



Midori Telles-Langdon at work in the Conservation Services portable.

## A Winning Experience

Midori Telles-Langdon, a high school co-op student working with Conservation Services, was a member of the Envirothon team from Stratford Central that won the Huron-Perth Regional Envirothon Competition on April 28<sup>th</sup>. This competition consists of four written tests concerning the subjects of wildlife, aquatics, soils, and forestry, as well as an oral presentation component concerning a current environmental issue. Teams consist of five members ranging from grades 9-12.

Midori attributes her team's Regional win in part to the experience she has gained working at the UTRCA with the Conservation Services and Planning & Research Units.

Contact: Craig Merkley, Conservation Services Specialist

## Water Monitoring & Stewardship

The UTRCA recently completed a project with Conservation Ontario to look at what water resource monitoring is needed to evaluate agricultural stewardship programs in Ontario, and their effects on river and Great Lakes water quality.

The Ontario Ministry of Agriculture, Food and Rural Affairs funded the project through the Canada-Ontario Agreement for the Protection of Great Lakes Water Quality.

A workshop was held in 2008 with 35 representatives from conservation authorities, ministries, and agricultural organizations. Recommendations were developed to better link water monitoring to stewardship initiatives. A report entitled *An Evaluation of Water Resource Monitoring Efforts in Support of Agricultural Stewardship in Watersheds of the Great Lakes Basin* was prepared for OMAFRA and CO.

Contact: Karen Maaskant, Water Quality Specialist

### Species of the Month

## Snapping Turtle (*Chelydra serpentina*)

Although still regularly seen in the wild, the snapping turtle is at great risk of large scale decline due to its late breeding age (15 to 20 years before maturity is reached), low survival of eggs and young, habitat loss, and frequent human-caused persecution of adults. Because of these threats, the snapping turtle was recently listed as a Species of Special Concern by COSEWIC (Committee on the Status of Endangered Wildlife in Canada) and is now protected.



A mature snapping turtle.

Unfortunately for the snapping turtle, its appearance, size and defensive tendencies on land have caused some to fear it. However, this turtle is a very important component of local waterways, serving as both predator and prey. Snapping turtle eggs and juveniles provide food for a number of bird and mammal species, and juveniles and adult snapping turtles help keep wetlands clean by consuming dead or dying prey.

In the Thames River watershed, snapping turtles are part of a unique life system, one we must maintain in order to have balance. We can better appreciate and protect our natural world through respect and understanding of local species, such as the snapping turtle.

### Description

- Shell length 20 - 50 cm (8 - 20").
- Broad, slightly domed upper shell with prominent serrated rear edge. Shell colour ranges from light brown to black, often obscured by algae. The small lower shell is cream to yellow in adults, and black to cream with a grey pattern in juveniles.
- The skin is grey, brown or black and the large head may be well-patterned with brown and black in some individuals. The adult snapper's long tail is adorned with triangular projections.



A juvenile snapping turtle.

- Snapping turtles are not well protected by their small lower shell. On land they display defensive behaviours, often attempting to bite in self-defense. In water, this species prefers to retreat to deeper areas or bury in mud when disturbed.
- The snapping turtle lays 15 to 60, round, firm-shelled, white eggs in June or July in open or sparsely vegetated sites. The eggs hatch in 50 to 90 days.

Snapping turtles, while mostly aquatic, can be found in the spring and summer moving across roads, yards and gardens in search of other wetlands or nesting sites. If found along a roadway and it is safe to do so, try to help the turtle across; its life may depend on it.

Snapping turtles may attempt to bite out of fear, but this is simply a way of scaring the predator (us) and then moving away as quickly as a turtle can. Apart from their snapping motion, their body movements are generally slow and cumbersome. By positioning yourself behind the turtle, and grasping the rear of the shell or base of the tail, you can gently drag the turtle across the road. If you must fully pick the turtle up, grab the base of the tail and also brace its weight by sliding your other hand underneath, on the lower shell, to lift. As long as you are behind the turtle it can not bite you. An alternative is to use a stick or shovel to gently push the turtle to a safe location, usually a wet area on the other side of the road.



The snapping turtle's small plastron (lower shell) does not provide much protection.

