



BE A PART OF PROTECTING THE LAND YOU LOVE



Invasive Species Early detection and rapid response

Invasive plants and insects are a growing concern among rural landowners in the Credit River watershed. Invasive species such as dog-strangling vine, garlic mustard, buckthorn and the emerald ash borer are unfortunately becoming common in our countryside. They are threatening the health of our woodlots, agricultural land, meadows and watercourses.

Many landowners are being very attentive by monitoring their acreage and watching for invasive species. Early action is the best way to nip the problem in the bud so to speak. Individual action is important, but this kind of problem also requires a collective effort.

The Invasive Species Centre (ISC) has joined forces with the Ontario Invasive Plant Council (OIPC) with funding from the Ontario Trillium Foundation, to establish an Early Detection and Rapid Response (EDRR) Network project in several regions of Ontario.

They are creating ways for landowners, community groups and volunteers to contribute to the fight against invasive species. This includes training landowners to identify and report invasives.

It is well understood that invasive species, brought here from other countries, can

have devastating impacts on our natural ecosystems. They outcompete native plants and animals and can take over large areas of land, choking out all other plant growth. You only have to look at our dying ash trees to see the devastating impacts of the emerald ash borer.

The new EDRR initiative aims to train and equip volunteers to identify, report, track and control invasive plants and insects. The project is launching in four pilot regions: Halton Region, Region of Peel, Sault Ste. Marie and Thunder Bay (two of which are in the Credit River watershed).

A local grassroots organization called Protect Our Water and Environmental Resources (P.O.W.E.R) is taking a lead role on invasive species action and awareness in Halton and Peel. Their project, called vectorI.A.S., supports community groups, schools, non-government organizations, conservation authorities and local governments to take action on invasive species.

Detecting and responding early to invasive species greatly improves control and potential eradication. Once established, invasives are difficult and expensive to control.

To get involved locally with the vectorI.A.S project, email Colin Cassin at: coordinator@powerhalton.ca.

To learn more about the EDRR or to register for a EDRR volunteer training workshop on September 19th in Georgetown, please visit <http://edrrontario.ca/>

GET SMART ABOUT INVASIVE SPECIES!



Download the Early Detection and Distribution Mapping System Ontario app (EDDMaps).

Take a picture and report invasive species. Search data, browse distribution maps and contribute to 'leading edge range' detection so that invasive species control efforts can be most effective.

INSIDE STORY DEDICATED STEWARDS OF THE LAND



Beavers play a vital role in increasing the biodiversity of plants and animals.

BEAVERS: DEDICATED STEWARDS OF THE LAND



Canadian icons by day, restoration super-heroes by night. Love them or hate them, beavers are remarkably adaptable creatures with an extraordinary ability to transform the landscape. How you feel about them often depends on which side of their dam you're on. While many think beavers live only in the Canadian wilderness, they are not uncommon in urban environments like Brampton and Mississauga. They also live in the middle and upper reaches of the Credit River watershed. Though quite shy, beavers are thriving in urban creeks and drainage ditches essentially ignored by humans. Did you know beavers build dams simply to regulate the water level in their lodge so the entrance doesn't freeze in winter? Where there's a dam, water will pool upstream. This causes flooding and falling trees which is when humans notice beavers.

CVC receives calls each year reporting beaver activity in the watershed. Some landowners are worried about flooding and property damage while others are concerned about beavers felling too many trees. Some landowners simply call to let us know where the beavers are in hopes that we can protect them. Usually though, they want advice on how to remove them.

When beaver activity poses a risk to human safety and property, the first question we ask is *Who owns the property where the beavers are building?* It's the landowner's responsibility to protect their own property (and their neighbours') from any negative impacts caused by beavers. If CVC doesn't own the property, there isn't a lot we can

do. CVC has jurisdiction over humans building within a floodplain, but we do not have jurisdiction over beavers building in a floodplain. They can work away without a permit.

