# The Freshwater Connection

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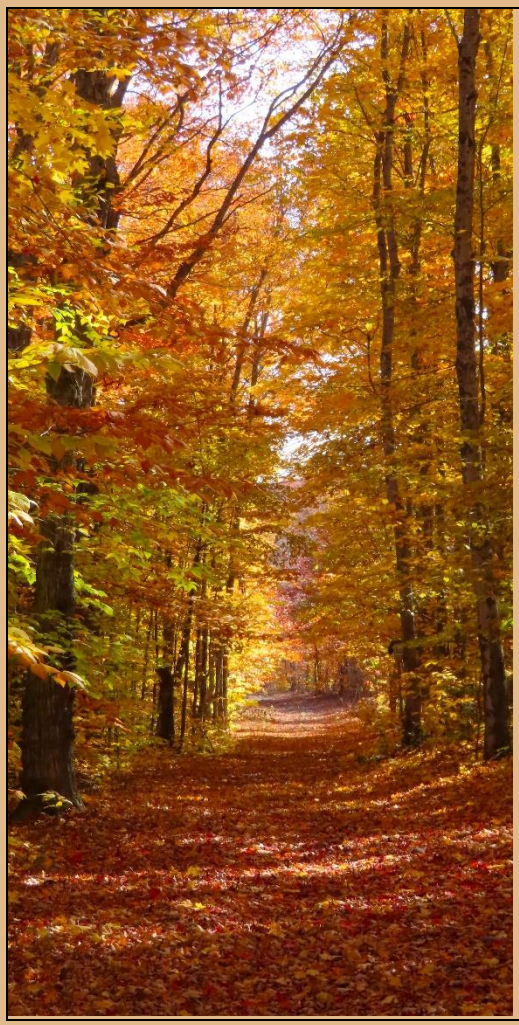
Managed Forest Tax Incentive
ALUS Farm Conservation
Freshwater Jellyfish



## The Managed Forest Tax Incentive Program (MFTIP)

By Phil Riley

The MFTIP is an excellent program that enables qualified woodlot owners to save 75% of their taxes on the wooded proportion of their property. In return, landowners promise to manage their woodlots sustainably, develop a set of objectives (such as trails, protect and maintain the woodlot, etc.) and can harvest timber using Good Forestry Program guidelines. In Ontario approximately 10% of all forested woodlots are in private ownership leaving 90% of private lands NOT enrolled in the MFTIP.

A MFTIP stewardship Plan extends for a period of 10 years. A new plan must be submitted before June 30th of each year to qualify for the following years' taxation. After five years a landowner must submit a record of work completed in the woodlot according to the Plan to stay enrolled in the program. After ten years a new updated plan must be written to continue enrolment.

To be eligible for a MFTIP the following criteria must be met:

-property is in Ontario.
-owned by a Canadian citizen or permanent resident, a Canadian corporation, partnership or trust or a conservation authority.
-the woodlot must be at least 9.88 acres in area excluding buildings or residence. -must include a minimum number of trees on each acre.

MFTIP Stewardship Plans help landowners learn and to appreciate the economic, aesthetic and environmental values of their woodlot. In addition, MFTIPs help to preserve woodlands for future generations, protect critical habitat and food sources for Species at Risk and other wildlife as well as protect riparian resources, air and water quality.

In addition to MFTIPs there is a similar program called Conservation Land Tax Incentive Program which provides a 100% property tax exemption for people willing to not utilize their forested land other than for passive uses; does not allow timber cutting (except for minimal personal usage). Program must be reapplied for each year.

If you have any questions about MFTIPs please contact a Managed Forest Tax Preparer (MFPA). Further information is available online.

# Voluntary Farm Conservation Initiatives
# Alternative Land Use Services (ALUS)

By Daniel Featherstone

We're excited to share how ALUS (Alternative Land Use Services) partners with farmers across Canada to create positive impacts on our environment. ALUS works closely with agricultural producers to enhance ecosystem services, from cleaner air and water to healthier habitats for wildlife. Here's how ALUS collaborates with farmers to create a more sustainable future.

## What is ALUS?

ALUS is a community-based program that provides support and funding to farmers who volunteer to implement sustainable practices on their land. These practices improve water quality, reduce soil erosion, increase biodiversity, and contribute to climate resilience. The goal of ALUS is to reward farmers for their efforts in land stewardship, making it easier for them to incorporate beneficial practices that conserve natural features while sustaining agricultural productivity.

## How ALUS Works with Farmers

1. Customized Plans for Each Farm ALUS understands that every farm is unique, so each farmer's plan is tailored to the specific needs of their land. This might involve planting cover crops, creating buffer zones along waterways, or restoring wetlands. ALUS field agents work

alongside farmers to assess the land, discuss conservation goals, and determine the best practices to implement

2. Financial Incentives and Technical Support Through ALUS, farmers receive financial incentives to help cover the costs of implementing new practices, as well as ongoing payments to recognize their commitment to environmental stewardship. ALUS also provides technical support, helping farmers access the expertise they need to achieve the best results.

3. Building Environmental Resilience By supporting practices that improve soil health, increase carbon sequestration, and enhance water management, ALUS helps farms become more resilient to climate change.

4. A Community-Based Approach ALUS operates on a local level, with community advisory councils made up of local leaders, farmers, and other stakeholders. These councils guide ALUS programs, ensuring that projects align with community needs and environmental goals.

