

# CURRICULUM VITAE

University of Idaho

**NAME:** Mark James Kimsey Jr.

**DATE:** December 31, 2021

**RANK OR TITLE:** Research Associate Professor

**DEPARTMENT:** Forest, Rangeland and Fire Sciences

**OFFICE LOCATION AND CAMPUS ZIP:**

Mary Forney Hall 214, 1133

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**DATE OF FIRST EMPLOYMENT AT UI:** October 1997

**DATE OF PRESENT RANK OR TITLE:** July 1, 2021

## EDUCATION BEYOND HIGH SCHOOL:

### Degrees:

Ph.D.	University of Idaho	Moscow, ID	2006	Natural Resources, Modeling
M.S.	University of Idaho	Moscow, ID	2003	Soil Science, Nutrition / Chemistry
B.S.	University of Idaho	Moscow, ID	1999	Forest Resources, Production
B.A.	ACMT	Minneapolis, MN	1999	Divinity

### Certificates:

Statistics	University of Idaho	Moscow, ID	2003
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## EXPERIENCE:

### Research, Outreach, and Teaching Appointments:

June 2020-present	Director	Intermountain Forestry Cooperative
Jan-June 2020	Interim Director	Intermountain Forestry Cooperative
2019-present	Affiliate Faculty	SWS, University of Idaho
2015-present	Res. Assoc. Professor	FRFS, University of Idaho
2008-2014	Research Scientist	Intermountain Forestry Cooperative
2006-2008	Post-Doctoral Fellow	Intermountain Forest Tree Nutrition Cooperative

### Consulting:

2016-current	Tree Nutrition Consultant	Intermountain West Tree Improvement Orchards
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## TEACHING ACCOMPLISHMENTS:

**Specialization:** Production silviculture, mensuration, nutrition, soils, geology, spatial modeling

### Courses Taught:

#### University of Idaho

Forest Measurements and Inventory	FOR 274	2017-present	3 cr.	enrollment, 35-45
Forest Resource Sampling	FOR 275	2016-present	2 cr.	enrollment, 30-40
North Idaho Field Trip	SOIL 4/556	2019-present	1 cr.	enrollment, 6-10

**Students Advised:**Undergraduate Students:

In addition to undergraduate advising, I also mentor and advise undergraduate students within the CNR senior thesis, NSF EPSCoR MILES Undergraduate Research Program, NSF Center for Advanced Forestry Systems and Adele Berkelund research experience programs. The following is a list of those students:

## Curricula Advising:

Paul Daniels	Forestry	2021-present
Kayla Duke	Forestry	2021-present
Jalon Eborall	Forestry	2021-present
Robin Kirby	Forestry	2021-present
Alexandrea Meacham	Forestry	2021-present
James Shook	Forestry	2021-present
Nicholas Szobody	Forestry	2021-present
Kayla Watson	Forestry	2021-present
George Clay	Forestry	2020-present
Shanna Crayne	Forestry	2019-present
Danielle Larsen	Forestry	2019-2021
Daria Paxton	Forestry	2019-2021
Bradley Rose	Forestry	2020-2021
Justin Bruns	Forestry	2019-2021
Caleb Joslin	Forestry	2019-2021
Thomas Luckey	Forestry	2019-2021
Shane Merrill	Forestry	2019-2021
Cameron Vu	Forestry	2019-2021
Britt Davis	Forestry	2019-2020
Matthew Gabrielson	Forestry	2019-2020
Elizabeth Evans	Forestry	2018-2021
Jesse Close	Forestry	2018-2020
Ryder Magnaghi	Forestry	2018-2019

## Research Experience/Senior Thesis Advising:

Natalie Wiley	Ecology and Conservation Biology	2018-2021
Hailey Danly	Forest Resources	2019-2020
Casey Danly	Forest Resources	2016-2018
Emily Mangini	Ecology and Conservation Biology	2016-2018
Paula Aubrey	Family and Consumer Sciences	2017-2018

Graduate Students:

Year(s) Advised	Student	Degree	Institution	Research Topic	Graduation Year
<b>Completed</b>					
2016-2017	Ann Abbott	PhD	Univ. of Idaho	Biomass modeling	2017
2016-2020	Kathryn Matthews	MS	Univ. of Idaho	Camas restoration	2020
2018-2020	Halli Hemingway (FBRI Fellow)	MS	Univ. of Idaho	Forest productivity modeling	2020
2018-2020	Allison Harvey	MS	Univ. of Idaho	Quantifying soil and plant properties relative to NRCS soil moisture regimes	2020
2018-2021	Patrick Whalen (FBRI Fellow)	MS	Univ. of Idaho	Site effects on young stand growth trajectories	2020

2018-2021	Ryan Heiderman	PhD	Univ. of Idaho	Site effect modeling on maximum stand density index	2021
<b>In Progress</b>					
2020-present	Logan Wimme	MS	Univ. of Idaho	Remote sensing and biometrics	2022
2021-present	Shawn DeFrance	MS	Univ. of Idaho	Spatial examination of regional G&Y model performance	2023
2022-present	Noel Daugherty	MS	Univ. of Idaho	High pulse lidar assessment of site productivity	2024
2022-present	Daria Paxton	MS	Univ. of Idaho	Climate, forest plant communities and soil moisture regimes	2024

**Graduate Student Committees:**

2021-present	Alexander Hoffman	PhD	University of Idaho
2019-present	Ryer Becker	PhD	University of Idaho
2020-2021	Chi-Juo Kuo	MS	University of Idaho
2019-2021	Joshua Mullane	MS	University of Idaho
2017-2020	Leslee Crawford	MS	University of Idaho
2018-2019	Shawn deFrance	MS	University of Idaho
2018-2019	Scott Sprague	MS	University of Idaho
2016-2018	Jacob Reely	MS	University of Idaho
2015-2018	Danielle Berardi	MS	University of Idaho
2014-2016	Max Ross	MS	University of Idaho
2013-2015	Bhanu Bhattarai	MS	University of Idaho

**Honor Society Advising:**

2011-present Society of Xi Sigma Pi Honor Society, faculty advisor

**Non-credit Classes – Guest Lecturer:**

Ecology	WLF 221	2018-2021
Principles of Ecology	WLF 102	2017-2019
Intro. to Forest Management	FOR 102	2016-2019
Exploring Natural Resources	NR 101	2016-2017
Forest Soil and Canopy Process.	FOR 330	2014-2015

**Honors and Awards:**

2017 Outstanding Advisor Award, Univ. of Idaho College of Natural Resources

**SCHOLARSHIP ACCOMPLISHMENTS:****Publications (\* indicates graduate students advised):**Refereed:

18. **Kimsey, M.**, B.M. Strimbu, and R.J. McGaughey. 2021. Advancements in forest mensuration and biometrics in the artificial intelligence era. *Can. J. For. Res.* 51(8): v-vi.  
<https://doi.org/10.1139/cjfr-2021-0175>

