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# COBWEBS



Summer 2009 – Volume 13

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A newsletter for GVSU Alumni in Biology and Natural Resources Management

## ***Closing Time***

**Shaily Menon, Biology Department Chair**



*"Of course you don't!" the Hatter said, tossing his head contemptuously. "I dare say you never even spoke to Time!"*

*"Perhaps not," Alice cautiously replied: "but I know I have to beat time when I learn music."*

*"Ah! That accounts for it," said the Hatter. "He won't stand beating. Now, if you only kept on good terms with him, he'd do almost anything you liked..."*

--- Lewis Carroll

This issue of Cobwebs comes during tough economic times for the state and the world, tough times which remind us that our work helps students prepare for a future in flux and which inspire us to do even more.

We bring you news of our outstanding graduating seniors in the Biology and NRM undergraduate program and the Biology Masters program. We share news of an Outstanding Service Award for one of our staff and a Pew Teaching Excellence Award for one of our faculty. Congratulations all!

We share updates on activities of our student clubs, presentations at Student Scholarship Day, and faculty activities in the form of outreach, presentations at scientific conferences and publications in scientific journals on diverse topics including seed dispersal and restoration experiments, desiccation tolerance during seed development, leaf color change, measuring higher cognitive development in students, invasive stinking ash, habitat factors influencing koala occurrence and management, control of cell division, temperature and plant cover in Alaska, riparian restoration,

tracking meadow vole movement, mutualistic endosymbiotic microbes and benefits of group living, brown and rainbow trout predation, replacing spotted knapweed-infested sites with native grasses, global assessment of sea-level rise due to climate change, antimicrobial activities of a telomerase inhibitor, effect of caffeine on lifespan of *Drosophila*, economic values and priorities related to open space preservation, severe weather observations, decomposition rates in the arctic tundra, ecology of bats, structural and functional metrics to assess stream restoration, plant behavior and communication, sexual transmission of microbes in tree swallows, and influence of genotype and blood lipid levels in middle school children.

In addition to welcoming new babies in our midst, we bring you pictures and updates of our four new faculty members – Tim Evans, Osman Patel, Amy Russell, and Georgette Sass – who have completed their first year with us. We are happy to report on the outcomes of another successful hiring cycle, which will bring two additional faculty members to the department starting Fall 2009 – Erin Naegle (Integrated Sciences) and Meg Woller-Skar (Quantitative Ecology). Jenny Jenkins, who has been a Visiting faculty member will join us as an Affiliate faculty member in Fall 2009.

Last year's editorial ended with the words: "Thus, having started at the beginning, I shall go on until I come to the end and then stop." As promised, we have had a year of transitioning chair-elect, Neil MacDonald, who will take over the role of department chair starting July 1. I intend to immerse myself in the exhilarations and challenges of life as a teacher-scholar and to befriend Time again.

As always, we'd love to hear from you. We hope you will join us at various events on and off campus, let us know about job or internship opportunities to share with current students, and send us updates on your various professional activities and accomplishments.

With good cheer and best wishes to all.

## ***Outstanding Graduates***

Robert Slider is the 2008/2009 Outstanding Graduating Senior Biology Major. Robert's GPA is above 3.8, he has done research in Alaska, and is a co-author on a peer-reviewed manuscript. Robert will be entering the Master's program here at GVSU and will be working with Dr. Hollister.

Abby Tomaszewski is the 2008/2009 Outstanding Graduating Senior Natural Resources Management Major. Abby's GPA is above 3.6 and she has

accepted a position in the National Park Service on Assateague Island (the island off the coast of Maryland with the wild horses!)

Garry Sanders is the 2008/2009 Outstanding Graduating Biology Department Graduate Student. Garry did his thesis project with Dr. Bopi Biddanda (from AWRI) working on a stable isotope study of food web linkages in submerged sinkhole ecosystems in Lake Huron. He is currently working as an Experimental Biology Aide with the Fish Habitat Program of the Oregon Department of Fish and Wildlife.

## ***Faculty and Staff Award Recipients***



Diane Laughlin, the Biology Department's Lab Supervisor, received the College of Liberal Arts and Sciences (CLAS) Outstanding Service Award. The CLAS service awards recognize outstanding college, university, community, and/or professional service that goes beyond the expectations and responsibilities of the staff member's position.



