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LONGLEAF PINE: AN UPDATED BIBLIOGRAPHY

This is the final report of cooperative agreement 19-94-045 between the Auburn University School of Forestry and the USDA Forest Service, Southern Research Station, Vegetation Management and Longleaf Pine research project at Auburn, Ala. An electronic format is available via the Internet (http://www.forestry.auburn.edu) and will be updated periodically. To access the database, click on the web page menu item entitled Longleaf Alliance in the Cooperative/Special Program section.

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LONGLEAF PINE: AN UPDATED BIBLIOGRAPHY

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The longleaf pine (*Pinus palustris* Mill.) forest figured prominently in the cultural and economic development of the South. What was once one of the most extensive forest ecosystems in North America has now become critically endangered (6). At the time of European settlement, this ecosystem dominated as much as 92 million acres throughout the southeastern United States (2). Acreage declined dramatically, largely due to human use, to 20 million acres by 1935 (9), then to 5 million acres by 1975, and 3.8 million acres a decade later (5). A 1994 update places the figure at 3.2 million acres (7).

Longleaf pine ecosystems are among the most species-rich plant communities outside the tropics (8). The extreme reduction of the longleaf pine ecosystem is the main reason for the precarious state of at least 191 taxa of vascular plants (3, 10) and key wildlife such as the red-cockaded woodpecker (RCW), gopher tortoise, and southern fox squirrel.

The continuing loss of longleaf pine forests has prompted a concerted effort to restore and manage the longleaf pine ecosystem to ensure its future as part of the region's natural and cultural heritage. In 1993, the USDA Forest Service Southern and Southeastern Forest Experiment Stations (now consolidated as the Southern Research Station) initiated a Longleaf Pine Ecosystem Restoration research program. Clearly an array of restoration, rehabilitation, regeneration, and management activities would be needed to reverse the decline of this southern forest ecosystem. The first year of this five-year research program was aimed at building partnerships and conducting surveys and assessments. A vital component of the initial planning year was to develop an updated bibliography of published work associated with the longleaf pine ecosystem. This was to be accomplished in cooperation with the Auburn University School of Forestry.

Three excellent sources of longleaf pine literature already existed. The first is Wahlenberg's book, Longleaf Pine, which had 637 citations (9). Croker picked up where Wahlenberg left off with an annotated bibliography from 1946-1967 (1). These two works formed the basis for Hu and Burns bibliography which spanned from 1858 to 1984 (4).

This bibliography represents a compilation of references not present in the works mentioned above or which have been published since 1984. A search was conducted for publications from 1984 to the present using INFOSouth, which is a southern forestry information service operated by the USDA Forest Service at the University of Georgia Science Library in Athens, Ga. Databases searched by INFOSouth included: AGRICOLA, 1970-1993; CAB ABSTRACTS, 1972-1993; BIOSIS, 1969-1993; DISSERTATION AB-STRACTS, 1861-1993; CURRENT CONTENTS; CRIS/USDA; FS INFO; and NTIS. In addition, other groups and individuals assisted in the search. Every effort was made to include relevant works from the ecosystem, community, and restoration ecology fields as they pertained to the longleaf pine ecosystem.

A chronological order was used for the bibliography, similar to that used by Hu and Burns. Each reference is listed by its year of publication in alphabetical order by author (e.g. FS 33001). The "FS" was used to recognize the USDA Forest Service for funding this effort. The "33001" indicates the publication year was 1933 and the 001 is the publication number within that year. Additionally, the bibliography is indexed by author. However, due to the size of the undertaking, the references are not annotated as was done by Croker, nor has a subject-matter index been provided similar to that of Hu and Burns. If a DESCRIPTOR field follows the location of the reference, these are keywords (phrases) that were included by the INFOSouth search

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and occasionally from other sources.

This bibliography is available in two formats. The first is this printed format which contains exactly 500 citations. The second is available on the Internet through the World Wide Web home page of the Auburn University School of Forestry (http://www.forestry.auburn.edu). This and other databases are accessible for full text searches over the Internet or to be downloaded for use on individual PCs. To access the databases, click on the web page menu item entitled "Longleaf Alliance" in the Cooperatives/Special Programs. Available databases include:

- 1. References included in this bibliography (Kush, et al. 1996).
- 2. Hu, S.C. and P.Y. Burns. 1986. Longleaf Pine: A bibliography 1858-1984. Res. Rep. No. 6. Baton Rouge, LA: Louisiana State University Agricultural Center, School of Forestry, Wildlife, and Fisheries: 93 p.
- 3. Wahlenberg, W.G. 1946. Longleaf pine: Its use, ecology, regeneration, protection, growth, and management. Washington, D.C. Charles Lathrop Pack Forestry Foundation, in cooperation with the U.S. Department of Agriculture, Forest Service. 429 p (citations only).

4. New references or references not found in the above databases.

Undoubtedly, the authors have overlooked some references and would appreciate notification of such. Please contact John S. Kush [phone: (334) 844-1065; or E-mail: kush@forestry.auburn.edu] or Ralph S. Meldahl [phone: (334) 844-1060; or E-mail: meldahl@forestry.auburn.edu]. Also, the authors can be reached by FAX at (334) 844-1084. The mailing address is: School of Forestry, 108 M. White Smith Hall, Auburn University, AL 36849-5418.

The intent is to continually update the database at Auburn University. As an example, the Proceedings of the 18th Tall Timbers Fire Ecology Conference entitled *The Longleaf Pine Ecosystem: Ecology, Restoration and Management* was published as this manuscript was being completed. While citations from this work are not published here, they have been added to the database available on the Internet.

Special thanks are extended to Jean Conn, Pratima Nepal, Wandsleigh Williams, and Marietjie Quicke for their assistance in putting this work together.

LITERATURE CITED

- (1) Croker, T. C., Jr. 1968. Longleaf pine: An annotated bibliography, 1946 through 1967. Res. Pap. SO-35. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:52 p.
- (2) Frost, C.C. 1993. Four centuries of changing landscape patterns in the longleaf pine ecosystem. In: Hermann, S.H. ed. Proceedings of the 18th Tall Timbers fire ecology conference, the longleaf pine ecosystem: ecology, restoration and management; 1991 May 30-June 2; Tallahassee, FL: Tall Timbers Research Station: No. 18:17-43
- (3) Hardin, E.D., and White, D.L. 1989. Rare vascular plant taxa associated with wiregrass (*Aristida stricta*) in the southeastern United States. Natural Areas Journal. 9:234-245.
- (4) Hu, S.C., and Burns, P.Y. 1986. Longleaf Pine: A bibliography 1858-1984. Res. Rep. No. 6. Baton Rouge, LA: Louisiana State University Agricultural Center, School of Forestry, Wildlife, and Fisheries: 93 p.
- (5) Kelly, J.F., and Bechtold, W.A. 1990. The longleaf pine resource. In: Farrar, R.M., Jr. ed. Proceedings Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:11-22.
- (6) Noss, R.F., LaRoe, E.T., III, and Scott, J.M. 1995. Endangered Ecosystems of the United States: A Pre-

- liminary Assessment of Loss and Degradation. U.S. Department of Interior, National Biologic Survey Biological report 28. 58 p.
- (7) Outcalt, K.W., and Outcalt, P.A. 1994. The longleaf pine ecosystem: An assessment of currentconditions. Unpublished data on file. US Department of Agriculture, Forest Service, Southern Research Station, Gainesville, FL. 23 p.
- (8) Peet, R.K., and Allard, D.J. 1993. Longleaf pine-dominated vegetation of the southern Atlantic and eastern Gulf Coast region, USA. In: Hermann, S.H. ed. Proceedings of the 18th Tall Timbers fire ecology conference, the longleaf pine ecosystem: Ecology, restoration and management; 1991 May 30-June 2; Tallahassee, FL: Tall Timbers Research Station: No. 18:45-81.
- (9) Wahlenberg, W.G. 1946. Longleaf pine: Its use, ecology, regeneration, protection, growth, and management. Washington, D.C. Charles Lathrop Pack Forestry Foundation, in cooperation with the U.S. Department of Agriculture, Forest Service. 429 p.
- (10) Walker, J.L. 1993. Rare vascular plant taxa associated with the longleaf pine ecosystem. In: Hermann, S.H. ed. Proceedings of the 18th Tall Timbers fire ecology conference, the longleaf pine ecosystem: Ecology, restoration and management; 1991 May 30-June 2; Tallahassee, FL: Tall Timbers Research Station: No. 18:105-125.

BIBLIOGRAPHY

FS 33001

Anonymous. 1933. Longleaf pine seedlings damaged by hogs. South. For. Notes No. 1. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 33002

Anonymous. 1933. Effect of density of stand and of ground cover on height growth of longleaf pine seedlings. South. For. Notes No. 4. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 35001

Anonymous. 1935. Effect of density of stocking on growth of longleaf pine. South. For. Notes No.11. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 35002

Anonymous. 1935. Growth of planted southern pines. South. For. Notes No. 11. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 35003

Anonymous. 1935. Mortality in turpentined pines. South. For. Notes No. 11. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 35004

Anonymous. 1935. Pulpwood utilization of longleaf pine. South. For. Notes No. 11. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 35005

Anonymous. 1935. Relation of rodent population to reproduction of longleaf pine. South. For. Notes No. 12. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 35006

Anonymous. 1935. Effect of density and competition on growth of longleaf pine seedlings. South. For. Notes No. 14. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 36001

Anonymous. 1936. Gum yields from bark bars. South. For. Notes No. 16. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 37001

Anonymous. 1937. Tools and labor requirements for pruning longleaf pine. South. For. Notes No. 19. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 38001

Anonymous. 1938. Effect of pruning on diameter and height growth of longleaf pine saplings. South. For. Notes No. 20. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 38002

Anonymous. 1938. Burned faces and subsequent turpentining. South. For. Notes No. 21. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 38003

Anonymous. 1938. Root distribution of longleaf pine seedlings and associated vegetation. South. For. Notes No. 21. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 39001

Gemmer, E.W. 1939. Grazing in the pine forests of the Gulf Coastal Plain. South. For. Notes No. 30. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 39002

Liefeld, T.A. 1939. The effect of season on streak behavior. South. For. Notes No. 26. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 40001

Wakely, P.C. 1940. 1940 southern pine cone crops. South. For. Notes No. 35. New Orleans, LA:U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 42001

Demmon, E.L. 1942. Periodicity of forest fires in the South. Southern Lumberman. 165(2081):220-222.

FS 42002

Kurz, H. 1942. Florida dunes and scrub, vegetation and geology. Geological Bulletin No. 23. Tallahassee, FL: Florida Geological Survey, State of Florida, Department of Conservation. 154 p.

FS 42003

Laessle, A.M. 1942. The plant communities of the Welaka area: with special reference to correlation between soils and vegetational succession. Biological Science Series 4(1). Gainesville, FL: University of Florida Publication. 143 p.

FS 42004

Liefeld, T.A. 1942. Acid treatment of naval stores pine to stimulate gum yield. South. For. Notes No. 45. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 42005

Wells, B.W. 1942. Ecological problems of Southeastern United States Coastal Plain. Botanical Review. 8:533-561.

FS 43001

Biswell, H.H.; Lemon, P.C. 1943. Effect of fire upon seed-stalk production of range grasses. Journal of Forestry. 41(11):844.

FS 47001

Wakeley, P.C. 1947. Advances in storing southern pine seed. South. For. Notes No. 47. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

Muntz, H.H. 1950. Direct seeding gives good results. South. For. Notes No. 70. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 51001

Bruce, D. 1951. Fuel weights on the Osceola National Forest. Fire Control Notes. 12(3):20-23.

DESCRIPTORS: stand; fuel; palmetto; gallberry; understory brush.

FS 53001

Cassady, J.T. 1953. Burning may reduce grass production. South. For. Notes No. 85. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 54001

Chang, Y.P. 1954. Anatomy of common North America pulpwood barks. TAPPI Monograph 14. 249 p.

FS 54002

Chang, Y.P. 1954. Bark structure of North American conifers. Tech. Bull. 1095. Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington Office. 86 p.

FS 57001

Nelson, T.C. 1957. The original forest of the Georgia Piedmont. Ecology. 38(3):390-397.

FS 58001

Biswell, H.H. 1958. Prescribed burning in Georgia and California compared. Journal of Range Management. 11(6):293-297.

