# THEBUZZ

# POLLINATOR PARTNERSHIP

Pollinator Partnership Newsletter, Fall/Winter 2011

#### **Our Future Flies on the Wings of Pollinators**

#### School Garden Kit Teaches Kids About Food

he Bee Smart™ School Garden Kit supports educators in guiding students in grades 3 - 6 through a discovery process that will increase students' understanding in science, math, and language arts by connecting them to plants, pollinators, food, and gardens by creating habitat for pollinators.

Each Kit has components that can be used at school, at home, and online to maximize the learning experience. Although a diverse groups of schools are using this Kit, included is the California School Standards at the end of each Lesson Plan as a point of reference. There are also recommendations that help connect community resources to the outdoor classroom. Each Kit includes teacher incentives from our partner, Burt's Bees, to reward teachers for helping students become more bee-conscious. Get yours at www.pollinator.org/beesmart.htm for a \$150 donation!





### Free App Makes Plant Selection Easy!

See the BeeSmart™ Pollinator
Gardener app's easy user interface to browse through a database of nearly 1,000 native plants! Filter your plants by what pollinators you want to attract, light and soil requirements, bloom color, and plant type. The BeeSmart™ app is an excellent plant reference to attract bees, butterflies, hummingbirds, beetles, bats, and other pollinators to the garden, farm, school and every landscape. Available NOW for Android and iOS (iPhone, iPad, and iPod).



Get yours for free in your app store or market or by visiting:

www.pollinator.org/beesmartapp.htm

#### Features include:

- Customizable plant lists based on your preferences including pollinator type, flower color, soil type, sunlight and plant type.
- Regionally specific plant lists based on the geographical and ecological attributes of your location just by entering your zip code!
- Easy to use search option for querying on common or botanical plant names.
- Bring customized list to a nursery or garden center – never forget what to buy or plant again!
- Create a note easily using the free Catch app and add text, pictures and voice recordings to your plant notes.



In collaboration with

Catch



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# **RESEARCH NEWS**

#### Milkweeds for Monarchs

Monarch butterfly populations have been declining in rapid numbers, mostly due to habitat loss. The Pollinator Partnership (P2) is working with partners across North America and the Monarch Joint Venture to reverse this decline and create more monarch friendly habitat.

The first step to creating additional habitat for monarchs is growing more milkweeds. Milkweeds are the only host plants for monarchs. Monarchs lay eggs on milkweeds and newly hatched caterpillars feed on the milkweed.

P2 has been busily incorporating milkweeds into

restoration plans and gardens. For example, each Bee Smart™ School Garden Kit includes a regionally specific milkweed seed, and early next year P2 will be releasing a monarch habitat development manual

for utility rights-of-way managers that focus specifically on supporting monarchs as they make their seasonal migrations of over 3,000 miles.



- Mary Rager, P2 Plant Ecologist

# **Update: Boeing Field Work**

After a season's worth of data collection, a preliminary analysis has revealed that Santa Susana tarweed (*Deinandra minthornii*) growing near a restoration site attracts a greater diversity of pollinators. Santa Susana tarweed is considered rare and only occurs in California.

## Pollinators Support Wildlife

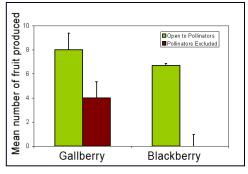
The first field season has come to an end in P2's Mississippi timberland study. Although there were some very heavy rains that caused some unusual bloom timing, we have finished the year with data verifying the pollinator dependence or limitation of many local wildlife plants. The chart to the right is our preliminary data comparing the fruiting of two important wildlife plants, gallberry (*llex sp.*) and blackberry (*Rubis sp.*).

Our experiment contrasted fruit development when pollinators were allowed to freely pollinate and when they were excluded with bags. Gallberry plants appear to be pollinator limited, meaning that more fruits develop when

pollinators are present – in this case twice as much fruit. Blackberries are pollinator dependent with no fruit development when pollinators are excluded. This means that the local wildlife need the bees as much as the plants do – without pollinators there would be no fruit or berries to feed on in the late summer and early fall.

Another key element of this study is looking at how increasing pollinator occurrence will impact the availability of food in the forest. We will need another field season to address this question, so stay tuned for another update in 2012.

- Vicki Wojick, Ph.D., P2 Program Associate



Preliminary data comparing the fruiting of two important wildlife plants, gallberry (*Ilex sp.*) and blackberry (*Rubis sp.*) with and without pollinators.

#### Name that Bumble Bee!



Thanks to P2 and the U.S. Forest Service, now, for the very first time, there's a guide to all 21 species of bumbles bees occurring east of the 100th Meridian in the United States. Detailed color

photos of bumble bees on their favorite blossoms are presented, along with distribution maps. Additional facial photos graphs are crucial for identification and are illustrated. Information on the natural history of each species is discussed including common food plants and life history information. A unique dichotomous key to the species is an indispensable part of the guide. The 103 page extensive guide was co-authored by scientists from three different countries:

Sheila Colla from Canada, Leif Richardson from the U.S. and UK expert Paul Williams. Get your copy of the Eastern Guide by donating \$10 for shipping and handling at www.pollinator.org/books.htm. The western US version is in the works and will be available soon!

- Stephen Buchmann, Ph.D., NAPPC International Coordinator



#### Grant to Help Farmers Requires Matching Funds

A 2 year \$150K grant from USDA NRCS requires a 1 to 1 match for P2 to complete an intense 4-state assessment of how programs that help farmers and pollinators be as effective as possible. Raising the match is required before work can commence. Your unrestricted OR matching dollars will bring pollinators to America's farmland. Please consider donating generously.

