

13th Symposium on The Natural History of Lower Tennessee
and Cumberland River Valleys

**Taking the Long View: The Role of Long-term Monitoring in
Understanding Ecosystem Impacts of Global Climate Change**
plus

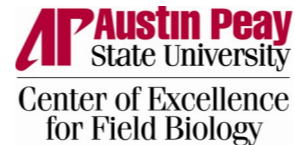
other topics in zoology, botany and environmental science
to be held at Brandon Spring Group Camp, Land Between The Lakes
April 3 and 4, 2009

Invited Papers: (1:30—5 p.m., Friday)

Multidisciplinary environmental sciences presentations.

Contributed Papers: (8 a.m.—noon, Saturday)

Presentations on the natural history and related topics of Tennessee,
Kentucky and contiguous areas.

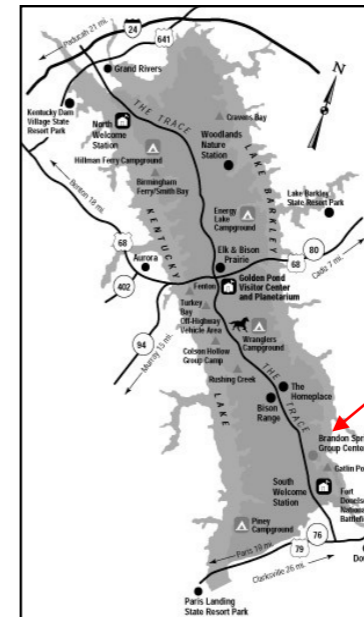


USDA FOREST SERVICE
LAND BETWEEN THE LAKES

DIRECTIONS TO
LAND BETWEEN THE LAKES



DIRECTIONS TO
BRANDON SPRING GROUP CAMP AT
LAND BETWEEN THE LAKES



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The Center for Field Biology
P.O. Box 4718
Austin Peay State University
Clarksville, TN 37044

Saturday, April 4, 2009

PROGRAM

Friday, April 3, 2009

**BRANDON SPRING GROUP CAMP
ACTIVITIES BUILDING, LBL**

1:30 p.m. Welcome
Steven W. Hamilton, Director
The Center for Field Biology, APSU

Howard Whiteman, Director
Watershed Studies Institute, MSU

Bill Lisowski
Area Supervisor
LBL National Recreation Area

INVITED PAPERS SESSION

Steven W. Hamilton,
Center for Field Biology, APSU
Moderator

2 p.m. **Northward Shifts in the Abundance of Tennessee and Kentucky Birds in Early Winter: A Response to Warmer Winter Temperatures?**
Gregory S. Butcher & Daniel K. Niven
National Audubon Society,
Washington, DC

2:45 p.m. Break

3:15 p.m. **How Does Natural History Become Science, and What Can It Tell Us About Climate Change?**
David Inouye
University of Maryland, College Park, MD

4 p.m. **Lakes, Reservoirs, and Their Landscapes as Environmental Sentinels: The Value of Real-time and Long-term Monitoring**
David S. White and Susan P. Hendricks
Hancock Biological Station and
Murray State University, Murray, KY

5 p.m. Dinner

7 p.m. TBA

CONTRIBUTED PAPERS, SESSION I

Botany (Activities Building)

Moderator: L. Dwayne Estes, Department of Biology, APSU

7:55 a.m. Opening Remarks

8 a.m. **Twenty Years Change in Compositional-Stability of Forest Communities at Land Between The Lakes, Kentucky and Tennessee.** Jonathan McQuaide and James Fralish, Southern Illinois University.

8:15 a.m. **Predicting the Spatial Distribution of an Invasive Plant, *Lonicera japonica*, Based on Species Occurrence Data from Two Watersheds in Western Kentucky and Tennessee.** Dongjiao Liu, Murray State University.

8:30 a.m. **Evaluating Backyard Model Designs for Sustainable Agriculture in Sedalia, Kentucky.** Dianna Johnson and I. P. Handayani, Murray State University.

8:45 a.m. **Water-Use Efficiency in *Lonicera maackii* and *Symphoricarpos orbiculatus* in Response to Increasing Light and CO₂.** April Tummins and A. Darlen Panvini, Belmont University.

9 a.m. **Using Molecular Markers to Study the Patterns of Genetic Diversity of an Invasive Plant, Alligator Weed (*Alternanthera philoxeroides*).** Hao Jiang, Murray State University.

9:15 a.m. **Grassland Soil Properties in Calloway County, Kentucky.** Robert Tokosh and I. P. Handayani, Murray State University.

9:30 a.m. **Evaluating Riparian Soil Properties in Panther Creek, Tennessee and Ledbetter Creek, Kentucky.** Robert Tokosh and I. P. Handayani, Murray State University.

