



ENVIRONMENT COMMITTEE AGENDA

Monday, April 28, 2025

10:00 AM

Meetings are broadcasted, recorded and livestreamed, and are available on the Internet. All meetings are hybrid format (both electronic platform and in-person at the Town Hall, Menesetung Room)

If you wish to attend this hybrid meeting by audio or video conference please contact Andrea Rowntree at arowntree@goderich.ca or 519-524-8344 Ext. 204, Town Hall, Goderich

Pages

1. CALL TO ORDER

2. UNANIMOUS MOTION

Moved by: _____

Seconded by: _____

That the Environment Committee hereby unanimously consents to discussing and considering the following at the April 28, 2025, Special Environment Committee meeting at 10 AM;

1. Ecological Health Assessment - Maitland Woods, River Valley, and Shoreline Bluffs

3. DISCLOSURE OF PECUNIARY INTEREST

4. CONFIRMATION OF THE AGENDA AND ADOPTION OF MINUTES

4.1 Approval of the Agenda

Moved by: _____

Seconded by: _____

That the Environment Committee hereby accepts the April 28, 2025, Agenda, as presented.

5. DELEGATIONS AND PRESENTATIONS

- 5.1 Erin Gouthro and Phil Beard, Maitland Valley Conservation Authority re: Ecological Health Assessment - Maitland Woods, River Valley, and Shoreline Bluffs

Moved by: _____

Seconded by: _____

That the Environment Committee receive the Ecological Health Assessment of the Maitland Woods, River Valley and Shoreline Bluffs, provided by the Maitland Valley Conservation Authority, for information

And further that the Environment Committee provide a report to Goderich Town Council that recommends:

1. That the Town's Asset Management/Environmental Services Manager work with MVCA staff to create a Terms of Reference/Scope of Work for a Request For Proposal on the Ecological Health Assessment of the Maitland Woods, River Valley, and Shoreline Bluffs within the Town of Goderich boundaries;
2. And that the above-noted Terms of Reference/Scope of Work be submitted to the Environment Committee for review and further recommendation to Council.

6. STAFF REPORTS

7. CORRESPONDENCE RECEIVED AND COPIED FOR WHICH THE DIRECTION OF THE COMMITTEE IS REQUIRED

8. CORRESPONDENCE RECEIVED FOR INFORMATION

9. CORRESPONDENCE RECEIVED AND RECOMMENDED ACTION NOTED

10. UNFINISHED BUSINESS

11. NEW BUSINESS

12. WORKPLAN

13. PUBLIC FORUM

14. ADJOURNMENT

Moved by: _____

Seconded by: _____

That the Environment Committee does now adjourn at ____ AM to meet again at the next Regular Meeting scheduled for June 16, 2025, at 10 AM.

STUDY AREA

The Maitland River Watershed is located in the lee of Lake Huron. It includes the drainage areas of the Maitland, Nine Mile and Eighteen Mile Rivers, and other small watersheds along the Lake Huron shore. With a moderate climate and gentle topography the area is largely composed of prime agricultural lands.

Once the Maitland River Watershed (outlined below), was an expanse of maple-beech forests. By the early 1900's over harvesting caused a resource collapse. Recovering forests became dominated by ash trees.

Remaining forests now face new threats. But forests are a foundation of local prosperity providing revenue to landowners as well as places for recreation. Forests are also a link in natural ecosystems. They support vast amounts of biodiversity, help clean air and water and buffer the affects of climate change.

2020 Forest Cover



WHY ASSESS FORESTS?

We cannot steward and manage what we don't know. The last forest study was completed in 2000 with the recommendation forests be consistently monitored. Since that time disturbances to local forests have accelerated.

The 2021-2022 study provides an updated forest assessment dataset on the public and private forests in the Maitland River Watershed.

WHAT MAKES A FOREST HEALTHY?

Healthy forests are intact environments with minimal disturbances; have structural diversity and lots of different kinds of native plants and animals.

