The Freshwater Connection



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Sweet Home Algoma By Bob Kellum

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Places, like the people who inhabit them, are unique. Place is the foundation for who we are and what we do. A thriving sense of place sets us apart; it brings visitors, retains residents and enriches lives. But a sense of place does not exist in a vacuum; it is a partnership that returns what we put into it, a partnership that begs attention, interaction and commitment.

Similarly, place is diminished when taken for granted or given only cursory attention. It is unmoved by pretense and un-swayed by intention. Place is a literal reflection of ourselves and inseparable from who we are being. How we treat place is how we treat ourselves. Literally engaging with soil, water, flora and fauna, and the endless dynamics that shape them, gives us perspective available by no other means, a perspective that would have us account for our actions and value our credibility. It is a perspective that would guide our every move and reward us for the lessons we glean.

I say these things out of my own experience of guidance and reward. I cannot get enough of the place I call home because I seek answers to questions I have not yet learned to ask. The place we

call home, along with its people and its history, call us to be our best selves, never saying "good enough" and forever striving to leave it better than we found it.

There is not one among us who would not make Algoma a better place. In that quest I encourage the reader to look for insight and inspiration where it resides: the place we call home. Bob Kellum



Lake Huron - Lakewide Action and Management Plan (LAMP)

Reference - From the Lake Huron LAMP https://www.binational.net/wp-content/uploads/2018/04/2017-2021 Lake Huron LAMP.pdf

The Lake Huron Lakewide Action and Management Plan (LAMP) identifies five major threats to water quality in Lake Huron

- Chemical Contaminants.
- Nutrient and Bacterial Pollution,
- Loss of Habitat and Native Species,
- Invasive Species, Climate Change.

Locally in Central Algoma - the major threats are contaminated sediments in the St Mary's River, livestock access to rivers, riverbank erosion, faulty septic systems, loss and degradation of streams and wetlands, lack of protection for coastal wetlands and invasive species.

ACTIVITIES THAT EVERYONE CAN TAKE

Chemical Contaminants - Chemical pollution occurs in many ways including atmospheric deposition; point source; non-point source and existing contaminated bottom sediments. Numerous programs have been established in the last several decades and as a result in the Lake Huron basin taken from air, sediment, fish and wildlife samples are declining.

ACTIVITIES THAT EVERYONE CAN TAKE

The public is encouraged to do its part to prevent chemical contaminants from entering the Lake Huron ecosystem, including watershed streams, lakes, wetlands, and groundwater by undertaking the following actions:

- Follow the 6 R's: rethink, refuse, reduce, reuse, repair, and recycle.
- Take household hazardous materials to hazardous waste collection depots.
- Never burn garbage in barrels, open pits, or outdoor fireplaces, to prevent the release of toxic compounds like dioxins, mercury, lead, etc.
- Use pharmaceutical take-back programs to properly dispose of unused or expired medication.
- Choose eco-friendly household cleaning and personal care products.
- Use more environmentally friendly asphalt-based sealants as an alternative to those with coal tar, which contain toxic substances.
- Consider using natural pest-control methods not toxic chemicals; and
- Always follow the recommendations found in provincial and state guides/advisories to eating sport fish, especially children and pregnant women.

Nutrients and Bacterial Pollution

Nutrient and bacterial pollution (phosphorus and nitrogen) can lead to nuisance and harmful algal blooms and bacterial pollution can make swimming areas unsafe. Sources may include discharges from municipal wastewater facilities (environmental compliance with operating conditions), agricultural operations, malfunctioning septic tanks and commercial fertilizer on lawns.

ACTIVITIES THAT EVERYONE CAN TAKE

Landowners and the public are encouraged to do their part to prevent nutrient and bacterial pollutants from entering groundwater, streams, lakes, wetlands, and Lake Huron by undertaking the following actions:

Choose phosphate-free detergents, soaps, and cleaners - use appropriate amounts.

- Avoid using lawn fertilizers.
- Always pick up pet waste.
- Use natural processes to manage stormwater runoff and reduce the number of impervious surfaces.
- Install a rain barrel and plant a rain garden with native plants, shrubs, and trees so that water soaks into the ground.
- Inspect and pump out your septic system regularly.



- Implement improved septic technologies, including conversion of septic systems to municipal or communal sewage systems.
- Incorporate agricultural best management practices, such as grassed swales, filter and/or buffer strips to control and reduce store stormwater runoff; and
- Keep cattle out of streams; leave a buffer strip to trap nutrient and sediment runoff; and plant a shelter belt.

