UNIVERSITY OF MAINE SYSTEM
Tenure and Promotion Application Form

I. FACE DATA

A. NAME: Aaron Robert Weiskittel

B. PRESENT RANK: Associate Professor with Tenure

C. COLLEGE/DEPARTMENT: College of Natural Science, Forestry, and Agriculture, School of Forest Resources

D. PROFESSIONAL EXPERIENCE:

YEAR(S)	EMPLOYER(S)	POSITION(S)
Sept 2016 to Present	University of Maine, Center for Research on Sustainable Forests	Acting Director
Oct 2014 to Present	University of Maine, Mitchell Center for Sustainability Solutions	Associate Faculty
Sept 2013 to Present	University of Maine, School of Forest Resources	Associate Professor
Sept 2011 to Present	University of Maine, Forest Bioproducts Research Institute	Cooperating Faculty
Nov 2010 to Present	Laval University	Adjunct Graduate Faculty
Sept 2010 to Present	University of Maine, School of Forest Resources	Irving Chair of Forest Ecosystem Management
Sept 2010 to Present	University of Maine, Ecology and Environmental Science Program	Cooperating Faculty
Sept 2009 to Aug 2017	University of Maine, Cooperative Forestry Research Unit	Cooperating Scientist
Jan 2008 to Aug 2013	University of Maine, School of Forest Resources	Assistant Professor
Jan 2006 to Dec 2007	Weyerhaeuser Company	Research Forester
Sept 2004 to Dec 2006	Oregon State University	Graduate Research Assistant
Sept 2003 to Aug 2004	Oregon State University	Faculty Research Assistant
Sept 2001 to Aug 2003	Oregon State University	Graduate Research Assistant

E. EDUCATIONAL BACKGROUND

YEAR(S)	INSTITUTION(S)	FIELD	DEGREE
Sept 2004 – Dec 2007	Oregon State University	Forest Science	PhD
Sept 2001 – Aug 2003	Oregon State University	Forest Resources	MS
Sept 1997 – May 2001	The Ohio State University	Natural Resources (Forestry Concentration)	BS

II. RECORD OF ACTIONS

A. INITIAL PROBATIONARY APPOINTMENT

1. Date: January 1, 2008
2. Length of Initial Appointment: 1 year
3. Prior Experience Credited toward Tenure: 0 year
4. Rank: Assistant Professor

B. REAPPOINTMENTS

DATE(S)	LENGTH
January 2009	1 year
January 2010	1 year
January 2011	1 year
January 2012	1 year

C. PROMOTION(S)

EFFECTIVE DATE(S)	TO RANK
September 2013	Associate Professor with Tenure

D. RECOMMENDATIONS FOR:

RECOMMENDING BODY	RECOMMENDATION (YES/NO/ NO ACTION)	SIGNATURE	DATE
Peer Committee			
Dean			
Provost/VPAA			
President			

E. EXCEPTIONS TO BOARD OF TRUSTEES POLICY

None

F. TRANSMITTAL LETTERS

1. President
2. Provost/VPAA
3. Dean

III. CANDIDATE'S PROFILE

A. DOCUMENTATION OF TEACHING

Percentage of Time Devoted to Teaching: 20%

1. Teaching Responsibility

My currently assigned courses are:

- SFR 402/503, Advanced Forest Measurements and Modeling (3 credits, spring)
- SFR 575, Advanced Forest Biometrics (3 credits, spring, every other year)

SFR 402/503 is required for FTY majors and MF students (20-30 students per year). SFR 575 is taken by MF, MS, and PhD students primarily in SFR (6-10 students per year).

2. Philosophy and Strategies

My philosophy is that teaching is an interactive process of learning and importing knowledge to develop future resource managers and not just the delivery of curriculum. My commitment to education is to maintain current knowledge and to help students build strong analytical as well as critical thinking skills. I have encouraged my students to be active and self-directed learners through a variety of teaching methods and techniques, which I was exposed to as a graduate teaching assistant and while taking a graduate-level course on teaching.

I like my students to have a broad understanding of science, practical knowledge of forest biometrics fundamental principles, and the critical thinking skills that will help them to solve future problems in an effective and efficient manner. I have striven to accomplish this by giving lectures with practical and relevant current issues, incorporating field trips and lab exercises into the course, and maintaining an open-door policy to give students an opportunity to interact outside of the classroom.

I am a firm believer in active learning and have tried to maintain a very lively and interactive classroom. Thus, there should not be a divide between being a research scientist and teaching courses as good teachers are constantly evolving and need to be at the cutting edge of recent scholarship. Further, I have empowered student involvement by doing in-class demonstrations, incorporating current research papers, and conducting in-class polls. The implementation of this teaching philosophy is the result of trial-and-error, advice from other instructors, and experience. The ultimate goal of my philosophy is to foster a learning environment effective for not only my students, but also myself.

3. Efforts to Improve Teaching Effectiveness
- Read several textbooks on university teaching
- Attended several University of Maine Center for Teaching Excellence workshops
- Subscribe to and read the Teaching Professor

4. Information on Courses Taught

Spring 2017
- SFR 499 – Senior Research Capstone (1 credit), 1 student

Fall 2017
- SFR 498 – Senior Research Capstone (2 credits), 1 student

Spring 2016
- SFR 402 – Advanced Forest Measurements and Modeling (3 credits), 18 students
- SFR 503 – Advanced Forest Measurements and Modeling (3 credits), 6 students
- SFR 575 – Advanced Forest Biometrics (3 credits), 7 students

Spring 2015
- SFR 205 – Forest Measurements (Co-instructed, 3 credits), 23 students
- SFR 402 – Advanced Forest Measurements and Modeling (3 credits), 13 students
- SFR 499 – Senior Research Capstone (1 credit), 1 student
- SFR 503 – Advanced Forest Measurements and Modeling (3 credits), 9 students
- SFR 575 – Advanced Forest Biometrics (3 credits), 5 students

Fall 2014
- SFR 498 – Senior Research Capstone (2 credit), 1 student

Spring 2014
- SFR 205 – Forest Measurements (Co-instructed, 3 credits), 27 students
- SFR 402 – Advanced Forest Measurements and Modeling (3 credits), 12 students

Spring 2013
- SFR 205 – Forest Measurements (Co-instructed, 3 credits), 13 students
- SFR 402 – Advanced Forest Measurements and Modeling (3 credits), 17 students
- SFR 575 – Advanced Forest Biometrics (3 credits), 5 students

Fall 2012
- FTY 601 – Forest Mensuration Problems (Independent Study, 1 credit), 2 students

Spring 2012
- FTY 266 – Advanced Forest Measurements (Co-instructed with PhD student, 3 credit), 13 students
- FTY 456 – Advanced Forest Biometry (3 credits), 5 students

Fall 2011
- FTY 601 – Forest Mensuration Problems (Independent Study, 1 credit), 3 students

Spring 2011
- FTY 266 – Advanced Forest Measurements (3 credits), 14 students
- FTY 456 – Advanced Forest Biometry (3 credits), 7 students
- FTY 345 – Special Problems in Forest Measurements (1 credit), 2 students
- FTY 601 – Forest Mensuration Problems (Independent Study, 1 credit), 3 students

Fall 2010
- FTY 601 – Forest Mensuration Problems (Independent Study, 1 credit), 2 students

Spring 2010
- FTY 266 – Advanced Forest Measurements (3 credits), 22 students
- FTY 601 – Forest Mensuration Problems (Independent Study, 2 credits), 1 student

Fall 2010
- FTY 601 – Forest Mensuration Problems (Independent Study, 1 credit), 2 students

Spring 2009
- FTY 266 – Advanced Forest Measurements (3 credits), 12 students
- FTY 601 – Natural Resources Data Analysis and Sampling (2 credits), 8 students

Fall 2009
- FTY 345 – Special Problems in Forest Resources (Independent Study, 2 credit), 2 students
- FTY 601 – Special Problems in Forest Measurements (1 credit), 3 students

Fall 2008
- FTY 601 – Forest Mensuration Problems (Independent Study, 1 credit), 2 students

5. Guest Lectures
- CHE 598 - Lignocellulosic Biorefinery (3 lectures)
- SFR 101 – Introduction to Forestry (2 days)
- SFR 521 – Research Methods in Forest Resources (8 lectures)
- FTY 511 – Scale in Forest Ecology and Management (1 lecture)
- FTY 241 – Field Practice in Forest Management (3 days)

- SFR 477 - Forest Management
- SFR 605 – Forest Carbon

6. Undergraduate Advising
   I have regularly advise 5-10 undergraduate students. I meet with each student at least once a semester and send them regular reminders via email.

7. Undergraduate Honors Theses, Capstone Projects and Directed Research
   - Regularly advise capstone projects for sample design, analysis of inventory, and growth model projections
   - Grayson O'Connor, Comparison of approaches for estimating biomass in Maine, Directed Research Capstone Project, 2017
   - Daniel Murphy, Radial growth dynamics in a central Maine peat bog, Directed Research Capstone Project, 2016
   - Cassie Vallinancourt, White pine growth dynamics on the University Forest, Honor's Thesis Committee Member, 2011
   - Nicole Rogers, Evaluation of growth, mortality, and harvesting trends in Maine using existing inventory data, Honor's Thesis Committee Member, 2011

8. Graduate, Post-doctoral and Research Associate Advising Student Advising

Graduate Students

Year	Student	Degree	Institution	Status
Chair/Co-chair (8 MS, 4 MF, 7 PhD)*				
2011	Kate Berven*	MS	UM	Completed
2011	Joseph Pekol	MS	UM	Completed
2012	Baburam Rijal	MS	UM	Completed
2012	Sarah Johnson	MS	UM	Completed
2012	Matthew Russell	PhD	UM	Completed
2013	Eben Sypitkowski	MF	UM	Completed
2013	Elizabeth Farrell	MF	UM	Completed
2014	Rei Hayashi*	MS	UM	Completed
2014	Jeffrey Lombardo*	MS	UM	Completed
2014	Sean Hutchinson	MS	UM	Completed
2015	Emily Silver*	PhD	UM	Completed

Year	Student	Degree	Institution	Status
2016	Joshua Puhlick	PhD	UM	Completed
2016	Caitlin Andrews	MS	UM	Completed
2016	Neila Cola	MF	UM	Completed
2016	Clarke Cooper	MF	UM	Completed
2017	Mark Castle	MS	UM	Completed
2017	Bethany Munoz*	PhD	UM	In Progress
2017	Cen Chen	PhD	UM	In Progress
2017	Kasey Legaard	PhD	UM	In Progress
2017	Ben Rice	PhD	UM	In Progress
2017	Andrew Kennedy	MF	UM	In Progress
Committee Member (18 MS, 5 MF, 11 PhD)				
2009	Andrew Nelson	MS	UM	Completed
2010	Christopher Guitermann	MS	UM	Completed
2010	Christopher Zellers	MS	UM	Completed
2010	Kenneth Laustsen	MF	UM	Completed
2011	Andrea Burke	MS	UM	Completed
2011	Justin Waskiewicz	PhD	UM	Completed
2011	Emma Schulz	MS	UM	Completed
2011	Adam Bland	MS	UM	Completed
2012	Patrick Heisel	MS	UM	Completed
2012	Patrick Clune	MS	UM	Completed
2012	Louis-Vincent Gagné	MS	Laval	Completed
2013	Andrew Nelson	PhD	UM	Completed
2014	Sam Mathes	MF	UM	Completed
2014	Vance Brown	MF	UM	Completed
2014	Jaime Medina Sotomayor	PhD	Sao Paulo	Completed
2015	Brian Erikson	MF	UM	Completed
2015	Patrick Heisel	PhD	UM	Completed

Year	Student	Degree	Institution	Status
2015	Paul Swezdo	MF	UM	Completed
2015	Eliyas Ayrey	MS	UM	Completed
2015	David Carter	MS	UM	Completed
2016	Aaron Teets	MS	UM	In Progress
2016	Emily Wilkins	MS	UM	Completed
2016	Kathleen Dunckel	PhD	UM	Completed
2017	Elias Ayrey	PhD	UM	In Progress
2017	Neil Ver Planck	PhD	MSU	In Progress
2017	Paul Swezdo	MS	UM	In Progress
2017	Kaizad Patel	PhD	UM	In Progress
2017	David Sandilands	MS	UM	In Progress
2017	Stefan Stängle	PhD	Freiburg	Completed
2017	Isabel Therrien	MS	Moncton	In Progress
2017	Erin Fien	MS	UM	In Progress
2017	Nicole Rogers	PhD	UVM	In Progress
2017	John Kilbride	MS	UM	In Progress

Post-doctoral Researchers (7)

1. Arun Bose (May 2015 – Present)
2. Christian Kuehne (Oct 2014 – Present)
3. Joshua Puhlick (Dec 2014 – Present)
4. Mohammad Bataineh (March 2011 – May 2014)
5. Erin Simons-Legaard (2011 – 2014)
6. Rongxia Li (Jan 2009 – Jul 2012)
7. Laura Leites (Jan 2010 – Dec 2010)

Faculty Research Assistants (5)

1. Jereme Frank (June 2011 - Present)
2. Kate Gerdnt (Aug 2107 – Present)
3. Kasey Legaard (Sept 2011 – Present)
4. Jack Witham (Sept 2014 - Present)
5. Rachel Knapp (Sept 2015 – May 2017)

B. DOCUMENTATION OF SCHOLARSHIP AND PROFESSIONAL ACTIVITY

Percentage of time devoted to research: 80%

1. Publications and Creative Works (* denotes an advised grad student, post-doc, or research assistant; Total Citations = 1811; h-index = 22; i10-index = 51)

Accepted Peer-Reviewed Journal Articles (101)

1. Wilkins, E., de Urioste-Stone, S., *Weiskittel, A.*, and Gabe, T. 2017. Weather sensitivity and climate change perceptions of tourists: a segmentation analysis. Tourism in Changing Natural Environments: In press.

2. Ver Planck, N., Finely, A.O, Kershaw, Jr., J.A., *Weiskittel, A.R.* and Kress, M.C. 2017. Hierarchical Bayesian models for small area estimation of forest variables using LiDAR. Remote Sensing of Environment: in press.

3. Cen, C.*, *Weiskittel, A.*, Bataineh, M., and MacLean, D.A. 2017. Even low levels of spruce budworm defoliation affect mortality and ingrowth but net growth is more driven by competition. Canadian Journal of Forest Research: in press.

