Island Marble Butterfly – Winter Update

-Kayla Seaforth, Orcas Island Field Assistant

Island Marble Chrysalis
Photo Credit: Gary Tarleton

The near constant rain of the last week has me dreaming of cocooning up in a blanket, warm and protected from the elements during the dark days that have us marching soggily into a socially distanced winter. This is mere fantasy for me, but I find myself gaining insight into this low key existence as I learn more about the island marble butterfly. The endangered butterfly is a master of transformation, only inhabiting the winged adult form that most of us recognize for a short period in the spring before laying its eggs on a host plant. These eggs hatch after approximately ten days and go through a serious growth spurt over the following month; the caterpillars shed their skin five times before seeking out the blade of grass or stick that they will exist on as a chrysalis for nearly nine months, from late summer to spring of the following year.

Moveable Feast project manager Eliza Habegger shows off a field mustard plug

No island marble chrysalises lie in the grass around our recently created Moveable Feast sites on San Juan Island yet, but it is not hard to imagine the delicate winter homes of our winged friends surrounding the peculiar looking community of wire cages that Land Bank staff recently installed. Each site is home to 24 patches, eight of which have received field mustard seed (one of the host plants of the island marble), another eight have received mustard transplants that were started at the Salish Seeds Nursery, and the remaining eight patches will stay as they are for comparison.

As island gardeners are aware, deer can inflict ruinous damage to unprotected plants, so we have installed lightweight deer fences around each patch. Field mustard requires annual soil disturbance for seed to sprout so we have designed these experimental patches to be moved around the site easily. By shifting the grid of patches annually we avoid disturbing the soil in areas near mustard patches that are most likely to house chrysalises.

Staff and partners prepare site for seeding Photo Credit: Karen Regan, USFWS

The purpose of our plots in the Moveable Feast experiment is not to immediately introduce butterflies, but to collect valuable information about a favorite host plant of theirs, field mustard, as well as to explore low cost and easy to implement site preparation methods. We hope that the information collected in our experimental plots will add to the body of knowledge that others at Washington Department of Fish and Wildlife, the National Park Service, San Juan Preservation Trust and others have already built, and that the methods we have identified will make participation accessible to more members of our community. It takes a village, and we are just one piece of this complex yet exciting puzzle of species recovery.

This project would not be possible without the contributions of the U.S. Fish and Wildlife Service, both financially via a grant, and through the patient and thorough exchange of information and ideas. We thank all our partners for their contributions and look forward to seeing the results of this first year of work next spring when the mustard plants show off their cheerful yellow flowers, and butterflies begin to emerge from their winter hideouts.