FS 58002

Scheer, R.L. 1958. Intensive site preparation stimulates longleaf growth on sandhills. South. For.Notes No. 115. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 59001

Derr, H.J. 1959. New rates for repellents in direct seeding. South. For. Notes No. 123. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station.

FS 59002

Shigematsu, Y. 1959. Studies on structure of bark. IV. Microscopic structure of bark of pines (2). Science Report No.11. Kyoto Prefect, University of Agriculture:120-125.

FS 61001

Cooper, C.F. 1961. The ecology of fire. Scientific American. 204(4):150-160.

FS 61002

Mergen, F. 1961. Natural and induced flowering in young pine trees. In: Proceedings- sixth southern conference on forest tree improvement; 1961 June 7-8; Gainesville, FL: University of Florida, School of Forestry:129-136.
DESCRIPTORS: early flowering; seed source.

FS 62001

Czabator, F.J. 1962. Germination value: an index combining speed and completeness of pine seed germination. Forest Science. 8:386-396.

DESCRIPTORS: germination; germination value; mean daily germination; peak value; germination value.

FS 62002

Duvall, V.L. 1962. Burning and grazing increase herbage on slender bluestem range. Journal of Range Management. 15(1):14-16.

FS 62003

Quarterman, E.; Keever, C. 1962. Southern mixed hardwood forest: climax in the southeastern coastal plain, U.S.A. Ecological Monograph. 32(2):167-185.

DESCRIPTORS: mesic uplands; dominance; hardwood; forest climax.

FS 62004

Schiff, A.L. 1962. Fire and water scientific heresy in the Forest Service. Cambridge, MA: Harvard University Press. 225 p.

DESCRIPTORS: prescribed burning; flood; fire.

FS 63001

Paul, B.H. 1963. The application of silviculture in controlling the specific gravity of wood. Tech. Bull. 1288.
Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington Office. 97 p.

FS 64001

Lewis, C.E. 1964. Forage response to month of burning. Res. Note SE-35. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 4 p.

FS 66001

Hughes, R.H. 1966. Fire ecology of canebrakes. Tall Timbers Fire Ecology Conference. 5:148-158.

DESCRIPTORS: fire; regeneration; canebrakes; seedling; germination; stand; vigor; foliage production.

FS 67001

Croker, T.C., Jr. 1967. Furrow seeders can save much money. Tree Planters' Notes. 18(1):1-4.

FS 67002

Duncan, C.G. 1967. Effect of light on the rate of decay of three wood-destroying fungi (*Lenzile strabea*, *Lentinus lepidens*, *Poria monticola*). Phytopathology. 57(10):1121-1125.

DESCRIPTORS: light intensity; wood-destroying fungi; decay.

FS 68001

Croker, T.C., Jr. 1968. Ecology of an ideal forest community in the longleaf-slash pine region. In: Linnertz, N.E. ed. Proceedings of the 17th annual forestry symposium: the ecology of southern forests. Baton Rouge, LA: Louisiana State University:78-90.

FS 68002

Jackson, L.W.R. 1968. Growth and specific gravity of unthinned longleaf, slash pine (*Pinus palustris*, *P. elliottii*) in Georgia Piedmont. Naval Stores Review and Terpene Chemicals. 78(6):10-11.

FS 68003

Lantz, N. 1968. Pine straw: a new by-product of forest wildlife management. Wildlife in North Carolina. 32(6):9 *DESCRIPTORS:* pinestraw.

Malcolm, R.L.; McCracken, R.J. 1968. Canopy drip: A source of mobile soil organic matter for mobilization of iron and aluminum. Soil Science Society of America Proceedings. 32(6):834-838.

DESCRIPTORS: canopy drip; iron; aluminum; podzolization; pedogenic process; soil organic matter; polyphenol; reducing-sugar; organic acids.

FS 68005

Martin, R.E.; Crist, J.B. 1968. Selected physical-mechanical properties of eastern tree barks. Forest Products Journal. 18(11):54-60.

FS 68006

Monk, C.D. 1968. Successional and environmental relationships of the forest vegetation of north central Florida. American Midland Naturalist. 79(2): 441-457.

FS 68007

Ross, E.W. 1968. Sand Pine, a new host of *Fomes annosus*. The Plant Disease Reporter. 52(8):635.

FS 69001

Bennett, F.A. 1969. Design difficulties in stand density studies. Res. Note SE-111. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 5 p.

 $\label{eq:DESCRIPTORS:} DESCRIPTORS: stand density; mortality; stratification.$

FS 69002

Biesterfeldt, R.C. 1969. Acquittal of the short-tailed shrew. Forest and People. 19(2):18-19.

FS 69003

Biesterfeldt, R.C.; Mann, W.F., Jr. 1969. New hope for strip-mine reclamation. Forest Farmer. 28(12):6-8, 16, 18

FS 69004

Casebier, R.L.; Hamilton, J.K.; Hergert, H.L. 1969. Chemistry and mechanism of water prehydrolysis on Southern Pine Wood. TAPPI. 52(12):2369-77.

DESCRIPTORS: prehydrolysis.

FS 69005

Croker, T.C., Jr. 1969. Natural regeneration systems for longleaf pine. Forest Farmer. 28(13):6-7, 16-18.

FS 69006

Dunning, C.E. 1969. The structure of longleaf-pine latewood. I. Cell-wall morphology and the effect of alkaline extraction. II. Intertracheid membranes and pit membranes. TAPPI. 52(7):1326-1341.

DESCRIPTORS: cell-wall; intertracheid membranes; pit membranes; alkaline extraction; latewood.

FS 69007

Grigsby, H.C. 1969. Exotic trees unsatisfactory for forestry in southern Arkansas and northern Louisiana. Res. Note SO-92. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 5 p.

FS 69008

Harms, W.R. 1969. Sand pine in the Georgia-Carolina sandhills: Third-year performance. Res. Note SE-123.

Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 3 p. *DESCRIPTORS:* Kershaw soil; Troup soil.

FS 69009

Harrington, T.A.; McDonald, J.K. 1969. A prediction of things to come in naval stores. Naval Stores Review. 78(10):4-7.

FS 69010

Howard, E.T.; Manwiller, F.G. 1969. Anatomical characteristics of southern pine stemwood. Wood Science. 2(2):77-86.

DESCRIPTORS: tracheid; pits; parenchyma.

FS 69011

Lawrence, R.V. 1969. Naval stores products from southern pines. Forest Products Journal. 19(9):87-92.

FS 69012

Little, E.L., Jr.; Critchfield, W.B. 1969. Subdivisions of the genus *Pinus* (pines). Misc. Publ. 1144. Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington Office. 51 p.

DESCRIPTORS: taxonomy.

FS 69013

McConnel, J.L. 1969. Grafting latex dipped scions. Tree Planters' Notes. 19(4):13-15.

DESCRIPTORS: grafting; scions; orchard.

FS 69014

Randall, C.E. 1969. Our southern pines--Part I. American Forests. 75(6):32-35, 47-48.

FS 69015

Ruehle, J.L. 1969. Improving seedling growth in longleaf pine plantations with nematicidal soil fumigants. Journal of Nematology. 1:248-253.

DESCRIPTORS: fumigation; DD; DBCP; nematicide.

FS 69016

Stransky, J.J. 1969. Deer habitat quality of major forest types in the south. In: Proceedings of a symposium: the white-tailed deer in the southern forest habitat. Nacogdoches, TX: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:42-45.

DESCRIPTORS: Bottom-land hardwoods; deer habitats; upland hardwood; loblolly-shortleaf pine hardwoods; longleaf-slash pine.

FS 69017

Walker, L.C.; Collier, G.L. 1969. Geography of the southern forest region. Bull. 18. Nacogdoches, TX: Stephen F. Austin University, School of Forestry. 68 p.

DESCRIPTORS: silviculture.

FS 69018

Wilhite, L.P.; Schultz, R.P. 1969. Summer plantings of sand and longleaf pines fail. Tree Planters Notes. 20(1):7.

FS 70001

Berry, C.W. 1970. Enumeration and identification of the microbial populations from burned and unburned pine forest soil. M.S. Thesis, Louisiana Tech. University.

Lay, D.W., and Russell, D.N. 1970. Notes on the redcockaded woodpecker in Texas. AUK. 87(4):781-786.

FS 70003

Schultze-Dewitz, G. 1970. On the intensity of decay of several brown-rotting fungi, investigated on pine wood. Drev. Vysk. 4:167-178.

DESCRIPTORS: brown-rotting fungi; decay; resin.

FS 70004

Schultze-Dewitz, V.G. 1970. True and false annual rings in pitch pine (*Pinus palustris* Mill.). Drev Vysk. 3:133-138.

DESCRIPTORS: annual rings; tracheids; auxins.

FS 70005

Woodwell, G.M. 1970. Effects of pollution on the structure and physiology of ecosystems. Science. 168(3930):429-33.

DESCRIPTORS: radiation-resistant; fire-resistant; annuals; perennials.

FS 71001

Anonymous. 1971. Well-bred longleaf pine shows resistance to brown-spot. Forest Farmer. 30(5):14-15.

FS 71002

Croker, T.C., Jr. 1971. Binocular counts of longleaf pine strobili. Res. Note. SO-127. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 3 p.

FS 71003

Fatzinger, C.W.; Asher, W.C. 1971. Observation of pupation and emergence behavior of *Dioryctria abietella* (Lepidoptera; Pyralidae (Phycitinae)). Annals of the Entomological Society of America. 64(2):413-418.

DESCRIPTORS: Dioryctria abietella; pupation; larvae; pupae; moths.

FS 71004

Gemborys, S.R.; Hodgkins, E.J. 1971. Forests of small stream bottoms in the Coastal Plain of southwestern Alabama. Ecology. 52(1):70-84.

DESCRIPTORS: ordination gradient; water-table depth; soil-surface gradient; soil pH.

FS 71005

Howard, E.T. 1971. Bark structure of Southern Pines. Wood Science. 3(3):134-148.

DESCRIPTORS: periderm; bark.

FS 71006

Hunter, J.H.; Agerton, B.M. 1971. Annual diameter growth of conifers adjacent to Eglin reservation test area C-52A as related to the testing of defoliant spray equipment. Tech. Rep. AFATL-TR-71-52. May 1971.

FS 71007

Kuhlman, E.G. 1971. Seedling inoculations with *Fomes annosus* show variation in virulence and in host susceptibility. Phytopathology. 60(12):1743-1746.

DESCRIPTORS: regeneration.

FS 71008

Langdon, O.G. 1971. Effect of prescribed burning on timber species in the Southeastern Coastal Plain. In: Proceedings - prescribed burning symposium; 1971 April

14-16; Charleston, SC: Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 160 p.

FS 71009

Watts, W.A. 1971. Postglacial vegetation history of southern Georgia and central Florida. Ecology. 52(4):676-690.

FS 72001

Barcia, D.R.; Merkel, E.P. 1972. Bibliography on insects destructive to flowers, cones, and seeds of North American Conifers. Res. Pap. SE-92. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 80 p.

FS 72002

Goolsby, R.P.; Ruehle, J.L.; Yates, H.O., III. 1972. Insects and diseases of seed orchards in the South. Rep. No. 28. Macon, GA: Georgia Forest Research Council. 25 p.

FS 72003

Hartshorn, G.S. 1972. Vegetation and soil relationships in southern Beaufort County, North Carolina. Journal of Elisha Mitchell Science Society. 88(4):226-238.

FS 72004

Hebb, E.A. 1972. Resistance to ice damage - a consideration in reforestation. Tree Planters' Notes. 22(2):24-25.

FS 72005

Morse, D.H. 1972. Habitat utilization of the red-cockaded woodpecker during the winter. AUK. 89(2):429-435.

FS 73001

Britt, R.W. 1973. Management of natural stands of Choctawhatchee sand pine. In: Proceedings - sand pine symposium. Gen. Tech. Rep. SE-2. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:135-143.

DESCRIPTORS: fire; shelterwood; sandhills.

FS 73002

Burns, R.M. 1973. Comparative growth of planted pines in the sandhills of Florida, Georgia, and South Carolina. In: Proceedings - sand pine symposium. Gen. Tech. Rep. SE-2. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station: 124-134.

DESCRIPTORS: slash pine; loblolly pine; short-leaf pine; longleaf pine; Ocala sand pine; Choctawhatchee sand pine.

