

David Robert Coyle, Ph.D.

Southern Regional Extension Forestry
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EDUCATION

Ph.D. University of Wisconsin, Madison, WI, May 2011

Major: Entomology

Advisor: Kenneth F. Raffa

M.S. Iowa State University, Ames, IA, May 2000

Co-Majors: Forestry and Entomology

Advisors: Elwood R. Hart and Richard B. Hall

B.A. Luther College, Decorah, IA, May 1997

Major: Biology

Advisor: Kirk J. Larsen

PROFESSIONAL EXPERIENCE

January 2018 – Present: **Adjunct Faculty**, D.B. Warnell School of Forestry and Natural Resources, University of Georgia

September 2017 – Present: **Affiliate Faculty**, School of Forest Resources and Conservation, University of Florida

August 2015 – Present: **Forest Health Extension Associate**, Southern Regional Extension Forestry, Dr. William G. Hubbard, supervisor. I created and implemented a regional forest and tree health and invasive species education program for the southeastern U.S. (<http://southernforesthealth.net/>). Duties include material development (electronic and paper resources), in-person and online training, and consultations. I work closely with a diverse team of IT and Design professionals, as well as experts from across the U.S. to develop educational content for forestry and natural resource professionals, arborists, and landowners. I work closely with University and State forest and tree health personnel across the southeastern U.S. to tailor project deliverables to individual state needs. Thus far, I have delivered training workshops in five states for both state forestry agencies and university extension personnel. I facilitate a webinar series that draws nearly 200 people per live webinar.

January 2011 – August 2015: **Postdoctoral Research Associate and FIRST IV Teaching Scholar**, University of Georgia-Athens, Dr. Kamal J. K. Gandhi, advisor. I have been involved with multiple projects across the southeastern U.S. that examined forest management as a way to mitigate pest issues and improve growth, above and belowground interactions between forest biota and tree physiology, and the effects of non-native species on biodiversity. I was the primary contact for a large, multi-state project examining abiotic and biotic factors affecting southern pine health. This project was conducted across Alabama and Georgia over 3 years, and sampled many abiotic and biotic forest attributes. Throughout the project I managed a diverse team of University and State and Federal Government personnel during project development, data collection and analysis, and reporting. I was also part of teams that evaluated emerald ash borer impacts in Michigan, an oak-feeding caterpillar outbreak in urban/suburban areas in Georgia, and southern pine beetle impacts in Mississippi.

June 2009 – June 2012: **Research Associate and Independent Contractor**, USDA Forest Service Northern Research Station. Worked with a team of Federal researchers to identify suitable sites

for intensively-managed *Populus* in the northern Lake States to enhance ecosystem services and provide biomass. Data collected and analyzed included soils, topography, and potential for conversion to intensively-managed forest. Developed www.poplardatabase.com which summarized current literature on intensively-managed *Populus*.

June 2009 – May 2010: **Research Associate and Independent Contractor**, Centers for Disease Control. My research examined how forest management impacted interactions among deer ticks, Lyme disease, forest health, and humans in red pine plantations. The research program included tick, mammal, and flora sampling, data analysis, undergraduate supervision, and manuscript preparation.

August 2004 – January 2011: **Graduate Research Assistant and EPA STAR Fellow**, University of Wisconsin-Madison. My dissertation project examined the effects of root herbivory on tree growth and physiology, soil microbial communities, and forest composition. Working with a team of University and Federal researchers, this program included project conceptualization, design, implementation, data collection and synthesis, and technician supervision.

January 2000 – June 2004: **Biological Research Technician**, USDA Forest Service Southern Research Station. Lead technician on project examining factors driving tree production in intensively-managed forest systems. Supervised and coordinated the efforts of two technicians and up to six student workers. Responsible for maintenance of 60 acre research plantation, instrument installation and operation, data collection and analysis, and manuscript preparation. Monitored and controlled pests in the plantation. Installed, maintained, recorded and reported data from two *Populus* clonal trials and other independent entomology research projects.

June 1997 – December 1999: **Graduate student**, Iowa State University, Ames, IA. Duties included maintaining cottonwood leaf beetle colony, supervising 1-2 student workers, and the implementation, maintenance, data collection, and manuscript preparation for several projects examining various aspects of plantation forestry.

GRANTS RECEIVED (total = \$1,566,771)

USDA Forest Service, Southern Region LaSR Competitive Grant Program. 2017-2019. \$369,000. Development of a regional forest health and invasive species training and education program.

PI: **Coyle, D.R.**

Extension Innovation Award, University of Georgia. 2017-2018. \$7,760. Georgia Landowner Academy: opportunities for Heir's Property Landowners in Georgia. PIs: Li, Y., **D.R. Coyle**, and J.L. Morgan.

USDA Forest Service, National Climate Center. 2017-2018. \$50,000. Don't fear the fire: An education initiative for prescribed burning after drought. PIs: O'Brien, J., B. Hornsby, L. Bobby, W. Hubbard, and **D. Coyle**.

USDA Forest Service, Southern Research Station. 2016-2017. \$50,000. Extension and technology transfer tools in support of the USDA Southeast Regional Climate Hub. PIs: **Coyle, D.R.** and W. G. Hubbard.

USDA Forest Service – R8 FHP. 2015-2016. \$120,000. Developing a regional forest health and invasive species outreach program. PIs: **Coyle, D.R.** and W. G. Hubbard.

USDA Forest Service-Savannah River. 2013-2015. \$23,838. Completion of data analysis and publication of manuscripts on optimal nutrition, nutrient efficiency, and production of short-rotation woody crops for bioenergy. PIs: **Coyle, D.R.** and K.J.K. Gandhi.

USDA Forest Service, Southern Research Station. 2011-2013. \$158,266. Extent, severity, and types of threats to the health and resiliency of pine forests in the South. PI: Gandhi, K.J.K.

***D.R. Coyle** was a major contributor in project design, development, and writing, but was unable to be listed as a PI due to University regulations.

USDA Forest Service, Forest Health and Protection. 2010-2012. \$179,000. Southern pine beetle: evaluation of current prevention and management practices, and population levels in southeastern forests. PI: Gandhi, K.J.K. ***D.R. Coyle** was a major contributor in project design, development, and writing, but was unable to be listed as a PI due to University regulations.

Centers for Disease Control and Prevention. 2009-2010. \$112,860. Evaluating impacts of environmental precursors on the abundance and distribution of Lyme disease vectors. PIs: **Coyle, D.R.**, M.W. Murphy, S.M. Paskewitz, and K.F. Raffa.

British Ecological Society – Small Ecological Project Grant. 2009. \$3,856. Does mother know best? How does feeding legacy and leaf chemistry affect vine weevil feeding and oviposition choices. PI: **Coyle, D.R.**

USDA Forest Service Northern Research Station, Climate Change Research Council. 2009-2010. \$60,000. Carbon Sequestration Potential of Poplar Energy Crops at Regional Scales. PI: Zalesny, R.S. Co-PIs: D.M. Donner, **D.R. Coyle**.

Wisconsin Focus on Energy Environmental and Economic Research and Development Program. 2009-2012. \$169,020. Land-use, soil health, and water quality changes with woody energy crop production in Wisconsin and Minnesota. PIs: Zalesny, R.S. Jr., D.M. Donner, **D.R. Coyle**, B.R. Sturtevant, E.J. Gustafson, N.D. Nelson, and D.E. Riemenschneider.

Wisconsin Focus on Energy Environmental and Economic Research and Development Program. 2009-2012. \$144,155. Impacts of harvesting woody biomass on nutrient cycling and biodiversity in northern hardwoods. PIs: Donner, D.M., M. St. Pierre, R.S. Zalesny Jr., C.A. Ribic, **D.R. Coyle**, and D. Eklund.

