



INDIANA ACADEMY OF SCIENCE NEWSLETTER

Number 142

December 2009

Results of the Loblolly Marsh Wetland Preserve Bioblitz, Jay County, Indiana

by Donald G. Ruch

On June 19-20, 2009, a 24-hour BioBlitz was held at the Loblolly Marsh Wetland Preserve (part of the Limberlost Swamp) in Jay County, Indiana. The event was held to honor the one-hundredth year anniversary of the publication of *A Girl of the Limberlost* by Gene Stratton-Porter, an Indiana native whose concern regarding the ecological consequences of deforestation and wetland drainage foreshadowed the environmental movement of today. The event was organized by Jamie Faller, Program Developer, Limberlost State Historic Site and Anne Fairchild, Eastern Region Program Manager, Indiana State Museum and Historic Sites in collaboration with a number of partners, including the Indiana State Museum and Historic Sites, Limberlost State Historic Site, the Indiana Department of Natural Resources, Ken Brunswick, Northeastern Indiana Regional Ecologist, Indiana Department of Natural Resources, the Jay County Soil & Water Conservation District, Jay County REMC, Adams County Community Foundation, Friends of the Limberlost, the Rivers Institute at Hanover College, and the Biodiversity and Natural Areas Committee of the Indiana Academy of Sciences.

For those unfamiliar with such an event, the term “BioBlitz” was coined by Susan Rudy, a U.S. National Park Service naturalist, while helping to organize the first BioBlitz held at Kenilworth Aquatic Gardens, Washington D.C. from May 31 to June 1, 1996. A BioBlitz (also written bioblitz), short for biodiversity blitz, is a rapid assessment of the flora and fauna living in a particular area at a given point in time. It is essentially a “snapshot in time” of the living organisms of a particular site. A full BioBlitz must take place over a full 24-hour period since different organisms will be found at different times of the day. Additionally, it should be noted that since the species pool

changes throughout the year, a one day BioBlitz will not produce a complete inventory of the biodiversity of the site. Lastly, the success of the event is based primarily on two factors, i.e., the organization of the event and the team of dedicated scientists, naturalists, and volunteers conducting the surveys.

The bioblitz at Loblolly Marsh Wetland Preserve recorded a total of 545 species, including two bees, 55 birds, 24 butterflies and moths, 29 dragonflies and damselflies, one fish, 25 fungi, 15 reptiles and amphibians, two insects, five mammals, 376 plants, and 11 sciomyzid flies. The complete list of organism can be seen on the IAS website under Events.



Daryl Karns (left) and Andrew Hoffman (front center) are displaying an Eastern snapping turtle found during the bioblitz. The women are from a local girl scout troop. Photo by Daryl Karns.

Note from the President's Corner

Writing one's last President's Corner evokes many emotions. First is one of thanksgiving. I found the fall meeting to be a memorable one. Attendance was excellent and included large numbers of young scientists. The meeting was enhanced by a variety of special speakers, a diversity of outstanding research presentations, and a plethora of posters. My thanksgiving is for the dedication of the meeting organizer **Mike Finkler** and all his support at IU-Kokomo. Likewise, I am thankful to the various section chairs and co-chairs and fellow officers on the Executive Committee and Academy Council who played significant roles in organizing and hosting the event. We have a fine team.

My second emotion is of satisfaction. During my tenure I think we made progress on several fronts. I made at least five significant appointments this year and started a major reworking-upgrading of the website. With guidance from our faithful Treasurer **Ed Frazier**, I took initial steps toward being sure that we remain compliant with changing IRS expectations for non-profit organizations. Finally, the Academy made some important decisions about (1) section delimitations and (2) the annual meeting. Regarding sections, the Council approved a reduction in number and, at the same time, a move to make section names more generic. We anticipate that this will make our section structure responsive to the changing times and interests of the membership. The Council also approved holding the next annual meeting in late winter or early spring of 2011, a move that has important implications as described below and by our incoming President Jim Curry elsewhere in this Newsletter.

Quite honestly my third emotion is of relief. I hope that the way is now prepared, but we as an Academy have large issues in 2010. During this past year, as we considered matters such as annual meeting, sections, membership, website, etc., it became clear that we needed a broader examination of Academy structure and function. This means updating the mission and governance of the Academy, taking more action for maintaining our non-profit status, reviewing the effectiveness of programs, moving more Academy functions on-line, and promoting membership. These will require significant time and leadership.

However, my next emotion is of hope for the future. I have seen within our organization people of talent and dedication. My continuing role as Immediate Past-president will be to support Jim Curry in this coming year. He brings



Paul Rothrock, 2009 IAS President

wisdom for guiding necessary change and showcasing the “new” when the entire Academy meets in early 2011.

