

Honey bees have more than just agricultural value...

...their pollination services also provide an array of ecological benefits that cannot easily be assigned a dollar value.

Honey bees pollinate native wild trees and vegetation which in turn provides many important ecosystem services including:



- Food and habitat for wildlife
- Improved water filtration
- Removal of carbon dioxide from the atmosphere
- Better flood and erosion control
- Increased biodiversity
- Improved aesthetic and sustainable urban landscapes.

These services are essential to Marylanders' commitment to preserving and respecting our state's natural resources.



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Maryland State Beekeepers Association, Inc.
Dedicated to beekeeping in Maryland since 1908

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*Photo credits: Tatiana Lisle, queen and drinking bees;
Angie McDaniel, bee on sedum.*

THE VALUE OF HONEY BEES IN MARYLAND



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Honey bees play a critical role in Maryland agriculture

The Value of Honey Bees to Important Maryland Crops				
Crop	2011 Value (\$)	Dependence X on Insect Pollination	Proportion X Attributed to Honey Bees	Value Attributable to Honey Bees (\$)
Apples	7,650,000	1.0	0.9	6,885,000
Peaches	4,735,000	0.6	0.8	2,272,800
Soybeans	204,094,000	0.1	0.5	10,204,700
Cantaloupes	1,320,000	0.8	0.9	950,400
Cucumbers	1,050,000	0.9	0.9	850,500
Watermelon	8,736,000	0.7	0.9	5,503,680
Total	227,585,000			26,667,080

Source: USDA NASS, 2012; Morse and Calderon, 2000.

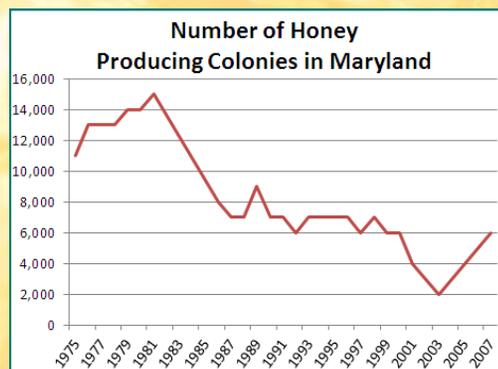
But honey bees are in trouble...

Bee colonies are on the decline in Maryland. The Bee Informed Partnership 2011-2012 survey indicates that 26% of honey bee colonies were lost in Maryland during the winter. The number of honey producing colonies in 2007 is 45% less than in 1975 and 60% less than in 1981.

Honey bees face many stressors, including:

- **Pesticides:** Increased use of pesticides, including homeowner applied pesticides, poses a risk to native and managed bees alike.
- **Pests and Pathogens:** Bees face an unprecedented array of disease organisms, dozens of viruses, and a poorly understood phenomenon called Colony Collapse Disorder in which the entire colony suddenly disappears.
- **Regulations:** Uninformed local council members and commissioners may consider bees a safety concern and so attempt to prevent beekeeping. In fact, properly managed bees are gentle bees and help keep more aggressive and less desirable bees out of our communities! Thus, encouraging responsible beekeeping in our cities not only increases pollination of backyard crops but also helps prevent diseased and more aggressive bees from moving in.
- **Poor Nutrition through Habitat Loss:** Often, development means areas that once bloomed with a variety of flowers are paved over or covered over with flower-free lawns.

- **Over \$26 million dollars of agricultural produce** are attributed to honey bee pollination in Maryland annually.
- **More than 100,000 pounds of honey** are produced by Maryland beekeepers annually. Honey is produced in both the country and city, with city beekeepers sometimes producing more honey per hive than their rural neighbors!
- **Using beeswax and hive by-products,** dozens of home-based businesses produce top quality, value-added products, such as soaps, lip balms, and candles.



Source: USDA NASS (1975-2007).

You can make a difference!

- **Keep bees!** Adding colonies increases genetic diversity and supports long-term colony survivorship. Begin by taking a short course with a beekeeping club. For a list of Maryland clubs visit: www.mdbeekeepers.org/clubs.html
- **Support local beekeeping programs,** such as the University of Maryland's Baltimore City Youth Beekeeping Program. Visit: baltimore.umd.edu/Urban_Agriculture
- **Educate local representatives** about the importance of keeping beekeeping lawful. Your voice can make a difference!
- **Follow the label for pesticide applications.** Better yet, avoid applying altogether or use Integrated Pest Management. Visit: www.mdipm.umd.edu/
- **Buy local honey** to support local beekeepers. To see what farmers markets offer honey visit www.marylandsbest.net/
- **Plant habitat for pollinators.** Information is readily available online. Be sure to plant non-invasive species. Visit: www.xerces.org/pollinators-mid-atlantic-region/



Sedum is an excellent nectar source. Blooming late summer through fall, it offers food to honey bees and other pollinators when the overall nectar flow is low.