The most extreme management practices include legally trapping beavers (a licensed fur trapper must do this) and/or removing the dam (which first means a call to Fisheries and Oceans Canada to make sure there's no harm to fish and fish habitat). There are other less aggressive options though, like installing a beaver baffle. Contact your local Ministry of Natural Resources and Forestry office for advice on techniques to control water levels behind a beaver dam.



If there is no risk to human safety and/or property, why not leave the beavers alone? Beaver dams and ponds help surrounding natural areas, regardless of which side of their dam you are on. Beavers play a vital role in increasing the biodiversity of plants and animals. The wetlands that beavers create help clean water as it flows through. Their dams help prevent downstream

flooding during high rainfall events and they provide deeper, cooler water, enhancing fish habitat. Many biologists are now recognizing beavers for their ability to improve ecosystems. They are even turning to beavers for help, encouraging them to move into areas that need restoring.

Next time you see one of these industrious creatures, consider first whether they are posing a true risk to human safety or property. If not, silently thank them for being the dedicated stewards they are. Without beavers, the Credit River watershed would be a very different place.

DID YOU KNOW?

Brook trout are the only native trout in the Credit River. They live only in the highest quality water and are considered the canary-in-the-coal-mine for rivers.

Brook trout in the Credit River are in trouble. Rising pollution levels, invasive species, habitat loss, and dams or blockages to fish passage are contributing to their decline.

We need your help! Volunteer to *Bringing Back Brookies* (a partnership with Trout Unlimited Canada), a program to improve brook trout habitat in the upper Credit River.

To find out how you can make a difference, visit Trout Unlimited Canada - Greg Clark Chapter at <https://sites.google.com/site/tucgregclark/>



Photo by Jon Clayton, CVC

from the *Expert*



CVC's Bryana McWhirter, Invasive Species Crew Leader, on why built habitat structures provide much needed shelter for local wildlife.

Artificial habitat structures are a great way to attract wildlife to newly established

restoration projects, young plantations and forests. Unlike mature forests, younger forests and newly restored sites often do not have features needed to attract and sustain diverse wildlife. Artificial structures can mimic features found in mature habitats such as large trees, dead standing trees and natural cavities that provide shelter and breeding sites for many animals. Man-made structures can also provide specialized habitat such as hibernacula for snakes or bats.

It is important to build a habitat feature with a specific target species in mind and tailor the design and installation to their needs. For example to provide a suitable

artificial nest space for a pileated woodpecker, the box should mimic the width, depth and entrance hole size of a natural cavity the woodpecker would use. Not only will this help attract them, it will also decrease the likelihood that unwanted occupants, such as European starlings, will take up residence.

CVC can help you build and install habitat structures. A selection of habitat structures are also available through our Landowner Action Fund Program. Contact a CVC Stewardship Coordinator for help to get you started.

**CREATE A
LANDOWNER ACTION PLAN
AND QUALIFY FOR THE
LANDOWNER ACTION FUND**

Attend a free workshop, assess your property and take action to protect your land and water

Get your projects done with grants and technical assistance*

Projects include well abandonment, stream restoration, tree planting, invasive plant control, native plant gardening and more

Register at creditvalleyca.ca/events

Landowners should own one acre or more of rural property in the Credit River watershed.

*Subject to available funding sources and eligibility requirements for grants

**Caring for your
LAND & WATER**

*Sat. Oct. 24
9:30 a.m. to 2:30 p.m.
Alton Library Community Room*

Register by Oct. 16



**Caring for your
HORSE & FARM**

*Sat. Nov. 21
10 a.m. to 3 p.m.
Watershed Learning Centre,
Terra Cotta Conservation Area
Register by Nov. 15*

**Fall Forestry and
Habitat Restoration
Forum**



HEAR FROM EXPERTS ABOUT

- Restoration Services for Private Landowners
 - Tree planting
 - Grassland restoration
 - Invasive plant removal
 - Forest management
- Project funding and property tax rebates
- Forest fungi (includes an outdoor forest walk)
- Wildlife habitat structures to attract wildlife to your property
- Emerald ash borer (EAB) update

**September 19, 2015
9:30 a.m. to 3 p.m.**



CVC's Forestry Operations Centre
15526 Heart Lake Road, Caledon

Space is limited.
Register by September 16 at
www.creditvalleyca.ca/forestryforum

For more information visit
www.creditvalleyca.ca/events



FARM GATE

THANK FUNGI FOR YOUR SOIL STRUCTURE



During *International Year of Soils*, a lot of attention has been paid to soil quality and soil structure.

