

Jamie L. Schuler

Division of Forestry and Natural Resources
West Virginia University
Morgantown, WV 26506
phone: (870)723-9378 cell, (304)293-3896 office
email: jamie.schuler@mail.wvu.edu

EDUCATION

Ph.D., North Carolina State University, Department of Forestry and Environmental Resources, Raleigh, NC (Spring 2005), Major/minor: Silviculture/Forest Soils

M.S., SUNY College of Environmental Science and Forestry, Department of Forestry, Syracuse, NY (1999), Major: Forest Management

B.S., SUNY College of Environmental Science and Forestry, Syracuse, NY (1997), Dual major: Forestry and Environmental & Forest Biology

A.S., Finger Lakes Community College, Department of Conservation, Canandaigua, NY (1994), Major: Pre-environmental Science and Forestry

PROFESSIONAL EXPERIENCE

Associate Professor of Silviculture- West Virginia University (2017-present)

Program Coordinator for the WVU Research Forest (2017-present)

Assistant Professor of Silviculture- West Virginia University (2012-2017)

Associate Professor of Silviculture and Sturgis Chair in Forest Biology
University of Arkansas-Monticello (2011-2012)

Assistant Professor of Silviculture and Sturgis Chair in Forest Biology
University of Arkansas-Monticello (2009-2011)

Assistant Professor of Silviculture- University of Arkansas-Monticello (2005-present)

Assistant Director- Hardwood Research Cooperative (HRC) (2001 to 2005)

Graduate Research Assistant (1999 to 2001), North Carolina State University, Department of Forestry

Laboratory Research Aide (1999), SUNY College of Environmental Science and Forestry, Syracuse, NY

Silvicultural Research Aide (1996) New York Center for Forestry Research & Development, Syracuse, NY

TEACHING EXPERIENCE

West Virginia University

- Forest Management and Planning (Capstone), Spring 2015-
- Silvicultural Systems (FMAN 311), Fall 2012-
- Graduate Silviculture (FMAN 693), Fall 2013-
- Sugarbush Management (FOR 411), Spring 2014-
- Summer Field Practicum (FMAN 400), Summer 2013 -

University of Arkansas-Monticello

- Introduction to Forestry (FOR 1061), Fall, 2005 to 2011
- Dendrology I (FOR 2231), Fall, 2005 to 2011
- Dendrology II (FOR 2629), Spring, 2006 to 2012
- Silviculture (FOR 2643), Spring, 2006 to 2012
- Silvics (FOR 3371), Summer, 2006
- Undergraduate Independent Study (FOR 3782), Fall, 2006
- Forest Stand Dynamics (FRS 5433), Fall 2006 & 2009, graduate level course

MEMBERSHIPS/CERTIFICATIONS

- WV Registered Forester, WV#782
- WV Registered Pesticide Applicators License
- WV Certified Logger
- AR Registered Forester #1016
- Society of American Foresters
- Phi Kappa Phi, National Honor Society
- Xi Sigma Pi, Forestry Honor Society

AWARDS

- WVU Division of Forestry and Natural Resources Outstanding Service Award 2018
- WVU Society of American Foresters Student Chapter Outstanding Educator Award, 2016 & 2018
- SAF Ouachita Division, Forest Science Research Award, 2010
- Sturgis Chair in Forest Biology (2009)
- University of Arkansas Faculty Service and Achievement Award (2009)
- Arkansas Forest Resource Center Team Work Award (2009)
- Charles B. Davey Graduate Fellowship for excellence in biological sciences, NCSU (2002)
- Robin Hood Oak Award, SUNY-ESF, Syracuse, NY (1997) for leadership within the campus community and academic merit

- Maple Leaf Award, SUNY-ESF, Syracuse, NY (1997) for service within the campus community

PUBLICATIONS (In Print/Accepted)

