



# FFEM Newsletter

## President's Message

## New Logo Design under development for FFEM

By Pam Ford

### Happy Spring, fellow Friends!

On the evening of February 7, 2008, the FFEM hosted a catered Open Meeting, to reward all who have expressed their dedication to the Museum, and to drum up participation in upcoming projects. The turnout was incredible! In attendance were FFEM board members, Entomology graduate students, Dr. K. C. Kim (FEM Curator), Dr. Gary Felton (Department Head of Entomology), Dr. Bruce McPherson (Associate Dean for Research in the College of Ag Sciences), Dr. Denise Piechnik (Research Associate under Dr. Kim), Delta school students and their faculty mentor, Sarah Bresler, and friends and family of the above. After munching on cookies and Roly Poly wraps, and after self-introductions, Dr. Kim discussed the roles of the Frost Museum, and commented on the tenuous status of present-day taxonomy. I gave a brief overview of three of the FFEM's short-term goals—

cleaning/organization of the Museum, designing a new FFEM logo, and fixing/updating/creating Museum displays—and introduced the representatives of the respective committees. Denise Piechnik commented on the cataloguing of books and other organizational tasks, Pam Ford discussed the characteristics of a good logo,

and Amanda Bachmann provided specific examples of Museum displays that need maintenance. All three were able to enlist volunteers by the end of the meeting!

Several students testified to the importance of the Museum in their own research and outreach efforts. Lori Shapiro and Amanda Bachmann commented on the taxonomic importance of the Museum's collections of chrysomelid beetles and aphids, respectively. Katie Ellis provided a written comment on an unplanned Museum visit she made with a group of children. In summary, I reminded the group that the end of the school year is the prime time for hundreds of K-12 students to visit the campus, and that there will be many opportunities to participate in Museum outreach activities in the coming months.

Perhaps the highlight of the evening came from Dr. McPherson, who stood and gave a rousing, impromptu speech stressing the importance of "big" thinking in our endeavors. In fact, the attendance, support, and participation of all was inspiring, and reassured the FFEM board that the Museum will persist—and *evolve*—in the years to come.

Hannah Stout, President

### Inside this issue:

<b>The Resurrection of Rachel Carson</b>	<b>2-4</b>
<b>FFEM donates bookcases to museum</b>	<b>4</b>
<b>Plans for Museum Displays</b>	
<b>Protecting our Pollinators</b>	<b>5</b>
<b>Executive Committee Minutes</b>	<b>6-8</b>
<b>Officers, Membership Application, Web site Business Address and New Members Upcoming Events</b>	<b>9</b>



Mayfly

The Friends of Frost Museum has been in the process of creating a "fresh look" through the development of a new logo that corresponds with the updating of the museum exhibits. The Friend's committee of designers is working to provide a new and innovative way to express the key message of the FFEM through a memorable image that can be utilized in multiple formats.

The logo design development began with discussions about organizational identity. The more information gathered, the easier it was to develop a comprehensive approach to research and brainstorming. What is taken into consideration? We looked at what sets FFEM apart, the history, the future, the current goals and ones they aspire to. After the call went out for ideas, several contributors using their own creativity and resources submitted sketches that best defined what the FFEM is trying to encourage. Imagery conveying the research of Dr. Frost, biodiversity relevance, and outreach initiatives were just a few of ideas submitted for consideration.

The next phase of development in the design process is the sketchbook arena where the ideas are batted around. Suggestions are made as some stick and others are cast aside. Persistence prevails and eventually the concept develops structure and ultimately a finished identity. The FFEM hopes to unveil the new logo design by late spring.

## The Resurrection of Rachel Carson

by Robert Snetsinger

The 2007 publication of *The Gentle Subversive* by Mark Hamilton (Oxford University Press) has opened a new round of fighting in the Great 46-Year Environmental War, which started in 1962 with the publication Rachel Carson's *Silent Spring*. *The Gentle Subversive* is receiving mixed reviews: "A Beautiful Tribute to the Life and Legacy of Rachel Carson;" "Rachel Carson's careless criticism of DDT which she claims killed millions of people, mostly poor children, a point that deserved better coverage in this book. Even today, decades later, there is still no good alternative to DDT for fighting malaria." I was a "private" or graduate student at the University of Illinois in 1958 when the first shots were fired between Carson and my mentor George Decker, Head of the Section of Economic Entomology, Illinois Natural History Survey, Urbana IL (INHS). I delivered the "Cartel" or arranged a telephone meeting of the combatants. Since the honor of my mentor is challenged, dueling etiquette requires a rebuttal.