If a turtle lays eggs in your garden, count yourself lucky. By leaving the eggs alone, and clearing tall vegetation from around the nest, hopefully young snapping turtles will hatch out in the late summer and will head off to the nearest wetland or stream. Snapping turtles can live to great ages, so by helping a local turtle, you may be helping a part of local history as the turtle nesting in your garden could be over 70 years old.

*For more information on this species, or other watershed reptiles, contact Scott Gillingwater, Species at Risk Biologist.*

## Aquatic Invasive Species Technical Workshop

The Ontario Federation of Anglers and Hunters (OFAH) and the Ontario Ministry of Natural Resources (MNR) have partnered to deliver an Invading Species Awareness Program. Through this program, an Aquatic Invasive Species (AIS) Technical Workshop was developed to target professionals who engage in aquatic field work. One of the three Southern Ontario AIS workshops was held at the UTRCA on April 24<sup>th</sup>. Several staff from UTRCA, neighbouring CAs and local MNR offices participated.

The half-day workshop was designed to provide technical professionals with the knowledge and expertise to identify, prevent the spread of, and report occurrences of aquatic invasive species in Ontario. The workshop topics explored the AIS problem in the province, pathways of introduction and spread, preventing further spread including acceptable decontamination methods, reporting procedures, and identification and preservation of AIS specimens.

In general, participants learned that AIS have profound detrimental impacts on Ontario's ecosystems, native biodiversity, and economy. The best way to avoid impacts from AIS is to prevent invasive species from entering. Species are introduced and spread by the following means: shipping (ballast water and encrustation), recreational and commercial boating, movement of live bait, aquarium and horticultural trade, live fish food and live bait, unauthorised introductions (taking a species from one lake or waterbody to another), and canals and water diversions

Realising that prevention is not always plausible, early detection and an appropriate rapid response to the invasion are essential to successfully control invasive species in an infested region. Technical professionals learned several measures to aid the prevention and control of AIS:

- Prevent invasive species from entering by practicing proper decontamination and other prevention measures.
- Assume every waterbody is infested; therefore, all equipment, including boats, should always be considered contaminated, and treated after every use. All equipment and boats should be cleaned between trips or sample events and left to dry for as long as possible.
- Always visually inspect gear and equipment.
- Detect invasive species early through regular monitoring practices (field work).
- Report new sightings to the Invading Species Hotline at 1-800-563-7711, or [www.invadingspecies.com](http://www.invadingspecies.com)

*Contact: Cathy Reeves, Aquatic Biology Technician*



Some of the Makeover crew with their loot.

## 20 Minute Makeover

At 2 p.m. on Friday, April 17<sup>th</sup>, the City of London promotes the 20 Minute Makeover, where businesses and landowners are encouraged to pick up trash around their buildings. This year, the UTRCA joined in. With minimal planning, Cathy Quinlan assembled some gloves and garbage bags and 11 staff members came out to pick up garbage around the administration building, parking lot, trail heads and along the laneway. Many hands make light work and staff were able to fill several garbage bags in the allotted 20 minutes. Thanks to all. Keep litter in its place!

Contact: *Cathy Quinlan, Terrestrial Biologist*

## On the road again

The UTRCA has been getting conservation messages out to communities with displays at the following locations during the past month:

- Fanshawe College Library, London
- Ford London
- GM Woodstock
- London Central Library
- London Children's Aid Society
- TD branches throughout London
- Earth Day Stratford
- Sunoco Earth Day, London
- Linc Parent Fair, Stratford
- Stoney Creek Community Day, London
- Emergency Preparedness Day, Saunders Secondary School, London
- Emergency Preparedness Day, Fanshawe College
- SLOME Career Day, London

Contact: *Steve Sauder, Marketing Specialist*

## St. Marys Water Conservation Pilot Project

The Town of St. Marys, UTRCA and St. Marys Green Committee are implementing a Water Conservation Pilot Project. Since the Town of St. Marys relies solely on groundwater for its municipal water supply, the Town must protect both the quality and quantity of its well water.