INDICATORS and METHODOLOGY

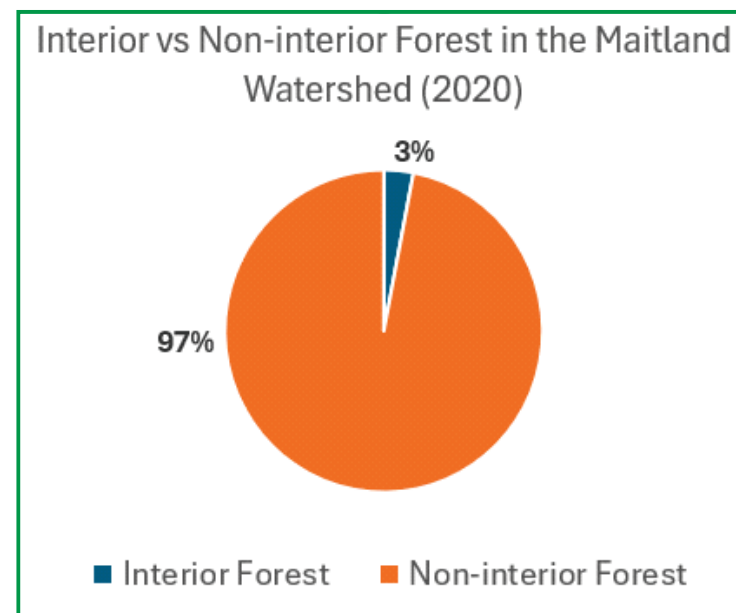
Maitland Conservation staff and volunteers gathered data on the following indicators at more than 200 plots across the watershed. We looked at:

- Amount of forest remaining including size, shape and connection to other forests
- Tree size, height and species
- Tree health and mortality
- Canopy closure
- Forest plants
- Disturbances such as harvest, disease, insects and wind damage

To survey sites, staff used the Vegetation Sampling Protocol method, developed by Dr. Danijela Puric-Mladenovic from the Daniels Faculty of Architecture, Landscape and Design at the University of Toronto.

FOREST RESOURCE CHARACTERISTICS

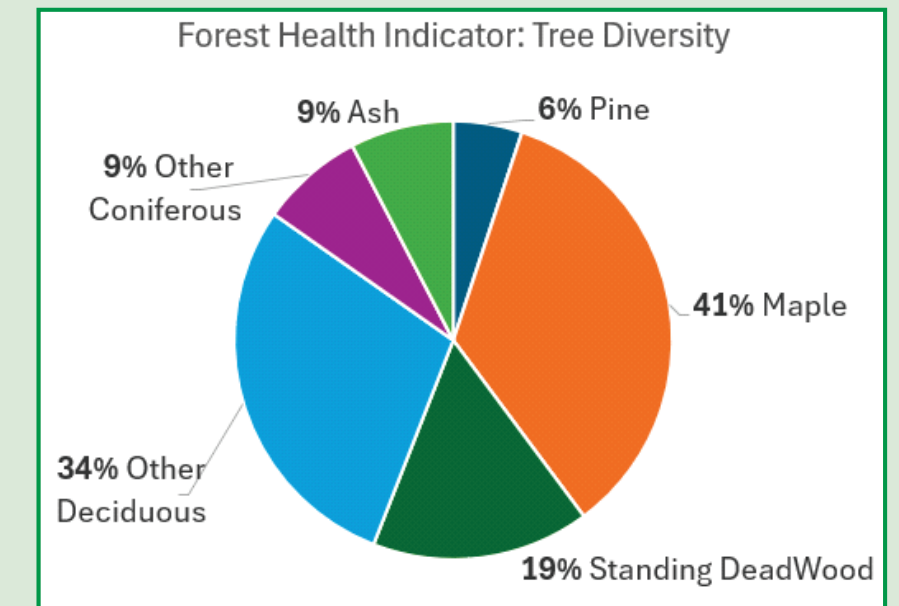
- In the Maitland River watershed 57,678 ha of forest remain (equal to 16.09 % of the land base)
- 206.87 ha of forested land was lost in the watershed from 2015 to 2020.



