

COBWEBS

a newsletter for gvsu biology and natural resource management alumni

SUMMER 2012

VOLUME 16

Mission Statement

the grand valley state university 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

Annual Report from the Chair

Odds and Ends Captured in the Web

Neil MacDonald, Chair, Biology Department

The Biology Department is pleased to welcome two new faculty members for the fall, 2012 semester. Stephen Rybczynski, in addition to assignments in Biology, will be teaching in the Integrated Sciences Program. Steve is coming to GVSU from the University of Oklahoma, where he was a lecturer in the Department of Botany and Microbiology. His scholarly interests include both aquatic ecology and science education, and he has previous professional experience in both areas. Jennifer Moore will be teaching in the Natural Resources Management Program, and comes to us from her position as a research fellow in the Michigan State University Fisheries and Wildlife Department. Jen has extensive experience

working with endangered species in New Zealand, and her scholarly interests are in conservation and landscape genetics. We welcome both Steve and Jen, and look forward to having them as our colleagues.

Our efforts to revise the Biology curriculum made substantial progress during the past year. After lengthy discussions within the Department, and further deliberations at the College and University levels, the revised Biology minor was approved and will be available to students this fall. The revised minor allows students substantial flexibility in course selection after they complete the two required introductory Biology courses. The new minor will allow students to take a greater variety of courses that will better complement their interests in a breadth of fields, including teaching, health sciences, nursing, botany, zoology, ecology, aquatic sciences, wildlife biology, resource ecology, biological sustainability, or evolutionary biology. The revised Biology minor will continue to serve the same groups of students as the previous minor did, but also will attract additional students who did not pursue the old minor because of its more rigid structure.

IN THIS NEWSLETTER:

- *a letter from the biology department chair*
- *outstanding graduates*
- *faculty award recipients*
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- *pre-veterinary club news*
- *student scholars day 2012*
- *faculty activity highlights*

To facilitate all aspects of the undergraduate Biology Program, the department created the Biology Undergraduate Program Committee last year, parallel to the existing program committees for the undergraduate Natural Resources Management program and Biology Master's program already in place. The Biology Undergraduate Program committee will be responsible for curriculum review and revision, assessment, scholarships, and all other matters related to the Biology undergraduate program. In a department with more than 700 students in its three programs, having faculty subgroups help manage these degree-granting programs efficiently has become increasingly critical.

On a final note, and providing some resonance with my "This Old House" theme from the 2010 Cobwebs, the Biology Department was deeply involved in the planning phases for a new Allendale Laboratory Building last year. Preliminary building plans were developed last fall, and

have been approved by the state for construction when funding is available. When and if this new building is constructed, the Biology Department would be the primary occupant, with access to substantially increased teaching and research spaces. We of course are keeping our fingers crossed and will continue working next year to help make the new building a reality in the near future.

We are always interested in hearing what our alumni are doing, so feel free to send us updates at biodept@gvsu.edu. Better yet – send your alumni news to the Grand Valley Magazine at gvmagazine@gvsu.edu. We are very proud of all of our alumni, and would be very pleased to see your accomplishments included in the next Grand Valley Magazine!

Outstanding Graduating Seniors!

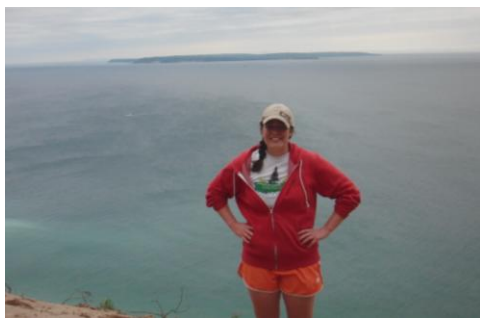
To qualify for the Outstanding Graduating Senior award students must have a 3.5 gpa or greater. Recipients demonstrate excellence in and out of the classroom with potential for outstanding future achievement in the field. Award recipient names are engraved on a Biology Department plaque and they are recognized across the GVSU campus.



Biology

Ben Fair

In 2012 I will begin Cornell University's Biochemistry, Molecular and Cell Biology PhD program. It is an interdisciplinary program letting students explore topics from developmental biology to structural biochemistry before picking a thesis advisor. I will start with lab rotations in the fall before I choose my thesis advisor. I am very interested in biophysics and protein structure/function. I hope the combination of research and teaching experiences in this program will help me decide my aspirations after graduate school.



Natural Resource Management

Heather Snyder

I have been working as an environmental education teacher at the Howell Nature Center and am now currently a director of their summer resident camp. I have applied for Americorps and hope to serve a term in Montana working on a watershed project. After my term is complete I hope to attend graduate school at the University of Wisconsin Steven's Point. I aspire to obtain my Master's Degree in Natural Resources Management with an emphasis in Environmental Education. My long term goal is to act as either an Environmental Education Coordinator or an Executive Director at a well established Nature Center.

Scholarship Recipients

Michigan Garden Club Scholarship - \$1000
Thad Cummings

John Salski Memorial Scholarship - \$1000
Chase Baldwin
Danielle Bradke

Huizenga Biology Education Scholarship - \$1000
Steve Krauss
Alyssa VanderStel
Megan Hurley
Alicia Tooker
Mindy Bode

Howard and Rose Stein Scholarship - \$3000
Lauren Spaans

DeWitt Barrels Environmental Scholarship - \$1000
Kaitlyn Kiessling

John Shontz Native Plants Biology Scholarship - \$3000
Wendal Kane
Laurel Scholten
Grady Zuiderveen

Barbara Waddell Research Award - \$3000
Laurel Scholten
(Todd Aschenbach advisor)

Arleane Treanor Internship - \$3000
Laura Goldsmith

Pre-Veterinary Club News

President: Katelyn Nettler, Vice President: Christina Fenske, Secretary: Jessica Pontow, Treasurer: Katie Gundersen, Volunteer Coordinator: Chris Stretton & Public Relations: Justine Travis.

This has been a great year for the Pre-Vet Club. I would like to thank all of my fellow officers and dedicated members for really putting a lot into the club to achieve our goals. The club had many accomplishments this year. From last year, we carried over the idea of having a different theme for each month to reflect and give a presentation on the different aspects of the dynamic field of veterinary medicine. In addition, we had a speaker or volunteer event each month to reflect this theme. Due to a majority of freshmen new to the club, we decided, as officers, that one of our main goals was to really show and prepare them about the field of veterinary medicine! Therefore, during the month of the September we focused on exploring all the different career options in the veterinary medicine field; they're options were open! They could become anything from a veterinarian to a public health professional or a veterinary technician; their opportunities are endless. October was *Exotic/Zoo Animal Month* and we got a behind-the-scenes tour at Boulder Ridge Animal Park (Lowell, MI) and had one of their zookeepers gave us the inside scoop of working at a zoo and caring for the not-your-everyday kind of animals. We also had Dr. Bennett from John Ball Zoo come in to tell us even more about

zoo veterinary field. As a surprise he brought in a Ball Python to show the club! As part of our other club goal, we wanted to increase the amount of time our club volunteered as a whole. So towards the end of October, club members and officers volunteered at John Ball Zoo's Halloween Event, "Zoo Goes Boo".

November was *Equine Medicine Month*, so we headed out to a previous Pre-Vet Club officer's horse training and boarding facility to watch her ferry her horses feet while she talked about her experiences with Dr. Trippany of Willow Run Veterinary Service. During this month we also had a representative from Ross School of Veterinary Medicine in St. Kitts (the Caribbean). This allowed us to see vet school options not just here in the United States, but also abroad.

