

## Program Of Events

Friday, 16 June 2000

<b>5:00 pm - 7:00 pm</b>	<b>Board of Directors Dinner, Newick's Restaurant (No Host)</b>
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Saturday, 17 June 2000

<b>7:00 am - 8:30 am</b>	<b>Breakfast, Philbrook Dining Hall</b>
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<b>9:00 am - 5:00 pm</b>	<b>Board of Directors Meeting, Memorial Union Building</b>
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<b>12 Noon - 1:30 pm</b>	<b>Lunch for Board of Directors</b>
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<b>12 Noon - 7:00 pm</b>	<b>Meeting Registration, Strafford Room, Memorial Union Building</b>
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<b>7:00 pm - 11:00 pm</b>	<b>Welcoming Social, Lawn outside of Christensen and Williamson Halls</b>
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Sunday, 18 June 2000

<b>7:00 am - 8:30 am</b>	<b>Breakfast, Philbrook Dining Hall</b>
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<b>7:00 am - 8:30 am</b>	<b>Breakfast With A Scientist, Philbrook Dining Hall</b>
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<b>7:30 am - 1:00 pm</b>	<b>Meeting Registration, Strafford Room, Memorial Union Building</b>
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<b>8:30 am - 10:00 am</b>	<b>Plenary Session, Granite State Room, Memorial Union Building</b>  Welcome: David Hiley, Provost and Vice President, University of New Hampshire  Response: O. J. Reichman, President, American Society of Mammalogists  <b>Student Honoraria:</b> O. J. Reichman, Chair
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1. **Anna M. Jackson Award:** North American desert rodents: test of the bounded range model of species richness. Christy M. McCain. Natural History Museum and Department of Ecology and Evolutionary Biology, University of Kansas, Lawrence, KS.
2. **A. Brazier Howell Award:** The effects of the raccoon parasite, *Baylisacaris procyonis*, on introduced populations of the imperiled Allegheny woodrat (*Neotoma magister*). Kathleen LoGuidice. Program in Ecology and Evolution, Rutgers University, New Brunswick, NJ.
3. **American Society of Mammalogists Award:** Phylogeography of American martens (*Martes americana*). Karen D. Stone. University of Alaska Museum and Alaska Cooperative Fish and Wildlife Research Unit, University of Alaska.
4. **Shadle Fellowship Award:** Influence of the mating system on genetically effective population size in a polygynous tent-making bat, *Cynopterus sphinx* (Megachiroptera). Jay Storz. Department of Biology, Boston University, Boston, MA.

**10:00 am - 10:20 am** **Break, Lobby outside Granite State Room**

**10:20 am – Noon** **Keynote Session:** Chairperson, Bruce Patterson

5. **Grinnell Address**  
**Creating and using web-based materials for teaching about mammals**  
**Philip Myers, Museum of Zoology and Department of Biology,**  
**University of Michigan, Ann Arbor, MI**

6. **Merriam Address**  
**Mammalian salivary glands and the concept of the evolutionary machine**  
**Carleton J. Phillips, Department of Biological Sciences,**  
**Texas Tech University, Lubbock, TX**

**12 Noon - 1:30 pm** **Lunch, Philbrook Dining Hall**

**1:15 pm - 3:30 pm** **Concurrent Technical Session 1**

Concurrent Technical Session 1A Iddles Auditorium	Concurrent Technical Session 1B Spaulding Auditorium	Concurrent Technical Session 1C Horton Auditorium
<b>Evolution/Genetics I</b>	<b>Conservation I</b>	<b>Natural History I</b>
Chairperson: Bob Tamarin	Chairperson: Ed Heske	Chairperson: Felicia Keesing

**1:15. 7.** Population genetic analysis across the distributional range of an endangered marine mammal, the Stellar sea lion (*Eumetopias jubatus*). John W. Bickham<sup>1</sup>, Robert G. Trujillo<sup>1</sup>, and Thomas R. Loughlin<sup>2</sup>. <sup>1</sup>Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX 77843-2258; and <sup>2</sup>National Marine Mammal Lab., 7600 Sand Point Way NE, Seattle, WA 98115.

**1:30. 8.** Contrasting patterns of microsatellite and MHC diversity in solitary and social tuco-tucos (Rodentia: Ctenomyidae). Eileen A. Lacey, and Tina M. Hambuch. Museum of Vertebrate Zoology and Department of Integrative Biology, University of California, Berkeley, CA 94720.

**1:45. 9.** Variability of microsatellite markers associated with geographic latitude in yellow-necked mice (*Apodemus flavicollis*). Taras K. Oleksyk<sup>1</sup>, Travis C. Glenn<sup>1</sup>, James R. Purdue<sup>2</sup>, Michael W. Smith<sup>3</sup>, and Michael H. Smith<sup>1</sup>. <sup>1</sup>SREL, Drawer E, Aiken, SC 29802; <sup>2</sup>ISM, 1011 East Ash Street, Springfield, IL 62703; and <sup>3</sup>Laboratory of Genomic Diversity, National Cancer Institute – FCRDC, Building 560, Frederick, MD 21702.

**2:00. 10.** Comparison of haplotype frequencies in the control region of the mitochondrial genome of the bank vole (*Clethrionomys glareolus*) at Chronobyl. Amy Bickham<sup>1</sup>, Jeffrey K. Wickliffe<sup>1</sup>, Cole W. Matson<sup>2</sup>, Brenda E. Rodgers<sup>1</sup>, Ronald K. Chesser<sup>3</sup>, and Robert J. Baker<sup>1</sup>. <sup>1</sup>Department of Biological Sciences, Texas Tech University, Lubbock, TX 79409-3131; <sup>2</sup>Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX 77843-2258; and <sup>3</sup>Savannah River Ecology Lab, Drawer E, Aiken, SC 29801.

**2:15. 11.** Population genetics of *Sigmodon*

**1:15. 16\*.** Seasonal food habits of a reintroduced river otter population in Pennsylvania. Anthony J. Giordano<sup>1</sup>, Thomas L. Serfass<sup>1</sup>, and Timothy J. Stecko<sup>2</sup>. <sup>1</sup>Department of Biology, Frostburg State University, Frostburg, MD 21532; and <sup>2</sup>School of Forest Resources, Pennsylvania State University, University Park, PA 16802.

**1:30. 17\*.** The impact of black-tailed prairie dog (*Cynomys ludovicianus*) towns on carnivore distributions in the Oklahoma panhandle. Michael J. Shaughnessy Jr. Department of Zoology, University of Oklahoma, Norman, OK 73019.

**1:45. 18\*.** Estimating trends in coyote populations using fecal line surveys. Jacquie R. Gerads, and Jonathan A. Jenks. Wildlife and Fisheries Sciences, South Dakota State University, Brookings, SD 57007.

**2:00. 19.** Predation and disease in the European wild rabbit, *Oryctolagus cuniculus*: new insights from long-term data. Diana Bell. University of East Anglia, Norwich, UK.

**1:15. 25.** Microhabitat use by eastern chipmunks (*Tamias striatus*). Marianna D. Wood. Biological and Allied Health Sciences, Bloomsburg University, Bloomsburg, PA 17815.

**1:30. 26.** Use of space by meadow voles in relation to forage quality and time of day. Joe Jacquot<sup>1</sup>, and Nancy Solomon<sup>2</sup>. <sup>1</sup>Grand Valley State University, Allendale, MI 49401; and <sup>2</sup>Department of Zoology, Miami University, Oxford, OH 45056.

**1:45. 27.** The paradox of diet choice of herbivores: the more we know, the less we can explain. George O. Batzli. Department of Ecology, Ethology and Evolution, University of Illinois, Urbana, IL 61801.

**2:00. 28\*.** Possible factors affecting presence of swift fox in South Dakota. Vickie J. Smith<sup>1</sup>, Jonathan A. Jenks<sup>1</sup>, Eileen Dowd Stukel<sup>2</sup>, Christopher C. Zell<sup>1</sup>, and Richard A. Peterson<sup>1</sup>. <sup>1</sup>Department of Wildlife and Fish, South Dakota State University, Brookings, SD 57007; and <sup>2</sup>Department of Game, Fish and Parks, Pierre, SD 57501.

**\*Student paper with evaluation requested**

*hispidus*: patterns of genetic diversity at the major histocompatibility complex. Russell Pfau, Ron A. Van Den Bussche, and Karen McBee. Department of Zoology, Oklahoma State University, Stillwater, OK 74078.

**2:30. 12.** Molecular systematics of the *Phyllotini* (Rodentia: Sigmodontinae). Jorge Salazar-Bravo, Jerry W. Drago, and Terry L. Yates. Department of Biology, University of New Mexico, Albuquerque, NM 87131.

**2:45. 13\*.** Using microsatellites to resolve parentage in populations of Gunnison's and Utah prairie dogs. Michelle L. Haynie<sup>1</sup>, Ronald A. Van Den Bussche<sup>1</sup>, John L. Hoogland<sup>2</sup>, and Dennis A. Gilbert<sup>3</sup>. <sup>1</sup>Department of Zoology, Collection of Vertebrates, and Oklahoma Cooperative Fish and Wildlife Research Unit, Oklahoma State University, Stillwater, OK 74078; <sup>2</sup>Appalachian Environmental Research Laboratory, University of Maryland, Frostburg, MD 21532; and <sup>3</sup>PE Applied Biosystems, Foster City, CA 94404.

**3:00. 14.** Phylogeography of red-backed voles (*Clethrionomys*) in a complex ecosystem. Amy M. Runck, and Joseph A. Cook. University of Alaska Museum, Fairbanks, AK 99775.

**3:15. 15\*.** Sweeping mtDNA haplotypes in wild mice with XY females. Hopi Hoekstra. University of Washington, Seattle, WA 98195.

**2:15. 20.** Differential vulnerability of Liberian mammals to hunting pressure and the implications for conservation. Reginald Hoyt. Department of Conservation & Science, Philadelphia Zoo, Philadelphia, PA 19104-1196.

**2:30. 21.** Responses of small mammal populations to riparian buffers in western Washington. Stephen West. College of Forest Resources, University of Washington, Seattle, WA 98195-2100.

**2:45. 22.** Quantifying small mammal relationships with coarse woody debris. Chris C. Maguire. Department of Forest Science, Oregon State University, Corvallis, OR 97331-7501.

**3:00. 23.** Effects of season of fire on small mammals in tallgrass prairie. Brock R. McMillan<sup>1</sup>, Glennis A. Kaufman<sup>2</sup>, Donald W. Kaufman<sup>2</sup>, Raymond S. Matlack<sup>2</sup>, and Ryan L. Rehmeier<sup>2</sup>. <sup>1</sup>Department of Biological Sciences, Minnesota State University, Mankato, MN 56001; and <sup>2</sup>Division of Biology, Kansas State University, Manhattan, KS 66506.

**3:15. 24.** Evaluating viability risks to endemic mammals in land management planning. Winston Smith. Forestry Sciences Laboratory, Juneau, AK 99801-8545.

**2:15. 29.** Ecology of eastern coyote on suburban Cape Cod, Massachusetts. Jonathan Way, and Isaac M. Ortega. Department of Natural Resource Management and Engineering, University of Connecticut, Storrs, CT 06269.

**2:30. 30.** Dietary responses of coyotes to a windfall of carrion. Troy Livingston, and Philip S. Gipson. Kansas Cooperative Fish & Wildlife Research Unit, Division of Biology, Kansas State University, Manhattan, KS 66506.

**2:45. 31.** Acoustic vocalizations of the northern elephant seal. Sandra Banack, Robert Cummings, Phyllis Trabold, Karen Eiler, Jennifer Hoskinson, Kerry King, and Jason Wallace. Department of Biological Science, California State University, Fullerton, CA 92834-6850.

**3:00. 32.** Harp (*Phoca groenlandica*) and hooded (*Cystophora cristata*) seals residing along the eastern coast of the United States: extralimital or natural occurrences? Belinda L. Rubinstein, and Beth S. Turnbull. New England Aquarium, Central Wharf, Boston, MA 02110.

**3:15. 33\*.** Distribution and population status of harbor seals in Rhode Island. Cheryl Schroeder. Saunterstown, RI 02874.

