

## Horticultural News and Research Important to American Gardeners

### BELEAGUERED BEES

In addition to everyday pests and diseases, the honeybee industry has a new threat to deal with, known as colony collapse disorder (CCD). First reported along the East Coast in fall 2006, CCD has since afflicted hives in 24 states across the country. Similar occurrences have been observed in Spain and Poland.

CCD is characterized by hives with a sudden lack of adult bees without any sign of the dead insects, and slow invasion by common pests. Unlike past colony losses, this disorder differs in that bees fail to return to the hive—a characteristic that is highly unusual for these insects—and colony decline is rapid, with bees disappearing in large quantities, sometimes literally overnight.

The cause of CCD is unknown; however scientists suspect a variety of factors may play a role in the decline, including accumulated stress from transporting bees long distances, viral diseases, a fun-

gus, parasitic mites, and insecticides. High bacteria levels, viruses, and fungi have been observed in the guts of recovered dead bees, causing researchers to speculate the afflicted bees' immune systems are being compromised.

With the monetary value of commercial honeybees estimated to be \$15 billion annually, CCD could have a dramatic effect on certain sectors of agriculture.



“Every third bite we consume in our diet is dependent on a honeybee to pollinate that food,” says Zac Browning, vice president of the American Beekeeping Federation. Farmers are 90 to 100 percent dependent on honeybee pollination for crops such as almonds, avo-

cados, blueberries, cranberries, cherries, asparagus, broccoli, celery, pumpkins, squash, and sunflowers.

For more information on CCD, please visit the Mid-Atlantic Apiculture website at <http://maarec.cas.psu.edu/ColonyCollapseDisorder.html>.

### COURT ORDERS MORE FEDERAL OVERSIGHT ON TRANSGENIC CROPS

In early February, the Federal District Court ordered that the United States Department of Agriculture (USDA) more thoroughly review requests to plant test plots of genetically engineered crops.

While this ruling comes in the wake of controversies surrounding transgenic alfalfa, rice, and sugar cane, it actually resulted from the discovery in 2004 that a genetically engineered grass had escaped a 400-acre test plot in Oregon and had crossed with wild plants of the same species up to 13 miles away.

In partnership with Monsanto, a major biotechnology and agribusiness firm, the Scotts Miracle-Gro Company developed a genetically engineered creeping bentgrass (*Agrostis stolonifera*) that resists glyphosate, the major ingredient in Monsanto's herbicide Roundup®. Environmental groups and federal agencies have voiced concerns that a “superweed” could result from the development of an herbicide-resistant grass that can cross easily with other grasses.

The testing of the bentgrass also called into question the assessment procedure the USDA Animal and Plant Health Inspection Service (APHIS) uses to grant permits for testing genetically modified plants.

In the case brought by the International Center for Technology Assessment, the Center for Food Safety, and other plaintiffs, the judge found that the USDA had violated the National Environmental Policy Act (NEPA). This regulation requires that the USDA take certain steps to determine the environmental risk of field testing genetically engineered crops, and there was no documentation showing it had done so before granting permits for Scotts to test approximately 2,000 acres of its bentgrass in Oregon, Idaho, and Virginia.

As a result of the judge's ruling, “the USDA will have to look at the impact of

### PEOPLE and PLACES in the NEWS

#### New Executive Director of Cleveland Botanical Garden

Cleveland Botanical Garden's board of directors has appointed Natalie Ronayne as the institution's new executive director. Ronayne became CBG's chief operating officer in 2005, then a year later became its acting executive director. Previously, she was director of the Department of Parks, Recreation and Properties for the City of Cleveland.



Natalie Ronayne

“Natalie possesses strong administrative and financial skills,” says Ruth S. Eppig, president of CBG's board, “and a significant knowledge of the community, its residents, its public officials, and those of us dedicated to plants, the environment, and making Greater Cleveland the best place in the country to work, study, and play.”

Brian Holley, who was the previous executive director since 1994, had juggled the job of executive director at the Cleveland Botanical Garden and the Naples Botanical Garden in Florida since June 2005. He left in February 2007 to run the Naples garden full time.

# Tour Philadelphia's Gardens



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all bioengineered crops instead of just wholesale excluding them from assessment, as they have had a pattern of doing," explains George Kimbrell, staff attorney for the Center for Food Safety. "This will mean that the permitting process should take longer, and going forward, these field tests can be challenged if the USDA doesn't comply with NEPA."

### RACHEL CARSON CENTENNIAL

May 27, 2007, marks the 100th birthday of the late author and ecologist Rachel Carson, widely credited with launching the modern environmental movement with her 1962 book, *Silent Spring*. Though Carson died in 1964 of breast cancer, her efforts to raise public awareness of environmental issues still resonate today. To commemorate the centennial of Carson's birth, several events and activities are taking place throughout the country.



Rachel Carson

At the Rachel Carson Homestead in Springdale, Pennsylvania, a year-long celebration will include the "Rachel Carson Birthday Celebration & Sustainable Feast" on May 27. The Homestead is also featuring the Legacy Challenge "to make permanent, measurable changes in behavior and policies that promote Rachel Carson's environmental ethic." Anyone can make pledges to "reduce their environmental footprint" by going to [www.rachelcarsonhomestead.org](http://www.rachelcarsonhomestead.org).