Rachel Carson was born 27 May 1907 in Springdale, PA (about 15 miles NE of Pittsburgh), a precocious author, she graduated from Parnassus High School, and entered Pennsylvania College for Women (Chatham College), Pittsburgh in 1925, specializing in English composition; graduated in 1929. Rachel also had a keen childhood interest in natural history, and though she had never seen an ocean she aspired to study marine life. She left western Pennsylvania for Baltimore and studied and taught zoology at John Hopkins, University of Maryland, and Woods Hole. Carson received her MS Degree from John Hopkins in 1932 and continued coursework, teaching, and publishing stories and articles on science in various magazines. In 1934, she withdrew from Hopkins' doctoral program and became a full-time teacher. In 1936, she accepted a position with the Bureau of Fisheries (Fish and Wildlife Service) as junior biologist and eventually became the Chief Editor and



**Rachel Carson**

popularized the research findings of the Bureau. In 1952, Rachel resigned from her government position to devote full-time to writing and to her rather sickly and dysfunctional family. She was a skilled writer on marine life and her best seller "The Edge of the Sea" was published in 1955.

According to legend, Rachel received a letter in February of 1958 from Olga Owens Huckins, Editor of the Boston Post, complaining about aerial spraying for mosquito control with DDT and the deaths of birds in the vicinity. This report initiated Rachel into action and resulted in the publication of *Silent Spring*, which was serialized in *The New Yorker* for three weeks in June of 1962 and published as a book by Houghton Mifflin later that year. *Silent Spring* produced a firestorm of protests from pesticide manufacturers, many agriculturists in the federal government, public health officials, and some entomologists, and activated an environmentalist movement that continues to this day to be a contentious issue among scientists and the general public. Rachel died 14 April 1964 in Silver Springs, Maryland of cancer. Her book is considered a landmark and rallying call for environmentalists and has elevated Rachel to a near goddess eminence.

I first learned of Carson's intension to write *Silent Spring* in the summer of 1958 while I was employed by the Illinois Natural History Survey, Urbana and a graduate student working on my PhD in Entomology at the U of I. My home was in Lake County, IL and I had a good knowledge of its plant and animal life and of its unique habitats. Ethel Untermyer of Deerfield, IL contacted me to lead a caravan of her conservation-minded friends to survey the natural areas of Lake County. This special lady envisioned the establishment of county-owned forest preserves for Lake County, similar to those already developed in Cook County. She knew Rachel Carson and her view of pesticides and we had discussions

about pesticides and the research being conducted by entomologists at Illinois Natural History Survey; together, we worked out a telephone meeting between Rachel and my thesis adviser George Decker, who was a past-president of the Entomology Society of America.

Starting in 1949, the 1400 American elm trees on the campus on the University of Illinois, Champaign/Urbana were sprayed twice each summer with DDT to Control Dutch Elm Disease and Elm Phloem Necrosis. The program was developed for the Grounds Department of the University by plant pathologists at the INHS and was monitored by INHS entomologists. Populations of mammals, birds, insects and their relatives on the campus were carefully monitored and pesticide residues were determined annually. In the spring of 1950, dead Robins were reported on campus. In the summer of 1952, I was employed by INHS to collect leaf samples from the Campus elms; a sling-shoot and rocks were used to obtain random foliage samples from the treetops. It was determined that the leaves were severely infested with Two-spotted Spider Mite, several species of aphids, mealy-bugs, and scale insects. Not only were the elms infested so were other tree and ornamental plantings on campus. High levels of residues of DDT and DDE were found in the soil, in rain puddles, and in the tissue of earthworms. The brains and other organs of dead Robins and other bird species showed high levels of DDT and DDE. It was apparent that earthworms were consuming the fallen and decaying elm leaves and that the Robins were consuming toxic-laden earthworms. Alternative methods of protecting elms from Dutch Elm Disease were being explored: systematic insecticides, the use of other insecticides with a shorter residue life, early diagnosis and removed of diseased trees, and pruning and fertilization of healthy elms. The INHS also recommended that the dead elms on campus be replaced with other species of shade trees and they should be planted diversely. George Decker was involved in all of these recommendations.

