**0600-0800 BREAKFAST** (Food will be served in the Mezzanine and limited seating provided in Great Smoky)

Enjoy a hearty breakfast and connect with others before we start the Symposium!

#### **0800-0930** Welcome, Introductions, and Special Music (Salon CDE)

Stacy Clark (Lead Symposium Coordinator), Research Forester, Southern Research Station, USDA Forest Service, Knoxville, TN, USA

Don Hodges (Symposium Host), Director, School of Natural Resources, The University of Tennessee, Knoxville, TN, USA

Toral Patel-Weynand (Symposium Host), the Director, Southern Research Station, USDA Forest Service, Asheville, NC, USA

Tommy Cabe, Tribal Forest Resource Liaison, Natural Resources Program, Agricultural and Natural Resources Department, Eastern Band of Cherokee Indians, Cherokee, NC, USA

Heather Slayton, State Forester, Division of Forestry, Tennessee Department of Agriculture in Nashville, TN, USA

Jason Maxedon, Executive Director, Tennessee Wildlife Resources Agency, Nashville, TN, USA Special Music by RB Morris, Greg Horne, Jeff Barbra and Sarah Pirkle, and Jay Clark

#### 0930-1000 PLENARY SESSION (Salon CDE)

Moderator: Stacy Clark, Southern Research Station, USDA Forest Service, Knoxville, TN, USA
0930 The world of oaks - diversity, cultural history, and conservation

<u>Timothy M. Boland</u>—Timothy M. Boland, The Polly Hill Arboretum, West Tisbury,
MA, USA

**1000-1030 BREAK** (Mezzanine)

#### 1030-1200 PLENARY SESSION cont. (Salon CDE)

Moderator: Stacy Clark, Southern Research Station, USDA Forest Service, Knoxville, TN, USA

- 1030 Challenges for management of amazing American *Quercus* communities under threat and rich *Quercus* forests in Europe
  - <u>Callie Schweitzer</u> and <u>Magnus Löf</u>—Callie Schweitzer, Southern Research Station, USDA Forest Service, Huntsville, AL, USA; Magnus Löf, Swedish University of Agricultural Sciences, Southern Swedish Forest Research Centre, Lomma, Sweden
- 1100 How can oaks survive and thrive in future climates

  Victoria Sork—Victoria Sork, Department of Ecology and Evolutionary Biology and the Institute of the Environment and Sustainability, University of California Los Angeles in Los Angeles, CA, USA
- 1130 The past, present and future of white oak in North America: Opportunities to grow and stabilize the hardwood market

  <u>Dallin Brooks</u>—Dallin Brooks, National Hardwood Lumber Association, Memphis, TN, USA

**1200-1330 LUNCH** (on your own)

#### 1330-1400 PLENARY SESSION cont. (Salon CDE)

Moderator: Callie Schweitzer, Southern Research Station, USDA Forest Service, Huntsville, AL, USA

1330 Why White Oak? (Salon CDE)

Ken Smith—Ken Smith, Brown-Forman, Cross Lanes, WV, USA

### **1405-1505 CONCURRENT SESSIONS 1, 2, AND 3**

#### 1405-1505 Concurrent Session 1. Growth and stand development (Sequoyah III)

Moderator: Anna Jensen, Department of Forestry and Wood Technology, Linnaeus University, Växjö, Sweden

- 1405 Quercus rubra pure and mixed plantations performance growing in a non-native habitat
  - <u>Verónica Loewe-Muñoz</u>, Rodrigo del Río, Claudia Delard, Luis Barrales, and Mónica Balzarini—Verónica Loewe-Muñoz, Chilean Forest Institute and Centro Nacional de Excelencia para la Industria de la Madera (CENAMAD), Pontificia Universidad Católica de Chile, Santiago, Chile
- 1425 Upland oak size-density relationships: A modern examination of Gingrich (1967) stocking
  - John M. Lhotka and <u>Lance A. Vickers</u>—Lance A. Vickers, Department of Forestry and Natural Resources, University of Kentucky, Lexington, KY, USA
- 1445 Evaluating fifteen years of experimental management treatments in Southern Appalachian forests of North Carolina

Melanie K. Taylor, Donald L. Hagan, T. Adam Coates, Julia A. DeFeo, Mac A. Callaham Jr., Helen H. Mohr, Thomas A. Waldrop, and Nina Wurzburger—Melanie K. Taylor, Southern Research Station, USDA Forest Service, Athens, GA, USA

#### **1405-1505** Concurrent Session 2. Ecological dynamics (Salon CDE)

Moderator: Michael Saunders, Department of Forestry and Natural Resources, Purdue University, West Lafayette, IN, USA

