

JOKELA, ERIC J.

As of August 27, 2009

A. Books, Edited

Jose, S., E.J. Jokela, and D.L. Miller (eds.). 2006. Longleaf Pine Ecosystems: Ecology, Silviculture, and Restoration. Springer-Verlag, New York 438 p.

Dickens, E.D., J. P. Barnett, W.G. Hubbard, and E.J. Jokela (eds.). 2004. Slash Pine: still growing and growing! Proc. of the slash pine symposium. USDA Forest Service Gen. Tech. Report SRS 76. 155p.

Jokela, E.J., and P.M. Dougherty (eds.). 2004. Long-term Production Dynamics of Loblolly Pine Stands in the Southern United States. A Special Issue of For. Ecol. and Manage. Vol. 192: 1-130.

B. Books Chapters

Jokela, E.J. 2007. The how and why of forest fertilization. Book chapter sidebar in: Managing Forests on Private Lands in Alabama and the Southeast. Alabama Forestry Commission.

Jose, S., E.J. Jokela, D. L. Miller. 2006. The longleaf pine ecosystem: An overview. Pp. 3-8. In: The Longleaf Pine Ecosystem: Ecology, Silviculture and Restoration (S. Jose, E.J. Jokela and D.L. Miller eds.) Springer-Verlag Publishers.

Fox, T.R., E.J. Jokela, and H.L. Allen. 2004. The evolution of pine plantation silviculture in the southern United States. Pp. 63-82. In Rauscher, M. and K. Johnsen (eds.), History of Forest Science in the Southern United States. USDA Forest Service Gen. Tech. Rep. 75.

Jokela, E.J. 2004. Nutrient management of southern pines. pp. 27-35. In Dickens, E.D., J. P. Barnett, W.G. Hubbard, and E.J. Jokela (eds.). Slash Pine: still growing and growing! Proc. of the slash pine symposium. USDA Forest Service Gen. Tech. Report SRS-76.

Stenberg, P., T. Kuuluvainen, S. Kellomaki, J. Grace, E. Jokela and H. Gholz. 1994. Crown structure, light interception and productivity of pine trees and stands. In Gholz, H.L., S. Linder and R. McMurtie (eds), Environmental Constraints on the Structure and Productivity of Pine Forest Ecosystems: A Comparative Analysis. Ecological Bulletin 43:20-34, Stockholm.

Jokela, E.J., H.L. Allen and W.W. McFee. 1991. Fertilization of southern pines at establishment. In Duryea, M.L. and P. Dougherty (eds), Forest Regeneration Manual. Kluwer Academic Press, The Netherlands. p. 263-277.

C. Refereed Journal Articles

Jokela, E.J., T.A. Martin, and J. G. Vogel. 2010. Twenty-five Years of intensive forest management with southern pines: Important lessons learned. J. For. (in press).

Duursma, R.A., A. Mäkelä, A., D.E.B. Reid, E.J. Jokela, A. J. Porté, and S.D. Roberts. 2010. Self-shading affects allometric scaling in trees. Functional Ecology (in press).