Dr. Neil MacDonald received the Pew Teaching Excellence Award. The Pew Teaching Excellence Awards were established to recognize outstanding teachers from around the university and are presented at the Faculty Award Convocation each year. Nominees are selected by students, alumni, other faculty, or academic units.

## ***GVSU Biology Club and TriBeta News***



This year, the biology club had many wonderful opportunities to fully pursue its goal to promote and enhance the interest of biology among the Grand Valley community. At the beginning of this year we visited Char Vanderhoning's family farm. At the farm we were able to enjoy the great outdoor and admire her beautiful horses. We also had a bonfire and hayride, toured her home and met her family. Finally, after ten or so years of opening her house to

the biology club, Char has been inducted into the club as an honorary member!

During the fall 2008 semester year we had a Halloween-themed bake sale. With the funds earned from the sale, we adopted a snow leopard at the John Ball Zoo. We were able to present our donation to the zoo when we went for a behind-the-scenes tour. Continuing the theme of enjoying nature, the club planned a camping trip at Nordhouse Dunes; unfortunately, due to an early snow and cool temperatures the trip had to be postponed.

During the winter months we invited several of our own biology professors to come and enlighten us biology-intrigued college students on their respective fields of expertise. These lectures came to be known as "Emphasis Talks." Dr. Mark Luttenton talked to us about the aquatic biology emphasis and Dr. Regina McClinton lectured on the emphasis of cellular and molecular biology. Also, Dr. Gary Greer discussed invasive plant species and last but not least, Dr. Terry Trier demonstrated outdoor survival skills and fire starting.

For the first time this year, the biology department (including the entire faculty) and the biology club joined efforts to host a biology department open house! The goal of the open house was to educate prospective and current biology students and about classes, research, job opportunities, and internships, and to meet the biology professors here at Grand Valley. We had a wonderful turn-out of both professors and students. I hope we will be able to continue this event in the future and be able to spread the word about how wonderful the biology department is here at GVSU!

Over the course of the year, we were able to co-host, with the pre-vet club, a presentation given by Dr. Lee Ann Berglund – Fosdick regarding her project: Haiti Tools and Training. Dr. Lee Ann, along with a few of her associates, go to Haiti twice every year to help train local "veterinarians" (people of good moral character), in animal care and husbandry in their extremely poor local populations. This program not only trains the veterinary staff, but also the locals on how to care for these animals. We donated the funds from our Valentines Day bake sale to Dr. Lee Ann's project.

In addition to Dr. Lee Ann's visit, the biology club also invited the Blandford Nature Center to GVSU with their rehabilitated animals to talk to us about their program and efforts to rehabilitate injured animals and educate others about their efforts. The club also visited the Blandford Nature Center to tour the preserve, eat a pancake breakfast and learn how maple sugar is made from their active sugarbush. Last but not least, the biology club held our annual bus trip to Chicago on a beautiful sunny day, perfect for hiking

around the city to visit museums, restaurants, parks, and do a little shopping!

This year has been filled with many fun and educational activities that not only included the biology club members but also the faculty, and the entire student body. This year would not have been as successful as it was without the help and support from the entire biology department, the amazing biology club members, our advisor Dr. Trier and our wonderful officers. Thanks to everyone! This has been an amazing year.

President: Allison Hoving, Vice-President: Joelle Jaros, Secretary: Jessica Trahey, Treasurer: Adrienne Gibson, Public Relations: Katie Bedard

## ***Soil and Water Conservation Society News***



It was another busy school year for the Soil and Water Conservation Society! The year kicked off in September with a highway trash cleanup along M-45 and participation in the Thornapple River Cleanup. The river cleanup is an annual event which SWCS has participated in for several years running. In October, SWCS spent a day collecting native prairie grass seed for the Land Conservancy of West Michigan (LCWM). Seeds collected by SWCS will be used to restore a prairie at Saul Lake Bog, another LCWM preserve. In November, Brad Slaughter with Michigan Natural Features Inventory was invited to speak to the group about Michigan flora and the important work which MNFI does cataloging and mapping our natural features. Later that month, Melanie Good with LCWM was kind enough to give the group a guided tour of a lakeshore preserve not normally open to the public. Although a chilly day, the hike was great fun, with plenty of wildlife in evidence, including a pair of bald eagles.