17. Heiderman, R. and **M. Kimsey**. 2021. A species-specific, site-sensitive maximum stand density index model for Pacific Northwest conifer forests. *Can. J. For. Res.* 51(8): 1166–1177. <https://doi.org/10.1139/cjfr-2020-0426>.
16. Hemingway, H.\* and **M. Kimsey**. 2020. Estimating forest productivity using site characteristics, multi-point measures, and a nonparametric approach. *Forest Science*. 66(6):645-652. <https://doi.org/10.1093/forsci/fxaa023>
15. Hemingway, H.\* and **M. Kimsey**. 2020. A multi-point felled tree validation of height-age modeled growth rates. *Forest Science*. 66(3):275-283. doi.org/10.1093/forsci/fxz090
14. Lockner, A.D., S.P. Cook, **M. Kimsey**, A.G. McDonald, and T. Shaw. 2019. Toxicity to Douglas-fir tussock moth and foliar concentration of individual monoterpenes in Douglas-fir following fertilization in thinned stands. *Northwest Science* 93(3-4):163-170.
13. **Kimsey, M.**, T. Shaw, M. Coleman. 2019. Site sensitive maximum stand density index models for mixed conifer stands across the Inland Northwest, USA. *Forest Ecology and Management*. 433:396-404. doi.org/10.1016/j.foreco.2018.11.013
12. McDaniel, P., M. Ross, J. Jimenez, M. Valerio, D. Strawn, **M. Kimsey**, S. Campbell, A. Falen. 2018. Pedogenic pathways in andic soils of the northern Rocky Mountains (USA). *Soil Sci. Soc. Am. J.* 82:1308-1318. doi:10.2136/sssaj2018.05.0186
11. Chase, C., **M. Kimsey**, T. Shaw, M. Coleman. 2016. The response of light, water, and nutrient availability to pre-commercial thinning in dry inland Douglas-fir forests. *Forest Ecology and Management*. 363:98-109.
10. Mahalovich, M.F., **M. Kimsey**, J.K. Fortin-Noreus, C.T. Robbins. 2016. Isotopic heterogeneity in whitebark pine (*Pinus albicaulis* Engelm.) nuts across geographic, edaphic and climatic gradients in the Northern Rockies (USA). *Forest Ecology and Management*. 359:174-189.
9. Cook, S.P., A. Carroll, **M. Kimsey**, and T. Shaw. 2015. Changes in a primary resistance parameter of Lodgepole pine to bark beetle attack one year following fertilization and thinning. *Forests*. 6:280-292
8. Coleman, M.D., T. Shaw, **M. Kimsey** and J.A. Moore. 2014. Nutrition of Douglas-fir in the inland northwest. *Soil Sci. Soc. Am. J.* 78:S11–S22
7. Shan, S., **M. Kimsey** and M.D. Coleman. 2014. Soil soluble nitrogen availability across an elevational gradient in a cold-temperate forest ecosystem. *Soil Sci. Soc. Am. J.* 78:S217-S224.
6. White, K.P., M. Coleman, D.S. Page-Dumroese, P.E. Gessler, **M. Kimsey** and T. Shaw. 2012. Examining soil parent material influence over Douglas-fir stem growth response to fertilization: taking advantage of information from spatiotemporally distributed experiments. *Forest Ecology and Management*. 286:101-107
5. **Kimsey, M.** and D. Roche. 2012. Long-term site preparation effects on volcanic ash forest soils and Douglas-fir productivity. *International Journal of Forest Engineering*. 23(1):15-24
4. **Kimsey, M.**, D. Page-Dumroese, and M. Coleman. 2011. Assessing bioenergy harvest risks: Geospatially explicit tools for maintaining soil productivity in western US forests. *Forests*. 2: 797-813
3. **Kimsey, M.**, M.T. Garrison-Johnston, and L. Johnson. 2011. Characterization of volcanic ash-influenced forest soils across a geoclimatic sequence. *Soil Sci. Soc. Am. J.* 75:267-279
2. **Kimsey, M.**, J.A. Moore, and P.A. McDaniel. 2008. A geographically weighted regression analysis of Douglas-fir site index in north central Idaho. *Forest Science*. 54(3):356–366
1. **Kimsey, M.**, P.A. McDaniel, D.G. Strawn, and J.A. Moore. 2005. Fate of applied sulfate in volcanic ash-influenced forest soils. *Soil Sci. Soc. Am. J.* 69:1507-1515

Peer-Reviewed:

6. Crawford, L.J., R. Heinse, **M.J. Kimsey**, D.S. Page-Dumroese. 2021. Soil sustainability and harvest operations: A review. Gen. Tech. Rep. RMRS-GTR-421. Fort Collins, CO. U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station. 39 p. <https://doi.org/10.2737/RMRS-GTR-421>.
5. **Kimsey, M.J.**, Laing, L.E., Anderson, S.M., Bruggink, J., Campbell, S., Diamond, D., Domke, G.M., Gries, J., Holub, S.M., Nowacki, G., Page-Dumroese, D.S., Perry, C.H., Rustad, L.E., Stephens, K., Vaughan, R., 2020. Soil Mapping, Monitoring, and Assessment, in: Forest and Rangeland Soils of the United States Under Changing Conditions. [https://doi.org/10.1007/978-3-030-45216-2\\_9](https://doi.org/10.1007/978-3-030-45216-2_9)
4. Mahalovich, M.F. and **M. Kimsey**. 2017. Drought tolerance and strong edaphic signals provide a better understanding of whitebark pine's response to climate change. *Nutcracker Notes: Journal of the Whitebark Pine Ecosystem Foundation*. 32:9-10
3. Barkley, Y., R. Brooks, A. Gray, R. Keefe, **M. Kimsey**, A. McFarland, and C. Schnepf. 2015. *Idaho forestry best management practices (BMPs) Field Guide*. University of Idaho, College of Natural Resources Extension publication.
2. Dumroese, D. and **M. Kimsey**. 2012. Maintaining site productivity during biofuel harvest operations. *Northwest Woodlands*. 28(4):22-23.
1. **Kimsey, M.**, B. Gardner, and A. Busacca. 2007. Ecological and topographic features of volcanic ash-influenced forest soils. p. 7-21 In Page-Dumroese, et. al. (eds.) *Proceedings – Volcanic Ash-Derived Forest Soils of the Inland Northwest: Properties and Implications for Management and Restoration*. Nov. 9-10, 2005, Coeur d'Alene, Idaho. USDA Forest Service. Rocky Mountain Experiment Station. Fort Collins, CO.

Other Publications/Reports:

60. Shaw, T. and **M. Kimsey**. 2021. N+S Cooperative fertilization study trials in north Idaho: 2-Yr foliar nutrient and stem growth responses. Technical Report 081921. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
59. **Kimsey, M.** 2021. Post-fire reforestation on productive WA DNR forestlands in the northeast region. Technical Report 020321. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
58. Shaw, T., **M. Kimsey**, and D. Patterson. 2021. Six-year response to nitrogen and sulfur fertilization at Stimson "Rocky Gorge" operational fertilization trial. Technical Report 033021. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
57. **Kimsey, M.** 2021. United States Forest Service Sandpoint Idaho Tree Improvement comprehensive orchard conifer nutrition analysis and summary report. Technical Report 020121. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
56. **Kimsey, M.** 2021. United States Forest Service Bozeman Montana Tree Improvement comprehensive orchard conifer nutrition analysis and summary report. Technical Report 020121. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
55. **Kimsey, M.**, T. Shaw, and M. Rust. 2020. Site type initiative – Phase 3 study plan: Relationship of woods run vs improved Douglas-fir to site growth factors. Technical Report 101320. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
54. Shaw, T. and **M. Kimsey**. 2020. Douglas-fir foliar nutrition for Stimson N+S operational fertilization monitoring sites in northern Idaho. Technical Report 082420. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.

