

Lance A. Vickers, Ph.D.

Curriculum Vitae

University of Kentucky, Department of Forestry and Natural Resources; 203 T.P. Cooper Building, Lexington, KY 40456; lance.vickers@uky.edu

Education:

The University of Missouri Ph.D. – Forestry (Quantitative Silviculture) Advisor: Dr. David R. Larsen Dissertation: “Modeling Regeneration and Early Stand Dynamics of Missouri Ozark Forests”	GPA: 3.9	Columbia, MO 2015
Virginia Polytechnic Institute & State University M.S. – Forestry (Silviculture) Advisor: Dr. Thomas R. Fox Thesis: “Predicting Regeneration in Appalachian Hardwood Stands Using the REGEN Expert System”	GPA: 3.9	Blacksburg, VA 2009
The University of Arkansas-Monticello B.S. – Forestry <i>Cum Laude</i>	GPA: 3.6 GRE Scores: Verbal – 500, Quantitative – 750, Analytical Writing – 4.0	Monticello, AR 2006

Employment:

The University of Kentucky Assistant Professor		Lexington, KY 2022 - Present
The University of Missouri Postdoctoral Fellow / Senior Research Specialist Supervisor: Dr. Benjamin O. Knapp		Columbia, MO 2015-2022
Texas A&M Forest Service Research Consultant Supervisors: Mr. James Rooni & Dr. James M. Guldin		Abilene, TX 2015-2018
The University of Missouri Graduate Research Assistant Supervisor: Dr. David R. Larsen		Columbia, MO 2011 - 2015
Forest Productivity Cooperative Research Associate Supervisors: Drs. Thomas R. Fox, Jose L. Stape, Rafael Rubilar & Mr. Timothy J. Albaugh		Blacksburg, VA 2010 - 2011
Virginia Polytechnic Institute & State University Graduate Research Assistant Supervisor: Dr. Thomas R. Fox		Blacksburg, VA 2007 - 2009
Kingwood Forestry Services, Inc. Forest Technician Supervisor: Mr. John McAlpine		Monticello, AR 2006 –2007

Teaching Experience:

The University of Missouri Adjunct Instructor FOR 4360/7360: Photogrammetry, Inventory, and Models Guest Lecturer/Assistant Forest Measurements and Inventory Forest Stand Dynamics Natural Resource Biometrics Silviculture and Silviculture Field Practicum		Columbia, MO 2022 2011 – 2022
Virginia Polytechnic Institute & State University Teaching Assistant Dendrology Laboratory Silviculture Principles and Applications	Average Instructor Rating: 3.6/4.0	Blacksburg, VA 2007 – 2009

Publications:

