



The Weed Watch

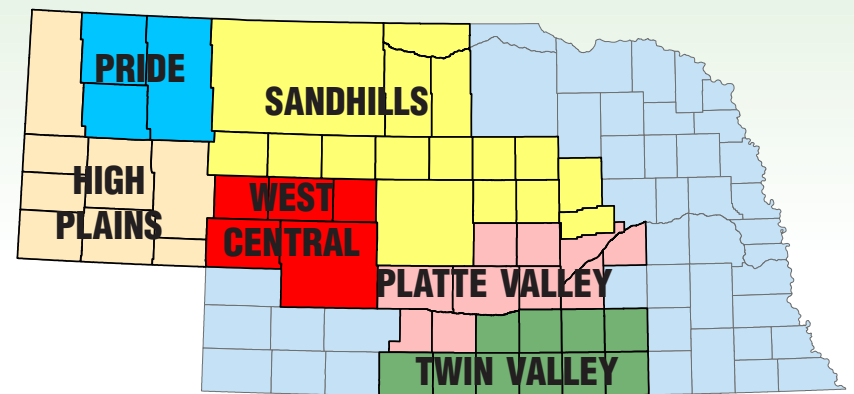
A publication of the Panhandle Research Integration for Discovery Education
in conjunction with High Plains, Sandhills, West Central, Platte Valley and Twin Valley Weed Management Associations

Spring 2012 Newsletter

Welcome...

...to the spring 2012 edition of The Weed Watch! Once again, PRIDE has expanded our publication by adding another Weed Management Area (WMA) – the Twin Valley WMA. Twin Valley will join forces with the following WMAs that are already part of The Weed Watch family: Sandhills, High Plains, West Central, Platte Valley, and our own PRIDE. Together, we offer noxious and invasive plant awareness and education to mailboxes or households in 48 counties. This spring, 98,000 copies will be printed.

The Weed Watch is one reason PRIDE recently earned a National Award. PRIDE's Mission Statement says, "PRIDE serves as a cornerstone to build and maintain partnerships between the many cooperators in invasive weed management and education. With this collaborative effort, a more efficient and successful approach to invasive weed management and awareness is achieved. PRIDE's efforts in pooling of funds and resources from contributors will result in a compounding of investments and rewards." Publishing The Weed Watch alone accomplishes our mission statement and makes all the work worthwhile.



Nebraska's Weed Management Areas (WMAs) at Work

Doug Mulligan,
Brown County Superintendent
Barbara Good-Small, Cherry County
Weed Superintendent

According to invasive species prevention specialists Randy Westbrooks and Chuck Barger, "Scientists at Cornell University estimated that losses to the American economy due to . . . invasive plants are now at least \$50 billion per year. Unlike chemical pollutants that can be eliminated from use and will eventually

break down in the environment, invasive species can reproduce and spread, causing ever-increasing harm. Our biggest challenge is to control invasive species faster than they can reproduce and spread."⁽¹⁾

In Nebraska, 13 Weed Management Areas (WMAs) have been formed to help control noxious and invasive plant species. They are working both independently and cooperatively with other groups to treat the infestations and to educate landowners and the public on the benefits of prevention and Early Detection and Rapid Response (EDDR). Together, these groups research, identify, and use various funding resources to help meet these goals.

Platte Valley WMA surveyed the 13 Nebraska WMAs and found that, as of

2011, the WMAs have treated a total of 78,305 acres, including:

- 27,185 acres of phragmites
- 18,470 acres of purple loosestrife
- 10,400 acres of musk thistle
- 11,000 acres of Canada thistle
- 11,250 acres of leafy spurge

Also, according to the survey, these groups surveyed and treated well over 2,000 miles of Nebraska rivers. Projects for treatment and education were funded by grants totaling \$13,614,000.

Westbrooks and Barger also point out that, "Since only about 2% of the U.S. population is now engaged in agriculture or land management, there is much less awareness of this issue than in generations

past. Clearly, land owners and managers, gardeners and horticulturalists, and others who have a strong connection to the land, have a major role to play in ongoing efforts to deal with this silent ecological explosion"⁽¹⁾. With cooperative efforts like this all across the Cornhusker State, Nebraska's Weed Management Areas are striving to meet the challenges that noxious and invasive plant species present.

1. Westbrooks, R. and C. Barger. 2011. Invasive Plants Coming to America. New Strategies for Early Detection and Rapid Response to Invasive Plants in the United States. Fact Sheet. USGS, Whiteville, NC, and U-GA EDDMapS, Tifton, GA. www.eddmaps.org/workshops/GeneralOverview.pdf



Plan to attend

the Leafy Spurge Task Force tour and conference on Wednesday, **August 1 and 2, 2012**, in the Ainsworth area. On August 1, educational tours will showcase results of biocontrol and chemical applications. The day will end with a steak fry. On August 2, speakers will present a variety of topics relating to noxious and invasive plants. For more information, contact Rod Stolcpart, Rock County Weed Superintendent, phone **402-822-0186**, or email weedmanrod@abbnbraska.com.

Twin Valley WMA Clears the Waterways

(Information for the following article first appeared in the Kearney Hub on September 24, 2011, in an article written by Lori Potter.)

Water trickling from Turkey Creek springs is a reminder that every drop counts in the Republican Basin.

