WASHINGTON STATE DEPARTMENT OF
Natural Resources

Washington Department of
FISH and WILDLIFE

January 31, 2013

MEMORANDUM

TO: Forest Practices Board

FROM: Sherri Felix, Forest Practices Policy Analyst, Washington State Department of Natural Resources

Gary Bell, Forest Habitats Wildlife Biologist, Washington State Department of Fish and Wildlife

SUBJECT: 2012 Annual Report on the Board's Voluntary Cooperative Protection Approach for Taylor's Checkerspot Butterfly (*Euphydryas editha taylori*)

The fifth annual report on the status of the Board's voluntary protection approach for the Taylor's checkerspot butterfly is attached. This report covers the 2012 calendar year.

On September 11, 2007, the Board approved the voluntary cooperative protection approach for the state listed Taylor's checkerspot butterfly recommended by the Department of Natural Resources and supported by the Department of Fish and Wildlife. At that time, the Board also directed staff of the two departments to annually report to the Board on the status of the voluntary cooperative protection approach.

We look forward to discussing the report with you at your February12, 2013 meeting.

In the meantime, please do not hesitate to contact us: sherri.felix@dnr.wa.gov or 360-902-1446; gary.bell@dfw.wa.gov or 360-902-2412.

Attachment

cc. Mary McDonald
Marc Engel
Eric Gardner
Bruce Thompson
Ann Potter
Jeff Davis

2012 Annual Report to the Forest Practices Board

The Status of a Voluntary Cooperative Approach for the Taylor's Checkerspot Butterfly
February 12, 2013

SPECIES BACKGROUND

The Taylor's checkerspot butterfly was listed by the Washington Fish and Wildlife Commission as State Endangered effective March 2, 2006. The species also remains listed by the U.S. Fish and Wildlife Service as a candidate for listing under the Endangered Species Act (ESA).

In Washington State, the species occurs in three highly localized areas in Clallam, Pierce and Thurston Counties. Occupied sites occur on non-federal forestland in Clallam and Thurston Counties. These sites consist of small grassy "balds" within the forest matrix, which have thin soils and generally are not conducive to efficient timber production. The species occupies their habitat throughout the year in various life stages, and are thus always present on occupied sites.

HISTORY OF FOREST PRACTICES BOARD ACTIONS

On May 10, 2006, the Forest Practices Board (Board) determined there is sufficient potential risk to the Taylor's checkerspot butterfly from certain forest practices to consider rule making and other protection strategies. The Board directed Department of Natural Resources (DNR) staff to notify the public of its intention to consider rule making.

From April 2006 to August 2007, the Department of Natural Resources (DNR) held meetings attended by the Washington Department of Fish and Wildlife (WDFW) experts, forest landowners and other interested stakeholders, including the Washington Butterfly Association and The Nature Conservancy. Discussions focused on the butterfly's habitat requirements, potential effects of certain forest practices, and protection strategy options. Additionally, WDFW staff met with individual landowners and land managers to further discuss voluntary protection and management options. During this process, the handful of large forest landowners who own or manage occupied butterfly sites committed to develop management plans with WDFW.

On September 11, 2007 the Board approved the voluntary protection approach recommended by DNR and supported by WDFW. This decision recognized the work of DNR and WDFW in conjunction with stakeholders, the commitments from many landowners to develop

management plans, as well as DNR's conditioning authority to protect public resources. In light of the precarious status of the species and the related need for protection and management assistance from forest landowners, the Board directed DNR and WDFW to annually report on the status of management plans, and any butterfly protection issues associated with individual Forest Practices Applications or Notifications. Once the landowners that committed to develop management plans with WDFW have successfully done so, staff will report every 5 years.

WORKSHOPS AND TRAINING

On March 26, 2009, DNR and WDFW conducted co-agency training for staff from both agencies who are involved in reviewing and conditioning Forest Practices Applications and Notifications, developing and reviewing Taylor's checkerspot butterfly management plans, etc. This training built upon a basic understanding of the species' life cycle and habitat requirements, and the potential positive and negative effects from forest practices, and highlighted the sensitivity of the species to possible impacts. It also clarified each agency's roles and responsibilities for processing, reviewing, and conditioning FPA/Ns that may have an effect on the butterfly. The training had the added benefits of creating ownership in protecting the species, as well as strengthening interagency working relationships.

2012 FOREST PRACTICES APPLICATIONS/NOTIFICATIONS (FPA/NS)

In the fall of 2006, DNR and WDFW initiated an interagency screening process for FPA/Ns with the potential to impact the Taylor's checkerspot butterfly. Using WDFW's GIS location data for occupied Taylor's checkerspot sites, DNR notifies WDFW of all FPA/Ns within one mile of, or within, a WDFW identified occupied site. WDFW reviews these FPA/Ns for potential impacts to the butterfly, and if necessary, works with the landowner/land manager to protect the site and species. Short of landowner action, WDFW requests protective FPA/N conditioning by DNR. This process continues today, and provides a safety net of protection.