4. Hiesel, P.*, Crandall, M.S., *Weiskittel, A.R.*, and Kizh, A.R. 2017. Assessing alternative silvicultural prescriptions for mid-rotation, unthinned, spruce-fir stands in Maine. Forests 8: 370.

5. Rehfeldt, G.E., Leites, L, Joyce, D., and *Weiskittel, A.* 2017. Role of population genetics in guiding ecological responses to climate. Global Change Biology: in press.

6. Kershaw Jr., J.A., *Weiskittel, A.*, Lavigne, M.B., and McGarrigle, E. 2017. An imputation/copula-based stochastic individual tree growth model for mixed species Acadian Forests: A case study using the Nova Scotia permanent sample plot network. Forest Ecosystems 4: 15.

7. MacPhee, C.*, Kershaw Jr., J.A., *Weiskittel, A.*, Golding, J., and Lavigne, M.B. 2017. Comparison of approaches for estimating individual tree height–diameter relationships in the Acadian Forest Region. Forestry: in press.

8. Teets, A.*, Fraver, S., Hollinger, D.Y., *Weiskittel, A.R.*, Seymour, R.S., and Richardson, A.D. 2017. Linking annual tree growth with eddy-flux measures of net ecosystem productivity across twenty years of observation in a mixed conifer forest. Agricultural and Forest Meteorology: in press.

9. Dunckel, K.*, Fiske, G., and *Weiskittel, A.* 2017. Projected future eastern hemlock distribution across alternative climate scenarios in Maine, U.S. Forests 8: 285.

10. Bose, A.*, Wagner, R.G., Roth, B.E., and *Weiskittel, A.* Influence of browsing damage and overstory cover on regeneration of American beech and sugar maple nine years following understory herbicide release in central Maine. New Forests: in press.

11. Castle, M.*, *Weiskittel, A.*, Wagner, R., Ducey, M., Frank, J., and Pelletier, G. 2017. Variation in stem form and risk of four commercially important hardwood species in the Acadian Forest: Implications for potential sawlog volume and tree classification systems. Canadian Journal of Forest Research: in press.

12. Carter, D.*, Seymour, R.S., Fraver, S. and *Weiskittel, A.* 2017. Effects of multiaged silvicultural systems on reserve tree growth 19 years after establishment across multiple species in the Acadian forest in Maine, USA. Canadian Journal of Forest Research 47: 1314-1324.

13. Wilkins, E.*, De Urioste-Stone, S., *Weiskittel, A.*, and Gabe, T. 2017. Effects of weather conditions on tourism spending: Implications for future trends under climate change. Journal of Travel Research: in press.

14. Huff, E.S.*, Leahy, J.E., Kittredge, D.B., Noblet, C.L. and *Weiskittel, A.* 2017. Psychological distance of timber harvesting for private woodland owners. Forest Policy and Economics 81: 48-56.

15. Bose, A.*, *Weiskittel, A.*, and Wagner, R. 2017. Temporal shift in American beech (*Fagus grandifolia* Ehrh) occurrence and abundance over the past three decades in forests of Northeastern USA. Journal of Applied Ecology.

16. Chen, C.*, *Weiskittel, A.*, Bataineh, M., and MacLean, D. 2017. Evaluating the influence of varying levels of spruce budworm defoliation on annualized individual tree growth and mortality in Maine, USA and New Brunswick, Canada. Forest Ecology and Management 396: 184-194.

17. Bose, A.*, *Weiskittel, A.*, and Wagner, R. 2017. Occurrence, pattern of change, and factors associated with American beech-dominance in forest stands of the northeastern USA. Forest Ecology and Management 392: 202-212.

18. Puhlick, J.J.*, Woodall, C., and *Weiskittel, A.* 2017. Implications of land-use change on forest carbon stocks in the eastern United States. Environmental Research Letters 12: 024011.

19. Carter, D.*, Seymour, R.S., Fraver, S., and *Weiskittel*, *A.R.* 2017. Reserve tree mortality in two expanding-gap silvicultural systems 20 years after establishment in the Acadian Forest of Maine, USA. Forest Ecology and Management 389: 149-157.

20. Hennigar, C. *Weiskittel*, *A.* Allen, H.L., and MacLean, D.A. 2017. Development and evaluation of a biomass increment-based index for site productivity. Canadian Journal of Forest Research 47: 400–410.

21. Lam, T.Y., Kershaw Jr., J.A., Hajar, Z.S.N., Rahman, K.A., *Weiskittel*, *A.R.*, and Potts, M.D. 2017. Evaluating and modelling genus and species variation in height-to-diameter relationships for Tropical Hill Forests in Peninsular Malaysia. Forestry 90: 268-278.

22. Ayrey, E.*, Fraver, S. Kershaw Jr, J.A., Kenefic, L.S., Hayes, D., *Weiskitel*, *A.R.*, and Roth, B.E. 2017. Layer Stacking: A novel algorithm for individual forest tree segmentation from LiDAR point clouds. Canadian Journal of Remote Sensing 43: 16-27.

23. Hiesel, P.*, Crandall, M., *Weiskittel*, *A.R.*, Benjamin, J., and Wagner, R.G. 2017. Evaluating the long-term influence of alternative commercial thinning regimes and harvesting systems on projected net present value of precommercially thinned spruce-fir stands in northern Maine. Canadian Journal of Forest Research 47: 203-214.

24. Radtke, P.J., Walker, D., Frank, J.*, *Weiskittel*, *A.*, DeYoung, C., MacFarlane, D., Domke, G., Woodall, C., Coulston, J. and Westfall, J. 2017. Improved accuracy of aboveground biomass and carbon estimates for live trees in forests of the eastern United States. Forestry 90: 32-46.

25. *Weiskittel*, *A.R.*, Kuehne, C.*, McTague, J.P., and Oppenheimer, M. 2016. Development and evaluation of an individual tree growth and yield model for the mixed species forest of the Adirondacks Region of New York, USA. Forest Ecosystems 3: 26.

26. McTague, J.P. and *Weiskittel*, *A.R.* 2016. Individual-tree competition indices and improved compatibility with stand-level estimates of stem density and long-term production. Forests 7: 238.

27. Hayashi, R.*, *Weiskittel*, *A.R.* and Kershaw, J.A. 2016. Influence of prediction cell size on LiDAR-derived area-based estimates of total volume in mixed-species and multi-cohort forests in northeastern North America. Canadian Journal of Remote Sensing 42: 473-488.

28. Puhlick, J.*, *Weiskittel*, *A.R.*, Fernandez, I.J., Fraver, S., Kenefic, L.S., Seymour, R.S., Kolka, R.K., Rustad, L.E. and Brissette, J.C.. 2016. Long-term influence of alternative forest management

treatments on total ecosystem and wood product carbon storage. Canadian Journal of Forest Research 46: 1404-1412.

29. Westfall, J.A., McRoberts, R.E., Radtke, P.J., and *Weiskittel, A.R.* 2016. Effects of uncertainty in upper-stem diameter information on tree volume estimates. European Journal of Forest Research 135: 937-947.

30. Bose, A.K.*, *Weiskittel, A.*, Wagner, R.G., and Kuehne, C. 2016. Assessing the factors influencing natural regeneration patterns in the diverse, multi-cohort, and managed forests of Maine, USA. Journal of Vegetation Science 27: 1140-1150.

31. Puhlick. J.J*, *Weiskittel, A.R.*, Fraver, S., Russell, M.B., and Kenefic, L.K. 2016. Assessing the role of natural disturbance and forest management on dead wood dynamics in mixed-species stands of central Maine, USA. Canadian Journal of Forest Research 46: 1-11.

32. Nelson, A.S.*, Wagner, R.G., Day, M.E., Fernandez, I.J., *Weiskittel, A.R.*, and Saunders, M.R. 2016. Light absorption and light-use efficiency of juvenile white spruce trees in natural stands and plantations. Forest Ecology and Management 376: 158-165.

33. Kuehne, C.*, *Weiskittel, A.R.*, Wagner, R.G., and Roth, B.E. 2016. Development and evaluation of individual tree- and stand-level approaches for predicting spruce-fir response to commercial thinning in Maine, USA. Forest Ecology and Management 376: 84-95.

34. Babcok, C.*, Finley, A.O., Cook, B.D., *Weiskittel, A.*, and Woodall, C.W. 2016. Modeling forest biomass and growth: Coupling long-term inventory and LiDAR data. Remote Sensing of Environment 108: 1-12.

35. MacFarlane, D.W. and *Weiskittel, A.R.* 2016. A new method for capturing stem taper variation for trees of diverse morphological types. Canadian Journal of Forest Research 46: 804-815.

36. Puhlick, J.J.*, Fernandez, I.J., and *Weiskittel, A.R.* 2016. Evaluation of forest management effects on the mineral soil carbon pool of a lowland, mixed-species forest in Maine, USA. Canadian Journal of Soil Science 96: 207-218.

37. Puhlick, J.J.*, Fraver, S., Fernandez, I.J., *Weiskittel, A.R*, Kenefic, L.S., Kolka, R.K., Gruselle, M.-C. 2016. Factors influencing organic-horizon carbon pools in mixed-species stands of central Maine, USA. Forest Ecology and Management 364: 90-100.

38. Staengle, S.*, *Weiskittel*, A., Dormann, C., and Brueche, F. 2016. Measurement and prediction of bark thickness in *Picea abies*: Assessment of accuracy, precision, and sample size requirements. Canadian Journal of Forest Research 46: 39-47.

39. Huff E.S.*, Leahy J.E., Hiebeler D., *Weiskittel A.R.*, Noblet C.L. 2015. An agent-based model of private woodland owner management behavior using social interactions, information flow, and peer-to-peer networks. PLoS ONE 10(11): e0142453. doi:10.1371/journal.pone.0142453.

40. Hayashi, R.*, Kershaw, Jr., J.A., and *Weiskittel*, *A.* 2015. Evaluation of alternative methods for using LiDAR to predict aboveground biomass in mixed species and structurally complex forests in northeastern North America. Mathematical and Computational Forestry & Natural Science 7: 49-65.

41. *Weiskittel*, *A.* 2015. Evaluating traditional peer-review processes and their alternatives: An opinionated discussion. Mathematical and Computational Forestry & Natural Science 7: 81-92.

42. Dunckel, K.*, *Weiskittel*, *A.*, Fiske, G., Sader, S.A., Latty, E., Arnett, A. 2015. Linking remote sensing and various site factors for predicting the spatial distribution of eastern hemlock occurrence and relative basal area in Maine, USA. Forest Ecology and Management 358: 180-191.

43. Simons-Legaard, E.*, Legaard, K., and *Weiskittel*, *A.* 2015. Predicting aboveground biomass with LANDIS-II: A global and temporal analysis of parameter sensitivity. Ecological Modelling 313: 325-332.

44. Kuehne, C.*, *Weiskittel*, *A.R.*, Fraver, S., and Puettman, K.J. 2015. Effects of thinning induced changes in structural heterogeneity on growth, ingrowth, and mortality in secondary coastal Douglas-fir forests. Canadian Journal of Forest Research 45: 1448-1461.

45. Silver, E.J.*, Leahy, J.E., Kitteridge, D., and Weiskittel, A.R. 2015. An evidence-based review of timber harvesting behavior among private woodland owners. Journal of Forestry 113: 490-499.

46. Silver, E.J.*, Leahy, J.E., Noblet, C.L., and Weiskittel, A.R. 2015. Maine woodland owner perceptions of long rotation woody biomass harvesting and bioenergy. Biomass and Bioenergy 76: 69-78.

47. Pamerleau-Couture, É.*, Krause, C., Pothier, D. and *Weiskittel*, *A.* 2015. Effect of three partial cutting practices on stand structure and growth of residual black spruce trees in north-eastern Quebec. Forestry 88: 471-483.

48. *Weiskittel*, *A.R.*, MacFarlane, D.W., Radtke, P.J., Affleck, D.L.R., Temesgen, H., Westfall, J.A., Woodall, C.W., and Coulston, J.W. 2015. A call to improve methods for estimating tree biomass for regional and national assessments. Journal of Forestry 113: 414-424.

49. Nelson, A.S.*, Wagner, R.G., *Weiskittel*, A.R., and Saunders, M.R. 2015. Effects of species composition, thinning intensity, and shade tolerance on vertical distribution of leaf area index in juvenile stands in Maine, U.S.A. European Journal of Forest Research 134: 281-291.

50. Jiang, H.*, Radtke, P.J., *Weiskittel*, *A.*, Coulston, J., Guertin, P.J. 2015. Climate and soils-based models of site productivity in eastern U.S. tree species. Canadian Journal of Forest Research 45: 325-342.

51. Finely, A.O., Banerjee, S., *Weiskittel*, *A.R.*, Babcock,C., and Cook, B.D. 2014. Dynamic spatial regression models for space-varying forest stand table. Environmentrics 25: 596-609.

52. Russell, M.B.*, *Weiskittel*, *A.R.*, and Kershaw Jr., J.A. 2014. Comparing strategies for modeling individual-tree height and height-to-crown base increment in mixed-species Acadian forests of northeastern North America. European Journal of Forest Research 133: 1121-1135.

53. Nelson, A.S.*, *Weiskittel*, A.R., Saunders, M.R., and Wagner, R.G. 2014. Development and validation of small-diameter aboveground biomass equations for naturally-regenerated and planted tree species in eastern Maine. Biomass & Bioenergy 68: 215-227.

54. Colgan, C., McGill, B., Hunter, M.L., and *Weiskittel*, *A.* 2014. Managing the middle ground: Forests in the transition zone between cities and remote areas. Landscape Ecology 29: 1133-1143.

55. Hayashi, R.*, *Weiskittel*, *A.* and Sader, S. 2014. Assessing the feasibility of low-density LiDAR for stand inventory predictions in complex and managed forests of northern Maine. Forests 5: 363-383.

56. Rice, B.*, *Weiskittel*, *A.R.*, and Wagner, R.G. 2014. Efficiency of alternative forest inventory techniques in partially harvested stands of Maine. European Journal of Forest Research 133: 261-272.

57. Nelson, A.S.*, *Weiskittel*, *A.*, and Wagner, R.G. 2014. Development of branch, crown, and vertical distribution leaf area models for contrasting hardwood species in Maine, USA. Trees 28: 17-30.

58. Gagné, L.-V.*, Genet, A., *Weiskittel*. *A.*, *Achim*, *A.* 2013. Assessing the potential stem growth and quality of yellow birch prior to restoration: A case study in eastern Canada. Forests 4: 766-785.