My final emotion is one of pride. I am proud to identify myself as a member of the Indiana Academy of Science.

-- Paul Rothrock
plrothroc@tayloru.edu
2009 IAS President

Note from the Incoming President

In the life of every organization there comes a time for renewal. For the IAS that time is now. Membership has been declining for more than ten years, attendance and participation at annual meetings is low, and our footprint in scientific efforts in Indiana is small.

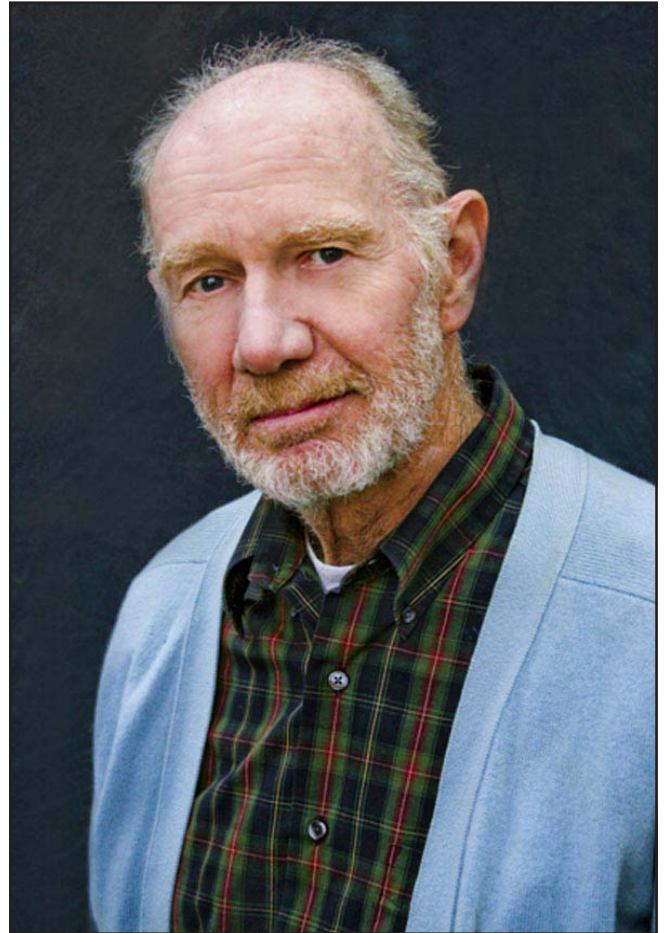
Recognizing the need to revitalize the organization, President **Paul Rothrock** recommended to the Council at the fall meeting that next year's spring meeting (2010) be entirely devoted to discussions between the Executive Committee and Council to ways of redressing the problems of decline. In order to develop an agenda and prepare specific proposals for the Executive Committee and Council to consider and act upon, I have named a committee (Futures Task Force) of six members: **Heather Bruns, Richard Kjonaas, Rebecca Nolan, Paul Rothrock, Edwin Squires**, and myself. Nolan, Rothrock, and Squires are past presidents; Kjonaas is the current president-elect; and Bruns is the current IAS treasurer.

In the quest for renewal the greatest need is governance reform. The current governance structure is cumbersome and inefficient. In order to make the organization more efficient and relevant the Futures Task Force is concentrating its work in the following areas:

Consideration of implementing a full time executive director position. The everyday work of the association is too extensive and demanding to be done by volunteer work. The lack of continuity of effort and long range planning is a major contributor to the Academy's decline in recent years. The presidential term of one year makes it impossible to develop and improve programs with any consistency.

Combining the Executive Committee and Council into a single, much smaller, board of directors. Authority and responsibility are so dispersed within the governance structure that action of any kind is slowed to a snail's pace. Consulting everyone involved, often multiple times, until a consensus can be achieved takes time. The result is often that no action is taken or that it comes too late to be effective.

Reducing the number (and size?) of committees. There are currently 14 standing committees with over 100 members. Some of these committees do not meet, partly because of the problem of getting members together who are widely separated geographically. A full time executive director would be expected to handle



Jim Curry, 2010 IAS President

much of the routine business now being conducted by the various committees and do so with greater efficiency and dispatch.

Updating and consolidating the bylaws and constitution. No one seems to know why this dichotomy exists. A single updated constitution will need to be drafted once changes have been approved to the governance structure. This will not be a function of the Futures Task Force but will follow from its deliberations and consequent action by the Council.