Refereed Journals

- 2021
- Pile, L.S., Snell, R., Vickers, L.A., Hutchinson, T., Kabrick, J., Jenkins, M.A., Graham, B., Rebbeck, J. 2021. The 'other' hardwood: growth, physiology, and dynamics of hickories in the Central Hardwood Region, USA. *For. Ecol. Manage.* 497. DOI: 10.1016/j.foreco.2021.119513
- Kenefic, L.S., Kabrick, J.M., Knapp, B.O., ..., Vickers, L.A., et al. 2021. Mixedwood silviculture in central and eastern North America: the science and art of managing for complex, multi-species temperate forests. *Can. J. For. Res.* 51(7). DOI: 10.1139/cjfr-2020-0410
- Vickers, L.A., Knapp, B.O., Kabrick, J.M., Dey, D.C., et al. 2021. Mixedwood forests of the northern US: contemporary status, distribution, and recent trends. *Can. J. For. Res.* 51(7). DOI: 10.1139/cjfr-2020-0467
- Royo, A.A., Vickers, L.A., Long, R.P., Stoleson, S.H., Stout, S.L., Ristau, T.E. 2021. The forest of unintended consequences: anthropogenic actions trigger the rise and fall of black cherry. *Bioscience* 71(7). <https://doi.org/10.1093/biosci/biab002>
- 2020
- Curtin, P.J., Knapp, B.O., Jack, S.B., Vickers, L.A., Larsen, D.R., Guldin, J.M. 2020. Effects of overstory competition on canopy recruitment patterns of naturally regenerated longleaf pine on two site types. *Can. J. For. Res.* 50(7): 624-635. DOI: 10.1139/cjfr-2019-0343
- 2019
- Vickers, L.A., McWilliams, W.H., Knapp, B.O., D'Amato, A.W., Dey, D.C., Dickinson, Y.L., Kabrick, J.M., Kenefic, L.S., Kern, C.C., Larsen, D.R., Royo, A.A., Saunders, M.R., Shifley, S.R., Westfall, J.A. 2019. Are Current Seedling Demographics Poised to Regenerate Northern US Forests? *Journal of Forestry* 117(6): 592-612; doi:10.1093/jofore/fvz046.
- Vickers, L.A., Larsen, D.R., Knapp, B.O., Kabrick, J.M., Dey, D.C. 2019. Height Development Milestones for Canopy Recruitment after Overstory Removal in the Missouri Ozarks. *For. Ecol. Manage.* 445: 122-133.
- Pile, L.S., Vickers, L.A., Stambaugh, M., Norman, C., Wang, G.G. 2019. The Tortoise and the Hare: A Race between Native Tree Species and the Invasive Chinese Tallow. *For. Ecol. Manage.* 445: 110-121.
- Vickers, L.A., Guldin, J.M., Houser, J., Rooni, J. 2019. Some Lessons Learned on Early Survival and Growth of Containerized, Locally-sourced Ponderosa Pine Seedlings in the Davis Mountains of West Texas, US. *Forests* 10, 267; doi:10.3390/f10030267.
- Vickers, L.A., McWilliams, W.H., Knapp, B.O., D'Amato, A.W., Saunders, M.R., Shifley, S.R., Kabrick, J.M., Dey, D.C., Larsen, D.R., Westfall, J.A. 2019. Using a Tree-seedling Mortality Budget as an Indicator of Landscape-scale Forest Regeneration Security. *Ecological Indicators* 96: 718-727.
- 2017
- Vickers, L.A., Larsen, D.R., Knapp, B.O., Kabrick, J.M., Dey, D.C. 2017. Reference Charts for Young Stands- A Quantitative Methodology for Assessing Tree Performance. *Can. J. For. Res.* 47(12): 1677-1686.
- Vickers, L.A., Larsen, D.R., Kabrick, J.M., Dey, D.C., Knapp, B.O. 2017. The Impact of Overstory Density on Reproduction Establishment in the Missouri Ozarks – Models for Simulating Regeneration Stochastically. *Forest Science* 63(1): 71-86.
- 2014
- Vickers, L.A., Larsen, D.R., Knapp, B.O., Kabrick, J.M., Dey, D.C. 2014. The Impact of Overstory Density on Sapling Height Growth in the Missouri Ozarks – Implications for Interspecific Differentiation during Canopy Recruitment. *Can. J. For. Res.* 44(11): 1320-1330.
- 2011
- Vickers, L.A., Fox, T.R., Loftis, D.L., Boucugnani, D.A. 2011. Using the REGEN Expert System to Predict Hardwood Regeneration in the Central Appalachians. *Journal of Sustainable Forestry* 30(8): 790-822.

Refereed Proceedings/Reports

- 2021
- Raymond, P., ..., Vickers, L., et al. 2021. Miser sur la régénération des conifères pour maintenir la composition mixte de forêts tempérées. *Avis de recherche forestière n° 168*. Direction de la recherche forestière. Québec Ministère des Forêts, de la Faune et des Parcs. ISSN: 1715-0795.
- Goff, Thomas C., ..., Vickers, L.A., et al. Missouri forests 2018: summary report. *USDA Forest Service Resource Bulletin NRS-122*
- 2020
- Albright, T.A., ..., Vickers, L.A., et al. New York Forests 2017. *USDA Forest Service Resource Bulletin NRS-121*.
- Kabrick, J.M., Clark, K.L., D'Amato, A.W., Muñoz Delgado, B., Dey, D.C., Kenefic, L.S., Kern, C.C., Keyser, T.L., Knapp, B.O., MacLean, D.A., Raymond, P., Schweitzer, C.J., Vickers, L.A., 2020. Research and management partnerships for resolving regeneration and recruitment challenges in hardwood – softwood mixtures in eastern North America. Pgs. 129-140 in: Pile, Lauren S., Deal, Robert L., Dey, Daniel C., Gwaze, David, Kabrick, John M., Palik, Brian J., Schuler, Thomas M., comps. *The 2019 National*

Silviculture Workshop: a focus on forest management-research partnerships. Gen. Tech. Rep. NRS-P-193.