59. Bataineh, M.M.*, Kenefic, L., *Weiskittel, A.*, Wagner, R., Brissette, J. 2013. Influence of partial harvesting and site factors on the abundance and composition of natural regeneration in the Acadian Forest of Maine, USA. Forest Ecology and Management 306: 96-106.

60. Puhlick, J.J.*, Moore, M.M. and *Weiskittel, A.R.* 2013. Factors influencing height-age relationships and recruitment of ponderosa pine regeneration in northern Arizona. Western Journal of Applied Forest Research 28:91-96.

61. Russell, M.B.*, *Weiskittel, A.R.*, and Kershaw, J.A. 2013. Benchmarking and calibration of Forest Vegetation Simulator individual tree attribute predictions across the northeastern US. Northern Journal of Applied Forest Research 30: 75-84.

62. Bataineh, M.M.*, Wagner, R.G., *Weiskittel, A.R.*, 2013. Long-term response of spruce–fir stands to herbicide and precommercial thinning: observed and projected growth, yield, and financial returns in central Maine, USA. Canadian Journal of Forest Research 43, 385-395.

63. Waskiewicz, J.*, Kenefic, L., *Weiskittel, A.*, Seymour, R., 2013. Species mixture effects in northern red oak–eastern white pine stands in Maine, USA. Forest Ecology and Management 298, 71-81.

64. Nelson, A.*, Wagner, R., Saunders, M., and *Weiskittel, A.* 2013. Influence of silvicultural intensity and species composition on the development of early-successional Acadian stands in eastern Maine. Forestry 86: 79-90.

65. Matney, J.*, Babcock, C., Finely, A.O., *Weiskittel, A.*, and Cook, B.D. 2012. Multivariate spatial regression models for predicting forest structure variables using LiDAR data. IEEE Journal of Selected Topics in Applied Earth Observations and Remote Sensing 99: 1-9.

66. Russell, M.B.*, Kenefic, L.K., *Weiskittel, A.R.*, Puhlick, J., and Brissette, J. 2012. Assessing and modeling standing deadwood attributes under alternative silvicultural regimes in the Acadian Forest region of Maine, USA. Canadian Journal of Forest Research 42: 1873-1883.

67. Russell, M.B.* and *Weiskittel, A.R.* 2012. Assessing and modeling snag survival and decay dynamics for the primary species in the Acadian forest of Maine, USA. Forest Ecology and Management 284: 230-240.

68. Nelson, A.S.*, Saunders, M.R., Wagner, R.G., *Weiskittel, A.R.* 2012. Hybrid poplar and white spruce early stand production in mixed and monospecific plantations in eastern Maine. New Forests 43: 519-534.

69. Rijal, B.*, *Weiskittel*, *A.R.*, Kershaw, J.A. 2012. Development of regional height to diameter static equations for 15 tree species in North American Acadian Region. Forestry 85: 379-390.

70. Li, R.*, *Weiskittel*, *A.R.*, Kershaw Jr, J.A., Dick, A., Seymour, R.S., 2012. Regional stem taper equations for eleven conifer species in the Acadian Region of North America: Development and assessment. Northern Journal of Applied Forestry 29: 5-14.

71. Kohnle, U., Hein, S., Musselmann, B., Sorensen, F.C., and *Weiskittel*, *A.R.* 2012. Influence of provenance on bark thickness and bark ratio of Douglas-fir (*Pseudotsuga menziesii* [Mirb.] Franco) growing in southwestern Germany. Canadian Journal of Forest Research 42: 382-399.

72. Guiterman, C.H.*, Seymour, R.S., *Weiskittel*, *A.R.* 2012. Long-term thinning Effects on the leaf area of *Pinus strobus* L. as estimated from litterfall and individual-tree allometric models. Forest Science 58: 85-93.

73. Li, R.*, Stewart, B., *Weiskittel*, *A.R.* 2012. A Bayesian approach for modeling nonlinear longitudinal/hierarchical data with random effects in forestry. Forestry 85: 17-25.

74. *Weiskittel*, *A.R.*, Crookston, N.L., Rehfeldt, G.E. 2012. Projection of Douglas-fir future habitat and productivity in western North America. Schweiz Z Forstwes 163: 70-78.

75. Rijal, B.*, *Weiskittel*, *A.R.*, Kershaw, J.A. 2012. Development of height to crown base models for thirteen tree species of the North American Acadian Region. Forestry Chronicle 88: 60-73.

76. Auty, D., *Weiskittel*, *A.R.*, Achim, A., Gardiner, B.A., and Moore, J.R. 2012. Influence of early respacing on Sitka spruce branch structure. Annals of Forest Science 69: 93-104.

77. Russell, M.B.*, *Weiskittel*, *A.R.*, Kershaw, J.A. 2011. Assessing model performance in forecasting long-term individual tree diameter versus basal area increment for the primary Acadian species. Canadian Journal of Forest Research 41: 2267-2275.

78. Li, R.*, *Weiskittel*, *A.R.*, and Kershaw, J.A. 2011. Modeling annualized occurrence, frequency, and composition of ingrowth using mixed-effects zero-inflated models and permanent plots in the Acadian Region of North America. Canadian Journal of Forest Research 41: 2077-2089.

79. McGarrigle, E.*, Kershaw, J.A., Lavinge, M., *Weiskittel*, *A.R.*, Ducey, M.J. 2011. Predicting small tree diameter distributions using predictions from a two-parameter Weibull distribution in the Acadian Forest region. Forestry 84: 431-439.

80. Guiterman, C.H.*, *Weiskittel*, *A.R.*, and Seymour, R.S. 2011. Influence of conventional and low density thinning on the volume growth and lower bole taper of a eastern white pine plantation in central Maine. Northern Journal of Applied Forestry 28: 123-128.

81. *Weiskittel*, *A.R.*, Crookston, N.L., Radtke, P.J. 2011. Linking climate, gross primary productivity, and site index across forests of the western United States. Canadian Journal of Forest Research 41: 1710-1721.

82. Li, R.* and *Weiskittel*, *A.R.* 2011. Estimating and predicting bark thickness for seven conifer species in the Acadian Region of North America using a mixed-effects modeling approach: Comparison of model forms and subsampling strategies. European Journal of Forest Research 130: 219-233.

83. Temesgen, H., Monleon, V., *Weiskittel*, *A.*, and Wilson, D. 2011. Sampling strategies for efficient estimation of tree foliage biomass. Forest Science 57: 153-163.

84. Russell, M.B.* and *Weiskittel*, *A.R.* 2011. Maximum and largest crown width equations for fifteen tree species in Maine. Northern Journal of Applied Forestry 28: 84-91.

85. *Weiskittel*, *A.R.*, Kenefic, L.S., Li, R.*, and Brissette, J.C. 2011. Long term influence of early spacing treatments on stand-level attributes in a northern conifer stand in Maine. Northern Journal of Applied Forestry 28: 92-96.

86. *Weiskittel*, *A.R.*, Hofmeyer, P.V., Seymour, R.S., and Kershaw, J.A. 2010. Modelling primary branch frequency and size for five conifer species in Maine, USA. Forest Ecology and Management 259: 1912-1921.

87. Li, R.* and *Weiskittel*, *A.R.* 2010. Comparison of model forms for estimating stem taper and volume in the primary conifer species in the Acadian Region of North America. Annals of Forest Science 67: 302.

88. Li, R.*, Bettinger, P., and *Weiskittel*, *A.R.* 2010. Comparison of three different methods used to generate forest landscapes for spatial harvest scheduling problems with adjacency restrictions. Mathematical and Computational Forestry and Natural Resources Sciences 2: 1-8.

89. *Weiskittel*, *A.R.*, Maguire, D.A., Monserud, R.A., and Johnson, G.P. 2010. A hybrid model for intensively managed Douglas-fir plantations in the Pacific Northwest, USA. European Journal of Forest Research 129: 325-338.

90. Hein, S. and *Weiskittel*, *A.R.* 2010. Cutpoint analysis for models with binary outcomes: a case study on branch mortality. European Journal of Forest Research 129: 585-590.

91. Hann, D.W. and *Weiskittel*, *A.R.* 2010. Evaluation of alternative approaches for predicting individual tree volume growth rate. Western Journal of Applied Forestry 25: 120-126.

92. Crookston, N.L., Rehfeldt, G.E., Dixon, G.E., and *Weiskittel*, *A.R.* 2010. Addressing climate change in the Forest Vegetation Simulator to assess impacts on landscape forest dynamics. Forest Ecology and Management 260: 1198-1211.

93. Benjamin, J., Kershaw, J.A., *Weiskittel*, *A.R.*, Chui, Y.H., and Zhang, S.Y. 2009. External knot size and frequency in black spruce trees from an initial spacing trial in Thunder Bay, Ontario. Forestry Chronicle 85: 618-624.

94. *Weiskittel*, *A.R.*, Kenefic, L.S., Seymour, R.S., and Phillips, L.M. 2009. Long-term effects of precommercial thinning on stem dimensions, form, and branch characteristics of red spruce and balsam fir crop trees. Silva Fennica 43: 397-409.

95. *Weiskittel*, *A.R.*, Kershaw, J.A., Hofmeyer, P.V., and Seymour, R.S. 2009. Species differences in total and vertical distribution of branch- and tree-level leaf area for the five primary conifer species in Maine, USA. Forest Ecology and Management 258: 1695-1703.

96. Kershaw, J.A., Benjamin, J., and *Weiskittel*, *A.R.* 2009. Approaches for modeling vertical distribution of maximum knot size in black spruce: A comparison of fixed and mixed effects nonlinear models. Forest Science 55: 230-237.

97. *Weiskittel*, *A.R.*, Hann, D.W., Bluhm, A.A., Hibbs, D.E., Lam, T.Y. 2009. Modeling plantation red alder dominant height growth. Forest Ecology and Management 258: 323-331.

98. *Weiskittel*, *A.R.*, Gould, P.J., and Temesgen, H. 2009. Sources of variation in the self-thinning boundary line for three species with varying levels of shade tolerance. Forest Science 55: 84-93.

99. Hein, S., *Weiskittel*, *A.R.* and Kohnle, U. 2008. Effect of wide spacing on tree growth, branch, and sapwood properties of young Douglas-fir [*Pseudotsuga menziesii* (Mirb.) Franco] in south-western Germany. European Journal of Forest Research 127: 481-493.

100. Hein, S., *Weiskittel*, *A.R.* and Kohnle, U. 2008. Branch characteristics of widely spaced Douglas-fir in south-western Germany: Comparisons of modeling approaches and geographic regions. Forest Ecology and Management 256: 1064-1079.

101. *Weiskittel*, *A.R.*, Temesgen, H., Wilson, D.S., and Maguire, D.A. 2008. Sources of within- and between-stand variability in specific leaf area of three ecologically distinct conifer species. Annals of Forest Science 65: 103.

2. Scholarly and Creative Work in Progress

Revised and Resubmitted (2)

1. Frank, J.*, Castle, M.*, Westfall, J.A., *Weiskittel*, *A.*, MacFarlane, D.W., Baral, S., Radtke, P.J., and Pelletier, G. Variation in occurrence and extent of internal stem decay in standing trees across the eastern US and Canada: Evaluation of statistical approaches and influential factors. Forestry.

2. Andrews, C.*, *Weiskittel*, *A.*, D'Amato, A.W., and Simons-Legaard, E. Variation in the maximum stand density index and its linkage to climate in mixed species forests of the North American Acadian Region. Forest Ecology and Management.

Submitted for Review (7)

1. Teets, A.*, Fraver, S., *Weiskittel*, *A.*, and Hollinger, D. Quantifying climate–growth relationships at the species and stand level in a mature mixed-species conifer forest. Global Change Biology.

2. Kuehne, C.*, *Weiskittel*, *A.*, Pommerening, A. and Wagner, R. Evaluation of ten-year temporal and spatial variability in structure and growth across contrasting commercial thinning treatments in spruce-fir forests of northern Maine, USA. Annals of Forest Science.

3. Bose, A.*, *Weiskittel*, *A.*, Kuehne, C., Wagner, R.G., Burkhart, H.E., and Turnblom, E. Does commercial thinning improve stand-level growth of the three most commercially important softwood forest types of North America? Forest Ecology and Management.

4. Bose, A.*, *Weiskittel*, *A.*, Kuehne, C., Wagner, R.G., Burkhart, H.E., and Turnblom, E. Tree-level growth and mortality responses to commercial thinning treatments of the four most commercially important softwood species in North America. Forest Ecology and Management.

5. Chen, C.*, *Weiskittel*, *A.*, Bataineh, M., and MacLean, D. Modeling variation and temporal development dynamics of individual tree defoliation caused by spruce budworm in Maine, USA and New Brunswick, Canada. Ecological Modelling.

6. Ferraco, H.*, McTague, J.P., Raiumundo, M., *Weiskittel*, *A.*, Carrero, O., and Scolforo, J.R. Comparison of statistical approaches for fitting taper functions to eucalypts of varying genetics in Brazil focused on sawlog production. Forest Ecology and Management.

7. Wilkins, E.*, De Urioste-Stone, S., *Weiskittel, A.*, and Gabe, T. Weather sensitivity and climate change perceptions of tourists: A segmentation analysis. Tourism Geographies.

3. Professional Presentations (64)

1. *Weiskittel, A.*, Kershaw, J., Crookston, N., and Hennigar, C. 2017. The Acadian Variant of the Forest Vegetation Simulator: Continued development and evaluation. 2017 Forest Vegetation Simulator (FVS) e-Conference. February 28-March 2.

2. *Weiskittel, A.*, Kuehne, C., McTague, J.P., and Oppenheimer, M. 2017. Development and evaluation of an individual tree growth and yield model for the Adirondacks Region of New York. 2017 Forest Vegetation Simulator (FVS) e-Conference. February 28-March 2.

3. *Weiskittel, A.*, Wilson, D., and Kuehne, C. 2016. Forecasting Douglas-fir response to silviculture: Evaluating alternative approaches and growth model projection uncertainty. Western Mensurationists' Annual Meeting. Skamania Lodge, Stevenson, WA. June 19-21.

4. *Weiskittel, A.* 2016. Modeling natural forest in northeastern USA. Invited seminar. University of the Frontier. Temuco, Chile. September 23.