- Forest cover is highest in the Lower Maitland River sub-watershed (24.3 %) and the lowest in the Eighteen Mile River sub-watershed (2 %)
- Conversion to agricultural lands is the leading cause of forest lost in the area

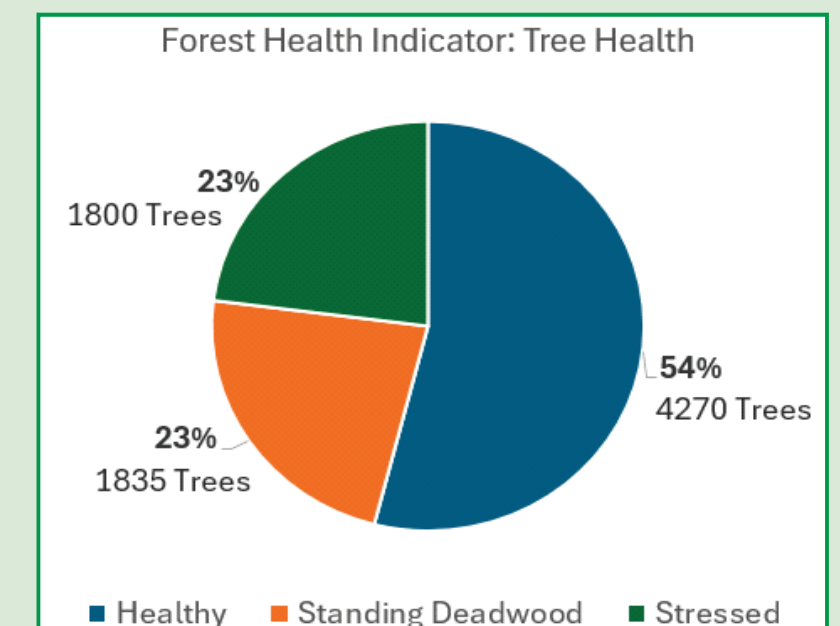
FOREST STRUCTURE and COMPOSITION

- Maple is the most common remaining tree species
- The variety of tree species in area forests are low and declining
- 1 in 5 trees are dead



TREE HEALTH and MORTALITY

- EAB is the leading cause of tree mortality in the Maitland Valley. The mortality rate in ash is almost 100 %.
- EAB is an invasive pest that originated in Asia and was brought to North America through international trade. Forests with ash are under severe stress.

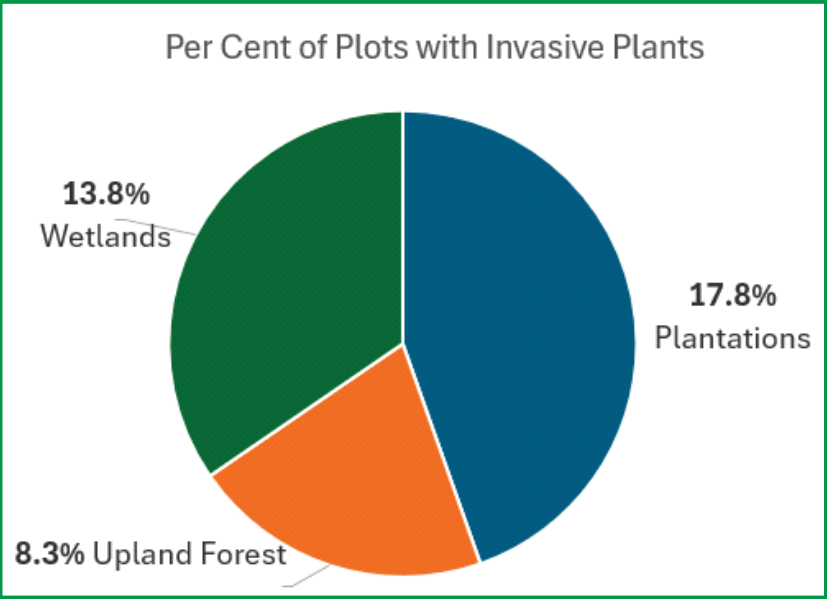


FOREST UNDERSTORY

- Biodiversity in the plant life growing beneath the forest canopy is declining.
- The best understory communities were in upland private forests and swamps.
- Understory health is important for forest health as understory plants provide important nutrients that seedlings need to survive. Good understories support tree nursery habitat and help facilitate canopy diversity.