In addition to a review of the organization's governance structure, other concerns are also being addressed. They include:

Reducing the number of sessions at the annual meeting. With the decline in membership has come a decline in the number of papers delivered. Some sessions have as few as one paper, and in recent years the sessions have ended by mid-day. Combining compatible disciplines into fewer sessions will alleviate

the first problem but not the second. Hopefully, a revitalized Academy will begin to attract and keep new members and the half day problem will go away.

Completion of the website and placing the Proceedings on line. To include on-line voting, payment of dues, the directory, etc.

Moving the annual meeting to the spring. This would be a controversial move as reasonable arguments can be made for both a fall and spring meeting. There is enough interest in a spring meeting, however, that it is being considered.

Increasing membership. Direct actions to increase membership can be temporarily successful but unless the Academy can continue to develop programs that

are attractive new members will not stay long. Hopefully, changes in the governance structure will make it possible to plan and develop multiyear programs that will attract and hold members.

The year has started off well with the first meeting of the Futures Task Force on November 21. I am confident that the coming year will be a productive one and that the work of the many dedicated people involved will result in a more efficient, focused, and effective Indiana Academy of Science.

-- Jim Curry

jcurry@franklincollege.edu

2010 IAS President

Proceedings Editor Retiring and Call for Applicants

After 10 years on the job, **James Berry** has announced his decision to step down from the position of Proceedings Editor effective next June. During his tenure Jim has transformed our journal into a timely, attractive, and well-formatted publication, and for that **we are all grateful.**

With Jim's resignation we need someone to carry-on the good work. There is a modest stipend and the appointment is for a three-year term, which is renewable. The person also may have some administrative responsibilities, although the specifics are uncertain—must wait on the proposals of the transition team. If you would like to be considered for the position, please contact **Bill McKnight** at iaspublications@indy.rr.com or **Jim Curry** at jcurry@franklin.edu.

A Thank You to the Academy from Frieda Fein

"I am the recipient of the 2008 Indiana Academy of Science 2nd Place Scholarship. I am writing to thank you for this scholarship. I have completed all of the math courses available at my high school and enrolled in an advanced calculus course at Indiana University South Bend. Your scholarship has helped me to pay my tuition for that course and enabled me to progress in math.

Thank you very much for your generosity.

Sincerely
Frieda Fein"

Note: Frieda Fein is a student at South Bend Adams High School and a student of Academy member, **Nevin Longenecker**. In the 2009 Talent Search, Frieda has won first place and is going to AAAS Convention in San Diego in mid February with the Academy's financial support.

-- Ed Frazier
IAS Treasurer

Important Information About the IAS Website

The Indiana Academy of Science has hired a company to redesign and update its website to expand its usefulness to the members of the Academy. Much of that update has been completed, but there is still more to be done. In the near future we expect to activate a secure area of that website that will permit members to have access to information not available to the public.

In the future we expect to be using email extensively. This will enhance our ability to notify members of important information quickly and it will be the primary means of newsletter distribution (in the future, we may not provide hard copies of the newsletter). With the advent of an online membership list it is likely that the Yearbook containing the directory of members will no longer be available as a hard copy.

In addition, we will have the ability to join, register, vote, pay dues, and buy publications online. So, you can understand that a high level security for the IAS website is being given the utmost attention.

When the membership list comes online the website will include access to names, phones and emails of Academy members (available to members only). When this function is activated you will receive a notice sent to the email address currently on IAS membership list. The email you receive will contain instructions about how to login to the

secure area of the website, how to select a password, and how to update any information that is not correct in your personal profile.

If your current email address is not on the IAS membership record, we will not be able to contact you. If you are not certain about your email being on record, check your copy of the "Indiana Academy of Science 2009 Yearbook". Your website profile contains the same information as the information in the yearbook.

If you have not listed your email address with IAS, please use the contact link located in the upper right area of the IAS website (next to the search window) to send your name and email address to be included on the membership list. A simple note such as, "I am a member of IAS. My name is <insert name> and my email address is <insert email address>." We will send you an email telling you how to login, create a password and update your profile. The response you send will not be handled automatically by a computer; a human will do it. Therefore, it may be a couple days before you receive a response.

