



# THE Quill

## THE SCHUYLKILL CENTER'S DRIVEWAY GETS A MUCH NEEDED MAKEOVER!

by Joanne Donohue and Sean Duffy

For nearly 44 years, cars, schoolbuses, trucks and tractors have traveled the Schuylkill Center's driveway. Over time, traffic and Mother Nature have eroded the gravel road, altering its profile. All roads, whether paved or gravel, are designed with a crown along the center line, which sheds stormwater off to either side. In recent years, the crown in our road had failed. Increased traffic had pushed the stone out to the sides, widening the road and creating sides higher than the center at some points. Stormwater no longer sheeted off to the sides of the road; instead, the stormwater cut deep channels or remained in potholes along the length of the driveway. The resulting deterioration grew past the point of routine maintenance.

A grant from Pennsylvania's Department of Conservation and Natural Resources Community Conservation Partnerships Program enabled SCEE to hire Tim Ziegler, consultant and Field Operations Specialist from The Center for Dirt and Gravel Road Studies. One matter of immediate concern was the health of our streams, one of which receives runoff from our driveway. Sediment from roads, construction sites, farm fields, and other sources is one of the largest contributors of non-point source pollution in Pennsylvania's waterways. Runoff can alter the flow of water, destroy spawning areas for fish in the stream bed, injure aquatic organisms, and fill in the nooks and crevices where macroinvertebrates are found.

Our driveway was re-engineered to prevent the gouging of the road surface, along with sediment and other pollutants. The volume and flow of the rain runoff is broken up, so there is little chance for a build-up of velocity and erosive forces. The surface is made of driving surface aggregate (DSA), a combination of different size stone particles which allow for maximum compaction. The road does not contain any silt, soil or clay, which helps the stormwater to sheet off the surface instead of being absorbed into the road. This method is considerably more cost effective than paving the road surface.

Culverts were strategically placed along the length of the driveway to allow the stormwater that sheets off the surface of the road to pass under the road through the drainage pipes. From there, the stormwater continues downhill into the woods and infiltrates into the soil. The driveway is also narrower, allowing it to shed stormwater from its surface more quickly, and allowing for easier maintenance of the crown. Drivers will notice woody "debris" on the side of the road where there was once vegetation. During construction, the vegetation was removed and debris put in its place to keep traffic off the shoulder of the road. Over time, vegetation will reclaim this part of the driveway.

While SCEE's staff will provide ongoing maintenance to the driveway, maintaining our new road is partially the responsibility of our visitors! Speeding drivers will not only create unsafe situations for others, but will also displace stone as they drive, causing depressions in the road where water can collect. Speed bumps have been placed to remind visitors of the need to observe the speed limit (15 mph) over the entire length of the driveway.

Drivers also need to be aware of the limitations caused by the narrower road. Drivers will need to yield to oncoming traffic at certain points; they should also be mindful of the animals which periodically cross the road. Some are large, like deer and turkeys. Others, like turtles and snakes, are smaller and harder to see.

One aspect of the new driveway that has remained unchanged is the beautiful vista that surrounds it. We hope the new driveway will enhance your next visit to The Schuylkill Center!

Sources: The Center for Dirt and Gravel Road Studies  
Road funded by a grant from:  
Pennsylvania's Department of Conservation and Natural Resources  
Community Conservation Partnerships Program

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- 18 Nature for the Young: Down on the Farm
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- 23 & 24 Halloween Hikes

#### November

- 20 Nature for the Young: Leaf Collages

#### December

- 5 & 6 Bird Seed Sale at The Schuylkill Center Bookstore
- 5 Nest and Branch: Opening Reception
- 18 Nature for the Young: The Bird Tree



at a  
glance

Down to Earth: Artists  
Create Edible Landscapes  
on view through  
November 23rd.

## Staff

Dennis Burton, *Executive Director*

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Donna D'Angelo, *Executive and Business Assistant*

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Zoë Cohen, *Art Program Manager*

Rachel Dobkin, *Art Program Coordinator*

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Beatrice Kelly, *Education Assistant*

Anna Marchefka, *Environmental Educator*

Claire Morgan, *Environmental Educator and Growing Greener Community Liaison*

Camila Rivera-Tinsley, *Environmental Educator*

## Land Restoration

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Sean Duffy, *Operations and Land Manager*

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Steve Aldrich, *Wildlife Rehabilitation Administrative Assistant*

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# LETTER FROM THE EXECUTIVE DIRECTOR

We look back on the summer of '09 and wonder where it went or if it even was: The dry spring, the cool July, and the incredulous but statistical .2" rainfall deficit after all those August floods. But keeping Ben Franklin's maxim in mind, "Everyone talks about the weather, no one does anything about it," we carried on with our mission of bringing quality environmental programming to the Philadelphia region. Below are some samplings that you can find in more detail in this newsletter or on our website.