Starting off the semester, January was *Small Animal Medicine Month* but instead of having a vet speaker, we had two representatives from Crash's Landing and Big Sid's Sanctuary tell us about their organization, what they do and why spaying and neutering are so important. Later that month we were able to set up two weekend volunteer opportunities for club members and officers. In February, *Application & Study Abroad Month*, we looked into study abroad options and foreign veterinary

medicine schools. We outlined various study abroad programs available to students, their costs and what they offered. Last year's club president Chelsea Van Assche came in to talk about not only her experience abroad in Belize, but to also give a deep insight to the VMCAS application process. The advice Chelsea gave was very eye-opening but inspiring.

March was *Large Animal Medicine Month* and Dr. Jon Visser talked about his career as a large animal veterinarian at West Michigan Veterinary Services. It was a very inspiring presentation, because he talked about the very beginning of his career and when he was in our shoes. Dr. Visser also had a lot of entertaining stories about progressing through the field of large animal vet medicine.

The Pre-Vet Club continued its affiliation with the American Pre-Veterinary Medical Association, a national organization of pre-vet students around the country. Every year, they hold a national symposium and while we did attend the symposium last year, as a club we decided to take a year off from traveling. However, some members and officers did make the journey to the 2012 Symposium at North Carolina State Veterinary School.

There they engaged in several informative lectures led by veterinarians and a hands-on lab about veterinary medicine. Our members got to help draw blood on pigs, assist in a swine necropsy and try their hand at suturing and bandaging labs. Many more of us made a trip later in April to Michigan State's Vet-a-Visit where we had the chance to engage in a round-table discussion about admission requirements with vet student and vet school professor, received a tour of the vet school hospital and overall had a great time exploring the field of veterinary medicine even further.

Our main goals as a club this year, above all else, was to help the younger graduates explore the field of vet medicine, increase the amount of volunteering we did as a club and to continue the sense of togetherness among club members. Going into this tough and highly competitive field, everything is easier and a lot less stressful if we all work together. Because of this close-knit camaraderie, the Pre-Vet Club provides a great opportunity for pre-vet students to immerse themselves in the field that they want to spend the rest of their lives in.

Soil And Water Conservation Club News

Julie Watkins, SWCS President

This year has been very busy for the members of GVSU's Soil and Water Conservation Society, Michigan's only student chapter. We really stepped it up this year by hosting bake sales to raise funds so we could reward club members on their hard work. With these funds we were able to offer pizza to our volunteers following a few events, as well as purchase club t-shirts. We provided a common grounds meeting space once per week for members to get updates on club happenings, do homework, socialize, and to present relevant media on issues concerning soil and water conservation. We also gave a facelift to the SWCS awards board located near PAD 207, as well as our events board located near PAD 247.

This past fall and winter we participated in a number of annual events plus many new events. We were welcomed back to the 16th annual Thornapple River clean-up. It is always the first event we participate in and is a great chance to get out and canoe with new members and local citizens. During the semesters we

participated in multiple events that included invasive species removal, tree planting, Grand River clean-up, wood duck box set-up, club t-shirt tie-dye and more. We also sponsored a two mile stretch of Lake Michigan Drive that we clean-up through MDOT's Highway Clean-up program. The highway clean-up was a huge success due to our first time collaboration with the GVSU Biology Club. We also began collaborating with GVSU's Student Environmental Coalition (SEC) to aid them in some of their events, as well as have them attend many of ours. Our final event was a garlic mustard pull at Aman Park in Allendale followed by a potluck. This gave new club members a chance to meet and greet the officers for the 2012/2013 school year which include: Caleb Syswerda – President, Rebecca Andrews – Vice-president, Danielle Bradke – Secretary, and Frank Parks – Financial Officer.

During the school year, we hosted Kelly Goward from the Michigan state chapter of the SWCS. She informed members of benefits they can earn from participating in the club, as well as scholarships and other benefits they will be eligible for by becoming a national member of the

SWCS. Overall, the year was a great success and members were able to enjoy more time socializing and getting to know one another through many of our new events. Next year there will be added efforts at the beginning of the school year to recruit new members as many have since graduated. So, if you are in need of

volunteer experience, a more robust CV, or just looking to spend some time with like-minded individuals while being a steward to the environment, then consider becoming a member of the GVSU's SWCS in the upcoming year.

Student Scholars Day 2012

Student Scholars Day 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. This year, there were 21 poster presentations and 18 oral presentations presented by GVSU biology department students or assisted by GVSU biology department faculty.

POSTER PRESENTATIONS

The Role of CBL10 in Stamen Development in *Arabidopsis thaliana*

Presenter: Misty Van Brocklin
Mentor: Margaret Dietrich

Factors Associated with Egg Hatching in Tree Swallows

Presenters: Megan Briggs, Mary Graham, Amanda Rostic, Deb Near, Danielle Smith
Mentors: Patrick Thorpe, Michael Lombardo

Effect of Increased G-Load on Rat Mammary Gland Development

Presenter: Kibrom Gebre-Egziabher
Mentor: Osman Patel

Larval Steelhead Densities in the Muskegon River, Michigan

Presenter: Neal Swanson
Mentor: Mark Luttenton

Status of Reintroduced American Marten in the Manistee National Forest Within Michigan's Northern Lower Peninsula

Presenter: Julie Watkins
Mentors: Paul Keenlance, Joseph Jacquot

Parental Decisions and Paternity in the Yellow Warbler

Presenter: Julie Watkins
Mentor: Michael Henshaw

Lonely Boy: Parental Division of Labor and Single-Parenting in Convict Cichlids (*Amatitlania nigrofasciata*).

Presenter: Lindsay Stoyka
Mentor: Jodee Hunt

Ancient Migrations into Eurasian Steppe Revealed by Genetic Analysis of Ancient mtDNA

Presenter: Jessica Riley
Mentor: Alexey Nikitin

The Synthesis and Testing of GV-2 Chemical Derivatives for Antibacterial Derivatives

Presenter: Joseph Baumann
Mentors: Rod Morgan, Robert Smart

Arctic Ecology in West Michigan Classrooms

Presenter: Jennifer Liebig
Mentor: Robert Hollister

A Genetic Analysis of Native and Invasive *Phragmites australis* along Michigan's West Coast

Presenter: Grady Zuiderveen
Mentor: Timothy Evans

Don't Spray Wasps! Using *Polistes* Paper Wasps for Pest Management in the Home Garden.

Presenter: Laura Goldsmith
Mentor: Michael Henshaw

The Relationship Between the Innate Immunity and Ectoparasite Load of Adult Tree Swallows (*Tachycineta bicolor*)

Presenter: Mary Graham
Mentors: Patrick Thorpe, Michael Lombardo

Evolution of Parental Care in Convict Cichlids: Offspring Survival & Horizontal Transmission of Microbes

Presenters: Zachary Hundley, Elizabeth Sommers
Mentor: Jodee Hunt

Rescue of the Delorean Phenotype in *Drosophila melanogaster*

Presenter: Kevin Mittner
Mentor: Georgette Sass

Identifying an Atypical Actin Binding Domain in the Fission Yeast Mid1 Scaffold

Presenter: Cody Hager
Mentor: Dawn Clifford Hart

Characterization of PkndInΔ5, a Derivative Allele of the Delorean Mutation Associated with the Protein Kinase N Gene in *Drosophila melanogaster*

Presenter: Allison Burke
Mentor: Georgette Sass

Fission Yeast Cyclin-Dependent Kinase, Cdc2, Regulates the Mid1 Scaffolding Protein During Cytokinesis

Presenter: Justin Hackett

Mentor: Dawn Clifford Hart

Phospho-Regulation of the Anillin-Related Scaffolding Protein Mid1 by Sid2 in Fission Yeast Cytokinesis