The following is a summary of the January 1, 2012 through December 31, 2012 FPA/Ns:

- A total of twelve FPA/Ns were within one-mile of a WDFW identified occupied Taylor's checkerspot butterfly site as follows:
    - Eight FPA/Ns (67%) were within one-half to one-mile from a site, and
    - Four FPA/Ns (34%) were within one-half mile from a site.
- Eleven FPA/Ns (92%) were to conduct Class III forest practices activities.
- One FPA/N (8%) was a Class II renewal for an alternate plan that is selectively removing Douglas-fir to improve habitat quality for prairie balds, Gerry oak, and associated wildlife.
- Large forest landowners conducted even and uneven-aged harvest, habitat restoration, road right-of- way work, and pesticide and fertilizer application on six FPA/Ns (50%).
- Small forest landowners conducted even and uneven-aged harvest on six FPA/Ns (50%).

None of these forest practices were determined by WDFW to pose a risk to the species and therefore, none were conditioned by DNR with protective measures.

BUTTERFLY SITE MANAGEMENT PLANS AND OTHER LANDOWNER EFFORTS

WDFW, utilizing information developed during the stakeholder process on rules and other protection approaches, developed general guidance on what types of activities should be addressed by management plans in order to protect the habitat of occupied sites. In late 2006, this guidance was distributed to the large forest landowners who own or manage sites occupied by the butterfly, and WDFW subsequently modified the document based on landowner input. The document may be updated in the future to provide clarity or to incorporate knowledge gained relative to protection and management of occupied sites.

There are five large forest landowners that own or manage all or portions of occupied sites. These landowners are at different stages of management plan development. The recent and current economic conditions have affected the ability of at least some landowners to work on their management plans.

- Merrill & Ring Company and WDFW collaboratively developed a management plan covering the company's ownership at one Clallam county butterfly site. The plan was approved and signed on February 10, 2010.
- The Department of Natural Resources (DNR) manages four occupied butterfly sites in Clallam County. Their management plan was developed jointly by the two agencies, and approved November 1, 2010.
- WDFW and Weyerhaeuser are currently collaborating to complete development of the company's proposed management plan.
- To date, Green Crow has not developed a management plan. However, they have committed to WDFW that they will not conduct any forest practices activities on their land near an occupied site for the foreseeable future.
- The remaining large forest landowner, Aloha, is in the process of selling their parcel that contains part of an occupied site. The Center for Natural Lands Management (formerly The Nature Conservancy of Washington) is using Department of Defense funds from the Army Compatible Use Buffer Program, and is in the final stages of purchasing this property, placing it in conservation ownership in perpetuity.

There are eight small forest landowners who own small portions of sites occupied by the Taylor's checkerspot, or who own property immediately adjacent to occupied sites. Due to staff workload issues, these landowners have not been contacted by WDFW to ascertain the possibility of developing plans to protect and restore Taylor's checkerspot habitat. Since late 2006, there have been no FPA/Ns issues or concerns associated with these sites, leaving WDFW confident that the resource risk from forest management is low. WDFW will work with these landowners to ensure protection of these sites if FPA/Ns are submitted that will have negative impacts.

PROTECTION BY COUNTIES

WDFW's Priority Habitats and Species (PHS) database with GIS location data for Taylor's checkerspot butterflies is regularly available to, and requested by, counties in order to identify known occupied butterfly sites as they conduct local land use planning. Thurston County receives PHS data from WDFW digitally, updated on a regular basis. Clallam County receives this data upon request (e.g., WDFW responds to requests from Clallam County for

PHS data related to public works projects). This is the same data that WDFW biologists use to screen FPA/Ns and other proposals going through the State Environmental Policy Act process for potential project impacts to the Taylor's checkerspot butterfly.

2012 Surveys and Conservation Actions

Butterfly Surveys

In the spring/summer of 2012, WDFW conducted butterfly surveys to monitor current and recently occupied Taylor's checkerspot populations in Washington. In the south Puget Sound region, survey efforts at Bald Hills in Thurston County were not conducted in 2012. WDFW believes that, due to intensive survey efforts resulting in no butterfly detections since 2007, it is unlikely that Taylor's checkerspot currently persists on any previously occupied sites in the Bald Hill area. Taylor's checkerspot populations were monitored at one site on Joint Base Lewis-McChord (JBLM) in Pierce County as well as on four south Puget Sound prairies where WDFW has reintroduced captive-reared butterflies. Formal sampling data have not yet been analyzed for 2012, however raw numbers of butterflies counted at the site on JBLM approached or exceeded numbers observed in 2005 and 2006, the best years observed since the population was located in 2004. Raw counts at the four reintroduction sites provided contrasting results with a notable increase in numbers at one site and similar or reduced numbers at the others.

