



The Butterfly Pavilion & Insect Center
6252 West 104th Avenue
Westminster, CO 80020

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Organization
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Youth Summer Camps



The Butterfly Pavilion offers one-hour, half day, and full day science education camps focusing on a variety of insect-related topics during the summer from June to August.

The journey begins in the classroom with crafts, animal encounters, and activities, and then ventures out into the great outdoors where explorers face nature and all its creatures! Campers will learn about insects, arachnids, aquatic invertebrates, and their important role in the environment. Each day is sure to thrill all children, from the timid worm collector to the budding entomologist.

Camps are for children ages 5 - 10 and provide an exciting and engaging opportunity for kids to learn about science and invertebrates using buggy crafts, outdoor bug safaris and other activities. The camps are offered in partnership with local organizations and vary in price. More camp information is available at www.butterflies.org!

SAVE THE DATE:

Plant Conservation Day
May 30

Insectival
July 11 & 12

Back to School Gift Shop Sale
August 13 - 16

Senior Day
August 19

Tunes at Two on Tuesday
(Music in the Garden Program)
September 1, 8, 15, 22, 29

Date Night
September 10

October 3 & 4
Fall Clearance Sale

Bug A Boo Halloween Event
October 24 & 25

Living Lights Celebration
Month of December



Flutterings

Journal of the Butterfly Pavilion Spring 2009



Declining pollinators, real or imagined?

By Elise Oberliesen, freelance writer

Sticky and sweet, honey makes anything taste delicious. Drizzled on warm peanut butter toast—breakfast served. Warm milk and a dollop of honey lulls you and the kids into dreamland. Thanks to the honey bees, life is sweet.

Always on the fly, bees have a big job. Pollinating the nation's breadbasket and citrus groves—the job keeps bees employed and with no worries of downsizing.

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Butterflies are just
the beginning....



The Flight of Bees & Pollinators

story continued from front page

But not all plants require winged pollinators like birds, bats, bees and butterflies. That's because self-pollinators like tomatoes, peppers and strawberries do it themselves.

Ask Jerry Webb what he thinks about bees and he will say they are one of the most fascinating creatures on the planet. Webb keeps 35 hives at his home in Littleton. With 40 years experience, Webb has great respect for these masterful fliers. Webb spent many years teaching others about bees, harvesting honey, and until recently, he sold beekeeping supplies to others who share his passion.

With great attention on the carbon footprint, disappearing farmland and clean drinking water, it would be unfair to omit disappearing pollinators, namely, bees. Although colony collapse disorder, CCD, is gaining attention, researchers want to better understand why bees are either turning up dead or disappearing from the hive or apiary.

But not all agree the problem is real. Beekeepers reporting evidence of declined populations would seem real enough. But Webb said the numbers can be linked to "normal attrition." He said it isn't an issue, but rather hype.

When hives experience a 20 percent reduction, for example, it could simply reflect the natural progression of the hive.

"Life expectancy of a queen is 2-3 years," said Webb. "With worker bees, it's 6 months in the summer when she's working," he added.

Another possible factor is the swarming phenomenon, says Webb, where half the bees leave the hive. The queen invites half the staff to find a new home; and off they go. Existing workers raise a new queen to rule the roost. It's just the way of the bee.

Debate about the declining bee populations rages on. With more questions than answers, the future holds a wildcard. And it's a growing sentiment shared by more people, including Laurie Davies Adams, executive director for the California-based Pollinator Project.

"The fact is, we don't really know the status of pollination," Adams said. "We're just at the beginning of understanding the plant pollinator risks. It's a relationship we are vitally dependent on, yet sorely ignorant of its status," she added.

And that's why Adams believes we should not ignore the problem until we are certain what is happening with the bees.

"It's clear the honey bee is in trouble, and the bumble bee as well. But most of the listed endangered insects are butterflies," Adams said, referring to a study from the National Academy of Sciences.

Some plants fare better than others, says Sarada Krishnan, Horticulture Director at Denver Botanic Gardens. The impact of pollinators is much greater on the agriculture industry, she said.



"From an ornamental horticulture perspective, not so much," Krishnan said.

But that's not to say the wild iris and lunging sunflowers we enjoy while hiking are out of the woods, in terms of potential pollination threats. Krishnan said we need to be aware that native bees pollinate native plants. And this symbiotic relationship helps them thrive. Without each other, survival could come into question for both.