Presenter: Ashley DeWitt

Mentor: Dawn Clifford Hart

A Landscape Perspective on Bird Beak Deformity: An Epizootic of Unknown Etiology

Presenter: Rachelle McLaughlin

Mentor: Shaily Menon

Subcloning of a pkN cDNA from *D. melanogaster*

Presenter: Stephanie Maciejewski

Mentor: Bruce Ostrow

ORAL PRESENTATIONS

The Replacement of Cattle with Eland Antelope in Namibia

Presenter: Karl Sebastian Fester

Mentor: C. "Griff" Griffin

Abundance and Effective Management of Buckthorn at Blandford Nature Center

Presenter: Clara Trippel

Mentor: C. "Griff" Griffin

Evaluating Removal and Mark-Recapture Methods for Estimating Sculpin Abundance in Streams

Presenter: Brandon Harris

Mentor: Carl Ruetz

The Influence of Stonegate Public Golf Course on Cedar Creek

Presenter: Elizabeth Mullins

Mentor: C. "Griff" Griffin

Food Webs and Rivers: Importance of Contiguous Habitat Interactions

Presenter: Noah Jansen-yea

Mentor: Eric Snyder

Genetic Demography of *Perimyotis subflavus* Reveals Regional Population Trends

Presenter: Alynn Martin

Mentor: Amy Russell

The Economic Implications of the Corporate Average Fuel Economy Regulations

Presenter: Jonathan Rogers

Mentor: C. "Griff" Griffin

Identification of the Late Embryogenesis Abundant Proteins Gene Family in the Orchidaceae

Presenter: Timothy Godfrey

Mentors: Sheila Blackman, Pei-Lan Tsou

Effects of Experimental Warming on Phenology and Growth of *Carex aquatilis*-stands in Northern Alaska

Presenter: Timothy Botting

Mentor: Robert Hollister

Wilderness Messages Available on Land Management Agency Websites

Presenter: Gareth Hickson

Mentor: C. "Griff" Griffin

The Ecological Implications of Wolf Re-Introduction to Rocky Mountain National Park

Presenter: William Jacques

Mentor: C. "Griff" Griffin

Effects of Organic vs. Traditional Agriculture on Soil Health

Presenter: Elizabeth Dunnuck

Mentor: C. "Griff" Griffin

Habitat Characteristics and Distribution of American Marten (*Martes Americana*) in the Manistee National Forest.

Presenter: Mitchell Poling

Mentor: C. "Griff" Griffin

Increasing Composting in GVSU Campus Dining

Presenter: Allison Proffitt

Mentor: C. "Griff" Griffin

Effects of Vermicompost on Germination of Various Vegetables

Presenter: Joseph Weis

Mentor: C. "Griff" Griffin

Bottlenose Dolphin Care and Training

Presenter: Kayla Morawski

Mentor: Terry Trier

Germination Rates of Grass Seed With Ice-Melting Solution Applications

Presenter: Tami Brown

Mentor: C. "Griff" Griffin

Genetic Analysis of Ancient Human Remains from the Bronze Age Nomadic Steppe Cultures of Ukraine

Presenter: Jeff Pashnick

Mentor: Alexey Nikitin

Faculty Activity Highlights

Todd Aschenbach

- Soil and Water Conservation Society Education Award (01/2011)
- Aschenbach, T., Brandt, E., Buzzard, M., Hargreaves, R., Schmidt, T., Zwagerman, A. Initial Plant Growth in Sand Mine Spoil Amended with Peat Moss and Fertilizer Under Greenhouse Conditions: Potential Species for Use in Reclamation
- Aschenbach, T. (2011). *Final Report to the Center for Scholarly and Creative Excellence*. Allendale, MI: GVSU Community Garden Soil Improvement.
- Aschenbach, T. (Presenter & Author), Roos, R. (Author Only), Henne, C. (Author Only), 20th World Conference on Ecological Restoration, Society for Ecological Restoration International, Merida, Mexico, "Initial Results from a Michigan Sand Prairie Restoration Experiment: Nature or Nurture?", Academic, International, Accepted. (August 23, 2011).
- Roos, R. (Presenter & Author), Aschenbach, T. (Author Only), Henne, C. (Author Only), 3rd Annual Meeting of the Midwest-Great Lakes Chapter of the Society for Ecological Restoration International, Springfield, IL, "A Michigan Sand Prairie Restoration: Nature or Nurture?", Academic, Regional, Accepted. (April 1, 2011).
- Roos, R. (Presenter & Author), Aschenbach, T. (Author Only), Henne, C. (Author Only), 4th Stewardship Network Conference: The Science, Art and Practice of Restoring Native Ecosystems, East Lansing, MI, "A Michigan Sand Prairie Restoration Experiment", Academic, Regional, Accepted. (January 21, 2011).

Sheila Blackman

- Godfrey, T. (Presenter & Author), Blackman, S. (Author Only), Tsou, P.-L. (Author Only), West Michigan Regional Undergraduate Science Research Conference, Van Andel/GVSU, Van Andel Institute, "Identification of the Late Embryogenesis Abundant Protein Gene Family in the Orchidaceae", Academic, West Michigan. (November 12, 2011).
- Godfrey, T. (Presenter & Author), Blackman, S. (Author Only), Tsou, P.-L. (Author Only), Student Summer Scholars Showcase, GVSU, Grand Rapids, "Identification of Late Embryogenesis Abundant Protein Genes in the Orchidaceae", Academic, West Michigan, Invited. (August 2011).

Margaret Dietrich

- Pew Teaching Excellence Award, FTLC, Teaching, University. (February 3, 2011).
- Greer, G., Dietrich, M., DeVol, J., Rebert, A. The Effects of Exogenous Cytokinin on the Morphology and Gender of *Osmunda regalis* Gametophytes. *The American Fern Journal* (in press).
- Dietrich, M., Hansen, A., West Michigan Regional Undergraduate Science Research Conference, Grand Rapids MI, "Initial cell size affects the hormone response in *Physcomitrella patens*", (November 12, 2011).
- Dietrich, M., Van Brocklin, M., West Michigan Regional Undergraduate Science Research Conference, Grand Rapids MI, "The role of CBL10 in the development of flowers in *Arabidopsis thaliana*", (November 12, 2011).
- Dietrich, M., Monihan, S. M., Renault, H., Schumaker, K. S., International Conference on Arabidopsis Research, Madison WI, "The Arabidopsis CALCINEURIN B-LIKE protein mediates flower development during plant growth in saline conditions", (June 23, 2011).

Christopher Dobson

- Wampler, L.* and C. Dobson. (2010). Helicopter seeds and hypotheses...that's funny! Republished as a chapter in *Tried and True: Time-Tested Activities for Middle School*, ed. by Liftig, I., NSTA Press, National Science Teachers Association.
- Wampler, L.* and C. Dobson. (2010). Helicopter seeds and hypotheses...that's funny! Republished as a chapter in *The Frugal Science Teacher, PreK-5: Strategies and Activities*, ed. by Froschauer, L., NSTA Press, National Science Teachers Association.

- Wampler, L.* and C. Dobson. (2010). Helicopter seeds and hypotheses...that's funny! Republished as a chapter in *The Frugal Science Teacher, 6-9: Strategies and Activities*, ed. by Froschauer, L., NSTA Press, National Science Teachers Association.
- Dobson, C., Fall Science Update, Regional Math & Science Center, "Helicopter seeds and hypotheses...That's funny!" (November 16, 2011).
- Miller, H., P. Llerandi-Roman (Author Only), S. Mattox (Author Only), and C. Dobson (Author Only), Geological Society of America Annual Meeting, Minneapolis, MN, "Integrating climate change for elementary pre-service teachers." (2011).
- Dobson, C., S.* Haley, A.* Scott, and E. Naegle, Michigan Science Teachers Association Annual Conference, Grand Rapids, MI, "Global climate change and integrated science." (February 26, 2011).

