

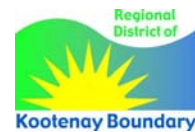


# Central Kootenay Invasive Plant Committee

## Summary of Activities, 2005



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December 1, 2005  
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Ministry of Transportation

## **SUMMARY**

In February 2005, a group of concerned local citizens, land managers, and government and non-government agencies formed the Central Kootenay Invasive Plant Committee (CKIPC). Located in southeastern BC, this non-profit society focuses on education and awareness about invasive plants, preventing the further introduction and establishment of invasive species, promoting a collaborative approach to management, developing and maintaining a comprehensive inventory, and working towards the control of invasive species.

This report summarizes activities in 2005, the first year of operation. To promote education and awareness, the CKIPC provided talks and presentations, developed and distributed invasive plant fact sheets, wrote press releases to local newspapers, developed a display booth and showcased it at fall fairs, developed and launched a website, coordinated a purple loosestrife handpull day, and visited landowners with key invasive plants on their property.

As well, the CKIPC promoted collaborative and coordinated management, including hosting a coordination meeting for land managers, providing a weed tour to committee members to share information and ideas, met with representatives across the border in Idaho, reporting new and high priority infestations to appropriate land managers, and releasing insect on private land for biological control of spotted knapweed.

The CKIPC also conducted an inventory of four highly invasive plant species in the area: hoary alyssum, purple loosestrife, field scabious and rush skeletonweed. GIS services were provided in partnership with Selkirk College to develop finalized maps for the inventories.

For more information on the CKIPC, please see [www.kootenayweeds.com](http://www.kootenayweeds.com).

## **ACKNOWLEDGEMENTS**

The Central Kootenay Invasive Plant Committee is extremely grateful for funding contributions this year, including the Inter-Ministry Invasive Plant Committee, Ministry of Agriculture and Lands, FortisBC, BC Hydro, Columbia Basin Trust, Ministry of Transportation, Regional District of Kootenay Boundary, Terasen Gas and Kootenay Wildlife Services Ltd. Special thanks to members of the Board of Directors for their valuable input and guidance, including Val Miller, John Gwilliam, Terry Anderson, Rieva McCuaig, Dennis Ostgaard, Allan Freeborn, and Lorne Ostendorf.

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## **1.0 INTRODUCTION**

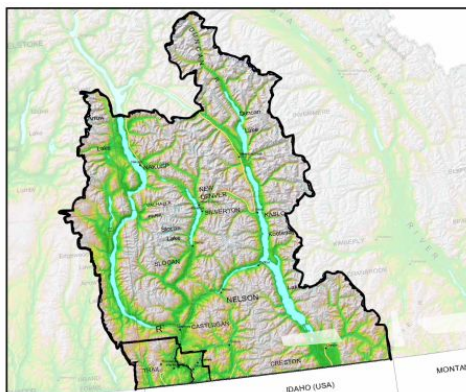
In November, 2004, a group of concerned local citizens, land managers, and government and non-government agencies met in Nelson, BC, to determine if there was interest in forming an invasive plant committee in the Central Kootenay area. Participants at the meeting were aware of the successes of the East Kootenay Weed Committee to the east, and the Boundary Weed Management Committee to the west. There was overwhelming support to form the Central Kootenay Invasive Plant Committee (CKIPC).

As a result, the Committee formally established as a non-profit society in February 2005. The goals of the CKIPC are to

- To raise awareness and educate the public, government agencies, and other land managers about invasive plants and their impacts in the area;
- To prevent the further introduction and spread of invasive plants in the area through education and awareness, early detection and control, and coordinated integrated weed management efforts;
- To promote coordinated and collaborative management of invasive plants between agencies and land occupiers;
- To work towards the control/containment of highly invasive non-native plant species;
- To provide a conduit for information and a source of expertise on invasive plants; and
- To develop and maintain a comprehensive inventory of invasive plant species within the area of responsibility;

### **Location**

The CKIPC focuses on the Regional District of the Central Kootenay (RDCK) geographic area, as well as Areas A and B of the Regional District of the Kootenay Boundary (RDKB).



**Figure 1. Map of the Central Kootenay Invasive Plant Committee area.**

## Board of Directors

The first Board of Directors for 2005 include:

- Val Miller, Chair (Environmental Farm Planner)
- John Gwilliam, Vice-Chair (Columbia Basin Fish and Wildlife Compensation Program)
- Rieva McCuaig, Secretary (Ministry of Agriculture and Lands)
- Terry Anderson, Treasurer (Ministry of Environment)
- Dennis Ostgaard (Rocky Mountain Elk Foundation)
- Lorne Ostendorf (Creston Valley Agricultural Society)
- Allan Freeborn (Kootenay Weed Control)

The current Coordinator for the Committee is Juliet Craig.

## 2.0 2005 ACTIVITIES

### 2.1 Education

The primary focus of the first year of operation was education and awareness. A number of activities were undertaken, and educational tools were developed that can be used in future years.

### Talks and presentations

Talks were given to a variety of local government offices and community groups.

Group	Location	Date	Number in audience
Kootenay Citizens Against Pesticides	Nelson	May 11	60
West Kootenay Naturalists	Kokanee Cr. Park	May 28	25
RDCK	Nelson	July 6	8
RDKB	Trail	June 23	20
City of Trail	Trail	July 18	10
Purple loosestrife handpull day	North Shore	July 22	10
CBC Radio Interview	Throughout Province	July 27	
BKR Radio Interview	Throughout Kootenays	July 27	
Nelson Garden Club	Nelson	Nov. 1	15
RDKB Landfill Staff	Trail	Nov. 15	3
<b>TOTAL</b>			<b>168</b>

### Educational printed materials

A number of fact sheets were developed on invasive plants in the region, including:

- Scotch broom
- Yellow flag iris
- Knotweed
- Hoary alyssum
- Top 10 weeds of the Central Kootenay

As well, Ministry of Agriculture printed their fact sheets as an in-kind contribution.