5. *Weiskittel, A.* 2016. LiDAR for forestry: Opportunities and limitations. Invited keynote to Vermont Society of Annual Foresters Annual Meeting. Fairlee, VT. March 24.

6. *Weiskittel, A.* 2016. Growth and yield models: Unlocking the black box. Invited webinar to Sustainable Forestry Initiative auditors. February 23.

7. *Weiskittel, A.* 2015. Forecasting the unknown: Potential impacts of climate change on Maine's forest. Forest Resources Association. Bangor, ME. November 5.

8. *Weiskittel, A.* 2015. Reviewing the peer-review process: Can we do better? Western Mensurationists Annual Meeting. Vancouver, WA. June 21-23.

9. *Weiskittel, A.* and Wagner, R. 2015. Extending the Acadian Variant of the Forest Vegetation Simulator to managed stands in the Northeast US. National Science Foundation Center for Advanced Forestry Systems Annual Meeting. Asheville, NC. May 19-21.

10. *Weiskittel, A.* 2014. Forest modeling research in Maine. Invited seminar. Northern Hardwoods Research Institute. University of Moncton. Edmundston, New Brunswick. May 1.

11. *Weiskittel*, *A.* 2014. Climate change and forest growth modeling: The uncertainty of predicting the unknown. Invited seminar. Michigan State University Hanover Seminar Series. East Lansing, MI. March 11.

12. *Weiskittel*, *A.R.* 2013. Development of a regional growth and yield model for complex, managed stands of the Acadian Forest. IUFRO Meeting on Complex Forest Ecososytems. New Orleans, LA. October 7 – 9.

13. *Weiskittel*, *A.R.* 2013. Linking growth and wood quality models: Past, present, and future. MeMoWood Conference. Invited keynote. Nancy, France. October 1-4.

14. Kenefic, L.S. and *Weiskittel*, *A.R*. 2013. U.S. Forest Service research in northern conifers: Historical perspective, management implications, and modeling applications. Invited webinar. Northeastern States Research Cooperative. March 21.

15. Kenefic, L.S., Brissette, J.C., and *Weiskittel*, *A.R*. 2012. Growth, mortality and harvest in 10 silvicultural treatments over 60 Years on the Penobscot Experimental Forest in Maine, USA. ECANUSA Forest Science Conference. Durham, NH. November 1-3.

16. Rice, B., Wagner, R., and *Weiskittel*, *A.R.* 2012. Nonselective partial harvesting in Maine. ECANUSA Forest Science Conference. Durham, NH. November 1-3.

17. Lombardo, J.M.*, Kenefic, L.K., Wilson, J.S., and *Weiskittel*, *A.R.* 2012. Tree regeneration in partially harvested mixed wood stands in Maine. ECANUSA Forest Science Conference. Durham, NH. November 1-3.

18. Puhlick, J.*, *Weiskittel*, *A.*, Kenefic, L., Fernandez, I., Fraver, S., Rustad, L., Kilka, R., and Brissette, J. 2012. How silvicultural treatments affect carbon storage on the Penobscot Experimental Forest: A 60 Year Perspective. ECANUSA Forest Science Conference. Durham, NH. November 1-3.

19. Brissette, J.C., Kenefic, L.S., and *Weiskittel*, *A.R*. 2012. Fifty-plus years of stand development following shelter wood cutting in northern conifers. ECANUSA Forest Science Conference. Durham, NH. November 1-3.

20. Bataineh, M. Kenefic, L, *Weiskittel*, *A.R.*, Wagner, R., Brissette, J., and Seymour, R. 2012. The relative importance of harvesting and local site factors in structuring regeneration abundance and composition. ECANUSA Forest Science Conference. Durham, NH. November 1-3.

21. Nelson, A.S., Wagner, R.G., Saunders, M.R., and *Weiskittel*, *A.R.* 2012. Influence of management intensity on the productivity of early successional Acadian stands in eastern Maine. ECANUSA Forest Science Conference. Durham, NH. November 1-3.

22. Nelson, A.S., *Weiskittel*, *A.R.*, Wagner, R.G., and Saunders, M.R. 2012. Vertical distribution and total tree leaf area equations of juvenile trees in eastern Maine. Southern Mensurationist 2012 Annual Meeting. Jacksonville, FL. October 1-2.

23. Nelson, A.S., *Weiskittel*, *A.R.*, Wagner, R.G., and Saunders, M.R. 2012. Development and validation of aboveground sapling biomass equations in Maine. 16th Annual Northeastern Mensurationists Organization Meeting. State College, PA. October 7-9.

24. Frank, J. and *Weiskittel*, *A.R.* 2012. A review of biomass and taper equations in the Northeastern United States. 16th Annual Northeastern Mensurationists Organization Meeting. State College, PA. October 7-9.

25. Medina Sotomayor, J.F., *Weiskittel*, *A.*, Cardoso, C.S., and Zarate de Couto, H.T. 2012. Above ground biomass estimation using nonlinear and mixed effects models in a native Atlantic rain forest in Brazil. International Biometric Society Conference. Kobe, Japan. August 26-31.

26. *Weiskittel*, *A.*, M. Russell, and Kershaw, J.A. 2012. Development and evaluation of the Acadian Variant of the Forest Vegetation Simulator. 4th Forest Vegetation Simulator Conference. Fort Collins, CO. April 17-19.

27. Russell, M.*, *Weiskittel*, *A.*, and Radtke, P. 2012. Evaluation of the Northeast Variant of the Forest Vegetation Simulator. 4th Forest Vegetation Simulator Conference. Fort Collins, CO. April 17-19.

28. Weiskittel, A.R. 2011. Assessing current and future forest productivity. Intermountain Forest Tree Nutrition Cooperative Advisory Board Meeting. Spokane, WA. December 8. (Invited talk)

29. Nelson, A.S.*, R.G. Wagner, M.R. Saunders and A.R. Weiskittel. 2011. Influence of silvicultural intensity and compositional objectives on the productivity of regenerating Acadian mixedwood stands in Maine, USA. pp. 90-92 in Proceedings of the 7th International Vegetation Management Conference. IUFRO Unit 1.01.04 Forest Vegetation Management. Valdivia, Chile. November 7-10.

30. *Weiskittel*, *A.*, Hann, D.W., Kershaw, J.A., and Vanclay, J.K. 2011. Lessons learned from writing a book on forest growth and yield modeling. Southern Mensurationists Annual Meeting. Memphis, TN. October 24-25.

31. Nelson, A.*, *Weiskittel*, *A.* and Wagner, R.G. 2011. Production ecology and dynamics of early-successional mixedwood stands in central Maine. Northeastern Mensurationists Organization Annual Meeting. Quebec City, Quebec. October 3-4.

32. Johnson, S.*, *Weiskittel*, *A.*, and Kenefic, L. 2011. Meta-analysis of long-term forest growth across the Northeastern United States. Northeastern Mensurationists Organization Annual Meeting. Quebec City, Quebec. October 3-4.

33. Clune, P.*, *Weiskittel*, *A.*, Wagner, R.G., and Seymour, R.S. 2011. Growth and development of Maine spruce-fir forests following commercial thinning. Northeastern Mensurationists Organization Annual Meeting. Quebec City, Quebec. October 3-4.

34. Russell, M.* and *Weiskittel*, *A.* 2011. Compatible height and height to crown base increment models for the primary Acadian tree species. Northeastern Mensurationists Organization Annual Meeting. Quebec City, Quebec. October 3-4.

35. Rice, B.*, *Weiskittel*, *A.* and Wagner, R.G. 2011. Partially harvested stands and inventory: A comparison of methods. Northeastern Mensurationists Organization Annual Meeting. Quebec City, Quebec. October 3-4.

36. *Weiskittel*, *A.R.* 2011. Linking Tree Crowns, Growth and Yield, and Wood Quality Equations: What Works and Where to Next? ForValueNet Modelling Tree Crown Architecture for Wood Quality Prediction Workshop. University of Alberta. Edmonton, Alberta. June 5-7. (Invited talk)

37. Russell, M.B.*, *Weiskittel*, *A.R.*, Wagner, R.G. 2011. Refinement of regional growth and yield models for naturally-regenerated, mixed species stands in the Northeast. National Science Foundation Center for Advanced Forestry Systems Annual Meeting. Seattle, WA. June 14-16.

38. Russell, M.B.* and *Weiskittel*, *A.R.* 2011. Modeling individual tree increment in the mixed-species Acadian Forests: Are species-specific equations required? Western Mensurationists Annual Meeting. Banff, Alberta. June 19-21.

39. Russell, M.B.* and *Weiskittel*, *A.R.* 2010. Development of maximum and stand-grown crown width equations for the primary species in the Acadian Region. FIA and Southern Mensurationists Joint Symposium. Knoxville, TN. October 5-7.

40. Li, R.* and *Weiskittel*, *A.R.* 2010. Modeling the occurrence, frequency, and composition of ingrowth in the Acadian Region. FIA and Southern Mensurationists Joint Symposium. Knoxville, TN. October 5-7.

41. Pekol, J.* and *Weiskittel*, *A.* 2010. Spatial modeling using R: A case study with three landscape types and a disturbance agent. 14th Annual Northeastern Mensurationists Organization Meeting. Stockbridge, MA. November 1-2.

42. Rijal, B.* and *Weiskittel*, *A.* 2010. Development of regional height to crown base models in the Acadian forest. 14th Annual Northeastern Mensurationists Organization Meeting. Stockbridge, MA. November 1-2.

43. Russell, M.*, Li, R.*, and *Weiskittel*, *A.R.* 2010. R2WinBugs: Using R for Bayesian analysis. 14th Annual Northeastern Mensurationists Organization Meeting. Stockbridge, MA. November 1-2.

44. Li, R.* and *Weiskittel*, *A.R.* Efficiency in using R: 2010. Parallel computing and working R in Linux. 14th Annual Northeastern Mensurationists Organization Meeting. Stockbridge, MA. November 1-2.

45. Li, R.*, *Weiskittel*, *A.R.*, Dick, A., Kershaw, J.A. 2010. Evaluating stem taper and bark thickness equations for the major conifer species in the Acadian Region of North America. ECANUSA Conference. University of Moncton. Edmundston, New Brunswick. October 14-16.

46. Rijal, B.* and *Weiskittel*, *A.R.* 2010. Development of regional height to diameter allometric equations for naturally-regenerated, mixed species, and multi-cohort forests of the Acadian Region. ECANUSA Conference. University of Moncton. Edmundston, New Brunswick. October 14-16.

47. Russell, M.B.* and *Weiskittel*, *A.R.* 2010. Assessing model prediction uncertainty in forecasting long-term tree basal area and diameter increment for the primary Acadian tree species. ECANUSA Conference. University of Moncton. Edmundston, New Brunswick. October 14-16.

48. Waskiewicz, J.*, Kenefic, L., Seymour, R., and *Weiskittel*, *A.R.* 2010. Effects of neighborhood-scale competition and composition on individual tree growth in oak-pine mixed stands in Maine. ECANUSA Conference. University of Moncton. Edmundston, New Brunswick. October 14-16.

49. *Weiskittel*, *A.R.*, Crookston, N.L, Rehfeldt, G.E., Radtke, P.J. 2010. Mapping Douglas-fir current and future abundance and potential site productivity in western United States. Opportunities and risks for Douglas-fir in a changing climate. Freiburg, Germany. October 18-20.

50. Russell, M.* and *Weiskittel*, A.R. 2009. Development of a growth index for application in the mixed-species Acadian Forest. 13th Annual Northeastern Mensurationists Meeting. November 2-3. Durham, NH.

51. Rijal, B.* and *Weiskittel, A.R.*2009. Individual tree diameter and height allometric equations in the Acadian Forest. 13th Annual Northeastern Mensurationists Meeting. November 2-3. Durham, NH.

52. Li, R.* and *Weiskittel, A.R.* 2009. Evaluating model forms of bark thickness equations for seven conifers species using a mixed-effects model approach. 13th Annual Northeastern Mensurationists Meeting. November 2-3. Durham, NH.

53. Temesgen, H., Monleon, V., *Weiskittel, A.R.*, and Wilson, D.S. 2009. A tale of two phases: Design and estimation of tree foliage biomass. 20th Annual International Envirometrics Society Annual Conference. Bologna, Italy. July 5 – 9.

54. Li, R.*, Bettinger, P. and *Weiskittel, A.R.* 2009. Comparison of three different methods used to generate forest landscapes for spatial harvest scheduling problems with adjacency restrictions. 13th Symposium on Systems Analysis in Forest Resources. Charleston, SC. May 26 – 29.

55. *Weiskittel, A.R.* 2008. Douglas-fir, genetics, and climate change: A synthesis of past and present research in the Pacific Northwest. Invited seminar. Baden-Württemberg Forest Research Institute. Freiburg, Germany. December 22.

56. *Weiskittel, A.R.* and Temesgen, H. 2008. Efficiency of some sampling alternatives to estimate tree- and stand-level foliage biomass. Southern Mensurationists' Annual Meeting. St. Augustine, FL. November 6-8.

57. Perry, T.E., *Weiskittel, A.R.*, Wagner, R.G., and Saunders, M.R. 2008. Austin Pond Study: Re-analysis of net present value for treatments using a calibrated FVS. University of Maine, Cooperative Forestry Research Unit Fall Advisory Meeting. Greenville, ME. October 28.

58. *Weiskittel, A.R.*, Kershaw, J.A., and Brissette, J. 2008. Development of an Acadian Variant of FVS. Eastern Canada and United States Forest Science Conference. Orono, ME. October 17-18.

59. Li, R.* and *Weiskittel, A.R.* 2008. Regional variation in dominant height growth for balsam fir and red spruce in Maine. Eastern Canada and United States Forest Science Conference. Orono, ME. October 17-18.

60. Li, R.* and *Weiskittel, A.R.* 2008. Development and evaluation of regional taper and volume equations for the primary conifer species in Maine. Northeastern Mensurationists' Meeting. Bar Harbor, ME. October 7-8.

61. *Weiskittel*, *A.R.* and Hein, S. 2008. Predicting crown attributes for wood quality: Are model form, regional, and species differences important? IUFRO Working Party 5.01.04 Wood Quality Modelling Conference. Koli, Finland. June 8-14.

62. Hein, S. and *Weiskittel*, *A.R.* 2008. Generalized mixed models on knottiness of European beech. IUFRO Working Party 5.01.04 Wood Quality Modelling Conference. Koli, Finland. June 8-14.