- 1405 Masting dynamics of bottomland oaks in the Mississippi Alluvial Valley, USA <a href="Emile S. Gardiner">Emile S. Gardiner</a>, Southern Research Station, USDA Forest Service, Stoneville, MS, USA
- 1425 **Establishment of oaks after wildfire depends on fire intensity**<u>Jennifer Franklin</u> and Matthew Aldrovandi—Jennifer Franklin, School of Natural Resources, The University of Tennessee, Knoxville, TN, USA
- 1445 Prescribed fire improves red oak regeneration in northern New Hampshire
  Khanh Ton, Matt Vadeboncoeur, Nat Cleavitt, Abigail Powell, and Heidi Asbjornsen—
  Khanh Ton, The University of New Hampshire, College of Life Sciences and
  Agriculture, Durham, NH, USA

#### 1405-1445 Concurrent Session 3. Woodland and forest restoration (Hiwassee)

Moderator: Yana Valachovic, University of California Cooperative Extension, Berkely, CA, USA

- 1405 Land restoration after a big fire event: oaks versus pines
  - M.R. Mosquera-Losada, J.J. Santiago-Freijanes, F.J. Rodríguez- Rigueiro, A. Rigueiro-Rodríguez, A. Couso-Viana, and Ferreiro Domínguez Nuria—M.R. Mosquera-Losada Department of Crop Production and Project Engineering, Santiago de Compostela University, A Coruña, Spain
- 1425 Evaluation of common silvicultural practices on the survival and growth of willow oak (*Quercus phellos*) on old field agricultural sites

  Jason Steele, W. Michael Aust, and John Seiler—Jason Steele, Freese and Nichols, Inc., Winston-Salem, NC, USA

### **1505-1530 BREAK** (Mezzanine)

## 1530-1730 CONCURRENT SESSIONS 1 (cont.), 4, and 5; REGEN MODEL TRAINING

## 1530-1630 Concurrent Session 1 (cont.). Growth and stand development (Sequoyah III)

Moderator: David Buckley, School of Natural Resources, The University of Tennessee, Knoxville, TN, USA

- 1530 Adaptive strategies of white oak (*Quercus alba*) in response to climate change:
  Insights from a forty-year study of growth and phenology
  Austin M. Thomas, Mark V. Coggeshall, Phillip A. O'Connor, and C. Dana Nelson—
  Austin M. Thomas, Southern Research Station, USDA Forest Service, Lexington, KY, USA
- 1550 Forest management of sessile and pedunculate oak in Germany from coppice forests to climate-smart forests for diverse ecosystem services

  Peter Spathelf, Jens Schröder, and Hiltrud Bontrup—Peter Spathelf, Eberswalde University for Sustainable Development, Eberswalde, Germany
- 1610 Cherrybark oak (*Quercus pagoda*) crown profiles after ten years of growth in mixed species stands of three spacings in the Cumberland Mountains of Morgan County, Tennessee
  - <u>Martin Schubert</u>, Wayne Clatterbuck, and John Zobel—Martin Schubert Forest Resources AgResearch and Education Center, University of Tennessee in Oliver Springs, TN, USA

## 1630-1730 Special Workshop: REGEN Model for Hardwood Forests in Eastern North America (Sequoyah III)

Leader: <u>Tara L. Keyser</u> — Tara L. Keyser is a Center Director with the Southern Research Station, USDA Forest Service in Asheville, NC, USA

#### **LEADER CHANGE:**

This workshop will be led by Bernard Isaacson—Bernard Isaacson is a Research Ecologist with the Southern Research Station, USDA Forest Service in Bordentown, New Jersey, USA

## **1530-1730** Concurrent Session 4. Genetic and evolutionary foundations (Salon CDE)

Moderator: Emile Gardiner, Southern Research Station, USDA Forest Service, Stoneville, MS, USA

- 1530 The evolution of freezing tolerance in oaks (*Quercus*)
  Clarissa G. Fontes, Frank Hoerner, Andrew Hipp, Jose Eduardo Meireles, and
  <u>Jeannine Cavender-Bares</u>—Jeannine Cavender-Bares, Department of Ecology,
  Evolution and Behavior, University of Minnesota, St Paul, MN, USA
- 1550 Genetic introgression and hybridization among white oak species: Developing approaches to management that embrace oaks' complex genetic histories

  <u>Drew A. Larson</u>, Margaret E. Staton, Andrew L. Hipp, Seth DeBolt, Dana Nelson, and Matthew W. Hahn—Drew A. Larson, Department of Biology, Indiana University, Bloomington, IN, USA
- 1610 Promoting white oak (*Quercus alba*) sustainability through a range-wide tree improvement program in the eastern United States

  Laura E. DeWald, Zachary Hackworth, <u>Jeffrey Stringer</u>, and John Lhotka—Jeffrey Stringer, Department of Forestry and Natural Resources, University of Kentucky, Lexington, KY, USA
- 1630 Spring bud phenology of Quercus alba seedlings planted in a common garden in southern Vermont, USA

