



Unwanted Invaders

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Invasive Species Council of Manitoba

c/o 5006 Roblin Blvd. Winnipeg, MB R3R 0G7
Ph: 204-232-6021 Fax: 204-986-7236 Email: hcatton@winnipeg.ca

ISCM is growing

By Haley Catton
ISCM Coordinator

Since our last newsletter, we here at the Invasive Species Council of Manitoba (ISCM) have been very busy spreading the word about invasive species, collaborating with various organizations and planning future projects across the province. As a result, our council continues to grow, and now includes an impressive 200 stakeholders after just 14 months of operation.

In December, various members of the ISCM executive participated in an invitational Canadian Invasive Plant Framework regional workshop hosted by the Canadian Food Inspection Agency in Winnipeg. The new nation-wide framework will be published in the fall of 2008, and we look forward to working with this new tool.

As ISCM coordinator, I had the pleasure of attending the Invasive Plant Council of British Columbia's annual general meeting and "Preventing the Invasion" forum in Vancouver in January. It was an excellent opportunity to learn from other councils across Canada and make valuable contacts for future collaboration.

We here in Manitoba are excited about the upcoming "Breaking Down Borders" forum on February 25-26. This invitational forum will be an excellent opportunity for discussion of invasive species issues across western Canada and how we can cooperate among the provinces to work on these important issues.

The ISCM has been busy spreading its message in the past few months, speaking to numerous groups, promoting the Prairie Region Invasive Plant Species online database (www.crerl.usask.ca/prips),

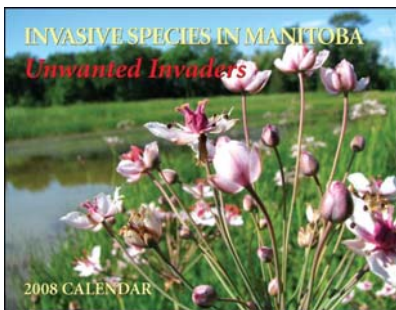
attending Manitoba Beef Week, and providing GPS/GIS training to the Manitoba Weed Supervisors Association among other activities. On February 19-20, the ISCM attended the Manitoba GreenShow to reach out to the horticultural community. We had many good discussions and made valuable contacts.

I would like to thank all the stakeholders who helped coordinate a rather impressive distribution of approximately 8,000 copies of our 2008 Invasive Species in Manitoba: Unwanted Invaders calendars. These free awareness products have been getting major exposure and receiving a very positive response in Manitoba and beyond!

Next up for the ISCM is our 1st annual general meeting in April, stay tuned for an announcement as to the date and location. We hope to see you there!



The ISCM had a booth at February's Manitoba GreenShow. Photo by Haley Catton.



The 2008 ISCM calendar has been a huge success with roughly 8,000 copies distributed across Manitoba and other provinces. Contact us to get your copy today before they're all gone!
Photo by Graham Hnatiuk.

ISCM Chair Attends NAWMA Conference

By Cheryl Heming
ISCM Chair &
City Naturalist, City of Winnipeg

I was lucky enough to be able to attend the 15th annual North American Weed Management Association (NAWMA) Conference in Las Vegas, Nevada in September 24 to 27th, 2007. The mission of NAWMA is to provide education, regulatory direction, professional improvement, and environmental awareness to preserve and

protect our natural resources from the degrading impacts of exotic, invasive noxious weeds.

The presentation of most interest to me described the landscape approach to controlling invasive species by the area "Invasives Team" centered out of Lake Mead, NV. It resembles a 'swat team' style approach to dealing with priority invasives in the desert landscape of southern Nevada

and eastern California. This committee team determines priorities and assists land management groups, local municipalities, nature preserves, utilities and anyone else with controlling or in some cases eliminating regionally important invasive species.

Funding for the committee team comes from all levels of government and industry as well some creative fund raising approaches. All resources are

utilized to the maximum with minimal duplication.

The conference field trips were very good. The projects visited were not only examples of invasive species control but also excellent stream and creek bank restoration.

Nevada was a worthwhile trip and I am looking forward to hopefully attending the 2008 NAWMA conference in Montana this fall.

Weed Supervisors bring Invasive Species to Ag In The Classroom



Downy brome, the invasive species highlighted in the Amazing Agriculture Race at Ag Days in Brandon in January 2008. Photo by Chris Evans, www.invasive.org.

By Michèle Ammeter
Weed Supervisor
Macdonald Weed District

Ag In the Classroom – Manitoba (AITC-M) is a program that enhances awareness of agriculture in Manitoba schools in an accurate, balanced, and current manner.

This past January 15-17 at Ag Days in Brandon, 500 grade 7 and 8 students and their teachers had the opportunity to participate in AITC-M. Fun and interactive curriculum-based station activities and an “Amazing Agriculture Race” got students thinking about many aspects of agriculture, including invasive species. The race involves groups of

students travelling around the show with a teacher, obtaining clues and information on various subjects from a variety of prearranged sources and booths.