In February, three speakers were invited to talk to the group. Jack McGowan-Stinski with The Nature Conservancy spoke about fire ecology and prescribed fire in Michigan. Beth McCarthy with the Student Conservation Association and Kristin Nelson with AmeriCorps both spoke about summer job opportunities in conservation available to students. Also in February, SWCS assisted the LCWM with removing non-native Scotch pine from a nature preserve in Holland. Despite inclement weather, more than 10 people participated in this event and succeeded in treating most large Scotch pine present on the preserve.

In late March, SWCS again assisted LCWM by conducting a stream bioassessment of the headwaters of a stream which runs through the White Preserve in Lowell. The year wrapped up in April with another highway

cleanup on M-45, a bowling party, the election of new officers for next year, and the placement of wood duck boxes in the ravines on campus. Huge thanks to everyone who participated in these events and helped to make them a success. A special thank you to Dr. Neil MacDonald who has been the SWCS advisor for a number of years, but is now passing the torch to Dr. Todd Aschenbach. See you all next year!

## ***GVSU Pre-Veterinary Club***



Grand Valley State University grows each year, and the pre-veterinary club continues to grow as well. Over the past year, the pre-veterinary club has strived to help prepare both new and senior members for vet school. Over the coming summer, we have many pre-veterinary club members applying to various veterinary schools.

The first event the pre-vet club participated in was a trip to the John Ball Zoo to take a tour of the veterinary facilities, as well as various other parts of the zoo. The tour was led by Cheryl Dykstra. To raise money for the fall 2008 semester, club members baked goods for a bake sale that was held in Grand Valley's Kirkhof Center. Also during the fall semester, the club hosted a donation drive for the Humane Society of Kent County. Additionally in the fall, Erica Wasserman, the Associate Director of Admissions from Ross University, was invited to give a presentation on their veterinary school.

During the winter semester, the pre-veterinary club worked together with the biology club to bring in Dr. LeeAnn Fosdick who gave a presentation about her Haiti Veterinary Project. Afterwards, the club hosted a donation drive to raise money for her project. The semester ended with a visit to the MSU College of Veterinary Medicine and a tour of the facilities led by Helen Mayer, MSU CVM Undergraduate Academic Advisor, who also went through the vet school admission requirements and took questions from students. Throughout the year, the meetings were aimed at helping students find different vet schools and learn their application requirements. The club also had a meeting to help clarify any questions students had while scheduling for the next year.

We have many events already planned for next year. Due to inadequate funds, we were not able to host pre-professional day this year, but the planning has already begun to have the event this coming November. The planning for this event involves many other pre-professional clubs and their members. During pre-professional day students gain knowledge about their chosen field as well as the various schools they may want to apply to.

Additionally, donation drives, fundraisers, the yearly visit to John Ball Zoo and MSU CVM are all on the agenda for next year.

The club advisor is Dr. Terry Trier and the 2008-2009 club officers are: President Amanda Hatfield, Vice President Marie Rapin, Secretary Allyson Barchett, and Treasurer Genevieve Dinsmore.

Submitted by: Amanda Hatfield, President

## ***Nine Students Earn Biology Related Academic Scholarships from GVSU***

Thanks to generous contributions to four biology endowment funds, nine students will receive financial support for the 2009/2010 academic year.

Clare Mazure and Melissa Briscoe received a scholarship from the **John Salski Memorial Fund**. The John Salski Memorial Fund is awarded on the basis of academic merit and supports summer academic and research activities.

Kyle Cooper, Karen Luxford, and Erica Mee received a scholarship from the **Howard and Rose Stein Endowed Biology Scholarship**. The Howard and Rose Stein scholarship is awarded on the basis of academic merit and supports students who are majoring in Biology and earning a secondary teaching certificate or a biology major who intends to pursue a research career with a laboratory focus after graduation.

Anne Bellino, Theodore Baker, Joshua Duram, and Karen Luxford received a scholarship from the **Professor Paul A. Huizenga Education Scholarship**, which is awarded on the basis of academic merit & financial need and supports biology majors pursuing secondary teaching certification.

Corey Kapolka is the first recipient of the **John Shontz Scholarship**, which is funded through the **Waddell-Treanor Native Plants Endowment**, and supports students who are majoring in Biology with a Plant Biology emphasis.

For more information on contributing to these funds, please visit the GVSU University Development web site (<http://gvsu.edu/development/>) or e-mail/call the Biology/NRM Department.

