

34th Annual Ecology and Evolutionary Biology Graduate Student Symposium.

21-22 January 2010
Morison Room, Corson-Mudd Atrium
Cornell University

Thursday, January 21st

10:30-11:35 – Session 1

10:30 Opening Remarks

10:35 **Susan C. Cook** and **A.A. Agrawal** (Dept. of Ecology and Evolutionary Biology, Cornell University)

Impact of plant origin and diversity on old-field plant communities.

10:50 **Amanda N. Cass**¹, **M.D. Servetnick**² and **A.R. McCune**¹ (1. Dept. of Ecology and Evolutionary Biology, Cornell University; 2. Science and Technology Program, University of Washington Bothell)
Of Mice and Fish: conservation and divergence in the expression of key lung morphogenesis genes in the actinopterygian swimbladder.

11:05 **Robert Bode** (Dept. of Ecology and Evolutionary Biology, Cornell University)

Patterns of Protease Inhibitor Induction and their Implications in *Solidago altissima*.

11:20 **Nancy Chen** and **A.G. Clark** (Dept. of Ecology & Evolutionary Biology; Dept. of Molecular Biology & Genetics)

A Novel Method for Identifying Female-Specific Sequences in the Avian Genome.

11:35-12:45 – Break

12:45-1:45 – Session 2

12:45 **Amos Belmaker**^{1,2}, **U. Motro**³, **M.W. Feldman**⁴ and **A. Lotem**² (1. Dept. of Ecology and Evolutionary Biology, Cornell University; 2. Dept. of Zoology, Tel Aviv University, Israel; 3. Dept. of Systematics and Evolution, The Hebrew University, Israel; 4. Dept. of Biological Sciences, Stanford University)

Learning to choose among social foraging strategies in adult house sparrows (*Passer domesticus*).

1:00 **Kimberly Morrell** (Dept. of Ecology and Evolutionary Biology, Cornell University)

The role of plant-plant communication in structuring the arthropod community of Tall Goldenrod, *Solidago altissima*.

1:15 **Marjorie G. Weber**^{1,2} and **G.J. Binford**² (1. Biology Dept. Lewis and Clark College; 2. Dept. of Ecology and Evolutionary Biology, Cornell University)

An integrative investigation of species boundaries among fiddle back spiders in North America's Desert Southwest.

1:30 **Rayna C. Bell**^{1,2}, **K. Chavarria**², **S.E. Williams**³, **C. Moritz**², **J.B. MacKenzie**² (1. Dept of Ecology & Evolutionary Biology, Cornell University; 2. Museum of Vertebrate Zoology, UC Berkeley; 3. James Cook University, Australia)

Multi-locus analyses of molecular divergence in tree frogs (Hylidae), of the Australia Wet Tropics.

1:45-2:00 – Break

2:00-3:15 – Session 3

2:00 **William J. Guerra, M. Goman, S.W. Manning** (Dept. of Earth and Atmospheric Sciences, Cornell University)

A preliminary tree-ring chronology for Oaxaca, Mexico.

2:15 **Carrie McCalley and J.P. Sparks** (Dept. of Ecology and Evolutionary Biology, Cornell University)

Soil nitrogen emissions in a changing climate: Implications for arid regions.

2:30 **David Cerasale** (Dept. of Ecology and Evolutionary Biology, Cornell University)

Control of energy balance in migratory birds: adaptive modulation of the response to leptin

2:45 **Daniel T. O'Brien, A.C. Gallup and D.S. Wilson** (Dept. of Biology, Binghamton University)

Prosociality Along the Urban-Rural Continuum: The Relationship Between Population Density and Adaptive Social Behavior.

3:00 **Gaylord Desurmont** (Dept. of Ecology and Evolutionary Biology, Cornell University)

Egg-crushing through time and space: evolution of plant defenses against a major invasive pest.

Friday, January 22nd

10:30-11:30 – Session 1

10:35 **Becky Cramer and J.T. Liljfeld** (Dept. of Neurobiology and Behavior, Cornell University)

Sperm morphology changes seasonally but does not relate to male condition in house wrens.

10:50 **Joseph L. Simonis** (Dept. of Ecology and Evolutionary Biology, Cornell University)

Aerial defense of offspring by gulls (*Larus* spp.), against intruding researchers.