  John Butnor, Paula M. Murakami, and Laura DeWald—John Butnor, Northern

Research Station, USDA Forest Service, Burlington, VT, USA

- Population genetic survey of an Old World oak, Quercus cerris, as a starting point for the development of adaptive oak management in Central Europe

  Botond B. Lados, László Nagy, Attila Benke, Csilla É. Molnár, Zoltán A. Köbölkuti, Attila Borovics, and Klára Cseke—Botond B. Lados, Department of Tree Breeding, University of Sopron, Forest Research Institute, Sárvár, Hungary
- 1710 A genetic conservation program for the endangered mapleleaf oak (*Quercus acerifolia*) in the southeastern United States

  Mark V. Coggeshall, Ryan Russell, Amy Byrne, and Marcus V. Warwell—Mark V. Coggeshall, Northern Research Station, USDA Forest Service in Columbia, MO, USA

## 1530-1730 Concurrent Session 5. Form and function under environmental stress (Hiwassee)

Moderator: Verónica Loewe-Muñoz, Chilean Forest Institute and Centro Nacional de Excelencia para la Industria de la Madera, Pontificia Universidad Católica de Chile, Santiago, Chile

1530 Local acclimation of holm oaks is driven by early-life plastic trait adjustments

Raquel Juan-Ovejero, <u>Jorge Castro</u>, Francisco B. Navarro, Domingo Alcaraz-Segura, Alexandro A. Leverkus, and José I. Querejeta—Jorge Castro, Department of Ecology, University of Granada, Granada, Spain

- 1550 Effect of revegetation method (direct seeding versus outplanting) on holm oak root architecture
  - Raquel Juan-Ovejero, <u>Jorge Castro</u>, Francisco B. Navarro, E. Rodríguez-Caballero, M. Reyes-Martínez, Domingo Alcaraz-Segura, M.N. Jiménez, and Alexandro A. Leverkus—Jorge Castro, Department of Ecology, University of Granada in Granada, Spain
- 1610 Effects of dormant season flooding on pin oak (*Quercus palustris*) root growth

  <u>Ian Vaughan</u>, Benjamin Knapp, Emile S. Gardiner, John Kabrick, and Morgan Davis

  Ian Vaughan, National Forests in Mississippi, USDA Forest Service, Jackson, MS, USA
- 1630 Shedding light on oak dominance in southern Appalachian forests under modern nitrogen conditions
  - <u>Sarah Ottinger</u>, Chelcy Miniat, Joel Scott, and Nina Wurzburger—Sarah Ottinger, Tennessee Valley Authority, Knoxville, TN, USA
- 1650 Exploring the effects of fire return intervals on resource-use strategies of pyrophytic and mesophytic species
  - <u>Arthur Lamounier Moura</u>, Heather D. Alexander, John L. Willis, Zhaofei Fan, Michael J. Aspinwall, Callie J. Schweitzer, and Kevin M. Robertson—Arthur Lamounier Moura College of Forestry, Wildlife and Environment, Auburn University, Auburn, AL, USA
- 1710 Exploring leaf litter flammability in eastern U.S. oak and pine forests: Implications for fire ecology
  - Monika Rawat, Tamara Milton, Rachel Nation, John Willis, Stephen Brewer, Callie Schweitzer, and Heather D. Alexander—Monika Rawat, Forest and Fire Ecology Lab, College of Forestry, Wildlife and Environment, Auburn University, Auburn, AL, USA

**1800-2030 WELCOME RECEPTION and SUPPER** (The University of Tennessee, Agriculture Campus; 2431 Joe Johnson Dr., Agriculture and Natural Resources Bldg., Knoxville, TN 37996-4563)

The welcome reception will be held at the new Agriculture and Natural Resources Building on the University of Tennessee Agriculture Campus. A traditional southern BBQ supper will be served. Attendees will be provided a limited number of drinks (beer, wine, or cocktail). A cash bar will be available for attendees who wish to purchase additional drinks (credit cards accepted—bring cash for tips and have your ID—age verification for all alcohol purchases is Tennessee law). Vegan and Vegetarian options will be available. All attendees are welcome to use the free shuttle bus. Please meet at the pre-arranged shuttle area (location will be provided to you at the Symposium) and load buses (for free) that will shuttle you to the Agriculture Campus. Shuttles will begin at 1745. Buses will return attendees to the Hilton around 2030. If you plan to drive to the venue, please request a parking pass at the registration desk. Vehicles without a parking pass will receive a ticket and fine. Uber and Lift are also available, and it is not too far of a walk (1.8 miles/2.9 km).

**0600-0800 BREAKFAST** (Food will be served in the Mezzanine and limited seating provided in Great Smoky)

Enjoy a hearty breakfast and connect with others before you start your day!