63. Sader, S. and *Weiskittel*, *A.R.* 2008. Monitoring Maine forests from above: From science to application. Physically based remote sensing of forests 2nd annual workshop. Helsinki, Finland. June 3-4.

64. Temesgen, H., *Weiskittel*, *A.R.*, and Wilson, D.S. 2008. Efficiency of some sampling alternatives to estimate tree- and stand-level foliage biomass. 9th Annual The International Environmetrics Society Conference. Kelowna, BC, Canada. June 8-13.

4. Other Scholarly Activities

Book (1)

1. *Weiskittel*, *A.R.* Hann, D.W., Kershaw Jr., J.A., and Vanclay, J.K. 2011. Forest growth and yield modeling. Wiley. 415 p.

Book Chapters (2)

1. *Weiskittel*, *A.* 2014. Forest growth and yield models for intensively managed plantations. In: Borges, J.G., Diaz-Balteiro, L., and McDill, M.E. The Management of Industrial Forest Plantations: Therotical Foundations and Applications. Springer, pp. 61-90.

2. Twery, M.J. and *Weiskittel*, *A.R.* 2012. Forest-management modeling. In: Waingwrith, J. and Mulligan, M. (Eds.). Environmental Modelling: Finding Simplicity in Complexity, Second Edition: John Wiley & Sons, Sussex, UK, pp.379-398.

Non-peer-reviewed Reports (19)

1. *Weiskittel*, *A.*, Kershaw, J., Crookston, N., and Hennigar, C. 2017. The Acadian Variant of the Forest Vegetation Simulator: Continued development and evaluation. In: Keyser, C.E. and Keyser, T.L. (eds.) Proceedings of the 2017 Forest Vegetation Simulator (FVS) e-Conference. e-Gen. Tech. Rep. SRS-224. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. pp. 10-13.

2. *Weiskittel, A.*, Kuehne, McTague, J.P., and Oppenheimer, M. 2017. Development and evaluation of an individual tree growth and yield model for the Adirondacks Region of New York. In: Keyser, C.E. and Keyser, T.L. (eds.) Proceedings of the 2017 Forest Vegetation Simulator (FVS) e-Conference. e-Gen. Tech. Rep. SRS-224. Asheville, NC: U.S. Department of Agriculture Forest Service, Southern Research Station. pp. 14-17.

3. *Weiskittel, A.*, Frank, J., Walker, D., Radtke, P. Macfarlane, D., and Westfall, J. 2016. Advancing individual tree biomass prediction: assessment and alternatives to the component ratio method. Gen. Tech. Rep. PNW-GTR-931. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Portland, OR. pp. 125-132.

4. *Weiskittel, A.*, Frank, J., Westfall, J., Walker, D., Radtke, P., Affleck, D., and Macfarlane, D. 2016. Gaps in sampling and limitations to tree biomass estimation: A review of past sampling efforts in the United States over the last 50 years. Gen. Tech. Rep. PNW-GTR-931. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Portland, OR. pp. 31-35.

5. Radtke, P.J., Walker, D.M. *Weiskittel, A.R.*, Frank, J., Coulston, J.W., and Westfall, J.A. 2016. Legacy tree data: A national database of detailed tree measurements for volume, weight, and physical properties. Gen. Tech. Rep. PNW-GTR-931. U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. Portland, OR. pp. 25-30.

6. McTague, J.P., Oppenheimer, M.J., and *Weiskittel, A.R.* 2014. Stand table projection and individual-tree height prediction for second rotation loblolly and slash pine plantations in southern United States. Research Report 14-03. Rayonier Forest Resources. Jacksonville, FL. 38 p.

7. McTague, J.P., *Weiskittel, A.R.*, and Oppenheimer, M.J. 2014. Stand-level growth and yield of Douglas-fir and western hemlock in the Pacific Northwest. Research Report 14-01. Rayonier Forest Resources. Jacksonville, FL. 51 p.

8. *Weiskittel, A.*, Kershaw, Jr., J., and Hennigar, C. 2013. Refinement of Forest Vegetation Simulator individual-tree growth and yield model for the Acadian Region. In: Roth, B.E. (Ed.) 2013. Cooperative Forestry Research Unit: 2012 Annual Report. University of Maine. Orono, ME. pp. 67-77. Available online: https://umaine.edu/cfru/files/2015/05/Annual-Report-2012.pdf.

9. Berven, K.*, Kenefic, L., *Weiskittel, A.*, Twery, M., and Wilson, J., 2013. The lost research of early northeastern spruce-fir Experimental Forests: A tale of lost opportunities. In: Camp, A.E., Irland, L.C., Carroll, C.J.W. (Eds.), Long-term Silvicultural and Ecological Studies: Results for Science and Management, Volume 2. Yale University, Global Institute of Sustainable Forestry, New Haven, CT, pp. 103-115.

10. Nelson, A.S.*, Weiskittel, A.R., Wagner, R.G., and Saunders, M.R. 2012. Verification of the Jenkins and FIA Sapling biomass equations for hardwood species in Maine. In Moving from Status to Trends: Forest Inventory and Analysis (FIA) Symposium 2012. Edited by R.S. Morin, and G.C. Liknes. USDA Northern Research Station Gen. Tech. Rep. NRS-P-105, Baltimore, MD. pp. 373-377.

11. Boulfroy, E., Forget, E., Hofmeyer, P.V., Kenefic, L.S., Larouche, C., Lessard, G., Lussier, J.-M., Pinto, F., Ruel, J.-C., *Weiskittel*, *A.*, 2012. Silvicultural guide for northern white-cedar (eastern white cedar). General Technical Report NRS-98. USDA Forest Service, Newtown Square, PA.

12. *Weiskittel*, *A.R.* and Li, R.* 2012. Development of regional taper and volume equations: Hardwood species. University of Maine Cooperative Forest Research Unit 2011 Annual Report.

13. *Weiskittel*, *A.* Li, R.*, and Kershaw, J.A. 2012. Modeling natural regeneration ingrowth in the Acadian Forest. University of Maine Cooperative Forest Research Unit 2011 Annual Report.

14. *Weiskittel*, *A.R.* Russell, M.B.*, Wagner, R.G., and Seymour, R.S. 2012. Refinement of the Forest Vegetation Simulator northeastern variant growth and yield model: Phase 3. University of Maine Cooperative Forest Research Unit 2010 Annual Report. 23-30.

15. *Weiskittel*, *A.R.*, Wagner, R.G., and Seymour, R.S. 2011. Refinement of the Forest Vegetation Simulator northeastern variant growth and yield model: Phase 2. University of Maine Cooperative Forest Research Unit 2010 Annual Report. 23-30.

16. *Weiskittel*, *A.*, Li, R.*, Kershaw, J.A., Dick, A. 2011. Development of regional stem taper and volume equations. University of Maine Cooperative Forest Research Unit 2010 Annual Report. 31-36.

17. *Weiskittel*, *A.R.*, Wagner, R.G., Seymour, R.S., 2010. Refinement of the Forest Vegetation Simulator, Northeastern Variant growth and yield model: Phase 1. In: Meyer, S.R. (Ed.), 2009 Annual Report. University of Maine, Cooperative Forestry Research Unit, Orono, ME, pp. 44-48.

18. *Weiskittel*, *A.R.*, Li, R.*, Hein, S., and Kohlne, U. 2009. Long-term trends of several Douglas-fir provenances in southwestern Germany: Implications for climate change. Forest Research Institute of Baden-Württemberg. Freiburg, Germany. 38 p.

19. Perry, T.E., *Weiskittel*, *A.R.*, Wagner, R.G., and Saunders, M.R. 2008. Long-term financial returns from herbicide release and precommercial thinning in Maine spruce-fir stands: Austin Pond re-visited with an improved FVS model. University of Maine, Cooperative Forestry Research Unit Internal Report.12 p.

Professional Organization Membership and Activities

1. Society of American Foresters (2000 – Present)
2. New England Society of American Foresters (2008 – Present)

External Reviewer

- Journal Articles (169)

- Books (3)
  -Proposed forest modeling textbook by Burkhart et al. (2009)
  -Proposed book on sustainable bio-energy production by Sifert et al. (2009)
  -Proposed forest biometrics textbook by Mehtätalo and Lappi (2014)

- Reports (6)
  -Maine Agricultural and Forest Experiment Station (2 reports)
  -Nova Scotia Department of Natural Resources (1 report)
  -US Forest Service General Technical Report (3 reports)

- Grants (8)
  -Austrian Science Fund (2017)
  -Chilean National Science and Technology Commission (2016)
  -Natural Science and Engineering Council of Canada (2014)
  -Northern Arizona University Experiment Station (2014)
  -German Research Foundation (2013)
  -USDA AFRI (2012)
  -National Science Foundation (2012)
  -NSRC Theme 3 (2010)
  -Minnesota Agricultural and Forest Experiment Station (2009)

- Tenure Packets (3)
  -Dr. Jingjing Liang (West Virginia University)
  -Dr. Andrew Sanchez-Meador (Northern Arizona University)
  -Dr. Salvador Gerzan (University of Florida)

- External Searches (1)
  -University of Freiburg Chair of Forest Growth Professorship

C. DOCUMENTATION OF RESEARCH/TRAINING GRANTS

Projects funded as PI: $3,986,060
Projects funded as Co-PI: $4,801,026
Total: $8,787,086

Funded as Principal Investigator ($3,986,060)

Weiskittel, A., De Urioste-Stone, S., and Daigneault, A. 2017. Benchmarking Maine's forest product sector and assessing future markets. USDA NIFA. $150,000.

Weiskittel, A. 2017. Biomass supply analysis for Maine. US Forest Service, Forest Inventory and Analysis. $249,822.

Weiskittel, A., De Urioste-Stone, S., Haskell, J.E., and Silka, L. 2017. Evaluating varying perceptions of forest fire risk in Maine. USFS Forest Service, State and Private. $149,550.

Weiskittel, A. 2017. National tree biomass project Maine. US Forest Service, Forest Inventory and Analysis. $75,000.

Weiskittel, A. 2017. Synthesis and vision for Northeastern States Research Cooperative. US Forest Service, Northern Research Station. $45,000.

Weiskittel, A. 2017. Penobscot Experimental Forest research and technology transfer. US Forest Service, Northern Research Station. $114,998.

Weiskittel, A. 2017. Roadmap and vision for Maine's forest product sector. Maine Technology Institute. $500,000.

Weiskittel, A., Hayes, D., and Cook, B. 2016. Visionary workshop for understanding and forecasting the impact of climate change on Maine's forest. Maine Space Grant Consortium. $74,998.

Weiskittel, A., Leahy, J., Hunter, M., and Whitham, J. 2016. 2016 Holt Research Forest. Maine Tree Foundation. $97,775.

Weiskittel. A. 2015. Penobscot Experimental Forest research and technology transfer. US Forest Service, Northern Research Station. $89,061

Weiskittel, A. 2015. Collaborative research: Understanding and modelling competition effects on tree growth. National Science Foundation. $65,944.

Weiskittel, A., Leahy, J., Hunter, M., and Whitham, J. 2015. 2015-2016 Holt Research Forest. Maine Tree Foundation. $97,775.

Weiskittel, A., Puhlick, J., and Woodall, C. 2015 Projecting net carbon storage and sequestration of the northeastern US forest and forest products sector under alternative future scenarios. USDA Agricultural Services. $166,736.

Weiskittel, A. 2015. The Acadian Forest and climate change: Analyzing species distributions. NASA Earth and Space Science Fellowship. $30,000.

Weiskittel, A.R. 2015. An improved biomass and carbon database for U.S. tree species. US Forest Service, Forest Inventory and Analysis. $95,000.

Weiskittel, A. 2014. The Acadian Forest and climate change: Analyzing species distributions. NASA Earth and Space Science Fellowship. $30,000.

Weiskittel, A. 2014. Assistance with developing a database of legacy individual tree biomass studies. US Forest Service, Forest Inventory and Analysis. $85,427.

Weiskittel, A.R. 2014. An improved biomass and carbon database for U.S. tree species. US Forest Service, Forest Inventory and Analysis. $75,000.

Weiskittel, A., Frank, J., and Pelletier, G. 2014. Assessing the influence of tree form and damage on commercial hardwoods growth, survival, volume, and biomass in Maine. Northeastern States Research Cooperative. $76,236.

Weiskittel, A., Hennigar, C., and Allen, L. 2014. Linking site quality and tree growth and survival in the Acadian Forest. Cooperative Forestry Research Unit. $59,400.

Weiskittel, A., Frank, J., and Pelletier, G. 2014. Assessing the influence of tree form and damage on commercial hardwoods growth, survival, volume, and biomass in Maine. Cooperative Forestry Research Unit. $46,702.

Weiskittel, A. and Puhlick, J. 2014. Evaluation of current and future carbon stocks in the northeastern US. US Forest Service, Northern Research Station. $27,997.

Weiskittel, A.R. 2013. Quantifying the influence of stand spatial structure and species composition on forest growth and regeneration patterns: Evaluating the role of distance-dependent competition indices within the Acadian Variant of the Forest Vegetation Simulator. Northeastern States Research Cooperative. $79,252.

Weiskittel, A. 2013. The Acadian Forest and climate change: Analyzing species distributions. NASA Earth and Space Science Fellowship. $30,000.

Weiskittel, *A.R.* 2012. Assistance with Experimental Forest Research in the Acadian Region. US Forest Service, Northern Research Station. $20,103.

Weiskittel, *A.R.* 2012. An improved biomass and carbon database for U.S. tree species. US Forest Service, Forest Inventory and Analysis. $75,536.

Weiskittel, *A.*, Hennigar, C., Erdle, T., and MacLean, D. 2012. Extending the Acadian variant of FVS to managed stands. University of Maine, Cooperative Forest Research Unit. $37,582.

Weiskittel, *A.R.*, Kenefic, L., and Brissette, J. 2012. Implementing a commercial thinning in Study 58, the U.S. Forest Service's precommercial thinning x fertilization experiment on the Penobscot Experimental Forest. Penobscot Experimental Forest Research Operations Team. $3,360.

Weiskittel, *A.R.* and Sader, S. 2012. Linking LiDAR and ground-based forest inventory plots for improving estimation of key attributes. Cooperative Forestry Research Unit. $60,123.

Weiskittel, *A.R.* 2011. An improved biomass and carbon database for U.S. tree species. US Forest Service, Forest Inventory and Analysis. $80,000.