- Bin, Y., Q. Hao, B. Lv, N. Wang, S. Liu, Y. Zhou, J. Schuler, and J. Wang. 2018. Why *Vatica mangachapoi* shows stronger capability of natural regeneration in the coastal barren sandy soil—seed rain dynamic. *Asian International Journal of Life Sciences*. *In Press*.
- Liebermann, H., **J. Schuler**, M. Strager, A.K. Hentz, and A. Maxwell. Using Unmanned Aerial Systems for Deriving Forest Stand Characteristics in Mixed Hardwoods of West Virginia. *Journal of Geospatial Applications in Natural Resources* 2(1):23-53.
- Martin, A., **J. Schuler**, and J. Edwards. 2017. Vegetation Response to Strip Cutting Young Hardwood Stands in West Virginia. *J. Sustainable Forestry* 36:818-832.
- **Schuler, JL**, DC Bragg, K McElligott. 2017. Biomass estimates of small diameter planted and natural-origin loblolly pines show major departures from the National Biomass Estimator equations. *Forest Science* 63(3):319-330.
- Caterino, B., **J. Schuler**, S. Grushecky, and J. Skousen. 2017. Surface mine to biomass farm: growing shrub willow (*Salix* spp.) in northeastern West Virginia. *Journal American Society of Mining and Reclamation* 6(1):1-14.
- Monteleone, A, J. Skousen, L. McDonald, **J. Schuler**, J. Pomp, M. French, and R. Williams. 2017. Evaluation of small tree and shrub plantings on reclaimed surface mines in West Virginia. *Journal American Society of Mining and Reclamation* 6(1):34-61.
- Gary W. Miller, **Jamie L. Schuler**, and James S. Rentch. 2017. Crown Class Dynamics of Oaks after Commercial Thinning in West Virginia: 30-Year Results. In: Kabrick, J.M., D. Dey, B.O. Knapp, D.R. Larsen, S.R. Shifley, and H.E. Stelzer (eds.). *Proceedings of the 20th Central Hardwood Forest Conference*; 2016 March 28-April 1; Columbia, MO. USDA Forest Service, GTR NRS-P-167: 193-201
- **Schuler, J.**, M. Boyce, and G.W. Miller. 2017. The Impact of Strip Clearcutting on Red Oak Seedling Development. . In: Kabrick, J.M., D. Dey, B.O. Knapp, D.R. Larsen, S.R. Shifley, and H.E. Stelzer (eds.). *Proceedings of the 20th Central Hardwood Forest Conference*; 2016 March 28-April 1; Columbia, MO. USDA Forest Service, GTR NRS-P-167: 19-26.
- Yuan Wen, **Jamie L. Schuler**, Shirong Liu, Pu Mou, Hui Wang, Haolong Yu, Jingxin Wang. 2016. Soil carbon dynamics in a *Pinus massoniana* plantation following clear-cutting and slash removal. *Journal of Plant Ecology* 9(1):20-29.

- Nobert, HA, DW McGill, ST Grushecky, JG Skousen, **JL Schuler**. 2016. Salix spp. as a biomass crop: Investigating its potential on mined lands and the use of biochar as a soil amendment. *Journal of the American Society of Mining and Reclamation* 5(2):58-76.
- Sharma, S., JP Adams, **JL Schuler**, RL Ficklin, and DC Bragg. 2016. Effect of seedling stock on the early stand development and physiology of improved loblolly pine (*Pinus taeda* L.) seedlings. *iForest* 9:690-695.
- **J. Schuler** and A. Martin. 2016. Strip thinning young hardwood forests: multi-functional management for wood, wildlife, and bioenergy. *Proceedings of the 18th Biennial Southern Silvicultural Research Conference*. USDA Forest Serv., e-GTR SRS-212:523-527.
- M.A. Fenwick, **J.L. Schuler**, and T.M. Schuler. 2016. First year sprouting and growth dynamics in response to prescribed fire in a mesic mixed-oak forest. *Proceedings of the 18th Biennial Southern Silvicultural Research Conference*. USDA Forest Serv., e-GTR SRS-212:219-225.
- Dallaire, K., J. Skousen, and **J. Schuler**. 2015. Height of three hardwood species growing on mine sites reclaimed using the forestry reclamation approach compared to natural conditions. *Journal of the American Society of Mining and Reclamation* 4(2):20-35.
- **Schuler, J.L.** and W. McCarthy. 2015. Development of eastern cottonwood cuttings as modified by cutting length and surface area available for rooting. *New Forests* 46:547-559.
- **Schuler, J.L.**, B. Woods, J. Adams, and R. Souter. 2015. Crown size relationships for black willow in the lower Mississippi Alluvial valley. 17th Biennial Southern Silvicultural Research Conference, March 5-7, Shreveport, LA. e-GTR SRS-203
- Bragg, D.C., **J.L. Schuler**, M.H. Pelkki, D.A. Scott, and J.M. Guldin. 2015. More than just timber: Silvicultural options and ecosystem services from managed southern pine stands. P.411-418 in Holley, A.G., K.F. Connor, J.D. Haywood (eds.), *Proc. 17th Biennial Southern Silvicultural Research Conference*, March 5-7, Shreveport, LA. e-GTR SRS-203
- **Schuler, J.L.**, S. Grushecky, and J. Wang. 2014. Establishing perennial seed-based energy crops on reclaimed surface mine soils in the central Appalachians. *Central Hardwood Forest Conference Paper*. USDA Forest Service, GTR NRS-P-142:184-192.
- Fenwick, A., **J. Schuler**, S. Grushecky, T. Schuler, and M. Thomas-Van Gundy. 2014. Kanawha State Forest, WV- Wildland fire fuel load assessment and geospatial distribution. *Central Hardwood Forest Conference Paper*. USDA Forest Service, GTR NRS-P-142:122-132.
- K.C., Dipesh and **J.L. Schuler**. 2013. Fine-root production and aboveground development for loblolly pine, silver maple, and cottonwood. *Communications in Soil Science and Plant Analysis* 44:2207-2218.