James Dunn

- Technical Report -Non-Refereed, Dunn, J. Landscape factors which influence the dispersal behavior and metapopulation dynamics of the Karner blue butterfly. 19 pp. US Fish and Wildlife Service. Green Bay Wisconsin. This was a final report as part of my obtaining an endangered species permit.
- Dunn J. P., Surveys for the Rare Frosted Elfin in Michigan's Oak Savannah and Suggested Management Practices. Presented June 25, 2011, at the Annual Meeting of the Michigan Entomological Society, Pierce Cedar Creek, Hastings MI.

Timothy Evans

- Givnish, T. J., Barfuss, M. H. J., Van Ee, B., Riina, R., Schulte, K., Horres, R., Gonsiska, P. A., Jabaily, R. S., Crayn, D. M., Smith, A. C., Winter, K., Brown, G. K., Evans, T., Holst, B. K., Luther, H., Till, W., Zizka, G., Berry, P. E., Sytsma, K. J. (2011). Phylogeny, adaptive radiation and historical biogeography in Bromeliaceae: insights from an 8-locus plastid phylogeny *American Journal of Botany* 98 872-895
- Zuiderveen, G. (Presenter & Author), Evans, T. (Author Only), GVSU Student Scholars Day, GVSU, "A Phylogenetic Analysis of the African Plant Genus *Palisota* (family Commelinaceae) Based on Chloroplast DNA Sequences", Academic, Local, Accepted. (April 13, 2011).
- James, C. (Presenter & Author), Evans, T. (Author Only), GVSU Student Scholars Day, GVSU, "Phylogenetic Relationships within the Neotropical Plant Genus *Lymania* (Family Bromeliaceae) based on Several DNA Regions", Academic, Local, Accepted. (April 13, 2011).

Gary Greer

- Hollingsworth, S., Greer, G., Andres, E. Pheromonal Interactions Among Gametophytes of *Osmundastrum cinnamomea* and the Origins of Antheridiogen Systems in Leptosporangiate Ferns. *International Journal of Plant Sciences*. Expected in the March 2012 issue.
- Greer, G., Dietrich, M., DeVol, J., Rebert, A. The Effects of Exogenous Cytokinin on the Morphology and Gender of *Osmunda regalis* Gametophytes. *American Fern Journal*, expected in first issue of this quarterly.

Carol Griffin

- Griffin, C. Revisions to the Wilderness Education Plan for Nordhouse Dunes Wilderness. (Submitted)
- Griffin, C. *Baseline Inventory and Monitoring Plan for Identifying Visitor Use Levels in the Nordhouse Dunes Wilderness*. (Submitted)
- Griffin, C., Buzzard, M., Maxey, M. *Baseline Inventory and Monitoring Plan for Identifying User-Created Campsites in the Nordhouse Dunes Wilderness*.
- Griffin, C., Rethinking Protected Areas in a Changing World, George Wright Society, New Orleans, LA, "Management Implications Based on Visitor Use Data from Nordhouse Dunes Wilderness", Academic, International, Accepted. (March 15, 2011).
- Griffin, C. (Presenter & Author), Gilles, R. (Presenter & Author), General Education and Assessment 3.0: Next-Level Practices Now, Association of American Colleges and Universities, Chicago, IL, "LEAPing Toward a Culture of Assessment and Alignment", Academic, International, Accepted. (March 4, 2011).
- Gilles, R., Griffin, C., University-wide Assessment Conference, GVSU, Grand Rapids, "The Next Step in General Education Assessment: Raising the Bar", Academic, Local, Invited. (January 7, 2011).

Michael Henshaw

- Henshaw, M., Hunt, J., Mutti, N., Havukainen, H., Amdam, G. Development of an RNA interference tool, characterization of its target, and an ecological test of caste differentiation in the eusocial wasp *Polistes*. *PLOS One* 6 (11) e26641
- Henshaw, M., Toth, A. L., Young, T. Development of new microsatellite loci for the genus *Polistes* from publically available expressed sequence tag (EST) sequences. *Insectes Sociaux* 58 (4) 581-584
- Goldsmith, L. (Presenter (Poster)), Henshaw, M. (Author Only), Student Summer Scholars Showcase, GVSU, Pew Campus, "Don't Spray the Wasps! Using paper wasps to control garden pests.", Academic, West Michigan, published in proceedings.

Robert Hollister

- Faculty Mentor Award, Graduate Student Association Award for Outstanding Faculty, Teaching, University, No monetary award. (April 2011).
- Liljedahl, A. K., Hinzman, L. D., Harazono, Y., Zona, D., Tweedie, C. E., Hollister, R., Engstrom, R., Oechel, W. C. (2011). Limitations on Evapotranspiration rates from an Arctic coastal wetland with implications in a changing climate *Biogeosciences* 8 (11) 3375-3389
- Elmendorf, S. C., Henry, G. H., Hollister, R., Bjork, R. G., Bjorkman, A. D., Callaghan, T. V., Collier, L. S., Cooper, E. J., Correlissen, J. H., Day, T. A., Fosaa, A. M., Gould, W. A., Gretarsdottir, J., Harte, J., Hermanutz, L., Hik, D. S., Hofgaard, A., Jarrad, F., Jonsdottir, I. S., Keuper, F., Klanderud, K., Klien, J. A., Koh, S., Kudo, G., Lang, S. I., Loewen, V., May, J. L., Mercado, J., Michelsen, A., Molau, U., Myers-Smith, I. H., Oberbauer, S. F., Piper, S., Post, E., Rixen, C., Robinson, C. H., Schmidt, N. M., Shaver, G. R., Stenstrom, A., Tolvanen, A., Totland, O., Troxler, T., Wahren, C.-H., Webber, P. J., Welker, J. M., Wookey, P. A. Global assessment of experimental climate warming on tundra *Ecological Letters*
- Elmendorf, S. C., Henry, G. H., Hollister, R., Bjork, R. G., Boulanger-Lapointe, N., Cooper, E. J., Correlissen, J. H., Day, T. A., Dorrepaal, E., Elumeeva, T. G., Gill, M., Gould, W. A., Harte, J., Hik, D. S., Hofgaard, A., Johnson, D. R., Johnstone, J. F., Jónsdóttir, I. S., Klanderud, K., Klien, J. A., Koh, S., Kudo, G., Lang, S. I., Loewen, V., May, J. L., Mercado, J., Michelsen, A., Molau, U., Myers-Smith, I. H., Oberbauer, S. F., Piper, S., Post, E., Rixen, C., Robinson, C. H., Schmidt, N. M., Shaver, G. R., Stenstrom, A., Tolvanen, A., Totland, O., Troxler, T., Wahren, C.-H., Webber, P. J., Welker, J. M., Wipf, S. Linking plot-scale evidence of tundra vegetation change to recent summer warming *Nature Climate Change* (submitted)
- Lara, M. J., Villarreal, S., Johnson, D. R., Hollister, R., Webber, P. J., Tweedie, C. E. Estimated change in tundra ecosystem function from 1972 to 2010 near Barrow Alaska *Environmental Research Letters* (submitted)
- Villarreal, S., Hollister, R., Johnson, D. R., Lara, M. J., Webber, P. J., Tweedie, C. E. Tundra vegetation change near Barrow, Alaska (1972-2010) *Environmental Research Letters* (submitted)
- Liebig, J. A. (Presenter & Author), Hollister, R. (Author Only), Student Scholarship Day, GVSU, Allendale, Michigan, "Connecting differences in phenology to changes in arctic plant communities", Academic, Local, Accepted. (April 13, 2011).
- Kremers, K. S. (Presenter & Author), Hollister, R. (Author Only), Student Scholarship Day, GVSU, Allendale, Michigan, "Long-term response of *Luzula arctica* and *Luzula confusa* to warming in the Alaskan tundra", Academic, Local, Accepted. (April 13, 2011).
- May, J. L. (Presenter & Author), Hollister, R. (Author Only), Student Scholarship Day, GVSU, Allendale, Michigan, "Predicting long-term tundra plant community change in response to warming", Academic, Local, Accepted. (April 13, 2011).
- Slider, R. T. (Presenter & Author), Hollister, R. (Author Only), Student Scholarship Day, GVSU, Allendale, Michigan, "What makes an arctic plant predictable?", Academic, Local, Accepted. (April 13, 2011).
- Kremers, K. S. (Presenter & Author), Hollister, R. (Author Only), 115th Annual Meeting, Michigan Academy of Sciences, Arts, and Letters, Saginaw State University, Saginaw, MI, "Long-Term Response of *Luzula arctica* and *Luzula confusa* to Warming in the Alaskan Tundra", Academic, State, peer-reviewed/refereed, Accepted. (March 11, 2011).