INVASIVE PLANTS

- 13% of plots had one or more invasive plants
- Invasive plants need management particularly in disturbed forests and plantations
- Invasive plants were observed the least in less disturbed upland forest sites



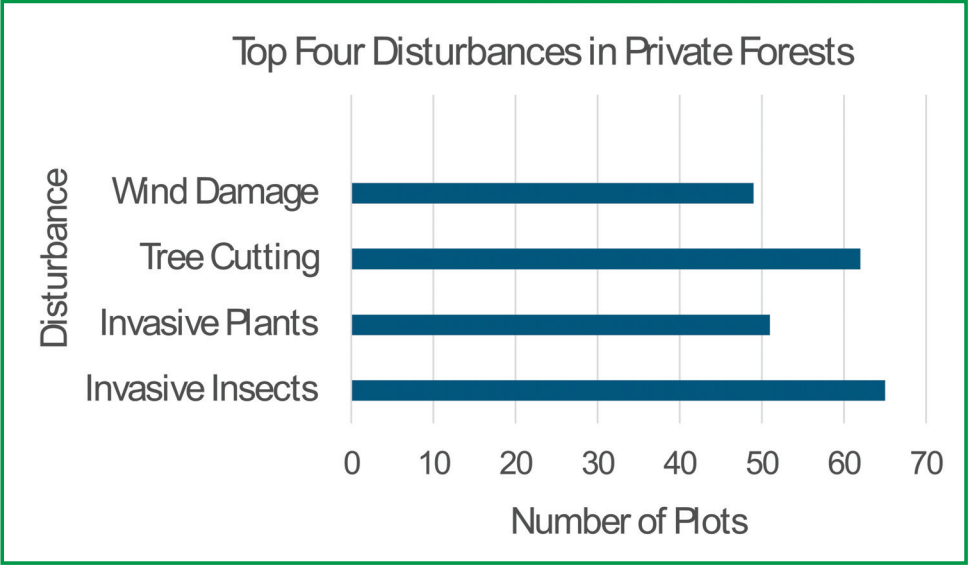
Common invasive plants:

- ▶ Garlic Mustard
- ▶ Common Buckthorn
- ▶ Glossy Buckthorn
- ▶ Reed Canary Grass



DISTURBANCES

- The main disturbance in 2021 - 2022 was insects and pests
- All plots had at least one disturbance
- Most plots had three or more disturbances



NEXT STEPS

- Additional research is needed to answer questions raised by the assessment. Maitland Conservation is working to develop partnerships with science experts to identify how landowners can best restore the health and resiliency of forests. We are also seeking input from landowners on how to best provide support for effective stewardship.
- We are implementing monitoring to ensure forests can be managed for incoming invasive pests and disease. In 2024 we will participate in a pilot project to monitor Hemlock Woolly Adelgid. In addition, ash land restoration will get underway in response to EAB.
- Landowners can have a big impact on forest health. Walk your woodlot on a regular basis and look for signs of disturbance. Remove invasive plants from woodlots. Develop a Forest Management Plan with a Registered Professional Forester. Check our website for information on programs that support tree planting and forest health improvement.