EPA STAR Fellowship. 2006-2009. \$111,516. The effect of above and belowground herbivory by invasive weevils on forest dynamics: effects on individual tree and forest community survival, growth, biomass and nutrient partitioning, and productivity. PI: **Coyle, D.R.**

Applied Ecological Services. 2006-2009. \$7,500. Above and belowground herbivory by invasive weevils on forest trees: effects on survival, productivity, nutrient allocation, and forest community composition. PI: **Coyle, D.R.**

ADDITIONAL FUNDING (total = \$14,999)

University of Florida, School of Forest and Resource Conservation. 2017. \$5,000. Development of an online Forest and Tree Health Diagnostic program for the Southeast. PI: **Coyle, D.R.**

University of Florida, School of Forest and Resource Conservation. 2016. \$3,000. Development of an online Forest and Tree Health Diagnostic program for the Southeast. PI: **Coyle, D.R.**

Tennessee Department of Agriculture, Division of Forestry. 2016. \$9,999. Development and implementation of a survey to evaluate the efficacy of the Don't Move Firewood outreach campaign. PI: **Coyle, D.R.**

OUTREACH ACTIVITIES

Publications:

Stanosz, G., M. Cram, **D. Coyle**, and L. Haugen. 2018. Heterobasidion root disease in eastern conifers. Forest Insect and Disease Leaflet 76, USDA Forest Service. 9 pgs.

- Crocker, E., A. Bordas, and **D.R. Coyle**. 2018. Biology, ecology, and management of Biscogniauxia (Hypoxylon) canker in the southeastern U.S. Southern Regional Extension Forestry Publication SREF-FH-009. 10 p.
- Kauffman, B.W., W.K. Clatterbuck, A.M. Liebhold, and **D.R. Coyle**. 2017. Gypsy moth in the southeastern U.S.: biology, ecology, and management strategies. Southern Regional Extension Forestry Publication SREF-FH-008. 10 p.
- Campbell, J.H. and **D.R. Coyle**. 2016. Littleleaf disease: biology, ecology, and management in southern pines. Southern Regional Extension Forestry Publication SREF-FH-007/SREF-SLP-019. 10 p.
- Hughes, M.A., J.A. Smith, and **D.R. Coyle**. 2016. Biology, ecology, and management of laurel wilt and the redbay ambrosia beetle. Southern Regional Extension Forestry Publication SREF-FH-006. 8 p.
- Pile, L.S., N.J. Loewenstein, G.W. Wheeler, and **D.R. Coyle**. 2016. Chinese tallowtree biology, ecology, and management in southeastern U.S. forests. Southern Regional Extension Forestry Publication SREF-FH-005. 7 p.
- Dreaden, T.J., J.A. Smith, M.M. Cram, and **D.R. Coyle**. 2016. Biology, diagnosis, and management of Heterobasidion root disease in southern pines. Southern Regional Extension Forestry Publication SREF-FH-004. 5 p.
- Haavik, L.J. and **D.R. Coyle**. 2016. The Sirex woodwasp, *Sirex noctilio*: Ecology, Potential Impact, and Management in the Southeastern U.S. Southern Regional Extension Forestry Publication SREF-FH-003. 7 p.
- Coyle, D.R.**, A.B. Self, J.D. Floyd, and J.J. Riggins. 2016. Ips bark beetles in the southeastern U.S. Southern Regional Extension Forestry Fact Sheet SREF-FH-002. 9 p.
- Coyle, D.** and M. Megalos. 2016. Promoting a healthy forest on your land. Southern Regional Extension Forestry Fact Sheet SREF-FH-001. 8 p.
- GFC, Forest Health Staff, **D.R. Coyle**, and K.J.K. Gandhi. 2015. Hardwood defoliating caterpillars of North Georgia. Georgia Forestry Commission. 7 p.
- Coyle, D.R.** and D.R. Lewis. 1999. Common Butterflies of Iowa. Iowa State University Extension Press, Pm 1795. 16 pp.
- Coyle, D.R.** 1999. Carrion Beetles. Iowa Insect Information Note. Iowa State University Extension. 1 page.

Training Workshops:

- Texas ISA Emerald Ash Borer Training Workshop. 29 March 2018, Tyler, TX (50 ppl, 1 hr classroom instruction).
- Forest Pest Training for UGA Extension Agents. 25 January 2018, Rock Eagle Center near Eatonton, GA (42 ppl total, 1 hr classroom instruction).
- Longleaf Alliance Forest Health training. 23 January 2018, Aiken, SC (40 ppl. total 1.5 hrs classroom instruction).
- South Carolina Master Naturalists training. 9 August 2017, Columbia, SC. (30 ppl. total, 6 hrs classroom instruction).
- Forest health and invasive species training. Training for Alabama Forestry Commission and Alabama USDA NRCS agents, 27-28 June 2017, Huntsville, AL; 18-19 July 2017, Andalusia, AL. (75 ppl. total, 10 hrs classroom and field instruction each day).
- Forest health, invasive species, and silviculture training. Training for Virginia Department of Forestry and Virginia Cooperative Extension agents, 23 and 25 May 2017, Chesterfield and Amherst, VA. (70 ppl. total, 7 hrs classroom and field instruction each day).

Forest & Tree Health, Invasive Species, and Silviculture & Tree Care Training. Training for Clemson University Horticulture and Natural Resource Extension Agents. 9-10 May 2017, Clemson, SC. (25 ppl., 14 hrs classroom and field instruction).

Identification and management of invasive and native pests in Georgia's forests (with Dr. Elizabeth Benton, UGA-Warnell), 9-10 March 2017, Perry, GA. (35 ppl, 1.5 hrs classroom instruction).

Pine straw production – stand management and economics (with Drs. David Dickens and Dave Moorhead, UGA-Warnell), 11-12 October 2016, Statesboro, GA (30 ppl, 12 hrs classroom and field instruction; DRC lecture for 1 hr).

Managing forests for health, wildlife, and productivity (with Drs. Elizabeth Benton and Mark McConnell, UGA-Warnell), 4-5 October 2016, Athens, GA (35 ppl, 12 hrs classroom instruction).

Forest health, invasive species, and silviculture training. Training for South Carolina Forestry Commission field agents, 16-17 August 2016, Columbia, SC. (45 ppl, 9 hrs classroom and field instruction).

Forest health, invasive species, and silviculture (with Bobby Solomon, Fort Valley State University Extension), 30 June 2016, Talbotton, GA. (20 ppl, 5 hrs classroom instruction).

Forest health and invasive species training. Training for Fort Valley State University Extension personnel, 29 February 2016, Ft. Valley, GA. (20 ppl, ½ hr classroom instruction).

Presentations:

WinterGreen, Duluth Convention Center, 26 January 2017, Duluth, GA. (50 min.)

Tree Farm Field Day – Granade Farms, 11 May 2017, Rayle, GA (30 min.)

WinterGreen, Duluth Convention Center, 27 January 2017, Duluth, GA. (50 min.)

Gwinnett County Extension Green Industry Update, 13 March 2012, Lawrenceville, GA. (60 min.)

Georgia Arborists Association Meeting, 13 September 2011, Decatur, GA. (50 min.)

Adult Nature Weekend, Iowa Lakeside Laboratory, 6-8 August 1999, Lake Okoboji, IA. 2 presentations (3 hr. each)

1998 Master Woodland Managers Program, 15 Sept. 1998, Wapsi River Environmental Education Center, Scott Co., IA. (50 min.)

Iowa State University Extension: Third Annual Forest Foray, 26-28 June 1998, Iowa 4-H Education and Natural Resources Center, Madrid, IA. (60 min.)