- K.C., Dipesh* and **J.L. Schuler**. 2013. Estimating fine-root production and mortality in the biomass plantations. *Communications in Soil Science and Plant Analysis* 44:2514-2523.
- **Schuler, J.L.**, D. Bragg, E. Heitzman, and J. Milks. 2013. Seedling response to initial oak woodland restoration treatments on the Ozark National Forest. *Proceedings 18th Central Hardwood Forest Conference*, GTR-NRS-P-117.
- Sharma, S.* , JP Adams, **JL Schuler**, DC Bragg, RL Ficklin. 2013. Genetic effects on early stand development of improved loblolly pine (*Pinus taeda* L.) seedlings. *Proceedings of the Southern Tree Improvement Conference*, June 10-13, Clemson, SC
- **Schuler, J.L.** 2012. Comparing second year growth of American sycamore, black willow, and eastern cottonwood with and without fertilization. P. 290-291 in Butnor, J.R. (ed.), *Proc. 16th Biennial Southern Silvicultural Research Conference*. e-GTR SRS-156.
- Gann, B., L. Thompson, and **J.L. Schuler**. 2012. Control and management of eastern baccharis in a recently established bottomland hardwood plantation. P. 122-125 in Butnor, J.R. (ed.), *Proc. 16th Biennial Southern Silvicultural Research Conference*. e-GTR SRS-156.
- Robison, D.J., T. San Filipo, C. Lawrence III, **J.L. Schuler**, and B.J. Berenguer. 2012. Stand and individual tree growth response to treatments in young natural hardwoods. P. 264-266 in Butnor, J.R. (ed.), *Proc. 16th Biennial Southern Silvicultural Research Conference*. e-GTR SRS-156.
- **Schuler, J.L.** and D.J. Robison. 2010. Performance of Northern Red Oak Enrichment Plantings in Naturally Regenerating Southern Appalachian Hardwood Stands. *New Forests* 40(1):119-130.
- Berenguer, B.J., **J.L. Schuler**, M.H. Gocke, E. Treasure, D.J. Robison. 2010. Accelerating young stand development in natural Piedmont hardwoods. In: *Proceedings 14th Biennial Southern Silviculture Research Conference*. UDSA Forest Service General Technical Report SRS-121.
- **Schuler, J.L.** and J. Stephens. 2010. Releasing Red Oak Reproduction Using a Growing Season Application of Oust. In: *Proceedings 14th Biennial Southern Silviculture Research Conference*. UDSA Forest Service General Technical Report SRS-121.
- **Schuler, J.L.**, M. Pelkki, and C. Stuhlinger. 2009. Biological and economic considerations in establishing a short-rotation bioenergy plantation. *Journal of the Arkansas Academy of Science* 63:153-157
- Berenguer, B.J., **J.L. Schuler**, D.J. Robison, M.H. Gocke, and E. Treasure. 2009. Response of a rising 2-year-old natural Piedmont upland stand to fertilization. *New Forests* 37(2):155-174.

- **Schuler, J.L.** and D.J. Robison. 2009 Response of reproduction and residual overstory trees to even-aged regeneration methods in southern hardwoods. In: Columbus, F (ed.), Forest Regeneration: Ecology, Management and Economics. Nova Publishers.
- **Schuler, J.L.** and H.O. Liechty. 2008. Seed bank emergence following prescribed burning in the Ozark Highlands. P.516-524 in Jacobs, DF, Michler, CH (eds), Proceedings of the 16th Central Hardwood Forest Conference. USDA Forest Service GTR NRS-P-24.
- **Schuler, J.L.** and D.J. Robison. 2008. The effects of intensive management on the leaf characteristics and growth phenology of young yellow-poplar stems. Forest Ecology and Management 255(3-4):787-796.
- **Schuler, J.L.** 2008. Planting techniques for loblolly pine seedlings on two subsoiled sites in Arkansas. Journal of the Arkansas Academy of Science 61:89-93
- **Schuler, J.L.** and D.J. Robison. 2006. Stand development and growth response of 1 to 6 year-old natural upland hardwoods to silvicultural treatments. Forest Ecology and Management 232 (1/3):124-134.
- **Schuler, J.L.** and D.J. Robison. 2006. The response of two very young, even-aged upland hardwood stands to weed control and fertilization. P. 615-619 in Connor, K.F. (ed.), Proc. 13th Biennial Southern Silvicultural Research Conference. Memphis, TN. USDA For. Serv. Gen. Tech. Rep. SRS-92.
- **Schuler, J.L.** and D.J. Robison. 2006. Crop tree release options for young hardwood stands in North Carolina. P. 637-638 in Conner, K.F. (ed.), Proc. 13th Biennial Southern Silvicultural Research Conference. Memphis, TN. USDA For. Serv. Gen. Tech. Rep. SRS-92.
- **Schuler, J.L.** 2005. Stand dynamics and ecological constraints on growth in young naturally regenerated hardwood stands. Ph.D. Dissertation, North Carolina State University, Raleigh, NC 149 p.
- Gocke, M.H., **J.L. Schuler**, D.J. Robison, and B. Goldfarb. 2005. Development of northern red oak rooted cutting and enrichment planting systems. *In*: 9th Workshop on Seedling Physiology and Growth Problems in Oak Plantings. West Lafayette, IN. October 19-20, 2004.
- **Schuler, J.L.**, D.J. Robison, and H. Quicke. 2004. Assessing the use of Chopper® herbicide for establishing hardwood plantations on a cutover site. Southern Journal Applied Forerstry 28(3):163-170.
- **Schuler, J.** and D. Robison. 2004. Hardwood plantations and enrichment plantings. Forest Landowner 63(2):21-25.