FS 73003

Hough, W.A. 1973. Fuel and weather influence wildfires in sand pine forests. Res. Pap. SE-106. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 11 p.

DESCRIPTORS: fuel; weather; wildfires; moisture content; relative humidity; rainfall deficiency.

FS 73004

Johnson, E.W. 1973. Relationship between point density measurements and subsequent growth of southern pines. Bull. No. 447. Auburn University, AL: Auburn University, Agricultural Experiment Station. 109 p.

DESCRIPTORS: point density.

Langdon, O.G.; Schultz, R.P. 1973. Longleaf and slash pines. In: Silvicultural systems for the major forest types of the United States. Agric. Hndbk. No. 445. Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington Office:85-89.

FS 74001

Boyer, W.D. 1974. Longleaf pine cone production related to pollen density. In: Kraus, J. ed. Proceedings of a colloquium: seed yield from southern pine seed orchards; 1974 April 2-3: Macon, GA: Georgia Forest Research Council:8-14.

DESCRIPTORS: seed production; flowering.

FS 74002

Campbell, T.E. 1974. First-summer survival rate high for fall- and spring-germinated longleaf pine. Tree Planters' Notes. 25(3):18-19.

DESCRIPTORS: germination.

FS 74003

Hodges, C.S., Jr. 1974. Relative susceptibility of slash, loblolly and longleaf pines to infection by *Fomes annosus*. In: Kuhlman, E.G. ed. Proceeding - 4th international conference on *Fomes annosus*; 1973 September 17-22; Athens, GA: U.S. Department of Agriculture, Forest Service, Washington Office:86-91

DESCRIPTORS: infection; susceptibility; inoculation.

FS 74004

Schultz, R.P.; Wilhite, L.P. 1974. Changes in a flatwoods site following intensive preparation. Forest Science. 20(3):230-237.

FS 76001

Barnett, J.P. 1976. Cone and seed maturation of southern pines. Res. Pap. SO-122. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 11 p.

DESCRIPTORS: seed yield; cone; germination; immature cones; maturity; sugar content; x-rays.

FS 76002

Lewis, C.E., Harshbarger, T.J. 1976. Shrub and herbaceous vegetation after 20 years of prescribed burning in the South Carolina Coastal Plain. Journal of Range Management. 29:13-18.

DESCRIPTORS: ground cover; burning treatments; herbage yield.

FS 76003

Lohrey, R.E.; Robert, L.B. 1976. Yield tables and stand structure for unthinned longleaf pine plantations in Louisiana and Texas. Res. Pap. SO-133. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 53 p.

FS 76004

Taras, M.A.; Clark, A., III. 1976. Aboveground biomass of longleaf pine in a natural sawtimber stand in southern Alabama. Res. Pap. SE-162. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 32 p.

DESCRIPTORS: weight; volume; prediction equations; biomass.

FS 76005

Veno, P.A. 1976. Successional relationships in five Florida plant communities. Ecology. 57(3):498-508.

DESCRIPTORS: sandhills; fire suppression; mesic hammock; scrub; succession; xeric hammock.

FS 77001

Witcher, W.; Lane, C.L. 1977. Cronartium fusiforme on direct seeded and planted pines.

DESCRIPTORS: Savannah River Plant.

FS 78001

White, T.L.; Knopp, J.A. 1978. Conelet abortion and ATP levels in longleaf pine. Canadian Journal of Botany. 56:680-685.

 $\label{eq:DESCRIPTORS:} DESCRIPTORS: \ conelet \ abortion; \ ATP; \ encased \ conelets.$

FS 79001

Harlow, W.M.; Harrar, E.S.; White, F.M. 1979. Textbook of dendrology. New York, McGraw-Hill, Inc. 6th ed. 542 p.

FS 79002

Saucier, J.R.; Henderson, L.T.; Schoenike, R.E. 1979. Wood properties of plantation-grown sonderegger pine. Res. Note SE-272. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 4 p.

DESCRIPTORS: specific gravity; tracheid length.

FS 79003

Van Lear, D.H.; Jones, S.M. 1979. Classification of plant communities at the Savannah River Plant. Rep. No. 1026-2. Savannah River Plant: U.S. Department of Energy, Washington, D.C.

DESCRIPTORS: communities; classification.

FS 80001

Boyer, W.D. 1980. Interim site-index curves for longleaf pine plantations. Res. Note SO-261. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 5 p.

DESCRIPTORS: sites index; growth; density; height; cutting.

FS 80002

Delcourt, P.A. 1980. Goshen Springs: late Quaternary Vegetation record for southern Alabama. Ecology. 61(2):371-386.

FS 80003

Goodwin, O.C. 1980. Fertilization increases straw production and tree growth of longleaf pine stand in North Carolina. For. Note 43. Raleigh, NC: North Carolina Forest Service, Division of Forest Resources:6 p.

FS 80004

Michael, J.L. 1980. Long-term impact of aerial application of 2,4,5-T to longleaf pine (*Pinus palustris*). Weed Science. 28:255-257.

DESCRIPTORS: pine release; herbicide; competition; 2,4,5-T.

FS 80005

Shain, W.A.; Helms, J.R. 1980. Growth and yield of loblolly, slash, and longleaf pines in the South Carolina Sandhills: third measurement. Rep. No. 10706-1.

Savannah River Plant: U.S. Department of Energy, Washington, D.C.

DESCRIPTORS: comparative evaluations; experimental data; plant growth; productivity; soils; survival curves.

FS 80006

Sparks, R.C.; Linnartz, N.E.; Harris, H.E. 1980. Long-term effects of early pruning and thinning treatments on growth of natural longleaf pine. Southern Journal of Applied Forestry. 4:77-79.

DESCRIPTORS: pruning; thinning; stocking rate.

FS 80007

Watts, W.A. 1980. The late Quaternary Vegetation history of the Southeastern United States. Annual Review of Ecology and Systematics. 11:387-409.

FS 81001

Bechtold, W.A.; Sheffield, R.M. 1981. Forest statistics for Florida, 1980. Res. Bull. SE-58. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station.

DESCRIPTORS: inventories; industries; removal; structural; timber; forest land; growth; tables (data).

FS 81002

Boyer, W.D. 1981. Pollen production and dispersal as affected by seasonal temperature and rainfall patterns. In: Franklin, E.C., ed. Pollen management handbook. Agric. Hdbk No. 587. Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington Office:2-9.

FS 81003

Boyer, W.D. 1981. Site and stand factors affecting height growth curves of longleaf pine plantations. In: Barnett, J.P., ed. Proceedings - 1st biennial southern silviculture research conference. 1980 November 6-7; Atlanta, GA: Gen. Tech. Rep. SO-34. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:184-187.

FS 81004

Christensen, N.L. 1981. Fire regimes in southeastern ecosystems. In: Mooney, H.A.; Bonnicksen, T.M.; Christensen, N.L.; Loton, J.E.; Reinsers, W.A., eds. Fire regimes and ecosystems properties. Gen. Tech. Rep. WO-26. Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington Office:112-136

DESCRIPTORS: fire; ecosystem; southeast; Coastal Plain; landscape; fuel production; moisture condition.

FS 81005

Guldin, R.W.; Barnett, J.P., comps. 1981. Proceedings of the Southern Containerized Forest Tree Seedling Conference. Gen. Tech. Rep. SO-37. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 156 p.

DESCRIPTORS: reforestation; forest trees; containers; planting; plant diseases; morphology; plant growth; automation; survival; greenhouses.

FS 81006

Hatchell, G.E. 1981. Effects of root dips of benomyl and captan on seedling response and mycorrhizal development of outplanted longleaf, sand, and loblolly pines. Rep. No. SRO-870-21. Athens, GA: Institute for Myc-

orrhizal Research and Development. U.S. Department of Agriculture, Forest Service.

DESCRIPTORS: fungicides; seedlings; biological effects; experimental data; inoculation; mycorrhizae; survival curves.

FS 81007

Nifong, T.D. 1981. Natural areas inventory of Brunswick county, North Carolina. Rep. No. CEIP-10. Raleigh, NC: North Carolina Coastal Energy Impact Program.

DESCRIPTORS: natural resources; coasts; inventories; flood plains; vegetation; forest trees; swamps; birds; sites; mammals; plants; protection; bays.

FS 81008

Parker, J.A.; Haines, L.W. 1981. Longleaf pine seedling survival studies. In: Barnett, J.P., ed. Proceedings - 1st biennial southern silviculture research conference. 1980 November 6-7; Atlanta, GA: Gen. Tech. Rep. SO-34. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:16-19.

FS 82001

Garner, J.W.; Olinger, H.L. 1982. Modification of tree planter to include herbicide application. Tree Planters' Notes. 33(3):13-14.

FS 82002

Goodwin, O.C. 1982. Fertilization of longleaf pine stand increases straw production and tree growth yields up to three years. For. Note No.56. Raleigh, NC: North Carolina Forest Service, Division of Forest Resources. 5 p.

DESCRIPTORS: fertilization; straw production; growth; yields; plant nutrients; soil nutrients.

FS 82003

Guldin, R.W. 1982. What does it cost to grow seedlings in containers? Tree Planters' Notes. 33(1):34-37.

DESCRIPTORS: container-grown seedlings; bareroot seedlings; nursery; planting cost; site preparation.

FS 82004

Hatchell, G.E. 1982. Effects of root dips of benomyl and captan on seedling response and mycorrhizal development of outplanted longleaf, sand, and loblolly pines. Rep. No. SRO-870-29. Athens, GA: Institute for Mycorrhizal Research and Development, U.S. Department of Agriculture, Forest Service.

DESCRIPTORS: fungicides; population density; seedlings; biological effects; experimental data; mycorrhizae; survival curves.

FS 82005

McKee, W.H., Jr. 1982. Changes in soil fertility following prescribed burning on Coastal Plain pine sites. Res. Pap. SE-234. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 23 p.

DESCRIPTORS: soil fertility; weathering; calcium; nitrogen; burning; chemical constituent; sand; silt.

FS 82006

Moore, W.H.; Swindel, B.F.; Terry, W.S. 1982. Vegetation response to prescribed fire in a north Florida flatwoods forest. Journal of Range Management. 35(3):386-389.

DESCRIPTORS: grazing; management; controlled burning; fire effects; ecology.

FS 82007

Pearson, H.A.; Grelen, H.E.; Epps, E.A.; Johnson, M.K.; Blakewood, B.W. 1982. Botanical composition and nutritive value of cattle diets on Southern Pine Range. Res. Pap. SO-178. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 24 p.

DESCRIPTORS: diets; nutritive value; cattle; forest land; concentration (composition); range grasses; sampling; forage grasses; animal nutrition; digestion (biology); proteins; vitamins; calcium; phosphorus; tables (data).

FS 82008

Pyne, S.J. 1982. Fire in America. Princeton, N.J., Princeton University Press. 654 p.

FS 82009

Streng, D.R.; Harcombe, P.A. 1982. Why don't east Texas savannas grow up to forest? American Midland Naturalist. 108:278-294.

FS 82010

Wright, H.A.; Bailey, A.W. 1982. Fire ecology. New York: John Wiley and Sons. 501 p.

DESCRIPTORS: fire history; fire suppression; prescribed burning

FS 83001

Dennington, R.W.; Farrar, R.M., Jr. 1983. Longleaf pine management. R8-FR 3. Atlanta, GA: U.S. Department of Agriculture, Forest Service, Southern Region. 17 p.

FS 83002

Grelen, H.E. 1982. May burns benefits survival and growth of longleaf pine seedlings. In: Jones, E.P., Jr. ed. Proceedings - 2nd biennial southern silvicultural research conference; 1982 November 4-5; Atlanta, GA: Gen. Tech. Rep. SE-24. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:70-74.

DESCRIPTORS: May burns; survival; growth.

FS 83003

Hough, W.A. 1983. Fuel consumption and fire behavior of hazard reduction burns. Res. Pap. SE-36. Asheville, NC:
 U.S. Department of Agriculture, Forest Service Southern Forest Experiment Station.

DESCRIPTORS: fuel consumption; fires; spreading; moisture content; estimation; regression analysis; humidity.

FS 83004

Walker, J.; Peet, R.K. 1983. Composition and species diversity of pine-wiregrass savannas of the Green Swamp, North Carolina. Vegetatio. 55:163-179.