"The loss of native bees is of great importance. If they go extinct, you will see a loss of native plants that depend on those bees for pollination."

Plant Conservation Day May 30, 2009

Dig, plant, touch, smell, and grow. Join us from 10 a.m. to 4 p.m. for a full day of plants – up close and personal. We'll have hands-on tours, classes, family activities, volunteer opportunities, and a plant sale. Dr. Douglas Tallamy, native plant expert, will speak at 10 am. Come learn about and celebrate native plants! Event included with the price of admission. More information available at www.butterflies.org.



Attention Teachers: The Butterfly Pavilion offers teacher workshops throughout the summer. Earn continuing education credits while having fun. Visit www.butterflies.org!

Healthier Kids, A Healthier World



A recent study by the Kaiser Family Foundation found that children aged 2-18 spend an average of 5 ½ hours a day “consuming” electronic media such as television, video games, and the internet, while spending increasingly less time in unstructured outdoor play – a major concern for both the future health of the nation’s children and our environment.

In his book *Last Child in the Woods*, author Richard Louv suggests that lack of outdoor experience and physical activity can lead to both negative psychological and physical conditions such as obesity, depression, attention problems, and social isolation. These conditions, paired with a child’s alienation of the natural environment can lead to “Nature Deficit Disorder.”

Unfortunately, an increasing number of school districts are reducing or eliminating environmental education curriculum and/or programs. A survey from a 2008 report from the Center on Education Policy (CEP) found that administrators and teachers attribute two primary factors to this recent shift in pedagogy: budgetary restrictions, and the enforced increase in testing requirements for core subjects like math and reading. As a result, teachers are allotting more instruction time for these subjects and subsequently decreasing time for subjects like science, music, and art.

According to experts such as Louv, environmental education programs, in the both classroom and informal educational settings, allow students to gain interest in both science and their environment. Environmental education connects classroom lessons to real-world experiences, and

allow students to participate in hands-on experiential learning, and can often ignite curiosities that are lost with a lack of outdoor experience. This method of inquiry-based learning has been shown to improve student achievement in science, as well as core subjects such as math, reading, and social studies.

Decreasing environmental literacy in our nation has also sparked concern for our planet’s rising environmental challenges. A 2003 report from the National Science Foundation’s Advisory Committee for Environmental Research established that *“in coming decades, the public will more frequently be called upon to understand complex environmental issues, asses risk, evaluate proposed environmental plans and understand how individual decisions affect the environment at local and global scales. Creating a scientifically informed citizenry requires a concerted, systematic approach to environmental education...”*

Although school districts have had to make tough decisions and decrease programming, a new bill in Congress may provide the resources needed to keep environment education in the classroom. The No Child Left Inside Act, which recently passed the House of Representatives, “would authorize major new funding for states to provide high-quality, environmental instruction. Funds would support outdoor learning activities both, at school and in non-formal environmental education centers, teacher training, and the creation of state environmental literacy plans.” For more information about No Child Left Inside Act visit www.ncliacoalition.org.

written by Michele Morenz



Insect Census Coming this Spring

In addition to providing an interactive educational experience for families, the Butterfly Pavilion also serves as a center for research.

The Butterfly Pavilion has participated in nationwide studies such as Project Budburst, MonarchWatch and The Great Sunflower Project. Such studies are documenting the importance of invertebrate habitats, both locally and globally.

Invertebrates – animals without backbones – make up 97% of the all species on the planet! Invertebrates can be found in our oceans, redwood

forests, tropical rainforests and even in our own backyard.

Last spring, the Butterfly Pavilion horticulture department took a hard look at the secret life of its gardens. We observed and counted beneficial insects, especially predators, parasitoids and pollinators. The goal of this census was to get a sense of insect diversity in our outdoor landscapes.

If our gardens are indeed oases in the concrete desert, then we want to know just how useful they are to native insects and other invertebrates. By the time we had our first frost, we learned that our

gardens regularly host at least eleven bee species and ten butterfly species. Also, we learned to recognize seasonal and plant host patterns for such critters as ambush bugs and ladybugs.

We will again be counting beneficial insects this spring, and we need your help. Become a volunteer today and join our efforts to research invertebrates and their impact on our environment. For more information about Butterfly Pavilion research or volunteer opportunities visit www.butterflies.org.

written by Amy Yarger

Sign up to become a volunteer by calling (720) 974-1868 or volunteering@butterflies.org!