Webinars (live, archived; total viewers as of 5 December 2017):

Biology, Ecology, and Management of Laurel Wilt in the Southeastern U.S. Dr. Marc Hughes, University of Florida, 4 February 2016. (122 live, 232 archived; 357 total)

Managing Chinese Tallow in Forests - An Integrated Approach. Dr. Lauren Pile, Clemson University, 24 February 2016. (137 live, 285 archived; 422 total)

Gypsy Moth Biology, Ecology, Management, and Implications for the Southeastern U.S. Dr. Andrew Liebhold, USDA Forest Service, 23 March 2016. (157 live, 272 archived; 429 total)

Emerald Ash Borer Biology, Ecology, Management, and Implications for Natural and Urban Forest Areas in the Southeast. Dr. Dan Herms, The Ohio State University, 20 April 2016. (222 live, 383 archived; 605 total)

Cogongrass Management - Past, Present and Future. Dr. Greg MacDonald, University of Florida, 21 September 2016. (143 live, 128 archived; 271 total)

The Biology, Diagnosis, Epidemiology, and Management of Oak Wilt in the Southeastern U.S. Dr. David Appel, Texas A&M University, 26 October 2016. (191 live, 293 archived; 484 total)

Heterobasidion (aka Annosum or Fomes) Root Disease of Pines in the South. Ms. Michelle Cram, USDA Forest Service, 17 November 2016. (122 live, 216 archived; 338 total)

The People Have Spoken: Using Forest and Firewood National Polling Data to Promote Forest Health. Ms. Leigh Greenwood, The Nature Conservancy, 25 January 2017. (211 live, 123 archived; 334 total)

Integrative Forest Management for Wildlife and Forest Health. Dr. Mark McConnell, University of Georgia, 15 February 2017. (415 live, 386 archived; 811 total)

Hemlock Woolly Adelgid Biology and Management in the Southeastern U.S. Dr. Elizabeth Benton, University of Georgia, 29 March 2017. (255 live, 142 archived; 397 total)

Southern Pine Beetle Biology, Ecology, and Management. Dr. John Nowak, USDA Forest Service, 19 April 2017. (231 live, 301 archived; 532 total)

Weather Variability and Its Impacts on Forest Health. Dr. David Coyle, Southern Regional Extension Forestry; Dr. Steve McNulty and Ms. Jennifer Moore Myers, USDA Forest Service, 15 May 2017. (150 live, 203 archived; 353 total)

Privet Biology and Management in the Southeastern U.S. Dr. Nancy Loewenstein, Auburn University, 31 August 2017. (222 live, 113 archived; 335 total)

Fall Cankerworm Biology, Ecology, and Management in Urban and Rural Landscapes. Ms. Laurie Reid Dukes, City of Charlotte, 4 October 2017. (146 live, 69 archived; 215 total)

Hardwood Forest Management for Health and Productivity. Dr. Wayne Clatterbuck, University of Tennessee, 1 November 2017. (169 live, 25 archived; 194 total)

It's Not a Disease (or is it?): Managing Tree and Forest Health in Palms, Pines, and More. Dr. Carrie Harmon, University of Florida, 21 February 2018. (93 live, 22 archived; 115 total)

Media:

I have been interviewed multiple times for newspapers and social media blogs on various forest and tree health issues, including emerald ash borer, Ips bark beetles, southern pine beetle, and laurel wilt. I worked with Dr. Nick Furman (UGA Ag Education) aka "Ranger Nick" to record a tv spot on emerald ash borer which was shown on RFD-TV

(<https://www.youtube.com/watch?v=W9W5nqXj3p4>). I am "on call" for organizations such as the Entomological Society of America, National Association of State Foresters, and the Southern Group of State Foresters for when media invitations arise and they need an expert in forest or tree health.

Social media:

I maintain an active social media platform for forest and tree health, forestry, and invasive species education.

Twitter: @drdavecoyle currently has 1,677 followers, and averages ~4,100 impressions per day.

Instagram: drdavecoyle, 80 followers; I started this account in late November 2017.

Facebook: [southernforesthealth](#) (444 follows) is the page on which I curate forest and tree health information for the southeastern U.S., and is closely linked with the website of the same name (listed below).

Facebook: [SouthernTreeHealthDiagnostics](#) (409 members) is a page jointly curated with extension professionals from the University of Florida and Florida Forest Service. We invite people to submit their tree and forest health questions and pictures, and using the collective knowledge of many we are often able to provide a diagnosis (or close approximation) or direct the user to more appropriate resources.

Consultations:

I have served and continue to serve as a consultant for private individuals, industries, state, university, and federal employees on forest health issues in the southeastern U.S. On average, I handle 20-25 requests per year through phone, email, or on-site visits.

Websites created:

- Developed (with Southern Regional Extension Forestry group) a website to deliver forest health and invasive species education for the southeastern U.S. Available at <http://southernforesthealth.net/>.
- Developed (with Dr. Kamal Gandhi and Ms. Brittany Barnes, UGA; Drs. Kier Klepzig and John Nowak, USDA Forest Service) a website highlighting issues in southern pine health, especially pertaining to insect and fungal factors in the southeastern US. Available at www.sph.uga.edu.
- Developed (with Dr. Ron Zalesny, USFS Institute for Applied Ecosystem Studies) an online database for short rotation woody crop / intensive forestry poplar literature entitled “Short Rotation *Populus*: A Database of North American Literature, 1989 – 2011”. Available at www.poplardatabase.com.

Volunteer outreach activities:

Judge, GA State 4-H competition, July 2016

University of Wisconsin-Madison Insect Ambassador, January 2005 – January 2009.

Iowa State Insect Zoo Participant, January 1998 – December 1999.

RESEARCH PUBLICATIONS (58 refereed research articles and 4 book chapters published; ^G indicates Graduate student co-author, ^U denotes Undergraduate student co-author)

Refereed Research Articles:

Denham, S.O.^G, **D.R. Coyle**, A.C. Oishi, B.P. Bullock, K. Heliövaara, and K.A. Novick. 201x.

Tree resin flow dynamics during an experimentally introduced bark beetle infestation. *Can. J. For. Res.: Accepted for publication.*

Perry, K.I., D.A. Herms, W.S. Klooster, A. Smith, D.M. Hartzler, **D.R. Coyle**, and K.J.K. Gandhi 201x. Downed coarse woody debris dynamics in ash (*Fraxinus* spp.) stands invaded by emerald ash borer (*Agilus planipennis* Fairmaire). *Forests: Accepted for publication.*

Schultz, A.N.^G, A.M. Mech^G, M.M. Cram, C. Asaro, **D.R. Coyle**, R.D. Lucardi, S. Lucas, and K.J.K. Gandhi. 201x. Association of *Caliciopsis pinea* Peck and *Matsucoccus macrocitrices* Richards with eastern white pine (*Pinus strobus* L.) seedling dieback. *For. Ecol. Manage.: Accepted for publication.*

Schultz, A.N.^G, A.M. Mech^G, C. Asaro, **D.R. Coyle**, M.M. Cram, R.D. Lucardi, and K.J.K. Gandhi. 2018. Assessment of abiotic and biotic factors associated with eastern white pine (*Pinus strobus* L.) dieback in the Southern Appalachian Mountains. *For. Ecol. Manage.: In Press.*

Avtzis, D.N., **D.R. Coyle**, V. Christopoulous, and A. Roques. 2017. Biological invasions, national borders, and the current state of non-native insect species in Greece and the neighboring Balkan countries. *Bull. Insectol.* 70: 161-169.

Coyle, D.R., U.J. Nagendra^G, M.K. Taylor, J.H. Campbell^G, C.E. Cunard^G, A.H. Joslin^G, A. Mundepi^G, C.A. Phillips^G, and M.A. Callaham, Jr. 2017. Soil fauna responses to natural disturbances, invasive species, and global climate change: Current state of the science and a call to action. *Soil Biol. Biochem.* 110: 116-133.