-- **K. Michael Foos**
foos@indiana.edu
Professor Emeritus
Indiana University East

Indiana Academy of Science Winter 2009 Research Grant Recipients

Danielle J. Whittaker , Indiana University \$3,000.00 Hormonal regulation of chemical signals in songbirds.	Forrest Collins Hobbs , Indiana University \$2,543.00 Inferring the spatial genetic structure and phylogeographic history of Indiana's eastern hemlock (<i>Tsuga Canadensis</i>) stands with microsatellite markers.
Daniel Johnson , Indiana University \$1,483.00 Determining the diversity and spatial association of trees in an Indiana old-growth forest.	Evelyn Rynkiewicz , Indiana University \$2,774.00 How does co-infection and immune function affect tick-borne disease dynamics in vector and host communities.
Daniela Vergara , Indiana University \$2,381.00 Using Molecular Markers with different rates of evolution to study evolution in a model organism for the maintenance of sex.	Kamal Prajapati , Ball State University \$1,100.00 Doxorubicin resistance in a small cell lung cancer cell line can be abolished by siRNA down-regulation of <i>cox-1</i> .
Charla McCormick , Indiana University \$2,580.00 Investigating kinships at Angle Mounds.	Muhammad Maqbool , Ball State University \$3,000.00 Build-up and linear attenuation coefficient of MCP-200 alloy, MCP-69 alloy and wax, for dose accuracy in cancer treatment and prevention.
David Civitello , Indiana University \$2,844.00 Context dependent epidemiology: integrating genetic and environmental heterogeneity in a planktonic disease system.	

continued on the next page

Ashley Daniels, Purdue University \$3,000.00
 Assessing the effects of eutrophication on diagenetic trematode infection and amphibian malformation.

Robert K. Swihart, Purdue University \$2,574.00
 Chestnut reintroduction: the role of insect seed predators on early life stage demography.

62nd Annual Indiana Academy of Science Talent Search

The sixty-second annual Indiana Academy of Science Talent Search was held at Indiana University-Kokomo October 23-24, 2009. As co-chair of the Youth Activities Committee and a judge at this year's Talent Search, I was quite impressed with the caliber of students and the breadth of quality research they had performed. It is so refreshing to see such bright young people so passionate and invigorated by science. The competition is fairly rigorous consisting of submission of a research paper describing the work and then, if selected for the finals, being interviewed by the panel of judges as a group and then individually in front of a poster presentation of the research. This year there were twelve finalists representing five high schools from across the state. Their projects dealt with a variety of topics ranging from fuel cells and a novel airplane wing design to the effects of stimulant drinks and even an archaeological study. Many of our participants receive junior grants from the Academy and are so appreciative of this financial support, which is often a determining factor in the completion of their projects. Our two first place winners each receive a trip for themselves and their sponsoring teacher to the 2010 AAAS meeting in San Diego, as well as a year-long

subscription to *Science*, and they were **Jonathan Nance** of Noblesville High School and **Frieda Fein** of John Adams High School. Jonathan's research project was entitled "Aerobird II: A Comparison of the Lift to Drag Ratio Difference Between a Constant Forward Swept Wing and a Wing that Combine Fore and Aft Swept Angles Designed to Reduce Aeroelastic Divergence." "Investigations of Faunal Diets at Pokagon Village Site to Determine Farming Practices of the Pokagon Band Circa AD 1830" was the title of Frieda's work. Our second place finisher was **Marijke Wijnen** of John Adams High School who received a \$600 scholarship for her work "Improving the Efficiency of the Bioremediation Process in Xylene Contaminated Soil." **Clair Sieradzki**, of Marian High School, finished in third place receiving a \$300 scholarship for her project "Hollow Fiber Membranes: An Efficient Way to Supply Oxygen to a Biocathode in a Microbial Fuel Cell." Our other Talent Search Winners were **Paige Kirkland** and **Jeffrey Martin**. The remaining finalists were **Karson Merrell**, **Kyle Miller**, **Brianna Morris**, **Ryan Newlon**, **David Kern**, and **Emily Lohr**. All of the finalists and winners received a \$50

cash award to help support their continued research endeavors. At the luncheon following the competition it was wonderful to see the level of support all of these talented young people receive from not only their sponsoring teacher but also their family. **Marcia Gillette**, director of the Talent Search, deserves much praise for the amazing job she does in organizing, planning



Participants of the 2009 IAS Talent Search held at IU Kokomo.

continued next page

and executing this fantastic event. My fellow judges, **Mark Davis** of the University of Evansville, **Kari Clase** of Purdue University, **Howard McLean** and **Maarij Syed** both of Rose Hulman Institute of Technology, also deserve thanks for the dubious task of choosing the best projects out of all the excellent work received again this year. The Indiana Academy of Science should be very proud of helping to nurture these future scientists and continue to foster their obvious love and excitement for the field we all are passionate about. Both myself and **Patty**

Zeck, my YAC co-chair, would love to hear ideas from Academy members on ways of increasing high school participation in this very valuable program, as we have the same five schools participating each and every year. Every year at the HASTI conference, Patty tries to recruit more participants, but we would value other suggestions. I can be reached at jametzler@bsu.edu and Patty at ZECKP0@aol.com.