11:05 **Erica L. Larson**¹, **J.A. Andres**², and **R.G. Harrison**¹ (1. Dept. of Ecology and Evolutionary Biology, Cornell University, 2. Department of Biology, University of Saskatchewan).

Speciation in field crickets: the role of seminal fluid proteins.

11:20 **Daniel T. Baldassarre** (Dept. of Neurobiology and Behavior, Lab of Ornithology, Cornell University)

Sexual selection and speciation in the red-backed fairy-wren.

11:30-12:45 – Break

12:45-1:45 – Session 2

12:45 **Fríða Jóhannesdóttir**^{1,2}, **T.A. White**^{2,3} and **J.B. Searle**² (1. Dept. of Ecology and Evolutionary Biology, Cornell University; 2. Dept. of Biology, University of York, UK; 3. School of Biological and Biomedical Sciences, Durham University, UK)

The taming of the shrew: towards an understanding of the colonization and evolutionary history of the common shrew (*Sorex araneus*) in Britain.

1:00 **Ana V. Longo Berríos**^{1,2} and **P.A. Burrowes**² (1. Dept. of Ecology and Evolutionary Biology, Cornell University; 2. Dept. of Biology University of Puerto Rico)

Persistence with chytridiomycosis does not assure survival of direct-developing frogs.

1:15 **Christopher M. Dalton**¹, **R. El-Sabaawi**², **D.C. Honeyfield**³, **S.K. Auer**⁴, **A.S. Flecker**¹ and **D.N. Reznick**⁴ (1. Dept. of Ecology and Evolutionary Biology, Cornell University; 2. Dept. of Biology, University of Victoria, Canada; 3. USGS Northern Appalachian Research Lab; 4. Dept. of Biology, University of California Riverside)

The ecological implications of rapid evolution: Using ecological stoichiometry to explore the ecosystem consequences of phenotypic change in a vertebrate consumer.

1:30 **Benjamin D. Dalziel** and **S.P. Ellner** (Dept. of Ecology and Evolutionary Biology, Cornell University)

Connecting movement to population dynamics in woodland caribou.

1:45-2:00 – Break

2:00-3:15 – Session 3

2:00 **Benjamin Zuckerberg**, **D.N. Bonter**, **W.M. Hochachka**, **W.D. Koenig**, and **J.L. Dickinson** (Cornell Lab of Ornithology)

The Role of Weather in Driving Regional Patterns of Occupancy in Wintering Birds.

2:15 **Roi Dor**¹, **R.J. Safran**² and **I.J. Lovette**¹ (1. Lab of Ornithology, Cornell University; 2. Dept. of Ecology and Evolutionary Biology, University of Colorado)

Phylogeny of the Barn Swallow complex: speciation and introgression.

2:30 **Sergio Rasmann** and **A.A. Agrawal** (Dept. of Ecology and Evolutionary Biology, Cornell University)

Evolution of specialization: a phylogenetic study of host range in the red milkweed beetle (*Tetraopes tetraophthalmus*)

2:45 **David Rodriguez**¹, **J.P. Weaver**², **J.R. Cedeño-Vasquez**³, **M.J.R. Forstner**⁴ and **L.D. Densmore**² (1. Dept. of Ecology and Evolutionary Biology, Cornell University; 2. Dept. of Biological Sciences, Texas Tech University; 3. El Colegio de la Frontera Sur; 4. Dept. of Biology, Texas State

University-San Marcos)

Intra- and inter-specific hybridization in New World crocodiles (Genus: *Crocodylus*).

3:00 **Guillermo Velo-Antón^{1,2}, C.G. Becker¹, AND A.C. Rivera²** (Dept. of Ecology and Evolutionary Biology, Cornell University; 2. Grupo de Ecoloxía Evolutiva, Departamento de Ecoloxía e Bioloxía Animal, Universidade de Vigo)

Turtle Carapace Anomalies: The Roles of Genetic Diversity and Environment.

3:15 **Closing remarks**

3:15-4:15 **Reception, Corson-Mudd Atrium**

Funded in Part by the Graduate and Professional Student Assembly Finance Commission. Open to the Cornell Community