- Helbig, C.E.^G, **D.R. Coyle**, K.D. Klepzig, J.T. Nowak, and K.J.K. Gandhi. 2016. Colonization dynamics of subcortical insects on forest sites with relatively stressed and unstressed loblolly pine trees. *J. Econ. Entomol.* 109: 1729-1740.
- Coyle, D.R.**, G.T. Green, B.F. Barnes, K.D. Klepzig, J.T. Nowak, and K.J.K. Gandhi. 2016. Landowner and manager awareness and perceptions of pine health issues and southern pine management activities in the southeastern U.S. *J. For.* 114: 541-551.
- Zalesny, R.S. Jr., J.A. Stanturf, E.S. Gardiner, G.S. Bañuelos, R.A. Hallett, A. Hass, C.M. Stange, J.H. Perdue, T.M. Young, **D.R. Coyle**, and W.L. Headlee. 2016. Environmental technologies of woody crop production systems. *Bioenerg. Res.* 9: 492-506.
- Zalesny, R.S. Jr., J.A. Stanturf, E.S. Gardiner, J.H. Perdue, T.M. Young, **D.R. Coyle**, W.L. Headlee, G.S. Bañuelos, and A. Hass. 2016. Ecosystem services of woody crop production systems. *Bioenerg. Res.* 9: 465-491.
- Coyle, D.R.**, D.P. Aubrey, and M.D. Coleman. 2016. Growth responses of narrow or broad site adapted tree species to a range of resource availability treatments after a full harvest rotation. *For. Ecol. Manage.* 362: 107-119.
- Pfammatter, J.A.^G, **D.R. Coyle**, K.J.K. Gandhi, N. Hernandez^G, R.W. Hofstetter, J.C. Moser, and K.F. Raffa. 2016. Structure of phoretic mite assemblages across subcortical beetle species at a regional scale. *Environ. Entomol.* 45: 53-65.
- Coyle, D.R.**, K.D. Klepzig, F.H. Koch, L.A. Morris, J.T. Nowak, S.W. Oak, W.J. Otrosina, W.D. Smith, and K.J.K. Gandhi. 2015. A review of southern pine decline in North America. *For. Ecol. Manage.* 349: 134-148.
- Nowak, J.T., J.R. Meeker, **D.R. Coyle**, C.A. Steiner, and C. Brownie. 2015. Southern pine beetle infestations in relation to forest stand conditions, previous thinning, and prescribed burning: Evaluation of the Southern Pine Beetle Prevention Program. *J. For.* 113: 454-462.
- Coyle, D.R.**, C.L. Brissey^U, and K.J.K. Gandhi. 2015. Species characterization and responses of subcortical insects to trap-logs and ethanol in a hardwood biomass plantation. *Agric. For. Entomol.* 17: 258-269.
- Lee, X.^G, **D.R. Coyle**, D. Johnson, M.W. Murphy, M.A. McGeehin, R.J. Murphy, K.F. Raffa, and S.M. Paskewitz. 2014. Prevalence of *Borrelia burgdorferi* and *Anaplasma phagocytophilum* in *Ixodes scapularis* (Acari: Ixodidae) nymphs collected in managed red pine forests in Wisconsin. *J. Med. Entomol.* 51: 694-701.
- Coyle, D.R.**, W.J. Mattson, A.L. Friend, and K.F. Raffa. 2014. Effects of an invasive herbivore at the single plant scale do not extend to population-scale seedling dynamics. *Can. J. For. Res.* 44: 8-16.
- Mech, A.M.^G, C. Asaro, M. M. Cram, **D.R. Coyle**, P.J. Gullan, L.G. Cook, and K.J.K. Gandhi. 2013. *Matsucoccus macrocitrices* (Hemiptera: Matsucoccidae): first report, distribution, and association with symptomatic eastern white pine in the southeastern United States. *J. Econ. Entomol.* 106: 2391-2398.
- Coyle, D.R.**, J. Pickering, K.A. Dyer, F.R. Lehman^G, J.A. Mohan, and K.J.K. Gandhi. 2013. Dynamics of an unprecedented outbreak of two native moth species, *Cissusa spadix* and *Phoberia atomaris* (Lepidoptera: Noctuidae), on southern oak trees (*Quercus* spp.) in the southeastern United States. *Am. Entomol.* 59: 82-94.
- Coyle, D.R.**, D.P. Aubrey, J.P. Siry, R.R. Volfovicz-Leon, and M.D. Coleman. 2013. Optimal nitrogen application rates for three intensively-managed hardwood tree species in the southeastern USA. *For. Ecol. Manage.* 303: 131-142.

- Coyle, D.R.**, M.W. Murphy, S.M. Paskewitz, J.L. Orrock, X. Lee^G, R.J. Murphy, M.A. McGeehin, and K.F. Raffa. 2013. Belowground herbivory initiates a cascade that increases abundance of Lyme disease vectors. *For. Ecol. Manage.* 302: 354–362.
- Kaczmarek, D.J., D.R. Coyle, and M.D. Coleman. 2013. Survival and growth of a range of *Populus* clones in central South Carolina USA through age ten: Do early assessments reflect longer-term survival and growth trends? *Biomass Bioenergy* 49: 260–272.
- Zalesny, R.S. Jr., D.M. Donner, **D.R. Coyle**, and W.L. Headlee^G. 2012. An approach for siting poplar energy production systems to increase productivity and associated ecosystem services. *For. Ecol. Manage.* 284: 45–58.
- Coyle, D.R.** and K.J.K. Gandhi. 2012. The ecology, behavior, and biological control potential of hymenopteran parasitoids of woodwasps (Hymenoptera: Siricidae) in North America. *Environ. Entomol.* 41: 731–749. (Invited Review).
- Coyle, D.R.**, W.J. Mattson, M.S. Jordan^U, and K.F. Raffa. 2012. Variable host phenology does not pose a barrier to invasive weevils in a northern hardwood forest. *Agric. For. Entomol.* 14: 276–285.
- Coyle, D.R.**, J.A. Pfammatter^G, A.M. Journey, T.L. Pahs, V.J. Cervenka, and R.L. Koch. 2012. Community composition and phenology of native Siricidae (Hymenoptera) attracted to semiochemicals in Minnesota. *Environ. Entomol.* 41: 91–97.
- Aubrey, D.P.^G, **D.R. Coyle**, and M.D. Coleman. 2012. Functional groups show distinct differences in nitrogen cycling during early stand development: implications for forest management. *Plant Soil* 351: 219–236.
- Pfammatter, J.A.^G, **D.R. Coyle**, A.M. Journey, T.L. Pahs, J.C. Luhman, V.J. Cervenka, and R.L. Koch. 2011. Bark beetle (Coleoptera: Curculionidae: Scolytinae) community structure in northeastern and central Minnesota. *Great Lakes Entomol.* 44: 163–176.
- Orrock, J.L., G.R. Curler^U, B.J. Danielson, and **D.R. Coyle**. 2011. Large-scale experimental landscapes reveal distinctive effects of patch geometry and connectivity on arthropod communities. *Landsc. Ecol.* 26: 1361–1372.
- Coyle, D.R.**, J.A. Zalesny, R.S. Zalesny, Jr., and A. Wiese. 2011. Irrigating poplar energy crops with landfill leachate negatively affects soil micro- and meso-fauna. *Internat. J. Phytoremed.* 13: 845–858.
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- Coyle, D.R.**, A.A. Allred^G, K.R. Kosola, and K.F. Raffa. 2011. Altered GAI activity of hybrid aspen has minimal effects on the performance of a polyphagous weevil, *Polydrusus sericeus*. *Entomol. Exp. Appl.* 138: 104–109.
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- Coyle, D.R.**, M.S. Jordan^U, and K.F. Raffa. 2010. Host plant phenology affects performance of an invasive weevil, *Phyllobius oblongus* (Coleoptera: Curculionidae), in a northern hardwood forest. *Environ. Entomol.* 39: 1539–1544.
- Coyle, D.R.**, W.J. Mattson, and K.F. Raffa. 2010. Laboratory performance of two polyphagous invasive weevils on the predominant woody plant species of a northern hardwood community. *Environ. Entomol.* 39: 1242–1248.