- Love-Myers, K.R., A. Clark III, LR. Schimleck, E.J. Jokela, and R.F. Daniels. 2009. Specific gravity response of slash and loblolly pine following mid-rotation fertilization. *For. Ecol. Manage.* 257:2342-2349.
- Staudhammer, C.L., E.J. Jokela and T.A. Martin. 2009. Competition dynamics in pure- versus mixed-family stands of loblolly and slash pine in the southeastern United States. *Can. J. For. Res.* 39:396-409.
- Sarkhot, D.V., E.J. Jokela, and N.B. Comerford. 2008. Surface soil carbon size-density fractions altered by loblolly pine families and forest management intensity for a Spodosol in the southeastern United States. *Plant and Soil* 307:99-111.
- Lopez-Zamora, C. Bliss, E.J. Jokela, N.B. Comerford, S. Grunwald, E. Barnard, and G.M. Vasquez. 2007. Spatial relationships between nitrogen status and pitch canker incidence in slash pine planted adjacent to a poultry operation. *Environmental Pollution* 147:101-111.
- Roth, B.E., E.J. Jokela, T.A. Martin, D.A. Huber and T.L. White. 2007. Genotype x environment interactions in selected loblolly and slash pine plantations in the southeastern United States. *For. Ecol. and Manage.* 238:175-188.
- Fox, T.R., E.J. Jokela, and H.L. Allen. 2007. The development of pine plantation silviculture in the southern United States. *J. For.* 105: 337-347.
- Sarkhot, D., Comerford, N. B., Jokela, E. J., Reeves, J. B. & Harris, W. G. 2007. Aggregation and aggregate carbon in a forested southeastern Coastal Plain Spodosol. *Soil Sci. Soc. Am. J* 71:1779-1787.
- Sarkhot, D., Comerford, N. B., Jokela, E. J. and Reeves, J. B. 2007. Effects of forest management intensity on carbon and nitrogen content in different soil size fractions of a north Florida Spodosol. *Plant and Soil* 294: 291-303.
- McKeand, S.E., E. J. Jokela, D.A. Huber, T.D. Byram, H. Lee Allen, B. Li, T. J. Mullin. 2006. Performance of improved genotypes of loblolly pine across different soils, climates, and silvicultural inputs. *For. Ecol. and Manage.* 227: 178-184.
- Comerford, N.B., W. Cropper, H. Li, P.J. Smethurst, K. Van Rees, E.J. Jokela, H. Adegbidi, and N.F. Barros. 2006. Soil supply and nutrient demand (SSAND): A general nutrient uptake model and an example of its application to forest management. *Can. J. Soil Sci.* 86:665-673.
- Adegbidi, H.G., E.J. Jokela, N.B. Comerford. 2005 Factors influencing production efficiency of intensively managed loblolly pine plantations in a 1- to 4-year-old chronosequence. *For. Ecol. and Manage.* 218: 245-258.
- Jokela, E.J., P.M. Dougherty, and T.A. Martin. 2004. Production dynamics of intensively managed loblolly pine stands in the southern United States: A synthesis of seven long- term experiments. *For. Ecol. and Manage.* 192: 117-130.
- Martin, T.A., and E.J. Jokela. 2004. Stand development and production dynamics of loblolly pine growing on spodosols in north-central Florida USA. *For. Ecol. and Manage.* 192: 39-58.
- Jokela, E.J., and P.M. Dougherty. 2004. Long-term production dynamics of loblolly pine stand in the

southern United States. *For. Ecol. and Manage.* 192:1-2.

Martin, T.A., and E.J. Jokela. 2004. Developmental patterns and nutrition impact radiation use efficiency components in southern pine stands. *Ecological Applications*. 14:1839-1854.

Adegbidi, H.G., N.B. Comerford, E.J. Jokela and N.F. Barros. 2004. Root development of young fast growing loblolly pine in Spodosols of the lower Coastal Plain. *Soil Sci. Soc. Am. J.* 68:596-604.

Gagnon, J.L., E.J. Jokela, W.K. Moser, and D.A. Huber. 2004. Characteristics of gaps and natural regeneration in mature longleaf pine flatwoods ecosystems. *For. Ecol. and Manage.* 187:373-380.

Gagnon, J.L., E.J. Jokela, W.K. Moser, and D.A. Huber. 2003. Dynamics of artificial regeneration in gaps within a longleaf pine flatwoods ecosystem. *For. Ecol. and Manage.* 172: 133-144.

Gagnon, J.L., E.J. Jokela, W.K. Moser, and D.A. Huber. 2003. Characteristics of gaps and natural regeneration in mature longleaf pine flatwoods ecosystems. *For. Ecol. and Manage.* 187:373-380.

Xiao, Y., E.J. Jokela, and T.L. White. 2003. Species differences in crown structure and growth performance of juvenile loblolly and slash pine. *For. Ecol. and Manage.* 174:295-313.

Xiao, Y., E.J. Jokela, and T.L. White. 2003. Growth and leaf nutrient responses of loblolly and slash pine families to intensive silvicultural management. *For. Ecol. and Manage.* 183:281-295.

Adegbidi, H.G., E.J. Jokela, N.B. Comerford, and N.F. Barros. 2002. Biomass development of intensively managed loblolly pine plantations growing on Spodosols in the southeastern USA. *For. Ecol. and Manage.* 167: 91-102.

Jokela, E.J., and T.A. Martin 2000. Effects of ontogeny and soil nutrient supply on production, allocation and leaf area efficiency in loblolly and slash pine stands. *Can. J. For. Res.* 30: 1511-1524.