53. Shaw, T. and **M. Kimsey**. 2020. Douglas-fir foliar nutrition for PotlatchDeltic N+S operational fertilization monitoring sites in northern Idaho. Technical Report 060420. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
52. Shaw, T. and **M. Kimsey**. 2020. Cherry Lane Seed Orchard soil and foliar nutrition determination. Technical Report 033120. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
51. Shaw, T. and **M. Kimsey**. 2020. Response to repeated vegetation control on western larch and Douglas-fir “Maximum Productivity” seedling trials. Technical Report 030420. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
50. **Kimsey, M.** 2020. Foliar nutrient status of the United States Forest Service whitebark pine breeding orchard – Coeur d’Alene, ID. Technical Report 042282020. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
49. **Kimsey, M.** and T. Shaw. 2019. Western larch thinning and fertilization growth and yield trial – Progress Report 2. Technical Report 121219. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
48. **Kimsey, M.** and T. Shaw. 2019. Post-fire reforestation on productive Washington Department of Natural Resources forestlands in northeast Washington – Progress Report 3. Technical Report 121219. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
47. Coleman, M., T. Shaw, and **M. Kimsey**. 2019. Establishment report: Paired plot density management project. Technical Report 092519. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
46. Shaw, T. and **M. Kimsey**. 2019. Four-year response to nitrogen and sulfur fertilization at Stimson “Rocky Gorge” opfert trial. Technical Report 092519. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
45. Shaw, T. and **M. Kimsey**. 2019. Douglas-fir foliar nutrition for PotlatchDeltic N+S operational fertilization monitoring sites in northern Idaho. Technical Report 080919. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
44. **Kimsey, M.** 2019. United States Forest Service Sandpoint Idaho Tree Improvement comprehensive orchard soil nutrition analysis and summary report. Technical Report 063019. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
43. **Kimsey, M.** 2019. United States Forest Service Custer-Gallatin Montana Tree Improvement whitebark pine seed orchard foliar nutrient analysis and summary report. Technical Report 063019. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
42. **Kimsey, M.** 2019. United States Forest Service Lolo Montana Tree Improvement ponderosa pine seed orchard foliar and soil analysis and summary report. Technical Report 062919. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
41. Shaw, T. and **M. Kimsey**. 2019. One and three-year response to repeated vegetation control for the Hancock 2018 Douglas-fir and 2016 western larch maximum productivity seedling trials. Technical Report 053119. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
40. Shaw, T. and **M. Kimsey**. 2019. PotlatchDeltic density management research sites: 4-Year thinning treatment responses on 2012-2014 density sites. Technical Report 043019. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.

39. **Kimsey, M.** and T. Shaw. 2019. Post-fire reforestation on productive Washington Department of Natural Resources forestlands in northeast Washington – Progress Report 2. Technical Report 031219. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
38. Shaw, T. and **M. Kimsey**. 2019. Potlatch/Deltaic density management research sites: Establishment summary on 2006-2018 density sites. Technical Report 030319. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
37. **Kimsey, M.** and T. Shaw. 2019. The HERBICON Project – Final Report. Technical Report 030319. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
36. **Kimsey, M.** 2018. United States Forest Service Sandpoint Idaho Tree Improvement comprehensive orchard nutrition analysis and summary report. Technical Report 040418a. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
35. **Kimsey, M.** 2018. United States Forest Service Lolo Montana Tree Improvement western larch orchard nutrition analysis and summary report. Technical Report 040418b. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
34. **Kimsey, M.** 2018. United States Forest Service Big Fork Montana Tree Improvement comprehensive orchard nutrition analysis and summary report. Technical Report 040418c. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
33. Shaw, T., **M. Kimsey**, and A. Acuff. 2018. Potlatch Forest Holdings fertilizer responses in north Idaho. A report to Potlatch Timber Holdings. Intermountain Forestry Cooperative. University of Idaho. College of Natural Resources.
32. **Kimsey, M.** 2017. United States Forest Service Sandpoint Idaho Tree Improvement western white pine orchard nutrition summary: 2014-2016. Technical Report 051117. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
31. **Kimsey, M.** 2017. SDS Lumber ponderosa pine orchard nutrition analysis and summary report. Technical Report 041017a. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
30. **Kimsey, M.** 2017. United States Forest Service Lolo Montana Tree Improvement ponderosa pine and Douglas-fir orchard nutrition analysis and summary report. Technical Report 041017b. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
29. **Kimsey, M.** 2017. United States Forest Service Nez Perce/Clearwater Idaho Tree Improvement ponderosa pine and lodgepole pine orchard nutrition analysis and summary report. Technical Report 041017c. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
28. **Kimsey, M.** 2017. United States Forest Service Big Fork Montana Tree Improvement western larch and Douglas-fir orchard nutrition analysis and summary report. Technical Report 041017d. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
27. **Kimsey, M.** 2016. Idaho Department of Lands Bonners Ferry Tree Improvement Douglas-fir nutrition analysis and summary report. Technical Report 052016a. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
26. **Kimsey, M.** 2016. United States Forest Service Sandpoint Idaho Tree Improvement ponderosa pine and western larch orchard nutrition analysis and summary report. Technical Report 052016b. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.

25. **Kimsey, M.** 2016. United States Forest Service Bigfork Montana Tree Improvement Douglas-fir and western larch orchard nutrition analysis and summary report. Technical Report 0520116c. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
24. **Kimsey, M.**, K. Apostol, R. Lieberg, T. Shaw, A. Davis and M. Coleman. 2016. Herbicide effects on nursery conifer seedlings grown in differing soil parent materials. Technical Report 050416. Intermountain Forestry Cooperative. College of Natural Resources, University of Idaho, Moscow.
23. Shaw, T., **M. Kimsey**, and C. Chase. 2015. Nutrient effects on Inland Northwest forest health and productivity. *Western Forester*.
22. **Kimsey, M.** 2014. Geospatial Douglas-fir site index modeling for northern Idaho and northeast Washington. Technical Report 063014. Intermountain Forest Tree Nutrition Cooperative. College of Natural Resources, University of Idaho, Moscow.
21. Shaw, T., **M. Kimsey**, and A. Acuff. 2014. Effects of thinning density and fertilization on the growth and development of three young Douglas-fir stands in northern Idaho. Intermountain Forest Tree Nutrition Cooperative. Technical Document. University of Idaho, Moscow.
20. Shaw, T., M. Coleman, **M. Kimsey**, and P. Mika. 2014. Forest health and nutrition study ten-year growth, mortality and foliar nutrition. Intermountain Forest Tree Nutrition Cooperative. Technical Document. University of Idaho, Moscow.
19. Shaw, T. and **M. Kimsey**. 2013. Operational fertilization comparisons in pre-merchantable stands of mixed conifer species in western Montana: nine-year growth responses. A report to Plum Creek Timber Company by the Intermountain Forest Tree Nutrition Cooperative. University of Idaho. College of Natural Resources.
18. Shaw, T. and **M. Kimsey**. and A. Acuff. 2012. Four-year growth response of a Douglas-fir stand to thinning and fertilization treatments at Moe's Ranch study site. St. Maries, Idaho. A report to Potlatch Timber Holdings. Intermountain Forest Tree Nutrition Cooperative. University of Idaho. College of Natural Resources.
17. **Kimsey, M.** Cook, S. and Shaw, T. 2011. Thinning and fertilization impacts on Douglas-fir and lodgepole pine resistance to insect pests, 2-year diameter growth and soil nutrition. Intermountain Forest Tree Nutrition Cooperative. Technical Document. University of Idaho, Moscow.
16. **Kimsey, M.** 2011. Washington State Wood-5 project: Forest plot inventory database development. Intermountain Forest Tree Nutrition Cooperative. Technical document. University of Idaho, Moscow.
15. **Kimsey, M.** 2010. Foliar and ion exchange resin data summary for the Dynamic Soil Property study. Technical Report to USDA – Natural Resources Conservation Service.
14. Shaw, T.M., **M. Kimsey**, M. Coleman and S. McLeod. 2009. Density control and fertilization in young western larch and the development of Canada Lynx habitat establishment and summary report or Silvis Western Larch Research site. University of Idaho, College of Natural Resources, Intermountain Forest Tree Nutrition Cooperative.
13. Shaw, T.M., **M. Kimsey**, and D. Page-Dumroese. 2009. Post-harvest fertilization as mitigation for nutrient removals: Permanent monitoring plots on the Panhandle National Forest establishment and summary report "Rye on Ham". University of Idaho, College of Natural Resources, Intermountain Forest Tree Nutrition Cooperative.
12. Shaw, T.M., **M. Kimsey**, M. Coleman and P. Mika. 2009. Installation and summary report at Canus Nutrient Management Study site in Northeast Oregon. University of Idaho, College of Natural Resources, Intermountain Forest Tree Nutrition Cooperative.