The goal of the pilot project is to increase awareness of the need to conserve our supply of water and to provide incentives for homeowners to reduce their water consumption. Environment Canada data shows that 65% of water usage in a home is attributed to toilet flushing (30%) and showering/bathing (35%). The project focuses on reducing water usage in these two areas by installing water conservation fixtures.

The pilot project aims to reduce water consumption in 200 homes serviced by municipal water by a minimum 30%, by replacing one existing low efficiency (13 L/flush or more) toilet with a single flush 4.5 L/flush high efficiency toilet. A low flow showerhead, bathroom faucet aerator and kitchen faucet aerator will also be provided as part of the project. Contracted plumbers will install the fixtures and take away the old toilet, showerhead, and aerators for recycling.

The reduction in water consumption for each home will be monitored through water billing information. Participating homeowners will have \$50 applied to their water account.

To participate in the project, homeowners must meet the following criteria:

- Must be a resident of the Town of St. Marys, residing in a single dwelling home or semi detached dwelling
- The home must have been built before 1996 and must be connected to the municipal water supply
- Must be replacing a 13 L or larger toilet
- The home must be within the 2 year municipal well head protection area

To date, 45 homeowners have registered for the project. Funding for the project has been received from the Ontario Ministry of the Environment's Ontario Drinking Water Stewardship Program and the Stratford and Perth County Community Foundation.

Contact: *Vanni Azzano, Community Education Specialist*

## The Water Festival is Coming Soon!

The UTRCA, County of Oxford, City of Woodstock, other local conservation authorities, and community groups are gearing up for the Oxford Children's Water Festival. The four-day festival will help students in grades three to five to discover the importance of water in their lives and communities.

The event runs from May 26<sup>th</sup> to 29<sup>th</sup>, at Pittock Conservation Area in Woodstock. Over 2,800 students from across Oxford County and surrounding areas will participate.

The water festival features 47 activity stations focused on five main themes: water science, water technology, water protection, water conservation and water attitude.



Students discover some amazing aquatic creatures at the Festival.

The first local water festival was in Oxford in 2001. Since then, festivals were held in London-Middlesex (2007) and St. Thomas-Elgin (2008). The plan is for a three-year rotation in Oxford, London-Middlesex and St. Thomas-Elgin.

As with other Children's Water Festivals held across the province, the intent is to motivate students to become water stewards in their classrooms and communities. By combining hands-on interactive activities with messages relevant to their daily lives, students "soak up" knowledge on the properties, uses, connections and importance of water.

Contact: Linda Smith, Water Festival Coordinator

## Monitoring Our Watershed

The UTRCA's water monitoring programs are in full swing for 2009 with both routine stream monitoring and special projects starting up. Monitoring is conducted to assess the stream health and pollution levels in the 28 watersheds that make up the Upper Thames watershed. Monitoring data is used to measure the effects of land use activities and conservation measures on streams, and helps to target new work. Data is reported through the UTRCA Watershed Report Cards and other project reports. Following are some of this year's stream monitoring programs.

### *Stream Water Quality*

The UTRCA monitors 24 stream sites every month for water chemistry (such as nutrients and metals), through the Provincial Water Quality Monitoring Network. Bacteria are monitored at these same locations through a partnership with local health units. This monitoring program has run for over 40 years and gives a good measure of long term pollutant levels.

### *Benthic Invertebrates*

The UTRCA benthic monitoring resumes in late May and early June at about 60 sites. Benthic (streambed) invertebrates are excellent indicators of water and aquatic ecosystem quality. Other benthic sampling will include reference (or least impacted) sites and sites in watersheds targeted for remedial programs or additional study.



Downloading data from a groundwater monitoring well.

### *Groundwater*

The UTRCA currently has 24 monitoring wells in the Provincial Groundwater Monitoring Network. Water level monitoring is continuous throughout the year. The water levels data is being examined for two pilot projects currently underway for the Ontario Low Water Response Program, in partnership with the MNR. Starting in September, the wells will also be sampled for water quality.

The UTRCA samples 13 monitoring wells and two surface water sites three times per year for water quality. This program is in partnership with the City of London.

### *Pesticides*

The UTRCA will be monitoring pesticides as part of two studies to assess pesticide levels in streams: a Ministry of the Environment (MOE) Urban Pesticide Study with a site in London, and an OMAFRA Agricultural Pesticide Study with five rural stream locations. Samples are collected from June to October.