DESCRIPTORS: wiregrass; community types; species diversity; fire frequency; savannas; soil moisture; North Carolina.

FS 84001

Barnett, J.P. 1984. Relating seedling physiology to survival and growth in container-grown southern pines. In: Duryea, M.L.; Brown, G.N. ed. Proceedings of the

physiological working group technical session, Society of American Forester's national convention: seedling physiology and reforestationsuccess; 1983 October 16-20; Portland, OR: Dordrecht, Netherlands, Martinus Nijhoff/Dr W. Junk Publishers:157-176.

 $DESCRIPTORS: \ container \ grown \ plants; \ seedling \ culture.$

FS 84002

Byrd, N.A.; Lewis, C.E.; Pearson, H.A. 1984. Management of southern pine forests for cattle production. R8-GR4. Atlanta, GA: U.S. Department of Agriculture, Forest Service, Southern Region. 22 p.

 $DESCRIPTORS: {\it range management; cattle; reproduction.}$

FS 84003

Goddard, R.E.; Rockwood, D.L.; Kok, H.R. 1984. Cooperative forest genetics research program: twenty-sixth progress report. Rep. No. 35. Gainesville, FL: University of Florida, School of Forest Resources and Conservation. 26 p.

DESCRIPTORS: fungal diseases; disease resistance; plant breeding; breeding programs.

FS 84004

Grelen, H.E.; Hughes, R.H. 1984. Common herbaceous plants of southern forest range. Res. Pap. SO-210. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 147 p.

DESCRIPTORS: grasses; forbs; bluestem; wiregrass; marshes; prairies; bottomland hardwoods; upland hardwoods.

FS 84005

Hatchell, G.E. 1984. Effects of root dips of benomyl and captan on seedling response and mycorrhizal development of outplanted longleaf, sand, and loblolly pines. Rep. No. 00870-37. Athens, GA: Institute of Mycorrhizal Research and Development, U.S. Department of Agriculture, Forest Service.

 $\label{eq:DESCRIPTORS: seedlings; fungicides; growth; mycorrhiza.}$ mycorrhiza.

FS 84006

Johnson, V.J. 1984. How shape affects the burning of piled debris. Fire Management Notes. 45(3):12-15.

DESCRIPTORS: slash; controlled burning; planning; ecology; forest fires.

FS 84007

Judge, R.P.; Strait, R.; Hyde, W.F. 1984. Economics of endangered species management: the red-cockaded woodpecker. In: Sabol, K. ed. Transactions 49th North American wildlife and natural resources conference. Washington, D.C.: Wildlife Management Institute:375-381.

DESCRIPTORS: rotation; birds; conservation; management; economics; ecology.

FS 84008

Kais, A.G.; Cordell, C.E.; Affeltranger, C.E. 1984. Increased survival of longleaf pine with *Pisolithus tinctorius* and benomyl. In: Molina, R. ed. Proceedings - 6th North American Conference on Mycorrhizae; 1984 June 25-29; Bend, OR: Oregon State University, Col-

lege of Forestry:222.

DESCRIPTORS: benomyl; survival.

FS 84009

Kalisz, P.J.; **Stone, E.L.** 1984. Soil mixing by scarab beetles and pocket gophers in north-central Florida. Soil Science Society of America Journal. 48(1):169-172.

DESCRIPTORS: pedoturbation; soil movement; mammals.

FS 84010

Kossuth, S.V. 1984. Biomass chemicals: improvement in quality and quantity with physiological regulators. Biomass. 6(1-2):47-59.

DESCRIPTORS: biomass energy research; growth regulators; plant physiology.

FS 84011

Marx, D.H.; Cordell, C.E.; Kenney, D.S.; Mexal, J.G.; Artman, J.D.; Riffle, J.W.; Molina, R.J. 1984. Commercial vegetative inoculum of *Pisolithus tinctorius* and inoculation techniques for development of ectomycorrhizae on bare-root tree seedlings. Forest Science Monograph. No. 25

DESCRIPTORS: mycorrhizae; culture techniques; inoculation; fungi; specific taxa; woody plants; techniques.

FS 84012

Miller, J.H. 1984. Soil-active herbicides for single-stem and stand hardwood control. In: Proceedings of the 37th Southern Weed Science Society meeting; 1984 January 17-19; Hot Springs, AR; SWSPBE 37; Champaign, IL: Weed Science Society of America:173-181.

DESCRIPTORS: herbicides.

FS 84013

Sommer, H.E.; Wetzstein, H.Y.; Stine, M.; Lee, N. 1984. Differentiation in tissue culture of sweetgum and southern pines. In: Proceedings of the Technical Association of the Pulp and Paper Industry research and development conference; 1984 September 30 - October 3; Appleton, WI: University of Georgia, School of Forest Resources:35-37.

DESCRIPTORS: TAPPI research; vegetative propagation; tissue culture; leaves; anatomy.

FS 84014

Tinus, R.W.; Owston, P.W.; Barnett, J.P. 1983. Stock quality - stock types: Container. In: Duryea, M.L.; Brown, G.N. ed. Proceedings of the physiological working group technical session, Society of American Forester's national convention: seedling physiology and reforestation success; 1983October 16-20; Portland, OR: Dordrecht, Netherlands, Martinus Nijhoff/Dr W. Junk Publishers:143-176.

DESCRIPTORS: seedling physiology; reforestation success; planting stock; containers; nursery management; quality.

FS 84015

USDA Forest Service. 1984. Southern Pine nursery handbook. Atlanta, GA: U.S. Department of Agriculture, Forest Service, Southern Region. 372 p.

DESCRIPTORS: nurseries; seedlings.

FS 84016

Wengert, E.M. 1984. Southern pine high temperature kiln control with temperature drop across the load (TDAL) measurements. In: Robertson, D; White, J.; comp. Proceedings - computer automation for sawmill profit; Dubuque, IA: Kendall/Hunt Publishing:83-85.

DESCRIPTORS: lumber; drying; kilns; temperatures; automatic control; moisture content.

FS 84017

Zahn, J.J. 1984. Strength of southern pine 2x4 beam-columns. Forest Products Laboratory, U.S. Department of Agriculture, Forest Service. 56 p.

DESCRIPTORS: wood testing; simulation methods; strength of materials; wooden beams.

FS 85001

Barnett, J.P. 1985. Estimating seed vigor by sugar exudates and radicle elongation. Tree Planters' Notes. 36(3):16-19.

DESCRIPTORS: seeds; radicles; sugars; vigor.

FS 85002

Beers, B.L.; Bailey, R.L. 1985. Yields, stand structure and economic conclusions: based on a 22-year-old site preparation study with planted loblolly and longleaf pines. Res. Pap. No. 55. Georgia Forestry Commission, Research Division. 7 p.

DESCRIPTORS: stand characteristics; increment; volume; structure; site preparation; mechanical methods.

FS 85003

Beers, B.L.; Bailey, R.L. 1985. Yields, stand structure and economic conclusions from a 22-year-old site preparation study with planted loblolly and longleaf pines. In: Shoulders, E., ed. Proceedings - 3rd biennial southern silvicultural research conference; 1984 November 7-8; Atlanta, GA: Gen. Tech. Rep. SO-54. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:86.

FS 85004

Boyer, W.D. 1985. First-year survival of planted longleaf pine bare-root and container stock as affected by site preparation and release. In: Shoulders, E., ed. Proceedings - 3rd biennial southern silvicultural research conference; 1984 November 7-8; Atlanta, GA: Gen. Tech. Rep. SO-54. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:74-78.

FS 85005

Boyer, W.D. 1985. Timing of longleaf pine seedling release from overtopping hardwoods: a look 30 years later. Southern Journal of Applied Forestry. 9(2):114-116.

 $\label{eq:DESCRIPTORS:} Description DESCRIPTORS: plant competition; weed control; cutting.$

FS 85006

Byram, T.D.; Lowe, W.J. 1985. Longleaf pine tree improvement in the western Gulf region. In: Proceedings - 18th southern forest tree improvement conference; 1985 May 21-23; Long Beach, MS:Pub. No. 40. Southern Forest Tree Improvement Committee:78-87.

Dwinell, L.D.; Barrows-Broaddus, J.B.; Kuhlman, E.G. 1985. Pitch canker: a disease complex of southern pines. Plant Disease. 69(3):270-276.

FS 85008

Farrar, R.M., Jr. 1985. Crown ratio used as a surrogate for form in a volume equation for natural longleaf pine stems. In: Shoulders, E., ed. Proceedings - 3rd biennial southern silvicultural research conference; 1984 November 7-8; Atlanta, GA: Gen. Tech. Rep. SO-54. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:429-435.

DESCRIPTORS: stems; volume determination; crown cover.

FS 85009

Farrar, R.M., Jr. 1985. Predicting stand and stock tables from a spacing study in naturally regenerated longleaf pine. Res. Pap. SO-219. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 28 p.

DESCRIPTORS: volume; prediction; yields; tree age; stand density; stocking density; computer software; basal area.

FS 85010

Farrar, R.M., Jr. 1985. Volume and growth predictions for thinned even-aged natural longleaf pine stands in the east Gulf area. Res. Pap. SO-220. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 171 p.

FS 85011

Fatzinger, C.W. 1985. Attraction of the black turpentine beetle (Coleoptera: Scolytidae) and other forest *Coleoptera* to turpentine-baited traps. Environmental Entomology. 14(6):768-775.

DESCRIPTORS: insect traps; baits; turpentine; insect attractants.

FS 85012

Gaby, L.I. 1985. The southern pines: An American Wood. FS-256. U.S. Department of Agriculture, Forest Service. 10 p.

FS 85013

Glover, G.R.; Creighton, J.L. 1985. Effects of hardwoods on pine yield, summary of data. In: Proceedings - Southern Weed Science Society, 38th annual meeting; 1985 January; SWSPBE 38; Champaign, IL: Weed Science Society of America:256.

DESCRIPTORS: ammonium sulphamate; usage; dalapon; glyphosate; 2,4,5-t; 2,4-d; hexazinone paraquat; picloram; simazine; triclopyr; weed control; chemical vs. cultural weed control.

FS 85014

Hatchell, G.E. 1985. Seedling quality and field performance of longleaf pine seedlings affected by ectomycorrhizae and nursery cultural practices. In: Shoulders, E., ed. Proceedings - 3rd biennial southern silvicultural research conference; 1984 November 7-8; Atlanta, GA: Gen. Tech. Rep. SO-54. New Orleans, LA: U.S. De-

partment of Agriculture, Forest Service, Southern Forest Experiment Station:395-402.

DESCRIPTORS: cultural methods; seedlings; performance.

FS 85015

Humphrey, S.R.; Eisenberg, J.F.; Franz, R. 1985. Possibilities for restoring wildlife of a longleaf pine savanna in an abandoned citrus grove. Wildlife Society Bulletin. 13(4):487-496.

DESCRIPTORS: wildlife; wildlife conservation; abandoned land; citrus; orchards; habitat improvement.

FS 85016

Kais, A.G. 1985. Recent advances in control of brown spot in longleaf pine. In: 34th annual forestry symposium; Baton Rouge, LA: Louisiana State University, Division of Continuing Education:83-90.

DESCRIPTORS: scirrhia; disease control; benomyl; survival; root treatment.

FS 85017

Kroll, J.C.; Deauman, W.C.; Foster, C.D.; Kulhavey, D.L.; Tracey, W.D. 1985. Survival of pines on droughty soils: two year results. In: Shoulders, E., ed. Proceedings - 3rd biennial southern silvicultural research conference; 1984 November 7-8; Atlanta, GA: Gen. Tech. Rep. SO-54. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:128-131.

FS 85018

Lewis, C.E.; Monson, W.G.; Bonyata, R.J. 1985. Pensacola bahiagrass can be used to improve the forage resource when regenerating southern pines. Southern Journal of Applied Forestry. 9(4):254-259.

DESCRIPTORS: agroforestry; direct sowing; nutritional value; digestibility; fertilizers.

FS 85019

Marx, D.H. 1985. Reclamation of Borrow Pits and Denuded Lands: Final Report, September 1, 1976 to December 31, 1985. Rep. No. 00870-40. Savannah River Plant: U.S. Department of Energy. 5 p.

DESCRIPTORS: land reclamation; field tests; plant growth; sewage; sludge; solid waste disposal.

