UC Davis Department of Entomology *and*The California Center for Urban Horticulture

Häagen-Dazs® Honey Bee Haven: Living and Learning among the Busiest Agricultural Workers



We rely upon honey bees to pollinate roughly one-third of the foods we eat. But these busy agricultural workers are in trouble. Seasonal food shortages and monoculture production can exacerbate health problems for bees already challenged by factors such as stress, disease, pesticides, inbreeding and climate change. Some or all of these factors may be culprits in colony collapse disorder (CCD), a phenomenon in which an entire colony will abandon its hive. There is no solution as yet.

A Solution for the Bees

Honey bee pollination adds \$10.7 billion to the value of the crops they pollinate, not including the value of "free" pollination—to marginal crops, pastures, the environment, and home gardens. The impact of CCD is national, but California agriculture is especially susceptible to losses stemming from CCD because of the variety and volume of crops requiring honey bee pollination, including almonds, stone fruits, melons, squash, and forage crops. Concern for the health of honey bee colonies is at an unprecedented high and has captured the attention of school children and policy makers alike.

The UC Davis Department of Entomology and California Center for Urban Horticulture are partnering with ice cream-maker **Häagen-Dazs** to build **Honey Bee Haven**, a half-acre public garden that will provide a three-season food supply for honey bees. The garden is located at the Harry H. Laidlaw Honey Bee Research Facility, a leader in bee biology research since its founding in 1932. Research at the facility focuses on bee biology, bee health and meeting the needs of California's multibillion-dollar agricultural industry.

In addition to providing nutrition for the bees and an excellent site for field research, Honey Bee Haven will serve as a teaching resource for schools and the general public. The garden design is embedded with engaging, thought-provoking lessons on how we rely upon bees to support food production and how our care of and interaction with them is critical to their survival. Construction will occur July-October 2009.



The Visitor Experience

A team of award-winning landscape architects, exhibit designers and interpretive planners have planned a thought-provoking storyline—what honey bees are, what they do, why they're in trouble and how we can help—that forms the basis of the garden structure and visitor experience. Features include the following:

At the main garden entrance, visitors will be greeted by a *scale-model of a honey bee* and giant flower specimens that will "shrink" human scale to that of a bee. Visitors will be able to examine details of honey bee anatomy and imagine themselves in the role of a bee visiting the garden to find food, water and shelter. Envisioned to be four feet, head to tail, the bee sculpture will be an immediate attraction to visitors who will be welcome to touch and explore the model.

Four inter-connected garden collections form the physical and interpretive framework of the garden. Incorporated into each—Honeycomb Hideout, Nectar Nook, Pollinator Patch and My Backyard—are gathering spaces that serve as orientation points for guided tours, facilitated programs and 'chat time' with beekeepers and entomologists. Each collection explores a distinct theme, such as pollination for food production, the high demand that monoculture places on honeybees, home-garden solutions that benefit honey bees, and distinctive behaviors and habitats of honey bees.

Interpretive signage throughout the site will shape visitors' impressions and provide important information about bees and their role in agriculture and environmental pollination.

Design team

Donald Sibbett, Landscape Architect, designs learning environments for nature centers, public gardens and museums, including the Laurance S. Rockefeller Preserve, the Gore Range Natural Science School and the Yosemite National Institute/Headlands Institute.

Ann F. Baker is a Sr. Landscape Architect with RRM Design Group. She brings expertise on ecological design to projects including commercial site planning, urban garden design and trail construction.

Jessica Brainard, Interpretive Planner, develops scientific exhibits, including recent projects at the California Academy of Sciences, the Lindsay Wildlife Museum, and the Huntington Botanical Gardens.

Chika Kurotaki, Exhibit Designer, has created interpretive exhibits and displays at Pillar Point Harbor, Golden Gate National Parks Conservancy, and the UC Davis Tahoe Environmental Research Center.

Department of Entomology, UC Davis

Top-ranked by the *Chronicle of Higher Education*, the department offers thirteen specializations, such as biological control, pollination biology and forensic entomology. The faculty's work on fundamental and applied problems has led to ground-breaking scientific discoveries and practical solutions for integrated pest management in California's agricultural and urban environments. http://entomology.ucdavis.edu

The California Center for Urban Horticulture

The CCUH helps Californians develop more sustainable gardens, landscapes and public parks with timely horticultural information. http://ccuh.ucdavis.edu

Cagwin and Dorward Landscape Contractors

As leaders in "Green, Sustainable, Organic" landscape solutions, Cagwin and Dorward invests heavily in education and advocacy on environmentally sound landscape strategies. www.cagwin.com

Donor Opportunities

Together, we can make a difference for honey bees and provide engaging educational experiences that inspire new learning about these important agricultural workers. For more information about how you can make a donation to support Honey Bee Haven and honey bee research at UC Davis, please contact us.

Jan Kingsbury, Director of Major Gifts

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