

# **Benton County Prairie Species HCP Butterfly TAC Subcommittee Meeting: Meeting Minutes January 26, 2007**

## **Committee Attendees:**

Dana Ross, Consultant  
Cheryl Schultz, WSU  
Mark Wilson, OSU  
Al Kitzman, Benton County  
Ann Kreager, ODFW  
Duncan Thomas, Beazell Memorial Forest Ecologist  
Paul Hammond, Consultant  
Steve Smith, USFWS  
Carolyn Menke, Michelle Michaud, Tom Kaye, IAE

Public: Rana Foster, Corvallis Audubon Society

## **Review of Current/Upcoming Research:**

Cheryl Schultz stated that she received funding to work in the Wren area in 2007. Work will focus on Fender's blue butterfly (FBB) dispersal, and how they move between patches in a partially wooded habitat. Benton County is different to the Eugene area, because there are wooded areas in Benton County that could affect the FBB movement across the landscape. Cheryl will develop a Benton County model that will be similar to the Eugene model. To use this model, she needs population data. Cheryl currently has funding for one year, but will need at least 2 years of dispersal data. She is asking the question: what additions are needed to the existing habitat to allow persistence of the species in Benton County. Cheryl talked about her work with the West Eugene Wetlands Project, which focused on how much land needs to be restored and where that land should be located. Cheryl doesn't know whether her dispersal model for FBB could be used for Taylor's checkerspot butterfly (TCB) without modifications.

Cheryl said that the habitat for a subpopulation could be contiguous or dispersed as smaller patches, but patches more than about 5 km apart would not serve as habitat for the same subpopulation. The distribution of patches of habitat within the landscape is therefore critical to the survival of the species. We need to get a handle on the various aspects of the habitat that are important to the species and learn how the species uses the habitat. Sites with existing lupine should be supplemented with nectar habitat, if needed, and visa versa. We need to also consider the flexibility in management (e.g., are landowners willing to mow at certain times of year). Cheryl indicated that nectar studies have been done in Eugene on approximately 70% of species used. Vetches are harder to get the nectar out of, so they not the best nectar species, but FBB will use vetch if nothing else available. Tom indicated that the number of flowers and when they are open is also as important as percent coverage. Cheryl indicated that you want to have nectar plants flowering at different times of the flight year. Duncan suggested that a plant species database with phenology and nectar quality would be very useful for assessing habitat quality.

Steve Smith indicated that FBB dispersal information will be valuable. FBB is the driver for the HCP. The HCP will consist of two parts: where impacts will occur, where conservation will occur. For the mitigation part of the plan, it is critical to assess where at risk populations are located, and what opportunities are available to mitigate for those impacts. Before and after the HCP is completed, funds are available for acquisition and enhancement to create the reserves. Once take is allowed, federal funds won't be available for "mitigation". Duncan Thomas asked for clarification of the relationship between mitigation and restoration, can the mitigation be included as part of the restoration plan, or is project-specific offset mitigation a requirement for HCP? The USFWS makes the decision whether the amount of mitigation is sufficient for the amount of take that is estimated. USFWS indicated the HCP relies on having the best available science, and the County will be required to show that the mitigation is successful before the take will be allowed.

According to Steve it is important to know baseline information, dispersal, and connectivity in order to know whether the amount of take and its associated mitigation does not "significantly" affect the species – meets the Environmental Assessment criteria for issuance of a Finding of No Significant Impact or requiring an Environmental Impact Statement. Benton County take will be minimal. A key question will be: How many voluntary landowners can the County bring in to assist with conservation of the species? The biggest risk is the "do nothing" activity (which isn't take) that allows loss of habitat. The County may be able to purchase property with an existing population and have that area serve as mitigation for impacts to the species at other areas.

Dana Ross indicated that he was concerned about loss of TCB habitat and populations, as they could wink out very easily. He has observed what nectar the TCB uses, but hasn't done any particular "nectar" studies, and believes nectar abundance is very important. Al Kitzman stated that aspect and vertical structure also seem to be important for TCB. Paul Hammond indicated that low vegetation type is important. Microclimate conditions are important; TCB like to be out of the wind. TCB larvae are difficult to find, but are seen on *Plantago lanceolata*. The establishment of a native host plant is important because *Plantago* is an annual with variable emergence dates. (*Plantago* was late at Beazell in 2006). The native host plant for TCB was likely a *Castilleja*, although there is also a possibility that some *Plantago* could be native. *Plantago lanceolata* can be annual, biennial or perennial. According to Duncan Thomas, the plants in the Beazell meadows are perennial.

