

Major milestone for Taylor's checkerspot butterflies in Helliwell

By Chris Junck, Taylor's Checkerspot Butterfly Recovery Project Team

The Taylor's Checkerspot Butterfly Recovery Project Team is excited to share some great news.

Last year the team released 1,476 Taylor's checkerspot butterfly caterpillars in Helliwell Provincial Park's coastal bluff meadows. Many of those larvae metamorphosed into adult butterflies. Several butterflies mated and produced thousands of eggs. More than 1,900 larvae hatched and went through one or more stages before they stopped eating and grouped together in larval webs. The larvae then changed into their overwintering diapause stage. This March, Pascale Archibald and Kihan Yoon-Henderson found more than 230 larvae that survived the winter to continue their lifecycle.

"This is a significant milestone for the project. It's the first time since 1996 that we have documented proof that Taylor's checkerspot butterflies successfully completed their entire lifecycle in Helliwell Provincial Park," said Jennifer Heron, project lead and provincial invertebrate conservation specialist. She added, "This is a hopeful sign that our coastal bluff habitat restoration work and other Taylor's checkerspot butterfly recovery efforts in the park are succeeding."

This spring, the team released more Taylor's checkerspot butterfly caterpillars that were raised at the Greater Vancouver Zoo by Wildlife Preservation Canada staff Andrea Gielens. On March 25, representatives of the Hornby Island Provincial Parks Committee, Conservancy Hornby Island, and the Hornby Island Natural History Centre (Neil Wilson, Bill Caywood, Joanne Wyvill, Bill Hamilton, Ondrea Rogers, and Don Peterson) helped introduce 100 larvae to their new home near St. John's Point in Helliwell Provincial Park.

On the following day, the team and guest participants released 340 larvae for the first time on Flora Islet, which is also part of Helliwell Provincial Park. The warm, sunny weather was ideal for the caterpillars, and they began searching for food immediately. They didn't need to go far. They were placed on plantain, which is one of their favourite food sources. Flora Islet may be a great location for the checkerspots – food plants are abundant for larvae to munch, and there are plenty of flowering plants such as spring gold, camas, small-flowered blue-eyed Mary, and sea blush with nectar for the adult butterflies.

This is a critical period for the caterpillars. They need to find enough high-quality food to be able to grow and transform through their life stages. The caterpillars are tiny, delicate, and vulnerable. Trampling by park visitors and dogs are a key threat to the larvae and the plants they need to survive.

Helliwell's visitors can increase the caterpillars' chance of survival by adhering to park rules. "Dogs must be on a leash according to provincial park regulations, and bikes aren't allowed in this park," said Stephanie Govier, BC Parks conservation specialist. Please tread carefully and watch out for caterpillars. Stay on the trails that are delineated by ropes and restoration area signs. If you visit Flora Islet, stay on the shore, and avoid the fragile meadows. This will reduce the possibility of stepping on a caterpillar or their host plants.

Don't move or pick up Taylor's checkerspots. Instead, report sightings to Taylors.Checkerspot@gov.bc.ca, or by using the free iNaturalist app (www.inaturalist.org). It is an easy-to-use species identification tool that enables citizen scientists to record and contribute important species data for projects around the globe.

Media Release

BC Parks and the project team thank the Cowichan Tribes, Halalt, Homalco, K'ómoks, Lake Cowichan, Lyackson, Penelakut, Qualicum, Snaw'Naw'As, Stz'uminus, Tla'amin, We Wai Kai, and We Wai Kum First Nations for allowing us to restore ecosystems in their traditional territories. Several local volunteers from Conservancy Hornby Island, the Hornby Island Natural History Centre, the Hornby Island Provincial Parks Committee, and others also contributed to the success of this wetland project.

The recovery project has benefited from funding and in-kind contributions from the BC Parks Licence Plate Program, the Habitat Conservation Trust Foundation, the Environment Canada Habitat Stewardship Fund, and the B.C. Ministry of Environment and Climate Change Strategy (Ecosystems Branch), and others.

The Taylor's Checkerspot Butterfly Recovery Project Team includes biological consultants and representatives from the B.C. Ministry of Water, Land and Resource Stewardship, B.C. Ministry of Environment and Climate Change Strategy, BC Parks, Denman Conservancy Association, Garry Oak Ecosystems Recovery Team, Greater Vancouver Zoo, Mosaic Forest Management, Wildlife Preservation Canada, and others.

Learn more about the Taylor's checkerspot butterfly:

<https://goert.ca/activities/taylors-checkerspot/>

and

<https://www2.gov.bc.ca/gov/content/environment/plants-animals-ecosystems/species-ecosystems-at-risk/implementation/conservation-projects-partnerships/taylors-checkerspot>

Photos

All photos by Chris Junck, except #6 and #10 by Don Peterson.



Photo 1

Caption 1: In March, Pascale Archibald (L) and Kihan Yoon-Henderson searched Helliwell's coastal bluff meadows for offspring of the Taylor's checkerspot butterfly caterpillars that were released in 2023. They found more than 230 larvae!