- Hillstrom, M.L.^G, L.M. Vigue^G, **D.R. Coyle**, K.F. Raffa, and R.L. Lindroth. 2010. Performance of the invasive weevil *Polydrusus sericeus* is influenced by atmospheric CO₂ and host species. *Agric. For. Entomol.* 12: 285–292.
- Coyle, D.R.**, D.A. Aubrey^G, and J. Bentz. 2010. *Erythroneura lawsoni* (Homoptera: Cicadellidae) abundance and feeding injury levels are influenced by foliar nutrient status in intensively managed American sycamore. *Agric. For. Entomol.* 12: 89–97.
- Zalesny, J.A., R.S. Zalesny Jr., **D.R. Coyle**, R.B. Hall, E.O. Bauer. 2009. Clonal variation in morphology of *Populus* root systems following irrigation with landfill leachate or water during 2 years of establishment. *BioEnergy Res.* 2: 134–143.
- Coyle, D.R.**, M.D. Coleman, and D.P. Aubrey^G. 2008. Above and belowground biomass accumulation, production, and distribution of sweetgum and loblolly pine grown with irrigation and fertilization. *Can. J. For. Res.* 38: 1335–1348.
- Coyle, D.R.**, E.R. Hart, J.D. McMillin, L.C. Rule, and R.B. Hall. 2008. Effects of repeated cottonwood leaf beetle defoliation on *Populus* growth and economic value over an 8-year harvest rotation. *For. Ecol. Manage.* 255: 3365–3373.
- Aubrey, D.A.^G, M.D. Coleman, and **D.R. Coyle**. 2007. Ice damage in loblolly pine: understanding the factors that influence susceptibility. *For. Sci.* 53: 580–589.
- Zalesny, J.A., R.S. Zalesny, **D.R. Coyle**, and R.B. Hall. 2007. Growth and biomass of *Populus* irrigated with landfill leachate. *For. Ecol. Manage.* 248: 143–152.
- Balser, T.C., K.D. McMahan, D. Bart, D. Bronson^G, **D.R. Coyle**, N. Craig^G, M. Flores-Mangual^G, K. Forshay^G, S.E. Jones^G, A.E. Kent^G, and A.L. Shade^G. 2006. Bridging the gap between micro- and macro-scale perspectives on the role of microbial communities in global change ecology. *Plant Soil* 289: 59–70.
- Coyle, D.R.**, M.D. Coleman, J.A. Durant^U, and L.A. Newman. 2006. Multiple factors affect pest and disease damage on 31 *Populus* clones in South Carolina. *Biomass Bioenergy* 30: 759–768.
- Coyle, D.R.**, M.D. Coleman, J.A. Durant^U, and L.A. Newman. 2006. Survival and growth of 31 *Populus* clones in South Carolina. *Biomass Bioenergy* 30: 750–758.
- Coyle, D.R.**, D.C. Booth, and M.S. Wallace. 2005. Ambrosia beetle (Coleoptera: Scolytidae) species, flight, and attack on living eastern cottonwoods. *J. Econ. Entomol.* 99: 2049–2057.
- Coyle, D.R.** and M.D. Coleman. 2005. Forest production responses to irrigation and fertilization are not explained by shifts in allocation. *For. Ecol. Manage.* 208: 137–152.
- Allen, C.B.^G, R.E. Will, R.C. McGarvey, **D.R. Coyle**, and M.D. Coleman. 2005. Radiation-use efficiency and gas exchange responses to water and nutrient availability in irrigated and fertilized stands of sweetgum and sycamore. *Tree Physiol.* 25: 191–200.
- Coyle, D.R.**, T.E. Nebeker, E.R. Hart, and W.J. Mattson, Jr. 2005. Biology and management of insect pests in North American intensively-managed hardwood forest systems. *Annu. Rev. Entomol.* 50: 1–29.
- Coyle, D.R.** and J.W. Amrine, Jr. 2004. New collection records and host range of the cottonwood leafcurl mite, *Tetra lobulifera* (Keifer) (Acari: Eriophyidae), in the USA. *Internat. J. Acarol.* 30: 3–8.
- Coyle, D.R.**, J.T. Nowak, and C.J. Fettig. 2003. Irrigation and fertilization effects on Nantucket pine tip moth (Lepidoptera: Tortricidae) damage levels and pupal weight in an intensively-managed pine plantation. *J. Entomol. Sci.* 38: 621–630.
- Coyle, D.R.**, J.D. McMillin, R.B. Hall, and E.R. Hart. 2003. Effects of cottonwood leaf beetle (Coleoptera: Chrysomelidae) larval defoliation, clone, and season on *Populus* foliar phagostimulants. *Environ. Entomol.* 32: 452–462.

- Coyle, D.R.** 2002. Effects of clone, silvicultural, and miticide treatments on cottonwood leafcurl mite (Acari: Eriophyidae) damage in plantation *Populus*. *Environ. Entomol.* 31: 1000–1008.
- Coyle, D.R.,** J.D. McMillin, R.B. Hall, and E.R. Hart. 2002. Cottonwood leaf beetle (Coleoptera: Chrysomelidae) defoliation impact on *Populus* growth and above-ground volume in a short-rotation woody crop plantation. *Agric. For. Entomol.* 4: 293–300.
- Coyle, D.R.,** J.D. McMillin, R.B. Hall, and E.R. Hart. 2001. Cottonwood leaf beetle (Coleoptera: Chrysomelidae) larval performance on eight *Populus* clones. *Environ. Entomol.* 30: 748–756.
- Coyle, D.R.,** J.D. McMillin, S.C. Krause, and E.R. Hart. 2000. Laboratory and field evaluations of Novodor and Raven for control of cottonwood leaf beetle (Coleoptera: Chrysomelidae). *J. Econ. Entomol.* 93: 713–720.
- Coyle, D.R.,** J.D. McMillin, and E.R. Hart. 1999. Pupal and adult parameters as potential indicators of cottonwood leaf beetle (Coleoptera: Chrysomelidae) fecundity and longevity. *Great Lakes Entomol.* 32: 107–113.
- Coyle, D.R.** and K.J. Larsen. 1998. Carrion beetles (Coleoptera: Silphidae) of northeastern Iowa: A comparison of baits for sampling. *J. Iowa Acad. Sci.* 105: 161–164.

Refereed Commentary Articles:

- Coyle, D.R.** 2010. Genetically modified organisms (GMOs) should be incorporated into management programs for insect crop pests to reduce insecticide use while providing acceptable levels of damage against all pests and improve crop yield. Introduction. *In* 2008 student debate: The use of genetically modified organisms in entomology. A.L. Nielsen and R.G. Burrus (eds.). *Am. Entomol.* 56: 106–114.
- Coyle, D.R.,** D.P. Aubrey^G, and C.R. Hickman^G. 2010. Not sure about a PhD program? Work in science on a “pre-PhD”. *Front. Ecol. Environ.* 8: 105–106.
- Boyles, J.G.^G, D.P. Aubrey^G, B.S. Cooper^G, J.G. Cox^G, **D.R. Coyle**, R.J. Fisher^G, J.D. Hoffman^G, and J.J. Storm^G. 2008. Statistical confusion among graduate students: Sickness or symptom? *J. Wildl. Manage.* 72: 1869–1871.
- Coyle, D.R.,** R.K. Krell^G, S.A. Lefko^G, and C.D. Pilcher^G. 2000. Should type specimens of insects indigenous to one country but housed in another be returned to their country of origin? Con Position. *In* International issues in entomology: a student debate. L.L. Allee (ed.). *Am. Entomol.* 46: 162–172.