Jokela, E.J., D. Wilson, J.E. Allen. 2000. Early growth responses of slash and loblolly pine following fertilization and herbaceous weed control treatments at establishment. *South J. Appl. For.* 24:23-30.

Bailey, R.L., S.W. Martin, and E.J. Jokela. 1999. Growth and yield predictions for lower Coastal Plain slash pine plantations fertilized at mid-rotation. *South J. Appl. For.* 23:39-45.

Blakeslee, G.M., E.J. Jokela, C.H. Hollis, D.S. Wilson, W.D. Lante, and J.E. Allen. 1999. Pitch canker in young loblolly pines: influence of precommercial thinning and fertilization on disease incidence and severity. *South. J. Appl. For.* 23:139-143.

Grierson, P.F., N.B. Comerford, and E.J. Jokela. 1999. Phosphorus mineralization and microbial biomass in a Florida Spodosol: effects of water potential, temperature and fertilizer application. *Boil. Fertil. Soils* 28:244-252.

Grierson, P.F., N.B. Comerford, and E.J. Jokela. 1998. Phosphorus mineralization kinetics and response of microbial phosphorus to drying and rewetting in a Florida Spodosol. *Soil Biology and Biochemistry.* 30: 1323-1331.

McCrary, R.L. and E.J. Jokela. 1998. Canopy dynamics, light interception, and radiation use efficiency of selected loblolly pine families. *For. Sci.* 44:64-72.

- McCrary, R.L. and E.J. Jokela. 1996. Growth phenology and crown structure of selected loblolly pine families, planted at two spacings. *For. Sci.* 42:46-57.
- Beets, P.N., and E.J. Jokela. 1994. Upper mid-crown yellowing in radiata pine: Some genetic and nutritional aspects associated with its occurrence. *New Zealand J. For. Sci.* 24:35-50.
- Dalla-Tea, F. and E.J. Jokela. 1994. Needlefall returns and resorption rates in young intensively managed slash and loblolly pine stands. *For. Sci.* 650-662.
- Harding, R.B., and E.J. Jokela. 1994. Long-term effects of forest fertilization on site organic matter and nutrients. *Soil Sci. Soc. Am. J.* 58:216-221.
- Jokela, E.J. 1993. Cooperative research in forest fertilization. *J. For.* . 91:28-29.
- Beets, P.N., T.W. Payn and E. J. Jokela. 1993. Upper mid-crown yellowing (UMCY) in *Pinus radiata* forests. *New Zealand J. of Forestry.* 24-28.
- Jokela, E.J., and S.C. Stearns-Smith. 1993. Fertilization of established southern pine stands: effects of single and split nitrogen treatments. *South. J. Appl. For.* 17: 135-138.
- Dalla-Tea, F. and E.J. Jokela. 1992. Estimacion del indice de area foliar en plantaciones de *Pinus elliottii* var *elliottii* y *Pinus taeda*. *Rev. Investig. Agraria: Serie Sistamas y Recursos Forestales* 1: 123-136.
- Stearns-Smith, S.C., E.J. Jokela and R.C. Abt. 1992. Thinning and fertilizing southern pine stands of the lower Coastal Plain: biological and economic effects. *South. J. Appl. For.* 16:186-193.
- Dean, T.J. and E.J. Jokela. 1992. A density management diagram for slash pine plantations in the lower Coastal Plain. *South. J. Appl. For.* 16: 178-185.
- Polglase, P.J., E.J. Jokela and N. B Comerford. 1992. Phosphorus, nitrogen and carbon fractions in litter and soil of southern pine plantations. *Soil Sci. Soc. Am. J.* 56: 566-572.
- Polglase, P.J., N.B. Comerford and E.J. Jokela. 1992. Leaching of inorganic P from litter in southern pines. *Soil Sci. Soc. Am. J.* 56:573-577.
- Polglase, P.J., E.J. Jokela and N.B. Comerford. 1992. Nitrogen and phosphorus release from decomposing needles of southern pine plantations. *Soil Sci. Soc. Am. J.* 56: 914-920.
- Polglase, P.J., N.B. Comerford and E.J. Jokela. 1992. Mineralization of nitrogen and phosphorus from soil organic matter in southern pine plantations. *Soil Sci. Soc. Am. J.* 56: 921-927.
- Dalla-Tea, F., and E.J. Jokela. 1991. Needlefall, canopy light interception, and productivity of young intensively managed slash and loblolly pine stands. *For. Sci.* 37: 1298-1313.
- Jokela, E.J., W.W. McFee and E.L. Stone. 1991. Micronutrient deficiency in slash pine: response and persistence of added manganese. *Soil Sci. Soc. Am. J.* 55: 492-496.
- Colbert, S.R., E.J. Jokela and D. G. Neary. 1990. Effects of annual fertilization and sustained weed control on dry matter partitioning, leaf area, and growth efficiency of juvenile loblolly and slash pine. *For. Sci.* 36: 995-1014.