Volunteers Soar to New Heights

The Butterfly Pavilion is always looking for outgoing individuals who enjoy learning about invertebrates and sharing that information with others! The commitment is minimal and the rewards are paramount! We ask that volunteers give at least two hours per week. No experience is required. We provide all the training.

New volunteers begin their training with a New Volunteer Orientation offered monthly. The orientation includes a tour of the Pavilion and information on who we are, our message, and the different volunteer opportunities. We will also include our butterfly farming story and its important conservation implications. An application and interview must be completed before further training.

This orientation is followed by one of our three exhibit trainings—Wings of the Tropics, Tide Pool, or Crawl-a-See-Em., and a shadowing opportunity.

Additionally, we will offer regular “WOW trainings” for volunteers who want to expand their knowledge. WOW topics include Rainforest Products, Horseshoe Crabs Up Close, Terrific Tarantulas and much more!

If you have 2 extra hours that you can share with us per week, consider becoming a valued volunteer at the Butterfly Pavilion. Please contact the Volunteer Coordinator at 720-974-1868 or volunteering@butterflies.org for more information.

Volunteer Events & Trainings Schedule for April - June:

Saturday, April 11

WOW Training - Learn about Walking Sticks and become a valuable resource for the Crawl-a-see-em. (For current volunteers only)

Thursday, April 16, 3-5 p.m.

New Volunteer Orientation. Learn how you can become involved at the Butterfly Pavilion as a volunteer. Required orientation for all new volunteers. Application and interview must be completed before further training.

Thursdays, April 23 and 30, 2-5 p.m.

Butterfly Specialist Training. Learn about the Wings of the Tropics exhibit and its tropical butterflies and plants. Become an expert and help visitors build a love for invertebrates.

Wednesday, April 29 6 p.m.

Volunteer Potluck and Awards. Come enjoy a special evening of friendship and food. (For current volunteers only)

Saturday, May 2, 3-5 p.m.

New Volunteer Orientation. Learn how you can become involved at the Butterfly Pavilion as a volunteer. Required orientation for all new volunteers. Application and interview must be completed before further training.

Saturday, April 11

WOW Training - Tropical Tour. Learn about rainforests and all it has to offer. (For current volunteers only.)

Saturdays May 9 and 16, 3-5 p.m.

Tide Pool Specialist Training. Covers the Water's Edge exhibit and includes information on the tide pool animals, ocean invertebrate phyla, FAQs, and hands-on time.

(more events on page 5)

Hour Awards

30 Hours

Emily Dahlberg
Kristine Edwards
Sarah Lamer
Tina Miller
Lee Reeves
Doe Shively

50 Hours

Amanda Pruess

100 Hours

Nedra Fortune
Carol Githens
Janet Lutz
Judith McFadden
Jane Meyer
Jeremy Sunder Raj

500 Hours

Ross Echtermeyer
Cheryl Patrick
Sherry Ruby

600+ Hours

Paul Bay

3500+ Hours

Francis (Fran) Haas

Sea Star

Paul Bay
Gary Gagnon
Lori Harrison
Bunny Kleinhenz
David Sherman
Kyle Andrews
Cheryl Patrick
Virginia Hokensn
Warren Fair

Year Awards

1 Year

Vern Collins
Lori Harrison
Sarah Lamer
Leah Smith
Michelle Stremich
Karin Wilson

4 Years

Paul Bay
Joann Dawe
Ross Echtermeyer
Alex Gray
Anita Liuzzi
Shirley McConnell
Amanda Noland
Kathy Raaf
Sherry Rubinstein

9 Years

David Sherman



Did you know the Butterfly Pavilion is 501(c)3 nonprofit organization. You can give tax deductible donations through www.givingfirst.org

Mantis Mascot Volunteers Needed



Butterfly Pavilion volunteers provide a variety of services and assist our staff in many ways. Volunteers work in our gardens, provide information to visitors in the exhibit areas, and others help with office work. But did you know volunteers also assist with marketing the Butterfly Pavilion through mascot appearances?

A few years ago the Butterfly Pavilion purchased a praying mantis mascot costume for use at fairs, special events, parades, and during television interviews. The praying mantis has traveled all over the state and most recently was featured on Good Morning America during a special about Denver.

Over the years, several volunteers have dressed as the green invertebrate, and have made children smile and adults giggle. It takes a special person to embody the characteristics of the insect that can move its head 180-degrees and uses camouflage to avoid being eaten. One such volunteer is Mike Sipes who has appeared as the mantis several times at various public relations events and outreach efforts.