## ***Baby Announcements!***

***We had two additions to the Biology Department family:***



Judy Caroline Hollister  
July 19, 2008 2:14AM  
6lbs 3oz 20 inches

She is doing great, just starting to crawl and does a pretty good daa daa. Her older brother James (3 1/2) is happy too.



Prof. Joe Jacquot and wife, Laurie Mohr, are pleased to announce the birth of their son James Franklin Mohr Jacquot. James was born on November 14th, 2008. James is pictured here at 3 months ready for Michigan weather.

## ***New Faculty***



**Dr. Tim Evans** is a plant systematist who joined the GVSU faculty during the fall of 2008. Before coming to GVSU, he was a faculty member at Hope College for 11 years. He received his Bachelor's and Master's degrees from the University of Wyoming, and his Ph.D. from the University of Wisconsin-Madison, and he was a postdoctoral researcher at Miami University-Ohio for two years.

Dr. Evans' research involves the use of both molecular (DNA sequence data and other molecular markers) and morphological data to determine phylogenetic relationships among plants, specifically the monocot families Commelinaceae (Wandering Jew, Asiatic dayflower, etc.) and Bromeliaceae (pineapple family). Within these families, Dr. Evans is using phylogenetic approaches to understand the concerted evolution of morphological traits (i.e. plant pollination syndromes), the relationship

between adaptive radiation and molecular evolution, and to evaluate speciation and extinction rates of plants. These projects include collaborations with colleagues from several institutions, including Smithsonian Institution, the University of Wyoming, and Universidade Federal do Rio de Janeiro, Brazil.

When Dr. Evans is not working with his students and plants, he enjoys spending time with his wife, two children, and their hedgehog, Barberry. Additionally, he is an avid caver, and he studies Okinawa kempo karate.



**Dr. Osman Patel** is a Reproductive Biologist who joined the Biology Department in August 2008 as an Assistant Professor (Developmental & Cell Biology). He received his Bachelor's in Veterinary Medicine from University from Zambia and Master's in Veterinary Medicine from University of Glasgow, Scotland. He obtained his Ph.D. from the University of Tokyo (Japan) in 1995 and was most recently an Assistant Research Professor at the Michigan State University.

Dr. Patel investigates the abrogation of the homeorhetic mechanism in pregnant rats exposed to altered gravity using genomic, cellular and molecular approaches. He also studies the molecular and cellular mechanisms regulating placentogenesis. These research projects include collaborations with colleagues from Michigan State University and Iwate University (Japan).

Outside of work, he enjoys traveling, soccer, tennis and spending time with his family.



**Dr. Amy Russell** is an evolutionary ecologist who joined the Biology Department in August 2008 as an Assistant Professor of Biology. She received her Ph.D. from the University of Tennessee in 2003. Following her dissertation, Dr. Russell completed a 2-year postdoctoral fellowship at Yale University and a 3-year postdoctoral appointment at the University of Arizona. Despite these travels, Dr. Russell is a Midwesterner at heart, having received her undergraduate and master's degrees at Bowling Green State University in Ohio.

Dr. Russell's research focuses on using evolutionary

genetics to address the unique conservation threats faced by bats around the world. In North America, migratory tree-roosting bats are primarily threatened by fatal collisions with wind turbines, while hibernating and cave-roosting bats are threatened by a lethal fungal infection known as White-Nose Syndrome (WNS). In the Caribbean, global climate change and associated increases in sea level and hurricane intensity pose a major threat to native bats. Dr. Russell is using population genetic methods to assess current population sizes, patterns of population structuring, and intensities of recent declines due to these threats. She is also using modeling and simulation analyses to project the impact of future threat scenarios on bat populations.

Outside of teaching and research, Dr. Russell enjoys traveling, knitting, and exploring regional food specialties with her husband. Additionally, she enjoys spending time with her cat Wormy and her corn snake Jub-Jub II: The Journey Home.



**Dr. Georgette Sass** is a *Drosophila* Geneticist who joined the Biology faculty as an Assistant Professor in the fall of 2008 after teaching at GVSU as an instructor since 2003. She received a Bachelor's degree in Biology from Kent State University and a Ph.D. in Biochemistry and Biophysics from the University of North Carolina, Chapel Hill. In her Postdoctoral research at the Fred Hutchinson Cancer Center in Seattle, Washington and at Emory University in Atlanta, she examined the interplay between chromatin structure and gene expression.