## **Buzz Across the** Nation in Support of Highways BEE Act

Introduction of the Highways Bettering the Environment (BEE) Act (H.R. 2381) in June, during 2011 Pollinator Week, was an important benchmark in the three-year effort by the Pollinator Partnership to "pollinate" federal transportation law. Highway rightof-ways managed by State Departments of



Transportation represent 17 million acres of opportunity for cash-strapped States to both save money and improve pollinator habitat through Integrated Vegetation Management (IVM), including reduced mowing and strategic plantings of native forbs and grasses. H.R. 2381 directs the Secretary of Transportation to use existing authorities, programs and funding to assist IVM and pollinator habitat efforts by State DOT's.

Lead sponsors are pollinator advocates Alcee L. Hastings (D-FL) and Timothy V. Johnson (R-IL). Rep. Hastings said, "Many conservation approaches are viewed as adding costs - this measure is designed to help cash-strapped states reduce roadside maintenance costs, while providing habitat for pollinators and other benefits. Everyone wins; we save money, and the safety of our nation's highways is enhanced. Rep Johnson noted, "Our bill's approach is to help States reduce roadside maintenance costs while providing better habitat for pollinatorssimilar to farmers being good conservationists while they produce our food. Neighboring farmers will benefit from improved ag pollination services."

The Pollinator Partnership worked closely with the original sponsors to develop the legislation. A group letter facilitated by the P2has been signed by 27 diverse national organizations representing beekeepers, gardeners, farmers and conservation groups, as well as businesses including Blue Diamond Growers, Lafarge and Waste Management. The letter has also been signed by 46 researcher scientists, 175 other national and regional organizations and over 1,500 individuals.

What can you do? Find out more and sign the group letter at www.pollinator.org/BEEAct.htm

#### A Big Buzzing Thank You to our WONDERFUL SUPPORTERS!

Over the past 6 months we've received donations from:

Laurie and Chick Adams Stephen Akeson Almond Board of California American Beekeeping Federation Atherton Garden Guild Julie Baker Holly Bartholmai **BASF Corporation** Bee-Alive, Inc. Gus and Kay Benz John Birkmire Emily S Brigham Rob Brown Christina Brownlow Danika Burr **Burt Family** Foundation Burt's Bees Ellen Calderazzo Mary Cefalu Juanita Cole The Conservation CropLife America Patrick de Freitas Rachel Edelson Susan Ellis Fred Eltringham Herbert Englishman

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This issue is also available at our Web Site at

www.pollinator.org.

We're busy as bees producing The Buzz.

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## Smithsonian Institution and Pollinator Partnership Bring International Focus to Pollinator Plight



P2's signature collaborative initative, the North American Pollinator Protection Campaign (NAPPC), brought science, agro-business, government agencies and conservation groups together for an intensive strategic two day summit in Washington DC. From Europe, Mexico, Canada, and the U.S., key stakeholders set in motion plans to combat pollinator loss through outreach, science, policy and restoration action.

This 11th Annual International NAPPC Conference was held at the nations leading repository of America's scientific treasure, the Smithsonian's National Museum of

To watch live recorded streaming videos of the conference, visit http://www.mnh.si.edu/nappc2011/

Natural History. The NAPPC delegates heard inspiring keynote addresses from the U.S. Fish and Wildlife Agency's Associate Deputy Bryan Arroyo, Ed Flanagan of Jasper Wyman and Son, the Rev. Richard Cizick, and Graham Hartwell of BASF in England. All the way France, the filmmaker Mark Daniels showed the first ever U.S. screening of *The Mysterious Disappearance of the Bees*.

The heart of the summit was a meeting of the minds set in motion by focused Task Forces addressing all issues from the importation of bees from other countries to the use of international treaties to support healthy pollinator populations and everything in between. NAPPC partners, with the support of P2's staff, build liaisons to bring the finest minds and resources to bear on these problems from a united and strategic perspective. Filmmaker Mark Daniels, a first time NAPPC participant, commented that "in all my experience, I have never seen such a variety of perspectives working together. This is truly remarkable."



During a behind-thescenes tour of the U.S. National Herbarium, Gary Krupnick, Ph.D., head of the Plant Conservation Unit at the Smithsonian Institution, shows a specimen of Passiflora (The Passion Flower family) collected by the U.S. National Cancer Institute for their anti-cancer and anti-AIDS screening program.



NAPPC Evening Reception, Rotunda, Smithsonian Institution, Washington, DC



Dr. David Inouye NAPPC Chairman

NAPPC Partners exchange ideas and create strategic plans in Task Forces.



The Strange Disappearance of the Bees Film Panel Discussion: Left to Right: Dave Mendes, American Beekeeping Federation; Dennis vanEngelsdorp, Dept. of Entomology -Penn State; Mark Daniels, Filmmaker; Tom Moriarity and Tom Steeger, EPA; Laurie Adams. Pollinator Partnershin



Rev. Richard Cizik, Keynote Speaker, Bridging Outward: Collaborators for the Planet



Pollinator Advocate Award Winners, Left to Right were Clement Kent, Isabel Ramirez, Laura and Peter Berthelsen, presented by P2's Laurie Adams, Executive Director and Dr. Vicki Wojcik, Program Associate; and NACD's Rich Duesterhaus