#### **0800-1000 PLENARY SESSION** (Salon CDE)

Moderator: Callie Schweitzer, Southern Research Station, USDA Forest Service, Huntsville, AL, USA

- 0800 Mesophication of oak landscapes: mechanisms and management

  Heather D. Alexander, Josue Chevez Sahona, Brice Hanberry, Tamara Milton, Arthur
  Lamounier Moura, Monika Rawat, Courtney Siegert, and John Willis—Heather D.

  Alexander, College of Forestry, Wildlife and Environment, Auburn University,
  Auburn, AL, USA
- 0830 Fire and the oak regeneration process

  <u>Daniel C. Dey</u>—Daniel C. Dey, Northern Research Station, USDA Forest Service,
  Columbia, MO, USA
- 0900 **The White Oak Initiative**<u>Jason Meyer</u>—Jason Meyer, The White Oak Initiative, Washington, DC, USA
- 0930 Fifty years of observations on oak (*Quercus*) tree improvement and artificial regeneration programs in eastern North America

  Scott E. Schlarbaum—Scott E. Schlarbaum, School of Natural Resources, The University of Tennessee, Knoxville, TN, USA

**1000-1030 BREAK** (Mezzanine)

### 1030-1150 CONCURRENT SESSIONS 5 (cont.), 6, and 7

## 1030-1150 Concurrent Session 5 (cont.). Form and function under environmental stress (Salon CDE)

Moderator: Anastasia Pantera, Department of Forestry and Natural Environment Management, Agricultural University of Athens, Greece

Sensitivity of native (Quercus robur) and exotic (Quercus rubra) oak trees to periodic drought events in a warming city of southwest Germany
Lisa Spoden, Georgios Skiadaresis, Julia Schwarz, Jürgen Bauhus, and Somidh Saha—Somidh Saha, Research Group Sylvanus, Institute for Technology Assessment and Systems Analysis, Karlsruhe Institute of Technology in Karlsruhe, Germany

1050 Ecohydrological responses of *Quercus rubra* and *Q. velutina* to seven years of experimental drought

Matthew A. Vadeboncoeur, Samuel Zuckerman, Mauro Brum, Shersingh Joseph Tumber Davila, and Heidi Asbjornsen—Matthew A. Vadeboncoeur, Earth Systems Research Center, University of New Hampshire, Durham, NH, USA

1110 Intraspecific variation in growth, photosynthetic and functional traits in *Quercus* robur in relation to drought and vapor pressure deficit

<u>Marzena Niemczyk</u>, Piotr Wrzesiński, Tomasz Wojda, and Szymon Jastrzębowski— Marzena Niemczyk, Department of Silviculture and Forest Tree Genetics, Forest Research Institute in Raszyn, Poland

## 1030-1110 Concurrent Session 6. Informing management through predictions (Sequoyah III)

Moderator: Kevin Hoyt, Center Director, University of Tennessee Forest Resources AgResearch and Education Center, Oak Ridge, TN, USA

1030 White oak population trends – distilling regeneration, recruitment, growth, and drain concerns across the range

<u>Lance A. Vickers</u>, Benjamin O. Knapp, John M. Lhotka, Jeffery W. Stringer, Thomas C. Goff, and Randall S. Morin—Lance A. Vickers, Department of Forestry and Natural Resources, University of Kentucky, Lexington, KY, USA

1050 Site factors, disturbances, and the distribution of oaks

John M. Kabrick and Lance A. Vickers—John M. Kabrick, Northern Research Station,
USDA Forest Service, Columbia, MO, USA

## 1030-1130 Concurrent Session 7. Pests, pathogens, and beneficial microorganisms (Hiwassee)

Moderator: J. Stephen Brewer, Department of Biology, University of Mississippi, Oxford, MS, USA

- 1030 Oak processionary moth (*Thaumetopoea processionea*) Hazard assessment and decision support for management
  - <u>Paula Halbig</u>, Anne-Sophie Stelzer, Peter Baier, Josef Pennerstorfer, Horst Delb, and Axel Schopf—Paula Halbig, Forest Research Institute Baden-Wuerttemberg (FVA), Department of Forest Protection, Vienna, Austria
- 1050 Soil fungal response interactions with seedling stock age across white oak (*Quercus alba*) outplantings in Kentucky, Tennessee, and Alabama, USA

  Shawn P. Brown, Amira Noui, Richard Baird, Scott E. Schlarbaum, Callie Schweitzer, and Stacy L. Clark—Shawn P. Brown, The University of Memphis, Department of Biological Sciences, Memphis, TN, USA
- 1110 Molecular detection of oak wilt pathogen by pairing TaqMan probes with an inexpensive blue-flashlight