On May 19, the Rachel Carson Council is holding an open house at the Silver Spring, Maryland, home in which Rachel Carson lived for more than three decades and where she wrote *Silent Spring*. The organization encourages everyone to pledge to make May 27 a "pesticide-free" day.

The Newton Marasco Foundation is celebrating Carson's centennial by sponsoring presentations of "A Sense of Wonder," a one-woman play about Carson's life. They are also working with federal, state, and local governments to officially declare May 27 Rachel Carson Day. Visit [www.newtonmarascofoundation.org](http://www.newtonmarascofoundation.org) for more information.

The Friends of the Fish and Wildlife Service National Conservation Training Center have started a book club in honor of the centennial. During 2007, they will discuss books by and about Rachel Carson. Go to <http://rcbookclub.blogspot.com> to join in.

### CONNECTING KIDS WITH NATURE

In an effort to get youngsters to tune into green rather than a screen, the National Wildlife Federation (NWF) has launched the Green Hour™ program, designed to encourage children to experience at least one hour a day that would include "unstructured play and interaction with the natural world."

On [www.greenhour.org](http://www.greenhour.org), the NWF provides ideas for parents and children to explore and enjoy nature, with new activity suggestions appearing weekly. Some of the recommended backyard activities include adopting a tree, putting up a feeder and identifying the birds that come to visit, and going on a scavenger hunt for feathers, spider webs, bird nests, acorns, and other natural treasures. There is also a blog and a "Community Corner" where participants can share comments, questions, and ideas.



Digging for worms can teach children about soil ecology.

### ENDANGERED SPECIES DAY

In support of threatened, rare, and endangered plants and animals, last year the U.S. Senate designated May 11, 2006 Endangered Species Day. With encouragement from numerous conservation groups, the Senate recently passed a resolution to declare May 18, 2007, as the second annual Endangered Species Day.

"Many species are struggling," says Mark Rockwell, the Endangered Species Coalition State Organizer for California. "Raising awareness is critical to the protection process."

Numerous organizations will host events to emphasize the importance of protecting and preserving threatened species. These will include lectures and seminars at the Zoological Society of San Diego's Center for Conservation and Research for Endangered Species (CRES), the largest zoo multidisciplinary research team in the world. The New England Wild Flower Society in Framingham and Arnold Arboretum in Boston, Massachusetts, also plan to host events.

For more information, visit the Endangered Species Coalition website at [www.stopextinction.org](http://www.stopextinction.org).

### GRANTS FOR HORTICULTURAL RESEARCH

The Horticultural Research Institute (HRI) has awarded \$350,000 to fund 24 research projects and four scholarships for 2007. Chosen by the HRI Executive Committee from a collection of more than 100 applications, projects were granted based on their potential to solve industry-related problems and offer new techniques to the field.

The grants include a \$30,000 award to Harold Pellett of the Landscape Plant Development Center in Minnesota for his project, "Development of New Landscape Plants for all Regions of North America," and a \$25,000 grant to Pierluigi Bonello and Daniel A. Herms from Ohio State University for their work on "Molecular Biology of Ash Resistance to the Emerald Ash Borer." Robert D. Wright from Virginia Polytechnic Institute and State University was awarded \$15,000 for an experiment investigating the use of pine chips as a container medium for nursery crops.

A division of the American Nursery & Landscape Association, HRI has awarded more than \$4 million of industry funds to approximately 600 research projects since 1963. For additional information, visit [www.anla.org/research](http://www.anla.org/research).

### STAMP OF APPROVAL FOR POLLINATORS

This summer, the United States Postal Service is releasing four new stamps in recognition of the insects, birds, bats, and other animals that pollinate the world's food and ornamental plants. These new stamps depict four pollina-



This set of four new stamps featuring pollinators will be available this summer.

tors and four wildflowers in an interlocking design that emphasizes the "ecological relationship between pollinators and plants and suggests the biodiversity necessary to ensure the viability of that relationship."

The stamps feature two Morrison's bumblebees with purple nightshade (*Solanum xanti*); a calliope hummingbird with a hummingbird trumpet blossom (*Epilobium canum*, syn. *Zauschneria cana*); a lesser long-nosed bat and a saguaro flower (*Carnegiea gigantea*); and a southern dogface butterfly on prairie ironweed (*Vernonia fasciculata*).

### A BLOOMIN' CHANGE

Gardeners can help track the effects of climate change by participating in Project Budburst, sponsored by the National Phenology Network, an organization designed to compile "phenological data to support global change research."

Project Budburst is a national campaign that encourages members of the public to monitor certain events in their natural surrounding. Participants choose from a list of 54 trees, shrubs, and ornamental plants and then track the leafing and flowering times of an individual plant through June 15. After compiling the data, scientists will compare the results to historical records in an effort to track the effects of climate change on plants.

With the contribution of the public, scientists hope to monitor longer-term changes in our natural environment. Visit the Project Budburst website at [www.windows.ucar.edu/citizen\\_science/budburst](http://www.windows.ucar.edu/citizen_science/budburst) to learn how you can participate.

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