

# The Annual Weed

Volume 5, Issue 1 February 2004

## Jackson Hole Weed Management Association

The purpose of the JHWMA plan is to establish common long and short term management policies, goals, and objectives necessary for cooperatively managing and funding noxious weed activities across all jurisdictional boundaries in the JHWMA.

Cooperatives include federal, state, county, and private land management agencies as well as other interested organizations and individuals. This mutual aid approach to weed management will insure that the maximum efficiency and effectiveness for prevention and control is realized.

The JHWMA area is approximately 1.8 million acres, consisting of 54% Bridger-Teton National Forest, 22% Yellowstone National Park, 18% Grand Teton National Park, 3% Private lands in Jackson Hole, 1.3% National Elk Refuge. Others include State of Wyoming, Bureau of Reclamation, and Bureau of Land Management.

The JHWMA was established in 1997 and has played a critical role in restoration and protection of native plant ecosystems. These ecosystems support wildlife and recreational opportunities in the JHWMA area every day. This group is dedicated to prevention, control, and eventually stabilization of the ecosystem from further spread of noxious weed invasion.

[www.jhwma.org](http://www.jhwma.org)

[www.tcweed.org](http://www.tcweed.org)

## Wyoming Game and Fish Department

The Wyoming Game & Fish Department continually works in cooperation with Teton County Weed and Pest. Educational efforts have been made throughout the year in wildlife habitat talks, passing out weed pocketbooks, and stocking the office with various Weed and Pest brochures. G&F is also planning to give a PowerPoint presentation to inform the region employees of the different weeds to look for and what to do when they find them.

The Department purchases certified weed free hay for 22 State feedgrounds however, it is not always clean. Employees keep an eye out for new infestations, especially in these areas. Some feedgrounds are already being treated for various weeds. Biologists also look for weeds and GPS their location when working in the field. The Department has hired a contract employee to work at the South Park feedground, and part of her time has been spent pulling henbane, houndstongue, and spotted knapweed. Also this year, the G & F sponsored their first weed pull with TCWP. Department employees assisted with the weed problem at the South Park feedgrounds.

The Wyoming Game & Fish Department plays a big role in locating funding for the JHWMA. The successes include grants from the Rocky Mountain Elk Foundation and the WGFD Trust Fund. This money is distributed throughout Teton County to promote healthy crucial wildlife ranges.

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## The Jackson Hole Land Trust

During 2003, the Jackson Hole Land Trust hired a contractor to spray for noxious weeds on three protected properties. On the Hardeman Ponds and Meadows property 13.5 man hours were spent treating Oxeye Daisy, thistle and toadflax; 18 man hours were spent treating thistle, houndstongue, and tansy on the de Beixedon property which lies on Boyles Hill Road; and, 26.5 man hours were spent spraying Dalmatian toadflax and spotted knapweed at the C-V Ranch. In addition, the Land Trust sponsored two weed pulls, and provided various land owners with information regarding noxious

# Teton County Weed & Pest

This was an extraordinary summer for TCWP and thanks to a great summer crew, more was accomplished than ever before. Financial help from the Teton Conservation District allowed us to move weed control efforts to the next level. Even though we found a patch of 13.5 acres of leafy spurge on Munger Mountain (see photo below - Jim Ozenberger from BTNF inspects the infestation), found serious infestations of saltcedar and perennial pepperweed on the Snake River, and found more new noxious weed species than in past years combined,



we were still able to handle these new problems and accomplish our original goals. Much of this was possible because we knew that we had the financial support for the TCD behind us. We released 15,000 *L. minutus*, 8,000 *C. achates*, and 600 *A. zoegana* on spotted knapweed; 23,100 *T. horridus* on musk thistle; 13,900 *C. litura* on Canada thistle; 7,400 *M. janthinus* on Dalmatian toadflax and 6,000 *C. Quadrigemina* and 200 *A. plagiata* on St. Johnswort. The

total bill on the releases was over \$38,000, \$16,000 of which the TCD contributed. The benefits of these releases will be felt for years to come. In addition, 1,701.7 acres were treated with herbicides and mechanical methods within the JHWMA, most of which were on important or critical game habitat.