5. Success Stories and Impact ALUS farmers are seeing significant benefits from their projects. For example, restoring wetlands on farms has reduced flooding downstream, and planting native grasses has improved soil quality, reduced erosion, and created habitats for pollinators and other wildlife. Together, these efforts make a tangible difference in rural and urban communities alike.

## Why ALUS Matters

Agricultural land spans a significant portion of our landscape, and the way we manage it profoundly influences our environment. By adopting solutions that support both natural ecosystems and sustainable farming practices, we foster a landscape that benefits our entire region. Agriculture and nature are both essential to our region's identity, and striking this balance strengthens our community and preserves our shared heritage.

# Central Algoma – Warm Autumn Lake Water
# Freshwater Jellyfish - Craspedacusta sowerbii

With the warm autumn lake water Central Algoma cottagers have been reporting the floating medusa stage of Freshwater Jellyfish in this fall. Freshwater Jellyfish is not native to Canada and is an invasive species. The jellyfish consume zooplankton and are a concern. Their tentacles sting and paralyze zooplankton but are not capable of piercing mammal skin.

Photo Credit: Sarah Plouffe

In Ontario view distribution maps at: www.eddmaps.org/Ontario

Photograph and report sightings on **inaturalist** to https://www.inaturalist.org/ or www.eddmaps.org

# How the Peach Blossom Jellyfish is spreading across North America



The Peach Blossom Jellyfish (Craspedacusta sowerbii) is native to China and an invasive species in Canada. (Florian Lüskow), Author provided. Published: September 21, 2023, 6.07pm EDT. AuthorFlorian Lüskow, Postdoctoral research fellow, Faculty of Science, University of British Columbia

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Invasive species are a real problem in Canada, and one species in particular, the freshwater jellyfish species of the genus Craspedacusta sowerbii — C. sowerbii, or the Peach Blossom Jellyfish — are as widespread as they are also poorly understood.

There is anecdotal evidence that the invasive jellyfish had been present in British Columbia lakes and ponds for decades. Still, compiled data suggest that the number of sightings has increased considerably since the year 2000.

Unfortunately, however, we still have very limited information about the range of its presence in Canada, how it got here, how it spreads and what its essential impact on freshwater ecosystems across Canada may be. No mitigation and management strategy has yet been developed and many fundamental questions about the species ecology are unanswered.

## Climate change and species introductions

The Craspedacusta species is a subtropical but adaptable organism which favours moderate- to high-water temperatures. While cold water temperatures have acted as a historical check on their growth and expansion, warming temperatures around the globe are helping to expand their territory.

Recent increases in sightings of C. sowerbii in B.C., across Canada and worldwide are therefore indicative of an expanding suitable habitat for the jellyfish as a result of global warming, alongside a growing public awareness and increased observational efforts leading to more effective recognition.

Current modelling shows that the Peach Blossom Jellyfish will expand to ever higher latitudes in both hemispheres over this century and be present in freshwater systems longer in the year from spring to late autumn.

Unfortunately, the species has rarely been the focus of research. Currently, as far as I am aware, only biological oceanographer Evgeny Pakhomov and I are now researching the species and its significance for Canada.

Our research shows that this trend is not restricted to B.C. but is expected to happen in other provinces such as Alberta, Ontario and Québec too. Craspedacusta sowerbii irregularly occurs in the Great Lakes area on both sides of the Canada-United States border since the 1930s.

## Small invader, unpredictable occurrence

The current state of provincial monitoring and reporting on this species is, unfortunately, lacklustre.

While a number of tools and data have been shown to be effective in monitoring populations in North America and Europe, no province currently includes these in annual reports and statistics.

For example, the Invasive Species Council of British Columbia's annual report does not conduct large-scale data synthesis on the Peach Blossom Jellyfish. As a result of this lack of data, no evidence of seasonal or long-term population trends exists.

Compounding these difficulties is the fact that the C. sowerbii is known as a species complex, meaning that there are likely several species going undetected under the same name. The nuances of these species distinctions are not only of academic interest, but also hold the key to identifying how these species move across and between ecosystems.

Understanding all of these aspects is crucial for us to start seriously thinking about mitigation and management strategies.

## We cannot manage what we don't understand

While the species is harmless to humans, it is unknown how the freshwater jellyfish interact with other lake and pond inhabitants. There is evidence that these jellyfish are a potentially rich source of food for juvenile fish and they could compete with other native species as food.

Meanwhile, not enough up-to-date information is available about the various life stages of the jellyfish and the particular impacts of each stage. Indeed, while polyps and other juvenile stages are present year-round, their exact locations, abundance and activity levels are entirely unknown.

While governmental reporting infrastructure does exist in some provinces and territories, large-scale data have not yet been analyzed. Efforts are hampered by

the lack of inclusion of the Peach Blossom Jellyfish in regular monitoring programs.

We hope to stimulate interest and motivation to better understand this problem at all levels from federal to provincial governments and local municipalities.

This lack of data, and effort by provinces to collect them, has serious consequences for Canada's ecological security and limits the effectiveness of any management or adaptation plan in the years to come.

## Become a member

Your annual membership fee will provide a base budget for work of CAFC and demonstrate the commitment of local partners working towards a common goal. A strong diverse group is an essential component in meeting the goals of the Central Algoma Region.

**Support us at** https://www.centralalgomafreshwatercoalition.ca