- **Schuler, J.L.** and D.J. Robison. 2004. Determining stocking levels in young, mixed hardwood stands in the North Carolina Piedmont. P. 280-282 *in* Connor, K. (ed.), Proc. Twelfth Biennial Southern Silvicultural Research Conference, Biloxi, MS. USDA For. Serv. Gen Tech Rep. SRS-71.
- Robison, D.J., **J.L. Schuler**, L. Jervis, J. Cox, and P.J. Birks. 2004. Release and enrichment planting in young natural upland hardwoods. P. 283-286 *in* Connor, K. (ed.), Proc. Twelfth Biennial Southern Silvicultural Research Conference, Biloxi, MS. USDA For. Serv. Gen Tech Rep. SRS-71.
- Snider, A.G., E.O. Sills, S.K. Pattanayak, and **J.L. Schuler**. 2003. Policy innovations for private forest management and conservation in Costa Rica. *Journal of Forestry* 101(5):18-23.
- **Schuler, J.** 2003. New forests for northeastern China. *Sylvanet: A publication of the international forestry program*. College of Natural Resources. North Carolina State University. 16(2):4.
- **Schuler, J.** and S. Pattanayak. 2002. Costa Rica's innovative environmental conservation initiatives. *Sylvanet: A publication of the international forestry program*. College of Natural Resources. North Carolina State University. 15(2):10-13.
- **Schuler, J.L.** and D.J. Robison. 2002. Response of 1- to 4-year-old upland hardwoods to stocking and site manipulations. P. 266-269 *in* K.W. Outcalt (ed.), Proc. Eleventh Biennial Southern Silvicultural Research Conference, Knoxville, TN. USDA For. Serv. Gen. Tech. Rep. SRS-48.
- **Schuler, J.**, K. Johansson, and F. Flores. 2001. Forestry in Sweden. *Sylvanet: A publication of the international forestry program*. College of Natural Resources. North Carolina State University. 14(2):4-5.
- B. Brazell, M. Gocke, H. Saunders, and **J. Schuler**. 2001. Shell forestry plantations in Paraguay. *Sylvanet: A publication of the international forestry program*. College of Natural Resources. North Carolina State University. 14(2):6-7.
- **Schuler, J.L.** and R.D. Briggs. 2000. Assessing application and effectiveness of forestry best management practices in New York. *Northern Journal of Applied Forestry* 17:125-134.

PROFESSIONAL PRESENTATIONS (* indicates presenter other than Schuler)

- Lutz, A.*, J. Schuler, M. Thomas-Van Gundy. 2017. Characterizing gaps in a mature red spruce forest. WV SAF Meeting, Aug. 30-Sept 1, Elkins, WV

- Monteleone, A.* , J. Skousen, R. Williams, J. Pomp, M. French, J. Schuler, L. McDonald, I Holaskova. Survival and growth of woody plants on four reclaimed surface mines. 2017 WV Mine Drainage Task Force Symposium, April 9-13, Morgantown, WV
- Caterino, B.* , J Schuler, S Grushecky, J Skousen. 2016. Surface mine to biomass farm: growing shrub willow in northeastern WV. National Meeting of American Society of Mining and Reclamation, June 4-9, 2016, Spokane, WA
- J Schuler, G Miller, M Boyce. 2016. Using the strip clearcut method for recruiting red oak seedlings. SAF National Convention, November 2-6, 2016, Madison, WI
- Wang, J. and J Schuler. 2016. Economic and Environmental Impacts of Woody biomass Utilization in the central Appalachian region. NIFA Project Directors Meeting, October 19, 2016, New Orleans, LA.
- J Schuler. 2016. Sugarbush management. Forest Stewardship Workshop. December 13, 2016, Flatwoods, WV.
- GW Miller*, JL Schuler, JS Rentch. 2016. Crown Class Dynamics of Oaks after Commercial Thinning in West Virginia: 30-Year Results. Central Hardwood Forest Conference, March 31, 2016. Columbia, MO.
- Schuler, JL, M Boyce, GW Miller. 2016. The impact of strip clearcutting on red oak seedling development. Central Hardwood Forest Conference, March 30, 2016. Columbia, MO
- J Schuler. 2015. Maple Syrup production 101. 11th Annual Small Farms Conference, Feb 27, 2015, Charleston, WV
- J Schuler and A Martin. 2015. Strip thinning young hardwood forests: multi-functional management for wood, wildlife, and bioenergy. 18th Biennial Southern Silvicultural Research Conference, March 3, 2015, Knoxville, TN
- M.A. Fenwick*, J Schuler, and T Schuler. 2015. First year sprouting and growth dynamics in response to prescribed fire in a mesic mixed-oak forest. 18th Biennial Southern Silvicultural Research Conference, March 3, 2015, Knoxville, TN
- Schuler, J. Strip Thinning for Biomass. NEWBio Workshop, Aug. 4, 2015, Morgantown, WV
- Schuler, J. Tree plantings and related aspects on former surface mine lands. 10th Annual WV Brownfields Conference, Sept. 15, 2015, Morgantown, WV
- Fenwick, A* , J. Schuler, S. Grushecky, T. Schuler, and M. Thomas-Van Gundy. 2014. Kanawha State Forest, WV- Wildland fire fuel load assessment and geospatial distribution. Central Hardwood Forest Conference, March 11, 2014, Carbondale, IL.