<https://doi.org/10.2737/NRS-GTR-P-193-paper19>

2018

Vickers, L.A., Houser, J., Rooni, J., Guldin, J.M. 2018. Restoring ponderosa pine in the Davis Mountains of west Texas: impacts of planting practices on seedling survival. Pgs. 82-88 in: Kirschman, J.E. comp. Proceedings of the 19th Biennial Southern Silvicultural Research Conference. USDA For. Serv. e-Gen. Tech. Rep. SRS-234. 444p.

2017

Vickers, L.A., Larsen, D.R., Knapp, B.O., Dey, D.C., Kabrick, J.M. 2017. Modeling the impact of overstory density on the regeneration dynamics of Missouri Ozark forests. Pgs. 72-73 in: Keyser, C.E., Keyser, T.L. eds. Proceeding of the 2017 Forest Vegetation Simulator (FVS) e-Conference. USDA For. Serv. e-Gen. Tech. Rep. SRS-224. 200p.

Good, G., Knapp, B.O., Vickers, L.A., Larsen, D.R., Kabrick, J.M. 2017. Evaluation of sapling height development and intraspecific differentiation after clearcut and group selection harvests in the Missouri Ozarks. Pgs. 78-86 in: Kabrick, J.M., Dey, D.C., Knapp, B.O., Larsen, D.R., Shifley, S.R., Stelzer, H.E. eds. Proceedings of the 20th Central Hardwood Forest Conference. USDA For. Serv. Gen. Tech. Rep. NRS-P-167. 313 p.

2016

Vickers, L.A., Larsen, D.R., Kabrick, J.M., Dey, D.C., Knapp, B.O. 2016. A collection of sprouting parameters for simulating regeneration establishment in the Missouri Ozarks. Pgs. 238-244 in: Schweitzer, C., Clatterbuck, W.K., Oswald, C. eds. 2016. Proceedings of the 18th Biennial Southern Silvicultural Research Conference. USDA For. Serv. e-Gen. Tech. Rep. SRS-212. 614 p.

2015

Vickers, L.A., Fox, T.R. 2015. Species composition of developing Central Appalachian hardwood stands following clearcutting. Pgs. 62-69 in: Holley, G.A., Connor, K.F., Haywood, J.D. eds. 2016. Proceedings of the 17th Biennial Southern Silvicultural Research Conference. USDA For. Serv. Gen. Tech. Rep. SRS-203. 551 p.

2014

Vickers, L.A., Larsen, D.R., Dey, D.C., Kabrick, J.M., Knapp, B.O. 2014. A potential quantitative method for assessing individual tree performance. Pg. 201 in: Groninger, J.W., Holzmueller, E.J., Nielsen, C.K., Dey, D.C. eds. 2014. Proceedings of the 19th Central Hardwood Forest Conference. USDA For. Serv. Gen. Tech. Rep. NRS-P-142. 201 p.

2013

Vickers, L.A., Fox, T.R., Loftis, D.L., Boucugnani, D.A. 2013. Predicting the regeneration of Appalachian hardwoods: adapting the REGEN model for the Appalachian Plateau. Pgs. 277-280 in: Guldin, J.M. ed. Proceedings of the 15th Biennial Southern Silvicultural Research Conference. USDA For. Serv. Gen. Tech. Rep. SRS-175. 585 p.