Twin Valley Weed Management Area (TVWMA) Project Director Merle Illian of Red Cloud and landowners along the creek in Franklin and Harlan counties hope that work to clear channel debris, remove trees, and reopen springs will benefit Republican River flows. Since 2005, TVWMA projects have focused on clearing debris and killing invasive weeds choking the river from Cambridge to the Nebraska-Kansas state line near Superior. Now that the river can carry more water, attention has turned to similarly plugged tributaries.

Turkey Creek was selected for the first project because TVWMA officials knew area landowners would participate and there would be positive results. According to Illian, thirty years ago Turkey Creek flowed two times more water than it does now. “We knew that if we get in there and open up the springs, we can get good water flow,” Illian said.

Turkey Creek runs for 10^{1/2} miles “as the crow flies,” Illian said, but work along the serpentine stream involves nearly 18 channel miles. Debris in the narrow Turkey Creek channel comes from trees and crops next to the creek. Vegetation can be removed for up to 100 feet on either side of the channel, but negotiations with landowners determine how much vegetation is taken. Illian said some want more trees left for wildlife habitat or hunting while others want cleared areas for grazing cattle.

He said landowner cooperation has been vital to all the Republican Basin projects. For the 142 miles of river channel from Cambridge to the state line, all but about eight of the 260 landowners signed agreements for weed spraying and channel clearing.

Expansion of the Project

The goal is to replicate that success in other tributaries, starting in 2012 with an eight-mile section of Sappa Creek, from southwest of Stamford to the Republican River southwest of Orleans. Illian said Sappa Creek is a priority because it is just west of Harlan County Lake, and a major goal is to keep the reservoir’s volume above the trigger for “water-short year” Republican River Compact compliance regulations.

As funding becomes available, TVWMA officials want to also clear Thompson Creek in the Riverton area, Center Creek near Franklin, Indian Creek west of Red Cloud, and Crow Creek between Naponee and Republican City. “They all have springs,” Illian said, and more water in free-flowing creeks will enhance streamflows to Kansas for compact compliance.

High river flows the past two years and the channel’s improved carrying capacity have resulted in “a lot of sloughing off of trees,” he said. He’s excited about the higher flows achieved in the Republican River since the first weed spraying was done in 2005. “That river was choked off ... It’s just amazing that we have a transportation system for this water to get to Kansas now,” Illian said.

There also have been benefits to flood-prone areas. When the Corps of Engineers released lake water at 300 cubic feet per second (cfs) in 2007, the river was breaking out of its banks at Franklin. One year later, there was a 1,000 cfs release “and it went right down the river, no problem,” he said.

Using Grants

Turkey Creek is one of several projects funded by a Nebraska Environmental Trust grant. Landowners provide a 15 percent in-kind match by disposing of or removing tree piles. Illian said TVWMA projects are a good fit for Environmental Trust support because they involve many partners and “stretching the funds out into a wide area.” Overall since 2005, about \$2.8 million worth of work has been done or is in progress in the eastern Republican Basin. In addition to the Environmental Trust grant, the TVWMA has received grants from the Corps of Engineers, from the state through LB701, and from the Cooperative Conservation Partnerships Initiatives administered by the U.S. Department of Agriculture’s Natural Resources Conservation Service.

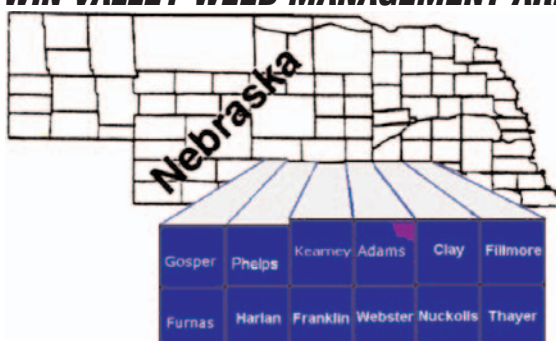


Before – Removing trees and other debris in Turkey Creek and trees on either side of the creek bank will help water flow on to the Republican River. The project also is opening natural springs in the creek channel.



After – Water flows unobstructed in Turkey Creek after work was done to clear channel debris and remove trees close to the creek bank.

TWIN VALLEY WEED MANAGEMENT AREA



Adams County
Lynn Hanson
402-461-7173

Franklin County
Mark Goebel
308-425-3716

Harlan County
Tim Burgeson
308-928-9800

Thayer County
Brian Schardt
402-365-4366

Clay County
Bruce Rumsey
402-762-3652

Furnas County
Todd Weverka
308-268-2824

Kearney County
Joseph D. Anderson
308-832-2854

Webster County
Lynn “Bud” Collison
402-746-2890

Fillmore County
Todd Boller
402-366-1921

Gosper County
Marty Craig
308-324-3771

Nuckolls County
Tim Stutzman
402-225-2361

TWIN VALLEY WMA
Project Coordinator
Merle Illian
402-746-3560

PRIDE Receives National Recognition

Leslie Stewart-Phelps, Pine Ridge Ranger District and PRIDE board member

The Panhandle Research Integration and Discovery Education (PRIDE) weed management association (WMA) was awarded the National Forest System Invasive Species Program Award for 2011. The specific title of the award is "Partner Award for Education and Awareness on Invasive Species". Tom Tidwell, Chief of the U.S. Forest Service, presented the award in February during the National Invasive Species Awareness Week held in Washington, D.C.