FS 85020

McReynolds, R.D.; Kossuth, S.V. 1985. CEPA in liquid sulfuric acid increases oleoresin yields. Southern Journal of Applied Forestry. 9(3):170-173.

DESCRIPTORS: oleoresins; 2-chloroethylphosphonic acid; sulfuric acid.

FS 85021

Means, D.B.; Grow, G. 1985. The endangered longleaf pine community. ENFO Rep. 85(4):1-12.

DESCRIPTORS: biology; ecology; fire.

FS 85022

Mohlenbrock, R.H. 1985. Leon Sinks, Florida. Natural History. 94(12):76-78.

DESCRIPTORS: plant ecology; fire ecology; limestone soils; sandy soils.

FS 85023

Myers, R.L. 1985. Fire and the dynamic relationship be-

tween Florida Sandhill and Sand-pine scrub vegetation. Bulletin of the Torrey Botanical Club. 112:241-252.

DESCRIPTORS: sand pine scrub; soil; fire; scrub oaks.

FS 85024

Nelson, L.R.; Zutter, B.R.; Gjerstad, D.H. 1985. Planted longleaf pine seedlings respond to herbaceous weed control using herbicides. Southern Journal of Applied Forestry. 9(4):236-240.

DESCRIPTORS: seedlings; growth rate; height; tree diameter/girth; herbicides; weed control; fungal diseases; blights.

FS 85025

Outcalt, K.W. 1985. Direct seeding versus planting for establishment of pines on West Florida sandhills. In: Shoulders, E., ed. Proceedings - 3rd biennial southern silvicultural research conference; 1984 November 7-8; Atlanta, GA: Gen. Tech. Rep. SO-54. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:122-127.

DESCRIPTORS: direct sowing; seedlings; planting; hill sites; sand.

FS 85026

Repenning, R.W.; Labisky, R.F. 1985. Effects of even-age timber management on bird communities of the longleaf pine forest in northern Florida. Journal of Wildlife Management. 49(4):1088-1098.

DESCRIPTORS: forest influences; bird; wildlife management.

FS 85027

Richardson, D.R. 1985. Allelopathy and fire in the Florida scrub. American Journal of Botany. 72(6):864.

DESCRIPTORS: weeds; ecology; allelopathy.

FS 85028

Rounsaville, M.G. 1985. Techniques for successful artificial regeneration of longleaf pine. In: Proceedings - 18th southern forest tree improvement conference; 1985 May 21-23; Long Beach, MS: Pub. No. 40. Southern Forest Tree Improvement Committee:75-77.

FS 85029

Ruehle, J.L. 1985. The effect of cupric carbonate on root morphology of containerized mycorrhizal pine seedlings. Canadian Journal of Forest Research. 15(3):586-592.

DESCRIPTORS: mycorrhizae; inoculation; nursery management; containers; planting stock; quality; roots; growth; development; cupric carbonate; copper carbonate.

FS 85030

Schmidtling, R.C. 1985. Species and cultural effects on soil chemistry in a southern pine plantation after 24 years. In: Shoulders, E., ed. Proceedings - 3rd biennial southern silvicultural research conference; 1984 November 7-8; Atlanta, GA: Gen. Tech. Rep. SO-54, New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:573-577.

DESCRIPTORS: fertilizers; nitrogen; phosphorus; potassium; cultivation.

FS 85031

Shoulders, E. 1985. The case for planting longleaf pine. In: Shoulders, E., ed. Proceedings - 3rd biennial southern silvicultural research conference; 1984 November 7-8; Atlanta, GA: Gen. Tech. Rep. SO-54, New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:255-260.

DESCRIPTORS: plant establishment; survival; performance; productivity.

FS 85032

Stine, M.; Sommer, H.E. 1985. Comparison of adventitious shoot formation from mature embryos of longleaf pine, slash pine, and the hybrid, longleaf pine X slash pine. In: Proceedings of the 4th North Central Tree Improvement Conference; Madison, WI: University of Wisconsin-Madison, Department of Forestry:6-11.

DESCRIPTORS: hybridization; embryos (plant); shoots; development; tissue culture; f1 hybrids; ontogeny.

FS 85033

Teitelbaum, R.D.; Smith, W.P. 1985. Cavity-site characteristics of the red-cockaded woodpecker in Fontainebleau State Park, Louisiana. In: Proceedings of the Louisiana Academy of Sciences. 48:116-122.

DESCRIPTORS: birds; forest ecology; tree cavities.

FS 85034

Ting, J.C.; Chang, M. 1985. Soil-moisture depletion under three southern pine plantations in east Texas. Forest Ecology and Management. 12(3/4):179-193.

DESCRIPTORS: forest plantations; soil moisture.

FS 85035

Vozzo, J.A. 1985. Mulch and temperature effects on germination of southern pine seed. In: Shoulders, E., ed. Proceedings - 3rd biennial southern silvicultural research conference; 1984 November 7-8; Atlanta, GA: Gen. Tech. Rep. SO-54. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:42-44.

FS 85036

Winandy, J.E.; Boone, R.S.; Bendtsen, B.A. 1985. Interaction of CCA preservative treatment and redrying: effect on the mechanical properties of southern pine. Forest Products Journal. 35(10):62-68.

DESCRIPTORS: lumber; wood preservation; wood preservatives; drying; mechanical properties of wood.

FS 86001

Anderson, R.L.; Walkinshaw, C.H. 1986. Susceptibility of longleaf pine seedlings to *Cronartium quercuum* f. sp. *fusiforme* in greenhouse tests. Plant Disease. 70(1):50-51.

DESCRIPTORS: seedlings; greenhouse culture; susceptibility; rust diseases; screening tests.

FS 86002

Barnett, J.P.; Brissette, J.C. 1986. Producing southern pine seedlings in containers. Gen. Tech. Rep. SO-59. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 71 p.

DESCRIPTORS: seedlings; containers.

Barnett, J.P.; McGilvy, J.M. 1986. Periodicity in germination of stored slash and longleaf pine seeds. In: Proceedings - 9th North American Forest Biology Workshop, physiologic and genetics basis of forest decline; 1986 June 15-18; Stillwater, OK: Oklahoma State University:51-55.

DESCRIPTORS: speed of germination; germination value; product of mean daily germination; peak value.

FS 86004

Cao, Q.V.; Pepper, W.D. 1986. Predicting inside bark diameter for shortleaf, loblolly, and longleaf pines. Southern Journal of Applied Forestry. 10(4):220-224.

DESCRIPTORS: bark; diameter; prediction; mathematical models.

FS 86005

English, J.T.; Ploetz, R.C.; Barnard, E.L. 1986. Seedling blight of longleaf pine caused by a binucleate *Rhizoctonia solani*-like fungus. Plant Disease 70:148-150.

FS 86006

Funk, A. 1986. Two new Discomycetes on Pinus. Mycotaxon. 27:283-288.

DESCRIPTORS: fungi; plant pathogens; taxonomy; new taxa.

FS 86007

Gibson, M.D.; McMillin, C.W.; Shoulders, E. 1986. Moisture content and specific gravity of the four major southern pines under the same age and site conditions. Wood and Fiber Science. 18(3):428-435.

DESCRIPTORS: moisture content; specific gravity; site factors.

FS 86008

Gilly, S.P.; Barnard, E.L.; Schroeder, R.A. 1986. Field trials for control of *Rhizoctonia* blight of longleaf pine seedlings: effects of seedbed planting densities, fungicides and mulches. In: South, D.B., ed. Proceedings of the International Symposium on Nursery Management Practices for the Southern Pines; 1985 August 4-9; Montgomery, AL: Auburn University Alabama AgriculturalExperiment Station:476-485.

DESCRIPTORS: seedlings; disease control; blights; forest nurseries; plant density; seedbeds; benomyl; thiophanate-methyl; mancozeb; benodanil; mulches.

FS 86009

Griggs, M.M.; Schmidt, R.A. 1986. Disease progress of *Scirrhia acicola* in single and mixed family plantings of resistant and susceptible longleaf pine. In: Peterson, G.W., tech. coord. Proceedings - recent research conference on conifer needle diseases; 1984 October 14-18; Gulfport, MS: Gen. Tech. Rep. WO-50. Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington Office:5-10.

DESCRIPTORS: disease resistance; susceptibility; epidemics; brown spot disease; dieback; mixed conifers; varietal reactions.

FS 86010

Hatchell, G.E. 1986. Nursery cultural practices affect field performance of longleaf pine. In: South, D.B., ed. Proceedings of the International Symposium on Nursery Management Practices for the Southern Pines; 1985 August 4-9; Montgomery, AL: Auburn University Alabama Agricultural Experiment Station:148-156.

DESCRIPTORS: seedlings; forest nurseries; growth; survival; height; inoculation; seedbeds; plant density; root pruning.

FS 86011

Hooper, R.G.; Harlow, R.F. 1986. Forest stands selected by foraging red-cockaded woodpeckers. Res. Pap. SE-259. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 10 p.

DESCRIPTORS: birds; ecology; management; conservation.

FS 86012

Hu, Shih-Chang; Burns, P.Y. 1986. Longleaf pine: a bibliography, 1858-1984. Res. Rep. No. 6. Baton Rouge, LA: School of Forestry, Wildlife, and Fisheries, Louisiana Agricultural Experiment Station, Louisiana State University Agricultural Center. 93 p.

DESCRIPTORS: bibliography.

FS 86013

Hughes, J.S.; Evans, D.L.; Burns, P.Y.; Hill, J.M. 1986. Identification of two southern pine species in high-resolution aerial MSS data. Photogrammetric Engineering and Remote Sensing. 52(8):1175-1180.

DESCRIPTORS: identification; forest surveys; multispectral imagery; reflectance.

FS 86014

Jewell, F.F., Sr. 1986. Histological studies of *Scirrhia acicola* (Dearn.) Siggers and other needle-inhabiting fungi on longleaf and loblolly pines. In: Peterson, G.W., tech. coord. Proceedings - recent research on conifer needle diseases; 1984 October 14-18; Gulfport, MS: Gen. Tech. Rep. WO-50. Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington Office:1-4.

DESCRIPTORS: conifer needles; brown spot disease; fungi; histology; plant pathology; tissue analysis.

FS 86015

Kais, A.G.; Cordell, C.E.; Affeltranger, C.E. 1986. Benomyl root treatment controls brown-spot disease on longleaf pine in the southern United States. Forest Science. 32(2):506-511.

DESCRIPTORS: seedlings; root treatment; benomyl; growth rate; survival; soil texture; infection.

FS 86016

Kais, A.G.; Cordell, C.E.; Affeltranger, C.E. 1986. Nursery application of benomyl fungicide for field control of brown-spot needle blight (*Scirrhia acicola* (Dearn.) Sigg.) on longleaf pine (*Pinus palustris* Mill.) Tree Planters' Notes. 37(1):5.

DESCRIPTORS: benomyl; root treatment; planting stock; disease control; survival.

Kais, A.G.; Griggs, M.M. 1986. Control of brown spot needle blight infection on longleaf pine through benomyl treatment and breeding. In: Peterson, G.W., tech. coord. Proceedings - recent research on conifer needle diseases; 1984 October 14-18; Gulfport, MS: Gen. Tech. Rep. WO-50. Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington Office:15-19.

DESCRIPTORS: brown spot; fungus control; benomyl; root treatment; disease resistance; plant breeding.

FS 86018

Kandya, A.K.; Ogino, K. 1986. Reserve dry weight of seed: a significant factor governing the germination potential of seeds in some conifers. Journal of Tropical Forestry. 2(1):21-26.

DESCRIPTORS: seed germination; seed weight; seed characteristics.

FS 86019

Kraus, J.F. 1986. Brown spot needle blight susceptibility of longleaf pine seed sources in Georgia and Florida. In: Peterson, G.W., tech. coord. Proceedings - recent research on conifer needle diseases; 1984 October 14-18; Gulfport, MS: Gen. Tech. Rep. WO-50. Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington Office:11-14.

DESCRIPTORS: conifer needles; brown spot disease; provenance; disease resistance; breeding aims; progeny testing.

FS 86020

Kuhlman, E.G. 1986. Impact of annosus root rot minimal 22 years after planting pines on root rot infested sites. Southern Journal of Applied Forestry. 10(2):96-98.