Dr. Sass' current research involves her favorite experimental organism, the fruit fly *Drosophila melanogaster*. She is using the well-studied process of oogenesis to determine the molecular components that are required to establish a functional egg. She is studying a unique gain-of-function mutation that disrupts cell-cell signaling between germ-line derived cells and somatic cells of an egg chamber during oogenesis. Characterizations of this mutation, as well as genetic analysis of its interaction with proteins known to function in this pathway, are currently underway.

Time spent away from GVSU is focused on family. Dr. Sass and her husband (another Biology professor) collaborate on an ongoing genetic experiment that is currently looking at the management of early adolescence using their own F<sub>1</sub>. Dr. Sass is a "Foster Puppy Raiser" for Paws With A Cause<sup>®</sup>, an organization that trains Assistance Dogs. And whenever possible she can be found in her garden.

## ***Biology Department Mission***

The Biology department integrates meaningful practical experiences with excellent classroom teaching to prepare students to be critical thinkers, engaged citizens, and creative and competent professionals in the biological sciences.

## ***Student Scholarship Day, 2009***

### **Student Scholarship Day: A GVSU Tradition**

Student Scholarship Day (SSD) is held once each year to celebrate the scholarship and creative work performed by GVSU students. The day showcases faculty-mentored student work, shared through many venues, including (but not limited to) oral presentations, discussion and panel sessions, fine arts exhibits and performances, and poster presentations.

Student Scholarship Day projects may be initiated as part of a course or as independent collaborations with faculty. GVSU encourages all students to consider enhancing their personal and professional development by engaging in scholarly and creative work with faculty, and to share their work with the GVSU community.

The College of Interdisciplinary Studies is proud to present and host the 14th Annual Student Scholarship Day on Wednesday April 8, 2009. This event showcased over 400 presentations by more than 600 student presenters.

**Many Biology Department faculty and students presented this year, please take a look at all of the presentations below!**

### **Posters**

Melissa Buzzard (Erik Nordman). Evaluation of Local Parks Using the Recreation Opportunity Spectrum with an Additional Education Factor.

Ryan Nelson (Erik Nordman). Capillary Electrophoretic Detection of Canadian Albicans Fungi in Blood.

Kyle Burgher, Lisa Bol, Maegen Kish, Bradley Houdek (Michael Lombardo). Factors that Affect Egg Mass in Tree Swallows.

Mimoza Grajqevci (Bopi Biddanda). A Picture Gallery of Microbial Mats from Lake Huron and Around the World.

Andrea Steinbach (Noor Ghiasvand). A Review of the Global Situation of Classical Phenylketonuria.

Jennifer Taylor (Noor Ghiasvand). A Comparison of Energy Healing Modalities.

Jessica Trahey (Michael Henshaw). An Analysis of Isolation by Distance Based on Microsatellite Loci in *Polistes Metricus*.

Emily Henk (Margaret Dietrich). Bacterial Analysis of Michigan Cherry Wines.

Maggie Weinert (Bopi Biddanda). Production and Consumption Rhythm in Muskegon Lake: Trends through the Years.

Robert Slider (Robert Hollister). Reproductive Responses of Arctic Plants to Temperature Variation.

Melissa Bobowski (Michael Lombardo, Erik Nordman). Nest Site Characteristics and Reproductive Success in Tree Swallows.

Sarah Jones (Michael Henshaw). Microsatellite Loci Reveal a Genetically Homogeneous Population in the Widespread Paper Wasp, *Polistes Metricus*.

Corey Kapolka (Todd Aschenbach). Seed Dispersal Success of Transplanted Species in a Longleaf Pine Savannah Restoration Experiment at the Savannah River Site, South Carolina.

Beth Lubeck (Bruce Ostrow). Cloning and Sequencing of Sonic Hedgehog in the Southern Flying Squirrel.

Kyle Kilpatrick (Rod Morgan, Robert Smart). Antibacterial Properties of a Telomerase Inhibitor.

Kristina Powers (Janet Vigna). Effects of a Biological Pesticide, Bti, on Frog Larval Development in Aquatic Communities.

Autumn Trombka (Richard Rediske). Current Status and Trends of PCB Congeners in Fish from Muskegon Lake and White Lake.