Book Chapters:

- Nowak, J.T., K.D. Klepzig, **D.R. Coyle**, W.A. Carothers, and K.J.K. Gandhi. 2016. Chapter 5, p. 73-88. Southern pine beetles in central hardwood forests: frequency, spatial extent, and changes to forest structure. *In*: Natural Disturbances and Historic Range of Variation in Central Hardwood Forests. C.H. Greenberg and B.S. Collins (eds.). Springer Publishers, New York, NY. 406 p.
- Coyle, D.R.** and K.J.K. Gandhi. 2014. Plantation forests. Vol. 1, pp. 138-142. *In*: Biomes and Ecosystems: An Encyclopedia. R. W. Howarth (ed.). Salem Press, Pasadena, CA. 208 p.
- Coyle, D.R.,** W.J. Mattson, and K.F. Raffa. 2008. Invasive root feeding insects in natural forest ecosystems of North America. Chapter 8, pp. 134–151. *In*: Root Feeders: An Ecosystem Perspective. S.N. Johnson and P.J. Murray (eds.). CABI Press, Oxfordshire, UK. 230 p.
- Coyle, D.R.,** J.D. McMillin, R.B. Hall, and E.R. Hart. 2002. Deployment of tree resistance to insects in short-rotation *Populus* plantations. Chapter 9, pp. 189–215. *In*: Mechanisms and Deployment of Resistance in Trees to Insects. M.R. Wagner, K.M. Clancy, F. Lieutier, and T. D. Paine (eds.). Kluwer Academic Publishers, New York. 332 p.

Non-refereed Publications:

- Zalesny, Ronald S.; Coyle, David R. 2013. Short rotation *Populus*: a bibliography of North American literature, 1989-2011. Gen. Tech. Rep. NRS-110. Newtown Square, PA: U.S. Department of Agriculture, Forest Service, Northern Research Station. 103 p.
- Coleman M.D., **D.R. Coyle**, J. Blake, K. Britton, M. Buford, B. Campbell, J. Cox, B. Cregg, D. Daniels, M. Jacobson, K. Johnson, T. McDonald, K. McLeod, E. Nelson, D. Robison, R. Rummer, P. Sanchez, J. Stanturf, B. Stokes, C. Trettin, J. Tuskan, L. Wright, and S. Wullschleger. 2004. Production of Short Rotation Woody Crops Grown with a Range of Nutrient and Water Availability: Establishment Report and First-Year Responses. USDA-Forest Service, Southern Research Station, Asheville, NC. SRS-GTR-072. 21 p.

PROFESSIONAL PRESENTATIONS (I have given or co-authored 35 invited, 55 submitted, and 45 poster presentations to international, national, regional, and local meetings)Invited Academic Seminars:

- Coyle, D.R.** Bugs, bbq, and blurry pictures: forest health outreach in the Southeast. University of Florida, Department of Entomology and Nematology, 24 February 2017, Gainesville, FL. (50 min.)
- Coyle, D.R.** Interactions between below- and above-ground processes in forest ecosystems: Implications to forest health and human values. Luther College, Department of Biology, 12 April 2012, Decorah, IA. (50 min.)
- Coyle, D.R.** Interactions between below- and above-ground processes in forest ecosystems: Implications to forest health and human values. Southern Illinois University – Edwardsville, Department of Biology, 9 April 2012, Edwardsville, IL. (50 min.)
- Coyle, D.R.** What lurks beneath: Invasive rhizophagous weevils in northern hardwood forests. University of Wisconsin Department of Entomology seminar series, 30 September 2011, Madison, WI. (50 min.)
- Coyle, D.R.** Root herbivory, black-legged ticks, and Lyme disease: An ecological cascade in red pine forests. University of Georgia Department of Entomology seminar series, 4 April 2011, Athens, GA. (50 min.)

Invited Panel Participant:

- Coyle, D.R.** Tri-trophic Interactions: Government, University, and Private Landowner Interactions. Southern Forest Insect Work Conference, 25-28 July 2017, Melbourne, FL. (90 min. panel session)
- Coyle, D.R.** Not your grandfather's timber: What the future may hold for the next generation of forest landowners. National Association of Private Forest Landowners Annual Meeting, 2 June 2017, Asheville, NC. (90 min. panel session)

TEACHING**Soil Biology and Ecology****University of Georgia****Spring 2013**

Course co-created and taught with Dr. Mac Callaham, USDA Forest Service. Responsible for creating course lecture and lab schedule, development of discussion material, delivering half of the lectures, evaluating student participation and creating exams. Labs were co-instructed. Students will participate in a writing exercise with a goal of developing a peer-reviewed publication.

Disturbance Ecology of Forest Insects**University of Wisconsin****Fall 2008**

Course co-created and taught with Dr. Brian Sturtevant, USDA Forest Service. Assisted with course design and development of discussion material. Responsible for delivering half of the lectures, supervising class discussions, and evaluating student participation to determine grades.

Forest Pest Management **University of Wisconsin** **Fall 2007**

Assisted with all laboratory preparation and activities, created and delivered lectures, assisted with grading. Supervised independent project involving four students examining the interactions between fungi, mites, nematodes, and bark beetles.

Silviculture **Iowa State University** **Spring 1999**

Assisted in laboratory preparation, development, set-up, and grading. Presented various lectures and gave quizzes.

Invertebrate Zoology **Luther College** **Fall 1996**

Assisted in laboratory and test preparation and set-up, administration, and grading. Helped students throughout laboratory with questions and problems.

Aquatic Biology **Luther College** **Spring 1997**

Assisted in laboratory preparation and set-up. Helped students throughout laboratory with questions and problems. Coordinated transportation to field sites.

Guest Lectures:

- Forest Health and Protection (NC State University, Spring 2018) – forest declines
- Natural Resource Management for Teachers (UGA, Spring 2016 & Spring 2018) – how to teach entomology
- Forest Health (University of Florida, Spring 2017) – regional perspective on forest health
- Urban Tree Management (UGA, Spring 2017) – insects in the urban landscape
- Forest Pest Management (UGA, Spring 2015) – introductory material
- Advanced Forest Entomology (UGA, Fall 2012 & Fall 2014) – belowground herbivory
- Ecology of Natural Resources (UGA, Fall 2011) – energy flow and food webs

MENTORING

Ansley Silva, University of Georgia, Graduate Student, 2014 – 2016.

Ashley Schultz, University of Georgia, Graduate Student, 2013 – 2015. Won 1st place poster presentation at ESA Annual Meeting, 2014.

Mauranda Upchurch, University of Georgia, Young Scholars Internship Program, Summer 2014. Won 1st prize for student Science Fair poster at 41st Annual NOBCCChE Conference 2014.

Sander Denham, USDA Forest Service/North Carolina State University, Undergraduate Technician/Graduate Student, 2012 – 2014. Won 2nd prize for M.S. poster at the 2012 MEAS and FER Graduate Research Symposium.

Courtney Brissey, University of Georgia, Undergraduate Technician/Researcher, 2011 – 2013. Was named one of the 2013 UGA Student Employees of the Year, won 1st prize poster at 2012 Warnell Graduate Student Symposium.

Nakia Lee, University of Georgia, Young Scholars Internship Program, Summer 2011.

Michelle Jordan, University of Wisconsin, Undergraduate Technician/Researcher, 2007 – 2009. Received prestigious UW Hilldale Scholarship.

Allyson Czechowicz, Luther College, Undergraduate Volunteer, Summer 2008.

Mike Komp, University of Wisconsin, Undergraduate Technician/Researcher, 2008 – 2009.

Carly Lapin, University of Wisconsin, Undergraduate Technician/Researcher, 2006 – 2007.

Jaclin Durant, University of South Carolina, Undergraduate Researcher, 2002.

AWARDS

Southeastern Society of American Foresters Award of Excellence in Public Education & Technology Transfer. 2017.

National Science Foundation (NSF) Faculty Institutes for Reforming Teaching (FIRST IV) Postdoctoral Scholar 2011-2012.

North Central Region Student Representative to the North American Forest Insect Work Conference Student Plenary Session. 2011.

J. H. Comstock Award, Entomological Society of America North Central Branch. 2009.

Entomological Society of America Young Professional Award. 2008.

Entomological Society of America Student Activities Award. 2008.

Entomological Society of America Young Professional Award. 2007.

Vilas Travel Award, University of Wisconsin-Madison. 2007, 2008, 2010.

Ecological Society of America SDERP Travel Award. 2007.

EGSA Kinney Merit Award, UW Department of Entomology. 2005, 2006, 2007.

Wisconsin Arborists Association Outstanding Graduate Student Award. 2005.

