

*CURRICULUM VITAE*  
**DOUGLASS FREDERICK JACOBS**

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**EDUCATION**

- Ph.D., 2001. Department of Forest Science, Oregon State University, Corvallis, Oregon USA.
- M.S., 1998. Warnell School of Forest Resources, University of Georgia, Athens, Georgia USA.
- B.A., 1993. Emory University, Atlanta, Georgia USA.

**APPOINTMENTS**

- Full Professor (since 2011), Fred M. van Eck Endowed Chair of Forest Biology (since 2012). Department of Forestry and Natural Resources (FNR), Purdue University USA.
- US Fulbright Scholar to Sweden (2023-24).
- Director (since 2017). Tropical Hardwood Tree Improvement and Regeneration Center [www.trophirc.org](http://www.trophirc.org)
- Site Director (since 2015), National Science Foundation Industry/University Cooperative Research Center (NSF I/UCRC) – Center for Advanced Forestry Systems
- Editor-in-Chief (since 2010), *New Forests* (Springer Publishers, 2022 ISI Impact Factor = 2.2).
- Associate Head (2014-2023), FNR, Purdue University.

**VISITING PROFESSORSHIPS**

- 2023-24. Swedish Agricultural University. Alnarp, Sweden.
- 2016. College of Tropical Agriculture and Human Resources, University of Hawaii. Manoa, Hawaii.
- 2013. College of Forestry & Landscape Architecture. South China Agricultural University. Guangzhou.
- 2008-09. School of Forest Engineering, Technological University of Madrid, Spain.

**RESEARCH:** Emphasis on forest regeneration (nursery culture, site preparation, and planting) and pest resistance of threatened forest tree species, with implications for reforestation and ecological restoration. Publications cited **>11,000 times, h-index 56** [[Google Scholar](#)] and **>6,400 times, h-index 44** [ISI Web of Science].

**PUBLICATIONS** (recent selections, of 212 refereed journal articles). Complete list [here](#).

- Jacobs DF *et al.* **2023**. Reintroduction of at-risk forest tree species using biotechnology depends on regulatory policy, informed by science and with public support. *New Forests* 54:605-636.
- Brennan AN, Ma Z, Jacobs DF. **2023**. Perceptions of land managers towards using hybrid and genetically modified trees. *New Forests* 54:605-636.
- Gatti RC *et al.* **2022**. The number of tree species on Earth. *Proceedings of the National Academy of Sciences* 119:e2115329119.
- Luiz BC *et al.* **2023**. Framework for establishing a Rapid ‘Ōhi‘a Death resistance program. *New Forests* doi:10.1007/s11056-021-09896-5
- Gustafson EJ, Miranda BR, Dreaden TJ, Pinchot CC, Jacobs DF. **2022**. Beyond blight: *Phytophthora* root rot under climate change limits populations of reintroduced American chestnut. *Ecosphere* 13:e3917.
- Liang J *et al.* **2022**. Co-limitation toward lower latitudes shapes global forest diversity gradients. *Nature Ecology and Evolution* 6:1423–1437.
- Brennan AN, McKenna JR, Hoban SM, Jacobs DF. **2020**. Hybrid breeding for restoration of threatened forest trees: evidence for incorporating disease tolerance in *Juglans cinerea*. *Frontiers in Plant Science* 11:580693.

- Ebrahimi A, Lawson SS, McKenna JR, Jacobs DF. **2020**. Morpho-physiological and genomic evaluation of *Juglans* species reveals regional maladaptation to cold stress. ***Frontiers in Plant Science*** 11:229.
- Rose KME, Friday JB, Oliet JA, Jacobs DF. **2020**. Canopy openness affects microclimate and performance of underplanted trees in restoration of high-elevation tropical pasturelands. ***Agricultural and Forest Meteorology*** 292–293:108105.
- Löf M, Madsen P, Metslaid M, Witzell J, Jacobs DF. **2019**. Restoring forests: regeneration and ecosystem function for the future. ***New Forests*** 50:139-152.
- Gustafson EJ, Sturtevant BR, de Bruijn AMG, Lichti NI, Jacobs, DF, Kashian DM, Miranda BR, Townsend PA. **2018**. Forecasting effects of tree species reintroduction strategies on carbon stocks in a future without historical analog. ***Global Change Biology*** 24:5500-5517.
- Wallin E., Gräns D, Jacobs DF, Lindström A, Verhoef N. **2017**. Short-day photoperiods affect expression of genes related to dormancy and freezing tolerance in Norway spruce seedlings. ***Annals of Forest Science*** 74:59.
- Jacobs DF, Oliet JA, Aronson J, Bolte A, Bullock JM, Donoso PJ, Landhäuser SM, Madsen P, Peng S, Rey Benayas JM, Weber JC. **2015**. Restoring forests: what constitutes success in the twenty-first century? ***New Forests*** 46:601-614.
- Jacobs DF, Dalgleish HJ, Nelson CD. **2013**. A conceptual framework for restoration of threatened plants: the effective model of American chestnut (*Castanea dentata*) reintroduction. ***New Phytologist*** 197:378-393 (Tansley Review).

**GRADUATE STUDENTS SUPERVISED:** 6 current (5 Ph.D., 1 M.S.), 35 completed (11 PhD, 24 MS)

**POST-DOCTORAL SCIENTISTS SUPERVISED:** 17; **VISITING INTERNATIONAL SCIENTISTS SUPERVISED:** 19

### TEACHING

- Dendrology Fall 2002-2024 (except 2008, 2016, 2023).
- Forest Regeneration Fall 2004, 2006, 2009, 2011, 2013, 2015, 2018, 2020
- Silviculture week of summer practicum Summer 2003-2008, 2015, 2017, 2019-2020, 2022, 2024
- International Natural Resources Practicum (with NC State and SLU in Sweden) Summer 2005, 2007-08, 2012-13, 2015-19. 2023-24.
- Guest lecturer in international courses: 2021-2023, Forest regeneration, SLU, Sweden; 2021-2023, Broadleaves, SLU, Sweden; 2023, Forest and Landscapes, SLU, Sweden; 2013, Ecophysiology of plantation establishment, Universidad Austral de Chile, Valdivia, Chile; 2012, Forest Restoration in Theory and Practice, SLU, Frostavallen, Sweden; 2011, Afforestation for sustainable forest management, (INIA), Madrid, Spain

### SYNERGISTIC ACTIVITIES

- Symposia Organizing Committee: IUFRO Forest Seedling Root Development and Function, *virtual* (2021); IUFRO 3<sup>rd</sup> Restoring Forests, Lund, Sweden (2017); IUFRO Forest Regeneration in Challenging Environments, Oregon, USA (2017); IUFRO Forest Science Publishing, Helsinki, Finland (2015); IUFRO 2<sup>nd</sup> Restoring Forests, Indiana, USA (2014); IUFRO Nutrient Dynamics of Planted Forests, Washington, USA (2012); IUFRO 1<sup>st</sup> Restoring Forests, Madrid, Spain (2011)
- Coordinator, IUFRO Research Group 1.06.00, Restoration of Degraded Sites (2019-present); Coordinator, IUFRO Research Group 2.01.15, Whole Plant Physiology (2013-present); Deputy, IUFRO Research Group 1.06.00, Restoration of Degraded Sites (2015-2019); Deputy, IUFRO Research Group 9.01.06, Forest Science Publishing (2015-present)