## The Resurrection of Carson Continued

Not only was the Section of Economic Entomology INHS involved in developing non-chemical methods of pest control for shade trees, ornamentals and greenhouses crops, which my boss Dr. Lester English (1899-1976) and I were involved in, but all of Dr. Decker's staff were similarly directed to explore non-chemical methods of pest control. Studies were underway on parasites and predators and other control tactics for control of insect pests of corn, fruit crops, etc. and on the fate and side effects of pesticide residues. In 1955-1959, John Briggs (1926-2002) was employed by INHS to work on insect pathology; he was offered a higher salary elsewhere in 1959. All of my fellow graduate students at INHS were working on non-chemical approaches to pest management and our salaries were squeezed out of the pesticide companies.

Integrated pest management was being born, but the decision to use pesticides was still in the hands of governmental agencies and an inadequately trained general public. The pesticide industry saw profits to be made by selling their products and Robert White-Stevens, the assistant director of the Agricultural Research Division of American Cyanamid, was the "General" or spokes-person leading the pesticide industry's offensive in its early battle against *Silent Spring*. I got a full account of pesticide industry's disdain for Carson's meddling in 1963; Robert White-Stevens was a speaker at a conference and I was the host. There was a blizzard and he stayed at our house two extra days, snowbound. One of DDT's contributions to mankind was that entomologists gained an appreciation of the roles played by parasites and predators in biological control. A second development that came to light was that insect pests were capable by a natural selection process to develop resistance or immunity to pesticides.

I was not privileged to hear the telephone conversation in 1959 or what other exchanges that followed between George Decker and Rachel Carson. However, George attempted to inform

Rachel what was going in the area of the research at the INHS and by other institutions conducting entomological research. I believe his position was that Carson's concerns were appreciated and understood, and that experts were working on the problems. He cooperated with Carson by providing information. However, George had a temper and he was rallied by her personality in some manner. George believed that experts should be the judges of the best way to deal with pest problems, not politicians and emotional amateurs. George summarized his position in 1960 (*Insecticides in the 20th Century Environment*; AIBS Bulletin, Vol. 10, No. 2; April; pp. 27-31); Decker reasoned that when used responsibly pesticides are a necessity for mankind and malpractices in their use were a great concern. Before this manuscript was published, George asked many of his colleagues at the INHS for their input. Perhaps the entomologists of that time were too cavalier in their reliance on pesticides and too vocal in the defense of their territory, and with "cooler heads" some of the turmoil that followed could have been avoided. However, the pesticide companies fumed, the environmentalists cried "disaster," the politicians held hearings, acarology flourished, and cannibals stopped eating Americans.

The medical doctors of today are in same boat occupied by the entomologists of the 1960s. The drug companies blatantly promote the use of prescribed medicines, bypassing the judgments or diagnoses of medical doctors. Drug ads on TV and junk mail on Internet are creating a malignant society. The physicians are being coerced into prescribing drugs for imagined or self diagnosed ailments or problems. Responsible use of medicinal pharmaceuticals, when necessary is beneficial to mankind; promoting over-use and mis-use is not.

The profession of entomology won a great prize as a result of the *Silent Spring* and the Great Environmental War. I came to Penn State in 1960 to

work on pests of mushrooms in the *pre-Silent Spring* era. When I joined the Department of Zoology and Entomology: it was mostly devoted to teaching, research was secondary. There were six other entomologists: Beckford Coon (field crops), W Wayne Boyle (taxonomist), Charles Rutschky (insect morphology) Ed J Anderson (beekeeping), Tom Symth (insect physiologist), and Norris Blackburn (forest pests) in the Department; there were four graduate students in entomology in 1960. Dean Asquith, a fruit entomologist at Bigglerville, and James Cox (pests of grapes) at Northeast (Erie) were independents. The Department of Entomology Extension was a separate unit with six members: John Pepper, Lloyd Adams, Ed Udine, Stanley Gesell, and Henry Menusan; in addition William Clarke in apiculture extension specialist. Their jobs were mostly in the counties providing information to farmers and others; they had very little contact with the teaching entomologists and no research responsibilities