DESCRIPTORS: root rot; heterobasidion annosum; assessment; regeneration.

FS 86021

Lewis, C.E.; Harshbarger, T.J. 1986. Burning and grazing effects on bobwhite foods in the Southeastern Coastal Plain. Wildlife Society Bulletin. 14(4):455-459.

DESCRIPTORS: prescribed burning; grazing effects; habitat destruction; feed grasses; wildlife management.

FS 86022

Marx, D.H.; Hatchell, G.E. 1986. Root stripping of ectomycorrhizae decreases field performance of loblolly and longleaf pine seedlings. Southern Journal of Applied Forestry. 10(3):173-179.

DESCRIPTORS: seedlings; growth rate; stand establishment; rooting.

FS 86023

McClanahan, T.R. 1986. Seed dispersal from vegetation islands. Ecological Modeling. 32(4):301-309.

DESCRIPTORS: seed dispersal; islands; revegetation; plant density; plant community analysis; models; ecosystems.

FS 86024

Munson, K.; Watts, J.; Dippon, D.; Flinchum, M. 1986. Forestry information system. 6. Silvicultural practices. Circ. 632. Gainesville, FL: Florida Cooperative Extension Service. 20 p.

DESCRIPTORS: silviculture; computer software.

FS 86025

Pehl, C.E.; Shellnutt, H.E., Jr. 1986. Forest floor and soil nutrient conditions in the Georgia Sandhills. Res. Pap. No. 62. Macon, GA: Georgia Forestry Commission. 11 p.

DESCRIPTORS: forest litter; nutrients; soil chemistry; site types; site preparation; mechanical methods; chemical treatment.

FS 86026

Sluder, E.R. 1986. Gains from first-cycle selection in slash and longleaf pines. Silvae Genetica. 35(4):155-159. *DESCRIPTORS:* plant breeding; genetic gain; heri-

tability; disease resistance; selection differential.

FS 86027

Smith, D.M. 1986. The practice of silviculture. New York, John Wiley and Sons. 500 p.

FS 86028

South, D.B. 1986. Diphenylether herbicides in southern pine nurseries. In: South, D.B., ed. Proceedings of the International Symposium on Nursery Management Practices for the Southern Pines; 1985 August 4-9; Montgomery, AL: Auburn University Alabama Agricultural Experiment Station:441-453.

DESCRIPTORS: weed control; forest nurseries; herbicides; structure activity relationships; tolerances.

FS 86029

South, D.B. 1986. Herbicides for southern pine seedbeds. Southern Journal of Applied Forestry. 10(3):152-157. DESCRIPTORS: forest nurseries; weed control; herbicides; cost benefit analysis.

FS 86030

Thill, R.E.; Bellemore, J.C. 1986. Understory responses to fertilization of eroded Kisatchie soil in Louisiana. Res. Note SO-330. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 6 p.

DESCRIPTORS: fertilizers; ecology; ground vegetation; underwood; soil types.

FS 86031

Thill, R.E.; Martin, A., Jr. 1986. Deer and cattle diet overlap on Louisiana pine-bluestem range. Journal of Wildlife Management. 50(4):707-713.

DESCRIPTORS: cattle; diets; competition; rangelands; seasons; grazing; burning; foraging.

FS 86032

Tran, A.V.; Chambers, R.P. 1986. Chemicals from biomass: the identification and solution of inhibition caused by wood extractives on the fermentation of a southern pine prehydorlyzate to butanediol. In: Smith, W.H. ed. Biomass energy development; New York: Plenum Press:561-572.

DESCRIPTORS: fermentation; butanediol; biomass; inhibition; wood extractives; mannose; inhibitors; wood sugar.

FS 86033

Voight, W., Jr. 1986. Report on the longleaf pine. American Forests. 92(5):42-45, 63.

DESCRIPTORS: artificial regeneration; planting; forest nurseries; container grown plants.

Vozzo, J.A.; Bonner, F.T. 1986. Using electrical conductivity of seed leachate as a measure of seed quality in southern pines. In: South, D.B., ed. Proceedings of the International Symposium on Nursery Management Practices for the Southern Pines; 1985 August 4-9; Montgomery, AL: Auburn University Alabama Agricultural Experiment Station:94-101.

DESCRIPTORS: seeds; quality; electrical conductivity; exudates.

FS 86035

Wade, D.D.; Johansen, R.W. 1986. Effects of fire on southern pine: observations and recommendations. Gen. Tech. Rep. SE-14. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 14 p.

DESCRIPTORS: fire damage; prescribed burns.

FS 86036

Wood, G.W. 1986. Influences of forest fertilization on South Carolina deer forage quality. Southern Journal of Applied Forestry. 10(4):203-206.

DESCRIPTORS: fertilizers; deer; management; browse; foliage; responses; plant composition.

FS 87001

Allen, H.L.; Dougherty, P.M.; Campbell, R.G. 1987. Manipulation of water and nutrients - practice and opportunity in southern U.S. pine forests. Forest Ecology and Management. 30(1-4):437-453.

DESCRIPTORS: silviculture; water management; nutrients; forest growth; drainage; fertilizers; forestry practices; models; site preparation; thinning.

FS 87002

Barnett, J.P.; Kais, A.G. 1987. Longleaf pine seedling storability and resistance to brown-spot disease improved by adding benomyl to the packing medium. In: Phillips, D.R., comp. Proceedings - 4th biennial southern silvicultural research conference; 1986 November 4-6; Atlanta, GA: Gen. Tech. Rep. SE-42. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:222-224.

DESCRIPTORS: longleaf pine; seedling survival; brown-spot disease control; Scirrhia acicola.

FS 87003

Bonner, F.T. 1987. Cone storage and seedling quality in longleaf pine. Res. Note SO-341. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 4 p.

DESCRIPTORS: cones; storage; seed germination; moisture content; cone storage; seed quality.

FS 87004

Boyer, W.D. 1987. Annual and geographic variations in cone production by longleaf pine. In: Phillips, D.R., comp. Proceedings - 4th biennial southern silvicultural research conference; 1986 November 4-6; Atlanta, GA: Gen. Tech. Rep. SE-42. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:73-76.

FS 87005

Boyer, W.D. 1987. Volume growth loss: a hidden cost of periodic prescribed burning in longleaf pine? Southern

Journal of Applied Forestry. 11(3):154-157.

DESCRIPTORS: prescribed burning; growth; hardwoods.

FS 87006

Conner, R.N.; O'Halloran, K.A. 1987. Cavity-tree selection by red-cockaded woodpeckers as related to growth dynamics of southern pines. Wilson Bulletin. 99(3): 398-412.

FS 87007

Creighton, J.L.; Zutter, B.R.; Glover, G.R.; Gjerstad, D.H. 1987. Planted pine growth and survival responses to herbaceous vegetation control, treatment duration, and herbicide application technique. Southern Journal of Applied Forestry. 11(4):223-227.

DESCRIPTORS: herbicide application; weeds; survival; growth rate; plant height; tree diameter/girth.

FS 87008

Croker, T.C., Jr. 1987. Longleaf pine: a history of man and a forest. R8-FR7. Atlanta, GA: U.S. Department of Agriculture, Forest Service, Southern Region. 37 p.

DESCRIPTORS: history; regeneration; logging; silviculture; forest management.

FS 87009

Delcourt, P.A.; Delcourt, H.R. 1987. Long-term forest dynamics of the temperate zone. New York: Springer-Verlag. 439 p.

FS 87010

Dennington, R.W.; Sirmon, G.A. 1987. Longleaf pine - a favorite on the rebound. Forest Farmer 46(8):9-10.

FS 87011

Dobrowolski, J.P.; Blackburn, W.H.; Grelen, H.E. 1987. Sediment production from long-term burning of a longleaf pine-bluestem association. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings - Southern Evaluation Workshop, ecological, physical and socioeconomic relationships within southern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:251-260.

DESCRIPTORS: prescribed burning; sediments; sandy loam soils; silty soils.

FS 87012

Farrar, R.M., Jr. 1987. Stem-profile functions for predicting multiple-product volumes in natural longleaf pines. Southern Journal of Applied Forestry. 11(3):161-167.

DESCRIPTORS: stand measurement; volume determination; prediction; calculation; ratios.

FS 87013

Fatzinger, C.W.; Siegfried, B.D.; Wilkinson, R.C.; Nation, J.L. 1987. Trans-verbenol, turpentine, and ethanol as trap baits for the black turpentine beetle, (*Dendroctonus terebrans*), and other forest coleoptera in north Florida. Journal of Entomological Science. 22(3):201-209.

DESCRIPTORS: insect traps; baits; ethanol; turpentine; terpenoids; pheromones.

FS 87014

Frost, C.C.; Musselman, L.J. 1987. History and vegeta-

tion of the Blackwater Ecologic Preserve. Castanea. 52(1):16-46.

DESCRIPTORS: nature reserves; vegetation; plant community analysis.

FS 87015

Hamilton, R.B.; Yurkunas, V.G. 1987. Avian use of habitats in the longleaf-slash pine forests of Louisiana. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings - Southern Evaluation Workshop, ecological, physical and socioeconomic relationships within southern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. Atlanta, GA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:125-137.

DESCRIPTORS: national forests; wildlife; birds; habitat selection.

FS 87016

Hare, R.C. 1987. Increase longleaf pine seed yields by inhibiting conelet abortion. Southern Journal of Applied Forestry. 11(1):6-9.

DESCRIPTORS: seed production; cones; cytokinins; yields; boric acid.

FS 87017

Hatchell, G.E. 1987. Nursery cultural practices, seedling morphology, and field performance of longleaf pine. In: Phillips, D.R. comp. Proceedings - 4th biennial southern silvicultural research conference. 1986 4-6 November; Atlanta, GA.; Gen. Tech. Rep. SE-42. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:61-66.

FS 87018

Hatchell, G.E.; Marx, D.H. 1987. Response of longleaf, sand, and loblolly pines to *Pisolithus* ectomycorrhizae and fertilizer on a sandhills site in South Carolina. Forest Science. 33(2):301-315.

DESCRIPTORS: seedlings; slow release fertilizers; sandy soils.

FS 87019

Johnson, M.K. 1987. Inventory of mammals and birds on Bigfoot and Airey grazing allotments of the DeSoto National Forest, Mississippi. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings - Southern Evaluation Workshop, ecological, physical and socioeconomic relationships within southern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:166-170.

DESCRIPTORS: national forests; wildlife; mammals; birds; seasonality; habitats; grazing lands.

FS 87020

Kilpatrick, W.W. 1987. Soils of the loblolly/shortleaf and longleaf/slash pine project: Grant and Vernon Parishes, Louisiana. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings - Southern Evaluation Workshop, ecological, physical and socioeconomic relationships within southern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. New Orleans, LA: U.S. Department of Agriculture, Forest Service,

Southern Forest Experiment Station:67-72.

DESCRIPTORS: soil types; soil survey; soil mapping.

FS 87021

Kormanik, P.P.; Ruehle, J.L. 1987. Lateral root development may define nursery seedling quality. In: Phillips, D.R. comp. Proceedings - 4th biennial southern silvicultural research conference. 1986 4-6 November; Atlanta, GA.; Gen. Tech. Rep. SE-42. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:225-229.

FS 87022

Kossuth, S.V.; McReynolds, R.D. 1987. Induced changes in monoterpene composition of slash and longleaf pines. In: Proceedings - 14th plant growth regulator Society of America annual meeting. Lake Alfred, FL:268-277.

DESCRIPTORS: oleoresins; monoterpene; chipping; chemical composition; treatment; sulfuric acid; 2-chloroethylphosphonic acid.

FS 87023

Kulhavy, D.L.; Watterson, K.G.; Kroll, J.C.; Meeker, J.R. 1987. Management and pest management considerations on droughty soils: four years results. In: Phillips, D.R. comp. Proceedings - 4th biennial southern silvicultural research conference. 1986 4-6 November; Atlanta, GA.; Gen. Tech. Rep. SE-42. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:559-562.

FS 87024

Kush, J.S.; Meldahl, R.S.; Dwyer, S.P.; Farrar, R.M., Jr. 1987. Naturally regenerated longleaf pine growth and yield research. In: Phillips, D.R. comp. Proceedings - 4th biennial southern silvicultural research conference. 1986 4-6 November; Atlanta, GA.; Gen. Tech. Rep. SE-42. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station: 343-344.