Fact Sheet	Number of copies made	
Hoary alyssum	200	
Yellow Flag Iris	70	
Scotch broom	100	
Knotweed	100	
Top 10/Who is CKIPC?	400	
Rush skeletonweed	150	50 in-kind by MAFF
Orange hawkweed	150	50 in-kind by MAFF
Blueweed	20	In-kind by MAFF
Field scabious	50	In-kind by MAFF
Purple loosestrife	50	20 in-kind by MAFF

BC Hydro generously donated funds to develop a brochure on invasive plants in the Central Kootenay. The text has been written, and photos selected. Kathy Verigan is designing the product and it will be printed in December 2005.

### Display booth

During the summer of 2005, a display booth was developed for use at community events. The booth features a 3-Panel display board full of colourful photos and key information. This panel sits on a table along with information handouts, samples of invasive plants, biocontrol agents, and weed books.

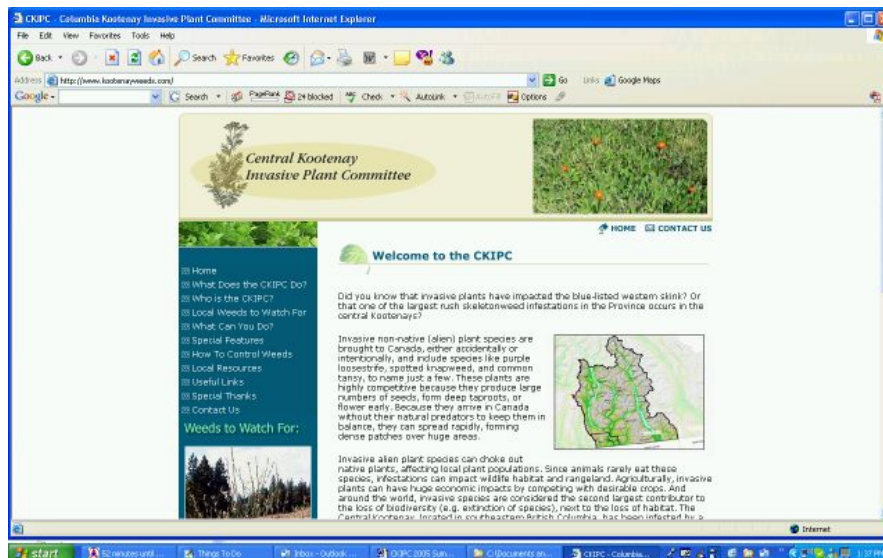


In 2005, the display booth was taken to the following events:

Event	Place	Date	# People Contacted
Cottonwood Market	Nelson	July 23	20
Creston Fall Fair	Creston	Sept. 10	> 400
Hills Garlic Festival	New Denver	Sept. 11	> 400
Nakusp Fall Fair	Nakusp	Sept. 17	124
Slocan Valley Fall Fair	Winlaw	Sept. 18	106
Pass Creek Fall Fair	Pass Creek	Sept. 24	124
BC River's Day	Trail	Sept. 25	165
Ministry of Environment Office	Nelson	Oct. 3-13	50
Non-Timber Forest Products Workshop	Nelson	Oct. 14-15	50

## Website

A website was developed by the CKIPC to provide local information on invasive plants in the area. Funktion Design developed the website and it can be viewed at [www.kootenayweeds.com](http://www.kootenayweeds.com).



The site features information on:

- Why are invasive plants a problem?
- What does the CKIPC do?
- Who is the CKIPC?
- Local weeds to watch for
- What can you do?
- Special features
- How to control weeds
- Local resources
- Useful links
- Special thanks
- Contact us

The site has a dynamic feature that allows us to update weed information and special features on a regular basis.

## **Press releases**

Numerous press releases were done in 2005 (see Appendix A). Feature press releases included:

- New group tackles alien invaders (April 29, 2005)
- CKIPC off to a great start (May 30, 2005)
- Field crew chasing alien invader (July 13, 2005)
- Pull those alien invaders and help the environment (July 18, 2005)
- Damaging alien invader in Slocan Valley and Glade (October 8, 2005)

As well, regular “weed of the week” columns were written for the Trail Daily Times and the Kootenay Express (Nelson). They included articles on:

- Scotch broom
- Purple loosestrife
- Orange hawkweed
- Japanese and giant knotweed
- Spotted knapweed
- Dalmatian toadflax
- Scotch thistle
- Yellow flag iris

An article on the CKIPC was also written for the Invasive Plant Council Newsletter No. 2.

## **Handpull Day**

A handpull day for purple loosestrife and yellow flag iris was held on July 27 from 7-9pm. This event was primarily designed to raise awareness about invasive plants in the region, and to encourage people to get involved in management. Seedheads were clipped from yellow flag iris plants in the Blaylocks Pond, and purple loosestrife plants were either pulled or clipped. A total of 10 people participated in this event. Mike Van Wijk assisted with organizing this event.

## **Landowner Visits**

As part of the invasive plant inventories conducted this year in the region, landowners were visited if they had purple loosestrife, field scabious or rush skeletonweed on their properties. Due to the vast area encompassed by hoary alyssum, we did not visit landowners with this species on their property. Rather, posters were put up in key locations. Dawn Wrangler assisted with landowner visits for rush skeletonweed and Mike Van Wijk for purple loosestrife.