In 1963, Zoology joined the new College of Science and the entomologists choose to remain in the College of Agriculture. All entomologists in the College of Agriculture were united to form a Department of Entomology. The new Department started with 15 professors of the three ranks, six graduate students, two graduate assistantships, five staff positions, and make-shift offices and laboratories. The starting salary for Assistant Professors was about \$6300 and Graduate Assistants received about \$1800. Now there are 37 professors of various ranks and post-doctoral scholars, 39 staff positions, and 40 graduate assistants, and you know your own salaries. To a large measure, the expansion of entomology research at Penn State came about from new funding generated by Rachel Carson and her *Silent Spring!* This bonanza also served other entomology departments in other states and numerous state and federal agencies.

One example is the creation of the USDA pesticide residue research

## The Resurrection of Carson Continued

unit established at Tifton, Georgia at the Coastal Plain Research Station in 1960. This unit had two chemists and three entomologists led by E. W. Beck. R. A. Byers was one of the entomologists hired in 1961. This was Bob's first full time position in his career and this was the direct result of *Silent Spring*!

## Butterfly Habitat Tour

The Osher Lifelong Learning (OLLI; formally CALL) Butterfly Habitat Tour is scheduled for Sat. Aug. 2 from 10 am - 4 pm. The tour will start from Tudek Park at 10 am and from there stops will be made at various butterfly friendly sites in Centre County; sites where the forest lands that were sprayed with Bt for Gypsy Moth control will also be visited to assay effects of Bt on certain butterfly populations. This is an outreach activity of the FFEM and will be hosted by Bob "Butterfly" Snetsinger. For additional information contact:

Barbara Lindenbaum, Sr.  
Center Director  
Centre Region Senior Center  
131 S. Fraser St. #1, State College, PA 16801  
(814) 231-3076  
<mailto:blindenbaum@crcog.net>  
Visit <http://www.crpr.org>



## Plans for Museum displays to be updated By Amanda Bachmann

As many of you know, we are in the process of updating a few things around the Frost Museum. Part of the clean up effort includes improving the current displays and creating some new ones that better reflect the mission of the museum and the Entomology program. Current plans for improvement include a native pollinator exhibit with the live beehive, updating the display about Dr. Frost and the history of the museum, adding information about fireflies, the state insect, as well as information on invasive species of local concern. Other ideas that are in the works are an exhibit on aquatic insects, adding information about insect derived products, and creating an area that will be updated regularly about current research going on in the Department of Entomology. We will be working with the Master gardeners, graduate students, and high school volunteers in the coming months to accomplish these goals.

## FFEM Donates Bookcases to Frost Museum

The Friends of the Frost Museum purchased two seven foot tall bookcases to house the books donated to the Frost Museum by FFEM. The bookcases were made of oak with glass doors by FFEM board member James Frazier. The bookcases are located in R. Snetsinger's office and were greatly needed to house the most of the books FFEM purchased from the Beatty Estate book sale. Many of the books are duplicates and we will be offering them for sale in the future. Some books are quite valuable and most are out of print and not available at bookstores.



## Protecting Our Pollinators By Molly Sturniolo, Master Gardener



Molly

You may have heard recently that Haagen-Dazs has announced a gift of \$150,000 toward honeybee-related programs in Penn State's College of Agricultural Sciences. This generous gift will help in many areas by providing support for the training of graduate and undergraduate students and allowing Penn State to purchase two expensive pieces of equipment that will enable faster processing of samples and aid in the molecular detection and identification of viruses, pesticides and other substances potentially harmful to honeybees and other pollinators.

While what is happening within the college walls is very important for research and finding answers to the declining honeybee population, a portion of the Haagen-Dazs gift is earmarked for a program to make the public aware of how homeowners and gardeners can make a difference in saving our pollinators.

A portion of the gift will be used to help Master Gardeners develop Pollinator Friendly Gardens throughout Pennsylvania. A steering committee has been formed to choose the best plants, create signage, develop programs, and to provide instruction for planting a pollinator friendly garden

What can you do to help out the pollinators? Plant your own Pollinator Friendly Garden!