**3:30 pm - 3:45 pm**

**Break, Adjacent to Strafford Room, Memorial Union Building**

**3:45 pm - 5:45 pm**

**Poster Session I, Strafford Room, Memorial Union Building**

**Natural History, Techniques, and Conservation**

- 34\*.** Food habits of the northern long-eared myotis (*Myotis septentrionalis*) across space and time. Timothy Carter<sup>1</sup>, Steven Carroll<sup>1</sup>, Sheldon Owen<sup>2</sup>, Alex Menzel<sup>3</sup>, Mark Ford<sup>4</sup>, George Feldhamer<sup>1</sup>, and Brian Chapman<sup>2</sup>. <sup>1</sup>Department of Zoology, Southern Illinois University; <sup>2</sup>Warnell School of Forest Resources, University of Georgia; <sup>3</sup>Wildlife and Fisheries, Division of Forestry, West Virginia University; and <sup>4</sup>USDA Forest Service, Northern Research Station.
- 35\*.** Microhabitat analysis of golden mouse (*Ochrotomys nuttalli*) ground nests and their relationships to arboreal nests in Southern Illinois. Anita Morzillo, and George A. Feldhamer. Department of Zoology, Southern Illinois University, Carbondale, IL 62901-6501.
- 36.** Demography and parasite loads associated with chipmunks that occupy forested and human-modified habitats. Heather Gates, Carolyn Mahan, Michael Patrick, and Michael Smith. Department of Biology, Altoona College, The Pennsylvania State University, Altoona, PA 16601.
- 37.** Feeding ecology of the culpeo fox (*Pseudalopex culpaeus*) during an El Niño disturbance in north central Chile: evidence for functional and numerical responses. Andrea Campanella<sup>1</sup>, W. Bryan Milstead<sup>2</sup>, Gaia Vaglio-Laurin<sup>1</sup>, Valeria Salvatori<sup>1</sup>, Luigi Boitani<sup>1</sup>, and Peter L. Meserve<sup>2</sup>. <sup>1</sup>Dip. di Biologia Animale e dell'Uomo, Università La Sapienza di Roma, Rome, Italy; and <sup>2</sup>Department of Biological Sciences, Northern Illinois University, DeKalb, IL 60115.
- 38\*.** Small murids as avian nest predators as determined by dye-injected eggs. Thomas J. Maier, and Richard M. DeGraaf. USDA Forest Service, Northeastern Research Station, University of Massachusetts, Amherst, MA 01003-4210.
- 39.** Morphometrics of the Central American Verapaz Shrew (*Sorex veraepacis*) with comments on natural history. John Matson<sup>1</sup>, Timothy J. McCarthy<sup>2</sup>, Sergio Perez<sup>3</sup>, and Ralph P. Eckerlin<sup>4</sup>. <sup>1</sup>Department of Biological Science, San Jose State University, San Jose, CA 95192; <sup>2</sup>Section of Mammals, The Carnegie Museum of Natural History, Pittsburgh, PA 15206; <sup>3</sup>Museo de Historia Natural, Universidad de San Carlos, Guatemala City, Guatemala; and <sup>4</sup>Natural Science Division, Northern Virginia Community College, Annandale, VA 22003.
- 40.** Indiana bats (*Myotis sodalis*): journeys in space and time. Allen Kurta<sup>1</sup>, and Susan W. Murray<sup>2</sup>. <sup>1</sup>Department of Biology, Eastern Michigan University, Ypsilanti, MI 48197; and <sup>2</sup>Department of Biology, Boston University, Boston, MA 02215.

41. Seed preference by heteromyid rodents in relation to different habitats and microhabitats in the Sarcocaulle Desert of Baja California, Mexico. Anahid Gutierrez-Ramos, and Sergio Ticul Alvarez-Castañeda. Centro de Investigaciones Biológicas del Noroeste, S.C. La Paz, Baja California Sur, México 23090.
42. Thermoregulatory consequences of winter den site selection by male Virginia opossums (*Didelphis virginiana*) in an urban environment in northwest Missouri. H.A. Zeigler, J.K. Lingenfelter, and C.D. Chevalier. Department of Biology, Missouri Western State College, St. Joseph, MO 64507.
- 43\*. Average pup mass at birth increases with parity in *Microtus ochrogastor*, life history implications. Cathleen Early, and Wendy Sera. Department of Biology, Baylor University, Waco, TX 76798-7388.
- 44\*. A comparison of botfly (*Cuterebra* spp.) infestation levels in two *Peromyscus leucopus* populations of different densities. Clare C. Weickert, Joseph C. Whittaker, and George A. Feldhamer. Department of Zoology, Southern Illinois University at Carbondale, Carbondale, IL 62901.
45. Gliding speeds in flying squirrels (*Pteromyinae*). Richard W. Thorington, Jr.<sup>1</sup>, Brain J. Stafford<sup>1</sup>, and Takeo Kawamichi<sup>2</sup>. <sup>1</sup>Division of Mammals, Department of Vertebrate Zoology, Smithsonian Institution, Washington, DC 20560-0108; and <sup>2</sup>Osaka City University, Sugimoto, Sumiyoshi-ku, Osaka 558, Japan.
46. Strandings of harbor porpoise (*Phocoena phocoena*) in Massachusetts's waters: 1978-1998. Frederick Wenzel. NMFS, Protected Species Branch, Woods Hole, MA 02543.
47. Mammalian monitoring in the United States and Canada. Spencer Stewart, Steven R. Sheffield, Thomas E. Lee, and Justina C. Ray. ACU Box 28246, Abilene, TX 79699-8246.
- 48\*. Evaluating environmental contamination using immune biomarkers for in situ rodents. James A. Wilson, Dan Rafferty, Robert Lochmiller, and Nick Basta. Oklahoma State University, Departments of Zoology and Agronomy, Stillwater, OK 74075.
49. Analysis of the microhabitat use by three species of heteromyid rodents in the Baja California Desert. Patricia Cortés-Calva. Centro de Investigaciones Biológicas del Noroeste S.C. Mar Bermejo #195, Col Playa Palo Santa Rita, Baja California Sur, Mexico. C.P. 23090.
50. Fecal nitrogen and fecal 2,6 diaminopimelic acid as indices to diet quality: effects of gender and tannin consumption. Robert G. Osborn<sup>1</sup>, and Tim F. Ginnett<sup>2</sup>. <sup>1</sup>Department of Wildlife and Fisheries Science, Texas A&M University, College Station, TX 77843; and <sup>2</sup>Texas Agricultural Experiment Station, Texas A&M University System, Uvalde, TX 78801.
51. Mammalian osteopreparation: shedding light on carrion beetles (*Dermestes maculatus*). John J. Ososky. Department of Vertebrate Zoology, MRC 534 Smithsonian Institution, Washington, DC 20560.
52. A survey methodology for bats utilizing ultrasonic and mist net techniques. Timothy E. Blackburn<sup>1</sup>, and Michael Gannon<sup>2</sup>. <sup>1</sup>Department of Biology, The Pennsylvania State University, Altoona College, Altoona, PA 16601; and <sup>2</sup>the IDGP Ecology Program, The Pennsylvania State University, University Park, PA 16802.

- 53\*. An alternative technique for indexing populations of small mammals. Michale Glennon, and William F. Porter. State University of New York, College of Environmental Science and Forestry, Syracuse, NY 13210.
54. Relative activity of forest bats related to opening size in the Bartlett Experimental Forest, New Hampshire -- a preliminary examination. Mariko Yamasaki<sup>1</sup>, and Rachel Stevens<sup>2</sup>. <sup>1</sup>USDA Forest Service, Durham, NH 03824; and <sup>2</sup>NH Fish and Game Department, Stratham, NH 03885.
- 55\*. The effects of roads and utility corridors on small mammals in Prince Edward Island National Park. Shebel Hariharan, and Marina Silva. Department of Biology, University of Prince Edward Island, Charlottetown, Prince Edward Island, C1A 4P3, Canada.
56. Hunting of flying fox fruit bats, *Pteropus tonganus*, on Niue Island, South Pacific Ocean. Anne Brooke<sup>1</sup>, and Marco Tschapka<sup>2</sup>. <sup>1</sup>Newfields, NH 03856; and <sup>2</sup>University of Ulm, Ulm, Germany.
- 57\*. Sympatry in three species of *Pseudalopex* foxes in Chile. Elise McMahon<sup>1</sup>, P. Zahler<sup>2</sup>, W.E. Johnson<sup>3</sup>, A. Iriarte Walton<sup>4</sup>, and T.K. Fuller<sup>5</sup>. <sup>1</sup>Organismic and Evolutionary Biology, Amherst, MA 01003; <sup>2</sup>Department of Natural Resources Conservation, University of Massachusetts Amherst, Holdsworth Hall, Amherst, MA, 01003; <sup>3</sup>Laboratory of Genomic Diversity, National Cancer Institute, Frederick, MD, 21702; <sup>4</sup>Subdepartamento de Vida Silvestre, Servicio Agrícola y Ganadero, Avenida Bulnes 140, Santiago, Chile; and <sup>5</sup>Department of Natural Resources Conservation, University of Massachusetts Amherst, Holdsworth Hall, Amherst, Ma, 01003.
58. The diversity and conservation of the world's mammal species. Russell Cole<sup>1</sup>, and Don E. Wilson<sup>2</sup>. <sup>1</sup>Department of Biology, Colby College, Waterville, ME 04901; and <sup>2</sup>National Museum of Natural History, Smithsonian Institution, Washington, DC 20560.
59. Ecology of the endangered Darwin's fox in a fragmented forest in southern Chile. Jamie E. Jiménez, and Jaime R. Rau. Laboratorio de Ecología, Universidad de Los Lagos, Osorno, Chile.
60. Conservation strategy for the eastern small-footed bat (*Myotis leibii*, Audubon and Bachman): a preliminary assessment. Sandra Y. Erdle, and Christopher S. Hobson. Virginia Department of Conservation and Recreation, Division of Natural Heritage, Richmond, Virginia 23219.
61. Food habits of the cottontail rabbit (*Sylvilagus floridanus*) and goats in Zapotilan Salinas, Puebla, Mexico. Jesús Martínez, Maximina Contreras, and Rosa Ma. González. Escuela de Biología, Benemérita Universidad Autónoma de Puebla, Edif. 76 C.U. Puebla, México.
62. Response of a small mammal community to cloud forest fragmentation in the state of Veracruz, Mexico. Robert Manson. Instituto de Ecología, A.C., Xalapa, Veracruz, Mexico.
63. Small mammal communities and bushmeat hunting along the Ghana coast. James M. Ryan<sup>1</sup>, and D. Attuquayefio<sup>2</sup>. <sup>1</sup>Biology Department, Hobart and William Smith Colleges, Geneva, NY 14456; and <sup>2</sup>Department of Zoology, University of Ghana, Legon-Accra, Ghana.
64. Seasonal home range, movements, and cover of the Appalachian cottontail, *Sylvilagus obscurus*, at Dolly Sods, West Virginia. Kelly A. Boyce, and Ronald E. Barry. Department of Biology, Frostburg State University, Frostburg, MD 21532.

65. Variability of Delmarva fox squirrel populations in time and space. Raymond D. Dueser<sup>1</sup>, Irvin W. Ailes<sup>2</sup>, William Giese<sup>3</sup>, Kenneth M. Reynolds<sup>4</sup>, Glenn D. Therres<sup>5</sup>, Karen Giovengo<sup>6</sup>, Nancy D. Moncrief<sup>7</sup>, and Karen Terwilliger<sup>8</sup>. <sup>1</sup>College of Natural Resources, Utah State University, Logan, UT 84322; <sup>2</sup>Chincoteague Natural Wildlife Refuge, Chincoteague, VA 23336; <sup>3</sup>Blackwater Natural Wildlife Refuge, Cambridge, MD 21613; <sup>4</sup>Delaware Department Natural Resources & Environmental Control, Smyrna, DE 19977; <sup>5</sup>Maryland Department of Natural Resources, Annapolis, MD 21401; <sup>6</sup>Chesapeake Bay Field Office, U.S. Fish & Wildlife Service, Annapolis, MD 21401; <sup>7</sup>Virginia Museum of Natural History, Martinsville, VA 24112; and <sup>8</sup>Marsh Pointe Farm, Locustville, VA 23404.
66. Identification of cotton mice in southern Illinois using GPI-1. Valerie A. Barko, George A. Feldhamer, and Brian L. Sloss. Department of Zoology, Southern Illinois University, Carbondale, IL 62901-6501.

<b>5:00 pm - 7:00 pm</b>	<b>Dinner, Philbrook Dining Hall</b>
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<b>7:00 pm - 9:00 pm</b>	<b>Workshop, Spaulding Hall Auditorium</b>
	<b>How to get the most out of your ASM membership</b>
	<b>Chairperson: Christine L. Hice</b>

<u>Speaker</u>	<u>Topic</u>
O. J. Reichman	Members meeting
Barbara Stein	Committees
Robert Bradley	Grants-in-Aid and Schadle Award
David Schmidly	Networking
Christine Hice	Student's experience
Cynthia Rebar	Honoraria
Joseph Merritt	Publications
Terry Doonan	Web site and electronic resources
Eileen Lacey	Member diversity and mentoring

**Open discussion after presentations**

<b>9:00 pm - 11:00 pm</b>	<b>No-host Social, Philbrook Dining Hall</b>
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Monday, 19 June 2000

**6:15 am - 7:30 am** **Run/Walk for Research, College Woods**

**7:00 am - 8:30 am** **Breakfast, Philbrook Dining Hall**

**7:00 am - 8:30 am** **Breakfast With A Scientist, Philbrook Dining Hall**

<b>8:00 am - 9:45 am</b>		
<b>Concurrent Technical Session 2</b>		
Concurrent Technical Session 2A Iddles Auditorium	Concurrent Technical Session 2B Spaulding Auditorium	Concurrent Technical Session 2C Horton Auditorium
<b>Population Ecology I</b>	<b>Movements I</b>	<b>Systematics I</b>
Chairperson: Jerry Wolff	Chairperson: Dan Rosenblatt	Chairperson: Leslie Carraway

**8:00. 67\*.** Metapopulation theory in the real world: empirical tests from a long-term study of a small mammal assemblage in north-central Chile. W. Bryan Milstead<sup>1</sup>, Peter L. Meserve<sup>1</sup>, and Julio R. Gutierrez<sup>2</sup>. <sup>1</sup>Department of Biological Sciences, Northern Illinois University, DeKalb, IL 60115; and <sup>2</sup>Departamento de Biología, Universidad de La Serena, Casilla 599, La Serena, Chile.