<b>Invasive Plant</b>	<b>No. houses visited</b>
Field scabious	7
Rush skeletonweed	99
Purple loosestrife	50 (approx.)
Scotch thistle	2



## **2.2 Coordination**

### **Coordination Meeting**

The CKIPC promoted a coordinated approach to invasive plant management in the Central Kootenay region this year. A coordination meeting of land managers was held on April 6 at the Columbia Power Corporation office in Castlegar. Agencies and companies met to share their weed management strategies and plans. High priority weed species and sites were discussed. It appears that the primary area where coordination is required is the Castlegar to Waneta corridor. In this area, several agencies and companies are actively managing for invasive species.

### **Weed Tour**

Another coordination event was the First Annual Weed Tour that was held on May 26. Participants traveled in a school bus (provided by TeckCominco) to sites in the Columbia Gardens, Pend D'Oreille and Waneta areas. At each stop, a resource person gave a short presentation to begin a discussion on a particular issue.

### **Cross-Border Coordination**

Juliet and Kevin Paterson (Weed Coordinator for the East Kootenay) met with Duke Guthrie, Weed Control Superintendent with the County of Boundary in Idaho. We looked at a jointed goat grass site just across the border from Creston, and shared contact information to coordinate activities in the future.

### **Weed Reports**

Another form of coordination was the passing along of weed information to agencies/landowners/companies if they had weeds on their property. Location information for high priority sites was passed along so that the land manager could treat the weeds.

### **Broader Coordination**

Juliet Craig represented the CKIPC on a broader level. She participated in the Invasive Plant Council of BC forum on January 25 in Richmond, BC. This was self-funded since the CKIPC had not formally established. As well, she met with weed coordinators from throughout the Province at a Weed Coordinator's Meeting in Penticton on August 11.

### **Insect Releases**

Weed Committees throughout the rest of the province serve as a conduit for biocontrol releases on Private land. Given limited time and resources this year, biocontrol releases for private landowners was not widely advertised. Four releases were done on two properties this year, including two *Larinus obtusus* and two *Cyphocleonus achates*. Ministry of Forests supplied the insects. There is great interest from private residents in the area to receive biocontrol agents next summer.

## **2.3 Inventory**

Funding was received from the Inter-Ministry Invasive Plant Committee to conduct an inventory of hoary alyssum, purple loosestrife, field scabious and rush skeletonweed. These four plant species are considered to be high priority in the region. All four of these species are extremely aggressive invaders. Rush skeletonweed was selected because it is extremely aggressive and relatively contained in the Kootenays. The 2005 inventory follows up on an inventory in 2000 and has revealed that it has not spread significantly, but existing patches have become denser. Field scabious was inventoried in 2000 and 2002 and is spreading rapidly in Salmo. This year an additional site was found in Meadows. Purple loosestrife had been inventoried in the late 1990's but little was known about its current distribution. It is currently infesting Kootenay Lake, Kootenay Canal, Mel Deanna Lake and the Fauquier areas. Hoary alyssum is only recently spreading and the inventory revealed that it has heavily infested the Kootenays, particularly Fruitvale, Trail, Harrop and the Pend D'Oreille.

A call for proposals was put out for this inventory, and the successful proponent was Kootenay Wildlife Services Ltd. This company conducted the field work, including surveying road systems in the area and mapping point and polygon infestations. A partnership was developed with Selkirk College to provide the mapping services. They are digitizing the polygons, and producing maps of these invasive species. A more detailed report for this inventory will be completed in January 2006.

## **2.4 Source of Information**

Another role of the CKIPC is to act as a conduit for information. All contacts of the CKIPC received a monthly email that included upcoming events, pertinent information, a "weed of the week", and an update on the CKIPC and activities. As well, the CKIPC received phone calls from people interested in receiving more information on invasive plants in the region and their management. Information was shared by phone and by mail with over 45 people.

## **3.0 FUNDING**

Funding for the 2005-06 fiscal year was graciously provided by the following agencies:

- Inter-Ministry Invasive Plant Committee
- Ministry of Agriculture and Lands
- FortisBC
- BC Hydro
- Ministry of Transportation
- Columbia Basin Trust
- Regional District of Kootenay Boundary
- Terasen Gas
- Kootenay Wildlife Services Ltd.

## **In-Kind**

A number of agencies and companies provided in-kind services this year, including:

- Ministry of Environment
- Ministry of Agriculture
- TeckCominco Ltd.
- Columbia Basin Fish and Wildlife Compensation Program
- Kootenay Weed Control
- Kootenay Wildlife Services Ltd.
- Creston Valley Agricultural Society
- Columbia Power Corporation

## APPENDIX A. SAMPLES OF ARTICLES BY THE CKIPC, 2005.

New column

# Group tackles area's alien invaders: weeds

*Weed of the Week is a new Times column that will run on alternate Fridays.*

*Biologist Juliet Craig will write about how to identify, and what to do about, invasive plants in the area.*

*But first, we start with an introduction to the Central Kootenay Invasive Plant Committee. Central Kootenay covers the area from Rossland to Yahk, and Nakusp to the U.S. border.*

The Central Kootenay is full of alien species, and a new group has formed to combat them. These species are not typical aliens with big eyes and antennae. They are plants, often with beautiful flowers, and they are taking over local ecosystems. Invasive non-native plant species are brought to Canada, either accidentally or intentionally, and include species like purple loosestrife, spotted knapweed, and common tansy, to name just a few. These plants are highly competitive because they produce large numbers of seeds, form deep taproots, or flower early. Because they arrive in Canada without their natural predators to keep them in balance, they can spread rapidly, forming dense patches over huge areas. "These plant species can choke out native plant species, affecting local plant populations," explains Juliet Craig, coordinator for the newly-formed Central Kootenay Invasive Plant Committee. "Since animals rarely eat these species, infestations can impact wildlife habitat and rangeland. Agriculturally, invasive plants can have huge economic impacts by competing with desirable crops. "And around the world, invasive species are considered the second-largest contributor to the loss of biodiversity (e.g. extinction of species), next to the loss of habitat." The committee was formed to raise awareness about these alien invaders, develop local inventories of these species, and coordinate management activities.

