



## Partners for Sustainable Pollination

August 27, 2009—By E-mail to [robert.stephenson@wdc.usda.gov](mailto:robert.stephenson@wdc.usda.gov)

U.S. Department of Agriculture  
Commodity Credit Corporation  
14<sup>th</sup> and Independence Avenue, SW  
Washington, DC 20250

**RE: Comments on Conservation Reserve Program Interim Rule—*Habitat and BMPs for Managed and Native Pollinators as a Priority Natural Resource Concern***

Partners for Sustainable Pollination (PFSP) is pleased to respond to the Commodity Credit Corporation (CCC) request for comments (74 FR 30907-30912, June 29, 2009) on the Conservation Reserve Program (CRP) interim rule. The CRP assists producers in conserving and improving soil, water, wildlife, and other natural resources by converting environmentally sensitive acreage from the production of agricultural commodities to a long-term vegetative cover.

USDA is requesting comments on detailed environmental and other needs and goals on which CRP resources should be focused or targeted to optimize environmental benefits consistent with program goals and purposes. As CRP's purpose and goals have changed over time, it is possible that unintended barriers to enrollment may exist. Therefore, USDA is also requesting comments on any barriers to enrollment (outside of statutory provisions) and what steps should CCC take to remove such barriers to enrollment or to streamline program participation within the CRP consistent with statutory objectives.

**In brief, PFSP's comments are directed to the critical importance of managed and native pollinators to agriculture and healthy ecosystems and to the need to fully implement the new conservation authorities for managed and native pollinators in the 2008 farm bill on an expedited basis to help farmers and ranchers improve habitat on private lands for managed and native pollinators. CRP lands provide critical larger scale habitat opportunities needed for quality honey bee pasture-quality forage that are generally protected from pesticide use and drift.**

PFSP believes the wellbeing of managed and native ag pollinators is a critical natural resource concern that has been long neglected. Bees and other animal pollinators are vital partners in agricultural production and in healthy wildlife ecosystems. About one of every three bites we eat is from crops pollinated by bees and other pollinators. Pollination of many specialty crops is almost totally reliant on the services provided by beekeepers and their managed honey bees. It is conservatively estimated that over \$15 billion in crops are pollinated by managed honey bees in the U.S., with an additional \$3 billion in crops pollinated by native bees.

Our nation's honey bees are seriously threatened by a complex of pest and disease challenges, including Colony Collapse Disorder (CCD). There are increasing indications that native pollinators are also at risk. Honey bee losses have been heavy, jeopardizing the continued viability of our commercial crop pollination industry and reliable and affordable pollination services to the U.S. agricultural community.

This threat goes beyond pollinators to include the beekeepers that manage honey bees and deliver essential pollination services to specialty crops that are vitally dependent on honey bees for pollination. Unfortunately, the commercial beekeeping businesses that provide essential crop services are struggling to remain viable, with a significant contributing factor being lack of suitable forage for their bees between pollination contracts.

Fortunately, it doesn't take new programs to take action. Under the new farm bill pollinator conservation provisions, existing conservation program authorities such as the CRP can be readily applied to establish habitat and forage for managed and native pollinators.

#### Habitat Forage Essential for Honey Bee Health and Viability of Beekeepers

While honey bees and native bees can be regarded as agricultural inputs akin to tractors and fertilizer, they are unique in that they are biological inputs that require maintenance and nutrition throughout the year. They can't just be put on the shelf until they are needed for the next pollination season.

There is a broad scientific consensus that natural forage and nutrition are essential to good bee health and to bees' ability to cope with pests, pathogens and other stressors. Improving natural forage for honey bees and native pollinators is a proven method of contributing to their health and sustainability.

Historically, beekeepers have had access to bee forage after their bees finish pollinating crops for the season. Unlike other sectors in agriculture, most beekeepers do not have control over the land they need to nourish and manage their bees. They are essentially "guests" of other landowners and are dependent on others to provide safe habitat and practices needed for bee pasture they need to keep their honey bees adequately nourished and healthy honey bees. Over the decades, a number of forces including urbanization, changes in agricultural practices and pesticide use, and bans on honey bees at restoration projects on public lands have combined to decrease the acreage and sites available as safe bee pasture to beekeepers and their bees. The impact of the lack of availability of natural forage and resulting poor nutrition on the health of honey bees is well documented.

Entomologists agree that bees require a mixing of pollens throughout the year to acquire the necessary proteins, lipids, vitamins, minerals and micronutrients required by bees to be at their healthiest—or another way to view it—their most resistant to pests and pathogens. Proper nutrition is also essential for the physiological development of bees to live their intended life span.

Pollens are the health food in honey bee colonies. They provide protein, lipids, vitamins, minerals, sterols, antioxidants and other nutrients required by the bees. No single pollen source can provide all the nutrients required in the diet of honey bees. This can become particularly important when colonies are used for pollinating commercial crops where cultivation and herbicides are used for "clean cultivation" or "removal of competing bloom." In order to have colonies populated with the most robust bees, best capable of dealing with diseases, parasites, and exposure to toxic chemicals, colonies need access to a good mix of quality pollens.

### Provide Larger Scale Local Habitat for Managed Honey Bees

California is a state where conservation action is especially critical in helping to reduce the serious deficit in natural forage for honey bees in California. A major forage deficit in California drives the importation of honey bees from other regions of the U.S., the importation of bee packages from Australia and the importation of contaminated pollen for honey bee feed supplements from sources like China to help meet California agriculture's pollination needs.