**8:15. 68.** The genetic effects of corridors: a simulation study. Stephen Mech. Department of Biology, University of Memphis, Memphis, TN 38152-6080.

**8:30. 69\*.** Movements of the cotton mouse (*Peromyscus gossypinus*) through an

**8:00. 74.** Landscape ecology of small mammals: the integration of human-dominated and natural systems. Gary W. Barrett. Institute of Ecology, University of Georgia, Athens, GA 30602-2202.

**8:15. 75.** Movement patterns of black bears on a fitness landscape. Roger A. Powell. Department of Zoology, North Carolina State University, Raleigh, NC 27695-7617.

**8:30. 76.** Mammals traveling on foot: do they

**8:00. 81.** Molecular phylogeny and phylogeography of Madagascar's shrew tenrecs (*Tenrecidae: Microgale*). Link Olson<sup>1</sup>, Steven M. Goodman<sup>2,3</sup>, and Anne D. Yoder<sup>1</sup>. <sup>1</sup>Department of Cell and Molecular Biology, Northwestern University, Chicago, IL 60611; <sup>2</sup>Department of Zoology, Field Museum of Natural History, Roosevelt Road at Lake Shore Drive, Chicago, IL 60605; and <sup>3</sup>World Wide Fund for Nature, BP 738, Antananarivo [101], Madagascar.

**8:15. 82.** Phylogenetic affinities of the Old World sucker-footed bat (*Myzopoda aurita*) inferred from mitochondrial ribosomal sequences. Steven R. Hooper, and Ronald A. Van Den Bussche. Collection of Vertebrates and Zoology Department, Oklahoma State University, Stillwater, OK 74078.

**8:30. 83.** Systematics of voles of the genus *Microtus* from northern Pakistan inferred from

experimentally fragmented landscape. Karen Mabry, and Gary W. Barrett. Institute of Ecology, University of Georgia, Athens, GA 30602-2202.

**8:45. 70.** Effects of habitat destruction and diet breadth in a predator-prey metapopulation model: analytical predictions. Robert K. Swihart<sup>1</sup>, Norman A. Slade<sup>2</sup>, Zhilan Feng<sup>3</sup>, and Thomas M. Gehring<sup>1</sup>. <sup>1</sup>Department of Forestry and Natural Resources, Purdue University, West Lafayette, IN 47907; <sup>2</sup>Natural History Museum and Department of Ecology and Evolutionary Biology, University of Kansas, Lawrence, KS 66045-2454; and <sup>3</sup>Department of Mathematics, Purdue University, West Lafayette, IN 47907-1395.

**9:00. 71.** Effects of habitat destruction and diet breadth in a predator-prey metapopulation model: spatially explicit simulations. Norman A. Slade<sup>1</sup>, Robert K. Swihart<sup>2</sup>, Zhilan Feng<sup>3</sup>, and Thomas M. Gehring<sup>2</sup>. <sup>1</sup>Natural History Museum and Department of Ecology and Evolutionary Biology, University of Kansas, Lawrence, KS 66045-2454; <sup>2</sup>Department of Forestry and Natural Resources, Purdue University, West Lafayette, IN 47907; and <sup>3</sup>Department of Mathematics, Purdue University, West Lafayette, IN 47907-1395.

**9:15. 72\*.** Factors affecting the population growth of *Ochotona princeps*: behavior tradeoffs or climate? Michael Kreuzer, Jr., and Nancy J. Huntley. Department of Biological Sciences, Idaho State University, Pocatello, ID 83201.

**9:30. 73.** Vole populations in western Oregon: can we explain a population crash? Jerry Wolff<sup>1</sup>,

use landscape as a basis for compass-like orientation? Jacques Bovet. Département de Biologie, Université Laval, Quebec City, QC, G1K 7P4, Canada.

**8:45. 77.** The effect of fragmentation of grassland nesting habitat on the selection of landscape features by predators in North Dakota. Michael L. Philips<sup>1</sup>, David J. Horn<sup>1</sup>, William R. Clark<sup>1</sup>, Marsha A. Sovada<sup>2</sup>, Rolf R. Koford<sup>3</sup>, and Raymond J. Greenwood<sup>2</sup>. <sup>1</sup>Department of Animal Ecology, Iowa State University, 124 Science II, Ames, IA 50011; <sup>2</sup>Northern Prairie Wildlife Research Center, USGS, Jamestown, ND 58401; and <sup>3</sup>Iowa Cooperative Research Unit, USGS, Iowa State University, Ames, IA 50011.

**9:00. 78\*.** Socio-ecological determinants of space utilization patterns in female spotted hyenas (*Crocuta crocuta*). Erin E. Boydston. Department of Zoology, Michigan State University, East Lansing, MI 48824.

**9:15. 79\*.** American marten within heterogenous landscapes: examination of individual movement paths. Kimberly Heinemeyer, S. Minta, and J. Deck. Department of Environmental Studies, University of California, Santa Cruz, CA 95064.

morphological and molecular data. C. William Kilpatrick<sup>1</sup>, and Charles A. Woods<sup>2</sup>. <sup>1</sup>Department of Biology, University of Vermont, Burlington, VT 05405-0086; and <sup>2</sup>Florida Museum of Natural History, University of Florida, Gainesville, FL 32611-7800.

**8:45. 84.** Evidence from the nuclear BRCA1 gene for higher-level relationships among rodents. Anne Walton, and Ronald M. Adkins. Department of Biology, University of Massachusetts, Amherst, MA 01002.

**9:00. 85.** Phylogenetics of didelphid marsupials as inferred from nuclear IRBP gene sequences. Robert Voss, and Sharon Jansa. American Museum of Natural History, New York, NY 10024.

**9:15. 86.** Systematics of Madagascar's native rodents: the emerging picture from nuclear and mitochondrial gene sequences. Sharon Jansa. American Museum of Natural History, New York, NY 10024.

**9:30. 87\*.** Molecular systematics of the long-

and W. Daniel Edge<sup>2</sup>. <sup>1</sup>Department of Biology, The University of Memphis, Memphis, TN 38152; and <sup>2</sup>Department of Fisheries and Wildlife, Oregon State University, Corvallis, Oregon 97331.

**9:30. 80.** Using fine-scale movement to assess habitat selection: chipmunks and roads as an example. John L. Wright<sup>1</sup>, Kevin J. Crane<sup>2</sup>, and Patrick A. Zollner<sup>1</sup>. <sup>1</sup>USDA NCRS FSL, 5985 Hwy K, Rhinelander, WI 54501; and <sup>2</sup>Department of Life Sciences, Indiana State University, Terre Haute, IN 47809.

tongued bats of the genus *Glossophaga* (Chiroptera: Phyllostomidae). Federico G. Hoffmann, and Robert J. Baker. Department of Biological Sciences, Texas Tech University, Lubbock, TX 79409-3131.

**9:45 am - 10:00 am** **Break, Adjacent to Strafford Room, Memorial Union Building**

**10:00 am - 12 Noon** **Members Meeting I, Horton Auditorium**

**12 Noon - 1:30 pm** **Lunch, Philbrook Dining Hall**

<b>1:15 pm - 3:30 pm</b>		
<b>Concurrent Technical Session 3</b>		
Concurrent Technical Session 3A Iddles Auditorium <b>Community Ecology I</b> Chairperson: Rick Ostfeld	Concurrent Technical Session 3B Spaulding Auditorium <b>Movements II</b> Chairperson: Winston Smith	Concurrent Technical Session 3C Horton Auditorium <b>Zoogeography I</b> Chairperson: Steve Jenkins

**1:15. 88.** Patch choice by foraging small mammals: gerbils, ricer rats and Chebychev's inequality. Penny Reynolds. Department of Biology, University of Richmond, Richmond, VA 23173.

**1:15. 97.** Modeling the equilibrium utilization distribution of the British grey seal population. Jason Matthiopoulos, Mike Fedak, and Bernie McConnell. Sea Mammal Research Unit, Gatty Marine Laboratory, School of Environmental and Evolutionary Biology, University of St. Andrews, Fife, Scotland, KY16 8LB.

**1:15. 106\*.** Population genetics of an island endemic, the Prince of Wales flying squirrel (*Glaucomys sabrinus griseifrons*). Allison Bidlack, and Joseph A. Cook. University of Alaska Museum, Fairbanks, AK 99775.

**1:30. 89\*.** Incidental predation in relation to predator density and giving-up density: white-footed mice preying upon songbird nests. Jacob R. Goheen<sup>1</sup>, Kenneth A. Schmidt<sup>2</sup>, and Robert Naumann<sup>2</sup>. <sup>1</sup>Department of Forestry and Natural Resources, Purdue University, West Lafayette, IN 47907; and <sup>2</sup>Institute of Ecosystem Studies,

**1:30. 98.** Scale-dependent movement patterns of minke whales (*Balaenoptera acutorostrata*). S. Jonathan Stern<sup>1</sup>, and A. Rus Hoelzel<sup>2</sup>. <sup>1</sup>Department of Marine Biology, Texas A&M University, Galveston, TX 77551; and <sup>2</sup>Biological Sciences, University of Durham, Durham, U.K., DH1 3LE.

**1:30. 107\*.** Population genetic structure of boreal-adapted mammals. Gregory M. Wilson, Karen McBee, and Ronald A. Van Den Bussche. Department of Zoology and Collection of Vertebrates, Oklahoma State University, Stillwater, OK 74078.

Millbrook, NY 12545.

**1:45. 90.** Rodent community dynamics: the role of colonization in community dynamics. Morgan Ernest, and James H. Brown. Department of Biology, University of New Mexico, Albuquerque, NM 87131.

**2:00. 91.** Rodent community dynamics: regulation of species diversity. James H. Brown, and S.K. Morgan Ernest. Department of Biology, University of New Mexico, Albuquerque, NM 87131.

**2:15. 92.** The impact of habitat and disturbance on small mammal community structure in humid tropical forests. Christine L. Hice. Department of Biological Sciences, Texas Tech University, Lubbock, TX 79409.

**2:30. 93\*.** Responses of mammals at two trophic levels to partial harvesting. Angela K. Fuller, Henry J. Lachowski, and Daniel J. Harrison. Department of Wildlife Ecology, University of Maine, Orono, ME 04469.

**1:45. 99.** Effects of fire on foraging patterns and habitat use of a mycophagous marsupial. Karl Vernes<sup>1</sup>, and Daniel T. Haydon<sup>2</sup>. <sup>1</sup>Department of Biology, Mount Allison University, Sackville, New Brunswick, E4L 1G7, Canada; and <sup>2</sup>Centre for Tropical Veterinary Medicine, University of Edinburgh, Easter Bush, Roslin, Midlothian EH25 9RG, UK.

**2:00. 100.** A new pattern-oriented approach for analyzing dispersal of large carnivores that combines simulation modeling with real data. Thorsten Wiegand<sup>1</sup>, and Eloy Revilla<sup>1,2</sup>. <sup>1</sup>Department of Ecological Modeling, UFZ-Center for Environmental Research, Permoserstr. 15, D-04318 Leipzig, Germany; and <sup>2</sup>Estacion Biologica de Doñana, Avda de Maria Luisa s/n, Pabellon del Peru, E-41013 Seville, Spain.

**2:15. 101.** Dispersal of the Iberian lynx in heterogeneous landscapes: from movement rules to population models. Eloy Revilla<sup>1,2</sup>, and Thorsten Wiegand<sup>1</sup>. <sup>1</sup>Department of Ecological Modeling, UFZ-Center for Environmental Research, Permoserstr. 15, D-04318 Leipzig, Germany; and <sup>2</sup>Estacion Biologica de Doñana, Avda de Maria Luisa s/n, Pabellon del Peru, E-41013 Seville, Spain.

**2:30. 102.** Home range analysis using mechanistic home range models. Paul Moorcroft, M.A. Lewis, and R.L. Crabtree. Department of Ecology and Evolutionary Biology, Princeton University, Princeton, NJ 08544-1003.