### Weed of the Week



Juliet Craig

The group includes representatives from non-profit societies, utility companies, government agencies, and local companies. Funding has been provided by B.C. Ministry of Agriculture, Food and Fisheries, B.C. Hydro, Fortis, Terasen Gas, and the Columbia Basin Trust. "We are hoping to raise the public's awareness about these plants. By assisting local residents with learning to identify them we can reduce or prevent further spread of the species currently established here and stop the introduction of new invasive species that have not yet found their way to our region," says Craig. To find out more about the Central Kootenay Invasive Plant Committee or local invasive species, please call 352-1160 or e-mail [invasiveplants@uniserve.com](mailto:invasiveplants@uniserve.com)

Trail Daily Times, 26 May 2005

## Weed tour a great success

By JULIET CRAIG  
Special to the Daily News

Did you know that invasive plants have impacted the blue-listed western skink? Or that plumeless thistle occurs in the central Kootenays?

Participants in the Central Kootenay Invasive Plant Committee learned about these and other topics during the First Annual Weed Tour held last month. A school bus crammed with lively and interested members toured around the Waneta area south of Trail, stopping at a number of sites along the way. At each stop, a resource person presented a topic of interest, and then began a short discussion.

Representatives from utility companies, government agencies, the regional district, local naturalist clubs, and many more, enthusiastically came together to share information about invasive plants, including perspectives on their impacts, control techniques, and specific management issues. For example, utility companies shared upcoming expansion plans and their proactive approach to weed management. Local biologists discussed impacts of weeds on red- and blue-listed species. Biocontrol experts pointed out a variety of insects and had the group on their hands and knees in search of the more elusive weevils. And local land managers pointed



— PHOTO SUBMITTED

Participants of the Central Kootenay Invasive Plant Committee searching for the elusive *Mogulones crugger* bioagent for hound's tongue.

out new invaders and strategies for their management.

The tour was a great success, leading to a strong start for the newly formed Central Kootenay Invasive Plant Committee. Other activities planned for this year include a public hand-pulling day for purple loosestrife, the development of outreach tools (e.g. display booth, website, brochure), an inven-

tory of high priority species, outreach to landowners, and a series of press releases designed to educate the public. For more information, contact [invasiveplants@uniserve.com](mailto:invasiveplants@uniserve.com) or (250) 352-1160.

*Juliet Craig is the coordinator for the Central Kootenay Invasive Plant Committee.*

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Nelson Daily News, 6 June 2005

*This Good Earth*  
Tips for the local gardener

### Your Garden Plants May Threaten the Environment

Gardeners should be aware of Dalmatian toadflax and other garden ornamentals that "jump the garden fence" and become highly invasive to the local environment.

Brought to North America as an ornamental species in the late 1800s, Dalmatian toadflax has become a garden escapee, infesting thousands of hectares in B.C. Like other non-native invasive species, this plant arrived without natural predators to keep it in balance. It's early flowering, prolific seed production, and strong root system, make it a very aggressive competitor and native plant species can't keep up. Eventually, thickets of Dalmatian toadflax can grow in areas that used to be beautiful native grasslands.

The spread of Dalmatian toadflax is such a concern that Federal and Provincial governments have released insects to help control it. This technique for management of highly invasive plants is called "Biological control", where natural predators of the plant are identified in its country of origin. Before this takes place, the insects must go through a rigorous screening process, to ensure they are host specific and will not attack any other desirable agricultural or native plants. Biocontrol insects specific to Dalmatian toadflax have been released in Canada and are gradually lessening infestations of this invasive plant, allowing native species to move back in.

As a gardener, you help prevent the introduction of invasive species by removing Dalmatian toadflax from your garden and replacing it with another species that is not aggressive. You can check the following website to see other species considered to be invasive: <http://www.agf.gov.bc.ca/opprot/weedguid/weed.htm#noxious>.

*Juliet Craig is the coordinator for the Central Kootenay Invasive Plant Committee. 352-1160. [invasiveplants@uniserve.com](mailto:invasiveplants@uniserve.com).*

Kootenay Express, 1 June 2005



**SPREADING LIKE WILDFIRE:** Escaped Dalmatian toadflax (*Linaria dalmatica*) flowers are pretty but spreads quickly and takes over areas, like this habitat near Creston.

## Your garden plants may threaten the environment

Gardeners should be aware of Dalmatian toadflax, and some other garden ornaments, that "jump the garden fence" and become highly invasive to the local environment.

Brought to North America as an ornamental species in the late 1800s, Dalmatian toadflax has become a garden escapee, infesting thousands of hectares in B.C.

Like other non-native invasive species, this plant arrived without natural predators to keep it in balance. It's early flowering, prolific seed producer, and strong root system, make it a very aggressive competitor and native plant species can't keep up.

Eventually, hundreds of Dalmatian toadflax can grow in areas that used to

be beautiful native grasslands. The spread of Dalmatian toadflax has been such a concern that federal and provincial governments have released insects to help control this plant. This technique for management of highly invasive plants is called "biological control," where natural predators of the plant are identified in its country of origin.

Before these insects are allowed into North America, they must go through a rigorous screening process, to ensure they are host specific and will not attack any other desirable agricultural or native plants.

Biocontrol insects specific to Dalmatian toadflax have been released in Canada and are gradually lowering

abundances of this invasive plant, allowing native species to move back in.

