

CURRICULUM VITAE

HAN, HAN-SUP

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EDUCATION:

Ph.D., Oregon State University, Corvallis, Oregon, June 1998, Forest Engineering
M.S., University of Maine, Orono, Maine, December 1994, Forest Operations
M.S., Kangwon National University, South Korea, March 1986, Forest Ecology
B.S., Kangwon National University, South Korea, March 1984, Forest Resources

EXPERIENCE:

Associate Professor, Department of Forestry and Wildland Resources, Humboldt State University, Arcata, California, January 2007-present.
Assistant Professor, Department of Forest Products, University of Idaho, Moscow, Idaho, July 2001-December 2006.
Assistant Professor, Forestry Program, University of Northern British Columbia, Prince George, British Columbia, Canada. July 1998-June 2001.
Research Associate (Post-Doctoral), Department of Forest Engineering, Oregon State University, Corvallis, Oregon, USA. January 1998-June 1998.

COURSES TAUGHT:

Humboldt State University:

Introduction to Forest Operations (FOR 250)
Forest Management (FOR 315)
Forest Harvesting and Utilization (FOR 350)
Forest Road Location and Design (FOR 353)
Harvesting Systems Design and Cost Analysis (FOR 450)

University of Idaho:

Production Planning and Cost Control in Forest Industry (FORP 431)
Cable System Analysis (FORP 434)
Operations Analysis in Timber Harvesting (FORP 439)
Forest Products Department Seminar (FORP 501)

University of Northern British Columbia, Canada:

Forest Harvesting Systems (FSTY 302)
Forest Products (FSTY 407)
Forest Practices and Management (FSTY 408)

PUBLICATIONS:

Refereed Publications:

Han, S.-K., H.-S. Han, D.S. Page-Dumroese, and L. Johnson. 2009. Soil compaction associated with cut-to-length and whole-tree harvesting of conifer forest. *Canadian Journal of Forest Research*, In press
Keyes, C., P. Matzka, K. Wright, R. Glebocki, and H.-S. Han. 2008. Early precommercial thinning of redwood sprout clumps: evaluation of four techniques. *International Journal of Forest Engineering*. Vol.19(2): 28-36.

- Allen, T.T., H.-S. Han, and S.R. Shook. 2008. A structural assessment of the contract logging sector in the Inland Northwest. *Forest Products Journal*, Vol.58 (5):27-33.
- Pan, Fei, H.-S. Han, L. Johnson and W. Elliot. 2008. Production and cost of harvesting and transporting small diameter ($\leq 5''$) trees for energy. *Forest Products Journal*, Vol.58 (5):47-53.
- Pan, Fei, H.-S. Han, L. Johnson and W. Elliot. 2008. Net energy output from harvesting small-diameter trees using a mechanized system. *Forest Products Journal*, Vol.58 (1/2):25-30.
- Adebayo, A., H.-S. Han and L. Johnson. 2007. Productivity and cost between cut-to-length and whole tree harvesting in a mixed conifer stand. *Forest Products Journal*, Vol.57 (6):59-69.
- Hartley, D. and H.-S. Han. 2007. Effects of four silvicultural prescriptions on cable harvesting productivity and cost in western Washington. *Western Journal of Applied Forestry*, Vol. 22(3): 204-212. (Selected as the runner up for the Best Paper of the Year 2008)
- Han, H.-S. 2007. Economics of using timber harvesting equipment on ash-cap soils. The USDA Forest Service, General Technical Report RMRS-P-44. 69-82p.
- Johnson, L., D. Page-Dumroese, and H.-S. Han. 2007. Effect of machine traffic on the soil properties of ash cap soils. The USDA Forest Service, General Technical Report RMRS-P-44. 165-172p.
- Froese, K and H.-S. Han. 2006. Residual stand damage from cut-to-length thinning in a mixed conifer stand in northern Idaho. *Western Journal of Applied Forestry*, Vol. 21(3): 142-148.
- Han, H.-S., D. Page-Dumroese, S.-K. Han, and J. Tirocke. 2006. Effect of slash, machine passes, and moisture content on soil strength in a cut-to-length harvesting. *International Journal of Forest Engineering*, Vol. 17(2): 11-24.
- Ryan, H. and H.-S. Han. 2006. A comparison of stump heights between hand and mechanical felling. *Western Journal of Applied Forestry*, Vol. 21(1): 33-38.
- Han, H.-S. and C. Renzie. 2005. Effect of ground slope, stump diameter, and species on stump height for chainsaw and feller-buncher felling, *International Journal of Forest Engineering*, Vol. 16 (2):81-88.
- Han, H.-S. and C. Renzie. 2005. Productivity and cost of partial cut logging to control mountain pine beetle infestations in British Columbia, *Western Journal of Applied Forestry*. Vol. 20 (2): 128-133.
- Han, H.-S., H.W. Lee, and L.R. Johnson. 2004. Economic feasibility of an integrated harvesting system for small-diameter trees in southwest Idaho. *Forest Products Journal*. Vol.54 (2):21-27.
- Han, H.-S., T.W. Steele, and L.D. Kellogg. 2001. DamQuick: A new method for rapidly assessing residual stand damage during partial timber harvests. *Western Journal of Applied Forestry*. Vol. 18 (2):81-87.
- Han, H.-S. and L.D. Kellogg. 2000. Damage characteristics in young Douglas-fir stands from commercial thinning with four timber harvesting systems. *Western Journal of Applied Forestry*. Vol. 15 (1). 27-33.
- Han, H.-S., L.D. Kellogg, G.M. Filip and T.D. Brown. 2000. Scar closure and future timber value losses from thinning damage in western Oregon. *Forest Products Journal*. Vol. 50 (1):36-42.
- Han, H.-S. and L.D. Kellogg. 2000. A comparison of sampling methods and a proposed quick survey for measuring residual stand damage from commercial thinning. *International Journal of Forest Engineering*. Vol. 11 (1): 63-69.