You don't need a lot of space to start a pollinator garden. Even a few containers can attract pollinators to your porch or deck. If you don't already have a garden site, choose a location

that receives at least six hours of full sun each day. The plants that attract pollinators will grow best in full sun.

Plant plenty of nectar- and pollen-rich flowers. Use as many plants native to your region as possible. Native plants have evolved closely with native insects and are well-suited to meet their needs. In fact, some pollinator species are entirely dependent on the availability of certain native plants.

Try to put in flowers with a



Two long-horned beetles and a skipper on coneflower

range of shapes and sizes. Trumpet or cup-shaped flowers, such as cardinal flower, honeysuckle, and bee balm, attract a wide range of pollinators. Pollinators with shorter tongues, such as small native bees and wasps, feed on tightly packed clusters of small flowers, such as those found on milkweed, zinnia, phlox, and mint. Hummingbirds feed on red, purple, or orange flowers with lots of nectar, such as bee balm, fuchsia, sage, and nasturtium

Include a variety of flowers that bloom throughout the season. By doing

so, you will accommodate different pollinators' preferences and provide



Bumblebee pollinators

a sequence of pollen and nectar sources throughout different life cycle stages. Consider using shrubs and trees, such as dogwood, blueberry, cherry, plum, and willow that provide nectar or pollen in early spring when other food sources are scarce.

Provide water. Pollinators such as butterflies will gather and sip at shallow pools, mud puddles, and bird baths. Bees and wasps can use mud as a home-building material. Mud puddles also provide important minerals for some pollinators.

Avoid using pesticides and herbicides. Many can be harmful to pollinators as well as pests. Herbicides may wipe out key plants that are important for pollinators' food mix. If you feel that you must control pests, consider using soft pesticides such as insecticidal soap, summer oils, or pesticides derived from plants or microbes. Apply them only after sundown, when most pollinators have stopped their nectar-gathering.

Provide sites and materials for nesting and over wintering. Leave cut plant stems exposed, turn flowerpots that have drainage holes upside down, leave twigs and brush in small piles, create mud puddles, or put out pieces of string or other light fibers for nest building

Flowers to consider for your

Pollination Gardening:

- Cosmos bipinnatus - Cosmos
- Zinnia elegans - Zinnia
- Chrysanthemum max. - Mums
- Lavatera trimetris - Mallow
- Echinacea purpurea – Purple Coneflower
- Helianthus annuus - Sunflower
- Lobelia cardinalis - Cardinal Flower
- Lobelia siphilitica - Great Blue Lobelia
- Pycnanthemum muticum - Mountain mint
- Monarda didyma - Bee Balm
- Asclepias tuberosa- Butterfly Weed
- Zizia aptera - Heart-leaved
- Alexanders Symphyotrichum laeve - Smooth Aster

Centre County Master Gardeners have secured a garden plot at the Russell E. Larson Agricultural Research Station to plant a Pollinator Friendly Garden. Visit the new garden at Ag Progress Days this summer or to find out more email [mas79@psu.edu](mailto:mas79@psu.edu).



## Minutes of FFEM Executive Committee Meetings

Several meetings of the Executive Committee have been held since the last newsletter.

Frost Museum,  
Penn State University  
University Park, PA 16802  
**Dec. 6, 2007**

President Hannah Stout called the meeting to order at 10:12 AM. Also present were Amanda Bachmann, Beth and Don Brobst, Pam Ford, Maryann Frazier, K. C. Kim, Denise Piechnik, Ralph Mumma and Bob Byers.

R. Byers summarized the minutes of the last meeting held Nov. 7, 2007. There was a correction to the minutes. D. Piechnik moved to accept the minutes as corrected. P. Ford seconded. Motion passed.

R. Byers presented the treasurer's report. Income for November was from interest \$ 35.56. Expenses in November were for supplies from Office Depot for printing the Newsletter and postage for mailing the newsletter. Also \$30 was spent on a display case. Total assets were \$12,865.39. M. Frazier moved to accept the treasurer's report. B. Brobst seconded. Motion passed.