Meher A. Ony, Grace Pietsch, Monique L. Sakalidis, William E. Klingeman, Meg Staton, and Denita Hadziabdic—Meher A. Ony, Department of Entomology and Plant Pathology, The University of Tennessee in Knoxville, TN, USA

1130 Potential role of plant-soil feedback in oak regeneration decline

Sarah McCarthy-Neumann, Katherine E. A. Wood, and Richard K. Kobe—Sarah

McCarthy-Neumann, Department of Environmental Science, Tennessee State

University in Nashville, TN, USA

**1150-1330 LUNCH** (on your own)

### 1330-1450 CONCURRENT SESSIONS 6 (cont.), 7 (cont.), and 8

## 1330-1430 Concurrent Session 6 (cont.). Informing management through predictions (Sequoyah III)

Moderator: Tamara Milton, College of Forestry, Wildlife and Environment, Auburn University, Auburn, AL, USA

- 1330 Habitat suitability model optimization for stand initiation in bottomland hardwood forests, Lower Mississippi Alluvial Valley
  - <u>Segun M. Adeyemo</u>, Joshua J. Granger, Krishna P. Poudel, Yun Yang, and Brady Self—Segun M. Adeyemo, Department of Forestry, Mississippi State University, Starkville, MS, USA
- Synthesizing changing oak species distributions, mast availability, and effects on wildlife species under future climate, social, and land-use change Laura M. Thompson, Joseph D. Clark, Stacy L. Clark, Jane Foster, and Scott E. Schlarbaum—Laura M. Thompson, National Climate Adaptation Science Center, U.S. Geological Survey, Knoxville, TN, USA
- 1410 Predicting fuel consumption under high-frequency fire regimes in oak-pine mixedwood forests by using the First Order Fire Effects Model in Alabama, USA Julia DeFeo, Adam Coates, Callie Schweitzer, and John Craycroft—Julia DeFeo, Department of Forest Resources and Environmental Conservation, Virginia Tech, Blacksburg, VA, USA

## 1330-1430 Concurrent Session 7 (cont.). Pests, pathogens, and beneficial microorganisms (Hiwassee)

Moderator: Shawn Brown, Department of Biological Sciences, The University of Memphis, Memphis, TN, USA

1330 Erythmelus klopomor – Promising candidate for classical biological control against the invasive oak lace bug

<u>Marton J. Paulin</u>, George Melika, Serguei Triapitsyn, and Gyorgy Csóka—Marton J. Paulin, Forest Research Institute, Department of Forest Protection, University of Sopron, Sopron, Hungary

- 1350 Forwarding diagnostics and monitoring for the oak wilt pathogen through development of a LAMP assay
  - Colton Meinecke, Andrew Loyd, <u>Rhys Eshleman</u>, Demian Gomez, and Caterina Villari—Rhys Eshleman, University of Georgia, Athens, GA, USA
- 1410 Putting a new spin on an old disease: using molecular tools to identify beetles carrying spores from the oak wilt fungus in Gillespie County, Texas, USA

  Grace M. Pietsch, Meher A. Ony, Demian F. Gomez, Kevin Moulton, Denita Hadziabdic, Erin Davis, and William E. Klingeman—Grace M. Pietsch, Department of Plant Sciences, The University of Tennessee, Knoxville, TN, USA

#### **1330-1450** Concurrent Session 8. Practices for restoration (Salon CDE)

Moderator: Somidh Saha, Research Group Sylvanus, Institute for Technology Assessment and Systems Analysis, Karlsruhe Institute of Technology

- 1330 Reverting homogenous forest landscapes into mixed oak forests in southwestern Europe
  - Andrés Bravo-Oviedo, Jorge Maestre-Villanueva, Belén Acuña-Míguez, and Elena D. Concepción—Andrés Bravo-Oviedo, Adaptive Silviculture and Applied Forest Ecology Lab, National Museum of Natural Sciences, Madrid, Spain
- Impact of fires on soils in oak and pine stands
  M.R. Mosquera-Losada, J.J. Santiago-Freijanes, F.J. Rodríguez- Rigueiro, A. Rigueiro-Rodríguez, A. Couso-Viana, and Ferreiro Domínguez Nuria—M.R. Mosquera-Losada Department of Crop Production and Project Engineering, Santiago de Compostela University, A Coruña, Spain
- 1410 Best practices for regeneration of California blue oaks (*Quercus douglasii*)

  Andrea L. Warner, Dustin K. Flavell, and Nikolas S. Schweitzer—Andrea L. Warner,
  Sierra Foothill Research and Extension Center, University of California Agriculture
  and Natural Resources, Browns Valley, CA, USA
- 1430 Development of underplanted bottomland oak species under chemically treated juvenile stands within South Carolina floodplains
  Stephen Peairs and Nilesh Timilsina—Stephen Peairs, School of Natural Resources, The University of Tennessee, Knoxville, TN, USA