Questions? Contact Maitland Conservation staff:

Erin Gouthro, Watershed Ecologist: egouthro@mvca.on.ca

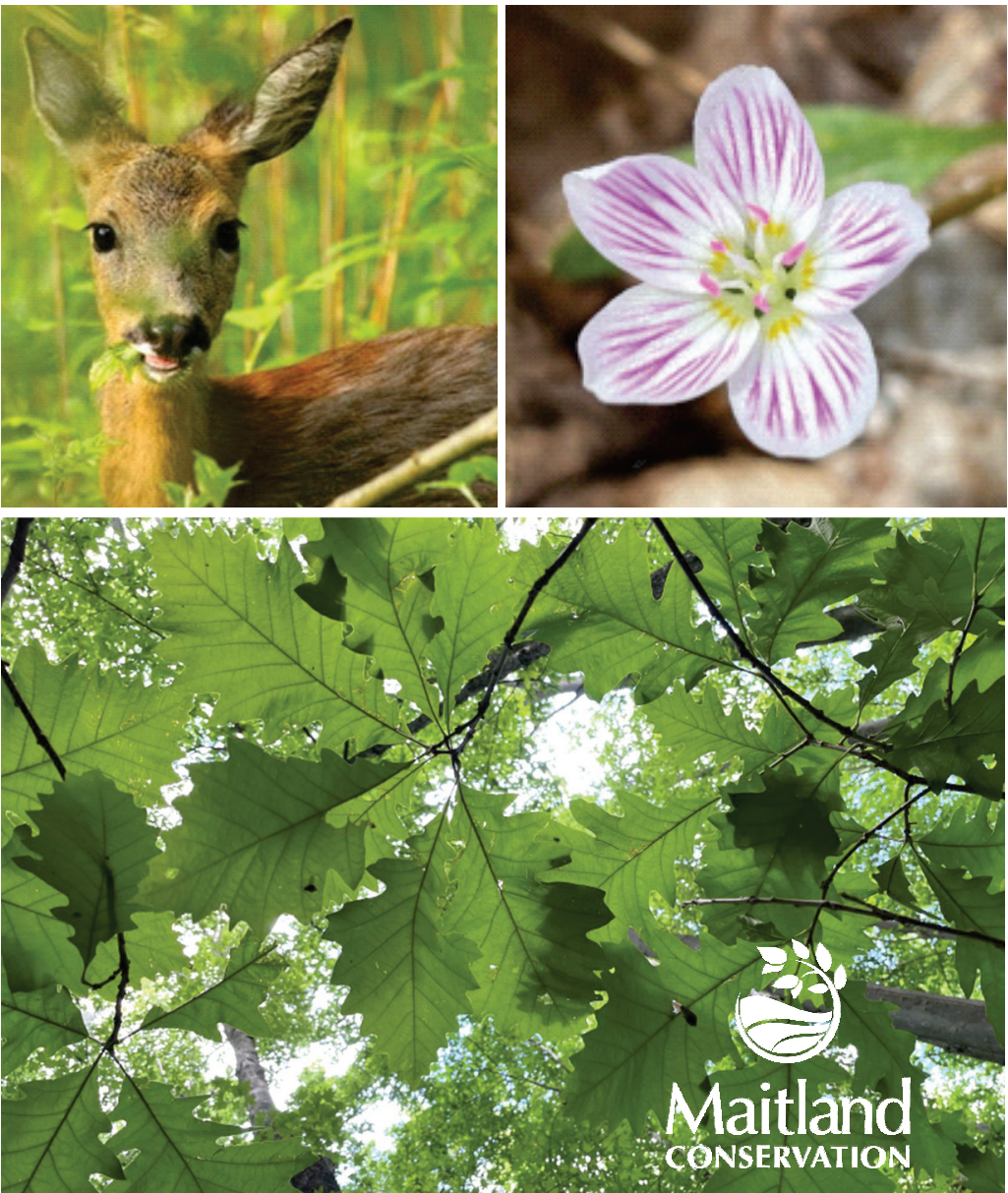
Emily Shaw, Ecological Monitoring Assistant: foresthealth@mvca.on.ca

The Forest Health Study was supported by:



Forest Health Study 2021 - 2022

REPORT SUMMARY



Forests are struggling reveals Forest Health study

One in five trees are dead and invasive plants and insects are taking their toll but education can help landowners encourage forest regeneration

By Lisa Boonstoppel-Pot

Forest health is a big issue, not just because trees are valuable but because forests are homes to wildlife, offer recreational and hunting opportunities to humans and are, “absolutely beautiful” says Erin Gouthro, who has been known to hug a tree or two.