FS 87025

Labisky, R.F.; Hovis, J.A. 1987. Comparison of vertebrate wildlife communities in longleaf pine and slash pine habitats in north Florida. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings - Southern Evaluation Workshop, ecological, physical and socioeconomic relationships within southern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:201-228.

DESCRIPTORS: national forests; wildlife; population density; habitat selection.

FS 87026

Lantz, C.W. 1987. "Insignificant" events may cause plantation failures. R8-MB 11, Atlanta, GA: U.S. Department of Agriculture, Forest Service, Southern Region. 2 p.

DESCRIPTORS: reforestation.

FS 87027

Lantz, C.W.; Kraus, J.F. 1987. A guide to southern pine seed sources. Gen. Tech. Rep. SE-43. Asheville, NC:

U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 34 p.

DESCRIPTORS: seeds.

FS 87028

Lauer, D.K. 1987. Seedling size influences early growth of longleaf pine. Tree Planters' Notes. 38(3):16-17.

DESCRIPTORS: seedling culture; growth; survival; seedling size; scirrhia.

FS 87029

Levi, M.P. 1987. Pressure-treated southern pine—some questions and answers. AG 99. Raleigh, NC: North Carolina Agricultural Extension Service, North Carolina State University. 2 p.

 $\label{eq:DESCRIPTORS:} DESCRIPTORS: preservative treated wood; guidelines.$

FS 87030

Mullin, K.; Williams, K.L. 1987. Mammals of longleafslash pine stands in central Louisiana. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings -Southern Evaluation Workshop, ecological, physical and socioeconomic relationships within southern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:121-124.

DESCRIPTORS: national forests; wildlife; mammals; habitat selection; tree age.

FS 87031

Myers, R.L.; White, D.L. 1987. Landscape history and changes in sandhill vegetation in north-central and south-central Florida. Bulletin of the Torrey Botanical Club. 114(1):21-32.

DESCRIPTORS: synecology; fires; land use history; vegetation types.

FS 87032

O'Meara, T.E.; Abbott, M.J. 1987. Gopher tortoise response to summer burning in longleaf pine/turkey oak. Sandhills annual performance report. Nongame Wildlife Program. Tallahassee, FL: Nongame Wildlife Section, Division of Wildlife, Florida Game and Fresh Water Fish Commission. 7 p.

DESCRIPTORS: gopher tortoise; reptile populations; burning.

FS 87033

Pearson, H.A.; Grelen, H.E.; Parresol, B.R.; Wright, V.L. 1987. Detailed vegetative description of the longleaf-slash pine type, Vernon District, Kisatchie National Forest, Louisiana. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings - Southern Evaluation Workshop, ecological, physical and socioeconomic relationships within southern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:107-115.

DESCRIPTORS: national forests; forest types; vegetation types; botanical composition.

FS 87034

Pearson, H.A.; Lohoefener, R.R.; Wolfe, J.L. 1987. Amphibians and reptiles on longleaf-slash pine forests in

southern Mississippi. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings - Southern Evaluation Workshop, ecological, physical and socioeconomic relationships within southern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:157-165. DESCRIPTORS: national forests; amphibia; rep-

FS 87035

tiles; habitat selection.

Riekerk, H. 1987. Hydrologic effects of flatwoods silviculture. In: Phillips, D.R. comp. Proceedings - 4th biennial southern silvicultural research conference. 1986 4-6 November; Atlanta, GA.; Gen. Tech. Rep. SE-42. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:321-325.

FS 87036

Rounsaville, M.G. 1987. Woodpeckers, recreationists and lumbermen cheer the success of artificial regeneration of longleaf pine. In: Proceedings - National Silviculture Workshop: silviculture for all resources; Sacramento, CA; 1987, 11-14 May; Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington Office:104-114.

DESCRIPTORS: artificial regeneration; wildlife management.

FS 87037

Rowell, R.M.; Esenther, G.R.; Nicholas, D.D.; Nilsson, T. 1987. Biological resistance of southern pine and aspen flakeboards made from acetylated flakes. Journal of Wood Chemistry and Technology. 7(3):427-440.

DESCRIPTORS: particleboard; bacteria; decay fungi; resistance; testing.

FS 87038

Schmidtling, R.C. 1987. Relative performance of longleaf compared to loblolly and slash pines under different levels of intensive culture. In: Phillips, D.R. comp. Proceedings - 4th biennial southern silvicultural research conference. 1986 4-6 November; Atlanta, GA.; Gen. Tech. Rep. SE-42. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station: 395-400.

FS 87039

South, D.B. 1987. A re-evaluation of Wakeley's 'critical tests' of morphological grades of southern pine nursery stock. South African Forestry Journal. 142:56-59.

**DESCRIPTORS:* seedlings; morphology; planting stock; quality.

FS 87040

Stanton, W.M.; Hamilton, R.A. 1987. Producing longleaf pine straw. Woodland Owner Notes No. 18. Raleigh, NC: North Carolina Agricultural Extension Service. 3 p.

FS 87041

Stewart, A.W.; Hurst, G.A. 1987. Vegetation in the longleaf-slash pine forest, Biloxi district, Desoto National Forest, Mississippi. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings - Southern Evalu-

ation Workshop, ecological, physical and socioeconomic relationships withinsouthern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:149-155.

DESCRIPTORS: vegetation types; botanical composition; understory vegetation.

FS 87042

Summerville, K.O. 1987. Seed yields per bushel: orchard vs natural stands. In: Proceedings of the 19th southern forest tree improvement conference. 1987 June 16-18; College Station, TX: No. 41. Southern Forest Tree Improvement Committee:190-194.

DESCRIPTORS: seeds; yields; forest plantations; natural distribution.

FS 87043

Tanner, G.W. 1987. Soils and vegetation of the longleaf/slash pine forest type, Apalachicola National Forest, Florida. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings - Southern Evaluation Workshop, ecological, physical and socioeconomic relationships within southern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:186-200.

DESCRIPTORS: vegetation types; botanical composition; soil types; overstory vegetation; understory vegetation.

FS 87044

Tschinkel, W.R. 1987. Seasonal life history and nest architecture of a winter-active ant, *Prenolepis imparis*. Insectes Sociaux. 34(3):143-164.

DESCRIPTORS: formicidae; natural enemies; predators; foraging; foraging period; biology; behavior.

FS 87045

Van Lear, D.H.; Jones, S.M. 1987. An example of site classification in the Southeastern coastal plain based on vegetation and land types. Southern Journal of Applied Forestry. 11(1):23-28.

DESCRIPTORS: plant communities; Savannah River Plant; forest ecosystems.

FS 87046

Williams, K.L.; Mullin, K. 1987. Amphibians and reptiles of longleaf-slash pine stands in central Louisiana. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings - Southern Evaluation Workshop, ecological, physical and socioeconomic relationships within southern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:116-120.

DESCRIPTORS: national forests; amphibia; reptiles; habitat selection.

FS 87047

Wolfe, J.L.; Lohoefener, R. 1987. The small mammal fauna of a longleaf-slash pine forest in southern Mississippi. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings - Southern Evaluation Workshop, ecologi-

cal, physical and socioeconomic relationships within southern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:171-177.

 $DESCRIPTORS: \ national \ forests; \ mammal; \ habitats.$

FS 87048

Wood, J.C.; Blackburn, W.H.; Pearson, H.A.; Hunter, T.K.; Knight, R.W. 1987. Assessment of silvicultural and grazing treatment impacts of infiltration and runoff water quality of longleaf-slash pine forest, Kisatchie National Forest, Louisiana. In: Pearson, H.A., Smeins, F.E., Thill, R.E., comp., Proceedings - Southern Evaluation Workshop, ecological, physical and socioeconomic relationships within southern National Forests; 1987 May 26-27; Long Beach, MS: Gen. Tech. Rep. SO-68. NewOrleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:245-249.

DESCRIPTORS: national forests; intensive forestry; grazing effects; runoff water; infiltration; water composition and quality.

FS 88001

Barnett, J.P.; Brissette, J.C.; Kais, A.G.; Jones, J.P. 1988. Improving field performance of southern pine seedlings by treating with fungicides before storage. Southern Journal of Applied Forestry. 12(4):281-285.

DESCRIPTORS: seedlings; benomyl; survival; storage.

FS 88002

Bechtold, W.A.; Ruark, G.A. 1988. Structure of pine stands in the Southeast. Res. Pap. SE-274. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 185 p.

DESCRIPTORS: forest surveys; southern states.

FS 88003

Boyer, W.D. 1988. Effects of site preparation and release on the survival and growth of planted bare-root and containergrown longleaf pine. Georgia For. Res. Pap. 76. Georgia Forestry Commission, Research Division. 9 p.

DESCRIPTORS: herbicide application; site preparation; release.

FS 88004

Christensen, N.L. 1988. Vegetation of the Southeastern Coastal Plain. In: Barbour, M.G.; Billings, W.D. eds. North American Terrestrial Vegetation. New York; Cambridge University Press:317-363.

FS 88005

Fatzinger, C.W. 1988. Estimating cone and seed production and monitoring pest damage in southern pine seed orchards. Res. Pap. SE-271. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 30 p.

DESCRIPTORS: seeds; viability; diseases; pests.

FS 88006

Gates, C.A.; Tanner, G.W. 1988. Effects of prescribed burning on herbaceous vegetation and pocket gophers (*Geomys pinetis*) in a sandhill community. Florida Scientist. 51(3):129-139.

DESCRIPTORS: prescribed burning; herbage; fire effects; biomass; botanical composition; pocket gopher; plant communities; plant succession; dunes.

FS 88007

Govindaraju, D.R. 1988. Life histories, neighborhood sizes, and variance structure in some North American conifers. Biological Journal of the Linnean Society. 35(1):69-78.

DESCRIPTORS: synecology.

FS 88008

Hooper, R.G. 1988. Longleaf pines used for cavities by redcockaded woodpeckers. Journal of Wildlife Management. 52(3):392-398.

DESCRIPTORS: woodpeckers; population density; forest damage; statistical analysis; tree cavities.

FS 88009

Kulhavy, D.L.; Mitchell, J.H.; Conner, R.N. 1988. The southern pine beetle and the red-cockaded woodpecker: potential for interaction. In: Payne, T.L.; Saarenmaa, H. Integrated control of Scolytid bark beetles. Blacksburg, VA: College of Agriculture and Life Science, Virginia Polytechnic Institute and State University:337-343

DESCRIPTORS: biological control; interactions; woodpeckers.

FS 88010

Lantz, C.W.; Barnett, J.P.; Kais, A.G. 1988. Benomyl improves storability and brown spot resistance of longleaf pine seedlings. Mngt. Bull. R8 MB-17. Atlanta, GA: U.S. Department of Agriculture, Forest Service, Southern Region. 2 p.

DESCRIPTORS: fungal diseases; mycosphaerella; planting stock; storage; fungicides; benomyl.

FS 88011

Lewis, C.E.; Swindel, B.F.; Tanner, G.W. 1988. Species diversity and diversity profiles: concept, measurement, and application to timber and range management. Journal of Range Management. 41(6):466-469.

DESCRIPTORS: cattle; grazing; agroforestry; plantations; silviculture; ecology; site preparation; management; silvopastoral systems; botanical composition.

FS 88012

Lewis, C.E.; Tanner, G.W.; Terry, W.S. 1988. Plant responses to pine management and deferred-rotation grazing in north Florida. Journal of Range Management. 41(6):460-465.

DESCRIPTORS: livestock; grazing systems; prescribed burning; grazing effects; plant succession.

FS 88013

Moorhead, D.J. 1988. Selecting and planting pine seedlings. Bull. No. 983. Athens, GA: University of Georgia, College of Agriculture, Cooperative Extension Service. 22 p.

DESCRIPTORS: seedlings; planting methods.

FS 88014

Nelson, R.; Krabill, W.; Tonelli, J. 1988. Estimating forest biomass and volume using airborne laser data. Re-

mote Sensing of Environment. 24(2):247-267.

DESCRIPTORS: remote sensing; lasers; stand characteristics; volume determination; weight determination.

FS 88015

Noss, R.F. 1988. The longleaf pine landscape of the Southeast: almost gone and almost forgotten. Endangered Species UPDATE. 5(5):1-8.