- Liebig, J. A. (Presenter & Author), Hollister, R. (Author Only), 115th Annual Meeting, Michigan Academy of Sciences, Arts, and Letters, Saginaw State University, Saginaw, MI, "Phenology of Arctic Plant Species as Indicator of Response to Warming", Academic, State, peer-reviewed/refereed, Accepted. (March 11, 2011).
- Slider, R. T. (Presenter & Author), Hollister, R. (Author Only), 115th Annual Meeting, Michigan Academy of Sciences, Arts, and Letters, Saginaw State University, Saginaw, MI, "Which Factor to Use? Predicting Arctic Plant Responses to Warming.", Academic, State, peer-reviewed/refereed, Accepted. (March 11, 2011).

Jodee Hunt

- Lane, P., Hunt, J., Farris, J. (2011). Innovative teaching to engage and challenge twenty-first century students: an interdisciplinary approach. *Journal of Entrepreneurship Education*
- Adams, L. (Presenter) and J. Hunt. *Have you licked your kids today? Transmission of microbes through parental care in a teleost fish.* (July 29, 2011).
- Hunt, J. (Presenter) and L Adams. *Honey, I moved the kids: division of labor and fitness benefits in a biparental cichlid fish.* (July 29, 2011).
- Zippel, M. (presenter) and J. Hunt. *Has dad licked the kids today? Transmission of microbes in a teleost fish, Cichlosoma nigrofasciatum.* Oral presentation. (April 13, 2011).
- Haupt, A., C.J. Scheiber (co-presenters), and J. Hunt. *Honey, I ate the kids! Life history strategies fish behavior and management of a cichlid colony.* Poster presentation. (April 13, 2011).
- Gaskell, A., L. Stoyka, (co-presenters) and J. Hunt, J. *Honey, I moved the kids: division of labor in a biparental cichlid fish.* Poster presentation. (April 13, 2011).
- Hunt, J. *Ecoturismo y Ciencias Ambientales: Collaborative Projects in Education & Sustainability with Faculty of FAREM, Estelí, Nicaragua.* Poster presentation (Invited; April 6, 2011).
- Hunt, J. *Honey, I moved the kids: division of labor in a biparental cichlid fish.* Poster presentation (Invited; April 6, 2011).
- Hunt, J. and L. Adams. Lyndsey, A. *Did mom (or dad) lick the kids today? Biparental care and transmission of beneficial microbes in convict cichlids.* Oral presentation (Invited; Feb. 17, 2011).
- Deaner, R. O. and J. Hunt, J. *Honey, who's got the kids? The evolutionary origins of alloparenting, empathy and cooperation.* Oral presentation & discussion. (October 21, 2011).

Joseph Jacquot

- Larsen, A. (Presenter & Author), Jacquot, J. (Author Only), Keenlance, P. (Author Only), 72nd Midwest Fish and Wildlife Conference, Iowa Department of Natural Resources, Des Moines, Iowa, Academic, Regional, Accepted. (December 2011).
- Canaan, M. (Presenter & Author), Hillman, T. (Presenter & Author), Keenlance, P. (Author Only), Jacquot, J. (Author Only), Henshaw, M. (Author Only), 72nd Midwest Fish and Wildlife Conference, Iowa Department of Natural Resources, Des Moines, Iowa, "Southern flying squirrel den site selection and genetic relatedness of summer nesting groups", Academic, Regional, Accepted. (December 2011).
- Miara, S. (Presenter & Author), Colyer, A. (Author Only), Keenlance, P. (Author Only), Jacquot, J. (Author Only), Larsen, A. (Author Only), Canaan, M. (Author Only), 18th Annual Meeting of the Wildlife Society, The Wildlife Society, Waikoloa, Hawaii, "Winter den characteristics and behavior of southern flying squirrels in Southwest Michigan", Academic, National, Accepted. (November 2011).

Paul Keenlance

- Larsen, A. (Presenter & Author), Jacquot, J. (Author Only), Keenlance, P. (Author Only), 72nd Midwest Fish and Wildlife Conference, Iowa Department of Natural Resources, Des Moines, Iowa, "Gypsy moth consumption and small mammal communities during an oak savanna restoration in Michigan" Academic, Regional, Accepted. (December 2011).
- Canaan, M. (Presenter & Author), Hillman, T. (Presenter & Author), Keenlance, P. (Author Only), Jacquot, J. (Author Only), Henshaw, M. (Author Only), 72nd Midwest Fish and Wildlife Conference, Iowa Department of Natural Resources, Des Moines, Iowa, "Southern flying squirrel den site selection and genetic relatedness of summer nesting groups", Academic, Regional, Accepted. (December 2011).

- Laarman, P. (Presenter & Author), Keenlance, P. (Author Only), Schumacher, C. (Author Only), 18th Annual Meeting of the Wildlife Society, The Wildlife Society, Waikoloa, Hawaii, "Monitoring Eastern Box Turtles on the Huron Manistee National Forest", Academic, National, Accepted. (November 2011).
- Miara, S. (Presenter & Author), Colyer, A. (Author Only), Keenlance, P. (Author Only), Jacquot, J. (Author Only), Larsen, A. (Author Only), Canaan, M. (Author Only), 18th Annual Meeting of the Wildlife Society, The Wildlife Society, Waikoloa, Hawaii, "Winter den characteristics and behavior of southern flying squirrels in Southwest Michigan", Academic, National, Accepted. (November 2011).

Alexandra Locher

- Locher, A., Campa, H. III., Leefers, L. L., Beyer, D. E. Understanding cumulative effects of aspen harvest on wildlife habitat and timber resources in Northern Michigan. *Northern Journal of Applied Forestry*
- Long, A., Locher, A. American woodcock use of pine stands in southern Arkansas *Wilson Journal of Ornithology* (working paper)
- Scribner, K., Locher, A., Murphy, B., Kanefsky, J. Influence of landscape features on spatial genetic structure of white-tailed deer in human-altered landscapes *Journal of Wildlife Management* (working paper)

