# UNDERSTANDING THE EMERGING GLOBAL HONEY BEE HEALTH CRISIS

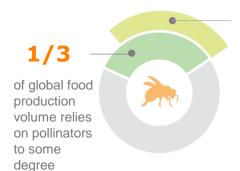
### THE WORLD RELIES ON THE HONEY BEE

The future security of America's food supply depends on healthy honey bees.

**Tom Vilsack**, Agriculture Secretary

Honey bees are a key component to sustainable agriculture, healthy diets, the global food supply, and the economy.

Sources: Klein 2007, Calderone 2012



80%

of flowering plants are pollinated by honey bees and other insects

#### THE CURRENT CHALLENGE

Today, a major decline in honey bee health has put agriculture, healthy lifestyles, and worldwide food security at risk. U.S. overwintering losses for managed honey bees from 2007 to 2011 ranged from approximately 28-33%, compared to a historical rate of 10-15%.\*

\*Source: Survey data generated by USDA



APPROX. 30%

Of the honey bee population is now lost each winter, compared to 10-15% historically

#### STRESS FACTORS ON HONEY BEE HEALTH



#### **Pesticide Exposure**

Intensified agriculture and beekeeping practices lead to pesticide exposure.



#### **Lack of Genetic Diversity in Breeding**

Management and selective breeding practices may have reduced genetic diversity in bees.



#### **Lack of Forage & Nutrition**

Lack of a varied diet – due to declining wild spaces and increased monocultures – have led to malnutrition.



#### **Arthropod & Disease Pests**

Intensification of commercial beekeeping and miticide resistance has increased bee susceptibility to Varroa mites.

#### WHAT'S AT STAKE IF WE DON'T ACT?

If we do not act, honey bee health, the global food supply, healthy ecosystems, and the economy will be impacted.

# THE HONEY BEE HEALTH COALITION

#### **WHY WE EXIST**



We've formed **The Honey Bee Health Coalition** to bring together beekeepers, researchers, government agencies, agribusinesses, growers, conservation groups, manufacturers and consumer brands, and other key partners to improve the health of honey bees in general and specifically around production agriculture.

## **OUR MISSION**

Our mission is to **collaboratively implement solutions** that will help to achieve a healthy population of honey bees while also supporting healthy populations of native and managed pollinators in the context of productive agricultural systems and thriving ecosystems.

#### **HONEY BEE HEALTH COALITION INITIATIVES**

The Coalition is focusing on accelerating collective impact to improve honey bee health in four key areas.



Forage & Nutrition



Hive Management



**Crop Pest Management** 



Outreach, Education & Communications

# SUPPORT THE COALITION

**Join us** as we work to achieve a healthy population of honey bees to support productive agricultural systems and thriving ecosystems.

For more information, contact Julie Shapiro at <a href="mailto:jshapiro@keystone.org">jshapiro@keystone.org</a>.