Weiskittel, *A.R.*, Brissette, J., Fernandez, I., Kenefic, L., Kolka, R., Rustad, L. 2011. How silvicultural treatments affect carbon storage in a northern conifer forest: A 60-Year Perspective. US Forest Service, Northeastern States Research Cooperative. $55,720.

Weiskittel, *A.R.*, Simons-Legaard, E., Legaard, K., Wilson, J., Sader, S. 2010. Carbon dynamics and forest management: A retrospective analysis and projection of the potential effects of land use, climate change, and natural disturbances in Northeastern Forests. NASA-NIFA Carbon Cycle Science. $597,383.

Weiskittel, *A.R.* and Seymour, R.S. 2010. Re-establishment and evaluation of young pure and mixed-species spruce plantations. University of Maine ROT funds. $3,000.

Weiskittel, *A.R.*, Mercier, W., Wilson, J., and Kershaw, J. 2010. Modeling natural regeneration and ingrowth in managed stands of the Acadian Region. University of Maine Cooperative Forestry Research Unit. $41,772.

Weiskittel, *A.R.* 2009. Do Silvicultural Outcomes Vary in Response to Climatic Gradient in the Northern Forest? US Forest Service Northern Research Station. $25,500.

Weiskittel, *A.R.*, Kershaw, J.A., and Dick, A. 2009. Development of regional taper and volume equations for the primary species in the Acadian Region. Cooperative Forestry Research Unit. $39,764.

Weiskittel, *A.R.* and Kenefic, L. 2009. Using the US Forest Service's long-term database for growth and yield modeling. US Forest Service Penobscot Experimental Forest ROT grant. $5,000.

Weiskittel, *A.R.*, Kershaw, J.A., Brissette, J., Gove, J., and Keyser, C. 2008. Development of an Acadian Variant of FVS. US Forest Service Northern Research Station Agenda 20/20. $81,933.

Weiskittel, *A.R.*, Kershaw, J.A., and Kenefic, L.A. 2008. Refinement of the FVS-NE predictions of individual tree growth response to thinning. US Forest Service Northeastern States Research Cooperative. $84,194.

Weiskittel, *A.R.* and Crookston, N. 2008. Estimating and mapping forest potential productivity. US Forest Service Rocky Mountain Experimental Research Station. $108,561.

Weiskittel, *A.R.*, Wagner, R.G., and Seymour, R.S. 2008. Refinement of the FVS-NE individual tree growth model. University of Maine, Cooperative Forestry Research Unit. $86,055.

<u>Funded as Co-Principal Investigator ($4,801,026)</u>

Witham, J. and *Weiskittel*, *A.* 2017. Holt Research Forest. Maine Tree Foundation $75,000.

Mortelliti, A., Roth, B., *Weiskittel*, *A.*, Zydlewski, J., and Kenefic, L. 2017. Optimizing stand composition and forest regeneration strategies by improving understanding of important biological controls. University of Maine Research Reinvestment Funds Seed Grant Program. $74,224.

Ward, J., *Weiskittel*, *A.*, and Strauch, P. 2017. Roadmap and vision for Maine's forest product sector. Economic Development Administration. $2,000,000.

Simons-Legaard, E., Legaard, K., and *Weiskittel*, *A.* 2016. The Maine Forest Ecosystem Status and Trends (ForEST) app: Informing management of dynamic landscapes. University of Maine Research Reinvestment Funds Seed Grant Program. $75,748.

Rahimzadeh-Bajgiran, P., *Weiskittel*, *A.*, Nelson, P., Kneeshaw, D., and MacLean, D. 2016. A novel framework for detecting and assessing spruce budworm (SBW) forest defoliation over Maine at high spatial and temporal resolutions. University of Maine Research Reinvestment Funds Seed Grant Program. $72,320

Kenefic, L., Crandall, M., D'Amato, A., and *Weiskittel*, *A.* 2016. Sustainable northern conifer forest management: New findings and outreach tools. Northeastern States Research Cooperative. $95,150.

Rahimzadeh-Bajgiran, P., *Weiskittel*, *A.*, Kneeshaw, D., and MacLean, D. 2016. Understanding landscape level factors influencing spruce budworm (SBW) outbreak patterns in Maine and forecasting future risk at high spatial resolution. Northeastern States Research Cooperative. $58,628

D'Amamto, A.W.., King, D., *Weiskittel*, *A.*, Palik, B., Flaspohler, Rimmer, C., DeLuca, W., and Auer, S. 2015. Modeling effects of climate change on spruce-fir forest ecosystems and associated priority bird populations. US Department of Interior Northeast Climate Science Center. $208,0000

Kuehne, C., *Weiskittel*, *A.*, and Legaard, K. 2015. Classifying and evaluating partial harvests and their effect on stand dynamics in northern Maine. Northeastern States Research Cooperative. $77,371.

Wagner, R. and *Weiskittel*, *A.* 2014. Phase 2 - UMaine Membership in IUCRC Center for Advanced Forestry Systems. National Science Foundation. $300,000.

Kenefic, L., Munoz, B., *Weiskittel*, *A.*, Fernandez, I., and Fraver, S. 2014. A Long-term perspective on biomass harvesting: Northern conifer forest productivity 50 years after whole-tree and stem-only harvesting. Northeastern States Research Cooperative. $68,800.

Bataineh, M., *Weiskittel*, *A.*, Seymour, R., and MacLean, D. 2014. Incorporating spruce budworm impacts into the Acadian Variant of the Forest Vegetation Simulator. Northeastern States Research Cooperative. $69,747.

Simons-Legaard, E., Leahy, J., Legaard, K., and *Weiskittel*, *A.* 2013. An analysis of disturbance interactions and ecosystem resilience in the northern forest of New England. National Science Foundation. $235,494.

Simons-Legaard, E., *Weiskittel*, *A.*, D'Amato, A., Sturtevant, B., and Legaard, K. 2013. Future distribution and productivity of spruce-fir forests under climate change: A comparison of the Northeast and the Lake States. Northeastern States Research Cooperative. $99,502.

Hennigar, C. and *Weiskittel*, *A.* 2012. Extending the Acadian variant of the Forest Vegetation Simulator to intensively managed stands. New Brunswick Department of Natural Resources Growth and Yield Unit. $15,000.

Roth, B., Wagner, R.S., Seymour, R., *Weiskittel*, *A.*, Benjamin, J. 2012. CFRU Commercial Thinning Research Network: Continued measurements and new opportunities. University of Maine, Cooperative Forest Research Unit. $196,268. using LIDAR technology. Maine Technology Assessment Fund. $2,098,924.

Sader, S., Gallandt, E., Harrison, D., *Weiskittel, A.*, and Wilson, J. 2012. Acquisition of high resolution digital aerial imaging system. University of Maine. $14,943.

Bell, K., Leahy, J., Daigle, J., and *Weiskittel, A.* 2012. Ecological and Social Change: Adaptation, Place, and Evaluation (ESCAPE). University of Maine, Sustainable Solutions Initiative. $29,246.

Kenefic, L., *Weiskittel, A.*, and Brissette, J. 2012. Effects of Alternative Silvicultural Treatments on Tree Quality in the Penobscot Experimental Forest Compartment Study. Penobscot Experimental Forest Research Operations Team. $1,512

Puhlick, J., *Weiskittel, A.*, and Fraver, S. 2012. Estimating forest floor and standing dead wood biomass and carbon content on the Penobscot Experimental Forest. Penobscot Experimental Forest Research Operations Team. $2,728.

Wilson, J., *Weiskittel, A.*, and Hennigar, C. 2012. Extending the Acadian variant of the Forest Vegetation Simulator to intensively managed stands. Northeastern States Research Cooperative, Theme 3. $48,154.

Bataineh, M.M., *Weiskittel, A.*, Kenefic, L., Rice, B., and Seymour, R. 2012. Evaluating and predicting the regional effects of silviculture and site factors on regeneration in the northern conifer forest. Northeastern States Research Cooperative, Theme 3. $65,974

Meyer, S., Wilson, J., Johnson, M.L., *Weiskittel, A.*, Lilieholm, R.J., Cronan, C.S., and Stein, S. 2012. Potential impacts of alternative future land uses on forest management and wood supply across Maine. Northeastern States Research Cooperative, Theme 3. $58, 201.

Russell, M.B. and *Weiskittel, A.R.* 2010. Snag dynamics and standing deadwood volume in relation to silvicultural treatments at the Penobscot Experimental Forest. University of Maine ROT funds. $1,000.

Brissette, J.B. and *Weiskittel*, A.R. 2010. More than 50 Years after they were established how well do the permanent sample plots represent stand conditions in the Forest Service long-term silviculture experiment? University of Maine ROT funds. $1,000.

Rice, B., *Weiskittel, A.R.*, Wilson, J., and Wagner, R.G. 2010. Nonselective partial harvesting in Maine's working forests. US Forest Service Northeastern States Research Cooperative. $41,500.

Russell, M.B., *Weiskittel, A.R.*, Radtke, P.J., Van Dyk, M., and Brissette, J.B. 2010. Assessing model prediction uncertainty of forest growth and carbon estimates using the Forest Vegetation Simulator: Do crown measurements matter? US Forest Service Northern Research Station. $29,500

Pekol, J., *Weiskittel, A.*, Wagner, R., and Meyer, S. 2010. Exploring the effects of thinning on stand- and tree-level mortality in Maine's spruce-fir forests. University of Maine, Cooperative Forestry Research Unit. $4,950.

Leahy, J., *Weiskittel, A.*, Mercier, W., Gorcya, E., Teisl, M., Lindenfeld, L., and Bell, K. 2009. Improving small-scale forest policy and management through social learning and modeling. Maine Sustainability Solutions Initiative. $40,000.

Kenefic, L. and *Weiskittel, A.R.* 2009. Using pioneering growth and yield studies to inform management and modelling. Northeastern States Research Cooperative. $40,425.

Olson, M.G., Wagner, R.G., Weiskittel, A.R., Saunders, M.R., and Nelson, A.S. 2009. Role of silvicultural intensity and species composition objectives on the growth, dynamics, and carbon balance of Northeastern forest stands. Northeastern States Research Cooperative. $71,808.

Wagner, R.G. and *Weiskittel, A.R.* 2009. University of Maine Proposal for Joining the NSF Center for Advanced Forestry Systems. National Science Foundation. $350,000.

Crookston, N.L, *Weiskittel, A.R.*, and Howe, G.T. 2008. Development and delivery of a climate-driven Forest Vegetation Simulator. US Forest Service Climate Change Research Initiative. $153,000.

Kenefic, L.K., Wilson, J., and *Weiskittel, A.R.* 2008. Influence of partial harvesting intensity and technology on northern forests sustainability and productivity. US Forest Service, Northern Research Station Agenda 20/20. $74,500.

Hein, S. and *Weiskittel, A.R.* 2008. Assessing and modeling the impact of climate change on Douglas-fir growth in the US and Germany. German Academic Exchange Service. $16,720.

Meyer, S. Wagner, R.G., Seymour, R., and *Weiskittel, A.R.* 2008. Maine Commercial Thinning Research Network. University of Maine, Cooperative Forestry Research Unit. $187,613.

D. DOCUMENTATION OF DEPARTMENT/CAMPUS/COLLEGE SERVICE

- Member of College of Natural Sciences, Forestry, and Agriculture Dean search committee, October 2016 - Present
- Chair of Nutting Hall Technology Committee, January 2016 - Present
- Co-chair of Wildlife Department of Wildlife, Fisheries, and Conservation Biology and School of Forest Resources Forest Wildlife Management faculty search committee, January 2015 – May 2015
- Faculty coordinator of School of Forest Resources Noontime Seminar Series, Spring 2015

- Member of School of Forest Resources Forest Conservation and Recreation Policy faculty search committee, January 2015 – May 2016
- Member of University Committee on Soft Money Research Faculty, January 2015 – May 2015
- Member of University of Maine Faculty Fellows, January 2015 - Present
- Member of Nutting Hall Space Committee, January 2014 – Present
- Member of School of Forest Resources Forest Landscape Management faculty search committee, January 2014 – April 2014
- Chair of Barbara Wheatland Remote Sensing and Geospatial Analysis Faculty Position Search Committee, November 2013 – February 2014
- Member of School of Forest Resources Forest Landscape Management faculty search committee, March 2013 – July 2013
- Member of School of Forest Resources Director Search, January 2013 – April 2013
- Chair of Forest Carbon and Climate Faculty Position Search Committee, September 2012 – May 2013
- Member of School of Forest Resources Summer Field Camp Organization Committee, September 2012 – May 2013
- Chair of School of Forest Resources Equipment Room Committee, May 2012 – Present
- Member of School of Forest Resources Graduate Student Program Committee, September 2012 – August 2015
- Provide experimental design and statistical analysis advice to faculty and graduate students, January 2009 - Present

E. DOCUMENTATION OF PUBLIC SERVICE

- Member of Scientific Committee for IUFRO Working Groups 4.01.00, 4.03 & 5.01.04 2018 international conference on future-focused forest modelling, “New Frontiers in Forecasting Forests.”, September 2017 – Present.
- Associate Editor for Canadian Journal of Forest Research, March 2016 – Present
- Member of Forest Ecology and Management Editorial Board, November 2016 – Present
- Organized visionary meeting on climate change and forest ecosystem services in Portland, Maine, Nov 3-6, 2016
- Served on Scientific Committee for ECANUSA meeting in Burlington, VT, June-Sept 2016
- Invited co-lecturer for “Inventory and modelling of complex forests” workshop in Palencia, Spain, June 7-11, 2016
- Organized sessions on forestry for the Maine Sustainability and Water Conference, 2015, 2016
- Organized the 2015 Northeastern Mensurationists Organization annual meeting
- Served on Scientific Committee for International Union of Forestry Research Organizations 8th international conference for Working Parties 5.01.04 and 3.02.04: ‘Modelling Wood Quality, Supply and Value Chain Networks’, September 2015 – June 2016
- Co-organized the 2014 Northeastern Mensurationists Organization annual meeting
- Session evaluator for 2014 Society of American Foresters Annual Meeting

- Co-chair of International Union of Forestry Research Organizations Working Party 4.01.04, “Effects of environmental changes on forest growth”, September 2013 – Present
- Organized and presented the workshop, “Forest Inventory: New Ideas Explained, Old Ideas Revisited” at New England Society of American Foresters Annual Meeting, May 17, 2013
- External examiner for PhD defenses; University of Freiburg (January 2017); Canterbury University (May 2016), University of Alberta (September 2015), University of Sao Paulo (March 2013) and University of New Brunswick (April 2013, September 2015)
- Associate Editor for Annals of Forest Science, June 2013 – Present
- Associate Editor for New Zealand Journal of Forest Science, April 2013 – Present
- Associate Editor for Forest Science, March 2013 – December 2014
- Regular reviewer for several peer-reviewed journals (169 manuscripts reviewed since 2008)
- Associate Editor for European Journal of Forest Research, August 2011 – January 2017
- Member of University of Maine Penobscot Experimental Forest Research Operations Team, June 2012 – November 2014
- Member of the Baxter State Park Scientific Management Area Advisory board, April 2010 – Present
- Member of the JD Irving’s Forest Research Advisory Committee, September 2010 – Present

F. DOCUMENTATION OF SPECIAL RECOGNITION/AWARDS

1. G. Peirce and Florence Pitts Webber Outstanding Researcher in Forest Resources, 2009
2. G. Peirce and Florence Pitts Webber Outstanding Teacher in Forest Resources, 2011
3. US Forest Service Award of Excellence, 2012
4. University of Maine, College of Natural Sciences, Forestry, and Agriculture Outstanding Researcher, 2016
5. Canadian Journal of Forest Research Outstanding Reviewer, 2016

IV. EVALUATIONS OF TEACHING

A. STUDENT EVALUATIONS OF TEACHING

This summary has been verified by William H. Livingston 

Title Associate Director of Undergraduate Programs, School of Forest Resources

Date September 29, 2018

1. Summary of quantitative student evaluations

   Based on student evaluations, my instruction and teaching methods have been effective as the average ratings were quite high for several questions and well above the college averages (Table 1). For all questions asked, the overall mean was 4.46 ± 0.24 on a 1 to 5 scale with 5 being the highest.