Michael Lombardo

- Fellow, American Ornithologists' Union (AOU), Scholarship/Research/Creative Activity, International, No monetary award. (2011).
- GVSU - Service Award, GVSU, Teaching, Scholarship, Service, University, No monetary award. (December 1, 2011). 20-years of service to GVSU (1991-2010).
- Stambaugh, T., Houdek, B. J., Lombardo, M., Thorpe, P., Hahn, D. C. (2011). Innate immune response development in nestling Tree Swallows *The Wilson Journal of Ornithology* 123 (4) 779-787
- Houdek, B. J., Lombardo, M., Thorpe, P., Hahn, D. C. (2011). Innate immunity is not related to the sex of adult Tree Swallows during the nestling period *The Condor* 111 (4) 853-859
- Lombardo, M. On the evolution of sport. *Evolutionary Psychology*.
- Shutler, D., Hussell, D. J. T., Norris, D. R., Winkler, D. W., Robertson, R. J., Bonier, F., Rendell, W. B., Belisle, M., Clark, R. G., Dawson, R. D., Wheelwright, N. T., Lombardo, M., Thorpe, P., Truan, M. A., Walsh, R., Leonard, M. C., Horn, A. G., Vleck, C. M., Vleck, D., Rose, A. P., Whittingham, L. A., Dunn, P. O., Hobson, K. A., Stanback, M. T. Win Some, Lose Some: Temporal Patterns Across North America in Nest Box Occupancy by Tree Swallows, Aerial Insectivores *Avian Conservation Ecology*
- Lombardo, M. (Presenter & Author), Baiz, M. (Author Only), Bibby, K. (Author Only), Bol, L. (Author Only), Hightower, L. (Author Only), McLaughlin, R. (Author Only), Near, D. (Author Only), Spadacene, L. (Author Only), 2011 Annual Meetings of AFO, COS, & WOS, Association of Field Ornithologists, Cooper Ornithological Society, Wilson Ornithological Society, Kearney, NE, "Sex differences in parental antipredator responses during the nestling period in Tree Swallows", Academic, International, Accepted. (March 12, 2011).
- Lombardo, M. (Presenter (Poster)), GVSU-CLAS Sabbatical Showcase and Spring Celebration, GVSU - College of Liberal Arts & Sciences, GVSU-Allendale, "On the evolution of sport. I. The male spectator lek hypothesis", Academic, Local, published elsewhere, Accepted. (April 6, 2011).
- Baiz, M. (Presenter & Author), Bibby, K. (Presenter & Author), Bol, L. (Presenter & Author), Hightower, L. (Presenter & Author), McLaughlin, R. (Presenter & Author), Near, D. (Presenter & Author), Spadacene, L. (Presenter & Author), Lombardo, M. (Mentor), Student Scholars Day GVSU-Allendale, "Sex differences in parental antipredator responses during the nestling period in Tree Swallows", Academic, Local, Accepted. (April 13, 2011).
- Spadacene, L. (Presenter (Poster)), Lombardo, M. (Mentor), Student Scholars Day, GVSU-Allendale, "The effects of ectoparasites on Tree Swallow biology", Academic, Local, Accepted. (April 13, 2011).
- Lombardo, M. (Presenter & Author), Deaner, R. O. (Author Only), Evolution for Everyone, GVSU - College of Liberal Arts & Sciences, GVSU, "You can't teach speed: sprinters break the "10-year rule"", Academic, West Michigan. (October 21, 2011).

Mark Luttenton

- Journal Article Submission, Journal of Great Lakes Research. (October 4, 2011).
- Journal Article Submission, Fundamental and Applied Limnology. (October 1, 2011).
- Journal Article Submission, International Bioremediation & Biodegradation. (August 8, 2011).
- Swanson, N., A. Wieten and M. Luttenton. 2011. Larval steelhead densities in the Muskegon River, Michigan. Midwest Fish and Wildlife Conference, Des Moines, IA.

Neil MacDonald

- MacDonald, N., Mays, D. W., Rediske, R. R., Ruetz III, C. R. (2011). Environmental variation, fish community composition, and brown trout survival in the Pigeon River, Ottawa County, Michigan. *Michigan Academician* XL (2) 135-168.
- MacDonald, N. (Presenter & Author), Michigan Prescribed Fire Council, 12th Annual Workshop, Michigan Prescribed Fire Council, Pierce Cedar Creek Institute, Hastings, Michigan, "Spotted knapweed responses to fire: direct effects and interactions with other control methods", Non-Academic, Regional, Invited. (September 9, 2011).
- MacDonald, N. (Presenter & Author), Kapolka, C. K. (Author Only), Botting, T. F. (Author Only), Martin, L. M. (Author Only), Linkages between ecological restoration and ecosystem sustainability, Midwest-Great Lakes Chapter Society for Ecological Restoration International, Springfield, Illinois, "Second-year site preparation and hand pulling effects on spotted knapweed control on a degraded site in western Michigan.", Academic, Regional, Accepted. (April 2, 2011).

Shaily Menon

- Library Author Recognition, Grand Valley State University. (2011).
- University Outstanding Service Award, GVSU. (February 3, 2011).
- Menon, S. Forecasting ecological impacts of sea-level change on coastal conservation areas in India. *Journal of the Bombay Natural History Society* (Submitted)
- Menon, S. (2012). Rhododendron species in the Indian Eastern Himalayas: New approaches to understanding rare plant species distributions *Journal of American Rhododendron Society* Spring 2012 78-84
- Menon, S. (2011). IT'S WAR! (OR SO WE'RE TOLD) Violent rhetoric clouds issues surrounding species. *WAKE - Great Lakes Thought and Culture*.
<http://wakegreatlakes.org/content/nonfiction/asian-carp-frenzy-rhetoric-war-clouds-issues-surrounding-species>
- Menon, S. (2011). *Quarterly Review of Biology*, 86 (3), pp. 220. Dallmeier, Fenech, MacIver, Szaro, *Climate Change, Biodiversity, and Sustainability in the Americas: Impacts and Adaptations*. (Chicago: The University of Chicago Press, 2010.)
- Menon, S., Keynote Address - Faculty Awards Convocation, Grand Valley State University, Loosemore Auditorium, "Whose Nature? Reflections on a Changing Landscape", Non-Academic. (February 3, 2011).

Roderick Morgan

- Morgan, R. (Author Only), Smart, R. (Author Only), Schroeder, W. (Author Only), *Wildgen, B. (Presenter & Author), *Kenyon, P. (Presenter & Author), West Michigan Regional Undergraduate Science Research Conference, Van Andel Institute, Grand Rapids, MI, "The Synthesis and Testing of GV-2 Chemical Derivatives for Antibacterial Activity", Academic. (November 2011).
- Morgan, R. (Presenter & Author), CLAS Colloquium, GVSU CLAS, Padnos Hall, "Bugs against Drugs: Antibiotic Discovery at GVSU". (October 2011).
- *Gibson, A.M. (Presenter & Author), Morgan, R. (Author Only), Nikitin, A. (Author Only), *MacDonald, N. (Author Only), The North American Benthological Annual Meeting, NABS, Providence, RI, "Isolation of a Caffeine Utilizing Pseudomonas Putida spp. from an Aquatic Environment", Academic. (May 2011).
- *Gibson, A. M., Nikitin, A., *McDonald, N., Morgan, R., NCUR, Ithaca College, Ithaca College, Ithaca NY, "The growth of an aquatic bacterial species on high concentrations of caffeine", Academic, National, peer-reviewed/refereed, Accepted. (April 2, 2011).

Alexey Nikitin

- 10 Year Service Award, GVSU.
- Nikitin, A.G. (2011). Bioarcheological analysis of Bronze Age human remains from the Podillya region of Ukraine *Interdisciplinaria Archaeologica* 2 (1) 31-36.
- Ivanova, S., Nikitin, A.G. Population dynamics of the steppe cultures of the Eneolithic and Early Bronze Age from the point of view of archaeogenetics. *Stratum Plus*, in review.
- Nikitin, A.G, Newton, J.R., Potekhina, I.D. East and West Eurasian lineages in ancient mitochondrial DNA from Neolithic Mariupol-type cemeteries of the North Pontic region. *American Journal of Physical Anthropology*, in review.
- Gibson, A. M., Nikitin, A., McDonald, N., Morgan, R. M., North American Benthological Society (NABS) Annual Meeting, Providence, Rhode Island, "Isolation of a caffeine utilizing *Pseudomonas putida* spp. from an aquatic environment", Academic, National, peer-reviewed/refereed, published in proceedings, Accepted. (May 2011).
- Gibson, A. M., Nikitin, A., McDonald, N., Morgan, R., NCUR, Ithaca College, Ithaca College, Ithaca NY, "The growth of an aquatic bacterial species on high concentrations of caffeine", Academic, National, peer-reviewed/refereed. (April 2, 2011).
- Newton, J., Nikitin, A., The Michigan Academy of Science Arts and Letters 115th Annual Conference, Saginaw Valley State University, "Mitochondrial DNA Evidence Suggests West and East Eurasian Genetic Influences in Neolithic Europeans", Academic, State. (March 11, 2011).