**1:45. 108.** Historical origins and contemporary structure of two major biogeographic "suture zones" in the Pacific Northwest: evidence from comparative phylogeography of boreal mammals. Brian Arbogast, and G.J. Kenagy. Burke Museum, University of Washington, Seattle, WA 98195-3010.

**2:00. 109.** Quantitative measures of change in Pleistocene mammal distributions and community composition: is community membership in temporally dependent? S. Kathleen Lyons. Committee on Evolutionary Biology, University of Chicago, Chicago, IL 60637.

**2:15. 110.** Elevational variation of mammal communities in the Manu Biosphere Reserve, Peru. Sergio Solari<sup>1</sup>, B.D. Patterson<sup>2</sup>, L. Luna<sup>2</sup>, P.M. Velazco<sup>2</sup>, and J. Amanzo<sup>2</sup>. <sup>1</sup>Museo de Historia Natural, Universidad Nacional Mayor de San Marcos, Aptdo. 14 0434, Lima 14, Perú; and <sup>2</sup>Museo de Field Museum, Chicago, IL 60605.

**2:30. 111.** Why are there so many species in the tropics? Toward a unified theory for the latitudinal gradient of diversity. Dawn M. Kaufman<sup>1</sup>, Dov F. Sax<sup>2</sup>, and James H. Brown<sup>3</sup>. <sup>1</sup>National Center for Ecological Analysis & Synthesis, Santa Barbara, CA 93101; <sup>2</sup>Department of Ecology, Evolution and Marine Biology, University of California, Santa Barbara, CA 93106;

and <sup>3</sup>Department of Biology, University of New Mexico, Albuquerque, NM 87131.

**2:45. 94.** Carnivore activity along an urban-rural gradient. Lynda Randa<sup>1</sup>, Regina Slusinski<sup>2</sup>, and John Yunger<sup>2</sup>. <sup>1</sup>Natural Sciences Division, College of DuPage, Glen Ellyn, IL 60137; and <sup>2</sup>Environmental Biology, Governors State University, University Park, IL 60466.

**2:45. 103.** Fine scale movements and habitat use by elk and mule deer in northeastern Oregon. John G. Kie<sup>1</sup>, Alan A. Ager<sup>1</sup>, John W. Kern<sup>2</sup>, and Bruce K. Johnson<sup>3</sup>. <sup>1</sup>U.S. Forest Service, Pacific Northwest Research Station, La Grande, OR 97850; <sup>2</sup>Western Ecosystems Technology, Inc.; and <sup>3</sup>Oregon Department of Fish and Wildlife.

**2:45. 112.** Geographic distribution of two southern African sibling species of the genus *Aethomys* (Rodentia: Muridae). Alicia V. Linzey<sup>1</sup>, Michael H. Kesner<sup>1</sup>, Christian T. Chimimba<sup>2</sup>, Terence J. Robinson<sup>3</sup>, Peter J. Taylor<sup>4</sup>, and Christia Newbery<sup>5</sup>. <sup>1</sup>Department of Biology, Indiana University of Pennsylvania, Indiana, PA 15705; <sup>2</sup>Department of Zoology and Entomology, University of Pretoria, Pretoria 0002, SA; <sup>3</sup>Department of Zoology, University of Stellenbosch, Private Bag X1, Matieland 7602, SA; <sup>4</sup>Durban Natural Science Museum, Durban 4000, SA; and <sup>5</sup>Rustenburg Nature Reserve, Protea Park 0305, SA.

**3:00. 95.** Demographics of mesocarnivores in the cross timbers ecoregion. Laurence Levesque<sup>1</sup>, Eric C. Hellgren<sup>1</sup>, David M. Leslie, Jr.<sup>2</sup>, and David M. Engle<sup>3</sup>. <sup>1</sup>Department of Zoology, Oklahoma State University, Stillwater, OK 74078; <sup>2</sup>Oklahoma Cooperative Fish and Wildlife Research Unit, Oklahoma State University, Stillwater, OK 74078; and <sup>3</sup>Department of Plant and Soil Sciences, Oklahoma State University, Stillwater, OK 74078.

**3:00. 104.** Short-term movements of deer mice: quantitative analysis using a long-term data set. Ryan L. Rehmeier, Glennis A. Kaufman, and Donald W. Kaufman. Division of Biology, Kansas State University, Manhattan, KS 66506.

**3:00. 113\*.** Functional determinants of macroecological patterns in body-size and shape of new world bats: a preliminary assessment. Richard Stevens. Department of Biology, Texas Tech University, Lubbock, TX 79409-3131.

**3:15. 96\*.** Species diversity of medium and large-sized mammals in a variety of habitats in Big Bend National Park. Tracy Carter<sup>1</sup>, Wendy E. Sera<sup>1</sup>, Kevin J. Gutzwiller<sup>1</sup>, and Wylie Barrow<sup>2</sup>. <sup>1</sup>Department of Biology, Baylor University, Waco, TX 76798-7388; and <sup>2</sup>USGS National Wetlands Research Center, Lafayette, LA 70506.

**3:15. 105.** Experimental model systems used to predict individual movements in a landscape. Harry Andreassen. Division of Zoology, Department of Biology, University of Oslo, Blindern, Oslo, Norway, N-0316.

**3:15. 114\*.** Predictive models of spiny pocket mouse (*Heteromys*) distributions in South America: historical and biotic restrictions to potential ranges. Robert P. Anderson<sup>1</sup>, Marcela Gómez-Laverde<sup>2</sup>, and A. Townsend Peterson<sup>1</sup>. <sup>1</sup>Natural History Museum and Department of Ecology & Evolution Biology, University Kansas, Lawrence, KS 66045; and <sup>2</sup>Fundación Ulamá, Apartado 93674, Santafé de Bogotá, Colombia.

**3:30 pm - 3:45 pm**

**Break, Adjacent to Strafford Room, Memorial Union Building**

**3:45 pm - 5:45 pm**

**Symposium, Spaulding Auditorium**

**Movement as a link between behavior and landscape ecology:  
mammals as models**

**Chairperson:** Patrick Zollner

- 115.** Analyzing animal movement paths to measure response to spatial scale. Vilis Nams. Department of Environmental Sciences, NSAC, Truro, Nova Scotia, B2N 5E3, Canada.
- 116.** Developing a mechanistic basis for the landscape ecology of ungulate populations. Peter Turchin, and Kim Cuddington. Department of Ecology and Evolution Biology, University of Connecticut, Storrs, CT 06269.
- 117.** From empirical data to a simulation model and back again: landscape-level interpatch dispersal by forest dwelling small mammals of the midwestern U.S. Patrick A. Zollner<sup>1</sup>, and Dan Rosenblatt<sup>2</sup>. <sup>1</sup>USDA Forest Service, North Central Research Station, Rhinelander, WI 54501; and <sup>2</sup>New York State Department of Environmental Conservation, Bureau of Wildlife, SUNY, Stony Brook, NY 11790.
- 118.** Simulating dispersal of juvenile American martens in heterogeneous landscapes. Eric J. Gustafson<sup>1</sup>, and Robert H. Gardner<sup>2</sup>. <sup>1</sup>USDA Forest Service, North Central Research Station, Rhinelander, WI 54501; and <sup>2</sup>Appalachian Laboratory, Center for Environmental Studies, University of Maryland, Frostburg, MD 21532.

**6:30 pm - 9:00 pm**

**Picnic, Odiorne State Park**

**9:30 pm - 11:00 pm**

**Auction, New Hampshire Hall**

**Tuesday, 20 June 2000**

**7:00 am - 8:30 am**

**Breakfast, Philbrook Dining Hall**

**7:00 am - 8:30 am**

**Breakfast With A Scientist, Philbrook Dining Hall**

8:00 am - 10:00 am		
Concurrent Technical Session 4		
Concurrent Technical Session 4A Iddles Auditorium	Concurrent Technical Session 4B Spaulding Auditorium	Concurrent Technical Session 4C Horton Auditorium
<b>Behavior I</b>	<b>Physiology</b>	<b>Techniques</b>
Chairperson: Allen Kurta	Chairperson: Joe Merritt	Chairperson: Ron Barry

- 8:00. 119.** Neighborhood-scale management of white-tailed deer in suburban environments. Jennifer L. Woodard. State University of New York, College of Environmental Science and Forestry, Syracuse, NY 13210.
- 8:00. 127.** Thyroid-disrupting pesticides, metabolism, and thermoregulation in cotton rats. Tom Tomasi. Biology Department, SMSU, Springfield, MO 68504.
- 8:00. 135.** A quantitative approach for assessing species-specific and scale-dependent responses to landscape configuration by bats in interior Atlantic Rainforest of Paraguay. Michael Willig, P. M. Gorresen, and R. E. Strauss. Department of Biology, Texas Tech University, Lubbock, TX 79409-3131.
- 8:15. 120\*.** Scent-marking behavior of territorial male pronghorn on Antelope Island, Great Salt Lake, Utah. Jennifer Wyssman, and W. Sue Fairbanks. University of Nebraska at Omaha, Omaha, NE.
- 8:15. 128\*.** Hematological values of overwintering eastern woodrats (*Neotoma floridana*). Michael V. Snyder<sup>1</sup>, Elmer J. Finck<sup>1</sup>, David K. Saunders<sup>1</sup>, Kevin Aldrich<sup>1</sup>, and Diane Post<sup>2</sup>. <sup>1</sup>Division of Biological Sciences, Emporia State University, Emporia, KS 66801; and <sup>2</sup>Department of Biology, University of Texas-Permian Basin, Odessa, TX 79762.
- 8:15. 136.** Efficiency of sharpshooting to manage overabundant deer populations. Anthony DeNicola. 54 Grandview Avenue, Hamden, CT 06514.
- 8:30. 121\*.** Territorial fidelity of male guanacos in the patagonia of southern Chile. Julie Young, and William L. Franklin. Iowa State University, Department of Animal Ecology, Ames, IA 50011.
- 8:30. 129.** Associations between infant-care behavior, steroid hormones, and parental experience in male marmosets. Scott Nunes, and Jeffrey A. French. University of Nebraska, Omaha, NE 68182.
- 8:30. 137.** Feasibility of using nest boxes to monitor southern flying squirrel populations. Donald P. Althoff<sup>1</sup>, and Peggy S. Althoff<sup>2</sup>. <sup>1</sup>Friends University, Wichita, KS 67213; and <sup>2</sup>Wichita State University, Wichita, KS 67260.
- 8:45. 122.** Copulation-site selection by guanacos in Torres del Paine National Park, Chile. Michael S. Bank<sup>1,2</sup>, and William L. Franklin<sup>1,3</sup>.
- 8:45. 130\*.** Behavioral and hormonal components of paternal care in the monogamous titi monkey (*Callicebus moloch*). DeeAnn M. Reeder<sup>1</sup>, Carsten Schradin<sup>2</sup>, Sally P. Mendoza<sup>1</sup>,
- 8:45. 138\*.** Distribution of pine marten (*Martes americana*) in the Black Hills, South Dakota. Dorothy M. Fecske, and Jonathan A. Jenks. Department of Wildlife and Fisheries

<sup>1</sup>Patagonia Wildlife Research Station, Torres del Paine National Park, Chile. <sup>2</sup>Department of Wildlife Ecology, University of Maine, Orono, ME 04469-5755. <sup>3</sup>Department of Animal Ecology, Iowa State University, Ames, IA 50011-3221.

**9:00. 123.** Estimating the reproductive consequences of group living in the social prairie vole. Nancy Solomon. Department of Zoology, Miami University, Oxford, Ohio 45056.

**9:15. 124.** Adult-offspring conflict and the termination of maternal care in juvenile guanacos, *Lama guanicoe*: the fate of individuals forced to disperse at different times. Ronald Sarno<sup>1</sup> and William L. Franklin<sup>2</sup>, <sup>1</sup>Laboratory of Genomic Diversity, National Cancer Institute, Bldg. 560, Room 11-84, Frederick, Maryland 21702-1201. <sup>2</sup>Department of Animal Ecology, 124 Science II, Iowa State University, Ames, IA 50011-3221.

**9:30. 125\*.** Food hoarding and sociality in the southern flying squirrel. Michael Winterrowd, and Peter D. Weigl. Biology Department, Wake Forest University, Winston-Salem, NC 27109.

William A. Mason<sup>1</sup>, and Gustl Anzenberger<sup>2</sup>. <sup>1</sup>Department of Psychology and California Regional Primate Research Center, University of California, Davis, CA 95616; and <sup>2</sup>Anthropologisches Institut und Museum, Universitaet Zuerich, Winterthurerstrasse 190, CH-8057 Zuerich, Switzerland.

**9:00. 131\*.** Regional variation in growth characteristics of white-tailed deer: evidence for maternal effects? Lowell E. Schmitz, and Jonathan A. Jenks. Department of Wildlife and Fisheries Sciences, South Dakota State University, Brookings, SD 57007.