“Forest products are an important way to diversify income on the farm and they also create resilience in the landscape by channeling water into the ground,” said Gouthro, a watershed ecologist for the Maitland Valley Conservation Authority. “Their deep root systems make them the most effective plant in the landscape to do that. Plus, mature trees can transfer thousands of gallons of water into the atmosphere on a hot summer’s day which gives us oxygen and stabilizes our local climate.”

Globally, forests are in decline — a trend which can be found even on our own doorsteps. After a century of over exploitation, forests within the Maitland Valley were left devastated and the land was left without protection from wind and water. People suffered without the cultural and economic benefits they depended on from forests. By the 1930s, a major effort began to protect remaining forests and replant lands. “One hundred years later, our remnant forests still face enormous challenges,” said Gouthro.

To understand their current condition and evaluate progress and identify problems, a Forest Health study was done. The results reflected the current global trend. Local forests are fragile and precariously perched with respect to their health. One in five trees in the forests are dead.

“That is 20 per cent of our trees gone,” said Gouthro. The loss of ash trees to the Emerald Ash Borer is well-known but beech trees are dying due to beech bark disease and have shown a 95 per cent decrease in the sample set since the last survey done in 2000. Other forest species, such as hickory and ironwood, while not declining, are not increasing either.

Invasive pests and insects, invasive plants, woodcutting and storm events are the top four disturbances in forests.

Maple trees are abundant but they are

the “last man standing.” As a valuable tree, there will be economic pressure to cut them and in the broader scale, forests dominated by one species are not diversified enough. “We need

management to enrich forests with species that should be common. Every upland forest should have a complement of bur oak, cherry, basswood and other native trees, for instance,” said Gouthro.



Doug and Cathy Walker stand in front of the woodlot that has provided them with income when their farm needed it but now serves as a location for joy and discovery. They are now keen to conserve the bush as a legacy for the next generation and took part in the Forest Health study to learn how healthy their bush is and what they can do to improve it.

Even maples have their struggles. Despite being common, some woodlots are seeing few to no young sugar maples in the understory. “We are seeing plots with no maple regeneration.”

It’s a mystery, and a concerning one. Gouthro wonders if there are too few mature trees to cast seed. Are maples being cut too young? She explained that the cycle from tree germination to the tree becoming an adult is 150 years. “That is two human lifetimes,” she said. “A tree that started growing in 1850 is just reaching adulthood now.”

She encourages farmers with woodlots to check on their forest regeneration, to see if maples and other healthy tree species are sprouting. If they only see ash or buckthorn regeneration, additional management steps are required to preserve the health of the woodlot.

“They could consider a planting program to enrich the forest with other

native trees,” advised Gouthro.

Size wise, forests dominated the landscape before Europeans settled. After settlement, forests declined to about 10 per cent, with conservation and replanting forests recovered to 18 per cent of that original forest cover. Since then, the watershed has lost an additional 400 acres decreasing forest cover to 16 per cent.

Ultimately, the protection and stewardship of forests requires a cultural shift. When it comes to harvesting wood, forests have been seen as a “golden goose that keeps laying golden eggs.” The Forest Health study shows forests are under intense pressure from multiple disturbances happening all at once which is pushing some woodlots to becoming unhealthy and in need of enhanced care and restoration. The lesson forests are teaching is that they aren’t inexhaustible and we have moved beyond a frontier landscape. “Our relationship with them

