GAURAV DHUNGEL

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EDUCATION

- **Ph.D.**
  Forestry and Environmental Resources, North Carolina State University, 2025.
  - Minor: Economics
  - Dissertation: *Long-term Sustainability of Oak Resource in the US: Role of Management and Markets*
    - Advisor: Dr. Justin S. Baker
- **M.S.**
  Forest and Natural Resource Science, University of Kentucky, 2021.
  - Thesis: *Sustainability and Economics of White Oak (Quercus alba) Timber Supply in Kentucky*
    - Advisor: Dr. Thomas O. Ochuodho
- **B.S.**
  Forestry, Tribhuvan University, Institute of Forestry Hetauda Campus, 2018.
  - Thesis: *Investigating Habitat and Conservation Issues of Re-introduced Wild Water Buffalo in Chitwan National Park, Nepal*
    - Advisor: Dr. Damodar Gaire

- **Technical Certificate**
  Forestry, Tribhuvan University, Institute of Forestry Hetauda Campus, 2013.

POSITIONS AND AFFILIATIONS

- **Postdoctoral Research Scholar**
  - Dept. of Forestry and Environmental Resources, NC State University. July 2026-Present.
    - Project: *Expanding and repurposing the scope of SubRegional Timber Supply (SRTS) model to Western US.*
- **ORISE Research Fellow**
  - USDA Forest Service-Southern Research Station. July 2025-June 2026.
    - Project: *Economic analysis and modeling on hardwood management and novel markets for biochar sourced from hardwood pulpwood.*
- **Graduate Research Assistant, Baker Resource Economics and Sustainability Lab**
  - Dept. of Forestry and Environmental Resources, NC State University. 2021-2025.
- **Student Affiliate, Southern Forest Resource Assessment Consortium (SOFAC)**
  - Dept. of Forestry and Environmental Resources, NC State University. 2021-2025.
- **Graduate Student Affiliate**
  - Center for Environmental and Resource Economic Policy. 2021-2025.
- **Graduate Research Assistant, Integrated Biophysical-Economic Analysis and Modeling Lab**
  - Dept. of Forestry and Natural Resources, University of Kentucky. 2019-2021.

HONORS AND AWARDS

- AERE Summer Conference Travel Scholarship. 2024.
- Camp Resources XXIX Travel Support. 2023.
- Student Diversity Scholar. Society of American Foresters. 2021.
- University Graduate Fellowship. Dept. of Forestry and Environmental Resources, North Carolina State University. 2021
- Graduation Regalia Award. University of Kentucky. 2021.
- Graduate Student Award of Excellence. Dept. of Forestry and Natural Resources, University of Kentucky. 2021.
- WWF Nepal Research Grant. 2018.
- IDEA WILD Equipment Support. 2018.
- Outstanding Students Scholarship. Institute of Forestry Hetauda Campus, Tribhuvan University. 2014-2018.

PUBLICATIONS AND OTHER MANUSCRIPTS

Journal Articles

Dhungel, G., Baker, J., Henderson, J.D., Cook, R. (2026). Acorn review: Biochar and its applications in US Forestry. *Forest Ecology and Management*. 620, 124134. https://doi.org/10.1016/j.foreco.2026.124134

Dhungel, G., Baker, J., Henderson, J.D. **(**2026). Physical Presence, Practical Absence: Accessibility of Timber Inventory in the Eastern US. *Trees, Forests and People.* 23(1), 101155. https://doi.org/10.1016/j.tfp.2026.101155

Dhungel, G., Ochuodho, T.O. (2024). Economic Impacts of Projected White Oak (*Quercus alba* L.) Timber Supply in Kentucky: A CGE Model Analysis. *Forests.* 15(1), 93. https://doi.org/10.3390/f15010093

Dhungel, G., Ochuodho, T.O., Lhotka, J.M., Stringer, J.W., Poudel, K. (2024). Sustainability of White Oak (*Quercus alba*) Timber Supply in Kentucky. *Journal of Forestry.* 122(1), 79-90. https://doi.org/10.1093/jofore/fvad041

Dhungel, **G.**, Rossi, D., Henderson, J.D., Abt, R.C., Sheffield, R., Baker, J.S. (2023). Critical Market Tipping Points for High-Grade White Oak Inventory Decline in the Central Hardwood Region of the United States. *Journal of Forestry*. 121(3), 224-234. https://doi.org/10.1093/jofore/fvad005

Manner, R.H., **Dhungel, G.**, Abt, R.C., Baker, J.S. (2026). Introducing pySRTS: The next generation of the SubRegional Timber Supply Model. *Journal of Forest Business Research*. 5(1), 61-97. https://doi.org/10.62320/jfbr.v5i1.93

