



Enhancing Pollination Services and Profitability- An Opportunity for U.S. Agriculture

Key Points of a report outlining the principal findings and recommendations of the Native Pollinator Project- an agricultural led initiative designed to explore pollination services from native pollinators.

Introduction

Over the past several years declines in populations of managed and native bees and other pollinators have been growing, as have calls for initiatives and programs designed to rebuild populations of native pollinators and enhance the pollination services that they provide. Leadership for most of these efforts has come largely from within the pollination stakeholder community.

A Pollinator Protection Project was initiated in 2006 and now operates as special project of the National Association of State Conservation Agencies. Guided by a national Steering Committee composed of agricultural and conservation leaders, the project for the first time presented findings and recommendations developed by individuals who produce or support the production of food, feed and fiber.

Roles of Pollinators

- Pollinators, which include bees, insects, birds, and other animals, are vital to production agriculture. Approximately 30 percent of the food and fiber crops grown throughout the world depend upon pollinators for reproduction. The fruits and seeds from these crop species provide 15 to 30 percent of the foods and beverages consumed by humans. Roughly translated, approximately one out of every four mouthfuls of food and drink that we consume are produced from pollination services provided by pollinators.
- The U.S. grows over 100 crop plants that are pollinated by insects and animals. Primary examples include almonds, apples, pears, citrus fruits, cherries, pumpkins, cucumbers, blackberries, cranberries, raspberries, strawberries, blueberries, melons, tomatoes, soybeans and sunflowers. Insect-pollinated crops produced in the United States were valued at an estimated \$20 billion to the U.S. economy in 2000.
- An estimated 15 percent of the combined value of U.S fruit, nut, vegetable and field crop production can be attributed to pollination services provided by native bees. Including meat and dairy products produced from bee-pollinated forage and hay crops, such as alfalfa and clover, as well as the mark-up and sale of insect-pollinated produce, the contribution of pollinators to the U.S. annual economy could be an order of magnitude more.

Populations in Decline

- The decline in pollinator populations across North America poses a real threat to production agriculture that could result in economic losses to the sector and the national economy in the billions of dollars.
- Native bees can't replace managed bees but represent a significant part of the overall pollination process for the nation's agricultural and horticultural crops, particularly in providing an "insurance policy" of additional pollination services when honey bee populations are low.
- The dramatic decline in pollinator populations is a critical issue for production agriculture but it is not yet on the top priority list for many agricultural organizations. Many growers are not aware of how significant the contribution of native pollinators is to the production of their crops and farm profitability.
- Many simple and relatively inexpensive practices for pollinator conservation are available. Opportunities exist to "piggy back" pollinator protection efforts with integrated pest management and conservation initiatives designed to protect soil, water and air quality and enhance wildlife habitat.
- Widespread adoption of these practices is unlikely unless there is a general appreciation by the production agriculture sector of the ecological and economic benefits of pollinators.

Working Together

The Native Pollinator in Agriculture Work Group is now organizing an Agricultural Pollination Alliance through which the agriculture sector can work collaboratively and proactively to establish and protect native pollinator habitat and increase populations of native and managed pollinators. The Alliance is working to gather information, identify priorities and engage partners and policy makers on the need to address pollination challenges.

Contact Information

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