These interregional movements and imports if unabated represent continuing vectors for more diseases and pathogens that could devastate honey bees in California and elsewhere in the U.S. and the essential pollination services they provide to agriculture in California and across the nation.

Any increases in local forage and bee pasture can reduce the needs for imported hives, produce healthier and more sustainable local pollinator populations, and reduce the potential for pests and diseases brought in through imports that can devastate honey bees and other pollinators. Updating the conservation practice standards at the national and state levels is a critical step in helping farmers and ranchers increase habitat for managed and native pollinators.

### Honey Bees Need Larger Scale Bee Pasture

A typical commercial holding yard of a hundred or more colonies must forage over an area of over at least a dozen square miles! The nutritional requirements of honey bee colonies are significant. Each colony requires a forage area of anywhere from one to many acres, depending upon the plant resources and soil moisture. Between crop pollinations, a beekeeper must keep his or her bees in holding yards to provide them adequate nutrition to maintain their strength.

Honey bees are especially dependent upon late summer and fall blooming plants, as they prepare for winter. Honey bees survive the winter by feeding on honey and pollen stored during summer and fall. Therefore, special consideration must be given to encouraging plantings of late summer and fall plants to meet this critical need.

While smaller scale plantings for native bees are helpful, for growers who wish to integrate larger scale beneficial practices that benefit honey bees, a potentially useful frame of reference is 'Bee Pasture' categories as defined by Dr. Keith Delaplane (University of Georgia): *Single Year Productive, Multi-Year Productive, and Permanent Productive*. By planning for sufficient resources for honey bees, other pollinators will also benefit.

### Utilize New Farm Bill Pollinator Provisions to Help Managed and Honey Bees

The CRP and other farm bill conservation programs managed by USDA should be utilized to the maximum extent practicable to encourage habitat development and protection for managed honey bees, pursuant to new pollinator conservation provisions in the farm bill. This new provision encourages use of all USDA conservation programs in developing habitat for native and managed pollinators, and conservation practices that benefit native and managed pollinators. Honey bees are, of course, managed pollinators; and their wellbeing is certainly critical to the future wellbeing of agriculture.

PFSP urges USDA to identify forage and habitat for ag pollinators—honey bees and native pollinators—as a national priority resource concern. State offices where ag pollination services are important should be encouraged to make a similar determination, especially in states or regions where ag pollination services are important and where forage deficits are recognized as a limiting factor for healthy honey bees and native ag pollinators.

### Update Conservation Practice Standards and Planting Recommendations to Include Pollinator Needs

PFSP understands that conservation practice standards and planting recommendations developed by NRCS are used to determine appropriate plantings of vegetative cover on CRP lands. PFSP applauds the stated commitment by NRCS to modifying selected practices to better clarify their relevance to managed and native pollinators. This work should proceed expeditiously, with emphasis placed on the larger scale needs of managed honey bees. We hope the CCC will encourage such action by NRCS.

### Enhance Planting Mixes to Include Plants that Provide Optimal Forage for Honey Bees

There are several plant species, particularly clovers, that are being widely used on CRP and other conservation lands that provide optimal forage value and carrying capacity for honey bees, such as in the Conservation Reserve Program (CRP), that are non-native and non-invasive. American Beekeeping Federation president Zac Browning testified at a congressional hearing in 2007 that beekeepers in aggregate place as much as 40 percent of their **hives on CRP lands for high quality and safe natural forage (no pesticide use) when the hives are not being used to pollinate crops**. PFSP urges that NRCS and CCC continue to include such species in recommended planting mixes where appropriate.

PFSP understands that at least one state NRCS office (Minnesota) has excluded all non-native species, including only native species in updating plant lists for pollinators. This type of action is a giant step backward for managed pollinators and should be reversed, at least until proven native plantings of equivalent forage value and carrying capacity can be identified.

### Designate Honey Bee Liaison at CCC and Convene Honey Bee Working Group to Assist

PFSP recommends that CCC (1) designate a liaison at CCC charged with working with beekeeping industry interests, and (2) establish and convene a working group of beekeepers, qualified research and extension specialists and interested agricultural producers to help maximize the bee pasture value of CRP lands.

### Educate CCC Assistance Providers and Growers About Honey Bee Habitat Needs and Approaches

PFSP urges CCC to provide training to CCC employees and other technical assistance providers to make them aware of the new farm bill authorities, the importance of habitat for managed and native bees, and how the CRP program can be used to assist farmers and ranchers. PFSP recommends that CRP application forms include credit for including forage for managed honey bees and other pollinators, as well as a commitment to allowing beekeepers to place their hives on CRP lands in determining eligibility and payment levels.

CCC could also conduct outreach programs to help make farmers and ranchers aware of the importance of providing bee pasture habitat on CRP lands for managed and native bees and the availability of technical resources and available assistance.

In closing, ag pollination services are critical to the future of American agriculture. The health of honey bees can no longer be only a beekeeper problem. As humans, we want to use the bees to meet our needs, but do not take ownership for the responsibility for ensuring their wellbeing and their right to thrive. PFSP believes these services are clearly at risk if we do not take decisive action to protect and sustain honey bees, beekeepers and native pollinators.

PFSP is a volunteer-based nonprofit headquartered in Santa Rosa, California that is dedicated to improving the health of honey bees through a collaborative approach involving beekeepers, growers, scientists and land management agencies with a concurrent objective of contributing to restoring native pollinator populations.

PFSP stands ready to assist the CCC in identifying appropriate planting mixes on CRP lands to help address the larger scale needs of managed honey bees and in encouraging farmers to allow beekeepers to place their hives on CRP lands for forage.

Respectfully Submitted,

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