William Counterman (Jim Dunn). The Rush to Restoration: Stressing the Need for Initial and On-going Assessment of Oak Savanna and Prairie Ecosystem Restoration Projects.

## **Oral Presentations**

Nicholas Van Dyken (Erik Nordman). Role of Retained Structures for Bird Communities in Managed Forests in Snoqualmie, Washington.

Martha Haglund (Erik Nordman). A New Method to Infer Trail Dimensions Based on Ecosystem Types.

Joseph Severson (Erik Nordman). Modeling Habitat Stability for Cougar in the Upper Peninsula of Michigan.

Mitchell Sydloski (Bruce Ostrow). Identification of Developmental Genes in the Southern Flying Squirrel (*Glaucomys volans*).

Anthony Holm (Erik Nordman). Distinguishing Forest Types within Van Zoren Woods.

Nicholas Berghuis (Erik Nordman). Changing Climate and the Response of Birds.

Jennifer Liebig & Jeremy May (Robert Hollister). Expansion of Southerly Distributed Species in the Arctic Response to Warming.

Emily Henk (Margaret Dietrich). Bacterial Analysis of Michigan Cherry Wines.

Paul Rogers (Erik Nordman). Agricultural vs. Native Prairie Areas Usage by White Tail Deer.

Megan Mutchler (Erik Nordman). Wildlife Rehabilitation and Charismatic Megafauna.

Alex Wieten (Mark Luttenton). Turtle Community Structure in Great Lakes Coastal Wetlands.

Lisa Farr (Erik Nordman). Van Zoren Woods Relative Health Evaluation.

Kathryn Schurr (Carol Griffin, Phyllis Curtiss). Consulting with a Purpose: Expanding Michigan's Wilderness with Sleeping Bear Dunes.

T. Garrison Sanders, JR. (Bopi Biddanda). Great Lakes Extreme Ecosystems: A Look into Groundwater Vent Communities in Lake Huron.

Nicholas Ettema (Eric Snyder). Recreational Impacts on Ecosystem Processes: Potential Effects of Recreational Boat Traffic on Metabolism in the Little Susitna River, Alaska.

Jeremy May (Robert Hollister). Changes in Plant Canopy Structure in Response to Warming.

Kara Daniel (Erik Nordman). Residential Adaptive Management Plan Using the Principles of Permaculture.

David Chambers (Erik Nordman). Pitch Pine and Oak Regeneration Success in Prescribed Fire Treatments at Camp Edwards, Bourne, MA.

## ***Highlights of Faculty Activity***

**Todd Aschenbach** was the co-author of a presentation given at The Stewardship Network Conference in East Lansing, MI. The title was *Seed dispersal success of transplanted species in a longleaf pine savannah restoration experiment at the Savannah River Site, South Carolina.*

**Sheila Blackman** was the co-author of a presentation given at the Joint Annual Meeting of the American Society of Plant Biologists and the Sociedad Mexicana De Bioquimica Rama, Mérida, Mexico. It was entitled *The integrin binding peptide RGD induces programmed cell death in Daucus carota cells.* She also co-authored an abstract entitled *Acquisition of Desiccation Tolerance During Seed Development in Phalaenopsis* that was presented to the Michigan Academy of Sciences, Arts, and Letters for their March, 2009 meeting.

**Stephen Burton** presented an activity using internet data to examine leaf color change to the National Science Teacher's Association in Boston, MA. He also presented a poster describing how we couple independent investigations with inquiry lesson development in SCI 336 at the meeting of the National Association of Biology Teachers, Memphis, TN. He also presented the results of the research conducted at Pierce Cedar Creek Institute during the summer of 2007 at the meeting of the Michigan Academy of Sciences at Western Michigan University.

**Margaret Dietrich** mentored several students as they presented research they had done with her at various local and regional meetings.

**Chris Dobson** published three papers. The first paper was entitled *Critical Thinking Skills: Measuring Higher Cognitive Development with Bloom's Taxonomy*, published through VDM Verlag Publishing, Germany. The second was entitled *Ecological field studies: Through field studies, students learn scientific process and ecological content*, published in The Science Teacher. He also co-authored an article entitled *Helicopter seeds and*

*hypotheses...that's funny!* published in Science Scope. He also was the co-author of a presentation given at the National Association of Biology Teachers National Convention, Memphis, TN, entitled *Forest Ecology in the Classroom*.