Jokela, E.J., W.H. Smith and S.R. Colbert. 1990. Growth and elemental content of slash pine 16 years after treatment with garbage composted with sewage sludge. *J. Environ. Qual.* 19: 146-150.

Bailey, R.L., T.M. Burgan and E.J. Jokela. 1989. Fertilized midrotation-aged slash pine plantations--stand structure and yield prediction models. *South J. Appl. For.* 13: 76-80.

Jokela, E.J., R.B. Harding and C.A. Nowak. 1989. Long-term effects of fertilization on stem form, growth relations and yield estimates of slash pine. *For. Sci.* 35: 832-842.

Popp, M.P., R.C. Wilkinson, E.J. Jokela, R.B. Harding and T.W. Phillips. 1989. Effects of slash pine phloem nutrition on the reproductive performance of *Ips calligraphus* (Coleoptera:Scolytidae). *Environ. Entomol.* 18: 795-799.

Neary, D.G., E.J. Jokela, N.B. Comerford, S.R. Colbert and T.E. Cooksey. 1990. Understanding competition for soil nutrients - the key to site productivity on southeastern Coastal Plain Spodosols. pp. 432-450. In: S.P. Gessel, D.S. LaCate, G.F. Weetman and R.F. Powers. *Sustained Productivity of Forest Soils. Proceedings of the 7th. North American Forest Soils Conference, University of British Columbia, Faculty of Forestry Publication, Vancouver, BC, Canada.*

Schmidt, R.A., E.J. Jokela, J.E. Allen, R.P. Belanger and T. Miller. 1990. Association between fusiform rust incidence and CRIF soil classification for slash pine plantations in the Coastal Plain of Florida and Georgia. *South. J. Appl. For.* 14: 39-43.

Jokela, E.J., S.B. Jack and C.A. Nowak. 1988. Site index curves for unthinned Norway spruce plantations in New York. *North. J. Appl. For.* 5:251-254.

Jokela, E.J., R.B. Harding and J.L. Troth. 1988. Decision making criteria for forest fertilization in the Southeast: An industrial perspective. *South. J. Appl. For.* 12: 153-160.

Jokela, E.J., E.H. White and J.V. Berglund. 1988. Predicting Norway spruce growth from soil and topographic properties in New York. *Soil Sci. Soc. Am. J.* 52: 809-815.

Jokela, E.J., R.D. Briggs and E.H. White. 1986. Volume equations and stand volumes for unthinned Norway spruce plantations in New York. *North. J. Appl. For.* 3: 7-10.

Jokela, E.J., K.P. Van Gorp, R.D. Briggs and E.H. White. 1986. Biomass estimation equations for Norway spruce in New York. *Can. J. For. Res.* 16: 413-415.

Jokela, E.J., C.A. Shannon and E.H. White. 1981. Biomass and nutrient equations for mature *Betula papyrifera* Marsh. *Can. J. For. Res.* 11: 298-304.

White, E.H. and E.J. Jokela. 1980. Comparison of two foliar sampling procedures for determining nutrient status of forest stands. *Can.J. For.Res.* 10. 233-237.

D. Non-Refereed

Adegbidi, H.G., N. B. Comerford, L. Hua, E.J. Jokela, and N.F. Barros. 2002. Determining nutrient requirements for intensively managed loblolly pine stands using the SSAND (soil supply and nutrient demand) model. Eleventh Biennial Southern Silvicult. Res. Conf. USDA For. Gen. Tech. Rep. SRS – 48:26-30.

Carter, D.C., and E.J. Jokela. 2002. Florida's renewable forest resources. Florida Cooperative

Extension Service Circular 1433. 10 p.

Gagnon, J. L., and E.J. Jokela. 2002. Opportunities for uneven-aged management in second growth longleaf pine stands in Florida. Florida Cooperative Extension Service Circular 1404. 10 p.