   Table 1. Summary of quantitative student evaluations (Spring 2009 – Spring 2017). Course evaluations forms are not used in special problems or independent study courses

Term	Course	N	How prepared was the instructor for the class? (Q1)	How clearly did the instructor present ideas and theories? (Q4)	How much were students encouraged to think for themselves? (Q5)	How concerned was the instructor for the quality of their teaching? (Q6)	Overall, how would you rate the instructor? (Q13)	Were class meetings profitable and worth attending? (Q14)	Did you develop significant skills in the field as a result of taking this course? (Q16)	How much intellectual discipline was required in the course? (Q21)	What is the overall rating of this course? (Q22)
SP 09	FTY 266	12	4.83	4.58	4.58	4.83	4.83	4.83	4.75	4.58	4.75
SP 09	FTY 601	6	4.67	4.17	4.50	4.67	4.50	4.50	4.17	3.83	4.33
SP 10	FTY 266	18	4.82	4.47	4.41	4.76	4.76	4.76	4.18	4.12	4.41
SP 11	FTY 456	6	4.83	4.08	3.67	4.67	4.79	4.67	4.50	3.67	4.33

Term	Course	N	How prepared was the instructor for the class? (Q1)	How clearly did the instructor present ideas and theories? (Q4)	How much were students encouraged to think for themselves? (Q5)	How concerned was the instructor for the quality of their teaching? (Q6)	Overall, how would you rate the instructor? (Q13)	Were class meetings profitable and worth attending? (Q14)	Did you develop significant skills in the field as a result of taking this course? (Q16)	How much intellectual discipline was required in the course? (Q21)	What is the overall rating of this course? (Q22)
SP 11	FTY 266	14	4.71	4.17	4.21	4.43	4.67	4.79	3.43	3.71	4.00
SP 12*	FTY 266	10	4.60	4.10	4.60	4.70	4.50	4.00	4.60	4.00	4.20
SP 12	FTY 456	5	5.00	4.00	5.00	5.00	5.00	5.00	4.80	4.00	4.80
SP 13	SFR 205	13	3.45	4.45	4.18	4.55	4.18	4.36	4.27	4.09	4.00
SP 13	SFR 402	17	4.27	3.73	4.09	4.36	4.82	3.91	3.91	3.82	4.20
SP 13	SFR 475	5	4.80	4.20	4.40	4.40	4.40	4.40	4.20	4.20	4.18
SP 14	SFR 205	27	5.00	4.50	4.90	5.00	4.90	4.80	4.80	4.20	4.70
SP 14	SFR 402	12	5.00	4.50	4.90	5.00	5.00	4.90	4.00	4.00	4.70
SP 15	SFR 205	23	4.40	3.55	4.20	4.00	4.60	4.15	3.80	4.10	3.65
SP 15	SFR 402	13	4.69	4.38	4.46	4.46	4.85	4.69	4.54	4.15	4.38
SP 15	SFR 499	1	-	-	-	-	-	-	-	-	-
SP 15	SFR 503	9	4.50	4.62	4.50	4.75	5.00	5.00	4.88	4.75	4.88

Term	Course	N	How prepared was the instructor for the class? (Q1)	How clearly did the instructor present ideas and theories? (Q4)	How much were students encouraged to think for themselves? (Q5)	How concerned was the instructor for the quality of their teaching? (Q6)	Overall, how would you rate the instructor? (Q13)	Were class meetings profitable and worth attending? (Q14)	Did you develop significant skills in the field as a result of taking this course? (Q16)	How much intellectual discipline was required in the course? (Q21)	What is the overall rating of this course? (Q22)
SP 15	SFR 575	5	5.00	4.50	4.50	4.00	4.75	4.75	5.00	4.67	5.00
SP 16	SFR 402	18	4.81	4.31	4.56	4.50	4.75	4.56	4.31	4.38	4.44
SP 16	SFR 503	6	5.00	4.00	4.50	4.25	4.75	5.00	5.00	4.75	5.00
SP 16	SFR 575	7	-	-	-	-	-	-	-	-	-
SP 17	SFR 499	1	-	-	-	-	-	-	-	-	-
Total/Avg		226	4.73	4.18	4.47	4.55	4.79	4.64	4.37	4.34	4.04

2. Summary of qualitative student evaluations
   - “Thanks Aaron. I feel I gained knowledge that will come useful in the future” (FTY 266, Spring 2009)
   - “Great course! Instructor inspired confidence in his knowledge of subject. Skills development heavily emphasized.” (FTY 266, Spring 2010)
   - “I learned more in this course than any other that I have ever taken” (FTY 266, Spring 2010)
   - “An excellent teacher who will put in the time for any student who asks. Very knowledgeable and practical tools/theory were effectively taught up until they could be applied in the field” (FTY 266, Spring 2011)
   - “Great class. I learned a lot about Excel and computing useful numbers from field data.” (FTY 266, Spring 2011)
   - “One of the most important and valuable classes in the SFR curriculum. Excellent overall!” (SFR 402, Spring 2014)

- “This course and its subject matter are integral to my profession. The instructor was highly skilled and provided students with the trajectory we needed to grasp this material.” (SFR 402, Spring 2014)
- “Instructor's concern with students' progress and learned was unprecedented. Aaron is in my top 5 for highest quality professor I have experienced at a university and I've had a lot of professors.” (SFR 402, Spring 2014)
- “The course brought together many concepts for me.” (SFR 503, Spring 2016)
- “One of the most important and valuable classes in the SFR curriculum. Excellent overall!” (SFR 402, Spring 2014)
- “This course and its subject matter are integral to my profession. The instructor was highly skilled and provided students with the trajectory we needed to grasp this material.” (SFR 402, Spring 2014)
- “Instructor's concern with students' progress and learning was unprecedented. Aaron is in my top 5 for highest quality professor I have experienced at a university and I've had a lot of professors.” (SFR 402, Spring 2014)
- “The course brought together many concepts for me.” (SFR 503, Spring 2016)
- “One of the best courses I've taken here.” (SFR 402, Spring 2016)
- “Easily a top 3 course for my college career. Thank you.” (SFR 402, Spring 2016)
- “This is one of the best courses I have had here so far.” (SFR 402, Spring 2016)

B. OTHER EVALUATIONS OF TEACHING

1. Peer evaluations of teaching

For all of my annual reappointments, promotion and tenure, and post-tenure evaluations, the School of Forest Resources Peer Committee has rated my teaching efforts as “Excellent”. Here are some comments from the evaluations:

- “In addition, he initiated his teaching responsibilities for a key require course (FTY 266) and a valuable graduate course (FTY 609) within the SFR. Dr. Weiskittel is quickly a faculty member sought out for his biometrics and modeling expertise by undergraduate and graduate students, as well as faculty within and external to the SFR” (February 2009)

- “Dr. Weiskittel has further established himself as a highly valued member of the teaching faculty for both undergraduate and graduate students over the past year. Dr Weiskittel’s research, teaching, and service accomplishment meet and generally exceed the expectations we have for our tenure-track faculty.” (December 2009)

- “Dr. Weiskittel has taken a key role in the major curriculum revision underway in the School. He has done this by taking the lead in coordinating, reworking, and recreating the quantitative

courses that will support the core curriculum for all three undergraduate majors and our professional, non-thesis, Master of Forestry." (April 2012)

- "Not only has Dr. Weiskittel turned our undergraduate teaching of forest measurements, sampling, and statistics from a weakness to a strength, he has elevated our overall graduate education program. These improvements are not easily seen in student evaluations." (November 2012)

- "Also, he voluntarily added SFR 205 to his teaching load twice during the period. In all cases, student ratings of his courses are above the college averages. Not only are his ratings quantitatively strong, qualitative ratings by students in the form of written comments show that he is an outstanding communicator. He routinely gives guest lectures in other classes to support his colleagues." (March 2017)

2. Teaching awards
   - G. Peirce and Florence Pitts Webber Outstanding Teacher in Forest Resources, 2011

3. Teaching of graduate students in the classroom and thesis advising
   - "Very useful course for grad students involved in research and/or practical issues of forest sampling and basic statistics. Aaron is well versed on the subject and extremely helpful to students with questions in a wide variety of statistical matters." (FTY 601, Spring 2009)

   - "This was a great course. Diverse topics and interesting material. Aaron was overprepared for each class. He clearly put a lot of time into preparing his lectures and reviewing the material. He is a skilled teacher even if he won't admit it." (FTY 601, Spring 2009)

   - "Aaron Weiskittel served both on my M.S. committee (2007-2010) and my PhD committee (2010-2013) while I completed my degrees in the School of Forest Resources. He was very active in helping me achieve my goals and refine my forestry interests and skills that have served me well in recent years as a tenure-track Assistant Professor. Considering the challenges that lied ahead after graduate school, his mentoring on academic expectations, setting high standards for publications, obtaining research funding, building collaboration networks, and training students have been invaluable. Many of the techniques of advising I learned from Aaron I use to mentor my graduate students. Without the time he committed (in addition to all his other responsibilities) to helping me succeed, I am certain I would not have been competitive for faculty positions or had the basic knowledge to build a successful academic career." (Dr. Andrew Nelson, University of Idaho)

   - "In the few years I've known Aaron, he has consistently provided both a welcoming and inclusive environment for all graduate students, myself included. Every question is received with understanding and respect. In return, both responses and advice are given with both

clarity and forward thinking. In my time preparing for comprehensive exams, and in the present as I prepare for my dissertation defense, he has provided challenging yet helpful insights into the foundations of my research and field of expertise." (Bethany Munoz, PhD candidate)

- "Dr. Weiskittel served as my PhD advisor in my program from 2009 through 2012. The success and vision of his research program was the primary reason I chose to pursue a PhD. Aaron shared his enthusiasm and passion for teaching through completing several independent studies with me. Aaron supported myself and fellow graduate students support by understanding the obstacles of life as a graduate student—for many of us, these obstacles included dealing with demanding committee members and overcoming standstills in data analyses. As an early career faculty member myself, I continue to rely on Aaron for his sage advice and mentorship in navigating life as a faculty member with research. teaching, and outreach duties." (Dr. Matthew Russell, University of Minnesota)

- "As a graduate advisor, Dr. Weiskittel was truly exceptional. Dr. Weiskittel always treated me like a professional colleague, and as I look back on my experience, I really appreciate how much he encouraged my development as a young scientist. From all standpoints, I regard Dr. Weiskittel as a first-class educator. I feel incredibly fortunate to have had his guidance in helping me pursue a career that is both exciting and rewarding." (Mark Castle, US Forest Service)

- "There are many opportunities, trials and tribulations throughout the graduate school experience and students frequently need subject expertise, professional advice, a thoughtful expert to guide the learning process or simply a nugget of wisdom that comes with experience. It is exceedingly rare to find a faculty member who can serve all of these roles with such grace, patience and expertise as Aaron Weiskittel. I have been truly fortunate to have him not just as an advisor but as a mentor and there is no doubt that the University of Maine is a much richer institution with Dr. Weiskittel in the role of educator, researcher, advisor and mentor." (Ben Rice, PhD candidate, Landvest)

V. DEPARTMENTAL PEER COMMITTEE EVALUATION

VI. LETTERS OF REVIEW

A. LETTERS INTERNAL TO UNIVERSITY OF MAINE

Dr. David Hart
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B. LETTERS INTERNAL TO THE UNIVERSITY OF MAINE SYSTEM, BUT EXTERNAL TO UNIVERSITY OF MAINE

C. LETTERS EXTERNAL TO THE UNIVERSITY OF MAINE SYSTEM AND UNIVERSITY OF MAINE

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APPENDIX: CURRICULUM VITAE

Aaron Weiskittel
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Education
Oregon State University, Ph.D. (Forest Science), 2006
Oregon State University, M.S. (Forest Resources), 2003
The Ohio State University, B.S. (Natural Resources), 2001

Employment
2016 – Present, Acting Director, Center for Research on Sustainable Forests, University of Maine, Orono, Maine
2008 – 2013, Assistant Professor of Forest Biometrics and Modeling, University of Maine, Orono, Maine
2013 – Present, Associate Professor of Forest Biometrics and Modeling, University of Maine
2010 – Present, Irving Chair of Forest Ecosystem Management, University of Maine, Orono, Maine
2009 – Present, Cooperating Scientist, Cooperative Forestry Research Unit, University of Maine, Orono, Maine
2006 – 2007, Research Forester, Weyerhaeuser Company, Federal Way, WA
2001 – 2006, Graduate Research Assistant, Oregon State University, Corvallis, OR

Teaching
Nine years of teaching undergraduate and graduate-level courses.

