

Tag & Release:

Escarpment Biosphere Conservancy's

Annual *Monarch Butterfly* Festival

WRITTEN & PHOTOGRAPHED
BY SANDRA J. HOWE

“The Monarch Butterfly migrates farther than any other butterfly in North America, all the way to Mexico at the end of the summer.

It is incredible that a small butterfly can fly 4,000 km!”

says Yuki Yamazaki, one of many volunteers helping and learning at the Monarch Butterfly Festival held each August near Tobermory at the Bruce Peninsula National Park Visitor Centre and nearby reserves. Escarpment Biosphere Conservancy (EBC) organizes the event to educate people about the life cycle and great migration of this majestic species, and to promote conservation and habitat protection.

► Sofia Marques of Burlington, left, holds a tagged Monarch ready to fly while sister Leah watches.





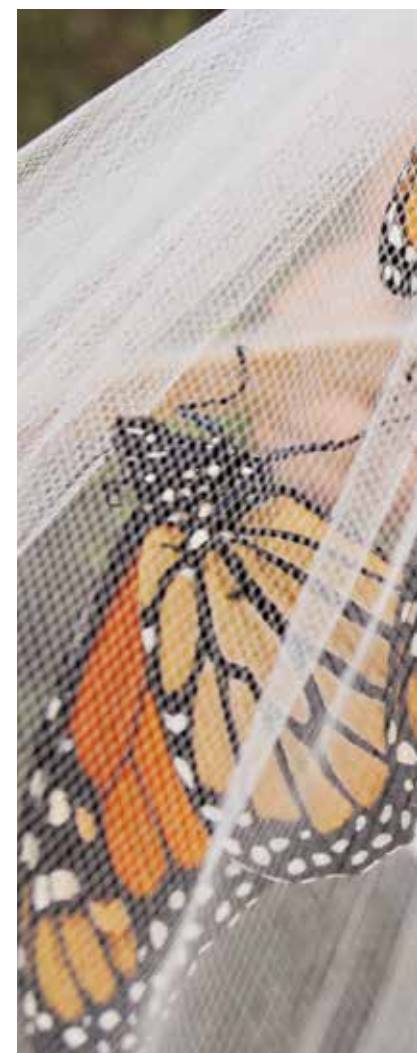


TAG@KU.EDU
 MONARCH WATCH
 1-888-TAGGING
 WBA 928 ▼

◀ A tagged monarch being placed on a child's finger before being released.

pressure, Ontario Ministry of Agriculture, Food and Rural Affairs (OMAFRA) removed milkweed from the Noxious Weeds List in 2014. Changes in land use and development of wild, natural areas also reduce habitat for Monarchs and many other species.

In late August, monarch butterflies throughout North America begin their flight south. While most adult monarchs only live for two to six weeks, this migrating generation survives through the journey south and all winter to begin the long trip north again. Some will winter on the California coast but the majority will travel 2,000 to 5,000 km to the mountain forests of central Mexico. Here they



Listed as a Species of Special Concern, provincially, and recently upgraded to an Endangered Species at the federal level, the monarch butterfly holds a special place in many people's hearts. It is the subject of a very active citizen science network, Monarch Watch, and also the star of the film *Flight of the Butterflies*. This film, shown in the Visitor Centre theatre, documents Dr.

Fred Urquhart's discovery of the migratory route and overwintering grounds through citizen science monitoring. At the monarch butterfly festival, visitors participate in this ongoing research by helping to capture, tag, and release monarchs on their journey south.

Monarchs make the second-longest migration of all known insects; globe skimmer dragonflies hold

first place. Monarchs spend the warm months feeding and reproducing in southern Canada and across the United States. They are entirely dependent on milkweed species for survival. Eggs are laid and caterpillars eat only milkweed, which has been considered a noxious weed. Agricultural herbicides target milkweed meaning loss of food supplies in farm fields, and along roadsides. Under public

► Common Milkweed with its distinctive seed pods. Knapweed with purple flowers in background.