Adhikari, R.K., Poudyal, N.C., Ochuodho, T.O., Parajuli, R., Joshi, O., Mehmood, S.R., Munsell, J.F., **Dhungel**, **G**., Thomas, W., Crocker, E., Zhou, M. (2023). Predictors of Landowners' Intention to Manage Emerald Ash Borer in Kentucky. *Forest Science*. 69(4), 452-462. https://doi.org/10.1093/forsci/fxad008

Adhikari, R.K., Poudyal, N.C., Ochuodho, T.O., Parajuli, R., Joshi, O., Mehmood, S.R., Munsell, J.F., **Dhungel**, **G**., Thomas, W., Crocker, E., Zhou, M. (2023). Understanding Forest Landowner Attitudes, Perceived Risk, and Response to Emerald Ash Borer in Kentucky. *Journal of Forestry*. 121(2), 157–167. https://doi.org/10.1093/jofore/fvac040

Poudel, K., Ochuodho, T.O., **Dhungel, G.** (2023). Economic Contribution of the Forest Sector in Kentucky: Community Dependence and Economic Well-Being. *Journal of Forestry*. 121(2), 135–144. https://doi.org/10.1093/jofore/fvac038

Dhungel G., Thanet, D.R. (2019). Investigating Habitat Suitability and Conservation Issues of Re-introduced Wild Water Buffalo in Chitwan National Park, Nepal. *Forestry: Journal of Institute of Forestry*. 16: 1-13. https://doi.org/10.3126/forestry.v16i0.28350

Technical Reports

Rossi, D., **Dhungel, G.**, Baker, J.S**.**, Abt., R.C. (2023). *Quantifying Intra-regional Carbon Leakage Potential from Multi-year Harvest Deferral Programs in the Southern United States.* Prepared for National Council for Air and Stream Improvement (NCASI).

Stringer J.W., Thomas, B., Ammerman, B., Niman, C., Agyeman, D., **Dhungel**, **G.**, Ochuodho, T.O. (2020). *Kentucky Forest Sector Economic Contribution Report 2018-2019.* Department of Forestry and Natural Resources, Forestry Extension Office, University of Kentucky.

Blog Posts

Dhungel, G. (2026). How Much Wood Is Out There? It Depends on the Method.

Dhungel, G. and Baker, J.S. (2024). New Markets for Small Roundwood and Forest Residues in Appalachia.

- Featured in *National Woodlands Magazine*. 47(2).

Dhungel, G., Rossi, D., Baker, J.S. (2023). Demand growth and price responsiveness can influence inventory tipping points of high-grade white oak.

Manuscripts in Progress

Dhungel, G., Baker, J.S., Forrester, J.A., Sills, E.O. **(**2025). Management, Markets, and Mesophication: An Empirical Exploration of Oak Forests in the Southeastern US. *Under Review*. https://dx.doi.org/10.2139/ssrn.5166393

Dhungel, G., Baker, J.S., Henderson, J.D. (2026). An Economic Model of Hardwood Management and Markets in the Southern Appalachian Region (SAR). *In Preparation*.

Manner, R.H., **Dhungel, G.**, Fuller, M., Clutter, M., Sodiya, O., Baker, J.S. (2026). Projecting the Spatiotemporal Scope and Extent of Resource and Market Impacts of Forest Product Mill Closures. *In Preparation*.

TECHNICAL SKILLS

RStudio | Computable General Equilibrium (CGE) modeling | Forest Inventory and Analysis (FIA) Data and Tools | Forest Vegetation Simulator (FVS) | IMPLAN | SubRegional Timber Supply (SRTS) | ArcGIS Pro | SQLite | General Algebraic Modeling System (GAMS) | Overleaf | GitHub

PROFESSIONAL SERVICE

- Handle SRTS data request for SOFAC members, 2024.
- Association of Environmental and Resource Economists Summer Conference, 2024 (**Moderator**).
- Association of Environmental and Resource Economists (**Past Member**).
- Society of American Foresters (**Member**).
- International Society of Forest Resource Economics (**Member**).
- University of Kentucky Graduate Student Congress (**Past Member**).
- Rotaract Club of Hetauda (**Past Member**)
- Journal of Forestry (**Reviewer**)
- Canadian Journal of Forest Research (**Reviewer**)
- Journal of Sustainable Forestry (**Reviewer**)
- Forests (**Reviewer**)

PROFESSIONAL PRESENTATION

Dhungel, G., Baker, J.S., and Henderson, J.D. **(**2026, October). *An Economic Model of Hardwood Management and Markets in the Southern Appalachian Region (SAR)*. SAF National Convention. Tacoma, WA.