11. Shaw, T.M., **M. Kimsey** and D. Parent. 2010. Growth response of operationally fertilized stand at Brickel Creek, North Idaho. University of Idaho, College of Natural Resources, Intermountain Forest Tree Nutrition Cooperative.
10. Coleman, M., T. Shaw, **M. Kimsey**, M. Garrison-Johnston, and P. Mika. 2008. Forest nutrition, site nutrient supply in response to amendments and harvest removals: A review of information relevant to Potlatch Corporation fee lands in northern Idaho. IFTNC: Report to Potlatch Corporation. University of Idaho. Moscow, Idaho.
9. Johnston, M., P. Mika, T. Shaw, **M. Kimsey**, and M. Coleman. 2008. First year foliage and two-year growth response of screening trials installed between 2002 and 2005 in north Idaho on Potlatch Forest Holdings. IFTNC: Report to Potlatch Corporation. University of Idaho. Moscow, Idaho.
8. Garrison-Johnston, M., L. Johnson, T. Shaw, and **M. Kimsey**. 2007. Potlatch screening trials: Foliar nutrient diagnostic report and two-year growth results for 2004 sites. IFTNC: Report to Potlatch Corporation. University of Idaho. Moscow, Idaho.
7. **Kimsey, M.J.** 2006. Volcanic ash and Douglas-fir productivity in western Clearwater County, Idaho. Technical report to Potlatch Corporation. University of Idaho. Moscow, Idaho.
6. **Kimsey, M.** 2005. Douglas-fir site index, cubic foot yield curves, and mean annual increment conversions for Cochran to Monserud timber productivity data. IFTNC: Report to USDA-Natural Resources Conservation Service, Boise, ID. University of Idaho. Moscow, Idaho.
5. Garrison-Johnston, M.T., T.M. Shaw, **M. Kimsey** and J.A. Moore, 2002. Potlatch screening trials 2002 establishment report. IFTNC/Potlatch Corporation.
4. Xiao, Y., J.A. Moore, T.M. Shaw and **M. Kimsey**. 2002. Foliar nutrient response of ponderosa and lodgepole pine to fertilizer and herbicide treatments at Clear Creek, central Idaho. IFTNC/Boise Cascade Corp. Rpt. # 3.
3. Shaw, T. M., J. A. Moore, and **M. Kimsey**. 2001. Foliar nutrient response and diagnosis to multi-nutrient/herbicide application for Douglas-fir, Ponderosa pine and Lodgepole pine in Northeast Oregon. IFTNC: Report to Boise Cascade Corporation. University of Idaho. Moscow, Idaho.
2. Xiao, Y., J. A. Moore, T. M. Shaw, and **M. Kimsey**. 2001. Nutrient screening trial results for Douglas-fir, Lodgepole pine, and Ponderosa pine in Central and Northeast Washington. IFTNC: Report to Boise Cascade Corporation. University of Idaho. Moscow, Idaho.
1. Xiao, Y., J.A. Moore, T.M. Shaw and **M. Kimsey**. 2001. Foliar nutrient responses for the second set (1999) of lodgepole pine and ponderosa pine fertilization and herbicide treatments on different rock types in central Idaho. IFTNC/ Boise Cascade Corp. Rpt. # 3.

Refereed (currently scheduled or submitted):

1. Chen, C., A.S. Nelson, T. Shaw, and **M. Kimsey**. *Submitted*. Effects of fertilization on the growth dominance of Inland Northwest forests of the United States. *Forests*.
2. Heiderman, R.\* and **M. Kimsey**. *Scheduled*. Pacific Northwest conifer forest stand carrying capacity under future climate scenarios. *Forests*.

**Presentations (\*invited; \*\* graduate students advised):**Conferences/Meetings/Workshops:

101. **Kimsey, M.\*** 2021. Resources for assessing and mapping soil properties: Support tools for effective forest management. *Soil Impacts and Recovery from East and Westside Harvest Operations Conference*. Coeur d'Alene, ID.
101. Heiderman, R.\*\* and **M. Kimsey.\*** 2021. Species-specific, site-sensitive stand carrying capacity models and future climate forecasting for Pacific Northwest conifer forests. *United States Forest Service -NASP training module*. Online.
100. **Kimsey, M.** 2021. Assessing and mapping regional variation in potential site carrying capacity. *Center for Advanced Forestry Systems Annual Meeting*. Online.
99. Wimme, L.\*\* and **M. Kimsey.** 2021. Stimson Hidden Meadows study: Western larch 4-yr growth response to thinning and multi-nutrient fertilization. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
98. Heiderman, R.\*\* and **M. Kimsey.** 2021. Physiographic influence of Douglas-fir thinning response. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
97. **Kimsey, M.** 2021. Site type initiative – Phase 3: Douglas-fir realized gain – seed source trial. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
96. **Kimsey, M.** 2021. Paired plot density trials: Western larch 4-yr growth response. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
95. **Kimsey, M.** 2021. Paired plot density trials: Ponderosa pine 4-yr growth response. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
94. Hemingway, H.\*\* and **M. Kimsey.** 2020. Estimating forest productivity using site characteristics, multipoint measures, and a nonparametric approach. *Western Mensurationists Annual Meeting*. Online.
93. Heiderman, R.\*\* and **M. Kimsey.** 2020. Optimizing maximum stand carrying capacity of Pacific Northwest, USA forests as a function of management objectives and site resources. *Western Mensurationists Annual Meeting*. Online.
92. Heiderman, R.\*\* and **M. Kimsey.** 2020. Assessing and mapping regional variation in potential site carrying capacity. *Center for Advanced Forestry Systems Annual Meeting*. Online.
91. Heiderman, R.\*\* and **M. Kimsey.** 2020. Maximum stand density index modelling for Oregon, Washington, and beyond. *USDA Forest Service Region 6 Silviculture Workshop*. Online.
90. Heiderman, R.\*\* and **M. Kimsey.** 2020. Machine learning to optimize stand density as a function of management objectives and site resources. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
89. Whalen, W.\*\* and **M. Kimsey.** 2020. Silvicultural treatment effects on height growth of commercially important conifer species of the Inland Northwest, USA. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
88. Hemingway, H.\*\* and **M. Kimsey.** 2020. Defining and estimating forest productivity using multi-point measures and a nonparametric approach. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
87. **Kimsey, M.** 2020. Paired plot pre-commercial thinning: Four-year growth response by Douglas-fir and ponderosa pine. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.

86. **Kimsey, M.\***, J. Schriever, and K. Halligan. 2019. InventoryEDU: Bringing forest inventory technology into the classroom. *Society of American Foresters Convention*. Louisville, KY.
85. Whalen, P.\*\*, **M. Kimsey**, and D. Opalach. 2019. Early stand silviculture effects on first log growth rates. *Forest Biometrics Research Institute Technical Meeting*. Portland, OR.
84. Hemingway, H.\*\*, **M. Kimsey**, and J. Arney. 2019. Nonparametric growth factor modeling of Douglas-fir second log growth rates. *Forest Biometrics Research Institute Technical Meeting*. Portland, OR.
83. Matthews, K.\*\*, **M. Kimsey**, A. Davis and P. McDaniel. 2019. Cultivating Camas Connections: Restoration Strategies for Propagation of Camassia quamash on the Weippe Prairie. *Society for Ecological Restoration*. Capetown, South Africa.
82. Matthews, K.\*\*, **M. Kimsey**, A. Davis and P. McDaniel. 2019. Restoration Strategies for Propagation of Camassia quamash on the Weippe Prairie. *Society for Ethnobiology Conference*. Vancouver, BC.
81. **Kimsey, M.\*** 2019. Modeling site-species effects on SDImax. *USDA Forest Service Region 6 Silviculture Workshop*. Online.
80. Matthews, K.\*\*, **M. Kimsey**, A. Davis and P. McDaniel. 2019. Restoration Strategies for Propagation of Camassia quamash on the Weippe Prairie. *Northwest Science Meeting*. Lewiston, ID
80. **Kimsey, M.** and A. Harvey. 2019. Modeling soil moisture regimes across Idaho and Oregon. *Northwest Forest Soils Council Conference*. Lincoln City, OR.
79. **Kimsey, M.** 2019. Douglas-fir four-year paired plot density management growth by thinning regime, density and site productivity. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
78. **Kimsey, M.** 2019. Review and update on Intermountain Forestry Cooperative initiatives. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
77. **Kimsey, M.\*** 2019. Optimizing density management for site and species composition. *USDA Forest Service Region 1 Silviculture Workshop*. Missoula, MT.
76. **Kimsey, M.\*** 2018. Site-species effects on maximum stand density index. *Applied early stand silviculture in the Inland Northwest Conference*. Spokane, WA.
75. Hemingway, H.\*\*, **M. Kimsey**, and J. Arney. 2018. Comparison of two height-age site indices for northern Idaho as a function of site characteristics. *Forest Biometrics Research Institute Technical Meeting*. Portland, OR.
74. **Kimsey, M.**, J. Schriever, and K. Halligan. 2018. InventoryEDU: Bringing forest inventory technology into the classroom. *Society of American Foresters Convention*. Portland, OR.
73. Mahalovich, M.F., **M. Kimsey**, and S. Winward. 2018. Genetic refugia: A bottoms-up approach to identifying climate refugia for whitebark pine. *Ecological Society of America Conference*. New Orleans, LA.
72. Matthews, K.\*\*, **M. Kimsey**, P. McDaniel. 2018. Restoration strategies for propagation of Camassia quamash on the Weippe Prairie. *Society of Ethnobiology Conference*. Madison, WI.
71. **Kimsey, M.** 2018. InventoryEDU: Bringing forest inventory technology into the classroom. *Western Mensurationists Meeting*. Flagstaff, AZ.
70. **Kimsey, M.\*** 2018. Optimizing density management for site and species composition. *USDA Forest Service Region 6 Silviculturists Meeting*. Skamania, WA.