Mike says he enjoys dressing as the mantis because of the delight it brings children. "People always want to take a picture with the mantis," Mike says. "I encourage other volunteers to be the mantis – it's easy."

We encourage anyone who is 5'5" to 5'9" and under 200 pounds to volunteer to be the mantis. Appearances usually only last one to two hours, and the mantis always has a "handler" to help with getting dressed and walking around! All training is provided. Volunteers interested in becoming the mantis should email volunteering@butterflies.org with availability and contact information.

We also need help naming the mantis. In the past, he's been known as "Wallapus," and most recently he's gone by "Pete." But we would like your help in determining the mascot's name. Please submit your name preference to marketing@butterflies.org. We'll select a new name in May! To view pictures of the mantis in action, visit the Butterfly Pavilion Facebook page.

The Butterfly Pavilion and Jefferson County Master Gardeners Present: *The Discovery Garden Series*

Spring has arrived! So get your gardening tools and sun hat out because it's time for the Discovery Garden Series. The Discovery Garden Series consists of seven monthly workshops that include demonstrations, lectures, field trips and hands-on activities. Workshops are taught by Butterfly Pavilion staff and local Master Gardeners. The workshops will explore the fascinating relationships between insects and plants as well as touch on the importance of native plants.

Each workshop is only \$10 per person! Sign up for the series or pick and choose the workshops that best fit your interests and/or schedule. Classes meet the third Sunday of the month at 1:30 p.m. unless otherwise indicated. Pre-registration and pre-payment are required by the Tuesday before the class. Space is limited, so sign up now by calling (720) 974-1868.

Schedule:

- April 19 - Companion Planting - Cathy Jo Clawson
- May 30 - Bringing Nature Home - Dr. Douglas Tallamy
- June 14 - Adapted Plants for Colorado - Harriett McMillan
- July 19 - Native Plants - Lenore Mitchell
- August 16 - Landscaping with Natives - Lenore Mitchell
- September 20 - Bees and the Harvest - Char Gottlieb
- October 4 - Diseases and Insects - Cathy Jo Clawson



The Butterfly Pavilion offers affordable birthday party packages for children ages 2 - 12!
Call (720) 974-1863 to book a party today. Includes zoo keeper talk and live animals!





Upcoming Events and Programs

Tripod Photography Session - April 21, May 19 and June 16 at 7:45 a.m.

Relish a quiet hour of tripod photography in our tropical conservatory before we open our doors to the general public. Pre-registration and pre-payment is required. Contact volunteering@butterflies.org or 720-974-1868 to reserve your space.

Ladybug Roundup - May 2, 10 – 11:30 a.m.

Ladybug Roundup is a specially designed 'workshop' for budding 3 & 4 year-old bug scientists. This pre-literacy family fun time will explore everything about ladybugs! \$13 for member pair; \$15 for non-members. Pre-registration is required. Call 720-974-1862 or email mstoltzfus@butterflies.org to sign up.

Sunset Stroll - May 7 and June 11

Visitors are invited to experience an enchanting evening set at dusk in our magical tropical conservatory. \$6 per person. Pre-registration is required. Call 720-974-1862 or email mstoltzfus@butterflies.org to sign up.

Teen Volunteer Training - June 4 & 11

For the summer of 2009, the Butterfly Pavilion is seeking interested teens to assist with Pavilion happenings. Teens must be willing to learn about our invertebrates or plants, and to interact in a fun and outgoing way with visiting children and adults. All necessary training will be provided. Interested teens must complete and return a teen volunteer application by May 1st. Contact (720) 974-1868 or volunteering@butterflies.org with questions.

Bug Safari - June 6, 10 – 11:30 am (Ages 5 & up)

Grab this chance to go on a safari, Colorado-style! Find out what creepy-crawlies we can expect to see outdoors, and create a do-it-yourself bug catching device. We'll discover how to best find insects, and identify what's in your own back yard! Pre-registration is required. Call 720-974-1862 or email mstoltzfus@butterflies.org to sign up.

New Volunteer Orientation - June 9

Learn how you can become involved at the Butterfly Pavilion as a volunteer. Required orientation for all new volunteers. Application and interview must be completed before further training. Contact (720) 974-1868 or volunteering@butterflies.org with questions.