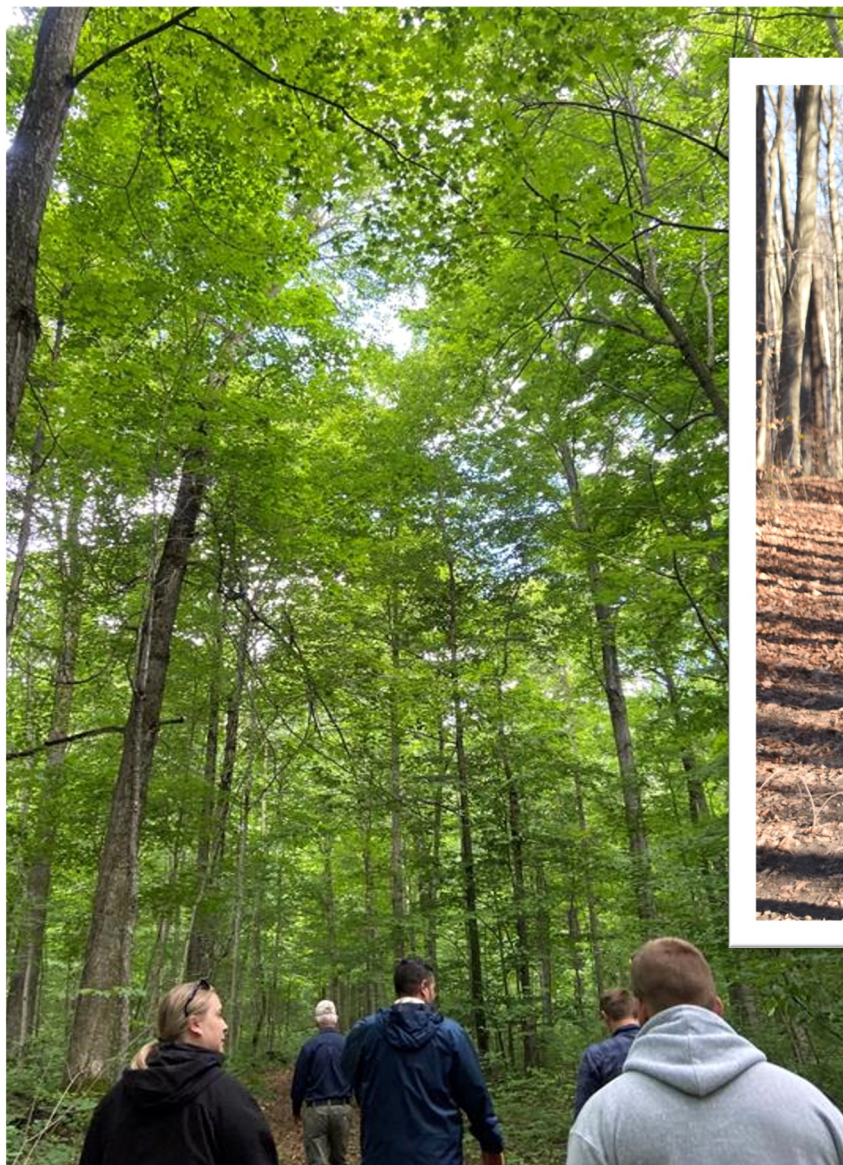
needs to mirror this,” said Gouthro.

Landowners could take the stress and pressure off forest by harvesting less often, and leaving a few trees to grow to maturity to encourage forest regeneration.

“That’s why this study is so important and valuable,” said Gouthro. “It aims to increase knowledge at the local level and empower landowners to understand the conditions of their forest so they can see the bigger picture and make good decisions for their forest.”

It’s hard to manage what you don’t know and without health assessment and monitoring information, forest management has fallen into a “one-size fits all” approach. Sharing knowledge from this study is high on Gouthro’s list and with the backing of good science from the Forest Health Study, she is excited to share it with landowners.

“The future of our forests is in the hands of our landowners,” said Gouthro. “It’s critically important they have relevant information. This study has been well



Forests provide clean air, aid in soil and water health and are home to Ontario’s wildlife which is why Erin Gouthro, a watershed ecologist with the Maitland Valley Conservation Authority, was eager to spearhead a Forest Health Study which has revealed some disturbing statistics about the health of our forests.

received and landowners I have spoken to found the study useful because it builds knowledge and understanding. It think it gives them confidence to know what they have observed is real and provides a foundation on which to ask questions and act.”

