WASHINGTON STATE DEPARTMENT OF
Natural Resources

Washington Department of
FISH and WILDLIFE

January 20, 2012

MEMORANDUM

TO: Forest Practices Board

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

David Whipple, Forest Policy Coordinator, Washington State Department of Fish and Wildlife

SUBJECT: 2011 Annual Report on the Board's Voluntary Cooperative Protection Approach for Taylor's Checkerspot Butterfly (*Euphydryas editha taylori*)

The fourth annual report on the status of the Board's voluntary protection approach for the Taylor's checkerspot butterfly is attached. This report covers the 2011 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 February14, 2012 meeting.

In the meantime, please do not hesitate to contact us: sherri.felix@dnr.wa.gov or 360-902-1446, and david.whipple@dfw.wa.gov or 360-902-2847.

Attachment

c. Darin Cramer
Marc Engel
Rocky Beach
Bruce Thompson
Ann Potter
Jeff Davis
Gary Bell

2011 Annual Report to the Forest Practices Board

The Status of a Voluntary Cooperative Approach for the Taylor's Checkerspot Butterfly *(Euphydryas editha taylori)*
February 14, 2012

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.

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, DNR held meetings attended by the 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 (FPA/Ns). 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 FPA/Ns, 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.

2011 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 Geographic Information System (GIS) locational 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 FPA/Ns near butterfly sites, from December 1, 2011 through December 31, 2011:

- Fourteen FPA/Ns were within one-mile of an occupied Taylor's checkerspot site, and no FPA/Ns were within an occupied site. Of these fourteen FPA/Ns:
    - Nine (64%) were within one-half to one-mile from a site,
    - Five (36%) were within one-half mile from a site,
- Ten (71%) of these forest practices were Class III activities, one (7%) was a Class IV-General application, and three (22%) were Class II renewals.
- Large forest landowners conducted even and uneven-aged harvest, road construction or maintenance activities, fertilizer application, and/or salvage on seven (50%) FPA/Ns.
- Small forest landowners conducting even and uneven-aged harvests and/or salvage on seven (50%) FPA/Ns.

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 DNR manages four occupied butterfly sites in Clallam County. Their management plan was developed jointly by the two agencies, and approved November 1, 2010.
- Weyerhaeuser has submitted a draft plan to WDFW, and the agency is currently conducting an internal review.
- Green Crow has not initiated development of their management plan. However they have notified WDFW that the company does not have plans for any forest practices activities on their land near an occupied site for a very long time.
- The remaining large forest landowner (Aloha) is attempting to sell their parcel that contains part of an occupied site. It may be possible to use Department of Defense funds from the Army Compatible Use Buffer Program to purchase the property. See "Conservation Actions" below.

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 reductions, WDFW has not been able to focus efforts to work with these small forest landowners to ascertain the possibility of developing plans to protect and restore Taylor's checkerspot habitat.

PROTECTION BY COUNTIES

WDFW's Priority Habitats and Species (PHS) database with GIS locational 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.

2011 SURVEYS AND CONSERVATION ACTIONS

Butterfly Surveys

In the spring/summer of 2011, WDFW conducted butterfly surveys on all occupied Taylor's checkerspot butterfly sites in the south Puget Sound region. Intensive surveys were again conducted on occupied balds in the Thurston County Bald Hill landscape, however no Taylor's checkerspots were found. WDFW believes that because intensive survey efforts

have not resulted in butterfly detections since 2007, it is highly unlikely that Taylor's checkerspot currently persists on any previously occupied sites in the Bald Hill area.

In addition, Taylor's checkerspot populations were monitored at one site on Joint Base Lewis-McChord (JBLM) as well as on two south Puget Sound prairies where WDFW has reintroduced captive-reared butterflies. Formal sampling data have not yet been analyzed for 2011, 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 two reintroduction sites provided contrasting results with a notable increase in numbers at one site and a reduction in numbers at the other.

In the north Puget Sound region (Clallam County), the primary survey goal this year was to search for potential new sites. In addition, butterflies were monitored at one of 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) to conduct Taylor's checkerspot surveys and monitoring on the Olympic National Forest. Results from Clallam County survey efforts were 1) no new sites were located and 2) butterfly numbers on the monitored sites were consistent with prior years. WDFW has made survey visits over several years to three formerly occupied sites in Clallam County, has not observed Taylor's checkerspots, and concludes it is likely that these sites are no longer occupied by the butterfly.

In total, nine populations of Taylor's checkerspot are currently known to persist in Washington: three in the south Puget Sound (two of which are experimental translocations), three on the Olympic National Forest, and three on state or private land in Clallam County.

Conservation Actions

Significant Taylor's checkerspot conservation actions were achieved by WDFW, DNR's Natural Areas Program, and The Nature Conservancy in partnership with the U.S. Fish and Wildlife Service (USFWS) and JBLM. The Department of Defense's Army Compatible Use Buffer Program funds checkerspot conservation actions outside JBLM. Using this funding source, 1) WDFW restored and enhanced habitat for Taylor's checkerspot and oversaw a large-scale captive-rearing and reintroduction effort at a Thurston County butterfly translocation site, 2) DNR restored and enhanced habitat in the Bald Hill Natural Area Preserve, and 3) The Nature Conservancy restored and enhanced habitat in Thurston County in preparation for future reintroductions of the butterfly.

In partnership with the USFS, WDFW was funded to develop a management plan for USFS Taylor's checkerspot occupied sites as well as restore and enhance habitat at one site. WDFW also assessed the effectiveness of 2010 habitat management efforts at a Clallam County site by monitoring butterfly use.

WDFW worked cooperatively with Washington State University (WSU) -Vancouver researchers, USFS, and USFWS to design and seek funding for a project to evaluate the population genetics of existing populations range-wide and captive-reared individuals to evaluate evidence of inbreeding, relatedness to other populations, subspecies genetic diversity, etc. Funding and support for this project has been provided by all the above

cooperators. WDFW also worked with partners in Washington, Oregon, and British Columbia to develop support for the project including collection of biological samples from the Olympic National Forest to be used in the genetic analyses.

SUMMARY

In the fourth year since the Board approved a voluntary, cooperative protection approach for the Taylor's checkerspot butterfly, there were fourteen FPA/Ns within one mile of an occupied butterfly site. This makes a total of 46 FPA/Ns within one mile of an occupied site in the first four years of the Board's voluntary protection approach for this species. There have 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. One landowner has submitted a draft plan to WDFW, and the agency is currently conducting an internal review. Additionally, one landowner has not begun development of their plan but does not foresee any forest practices in the area near an occupied site for a very long time, and one landowner is continuing efforts to dispose of their affected parcel.

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

Taylor's checkerspot butterfly surveys for 2011 have been conducted by WDFW on nearly all known occupied sites. No Taylor's checkerspots were observed on Thurston County sites, except on sites where WDFW and JBLM have recently translocated butterflies in an attempt to re-establish populations. Butterfly numbers have increased somewhat on at least some Clallam County sites, whereas butterflies were not detected on other sites in the county. WDFW has determined through repeated surveys that several recently existing butterfly populations likely no longer persist, including the populations in the Bald Hill landscape and three populations in Clallam County. Currently, there are nine Taylor's checkerspot populations in the state, two of which are experimental reintroductions. WDFW has not identified any additional Taylor's checkerspot occupied sites on state or private lands. WDFW continues to work with DNR, The Nature Conservancy, JBLM, USFWS, USFS, and WSU-Vancouver to monitor butterfly populations and enhance and restore butterfly habitat.