**9:15. 132\*.** Inter- and intraspecific variation in proximate, mineral, and fatty acid composition of milk in four species of old-world fruit bats (Chiroptera: Pteropodidae). Wendy R. Hood<sup>1</sup>, Thomas H. Kunz<sup>1</sup>, Olav T. Oftedal<sup>2</sup>, and Sara J. Iverson<sup>3</sup>. <sup>1</sup>Department of Biology, Boston University, Boston, MA 02215; <sup>2</sup>Department of Zoological Research, Smithsonian Inst., Washington, D.C. 20008; and <sup>3</sup>Department of Biology, Dalhousie University, Halifax, Nova Scotia, B3H 4J1, Canada.

**9:30. 133\*.** Comparative nitrogen requirements of *Sigmodon hispidus* and *Reithrodontomys fulvescens*: does dietary niche matter? Jennifer Parsons<sup>1</sup>, Eric C. Hellgren<sup>2</sup>, Robert L. Lochmiller<sup>2</sup>, David M. Leslie, Jr.<sup>1</sup>, and Eric E. Jorgensen<sup>3</sup>. <sup>1</sup>Oklahoma Cooperative Fish

Sciences, South Dakota State University, Brookings, SD 57007.

**9:00. 139.** Use of fuzzy classification to determine associations in a migratory population of white-tailed deer. Robert Klaver<sup>1</sup>, Jonathan A. Jenks<sup>2</sup>, Christopher S. DePerno<sup>3</sup>, and Steven L. Griffin<sup>4</sup>. <sup>1</sup>USGS EROS Data Center, Sioux Falls, SD 57198; <sup>2</sup>Department of Wildlife and Fisheries Sciences, South Dakota State University, Brookings, SD 57007; <sup>3</sup>Farmland Wildlife Research, Minnesota Department of Natural Resources, Medelia, MN 56062; and <sup>4</sup>South Dakota Department of Game, Fish, and Parks, Rapid City, SD 57702.

**9:15. 140.** An analysis of mammalogy course home pages. James Holden, P.O. Box 120755, Nashville, TN 37212.

**9:30. 141.** Long-term population trends of raccoons, opossums and striped skunks in Illinois. Stanley Gehrt<sup>1</sup>, George F. Hubert, Jr.<sup>2</sup>, and Jack A. Ellis<sup>3</sup>. <sup>1</sup>Max McGraw Wildlife Foundation, Dundee, IL 60118; <sup>2</sup>Illinois Department of Natural Resources, Hinckley, IL 60520; and <sup>3</sup>Illinois Department of Natural Resources, Effingham, IL

**9:45. 126.** Natal dispersal in the Siberian flying squirrel (*Pteromys volans*). Vesa Selonen, and Ilpo K. Hanski. Department of Ecology and Systematics, Division of Population Biology, FIN-00014 University of Helsinki, Finland.

and Wildlife Research Unit, Oklahoma State University, Stillwater, OK 74078; <sup>2</sup>Department of Zoology, Oklahoma State University, Stillwater, OK 74078; and <sup>3</sup>USEPA, 919 Kerr Research Drive, Ada, OK 74820.

**9:45. 134.** Selection for energy and protein in the diet of the white-footed mouse (*Peromyscus leucopus*). Terry Derting, Chad Lewis, and Tim Clark. Department of Biological Sciences, Murray State University, Murray, KY 42071.

**9:45. 142.** Museum specimen data predict crop damage by tropical rodents. Victor Sánchez-Cordero<sup>1</sup>, and Enrique Martínez-Meyer<sup>2</sup>. <sup>1</sup>Instituto de Biología, UNAM. Aptdo. Postal 70-153, México City, D.F., México 04510; and <sup>2</sup>Department of Geography and Kansas Applied Remote Sensing Program, University of Kansas, Lawrence, KS 66045.

**10:00 am - 10:15 am** **Break, Adjacent to Stafford Room, Memorial Union Building**

**10:15 am - 10:45 am** **Group Photo, Hillside outside of Memorial Union Building**

**10:45 am - 12 Noon** **Members Meeting II, Horton Auditorium**

**12 Noon - 1:30 pm** **Lunch, Philbrook Dining Hall**  
**Board of Directors Lunch Meeting, Memorial Union Building**

<b>1:15 pm - 3:30 pm</b>			<b>Concurrent Technical Session 5</b>		
Concurrent Technical Session 5A Iddles Auditorium	Concurrent Technical Session 5B Spaulding Auditorium	Concurrent Technical Session 5C Horton Auditorium			
<b>Morphology/Physiology</b>	<b>Population Ecology II</b>	<b>Systematics II</b>			
Chairperson: Tom Tomasi	Chairperson: Gus Smith	Chairperson: Robert Bradley			

**1:15. 143.** Accelerated rates of replacement substitutions in the cytochrome b gene of tuco-tucos and coruros. Enrique. P. Lessa<sup>1</sup>, F. G. Hoffmann<sup>2</sup>, I. Tomasco<sup>2</sup>, G. Wlasiuk<sup>2</sup>, and J. A. Cook<sup>2</sup>. <sup>1</sup>16 Divinity Ave., Cambridge, MA 02140. <sup>2</sup>University of Alaska Museum.

**1:15. 152.** The effect of density reduction on uinta ground squirrel populations: an analysis of life table response experiments. Madan K. Oli<sup>1</sup>, Norman A. Slade<sup>2</sup> and F.S. Dobson<sup>1</sup>. <sup>1</sup>Department of Biological Sciences, Auburn University, Auburn, AL 36849-5414; and <sup>2</sup>Natural History Museum and Department of Ecology and Evolution Biology, University of Kansas, Lawrence, KS 66045-2454.

**1:15. 161.** Molecular phylogenetics of the neotomine-peromyscine rodents. Robert D. Bradley<sup>1,2</sup>, Kristina E. Halcomb<sup>1</sup>, and Cody W. Edwards<sup>1</sup>. <sup>1</sup>Department of Biological Sciences, Texas University, Lubbock, TX 79409; and <sup>2</sup>Museum of Texas Tech University, Lubbock, TX 79409.

**1:30. 144.** Size sexual dimorphism in *Miopithecus talapoin* (Primates: Cercopithecidae). Craig S. Hood<sup>1,2</sup> and Maha Y. Askar<sup>1</sup>. <sup>1</sup>Department of Biological Sciences, Loyola University, New Orleans, LA 70118; and <sup>2</sup>Tulane University Museum of Natural History, Belle Chasse, LA 70037.

**1:45. 145.** The smoking gum: morphological corollaries of man-eating in some African lions (*Panthera leo*). Bruce D. Peterson<sup>1</sup>, Ellis J. Neiburger<sup>2</sup>, and Roland W. Kays<sup>3</sup>. <sup>1</sup>Department of Zoology, The Field Museum, Chicago, IL 60605; <sup>2</sup>1000 North Ave, Waukegan IL 60085; and <sup>3</sup>New York State Museum, CEC 3140, Albany NY 12230.

**2:00. 146\*.** Comparative analysis of nectar-feeding performance in four phyllostomid bats. Christopher Nicolay<sup>1</sup>, Elizabeth R. Dumont<sup>1</sup>, and York Winter<sup>2</sup>. <sup>1</sup>Department of Anatomy, NE Ohio University, College of Medicine, Rootstown, OH 44272; <sup>2</sup>Institute of Zoology, University of Munich LMU, 80333 Munich, Germany.

**2:15. 147.** A forgotten synapomorphy for the clade glires. Stuart Landry. Department of Biology, SUNY, Binghamton, NY 13902.

**2:30. 148.** The utility of hair structure for taxonomic discrimination in bats, with an example from the bats of Colorado. Brian Amman. Department of Biological Sciences, Texas Tech University, Lubbock, TX 79407.

**1:30. 153.** Reproductive patterns in sympatric *Peromyscus maniculatus* and *Peromyscus truei*, possible causes and possible r/K selection. Jeffrey B. Llewellyn. Ecology Program, Brevard College, Brevard, NC 18712.

**1:45. 154\*.** Are prairie voles as monogamous as we think they are? Aimee Dunlap-Lehtila, and Jerry O. Wolff. Department of Biology, The University of Memphis, Memphis, TN 38152.

**2:00. 155\*.** Body mass dynamics of meadow voles in Virginia, USA. Thomas Dolan, and Robert K. Rose. 1111 Wilkins Drive, Williamsburg, VA 23185.

**2:15. 156\*.** Ecological analyses of small mammal communities on Fort Bliss Military Base. Melinda L. Clary, Richard E. Strauss, Robert J. Baker, and Robert D. Bradley. Department of Biology, Texas Tech University, Lubbock, TX 79409-3131.

**2:30. 157.** White-footed mouse abundance during 15 years in an oak-pine forest. Susan P. Elias<sup>1</sup>, Jack W. Witham<sup>1</sup>, and Malcolm L. Hunter, Jr.<sup>2</sup> <sup>1</sup>Holt Research Forest-University of Maine, Arrowsic, ME 04530; and <sup>2</sup>Department of Wildlife

**1:30. 162\*.** Molecular systematics of the *Peromyscus truei* species group. Kristina E. Halcomb<sup>1</sup>, C. William Kilpatrick<sup>2</sup>, and Robert D. Bradley<sup>1</sup>. <sup>1</sup>Texas Tech University, Department of Biological Sciences, Lubbock, TX 79409-3131; and <sup>2</sup>University of Vermont, Department of Biology, Burlington, Vermont 05405-0086.

**1:45. 163.** Phylogenetic relationships among phyllostomid genera: data from the nuclear rag-2 gene. Robert J. Baker<sup>1</sup>, Calvin Porter<sup>1</sup>, John C. Patton<sup>1</sup>, and Ron A. Van Den Bussche<sup>2</sup>. <sup>1</sup>The Museum and Department of Biological Sciences, Texas Tech University, Lubbock, TX 79409; and <sup>2</sup>Department of Zoology, Oklahoma State University, Stillwater, OK 74078.

**2:00. 164.** *agouti*, AGOUTI, *agouti*: multiple perspectives on a classical mammalian coat-color locus. Joy Lapsertis, and Virginia Hayssen. Smith College, Clark Science Center, Northampton, MA 01063.

**2:15. 165\*.** The systematics of *Sigmodon hispidus* based on cytochrome b and androgen binding protein sequence data. Darin S. Carroll, Carleton J. Phillips, and Robert D. Bradley. Texas Tech University, Department of Biological Sciences, Lubbock, TX 79409-3131.

**2:30. 166\*.** Biogeography, cryptic species, and paraphyly: molecular phylogenetics of the genus *Neotoma*. Cody W. Edwards<sup>1</sup>, and Robert D. Bradley<sup>1,2</sup>. <sup>1</sup>Department of Biological Sciences, Texas Tech University, Lubbock, TX 79409-3131; and <sup>2</sup>Museum of Texas Tech University, Lubbock, TX 79409.

**2:45. 149\*.** Ecogeographic determinants of phenotypic variation in isolated montane populations of the long-tailed vole (*Microtus longicaudus*). Amy M. Ditto, and Julia T. Shahvar. Department of Biology, University of New Mexico, Albuquerque, NM 87131.

**3:00. 150.** Continuous body temperature monitoring of free-ranging woodchucks (*Marmota monax*). Stam M. Zervanos<sup>1</sup>, and Carmen M. Salsbury<sup>2</sup>. <sup>1</sup>P.O. Box 7009, Reading, PA 19610; and <sup>2</sup>Department of Biology, Albright College, Reading, PA 19612.

**3:15. 151\*.** Nutritional ecology of voles under differing environmental conditions. Scott Buchanan and Jack A. Cranford. Department of Biology, Virginia Tech, Blacksburg, VA 24060.

Ecology, University of Maine, Orono, ME 04469-5755.

**2:45. 158.** Long-term trends of botfly infestation in white-footed mice. Jack W. Witham. Holt Research Forest-University of Maine, Arrowsic, ME 04530.

**3:00. 159\*.** Incidence of meningeal worm (*Parelaphostrongylus tenuis*) in deer and elk populations in South Dakota. Christopher N. Jacques, and Jonathan A. Jenks. Wildlife and Fisheries Sciences, South Dakota State University, Brookings, SD 57007.

**3:15. 160\*.** Survival and movements of white-tailed deer in a fragmented urban landscape. Dwayne Etter<sup>1</sup>, Timothy Van Deelen<sup>1</sup>, Karmen Hollis<sup>2</sup>, Richard Warner<sup>2</sup>, James Chelsvig<sup>3</sup>, and Daniel Ludwig<sup>4</sup>. <sup>1</sup>Illinois Natural History Survey, Champaign, IL 61820; <sup>2</sup>University of Illinois, Champaign, IL 61820; <sup>3</sup>Forest Preserve District of Cook County, Elgin, IL 60120; and <sup>4</sup>Forest Preserve District of DuPage County, Wheaton, IL 60187.

**2:45. 167\*.** Karyotypic variation in the endemic rodent fauna of the Galapagos Islands. Marcia A. Revelez<sup>1</sup>, and Robert C. Dowler<sup>2</sup>. <sup>1</sup>Department of Biological Sciences, Texas Tech University, Lubbock, TX 79409-3131; and <sup>2</sup>Department of Biology, Angelo State University, San Angelo, TX.