PRIDE was nominated by the Pine Ridge Ranger District of the U.S. Forest Service. Since PRIDE was formed in 1997 and became the first WMA in Nebraska, members of the range staff at the ranger district have been on the board of directors. PRIDE's goals include environmental education and awareness as well as building and maintaining partnerships between cooperators involved in invasive weed management. PRIDE works closely with private, federal, and state land managers within three counties in the Panhandle of northwest Nebraska (Dawes, Box Butte, and Sheridan).

The area within the Pine Ridge Ranger District boundaries is a patchwork of U.S. Forest Service, state, and private lands. The Forest Service realizes that it is important to partner with others if they are to manage the invasive species on federal lands. PRIDE is a major partner who helps accomplish Forest Service goals. Their educational projects and programs reach private landowner neighbors and general public. This awareness gives Forest Service neighbors the knowledge to control their weeds, thereby reducing the spread of invasive species to federal lands.

Over the years, in addition to producing The Weed Watch twice a year, projects have included the following:

- Mapping and controlling thousands of acres of leafy spurge and other noxious weeds on East and West Ash Creeks in Dawes County. This included introducing insect biocontrol on leafy spurge and Canada thistle with followup educational programs.
- Intensive grazing management of 600 goats on invasive and noxious weeds on six major drainages flowing through the Pine Ridge Ranger District, with biological control, soil analysis, competitive grass seeding, and extensive educational programs.
- Preventing spread of weed seeds via the compost that is produced by the local sanitation departments by attaching "bumper" stickers that state, "Take PRIDE in your compost. NO WEEDS OR SEEDS in this dumpster?"
- Participating in an annual Conservation Festival designed for up to 200 fifth graders in the 3-county area. During the activity, students interact with Gretel, the weed-eating goat, and discuss the many methods to manage weeds.
- Partnering with Sandhills Task Force, Nebraska Game and Parks, and The Rocky Mountain Bird Observatory to remove Russian olive tree infestations along the Niobrara River in Sheridan County.

Another Great Year for PRIDE WMA

Kristi Paul, Sheridan County Weed Superintendent, PRIDE Founding Board Member

PRIDE has been busy this year with numerous projects. Following are many of the highlights for this past year:

- Implementing test plots and controlling houndstongue and Scotch thistle through a Nebraska Academy of Science grant
- Producing The Weed Watch, Spring and Fall 2011 and Spring 2012 and expanding The Weed Watch to other WMAs
- Presenting PRIDE's achievements to two groups:
 - * The Nebraska Weed Superintendents, October 2012
 - * The Governor's Riparian Task Force Committee, Grand Island, April 2012
- Presenting two weed-watcher activities to fifth graders at the annual Conservation Festival sponsored by the Upper Niobrara White NRD



Front row from left to right: Jan Bruhn, Box Butte County Weed Superintendent; Ann Cotton, District Secretary, Natural Resources Conservation Service; Kristi Paul, Sheridan County Weed Superintendent and PRIDE Treasurer; Leslie Stewart-Phelps, Rangeland Management Specialist-Botanist, Nebraska National Forest-Pine Ridge Ranger District and PRIDE Secretary. Back row from left to right: Lora O'Rourke, Rangeland Management Specialist, Nebraska National Forest-Pine Ridge Ranger District; Becky Paulsen, Dawes County Weed Superintendent, PRIDE President. Not pictured - Stephanie King, Soil Conservationist, NRCS; Cris Burks, Nebraska Department of Agriculture, and Nancy Adler, PRIDE Technician.

- In 2011, enhancing riparian habitat by controlling noxious weeds spreading along 30 miles of major waterways in the 3-county area. PRIDE plans to double that in 2012.

In presenting this award, Lora O'Rourke said, "In collaborating with federal, state, and private land owners, PRIDE has achieved an efficient and successful approach to weed education, awareness, and management. A tremendous amount of weed control has been accomplished on private lands in Sheridan, Dawes, and Box Butte Counties due to PRIDE's efforts. They are very deserving of this recognition. Our weed management job on the Pine Ridge Ranger District would be much harder without the partnership we have with PRIDE."

- Receiving Nebraska Department of Agriculture grants:

- * 2011 Riparian Habitat Recovery through Invasive Weed Control
- * 2012 Riparian Habitat Recovery through Invasive Weed Control
- * Teaming Together for Invasive Weed Awareness to produce The Weed Watch with other WMAs

- Receiving a national award from the U.S. Forest Service.

PRIDE members manage these projects in addition to our full-time jobs. To have a successful WMA, these projects require on-the-ground weed control, collaboration between members and partners, and hard work. Mostly, however, they require a passion to improve our environment through invasive weed control. PRIDE members have this passion in spades.



PRIDE

Box Butte County
Jan Bruhn
308-487-3755

Dawes County
Becky Paulsen
308-432-3056

Sheridan County
Kristi Paul
308-327-5629

PRIDE Board of Directors extends a fond farewell to founding member Cris Burks! Cris is changing occupations and will soon be moving to Wyoming. The board appreciates her dedicated service to PRIDE, and wishes her well in the future.