69. **Kimsey, M.\*** 2018. Stand density management in a region of limiting growth resources. *Inland Northwest Growth and Yield Cooperative Annual Meeting*. Coeur d'Alene, ID.
68. **Kimsey, M.** 2018. Project updates and future research direction of the Intermountain Forestry Cooperative. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
67. **Kimsey, M.** 2017. Site effects on conifer carrying capacity. *Northwest Forest Soils Council Winter Meeting*. The Dalles, OR.
66. **Kimsey, M.\*** 2017. Building quality control and quality assurance into natural resource inventory Excel databases. *6th Field Technology Conference: Data Collection in Forestry, Fisheries, and Natural Resources*. Portland, OR.
65. **Kimsey, M.\*** 2017. Slicers and pivot tables for inventory presentation. *6th Field Technology Conference: Data Collection in Forestry, Fisheries, and Natural Resources*. Portland, OR.
64. **Kimsey, M.\*** 2017. Modeling site-species impacts on maximum stand density. *USDA Forest Service Region 6 Silviculturists Meeting*. Springfield, OR.
63. **Kimsey, M.\*** 2017. Forest and rangeland soils in a changing world: New assessment tools and technologies. *USDA Forest Service National Soils Assessment Meeting*. Portland, OR.
62. **Kimsey, M.** 2017. Modeling maximum stand density index in mixed conifer forests of the Inland Northwest, USA. *Western Mensurationists Meeting*. Vancouver, BC.
61. **Kimsey, M.\*** 2017. Building geospatial maximum density models for westside conifer species. *Center for Intensive Plantation Silviculture Technical Workshop*. Aurora, OR.
60. **Kimsey, M.\*** 2017. Conifer nutrition across soil types and species. *USDA Forest Service Region 1 Tree Improvement Managers Meeting*. Riggins, ID.
59. **Kimsey, M.** 2017. Modeling SDI<sub>max</sub> in lodgepole pine stands: Evaluation of site effects on the frontier boundary. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
58. Mahalovich, M.F., **M. Kimsey**, and S. Winward. 2017. Adaptive capacity and climate refugia for interior *Pinus albicaulis*. *Crown of the Continent High Five Working Group Meeting*. Missoula, MT.
57. Grover, K., A.S. Nelson, M. Coleman, M. Rust, **M. Kimsey**, and T. Shaw. 2017. Response of superior western larch families to site quality and competition control. *Center for Advanced Forestry Systems Annual Meeting*. Portland, OR.
56. **Kimsey, M.\*** 2016. Stand density index in mixed species stands. *Idaho Department of Lands Timber Management Winter Meeting*. Moscow, ID.
55. **Kimsey, M.\*** 2016. Slash management and site factors on seedling survival and growth. *Idaho Department of Lands Timber Management Winter Meeting*. Moscow, ID.
54. **Kimsey, M.\***, M. Coleman, and T. Shaw. 2016. Forest production management in the Inland Northwest. *Bureau of Land Management Regional Forester Meeting*. Portland, OR.
53. Moser, K., Mahalovich, M.F., R.T. Graham, and **M. Kimsey**. 2016. Climate relationships to a 100-year-old provenance trial of ponderosa pine. *Society of American Foresters National Convention*. Madison, WI.
52. Nelson, A.S., M. Coleman, M. Rust, **M. Kimsey**, and T. Shaw. 2016. Response of superior western larch families to competition control and site quality. *Center for Advanced Forestry Systems Annual Meeting*. Pensacola, FL.
51. Nelson, A.S., M. Coleman, T. Shaw, and **M. Kimsey**. 2016. Forest response to nitrogen and potassium fertilization across common Inland Northwest parent materials. *Society of American Foresters National Convention*. Madison, WI.

50. **Kimsey, M.\*** 2016. Stand density index in multi-species stand management. *Bureau of Land Management Spatial Pattern and Age Cohort Workshop*. Medford, OR.
49. **Kimsey, M.\*** 2016. Maximum stand density index: Development and customization to your site. *United States Forest Service Region 5/6 National Advanced Silviculture Program*. Medford, OR.
48. Mahalovich, M.F and **M. Kimsey**. 2016. Geologic and genetic implications of restoring whitebark pine under climate change: suitable substrate, blister rust resistance and drought tolerance. *Whitebark Pine Ecosystem Foundation Annual Science and Management Workshop*. Whitefish, MT.
47. **Kimsey, M.**, M. Coleman, and T. Shaw. 2016. Linking spatial and tabular products – an ownCloud and ESRI portal demonstration. *Intermountain Forestry Cooperative Technical Meeting*. Moscow, ID.
46. Mahalovich, M.F., **M. Kimsey**, J. Fortin-Noreus, and C.T. Robbins. 2015. Interdisciplinary applications of stable isotopes in whitebark pine. *Interagency Grizzly Bear Committee Winter Meeting*. Missoula, MT.
45. Mahalovich, M.F. and **M. Kimsey**. 2015. Integrating complex adaptive patterns and levels of inbreeding in Ponderosa pine to refine species vulnerability assessments and seed transfer guidelines for reforestation. *13th Biennial Conference of Science and Management on the Colorado Plateau and Southwest Region*. Flagstaff, AZ.
44. Mahalovich, M.F. and **M. Kimsey**. 2015. Future outlook for whitebark pine in the Waterton-Glacier International Peace Park: 15 years of collaboration to develop blister rust resistance and drought tolerance. *12th Annual Waterton-Glacier Science and History Day*. West Glacier, MT.
43. Mahalovich, M.F. and **M. Kimsey**. 2015. Isotopic heterogeneity and nutritional ecology of whitebark pine nuts in the northern Rockies (USA). *12th Western Black Bear Workshop*. Canmore, Alberta, CA.
42. **Kimsey, M.\*** 2015, M. Coleman, and T. Shaw. 2015. Stand density index models and their use in forest management planning. *Montana State Society of American Foresters*. Whitefish, MT.
41. **Kimsey, M.**, M. Coleman, and T. Shaw. 2015. Soil nutrient availability relative to slash loading and vegetation control. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, ID.
40. **Kimsey, M.**, M. Coleman, and T. Shaw. 2015. Harvest and post-harvest nutrient mitigation: Effects on soil and tree nutrition, growth and mortality. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, ID.
39. **Kimsey, M.\*** 2015. Forest density management: Evolution of maximum stand density index. *Inland Empire Reforestation Council Conference*. Coeur d'Alene, ID.
38. **Kimsey, M.**, R. Volfovicz-Leon, M. Coleman, and T. Shaw. 2014. Physiographic controls on maximum stand density index of three major conifer species in the Inland Northwest, USA. *Soil Science Society of America Conference*. Long Beach, CA.
37. **Kimsey, M.\***, M. T. Shaw, M. Coleman. 2014. Management effects on future forest productivity. *Hancock Timber Resource Group Conference*. La Grande, OR.
36. **Kimsey, M.\*** 2014. Inland northwest geology, climate and forest productivity. *Center for Advanced Forestry Systems Annual Meeting*. Coeur d'Alene, ID.
35. **Kimsey, M.**, M. Coleman, and T. Shaw. 2014. Site type initiative Phase 1 report: Species maximum SDI model V2.0. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, ID.