- Schuler, Jamie L., S. Grushecky, and J. Wang. 2014. Establishing perennial seed-based energy crops on reclaimed surface mine soils in the central Appalachians. Central Hardwood Forest Conference, March 11, 2014, Carbondale, IL.
- J. Schuler. 2014. “*Rehabilitation and Restoration: Management Options for West Virginia’s Forests*” The ABCs of stocking. WV Society of American Foresters, Winter Meeting, April 1, 2014, Flatwoods, WV
- J. Schuler. 2014. Differences in biomass allocation patterns between planted and natural forests and their implications for multifunctional management. Crossett Forestry Field Day, May 16, 2014, Crossett, AR
- J. Schuler. 2014. Biomass accumulates differently between young planted and natural origin pine stands--why and what does it mean? Crossett Forestry Field Day, May 17, 2014, Crossett, AR
- JL Schuler, B Woods, JP Adams, R Souter. 2013. Crown size relationships for black willow in the Mississippi Alluvial Valley. 17th Biennial Southern Silvicultural Research Conference, March 7, 2013, Shreveport, LA
- KM McElligott, DC Bragg, JL Schuler. 2013. Predicting small-diameter loblolly pine aboveground biomass in naturally regenerated stands. 17th Biennial Southern Silvicultural Research Conference, March 7, 2013, Shreveport, LA
- DC Bragg, JL Schuler, MH Pelkki, DA Scott, JM Guldin. 2013. More than just timber: silvicultural options and ecosystem services from managed southern pine stands. 17th Biennial Southern Silvicultural Research Conference, March 7, 2013, Shreveport, LA
- Schuler, J. 2013. Fertilization of Fine Hardwoods. 2013 Walnut Council Meeting. Morgantown, WV. (invited)
- Schuler, J. 2013. “Oak Silviculture: Noteworthy Advances, Looming Challenges”: The role of herbicides in oak silviculture. Society of American Foresters National Convention. October 23, Charleston, SC (invited)
- Schuler, J.L., D. Bragg, E. Heitzman, and J. Milks. 2012. Seedling response to initial oak woodland restoration treatments on the Ozark National Forest. 18th Central Hardwood Forest Conference, Morgantown, WV, March 27, 2012.
- Schuler, J.L. 2011. Comparing second year growth of American sycamore, black willow, and eastern cottonwood with and without fertilization. 16th Biennial Southern Silvicultural Research Conference. Charleston, SC. Feb. 14, 2011.
- Gann, B., L. Thompson, and J.L. Schuler. 2011. Control and management of eastern baccharis in a recently established bottomland hardwood plantation. 16th Biennial Southern Silvicultural Research Conference. Charleston, SC. Feb. 14, 2011.