**1450-1530 BREAK** (Mezzanine)

### 1530-1610 CONCURRENT SESSIONS 8 (cont.), 9, and 12

**1530-1610** Concurrent Session 8 (cont.). Practices for restoration (Salon CDE) Moderator: Julia DeFeo, Department of Forest Resources and Environmental Conservation, Virginia Tech

1530 Refining the artificial regeneration prescription for white oak (*Quercus alba*) by using pedigree and advanced nursery practices

Stacy L. Clark, Scott E. Schlarbaum, and Callie J. Schweitzer—Stacy L. Clark, Southern Research Station, USDA Forest Service, Knoxville, TN, USA

1550 Competition control and increasing canopy openness benefit artificial white oak
(Quercus alba) regeneration in an expanding shelterwood in Indiana, USA

Michael R. Saunders and Elias B. Gaffney—Michael R. Saunders, Purdue University,
Department of Forestry and Natural Resources, West Lafayette, IN, USA

## 1530-1610 Concurrent Session 9. Economic and ecological services in oak forests (Sequoyah III)

Moderator: Tara Skiba, School of Natural Resources, The University of Tennessee, Knoxville, TN, USA

- 1530 Management, markets, and mesophication: An empirical exploration of oak forests in the southeast
  Gaurav Dhungel, Justin Baker, and Jesse Henderson—Gaurav Dhungel, North Carolina State University, Raleigh, NC, USA
- 1550 Economic impacts of projected white oak (Quercus alba) timber supply in Kentucky: A Computable General Equilibrium model analysis

  Gaurav Dhungel and Thomas Ochuodho—Thomas Ochuodho, Department of Forestry and Natural Resources, University of Kentucky, Lexington, KY, USA

#### **1530-1610** Concurrent Session 12. Healthy forests (Hiwassee)

Moderator: Morgan Varner, Tall Timbers Research Station, Tallahassee, FL, USA

- 1530 Central European oaks (*Quercus robur* and *Q. petrea*) from a forest health perspective using the example of southwestern Germany

  Horst Delb and Jörg Grüner—Horst Delb, Department of Forest Health Protection, Forest Research Institute of Baden-Wuerttemberg, Freiburg, Germany
- A tale of two outbreaks: Are oak populations becoming more vulnerable to insect outbreaks and climate stress in central Massachusetts, USA?
  Audrey Barker Plotkin, Brian Keeven, and Jaclyn Hatala Matthes—Audrey Barker Plotkin, Harvard Forest, Harvard University, Petersham, MA, USA

#### **1615-1715 FIRE PANEL** (Salon CDE)

Moderators: Heather D. Alexander and Daniel C. Dey. Heather is with the College of Forestry, Wildlife and Environment, Auburn University in Auburn, AL, USA; Daniel is with the Northern Research Station, USDA Forest Service in Columbia, MO, USA.

#### 1730-1930 POSTER RECEPTION (Mezzanine)

Thirty-one posters will be presented. Presenters will be standing by their posters during the reception to answer questions. Hors d'oeuvres and a cash bar will be available during the reception.

### Wednesday, October 9, 2024 — Field Tours

**0600-0800 BREAKFAST** (Food will be served in the Mezzanine and limited seating provided in Great Smoky)

Enjoy a hearty breakfast and connect with others before you start your field tour!

#### **FIELD TOURS**

Be prepared for rain or shine and wear closed-toed, sturdy shoes. Insect repellent will be provided on the tour, and we encourage its use to limit the spread of tick and mosquito borne illnesses. Lunch and refreshments will be provided for each field tour participant. Due to space limitations, participants are asked to attend the field tour they signed up for during registration. Bus and van loading locations will be announced at the Symposium.

## Great Smoky Mountains Biosphere Reserve (Great Smoky Mountains National Park, Townsend, TN)

Group 1 – Load buses at 0700 (group # is on the back of your name tag)

Group 2 – Load buses at 0900 (group # is on the back of your name tag)

## Forest Management of Upland Hardwoods (Catoosa Wildlife Management Area (Crab Orchard, TN)

Load buses at 0715

## Oak and Silvicultural Research (Forest Resources AgResearch and Education Center at Oak Ridge and Wartburg, TN)

Load Vans at 0700

#### 1800-2030 STUDENT and EARLY CAREER PROFESSIONALS SOCIAL

(Salon DE)

Leader: Tara Skiba, School of Natural Resources, The University of Tennessee, Knoxville, TN, USA.

This event is only open to students, early career professionals (within first 5 years of profession) and invited professional guests.

**0600-0800 BREAKFAST** (Food will be served in the Mezzanine and limited seating provided in Great Smoky)

Enjoy a hearty breakfast and connect with others before you start your day!