Herbert H. Osborn Outstanding Graduate Student Award, M. S. recipient, ISU Department of Entomology. 1999.

Sponsored by the Rocky Mountain Conference of Entomologists to attend the RMCE Meeting; Co-Champion of RMCE Horseshoe Tournament. 1999.

2nd place, M.S. Oral Presentation, North Central Branch of the Entomological Society of America (NCB-ESA) Meeting, Des Moines, IA. 1999.

HONORS

Preus Presidential Scholarship	Luther College Honors Grant
Edward H. Dahly Scholarship	Luther College Dean's List
Mayo Foundation Scholarship	National Honor Society Member
Minnesota Masonic Lodge Scholarship	Sigma Xi Honor Society Member
Gamma Delta Sigma Agriculture Honor Society Member	

LEADERSHIP POSITIONS

Scientific Committee, "Forest Insects and Pathogens in a Changing Environment: Ecology, Monitoring, & Genetics" conference, a Joint Meeting of the International Union of Forest Research Organizations (IUFRO) Working Parties 7.03.05 & 7.03.10, 2017

Advisory Board, Proactive Forest Health and Resistance (ProForest), 2017 – present

Board Member, Georgia Exotic Plant Pest Council, 2016-present

Board Member, North American Invasive Species Management Association, 2016 – present

Advisory Committee, Southern IPM Center, 2016 - present

ACTIVITIES AND SERVICE

Judge, UGA Warnell Graduate Student Symposium: 2012, 2013, 2015.

Judge, Georgia State Science and Engineering Fair: 2013.

NCB-ESA Student Affairs Committee: Member 2007, Vice-Chair 2008, Chair 2009.

NCB-ESA Executive Committee, student at-large member. 2009.

NCB Student Rep to the ESA Linnaean Games Committee. 2008, 2009.

NCB-ESA student representative to the ESA Student Affairs Committee. 2007.

Organizer, Forest Entomology Network, Entomological Society of America. 2008- present.

Entomological Society of America Local Arrangements and Technology Committee member. 2007.

Graduate Student Representative to the UW Entomology Faculty Hiring Committee. 2006

UW Entomology Graduate Student Association (EGSA). Vice President, 2005-2009

ISU Student Debate Team, Entomological Society of America National Meeting. 1999

ISU Entomology Graduate Student Organization (EGSO). Vice President 1998-1999

ISU EGSO representative to Graduate Student Senate. 1998-1999

ISU Student Debate Team, Joint Meeting of the Entomological Society of America and the American Phytopathological Society. 1998

Student Volunteer, Entomological Society of America National Meeting. 1998, 2005 - 2007

ISU Student Debate Team, Entomological Society of America National Meeting. 1997

SYMPOSIA LEADERSHIP AND ORGANIZATION

Co-Organizer/Moderator (with J. Hartshorn), ESA 2017 Symposium: Communication at the Intersection of Urban and Forest Communities. Entomological Society of America Annual Meeting, 5-8 November 2017, Denver, CO.

Moderator, NAISMA 2017 Symposium: Education and Outreach Tools. North American Invasive Species Management Association Annual Meeting, 23-26 October 2017, Sparks, NV

Co-Organizer/moderator (with J. Hulcr), SFIWC 2017 Symposium: Timber Industry and University Extension: How Can We Work Together? Southern Forest Insect Work Conference, 25-28 July 2017, Melbourne, FL.

Organizer/moderator, NAFIWC 2016 Symposium: Forest health extension in North America: challenges and opportunities. North American Forest Insect Work Conference, 31 May – 2 June 2016, Washington, D.C.

Organizer/Moderator, SFIWC 2015 Symposium: Our changing world: current and potential exotic species as threats to southeastern forests. Southern Forest Insect Work Conference, 21-24 July 2015, Fayetteville, AR.

Organizer/Moderator, SFIWC 2014 Symposium: Exotic Insects: New and Old Pests. Southern Forest Insect Work Conference, 22-25 July 2014, Charleston, SC.

Moderator, SFIWC 2014 Symposium: Open Session. Southern Forest Insect Work Conference, 22-25 July 2014, Charleston, SC.

Co-Organizer/Moderator (with C.J. Fettig and J.T. Nowak), ESA 2011 Symposium: Forest Entomology: Reflection on a Decade of Change. Entomological Society of America Annual Meeting, 13-16 November 2011, Reno, NV.

Co-Organizer/Moderator (with C.J. Fettig and J.T. Nowak), ESA 2010 Symposium: Forest Entomology: Current Issues and Emerging Trends Across North America. Entomological Society of America Annual Meeting, 12-15 December 2010, San Diego, CA.

Co-Organizer/Moderator (with C.J. Fettig and J.T. Nowak), ESA 2009 Symposium: What's New in Forest Entomology? Entomological Society of America Annual Meeting, 13-16 December 2009, Indianapolis, IN.

Co-Organizer/Moderator (with A.M. Ray and L.N. Meihls), ESA NCB 2009 Symposium: Invasive Insect Management: Are We Making Any Progress? Entomological Society of America North Central Branch Meeting, 15-19 March 2009, St. Louis, MO.

Co-Organizer/Moderator (with C.J. Fettig and J.T. Nowak), ESA 2008 Symposium: Forest Entomology: Changes Impacting Our Discipline. Entomological Society of America Annual Meeting, 16-19 November 2008, Reno, NV

- Co-Organizer/Moderator (with L. Campbell, T. Galvan, A. Jacobson, G. Mynhardt, A. Ray, and N. Spoomer), ESA NCB Student Symposium: Walking the Entomological Line: Making the Transition from Student to Professional. North Central Branch of the Entomological Society of America Annual Meeting, 24-27 March 2008, Columbus, OH.
- Co- Organizer/Moderator (with C.J. Fettig and J.T. Nowak), ESA 2007 Symposium: Exotic Forest Pests: Are We Making Any Progress? Entomological Society of America Annual Meeting, 9-12 December 2007, San Diego, CA
- Co-Organizer/Moderator (with G.N. Stevens), EcSA 2007 Symposium: Root herbivores as agents of change: Micro- and macro-herbivores across natural and managed systems. Ecological Society of America National Meeting, 5-10 August 2007, San Jose, CA
- Co- Organizer/Moderator (with C.J. Fettig and J.T. Nowak), ESA 2006 Symposium: Tribute to Wayne Berisford: Forest Entomologist. Entomological Society of America Annual Meeting, 10-13 December 2006, Indianapolis, IN
- Co- Organizer/Moderator (with C.J. Fettig and J.T. Nowak), ESA 2005 Symposium: Forest Entomology: Tree-Insect Interactions. Entomological Society of America Annual Meeting, 15-18 December 2005, Ft. Lauderdale, FL
- Co- Organizer/Moderator (with C.J. Fettig and J.T. Nowak), ESA 2004 Symposium: Forest Entomology: Current Issues Facing our Discipline. Entomological Society of America Annual Meeting, 14-17 November 2004, Salt Lake City, UT
- Co- Organizer/Moderator (with C.J. Fettig and J.T. Nowak), ESA 2003 Symposium: Forest Pest Management: Tree-Insect Interactions. Entomological Society of America Annual Meeting, 26-29 October 2003, Cincinnati, OH
- Co- Organizer/Moderator (with C.J. Fettig and J.T. Nowak), ESA 2002 Informal Conference: Forest Pest Management: Developing Tools to Solve the Challenges of Tomorrow. 50th Annual Entomological Society of America Meeting, 17-20 November 2002, Ft. Lauderdale, FL

SOCIETIES AND PROFESSIONAL MEMBERSHIPS

- Association of Natural Resource Extension Professionals, 2016 – present
- Society of American Foresters, 2013 – present
- Entomological Society of America, 1996 – present

PEER REVIEWS (~60 total)