Pres. Stout called for a Cleanup committee report. D. Piechnik said the public displays need a theme and new ones should be made interactive. She also called for a graduate student assistantship to support the museum. She thought FFEM could provide supplies for the public displays. Perhaps the department could provide matching funds. She asked K. C. Kim to give feedback on these ideas. M. Frazier said the high school students from the delta program made some good suggestions for improvement. They are willing to volunteer to help with updating the displays. They want to make it their senior project. A. Bachmann explained what is involved in a senior project. They make a plan and start their sophomore year. They make a public presentation and provide reports

during the course of the project.

M. Frazier made a motion that FFEM contribute \$5000 towards renovation of the public displays and a plan for new exhibits with a request for matching funds from the Department of Entomology or College of Agriculture. B. Brobst seconded. Considerable discussion followed. D. Piechnik moved to amend the motion to read \$3000-5000 rather than a fixed amount. R. Byers seconded. M. Frazier called for a question. H. Stout called for a voice vote. Motion passes as amended.

K. C. Kim moved that FFEM make a master plan for the museum. M. Frazier seconded. R. Byers will provide copies of the 2002 plan as a starter for a future plan. Motion tabled until the next meeting.

A. Bachmann said she announced the call for a new logo contest for the FFEM to the graduate students. She said we need a flyer advertising this activity.

P. Ford gave a report for the Artistic Design Subcommittee. She envisioned the new displays could involve plants with insects on it. B. Brobst thought a milkweed plant with its interactive insect feeders would be informative and easy to do. It would emphasize the biodiversity of host plant interactions on milkweed. D. Piechnik thought that native plants also could be used as backyard plantings to study insect biodiversity. This would involve the Master Gardeners.

A. Bachmann gave a report of the Graduate student association. She thought an open house for graduate students should be planned for January. Pres. Stout thought she should e-mail the department about it.

R. Byers moved to adjourn. B. Brobst seconded. Meeting adjourned at 11:25 AM.

Respectfully submitted,  
R. A. Byers, Secretary-Treasurer

.Frost Museum,  
Penn State University  
University Park, PA 16802  
**Jan. 3, 2008**

President Hannah Stout called the meeting to order at 11:15 AM. Also present were Amanda Bachman, Pam Ford, Denise Piechnik and Molly Sturniolo.

President Stout called for a reading of the minutes of the last executive committee meeting held on Dec. 6, 2007 and sent by e-mail by secretary-treasurer, R. Byers. There were corrections to the minutes. D. Piechnik moved to accept the minutes as corrected. A. Bachman seconded. Motion passed.

Pres. Stout called for a discussion of museum tours. Denise clarified that Shavers Creek Environmental center charges for camps and other outreach programs, which has likely contributed to its success. She wanted to know if we should charge fees for future Museum tours. The consensus was not without updates/improvements to displays.

Pres. Stout called for a discussion of the new FFEM logo contest. A. Bachmann submitted a template for a flyer advertising the logo contest. The deadlines and contact information would be decided today at this meeting. D. Piechnik thought the board should vote on the final design for the logo. P. Ford called for a clarification of the decision process. D. Piechnik asked if we should offer a reward for the final choice. A. Bachmann suggested a lottery to select the winner. It was decided we need a brainstorm session to pick the design. Hannah said we could provide food and have an open house with the brainstorm session and invite participants.

Pres. Stout asked for an update on the Museum cleanup from D. Piechnik. She thought we could combine a soft cleanup with an open house. After some discussion it was decided to

## Minutes of FFEM Executive Committee Meetings Continued

have the open house **Feb. 7<sup>th</sup> at 6 pm; RSVP by Jan 31<sup>st</sup>**. A. Bachmann was instructed to add information to a flyer and Pres. Stout will email RSVP reminders to the Entomology Dept. and reserve room 102/108 HH3. D. Piechnik planned to recruit volunteers to enter books into a database; and will send out an email to the graduate student listserv.

Pres. Stout called for a report from the Master Gardeners group. Molly said 21 new M.G. interns starting this spring semester and each will need 50 hrs. of volunteer service; last year they worked with Pam at Tudek Park. Molly Sturniolo suggested a possible project: a butterfly room in HH III greenhouse and therefore would be available for tours. Also they could work on displays/exhibits? Some ideas/themes for displays proposed by M. Sturniolo were: awareness of native plants vs. invasive plants; and specialists vs. generalists.