One of the most important weed control projects TCD funded was the use of a horseback sprayer contractor who, for the second year in a row, treated spotted knapweed on the Gros Ventre River. The continuation of this project was critical to the long term success of spotted knapweed control in Grand Teton National Park and the National Elk Refuge.

On the Snake River levee system, TCWP crews treated all sections of the levee twice for a total of 55.78 acres. (By contrast, we only treated 36.51 acres in 2002). TCD's contribution along with changes in spray tactics helped us to get this much acreage treated. On the Wyoming Highway system, TCWP crews treated 74.06 acres, 26.69 on the County road system, and 37.48 acres on the Community Pathways. All in all, TCWP crews treated 50% more acreage in 2003 than in 2002.

Finally, with help from TCD and the One Fly Foundation, the Snake River Project continued to thrive. A large amount of time was spent releasing bio control insects on the weed infestations on the river and searching for saltcedar, purple loosestrife and perennial pepperweed infestations. During our searches, we did not find any purple loosestrife, however we found numerous and frequent infestations of saltcedar and perennial pepperweed. We were very disheartened by these finds, however, all plants that were found by TCWP crews were 4 years old or younger. Therefore, we hope that this means that we have caught these infestations early enough that we may actually have a chance to eradicate these infestations before they become any more prolific. Future work on finding as many of

these plants as possible and removing them will be critical and costly, but at least we now know the plants are there.

Numerous weed pulls, a poster contest and newspaper and radio ads were also part of our efforts with the Snake R. Project. The SRP brochures were well received and a mass mailing to over 300 landowners resulted in dozens of requests for consultations and even more phone calls. Slowly, but surely our message is getting out.

As stated earlier, TCWP and the JHWMA would like to extend our sincerest gratitude to the TCD and its board. The partnership between TCWP and the TCD is an important one that will allow both of our organizations to accomplish some exceptional and impressive goals in the future.

## Teton Conservation District

In 2003 the Conservation District continued to be one of the biggest supporters of the JHWMA. They provided office space and support to the JHWMA Student Conservation Association intern, Lindsey Biegging. TCD provided funding for weed awareness advertisements in the newspapers, distribution of the JHWMA brochures, and continued to host all education sub-committee meetings. TCD also granted space for JHWMA materials in their fair booth and provided funding to purchase materials and promote noxious weed awareness (i.e. Wanted Poster for trailhead signs and GYCC Pocket Guides.)

## Pinto Ranch

During 2003, the Pinto Ranch addressed several small weed issues. The largest issue was to revisit the hayfields for an application to cover many broadleaf and thistle (especially Canadian) problems. A fall application of Redeem was conducted on approximately 376 acres. A spring 2004, application of Redeem on the remaining 268 acres will take place in order to complete the full coverage of all the hayfields. The overall cost for this program will be approximately \$13,000 to maintain the weed-free hay program at the ranch.

We are still addressing the spotted knapweed problem along the highway corridor near our lower ranch-house but due to the highway construction we were only able to treat the undisturbed areas which showed a dramatic decrease in plants. After nearly 5 years of control on this patch, we are only utilizing less than 1/4 of a backpack or approximately 1 gal. for this area compared to over 30 some gallons of treatment when we started. Close monitoring will follow these next few years in the construction zone for new plants.

Yellow Toadflax plants continue to be treated but that number has decreased dramatically in the past few years. We currently are focusing on only two areas that still have plants and hope to have those areas controlled in the future.

Addressing the Oxeye Daisy problems have been very successful and we have all but eliminated the infested areas. Less than a 1/4 of a backpack sprayer is utilized for control.

Ongoing control programs for Musk Thistle continue but each year the amount of man hours decrease.

## National Elk Refuge

This was the third year that the refuge provided funding to the Teton County Weed and Pest Dept. to hire one full time summer employee to work almost exclusively on the refuge. The refuge supplied housing, a vehicle and an ATV with spray tank attached. This employee started in early June and finished in mid- August.

This was the fifth year that about 700 acres on both sides of the refuge road from East Broadway to the twin Creek Corner (about 1/3 mile on each side of the road) was searched for musk thistle. Virtually thousands of musk thistle plants were chopped during the flowering stage. The non-irrigated lands had significantly fewer thistles than other years and control work seems to really make a difference. The irrigated lands still seem to have the same infestation as before control started. This program was completed with volunteer workers.