-- *Jennifer Metzler*
Co-chair of YAC

IAS Awards Presented at the Fall Meeting

IAS Special Service Award -- Frank A. Guthrie

The IAS was pleased to honor **Dr. Frank Guthrie**, who passed away on June 11, 2009, with the Special Service Award at the annual fall 2009 meeting.

Frank earned his Bachelor's degree from Hanover College, a Master's from Purdue and a Ph.D. from IU in Analytical Chemistry. He joined the faculty in the Chemistry Department at Rose Hulman in 1952 where he had a 42 year career. During that time, he served as the pre-health professions advisor for almost 20 years. He retired from Rose Hulman in 1994 as Professor Emeritus.

Frank has served the Indiana Academy in a variety of ways. He was an active member of the Chemistry Section for many years where he served as section Chair. He was elected a Fellow of the Academy in 1970 and was the President of the Indiana Academy of Sciences in that same year. Frank was a long term member and Chair of the Academy Foundation Committee. As Chair and one of our Foundation Account Trustees, he was very active in the long term management of our endowment account and instrumental in the decision to diversify our endowment holdings. As a consequence, our endowment account is healthy (even in spite of the current recession) in comparison to most state scientific organizations leaving us able to fund research grants for faculty and students as well as publications.

Frank has also served other professional organizations in a variety of capacities. For the American Chemical Society, he was a past National Secretary and the Chairman of the ACS Analytical Chemistry Division. For 29 years, he was the national councilor for the Wabash ACS Section to the ACS. He was also an active member of Alpha Chi Sigma, the national Chemistry honorary and Sigma Xi, the Scientific Research Society.



The Awards Committee chose to honor him for his service to the Indiana Academy of Science and also to his profession.

Mrs. Marcella Guthrie was unable to attend the meeting to accept this award in Frank's memory but she conveyed her gratitude to the Indiana Academy for recognizing Frank with this honor and looks forward to receiving the plaque and certificate.

continued on the next page

IAS Distinguished Scholar Award -- Marion T. Jackson

The IAS Awards Committee honored **Dr. Marion Jackson** with the Distinguished Scholar Award at the Fall 2009 annual meeting.

Dr. Jackson served as a faculty member at Indiana State University for nearly 5 decades. He has published over 50 peer reviewed scientific publications including several book chapters and 2 books. The two books are entitled *The Natural Heritage of Indiana*, published in 1997 and *101 trees of Indiana* published in 2004, both by Indiana University Press.

To quote his nominators, "During a time when many ecologists were seeking the mathematical formulas to explain populations and ecosystems, Marion's research emphasized an understanding of the complete life cycle of plants and studying long term changes in plant communities. These areas of investigation have now become the cornerstone of modern conservation and restoration biology."

Some of his research topics have included studies of the effects of differences in microclimates on spring wild flowers in Allee Woods Nature Preserve, studies of the structure and dynamics of the components of 40 different old growth beech and maple stands in 5 states and he continues to conduct a long-term ecological study on the structure and dynamics of 4 old growth forests.

IAS members understand that research and teaching go hand in hand and for Marion, this has been a very important component of his work. He mentored 18 MS and Doctoral students at Indiana State University and a number of his MS students went on to earn doctoral degrees. In their letter, his nominators quoted Marion's personal philosophy on teaching "Teaching as a profession is potentially immortal. The minds and lives that you touch today may ultimately influence those afar or generations yet unborn. Those privileged to teach must not take their opportunity too lightly. Human futures are too priceless to



be entrusted to the unskilled or those lacking commitment of conviction". His classes were rich in field experiences and provided his students with the type of hands on research oriented learning that is so critical for the development of strong scientists.

His involvement in the IAS began in 1961. He was elected as a Fellow in 1976 and has been vice-chair and chair of a variety of sections on numerous occasions. He has served on many committees including Publications, Biological Survey, Preservation of Natural Areas and Membership. He was Editor of the Proceedings of the IAS for 5 years and instituted full peer review of submissions for publication consideration. He was Co Chair of the program committee for our meeting in 2005. Marion served as president elect, president, and immediate past president of IAS in 1998, 1999 and 2000.

Marion is one of North America's and Indiana's most prominent plant ecologists and Natural resource managers. His career accomplishments in scholarship and contributions to the IAS speak for themselves.

IAS Fellows elected This Year

Tracy Branam, M.S., Geologist, Indiana Geological Survey, Bloomington, IN

Jim Plew, B.S., Geologist, Engineering Aggregates Corporation, Logansport

BOOK REVIEW

Children of God Children of Earth. James R. Curry.

