

For Immediate Release  
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# Fact Sheet: The Economic Challenge Posed by Declining Pollinator Populations

*Pollinators contribute substantially to the economy of the United States and are vital to keeping fruits, nuts, and vegetables in our diets. Over the past few decades, there has been a significant loss of pollinators—including honey bees, native bees, birds, bats, and butterflies—from the environment. The problem is serious and poses a significant challenge that needs to be addressed to ensure the sustainability of our food production systems, avoid additional economic impacts on the agricultural sector, and protect the health of the environment.*

## Economic Importance of Pollinators:

- Insect pollination is integral to food security in the United States. Honey bees enable the production of at least 90 commercially grown crops in North America. Globally, 87 of the leading 115 food crops evaluated are dependent on animal pollinators, contributing 35% of global food production.
- Pollinators contribute more than 24 billion dollars to the United States economy, of which honey bees account for more than 15 billion dollars through their vital role in keeping fruits, nuts, and vegetables in our diets.
- Native wild pollinators, such as bumble bees and alfalfa leafcutter bees, also contribute substantially to the domestic economy. In 2009, the crop benefits from native insect pollination in the United States were valued at more than 9 billion dollars.

## The Challenge of Pollinator Declines:

- The number of managed honey bee colonies in the United States has declined steadily over the past 60 years, from 6 million colonies (beehives) in 1947 to 4 million in 1970, 3 million in 1990, and just 2.5 million today. Given the heavy dependence of certain crops on commercial pollination, reduced honey bee populations pose a real threat to domestic agriculture.
- Some crops, such as almonds, are almost exclusively pollinated by honey bees, and many crops rely on honey bees for more than 90% of their pollination. California's almond industry alone requires the pollination services of approximately 1.4 million beehives annually—60% of all U.S. beehives—yielding 80% of the worldwide almond production worth 4.8 billion dollars each year.
- Since 2006, commercial beekeepers in the United States have seen honey bee colony loss rates increase to an average of 30% each winter, compared to historical loss rates of 10 to 15%. In 2013–14, the overwintering loss rate was 23.2%, down from 30.5% the previous year but still greater than historical averages and the self-reported acceptable winter mortality rate.
- The recent increased loss of honey bee colonies is thought to be caused by a combination of stressors, including loss of natural forage and inadequate diets, mite infestations and diseases, loss of genetic diversity, and exposure to certain pesticides. Contributing to these high loss rates is a phenomenon called colony collapse disorder (CCD), in which there is a rapid, unexpected, and catastrophic loss of bees in a hive.
- Beekeepers in the United States have collectively lost an estimated 10 million beehives at an approximate current value of \$200 each. These high colony loss rates require beekeepers to rapidly, and at substantial expense, rebuild their colonies, placing commercial beekeeping in jeopardy as a viable industry and threatening the crops dependent on honey bee pollination. The loss rates have driven up the cost of commercial pollination: for instance, the cost of renting honey bee hives for almond pollination rose from about \$50 in 2003 to \$150-\$175 per hive in 2009.

- Some of the viral agents that are impacting honey bee colonies are also now reported to be adversely affecting native pollinators, such as bumble bees, and the pollination services they provide.
- Population declines have also been observed for other contributing pollinator species, such as Monarch butterflies, which migrate from Mexico across the United States to Canada each year, returning to overwinter in the same few forests in Mexico. The Monarch butterfly migration, an iconic natural phenomenon that has an estimated economic value in the billions of dollars, sank to the lowest recorded levels this winter, with an imminent risk of failure.

#### Administration Actions:

In response to the challenges to commercial bee-keeping, the President's 2015 Budget recommends approximately \$50 million across multiple agencies within USDA to: enhance research at USDA and through public-private grants, strengthen pollinator habitat in core areas, double the number of acres in the Conservation Reserve Program that are dedicated to pollinator health, and increase funding for surveys to determine the impacts on pollinator losses.

Building on this budget initiative, President Obama today issued a Presidential Memorandum on [\*Creating a Federal Strategy to Promote the Health of Honey Bees and Other Pollinators\*](#) that takes a number of important steps to tackle the problem of pollinator declines, including:

- Directing the Federal Government to use its research, land management, education, and public/private partnership capacities to broadly advance honey bee and other pollinator health and habitat;
- Establishing a new Pollinator Health Task Force, co-chaired by United States Department of Agriculture and the Environmental Protection Agency, to develop a National Pollinator Health Strategy. The Strategy will include: a coordinated research action plan to understand, prevent, and recover from pollinator losses, including determining the relative impacts of habitat loss, pesticide exposure, and other stressors; a public education plan to help individuals, businesses, and other organizations address pollinator losses; and recommendations for increasing public-private partnerships to build on Federal efforts to protect pollinators;
- Directing Task Force agencies to develop plans to enhance pollinator habitat on federal lands and facilities in order to lead by example to significantly expand the acreage and quality of pollinator habitat, consistent with agency missions and public safety; and
- Directing Task Force agencies to partner with state, tribal, and local governments; farmers and ranchers; corporations and small businesses; and non-governmental organizations to protect pollinators and increase the quality and amount of available habitat and forage.

In line with these efforts, the Federal Government will also work to restore the Monarch butterfly migration using research and habitat improvements that will benefit Monarchs as well as other native pollinators and honey bees. These actions support the February 2014 Joint Statement by President Obama, Prime Minister Harper of Canada, and President Peña Nieto of Mexico to renew and expand collaboration between North American nations to conserve the Monarch butterfly.