34. **Kimsey, M.\*** 2014. Physiographic factors effecting forest site carrying capacity. *Northwest Forest Soil Council Winter Meeting*. Ellensburg, WA.
33. **Kimsey, M.\***, M. Johnston, P. Mika, and T. Shaw. 2014. Importance of volcanic ash-influenced forest soils in regeneration success and future forest productivity. *USDA-USFS Region 1 Silviculture Workshop*. Moscow, ID.
32. **Kimsey, M.\*** 2013. Ecological and physiological overview of volcanic soils and their influence on tree growth and vegetation. *Volcanic Ash-cap Forest Soils Conference*. Coeur d'Alene, ID.
31. McDaniel, P. and **M. Kimsey.\*** 2013. Harvest operation impacts on volcanic soil compaction and hydrology. *Volcanic Ash-cap Forest Soils Conference*. Coeur d'Alene, ID.
30. **Kimsey, M.** 2013. Soils, geology and forest management. *12th North American Forest Soils Conference*. Whitefish MT.
29. **Kimsey, M.**, M. Coleman, and T. Shaw. 2013. Validating IFTNC generated maximum stand density index models. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, ID.
28. **Kimsey, M.** and R. Volfovicz-Leon. 2012. The effect of fuzzed plot coordinates on the distribution of climate, topographic and soil parent material variables: Influence on maximum stand density index modeling in Idaho. *USFS – FIA Research Symposium*. Baltimore, MD.
27. **Kimsey, M.**, D. Page-Dumroese, M. Coleman. 2012. Geospatial soil risk assessments and BMP development for biomass harvesting. *Northwest Bioenergy Research Symposium*. Seattle, WA.
26. **Kimsey, M.**, M. Johnston, and L. Johnson. 2012. Climatic and landform effects on the distribution of fine-textured volcanic ash in a temperate forest ecosystem. *Soil Science Society of America Conference*. Cincinnati, OH. (Poster).
25. **Kimsey, M.\*** 2012. Geospatial tools for estimating and maintaining soil-site productivity. *Washington State Professional Soil Scientists*. Spokane, WA.
24. **Kimsey, M.** 2012. Forest nutrient research: Past, present and future. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, ID.
23. **Kimsey, M.\*** 2012. Geospatial tools for estimating and maintaining soil-site productivity. *Northwest Forest Soil Council Winter Meeting*. Vancouver, WA.
22. **Kimsey, M.**, D. Page-Dumroese, and M. Coleman. 2011. Assessing bioenergy harvest risks: geospatially explicit tools for maintaining soil productivity in western US forests. *Soil Science Society of America Conference*. San Antonio, TX.
21. **Kimsey, M.**, R. Volfovicz-Leon, M. Coleman, and T. Shaw. 2011. Forest stocking and productivity analysis in support of the IFTNC Site Type Initiative. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, ID.
20. **Kimsey, M.\***, T. Shaw, M. Johnston, P. Mika, and M. Coleman. 2011. Soil-site properties, forest productivity and silvicultural prescriptions. *Inland Empire Reforestation Council Conference*. Coeur d'Alene, ID.
19. **Kimsey, M.\***, T. Shaw, M. Johnston, P. Mika, and M. Coleman. 2010. Soil-site properties, forest productivity and silvicultural prescriptions. *Bureau of Land Management Silviculture Training Workshop*. Sisters, OR.
18. **Kimsey, M.** and D. Roche. 2010. Site preparation effects on selected Andisol soil properties and Douglas-fir growth after 24 years. *International Energy Association Bioenergy 43 Workshop*. Kamloops, British Columbia, CA.
17. **Kimsey, M.\***, M. Coleman, and T. Shaw. 2010. Site type initiative: Characterizing principal factors defining forest site type. *USDA-NRCS MLRA 43A Working Group Meeting*. Moscow, ID.

16. **Kimsey, M.**, M. Coleman, and T. Shaw. 2010. Conceptual framework for defining forest site types across the Inland Northwest. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, ID.
15. **Kimsey, M.** 2009. Geospatial modeling of Douglas-fir productivity. *GIS in the Rockies*. Loveland, CO.
14. **Kimsey, M.\*** 2009. Geology and soils of the Inland Northwest. *Washington Department of Natural Resources Silviculture Workshop*. Colville, WA.
13. **Kimsey, M.**, M. Coleman, and T. Shaw. 2009. Developing geospatial site type classification systems for forest nutrition management. *AF&PA – US DOE OIT Agenda 2020 Annual Meeting*. Vancouver, WA.
12. **Kimsey, M.**, M. Coleman, T. Shaw, and L. Johnson. 2009. Nutrient management: effects on future forest productivity. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, ID
11. **Kimsey, M.\*** 2008. Silviculture and management of Inland Northwest forests – Assessing forest productivity on volcanic ash-influenced forest soils. *BLM Silviculture Training Workshop*. Bend, OR.
10. **Kimsey, M.**, M. Coleman, T. Shaw, M. Johnston, and L. Johnson. 2008. Climatic and geologic controls on volcanic ash-influenced forest soils. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, ID.
9. **Kimsey, M.**, T. Shaw, and L. Johnson. 2007. Soil resin capsule nutrition analysis from cut-to-length and whole tree harvesting units. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, ID.
8. **Kimsey, M.\*** 2007. Forest growth and nutrition consequences of intensive harvesting treatments. *24th Annual Inland Empire Forest Engineering Conference*. Moscow, ID.
7. **Kimsey, M.**, J. Mandzak, D. Miller, P. McDaniel, and L. Johnson. 2006. Soil volcanic ash and Douglas-fir (*Pseudotsuga menziesii* var. *glauca*) productivity in western Clearwater County, Idaho. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, ID.
6. **Kimsey, M.\*** and P. McDaniel. 2005. Depositional history, current distribution, and field recognition of ash-cap soils. *Symposium - Volcanic Ash-Cap Forest Soils of the Inland Northwest: Properties and Implications for Management and Restoration*. Coeur d'Alene, ID.
5. **Kimsey, M.** J.A. Moore, and P. McDaniel. 2004. Use of environmental and terrain attributes to model volcanic ash distribution in northern Idaho. *Soil Science Society of America Conference*. Seattle, WA. (Poster).
4. **Kimsey, M.**, J.A. Moore, and P. McDaniel. 2003. Sulfate sorption in ash-influenced soils of the Inland Northwest. *4th North American Forest Ecology Workshop*. Corvallis, OR. (Poster).
3. **Kimsey, M.** P. McDaniel, J.A. Moore, and J. Mandzak. 2002. Volcanic ash and sulfate sorption in the Inland Northwest: implications for forest health management. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, Idaho.
2. **Kimsey, M.**, M. Johnston, T. Shaw, J.A. Moore. 2001. Surficial soil deposits: forest nutrition and fertilization. *Western Society of Soil Science Annual Meeting*. University of Idaho, Moscow, ID.
1. **Kimsey, M.**, J.A. Moore, T. Shaw, M. Johnston, and P. Mika. 2001. Vector Analysis of Western Larch Nutrient Status: A New Approach. *Intermountain Forest Tree Nutrition Cooperative Annual Meeting*. Moscow, Idaho.

