

Coevolution Institute (CoE) Comments, House Ag Subcommittee on Horticulture and Organic Agriculture, March 29 Hearing on “Colony Collapse in Honey Bee Colonies”

Executive Summary

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.

Not enough yet is known about Colony Collapse Disorder (CCD) and the massive loss of honey bee colonies to be able to conclude responsibly about its extent, cause(s) or remedy. We also don't know what the impact is on agriculture and, if any, on native pollinators. Beekeepers in 26 states (and now occurrences in Europe) are reporting catastrophic losses. Possibly similar to "disappearing disease" of past decades, CCD may be caused by a convergence of factors (mites, viruses, bee diseases, pesticides and other environmental stresses) which may have weakened bees' immune systems. Immediate funding for objective, rigorous science is needed to address this problem as well as an assessment of the entire pollination network. That's the only way to address CCD and also prevent future, potentially even more serious, problems.

Even as efforts are appropriately focused on how to address the CCD and meet farmers' vital pollinator needs, this is a simple but significant fact that **we can no longer take honeybees and other animal pollinators for granted**. As a major National Academy of Sciences report recommends, we must improve our scientific understanding, increase awareness about the amazing world of pollinators and their importance to our food supply and healthy ecosystems, and take action to protect pollinators and their habitat. We do know that forces like habitat destruction, improper use of pesticides, invasive species and global warming are placing our pollinator world at risk.

ACTIONS THAT CAN BE TAKEN NOW

Here are some actions that can be taken now, even as we work to address CCD and its impacts on honey bee colonies:

- ◆ Farmers can incorporate practical conservation practices now to sustain and enhance pollinators and their habitat.
- ◆ Congress can help now by strengthening the Conservation, Research and other titles of the 2007 Farm Bill in targeted ways to provide farmers and ranchers with improved pollinator assistance.
- ◆ Federal agencies and other stakeholders can help now by increasing and focusing the pollinator component of research and conservation programs, coordinating their efforts and collaborating closely with the ag community and other managers of our natural resources.
- ◆ CoE and many NAPPC partners pledge to help now by continuing to facilitate collaborative efforts for the benefit of pollinators and pollinator habitats and the agriculture systems and ecosystems that depend upon them.
- ◆ All Americans can help now with pollinator-friendly practices in their own back yards.
- ◆ Importation of non-native bees should be avoided, absent effective protocols.

AVOID IMPORTING POLLINATORS THAT COULD BECOME INVASIVE SPECIES

If CCD proves to be a serious problem this year, CoE cautions against scrambling to fill the void by importing other managed non-native pollinator species from other countries or other eco-regions. If CCD proves to be a persistent problem, the pressure to allow such remedies could grow. We need to avoid

compounding one problem by creating others that could make the situation far worse. Imported species intended for a good use can quickly become out-of-control *invasive* species. CoE urges the following policy and protocols be applied regarding any trans-boundary shipments:

- ◆ Trans-boundary movement of pollinators should fall under the regulations and agencies that govern other beneficial organisms, such as biocontrol agents.
- ◆ Appropriate quarantine facilities should be established in recipient countries and zones to assure the health of the pollinators being moved in.
- ◆ Veterinary, or equivalent, pollinator certifications of being disease-free should be established prior to shipment (for example, APHIS regulations for honeybees intended for shipment to U.S.).
- ◆ More information/research on diseases of pollinators other than Apis is urgently required.
- ◆ A major initiative should be undertaken to consider the potential use ("domestication") of endemic species for local use in pollination, instead of primary reliance on introduction of exotic species.
- ◆ Sanitary inspection and certification should be established for the operation of pollinator rearing and husbandry facilities.
- ◆ Risk Assessments should take into consideration environmental risks, and potential agronomic benefits, prior to importation of any pollinator across international and biogeographic borders.

Until such protocols can be implemented, trans-boundary (international and biogeographic) movement of pollinators should be curtailed immediately, both in the U.S. and globally.

FARM BILL PROGRAMS CAN BE “POLLINATED”

Existing farm bill conservation, forest management and other programs designed to work with and assist farm, ranch and forest land managers can be strengthened to better address managed and native pollinator needs by “pollinating” authorizing language in the next farm bill reauthorization through modest but significant language changes. This is NOT asking for *new* programs, but rather *enhancements* to existing programs as a pragmatic approach that can yield meaningful results with limited resources. Conservation authorities and other selected programs under the farm bill 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.

Candidate programs for such “pollinating” language include EQIP, the Conservation Reserve Program (CRP), the Conservation Security Program, the Wildlife Habitat Incentives Program, the Farm and Ranchlands Protection Program, the Grasslands Reserve Program, the Wetlands Reserve Program and the Watershed Rehabilitation Program, all capably operated by NRCS. Conservation assistance programs operated by USFS could be similarly augmented. Agencies can focus and better coordinate existing programs to address pollinator needs.

BEE Ready for National Pollinator Week, June 24-30, 2007. Events are being planned in our Nation’s capitol and throughout the country to celebrate and raise public awareness about our pollinating partners and the need to take actions that protect pollinators and their habitat. For more information, go to <http://www.pollinator.org>.

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 lands. More information about CoE may be accessed at www.coevolution.org. CoE facilitates the North American Pollinator Protection Campaign (NAPPC), a tri-national collaboration working 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. For more information about NAPPC, go to <http://www.nappc.org>.