Sandhills Weed Management Area: Outreach to the Ord High School FFA Chapter

Janet Sanders, Executive Director, Loup Basin RC&D Council

The Fall 2011 publication of The Weed Watch was mailed out to the sixteen counties that comprise the Sandhills Weed Management Area (SWMA). Before the mailing could begin, the USPS-Every Door Direct Mail™ (EDDM™) process needed to be completed. The Loup Basin Resource, Conservation, and Development (RC&D) office asked Dave Ference, advisor of the Ord FFA Chapter, if he had a group of students who could assist with the project. Within the hour, he arrived with 30 students who went right to work. Most of the students returned the following day to help finish the process of putting an EDDM™ label on each publication. The students were guided by five volunteers, who were members of the Loup Basin RC&D Council.

The SWMA invited the Ord High School FFA chapter and Dave Ference to their meeting on December 21, 2011, where the weed superintendents personally thanked the students for their assistance. The weed superintendents informed the students about noxious weed concerns within their own counties, the importance and advantages of educating the area citizens about controlling noxious weeds, and the benefits of serving the public.

Funds Available from Sandhills WMA to Spray Purple Loosestrife and Invasive Phragmites

Mark Lindvall, Valentine National Wildlife Refuge Manager
Barbara Good-Small, Cherry County Weed Superintendent

The threat to wetlands from two invasive species, phragmites and purple loosestrife, is imminent in the 190,000-acre Sandhills region of Nebraska. Both plants are common on the Platte River, and loosestrife is also common on the Niobrara River. The plants are spreading from the rivers into the Sandhills, which contains thousands of acres of wetlands that could potentially be affected. Native vegetation would be replaced and wildlife habitat degraded. Purple loosestrife can grow in wet meadows and could affect hay production. Both plants are very aggressive and have triggered large-scale control efforts throughout Nebraska and across the country.

To combat this twin threat, in 2011 the Sandhills Weed Management Area (SWMA) received a grant from the U.S. Fish and Wildlife Service for Early Detection and Rapid Response (EDRR) of purple loosestrife and invasive phragmites around Valentine National Wildlife Refuge. Under the grant, SWMA and refuge staff applied herbicide to several known and two new infestations. Efforts will continue in 2012 with remaining funds, and SWMA has applied for additional funding. This year SWMA will make funding available to private landowners for spraying either purple loosestrife or invasive phragmites in the Sandhills Weed Management Area. For further information or assistance with spraying these noxious weed, call Cherry County Weed Superintendant Barbara Good-Small at 402-322-1067. Unfortunately, this funding does not apply to the Niobrara River corridor.

A native phragmites common in the Sandhills is somewhat difficult to distinguish from the invasive phragmites. Purple loosestrife is easiest to locate when it blooms in late July and August. Several native plant species may be confused with purple loosestrife.

For weed identification assistance, contact the Nebraska Department of Agriculture (402-471-2351) for a brochure, contact your county weed superintendant, or visit

<http://invasiveplants.net/phragmites/morphology.htm> or

<http://www.ianrpubs.unl.edu/epublic/archive/ec177/build/ec177.pdf>.



Pictured in back row: Dave Ference (Ord FFA Advisor), Jay D. Tetschner (Chairman, SWMA), Shawn Owens (Custer County Weed Superintendent), Doug Mulligan (Brown County Weed Superintendent), Russell Stokes (Boone County Weed Superintendent), Carol Conard (Blaine/Thomas Counties Weed Superintendent), and David Boschult (NE Department of Agriculture).

Ord FFA students: Kenzie Drudik, Andi Shellhase, Clinton O'Neel, Jena Horner, Kaitlin Gilles, Dustin Miller, Grant Wilniak, Nolan Grint, Brenna Lech, Clint Kruml, Jaden Barnes, Cali Psota, and Megan Davis



SWMA used Nebraska Department of Agriculture grant funds to purchase these brochure racks for each county in their weed management area.

SANDHILLS WMA



Blaine/Thomas
Carol Conard
(308) 346-4047

Boone
Russell Stokes
(402) – 386-5284

Brown
Doug Mulligan
(402) 387-2287

Cherry
Barbara Small
(402) 322-1067

Custer
Shawn Owens
(308) 872-2410

Garfield
Jay D Tetschner
(308) 346-5696

Grant/Hooker
Neal Hayward
(308) 546-2706

Greeley
Walter Bjorklund
(308) 428-5955

Keya Paha
Travis Mundorf
(402) 497-3800

Loup
Lynn Strong
(308) 942-6218

Nance
Kevin Koziol
(308) 536-2523

Rock
Rod Stolcpart
(402) 822-0186

Valley
Darrell Kaminski
(308)536-2523

Wheeler
Doug Reiter
(308) 654-3397

Communication + Cooperation + Teamwork = Successes in 2011 for SWMA and MNWAG

Barbara Good-Small, Cherry County Weed Superintendent

Because we work together, landowners, Weed Management Areas (WMAs), and numerous resource agencies are all part of the success equation in managing noxious and invasive plant species. Two of our WMAs have four overlapping memberships. Weed superintendents from Brown, Cherry, Keya Paha, and Rock Counties make up the Middle Niobrara Weed Awareness Group (MNWAG) and are also members of the Sandhills Weed Management Area (SWMA), which has a total of 14 county superintendents. While their tasks are highly visible during the growing season, they accomplish much during their off-season as well. Described below are some of the accomplishments of these WMA members, with cooperation of various agencies and landowners:

Grant Funding Projects

SWMA offered U. S. Forest Service grant funding of \$17,100 to landowners with a cost/share program. Approximately 600 acres of leafy spurge were treated with ground rigs in 2011.