9:45 a.m. **Characteristics of Several East Tennessee Pine-dominated Forest Stands.** Hal DeSelm, University of Tennessee at Knoxville.

10 a.m. Break

10:30 a.m. **The Woody Flora of Land Between The Lakes, Kentucky and Tennessee—a 33-Year Revision.** Edward W. Chester, Austin Peay State University.

10:45 a.m. **A New Species of *Polymnia* (Asteraceae) from Tennessee.** Dwayne Estes, Austin Peay State University.

11 a.m. **A New Species of *Carex* section *Phacocystis* (Cyperaceae) from Great Smoky Mountains National Park, North Carolina and Tennessee.** Dwayne Estes, Austin Peay State University.

11:15 a.m. **Site Affinities of *Castanea dentata* at Mammoth Cave National Park.** Joe Schibig, Volunteer State Community College.

11:30 a.m. **Taxonomy, Ecology, and Distribution of Unusual Populations of *Lysimachia hybrida* (Myrsinaceae) from Tennessee and Alabama.** Tianita D. Duke and Dwayne Estes, Austin Peay State University.

11:45 a.m. ***Baccharis halimifolia* (Asteraceae), a Potentially Invasive Shrub New to Kentucky with an Update on the Expansion of the Species into Northern Tennessee.** Matt S. Bruton and Dwayne Estes, Austin Peay State University.

noon ***Vitis rupestris* (Vitaceae) Rediscovered in Tennessee.** Sunny Hart and Dwayne Estes, Austin Peay State University.

12:15 p.m. Adjour – Lunch

CONTRIBUTED PAPERS, SESSION II

Aquatic Biology and Zoology (Activities Building)

Moderator: Andrew N. Barrass, Center for Field Biology, APSU

7:55 a.m. Opening Remarks

8 a.m. **Global Environmental Pollution Trends and Effects on Wildlife and Human Health.** Bommanna Loganathan, Murray State University.

8:15 a.m. **Bioassessment of Streams in the New River Watershed of Eastern Tennessee Impacted by Coal Mining.** Amanda L. Whitley and Joseph R. Schiller, Austin Peay State University.

8:30 a.m. **Levels of Endocrine Disrupting Chemical Pollutants in Wastewater and Riverwater Samples.** Subhadra Vemu, Murray State University.

8:45 a.m. **Assessing the Biological Integrity and Fish Assemblages of Two Watersheds Located Within a Karst Agricultural Plain, Logan County, Kentucky.** Dereck Eison and Andrew N. Barrass, Austin Peay State University.

9 a.m. **Evaluation of Mircrosatellites in *Ambystoma tigrinum nebulosum*.** Sarah Thomason and Sarah Farmer, Murray State University.

9:15 a.m. **Seasonal Activity and Movements of Western Cottonmouths (*Agkistrodon piscivorus leucostoma*) Along the Cumberland River Bicentennial Trail, Ashland City, Tennessee.** Nathalie Smith and A. Floyd Scott, Austin Peay State University.

9:30 a.m. **Differential Use of Cave Chambers by Eastern Pipistrelle, *Perimyotis subflavus*, During Torpor and Prior to Maternal Roost Formation.** R. Seth McCormick and Andrew N. Barrass, Austin Peay State University.

9:45 a.m. **Feral Cats as a Primary Predator of Bat Species.** Morgan E. Kurz, R. Seth McCormick and Andrew N. Barrass, Austin Peay State University.

10 a.m. Break

10:30 a.m. **Recent Decline in Carolina Chickadee Clutch Size: A Response to Global Warming?** T. David Pitts, University of Tennessee at Martin.

10:45 a.m. **Habitat Choice in Fresh Water Meso-Crustacea (Amphipoda & Isopoda).** Craig W. Emerson and James E. Alexander, University of Louisville.

11 a.m. **Macroinvertebrate Bioassessment of Pleasant Grove Creek, Logan County, Kentucky.** Joseph R. Schiller, Steven W. Hamilton, Amanda L. Whitley, and Rachel Peacher, Austin Peay State University.

11:15 a.m. **Seasonal Butterfly Surveys at Land Between The Lakes.** Rita Venable, Tennessee State Parks.

11:30 a.m. **Macroinvertebrate Diversity and Water Quality at a Trout Hatchery Stream Entering the Obey River, Clay County, Tennessee.** Andrew E. Wicke, C. Steven Murphree and A. Darlene Panvini, Belmont University.

11:45 a.m. **Two First State Record Odonates for Tennessee: *Enallagma durum*, and *Somatochlora elongate*.** Richard Connors, Tennessee State Parks.

noon **Phycological Analysis of the West Fork of the Red River in North-central Tennessee.** Jefferson G. Lebkuecher, Austin Peay State University.

12:15 p.m. Adjour—Lunch