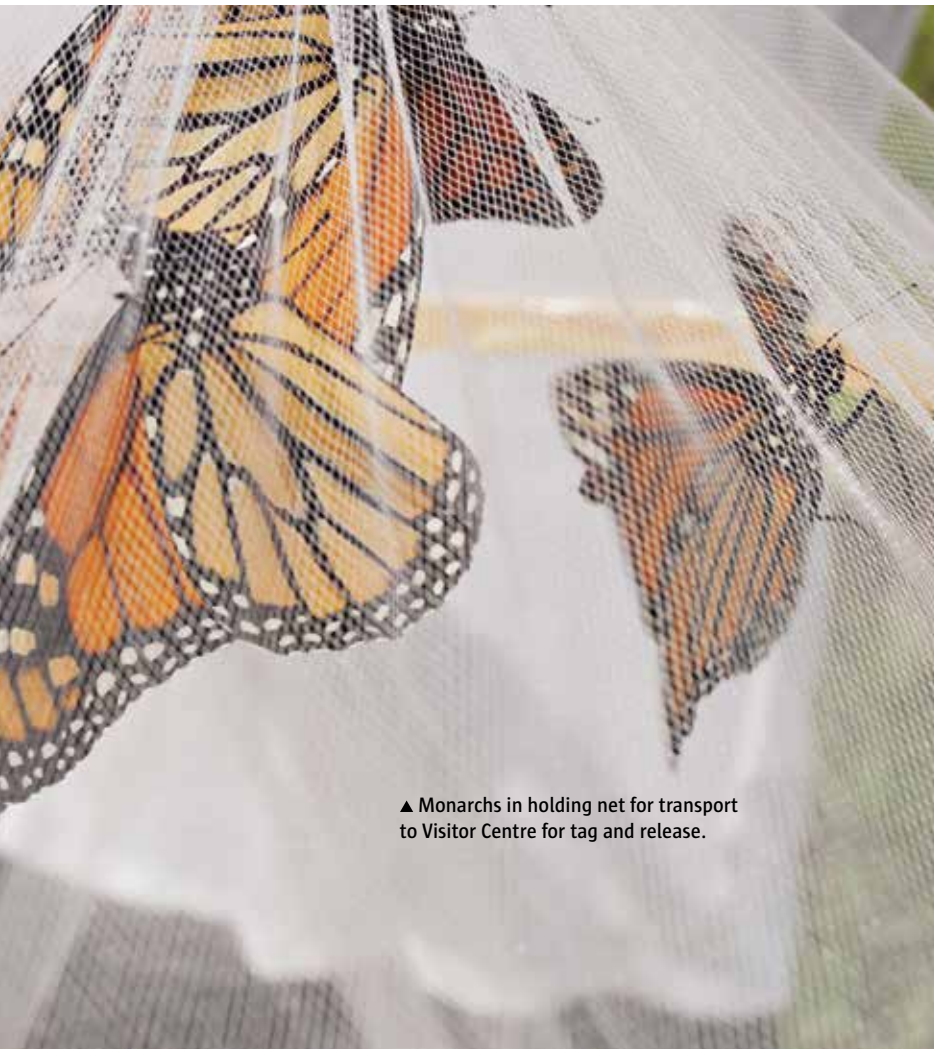
face additional threats: illegal logging causing habitat loss in the wintering reserves, and encroachment by agriculture and tourism. The “Golden Forests,” fir trees teeming with thousands of butterflies, are protected but still shrinking.

Late August Festival

The Monarch Butterfly Festival celebrates this amazing insect, educates the public about current risks to the species, and engages visitors in protecting and supporting the butterflies. EBC, the event organizer, is a major land trust in Ontario. EBC has over 156 nature reserves conserving more than 12, 500 acres or 50 square km, with new lands often coming into protection. These

properties span the length of the Niagara Escarpment, including Manitoulin Island, the Lake Huron shoreline and adjacent areas. This is a massive contribution to habitat protection for Monarch Butterflies as well as many other rare and endangered species of fauna and flora.

EBC hosts the Monarch Butterfly Festival at Bruce Peninsula National Park each year in late August



▲ Monarchs in holding net for transport to Visitor Centre for tag and release.