Manuscripts Submitted:

- Bruce, J., H.-S. Han, A.E. Akay, and W. Chung. 2009. Computer-aided cost estimation for forest road construction. Submitted to *International Journal of Forest Engineering*.
- Han, H.-S., J. Halbrook, F. Pan, and L. Salazar. 2008. Economic evaluation of a roll-off trucking system removing forest biomass resulting from shaded fuelbreak treatments. Submitted to *Biomass & Bioenergy Journal*.

Proceedings:

- Han, H.-S., J. Halbrook, F. Pan, and L. Salazar. 2008. Economic evaluation of a roll-off trucking system removing forest biomass resulting from shaded fuelbreak treatments. International Union of Forest Research Organizations (IUFRO) All-D Conference, June 15th – 18th, 2008, Sapporo, Japan.
- Pan, F., H.-S. Han, L. R. Johnson, W. J. Elliot. 2007. Net energy output from harvesting small-diameter trees

- using a mechanized system. The International Mountain Logging and 13th Pacific Northwest Skyline Symposium. Editors: John Sessions and Yvonne Havill, Proc. April 1-6, Corvallis, Oregon, 86-93p.
- Bruce, J., H.-S. Han, A. E. Akay, W. Chung. 2007. A computer application to estimate forest road construction cost. The International Mountain Logging and 13th Pacific Northwest Skyline Symposium. Editors: John Sessions and Yvonne Havill, Proc. April 1-6, Corvallis, Oregon, 129-140p.
- Pan, F., H.-S. Han, L. R. Johnson, W. J. Elliot. 2007. Production and cost of harvesting and transporting small-diameter trees for energy. The International Mountain Logging and 13th Pacific Northwest Skyline Symposium. Editors: John Sessions and Yvonne Havill, Proc. April 1-6, Corvallis, Oregon, 215-225p.
- Halbrook, J., H.-S. Han, R.T. Graham, T.B. Jain, and R. Denner. Mastication: A fuel reduction and site preparation alternative. The 2006 COFE annual meeting. Proc. July 30-Aug.2, 2006, Coeur d'Alene, Idaho, 11p.
- Adebayo, A. and H.-S. Han. 2006. Comparison of harvesting productivity and cost between cut-to-length and whole tree harvesting. The 2006 COFE annual meeting. Proc. July 30-Aug.2, 2006, Coeur d'Alene, Idaho, 9p.
- Han, S.-K. and H.-S. Han. 2006. Impacts on soils from cut-to-length and whole tree harvesting. The 2006 COFE annual meeting. Proc. July 30-Aug.2, 2006, Coeur d'Alene, Idaho, 11p.
- Han, H.-S, D. P.-Dumroese, S.-K. Han, and J. Tirocke. 2005. Effect of slash, machine passes, and soil wetness on soil strength in a cut-to-length harvesting. The 2004 COFE annual meeting. Proc. July 11-14, 2005, Fortuna, California. 7 p.
- Halbrook, J. and H.-S. Han. 2005. Cost and constraints of fuel reduction treatments in a recreational area. The 2004 COFE annual meeting. Proc. July 11-14, 2005, Fortuna, California. 7 p.
- Largo, S. and Han, H.-S. 2004. Economics of an Integrated Harvesting System in Fuel Reduction Thinning in Western Montana. The 2004 COFE annual meeting. Proc. April 27-30, 2004, Hot Springs, AK, 5 p.
- Largo, S., Han, H.-S and L. Johnson. 2004. Productivity and Cost Evaluation for Non-guyline Yarders in Northern Idaho. The 2004 COFE annual meeting. Proc. April 27-30, 2004, Hot Springs, Arkansas, 5 p.
- Higgason, C and Han, H.-S. 2004. Effectiveness and Economics of Fuel Reduction Treatments: A Literature Review. The 2004 COFE annual meeting. Proc. April 27-30, 2004, Hot Springs, Arkansas, 5 p.
- Han, H.-S. 2003. Current status and challenges of forestry education in the USA. International Symposium on the Forestry Education and Industry. October 17-18, 2002. Proc. Seoul, Korea. 12 p.
- Douglas R. Turner and H.-S. Han. 2003. Productivity of a small cut-to-length harvester in northern Idaho, USA. The 2003 COFE annual meeting. Proc. September 8-10, 2003, Bar Harbor, Maine, 5 p.
- Han, H.-S., H.W. Lee, and L.R. Johnson. 2002. Economic feasibility of small wood harvesting and utilization in southwest Idaho. International seminar on new roles of plantation forestry requiring appropriate tending and harvesting operations. Proc. September 29-October 5, 2002. Tokyo, Japan. 14 p.
- Han, H.-S. 2002. Forestry education in the USA. International Symposium on the Forestry Education. September 25-28, 2002. Proc. Chuncheon, Korea. 12 p.
- Hartley, D., L.R. Johnson, H.-S. Han. 2002. Harvesting productivity and cost of tractor-based machines for small scale operations. Small Wood Conference. Proc. March 3-5, 2002, Spokane, Washington, 10 p.
- Han, H.-S. and C. Renzie. 2001. Snip & Skid: Partial Cut Logging to Control Mountain Pine Beetle Infestations in British Columbia, International Mountain Logging and 11th Pacific Northwest Skyline Symposium, Proc., Seattle, December 10-12, 2001. pp. 96-104.
- Renzie, C. and H.-S. Han. 2001. An operational comparison of partial cut and clearcut harvesting methods in old cedar-hemlock forests in central British Columbia. Proc. the 24th Annual COFE meeting. Snowshoe, West Virginia, July 15-19, 2001.
- Han, H.-S. and L.D. Kellogg. 1997. Comparison of damage characteristics to young Douglas-fir stands from commercial thinning using four timber harvesting systems. Proc. The 1997 Annual COFE meeting. Rapid City, South Dakota, pp. 76-85.
- Pilkerton, S.J., H.-S. Han, and L.D. Kellogg. 1996. Quantifying residual stand damage in partial harvest operations, Proc. The 1996 Annual COFE meeting. Marquette: University of Michigan Press: pp. 62-72.