### **0800-0900** CARBON PANEL (Salon CDE)

Moderator: Trisha Johnson, The Nature Conservancy, Knoxville, TN, USA

### **0900-1000 PLENARY** (Salon CDE)

Moderator: Emile Gardiner, Southern Research Station, USDA Forest Service, Stoneville, MS, USA

- 0900 North coast oak woodland restoration: Oregon white oak and California black oak tree and stand response to release from Douglas-fir encroachment

  Yana Valachovic, Jeff Stackhouse, Lenya Quinn-Davidson, Brendan Twieg, Wallis Robinson, and Chris Lee—Yana Valachovic, University of California Cooperative Extension, Berkely, CA, USA
- O930 Cork oak afforestation using innovative techniques to mitigate climate change Constança Camilo-Alves—Constança Camilo-Alves, Institute for Advanced Studies and Research of the University of Evora, Mediterranean Institute for Agriculture, Environment and Development & CHANGE, Global Change and Sustainability Institute, University of Évora, Évora, Portugal

1000-1030 BREAK (Mezzanine)

### 1030-1150 CONCURRENT SESSIONS 9 (cont.), 10, and 11

## 1030-1130 Concurrent Session 9 (cont.). Economic and ecological services in oak forests (Sequoyah III)

Moderator: Heather Alexander, College of Forestry, Wildlife and Environment, Auburn University, Auburn, AL, USA

- 1030 Changes in groundlayer communities with variation in trees, sapling layers, and fires during 34 years of oak savanna restoration in Ohio, USA

  Jay Wright, Scott Abella, LaRae Sprow, Karen Menard, Timothy Schetter, and Lawrence Brewer—Jay Wright, Metroparks Toledo, Maumee, OH, USA
- 1050 Comparative analysis of organic soil horizon characteristics and carbon sequestration potential in oak and pine forests of the southeastern United States

  Basanta Shrestha, Heather D. Alexander, Yaniv Olshansky, and Jeffery B. Cannon—
  Basanta Shrestha, Forest and Fire Ecology Lab, College of Forestry, Wildlife and Environment, Auburn University, Auburn, AL, USA

1110 Carbon storage of restored oak savannas treated with varying fire frequency and seasonality compared to a closed-canopy forest and an old-field in Tennessee, USA Tamara Milton, Craig Harper, Nathan Wilhite, and Heather D. Alexander—Tamara Milton, College of Forestry, Wildlife and Environment, Auburn University, Auburn, AL, USA

## **1030-1150** Concurrent Session 10. Natural regeneration and recruitment (Salon CDE)

Moderator: Stacy Clark, Southern Research Station, USDA Forest Service, Knoxville, TN, USA

1030 Quercus reproduction response to a multi-phased shelterwood on the Daniel

Boone National Forest, Kentucky, USA

<u>Callie Schweitzer</u>, John Craycroft, Jared Calvert, Stacy Clark, and Jacob Royse—Callie Schweitzer, Southern Research Station, USDA Forest Service, Huntsville, AL, USA

- 1050 Effects of midstory removal timing on natural oak regeneration in Arkansas, United States
  - <u>Natalie A. Clay</u>, Mike McGowan, and Kyle Cunningham—Natalie A. Clay, Department of Entomology and Plant Pathology, University of Arkansas, Fayetteville, AR, USA
- 1110 Effects of selective cutting on structural attributes and oak recruitment in stands of mixed forests in southern Sweden

  Nora Pohl, Per-Ola Hedwall, Jorge Aldea, Emile Gardiner, Annika Felton, Luca

Muraro, Björn Nordén, and Magnus Löf—Nora Pohl, Southern Swedish Forest Research Centre, Swedish University of Agricultural Sciences in Lomma, Sweden

1130 Living on the edge: Development of an oak seedling bank in response to silviculturally-created openings in a productive mixed-hardwood forest in the southern Appalachian Mountains

<u>Tara L. Keyser</u> and Jodi Forrester—Tara L. Keyser, Southern Research Station, USDA Forest Service, Asheville, NC, USA

## 1030-1150 Concurrent Session 11. Historical oak ecosystems guide management (Hiwassee)

Moderator: Emily Rhoades, State, Private, and Tribal Forestry, USDA Forest Service, Atlanta, GA, USA

- 1030 Valonia oak (*Quercus ithaburensis* subsp. *macrolepis*) in Greece: From mythology to research breakthroughs for a sustainable future
  - <u>Anastasia Pantera</u>, Andreas Papadopoulos, Vassiliki Lappa, Georgios Mpakogiorgos, and Alexia Stokes—Anastasia Pantera, Department of Forestry and Natural Environment Management, Agricultural University of Athens, Karpenissi, Greece
- 1050 Agroforestry historical landscapes in Evrytania: old growth oaks as heritage identity and a driver for sustainable tourism