SWMA partnered with the Valentine National Wildlife Refuge in 2011 on a U. S. Fish and Wildlife Service Early Detection and Rapid Response (EDRR) grant. They used the \$10,000 funding to survey and treat the area in and around the refuge for purple loosestrife and phragmites. (See the article on this page for more details.)

MNWAG serves an area that is generally difficult to access along the Niobrara Wild and Scenic River Corridor. This makes it challenging to find and treat noxious and invasive species. One of MNWAG's goals is EDRR – to detect and treat invasive species at the early stages of infestation. A helicopter service proved to be a great management tool for this job last fall. The entire area was speedily and efficiently surveyed and treated within a two-day period.

Nebraska Department of Agriculture grant funding enabled MNWAG to share the helicopter service brought into the area by Platte Valley Weed Management Area. As a result of cooperation between the two WMAs, the Niobrara River Corridor from the



Helicopter treats invasive species along the Niobrara River.

western end of Cherry County to the eastern end of Holt County, and part of the Keya Paha River were surveyed for invasive phragmites and purple loosestrife on September 1 and 2, 2011. The next day, most of the purple loosestrife was treated, and minds were put at ease, as the surveys turned up no invasive phragmites.

Biocontrol

Biocontrol for purple loosestrife and leafy spurge have proven effective for areas within MNWAG and SWMA that have limited accessibility.

In 2009, SWMA was awarded \$10,000 through the Sandhills Task Force for leafy spurge biocontrol. A bug that damages leafy spurge, *Oberea erythrocephala*, does the most damage in the larval stage as it bores into the roots. These bugs were purchased and then distributed throughout various leafy spurge infestations in the SWMA region in 2009, but results were not apparent until 2011. Spring inspections revealed that severe infestations in shelter belts in Cherry County, where the *Oberea* had been released, were dramatically reduced.

This was the second of three years that MNWAG received part of the purple loosestrife biocontrol funding from a \$37,700 Environmental Trust grant. The National Park Service helped procure this grant. They also provide educational programs and monitoring of the *Galurucella* beetles that were introduced into purple loosestrife populations. Several biocontrol releases were made again this year in MNWAG's four counties. Visual surveys indicate progressively less infestation where the bugs have been released.



National Park employees as weed warriors.

Landowners, WMA members, and agencies are already surveying known infestations and are on the lookout for the appearance of new invasions this spring. With continued communication, cooperation, and teamwork, along with behind-the-scenes planning done this past winter, we should be ready for the challenge. Anyone who is not a member of one of these groups can also help by becoming aware and getting involved.

Sandhills WMA: New Website and Blog

Janet Sanders, Executive Director, Loup Basin RC&D Council

The Sandhills Weed Management Area (SWMA) has a new website <http://www.sandhillswma.org/>.

Current contact information for the weed superintendents, news releases, weed resources, and partnership information can be found on their website. In addition, Jay D. Tetchier, Chairman of the Sandhills Weed Management Area writes a blog on the website.

The Sandhills Weed Management Area is a project of the Loup Basin RC&D Council, which provides the SWMA with administrative assistance and technical support for the new website. For more information about the Sandhills Weed Management Area, send an email to info@sandhillswma.org, or call the Loup Basin RC&D Council at 308.728.3393

Invasive Plants Watch List: 2012

Kristi Paul, Sheridan County Weed Superintendent and PRIDE board member

The Nebraska Invasive Species Council (NISC) recently completed an “extreme makeover” of the Nebraska Watch List Weeds! The list of invasive plants in Nebraska was produced by the Council. It includes species that have been known to be invasive in at least one of the four ecoregions in Nebraska. A more region-based list was created due to the varied habitat types of Nebraska.

The new list is intended to:

- Provide a uniform methodology for categorizing invasive species.

- Provide a clear explanation of the process used to evaluate and categorize species.
- Provide flexibility so the criteria can be adapted to the needs of different regions or organizations.
- Identify where more information may be needed.
- Educate about the impacts of invasive species and the ability to prevent them.

Due to the length of the lists of weeds in Nebraska’s four ecoregions, The Weed Watch features photos of the following:

- **Category 1 species.** These are potential future invasive plants.
- Some of **Category 2 Priority species.** These are either species not yet in Nebraska but present a cause

for concern if sighted or species that are established and should be top priority for control efforts.

The entire document describing the Nebraska Watch List Weeds, including the criteria and the assessment process can be viewed at: <http://snr.unl.edu/invasives>

Four of the Category 1 invasive species are aquatic weeds, quick to invade rivers or lakes. To quote Randy Westbrook, Invasive Species Coordinator from Greenville, NC, “These weeds are only a boat-ride away from YOUR lake”.

