



BE A PART OF PROTECTING THE LAND YOU LOVE



NATURE'S RETURN:

Giving back with small actions to make a big impact

Don McClellan, landowner (left) with Karen Morrison, Headwaters Streams Committee member.

Situated in the headwaters of the Credit River watershed, Don and Karen McClellan own 100 beautiful acres of rolling hills in Mono. The farm has been in Karen McClellan's family for years and the two have called it home for the past 35 years.

A few years ago, Don noticed "the stream was starting to widen and get pretty mucky." Their cattle were using it as a water source. The McClellan's decided to keep the cattle out. They installed a temporary fence and built a spring-fed trough away from the creek. When the spring briefly ran dry in 2012, they wanted a long-term solution. Karen reached out to Credit Valley Conservation (CVC) where she met Mark Eastman, Senior Coordinator, Agricultural Outreach.

Mark connected the McClellan's to the Headwaters Stream Committee and committee member Karen Morrison. Through that partnership, they installed a permanent fence to keep the cattle out of the stream. They also set up a solar-powered water pump and trough system to pull clean drinking water from the creek – even in times of drought. To fix the trampled streambank, CVC planted 265

trees and shrubs. Volunteers joined in and planted an additional 700 dogwood and willow live stakes to further enhance the stream's buffer and shade the water to keep it cool.

This project showcases how a few small changes can make a big difference to the health of a stream and surrounding land. The streambank is restored, water sources are protected and the size of natural areas grew. Don reflected, "I've lost maybe an acre and a half of pasture on the other side of the creek but I know I would have needed to build a bridge to get the cows there anyway. This way I can protect the water and give a little corner of land back."

Don is happy with the assistance CVC provided. "It's been a really good experience," said Don. "More people should take advantage of this."

If you want to protect water sources, grow the size of natural areas with plantings, take steps to keep streams cool and make nature strong to prepare for the impacts of climate change, we'd love to hear from you.

CARING FOR YOUR LAND & WATER
Condensed Workshop



FREE
CREATE A PLAN FOR YOUR PROPERTY

Wednesday May 24, 6:30 to 9 p.m.
Terra Cotta Conservation Area
Halton Hills
- GRANTS AVAILABLE -

REGISTER AT CREDITVALLEYCA.CA/EVENTS

INSIDE STORY:
Restoration at Terra Cotta



UNRESTRICTED ACCESS: A LIFELINE FOR FISH

Fish swim up and down streams to find the right location to feed, spawn, rest and hide from predators. The ability to move is critical to their survival. Dams along rivers and streams can block fish movement.

Dams prevent fish passage and can create ponds upstream. This changes an entire stream ecosystem. Water flow slows down and sediment deposits (soil, gravel and debris) make ponds shallower, raising water temperature and changing which fish and wildlife live in the area. This has a big impact on brook trout, a native species that is very sensitive to temperature. Brook trout cannot survive when water temperatures rise above 21 degrees Celsius. With over 600 dams on

the Credit River and its tributaries, the impacts to brook trout and other fish species are significant.

Historically, dams were installed for power generation, lumber and grist mills, farming irrigation and swimming ponds. Today, the harm dams cause fish is recognized. Many dams are now at the end of their life span and need attention. At CVC's Terra Cotta Conservation Area, a multi-year project to remove these fish barriers is underway.

During the spring and summer of 2008, CVC progressively removed stop logs and drew down the water in Spring Pond. This allowed the natural path of Second Creek that

historically ran through the property to re-establish. Next to the stream, plants that like wet areas such as bulrushes, cattails, willows and dogwoods moved in, creating a wetland. This allowed the area to return to what existed before the pond. If you have an artificial pond on your property, you will likely notice over time the pond naturally fills in and becomes shallower. The draw down method used at Spring Pond speeds up the natural process of reverting an artificial pond back to a natural stream channel and wetland.

Protecting wildlife that has moved in since ponds were created is an important consideration when addressing fish barriers. Some open water is being left at Terra Cotta CA for reptiles and amphibians that now call Wolf Lake home. If you have walked along Wolf Lake in the last few years, you may have noticed a stream built around it in 2010. This by-pass channel provides fish access to Second Creek, while maintaining open water wetland habitat.

The two restoration methods used at Terra Cotta CA (draw down method and creating a by-pass channel) give fish the best chance for survival. Unrestricted access is a lifeline for fish and improves the health of our streams.

Draw Down Process at Spring Pond



STEWARDSHIP IS TAKING ROOT



Rural landowners will plant over **30,000** trees on their properties with CVC this year.

from the *Expert*



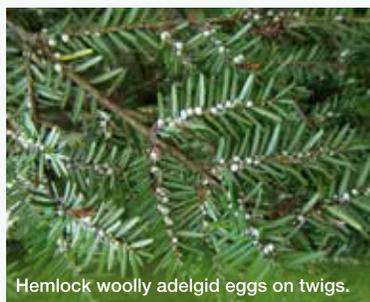
Bryana McLaughlin, Invasive Species Technician on the invasive forest pest - hemlock woolly adelgid

It's important to anticipate new invasive species arriving in the Credit River watershed. Being ahead of the curve on detection and management is critical to limiting their negative impacts to the environment.