The Schuylkill Center's Nature Ramblers enrolled 280 children into its diverse activities: They took field trips as far afield as Assateague Island and the Poconos; Many of the kids joined the artists at Brolo Farm and helped out with the "Down to Earth: Artists Create Edible Landscapes" environmental art installation; and all the campers had some exposure to watching an ecosystem develop in our new 180,000 gallon entrance pond as turtles, water snakes, dragonflies, toads, frogs, and wetland vegetation found their ecological niche.

The "Edible Landscapes" installation, in addition to being studied and minded by the campers, had rousing neighbor volunteer, Green Woods Charter School students, and intern assistance

from North Light Community Center. The installations produced bushels of fruits and vegetables enjoyed at the opening reception.

The Schuylkill Center Market Garden Farm, run by the gals from *Urban Girls Produce*, has done well despite the weather and starting literally from scratch. In addition to farmer's markets such as Clark Park and Head House Square, the produce is now being sold at a farm stand at The Center's main building on Tuesdays from 2:00 to 6:00pm. *Please bring your own shopping bag if possible.*

The Center will be partnering with Green Woods Charter School and the ReVerse Foundation to introduce the 8<sup>th</sup> grade students to natural building. The students, along with a talented and experienced group of instructors, will work together over a six-week period to build a straw bale structure for The Schuylkill Center. The students will learn fundamental concepts and techniques for designing straw bale structures in a mid-Atlantic/Northeast climate. The structure will be used by The Schuylkill Center to store garden and art supplies for various environmental art and educational exhibits.

—Dennis Burton

## volunteer thank you

by Claire Morgan

The Schuylkill Center held its annual membership picnic on July 11th. At the picnic, SCEE honored several volunteers who showed exceptional dedication to our mission in the past year. Henry Geyer was one of the honorees. Henry joined our Senior Environment Corps (SEC) in 2004 and immediately took on a leadership role in this program. He helped to train others to monitor the water quality of the Wissahickon Creek on a monthly basis and later participated in a Growing Greener grant that helped school students from the area monitor both the Wissahickon Creek and the Schuylkill River. Henry is currently involved in a program with our SEC that is taking samples of the Wissahickon Creek during the summer months to monitor bacteria levels.

A group of students from The Crefeld School in Chestnut Hill was also honored at the picnic.

For the past two years, the students have visited The Center on a weekly basis. With Dan Cunitz, a science teacher, as the leader, Tom O'Hanlon, Nathan Gould, Jory Labhart, Nick Crandall, and Logan Howe have assisted the Land Restoration Department in various tasks, including removing invasives, planting natives, maintaining the deer fence, clearing trails, grounds cleanup, and preparing plants for the Native Plant Sale. They've assisted other departments with tasks ranging from stuffing envelopes for Development to assisting with the completion of exhibits for the Art Department. We are honored to be a part of Crefeld's community service program and we look forward to continuing this relationship in years to come.

# Getting their hands dirty for *Down to Earth: Artists Create Edible Landscapes*

Community and Youth Groups, Schools, and neighbors of The Schuylkill Center get involved in SCEE's new Environmental Art exhibition.

By Zoe Cohen

*Down to Earth: Artists Create Edible Landscapes* is an exhibition that highlights the growing focus and emergence of “green” principles and sustainability in relationship to food, art, design and agriculture. Guest curator Amy Lipton, Co-Director of New York's Ecoartspace, selected six artists and artist teams who worked to create socially engaging interventions in the landscape related to food and agriculture, creating an aesthetic and cultural link between art and farming.

This spring and summer, the six artists and artist teams have been busy building and planting their installations at Brolo Hill Farm, The Schuylkill Center's Second Site at the corner of Port Royal Ave and Hagy's Mill Road. But the artists haven't been working alone... a wide range of groups and individuals have been assisting the artists in the building and maintenance of the installations. This community involvement was critical, as several of the artists live out of state, and could not personally tend to the day to day needs of the gardens.