Teacher Workshop: Insects in Art/Culture - June 16

Delve into myths and art activities as you explore the lives, history and significance of honeybees, silk moths, dragonflies and many more invertebrates. Contact (720) 974-1868 with questions.

Crawl-a-see-em Volunteer Training - June 23 and 30

From Colorado insects to camouflaged walking sticks to spooky spiders—help us share information about our fascinating arthropods. (for current volunteers only)

Volunteer Potluck and Awards - June 23

Come celebrate your hard work with food and fun! Held at the Butterfly Pavilion. (for current volunteers only)

Open Letter from the Butterfly Pavilion President and CEO

Dear Friends,

Are we facing some challenges? My goodness, are we ever. Americans are known for their resiliency, their positive attitudes, their ingenuity and an enduring will to overcome adversity, and we shall. You've demonstrated these attributes in supporting the notion of a sustainable environment. Your sensitivity and actions in relation to our many environmental dilemmas is evidence of your wisdom and perseverance.

Your attributes are shared by the Pavilion, but moreover, we thrive because of your commitment to environmental conservation education through the study of invertebrates. Our exquisite and exotic butterflies enhance and punctuate the experiential education process. Pause for a moment and give thought to what your financial support accomplished – yes, almost 400,000 school children benefited from our standards based programs. Your continued financial support will certainly create that ember of curiosity that enlightened inquisitiveness, which will burn bright in our young scholars.

Through your generosity and abiding faith in the Pavilion's mission, the Pavilion's Mindy Meiklejohn education endowment will soon announce a scholarship opportunity for a college student who has a declared major in the field of natural science. Please continue to keep the Pavilion at the forefront of your minds as your investment in our future, the future of our children and the future of our resilient home, the Earth. Wishes for an adventurous and rewarding summer.

Regards, Robert J. Bonacci - President And CEO



Member News



Members, now is a fantastic time to visit the Butterfly Pavilion! We have so many exciting events and opportunities for you to learn all about invertebrates and enjoy the budding of Spring!

April 9, 2009 5:30-7:30 p.m. "Egg"stravaganza – Learn all about insects and their eggs with our indoor egg hunt. An outdoor egg hunt will be available, weather permitting. Join us for egg hunts, creative crafts and delicious snacks. RSVP by calling (720) 974-1866.

May 16, 2009 (NOTE DATE CHANGE) - Fancy Nancy Member Only Event – The Butterfly Pavilion is partnering with the company Special Tea Parties to bring Jane O'Connor's character Fancy Nancy to life. Join us for a special event including a fashion show, decorate your own butterfly wings, special book reading and wonderful treats. RSVP by calling (720) 974-1866.

June 4, 2009 (NOTE DATE CHANGE) - Member Afternoon Club: Butterflies in Motion - Join us for an afternoon of dance as we learn to perform the life cycle of a butterfly. Each participant will decorate his/her own butterfly wings and enjoy a summer treat. RSVP by calling (720) 974-1866.

The membership department recently reviewed its membership options and expanded what's available for guests. We will now be offering a Family Premier membership for \$85. This membership includes all the great benefits that come along with our other memberships, but will allow TWO named cardholders, and TWO guests at every visit. We've also changed the name of the Plus One membership to Individual Premier. All benefits for this membership will remain the same. Interested in upgrading your membership, call the membership department TODAY at (720) 974-1866

The Butterfly Pavilion and Beau Jo's Colorado Style Pizza have teamed up to offer members 15% off their next meal at Beau Jo's. Stop by the Pavilion's front desk in April to pick up your customer key tag.

Members receive 10% off facility rentals. Book your next event at the Butterfly Pavilion! Call (720) 974-1871.



Membership Form

Membership Levels

Individual	\$45
Individual Premier	\$65
Family	\$65
Family Premier	\$85
Lacewing	\$150

Benefits

Free Admission
Member Only Events
One-time Guest Passes
Gift Shop Discount
Member Only Gift Shop Sales
Discounts on birthday parties, camps, workshops and facility rentals.
Reciprocal membership with US zoos

New Membership Renewal Membership

Primary Cardholder's Name

Second Cardholder Name (if applicable)

Address

City, State, Zip

Phone Number

Email Address

Names of Children:

Payment Information

Cash Check Credit Card

Credit Card Type

Credit Card #

Expiration Date

Send Form To:
Butterfly Pavilion, Attention: Membership
6252 W. 104th Avenue, Westminster, CO 80020