Jokela, E.J. and P.M. Dougherty. 2002. Introduction: Long-term ecophysiology of loblolly pine. Eleventh Biennial Southern Silv. Res. Conf. USDA For. Gen. Tech. Rep. SRS – 48:587.

Martin, T.A., and E.J. Jokela. 2002. Long-term trends in loblolly pine site productivity and stand characteristics observed at the IMPAC research site in Alachua County, Florida. Eleventh Biennial Southern Silv. Res. Conf. USDA For. Gen. Tech. Rep. SRS – 48:588.

Roth, B., T. Martin, E. Jokela, and T. White. 2002. Finding the keys to unlock the productivity of southern forests. Florida Forests 6:18-20.

Xiao, Y., E.J. Jokela, T.L. White, and D.A. Huber. 2002. Inter- and intra-specific differences in foliar N concentrations in juvenile loblolly and slash pine in north Florida. Eleventh Biennial Southern Silv. Res. Conf. USDA For. Gen. Tech. Rep. SRS – 48:7-9.

Jokela, E.J. and A.J. Long. 2000. Using soils to guide fertilizer recommendations for southern pines. Florida Cooperative Extension Service Circular 1230. 11 p.

Jokela, E.J. 1997. Silvicultural opportunities for increasing wood production through nutrient management. In: SFRC Spring Symposium Proceedings (Opportunities for increasing wood production in southern forests). 10 p.

Duryea, M.L., L.G. Arvanitis, E.J. Jokela, N.B. Comerford and S.S. Coleman. 1995. 20 years of progress ecosystem conservation and management partnership. 1995. IFAS Brochure 11 p.

Dalla-Tea, F. and E.J. Jokela. 1992. Nutricion y productividad DE Pinus elliottii y P. taeda. pp.235-242. In: CIEF, Jornodas Sobre Pinos Subtropicales, Eldorado, Misiones, August 5-7, Argentina.

Morris, L.A., E.J. Jokela and J. B. O'Connor. 1992. Silvicultural guidelines for pinestraw management in the southeastern United States. Georgia For. Res. Pap. No. 88. Georgia For. Comm. 11 p.

Jokela, E.J. and F. Dalla Tea. 1991. Canopy development, productivity and light use efficiency of intensively managed southern pine stands. In: Productivity in Perspective (Ed. P.J. Ryan). pp.246-247. Proc. Third Australian Forest Soils and Nutrition Conf., Melbourne, 7-11 Oct. (For. Comm. NSW: Sydney).

Polglase, P.J., E.J. Jokela and N.B. Comerford. 1991. Phosphorus and nitrogen cycling in intensively managed young pine stands of north-central Florida. In: Productivity in Perspective (Ed. P.J. Ryan). pp. 244-245. Proc. Third Australian Forest Soils and Nutrition Conf., Melbourne, 7-11 Oct. (For Comm. NSW: Sydney.)

Webb, R.S., E.J. Jokela and W.H. Smith. 1991. Recycling composted organic wastes on Florida's forest land. Florida Cooperative Extension Report FRC 44, 4 p.

Jokela, E.J. 1990. Silviculture: A lecture and laboratory handbook for Forestry 3162. School of Forest Resources and Conservation. 249 p.

Jokela, E.J., S.R. Colbert and J.E. Smith. 1988. Silvical summaries of selected Southeast Forest Trees. School of Forest Resources and Conservation. 287 p.

Jokela, E.J. and D.M. Flinchum. 1983. FOR 2: Principles of silviculture - an independent study guide. Dept. of Independent Study by Correspondence. 287 p.

Jokela, E.J. 1983. Forest site: The concept and its measurement. In: Soils Importance in Forest Management (SUNY Coll. Environ. Sci. and Forestry, Syracuse, N.Y.) 5 p.

Jokela, E.J. 1978. Forest fertilization: Its potential in Minnesota. Minnesota Sci. 33:12-13.

Jokela, E.J. and E.H. White. 1978. Fertilization of five tree species: *Pinus resinosa* Ait.: *Pinus banksiana* (Lamb): *Picea glauca* (Moench) Voss: *Populus tremuloides* (Michx): and *Picea mariana* (Mill.) BSP. A bibliography. Staff Pap. Ser. No. 2, Coll. For., Univ. of Minnesota. 13 p.

E. Research Reports (52)

F. Abstracts (56)