**Grants and Contracts Awarded:**

**Total funding:** \$2,363,393; **as PI:** \$903,827

**Since 2015:** \$1,539,006; **as PI:** \$760,460\*

\*Does not include ~\$200,000 in annual research expenditures as IFC Director

50. **Kimsey, M.** 2021. USDA-NRCS Soil Moisture Regime Monitoring - Phase 2. 2021. *USDA Natural Resources Conservation Service*. \$150,000.
49. **Kimsey, M.,** P. Gessler, and R. Heiderman. 2021. Review and analysis of system methods. *Idaho Forest Group*. \$57,657.
48. Coleman, M. and **M. Kimsey**. 2021. NSF-CAFS Supplemental Funding: Evaluating site productivity through remote sensing: tools for intensive management of commercial conifer species. *Center for Advanced Forestry Systems*. \$52,285.
47. Shaw, T. and **M. Kimsey**. 2020. Applied silviculture research. *PotlatchDeltic Corporation*. \$44,750.
46. **Kimsey, M.,** P. Gessler, J. Eitel and R. Heiderman. 2020. Methodological review. *Idaho Forest Group*. \$20,203.
45. **Kimsey, M.** 2020-2023. Developing geospatial site productivity indices for northern California mixed conifer forests. *New Forests*. \$161,936.
44. **Kimsey, M.** and R. Heiderman. 2019. Evaluating UAV LiDAR for deriving forest inventory metrics. *UI-ORED 2019 RISE-Jumpstart*. \$25,029.
43. Shaw, T. and **M. Kimsey**. 2019. Applied silviculture research. *PotlatchDeltic Corporation*. \$67,400.
42. Shaw, T. and **M. Kimsey**. 2019-2020. Maximum productivity site preparation-release study. *Hancock Forest Management*. \$21,850.
41. Shaw, T. and **M. Kimsey**. 2018-2024. Nitrogen and sulfur fertilization trials by soil strata. *Stimson Lumber Company*. \$26,900.
40. Shaw, T. and **M. Kimsey**. 2018-2019. Douglas-fir response to N+S fertilization in northeastern Washington – Rocky Gorge. *Stimson Lumber Company*. \$4,200.
39. Shaw, T. and **M. Kimsey**. 2018-2019. Maximum productivity site preparation-release study. *Hancock Forest Management*. \$23,000.
38. Shaw, T. and **M. Kimsey**. 2018. Applied silviculture research. *PotlatchDeltic Corporation*. \$78,250
37. Coleman, M., D. Johnson, P. Goebel. **M. Kimsey**, T. Hudiberg, and A. Nelson. 2018. Gap analysis instrument for measuring leaf area of forest canopies. *UI-ORED 2018 EIS Request*. \$7,025.
36. Coleman, M. and **M. Kimsey**. 2017-2021. Pacific Northwest maximum stand density index modeling. *USDA Forest Service Region 6*. \$54,000.
35. **Kimsey, M.** and T. Shaw. 2017-2023. Western larch thinning and fertilization growth and yield trial. *Stimson Lumber Company*. \$31,500.
34. **Kimsey, M.** and T. Shaw. 2017-2020. Post-fire reforestation on WA DNR productive sites in northeast Washington. *Washington Dept. of Natural Resources*. \$36,000.
33. McDaniel, P. and **M. Kimsey**. 2017-2020. Soil moisture regimes in seasonally dry landscapes of the northwestern United States. *USDA Natural Resources Conservation Service*. \$100,000.



32. Coleman, M. and **M. Kimsey**. 2017-2018. REU: Herbicide effects on outplanted conifer seedlings grown in differing soil types. *Center for Advanced Forestry Systems*. \$16,000.
31. Shaw, T. and **M. Kimsey**. 2017-2018. Maximum productivity site preparation-release study. *Hancock Forest Management*. \$21,050.
30. **Kimsey, M.** 2017. Forest inventory data collection toolkit. *USDA Natural Resources Conservation Service*. \$9,968.
29. **Kimsey, M.**, T. Shaw, M. Coleman. 2017. Calibration of FVS Inland Empire (IE) Variant for Potlatch's Idaho forest. *Potlatch Corporation*. \$19,996.
28. Shaw, T. and **M. Kimsey**. 2017. North Idaho conifer growth and yield by soil x productivity strata. *Potlatch Corporation*. \$50,000.
27. Shaw, T. and **M. Kimsey**. 2017. Potlatch land holdings density and fertilization research trials. *Potlatch Corporation*. \$46,886.
26. **Kimsey, M.** and A.S. Davis. 2016-2019. Camas propagation research for restoration of Weippe Prairie, Nez Perce national historical park. *US National Park Service*. \$82,586.
25. **Kimsey, M.**, T. Shaw, and M. Coleman. 2016-2018. Herbicide effects on outplanted conifer seedlings grown in differing soil parent materials. Industrial private timberlands collaborative: *Potlatch Corporation, Hancock Forest Management, Molpus Timberlands, Stimson Lumber*. \$52,194.
24. Shaw, T. and **M. Kimsey**. 2016-2017. Stimson OPFERT Foliar and 2-Year growth response. *Stimson Lumber Company*. \$4,500.
23. Shaw, T. and **M. Kimsey**. 2016. Nutrition, growth and yield, and density management research. *Potlatch Corporation*. \$50,020.
22. Shaw, T. and **M. Kimsey**. 2016. Hancock maximum productivity herbicide study. *Hancock Forest Management*. \$21,850.
21. Apostol, K., A.S. Davis, and **M. Kimsey**. 2015-2016. Developing a database for native seed production. *USDA Forest Service*. \$30,000
20. **Kimsey, M.**, T. Shaw, and M. Coleman. 2015-2016. Herbicide effects on outplanted conifer seedlings grown in differing soil parent materials. Industrial private timberlands collaborative: *Potlatch Corporation, Hancock Forest Management, Molpus Timberlands, Stimson Lumber*. \$52,194.
19. **Kimsey, M.**, T. Shaw, M. Coleman, K. Apostol, and A.S. Davis. 2015-2016. Herbicide effects on greenhouse conifer seedlings grown in differing soil parent materials. Industrial private timberlands collaborative: *Potlatch Corporation, Hancock Forest Management, Molpus Timberlands, Stimson Lumber*. \$54,952.
18. T. Shaw. And **M. Kimsey**. 2015. Nutrition, growth and yield, and density management research. *Potlatch Corporation*. \$58,580.
17. **Kimsey, M.** 2015. Geospatial distribution models for whitebark pine ponderosa pine and bluebunch wheatgrass. *USDA Forest Service*. \$6,245.
16. Shaw, T. and **M. Kimsey**. 2014-2021. Stimson operational fertilization monitoring plots. *Stimson Lumber Company*. \$23,700.
15. Shaw, T. and **M. Kimsey**. 2014-2015. Hancock maximum productivity herbicide study. *Hancock Forest Management*. \$12,600.
14. **Kimsey, M.**, C. Chase, and R. Keane. 2013-2015. Testing the validity of Forest Vegetation Simulator maximum stand density estimates. *Wildland Fire Science Partnership*. \$20,000.