- Agricultural and Forest Entomology
- Annals of the Entomological Soc. of America
- Biomass and Bioenergy
- Bulletin of Entomological Research
- Canadian Journal of Forest Research
- Crop Protection
- Ecological Entomology
- Ecology Letters
- Elsevier Publishing (2 book proposals)
- Entomologia Experimentalis et Applicata
- Environmental Entomology
- Forest Ecology and Management
- Forest Science
- International Journal of Phytoremediation
- Journal of Applied Entomology

Journal of Economic Entomology
 Journal of Forestry
 Journal of Insect Science
 Journal of the Kansas Entomological Society
 New Forests
 Oecologia
 Psyche
 Washington State University Extension (4 extension publications)
 Waste Management

Associate Editor for the journal **Forest Science**. July 2011 – present
 Manuscripts handled (23)

PROFESSIONAL MEETINGS AND WORKSHOPS ATTENDED

Southeastern Society of American Foresters Annual Meeting, 28-30 January 2018, Pine Mountain, GA
 Southern Group of State Foresters - Forest Health Committee annual meeting, 23-25 January 2018, Greenville, SC
 Annual Gypsy Moth Review and Continental Dialogue on Non-native Forest Insects and Diseases Joint Meeting, 7-10 November 2017, Savannah, GA
 Entomological Society of America National Meeting, 5-8 November 2017, Denver, CO
 North American Invasive Species Management Association Annual Meeting, 23-26 October 2017, Sparks, NV
 Forest Insects and Pathogens in a Changing Environment: Ecology, Monitoring, & Genetics, a Joint Meeting of the International Union of Forest Research Organizations (IUFRO) Working Parties 7.03.05 & 7.03.10, 2017; 10-14 September 2017, Thessaloniki, Greece
 Southern Forest Insect Work Conference, 25-28 July 2017, Melbourne, FL
 National Association of Private Forest Landowners Annual Conference, 30 May – 2 June 2017, Asheville, NC
 Western Gulf Forest Health Conference, 18-19 May 2017, Shreveport, LA
 Southern Group of State Foresters - Forest Health Committee annual meeting, 7-9 February 2017, Biloxi, MS
 Virginia Association of Forest Health Professionals Annual Conference, 30-31 January 2017, Glen Allen, VA
 USDA Forest Service Drought Mitigation Meeting, 18-19 January 2017, Atlanta, GA
 Continental Dialogue on Non-native Forest Insects and Diseases, 14-15 November 2016, Indianapolis, IN
 North American Invasive Species Management Association Annual Meeting, 26-29 September 2016, Salt Lake City, UT
 Southern Group of State Foresters Annual Conference, 13-16 June 2016, Mobile, AL
 North American Forest Insect Work Conference, 31 May – 2 June 2016, Washington, D.C.
 Southern Group of State Foresters - Forest Health Committee annual meeting, 11-14 January 2016, Nashville, TN
 Virginia Association of Forest Health Professionals Annual Conference, 29-30 January 2016, Blacksburg, VA
 Southern Forest Insect Work Conference, 21-24 July 2015, Fayetteville, AR
 Western Forest Insect Work Conference, 30 March – 2 April 2015, Santa Fe, NM

International Union of Forest Research Organizations (IUFRO) XXIV World Congress, 5-11 October 2014, Salt Lake City, UT

Southern Forest Insect Work Conference, 22-25 July 2014, Charleston, SC

Southern Forest Insect Work Conference, 23-26 July 2013, New Orleans, LA

Entomological Society of America Southeastern Branch Mtg., 3-6 March 2013, Baton Rouge, LA

Entomological Society of America Annual Meeting, 11-14 November 2012, Knoxville, TN

Southern Forest Insect Work Conference, 24-27 July 2012, Charlottesville, VA

USDA Interagency Research Forum on Invasive Species, 10-13 January 2012, Annapolis, MD

Entomological Society of America Annual Meeting, 13-16 November 2011, Reno, NV

North American Forest Insect Work Conference, 9-12 May 2011, Portland, OR

Entomological Society of America Annual Meeting, 12-15 December 2010, San Diego, CA

North Central Forest Pest Workshop, 4-7 October 2010, Elkhart Lake, WI

Entomological Society of America Annual Meeting, 13-16 December 2009, Indianapolis, IN

Entomological Society of America North Central Branch Mtg., 15-18 March 2009, St. Louis, MO

Entomological Society of America Annual Meeting, 16-19 November 2008, Reno, NV

British Ecological Society National Meeting, 3-5 September 2008, London, England

Ecological Society of America Annual Meeting, 3-8 August 2008, Milwaukee, WI

Entomological Society of America Annual Meeting, 9-12 December 2007, San Diego, CA

Ecological Society of America Annual Meeting, 3-10 August 2007, San Jose, CA

Gordon Research Conference, Plant-Herbivore Interactions, 18-23 February 2007, Ventura, CA

Entomological Society of America Annual Meeting, 10-13 December 2006, Indianapolis, IN

EPA Graduate Fellowship Conference, 24-26 September 2006, Washington, D.C.

Wisconsin Arborist's Association Annual Meeting, 5-7 February 2006, Green Bay, WI

Entomological Society of America Annual Meeting, 15-18 December 2005, Ft. Lauderdale, FL

Entomological Society of America Annual Meeting, 14-17 November 2004, Salt Lake City, UT

6th Biennial Meeting of the Short Rotation Woody Crops Operations Working Group, 7-10 November 2004, Charleston, SC

Southern Forest Insect Work Conference, 2-5 August 2004, Tampa, FL

Entomological Society of America Southeastern Branch Annual Meeting, 15-18 February 2004, Charleston, SC

Short-Rotation Woody Crops Cooperative Research Program Technical Meeting, 21-23 January 2004, Aiken, SC

Entomological Society of America Annual Meeting, 26-29 October 2003, Cincinnati, OH

Ecological Society of America Annual Meeting, 3-8 August 2003, Savannah, GA

Entomological Society of America Annual Meeting, 17-20 November 2002, Ft. Lauderdale, FL

Short-Rotation Woody Crops Cooperative Research Program Technical Meeting, 17-18 October 2002, Aiken, SC

Fourth Biennial Meeting of the Short Rotation Woody Crops Operations Working Group, 14-17 September 2002, Alexandria, MN

Entomological Society of America National Meeting, 9-12 December 2001, San Diego, CA

Short-Rotation Woody Crops Cooperative Research Program Technical Meeting, 18-19 October 2001, Aiken, SC

North American Forest Insect Work Conference, 14-18 May 2001, Edmonton, Alberta, Canada

Entomological Society of America National Meeting, 3-7 December 2000, Montreal, Quebec, Canada

Short Rotation Woody Crops Cooperative Research Program Technical Meeting, 24-25 October 2000, Aiken, SC

Third Biennial Meeting of the Short-Rotation Woody Crops Operations Working Group, 10-13 October 2000, Syracuse, NY

21st Session of the International Poplar Commission, 24-28 September 2000, Vancouver, WA

Entomological Society of America National Meeting, 12-16 December 1999, Atlanta, GA

Short Rotation Woody Crops Cooperative Research Program Technical Meeting, 19-20 October 1999, Aiken, SC

Poplar Council of the United States Biennial Meeting, 18-19 August 1999, Alexandria, MN

Rocky Mountain Conference of Entomologists, 1-5 August 1999, Woodland Park, CO

Entomological Society of America North Central Branch Mtg., 28-31 March 1999, Des Moines, IA

43rd Annual Shade Tree Short Course, 9-10 March 1999, Ames, IA

50th Annual Iowa Pest Control Workshop, 22 February 1999, Ames, IA

Joint Meeting of the Entomological Society of America and the American Phytopathological Society, 8-12 November 1998, Las Vegas, NV

North Central Forest Pest Workshop, 14-17 September 1998, Dubuque, IA

Entomological Society of America National Meeting, 14-18 December 1997, Nashville, TN

Poplar Council of the United States Biennial Meeting, 19-21 August 1997, Paducah, KY

Entomological Society of America National Meeting, 8-12 December 1996, Louisville, KY