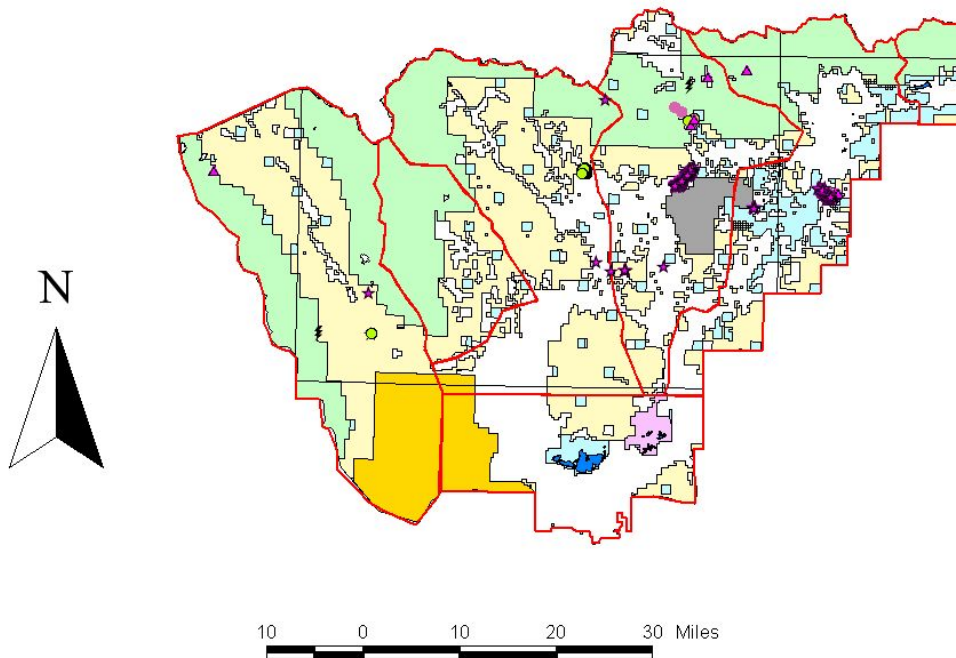
- Education—The range and roadside weed control seminar will be held in 2010. Improved communication among steering committee members will be encouraged by email, phone, and by mail. The effect of the new wash station and weed free hay signs will be monitored by measuring increased usage. News releases will be prepared to publicize the need for everyone to do their part in controlling and preventing the spread of noxious weeds by using the wash station and weed free hay. Hopefully, we will be able to get TV coverage as well.
- Inventory and mapping—The S.W.A.T. team, the Forest Service crew, the BLM crew, and a volunteer from the Camas Wildlife Refuge will serve as the primary means for scouting for and mapping new infestations of priority species already in the CWMA as an integral part of priority projects and scouting for infestations of new invaders. The S.W.A.T. team will be expanded, if possible, to provide more resources for scouting and inventorying while maintaining partnerships with private landowners for their weed control efforts. Expansion and maintenance of the weed map database will continue while using it to monitor previously treated infestations.
- Containment—Biological controls of large well-established infestations of leafy spurge, Canada thistle, and spotted knapweed will be pursued. The goat-grazing project on leafy spurge along with *Aphthona* flea beetles will be continued in Middle Creek and hopefully expanded into Medicine Lodge canyon. Additional insects will be procured to treat the very large and rapidly growing spotted knapweed infestation south of China Point between the old Butte highway and I-15. A concerted effort to encourage all landowners in the target area to participate in aerial and ground herbicide applications where feasible will be pursued.
- Control—Herbicides will continue to be used to reduce the size and vigor of established infestations. Finding and treating infestations of leafy spurge and spotted knapweed in the Birch Creek, and Camas Creek management zones will be a priority in 2010. Reducing the size of infestations of Canada thistle will continue in the Sheridan Creek and Camas Creek management zones.
- Eradication--Small and new infestations of existing weed species will be eradicated using herbicides and all infestations of new invaders will be sought out and eradicated in the most effective manner possible. All new invaders discovered will be promptly eradicated. Special attention will continue to be given to the thistle species, especially musk and Scotch thistle, the toadflaxes, dyer's woad, and houndstongue throughout the CWMA.
- Restoration—Where needed, native species of grasses and/or forbs/shrubs or other desirable vegetation will be seeded in areas previously heavily infested with noxious weeds.