- Robison, D.J., T. San Filipo, C. Lawrence III, J.L. Schuler, and B.J. Berenguer. 2011. Stand and individual tree growth response to treatments in young natural hardwoods. 16th Biennial Southern Silvicultural Research Conference. Charleston, SC. Feb. 14, 2011.
- Gann, B., J.L. Schuler, L. Thompson. 2010. Control of baccharis (*Baccharis halimifolia*) in an established bottomland hardwood plantation. Southern Weed Science Society Meeting, January 25-27, Little Rock, AR
- Schuler, J.L., D Bragg, L Groom, J Guldin, M Pelkki, DA Scott, P Tappe. 2009. Multifunctional management of natural origin southern pine forests to improve ecosystem services. NIFA-NRI Awardee Meeting. Nov. 4, Pittsburgh, PA.
- Schuler, J.L., M. Pelkki, and C. Stuhlinger. 2008. Pitfalls associated with establishing short rotation bio-energy plantations. Arkansas Academy of Science.
- Schuler, J.L. and H.O. Liechty. 2008. Seed bank emergence following prescribed burning in the Ozark Highlands. Central Hardwood Conference. West Lafayette, IN.
- Schuler, J.L. 2008. Managing Southern Pines. Univ. of AR Forestry and Wildlife Field Day, Batesville, AR.
- Schuler, J.L. 2008. Hardwood Regeneration. Univ. of AR Forestry and Wildlife Field Day, Batesville, AR.
- Schuler, J.L. 2007. "Planting guidelines for loblolly pine on subsoiled sites". Arkansas Academy of Science, Russellville, AR.
- Schuler, J.L. and J. Stephens. 2007. "Releasing Red Oak Reproduction Using a Growing Season Application of the Herbicide Oust". 14th Biennial Southern Silvicultural Research Conference, Athens, GA.
- B.J. Berenguer, J.L. Schuler, M.H. Gocke, E. Treasure, D.J. Robison* 2007. "Accelerating young stand development in natural Piedmont hardwoods". 14th Biennial Southern Silvicultural Research Conference, Athens, GA.
- Schuler, J.L. 2006. "Forest fertilization". Foresters Continuing Education Training, Prescott, AR.
- Schuler, J.L. 2006. "Managing southern pines". Univ. of AR Forestry and Wildlife Field Day. Batesville, AR
- Schuler, J.L. 2006. Arkansas Forester's Exam Refresher Course. Monticello, AR.
- Schuler, J.L. 2006. "Exploring Opportunities to Manage Upland Hardwood Reproduction". School of Forest Resources Seminar Series, Monticello, AR.

- Schuler, J.L. and D.J. Robison. 2006. “The response of two very young naturally regenerated upland hardwood stands to weed control and fertilization”. Thirteenth Biennial Southern Silvicultural Research Conference. Memphis, TN.
- Gocke, M.H., J.L. Schuler, D.J. Robison, and B. Goldfarb. 2004. “Development of northern red oak (*Quercus rubra* L.) rooted cutting and enrichment planting systems”. 9th Workshop on Seedling Physiology and Growth Problems in Oak Plantings. West Lafayette, IN.
- Schuler, J.L. 2004. “Introduction to Forest Soils”, Forestry Educational Outreach Program. North Carolina State University.
- Daniel Robison*, Jamie Schuler, Matt Gocke, Mark Romagosa, Leslie Newton and Peter Birks. 2004. Additional Strategies for Promoting the Growth of Oak in Natural Stands: "Single-Tree Oak Plantations". USDA Forest Service Oak Artificial Regeneration Workshop. Huntsville, AL.
- Schuler, J.L. 2003. “Hardwood Forestry in the U.S.”. Jilian Province Forest Service. Sipping, China.
- Schuler, J.L. and D.J. Robison. 2003. “Determining Acceptable Stocking Levels in Mixed, Upland Hardwood Stands in NC: Work in Progress”. Twelfth Biennial Southern Silvicultural Research Conference. Biloxi, MS.
- Robison, D.J. and J.L. Schuler. 2002. “Enhancing carbon sequestration in natural stands”. USDA Carbon Symposium on Natural Resource Management to Offset Greenhouse Gas Emissions. Raleigh, NC.
- Schuler, J.L. and D.J. Robison. 2001. “Response of 1- to 4-year-old upland hardwoods to stocking and site manipulations”. Eleventh Biennial Southern Silvicultural Research Conference. Knoxville, TN.
- Schuler, J.L. and R.D. Briggs. 1998. “Application of forestry BMPs in the Catskills”. New York City Watershed Forestry Program Training Session. Delancey, NY.

POSTER PRESENTATIONS

- Burns, R.C., Schuler, J., Zegre, N., and Fernandez, R. 2017. 45 years of climate data: Results and interpretation from the WVU Research Forest. Society of American Foresters (SAF) National Convention. Albuquerque, NM.
- Storm, A., Schuler, J., M.B. Adams. 2017. Long-term Modeling of an Appalachian Hardwood Forest Impacted by Elevated Rates of Nitrogen, Sulfur and Lime. Society of American Foresters (SAF) National Convention. Albuquerque, NM.