Professional Activities
(1) Editorial Board Member for Annals of Forest Science (2012 - Present), Canadian Journal of Forest Research (2016 – Present), European Journal of Forest Research (2011 - 2016), Forest Ecology and Management (2016 - Present), New Zealand Journal of Forest Science (2012 - Present), and Forest Science (2012 - 2014);

(2) Regular reviewer for *Canadian Journal of Forest Research*, *Forest Ecology and Management*, *Ecological Applications*, and *Ecological Modelling*.

(3) Co-chair of International Union of Forestry Research Organizations Working Party 4.01.04, “Effects of environmental changes on forest growth”, September 2013 – Present

(4) Member of the Baxter State Park Scientific Management Area Advisory board (April 2010 – Present) and JD Irving Forest Research Advisory Committee (2010 – Present)

(5) Member of the Society of American Foresters (1998-Present)

Publications (108)

Bose, A., Weiskitel, A., Burkhart, H.E., Turnblom, E., and Wagner, R.G. 2018. Does commercial thinning improve stand-level growth of the three most commercially important softwood forest types in North America? Forest Ecology and Management: in press.

Wilkins, E., de Urioste-Stone, S., Weiskittel, A., and Gabe, T. 2017. Weather sensitivity and climate change perceptions of tourists: a segmentation analysis. Tourism in Changing Natural Environments: In press.

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MacPhee, C., Kershaw Jr., J.A., Weiskittel, A., Golding, J., and Lavigne, M.B. 2017. Comparison of approaches for estimating individual tree height–diameter relationships in the Acadian Forest Region. Forestry: in press.

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Dunckel, K., Fiske, G., and Weiskittel, A. 2017. Projected future eastern hemlock distribution across alternative climate scenarios in Maine, U.S. Forests 8: 285.

Bose, A., Wagner, R.G., Roth, B.E., and Weiskittel, A. Influence of browsing damage and overstory cover on regeneration of American beech and sugar maple nine years following understory herbicide release in central Maine. New Forests: in press.

Castle, M., Weiskittel, A., Wagner, R., Ducey, M., Frank, J., and Pelletier, G. 2017. Variation in stem form and risk of four commercially important hardwood species in the Acadian Forest: Implications for potential sawlog volume and tree classification systems. Canadian Journal of Forest Research 47: 1457-1467.

Carter, D., Seymour, R.S., Fraver, S. and Weiskittel, A. 2017. Effects of multiaged silvicultural systems on reserve tree growth 19 years after establishment across multiple species in the Acadian forest in Maine, USA. Canadian Journal of Forest Research 47: 1314-1324.

Wilkins, E., De Urioste-Stone, S., Weiskittel, A., and Gabe, T. 2017. Effects of weather conditions on tourism spending: Implications for future trends under climate change. Journal of Travel Research: in press.

Huff, E.S., Leahy, J.E., Kittredge, D.B., Noblet, C.L. and Weiskittel, A. 2017. Psychological distance of timber harvesting for private woodland owners. Forest Policy and Economics 81: 48-56.

Bose, A., Weiskittel, A., and Wagner, R. 2017. Temporal shift in American beech (*Fagus grandifolia* Ehrh) occurrence and abundance over the past three decades in forests of Northeastern USA. Journal of Applied Ecology 54: 1592-1604.

Chen, C., Weiskittel, A., Bataineh, M., and MacLean, D. 2017. Evaluating the influence of varying levels of spruce budworm defoliation on annualized individual tree growth and mortality in Maine, USA and New Brunswick, Canada. Forest Ecology and Management 396: 184-194.

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Lam, T.Y., Kershaw Jr., J.A., Hajar, Z.S.N., Rahman, K.A., Weiskittel, A.R., and Potts, M.D. 2017. Evaluating and modelling genus and species variation in height-to-diameter relationships for Tropical Hill Forests in Peninsular Malaysia. Forestry 90: 268-278.

Ayrey, E., Fraver, S. Kershaw Jr, J.A., Kenefic, L.S., Hayes, D., Weiskitel, A.R., and Roth, B.E. 2017. Layer Stacking: A novel algorithm for individual forest tree segmentation from LiDAR point clouds. Canadian Journal of Remote Sensing 43: 16-27.

Hiesel, P., Crandall, M., Weiskittel, A.R., Benjamin, J., and Wagner, R.G. 2017. Evaluating the long-term influence of alternative commercial thinning regimes and harvesting systems on projected net present value of precommercially thinned spruce-fir stands in northern Maine. Canadian Journal of Forest Research 47: 203-214.

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Bose, A.K., Weiskittel, A., Wagner, R.G., and Kuehne, C. 2016. Assessing the factors influencing natural regeneration patterns in the diverse, multi-cohort, and managed forests of Maine, USA. Journal of Vegetation Science 27: 1140-1150.

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northeastern North America. Mathematical and Computational Forestry & Natural Science 7: 49-65.
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Kuehne, C., Weiskittel, A.R., Fraver, S., and Puettman, K.J. 2015. Effects of thinning induced changes in structural heterogeneity on growth, ingrowth, and mortality in secondary coastal Douglas-fir forests. Canadian Journal of Forest Research 45: 1448-1461.
Silver, E.J., Leahy, J.E., Kitteridge, D., and Weiskittel, A.R. 2015. An evidence-based review of timber harvesting behavior among private woodland owners. Journal of Forestry 113: 490-499.
Silver, E.J., Leahy, J.E., Noblet, C.L., and Weiskittel, A.R. 2015. Maine woodland owner perceptions of long rotation woody biomass harvesting and bioenergy. Biomass and Bioenergy 76: 69-78.
Pamerleau-Couture, É., Krause, C., Pothier, D. and Weiskittel, A. 2015. Effect of three partial cutting practices on stand structure and growth of residual black spruce trees in north-eastern Quebec. Forestry 88: 471-483.
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Gagné, L.-V., Genet, A., Weiskittel. A., Achim, A. 2013. Assessing the potential stem growth and quality of yellow birch prior to restoration: A case study in eastern Canada. Forests 4: 766-785.

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Russell, M.B., Weiskittel, A.R., and Kershaw, J.A. 2013. Benchmarking and calibration of Forest Vegetation Simulator individual tree attribute predictions across the northeastern US. Northern Journal of Applied Forest Research 30: 75-84.

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Waskiewicz, J., Kenefic, L., Weiskittel, A., Seymour, R., 2013. Species mixture effects in northern red oak–eastern white pine stands in Maine, USA. Forest Ecology and Management 298, 71-81.

Nelson, A., Wagner, R., Saunders, M., and Weiskittel, A. 2013. Influence of silvicultural intensity and species composition on the development of early-successional Acadian stands in eastern Maine. Forestry 86: 79-90.

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Russell, M.B. and Weiskittel, A.R. 2012. Assessing and modeling snag survival and decay dynamics for the primary species in the Acadian forest of Maine, USA. Forest Ecology and Management 284: 230-240.

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Rijal, B., Weiskittel, A.R., Kershaw, J.A. 2012. Development of regional height to diameter static equations for 15 tree species in North American Acadian Region. Forestry 85: 379-390.

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Hein, S., Weiskittel, A.R. and Kohnle, U. 2008. Branch characteristics of widely spaced Douglas-fir in south-western Germany: Comparisons of modeling approaches and geographic regions. Forest Ecology and Management 256: 1064-1079.

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Weiskittel, A.R. and Hix, D.M. 2003. Canopy gap characteristics of an oak-hickory old-growth forest. Ohio Journal of Science 103: 111-115.

Funded Research Projects

Weiskittel, A. 2017. National tree biomass project Maine. US Forest Service, Forest Inventory and Analysis $75,000
Weiskittel, A. 2017. Synthesis and vision for Northeastern States Research Cooperative. US Forest Service, Northern Research Station. $45,000.
Weiskittel, A. 2017. Penobscot Experimental Forest research and technology transfer. US Forest Service, Northern Research Station. $114,998.
Weiskittel, A. 2017. Roadmap and Vision for Maine’s Forest Product Sector. Maine Technology Institute. $500,000.
Weiskittel, A., Hayes, D., and Cook, B. 2016. Visionary workshop for understanding and forecasting the impact of climate change on Maine's forest. Maine Space Grant Consortium. $74,998.
Weiskittel, A., Leahy, J., Hunter, M., Whitham, J. 2016. 2016 Holt Research Forest. Maine Tree Foundation. $97,775.

Weiskittel. A. 2015. Penobscot Experimental Forest research and technology transfer. US Forest Service, Northern Research Station. $89,061

Weiskittel, A. 2015. Collaborative research: Understanding and modelling competition effects on tree growth. National Science Foundation. $65,944.

Weiskittel, A., Leahy, J., Hunter, M., Whitham, J. 2015. 2015-2016 Holt Research Forest. Maine Tree Foundation. $97,775.

Weiskittel, A., Puhlick, J., Woodall, C. 2015 Projecting net carbon storage and sequestration of the northeastern US forest and forest products sector under alternative future scenarios. USDA Agricultural Services. $166,736.

Weiskittel, A. 2014. The Acadian Forest and climate change: Analyzing species distributions. NASA. $30,000.

Weisktitel, A. 2014. Assistance with developing a database of legacy individual tree biomass studies. US Forest Service, Forest Inventory and Analysis. $85,427.

Weiskittel, A.R. 2014. An improved biomass and carbon database for U.S. tree species. US Forest Service, Forest Inventory and Analysis. $75,000.

Weiskittel, A., Frank, J., Pelletier, G. 2014. Assessing the influence of tree form and damage on commercial hardwoods growth, survival, volume, and biomass in Maine. Northeastern States Research Cooperative. $76,236.

Weiskittel, A., Hennigar, C., Allen, L. 2014. Linking site quality and tree growth and survival in the Acadian Forest. Cooperative Forestry Research Unit. $59,400.

Weiskittel, A., Frank, J., Pelletier, G. 2014. Assessing the influence of tree form and damage on commercial hardwoods growth, survival, volume, and biomass in Maine. Cooperative Forestry Research Unit. $46,702.

Weiskittel, A., Puhlick, J. 2014. Evaluation of current and future carbon stocks in the northeastern US. US Forest Service, Northern Research Station. $27,997.

Weiskittel, A.R. 2013. Quantifying the influence of stand spatial structure and species composition on forest growth and regeneration patterns: Evaluating the role of distance-dependent competition indices within the Acadian Variant of the Forest Vegetation Simulator. Northeastern States Research Cooperative. $79, 252.

Weiskittel, A. 2013. The Acadian Forest and climate change: Analyzing species distributions. National Aeronautics & Space Administration. $30,000.

Weiskittel, A.R. 2012. Assistance with Experimental Forest Research in the Acadian Region. US Forest Service, Northern Research Station. $20,103.

Weiskittel, A.R. 2012. An improved biomass and carbon database for U.S. tree species. US Forest Service, Forest Inventory and Analysis. $75,536.

Weiskittel, A., Hennigar, C., Erdle, T., and MacLean, D. 2012. Extending the Acadian variant of FVS to managed stands. University of Maine, Cooperative Forest Research Unit. $37,582.

Weiskittel, A.R., Kenefic, L., and Brissette, J. 2012. Implementing a commercial thinning in Study 58, the U.S. Forest Service's precommercial thinning x fertilization experiment on the Penobscot Experimental Forest. Penobscot Experimental Forest Research Operations Team. $3,360.

Weiskittel, A.R. and Sader, S. 2012. Linking LiDAR and ground-based forest inventory plots for improving estimation of key attributes. Cooperative Forestry Research Unit. $60,123.

Weiskittel, A.R. 2011. An improved biomass and carbon database for U.S. tree species. US Forest Service, Forest Inventory and Analysis. $80,000.

Weiskittel, A.R., Brissette, J., Fernandez, I., Kenefic, L., Kolka, R., Rustad, L. 2011. How silvicultural treatments affect carbon storage in a northern conifer forest: A 60-Year Perspective. US Forest Service, Northeastern States Research Cooperative. $55,720.

Weiskittel, A.R., Simons-Legaard, E., Legaard, K., Wilson, J., Sader, S. 2010. Carbon dynamics and forest management: A retrospective analysis and projection of the potential effects of land use, climate change, and natural disturbances in Northeastern Forests. NASA-NIFA Carbon Cycle Science. $597,383.

Weiskittel, A.R. and Seymour, R.S. 2010. Re-establishment and evaluation of young pure and mixed-species spruce plantations. University of Maine ROT funds. $3,000.

Weiskittel, A.R., Mercier, W., Wilson, J., and Kershaw, J. 2010. Modeling natural regeneration and ingrowth in managed stands of the Acadian Region. University of Maine Cooperative Forestry Research Unit. $41,772.

Weiskittel, A.R. 2009. Do Silvicultural Outcomes Vary in Response to Climatic Gradient in the Northern Forest? US Forest Service Northern Research Station. $25,500.

Weiskittel, A.R., Kershaw, J.A., and Dick, A. 2009. Development of regional taper and volume equations for the primary species in the Acadian Region. Cooperative Forestry Research Unit. $39,764.

Weiskittel, A.R. and Kenefic, L. 2009. Using the US Forest Service's long-term database for growth and yield modeling. US Forest Service Penobscot Experimental Forest ROT grant. $5,000.

Weiskittel, A.R., Kershaw, J.A., Brissette, J., Gove, J., and Keyser, C. 2008. Development of an Acadian Variant of FVS. US Forest Service Northern Research Station Agenda 20/20. $81,933.

Weiskittel, A.R., Kershaw, J.A., and Kenefic, L.A. 2008. Refinement of the FVS-NE predictions of individual tree growth response to thinning. US Forest Service Northeastern States Research Cooperative. $84,194.

Weiskittel, A.R. and Crookston, N. 2008. Estimating and mapping forest potential productivity. US Forest Service Rocky Mountain Experimental Research Station. $108,561.

Weiskittel, A.R., Wagner, R.G., and Seymour, R.S. 2008. Refinement of the FVS-NE individual tree growth model. University of Maine, Cooperative Forestry Research Unit. $86,055.

Awards

2016, University of Maine, College of Natural Sciences, Forestry, and Agriculture Outstanding Researcher

2016, Canadian Journal of Forest Research Outstanding Reviewer

2012, US Forest Service Award of Excellence

2012, G. Peirce and Florence Pitts Webber Outstanding Forestry Teacher Award

2009, G. Peirce and Florence Pitts Webber Outstanding Researcher in Forest Resources

2006, Western Mensurationists Best Speaker