Gardeners can help prevent the introduction of invasive species by removing Dalmatian toadflax from gardens and replacing it with another species that is not as aggressive. Instead of Dalmatian toadflax, consider planting annual strap-flowers, conifers, or yellow columbine.

You can also check the following website to see other species are considered to be invasive: <http://www.oid.gov.bc.ca/cropprotection/edgual/invasiveplants.htm>.

### Weed of the Week



Juliet Craig

Juliet Craig is the coordinator for the Central Kootenay Invasive Plant Committee and will write in the Times every second Friday. Contact her with questions at 250-352-1360 ([juliet@invasiveplants.com](mailto:juliet@invasiveplants.com)).

The Central Kootenay Invasive Plant Committee covers the area from Creston to Yoho, and Malheur to the U.S. border.

Trail Daily Times, 10 June 2005

## This Good Earth Tips for the local gardener

### A nasty iris

by Juliet Craig

Iris are my favourite flower. The lovely shape and multitude of colours make them simply gorgeous. But there is one species lurking amongst

the lot that is extremely harmful.

Yellow flag iris (*Iris pseudacorus*) is often planted near ponds and streams to beautify gardens. However, this harmless looking plant becomes

extremely aggressive if it escapes into native wetlands. Wind can blow the seeds into nearby water sources where they can float downstream and affect native habitat. Like purple loosestrife, yellow flag iris can displace native plants, which are important sources of food and shelter for wildlife. Ecological processes, such as oxygen production, may also change because invasive

aquatic plants can affect water chemistry and flow.

You can identify yellow flag iris because it is yellow with brown spots within the flower and is "wet-footed". That means that if you have a yellow iris that is growing at the edge of a pond or other wet habitat it is likely this species.

Once established, yellow flag iris is difficult to remove. Pull or dig the plants out being sure to get

all the root fragments so new plants can't resprout. Be careful to protect your skin, since resins in the leaves and rhizomes can cause irritation.

As a gardener, you can help prevent the introduction of invasive species by removing Yellow flag iris from your garden replacing it with another species that is not as aggressive, like Japanese iris, blue flag iris or native cattails.



For more information on alternatives, see <http://www.invasivespeciescoalition.org/GardenPlants/irisalternatives.pdf>

Kootenay Express, 15 June 2005

## New group tackles green alien invaders

The Central Kootenay is full of alien species, and a new group has formed to combat them. These species are not typical aliens with big eyes and antennae. They are plants, often with beautiful flowers, and they are taking over local ecosystems.

Invasive non-native plants are highly competitive because they produce large numbers of seeds, form deep taproots, or flower early. Because they arrive in Canada without their natural predators to keep them in balance, they can spread rapidly, forming dense

patches over huge areas.

The Central Kootenay Invasive Plant Committee formed to raise awareness about these alien invaders, develop local inventories of these species, and coordinate management activities. The group includes representatives from non-profit societies, utility companies, government agencies, and local companies. To find out more about the Central Kootenay Invasive Plant Committee or local invasive species, please call 352-2260 or email [invasive-plants@uniserve.com](mailto:invasive-plants@uniserve.com).

Kootenay Express, 4 May 2005

## Your Scotch thistle poses an environmental threat

by Juliet Craig

Scotch thistle is an introduced garden ornamental that can be impressive when it grows to three meters tall, towering above a garden. However, since each plant can produce thousands of seeds that are

viable in the soil of over 30 years, and plants can "hop" the garden fence into native habitat, this species is highly invasive. In the Okanagan, the detrimental effects of Scotch thistle are being seen since this species has escaped gardens and is impacting wildlife, livestock, and field crops. Since scotch thistle is growing in gardens in the West Kootenays, there is concern that it could do the same here.

### This Good Earth



Scotch thistle (*Onopordum acanthium*) is a tall thistle with multiple flower heads, each growing to five centimeters wide. The leaves are very large and irregularly lobed with sharp yellow spikes along the edges. Upper and lower leaf surfaces are covered with a thick mat of

cotton-like or woolly hairs, giving the foliage a grey-green colour.

A small cluster of plants can either spread immediately or over many years. Because the seeds remain viable in the soil so many years, patches in your garden may already harbour a large seed bank below them.

As a resident, you can help control the spread of this invasive species by removing all plants from your property. Plants can

cut and then dug up but since they can re-grow from severed roots, care must be taken to remove all plant parts. Avoid spreading cuttings or seeds of the plants through garden waste, dumping, or vehicles.

For more information on identification and control of scotch thistle, see [www.agf.gov.bc.ca/crop-protection/weedguid/scotchth.htm](http://www.agf.gov.bc.ca/crop-protection/weedguid/scotchth.htm) and [www.weedsbc.ca/pdf/scotch\\_thistle.pdf](http://www.weedsbc.ca/pdf/scotch_thistle.pdf)



A patch of scotch thistle growing in a garden in the Kootenay region.

Juliet Craig is the Coordinator for the Central Kootenay Invasive Plant Committee. 352-1160. [invasiveplants@uniserve.com](mailto:invasiveplants@uniserve.com)

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Kootenay Express, 14 September 2005

## BC Hydro supports new weed brochure

BC Hydro is the exclusive sponsor of a new brochure on problem weeds in the West Kootenay. The \$8,000 contribution to the Central Kootenay Invasive Plant Committee (CKIPC) will ensure the production of a high quality brochure as part of a public education program planned by the committee.

"Invasive non-native plants in the area are impacting biodiversity, wildlife habitat, and agricultural values," said CKIPC Coordinator, Juliet

Craig. "By raising awareness about these species, we can help prevent their further introduction and spread. We are very pleased to have BC Hydro's support for the development of a brochure that will help the public identify local weeds."

The brochure is under development and will feature 10 of the most common invasive plants in the region. The brochure will be ready by fall 2005 and at least 10,000 copies will be printed.