2012

Vickers, L.A., Fox, T.R., Stape, J.L., Albaugh, T.J. 2012. Silviculture of varietal loblolly pine plantations: second year impacts of spacing and silvicultural treatments on varieties with differing crown ideotypes. Pgs. 363-367 in: Butnor, J.R. ed. 2012. Proceedings of the 16th Biennial Southern Silvicultural Research Conference. USDA For. Serv. Gen. Tech. Rep. SRS-156. 391 p.

2011

Vickers, L.A., Fox, T.R., Loftis, D.L., Boucugnani, D.A. 2011. Adaptation and validation of the REGEN expert system for the Central Appalachians. Pgs. 332-340 in: Fei, S., Lhotka, J.M., Stringer, J.W., Gottschalk, K.W., Miller, G.W. eds. Proceedings of the 17th Central Hardwood Forest Conference. USDA For. Serv. Gen. Tech. Rep. NRS-P-78. 678 p.

Presentations:

Plenary/Invited

2022

Vickers, L.A., Royo, A., Stout, S., Knapp, B.O., Ristau, T., Pile Knapp, L. 2022. A range-wide look at black birch sapling proliferation over 40 years. Forest Health, Insect, and Disease Briefing, State College, PA

2021

Knapp, B.O., Vickers, L.A. 2021. White oak status and concerns. Missouri Forestry Summit 2021.

Knapp, B.O., Vickers, L.A. 2021. White oak research update. Missouri Forest Resources Advisory Council.

Vickers, L.A., Royo, A., Stout, S., Knapp, B.O., Ristau, T., Pile Knapp, L. 2021. Examining the extent, severity, and potential causes of increased birch regeneration. Silviculture and Research Working Groups of the Allegheny Forest Health Collaborative.

2020

Vickers, L.A. 2020. State of the forest- Missouri 2020. Missouri Forestry Summit: Our changing forests – the Management Dilemma. (virtual)

2018

Pile, L.S., Rebbeck, J., Wang, G., Vickers, L.A., Norman, C. 2018. Unintended consequences from intentional species introductions: challenges from aggressive invading species in the eastern United States. International Conference on Protective Forests. Shenyang, China.

2017

Vickers, L.A., McWilliams, W.H., Knapp, B.O. 2017. An examination of forest regeneration security in the Northern United States – a mortality budget for advance reproduction. Regeneration modeling for eastern forest types – Northern Research Station Webinar and Work Session.

McWilliams, W.H., Westfall, J.A., Vickers, L.A. 2017. SILVAH and FIA: Taking SILVAH regen guidelines to the regional level. SILVAH: 50 Years of Practicing Sustainable Forestry and Counting – Allegheny Society of American Foresters Summer Meeting

2016

Guldin, J.M., Vickers, L.A. 2016. Long-term silvicultural research studies – the good, the bad, and the ugly. 20th Central Hardwood Forest Conference.

Concurrent/Accepted

2022

Vickers, L.A., Royo, A., Stout, S., Ristau, T., Long, R.P., Stoleson, S., Knapp, B.O., Pile Knapp, L. 2022. A range-wide look at black birch sapling proliferation over 40 years. Forest Health, Insect, and Disease Briefing, State College, PA

Vickers, L.A., Knapp, B.O., Dey, D.C. 2022. Are forest health disturbances in oak forests accelerating composition shifts? Central Hardwood Forest Conference.

Vickers, L.A., Knapp, B.O., Dey, D.C. 2022. Are forest health disturbances in oak forests accelerating composition shifts? Missouri Natural Resources Conference.

Guldin, J.M., Vickers, L.A., Kuhn, B. 2022. Empirical assessment of growth patterns of white oak stave logs based on ocular inspection of cut stumps. Missouri Natural Resources Conference.

2020

Kabrick, J.M., Raymond, P., Kenefic, L.S., Knapp, B.O., Vickers, L.A., Dey, D.C. 2020. A conceptual framework for identifying silvicultural practices for temperate mixedwood management in eastern North America. Society of American Foresters National Convention (virtual).

Woodall, C.W., Albright, T., Morin, R.S., Vickers, L.A., Westfall, J.A., McWilliams, W.H. 2020. Tree regeneration monitoring: The Northern Experience. 2020 FIA National User Group Meeting (virtual).