The HCP goal is no net loss in population numbers and size, or connectivity. Benton County can mitigate for loss of butterflies on County property through acquisition. The County desires to go beyond what is the minimum required for issuance of a HCP. With respect to TCB and the Streaked Horned Lark, if these species are included in the HCP, USFWS will treat these as though listed. Duncan Thomas asked whether there are specific constraints on the types of mitigation that will be allowed in the HCP that could affect the type of survey/assessment work done this summer. Tom Kaye indicated that the HCP's conservation focus could be on the preservation of large populations and allow taking of small, fragmented populations. Cheryl Scultz feels that conservation focus should be on preservation of large populations AND small, connected populations and allow taking of small, ISOLATED, fragmented populations. There has been much work to suggest that small patches and populations that are close to other

populations are important and, depending on location, could be vital to the connectivity of a system.

### **2007/2008 Surveys & Field Methods**

A suggestion was made that in 2007 and 2008 IAE establish photos points for each site surveyed, and place plot corners with tent pegs or other markers that will not interfere with mowing. IAE in their field surveys will identify presence/absence of nectar and host species for both FBB and TCB. Dana indicated that the Wren area doesn't look that good for TCB. There are some prairie balds that could potentially have TCB, one of few areas Benton County that he thinks TCB might be present. He has surveyed Carson Prairie – no TCB. TCB were seen at Sulphur Springs in the 1980s.

Since the Wren area is a priority area for the recovery plan the USFWS may fund surveys. Census work in this area needs to occur annually, and whichever census method is used should be used consistently from year to year. Paul Hammond is the sole FBB surveyor in the Benton County, and another person is needed in the Willamette Valley. He estimates it would take at least three days to survey (population size estimate) the Wren properties for FBB. Henkle Way has FBB present, with lupine expanding from the roadway onto adjacent properties. Paul indicated that if we want to identify “reserve areas” for the HCP we will need to know the sizes of the different populations.

Mark Wilson commented on the field methods used in 2006, and liked the different approach for the different sites, as needed measurements vary depending upon whether the site would be used for restoration or protection. Carolyn Menke indicated she wanted to develop a method for ranking sites as low quality, moderate, and high quality. Cheryl mentioned a prairie quality ranking protocol by Jeff Foster at Ft. Lewis. Soil type, vegetation structure, and microhabitat are important components for habitat quality. Mark suggested identifying the key elements of the ideal habitat for each of the species and having this information available when assessing the property. Cheryl cautioned again having 15 or more variables to determine whether the habitat is suitable, as we merely want to understand key aspects of the species' habitat. We may want to add “landowner flexibility of management” to the assessment.

Many private landowners are not interested in conserving their property if they can't graze it. A property near Wren that is about to enter a conservation easement is great prairie habitat; and landowner is willing to put lupine back onto their property but fence it off to prevent calves from eating the lupine. Duncan Thomas will check with OSU extension about cattle and lupine consumption. The TAC can make the recommendation of whether or not grazing should be allowed at a particular site. Steve indicated that 30+ landowners in Wren are interested in conservation, but if something isn't done now, within 5 years we will lose landowners' interest. Would like to know from this group what landowners can do or shouldn't do on their property for the protection of the species. Mark stated that this group knows what can be done to ensure the species continued existence at these sites.

### **Biological Goals/Conservation Measures**

Mark indicated he liked the revised biological goals, but based on today's discussion, the third bullet should be eliminated. Benton County cannot maintain a minimum viable population for FBB delisting purposes.

### **Covered Activities**

Carolyn asked everyone to review the list of covered activities and identify any activities that should be added. Mark suggested pesticide application be included. A question was raised whether the take of FBB by automobiles will be included as a covered activity?

### **Tasks:**

IAE: Prepare a list of habitat criteria for each of the species for use during the survey season

IAE: Contact prairie landowners for survey permission.

IAE: Remove the third bullet – minimum population – from the biological goals. **DONE**

IAE: Ask USFWS whether automobile use/driving will be included as a covered activity re: take. **DONE**