What is a well-structured soil? Well-structured soil can be described as soil that is *loose or fluffy*. It has many soil particles bound together in groups (called aggregates) that crumble apart into smaller aggregates when disturbed. There are many benefits of a well-structured soil such as they drain water quickly, hold plant-available water, resist erosion, cycle nutrients efficiently and improve crop quality and yields.

By reducing tillage, minimizing compaction, rotating crops and growing cover crops, farmers and gardeners can improve soil structure tremendously. Using these management practices improves fungi populations and the network of spider-web-like fungi (called hyphae) through the soil. These fungi bind soil particles together, forming soil aggregates and improving soil structure.

Most plants have developed mutually beneficial relationships with fungi where fungal hyphae connect to plant roots. They are fascinating underground partners that work well together. Fungal hyphae on

the plant roots allows for a bigger rooting zone, which means more nutrients for the plant. In exchange, the fungi receive carbohydrates from the plant roots. This symbiotic relationship is called mycorrhiza.

On **September 19** join CVC for the **Fall Forestry and Habitat Restoration Forum** where guest speakers Hillary Hatzipetrakos and Drew Coull, fungi experts from Fungi Unveiled, will present the ecological benefits of fungi, safe mushroom foraging and how to cultivate your own mushrooms.

For more details and to register, visit creditvalleyca.ca/events.

ASK the EXPERT **LIVE CHAT**

Don't miss your chance to get expert advice from the comfort of your own home. CVC is launching live online 'Ask the Expert' events on the Countryside Stewardship Connection.

September 23, 8 to 8:30 p.m.
Guest expert - Ken Thajer, CVC Regulations Officer

October 21, 8 to 8:30 p.m.
Guest expert - Bob Morris, CVC veteran and ecological guru

Log onto www.csconnection.ca, become a member, post your questions and our guest experts will answer them.

Harvest season is in full swing – connect with local farmers online at:

Greenbeltfresh.ca
Connecting people to local food



COMING EVENTS

Register at: creditvalleyca.ca/events
Events are free unless otherwise indicated

Fall Forestry and Habitat Restoration Forum
Sat. Sept. 19, 9:30 a.m. to 3 p.m.
CVC Forestry Operations Centre
15526 Heart Lake Road, Caledon

Our Nature to Conserve: Exploring the Headwaters Stewardship Forum and Volunteer Appreciation Event
Sat. Oct. 3, 8:30 a.m. to 2:30 p.m.
Tony Rose Memorial Sports Centre, Orangeville

\$10, includes bus tour and lunch

Caring for Your Land and Water Workshop
Sat. Oct. 24, 9:30 a.m. to 2:30 p.m.
Alton Library Community Room, Alton

Caring for Your Horse and Farm Workshop
Sat. Nov. 21, 10 a.m. to 3 p.m.
Watershed Learning Centre, Terra Cotta Conservation Area

Funding in support of Credit Valley Conservation programs, workshops and events is generously provided by our regional and municipal partners.

CVC Countryside Stewardship programs are available to residents and landowners within the Credit River watershed. Our neighbouring conservation authorities offer similar programs. We would be pleased to direct those who live outside the Credit River watershed to the appropriate agency.



CVC was established in 1954 with a mandate to protect natural resources in the Credit River watershed. We have been working for 60 years with our partner municipalities and stakeholders to protect and enhance our land and water for present and future generations.