2019

Vickers, L.A., McWilliams, W.H., Knapp, B.O., D'Amato, A.W., Dey, D.C., Dickinson, Y.L., Kabrick, J.M., Kenefic, L.S., Kern, C.C., Larsen, D.R., Royo, A.A., Saunders, M.R., Shifley, S.R., Westfall, J.A. 2019. Are Current Seedling Demographics Poised to Regenerate Northern US Forests? 2019 FIA Stakeholders Science Meeting.

2018

Vickers, L.A., McWilliams, W.H., Knapp, B.O. 2018. Analyzing forest regeneration across the northern US. 21st Central Hardwood Forest Conference.

2017

Vickers, L.A., Rooni, J., Houser, J., Guldin, J.M. 2017. Regenerating multi-aged stands without natural reproduction – a quixotic quest? Society of American Foresters National Convention.

Vickers, L.A., Houser, J., Rooni, J., Guldin, J.M. 2017. Operation Ponderosa's Planting Demonstration: Lessons and questions from artificial regeneration efforts in the Davis Mountains. The Livermore Summit – Ponderosa pine restoration in the Southwestern United States.

Vickers, L.A., Rooni, J., Houser, J., Guldin, J.M. 2017. "Operation Ponderosa"—Response to a major ponderosa pine mortality event in the Davis Mountains of West Texas. 19th Biennial Southern Silvicultural Research Conference.

Vickers, L.A., D'Amato, A.W., McWilliams, W.H. 2017. An examination of advance reproduction in Vermont forests. 2017 New England Society of American Foresters Winter Meeting.

Vickers, L.A., Larsen, D.R., Dey, D.C., Kabrick, J.M., Knapp, B.O. 2017. Modeling the impact of overstory density on the regeneration dynamics of Missouri Ozark forests. 2017 Forest Vegetation Simulator (FVS) e-Conference.

2016

Vickers, L.A., Larsen, D.R., Dey, D.C., Kabrick, J.M., Knapp, B.O. 2017. Modeling the impact of overstory density on the regeneration dynamics of Missouri Ozark forests. 2016 Northeastern Mensurationist Organization Conference.

Vickers, L.A., Rooni, J., Houser, J., Guldin, J.M. 2016. "Operation Ponderosa"—Response to a major ponderosa pine mortality event in the Davis Mountains of West Texas. Society of American Foresters National Convention.

Vickers, L.A., Larsen, D.R., Dey, D.C., Kabrick, J.M., Knapp, B.O. 2016. Modeling the impact of overstory density on the regeneration dynamics of Missouri Ozark forests. 10th IUFRO International Workshop on Uneven-aged Silviculture.

Vickers, L.A., Larsen, D.R. 2016. Long-Term Data Three Ways: Using Longitudinal Data from Different Sources to Examine Sapling Canopy Recruitment Dynamics. 20th Central Hardwood Forest Conference.

Vickers, L.A., McWilliams, W.H., Knapp, B.O., Dey, D.C., Shifley, S.R., Larsen, D.R., Kabrick, J.K., Westfall, J.A. 2016. Evaluating reproduction adequacy in the Central States using the NRS-FIA Regeneration Indicator. Society of American Foresters National Convention.

Vickers, L.A., McWilliams, W.H., Knapp, B.O., Dey, D.C., Shifley, S.R., Larsen, D.R., Kabrick, J.K., Westfall, J.A. 2016. Evaluating reproduction adequacy in the Central States using the NRS-FIA Regeneration Indicator. 20th Central Hardwood Forest Conference.

2015

Vickers, L.A., Larsen, D.R., Knapp, B.O., Kabrick, J.M., Dey, D.C. 2015. Reference Charts – A quantitative methodology for assessing tree performance. 18th Biennial Southern Silvicultural Research Conference.

Vickers, L.A., Larsen, D.R., Kabrick, J.M., Dey, D.C., Knapp, B.O. 2015. A strategy for simulating regeneration establishment – Stand development hypotheses and empirical models. 18th Biennial Southern Silvicultural Research Conference.

2013

Vickers, L.A., Larsen, D.R. 2013. A Potential Method for Assessing Tree Performance. Northeastern Mensurationsist Organization Conference.