- Tomlinson, K. and J. Schuler. 2017. The Response of Naturally Regenerating Hardwood Stands to Weed Removal and Fertilization in West Virginia. 19th Biennial Southern Silvicultural Research Conference. March 13-16, Blacksburg, VA
- Caterino, BC, JL Schuler, ST Grushecky, and JG Skousen. 2016. Efficacy of coppicing shrub willow on reclaimed mine soil in northeastern West Virginia. Society of American Foresters National Convention. Madison, WI
- M.A. Fenwick, JL Schuler, TM Schuler. 2015. Response of Advanced Regeneration to a Shelterwood-Burn in a Mesic Mixed-Oak Forest. 5th fire in eastern oak forests conference. May 27-29, Tuscaloosa, AL
- Schuler, J. and A. Martin. 2014. Strip Thinning Young Hardwood Forests for Biomass. Biomass Utilization for Green Materials and Energy Conference. Sept 2, 2014, Morgantown, WV
- Fenwick, A. and J. Schuler. 2014. A Spatial Distribution of the Maple Resource for Maple Syrup Production in West Virginia. SAF National Convention, Oct 8-11, 2014. Salt Lake City, UT
- Schuler, J., DC Bragg, M Pelkki. 2014. Comparison of Biomass Components of Natural and Plantation Origin Loblolly Pine. Biomass 2014: Growing the Future Bioeconomy Conference, July 29, 2014, Washington, DC.
- Schuler, J.L. 2012. Seedbank composition on former homesites in a highly disturbed oak-hickory-pine forest. 18th Central Hardwood Forest Conference. March 26-28, 2012. Poster.
- Schuler, J.L. Biomass accumulation of woody species grown using short rotation culture techniques on marginal cropland. SAF National Convention, Honolulu, HI Nov. 1-5, 2011.
- Schuler, JL, D Bragg, L Groom, J Guldin, M Pelkki, DA Scott, P Tappe. 2011. Multifunctional management of natural origin southern pine forests to improve ecosystem services. NIFA-NRI Awardee Meeting. July 20-21, Washington, DC.
- Scott, A., D. Bragg, J. Guldin, J. Schuler. 2010. Spatial patterns of soil carbon storage under long-term silvicultural management. SAF National Convention, Oct. 27-31, Albuquerque, NM
- Schuler, J., H.O. Liechty, M. Pelkki, and C. Stuhlinger. 2010. Early Results for a Biomass Production System using Black Willow, Eastern Cottonwood and American Sycamore Under Two Levels of Fertility. Short Rotation Woody Crops Conference, Oct. 18-19, Syracuse, NY
- Schuler, J. 2010. Genotype screening trial for short rotation biomass plantation species in Arkansas: Year 1 results. Smallwood Conference, April 20-22, Hot Springs, AR

- McCarthy, WP and JL Schuler. 2009. Cottonwood Establishment: Carbohydrates or Surface Area? Poster Presentation, SAF National Convention, Sept. 30-Oct. 4, Orlando, FL
- S. Glaze* and J. Schuler. 2007. “Edge effect of strip thinning on natural regenerated bottomland hardwoods in East Texas”. Arkansas Academy of Science, Russellville, AR.
- Schuler, J., M. Lowe, and D. Robison. 2007. “The response of oak and ash stems on two young bottomland hardwood stands six years following strip thinning”, SAF National Convention, Portland OR.
- Booker, K*, H.O. Liechty, and J.L. Schuler. 2007. “Effects of seasonal prescribed fire on oak reproduction in stands impacted by oak decline in the Ozark National Forest”. Combined Ecological Society of American and Society of Restoration Ecology Conference, San Jose, CA.
- Berenguer, B.J., M.H. Gocke, J.L. Schuler, and D.J. Robison. 2007. “First Year Results of Various Densities of Yellow-Poplar Seedlings on Above- and Belowground Growth of Planted Northern Red Oak”. 14th Biennial Southern Silvicultural Research Conference, Athens, GA.
- Schuler, J.L. and D.J. Robison*. “Assessing crop tree release options for young upland Piedmont hardwood stands in North Carolina”. Thirteenth Biennial Southern Silvicultural Research Conference. Memphis, TN.
- Schuler, J.L., D.J. Robison, and H. Quicke. 2003. “The potential use of Chopper (Imazapyr) as a site preparation option for establishing hardwood plantations”. Twelfth Biennial Southern Silvicultural Research Conference. Biloxi, MS.

FUNDING (AWARDED)

Date	Title, Source	Award
2018	Developing a regional education program in sustainable land reclamation management in Central Appalachia. NIFA HEC. With R. Burns (PI), J. Wang, K. Hartman, J. Skousen, J. Schuler, K. Temple-Miller, J. Jastrzembski	\$497,266
2017	Expanding the maple industry in West Virginia and central Appalachian region through research and education. USDA AMS-ACER grant. Co-PI with WVDA.	\$203,716
2017	A real-world test of the deferred rotation harvest method. USDA Forest Service. J. Schuler (PI), USFS	\$15,000

