

# **Research/Teaching/Demonstration Project Study Plan – Legacy Oaks**

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 a 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 Legacy Oaks Project: release selected open-grown oaks that are remnants of historical oak savannas in OSU McDonald-Dunn Forest.

## **3. Principal Investigator**

Brad Withrow-Robinson (interim)

## **4. CY2007 Requests from FEC**

**Funding Request** – \$5,000

**College Forests staff-time request** – 6 days

## **5. Objective of RTD Project**

The objective of the COF Legacy Oaks Project is to identify and conserve selected groups of open-grown Oregon white oaks in McDonald-Dunn Forest through release-harvest in 2009, while creating an opportunity for faculty, students, and the public to establish related RTD projects.

## **6. Timeline: 2006-2010**

**2006:** Plan a Conservation management strategy; do an initial survey and mapping of legacy oaks embedded in forest matrix; establish the oak release task force.

**2007:** Task force will direct reconnaissance (by student employee) of oaks for release (collect information on number, age, vigor of trees, understory plants, conifer volume, and logging conditions of potential release gap). The task force will use this information to generate a ranking of candidate oaks, and then present a **proposal for legacy oak conservation to the FEC** for FEC approval (by October 2007), including the number of oaks to be released, approximate acreage involved, by zone and theme, and an estimate of the associated costs and revenues. The proposal will also identify areas of significant TRD potential, and a plan to communicate those opportunities to faculty and students.

On the ground activities in 2007 may include pre-release treatment of invasive weeds and base-line monitoring of selected sites (pre-treatment data-collection).

**2008:** Set up contract for timber harvesters. Continue pre-release weed control and baseline data-collection. Develop public education, demonstration and interpretive materials.

**2009:** Release-harvest of all selected groups of legacy oaks. Continue public education, demonstration and interpretive activities.

**2010:** Post-treatment data-collection; public tours and presentations

## **7. Basic overview of approach/methods**

Oak release involves identifying and selecting groups of open-grown oaks that might benefit from release, and then removing competing conifers that are shading out the oaks. Conifers will be removed from around selected oaks to a distance of at least one (oak) crown height.

## **8. Budget for Project: 2007-2009**

**2007:** The COF Legacy Oaks Project is requesting \$5000 to: 1. Hire a student employee (2 weeks) to collect and compile selection criteria data; 2. Consult a contract harvester (1 day) for field evaluation; 3. Treat invasive weeds in CY2007 before oak-release harvests are conducted; 4. Baseline data-collection (student employees)

**2008:** A smaller amount of funds will be sought (in October 2007) to continue invasive weed control and monitoring in 2008.

**2009:** Removal of conifers will take place in 2009 and funds will be requested (in October 2008) to hire harvest contractors. Revenues from sale of Douglas-fir timber harvested around the oaks may equal or exceed the cost of harvest contractors.

### **9. Teaching components of RTD Project**

The oak release 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 Legacy Oaks Project) will be presented to the university faculty and student body, and local community in public meetings in the late fall of 2006.