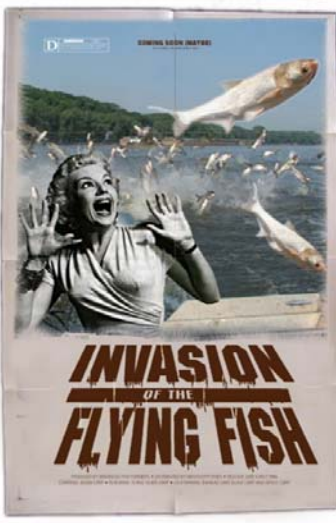
The Manitoba Weed Supervisors Association (MWSA) took part in the AITC program this year by hosting one of the 35 stations for the Amazing Agriculture Race at their booth called “Do You Know Your Weeds?”. Students arrived at the MWSA booth needing to learn about invasive plants and their effects on agriculture, particularly about the negative effects of downy brome on pastures.

The MWSA booth highlighted

weed identification with about 75 live plant species available to view, copies of the 2008 ISCM Unwanted Invaders calendar, and other MWSA information. Approximately 700 calendars were given away to interested students, farmers and members of the public. All in all it was a very successful two days of raising awareness on invasive species to Manitobans of all ages.

Ag in the Classroom has a website (www.aitc.mb.ca) with more information on their programs. Leanne Campbell is the AITC-M Project Coordinator and can be contacted at 1-204-479-1115 or by email leanne@aitc.ma.ca.

Aquatic Invasive Species: Getting the Message Out



Feared fish approaching Lake Michigan. Posted by Jeff Alexander August 13, 2007 <http://www.mlive.com/>



A zebra mussel. A picture is great but the actual item even better. Photo from: <http://epistemicgames.org/cgi-bin/coweb/science.net>

By Laurie Wesson
Fisheries and Oceans Canada

For the past several years as part of my work, I've had the pleasure of speaking to various audiences about aquatic invasive species. After my presentations, I know I've opened a few eyes and instilled an understanding of not just aquatic invaders, but of the problem of invasive species in general.

Whether the audience is a community or interest group, or school children, once you have the audience's attention with a picture like the one of silver carp jumping out of the Mississippi River (above left), they are all ears. Students especially relish the story about the northern snakehead (photo at right), a fish from Asia that has remarkably evolved the ability to breathe air. This scary invader can grow up to 1.8 m long, and if kept moist it can live out of water for days, walk across land, and eat rodents and

small rabbits...Maybe a bit of a stretch, but maybe not!

Audiences of all ages can't believe that even a tiny invader such as the spiny water flea can devastate an ecosystem. By becoming a dominant species, spiny water flea reduces the biodiversity of the ecosystem and becomes an abundant yet unpalatable food source for young fish.

But it is not just the odd and amazing stories that grab interest. Listeners are surprised by the different methods in which invasive species arrive: by bait buckets, recreational boating, the live food trade, the water garden and aquarium industry and of course the international transport of species in the ballast water of ships.

Though some in the audience are aware of the zebra mussel invasion of the Great Lakes, they are really not familiar with its environmental and economic impact. I provide insight about these impacts that reinforces the need to prevent

the spread of these unwanted species. I bring zebra mussel shells to pass around, and audiences can not believe how small they actually are. The hands-on displays make the audience involved with the topic and help them to remember the message.

I've found doing these presentations to be very rewarding. The invasive species message is always well received and the awareness gained by the audience is invaluable in helping to stop the spread of unwanted invaders.

For more information on presentations such as this, contact Haley Catton at hcatton@winnipeg.ca



Northern Snakehead fish. Photo from: www.fhwa.dot.gov/.../environment/eq_6_13.jpg

Management Tug of War: Invasive Species vs. Species At Risk

By Erl Svendsen
Biodiversity Analyst
AAFC-PFRA

Invasive weeds in Canada continue to be of concern especially where plant *Species at Risk* (SAR) occur. Invasive weeds and SAR compete against one another for space, moisture, nutrients and even for their very survival. For Agriculture and Agri-Food Canada - Prairie Farm Rehabilitation Administration (AAFC-PFRA), the invasive weed is leafy spurge (*Euphorbia esula*) and the SAR is western spiderwort (*Tradescantia occidentalis*).

Leafy spurge is an invasive weed of non-cultivated land throughout Canada. It is a deep-rooted, long-lived herbaceous perennial with great reproductive capacity. The main economic concern is that forage availability is reduced on rangeland since cattle tend to avoid grazing moderately-to-highly affected pasture. In dune complexes, spurge can be especially troublesome as it can stabilize dunes thereby destroying habitat for many dune-dependent species.

AAFC-PFRA has been actively involved in spurge management as 18 PFRA Com-

munity Pastures (CPs) have varying amounts of spurge with Elbow CP having the most. Furthermore, this pasture is also home to one of only four Canadian western spiderwort populations.

Western spiderwort is a federally- and provincially-protected plant SAR. It is a short, typically blue flowered, shallow-rooted herbaceous perennial. Spiderwort is commonly found on sparsely vegetated south-facing slopes and dune crests, but also grows among small shrubs in grazed areas. Spurge threatens spiderwort in two ways: indirectly through habitat loss from dune stabilization; and directly through displacement.