### *Nutrient Management*

The UTRCA is contracted by MOE to conduct water quality and stream flow monitoring for a six-year nutrient management study. The purpose of the project is to assess water quality in streams draining agricultural lands and to look for trends related to nutrient management and other land use practices. UTRCA monitors seven small agricultural watersheds for this study.

### *Reservoir Monitoring*

The UTRCA's reservoirs are monitored to assess dissolved oxygen and temperature conditions to help to inform reservoir management decisions. Routine monitoring is conducted from June to September at Fanshawe, Wildwood, Pittcock, Stratford, and Mitchell reservoirs.

### *Target Watersheds*

Several target watersheds will receive additional monitoring this year as part of focused community-based watershed strategy

development. These watersheds include Medway Creek, Trout Creek, and Mud Creek.

Cedar Creek in Woodstock will be monitored by the UTRCA in 2009 as part of a study initiated by the City of Woodstock from the results of the Watershed Report Cards.

### *Fish Sampling*

Fish sampling is being conducted across the watershed in 2009. Fish sampling started early this year, capturing and relocating fish as part of the Stoney Creek stream channel rehabilitation project during the winter. The next job is sampling targeted Steelhead (lake-run Rainbow Trout), to assist the Thames River Anglers club with egg collection for their hatchery. Current sampling is also providing specific species and numbers of fish for the Springbank Dam radio tracking study, to determine the impacts of the new dam gates on fish passage.



Fish sampling in Cedar Creek.

### *Temperature*

The UTRCA acquired 20 continuous temperature meters from MOE in 2008. These were used throughout the watershed last year to begin to assess stream temperature at a number of project sites and will be out in the streams again this year.

Contact: Karen Maaskant, Water Quality Specialist, or John Schwindt, Aquatic Biologist

## Speaking Out

The Professional Engineers of Ontario (PEO) London Chapter invited the UTRCA's Environmental Engineer, Imtiaz Shah, Ph.D., P.Eng., as a guest speaker to their annual certificate award dinner on March 19<sup>th</sup> in London.

This chapter holds an annual certificate presentation ceremony/dinner to recognize those individuals who earned their professional engineer (P.Eng.) license within the last year. Local engineers, PEO staff and families and friends were also invited to attend. The Honourable Jim Wilkinson, Minister of Research and Innovation, was the chief guest at the ceremony.

Imtiaz gave a presentation on sustainable stormwater management techniques, focusing on how to achieve sustainability, and sustainable SWM goals and benefits. He also shared some example of the sustainable SWM techniques.

Contact: Imtiaz Shah, Environmental Engineer



The Burn Team after another successful prescribed burn.

## Ecological Prescribed Fire

On April 24<sup>th</sup>, the UTRCA Burn Team undertook a prescribed burn of the Rea Meadow just outside the gates of Fanshawe Pioneer Village. This three-ha meadow is a tallgrass prairie, planted under the Communities for Nature Program three years ago. The sun-loving grasses and wildflowers of a prairie are adapted to fire, and repeated fire is needed to keep woody plants from taking over.

Chris White of the ESA Management Team was the Burn Boss, and five other staff with burn training participated. A water pump was installed in Fanshawe Reservoir and a couple hundred metres of hose were stretched out to the prairie. Everything within a few metres of the edge of the prairie was hosed down to create a fire break. All safety protocols were followed. The London Fire Department sent a fire truck to act as back-up, but they did not stay as they were more than satisfied with the precautions set in place (pump, hose, safety equipment, team, etc.). The burn took about six hours from set up, to burn, to hose down afterwards.

Thanks go out to TD Friends of the Environment Foundation for funding the burn equipment including pump, hose, drip torches, and hose drying rack.

Contact: Cathy Quinlan, Terrestrial Biologist

## Hunting Policies & Designated Hunting Areas

Reports from Ontario Provincial Police (OPP) in the UTRCA watershed indicate a rise in the number of deer related vehicle collisions (DRC). In 2007, Perth County OPP reported approximately 155 DRC, and Middlesex County OPP documented approximately 378 DRC.