*Drawn To / Drawn From the Garden* is an installation by Simon Draper of the Habitat for Artists collective. Simon worked with a team of artists to build a small art studio/ garden shed, surrounded by garden beds. The shed is slowly being covered with brightly painted wood shingles – painted by school and community groups who are invited to come work on the project. Participants from The Waldorf School of Philadelphia, Academy of Manayunk, and ArtReach have all contributed painting shingles to the project, resulting in a diverse and colorful garden shed!

Working to help maintain all of the installations is Teens 4 Good, a group of young people who are employed for the summer at various hands-on community projects. Teens 4 Good has been visiting the site twice a week to help keep the garden projects mulched, watered, and weed-free. Student Volunteer Amber Wiggs has been enjoying the work at *Down To*

*Earth* “because it has lots of garden plots that are interesting and unique. I like the idea that artists are incorporating nature with their creativity in art.” Jamie Brooke reflects that, “I enjoy helping the artists while they are away because they will be proud of what we were able to do to help.”

Students from the The Philadelphia University Engineering and Design Institute, Sustainable Design Program, and Landscape Architecture Program, have been working with artist Susan Liebovitz Steinman on her installation *Urban Defense*. This installation has at its heart a five-sided permaculture urban forest orchard, contained within a raised bed structure built using locally culled household salvage. The permaculture planting method mimics nature's principle of combining diverse compatible plantings that conserve labor, water and soil, to produce abundant healthy food. The Philadelphia University students have contributed to all phases of the construction, planting, and maintenance of the installation, bringing their considerable design, construction, and horticultural skills to the project. “Sourcing the materials with Susan Leibovitz Steinman was a great experience for me,” said Master's Degree student Fern Gookin. “Because gardening is, to an extent, unpredictable, a project like this tends to be fluid and take on a life of it's own. I've really enjoyed seeing the evolution.”

**“Down to Earth is a true community-based exhibition”** —Amy Lipton, Curator

Of the exhibition overall, Curator Amy Lipton notes, “These art projects are dependent on the unpredictability of weather and forces of nature, and like gardeners, the artists are merely collaborators with nature. They have taken on this complex challenge with skill and with the help of many staff members, volunteers, students and friends. *Down to Earth* is a true community-based exhibition that has been a learning experience for all, benefiting the artists, myself as curator, The Schuylkill Center staff and exhibition viewers alike.”



## Down to Earth: Artists Create Edible Landscapes

### Joan Bankemper

(New York, NY)

*Willa* - a contemporary “earthwork” which will function as a medicinal herb garden.

### Knox Cummin,

(Philadelphia, PA)

*Not Drain Away*- A rain water collection sculpture off of the roof of the existing farmhouse complete with rain barrels, piping and irrigation system, which waters the *American Roots* garden.

### Ann Rosenthal and Steffi Domike

(Pittsburgh, PA)

*An American Roots Garden* - Foods common to early America, including Native American crops and those brought by settlers and immigrants.

Simon Draper and the Habitat for Artists

Collective, with Todd Sargood and Odin

Cathcart, (Hudson Valley, NY) Jeff Bailey

(Phila, PA) and Cathy Lebowitz (New York, NY)

Mini art studio, potting shed, and seven vegetable/flower gardens.

### Stacy Levy

(Spring Mills, PA)

*Kept Out* - An enclosure of blue metal fencing that will exclude deer from a small piece of the woods as a way to investigate how the deer alter their own edible landscape.

### Susan Liebovitz Steinman

(San Francisco, CA)

*Urban Defense* - a five-sided permaculture urban forest orchard.

Photos: Zoe Cohen



# calendar of events

## september

### September 12 | **Down to Earth: Artists Create Edible Landscapes**

*On view through November 23*

Down to Earth exhibition highlights the growing focus and emergence of green principles and sustainability in relationship to food, art, design and agriculture. Guest curator, Amy Liprton, Co-Director of ecoartspace. Located at our Second Site, at the corner of Port Royal Ave. and Hagy's Mill Road.

### September 18 | **Nature for the Young: Down on the Farm** 1:30pm – 3:00pm; \$8 members/\$10 nonmembers

*For naturalists-to-be between the ages of 18 months and 4 years, and their caregivers.*

Join us on the journey of food! From the forest, to the farm, to our table; we will explore parts of plants and make connections between the plants that are grown and the foods that we are used to purchasing and eating from the supermarket. A tour of The Center's new Market Garden Farm is sure to please the little ones!