Category 1: Future Invasive Species

Species not in Nebraska yet, but pose a significant risk if introduced



Giant Reed



Oriental Bittersweet



Water Hyacinth



Hydrilla



Brittle Naiad



Giant Salvinia



Crown Vetch

Category 2: Priority Species

Species vary by ecoregion.
Complete list of Category 2 species
can be found at
<http://snr.unl.edu/invasives>



**Cutleaf
Teasel**



Garlic Mustard



Hoary Cress



Japanese Honeysuckle



Kudzu



**Russian
Knapweed**



Sickleweed



**St. John's
Wort**



**Sulphur
Cinquefoil**



**Yellow
Starthistle**

Platte Valley and West Central WMAs: Moving Forward with Monitoring and Control

Rich Walters, Project Coordinator, PVWMA and WCWMA

Since 2008, the Platte Valley Weed Management Area (PVWMA) and West Central Weed Management Area (WCWMA) have been collaborating and have received grants to control invasive plant species within the Platte River channels. Approximately 21,000 acres of phragmites have been treated with herbicide, and 1950 acres of dead biomass has been mechanically removed.

Monitoring Techniques

Personnel from the two WMAs perform yearly aerial monitoring via helicopter to monitor and detect infestations and to evaluate control effectiveness. In late August, the primary observer uses a laptop computer loaded with special software and a GPS-enabled digital camera. When an infestation

is seen, the observer speaks into a digital microphone. This tags a GPS location to the voice, and an image is captured. This information results in detailed maps of undesirable vegetation infestations,



including phragmites, purple loosestrife, Russian olive, and saltcedar.

Management actions performed by the two WMAs (such as burning, disking, grazing, shredding, and chemical spraying) are also mapped. This leads to better short-term and long-term evaluation of these practices. The WMAs are combining the two monitoring methods to develop “best management practices” for controlling invasive vegetation. The WMAs will distribute the resulting guide free to landowners.

Controlling Phragmites in 2012

Both aerial and ground application techniques will

be used during late summer 2012 to control remaining phragmites infestations. Starting June 1, an airboat will start near Columbus and work upstream, applying herbicide on infestations that cannot be treated by aerial applications. In late August, a helicopter contractor will fly the Platte River channels applying herbicide to any remaining infestations. Only approved aquatic herbicides are used in these projects.

Future Goals

Yearly monitoring flights will be continued and provide information on any remaining infestations, which should help detect re-infestations at an early stage. County weed districts will help implement cost-share policies and ensure that control measures are implemented on these infestations.

For more information, contact Rich Walters at rwalters@tnc.org.

Understanding the Impact of Invasive Plants

Stephen L. Young, Ph.D., Weed Ecologist, University of Nebraska-Lincoln

Invasive plants in the U.S. have become established at unprecedented rates with over 4,200 species on record. Across vast rangelands, wild lands, and riparian areas, invasive plants have either become established or continue to be a threat. The economic and environmental harm done by these invasive plants include reduced flow in waterways, altered fire regimes, and abandoned natural areas that were

once preserved for wildlife and recreation. The estimated cost of controlling invasive plant species is more than \$120 billion each year in the U.S.

Many states and provinces, Phragmites australis (the non-native common reed) is a widespread invasive plant species. The most significant effects of this phragmites include reduced flows, altered hydrology, and elimination of habitat suitable for many birds and animals. In addition, lands infested by phragmites are so degraded that any economic gains from recreational

activities do not warrant trying to control the invader.

Clearly, invasive plants such as phragmites are impacting ecosystems. However, a quantification of their effects continues to be difficult. First, researchers need more knowledge about the plant itself in the laboratory and in its natural habitat. A full understanding of the effect of environmental changes on phragmites will provide knowledge about biological invasions. Then that knowledge will help land managers manage invasive plants and various other techniques

restore damaged ecosystems.

To improve this understanding, the University of Nebraska-Lincoln is conducting field studies on the reproductive and vegetative characteristics of *P. australis*. The research will expand existing knowledge about how plants, soils, and abiotic variables are affected by invasive plant species. Research will also address questions such as, “Can ecosystems be altered naturally to limit or reduce the spread of invasive plant species?” and “What kind of monitoring can be done to reduce the possibility that an invasive plant will become established?”

For more information, contact Dr. Young at 308-696-6712, write him at his email – syoung4@unl.edu, or visit his website <http://ipscourse.unl.edu>.

2012 North American Invasive Plant Ecology and Management Short Course

June 26-28, 2012, University of Nebraska-Lincoln West Central Research & Extension Center,

402 West State Farm Road, North Platte, NE

The North American Invasive Plant Ecology and Management Short Course (NAIPSC) is three days of intense instruction and learning for those interested in the basics of invasive plant ecology and management. This year’s participants at the NAIPSC will learn first-hand about the latest research on invasive plant

water use and the implications this can have on restoration and other management activities in riparian and rangeland areas. Instructors will discuss the effects of introduced common reed (*Phragmites australis*) and native eastern redcedar (*Juniperus virginiana*) on water resources and neighboring plant and animal communities.