**3:00. 168.** Morphometric analysis of 17 subspecies of the spiny pocket mouse (*Chaetodipus spinatus*) from Baja California Sur, Mexico. Sergio Ticul Alvarez-Castañeda, and Teresa Mendez. Centro de Investigaciones Biológicas del Noroeste, S. C. La Paz, Baja California Sur, México, 23090.

**3:15. 169.** Intraspecific morphometric variation in *Aethomys namaquensis* (*Rodentia: Muridae*) from southern Africa. Christian T. Chimimba. Department of Zoology and Entomology, University of Pretoria, Pretoria 0002, SA.

**3:30 pm - 3:45 pm** Break, Adajacent to Strafford Room, Memorial Union Building

**3:45 pm - 5:45 pm** Poster Session II, Strafford Room, Memorial Union Building

**Behavior, Physiology, and Morphology**

- 170.** The relationship between body fat and season on dispersal behavior in *Oryzomys palustris*. Fred Punzo. Department of Biology, University of Tampa, Tampa, FL 33606.
- 171\*.** Anthropogenic food sources and aggression in coyotes: a study from northern California. Stephanie A. MacDonald, Michael J. Kutilek and Sulekha Anand. Department of Biological Sciences, San Jose State University, San Jose, CA 95192.
- 172.** An observation of the influence of posture of humans on the flight distance of captive wolves, *Canis lupus*. Andrew Joachim. 29 Jon Ridge Road, Lake Placid, NY.
- 173.** Vigilance behavior of *Procapra capensis* and *Heterohyrax brucei* in Zimbabwe. Ronald E. Barry. Department of Biology, Frostburg State University, Frostburg, MD 21532.
- 174.** The effects of seed size on seed dispersal by small mammals. Kari Sue Smith<sup>1</sup>, Angeles Mendoza<sup>2</sup>, Gerardo Ceballos<sup>2</sup>, Peter D. Smallwood<sup>3</sup>, and Michael A. Steele<sup>1</sup>. <sup>1</sup>Department of Biology, Wilkes University, Wilkes-Barre, PA 18766; <sup>2</sup>Centro de Ecología, UNAM, Mexico, D.F., Mexico; and <sup>3</sup>Department of Biology, Richmond University, Richmond, VA 23173.
- 175.** Processing of *Syncerus caffer* carcasses by predators and scavengers in Kenya. Sarah W. Lansing<sup>1</sup>, and Julian C. Kerbis Peterhans<sup>2</sup>. <sup>1</sup>Field Museum of Natural History, Division of Mammals, Chicago, IL 60605; and <sup>2</sup>University College, Roosevelt University, Chicago, IL 60605.
- 176.** Spatial organization of woodchucks (*Marmota monax*) in Maine. Christine Maher. Department of Biology, University of Southern Maine, Portland, ME 04104.
- 177.** Shrew aggregations: density-related mating behavior? Katherine L. Doyle<sup>1</sup>, and Thomas J. Maier<sup>2</sup>. <sup>1</sup>Biology Department, University of Massachusetts, Amherst, MA 01003-5810; and <sup>2</sup>USDA Forest Service, Northeastern Research Station, University of Massachusetts, Amherst, MA 01003-4210.
- 178\*.** Movement patterns of *Sigmodon hispidus* in an experimental landscape. Erin Dreelin, and Gary W. Barrett. Institute of Ecology, University of Georgia, Athens, GA 30602.
- 179.** Underwater communication sounds of Florida manatees. Thomas O'Shea<sup>1,2</sup>, Michael S. Blouin<sup>1,3</sup>, and Lynn B. Poché, Jr.<sup>4</sup> <sup>1</sup>USGS, Sirenia Project, Gainesville, FL; <sup>2</sup>Midcontinent Ecological Science Center, Fort Collins, CO 80525-3400; <sup>3</sup>Department of Zoology, Oregon State University, Corvallis, OR 97331; and <sup>4</sup>Naval Research Laboratory, Underwater Sound Reference Detachment, Orlando, FL 32856.
- 180.** Concentrations of lead in the tissues of *Peromyscus maniculatus* fed diets with different lead levels for several generations. Bruce D. Eshelman. Department of Biological Sciences, University of Wisconsin-Whitewater, Whitewater, WI 53190.
- 181.** Effects of food hoarding on winter activity of the Eurasian red squirrel. Tomomi Kataoka. Institute of Applied Zoology, Faculty of Agriculture, Hokkaido University, Sapporo, Hokkaido, Japan 060-8589.

- 182.** On the spatial arrangement of scatter hoards by small mammals: patterns of cache placement and cache recovery. Michael A. Steele<sup>1</sup>, Vanessa Scheffner<sup>1</sup>, Sharli Pate<sup>1</sup>, Peter Smallwood<sup>2</sup>, and Pierre Lavenex<sup>3</sup>. <sup>1</sup>Department of Biology, Wilkes University, Wilkes-Barre, PA 18766; <sup>2</sup>Department of Biology, Richmond University, Richmond, VA 23173; and <sup>3</sup>Department of Psychiatry, Center for Neuroscience, University of California, Davis, CA 95616.
- 183.** Sexual segregation in moose: effects of habitat manipulation. R. Terry Bowyer<sup>1</sup>, Becky M. Pierce<sup>1</sup>, Lawrence K. Duffy<sup>1</sup>, and Dale A. Haggstrom<sup>2</sup>. <sup>1</sup>Institute of Arctic Biology, University of Alaska Fairbanks, Fairbanks AK 99775; and <sup>2</sup>Alaska Department of Fish and Game, Fairbanks, AK 99701.
- 184.** Breeding dispersal and predation risk in the Plains Vizcacha. Marcel Machicote<sup>1</sup>, Lyn C. Branch<sup>1</sup>, and Diego Villarreal<sup>2</sup>. <sup>1</sup>Department of Wildlife Ecology and Conservation, University of Florida, Gainesville, FL 32611; and <sup>2</sup>Facultad de Ciencias Exactas y Naturales, Universidad Nacional de La Pampa, 6300 Santa Rosa, La Pampa, Argentina.
- 185\*.** Facultative torpor in free-ranging black-tailed prairie dogs (*Cynomys ludovicianus*). Erin Lehmer<sup>1</sup>, Beatrice Van Horne, Benjamin Kulbartz, and Gregory Florant. <sup>1</sup>501 Smith Street, Fort Collins, CO 80524.
- 186.** Gut-associated lymphoid tissue in *Microtus montanus* in the laboratory: effects of dietary protein and fiber. Zoë M. Smith, and Aelita J. Pinter. Department of Biological Sciences, University of New Orleans, New Orleans, LA 70148.
- 187.** Optimizing survivorship in cold: thermogenic profiles of non-hibernating mammals. Joseph F. Merritt<sup>1</sup>, David A. Zegers<sup>2</sup>, and Lynda R. Rose<sup>3</sup>. <sup>1</sup>Powdermill Biological Station, Carnegie Museum of Natural History, Rector, PA 15677; <sup>2</sup>Department of Biology, Millersville University, Millersville, PA 18551; and <sup>3</sup>University of Pittsburgh Medical Center, Pittsburgh, PA 15213.
- 188.** Effects of propylthiouracil on the magnitude of photoperiod-induced compensatory testicular hypertrophy in the marsh rice rat (*Oryzomys palustris*). Kent E. Edmonds. Department of Biology, Indiana University Southeast, New Albany, IN 47150.
- 189\*.** Profiles of fecal porphyrins in river otters following the Exxon Valdez oil spill. Christopher Taylor<sup>1</sup>, Lawrence K. Duffy<sup>2</sup>, R. Terry Bowyer<sup>3</sup>, and Gail M. Blundell<sup>4</sup>. <sup>1</sup>PO Box 1317, Haines, Alaska 99827; <sup>2</sup>Department of Chemistry, University of Alaska Fairbanks, Fairbanks, Alaska 99705; <sup>3</sup>Department of Biology and Wildlife, University of Alaska Fairbanks, Fairbanks, Alaska 99705; and <sup>4</sup>Institute of Arctic Biology, University of Alaska Fairbanks, Fairbanks, Alaska 99705.
- 190\*.** Fecal corticosteroids in agouti and nonagouti deer mice (*Peromyscus maniculatus*). James W. Harper, Rachel DeFina, and Virginia Hayssen. Department of Biology, University of Idaho, Moscow, ID 83844.
- 191\*.** Coat color browning in nonagouti deermice (*Peromyscus maniculatus*). Ilene Weinger. Smith College, Northampton, MA 01063.
- 192\*.** A comparison of vitamin D levels in five species of neotropical bats: evidence for steroid hormone resistance? Elizabeth Southworth<sup>1</sup>, Jeffrey Mathieu<sup>2</sup>, Michael F. Holick<sup>2</sup>, and Thomas H. Kunz<sup>1</sup>. <sup>1</sup>Department of Biology, Boston University, Boston, MA 02215; <sup>2</sup>Vitamin D, Skin and Bone Research Laboratory, Endocrine Section, Department of Medicine, Boston University Medical Center, Boston, MA.

- 193\*.** The effects of ambient temperature change on metabolic responses in eastern chipmunks (*Tamias striatus*). Aaron Alford<sup>1</sup>, and Steven H. Mills. <sup>1</sup>511 SE Bayberry Lane, Lee's Summit, MO 64063.
- 194.** The vomeronasal organ among postnatal old world primates. Timothy D. Smith<sup>1,2</sup>, Michael I. Siegel<sup>2</sup>, Christopher Bonar<sup>3</sup>, Kunwar P. Bhatnagar<sup>4</sup>, Mark P. Mooney<sup>2,5</sup>, Annie M. Burrows<sup>1,2</sup>, Matthew A. Smith<sup>6</sup>, and Lisette M. Maico<sup>1</sup>. <sup>1</sup>School of Physical Therapy, Slippery Rock University, Slippery Rock, PA 16057; <sup>2</sup>Department of Anthropology, University of Pittsburgh, Pittsburgh, PA 15260; <sup>3</sup>Cleveland Metro Parks Zoo, OH 44109; <sup>4</sup>Department of Natural Sciences and Neurobiology, University of Louisville, School of Medicine, Louisville, KY 40292; <sup>5</sup>Department of Oral Medicine and Pathology, University of Pittsburgh, Pittsburgh, PA 15261; and <sup>6</sup>Center for Neural Sciences, New York University, New York, NY 10003.
- 195.** Morphometric analysis of skull shape in anomalurid rodents. John Scheibe, and Erin Lenihan. Department of Biology, Southeast Missouri State University, Cape Girardeau, MO 63701.
- 196\*.** An examination of bite performance during the development of the opossum masticatory apparatus. Elicia Thompson. Ohio University, Irvine Hall, Athens, OH 45701.
- 197.** Ossification in the manus of the harbor porpoise (*Phocoena phocoena*): a different way to make a phalanx. Susan Dawson. Department of Anatomy and Physiology, University of Prince Edward Island, Charlottetown, Prince Edward Island, C1A 4P3, Canada.
- 198.** Variation within and among populations of *Microtus ochrogaster* in Missouri. Karen M. Wolfe, and Jerry R. Choate. Department of Biological Sciences and Sternberg Museum of Natural History, Fort Hays State University, Hays, KS 67601.
- 199\*.** Fluctuating asymmetry in antlers of Alaskan moose: size matters. Kelley M. Stewart<sup>1</sup>, R. Terry Bowyer<sup>1</sup>, John G. Kie<sup>1,2</sup>, and William C. Gasaway (deceased)<sup>3</sup>. <sup>1</sup>Institute of Arctic Biology, University of Alaska Fairbanks, Fairbanks, AK 99775; <sup>2</sup>United States Forest Service, Pacific Northwest Research Station, LaGrande, OR 97850; and <sup>3</sup>Alaska Department of Fish and Game.
- 200.** Comparative dural venous sinus morphology among three species of odontocetes. Anne M. Burrows, and Timothy D. Smith. School of Physical Therapy, Slippery Rock University, Slippery Rock, PA 16057; and Division of Mammals, Carnegie Museum of Natural History, Pittsburgh, PA 15206.
- 201.** Size relationships among mustelids. Gerald Svendsen, and Andy Wemmer. Department of Biological Sciences, Ohio University, Athens, OH 45701.
- 202.** Analysis of flying squirrel phylogeny using morphological data. Diane Pitassy, Richard W. Thorington, Jr., and Lindsay A. Pappas. Department of Vertebrate Zoology, Smithsonian Institute, Washington, DC 20560.
- 203.** Small mammals in natural and restored marshes in Louisiana. Gregory D. Hartman, Gale R. Haigh, and Kaili V. Patterson. Department of Biological & Environmental Sciences, McNeese State University, Lake Charles LA 70609.