One of those owners are Doug and Cathy Walker who, when told they had a very healthy woodlot, were kind of awakened to the treasure they had on their farm. “We had not really realized that before,” said Cathy, who walks on trails through the bush every day, enjoying the thriving understory and the “mother trees” that were left after logging.

The forest has served many purposes for the Walkers over the years. During hard times on the farm, they did log the bush for income and thankfully, had the luck to hire loggers who respected the woodlot and could see a longer vision for it. One logger removed all the ash and another preserved older maples so they could grow into full maturity.

“As we got older and the farming was more profitable, we could turn our attention to sustainability. Plus, at our age, you start to think about your legacy for future generations,” said Cathy when asked why they want to conserve and preserve their woodlot. “In the last 10 years, we have seen the bush in a different light.” Through reading and

education from the MVCA, the Walkers learned to stay on trails so as not to disturb the canopy. They are protective of the mature trees which will repopulate the forests. And their biggest piece of advice is to choose loggers carefully. “I don’t feel we have the right to say to young people they shouldn’t log their bush. We did it when money was tight. What I would say is choose your loggers carefully. We have seen examples of woodlots that were decimated. The loggers took everything and left huge ruts up and down which caused erosion. Those areas don’t recover and invasive plants move in.”

Cathy said woodlots are an investment for the long term in terms of income, but also in terms of lifestyle. “You need to take the long view and recognize there is a generation that will follow you who will benefit from your woodlot in many ways. One is logging. The other is to enjoy the trees and wildlife. We have an obligation to save trees and wildlife,” added Cathy.

The MVCA continues to do its part by improving the health of forests owned by Maitland Valley. These forests are monitored and used as demonstration sites for forest health actions. MVCA also has a forester working with landowners to increase forest cover by planting trees in the watershed. Funds provided by the Maitland Conservation

Foundation and the John Hindmarsh Environmental Trust Fund have been essential in getting more trees into the ground, as well as supporting the Forest health Study.

Funds may also be used to develop forest management plans to help landowners get their forests properly marked. Landowners can take action themselves by enriching their forest by planting diverse, native species. They can take advantage of tree and shrub order opportunities for spring and fall tree plantings. The MVCA also provides expertise and funds for restoration projects such as windbreaks, buffers and reforestation on a cost-share basis.

Gouthro also recommends that landowners be careful about introducing invasive plant species to their forests and to protect spring ephemerals (trilliums, trout lily, bloodroot, etc) which are under stress but have a vital role in providing nitrogen to tree seedlings.

Forest health is everyone’s responsibility and data from the Forest Health Study provides the science to inform landowners about the current condition of our forests and what work needs to be done. “Ultimately the Forest Health Study is about leadership,” concluded Gouthro. “It’s about us providing information to the community so they can use it to improve the health of their forests.” □



Ecologist Erin Gouthro of the Maitland Valley Conservation Authority walks with Stewart Lockie, MVCA’s Conservation Areas Coordinator, examining the trees and explaining the benefits trees make to the landscape. Gouthro is sharing knowledge about the status of forests in the MVCA watershed which were gleaned from the recent Forest Health study.



Thursday April 17, 2025

Angela Rowntree
The Town of Goderich
57 West Street
Goderich, ON
N7A 2K5

Attn: Environment Committee, Town of Goderich

Presentation Outline

Meeting April 28th at 10:00 am
Special Environment Committee Meeting

As per the motion moved by Councillor Petrie and seconded by Councillor Kelly to refer the Ecological Health Assessment- Maitland Woods, River Valley and Shoreline Bluffs presentation to the Environment Committee for consideration in order to make recommendation to Council, Maitland Conservation will present the following information:

1. Background and need to consider an ecological health assessment approach
2. What the ecological health assessment is
3. Outcomes and benefits
4. Examples of Application and function in ecological health planning
5. Next steps to actioning

The presentation is expected to take 20 to 30 minutes with opportunity for discussion and questions.