### September 23 | **Environmental Science Merit Badge for Boy Scouts (part 1 of 2)** 6pm – 9pm; \$30 fee includes two programs and materials

Work toward the environmental science merit badge on The Schuylkill Center's 350 acres of natural area in Philadelphia. Complete the experiments and learn the concepts required for the badge! Programs are led by an environmental science merit badge counselor; participants must attend second program on October 7th to be eligible for the merit badge. Pre-registration is required; space is limited.

### September 25 | **Night Hike & Campfire for Adults** 7:30pm – 9:30pm; \$5 for members; \$10 for nonmembers

Join us for a naturalist-led hike on The Schuylkill Center trails after dark. Experience how the meadow, forest and pond come alive after sunset. The hike will end at our beautiful pavilion area where participants will enjoy wine, spritzers and s'mores around the campfire. Space is limited; pre-registration is required.

## october

### October 3 and 4 | **Bird Seed Sale**

8:30am – 4:30pm Saturday

1:00pm – 4:30pm Sunday

Members receive 20% off regular store prices; non-members enjoy a 10% discount. Various sizes and types of seed ranging from 5lbs. – 50lbs. Visit our store, or place your order online at [www.schuylkillcenter.org](http://www.schuylkillcenter.org)

### October 7 | **Environmental Science Merit Badge for Boy Scouts (part 2 of 2)** 6pm – 9pm

Work toward the environmental science merit badge on The Schuylkill Center's 350 acres of natural area in Philadelphia.

Complete the experiments and learn the concepts required for the badge! Programs are led by an environmental science merit badge counselor; participants must attend both programs to be eligible for the merit badge. Pre-registration is required; space is limited.

### October 10 | **SCEE Organic Gardeners Harvest Meeting (for current plot holders)** 10:00am

Schuylkill Center members who have garden plots – this meeting provides an opportunity to plan with our staff for the 2010 growing season.

### October 10 | **Design Philadelphia visits Gimme Shelter** 2pm

Design Philadelphia is a city-wide cultural event that spotlights all things design from architecture to interior design, fashion to product design, textile to graphic design. The Design Philadelphia tour of Gimme Shelter will be led by Mary Salvante and representatives of the shelters' design/build teams.

### October 16 | **Nature for the Young: The Pumpkin Patch** 1:30pm – 3:00pm

\$8 members/\$10 nonmembers: additional \$5 fee for Pumpkin Picking and Hayride  
For naturalists-to-be between the ages of 18 months and 4 years, and their caregivers. Fall is the perfect time for pumpkin picking and for learning about seeds. We will explore the Schuylkill Center's property looking for seeds of all kinds. We'll take a hayride out to The Center's pumpkin patch and pick a pumpkin of our own, as well as dissect one to look for seeds!

### October 23 and 24 | **Halloween Hikes**

6pm – 10pm; \$5 for members;

\$7 for nonmembers

Experience the wonder of a night hike, go on a hayride, and meet nocturnal creatures in The Schuylkill Center's woodlands. Roast marshmallows, paint pumpkins, and make s'mores around the campfire at one of The Schuylkill Center's favorite family events!

## november

### November 20 | **Nature for the Young: Leaf Collages** 1:30pm – 3:00pm; \$8 members/\$10 nonmembers

For naturalists-to-be between the ages of 18 months and 4 years, and their caregivers. Autumn colors and shapes will be our inspiration as we read the story 'Leaf Man' by Lois Eckhart, and then go on a nature ramble to collect leaves of different shapes and colors. We will create a collage of leaves as a take home project.

## december

### December 5 and 6 | **Bird Seed Sale**

8:30am – 4:30pm Saturday

1:00pm – 4:30pm Sunday

Members receive 20% off regular store prices; non-members enjoy a 10% discount. Various sizes and types of seed ranging from 5lbs. – 50lbs. Visit our store, or place your order online at [www.schuylkillcenter.org](http://www.schuylkillcenter.org)

### December 5 | **Nest and Branch: Opening Reception** 5pm – 7pm, artists' talk at 6pm

Juried gallery exhibition on Birds and Habitat. On view through April 3rd.

### December 18 | **Nature for the Young: The Bird Tree** 1:30pm – 3:00pm;

\$8 members/\$10 nonmembers

For naturalists-to-be between the ages of 18 months and 4 years, and their caregivers. Nature prepares for winter in many ways! We will talk about the seasons and collect materials to decorate a 'bird tree' for the winter birds of the Schuylkill Center.