13. **Kimsey, M.** 2013. Digital soil mapping of Panther Creek watershed. *US Environmental Protection Agency*. \$2,950.
12. **Kimsey, M.** 2012-2014. A geospatial site index model for Idaho forest Ecological Site Description development. *USDA Natural Resources Conservation Service*. \$32,714.
11. Shaw, T. and **M. Kimsey**. 2012-2013. Density, fertilization and site quality effects on western larch. *Plum Creek Timber*. \$20,538.
10. **Kimsey, M.** 2010-2011. Washington State Wood-5 project forest plot inventory database development. *USDA Natural Resources Conservation Service*. \$26,703.
9. Neuenschwander, R., M. Coleman, and **M. Kimsey**. 2009-2010. Borlaug Fellowship. *Agricultural Science and Technology, Foreign Agricultural Service, US Department of Agriculture*. \$27,108.
8. Shaw, T., **M. Kimsey**, and M. Coleman. 2009-2010. Brickel Creek operational fertilization study. Inland Empire Paper, Idaho Dept. of Lands, and Forest Capital Partners Joint Research Grant. \$7,500.
7. Coleman, M., D. Page-Dumroese, D. Hoover, R. Lewis, **M. Kimsey**, T. Shaw, and P. Mika. 2008-2011. Geospatial site type classification system for forest nutrient management. *Agenda 2020*. \$150,000.
6. Johnson, L., Shaw, T., and **M. Kimsey**. 2007-2012. Post-harvest fertilization as mitigation for nutrient removals. *USDA Forest Service*. \$136,857.
5. Shaw, T. and **M. Kimsey**. 2007-2011. Young stand development under varying densities and fertilization regimes. *Washington Dept. of Natural Resources*. 2007-2011. \$109,000.
4. **Kimsey, M.** 2007-2009. Douglas-fir site index model development for Latah and Clearwater County, Idaho. *Idaho Department of Lands*. \$11,500.
3. Shaw, T. and **M. Kimsey**. 2006-2008. Fertilization, herbicide and site quality effects on western larch growth and foliar nutrition. *Plum Creek Timber*. \$43,717.
2. Johnson, L., M. Johnston, T. Shaw, P. Mika, and **M. Kimsey**. 2004-2007. Volcanic ash, forest productivity, and fertilization response of coniferous species in the Inland Northwest. *Agenda 2020*. \$150,000.
1. **Kimsey, M.**, J.A. Moore, and P. McDaniel. 2004-2006. Volcanic ash and Douglas-fir productivity. *Potlatch Corporation*. \$49,500

#### **Pending Grant Proposals:**

1. **Kimsey, M.**, P. Gessler, A. Smith, B. Stribmu, W. Tinkham. 2021. Revisioning precision forestry through tree level monitoring and modeling. NIFA-AFRI. \$800,000.

#### **SERVICE:**

##### **Committee Assignments:**

##### University of Idaho:

2016-2019                      Officer Education Committee, Chair

##### University of Idaho College of Natural Resources:

2017-2018                      Fish and Wildlife research faculty search committee

2020-present                    Dean's Leadership Council

2020-present                    Forest Enterprise Team

**Professional and Scholarly Organizations:**

2018-present	2023 North American Forest Soils Conference, planning group
2018-present	Society of American Foresters A-2: Technology working group
2017-present	Society of American Foresters A-1: Inventory/Biometrics working group
2016-present	Idaho Geological Mapping Advisory Committee
2010-present	USDA NRCS MLRA 43 Ecological Site Description working group
2007-present	USDA NRCS Dynamic Soil Properties working group
2006-present	Soil Science Society of America, member
2000-present	Society of American Foresters, member
2018-2021	Northwest Forest Soils Council, Past-president
2016-2021	The Society of Xi Sigma Pi, The National Forestry Honor Society, National President
2012-2018	Panther Creek Watershed working group
2015-2018	Northwest Forest Soils Council, President
2012-2015	Northwest Forest Soils Council, Vice President
2006-2009	Society of American Foresters, Palouse-Snake River Chapter, chair

Journal reviewer: Forest Ecology and Management, Forest Science, Forestry Chronicle, Forests, Canadian Journal of Forest Research, European Journal of Forest Research, Western Journal of Applied Forestry, Soil Science Society of America Journal, Open Journal of Soil Science, Geoderma.

Guest Editor: Canadian Journal of Forest Research, August 2021 Special Issue: Advances in forest mensuration and biometrics. <https://doi.org/10.1139/cjfr-2021-0202>

**Conference Organization / Session Moderation:**

Annually	Intermountain Forestry Cooperative Technical Meeting, Chair.
2019-2020	Western Mensurationists Annual Meeting, Chair
2019	Society of American Foresters Convention, Symposia Chair: Forest technology in the classroom (2 sessions).
2018	Western Forestry and Conservation Association Conference, Chair: Applied early stand silviculture in the Inland Northwest.
2018	Northwest Forest Soils Council Winter Meeting, Chair: The state of forest soils in the Pacific Northwest.
2017	Society of American Foresters Convention, Workshop Chair: Mobile inventory solutions for forest measurement education.
2017	Northwest Forest Soils Council Winter Meeting, Chair and Presenter. Geospatial modelling of soil, rock and the forested landscape.
2016	Northwest Forest Soil Council Field Tour, Chair and Lead. The Tripod Fire.
2016	Society of Ecological Restoration Northwest Conference, Symposia Co-Chair: Using geoeological zones to restore vegetation and soils at the project and landscape level.
2016	Society of Ecological Restoration Northwest Conference, Symposia Co-Chair: Management impacts on soil organic carbon, hydrology and biotic communities.
2016	Society of Ecological Restoration Northwest Conference, Workshop Chair: Soil Survey Support for Restoration Planning: Utilizing Web Soil Survey and the ArcMAP Soil Data Viewer Extension.
2015	Northwest Forest Soils Council Conference, Chair: Advances in applied ecosystem research: Implications for Northwest forest and range management.
2014	Northwest Forest Soil Council Field Tour, Chair and Lead. Forests and soils from the rivers to the ice: Ecological function and management.
2014	ASA-CSA-SSSA Conference, Session Moderator
2013	Western Forestry and Conservation Association Conference, Co-Chair: Management of volcanic ash influenced forest soils of the Inland Northwest.

- 2013 12<sup>th</sup> North American Forest Soils Conference, Program committee member, website developer, field tour coordinator, and presenter: The role of forest soils in sustaining ecosystem services.
- 2012 Society of American Foresters Convention, Program Development and Field Tour Committee: Resilient forests.
- 2010 Inland Empire Society of American Foresters Conference, Program Development Committee: The fires of 1910: A century later.
- 2009 Inland Empire Society of American Foresters Conference, Co-Chair: Managing our forests in challenging times.
- 2008 Inland Empire Society of American Foresters Conference, Chair: The challenges of forest management in the Inland Northwest.
- 2008 Inland Empire Society of American Foresters Conference Workshop, Chair and Presenter. Using NRCS Web Soil Survey and Soil Data Mart to extract and display soil and timber productivity data.
- 2008 Palouse-Snake River Society of American Foresters Field Tour, Chair and Lead: Craig Mountain Wildlife Management Area and Chimney Complex fire.
- 2007 Inland Empire-Montana Society of American Foresters Conference, Co-Chair: The changing role of forestry in the Inland Northwest.
- 2007 Palouse-Snake River Society of American Foresters Field Tour, Chair and Lead: Puget Sound Windmill farm and the Columbia Complex fire.
- 2005 Western Forestry and Conservation Association Conference, Moderator: Soils of the Douglas-fir region: Fundamentals and management practices.

#### **Outreach Service:**

- Annually Intermountain Forestry Cooperative: Forest management science and technology knowledge transfer (workshops/site visits) to USDA Forest Service Region 1 and 6, USDI Bureau of Land Management, Washington Department of Natural Resources, Idaho Department of Lands, Potlatch Corporation, Hancock Forest Management, Molpus Timberlands, Stimson Lumber Company, Bennett Lumber Company, Inland Empire Paper Company, New Forests-US, Idaho Forest Group.
- 2018 Forest research and adaptive management: silviculture strategies in a dynamic environment. Idaho Master Stewards Fall Meeting. Cottonwood, ID.
- 2017 USDA Forest Service Regional Tree Improvement Area Management Meeting. Riggins, ID
- 2015 Vaagen Brothers Annual Contractor Workshop. Colville, WA.
- 2014 USDA-NRCS District Soil Conservationist Annual Meeting.
- 2012-present University of Idaho Extension Logger Education Workshops (LEAP).
- 2012 Northeast Washington Forest Soil Management. Washington Tree Farm Association. Usk, WA.

#### **Honors and Awards:**

- 2008 Outstanding Communicator of the Year, Inland Empire Society of American Foresters
- 2008 STAR Recipient, Palouse Marketing Committee