**5:00 pm - 7:00 pm**

**Dinner for non-banquet participants, Philbrook Dining Hall**

**6:30 pm - 7:30 pm** **No-Host Pre-Banquet Social, New Hampshire Hall**

**7:30 pm - 9:30 pm** **Banquet, New Hampshire Hall**

**9:30 pm - 11:00 pm** **Post-Banquet Social, New Hampshire Hall**

**Wednesday, 21 June 2000**

**7:00 am - 8:30 am** **Breakfast, Philbrook Dining Hall**

**8:00 am – 10:00 am** **Concurrent Technical Session 6**

Concurrent Technical Session 6A  
Iddles Auditorium

**Behavior II**

Chairperson: Nancy Solomon

Concurrent Technical Session 6B  
Spaulding Auditorium

**Conservation II**

Chairperson: Morty Ortega

Concurrent Technical Session 6C  
Horton Auditorium

**Natural History II**

Chairperson: Peter Busher

**8:00. 204\*.** Individual variation in the nightly time-budget of the little brown bat, *Myotis lucifugus*. Jason W. Horn, and Thomas H. Kunz. Boston University, 5 Cummington Street, Boston, MA 02215.

**8:15. 205\*.** Behavioral correlates of swarming bats. Dale W. Sparks, B. Jagger Foster, and John O. Whitaker, Jr. Department of Life Sciences, Indiana State University, Terre Haute, IN 47809.

**8:30. 206\*.** Mechanisms of coexistence in bats of the Philippines. Jodi Sedlock. Department of Biological Sciences, University of Illinois at Chicago, Chicago, IL 60607.

**8:00. 212\*.** Population genetics of feral horses in the desert: implications of behavioral isolation. Michael C. Ashley. Ecology, Evolution, and Conservation Biology Program, University of Nevada, Reno, NV 89557.

**8:15. 213.** Conservation genetics of the endangered Florida Key deer. Kiara R. Banks, and Rodney L. Honeycutt. Department of Wildlife and Fisheries Science, Texas A&M University, College Station, TX 77843-2258.

**8:30. 214.** Taxonomy and distribution of mammals in the Central Desert of Baja California, Mexico. Evelyn Rios, and Sergio Ticul Alvarez-Castaneda. Centro de Investigaciones Biológicas del Noroeste, S. C. La Paz, Baja California Sur, México, 23090.

**8:00. 220\*.** Daily and seasonal variation in captures of southern short-tailed shrews (*Blarina carolinensis*) in southern Illinois. Joseph Whittaker, and George Feldhamer. Department of Zoology, Southern Illinois University, Carbondale, IL 62901.

**8:15. 221.** Temporal variation in a population of *Reithrodontomys megalotis* in the tallgrass prairie. Aaron W. Reed, Glennis A. Kaufman, and Donald W. Kaufman. Division of Biology, Kansas State University, Manhattan, KS 66506.

**8:30. 222\*.** Evidence of migration of *Leptonycteris curasoae* in the Mexican tropics. Guillermo Tellez<sup>1</sup>, Rodrigo A. Medellín<sup>1</sup>, Claudia Mora<sup>2</sup>, and Gary McCracken<sup>3</sup>. <sup>1</sup>Instituto de Ecología, UNAM, México, DF; <sup>2</sup>Department of Geology, University of Tennessee, Knoxville, TN;

**8:45. 207\*.** Resource partitioning along niche axes of syntopic *Peromyscus boylii* and *P. californicus* in California. Matina Kalcounis. Ecology and Evolution Group, Department of Zoology, University of Western Ontario, London, Ontario, N6A 5B7, Canada.

**9:00. 208.** Odors in traps: does the first night's capture influence the second night's capture? Stephen H. Vessey<sup>1</sup>, and Lee C. Drickamer<sup>2</sup>. <sup>1</sup>Department of Biological Sciences, Bowling Green State University, Bowling Green, OH 43403; and <sup>2</sup>Department of Biological Sciences, Northern Arizona University, Flagstaff, AZ 86011.

**9:15. 209\*.** Dialect differences in the alarm calls of the golden-mantled ground squirrel (*Spermophilus lateralis*) in Big Bear, California. Karen Eiler, and Sandra Banack. Department of Biological Science, California State University, Fullerton, CA 92831.

**9:30. 210.** Winter aggregations, Dehnel Effect, and habitat relations in the Suisun shrew, *Sorex ornatus sinuosus*. Warren S. F. Hays<sup>1</sup>, and W. Z. Lidicker, Jr.<sup>2</sup> <sup>1</sup>Department of Biology, Hawaii Pacific University, Honolulu, HI 96813; and <sup>2</sup>Museum of Vertebrate Zoology, University of California, Berkeley, CA 94720.

**9:45. 211.** Seasonal changes in diving behavior of northern elephant seals: implications

**8:45. 215\*.** Shared use of habitat and forage by bison and mule deer with a newly introduced population of bighorn sheep on Antelope Island, Utah. Melissa D. Hill, and W. Sue Fairbanks. Department of Biology, University of Nebraska at Omaha, Omaha, NE 68182.

**9:00. 216.** Forestry and historical population dynamics of Vancouver Island marmots (*Marmota vancouverensis*). Andrew Bryant. 108 Fifth Street, Nanaimo, British Columbia, V9R 1N2., Canada.

**9:15. 217.** Spacing behavior of the Siberian flying squirrel, *Pteromys volans*, in fragmented forest landscapes. Ilpo K. Hanski, and Vesa Selonen. Department of Ecology and Systematics, Division of Population Biology, University of Helsinki, Helsinki, Finland, FIN-00014.

**9:30. 218\*.** Roosting ecology of *Myotis septentrionalis* in northeast North America. Hugh Broders, and Graham Forbes. New Brunswick Cooperative Fish and Wildlife Research Unit, Department of Biology, University of New Brunswick, Fredericton, New Brunswick, E3B 6E1, Canada.

**9:45. 219\*.** Radio telemetry and geographical information systems to assess urban deer zoonoses.

and <sup>3</sup>Department of Ecology and Evolutionary Biology, University of Tennessee, Knoxville, TN.

**8:45. 223\*.** Bat ectoparasites and other symbiotic arthropods from the Trans-Pecos region of Texas. Christopher M. Ritzzi<sup>1</sup>, Michael T. Dixon<sup>2</sup>, and Jim V. Richerson<sup>3</sup>. <sup>1</sup>Department of Life Sciences, Indiana State University, Terre Haute, IN 47809; <sup>2</sup>Department of Biology, Texas Wesleyan University, Fort Worth, TX 76105; and <sup>3</sup>Department of Biology, Sul Ross State University, Alpine, TX 79830.

**9:00. 224\*.** Demography and habitat use of porcupines in a Texas pinyon-juniper woodland. Linda Ilse, and Eric C. Hellgren. Department of Zoology, Oklahoma State University, Stillwater, OK 74078.

**9:15. 225\*.** Demographics of a protected population of gray fox (*Urocyon cinereoargenteus*) in South Carolina. Julie L. Weston. Savannah River Ecology Laboratory, Aiken, SC 29802.

**9:30. 226.** A new color phase of *Ursus thibetanus*. Gary Galbreath, Sun H., and S. Montgomery. Biological Sciences, Northwestern University, Evanston, IL 60201.

**9:45. 227\*.** Dietary ecology of two species of mycophagous squirrel in southern New Brunswick. Shauna Blois, Karl Vernes, and Felix Baerlocher.

of changing body composition? Paul Webb<sup>1</sup>, Daniel E. Crocker<sup>2</sup>, Dorian S. Houser<sup>3</sup>, Daniel P. Costa<sup>4</sup>, and Burney J. Le Boeuf<sup>4</sup>. <sup>1</sup>Biology Department, Roger Williams University, Bristol, RI 02809; <sup>2</sup>Biology Department, Sonoma State University, Rhonert Park, CA 94928; <sup>3</sup>SPAWARSYSCEN, San Diego, CA 92152; and <sup>4</sup>Biology Department, University of California, Santa Cruz, CA 95064.

Karmen M. Hollis<sup>1</sup>, Richard E. Warner<sup>1</sup>, Chris Anchor<sup>2</sup>, James Chelsvig<sup>2</sup>, and Laura L. Hungerford<sup>3</sup>. <sup>1</sup>Department of Natural Resources and Environmental Sciences, University of Illinois, Urbana, IL 61801; <sup>2</sup>Forest Preserve District of Cook County, Elgin, IL 60120; and <sup>3</sup>Great Plains Veterinary Educational Center, University of Nebraska, Clay Center, NE 68933.

Department of Biology, Mount Allison University, Sackville, New Brunswick, E4L 1G7, Canada.

**10:00 am - 10:15 am** **Break, Adjacent to Strafford Room, Memorial Union Building**

**10:15 am - 12:15 pm** **Poster Session III, Strafford Room, Memorial Union Building**

**Community/Population Ecology, Evolution and Zoogeography**

- 229.** The raptor scourge: biomechanical indicators of avian predation pressure. Peter D. Weigl, Andrea B. Ward, and Rachel A. Conroy. Department of Biology, Wake Forest University, Winston-Salem, NC 27109.
- 229.** Biogeographical patterns of chiropterans in New Mexico. M. Scott Burt, William L. Gannon, and Timothy Sanchez-Brown. Mammalogy, Museum of Southwestern Biology, Department of Biology, University of New Mexico, Albuquerque, NM 87131.
- 230\*.** The effects of meadow voles (*Microtus pennsylvanicus*) and nitrogen on the biomass of a tallgrass prairie restoration. Christopher H. Kodani. Department of Biological Sciences, Northern Illinois University, DeKalb, IL 60115.
- 231.** The ecology of an outbreak: evidence for El Niño driven hantavirus outbreaks in the western hemisphere. T. Yates<sup>1</sup>, J. Mills<sup>2</sup>, C. Paramenter<sup>1</sup>, T. Ksiazek<sup>2</sup>, R. Paramenter<sup>1</sup>, C. Calisher<sup>3</sup>, S. Nichol<sup>2</sup>, K. Abbott<sup>5</sup>, J. Young<sup>2</sup>, M. Morrison<sup>4</sup>, B. Beaty<sup>3</sup>, A. Kuenzi<sup>4</sup>, J. Dunnun<sup>1</sup>, R. J. Baker<sup>6</sup>, and C. J. Peters<sup>2</sup>. <sup>1</sup>University of New Mexico, Albuquerque, New Mexico; <sup>2</sup>Centers for Disease Control and Prevention, Atlanta, Georgia; <sup>3</sup>Colorado State University, Fort Collins, Colorado; <sup>4</sup>University of Arizona, Tucson, Arizona; <sup>5</sup>Yavapai College, Prescott, Arizona; and <sup>6</sup>Texas Tech University, Lubbock, Texas.
- 232.** Effects of high white-tailed deer activity on a high white-footed mouse population in eastern mixed forest. David H. Byman. Penn State University, Worthington Scranton Campus, Dunmore, PA 18512.
- 233\*.** Competitive interactions of three small rodents in a changing landscape. Ginny Turner-Erfort. Department of Biological Sciences, University of Illinois at Chicago, Chicago, IL 60607-7060.