BC Hydro's goal is to create sustain-

able communities of low-growing native plants that require minimal maintenance so that we can continue to provide electricity to B.C. residents safely, reliably and cost-effectively. For more information on the Central Kootenay Invasive Plant Committee, contact Juliet Craig at 250 352-1160. For more information on BC Hydro's vegetation management program contact Dean den Biesen at 250 365-4563, or visit the website at [www.bchydro.com/safety](http://www.bchydro.com/safety).

Kootenay Express, 27 July 2005

## CASTLEGAR NEWS

Jul 13 2005

### BC Hydro backing new West Kootenay weed brochure

BC Hydro is the exclusive sponsor of a new brochure on problem weeds in the West Kootenay. The \$8,000 contribution to the Central Kootenay Invasive Plant Committee will ensure the production of a high quality brochure as part of a public education program planned by the committee.

BC Hydro takes an aggressive approach to controlling invasive plant species such as knapweed, common tansy and purple loosestrife," said Gary Birch, environment and social issues manager. We support the CKIPC's goal of raising awareness of the threat that noxious weeds pose to other plant species and wildlife."

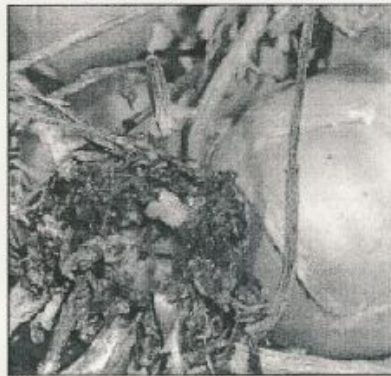
Invasive non-native plants in the area are impacting biodiversity, wildlife habitat, and agricultural values," said CKIPC coordinator, Juliet Craig. By raising awareness about these species, we can help prevent their further

introduction and spread. We are very pleased to have BC Hydro's support for the development of a brochure that will help the public identify local weeds."

The brochure is under development and will feature 10 of the most common invasive plants in the region. The brochure will be ready by fall 2005 and at least 10,000 copies will be printed.

We are always looking for effective ways to manage problem plants and protect the environment," said Dean den Biesen, BC Hydro environmental technical specialist. We cooperate in provincial noxious weed control programs that use specialized insects that selectively feed on the reproductive and rooting systems of plants such as diffuse and spotted knapweed, dalmatian toadflax, and hound's-tongue."

BC Hydro's goal is to create sustainable communities of low-growing native plants that require minimal maintenance so that we can continue to provide electricity to B.C. residents safely, reliably and cost-effectively. For more information on the Central Kootenay Invasive Plant Committee, contact Juliet Craig at 250-352-1160. For more information on BC Hydro's vegetation management program contact Dean den Biesen at 250-365-4563, or visit our website at [www.bchydro.com/safety](http://www.bchydro.com/safety).



BC Hydro photo Knapweed attacker - The larva in the centre of the photo is *Cyphocleonus achates*, a root-attacking weevil. It feeds only on the knapweed plant, weakening its ability to store nutrients and water, and exposing the root to fungal attack. It is one of several methods used to control the spread of invasive non-native weeds in the region.

Castlegar News, 13 June 2005



*This Good Earth*  
Tips for the local gardener

### Purple loosestrife – beautiful but deadly

Purple loosestrife is extremely beautiful, with its vibrant purple flowers perched on a tall stem. Growing in wetlands, this plant contributes to a lovely landscape view - to the unknowing eye, that is.

Purple loosestrife (*Lythrum salicaria*) is an aggressive, non-native invader. Originally planted in gardens, this species has infested wetlands throughout North America. It crowds out native vegetation, impacting native plants, amphibians, birds, and other wetland species. This species is estimated to be spreading at a rate of 115,000 hectares per year in the United States, destroying valuable wetlands.

Each plant is capable of producing up to 2.5 million seeds that can be dispersed by wind, water, wildlife, and humans. Plants can also reproduce from root fragments. Originally planted as a garden species, purple loosestrife is found in the Central Kootenays on the north shore of Nelson, Fauquier, Shoreacres area, Castlegar near Selkirk College and a wetland near the Meldeanna Trail.

The best way to identify purple loosestrife is by its square stems (roll it in your fingers) and opposite leaves. If you have purple loosestrife in your garden, remove it immediately. Pull or dig the plants out being sure to get all the root fragments so new plants can't resprout.

You can help reduce the purple loosestrife infestations by coming out to a public handpulling evening on Wednesday, July 27, at four-mile. It's a great way to help the environment, and have fun with your family and community. Free refreshments will be provided. For more information, call 352-1160.



Juliet Craig is the Coordinator for the Central Kootenay Invasive Plant Committee.  
352-1160, [invasiveplants@uniserve.com](mailto:invasiveplants@uniserve.com)

Kootenay Express, 27 July 2005

# Home & Garden

## Yellow flag iris unwelcome

Iris are my favourite flower. The lovely shape and multitude of colours make them simply gorgeous.

But there is one species lurking amongst the lot that is extremely harmful.

Yellow flag iris (*Iris pseudacorus*) is often planted near ponds and streams to beautify gardens.

However, this harmless looking plant becomes extremely aggressive if it escapes into native wetlands.

Wind can blow the seeds into nearby water sources where they can float downstream and affect native habitat.

Like purple loosestrife, yellow flag iris can displace native plants, which are important sources of food and shelter for wildlife.

Ecological processes, such as oxygen production, may also change because invasive aquatic plants can affect water chemistry and flow.

You can identify yellow flag iris because it is yellow with brown spots within the flower and is "wet-footed." That means that if you have a yellow iris that is growing at the edge of a pond or other wet habitat it is likely this species.