Vasiliki Lappa, Andreas Papadopoulos, Eleni Kelesi, and <u>Anastasia Pantera</u>— Anastasia Pantera, Department of Forestry and Natural Environment Management, Agricultural University of Athens, Karpenissi, Greece

- 1110 Re-accessing historical oak composition of Kentucky

  <u>Brice B. Hanberry</u>—Brice B. Hanberry, Rocky Mountain Research Station, USDA
  Forest Service in Rapid City, SD, USA
- 1130 Flammability of thirty-four North American oaks

  <u>J. Morgan Varner</u>, Timothy M. Shearman, and Jeffrey M. Kane—J. Morgan Varner,
  Tall Timbers Research Station, Tallahassee, FL, USA

### **1150-1330 LUNCH** (on your own)

### **1330-1400 PLENARY (cont.)** (Salon CDE)

Moderator: Emile Gardiner, Southern Research Station, USDA Forest Service, Stoneville, MS, USA

1330 Low-density tree planting: scope of oak cluster planting to create mixed forests Somidh Saha—Somidh Saha, Research Group Sylvanus, Institute for Technology Assessment and Systems Analysis, Karlsruhe Institute of Technology, Karlsruhe, Germany

# 1405-1505 CONCURRENT SESSIONS 10 (cont.), 11 (cont.), and 12 (cont.)

## **1405-1445** Concurrent Session 10 (cont.). Natural regeneration and recruitment (Salon CDE)

Moderator: Callie Schweitzer, Southern Research Station, USDA Forest Service, Huntsville, AL, USA

- 1405 Silvicultural trials for climate-adaptive capacity in oak-dominated systems

  Amanda Bunce, Thomas Worthley, Robert Fahey, and Christopher Riely—Amanda
  Bunce, University of Connecticut, Department of Natural Resources and the
  Environment, Storrs, CT, USA
- 1425 Early results from oak regeneration and recruitment trials in Connecticut

  Thomas Worthley—Thomas Worthley, Department of Natural Resources and the
  Environment, University of Connecticut, Storrs, CT, USA

## 1405-1505 Concurrent Session 11. (cont.) Historical oak ecosystems guide management (Hiwassee)

Moderator: Brice Hanberry, Rocky Mountain Research Station, USDA Forest Service, Rapid City, SD, USA

- 1405 Historical and current forests and fire culture in the Southern Appalachians

  J. Adam Warwick and Brice D. Hanberry—J. Adam Warwick, The Nature

  Conservancy, Hendersonville, NC, USA
- 1425 Causes of a seedling recruitment advantage for an encroaching oak over a historically dominant oak in a fire-restored open oak woodland

Griffin L. Williams and <u>J. Stephen Brewer</u>—J. Stephen Brewer, Department of Biology, University of Mississippi, Oxford, MS, USA

1445 Oak demographics and distributions on the Paint Rock Forest Dynamics Plot in northern Alabama, USA

<u>Helen A. Czech</u>, Dawn Lemke, Patience E. Knight, and Daniela Granato De Souza Helen A. Czech, Department of Natural Resources and Environmental Sciences, Alabama A&M University, Huntsville, AL, USA

#### 1405-1445 Concurrent Session 12. Healthy forests (Sequoyah III)

Moderator: Christine Martens, Southern Research Station, USDA Forest Service, Asheville, NC, USA

- 1405 Urban silviculture strategies for oak forests: Direct planting in existing and imminent canopy gaps in oak-beech forests
  - J. Bower, M.R. Piana, A. Reinmann, R. Hallett, L. DeWald L, and T.L.E. Trammell—M.R. Piana, Northern Research Station, USDA Forest Service, Amherst, MA, USA
- 1425 Tree damage and mortality following wildfire and prescribed fire in long unburned mixed oak-pine forests

<u>Kathleen Gabler</u>, Heather D. Alexander, Geoff Sorrell, and Steve Trull—Kathleen Gabler, College of Forestry, Wildlife and Environment, Auburn University, Auburn, AL, USA

**1505-1530 BREAK** (Mezzanine)

#### 1530-1615 WRAP UP AND STUDENT AWARDS (Salon CDE)

Moderators: <u>Stacy L. Clark</u> and <u>Brian R. Lockhart</u>—Stacy L. Clark, Southern Research Station, USDA Forest Service, Knoxville, TN, USA; Brian R. Lockhart (retired), Southern Research Station, USDA Forest Service, Stoneville, MS, USA

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#### 1615-1700 FUTURE CONFERENCE PLANNING (Salon CDE)

Moderator: <u>Stacy Clark</u>—Stacy Clark, Southern Research Station, USDA Forest Service, Knoxville, TN, USA

Anyone interested in planning future International Oak Symposium Conferences should attend. If you cannot attend, but are interested in this topic, please contact Stacy Clark at <a href="mailto:stacy.l.clark@usda.gov">stacy.l.clark@usda.gov</a>