Appendix I

S.W.A.T. Maps

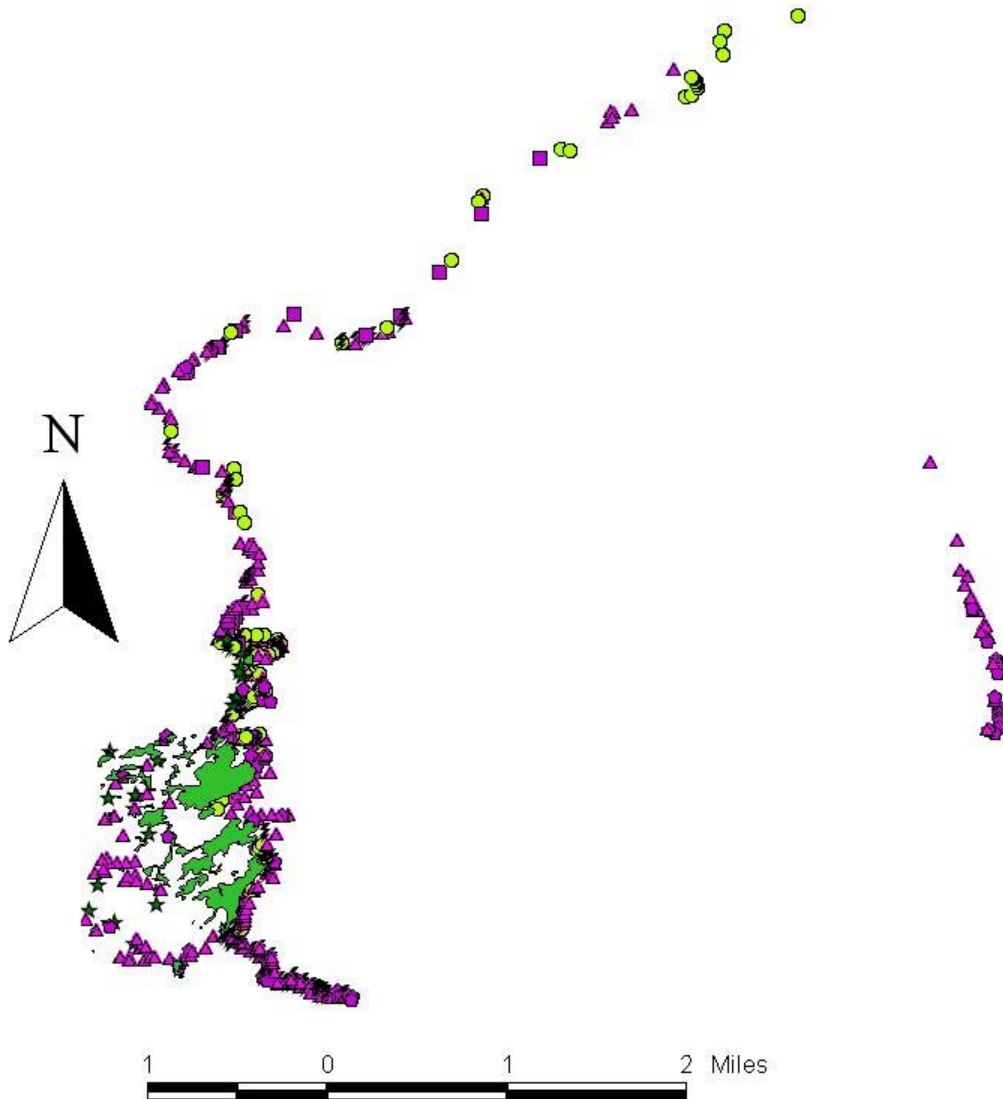
2009 Forest Service and Clark County Mapped Infestations

Clark County and USFS Mapped Infestations



There are 129 weed points, 478 weed areas, and one weed line on the map. Points were added on each polygon. Three project areas were intensely mapped; the Ashcraft leafy spurge on lower Indian Creek, the spotted knapweed southwest of China Point, and the spotted knapweed on the 18-Mile Ranch southwest of Kilgore.