Once established, yellow flag iris is difficult to remove. Pull or dig the plants out being sure to get all the root fragments so new plants can't resprout. Be careful to protect your skin, since resins in the leaves and rhizomes can cause irritation.

As a gardener, you can help prevent the introduction of invasive species by removing Yellow flag iris from your garden and replacing it with another species that is not as aggressive, like Japanese iris, blue flag iris or native cattails.

For more information on alternatives, see <http://www.invasivespeciescoalition.org/GardenPlants/Irisalternatives.pdf>

Juliet Craig is the coordinator for the Central Kootenay Invasive Plant Committee (250-352-1160, [invasiveplants@uniserve.com](mailto:invasiveplants@uniserve.com)). Weed of the Week runs in the Times every second Friday.

**Weed of the Week**



Submitted photo



**PRETTY INVADER:** Yellow flag iris sets roots down in wet habitats and can choke out other native species.

Trail Daily Times, 24 June 2005

*This Good Earth*  
Tips for the local gardener

### Scotch Broom - Alien Invader

Scotch broom is often admired as a beautiful ornamental species. With bright yellow flowers and lush green stems, it is certainly attractive. However, Scotch broom is considered a highly invasive alien plant.

Broom is originally from Scotland, and was brought to B.C. in the 1850's as a garden ornament for new immigrants to remind them of their homeland. Since then, this seemingly harmless plant has spread dramatically throughout the Coastal areas of B.C. It is now moving into some areas of the Southern Interior, changing the landscape and ecology. Broom is a member of the legume family and can form a close relationship with nitrogen fixing bacteria. The ability to access nitrogen helps the plant become established in disturbed areas with poor soil. Broom also acidifies the soil where it grows reducing competition from other plants. It is well adapted to grow in harsh conditions, and aggressively overtakes native species.

Broom has escaped cultivation and continues to spread throughout the Central Kootenay. You may have noticed the thickets of bright yellow flowers in Nelson area, Riondel, and Nakusp. Since broom has no natural enemies in B.C., the only way to get rid of it is to remove it yourself. You can do this by pulling small seedlings (less than a pencil width) when the soil is moist. Larger plants must be cut down, preferably in May when the flowers are out but they have not yet gone to seed. Broom does not grow well in shade so to help prevent older plants growing back, cover the cut stump in plastic to prevent light access. It is also important to remove cut plant material from desirable areas, as these old plant parts will release materials that prevent re-establishment of desirable plants.

Juliet Craig is the coordinator for the Central Kootenay Invasive Plant Committee. 352-1160. [invasiveplants@uniserve.com](mailto:invasiveplants@uniserve.com).

Kootenay Express, 25 May 2005

*This Good Earth*  
Tips for the local gardener

### Orange Hawkweed - alien invader

You may have seen orange hawkweed (*Hieracium aurantiacum*) springing up in your lawn with its beautiful delicate orange flowers. You may have also noticed how a few plants quickly spread into a dense mat, leaving little room for any other plants to grow. This rapid spread is typical of invasive non-native plant species that aggressively infest native habitats and have no natural predators to keep them under control.

Orange hawkweed, also known as "red devil" or "devil's paintbrush" is native to Europe. The ancient Greeks reputedly coined the term "hawkweed" because they thought that hawks ate the sap of these plants to sharpen their eyesight. Orange hawkweed, a perennial growing up to 40 cm tall, can be identified by its leafless stem with stiff black hairs. The leaves form a rosette at its base, and above ground runners travel between plants.

Hawkweed spreads both by seeds and by under-surface lateral roots, making it difficult to control. A 1 m square patch of orange hawkweed can produce over 40,000 seeds per year! This species is related to yellow hawkweeds, some of which are also non-native invasive species such as mouse-ear hawkweed.

Orange hawkweed is listed as "noxious" in BC, meaning that landowners are responsible for controlling these plants on their property. It is possible to dig up rosette plants, being careful not to break the roots since new plants can re-grow from the remaining pieces. If flowers are already present, be careful to dispose of the plants carefully, by placing them in a plastic bag or similar container so seeds cannot spread. Regular mowing before the flowers go to seed can reduce seed production.

Light infestations of orange hawkweed can be reduced by fertilizing with ammonium sulphate. Another method of killing off plants is to use solarization (cover with black plastic) followed by heavy doses of urea. Reseeding infested areas with native or non-invasive plants can help provide competition for hawkweed and encourage a healthy plant community.

The distribution of orange hawkweed has unfortunately been assisted by flower enthusiasts, who spread the plants to new gardens unaware of ecological impacts. Like all invasive species, the best method of control is prevention. Avoid planting this species in your garden, and using "wild seed" mixes that may contain harmful species. For more information on this species and its control techniques, see <http://www.agf.gov.bc.ca/cropprot/hawkweed.pdf>.

Juliet Craig is the Coordinator for the Central Kootenay Invasive Plant Committee. 352-1160. [invasiveplants@uniserve.com](mailto:invasiveplants@uniserve.com)

Kootenay Express, 29 June 2005

web: www.expressnews.ca • e-m  
**Spotted knapweed destroying wildlife habitat**

by Juliet Craig

At this time of year the hillsides are blushing with a dusty pink. Some people may exclaim how beautiful the pink "wildflowers" are that cover the hillside. However, those knowing its devastating effects are usually dismayed at the invasion of spotted knapweed.

Spotted knapweed (*Centaurea maculosa*) is the most prevalent non-native invasive plant species in the Central Kootenay. Covering thousands of hectares of land in BC, this species is highly competitive and degrades natural plant communities. An individual plant can produce up to 140,000 seeds per square metre, giving little opportunity for native plants to grow.

