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RE: Pollinator-Related Comments on Healthy Forests Reserve  
Program Interim Final Rule

The Coevolution Institute (CoE) is pleased to submit comments to the Natural Resources Conservation Service (NRCS), U.S. Department of Agriculture (USDA) on the interim final rule implementing the Healthy Forests Reserve Program (HFRP) pursuant to the statutory requirements of Title V of the Healthy Forests Restoration Act of 2003 (P.L. 108-148) [FR May 17, 2006, pp. 28547 ff]. CoE recommends **pollinator-related enhancements** as vital components to assisting landowners in *restoring and enhancing forest ecosystems to promote the recovery of threatened and endangered species and improving biodiversity*.

**RECOMMENDED POLLINATOR-RELATED ENHANCEMENTS:**

CoE supports the objectives of the HFRP. This represents another tool in the conservation toolbox to assist willing landowners in voluntarily advancing conservation and biodiversity objectives in forested habitat. Assisting landowners in restoring and enhancing forest ecosystems to promote the recovery of endangered and threatened species and improve biodiversity provides a targeted opportunity to create pollinator habitat that can contribute not only to ecosystem health and wildlife but to the economically valuable pollinating services that native pollinators may provide to neighboring agricultural activities.

A growing number of pollinators are listed as endangered or threatened. Just as critically, scientists are increasingly learning that pollinators are vitally important to biodiversity and healthy ecosystems. Their habitat and their pollinating presence in an ecosystem may well be critical to the survival and recovery of other endangered and threatened species. They pollinate plants that contribute fruits and nuts to the food supply for other species and facilitate the reproduction of flowering plants that provide food and habitat. Pollinators are often part of the food chain themselves for endangered and threatened species.

Incorporating an effective pollinator component in the HFRP interim final rule is not difficult or complicated. Indeed most if not all provisions are likely to operate to the benefit of pollinators and their habitat. For example, habitat fragmentation, invasive species and loss of plant diversity also harm pollinating species; and actions to address those issues are likely to benefit pollinators. However, with a few strategic changes and more conscious recognition of the pollinator component, the program can provide tremendous value-added benefits for pollinators and advance HFRP objectives. The HFRP interim final rule can be easily ‘pollinated’ to—

- Increase awareness among those in NRCS and the Forest Service implementing the program, including State Conservationists and technical and cost-share assistance providers, about the role that pollinators play in agriculture and healthy ecosystems and about recommended pollinator-related conservation practices and habitat changes that could be included in HFRP restoration plans;
- Encourage such providers to make landowners aware of pollinators, and practices that can benefit pollinators and pollinator habitat;
- Ensure that best management practices recommended for HFRP restoration plans appropriately incorporate pollinator-beneficial components; and
- Ensure that such practices and measures are eligible for cost-share assistance if needed.

CoE recommends the following enhancements to the interim final rule for inclusion in the final rule implementing the HFRP as *examples* of how value-added benefits can be facilitated for pollinators, forestry, agriculture and ecosystem health:

- “Ranking and Selection Criteria & Enrollment Priority” (Section 625.6)—NRCS seeks input about the manner in which projects should be selected for funding. The final rule should state that criteria used in establishing enrollment priorities and in selecting applications for enrollment should include appropriate consideration of and value for pollinator-friendly practices, recognizing their role in the survival matrix for other endangered and threatened species as well as their critical contribution to biodiversity.
- “Financial Assistance” (Section 625.10)—Practices and measures must be approved by the Chief to be eligible for assistance under the HRSP. The final rule should state that pollinator-friendly practices that are consistent with the endangered/threatened species and biodiversity objective of the HFRP are eligible. Many of these practices may be identical or similar to practices already approved for financial assistance by NRCS under other programs.
- “Conservation Treatment” (Section 625.2)—NRCS states that the agency expects some appropriate practices in forested habitat may not be in the existing scope approved practices in the Field Office Technical Guide, and that NRCS will therefore apply the term ‘conservation treatment’ to practices eligible for financial assistance. The final rule should include specific reference to appropriate practices for pollinator habitat as being encompassed by the ‘conservation treatment’ definition and thus eligible for financial assistance.
- “Improving Biological Diversity”—The final rule should clarify that when giving additional consideration to enrolling land that improves biodiversity, NRCS will give specific consideration to the importance of pollinators and pollinator habitat.
- “Nonprofit Conservation Organizations” (section 625.3)—NRCS indicates the agency may consult with nonprofit conservation organization. CoE offers to explore ways that our organization can assist NRCS and FS in implementing this important program. For example, a work group could be established through the North American Pollinator Protection Campaign (NAPPC), which CoE facilitates. An existing memorandum of

Understanding (MOU) between CoE and FS could be the vehicle for exploring this option.

- “Practices and Measures”—The final rule should clarify that in consulting with the Fish and Wildlife Service, NRCS will solicit input regarding appropriate pollinator-beneficial practices and measures that will be included as part of the conservation treatment in any restoration plan. As with other habitat treatments pollinator-related practices and measures will be site-specific. CoE and FWS are working together on pollinator initiatives under an MOU.
- “Selective Harvest”—The final rule should include mention that selective harvest to open the canopy for under-story vegetative diversity could also benefit pollinators, their habitat and interdependent species.

For native pollinators, and indeed the plant species that depend upon them for pollinating services—and the other species who are in turn dependent—it is important not only to avoid a monoculture, but to provide for a continuous regime of native flowering species to provide nectar and pollen during pollinators’ growing season. Pollinator habitat for food, shelter and nesting involves more than just suitable plant species. Many species of insect pollinators, including species that pollinate agricultural crops, require bare patches of ground for nesting and reproduction. Strategic incorporation of bare patches of ground in open patches of forest land may be appropriate.