Dhungel, G., and Baker, J.S. **(**2026, September). *Expanding SubRegional Timber Supply (SRTS) Model to Western US*. SOFAC Annual Meeting. North Carolina State University.

Dhungel, G., Baker, J.S., and Henderson, J.D. **(**2026, May). *An Economic Model of Hardwood Management and Markets in the Southern Appalachian Region (SAR)*. SOFAC Technical Meeting. North Carolina State University.

Dhungel, G., Baker, J.S., and Henderson, J.D. **(**2026, May). *An Economic Model of Hardwood Management and Markets in the Southern Appalachian Region (SAR)*. 2026 ISFRE and WFE Joint Meeting. Fort Collins, CO.

Dhungel, G. and Baker, J.S. **(**2025, September). *Economics of Sustainable Oak Management in the Southern Appalachian Region*. SOFAC Annual Meeting. North Carolina State University.

Dhungel, G. and Baker, J.S. **(**2025, March). *Potential Alternative Management Practices for Sustaining Oak Forests in the Southern Appalachian Region*. SOFAC Technical Meeting. North Carolina State University.

Dhungel, G. (2025, February). *Managing Forest for Multiple Objectives Under Changing Forest Dynamics: A Case for Upland Oak Forests in the US*. Guest Lecture Natural Resource Management (NR 400/500). North Carolina State University.

Dhungel, G. and Baker, J.S. **(**2024, October). *Management, Market, and Mesophication: An Empirical Exploration of Oak Forests in the Southeast*. International Oak Symposium. Knoxville, TN.

Dhungel, G. and Baker, J.S. **(**2024, October). *Potential Costs and Benefits of Alternative Oak Management Regimes in the Central Hardwood Region of the US*. International Oak Symposium. Knoxville, TN.

Dhungel, G. and Baker, J.S. **(**2024, August). *Updates on Hardwood Research*. SOFAC Annual Meeting. North Carolina State University.

Dhungel, G. and Baker, J.S. **(**2024, August). *Hardwood Modeling: Management and Accessibility*. Forest Carbon Economics and Modeling Workshop. The University of Maine.

Dhungel, G. and Baker, J.S. **(**2024, May). *Management, Market, and Endogenous Ecological Change: An Empirical Exploration of Oak Forests in the US*. Association of Environmental and Resource Economists (AERE) Summer Conference. Washington DC.

Dhungel, G. and Baker, J.S. **(**2024, March). *Management, Market, and Mesophication: An Empirical Exploration of Oak Forests*. Central Hardwoods Forest Conference. Lexington, KY.

Dhungel, G. and Baker, J.S. **(**2024, March). *Biophysical and Social Constraints on Wood and Carbon Availability in the Southeastern US*. Forest Carbon Solutions Initiative. North Carolina State University.

Dhungel, G. and Baker, J.S. **(**2024, February). *Updates on Hardwood Research*. SOFAC Technical Meeting. North Carolina State University.

Dhungel, G. and Baker, J.S. **(**2023, August). *Management Intervention and Endogenous Ecological Change: An Empirical Exploration of Oak Forests*. SOFAC Annual Meeting. North Carolina State University.

Dhungel, G. and Baker, J.S. **(**2023, August*). The Effect of Management Intervention on Mesophication of Historically Oak Dominated Forests*. Camp Resources XXIX. Asheville, NC.

Dhungel, G., et al. **(**2023, February). *Sub-Regional Timber Supply (SRTS) Extension to the Central Hardwood Region*. SOFAC Technical Meeting. North Carolina State University.

Dhungel, G., et al. **(**2022, August). *Critical market tipping points for high-grade white oak inventory decline in the central hardwood region of the United States*. SOFAC Annual Meeting. North Carolina State University.

Dhungel, G., et al. **(**2022, April). *Sustainability of White Oak (Quercus alba) Timber Supply in Kentucky*. Central Hardwoods Forest Conference. Morgantown, WV.

Dhungel, G. and Ochuodho, T.O. **(**2022, April). *Economy-wide impacts of White Oak (Quercus alba) Timber Supply in Kentucky*. Central Hardwoods Forest Conference. Morgantown, WV.

Dhungel, G. and Ochuodho, T.O. **(**2021, November). *Economy-wide impacts of White Oak (Quercus alba) Timber Supply in Kentucky*. Society of American Foresters. Virtual Convention.

Dhungel, G. and Ochuodho, T.O. **(**2021, May). *Economy-wide impacts of White Oak (Quercus alba) Timber Supply in Kentucky*. International Society of Forest Resource Economics. Virtual Convention.

Dhungel, G., et al. **(**2020, October). *Sustainability and Economics of White Oak (Quercus alba) Timber Supply in Kentucky*. Society of American Foresters. Virtual Convention.