Posters:

- Han, H.-S., Halbrook, J., F. Pan, L. Salazar. 2008. Economic evaluation of a roll-off trucking system removing forest biomass resulting from shaded fuelbreak treatments. Smallwood and Bioenergy & Wood Products Conference, Madison, Wisconsin, 12-15 May, 2008
- Halbrook, J., H.-S. Han, R. Graham, T. Jain, and R. Denner. 2007. Activity fuel treatment options: mastication or grapple piling? Society of American Forest National Convention. October 23-27, Portland, Oregon
- Bruce, J., H.-S. Han, A. E. Akay, W. Chung. 2006. Computer-aided cost estimation for forest road construction. The 2006 COFE annual meeting. July 30-Aug.2, 2006, Coeur d'Alene, Idaho.
- Kellogg, L., P. Adams, C. Davis, M. Allen and H.-S. Han. 2005. Integrating research for intensive management: economic and environmental effectiveness of alternative harvesting methods. XXII IUFRO World Congress, August 8-13, 2005, Brisbane, Australia.
- Halbrook, J. and H.-S. Han. 2005. Productivity and cost of Yoader (non-guyline yarder) in fuel reduction thinning. The 2005 COFE annual meeting, Fortuna, California, July 11-14, 1999.
- Largo, S., C. Higgason, and H.-S. Han. 2003. Economics of fuel reduction thinning and biomass energy opportunities. Small timber products outlook: A focus on energy. Post Falls, Idaho, November 20.
- Han, H.-S. 1999. Residual stand damage from partial harvesting. International Mountain Logging and 10th Pacific Northwest Skyline Symposium, Corvallis, Oregon, USA. March 28-April 1.