CoE applauds pollinator awareness and pollinator conservation assistance actions already being taken under existing authorities by NRCS, in part through involvement in the North American Pollinator Protection Campaign (NAPPC). Pollinator enhancements to existing NRCS programs, such as through modifications to the Field Office Technical Guide and Conservation Practices Standards would complement other significant efforts by NRCS to increase awareness about the importance of pollinators and information to help landowners incorporate pollinator-friendly practices in a range of conservation programs and practices. Examples include:

- Technical memorandum by Deputy Chief Lawrence Clark to all field offices calling attention to pollinators and pollinator-friendly practices.
- “Montana Native Plants for Pollinator-Friendly Plantings,” produced by NRCS in cooperation with Missoula County Extension.
- Co-hosting (with Forest Service) the NAPPC 2007 tri-national workshop and a pollinator symposium at USDA, October 18-20, 2006.

#### **POLLINATORS PLAY CRITICAL ROLE IN AGRICULTURE & ARE AT RISK:**

Insect and other animal pollinators play a pivotal part in the production of an estimated one out of every three bites of food that humans eat and in the reproduction of at least 80 percent of flowering plants. The commodities produced with the help of animal pollinators generate significant income for agricultural producers. For example, domestic honeybees pollinate an estimated \$14.6 billion worth of crops in the U.S. each year, produced on more than 2,000,000 acres. It is thus in the strong economic interest of both agricultural producers and the American consumer to help ensure a healthy, sustainable pollinator population.

Today, possible declines in the health and population of pollinators in North America and globally pose what could be a significant threat to the integrity of biodiversity, to global food webs, and to human health.

A number of pollinator species are at risk. Due to several reported factors, the number of commercially managed honeybee colonies in the U.S. has declined from 5.9 million in the 1940's to 4.3 million in 1985 and 2.5 million in 1998. All indications are the problem has worsened in recent years. About 900,000 rented colonies are employed to pollinate 400,000 acres of just one major cash crop, almonds, grown in California. At the same time, feral honeybee hives are today virtually non-existent in the U.S due to infestations of parasitic mites. The widespread disappearance of honey bees from household gardens has been one tangible result. As one indication of the seriousness of this problem, the American Farm Bureau Federation re-activated its honey bee and apiary committee earlier this year.

The Boards on Agriculture and Natural Resources and on Life Sciences at the Natural Resources Council, National Academies of Science, are jointly overseeing a study currently being conducted by top scientists to evaluate scientific knowledge and understanding about the health and status of pollinators in North America. It is anticipated that the results of that study, due out in the near future, will be instrumental in shaping future research and conservation efforts.

#### **NRCS CONSERVATION PROGRAMS CAN BE “POLLINATED” TO HELP PRIVATE LANDOWNERS ADDRESS POLLINATOR NEEDS:**

CoE believes all NRCS conservation programs designed to work with and assist farm, ranch and forest land managers can be enhanced through modest but significant improvements to help address pollinator needs.

Conservation programs can be highly effective in addressing factors which can contribute to pollinator declines including: habitat fragmentation, loss, and degradation causing a reduction of food sources and sites for mating, nesting, roosting, and migration; improper use of pesticides and herbicides; aggressive competition from non-native species; disease, predators, and parasites; climate change; and lack of floral diversity.

Effective pollinator protection practices often overlap and complement other conservation practices, particularly those designed to improve wildlife habitat, and vice versa. In other instances, a practice designed to achieve wildlife or other conservation practices could generate significant pollinator benefits by integrating modest enhancements.

#### **INTEREST OF COEVOLUTION INSTITUTE:**

The mission of CoE is to catalyze stewardship of biodiversity. CoE places a high priority on efforts to protect and enhance animal pollinators (*invertebrates, birds and mammals*) and their habitats in both working and wild land. More information about CoE may be accessed at [www.coevolution.org](http://www.coevolution.org).

CoE is a strong advocate of a collaborative approach, and is honored to have a number of beneficial pollinator partnership efforts ongoing through its management of the North American Pollinator Protection Campaign (NAPPC), a tri-national, public-private collaboration of scientific researchers, managers and other employees of state and federal agencies, private industry and conservation and environmental groups dedicated to ensuring sustainable populations of pollinating invertebrates, birds and mammals throughout the United States, Canada and Mexico. NAPPC's participants from nearly 140 entities, including NRCS, are working together to:

- Promote awareness and scientific understanding of pollinators;
- Gather, organize and disseminate information about pollinators;
- Provide a forum to identify and discuss pollinator issues; and
- Promote projects, initiatives and activities that enhance pollinators.

Examples of USDA involvement include an MOU with the U.S. Forest Service (FS) and a strong working relationship with the Natural Resources Conservation Service (NRCS), the Agricultural Research Service (ARS), and the Cooperative State, Research, Extension, and Economics Service (CSREES).

Since its founding in 1999, NAPPCC has been instrumental in focusing attention on the importance of pollinators and the need to protect them throughout North America. More information about NAPPCC and its collaborative efforts can be found at [www.nappcc.org](http://www.nappcc.org). Information for those interested in pollinators can also be found at another CoE/NAPPCC website [www.pollinator.com](http://www.pollinator.com) dedicated to the Pollinator Partnership, a cooperative conservation outreach program.

CoE and NAPPCC stand ready to work with NRCS to achieve pollinator-beneficial enhancements in the full toolbox of NRCS programs. NAPPCC can be a vehicle to facilitate access to pollinator expertise at both the national and locals to help enhance the programs and to realize pollinator progress across the landscape that private landowners manage.

Respectfully Submitted,



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