

**STATEMENT OF ROBERT JOHANSSON,
ACTING CHIEF ECONOMIST, U.S. DEPARTMENT OF AGRICULTURE
BEFORE THE U.S. HOUSE AGRICULTURE SUBCOMMITTEE ON
BIOTECHNOLOGY, HORTICULTURE, AND RESEARCH**

May 13, 2015

Chairman Davis, Ranking Member DelBene and other Members of the Subcommittee, thank you for the opportunity to be at today's hearing on the federal coordination and response regarding pollinator health. With more than 75 percent of flowering plants relying on pollinators, their health is important to the U.S. Department of Agriculture (USDA) and to all of us as consumers.

The value of honey production in the United States increased in volume and value terms by about 20 percent in 2014 relative to 2013 (USDA-NASS Honey Report; 2015, 1995) rising to 178.2 million pounds produced and \$385.2 million, respectively. The estimated value earned by honey producers in 2014 is more than double that of 1994 adjusting for inflation. However, production volume is lower by about 18 percent relative to 1994.¹ The current average price of \$2.16 per pound is a record high indicating the increasing value that US consumers place on honey (average of retail, private, and co-op pricing). U.S. imports of honey have also reached historic highs, nearly doubling in volume between 2004 and 2013 to 154 thousand metric tons (USDA-ERS 2014).²

U.S. honey producers are responding to higher honey prices; the number of producing colonies and average production per colony grew from 2.6 million colonies producing 57 pounds per year in 2013 to 2.7 million colonies at 65 pounds per colony of production in 2014. There is still plenty of room for growth; in 1993, there were more than 3 million colonies at 73 pounds of production per colony.³ Furthermore the rental fees that producers charge for pollination services continues to rise due to increasing demand. The average rental rate per hive doubled between 2005 and 2009 to more than \$150. In 2012 the fees charged for honeybee pollination services exceeded \$650 million (USDA-ERS 2014).⁴ However, annual loss of colonies remains high, making it difficult to meet rising demand for pollination services. Although the national

¹ <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1191>

² <http://www.ers.usda.gov/publications/sssm-sugar-and-sweeteners-outlook/sssm-314.aspx>

³ <http://usda.mannlib.cornell.edu/MannUsda/viewDocumentInfo.do?documentID=1191>

⁴ http://www.ers.usda.gov/media/1679173/special-article-september_-pollinator-service-market-4-.pdf

trend data we currently have is limited, we know that beekeepers lost 34 percent of their colonies during 2013-14, down from 45 percent the year before, but still very high.⁵

To promote the health of honeybees and other pollinators, President Obama issued his June 20, 2014 Presidential Memorandum charging Federal departments and agencies with taking steps to help restore pollinator populations. The Federal government is poised to lead this effort, given its broad national perspective and ability to identify and prioritize goals and programs that extend beyond state and national borders. Understanding that the Federal government cannot act alone in promoting pollinator protection, the President also identified the need for public-private partnerships as well as increased citizen engagement. To accomplish this effort, the President created the Pollinator Health Task Force, co-chaired by the Secretary of the USDA and the Administrator of the Environmental Protection Agency (EPA).

USDA has a rich history in partnering with other Federal agencies and numerous stakeholders in recognizing that the collaborative effort is much more effective in achieving success. USDA agencies are providing important contributions to the protection of pollinators. Our research agencies, including the Agricultural Research Service (ARS), National Institute of Food and Agriculture (NIFA), Economic Research Service (ERS), and National Agricultural Statistics Service (NASS) conduct and support research. As a recent example of this scientific collaboration, NASS has initiated a series of national colony loss surveys, which will provide the statistical foundation for several other Federal agencies conducting scientific work in this area. The Office of Pest Management Policy (OPMP) coordinates pest management work across the Department and with the Environmental Protection Agency. The Animal and Plant Health Inspection Service (APHIS) conducts a national survey of honey bee pests and diseases and collaborates with others on ways to manage, suppress, and eradicate pests and diseases. We are exploring ways to further leverage this work with our colony loss survey program, so that detailed results regarding honey bee health can be generalized to the nation as a whole. Our conservation programs, including those managed by the Farm Service Agency (FSA) and the Natural Resources Conservation Service (NRCS), support pollinator habitat across the country. And, the Forest Service (USFS) supports outreach, technology transfer, and pollinator habitat.

⁵ Lee et al (2015) "A national survey of managed honey bee 2013–2014 annual colony losses in the USA," *Apidologie* 46(3), pp 292-305.

The Office of the Chief Economist (OCE) will typically be asked to review and analyze various issues that may fall under the purview of those activities. Such, review and analysis may occur as part of the normal operation of my office. As such, I will describe some of our responsibilities and provide some examples of how we interact with EPA and their activities.

The Office of the Chief Economist

The main mission of the Office of the Chief Economist is to advise the Secretary of Agriculture on the economic prospects in agricultural markets and on the economic implications of policies and programs affecting the U.S. food and fiber system and rural areas; ensure the public has consistent, objective and reliable agricultural forecasts; and to promote effective and efficient rules governing USDA programs. Areas of major analyses include international trade agreements, risk-sharing institutions, crop insurance, commodity programs, developments in commodity markets, sustainable development, and agricultural labor.