Erik Nordman

- Partnership Award, Great Lakes Wind Collaborative, Scholarship/Research/Creative Activity, Regional, No monetary award. (September 2011).
- Journal Article Submission, Land Economics. (December 2011).
- Nordman, E., VanderMolen, J., Gajewski, B., Ferguson, A.. Great Lakes, great debates: Facilitating public engagement on offshore wind energy using the Delphi Inquiry approach In Robert B. Richardson (Ed.), *Building a Green Economy: Perspectives from Ecological Economics*. East Lansing: Michigan State University Press
- Nordman, E. Public purchases and private preferences: Challenges for analyzing public open space acquisitions *Urban Forestry and Urban Greening* 11 (2)
- Haven, C., Pebbles, V., Hummer, J., Nordman, E. (2011). *Public perceptions of offshore wind energy in Michigan's Upper Peninsula*. www.gvsu.edu/marec/offshore-wind-info-83.htm
- Nordman, E., Vaccaro, L. (2011). *Offshore wind energy in Michigan: Economic costs and benefits*. Michigan Sea Grant. www.gvsu.edu/marec/offshore-wind-info-83.htm
- Nordman, E., O'Keefe, D. (2011). *Offshore wind energy in Michigan: Implications for the Great Lakes Environment*. Ann Arbor, MI: Michigan Sea Grant. www.gvsu.edu/marec/offshore-wind-info-83.htm
- Nordman, E., Gajewski, B. (2011). *Citizen views on offshore wind energy in Lake Michigan* (pp. 2). www.gvsu.edu/marec/offshore-wind-info-83.htm
- Nordman, E. (2011). *Offshore wind energy outreach: wind farm visualization*. www.gvsu.edu/marec/offshore-wind-info-83.htm
- Nordman, E. (2011). *Status of offshore wind energy in Michigan's Great Lakes* (pp. 2). www.gvsu.edu/marec/offshore-wind-info-83.htm
- Nordman, E., VanderMolen, J., Gajewski, B., Ferguson, A. (2011). *Citizen views on offshore wind energy: benefits, challenges and information gaps*. West Michigan Wind Assessment Issue Brief #4.
- Nordman, E. (2011). *Offshore wind energy: public perceptions and policy dimensions*. West Michigan Wind Assessment Issue Brief #3.
- Higginson, N., Nordman, E. (2011). *The Interchange*, 17 (9). Naomi Oreskes, Erik Conway, *Merchants of Doubt: How a Handful of Scientists Obscured the Truth on Issues from Tobacco Smoke to Global Warming*. (New York: Bloomsbury, 2010.)
- Nordman, E., Holland-to-Holland Workshop on Offshore Wind Energy, Michigan Energy Office, Michigan State University Extension, GVSU Meijer Campus, Holland, MI, "Introduction and status of offshore wind energy in Michigan", Non-Academic, International, published elsewhere. (December 5, 2011).

- Nordman, E. (Presenter & Author), Coastal Zone 2011, National Oceanic and Atmospheric Administration, Chicago, IL, "Integrated assessment for constructive collaboration with coastal communities", Non-Academic, National, Accepted. (July 18, 2011).
- VanderMolen, J. (Presenter & Author), Nordman, E. (Author Only), State of the Science Workshop on the Ecological Effects of Wind., Great Lakes Wind Collaborative and Lugar Center for Renewable Energy, IUPUI, Indianapolis, IN, "Evaluating the ecological effects of wind using an integrated assessment", Academic, Regional, Accepted. (March 9, 2011).

Melvin Northup

- Northup, M. *Student Instructions for NRM 281 (Soils) labs.*
- Northup, M. *Faculty Instructions for NRM 281 (Soils) labs.*

Bruce Ostrow

- Teaching Excellence Award, Pew FTLC. (February 3, 2011).
- Ostrow, B., Strickler, T. Post-plastination dissection of a bowfin fish (*Amia calva*) plastinate. *Journal of Plastination*. (submitted)
- Mercer, A. (Presenter & Author), Ostrow, B. (Author Only), West Michigan Regional Undergraduate Science Conference, Van Andel Institute, "The lethality of the *k11209* line of *Drosophila melanogaster*", Academic, West Michigan, Accepted. (October 29, 2011).

Heather Rueth

- Rueth, H. Nutrient Budget Comparison of a Northern Hardwood Forest and Red Pine Plantation, Northern Lower Peninsula, Michigan *American Midland Naturalist Journal* (Submitted)
- Rueth, H., Shaver, G. R., Laundre, J. A. Soil Nitrogen Responses to Manipulations of Nutrient Availability and Air Temperature at Toolik Lake, Alaska. *Arctic, Antarctic and Alpine Research* (Working Paper)

Amy Russell

- Muscarella, R. A., Murray, K. L., Ortt, D., Russell, A., Fleming, T. H. (2011). Exploring demographic, physical, and historical explanations for the genetic structure of two lineages of Greater Antillean bats *PLoS One* 6(3): e17704 (submitted)
- Russell, A., Cox, M. P., Brown, V. A., McCracken, G. F. (2011). Population growth of Mexican free-tailed bats (*Tadarida brasiliensis mexicana*) predates human agricultural activity *BMC Evolutionary Biology* 11: e88 (submitted)
- Dávalos, L. M. (Presenter & Author), Russell, A. (Author Only), North American Symposium on Bat Research, North American Society for Bat Research, Toronto, Ontario, Canada, "False positive and false negative error rates in mitochondrial species delimitation", Academic, International, Accepted. (October 29, 2011).
- Russell, A. (Presenter & Author), Lancaster, W. (Author Only), Dávalos, L. (Author Only), North American Symposium on Bat Research, North American Society for Bat Research, Toronto, Ontario, Canada, "Genetic demography of *Pteronotus parnellii* reveals historic isolation of island populations", Academic, International, Accepted. (October 29, 2011).
- Miller-Butterworth, C. (Presenter & Author), Vonhof, M. (Author Only), Rosenstern, J. (Author Only), Turner, G. (Author Only), Russell, A. (Author Only), North American Symposium on Bat Research, North American Society for Bat Research, Toronto, Ontario, Canada, "Population genetic structure of *Myotis lucifugus* predicts the patterns of spread of white-nose syndrome in Pennsylvania", Academic, International, Accepted. (October 29, 2011).
- Martin, A. (Presenter & Author), Russell, A. (Author Only), Vonhof, M. (Author Only), North American Symposium on Bat Research, North American Society for Bat Research, Toronto, Ontario, Canada, "Genetic demography of *Perimyotis subflavus* reveals regional population trends", Academic, International, Accepted. (October 28, 2011). (GVSU graduate student)
- Vonhof, M. J. (Presenter & Author), Russell, A. (Author Only), North American Symposium on Bat Research, North American Society for Bat Research, Toronto, Ontario, Canada, "Genetic structure and demographic history of the eastern red bat (*Lasiurus borealis*)", Academic, International, Accepted. (October 28, 2011).