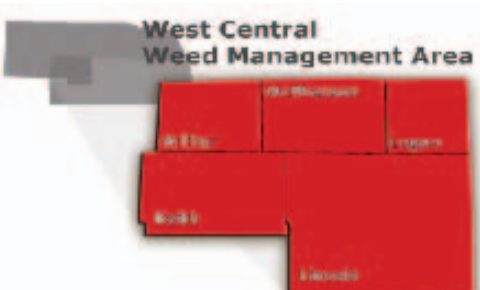
Also, this year’s class will visit the following field sites:

- Privately owned land that is actively being restored with prescribed burning, revegetation,

and various other techniques

- A riparian area where research is being conducted on native plant stand age and establishment effects on invasive plant species
- A rangeland where techniques to identify and locate plants will be demonstrated using GPS/GIS technology

For more information contact Steve Young syoung4@unl.edu or http://ipscourse.unl.edu/#Steve_Young



WEST CENTRAL WMA

Arthur County Kent Anderson 308 764-2203	Lincoln County Rod Yost 308 532-4590
Keith County Donald Chandler 308 726-3375	Logan-McPherson Richard Cook 308 636-6157



PLATTE VALLEY WMA

Buffalo County Mitch Huxoll 308 236-1244	Merrick County Corwin Roscoe 308 946-5375
Dawson County Marty Craig 308 324-3771	Phelps County Charles Brooks 308 995-6688
Hall County Rob Schultz 308 385-5097	Polk County Jim Carlson 402 747-2921
Hamilton County Brian Crabtree 402 694-3666	Sherman County Erv Dzingle 308-745-1513 Ext. 111
Howard County Rob Schultz 308-380-2099	PVWMA Coordinator Rich Walters 308-390-2511

High Plains Weed Management Association: Russian Olive Tree and Phragmites Removal Programs

Justin Relka, Field Coordinator, High Plains Weed Management Association

In January, the High Plains Weed Management Association (HPWMA) welcomed their new field coordinator, Justin Relka. Justin took over duties as field coordinator from Jared Eskam, who will be greatly missed at HPWMA.

During the winter, the HPWMA completed some ongoing projects as well some new ones. By the end of February, Russian olive trees had been removed on about 480 acres. For many of these projects, removal of the tree canopy resulted in more usable pasture, eliminating thick tree stands in which cattle hide and encouraging grass growth. Other landowners have expressed interest in the Russian olive tree removal program. HPWMA

will not be removing trees from April 1 through July 15, in compliance with the Migratory Bird Act. However, Justin will set up new projects and contact landowners about the program for projects after July 15.

Also during this period, HPWMA will be working with contractors on new and regrowth spraying projects targeting saltcedars and phragmites. With their cost-share program, which is available through grants from the Nebraska Environmental Trust Fund, the HPWMA anticipates a busy and successful year in 2012, controlling invasive species along the river and its surrounding waterways. For more details about the cost-share program, call **Justin Relka at (308) 633-1264**, or visit the web page at www.hpwma.org.

Stealing the Stories of Our Children

Kelly Sharp, Mid-Dakota Vegetation Management, Wild Dakota Pro Staff GIS Specialist

Stories! Yes, stories are the glue that has held sportsmen and women together for generations. This past year I had the privilege of being a guest at a Minnesota deer camp for opening weekend. One night by the fire I sat back and watched everyone laughing, eating, drinking, jousting with insults, and enjoying life for a while, and telling stories. I often think of all the stories I heard and told over the long weekend. Everyone had stories, long-ago stories from the old timers, to the youngsters telling stories that I hope one day to hear from my grandchildren about their first day of a hunt. Where would we be without these stories?

The last story I ever want to hear is from my grandchild coming to tell me that there are no more fish in his favorite lake, the birds are gone, and the only deer he has seen is on the video game "Big Game Hunter". We as sportsmen and women need to take a stand and do our part to keep invasive species from taking our children's stories away.

The easiest way to make a difference is to make sure we are not part of the problem. Don't spread invasive seeds and critters around.

Clean what you use. Clean yourself and your dog of any vegetation, mud, and debris. We've all heard the phrase, "Pack out what you pack in". I would add, "Don't pack out anything you didn't bring in." I know I can grow three inches and gain about 20 pounds from the mud on each of my feet after walking out of a spring snow goose field. And the ATV is even worse! Try to leave that mud in the field, and take the extra time and wash off your trucks, ATVs, and boats. Spray off as soon as possible in a safe place.

Decoys! Some hunters use thousands and they are great places for invaders to hitch a ride. As you pick up your decoys, clean off the moss, plants, and mud. Another good idea is to let your stuff dry for a week or so before you go to a new body of water. With everyone's help, we can keep invaders – whether weeds, aquatic plants, or other aquatic species – in their place. Even if you don't know what these invaders are or what they look like, you just need to know not to move them.

Next take some time and become more aware of these invaders and how they impact you. The more aware you become, the more you will find out how big a problem these thieves are and how they are quietly stealing the stories away from our children.



Invasions from the Water

Karie Decker, Nebraska Invasive Species Project Coordinator

Invaders from the water are called aquatic invasive species. They are just one boat ride away from invading your lake. They are a source of significant ecological and socio-economic problems throughout North America. Over \$20 billion is spent each year in the U.S. alone to combat aquatic invasives.

These invasive species include zebra mussels, Eurasian water milfoil, and whirling disease. They are being introduced into new habitats at an alarming rate. After introduction, populations of these non-native species often grow quickly and spread rapidly because they have no natural controls. Once established, they can displace native species, clog waterways, impact municipal and industrial irrigation and power systems, degrade

ecosystems, reduce or threaten recreational and commercial fishing, and cause wildlife and public health problems. For example, in 2010, zebra mussels were found in Zorinsky Lake in Omaha. The lake was closed, and it underwent a 2-year draw-down.