**James Dunn** published an extensive report for the Michigan DNR – Wildlife Division entitled *Investigations of dispersal, habitat quality analysis, and the development of monitoring techniques for Karner blue butterfly within the Muskegon Recovery Unit*.

**Gary Greer** published an article in the Transactions of the Illinois State Academy of Science entitled *Floral Visitation of the Invasive Stinking Ash in Western Suburban Chicago*. He also served as an associate editor for the American Fern Journal.

**Carol "Griff" Griffin** published an article in the journal, Ecological Management and Restoration, entitled *Identifying Multiscale Habitat Factors Influencing Koala (*Phascolarctos cinereus*) Occurrence and Management in Ballarat, Victoria, Australia*. She also submitted a report to the U.S. Forest Service, Huron-Manistee National Forest, entitled *Demographics of Individuals Acquiring a Permit in 2003-2006 for Boat Use on the Pine River, Michigan*.

**Dawn Hart** was the co-author of an article published in Current Biology, entitled *The SIN kinase Sid2 regulates cytoplasmic retention of the S. pombe Cdc14-like phosphatase Clp1*. She also co-authored an article published in the journal, Biochemical Society Transactions, entitled *The role of Cdc14 phosphatases in the control of cell division*.

**Robert Hollister** was the co-author of an article published in the Ninth International Conference on Permafrost, Institute of Northern Engineering, University of Alaska Fairbanks. It was entitled *Soil temperature and thaw response to manipulated air temperature and plant cover at Barrow and Atkasuk, Alaska*. He also co-authored four presentations given at the West Michigan Regional Undergraduate Science Research Conference, Grand Rapids, MI, and two presentations given at the ITEX during the International Polar Year: International Tundra Experiment – 15<sup>th</sup> Workshop, Reykjavik, Iceland.

**Jodee Hunt** co-authored a presentation entitled *Effects of urban riparian restoration on the behavior and abundance of passerine birds*, given at the Annual meeting of Animal Behavior Society, Snowbird, UT. She also co-authored a presentation entitled *Restoration of an urban wetland: experiments through a cooperative municipal-university partnership*, given

at the 1<sup>st</sup> Annual Conference of the Michigan Stewardship Network, East Lansing, MI. She also co-authored an article in the MBAA International Conference Proceedings, Operations Management & Entrepreneurship Association and the 2008 Conference and Proceedings, Allied Academies International Conference, Reno, NVT. The article was entitled *Innovation Goes Green*.

**Joe Jacquot** was the co-presenter of a poster entitled *Movement pathways of meadow jumping mice as revealed by powder-tracking* at the Annual Meeting of the American Society of Mammalogists, South Dakota State University, Brookings, SD.

**Michael Lombardo** co-authored two articles, entitled *Digit ratios in birds* and *Digit ratios in green anolis lizards*, published in the Anatomical Record. He also published an article entitled *Access to mutualistic endosymbiotic microbes: an under-appreciated benefit of group living*, published in Behavioral Ecology and Sociobiology. He was also the co-presenter of a poster entitled *The sexual transmission of microbes during copulation in Tree Swallows* at the International Society for Behavioral Ecology, Cornell University, Ithaca, NY.

**Mark Luttenton** was the co-author of a presentation given at the North American Benthological Society 56<sup>th</sup> annual meeting, Salt Lake City, UT, entitled *Potential brown and rainbow trout predation on larval lake sturgeon in the Big Manistee River, MI*. He also co-authored a presentation given at the Michigan Chapter of the American Fisheries Society, Annual meeting, Sault Ste. Marie, MI, entitled *Larval sturgeon as potential prey for juvenile brown trout and rainbow trout in the Big Manistee River, MI*.

**Neil MacDonald** was the co-author of an article entitled *Landfill cover soil, soil solution, and vegetation responses to municipal landfill leachate applications*, published in the Journal of Environmental Quality. He gave a presentation entitled *Establishment of native grasses on spotted knapweed-infested sites with the aid of herbicides and fire* at the Michigan Invasive Plant Council Symposium in East Lansing, MI.