In the north Puget Sound region (Clallam County), the primary survey goal again this year was to search for potential new sites. Five sites with potentially suitable habitat which have not been surveyed in past years were visited however, the butterfly was not found on any. In addition, butterflies were monitored at the three populations located on state or private land (in cooperation with the private landowner). WDFW also continued working in cooperation with the U.S. Forest Service (USFS) on Olympic National Forest (ONF) to conduct Taylor's checkerspot surveys and monitoring there. Results from Clallam County survey efforts were: 1) a single, new site confirmed on ONF, and 2) butterfly numbers on the monitored sites consistent with prior years. Prior WDFW survey visits over several years to three formerly occupied sites in Clallam County have resulted in no observed Taylor's checkerspots and it is likely that these sites are no longer occupied by the butterfly.

In total, 11 populations of Taylor's checkerspot are currently known to persist in Washington:

- 4 in the south Puget Sound (3 of which are nascent experimental translocations),
- 4 on the Olympic National Forest, and
- 3 on state or private land in Clallam County.

Conservation Actions

South Puget Sound Region

Significant Taylor's checkerspot conservation actions were achieved by WDFW, the DNR Natural Areas Program, and Center for Natural Lands Management in partnership with the U.S. Fish and Wildlife Service (USFWS), JBLM, and the Washington Recreation and Conservation Office (RCO). The Department of Defense's Army Compatible Use Buffer program funds checkerspot conservation actions outside JBLM. USFWS Recovery Funds

supported WDFW's efforts to re-establish Taylor's checkerspot populations in south Puget Sound. DNR and WDFW also received grant monies for south Puget Sound prairie restoration from the RCO's Washington Wildlife and Recreation Program. Using these funding sources:
1) WDFW restored and enhanced habitat for Taylor's checkerspot on three sites in Thurston County, and oversaw a large-scale captive-rearing and reintroduction effort on two Thurston County and two Pierce County butterfly translocation sites;
2) DNR restored and enhanced habitat in the Bald Hill Natural Area Preserve, and;
3) The Center for Natural Lands Management restored and enhanced habitat on several Thurston County sites in preparation for ongoing and future reintroductions of the butterfly.

North Puget Sound Region (Clallam County)
In partnership with the USFS, WDFW was funded to continue development of a management plan for three USFS Taylor's checkerspot occupied sites as well as restore and enhance habitat at one site. Working together, DNR and WDFW restored and enhanced habitat at two Taylor's checkerspot sites located on DNR lands.

Taylor's checkerspot is one of 21 Oregon and Washington rare and/or declining prairie and oak woodland species that will receive support from a 2012 USFWS State Wildlife Grant. Many partners cooperated to develop this project and will receive funding, including WDFW, DNR, Oregon Department of Natural Resources, The Center for Natural Lands Management, The American Bird Conservancy, local land banks, public land managers, and private landowners from both states. Weyerhaeuser is a participant and the project will enhance and restore Taylor's checkerspot habitat on their lands in the Bald Hill area. WDFW is the project lead for Washington.

WDFW continues working cooperatively with USFS, USFWS, and private researchers on a project to evaluate the population genetics of extant populations range-wide as well as captive-reared individuals (i.e. to evaluate evidence of inbreeding, relatedness to other populations, within subspecies genetic diversity, etc.). This effort also seeks to address phylogenetic questions (i.e. is the subspecies *taylori* made up of multiple taxa, and what is the relationship to neighboring subspecies?). WDFW coordinated genetic sample collection throughout the butterfly's range (Washington, Oregon, and British Columbia) and completed collection for Washington populations. Funding and support for this project was provided by all the above cooperators.

SUMMARY

All known occupied Taylor's checkerspot sites in Washington were monitored in 2012 by WDFW and partners. Overall butterfly numbers were relatively high throughout all of occupied sites within monitored populations. No Taylor's checkerspots were observed on Thurston County sites except where WDFW has recently translocated butterflies in an attempt to re-establish populations. Butterfly numbers appear to be consistent over the last few years on the six occupied Clallam County sites. One new Taylor's checkerspot site was discovered by WDFW within the Olympic National Forest. Currently, there are eleven Taylor's checkerspot populations in the state, three of which are experimental reintroductions. WDFW has not identified any additional Taylor's checkerspot occupied sites on state or private lands.

In the fifth year since the Board approved a voluntary, cooperative protection approach for the Taylor's checkerspot butterfly, there were twelve FPA/Ns within one mile of an occupied butterfly site. This makes a total of fifty-eight FPA/Ns within one mile of an occupied site in the first five years of the Board's voluntary protection approach for this species. There has not been any butterfly protection issues associated with these individual forest practices activities. There was one issue associated with an FPA just prior to the 2007 Board action.

Regarding butterfly management plans, of the five large forest landowners owning or managing occupied butterfly habitat, two management plans have been completed and approved. WDFW continues working with one landowner to finalize their draft plan. One landowner has not begun development of their plan but does not anticipate any forest practices near an occupied site for the foreseeable future. Finally, one landowner is completing efforts to sell their affected parcel to the Center for Natural Lands Management, which will result in conservation of this land in perpetuity.

The Thurston and Clallam County governments continue to utilize WDFW's GIS locational data as they conduct their local land use planning.