2008. AuthorHouse. 300 p. 6 x 9 (hard cover, \$18.30, paper \$14.10), ISBN 978-1-4389-1847-1.

As you should already know, James Curry (emeritus Biology Professor, Franklin College) is the Academy President-elect. You also should know that he is the author of the widely acclaimed *Dragonflies of Indiana*, published in 2004 by the Academy. What you may not know is that in 2008 Jim authored and self-published *Children of God Children of Earth*. The book was inspired by decades of experience teaching evolutionary biology to undergraduate students, many of them from conservative religious backgrounds. I received a copy last year and, despite not being religiously inclined, found it to be engaging—I had to deal with the issue many times during my

nearly two decades of teaching high school biology. The 26 chapters are peppered with quotes, personal anecdotes, poetry, supporting visuals, and cartoons. It is a well-written, thought-provoking, and scholarly work. Dr. Curry contends that science and religion have much to learn from each other. And, as he points out, many of the problems in the world today stem from ignorance, tradition, and an inability to consider viewpoints other than one's own. You can obtain a copy of the book by contacting the author at jcurry@franklincollege.edu or AuthorHouse, 1663 Liberty Drive, Suite 200, Bloomington, IN 47404, www.authorhouse.com.

-- Bill McKnight
Chair IAS Publications

Obituary of Frank A. Guthrie, Former IAS President

Feb. 16, 1927-June 11, 2009

Frank Albert Guthrie was born in Madison to Ned and Gladys (Glick) Guthrie of Hanover. After graduating from Hanover High School in June 1945, Frank entered the U.S. Army and served until he was honorably discharged as a technical sergeant IV in October 1946. He received an A.B. in chemistry from Hanover College, followed by an M.S. in chemistry from Purdue University in 1952.

He began his career at Rose Polytechnic Institute teaching chemistry in the fall of 1952. In 1954, he began working toward a Ph.D. in analytical chemistry at Indiana University, which he completed in 1962. During his time in Bloomington, he met Marcella Glee Farrar of Walkerton. The couple married on June 12, 1955 in LaPorte and lived in Bloomington, returning to Rose in 1956. In 1962, he was named an associate professor of chemistry, and in 1967, Dr. Guthrie was named professor of analytical chemistry. He served as the chief health professions adviser from 1975 to 1994. During his tenure at Rose, he also served as visiting lecturer at the University of Illinois and completed two



sabbatical years as visiting professor of chemistry at the U.S. Military Academy (USMA) at West Point.

He continued to serve Rose-Hulman in various capacities after his retirement in 1994, when he was bestowed the title of professor emeritus and later spent one semester as a visiting professor at Butler University.

Frank was active in various professional, civic and social organizations throughout his life.

As a student at Hanover College, he was inducted into Phi Gamma Delta (FIJI), and remained active in the fraternity throughout his life. He helped to found the local FIJI chapter at

Rose-Hulman Institute of Technology and served as its faculty adviser for many years. He was recognized as the first Rho Phi Chapter Purple Legionnaire.

He joined the American Chemical Society (ACS) in 1951 and was on numerous committees, holding leadership positions at the local, regional and national levels. He recently completed 29 years of service as a national councilor from the Wabash Valley Section. He was a past

continued on the next page

national secretary and chairman of the ACS Analytical Division. He participated in nearly every biannual ACS National Conference and was recognized for his years of service.

Frank and Marcella joined the Washington Avenue Presbyterian Church in 1957, and Frank was an active communicant, serving as elder, deacon and clerk of session. He also enjoyed the challenge of overseeing the church's investment fund as its manager for 23 years. More recently he was serving as an elder of Central Presbyterian Church.

Frank was also active in the Boy Scouts of America, both as a father of four Scouts and as an adult leader. He was a Scoutmaster for Troop 7, and served the Wabash Valley Council, BSA as vice president for Boy Scouts, and member of the Executive Board for 16 years. He earned his Wood Badge in 1976, and was awarded the Silver Beaver in 1980. He also received Vigil Honor Membership in Order of the Arrow in 1975.

For the past 20 years, Frank served as the local congressional district admissions coordinator for the U.S. Military Academy at West Point, helping to evaluate and select candidates for appointment to the Academy.

Frank was recently recognized as a 25-year member of Alpha Chi Sigma, the national honorary chemistry fraternity, and was an active member of the scientific research society Sigma Xi. Until recently, he also served as chairman of the finance committee for the Indiana Academy of Science. He was a past president of the Hanover Alumni Association, and actively supported several other academic institutions.

Frank Albert Guthrie is survived by his wife of 54 years, Marcella; his four sons, Mark, Bruce (Sue), Kent (Dana) and Lee (Cindy); three grandsons, Jordan, Billy and Andy; two sisters, Dorothy Hale and Eleanor Mitchell (Bob); and numerous nieces and nephews. He was preceded in death by his parents; and a sister, Alice Coppess.

