Research/Teaching/Demonstration Project
Study Plan – Native Prairies

10 October 2006

1. Relevance to McDonald-Dunn Forest Plan

Forest Plan Appendix – Oak/Prairie Team

The McDonald-Dunn Forest Plan established five appendix teams to write appendices and investigate research questions in the forest. The Oak/Prairie Team developed an Oak and Prairie Conservation and Restoration Strategy attached as Appendix 3 to the Forest Plan. The Oak/Prairie Team is also proposing and leading two RTD Projects beginning in CY2007 (one project is described here).

2. Title of RTD Project

College of Forestry Native Prairies Project: survey, delineation, and protection of the higher quality prairie areas in OSU McDonald-Dunn Forest

3. Principal Investigator

Brad Withrow-Robinson (interim)

4. CY2007 Requests from FEC

Funding Request - $18,000

College Forests staff-time request – 6 days

5. Objective of RTD Project

The objective of the COF Native Prairies Project is to identify and conserve remnant prairie areas, focusing first on protecting higher quality areas within McDonald-Dunn Forest through protection from false-brome and other invasive vegetation beginning in 2007, while creating an opportunity for faculty, students, and the public to establish related RTD projects.

6. Timeline: 2006-2009

2006: Plan a Conservation management strategy; establish the prairie task force.

2007: Survey and delineate prairie areas in McDonald-Dunn Forest; identify those areas with significant higher quality prairie areas. Prioritize sites to delineate and protect biological hot-spots in subsequent years; Identify areas of significant TRD potential, and a plan to communicate those opportunities to faculty and students; some interpretive materials will be developed.

On the ground activities in 2007 include delineation and baseline monitoring (pre-treatment data-collection), then initial treatments to establish a (false brome-free) buffered perimeter and removal of invasive herbaceous and woody nurse plants of several prioritized sites using herbicides and mechanical methods.

2008: Delineation and baseline monitoring, then initial treatments to establish a (false brome-free) buffered perimeter and removal of invasive herbaceous and woody nurse plants of additional using herbicides and mechanical methods. Further develop public education, demonstration and interpretive materials.

2009: Potential expansion of prairie restoration areas beyond protection of hot spots to suppress invasive herbaceous and woody plants. Continue public education, demonstration and interpretive activities.

7. Basic overview of approach/methods

Conservation of remaining prairie hot-spots involves surveying all prairies to identify and map higher quality prairie areas, to delineate them (map them and then mark on ground) and prioritize areas for protection from encroaching weeds.

Protection involves establishing buffered boundaries (excluding invasive grasses) and removing invasive weeds and competing brush within those boundaries with herbicides and mechanical tools.

8. Budget for Project

2007: The COF Native Prairies Project is requesting $15,000 to hire a botanical expert to survey all prairie remnants in McDonald-Dunn Forest and identify sections of higher quality prairie (a gradient) and plants of interest. The task force will use this information to identify priority areas, a sequence of actions to delineate and treat hotspots within these

remnants. We are also requesting $3,000 to pay for herbicide application and brush control within delineated hotspots.

2008: A smaller amount of funds will be sought (in October 2007) to continue work delineating, monitoring and treating hotspots in 2008.

9. Teaching components of RTD Project

The prairie task force will work with faculty, students and the public to identify and communicate areas of significant RTD potential and develop a conservation plan that allows for relevant teaching, research and demonstration activities, as is fitting to the educational mission of the College of Forestry. This will include, but should not be limited to baseline monitoring. The task force is charged with facilitating such activities, and is not itself responsible for designing or conducting them.

Teaching opportunities include involvement of undergraduate/graduate classes in ecology, silviculture and interpretation in planning, monitoring and educational design; involvement of local schools, or a high school teacher from the ORTOSA program (Oregon Teachers on Summer Assignment); and Extension programming on conservation and restoration for private land-owners. Graduate research would depend on higher levels of faculty involvement and outside research funding.

10. Outreach components of RTD project

High recreational use of the Forest creates a great need for outreach about restoration activities that will be changing the Forest landscape. Interpretive brochure material and signage will be developed to educate public visitors about oak and prairie conservation and restoration projects taking place in McDonald-Dunn Forest. The oak and prairie conservation and restoration strategy (including the COF Prairie Project) will be presented to the university faculty and student body, and local community in public meetings in the late fall of 2006.