There are two effective spurge control options in rangeland: chemical and biological. Chemical is the first defence against early invasion: eradication is possible with aggressive and repeated herbicide application when the patches are few and small. However, once spurge is established, chemical control is a limited option on rangeland due to three factors: few available registered herbicides; application by land is challenging in the typically rough terrain; and

cost. Where spiderwort coexists with the spurge, herbicides cannot be applied for fear of killing a SAR, which would contribute to its further decline and would also be a clear contravention of the Species at Risk Act.

AAFC-PFRA has opted to use predominantly biological controls, particularly at Elbow CP. Sheep have been used as a biological control at the Elbow CP since the early 1990s. Sheep can be trained to target and eat spurge and they have been effective at reducing spurge stem density to the point where cattle willingly graze affected areas. Sheep obviously also eat other plants including spiderwort, therefore they must be herded and managed carefully where plant SAR are found.

The other biological control used at Elbow CP is spurge flea beetles. Flea beetles reduce plant vigour and flowering by feeding on spurge leaves, bracts, stems and roots. Spurge beetles feed only on spurge and do not pose a concern for spiderwort.

Despite the success using biological controls, spurge continues to be a concern at Elbow and is expanding to new areas. This is what we've learned:

1. Eradication is possible if early, small infestations are aggressively targeted with herbicides. Continued monitoring and repeat applications as necessary are required to ensure complete control.
2. Once the infestations are established, biological controls are the most effective option. Trained and herded sheep can reduce spurge density, but as spurge expands to occupy new areas, sheep numbers must likewise be increased to provide effective



Western spiderwort, a Species At Risk. Photo by Candace Elchuk, Nature Saskatchewan.

“The presence of Species at Risk increase the level of weed management required”.

control. Similarly with spurge beetles: a single release may not be sufficient to keep up with spurge expansion. Beetle numbers and distribution should be monitored; multiple releases are required until beetle populations are self sustaining and expanding in area.

The presence of SAR increase the level of weed management required. Herbicide use is not compatible with SAR management. Sheep need to be closely monitored when grazing near plant SAR. Beetles are the best spurge control option in and around spiderwort habitat.

Unfortunately, leafy spurge, once established, cannot be wiped out. However, by using multiple approaches, spurge can be controlled to safeguard valuable rangeland resources and to protect spiderwort habitat.

For more information on the SAR found on AAFC-PFRA pastures, please contact Erl Svendsen, Biodiversity Analyst, AAFC-PFRA, at (306) 975-4142.



Cattle graze right up to patches of leafy spurge, but avoid grazing the plant itself. Photo by E. Svendsen, AAFC-PFRA-Range & Biodiversity Division.

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Haley Catton, Coordinator
c/o 5006 Roblin Blvd.
Winnipeg, MB
R3R 0G7

Phone: 204-232-6021
Fax: 204-986-7236
E-mail: hcatton@winnipeg.ca

Promoting Awareness, Education, Cooperation and Action regarding invasive species in Manitoba.

New ISCM website coming soon:

www.invasivespeciesmanitoba.com

Sign up to receive our quarterly newsletters by emailing hcatton@winnipeg.ca

The Invasive Species Council of Manitoba (ISCM) is a non-profit organization providing a centralized and coordinated province-wide leadership body adopting a collaborative approach to the prevention, early detection, management and potential eradication of invasive species in Manitoba. The ISCM was formed out the demand for collaboration among stakeholders in December of 2006, and continues to grow and gain momentum.

The ISCM executive has members representing Manitoba Conservation, the City of Winnipeg, Leafy Spurge Stakeholders Group, Manitoba Purple Loosestrife Project, Manitoba Weed Supervisors Association, Prairie Farm Rehabilitation Administration, Manitoba Water Stewardship, Rural Development Institute (Brandon University), Ducks Unlimited Canada, Manitoba Agriculture, Food & Rural Initiatives, and currently has approximately 200 stakeholders.

The ISCM would like to thank our funding sources, for we would not exist without the support of:

- Agriculture and Agri-Food Canada - Prairie Farm Rehabilitation Administration
- Rural Development Institute, Brandon University
- Manitoba Purple Loosestrife Project
- Leafy Spurge Stakeholders Group
- ECO Canada
- Manitoba Weed Supervisors Association
- Invasive Alien Species Partnership Program, a Government of Canada initiative
- Sustainable Development Innovations Fund, Manitoba Conservation
- Dow AgroSciences Canada
- City of Winnipeg, Ducks Unlimited Canada, Manitoba Agriculture, Food & Rural Initiatives, and Manitoba Water Stewardship (in-kind support)

Upcoming Invasive Species Events



February 25-26, 2008: Breaking Down Borders invitational forum, Winnipeg, MB.

March 7, 2008: ISCM is presenting at the Freshwater Institute Science Seminar series, Winnipeg, MB.

March 25-26, 2008: Integrated Brush Management Conference, Dauphin, MB.

April 16-17, 2008: Municipalities Trading Company of Manitoba Ltd. (MTCML) Tradeshow, Brandon, MB.

ISCM Annual General Meeting – Stay tuned for an announcement on the date and location of our first AGM in April!