

Species Fact Sheet

Taylor's checkerspot

Euphydryas editha taylori



STATUS: 9bXUb[YfYX

Taylor's checkerspot butterfly potentially occurs in these Washington counties: Clallam, Thurston, and Pierce.

(Map may reflect historical as well as recent sightings)

The Taylor's checkerspot butterfly, *Euphydryas editha taylori*, became a federal candidate species in October 2001 and was designated endangered by Washington State in 2006. A candidate assessment for this species is completed annually.

Current and Historical Status

Historically, Taylor's checkerspot was more widely distributed throughout prairies in the Willamette Valley, Puget Sound, and south Vancouver Island. Historic range and abundance of the species is not precisely known because extensive surveys were not conducted until recently. Northwest grasslands were formerly more common, larger and interconnected - conditions that likely would have supported a greater distribution and abundance of this taxon. Before its decline, the checkerspot was documented at more than 70 sites in British Columbia,

Washington, and Oregon. These sites included coastal and inland grasslands (prairies) on south Vancouver Island and surrounding islands in B.C., the San Juan Island archipelago, as well as open prairies in Washington's Puget Trough and Oregon's Willamette Valley.

As of March 2007, 10 populations of Taylor checkerspot butterflies have been detected throughout the species range. Seven populations of Taylor's checkerspot butterflies occur in Washington, two from the Willamette Valley, Benton County, Oregon, and one in British Columbia. In Washington approximately 45 % of the subspecies occur on south Puget Sound prairies and the north Olympic Peninsula Approximately 25% occur on Forest Service Lands on Olympic National Forest. The Taylor's checkerspot butterfly is also known to occur on private lands in the Gray's Marsh area on the Olympic Peninsula (5%). In Oregon, Taylor's checkerspot occur on Benton County, Oregon property (10%) and on a Bonneville Power Administration right-of-way (10%).

Twelve Taylor's checkerspot butterflies were detected for the first time on Denman Island, British Columbia, in mid-May, 2005. During surveys conducted on this site in 2007, over 600 butterflies were detected. In 2008 an individual butterfly was documented on Vancouver Island. This was the first record of the species in this vicinity since 1931. The butterflies in Canada occupy approximately 5% of its current habitat.

Description and Life History

Taylor's checkerspot is one of the darkest subspecies of the Edith checkerspot butterfly. It is a medium-sized, colorfully-checked butterfly with a wing span of 5.7 centimeters (2.25 inches). The ventral surface of the wings is primarily orange with bands of white cells. The dorsal portion has a proportionate mix of black, orange, and white.

Taylor's checkerspot butterflies produce one brood per year. Adults emerge in the spring, between April and May and have a flight period of 10 to 14 days. During this period they mate and lay clusters of as many as 1,200 eggs. Larvae emerge and grow until the fourth or fifth instar. Larvae feeding on a broad diversity of forbs in Puget Trough have been documented to enter diapause in mid-June to early July, hibernating through the winter.

Habitat

Habitat requirements for the Taylor's checkerspot consist of open grasslands and oak woodland or savannah sites where food plants for larvae and nectar sources for adults are available. Taylor's checkerspot larvae have been documented feeding on members of the figwort or snapdragon family (Scrophulariaceae), including paintbrush (*Castilleja*) and owl's clover (*Orthocarpus* = *Tryphysaria*), as well as native and nonnative *Plantago* spp. Larvae have also been reported utilizing *Veronica serpyllifolia*, *V. beccabunga* ssp *americana*, *Plectritis congesta*, and *Collinsia pariflora*.

Reasons for Decline

The primary cause of significant decline in butterfly populations, including Taylor's checkerspot, are related to the loss of suitable habitat, due largely to agricultural and urban development and encroachment of trees and nonnative plants. Other threats include the use of insecticides and recreational activities. Many small populations have been extirpated. The majority of the remaining checkerspot populations are at a considerable distance from one another, likely well beyond dispersal distance. Natural re-colonization is unlikely as populations disappear. As populations disappear and distance between populations increases, the only option for reestablishing populations would be via translocation or assisted migration.

Conservation Efforts

Various efforts to conserve Taylor's checkerspot in Washington are ongoing, including a multi-agency candidate conservation agreement, land acquisition, and habitat restoration projects. A Candidate Conservation Agreement (CCA/CCAA) is currently being developed for several grassland associated species, including the Taylor's checkerspot. Several agencies (DOD- Joint Base Lewis McChord), Washington Department of Fish and Wildlife, Washington Department of Natural Resources, Thurston County, Port of Olympia and The Nature Conservancy, (TNC) are collaboratively working with the USFWS to develop this agreement. TNC, with funding from USFWS, has also conducted restoration projects on prairie habitat at Joint Base Lewis McChord, Tenalquot Prairie, Glacial Heritage Preserve, Scatter Creek Wildlife Area, and the Mima Mounds and Rocky Prairie Natural Area Preserves. In Spring of 2007-2010, larvae were introduced at Glacial Heritage Preserve (Thurston County) on Joint Base Lewis McChord (Pierce County) and at Scatter Creek Wildlife area (Thurston County). Additional

reintroductions will occur when captive rearing methods have been improved and larvae are available.

References and Links

[Listing Status](#)

[USFWS Candidate Assessment](#)

[USFWS Threatened and Endangered Species Profile](#)

[USFWS Endangered Species Program](#)

[South Sound Prairies](#)

[Xerces Homepage](#)

[WDFW Status Report](#)

[Oregon Zoo and WDFW Captive Breeding Program](#)