Pres. Stout called for a discussion of a MASTER PLAN. She thought this plan and a clean, updated Museum could help the Department in recruiting a successor to K. C. Kim. P. Ford believed we should start with a long-term vision e.g. color palette, outline, etc. D. Piechnik suggested we have a mission statement and contacts. P. Ford suggested an outline for a plan/mission statement should be made first. Molly asked are indoor modifications allowed/possible? Specifically, improved lighting, paint walls, etc. Since time was short, Pres. Stout tabled the discussion until the next meeting.

Meeting adjourned at 12:15 PM.

Respectfully submitted,

R. A. Byers, Secretary-Treasurer

**Feb. 6, 2008**

Frost Entomological Museum,  
Penn State University  
University Park, PA 16802

President Hannah Stout called the meeting to order at 11:15 AM. Also

present were Amanda Bachmann, Pam Ford, K. C. Kim, Denise Piechnik, Molly Sturniolo, Robert Snetsinger and Robert Byers.

President Stout called for a reading of the minutes of the last executive committee meeting held on Jan. 3, 2008. There were corrections to the minutes. A. Bachmann moved to accept the minutes as corrected. D. Piechnik seconded. Motion passed.

R. Byers gave the financial report. The balance from 2007 was \$12,898.65. Income in January 2008 was from interest (\$32.87) and from dues (\$35.00). Expenses were \$30.00 for a display case. Yearly balance was \$37.87 and total assets were \$12,936.52.

Pres. Stout called for New Business. She called for a discussion of the open house meeting scheduled for Feb. 7 at 6 PM. She reported 20 people are planning to attend. A. Bachmann said one of the goals to be discussed at the open house should be updating the Forensic Entomology and other displays in the public area. P. Ford said another goal is the logo contest. She thought we need a long term plan or message to design a logo. She thought there should be collaboration of individuals with experience to design the logo. She presented the Obama logo as an example of a good design. A. Bachmann asked what are the goals of the Frost Museum? K. C. Kim said there are four goals: 1. A repository of specimens. 2. A Public museum area. 3. A source for taxonomy and biodiversity for students and 4. A research collection to benefit the campus and scientific community.

Pres. Stout presented an agenda for the open meeting. There will be an introduction of those present, Museum functions and goals, logo contest, call for volunteers for the museum cleanup, and updating exhibits. She will put this agenda in a handout. K. C. Kim said he would present a talk about the history of the Frost Museum from its conception to present day.

R. Byers moved to adjourn.

R. Snetsinger seconded. Meeting adjourned at 12:15 PM.

Respectfully submitted,  
R. A. Byers,  
Secretary-Treasurer

Frost Entomological Museum,  
Penn State University  
University Park, PA 16802

**Mar. 4, 2008**

President Hannah Stout called the meeting to order at 11:25 AM. Also present were Amanda Bachmann, Pam Ford, Denise Piechnik, Robert Snetsinger and Robert Byers.

President Stout called for a reading of the minutes of the last executive committee meeting held on Feb. 6, 2008. There was one correction to the minutes. D. Piechnik moved to accept the minutes as corrected. A. Bachmann seconded. Motion passed.

R. Byers gave the financial report. Income in February 2008 was from interest (\$32.68). Expenses were \$200.00 for food and drink for the open meeting held Feb. 7. Yearly balance was -\$114.45 and total assets were \$12,784.20. R. Byers said the IRS accepted our electronic tax return. He also sent a check for \$15 to renew The Pennsylvania Dept. of State application to solicit funds for non-profit organizations. D. Piechnik moved to accept the financial report. A. Bachman seconded. Motion passed.

Pres. Stout called for Old Business. R. Snetsinger reported on collecting papers by Stuart Frost. Dr. Frost published 290 papers and R. Snetsinger said most of the copies are in the Pattee library. The July 1979 issue of the Mel-sheimer Entomological Series has an autobiography written by Dr. Frost. R. Snetsinger wants to use the material to write a story of Dr. Frost to display in the museum.

## Minutes of FFEM Executive Committee Continued

He suggested it could be made into a travel case to display at events like the Great Insect Fair.