**Shaily Menon** was the co-author of an article published in the Wilson Journal of Ornithology, entitled *A preliminary analysis of the ecology and geography of the Asian nuthatches (Aves: Sittidae)*. She presented a paper entitled *First-pass global assessment of biodiversity consequences of sea-level rise mediated by climate change* at the 22<sup>nd</sup> Annual Meeting of the Society for Conservation Biology in Chattanooga, Tennessee.

**Rod Morgan** was the co-presenter of a paper at the 109<sup>th</sup> General Meeting of the American Society for Microbiology, Boston, MA, entitled *Studies of the Antimicrobial Activity of the Telomerase Inhibitor BIBR1532*. This research was also presented at the second annual West Michigan Regional Undergraduate Science Research Conference, Grand Rapids (VARI), MI.

**Alex Nikitin** was the co-author of an article published in the Journals of Gerontology – Biological Sciences, entitled *Effect of varying doses of caffeine on lifespan of Drosophila melanogaster*. He was also the author of an article entitled *Search of the remains of the first Ukrainian farmers*, published in the Michigan Space Grant Consortium.

**Erik Nordman** presented a lecture entitled *Open space preservation: economic values and priorities* at the Annis Water Resources Institute Seminar Series. He also gave a lecture entitled *Locating wind energy facilities in Michigan's coastal counties* to the Ottawa County Planning Commission. He was the co-author of a poster presented at the 2008 Society of American Foresters National Convention, Reno, NV, entitled *Education as an additional management factor in the Recreation Opportunity Spectrum*.

**Mel Northup** served as a Kent County SKYWARN severe weather spotter and as a cooperative weather observer with the National Weather Service.

**Heather Rueth** was the co-presenter of a presentation entitled *Comparison of decomposition rates in arctic tundra in response to increased nutrient availability and air temperature*, given at the Annual meeting of the Ecological Society of America in Milwaukee, WI.

**Amy Russell** published a paper for Endangered Species Research entitled *Roadkilled bats, highway design, and the commuting ecology of bats*. She was also the co-presenter of two presentations given at the North American Symposium on Bat Research in Scranton, PA. The first presentation was entitled *Dynamics of gene flow and extinction in island metapopulations under climate change: model discrimination through population genetic simulations*, and the second was entitled *A quantitative approach to historical ecology of the west Indies: Artibeus jamaicensis*.

**Nancy Shontz** published the most recent version of the study guide that accompanies Cummings' Human Heredity Text (8<sup>th</sup> edition).

**Eric Snyder** was the co-author of a poster presented at the North American Benthological Society in Salt Lake City, UT, entitled *Long-term monitoring of sand reduction in the Manistee River watershed, MI (USA): Assessing*

*ecological recovery trajectories for physical, chemical, biological and functional metrics.* He also gave a presentation entitled *Using structural and functional metrics to assess stream restoration*, given at the EAWAG (Swiss Federal Institute of Aquatic Science and Technology), Dübendorf, CH.

**Mark Staves** was the co-author of an article entitled *Model Scientists*, published in the Journal of Communicative and Integrative Biology. He also co-authored an article entitled *Symposia in Plant Neurobiology: A new venue for discussion of plant behavior and communication*, published in the Plant Science Bulletin. He was also the co-author of a presentation given at the Joint Annual Meeting of the American Society of Plant Biologists and the Sociedad Mexicana De Bioquímica Rama, Mérida, Mexico. It was entitled *The integrin binding peptide RGD induces programmed cell death in Daucus carota cells*. He also co-authored a presentation given at the West Michigan Undergraduate Science Research Conference, Grand Rapids, MI, entitled *The effect of intracellular and extracellular density on the gravicurvature of rice roots*.

**Pat Thorpe** co-authored two articles, entitled *Digit ratios in birds* and *Digit ratios in green anolis lizards*, published in the Anatomical Record. He was also the co-presenter of a poster entitled *The sexual transmission of microbes during copulation in Tree Swallows* at the International Society for Behavioral Ecology, Cornell University, Ithaca, NY.

**Pei-Lan Tsou** was the co-author of a presentation given at the West Michigan Regional Undergraduate Science Research Conference in Grand Rapids, MI, entitled *Characterization of the role of OXS1, a nucleocytoplasmic protein in oxidative stress tolerance using yeast-two-hybrid system*. She also co-authored a presentation given at the Michigan Academy of Science, arts, & letters Annual Meeting in Kalamazoo, MI, entitled *The Influence of ApoE Genotype on Blood Lipid Levels in Middle School Children*.