*For more information about upcoming events at The Schuylkill Center, please visit [www.schuylkillcenter.org](http://www.schuylkillcenter.org)*





# kids stuff

## Scavenger Hunt

Come take a walk on our trails and see how many of the following things you can find:

- Acorn.** Can you identify which type of oak tree it came from?
- Tree hollow.** What kind of animal would use a hollow for its home?
- Feather.** Can you name the species of bird it came from?
- A piece of Wissahickon schist.** Do you know what type of rock schist is?
- Cicada exoskeleton.** What stage of the cicada's life cycle is this?
- Rotting wood.** Can you name an insect that eats wood?  
Hint: You don't want them in your house!
- Berry.** Why are berries important for migrating birds?

Why not bring a camera? Take pictures of the items you find, and start a photo journal!

**Remember!** once you find the items on your scavenger hunt, put them back! They are part of the ecosystem here, and may be used as food or shelter for our wildlife. Have fun exploring The Schuylkill Center!

## Favorite Hikes

By Eagles Summer Campers Colin Brown, Elias Goodwin, Johnny Grumbach, Jamie Polson, Ethan Trihn, and Asher Schwartz

The Ravine Loop Trail was the definite favorite hike of each and every one of us. We not only got to enjoy the challenging nature of the trail, but also the many plants and animals we saw along the way - crayfish, toads, frogs, and even snakes and salamanders!

We were also able to use our new animal tracking skills to identify deer prints (and some scat!).

### things to do on your hike:

- Do a leaf rubbing
- Identify foods eaten by various animals
- Write a story about what you saw on your hike