Pres. Stout called for New Business. R. Snetsinger proposed a fund raising idea as follows. Melsheimer wrote a paper "Beetles of North America" and the collection was sold to Harvard University. R. Snetsinger has the key to this collection which is of considerable value. R. Snetsinger proposes to write a letter to the Entomological Society of America offering the key in exchange for a lifetime membership in the Friends of the Frost Entomological Museum a donation of \$500-\$1000. After some discussion R. Byers moved that R. Snetsinger should write the letter. D. Piechnik seconded. Motion passed.

P. Ford suggested we try to sell butterfly nets to the public to raise money. After some discussion of sources of manufactured nets, R. Snetsinger suggested we may be able to get them made locally in Bellefonte. He said Jackie Wolfe knows about making cloth from milkweed for nets that repel water. After some discussion Pres. Stout asked P. Ford to look into either buying or making the nets and also insect collecting kits for beginners.

A. Bachmann gave a report on progress of updating the display cases in the public area of the museum. Some ideas were: Insects products display (Honey, shellac, etc) Aquatic Insects, Firefly exhibit with flashing lights, and Insects of Pennsylvania. She also thought the "build a bug" winners from the Great Insect Fair should be displayed in the museum rather than the fifth floor of the ASI building which has limited exposure to the public.

A. Bachmann said we need to buy a UV filter to protect insect specimens from damage. After some discussion D. Piechnik moved to buy UV filters. A. Bachmann seconded. Motion passed.

Pres. Stout asked for an update on the museum cleanup project from

chairwoman D. Piechnik. Denise said she has postponed it until after spring break.

Pres. Stout asked for a report on the new logo. P. Ford gave a progress report. She said some progress is being made. She will have a report for the next newsletter. R. Byers asked for her information for the next Newsletter by April 15.

D. Piechnik moved to adjourn. A. Bachman seconded. Meeting adjourned at 12:15 PM.

Respectfully submitted,  
R. A. Byers, Secretary-Treasurer



President Stout leading Executive Committee Meeting



**Bumble Bee Flower Scarab**

*Euphoria inda* (Linnaeus)





**Primary Business Address**  
**Department of Entomology**  
**501 ASI Building**  
**University Park, PA 16802**

**Phone: (814) 863-2865**  
**Fax: (814) 865-3048**  
**Email: rab120636@comcast.net**

We are on the web  
<http://www.ento.psu.edu/Frost/index.html>

**Officers of FFEM 2008**  
  
**Pres. : Hannah Stout**  
**Vice Pres. : Amanda Bachmann**  
**Past Pres. : Justin Runyon**  
**Sec.-Treasurer: Robert Byers**  
**Members-at-Large:**  
**Beth Brobst**  
**Don Brobst**  
**Pam Ford**  
**James Frazier**  
**Maryann Frazier**  
**Ralph Mumma**  
**Neandra Joshi**  
**Robert Snetsinger**  
**Molly Sturniolo**  
  
**Newsletter Editor:**  
**Robert Byers**

**Welcome New Members !**  
**Lauren A. Wright**

**MEMBERSHIP APPLICATION**  
Please enroll me as a member of the  
**Friends of the Frost Entomological Museum**

Name \_\_\_\_\_  
Address \_\_\_\_\_  
\_\_\_\_\_  
Phone \_\_\_\_\_ (home)  
\_\_\_\_\_ (work)  
\_\_\_\_\_ (FAX)  
\_\_\_\_\_ (e-mail)

Membership Category  
*Yearly*  
Student (Ladybug) \$10.00  
Individual (Firefly) \$20.00  
Family (Honeybees) \$25.00

Sponsorship Category  
*Lifetime (over five years)*  
Silver Skippers \$500  
Golden Scarabs \$1000  
Monarchs (Corporate) (\$ variable)

Please send completed application and check payable to: **Friends of the Frost Entomological Museum**  
c/o Dept. Entomology, 501 ASI Bldg., Penn State Univ., Univ. Park, PA 16802

**Upcoming Events**  
**May 17, 2008 9AM-1PM Master Gardeners & Green Thumb Expo Plant sale. Rock Springs/Ag Progress Days Special Events Barn**  
  
**June 27-29, 2008 Ent. Soc. PA summer Collecting Trip, Leonard Harrison State Park**  
  
**Aug. 2, 2008 10AM-4PM Osher Lifelong Learning Butterfly Habitat tour Tudek Park, State College**  
  
**Oct. 4, 2008 Great Insect Fair Penn State Ag Arena**