- 234.** Allegheny bats: a study of species richness, activity and distribution in Virginia. Tyson Walker<sup>1</sup>, John Pagels, PhD.<sup>2</sup>, Bill McShea<sup>3</sup>, and Rick Reynolds<sup>4</sup>. <sup>1</sup> Center for Environmental Studies, Life Sciences Building, Richmond, VA 23284-3050; <sup>2</sup>Department of Biology, Virginia Commonwealth University, Richmond, VA 23284-2012; <sup>3</sup>Conservation and Research Center, Smithsonian Institution, Front Royal, VA 22630; and <sup>4</sup>Virginia Department of Game and Inland Fisheries, Verona, VA 24482.
- 235.** Small mammal abundance along an urban-rural gradient. John Yunger<sup>1</sup>, and Lynda Randa<sup>2</sup>. <sup>1</sup>Environmental Biology, Governors State University, University Park, IL 60466; and <sup>2</sup>Natural Sciences Division, College of DuPage, Glen Ellyn, IL 60137.
- 236.** Advantageous use of small mammals in risk assessments. E. Blake Hart<sup>1</sup>, Barney W. Cornaby<sup>2</sup>, and Steven V. Mitz<sup>2</sup>. <sup>1</sup>Bechtel Savannah River, Inc., Building 730-2B, Aiken, SC 29808; and <sup>2</sup>Science Applications International Corp, 800 Oak Ridge Turnpike, Oak Ridge, TN 37830.
- 237.** Annual variation in southern flying squirrel reproduction. Susan C. Loeb. Southern Research Station, Department of Forest Resources, Clemson University, Clemson, SC 29634.
- 238.** Reproductive pattern of *Peromyscus melanotis* (Rodentia: Muridae) in the southernmost part of its geographic range. Alondra Castro-Campillo<sup>1</sup>, Arturo Salame-Méndez<sup>2</sup>, Rosa O. González-Robles<sup>3</sup>, Alberto Castillo<sup>3</sup>, and José Ramírez-Pulido<sup>1</sup>. <sup>1</sup>Department of Biology; <sup>2</sup>Department of Biology and Reproduction; <sup>3</sup>Department of Math, University of Autón, Metropolitana, Iztapalapa, Apdo, Postal 55-535, 09340, Mexico.
- 239\*.** Gray fox distribution in southern California: detecting the effects of intraguild predation by coyotes and bobcats. Veronica Farias<sup>1</sup>, Todd K. Fuller<sup>1</sup>, and Raymond M. Sauvajot<sup>2</sup>. <sup>1</sup>Department Natural Resources Conservation, University of Massachusetts, Amherst, MA 01003-4210; and <sup>2</sup>U.S. NPS, 401 W. Hillcrest Dr., Thousand Oaks, CA 91360.
- 240\*.** Translocation of Choctawatchee beach mice (*Peromyscus polionotus allophrys*) between disjunct populations. Jeffrey L. Van Zant, and Michael C. Wooten. Department of Biological Sciences, 331 Funchess Hall, Auburn University, AL 36849.
- 241.** The *Peromyscus* genetic stock center: new approaches to old problems with development of a molecular map. Michael J. Dewey, Wallace D. Dawson, and Janet P. Crossland. Department of Biological Sciences, University of South Carolina, Cola, SC 29208.
- 242\*.** Male parental investment, interspecific hybridization, and the process of species formation in eutherian mammals. Raymond Pierotti, David S. Pennock, and Corey K. Welch. Division of Biological Sciences, University of Kansas, Lawrence, KS 66045.
- 243\*.** A preliminary analysis of genetic variation among North American long-eared *Myotis* species. Tanya Dewey. Museum of Zoology, University of Michigan, Ann Arbor, MI 48109-1079.
- 244\*.** The utility of the gene encoding the Interphotoreceptor Retinoid Binding Protein (IRBP) for phylogenetic analyses of oryzomyine rodents (Rodentia: Muridae). Marcelo Weksler. Department of Mammalogy, American Museum of Natural History, New York, NY 10024-5192.

245. A comparison of MHC variability within and among species of small felids. Meghan Smith, and Susan Hoffman. Department of Zoology, Miami University, Oxford, OH 45056.
246. Physical theory and the origin of flight, with particular reference to bats. Charles A. Long<sup>1</sup>, Guoping Zhang<sup>2</sup>, Thomas F. George<sup>3</sup>, and Claudine Long<sup>1</sup>. <sup>1</sup>Department of Biology and Museum of Natural History, University of Wisconsin—Stevens Point; <sup>2</sup>Department of Physics and Astronomy, University of Tennessee, Knoxville, TN; and <sup>3</sup>Department of Physics and Chemistry and Office of the Chancellor, University of Wisconsin—Stevens Point.
- 247\*. Getting the facts straight: the *Sturnira ludovici* complex and its allied species (Chiroptera: Phyllostomidae). Carlos Iudica, Norris H. Williams, W. Mark Whitten, and John F. Eisenberg. FLMNH, University of Florida, Gainesville, FL 32611-7800.
248. Habitat characteristics of foraging bats in bottomland forests of southern Illinois. Steve K. Carroll, Tim C. Carter, and George A. Feldhamer. Department of Zoology, Southern Illinois University, Carbondale, IL 62901-6501.
- 249\*. Phylogeography of mouse-like hamsters, *Calomyscus* sp., based on cytochrome b sequence data. Ryan W. Norris<sup>1</sup>, Charles A. Woods<sup>2</sup>, and C. William Kilpatrick<sup>1</sup>. <sup>1</sup>Department of Biology, University of Vermont, Burlington, VT 05405; and <sup>2</sup>Florida Museum of Natural History, University of Florida, Gainesville, FL.
250. Hooded seal (*Cystophora cristata*) records from the southern Gulf of Maine. David E. Harris, PhD<sup>1</sup>, Barbara Lelli<sup>2</sup>, and Greg Jakush<sup>2</sup>. <sup>1</sup>Lewiston-Auburn College, Lewiston, ME 04240; and <sup>2</sup>Marine Animal Lifeline.
251. Chromosomes of Philippine murid rodents. Eric Rickart. Utah Museum of Natural History, University of Utah, Salt Lake City, UT 84112.
252. Identifying flying squirrels in the fossil record. Lindsay Pappas, Richard W. Thorington Jr., and Diane Pitassy. Smithsonian Institution, NHB 390 MRC 108, Washington, DC 22314-0108.
- 253\*. Basicranial morphology and phylogenetic implications associated with the diversity of the genus *Monodelphis* (Marsupialia: Didelphidae). Vera C.S. Vidigal<sup>1,2</sup>, and Leandro de Oliveira Salles<sup>1</sup>. <sup>1</sup>Lab. Sistemática & Evolução de Mamíferos, Depto. Vertebrados (Mastozoologia), Museu Nacional, Rio de Janeiro; and <sup>2</sup>Department Biologia Animal-Vertebrats-Universitat de Barcelona, C/ Roger de Flor 288 - 5è 1a, Barcelona, Catalunya, Spain.
254. The postcranial morphology of tree shrews (Scandentia: Tupaiidae): functional morphology and taxonomic implications. Eric J. Sargis. City University of New York and New York Consortium in Evolutionary Primatology, New York, NY.

**12 Noon - 1:30 pm**

**Lunch, Philbrook Dining Hall**

**1:15 pm – 3:00 pm**

**Concurrent Technical Session 7**

Concurrent Technical Session 7A  
Iddles Auditorium

Concurrent Technical Session 7B  
Spaulding Auditorium

Concurrent Technical Session 7C  
Horton Auditorium

Zoogeography and Community Ecology Chairperson: Alicia Linzey	Population Ecology III Chairperson: John Kie	Evolution/Genetics II Chairperson: Steve Pugh
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**1:15. 255.** Patterns of predation on tree seeds and seedlings by east African small mammals. Felicia Keesing<sup>1</sup>, R.S. Ostfeld<sup>1</sup>, K. Marsee<sup>2</sup>, and J. Ponoto<sup>2</sup>. <sup>1</sup>Institute of Ecosystem Studies, Millbrook, NY 12545; and <sup>2</sup>Mpala Research Centre, Nanyuki, Kenya.

**1:30. 256.** The effect of hillslope angle on pocket gopher (*Thomomys bottae*) burrow geometry. O.J. Reichman<sup>1</sup>, Eric W. Seabloom<sup>1</sup>, and E. J. Gabet<sup>2</sup>. <sup>1</sup>National Center for Ecological Analysis and Synthesis, University of California, Santa Barbara, CA 93101-5504; and <sup>2</sup>Department of Geology, University of California, Santa Barbara, CA 93106-5504.

**1:45. 257.** Predators, prey, and habitat associations in the Inland Atlantic forest of Paraguay: a new paradigm. Gerald Zuercher<sup>1</sup>, Philip S. Gipson<sup>1</sup>, and Kim Hill<sup>2</sup>. <sup>1</sup>Kansas Cooperative Fish & Wildlife Research Unit, Division of Biology, Kansas State University, Manhattan, Kansas 66506; and <sup>2</sup>Department of Anthropology, University of New Mexico, Albuquerque, NM 87131.

**1:15. 262.** Population trends of wintering bats in Vermont. Stephen Trombulak<sup>1</sup>, Philip E. Higuera<sup>2</sup>, and Marc DesMeules<sup>3</sup>. <sup>1</sup>Department of Biology, Middlebury College, Middlebury, VT 05753; <sup>2</sup>College of Forest Resources, University of Washington, Seattle, WA 98195; and <sup>3</sup> Box 266, Route 194, Alna, ME 04535.

**1:30. 263\*.** Effects of habitat features and disturbance on abandonment of breeding areas by South American fur seals. Monica Sommer<sup>1</sup>, Daryl J. Boness<sup>2</sup>, and Stephen J. Insley<sup>2</sup>. <sup>1</sup>Department of Zoology, University of New Hampshire, Durham, NH 03824; and <sup>2</sup>Department of Zoological Research, National Zoological Park, Smithsonian Institution, Washington, DC 20008.

**1:45. 264.** Effects of grazing by bison and cattle on small mammals in tallgrass prairie. Raymond S. Matlack, Donald W. Kaufman and Glennis A. Kaufman. Division of Biology, Kansas State University, Manhattan, KS 66506.

**1:15. 269.** Development of a multiplexed fluorescent-labeled DNA microsatellite panel for genetic exclusion and population inference in white-tailed deer. J.D. Anderson<sup>1</sup>, R.A. Gonzales<sup>2</sup>, K.L. Gee<sup>2</sup>, L.K. Skow<sup>3</sup>, R.L. Gallagher<sup>1</sup>, D.A. Honeycutt<sup>3</sup>, R.W. DeYoung<sup>4</sup>, and R.L. Honeycutt<sup>1</sup>. <sup>1</sup>Department of Wildlife and Fisheries Sciences, Texas A&M University, College Station, TX 77843-2258, USA; <sup>2</sup>Samuel Roberts Noble Foundation, Ardmore, OK, USA; <sup>3</sup>Department of Veterinary Anatomy and Public Health, College of Veterinary Medicine, Texas A&M University, College Station, TX 77843, USA; <sup>4</sup>Department of Wildlife and Fisheries Sciences, Mississippi State University, Mississippi State, MS 39762.

**1:30. 270.** Group dispersal, predation, competition and extinction in granary house mouse populations. Paul K. Anderson. Biological Sciences, University of Calgary, Calgary, Alberta, T2N 1N4., Canada.

**1:45. 271.** Rodent communal nesting: a review of old and new evolutionary explanations. Loren Hayes. Department of Biology, Bates College, Lewiston, ME 04240.

**2:00. 258\*.** Higher incidence of botfly (*Cuterebra* sp.) parasitism of white-footed mice (*Peromyscus leucopus*) at woodland edges. Mosheh Wolf, and George Batzli. Shelford Vivarium, Champaign, IL 61820.

**2:15. 259\*.** Predicting patch occurrence across the geographic ranges of four small mammals in Washington. Sacha Vignieri. Department of Zoology, University of Washington, Seattle, WA 98195.

**2:30. 260.** Individual variation in food-hoarding behavior of kangaroo rats and pocket mice. Stephen H. Jenkins<sup>1</sup>, William S. Longland<sup>2</sup>, and Amy M. Barber<sup>3</sup>. <sup>1</sup>Department of Biology, University of Nevada, Reno, NV 89557; <sup>2</sup>USDA Agricultural Research Service, University of Nevada, Reno, NV 89512; and <sup>3</sup>Program in Ecology, Evolution, and Conservation Biology, University of Nevada, Reno, NV 89557.

**2:00. 265\*.** Survival, density, and winter diet of Appalachian cottontails, *Sylvilagus obscurus*, in West Virginia. Alana C. Sucke, and Ronald E. Barry. Department of Biology, Frostburg State University, Frostburg, MD 21532.

**2:15. 266.** Rabies among non-reservoir, carnivorous mammals in the United states, 1960-1997. John W. Krebs, Charles E. Rupprecht, and James E. Childs. Viral and Rickettsial Zoonoses Branch, Centers for Disease Control and Prevention, Atlanta, GA 30333.

**2:00. 272.** Mane variation in lions (*Panthera leo*) of Tsavo National Parks, Kenya. Roland Kays<sup>1</sup>, Bruce Patterson<sup>2</sup>, and Tom Gnoske<sup>2</sup>. <sup>1</sup>New York State Museum, Albany, NY 12230; and <sup>2</sup>Department of Zoology, The Field Museum, Chicago, IL 60605.

**2:15. 273.** Spatial partitioning of morphological and genetic variance in cotton mice. Michael Smith<sup>1</sup>, James L. Boone<sup>2</sup>, James M. Novak<sup>1</sup>, and Joshua Laerm (deceased)<sup>3</sup>. <sup>1</sup>Savannah River Ecology Lab, Drawer E, Aiken, SC 29802; <sup>2</sup>Science Applications International Corporation, Las Vegas, NV 89144; and <sup>3</sup>Georgia Museum of Natural History, University of Georgia, Athens, GA 30602.

**2:30. 274\*.** Ecomorphology of a guild of rhinolophoid bats from Malaysia - evidence for competitive structuring. Tigga Kingston<sup>1</sup>, Gareth Jones<sup>2</sup>, Zubaid Akbar<sup>3</sup>, and Thomas H. Kunz<sup>1</sup>. <sup>1</sup>Department of Biology, Boston University, Boston, MA 02215; <sup>2</sup>School of Biological Sciences, University of Bristol, Bristol, BS8 1UG, U.K.; and <sup>3</sup>Jabatan Zoologi, Fakulti Sains Hayat, Universiti Kebangsaan Malaysia, 43600 Bangi, Selangor, Malaysia.

**ATTENTION TO ALL ATTENDEES FLYING INTO BOSTON  
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