2009 Camas Wildlife Refuge Infestation Map



The long line of weed points follows Camas Creek as it winds through the Camas Wildlife Refuge. The purple triangles represent Canada thistle; the green octagons represent leafy spurge; the purple squares represent Scotch thistle; the green stars

represent Russian knapweed; the green pentagons represent musk thistle. There are 43 weed areas and 543 weed points.

Appendix II

Publicity on Goat Grazing Project

Intermountain Farm and Ranch, Friday July 3, 2009

LOCAL/IDAHO Intermountain Farm & Ranch • Friday, July 3, 2009

Clark Co. unleashes goats on noxious weeds

600 nannies, billies to splurge on spurge

By REBECCA SQUIRES
For Farm & Ranch

DUBOIS — Near Medicine Lodge outside of Dubois, the hills are alive. But it's not the "Sound of Music." It's the bleating of more than 600 goats.

About 250 nanny goats with kids were released on June 14 on Middle Creek. Their mission is to eat the leafy spurge that is taking over the area. The project, conducted by the Continental Divide Cooperative Weed Management Area, is the first of its kind in Clark County.

Leafy spurge is an invasive noxious weed that crowds out native plants. It grows anywhere, but is often found in riparian areas and along canal banks. Plants are about 3 feet tall with long thin leaves and greenish-yellow heart-shaped blossoms.

Milky latex is found in all parts of leafy spurge and can cause blisters, dermatitis and blindness in humans, horses and cattle. But the goats seem to really



Courtesy of Bo Billman

More than 600 goats are roaming the hills near Medicine Lodge west of Dubois, where they are expected to help clean up the noxious weeds such as leafy spurge. The plant is an invasive weed that crowds out desirable native species.

In fact, the use of goats as a control of leafy spurge is an idea that is taking a foothold across Idaho. Several counties across the state now use weed goats each year to contain spurge, which spreads rapidly. Some studies indicate that the use of goats augments other biocontrols,

ing insect populations to flourish.

Middle Creek and its tributary, Rocky Creek, lie in narrow, steep-walled canyons that are well-suited to goat grazing. Bonnie Jensen, owner of Weed Goats 2000, successfully bid the \$25,000 contract and will spend the next 90

goats stick to splurging on spurge.

Jensen has been contracting her goat herd for the past nine years. Each summer, she and her husband, Stan, seek contracts like this one or employ their goats as "clean-up" grazers following cattle herds.

horse, two herding dogs and two guard dogs to keep the goats alive and munching. The animals are penned each night to help protect them from predators like coyotes, cougars and wolves that frequent the area.

Like other control methods, goat grazing isn't expected to wipe out spurge in the first year, according to Clark County Weed Superintendent Bo Billman.

"Depending on funding, this is expected to be a four- to five-year project," he said.

Experience indicates that even beetles and herbicides don't eliminate spurge the first year.

The Continental Divide CWMA partnered with Clark County, the Bureau of Land Management, the Idaho Department of Agriculture and private land owners for the project.

Jensen, along with Billman and other government supervisors, will monitor the goats' progress through the spurge and evaluate the projects' effectiveness using test plots, photographs and GPS mapping.

The goats are expected to remain in the area until

The Jefferson Star, June 24, 2009, Vol. 106, No. 7

CHOWING DOWN
*The Johnson State
June 24, 2009 11:02 AM*



Photo Courtesy of BOB BILTMAN

Clark County unleashes goats on noxious weeds

OVER 600 GOATS ARE ROMPING THE HILLS NEAR MEDICINE LODGE. WHILE THEY ARE GOING FOR THE TOPS OF CLARK COUNTY'S NOXIUS WEEDS, THEY ALSO ARE CHANGING THE LANDSCAPE BY UNLEASHING NOXIOUS WEEDS THAT OVERSAD OUT NATIVE PLANTS.

REBECCA SQUIRES
Told to The Jefferson Star

Near Medicine Lodge outside Clark County, the hills resemble the "Sound of Music," the bleating of over 600 goats.

About 250 many goats with white coats released on June 14 on the hills. Their mission is to eat the weeds. The goats that are taking part in the Continental Divide Cooperative Weed Management Project, is the first of its kind in Clark County.