SELECTED PRESENTATIONS:

- Economic evaluation of a roll-off trucking system removing forest biomass resulting from shaded fuelbreak treatments. International Union of Forest Research Organizations (IUFRO) All-D Conference, Sapporo, Japan, June 15th – 18th, 2008
- Slash: Burn it or Remove it? Oral presentation to the National Fire Directors and Line Officers meeting, Dallas, Texas, March 11th - 12th, 2008.
- Community Biomass Meetings - Part I and II: Turning our fire problem into good use. November 16th, 2007 and February 23rd, 2008, Willow Creek, CA
- Getting Biomass to Market: harvesting techniques and alternative treatment costs. Woody Biomass Energy Workshop - Woody Biomass Utilization: Techniques and economic considerations for the North Coast. Eureka, CA. December 6-7 2007.
- Collection and transportation of woody biomass for energy. Presented to the Strategic Partnership Coalition meeting, Klamath, CA July 11th, 2007.
- Harvesting and transportation of forest biomass resulted from mechanical fuel reduction treatments in the US West. Presented to the Forest Leadership Team Meeting, Six River National Forests, Eureka, California, March 21st, 2007.
- Residual stand damage from partial cut harvesting. Sale Area Layout Harvesting Institute (SALHI) -West: Ground-based harvesting system. Corvallis, Oregon, May 2006.
- Logging contracting business in the Inland Northwest. The 23rd Inland Empire Forest Engineering Conference. Moscow, Idaho. March 7-8, 2006.
- Comparison of harvesting productivity and cost between cut-to-length and whole-tree systems. The 23rd Inland Empire Forest Engineering Conference. Moscow, Idaho. March 7-8, 2006.
- Soil compaction from cut-to-length and whole-tree harvesting. The 23rd Inland Empire Forest Engineering Conference. Moscow, Idaho. March 7-8, 2006.
- The economics of using timber harvesting equipment on ash-cap soils. Volcanic Ash-cap Forest Soils of the Inland Northwest: Properties and Implications for Management and Restoration, Coeur d'Alene, Idaho, November 9-10, 2005.
- Forest biomass for energy. The International Forest Engineering Institute: Forest Harvesting Study-Tour, Sisters, Oregon, July 2005.
- Effect of slash, machine passes, and soil wetness on soil strength in a cut-to-length harvesting. The 2004 COFE annual meeting. Proc. July 11-14, 2005, Fortuna, California.

- Comparison between cut-to-length and whole tree harvesting systems: harvesting productivity/cost, soil compaction and nutrition. Presented to research scientists and forest managers at Potlatch Inc. Lewiston, Idaho. May 2005.
- Soil compaction from a cut-to-length thinning in northern Idaho. The 22nd Inland Empire Forest Engineering Conference. Moscow, Idaho. March 6-7, 2005.
- Economic feasibility of an integrated harvesting system for small-diameter trees in southwest Idaho, May 18-21, 2004, Sacramento, California, USA.
- Impacts on residual trees from partial cut harvesting. Sale Area Layout Harvesting Institute (SALHI) -West: Ground-based harvesting system. Moscow, Idaho, May 2004.
- What's new in logging? The 65th Intermountain Logging Conference: Into the Future Logging. April 9-11, 2003. Spokane, Washington.
- Economic feasibility of small wood harvesting and utilization in southwest Idaho. International seminar on new roles of plantation forestry requiring appropriate tending and harvesting operations. September 29-October 5, 2002. Tokyo, Japan.
- Residual stand damage from partial cut harvesting. Sale Area Layout Harvesting Institute (SALHI) -West: Ground-based harvesting system. Moscow, Idaho. June 2002.
- Snip and Skid: partial cut logging to control mountain beetle infestations in British Columbia. The 19th Inland Empire Forest Engineering Conference. Moscow, Idaho. March 2002.
- Snip and Skid: partial cut logging to control mountain beetle infestations in British Columbia. Proc. International Mountain Logging and 11th Pacific Northwest Skyline Symposium. Seattle, Washington, December 10-12, 2001. pp 96-104.
- Damage characteristics in young Douglas-fir stands from commercial thinning with four timber harvesting system. The 18th Annual Forest Engineering Conference, Moscow, Idaho, March 6-7, 2001, Moscow, Idaho. March 2001.
- Operational issues in alternative harvesting methods to clearcut. Partial Cutting Training Workshops, Valemount, British Columbia, Canada. June 2000.

HONORS AND AWARDS:

- Outstanding Faculty Award, University of Idaho, 2004
- Forestry Legacy Scholarship, Oregon State University, 1996-1997

PROFESSIONAL AND SCHOLARLY ORGANIZATIONS:

- Council on Forest Engineering (COFE), Member, 1993-present, Co-Chair for 2006 COFE meeting
- Forest Products Society, Member, 2005-present and Chairperson (09/2005-02/2009) in Timber Harvesting Technical Interest Group,

JOURNALS REVIEWED:

- Silva Fennica
- Forest Science
- Croatian Journal of Forest Engineering
- Western Journal of Applied Forestry
- European Journal of Forest Research
- USDA Forest Service General Technical Report
- Journal of Forest Research
- International Journal of Forest Engineering
- Southern Journal of Applied Forestry