The invasion of spotted knapweed impacts wildlife, including ungulate winter range habitat. This species forms monocultures that displace native plants and reduce biodiversity, including habitat for the western skink and other threatened animals. As well, spotted knapweed reduces the grazing capacity of land, impacting ranchers and the agricultural community.

Spotted knapweed can be identified by its light

pink solitary flower with stiff black-tipped bracts below it giving a "spotted" appearance. The plant grows from a basal rosette in the first year to almost 2 m tall in the second. The leaves are deeply lobed and the plant is based on a stout taproot.

Once established, spotted knapweed is very difficult to get rid of.

### This Good Earth



Prevention is the best control, maintaining areas that are not infested as "knapweed-free". Mow or otherwise control plants anywhere they can be easily

spread, such as along a driveway or roadsides. Be careful not to spread seeds on the undercarriage of your vehicle or on your shoes and gear.

Biological control has been used for spotted knapweed in the Kootenays for many decades. Biological control involves the release of predators (usually insects) that attack knapweed to weaken the plants. These insects are carefully screened by Agriculture Canada to ensure that they only attack knapweed and no other plant species. Current biocontrol agents for knapweed include seed-head-attacking weevils and flies, and root-attacking weevils and moths.

For more information on how to identify and control spotted knapweed, see [www.weedsbc.ca/pdf/spot-ted\\_knapweed.pdf](http://www.weedsbc.ca/pdf/spot-ted_knapweed.pdf).



PHOTO COURTESY OF MINISTRY OF AGRICULTURE AND LANDS

Inset photo courtesy of Ministry of Forestry  
Juliet Craig is the Coordinator for the Central Kootenay Invasive Plant Committee.  
352-1160. [invasiveplants@uniserve.com](mailto:invasiveplants@uniserve.com)

Kootenay Express, 17 August 2005

### Field crew chasing alien invader

You may have noticed hoary alyssum with its fluffy white flowers and flattened seed pods along the roadside or in a local pasture.

What you may not have realized is that this seemingly harmless plant is actually an invasive, non-native plant species that is beginning to spread.

Hoary alyssum is toxic to horses, causing swelling of the lower legs, fever, and diarrhea.

In rare cases, ingestion of large amounts of hoary alyssum can lead to death.

When this plant spreads into hay fields, it can be extremely difficult and time-consuming to remove, leading to contaminated hay and potential illness.

In fact, farmers can no longer sell their hay in some areas where hoary alyssum is infesting.

The Central Kootenay Invasive Plant Committee (CKIPC) had noticed that hoary alyssum last appears to be spreading.

This year, they are conducting an inventory of this species (along with three other invasive plants) to determine how widespread this plant is and how far it has spread.

"We are surprised to how much hoary alyssum is around," says Dawn Wrangler, Invasive Plant Technician conducting the inventory.

"This plant has really taken off, especially in the Preridale and Trail areas. It is a concern for equestrians, but especially for people with horses or that grow hay."

Because hoary alyssum was introduced to Canada without natural predators to keep it under control, it will continue to spread and out-compete native plants.

Some people describe the infestation of invasive plants as "biological pollution" since they impact the environment and continue to spread.

**"This plant has really taken off."**  
- Dawn Wrangler

"The best thing that members can do is learn to identify invasive plants like hoary alyssum, and report," says Val Miller, Agronomist who is overseeing the project.

"If everyone was responsible for recognizing their plants then we can prevent this plant from spreading, and from impacting local farmers and horse-owners."

Hoary alyssum can be hand-pulled effectively. Picked plants should be carefully disposed of to ensure they do not spread.

The Central Kootenay Invasive Plant Committee was formed to raise awareness about invasive plant species, develop and maintain an inventory of these plants, promote coordinated and collaborative management, and prevent their further establishment and spread.

For more information on the CKIPC, contact [invasiveplants@uniserve.com](mailto:invasiveplants@uniserve.com) or (250) 352-1160.

To see a photo of hoary alyssum, go to <http://www.ugf.gov.bc.ca/strepp/invasiveplants/hoary-alyssum>.

Article submitted by:  
Jules Chung, member  
Invasive Plant Committee



Dawn Wrangler conducts an inventory of hoary alyssum in the field.



Prestige  
HOTELS & RESORTS

... a get away  
the Okanagan

We added more horsepower, then we just kept adding.

Arrow Lakes News, 27 July 2005

#### New Invasive Plant Committee forms

Invasive species are considered the second largest threat to biodiversity on the planet, after habitat destruction. Included among these are non-native plant species like spotted knapweed and Dalmatian toadflax that are taking over thousands of hectares in the Kootenays.

Invasive non-native plant species (weeds) are brought to North America, either intentionally or by accident, and become extremely aggressive. Because they arrive without natural predators to keep their populations under control, and they are highly competitive (by producing abundant seeds, sucking up nutrients and water, or taking up space), these plants begin to take-over from native plants. Important grasslands and other ecosystems are being converted into monocultures of these invading species, impacting wildlife habitat, rare and endangered species, and biodiversity. As well, these plants can invade agricultural land where they impact farmers by reducing crop yields and crop quality.

The Central Kootenay Invasive Plant Committee (CKIPC) formed recently as a non-profit society to bring together people concerned about invasive plant species. With members from government, industry, non-profit societies, and other local groups, the Committee's primary focus is education and awareness of these "alien invaders". Upcoming activities include developing a brochure, website, and display booth on local invasive species, writing articles about weeds to be on the look out for, and providing presentations to community groups.

For more information about the CKIPC and local invasive species, please call (250) 352-1160 or email [invasiveplants@uniserve.com](mailto:invasiveplants@uniserve.com).



Salix caprea  
Photo courtesy of BC Ministry of Agriculture, Food and Fisheries.