OCE serves as the focal point for the Nation's economic intelligence, analysis, and review related to domestic and international food and agriculture. The World Agricultural Outlook Board (or the World Board) is housed within OCE and coordinates and oversees clearance of all commodity and aggregate agricultural data used to develop USDA outlook and situation information. The World Board publishes the monthly *World Agricultural Supply and Demand Estimates* report, which shows U.S. farmers, policymakers, and traders what's going on in the world of farm commodity forecasts at a single moment in time. The World Board also publishes the *Weekly Weather and Crop Bulletin*, an international summary of crop-related weather developments.

Four other offices are located within the Office of the Chief Economist.

- The Climate Change Program Office functions as the Department-wide coordinator of agriculture, rural and forestry-related global change program and policy issues facing USDA. The Office ensures that USDA is a source of objective, analytical assessments of the effects of climate change and proposed response strategies.

- The Office of Environmental Markets supports the Secretary in the development of emerging markets for water quality, carbon sequestration, wetlands, biodiversity, and other ecosystem services.
- The Office of Energy Policy and New Uses advises the Secretary of Agriculture in developing and coordinating **USDA** energy policy, programs, and strategies related to energy and biobased products, and coordinates USDA activities related to energy and biobased products within and outside the **USDA**.
- The Office of Risk Assessment and Cost-Benefit Analysis ensures that major USDA regulations affecting the environment, human health or human safety are based on sound scientific and economic analysis. The Office reviews and provides guidance to agencies on risk assessments and cost-benefit analyses.

Coordination with EPA

The Department of Agriculture collaborates with the EPA on a number of key issues, such as on the Federal Pollinator Health Task Force. Many offices within the USDA have established working relationships with the EPA that date back to the Agency's founding.

As you know, the USDA works to support the American agricultural economy to strengthen rural communities; to protect and conserve our natural resources; to increase agricultural production and export; and to provide a safe, sufficient, and nutritious food supply for the American people. The USDA encourages sufficient and efficient production of food, fiber and forest products for the public welfare and manages and conserves many of the Nation's natural resources. The EPA administers and enforces Federal laws designed to protect the Nation's land, water, and air systems so that they may support life. The laws administered by EPA address air and water pollution, solid and hazardous waste management, pesticides and toxic substances and radiation protection. Many of EPA's actions – pesticide regulation, point and non-point source pollution control, solid waste management, air regulation, renewable fuel feedstock regulation – affect rural and agricultural communities. Through cooperation on environmental issues affecting agriculture and rural communities, the EPA and the USDA have developed strong working relationships.

My office, in particular, coordinates review of USDA and other agencies' significant rulemakings and has a long history of collaboration with the EPA. An example of how USDA and EPA have worked together is the Agricultural Worker Protection Standard. In July 2013, EPA notified USDA that the proposed rule and economic analysis were ready for review. Under the Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA), EPA must provide the Secretary of Agriculture a copy of a rule and give USDA the opportunity to review and comment. The Office of Pest Management Policy was created in 1997 to coordinate the USDA's role in the pesticide regulatory process. USDA's Office of Pest Management Policy invited EPA to brief USDA to provide an overview of the proposed rule and shortly after that briefing, the proposed rule arrived. In reviewing the economic analysis OCE helped enhance some assumptions that EPA had developed. The early deliberations resulted in improvements to some components in the draft proposed rule prior to the delivery of to the Office of Management and Budget (OMB) for interagency review and then for public comment.

The Office of the Chief Economist also works with EPA on non-regulatory matters. For example, the Office of the Chief Economist through its Office of Environmental Markets has been working closely with EPA to develop and expand market-based approaches to conservation in the Chesapeake Bay watershed. Market approaches can lower costs for those complying with water quality requirements and create new revenue streams for farmers. In 2013, USDA and EPA entered into a Department-level partnership agreement on water quality trading. Through this agreement USDA and EPA are collaborating on new tools and information to help the states in the region reduce costs in program design and implementation, improve environmental performance, and foster consistency. Under the agreement, OCE and EPA have jointly developed a web-based information support tool that links policy guidance from EPA with examples and materials from existing trading programs. That partnership has allowed USDA and EPA to better meet the needs of the States and should create new opportunities for farmers in the region while lowering the costs of improving water quality in the Chesapeake Bay.

We also work with EPA on a variety of Clean Air Act issues, such as our public comments to EPA's Science Advisory Board on the accounting framework for biogenic greenhouse gas emissions. As another example, my office and EPA cooperate on efforts to quantify and report national greenhouse gas emissions and sinks. USDA provides estimates of forest carbon stocks

and sequestration and works closely with EPA to estimate greenhouse gas emissions and sinks from the agricultural sector. EPA includes that information in the annual US Greenhouse Gas Inventory.

CONCLUSION

Thank you for inviting me to provide some perspective on pollinator issues as well as the role of the Office of the Chief Economist.