## Word Search

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f t e m b l q x l m s e r r k
v u r s a z y e l p l l u i w
n c n a x e r d r w y t t j a
y q e g i r r i o b i r d s h
b l c o i l n t o x n u p w s
r d f u s g s r s v u t i f r
i r q n h y l f r e t t u b e
d s e o o m j s y f d a o t t
g x u e e g d v a r u d u z l
e s n a d n a r h r r u w f e
e o d v o q m r m u s s o p h
l o p p t v t d d n f i l b s
w r y q r f z w n w j a p o y
f l o w e r s m s q o j d m u
m n g e e v j l s v p h t e o

```



See if you can find these words in the block of letters to the left...

- |           |          |             |
|-----------|----------|-------------|
| birds     | fungi    | springhouse |
| bridge    | hawk     | squirrel    |
| butterfly | meadow   | stream      |
| deer      | owl      | toad        |
| dragonfly | ponds    | trails      |
| farm      | possum   | tree        |
| flowers   | shelters | turtle      |

## Industrial Agriculture (IA)

20% of fossil fuel in the US is used for food production.

10 fossil fuel calories are required to produce 1 food calorie.

US IA emits as much CO<sub>2</sub> as 140 million automobiles.

Over 20% of IA energy is spent on packaging, processing and shipping food over 1000 miles.

\$34 billion in environmental damage is caused annually from IA's water and soil pollution, erosion, aquifer depletion and reduction of biodiversity.

71% of US Govt subsidies go to 10% of US farms.

IA pesticides kill 67 million birds annually.

The Land Institute notes that synthetic fertilizer use has increased 7 times in the last 40 years. 50% of that leaches into ground water contributing to "dead zones" in the ocean.



# URBAN FARMING AT THE SCHUYLKILL CENTER

by *Dennis Burton*

On Tuesday afternoons from 2:00 – 6:00, The Schuylkill Center offers fresh produce harvested from its 2 acre farm. The fresh fruits and vegetables, grown, harvested and sold by Urban Girls Produce at The Center's main building, will be available until the final harvest of the season in late October.

I want to clarify that The Center is not in this for the money. We created The Schuylkill Center Market Garden Farm because agriculture has become an important environmental issue. How and where we get our food impacts the environment no less than the other important choices we make such as the size and mileage of the car we drive, whether we drive a car at all, the amount of energy we use in our homes, and all the other decisions that define our carbon footprints and energy efficiency (see sidebar).

The produce at The Schuylkill Center Farm grows in soil that has no synthetic chemicals: We control injurious pests (mites, beetles, borers, slugs, aphids, etc.) by encouraging beneficial predators (birds, wasps, ladybugs, ants, etc.) with habitat suited for them; our fertilizer relies on the decom-



position of organic compost; our weeds are controlled by hand pulling then laying coffee sacks between the rows (the sacks are composted at the end of the season). The farm is relatively small but hundreds of people buy food from it. And it employs no less than a half dozen farmers through its profit-sharing system.

Our goal with The Schuylkill Center Farm is twofold: To grow and sell fresh, local, chemical-free fruits and vegetables for local consumption; and to create an opportunity to teach what that means. As with the other larger farms in Philadelphia – Weaver's Way's in Mt. Airy, and Mill Creek in West Philadelphia – we see the necessity of creating programs and opportunities for students, members, and shoppers to understand the farm-to-fork value of how and where their food is produced, and who is growing it. It's not likely that all of Philadelphia's food will be produced in Philadelphia anytime soon, but the hundreds of Philadelphians buying produce from these three farms and nearby farms in the immediate outlying counties are beginning to see the environmental value of "Buy Fresh, Buy Local."

## ENVIRONMENTAL EDUCATION: FUEL FOR THE CLASSROOM *By Virginia Ranly*

Biodiesel and other bio-based fuels have been part of national environmental and economic discussion for the past several years, but did you know it's also been a topic in science classrooms? This summer The Schuylkill Center tackled the biodiesel issue with teachers from across the region through a day-long workshop that explored the science behind biofuels, the environmental and economic considerations, and strategies for teaching about the topic in the classroom.

Common questions about biodiesel include whether it contributes to rising food prices or if it emits the same amount of greenhouse gases over its life as petroleum diesel. The Schuylkill Center brought in biodiesel expert Emily Landsburg, CEO of BlackGold Biofuels, to talk with the teachers about these issues and others. BlackGold Biofuels is a small Philadelphia-based biodiesel company. Landsburg spoke about how biodiesel can be

made from different feedstocks like soybean oil, used fryer grease, or in the case of BlackGold, waste trap grease from sewers. In addition to demystifying the transesterification process to make biodiesel, she also explained how the "oil" used to make biodiesel can be a byproduct of the soy protein used in food production or true waste products like sewer grease. Workshop participants also learned that from production to consumption, biodiesel produces many fewer greenhouse gas emissions than petroleum diesel.

The Biodiesel workshop was not just about learning facts. With guidance from Wissahickon Charter School's middle school science teacher Michael Friedman, teachers worked together to actually brew a liter of biodiesel from vegetable oil. They modeled the molecules integral to the transesterification process, and they experimented with puzzles and diagrams for illustrating the carbon cycle

as it pertains to fuel production, distribution and consumption. At the end of the day, teachers left with many of the materials they would need to replicate the activities in their own classrooms and additional ideas for incorporating the study of biodiesel into classroom units on energy.

The Schuylkill Center is able to offer teacher training and workshops with support from the Pennsylvania Department of Environmental Protection's Environmental Education Grants Program and additional support from Philadelphia University and partners such as Wissahickon Charter School and BlackGold Biofuels. Other workshops held at The Schuylkill Center this summer included Solar Energy and Green Roofs & Green Buildings. Supporting environmental education in the classroom through the training of and collaboration with teachers remains an important focus of The Schuylkill Center.