An intensive effort was again placed on controlling spotted knapweed in the Gros Ventre River bottom. In cooperation with the Grand Teton National Park and funding through the Teton Conservation District (\$11,450 grant) a contractor from Colorado was hired to chemically spray using horses and mules. This operation lasted about 3-4 weeks. Control of spotted knapweed seems to be improving along this river corridor. The gravel islands remain a real problem and may not be feasible to control due to chemical labeling limitations and continual reflooding of the islands. The battle line is the



uplands adjacent to the river and intensive control is targeted for these sites to keep knapweed from spreading into the uplands of the refuge. The horse method of spraying shows potential for other remote areas in Jackson Hole. A mule is lead by a horse.

The mule carries spray tanks charged by compressed CO<sub>2</sub>. This year a boom type sprayer was added to the mule, about a 15 foot swath could be sprayed behind the mule by pulling a string. Spot spraying is accomplished with a hand held wand from the lead horse.

The two small patches of perennial pepperweed which were found and sprayed in 2002, seem to be eliminated as no new plants were found this year. Continuing efforts to control diffuse knapweed in the Chambers field area of the refuge continued for the third year. Plants are still located but do not seem to be spreading out of control at this time.

The National Elk Refuge provided a \$5,000 grant to the Teton County Weed and Pest for the "Front Line Assistance Program" to assist with noxious weed control on private lands in the vicinity of refuge lands. A 50:50 cost share to have weeds controlled through Weed and Pest Dept. programs was provided to landowners.

Chemical control included the following approximate acreages: Musk thistle 40 acres; Spotted knapweed 40 acres; Dalmation toadflax 2 acres; Canada thistle 5 acres; Diffuse knapweed 5 acres; Tansy 1 acre; Hoary cress 3 acres.

## Bridger-Teton National Forest

Another season of fires left the BTNF in financially hard times at the end of August. In addition, the powers that be placed a particularly difficult goal of 513 treated acres on the program for the summer of 2003. The \$3,000 that TCD committed to work on the BTNF, along with a grant from the Greater Yellowstone Coordinating Committee allowed work to continue unabated despite budget cuts.

Seventeen sites received *Ceutorhynchus litura* for Canada thistle, while eight sites received *Trichosirocalus horridus* for musk thistle. A total of 12,200 insects were released for an average of 488 insects per release site. Each site were estimated to treat five acres of noxious weeds.

In the end, Jim Ozenberger and his crews treated 329.75 acres mechanically, 485.33 acres chemically, and 125 acres with biological controls for a total of 940.08 acres in the Jackson and Blackrock Ranger Districts.

## Grand Teton National Park

Chemical, mechanical, and biological treatments were used to eliminate or control noxious weeds in 2003. A total of 2441.6 person-hours were spent treating 1054 acres of weed infestations. Biological controls were applied to spotted knapweed (*Centaurea maculosa*) and dalmation toadflax (*Linaria dalmatina*). The Gros Ventre Riparian corridor received a concentrated effort to reduce spotted knapweed infestations. A total of 443.25 person-hours were worked to treat 55.85 acres along the river corridor and surrounding areas. Much of this work was carried out by Mike Berry using a horseback sprayer in the riparian corridor. Work also focused on high human use areas in the Gros Ventre Campground and the town of Kelly. At the Jackson Lake Dam complex, members of the Montana Conservation Corps spent 76 person-hours mechanically treating 5 acres of noxious weeds. In addition 0.357 acres of common tansy (*Tanacetum vulgare*) were chemically treated. New invasive weeds were again given high priority in 2003. Saltcedar (*Tamarix ramosissima*) and perennial pepperweed (*Lepidium latifolium*) were identified and treated in addition to the species identified in 2002. A total of 175.6 person-hours were dedicated to treating 3.8675 acres of new or recent infestations. Boom spraying was largely carried out by a contract with Simplot. In two days they were able to treat 726 acres of musk thistle (*Carduus nutans*) in the Kelly Hayfields. In addition, 67 acres were treated at the Elk Ranch, Aspen/Hunter Ranch, Barker/Ewing Meadow, and an old JY Ranch pasture. The Snake River Pit Restoration Area also received an initial treatment for Canada thistle (*Cirsium arvense*) in 2003. Our crew, along with the EPMT, spent several days treating Canada thistle in the hopes of encouraging native plant restorations that occurred in the spring.