2011

Vickers, L.A., Fox, T.R., Stape, J.L., Albaugh, T.J. 2011. Silviculture of Varietal Loblolly Pine Plantations: 1st Year Impacts of Spacing and Silvicultural Treatments on Varieties with Differing Crown Ideotypes. Forest Productivity Cooperative Ann. Meeting.

2010

Vickers, L.A., Fox, T.R. 2010. Hardwood Regeneration Modeling. Appalachian Hardwood Forest Research Alliance Instructional Workshop.

2009

Vickers, L.A., Fox, T.R. 2009. Theory, Methodology, and Application of the REGEN Expert System. Appalachian Hardwood Forest Research Alliance Instructional Workshop.

Grants:

2022

Establishing a Contemporary Baseline of Timber Harvesting Outcomes in Pennsylvania. Pennsylvania Bureau of Forestry. \$83,545.

2021

Sustainability of uneven-aged oak forest management in the Missouri Ozarks: how are current practices affecting white oak regeneration and recruitment? Missouri Department of Conservation. \$314,511.

2020

Spatial analysis of white and upland oak regeneration across the eastern US to support White Oak Initiative Conservation Plan. University of Kentucky. \$25,000.

Examining the extent, severity, and potential causes of increased birch regeneration. Pennsylvania Department of Agriculture, Commonwealth Specialty Crop Block Grant. \$25,102.

2019

Evaluating the extent and severity of black cherry regeneration failures in Eastern forests and exploring potential causes. USDA Forest Service Forest Health Monitoring. \$103,187.

Analyzing the distribution of northern US mixedwood forests. USDA Forest Service Northern Research Station. \$25,000.

2018

Do forest health issues in oak forests of the eastern US accelerate compositional shifts to non-oak species? USDA Forest Service Forest Health Monitoring. \$82,415.

2017

Regeneration adequacy metrics for the Mid-Atlantic States. USDA Forest Service Northern Research Station Forest Inventory and Analysis. \$50,000.

2016

Regeneration adequacy metrics for the Lake and New England States. USDA Forest Service Northern Research Station Forest Inventory and Analysis. \$50,000.

2015

Regeneration adequacy metrics for the Central States. USDA Forest Service Northern Research Station Forest Inventory and Analysis. \$50,000.

Restoring ponderosa pine in the Davis Mountains of West Texas: Impacts of planting practices on seedling survival and growth. USDA Forest Service Southern Research Station & Texas A&M Forest Service. \$18,500.

Awards:

Biennial Southern Silvicultural Research Conference Scholarship Award	2008
Society of American Foresters Student Quiz Bowl National Champion	2006
Mid-America Science Museum Scholarship Award	2006

Univ. of AR-Monticello Academic Olympics, Campus-wide Runner-up	2005
Univ. of AR-Monticello, Full Academic Scholarship	2002-2006
Future Farmers of America National High School Forestry Champion	2001

Associations:

Member – Society of American Foresters	2016 - Present
Member - Virginia Polytechnic Institute and State University Forestry Graduate Student Association	2007-2009
Registered Forester - State of Arkansas	2006
President - Xi Sigma Pi, National Forestry Honor Society, Univ. of AR-Monticello Chapter	2006
Captain - Society of American Foresters, Univ. of AR-Monticello Student Chapter Quiz-bowl Team	2005-2006
Vice President - Society of American Foresters, Univ. of AR-Monticello Student Chapter	2005

Shortcourses/Workshops Completed:

SILVAH-Oak – Oak Ecology and Silviculture. USDA Forest Service Northern Research Station.	2018
SILVAH - Silviculture of Allegheny Hardwoods. USDA Forest Service Northern Research Station.	2017
Likelihood Methods in Ecology. Cary Institute of Ecosystem Studies.	2012

Conference/Session Administration:

Co-Organizer: National SAF Special Session -Innovative Regeneration Strategies for Transformative Silvicultural Challenges	2017
Co-Organizer: Conference -The Livermore Summit- Ponderosa Pine Restoration in the Southwest	2017