Prevent these and other species from being introduced into Nebraska's ponds, lakes,

and streams. Remember to always Clean. Drain. Dry. Clean any plants, mud, and debris from boats or equipment before leaving a water body. Drain all live wells, bilge, bait buckets, and so forth. Dry your boat and equipment for at least 5 days before going to a new water body. Complete instructions can be found at <http://snr.unl.edu/invasives/boater.htm>



Banner County
Dick McGowan
308-436-4460

Cheyenne County
Brian Hiatt
308-254-3459

Deuel County
Walt Wolford
308-874-2433

Garden County
Terry Raymer
308-772-4311

Kimball County
David Hottell
308-235-2681

Morrill County
Owen Walker
308-262-0372

Scotts Bluff County
Jeff Schledewitz
308-436-6709

Sioux County
Nick Sanderson
308-668-9453

KIDS OF ALL AGES PAGE

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HIDDEN WORD FIND – Responsible landowners take pride in their management efforts to control weeds on private lands in order to protect our environment. Sometimes the greatest challenge is to identify noxious weeds before they spread and apply the best tools for each situation. Find the weeds hidden in the environment below, and use the proper tools and resources to prevent the spread of weeds to adjacent private and public lands.

Words are arranged horizontally, vertically, diagonally, forwards (left to right), backwards (right to left) and top to bottom or bottom to top.

Word List for Word Find

- | | | | |
|--------------------|----------------|-------------------|-------------------|
| weed free forage | bales | seeds | national award |
| forest | summer | musk thistle | saltcedar |
| burning | Sandhills | High Plains | nature |
| walk | horse | herbicide | PRIDE |
| roadside | ditches | leafy spurge | emerald ash borer |
| know | flooding | deer | worm |
| perennial | hay | compost | Twin Valley |
| trail | knapweed | control | houndstongue |
| noxious | West Central | goats | mud |
| hiking | hunting | phragmites | prevention |
| purple loosestrife | map | plumeless thistle | Scotch thistle |
| help | animals | bugs | sunshine |
| annual | mulch | certify | water |
| diffuse | Canada thistle | invasive | firewood |
| bees | Platte Valley | WMAs | wind |
| biennial | dogs | recreation | awareness |
| backyard | scout | spotted | biocontrol |
| field bindweed | human | weeds | education |

Can you find the differences?



ANSWERS to differences:

1. Mom's hair is shorter
2. Mom's pocket is missing
3. Butterfly is missing
4. Tree is different
5. Small rake is moved
6. Label is different
7. Tree root ball is different
8. Watering can is different
9. Dog is different
10. Additional dirt

County-Added Noxious Weeds

Kristi Paul, Sheridan County Weed Superintendent, and PRIDE board member

In addition to the ten weeds that have been declared noxious in Nebraska, every county has the option to petition the Director of the Department of Agriculture to place additional weeds on the “county added noxious weed” list. Many counties in Nebraska have county-added noxious weeds which landowners are required to control:



FIELD BINDWEED

Banner
Box Butte
Cheyenne
Dawes
Deuel

Garden
Morrill
ScottsBluff
Sheridan



HOUNDSTONGUE

Dawes
Sheridan



SCOTCH THISTLE

Banner
Dawes
Morrill
Sheridan
Sioux



TALL THISTLE

FLODMAN THISTLE

Fillmore



BULL THISTLE

Rock



WOOLYLEAF BURSAGE

Banner

PERENNIAL YELLOW BEDSTRAW

Cherry



Nebraska's Noxious Weeds



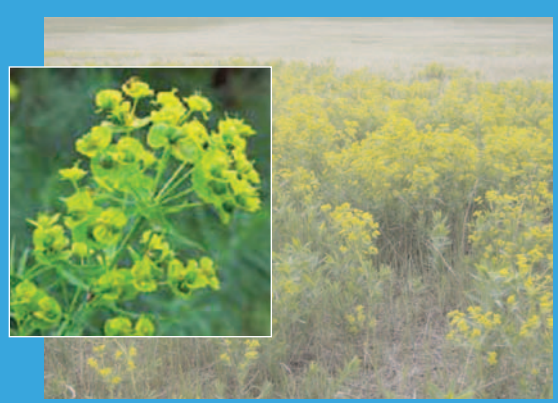
Canada Thistle



Diffuse and Spotted Knapweeds



Musk Thistle



Leafy Spurge



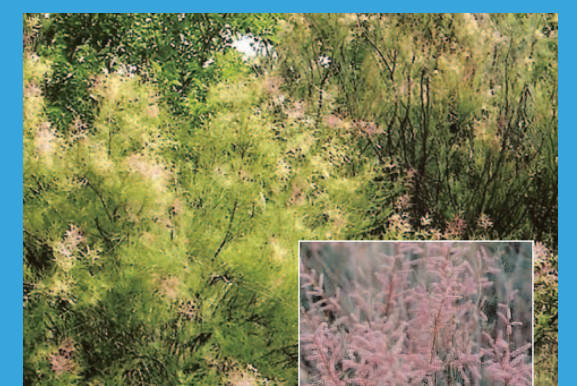
Phragmites



Plumeless Thistle



Purple Loosestrife



Saltcedar



Newly Added

Japanese and Giant Knotweed

It is the duty of each person who owns or controls land in Nebraska to effectively control noxious weeds on such land.