Formal inventories were conducted for weeds along Park rights-of-way, utility corridors, and the east shore of Jackson Lake. A total of 533 miles were walked and surveyed in 2003. A detailed summary of the extensive inventory effort can be found in the 2003 Weed Inventory Report (W:\WEEDS\AnnualReports\Weed Inventory 03).

Monitoring of biological control releases was also conducted in 2003. A total of 16 sites were sampled in 2003 and compared with data gathered in 2000. Early analysis shows that *Trichosirocalus horridus* released in 1995 is starting to have an impact on musk thistle infestations. It also appears that *Ceutorhynchus litura* released on Canada thistle in 2000 is already starting to show effects. The data for releases on spotted knapweed is still very ambiguous, and time will tell whether these controls are effective.

## Caribou-Targhee National Forest

The Palisades and Teton Basin Districts had a seasonal weed crew of 6 seasonal employees and 2 YCC employees. Through grant money a seventh seasonal was hired to work exclusively on backcountry weed control. Four pickups were used for the summer. Three were equipped with 200 gallon spray units. Six ATVs were used on and off throughout the season. These were equipped with spray units most of the time. Two horse trailer and 6 head of livestock were dedicated to the treatment of weeds.

Twenty five colonies of Canadian Thistle biological control insects were released, 5 colonies of knapweed insects were released and 50,000 leafy spurge insects were collected and released on the districts. The two districts treated 2900 acres of weeds during the 2003 season. Of these acres 570 were in the Jackson Hole Weed management Area. These acres are a combination of areas that were GPS mapped, estimates of areas treated and a value of 5 acres was given to each biological control colony release. On a positive note the one known backcountry infestation of leafy spurge in South Elk Creek on the Palisades District (in the JHWMA) was significantly smaller this year. The crew took herbicide and *Apthona* beetles to the site last summer and was able to find only a few scattered plants to release the beetles on. So our treatment efforts are working.

## JHWMA Members

Bridger-Teton National Forest, Bureau of Land Management, Bureau of Reclamation, Grand Teton National Park, Hatchet Ranch, Jackson Hole Conservation Alliance, Jackson Hole Land Trust, Jackson Hole Wildlife Foundation, Lost Creek Ranch, National Elk Refuge, Natural Resources Conservation Service, Pinto Ranch, Targhee National Forest, Teton Conservation District, Teton County Parks and Recreation Department, Teton County Weed & Pest District, Teton Science School, Wyoming Game & Fish Department, Wyoming Native Plant Society-Teton Chapter, and Yellowstone National Park.

A special *thank you* to the following JHWMA Supporters:

Center for Invasive Plant Management  
Community Foundation of Jackson Hole  
National Association of Counties/Five Star Initiative  
Rocky Mountain Elk Foundation  
Teton Conservation District

*For more information on the JHWMA or for a copy of the brochure, please*



Jackson Hole Weed Management Association

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[www.jhwma.org](http://www.jhwma.org)

## Education Committee

The Education Sub-Committee stepped up their efforts in 2003. Numerous weed pulls were held with various agencies sponsoring them, the 2nd Annual Poster Contest was a huge success, and the Snake River Project Kickoff Party had more than 60 people in attendance. With help from the Teton Conservation District, the new Snake River Project brochures were printed and distributed to agencies and landowners. Members of the Education Committee also participated in Elkfest, ECO-fair, and the Teton County Fair.

In the spring, 21 classroom visits were made for noxious weed lessons. In the fall, 14 classrooms with a total of 22 visits were made. Jim Ozenberger, John Moeny, Jim Gores, Amy Lerch, Steve Brock and Fred Smith all helped by bringing their expertise into the classroom. Lessons focus on native/non-native plants, habitat, weed pulls, revegetation, and more.

Guest ranches became a priority in 2003, presentations were made to employees and education materials distributed. GYCC Pocketbooks and Wanted Weed Posters were purchased to be used in 2004. Thanks to all who make this committee a success. A lot of hard work goes into projects, and no one person could have accomplished so much in one year.