The goats are an invasive species that grows out in the hills. It grows in a system, is often found in a system, and along with the goats, it is about three-foot tall long, thin leaves and green.

ish-yellow heart shaped blossoms. Milky latex is found in all parts of leafy spurge that can cause blisters, dermatitis and other ailments in humans, horses and cattle. But the goats seem to really like it.

In fact, the use of goats as a control of leafy spurge is an idea that is taking a foothold across Idaho. Several counties across the state now use weed goats each year to contain spurge, which spreads rapidly. Some studies indicate that the use of goats and other bio-control tools, like fire beetles, by allowing insect populations to flourish.

Middle Creek, and its tributary Rocky Creek, he in many areas, called to goat grazing. Bion Jensen, owner of Weed Goats 2000, successfully bid the \$25,000 contract and will spend the next 90 days making sure that the goats stick to splurging on spurge.

Jensen has been contracting her goat herd for the last nine years. Each summer, she and her husband Stan, seek contracts like this one or employ their goats as "clean-up" grazers following cattle herds.

Jensen uses a saddle horse, two herding dogs and two guard dogs to keep the goats alive and managed. The animals are penned in areas that help protect them from predators like coyotes, cougars and wolves that frequent the area.

Like other control methods, goat grazing isn't expected to wipe out spurge in the first year, according to Clark County Weed Superintendent Bo Billman.

Depending on funding, this

Jensen, along with Billman and other government supervisors, will monitor the spurge progress through the spurge and evaluate the projects' effectiveness using test plots, photographs and GPS mapping.

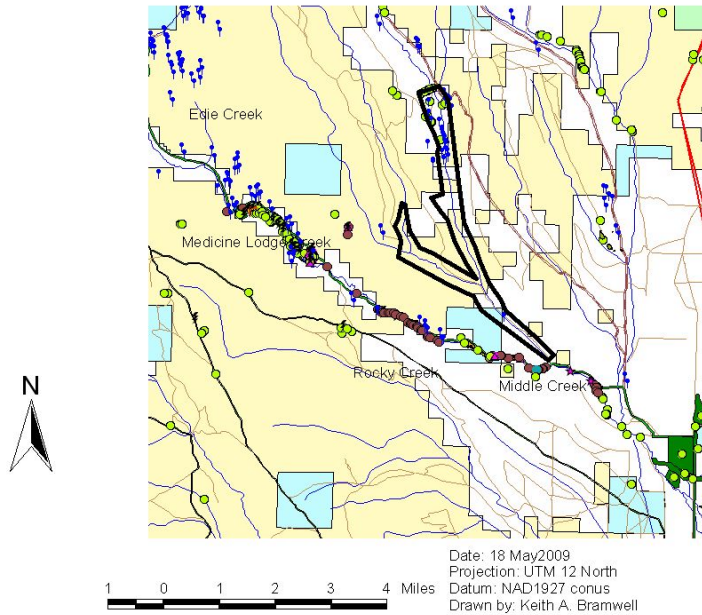
The goats are expected to remain in the area until mid-September.

GOATS 7 from page 1

is expected to be a four to five year project," he said.
Experience indicates that even beetles and herbicides don't eliminate spurge the first year.
The Continental Divide CWMA partnered with Clark County, the Bureau of Land Management, Idaho State Department of Agriculture, and pri-

Goat Grazing on Leafy Spurge Area Map

Continental Divide CWMA Middle Creek Goat Grazing on Spurge Project Area



Appendix III: Thank You Letter

*Continental Divide
Cooperative Weed Management Area*

% Keith A. Bramwell
P.O. Box 173
Dubois, Idaho 83423
(208) 374-5309 Cell (208) 705-0749

December 29, 2009

Matt Voile
Noxious Weed Program Manager
Idaho State Department of Agriculture
P.O. Box 790
Boise, Idaho 83701

Dear Sir:

On behalf of all the partners in the Continental Divide CWMA, I wish to express our deepest appreciation to you and your staff, the Director, the state legislators, and our federal partners for the outstanding support provided for our noxious weed program. Without that support, we would be lucky to manage just the weeds along the road. None of the rangeland work and cooperative projects would be possible. This year's work has been particularly fruitful in volume and, hopefully, results. We have made some major inroads into some very serious infestation problems.

Please extend our thanks to everyone involved.

Sincerely,

Keith A. Bramwell
CDCWMA Chairman