- Russell, A., CLAS Faculty Research Colloquium, Grand Valley State University, Allendale, MI, "False positive and false negative error rates in mitochondrial species delimitation", Academic, Local.
- Amelon, S. K. (Presenter & Author), Lindner, D. (Author Only), Robbins, A. (Author Only), Russell, R. (Author Only), Keel, K. (Author Only), Friggens, M. (Author Only), (Author Only), Russell, A. (Author Only), Perry, R. (Author Only), Ingersoll, T. (Author Only), Chaturvedi, V. (Author Only), Tyler, B. (Author Only), White-Nose Syndrome Symposium, U.S. Fish and Wildlife, Little Rock, AR, "Towards a systems approach to WNS epidemiological and environmental research needs", Academic, National, Invited. (May 17, 2011).
- Street, J. (Presenter & Author), Russell, A. (Author Only), Student Scholars Day, Grand Valley State University, Allendale, MI, "Environmental effect on male mating success: The importance of song exposure versus nutritional stress during development in male superb lyrebirds", Academic, Local.
- Lee, M. T. (Presenter & Author), Vonhof, M. J. (Author Only), Russell, A. (Author Only), Student Scholars Day, Grand Valley State University, Allendale, MI, "Genetic approaches to assessing the impact of wind turbines on eastern red bats", Academic, Local, Accepted. (April 13, 2011).
- Russell, A. (Presenter & Author), Briones, K. (Presenter & Author), Colloquium on the Conservation of Mammals, Midwest Bat Working Group, Louisville, KY, "Sampling hair and tissues for population studies of bats", Academic, Regional, Invited. (February 24, 2011).

Georgette Sass

- Sass, G., VanOveren, S., Ostrow, B., West Michigan Regional Undergraduate Science Research Conference, Van Andel Institute, Grand Rapids MI, "Rescue of the *delorean* mutation of *Drosophila melanogaster*," (October 29, 2011).
- Mittner, K. and Sass, G., Student Summer Scholars - Summer Showcase, "Rescue of the *delorean* phenotype in *Drosophila melanogaster*," DeVos Center, Grand Valley State University, (August 4, 2011).

Eric Snyder

- Keller, T., Snyder, E., Feminella, J. (2011). Mechanisms and potential implications of fragmentation in low-order streams *Journal of the North American Benthological Society* 30 1093-1094
- *Journal Article, Academic Journal*
- DeBoer, J. A., Holtgren, J. M., Ogren, S. A., Snyder, E. (2011). Resiliency of resident fish to a 100-year flood in a low-gradient Michigan stream *American Midland Naturalist* 166 446-452
- *Technical Report (Accepted)*
- VanDongen, J., Poczekaj, K., Snyder, E. (2011). Understanding nutrient pathways and reciprocal subsidies between stream and riparian zones using stable isotope analysis. Final report prepared for Pierce Cedar Creek Institute, Undergraduate Research Grant January 1, 2011 - December 31, 2011 Experiences. 23 pgs. (pp. 23). Final report prepared for Pierce Cedar Creek Institute, Undergraduate Research Grant Experiences.
- Jansen-Yee, N., Snyder, E. (2011). Food webs and rivers: Importance of contiguous habitat interactions. Final report prepared for the GVSU Student Summer Scholars program. 20 pgs.. GVSU Student Summer Scholars program.
- Snyder, E.B., A.M. Gibson†, L.M. Villalobos†, C. Caldwell†, J. Barnard, and S. Hanshue. 2011. Management implications and functional responses to mill dam removal: A case study on the Thornapple River, MI. (poster) North American Benthological Society, Providence, RI.
- Jansen-Yee, N. (Presenter & Author), Snyder, E. (Author Only), GVSU Student Summer Scholars Program final symposium, GVSU Student Summer Scholars Program final symposium, GVSU, "Food webs and rivers: Importance of contiguous habitat interactions", Academic, Local, published in proceedings, Accepted. (August 2011).
- VanDongen, J. (Presenter & Author), Poczekaj, K. (Presenter & Author), Snyder, E. (Author Only), Pierce Cedar Creek Institute, Undergraduate Research Grant Experiences symposium., Pierce Cedar Creek Institute, Pierce Cedar Creek Institute, Hastings, MI, "Nutrient pathways and reciprocal subsidies using stable isotope analysis", Academic, West Michigan, peer-reviewed/refereed, published in proceedings, Accepted. (August 2011).

- Villalobos, L. (Presenter (Poster)), Gibson, A. (Presenter (Poster)), Caldwell, C. (Author Only), Snyder, E., Annual meeting of the North American Benthological Society, NABS, Providence, RI, "Ecosystem responses to low-head dam removal: assessment of physical habitat, water chemistry, and macroinvertebrates", Academic, International, peer-reviewed/refereed, Accepted. (June 2011).
- Krynak, E. (Presenter & Author), Snyder, E. (Author Only), North American Benthological Society, Providence, RI., North American Benthological Society, Providence, RI., Providence, RI, "Aquatic mesohabitats: Abiotic and biotic comparisons in a sand dominated, 3rd Order, Michigan stream", Academic, International, peer-reviewed/refereed, Accepted. (June 2011).
- Gibson, A. (Presenter & Author), Villalobos, L. (Author Only), Caldwell, C. (Author Only), Snyder, E., National Conferences on Undergraduate Research, Ithica, NY., National Conferences on Undergraduate Research, Ithica, NY., Ithica, NY, "Low-Head Dam Removal Causes Immediate Physical Habitat and Water Chemistry Degradation", Academic, National, peer-reviewed/refereed, published elsewhere, Accepted. (May 2011).

Mark Staves

- Staves, M. (Author Only), Kovacevic, N. (Presenter & Author), Michigan Academy, Michigan Academy, SVSU, "Changing the density of the external medium changes the gravitropic response of rice, corn and radish roots.", Academic, State, peer-reviewed/refereed, published in proceedings, Accepted. (March 2011).
- Staves, M. (Presenter & Author), Miller, K. (Author Only), Michigan Academy, SVSU, "The Effect of External Calcium and Calcium-Channel Blockers on Gravitropism of Rice Roots.", Academic, State, peer-reviewed/refereed, published in proceedings, Accepted. (March 2011).

Patrick Thorpe

- Stambaugh, T., Houdek, B. J., Lombardo, M., Thorpe, P., Hahn, D. C. (2011). Innate immune response development in nestling Tree Swallows *The Wilson Journal of Ornithology* 123 (4) 779-787
- *Journal Article, Academic Journal*
- Houdek, B. J., Lombardo, M., Thorpe, P., Hahn, D. C. (2011). Innate immunity is not related to the sex of adult Tree Swallows during the nestling period *The Condor* 111 (4) 853-859
- *Journal Article, Academic Journal (Submitted)*
- Shutler, D., Hussell, D. J. T., Norris, D. R., Winkler, D. W., Robertson, R. J., Bonier, F., Rendell, W. B., Belisle, M., Clark, R. G., Dawson, R. D., Wheelwright, N. T., Lombardo, M., Thorpe, P., Truan, M. A., Walsh, R., Leonard, M. C., Horn, A. G., Vleck, C. M., Vleck, D., Rose, A. P., Whittingham, L. A., Dunn, P. O., Hobson, K. A., Stanback, M. T. Win Some, Lose Some: Temporal Patterns Across North America in Nest Box Occupancy by Tree Swallows, Aerial Insectivores *Avian Conservation Ecology*
- Lombardo, M., Thorpe, P. Captivity affects sperm production, testes size and beak color in House Sparrows (*Passer domesticus*) *International Studies of Sparrows* 33 5-16

Terry Trier

- *Journal Article, Academic Journal (working paper)* Foss, A., Mattson, W., Trier, T. Effects of Elevated CO2 Leaf Diets on Gypsy Moth Respiration Rates

Janet Vigna

- Vigna, J. and M. Shuster. (2011). *Biology for a Changing World with Core Physiology* In 1st edition (Ed.), New York: Scientific American/WH Freeman
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