▲ Bob Barnett dances among Goldenrod and Tansy while netting Monarchs near Tobermory.





▲ Monarch caterpillars grazing on Common Milkweed before forming a chrysalis, undergoing metamorphosis, and emerging as an adult butterfly. Various milkweed species are their only food source. According to the Environmental Commissioner of Ontario, Swamp Milkweed is the best choice for planting near rural areas, as it is not harmful to agriculture.



◀ Scouting for Monarchs to capture for tag and release at EBC's Alvar Bay Nature Reserve near Tobermory.

as the butterflies begin to migrate. Displays, films, crafts, naturalist talks, and guided walks add to the highlight: tag and release of captured Monarchs. EBC staff and volunteers bring a sense of excitement, joy, and wonder to the activities. From face painting to studying geology, people are having fun and learning.



▼ After successfully netting Monarchs, from left: Bob Barnett, Stephen Gile of Owen Sound, Yuki Yamazaki of Japan, Jiae Lim of Korea, and Evelyn Howe of Neustadt. Yuki and Jiae were volunteering at the Monarch Festival.



◀ Daryl Cowell, a Tobermory-based geology consultant, at Lake Huron shoreline in Alvar Bay Nature Reserve, explaining the erosion and glaciation processes that have shaped this alvar or limestone pavement.



on hand chasing butterflies with a net and sharing his stories and enthusiasm.

Volunteers are also invited to help catch Monarchs after some brief training on butterfly net use. This is a great chance to get up close with butterflies, literally in the field. We examined milkweed plants for eggs and caterpillars, collecting a few to carry back to the Visitor Centre. We ran around in the meadow trying to get close for capture; the trick is to wait for the Monarchs to land before scooping. Bob transfers the captured insects very carefully into a holding net. These butterflies go to the Visitor Centre for tag and release. The tiny numbered tag affixed to a wing allows researchers further south to monitor where and when these butterflies were tagged, adding to scientific knowledge of the butterflies' life cycle.

"This festival provides excellent outreach for public education on Monarch Butterflies as a species at risk, and all the ways people can help protect them. Individuals acting alone cannot stop climate change or alter agricultural practices but each little butterfly garden in a backyard can make a difference to species survival," says Audrey Armstrong of the Monarch Teacher Network of Canada. She notes that change is happening all the time; for example, OMAFRA's new Pollinator Health Action Plan should help legislate greater protection of habitat and reduction of herbicide use to protect pollinators including butterflies.

In the "Golden Forests" of Mexico, at least one tiny tag carried by a valiant Monarch Butterfly from Tobermory has been recovered. A Mexican tag was paid for returning the tag

Tobermory's Alvar Bay Preserve

Alvar Bay Nature Preserve, an EBC property just west of Tobermory, acts as a field lab for nature study. Daryl Cowell, a local geology consultant, provides fascinating guided walks to explore the alvar habitats along the Lake Huron shoreline. Alvars are globally rare ecosystems based on limestone plains with little or no soil. Participants learn about the formation and layers of the Niagara Escarpment, view fossils and erosion processes, and witness the signs left by glaciation on this unique landscape. Other researchers teach about butterflies, bats, insects, and local plants and wildlife during day and night hikes. Bob Barnett, landowner relations contact for EBC, is

▼ Evelyn Howe of Neustadt, left, and Jenna Siu of Richmond Hill use a guide to identify a captured butterfly. Jenna was a volunteer at the Monarch Festival in 2016.



to Monarch Watch staff thus contributing to sustainable livelihood and community engagement near these critical wintering grounds. In Bruce Peninsula National Park, thanks to the dedicated efforts of EBC staff and volunteers, more people will come to understand the incredible journey of this little insect. You can help by joining Monarch Watch at monarchwatch.org/waystations, supporting nature through conserving habitats, planting

milkweed and other nectar-producing native plants.

The 2017 Monarch festival is planned for the first weekend before Labour Day. For details, see escarpment.ca or call 888 815 9575. **NEV**

Sandra J. Howe's last feature for Niagara Escarpment Views was "Rural Rootz: Sustainably Self Built" in Winter 2016-17.