The UTRCA recognizes that the high deer population may be a liability to motorists and does its part as a watershed landowner to reduce their numbers by providing recreational hunting opportunities on approved lands. The Authority follows Ministry

of Natural Resources (MNR) protocols and regulations regarding hunting times for specific game ([www.mnr.gov.on.ca](http://www.mnr.gov.on.ca)).

The UTRCA currently offers hunting opportunities on eight properties for white-tailed deer and on one property for wild turkey. Hunting is allowed by a land use recreational permit only, for both shotgun and archery hunts. Hunting on UTRCA lands without a permit is considered trespassing and charges may be laid.

The decision to consider opening a new property to hunting opportunities is based on input from adjacent landowners, hunters, non-hunting user groups and the municipality where the lands are located. UTRCA staff assess the property using the Authority's 'Hunting Criteria Check List'. The check list considers factors such as risk to property users (both hunters and non-hunters) and risk to adjacent neighbouring properties. Operational concerns such as safe patron access, efficient vehicle parking, ease of sign posting, and enforcement are also rated.

If the property passes the primary check list review, a land use survey is sent to adjacent landowners, municipalities and community groups. This additional information helps the UTRCA Board of Directors decide whether or not to open the property to recreational hunting.

The properties where the UTRCA currently offers hunting opportunities are:

- Oxford County – one area in Wildwood CA, one area in Pittock CA
- Perth County – two areas in Wildwood CA, one area in Ellice Swamp, one area in Gads Hill Swamp
- Middlesex County – one area in Dorchester Swamp, one area in Ivey Tract

Properties approved for hunting are posted with appropriate signage and are closed to other recreational activities (e.g. hiking, biking) during the hunting periods. UTRCA staff patrol the properties during the hunting seasons to ensure non-permit holders are not hunting or trespassing, and to ensure safe hunting practices are being followed.

Any hunters who hold current licenses and applicable permits may contact the UTRCA and be added to the hunter contact list, which presently includes approximately 300 names. Each year, the UTRCA provides information on hunting opportunities to everyone on this list. Interested hunters enter a draw to win one of approximately 80 permits for recreational hunting at designated UTRCA properties.

Hunters who have provided the required information and fee are issued a land use recreational permit. All UTRCA permit holders must provide proof of liability insurance valid for the time period of their hunting activities.

When requested, the UTRCA also provides an 'enter to retrieve game' access permit to any hunters who hunt adjacent to lands owned by the Authority. This permit gives the hunters permission to cross onto UTRCA land to retrieve their game (all applicable information must be provided).

At the end of deer hunting season, the UTRCA sends out a deer hunter questionnaire to everyone who received a land use recreational permit to hunt. The survey collects information on wildlife sightings, deer taken, non-permitted hunter encounters (if any), and enforcement occurrences (i.e. MNR Conservation Officer, OPP, or UTRCA Provincial Offenses Act Officer).

*Contact: Karen Wilkie, Lands & Facilities Resource Technician*

## On the Calendar

Upcoming events are posted at [www.thamesriver.on.ca](http://www.thamesriver.on.ca)

- May 18: Fanshawe Optimist Fireworks (raindate May 24)
- May 26-29: Oxford Children's Water Festival, Pittock CA
- June 11: Downie Optimist Water Safety Day, St. Pauls
- June 13: Woodstock Trails Day, Pittock CA
- June 13-14: Civil War Re-enactment, Wildwood CA
- June 20: Trails Day, Fanshawe CA
- July 1: Woodstock Canada Day Celebration, Pittock CA
- July 11: Catch & Release Family Fishing Derby, Wildwood CA
- July 11: Family Fishing Day, Fanshawe CA

## On the Agenda

The following items will be presented at the UTRCA Board of Directors meeting on May 26<sup>th</sup>, 2009. Board meeting minutes are posted on the Downloads section of our website, at [www.thamesriver.on.ca](http://www.thamesriver.on.ca).

- Administration and Enforcement - Section 28 Report
- Public Sector Accounting Board (PSAB 3150)
- Building Committee Update
- Thames Centre Sewage Outlet Update

*Contact: Susan Shivas, Executive Assistant*