Lee Casebere, Indiana Department of Natural Resources, is Searching for Voucher Specimens of Four-toed Salamander Collected by Willis S. Blatchley

Willis S. Blatchley (1859-1940) was an outstanding Indiana naturalist and scientist whose heyday was in the late 1800's and early 1900's. His areas of expertise included entomology, ornithology, ichthyology, botany, and geology. Among his accomplishments, he was the state geologist for 16 years. Blatchley wrote authoritative books on beetles, weevils, grasshoppers and true bugs that are still highly regarded today. Early in his career, he was head of the science department at Wiley High School in Terre Haute. During that time, he studied the reptiles and amphibians of Vigo County and collected voucher specimens of most of them. According to two papers he published on the herpetofauna of the county, Four-toed Salamander was among the amphibians that he had collected there.

Many of the insects collected by Blatchley are housed at Purdue University. A large number of his reptile and amphibian specimens are housed at the Museum of Comparative Zoology at Harvard University, but Four-toed Salamander is not among them. A few years ago, Max Henschen discovered many mussels collected by Blatchley in a closet at Ball State University. At the time, they were not cataloged and were in a state of obvious neglect.

Might some of Blatchley's other collections be at other colleges or universities in Indiana? Perhaps they are in a well-maintained collection, or (as in the case of the mussels at Ball State) perhaps they are tucked away in some forgotten corner closet.

I am hoping to locate the Blatchley specimens of Four-toed Salamander. Please take a look at your vertebrate specimen collections to see if you might have them. I would also be interested in any other Four-toed Salamanders in your collections from Indiana. If you find something, I would like to know no later than January 31, 2010.

Thank you! You can reach me at:

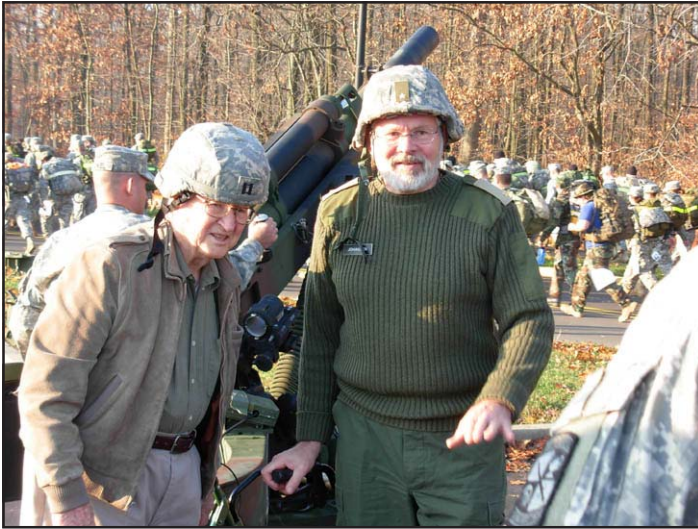
-- Lee Casebere
Division of Nature Preserves
402 W. Washington St., Rm. W-267
Indianapolis, IN 46204
Ph. 317-232-4053
Lcasebere@dnr.in.gov

Norwegian Road March

Here is a piece to demonstrate that members have a life beyond the academy. The University of Southern Indiana arranges a road march for ROTC groups in Indiana and surrounding states and Indiana guard members every fall. It is known as the Norwegian Road March, NRM in military parlance. **Nils Johansen**,

Immediate Past President of the Academy, represents the sponsoring organization, The Norwegian Field Artillery. Attached are a couple of pictures from the event.

-- **Nils I. Johansen, Ph.D., P.E.**
Immediate Past President of IAS



Winona Welch Award for Botanical Biodiversity Research Call for Proposals

Proposals are due January 22, 2010
For details, go the to IAS Home Page
(indianaacademyofscience.org)
and click on Research Grants

Submit six copies of the each proposal to:
-- **Donald G. Ruch, Chair**
Biodiversity and Natural Areas Committee
Department of Biology
Ball State University
Munice, Indiana 43706
druch@bsu.edu
765.285.8829

Scenes from the Fall Meeting at IU Kokomo

Photos by Paul Rothrock



Jerry Wilhelm made two appearances at the fall meeting. Here he is presenting updates on his "Flora of the Chicago Region" project. Jerry, as Speaker of the Year, also developed the theme of Ecological Consilience as he has experienced it in Illinois prairie ecosystems.



The always friendly and efficient Ed Frazier (IAS Treasurer) working registration at the fall meeting.