Loss of Habitat and Native Species

The main factors contributing to the loss of biological diversity are habitat alteration, destruction and fragmentation of habitat, non-native invasive species, climate change and unsustainable shoreline development.

ACTIVITIES THAT EVERYONE CAN TAKE

Protecting and restoring habitats and species involves the coordination of many different agencies, non-governmental organizations, professions, and the pursuit



of management actions by various partners and the public. Here are some suggestions on how to do your part:

- Maintain natural vegetation along the coast and streams.
- Resist the urge to "tidy up" the beach. Natural vegetation and debris serve as habitat.

- Plant native trees and shrubs on your property.
- Get involved with shoreline clean up events.
- Consider working with neighbours, not-for-profit organizations, and municipalities, to restore beach-dune health by installing sand fencing and planting dune grasses.
- Stay on constructed beach and dune paths and avoid trampling the sparse and fragile vegetation in these areas.
- Support and/or volunteer with local conservation authorities, stewardship councils and non-governmental environmental organizations.
- Access shoreline stewardship guides for advice, see https://www.lakehuron.ca/stewardship-plansand-guides; and
- Share your knowledge with your friends, neighbours, cottage renters or even strangers, about the rarity and ecological importance of each of the special shoreline types.

Invasive Species

The introduction, establishment and spread of invasive species are significant threats to water quality and biodiversity. Lamprey, Dreissend mussels, and Round Goby are but a few. Recreational activities can spread invasive species – related to unknowingly transferring eggs of invasive species on watercraft.

ACTIVITIES THAT EVERYONE CAN TAKE

Learn how Canada and the U.S. are contributing to aquatic invasive species science through the work of federal scientists, collaboration with national and international interest groups, and funding of partnership projects.

- Learn how to identify, report, and stop the spread of Phragmites.
- Use non-invasive plants for your yard or garden.



- Clean your boots before you hike in a new area to prevent the spread of weeds, seeds and pathogens.
- Drain and clean your boat before using it on a different body of water.

- Do not move firewood that can harbor forest pests; Do not release aquarium fish and plants, live bait or other exotic animals into the wild.
- Volunteer at a local park to help remove invasive species. Help educate others about the threat.

Climate Change

Impacts from climate change include warming air and water temperatures, changing precipitation patterns, decreased ice coverage and water level fluctuations. These climate-related impacts interact with one another and pose a challenge to management. Climate change adaptive measures are also required to build resilience.

ACTIVITIES THAT EVERYONE CAN TAKE

Personal Climate Change Mitigation Actions

Here are some solutions that you can use to reduce your personal contribution to greenhouse gas emissions:

- Be energy efficient by greening your home. Change your lightbulbs to LED bulbs; turn off the lights and unplug electronics and appliances when not in use; look for ENERGY STAR labels when buying new electronics or appliances; heat and cool smartly; and seal and insulate your home. You will also save money on your electricity bill!
- Choose green power. Switch your energy source to renewable energy such as wind or solar.
- Plant trees! Trees should be native or adapted to the local climate. Trees sequester carbon, helping to remove carbon dioxide and other greenhouse gases from the air.



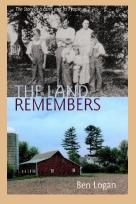
• Choose sustainable transportation. Transportation produces about 14% of global greenhouse gas emissions (IPCC, 2014). Walk, cycle, carpool, or take public transit when you can. Fly less or consider taking buses or trains. Purchase a smaller, fuel efficient, low-greenhouse gas vehicle. Drive efficiently.

- Conserve water. Take shorter showers; install low-flow shower heads and toilets. Use the dishwasher and washing machine only when you have full loads. Wash clothes in cold water.
- Eat locally. Buy organic and locally grown food, as it does not have to travel as far. Avoid buying processed foods.
- Reduce your waste. Garbage buried in landfills produces methane, a potent greenhouse gas. Compost when you can. Recycle paper, plastic, metal, and glass. Buy products with minimal packaging. Buy less stuff.



- Follow the 6 Rs of Sustainability: Rethink, refuse, reduce, reuse, repair, and recycle.
- Get involved and informed! Follow the latest news on climate change, voice your concerns via social media, and spread the word to your family and friends!

Book Review



Ben Logan remebers growing up on a hill country farm in Wisconsin in the 1920s and 30s. He was a student of Aldo Leopolds and was a keen observer of nature as well as people. People looked after themselves, helped their neighbours and contributed to community. – The New York Tmes called it "nostalgia for a world (Logan) makes me wish I'd known."

The Land Remembers - The Story of a Farm and Its People - by Ben Logan, Published by the University of Wisconsin Press

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/