The invasive hemlock woolly adelgid (HWA) threatens hemlock trees. This small aphid-like insect feeds on sugars and starches made in the tree's needles. As they feed, the insects consume the tree's energy stores. The cumulative impact of hundreds of insects eventually kills the tree.

Native to India, Japan, Taiwan, China and western North America, HWA was first reported in eastern North America in 1951. Since then it established itself in 26 American states. All species of hemlock can host the HWA, including Ontario's native eastern hemlock.

HWA was first detected in eastern Canada at an Etobicoke plant nursery in 2012 and then in 2013 in a natural area in the Niagara Gorge. The Canadian Food Inspection Agency (CFIA) Plant Surveillance Unit removed the infected trees and continues to survey and remove new infestations.



Hemlock woolly adelgid eggs on twigs.

To spot an infestation, look for the egg sacs. These small white fuzzy patches are found on the underside of twigs near the base of needles in late winter and spring. Help keep the Credit River watershed ahead of the invasion curve.

If you think you have found HWA on hemlock trees in your forest, contact the CFIA's Plant Health Surveillance Unit at inspection.gc.ca/pests and CVC's **Invasive Species Management** team at invasive.species@creditvalleyca.ca.

Discover a Hidden Bird Habitat: Grasslands



Bird-Friendly
CERTIFIED HAY

FREE



Decode the secrets of bird behaviour.

Thursday Jun. 22, 7 to 8 p.m.
640 Highpoint Sideroad, Alton

Explore which birds call grasslands home. Learn how to spot breeding pairs and how these ground nesting birds raise their young.

Bring your own binoculars or borrow a pair from us.

Register at
creditvalleyca.ca/events

DID YOU KNOW?

Whether you're new to country living or you've been a rural-dweller for years, grab a copy of the **Hello! Countryside Living** booklet for tips on protecting the land you love. Get to know your property's natural features and learn what you can do to help. CVC has a lot to offer such as workshops, resources, funding and technical expertise.

Find out more: creditvalleyca.ca/hellocountrysideliving





FARM GATE

MANAGING FARM WOODLOTS FOR ECOLOGICAL HEALTH AND LONG-TERM PROFIT



Managing your woodlot as a crop can be good for its health and provide you with additional farm income.

A healthy woodlot grows quickly and has an unevenly aged stand with good upper, middle and low level growth. To encourage this, selective harvests should be scheduled every 10 to 20 years to remove diseased and weak trees. When appropriate, some healthy mature trees should be removed to provide space for the next generation of harvestable trees. This makes the woodlot more resilient to disease, pests and extreme weather.

Well-managed woodlots with abundant high quality saw and veneer logs can generate up to \$500 per tree. Specialty products derived from forests such as mushrooms or maple syrup may provide even greater returns.

CVC can assist you with managing your woodlot and planning for your harvest. Forestry specialists prepare forest management plans, inventories, prescriptions and provide tree marking services.

CVC's goal is to improve the ecological function and long-term success of your woodlot. The side-benefit to you as the landowner is greater potential for long-term profits.

The next time you plan to take a walk through your woodlot, consider inviting CVC. Staff are available to assist you with managing your woodlot for health, wildlife habitat and long-term profits.

For more information, contact Mark Eastman, Senior Coordinator, Agricultural Outreach at 905-670-1615 ext. 430.

COMING EVENTS

Register at: creditvalleyca.ca/events

Events are free unless otherwise stated

Caring for your Land and Water - Condensed Workshop

Wednesday May 24, 6:30 to 9 p.m.
Terra Cotta Conservation Area, Halton Hills

Discover a Hidden Bird Habitat: Grasslands

Thursday Jun. 22, 7 to 8 p.m.
640 Highpoint Sideroad, Alton

Nature at Its Best: Forest and Wetland Health

Saturday Sept. 23, 9:30 a.m. to 3:30 p.m.
Monora Park Pavillion, Mono

Caring for Your Land and Water

Saturday Oct. 21, 10 a.m. to 2 p.m.
Monora Park Pavillion, Mono

Caring for Your Horse and Farm

Saturday Oct. 21, 10 a.m. to 2 p.m.
Monora Park Pavillion, Mono

Funding in support of CVC's programs, workshops and events is generously provided by our regional and municipal partners.

ARE YOU ON THE LIST?

Sign up for Countryside Stewardship Mail

Bi-weekly emails on countryside living, caring for your land and water, and events.

creditvalleyca.ca/csmail

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.



COUNTRYSIDE
stewardship

CVC was established in 1954 with a mandate to protect natural resources in the Credit River watershed. We have been working for more than 60 years with our partner municipalities and stakeholders to build a thriving environment that protects, connects and sustains us.