# RESCUE OF FRANKLIN INSTITUTE HAWK UNDERSCORES THREATS TO URBAN RAPTORS

by Lisa Sonneborn

In January of this year, Franklin Institute staff member Gene Mancini looked out his office window, and received a rare treat. A pair of Red-tailed hawks had begun to construct the outer shell of a nest by positioning sticks on Mancini's window ledge. Before the hawks were able to complete their project, however, strong winds knocked the structure from the ledge. After consulting with experts at the nearby Academy of Natural Sciences and the Pennsylvania Game Commission, The Franklin Institute's staff carpenter added a wooden extension to the ledge and replaced the nest. The hawks seemed to like the added security of their deluxe new perch and returned to complete their project. To the delight of city residents, Mancini installed a 'hawk cam' to track the birds' progress. With the birth of three babies in March, the hawks reached celebrity status, their growth tracked by local hawk enthusiasts, as well as hawk watchers across the United States.

As the baby hawks matured, Mancini was mindful of the challenges the birds would face in an urban environment. He called upon Rick Schubert, Director of The Schuylkill Center's Wildlife Rehabilitation Clinic, to assist in the event of an emergency. All seemed well, as two of the young hawks managed to leave the nest successfully. However, an emergency call came on Saturday, June 6<sup>th</sup>, when the only remaining juvenile hawk was seen on the street, attempting to fly, but unable to maintain elevation. When Rick arrived at the scene, a crowd had gathered; concerned that the presence of so many people would frighten the hawk and cause it to fly into the busy Parkway traffic, Rick's first task was crowd control. He then observed the hawk from a safe distance to consider next steps. The hawk, however, suddenly flew into traffic where it was nearly killed; panicked, the hawk flew into a fence, where, to the relief of onlookers, Rick was able to catch it. Rick took the hawk to our Wildlife Rehabilitation Clinic (WRC), where a thorough examination found it to be underweight, but in otherwise good condition. Rick attributed the hawk's flying difficulties to the fact that it was immature, and not yet fully capable of flight. Its undernourishment was likely due to the fact that the hawk's two siblings were

favored by the parents, and subsequently fed more. By Monday, the hawk had been returned to its nest in good health, having been well nourished at the WRC.

Rick and WRC volunteers continued to monitor the hawk's progress after its release. The mother hawk did return to the nest to feed the youngest of her offspring, and 10 days later the juvenile hawk was spotted on the roof. Despite fears that it would jump from the roof in an attempt to fly, the hawk remained safe, and had been spotted flying in the vicinity throughout June.

While hawk watchers anticipate the parent hawks' return to the nest next year, the rescue of their youngest offspring underscores both the wonder of seeing creatures in such an urban environment, as well as its inherent risks. Driven by loss of habitat and attracted by a plentiful food supply, hawks, falcons and other raptors have moved into our urban areas with increasing frequency. For many people, the presence of these majestic creatures in a large and busy city enables us to feel more connected to the natural world. But our urban lifestyle poses dangers for resident raptors; traffic, tall buildings, and even food sources can be potential threats. The rodents which can be plentiful in urban areas, and which juvenile hawks in particular find to be easy prey, may prove toxic to their predator. Chemicals used for pest control including Brodifacoum and other "second-generation anticoagulants" are lethal even in small doses. Rodents may continue to feed on poisoned bait for several days as the brodifacoum in its body builds up to many times the lethal amount. And even if the bait is indoors, a poisoned rodent may wander outside, where it's vulnerable to wild predators and domestic pets.

The WRC has treated many poisoned hawks this year alone, while the American Bird Conservancy's database of pesticide poisoning incidents contains hundreds of records of birds of prey - Red-tailed and Cooper's hawks, great horned owls, eastern screech owls, golden eagles - killed by brodifacoum. Ironically it is pesticides that are killing one of our natural allies against rodent pests, the hawks and owls. Other urban threats to wildlife are more difficult to solve, which is why the work done by



dedicated wildlife rehabilitation workers is of such importance. Said Rick Schubert. "We have already interfered with wildlife, with our roads, and cars, and buildings, and pollution, and pesticides, and habitat loss. Wildlife rehabilitation is not about interfering, it is about UNinterfering. It is about recognizing that wild animals have value, and putting them back in their natural state as they were before we disrupted them".

#### Sources

Franklin Institute Hawk Nest  
Urban Raptors, [www.urbanraptors.org](http://www.urbanraptors.org)  
*Urban Raptors, too, fall victim to Rodenticides*, 2007,  
Joe Eaton and Ron Sullivan

## grant support

Every year The Schuylkill Center gratefully accepts thousands of dollars in grant awards to support its programs. In 2009 despite the economic downturn, The Schuylkill Center was able to obtain over \$100,000 in grant funding including a very prestigious first-time award of \$15,000 from the National Endowment for the Arts. This grant was given to the Environmental Art Department to support the fall exhibition entitled *Down to Earth: Artists Create Edible Landscapes*.

The Schuylkill Center's Wildlife Rehabilitation Clinic (SWRC) received a grant of \$10,000 from the Burket-Plack Foundation to supply the Clinic with essential supplies and medication. This is the largest in a series of grants the Foundation has awarded SWRC over the past several years.

Other grants include \$25,000 from Rohm & Haas (Dow) to sponsor the 2009 Envirothon, \$12,029 from the Pennsylvania Department of Environmental Protection for teacher education programs focused on sustainable energy topics and an \$800 award from the Philadelphia Committee of the Garden Club of America to create an organic gardening education/demonstration plot at the Community Gardens.

The Schuylkill Center wishes to thank all of our funders for their generous support.





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