Right: The Chemistry Section hosted a special presentation by Christine Hrycyna on the ATP binding cassette (ABC) transporters, integral proteins important in understanding multidrug resistance in human cancers.

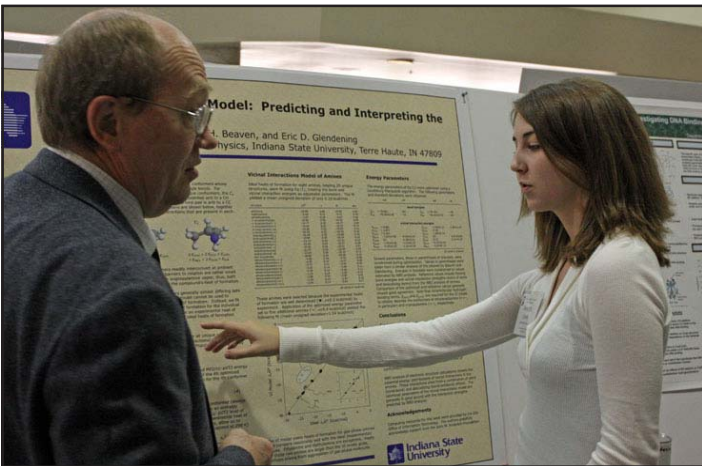




IAS Publications table was manned by Bill McKnight (left) and featured the latest book “Sedges of Indiana”. The distinguished Academy members visiting the table included Mike Foes (Webmaster), Nils Johansen (2008 President), and Jim Berry (Proceedings Editor).

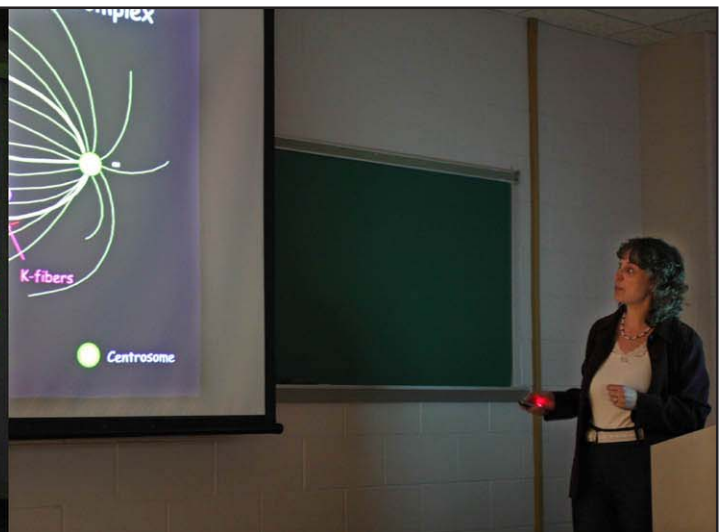
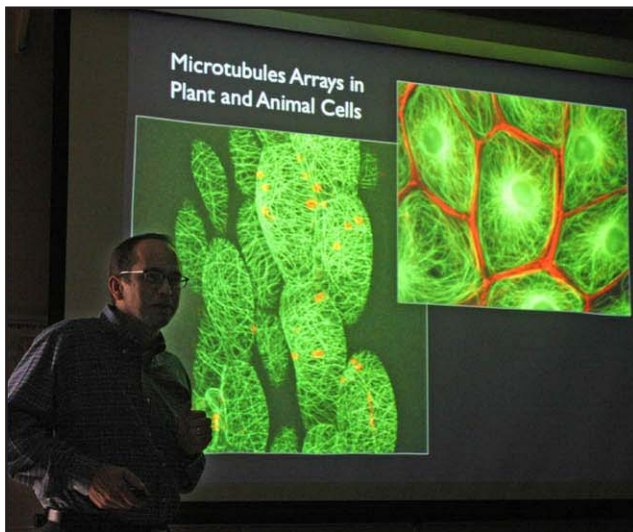


John Shuey (left) and Mike Finkler (right) checking out AV equipment. Mike ably hosted the IU-Kokomo meeting while John delivered a provocative talk on the potential impact of climate change on nature preserve planning by TNC.



2010 President-elect Rich Kjønaas interacting with student Meredith Lewis on her research poster.

Below: Sid Shaw and Claire Walczak (IU-Bloomington) provided an afternoon cell biology mini-symposium. Sid presented his work with plant microtubules while Claire reported on hers with chromosome movements during mitosis.



The INDIANA ACADEMY OF SCIENCE
Serving the State of Indiana Since 1885

**Deadline for submission of material for the March issue of the IAS Newsletter is
February 23, 2010**

Send copy to Donald G. Ruch at druch@bsu.edu

For IAS information, go to: www.indianaacademyofscience.org