Photo 2

Caption 2: One of the offspring of Taylor's checkerspot butterflies that were released in 2023. It is the first time since 1996 that there is documented proof that the butterflies completed their entire lifecycle in the park, and they're proof that the habitat restoration and other butterfly recovery initiatives in Helliwell are succeeding.

Media Release



Photo 3

Caption 3: St. John's Point larval release group (L to R): Pascale Archibald, Ondrea Rogers, Kihan Yoon-Henderson, Staphanie Govier, Bill Caywood, Jenifer Heron, Don Peterson, Joanne Wyvill, Neil Wilson, Eddy Gielens, Bill Hamilton, Andrea Gielens.



Photo 4

Caption 4: Project lead and provincial invertebrate conservation specialist Jennifer Heron discussed criteria for choosing caterpillar release sites and explained how to transfer larvae from cups to their new habitat.

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Photo 5

Caption 5: Joanne Wyvill, Kihan Joon-Henderson, Neil Wilson, Bill Hamilton and Bill Caywood releasing Taylor's checkerspot caterpillars at St. John's Point.



Photo 6

Caption 6: Larvae were gently transferred by paintbrush to plantain which is one of their favourite food plants. Photo by Don Peterson.



Photo 7

Caption 7: One of 100 Taylor's checkerspot butterfly larvae that were released at St. John's Point on March 25.

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Photo 8

Caption 8: Ondrea Rogers, Bill Caywood, Stephanie Govier.



Photo 9

Caption 9: Andrea Gielens and her son Eddy release some of the caterpillars that she raised at the Greater Vancouver Zoo.



Photo 10

Caption 10: Neil Wilson. Photo by Don Peterson.



Photo 11

Caption 11: Bill Hamilton.

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Photo 12

Caption 12: March 26 Taylor's checkerspot caterpillar release group on Flora Islet: (L to R) Alex Vallée, Rachel Shanner, Eli Simcoe Metcalfe, Stephanie Govier, Eddy Gielens, Andrea Gielens, Jennifer Heron, Michael Badry, Nick Page, Derek Moore, David Hendrickson, David Ranson, Purnima Govindarajulu.



Photo 13

Caption 13: Flora Islet has lush meadows of ribwort plantain, small-flowered blue-eyed Mary and other plants that provide food for larvae and nectar for adult butterflies. If you visit the Islet, please stay on the shore to avoid trampling the delicate meadows and caterpillars.

Background Information

Taylor's Checkerspot Butterfly (*Euphydryas editha taylori*)

- Also known as Edith's checkerspot.
- Historical range was Hornby Island, southeastern Vancouver Island, Puget Trough and to the Willamette Valley in Oregon. In B.C., they were once abundant at 10 sites in the Greater Victoria Area, one site each near Mill Bay and Comox, and sites on Hornby Island (including Helliwell Provincial Park).
- They were thought to have been extirpated (became locally extinct) from Canada by 2000 when no Taylor's checkerspots could be found in their last known sites on Hornby Island despite intensive searches. However, new populations were discovered on Denman Island in 2005 and near Campbell River in 2018.
- It is federally listed as Endangered (COSEWIC, SARA Schedule 1), and is on the BC Red list of at-risk species.
- Taylor's checkerspot butterflies need open sunny meadows where they can find suitable host plants (food for larvae and nectar producing flowers for adults), such as woolly sunflower, common camas, small-flowered blue-eyed Mary, wild strawberry, sea blush, and yarrow.
- Habitat loss, degradation and fragmentation are major factors in the species' decline. For example, the meadows along the coastal bluffs in Helliwell Provincial Park became less suitable for butterflies due to invasions of non-native plants and encroaching forests.
- Habitat enhancement work (weeding, selective limbing +/- or removal of conifers, re-planting and seeding with native species) has been ongoing in Helliwell Provincial Park for several years.

The Taylor's Checkerspot Butterfly Recovery Project

The Taylor's Checkerspot Butterfly Recovery Project is led by Jennifer Heron of the B.C. Ministry of Water, Land, and Resource Stewardship and is guided by the Garry Oak Ecosystems Recovery Team's Invertebrates at Risk Recovery Implementation Group. It is a collaborative effort to restore Taylor's checkerspot populations in British Columbia through habitat enhancement, captive butterfly rearing and release, monitoring, public outreach, and other activities.

Team Members

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Supporters

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Environment Canada Habitat Stewardship Fund
Garry Oak Ecosystems Recovery Team
Greater Vancouver Zoo
Habitat Conservation Trust Foundation
Hornby Island Community School
Hornby Island Co-op
Hornby Island Natural History Centre
Hornby Island Provincial Parks Committee
Mosaic Forest Management
Sea Breeze Lodge
University of British Columbia
Wildlife Preservation Canada

For more information about the Taylor's Checkerspot Butterfly Recovery Project, visit:
www.goert.ca/activities/taylors-checkerspot/

Or contact:

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