2016	Red spruce reponse to overstory release. J. Schuler, USFS	\$20,000
2016	Modeling stand development in mixed hardwoods. J. Schuler, USFS	\$22,000
2016	Assessing site sensitivity of yellow-poplar and white pine on degraded lands in West Virginia. J. Schuler (PI), WVU Faculty Excellence Grant.	\$4,000
2015	Red spruce reponse to overstory release. J. Schuler, USFS	\$15,000
2015	Improved Advanced Biomass Logistics Utilizing Woody and other Feedstocks in the Northeast and Pacific Northwest. Wang, J. and J. Schuler. US DOE	\$271,006
2014	Assessing Opportunities for Maple Syrup Production on Abandoned Mine Lands. J. Schuler. USDA Specialty Crop Block Grant	\$17,350
2014	Modeling the post-harvest success of desirable hardwood reproduction subjected to release and fertilization. Hardwood Research Trust	\$25,000
2014	Establishment of woody biomass plantings on Arch Coal Company lands in West Virginia. J. Schuler, S. Grushecky, J. Skousen. WV Division of Energy.	\$28,550
2013	Prescribed fires and shelterwood treatments: evaluating the potential for difficult to regenerate oak species. Joint Venture Agreement with USFS	\$19,493
2013	Using experiential learning to promote and increase maple syrup production in WV. USDA Specialty Crop Block Grant	\$22,392
2013	Sustainable perennial seed-based energy crop production on mine land. WVU, Dr. Samuel Faculty Excellence Grant	\$2,500
2010	Carbon sequestration and greenhouse gas emissions associated with cellulosic bioenergy feedstock production on marginal agricultural lands in the Lower Mississippi Alluvial Valley. M. Blazier, H. Liechty, M. Pelkki, J. Wang, C. West, J. Schuler, K. Brye.	\$973,218
2009	CSREES-NRI. Multi-functional management of natural origin southern pine forests to improve ecosystem services. Schuler, J., D. Bragg, M. Pelkki, J.M. Guldin, L. Groom, D.A. Scott and P. Tappe.	\$384,000
2009	UAM Faculty Research Award. Mixed species plantation development.	\$1,500
2009	National Park Service. Development of a strategy to control invasive	

	exotic plants and rehabilitate disturbed lands at former homesites at Hot Springs National Park.	\$30,000
2008	Hardwood Forestry Fund. Ecological approach to establishing mixed species plantations	\$8,700
2007	Price Industries. Establishment of bio-fuel plantations. With M. Pelkki, C. Stuhlinger, H. Liechty, D. Patterson and C. West	\$71,064
2007	UAM Faculty Research Award Impacts of planting depth and subsoiling on loblolly pine seedling development.	\$2,484
2007	CREES Round 13 Award Estimating belowground biomass in fast growing, short rotation woody biomass plantations in the Lower Mississippi Alluvial Valley	\$37,000
2006	UAM Faculty Research Award Effects of dormant and growing season fires on the soil seedbanks With H. Liechty	\$2,500
2005	UAM Faculty Research Award Loblolly pine planting protocols on poorly drained vertic soils	\$1,350
2005	CREES Round 12 Award Oust selectivity in natural hardwood stands	\$5,080
2005	USDA Forest Service New Techniques to Establish Northern Red Oak Regeneration Following the Recent Red Oak Borer Epidemic	\$11,000

GRADUATE STUDENTS

Current

- Holly Maze. TBA. M.S. student, WVU.
- Breanne Held. A real-world test of the deferred rotation harvest method. M.S. student, WVU, expected graduation May 2019.

Completed

- Aaron Lutz. Characterizing Red Spruce (*Picea rubens* Sarg.) Advanced Reproduction in a High Elevation Stand in West Virginia. M.S. student, WVU, graduated August 2018.

- Alex Storm. Modeling fertilization in a mixed hardwood stand. M.S. student, WVU, graduated August 2018.
- Kevin Tomlinson. The response of naturally regenerating hardwood seedlings to post-harvest weed control and fertilization. M.S. student, WVU, graduated summer 2017.
- Bart Caterino. Establishing biomass crops on former surface mine soils. M.S. student, WVU, graduated May 2017.
- Henry Liebermann. A work flow and evaluation of unmanned aerial systems derived forest stand characteristics in mixed hardwoods of West Virginia. M.S. student, WVU, graduated May 2017.
- Adele Fenwick. Prescribed fires and shelterwood treatments: evaluating the potential for difficult to regenerate oak species. M.S. student, WVU, graduated 2014.
- Ashlee Martin. Effects of strip thinning on deer browse. M.S. student, WVU, graduated 2014.
- William McCarthy, Initial cottonwood cutting length modified by cutting length and belowground surface area available for rooting. M.S. student, UAM, graduated 2011
- Dipesh K.C. Estimating root biomass and root turnover in short rotation woody biomass plantations in the Lower Mississippi Alluvial Valley. M.S. student, UAM, graduated 2009
- Benton Gann. Management of *Baccharis halimifolia* in established in hardwood plantations. M.S. student, UAM, graduated 2009.

INTERNATIONAL EXPERIENCE

- Study tour—“Forests and forest products in West Africa”. Ghana, West Africa. May 12-28, 2004.
- Foreign expert to China. Provided recommendations for developing a hardwood forestry program in the northeastern province of Jilin. August 22 - September 2, 2003.
- Study tour— “Management of Forest Plantations in Chile”. March 8-16, 2003.
- Study tour— “Environmental Service Payments in Costa Rica”. August 6-16, 2002.
- Course in “Intensive Management of Forest Plantations”. Asa, Sweden. September 3-13, 2001.
- Study tour— “Agroforestry” in Paraguay. March 2001.