FS 88016

Ostmeyer, J.G.; Elder, T.J.; Littrell, D.M.; Tatarchuk, B.J.; Winandy, J.E. 1988. Spectroscopic analysis of southern pine treated with chromated copper arsenate. I. X-ray photoelectron spectroscopy (XPS)-1. Journal of Wood Chemistry and Technology. 8(3):413-439.

DESCRIPTORS: x-ray photoelectron spectroscopy; copper arsenate; wood preservatives.

FS 88017

Platt, W.J.; Evans, G.W.; Davis, M.M. 1988. Effects of fire season on flowering of forbs and shrubs in longleaf pine forests. Oecologia. 76(3):353-363.

FS 88018

Platt, W.J.; Evans, G.W.; Rathbun, S.L. 1988. The population dynamics of a long-lived conifer (*Pinus palustris* Mill.). The American Midland Naturalist. 131(4):491-525.

DESCRIPTORS: population dynamics; plant communities; forest ecology; habitat selection; dispersion; revegetation; plant succession; colonizing ability.

FS 88019

Ranasinghe, M.A.S.K.; Wilkinson, R.C. 1988. Seasonal occurrence of *Gnophothrips fuscus* (Thysanoptera: Phlaeothripidae) on slash pine in Florida. Florida Entomologist. 71(3):384-387.

DESCRIPTORS: seedlings; thysanoptera; seasonal variation; trapping.

FS 88020

Richardson, D.R.; Williamson, G.B. 1988. Allelopathic effects of shrubs of the sand pine scrub on pines and grasses of the sandhills. Forest Science. 34(3):592-605.

DESCRIPTORS: allelopath; chemical composi-

tion; fires; mortality; scrub; fuel accumulation. FS 88021

Rome, A. 1988. Vegetation variation in a pine-wiregrass savanna in the Green Swamp, North Carolina. Castanea. 53(2):122-131.

FS 88022

Runion, G.B.; Bruck, R.I. 1988. Effects of thiabendazole-DMSO treatment of longleaf pine seed contaminated with *Fusarium subglutinans* on germination and seedling survival. Plant Disease. 72(10):872-874.

DESCRIPTORS: seeds; cankers; seed treatment; thiabendazole; DMSO; fungicides; seed germination; seedling emergence; survival; disease control.

FS 88023

South, D.B. 1988. Diphenylether herbicides used on southern pine seedlings in the United States. Aspects of Applied Biology. 16:215-222.

DESCRIPTORS: seedlings; bifenox; herbicides; nitrogen; oxyfluorfen; weed control; forest nurseries.

South, D.B.; Williams, H.M.; Webb, A. 1988. Should fall irrigation be applied at nurseries located on sands? Southern Journal of Applied Forestry. 12(4):273-274. DESCRIPTORS: alpine sand; seedling; irrigation; nurseries.

FS 88025

Strub, M.R.; Sprinz, P.T. 1988. Comparisons of southern pine height growth. Gen. Tech. Rep. NC-120. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station:428-434.

DESCRIPTORS: tree age; height.

FS 88026

Tschinkel, W.R. 1988. Distribution of the fire ants *Solenopsis invicta* and *S. geminata* (Hymenoptera: Formicidae) in northern Florida in relation to habitat and disturbance. Annals of the Entomological Society of America. 81(1):76-81.

DESCRIPTORS: habitats; pastures; ecology; distribution; environmental factors.

FS 88027

White, F.M.; Kunselman, M.B.; Robbins, D.H.; Crain, W.T.; Hood, C.A.; Precythe, H.W.; Moehler, F.A. 1988. Establishment and growth of longleaf pine on droughty sites in North Carolina. For. Note No. 61. Raleigh, NC: North Carolina Forest Service, Division of Forest Resources. 35 p.

FS 89001

Anderson, R.L.; Walkinshaw, C.H. 1989. Correlation of greenhouse inoculations of longleaf pine with *Cronartium quercuum* f.sp. *fusiforme* with field ranking of resistance. Plant Disease. 73(10):859.

DESCRIPTORS: testing; fungal diseases; rust diseases; resistance; methodology; genetics; variation; tree breeding.

FS 89002

Barnett, J.P. 1989. Shading reduces growth of longleaf and loblolly pine seedlings in containers. Tree Planters' Notes. 40(1):23-26.

DESCRIPTORS: container grown plants; light flux; shading; seedlings; performance.

FS 89003

Barnett, J.P. 1989. Site preparation, containers, and soil types affect field performance of loblolly and longleaf pine seedlings. In: Miller, J.H. comp. Proceedings - 5th biennial southern silvicultural research conference; 1988 November 1-3; Memphis, TN: Gen. Tech. Rep. SO-74. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:155-158.

DESCRIPTORS: seedlings; container grown plants; site preparation; survival; growth.

FS 89004

Blanche, C.A.; Elam, W.W.; Hodges, J.D.; Bonner, F.T.; Marquez, A.C. 1989. Accelerated aging: a potential vigor test for longleaf and slash pine seeds. In: Miller, J.H. comp. Proceedings - 5th biennial southern silvicultural research conference; 1988 November 1-3; Memphis, TN: Gen. Tech. Rep. SO-74. New Orleans, LA: U.S. Department of Agriculture, Forest Service,

Southern Forest Experiment Station: 107-114.

DESCRIPTORS: seeds; vigor; testing; aging; seed germination.

FS 89005

Boyer, W.D. 1989. Response of planted longleaf pine bareroot and container stock to site preparation and release: fifth-year results. In: Miller, J.H. comp. Proceedings 5th biennial southern silvicultural research conference; 1988 November 1-3; Memphis, TN: Gen. Tech. Rep. SO-74. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:165-168.

DESCRIPTORS: container grown plants; seedlings; site preparation; vegetationmanagement; plant competition; herbicides; survival; growth.

FS 89006

Bridges, E.L.; Orzell, S.L. 1989. Longleaf pine communities of the West Gulf Coastal Plain. Natural Areas Journal. 9(4):246-263.

DESCRIPTORS: savanna; wetland; upland; flatwoods.

FS 89007

Buckner, E. 1989. Evolution of forest types in the south-east. In: Waldrop, T.A. ed. Proceedings of pine-hard-wood mixtures: a symposium on management and ecology of the type. 1989 April 18-19, Atlanta, GA; Gen. Tech. Rep. SE-58. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:27-33.

DESCRIPTORS: historical account; Indians.

FS 89008

Caulfield, J.P.; Shoulders, E.; Lockaby, B.G. 1989. Methods for including risk in species-site selection decisions. In: Miller, J.H. comp. Proceedings - 5th biennial southern silvicultural research conference; 1988 November 1-3; Memphis, TN: Gen. Tech. Rep. SO-74. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:181-186.

FS 89009

Caulfield, J.P.; Shoulders, E.; Lockaby, B.G. 1989. Risk-efficient species-site selection decisions for southern pines. Canadian Journal of Forest Research. 19(6):743-752

DESCRIPTORS: forest economics; species choice; silviculture; statistical methods; profitability; investment; stumpage value.

FS 89010

Choong, E.T.; Fogg, P.J.; Shoulders, E. 1989. Effect of cultural treatment and wood-type on some physical properties of longleaf and slash pine wood. Journal of the Society of Wood Science and Technology. 21(2):193-206.

DESCRIPTORS: wood; fertilizer application; soil cultivation; cultural methods; physical properties; wood anatomy; shrinkage; moisture content; specific gravity; annual rings; correlation.

FS 89011

Clark, A. III; Schmidtling, R.C. 1989. Effect of intensive culture on juvenile wood formation and wood properties of loblolly, slash, and longleaf pine. In: Miller, J.H.

comp. Proceedings - 5th biennial southern silvicultural research conference; 1988 November 1-3; Memphis, TN: Gen. Tech. Rep. SO-74. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:211-217.

DESCRIPTORS: intensive forestry; juvenile wood; cultivation; fertilizers; growth; tree diameter/girth; height; wood density.

FS 89012

Clewell, A.F. 1989. Natural history of wiregrass (*Aristida stricta* Michx.; Graminae). Natural Areas Journal. 9(4):223-233.

DESCRIPTORS: wiregrass; Atlantic Coastal Plain; floristic composition.

FS 89013

Cooper, A.W. 1989. Ecology of the pine-hardwood type. In: Waldrop, T. H., ed. Proceeding of pine-hardwood mixtures: a symposium on management and ecology of the types; 1989, 18-19 April, Atlanta, GA. Gen. Tech. Rep. SE-58. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:3-8.

DESCRIPTORS: pine; hardwood; savanna; woodland; Coastal Plain; Piedmont Plateau; oak; Southeastern Evergreen Region.

FS 89014

Cordell, C.E.; Anderson, R.L.; Kais, A.G. 1989. How to identify and control brown-spot disease on longleaf pine. North Carolina Protection Rep. 15. Atlanta, GA: U.S. Department of Agriculture, Forest Service, Southern Region. 9 p.

DESCRIPTORS: identification; plant disease control.

FS 89015

Dennington, R.W. 1989. A crucial threshold for longleaf pine plantations. R8-MB41. Atlanta, GA: U.S. Department of Agriculture, Forest Service, Southern Region.

FS 89016

Duryea, M.L.; Edwards, J.C. 1989. Pine-straw management in Florida's forests. Circ. 831. Gainesville, FL: Florida Cooperative Extension Service. 6 p.

FS 89017

Elam, W.W.; Blanche, C.A. 1989. Accelerated aging: a potential vigour test for multipurpose tree seeds. ACIAR Proceedings Series No. 28:63-67.

DESCRIPTORS: seeds; seed germination; seed treatment; vigor; accelerated aging; assessment.

FS 89018

Glitzenstein, J.S.; Platt, W.J. 1989. The effects of season and frequency of burning on dynamics of oaks and pines in north Florida savanna habitats. Supplement - Bulletin of the Ecological Society of America. 70(2):124.

DESCRIPTORS: season of burning; frequency of burning; sandhill pines; flatwood pines; mortality; habitats; recruitment.

FS 89019

Govindaraju, D.R. 1989. Viability selection and self-thinning in conifers. Evolutionary Trends in Plants. 3(2):121-126.

DESCRIPTORS: thinning; natural thinning; stand characteristics; mortality; genetics; natural selection.

FS 89020

Hall, D.W. 1989. Is it wiregrass? Natural Areas Journal. 9(4):219-222.

FS 89021

Hardin, E.D.; White, D.L. 1989. Rare vascular plant taxa associated with wiregrass (*Aristida stricta*) in the Southeastern United States. Natural Areas Journal. 9(4):234-245.

DESCRIPTORS: wiregrass; rare plant taxa; endangered taxa.

FS 89022

Hartnett, D.C.; Krofta, D.M. 1989. Fifty-five years of postfire succession in a southern mixed hardwood forest. Bulletin of the Torrey Botanical Club. 116(2):107-113. DESCRIPTORS: plant succession; vegetation types; mortality; stand characteristics; forest fires; fire ecology; synecology; species diversity.

FS 89023

Hunter, M.L. 1989. What constitutes an old-growth stand? Journal of Forestry. 87(8):33-35.

DESCRIPTORS: age criteria; disturbance criteria.

FS 89024

Kush, J.S.; Bolton, R.K.; Bottenfield, T.R.; Meldahl, R.S.; Farrar, R.M. Jr. 1989. Longleaf pine crown relationships: a preliminary analysis. In: Miller, J.H. comp. Proceedings - 5th biennial southern silvicultural research conference; 1988 November 1-3; Memphis, TN: Gen. Tech. Rep.SO-74. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:433-436.

DESCRIPTORS: crown cover; growth rate; tree age; diameter; increment.

FS 89025

Lancia, R.A.; Roise, J.P.; Adams, D.A.; Lennartz, M.R. 1989. Opportunity costs of red-cockaded woodpecker foraging habitat. Southern Journal of Applied Forestry. 13(2):81-85.

DESCRIPTORS: birds; wildlife; habitats; wildlife management; habitat improvement; foraging; rotations; volume; yields.

FS 89026

Lipscomb, D.J. 1989. Impacts of feral hogs on longleaf pine regeneration. Southern Journal of Applied Forestry. 13(4):177-181.

DESCRIPTORS: pests; pigs; feral varieties; natural regeneration; browsing damage; mortality.

FS 89027

Loveless, R.W.; Pait, J.A. III; McElwain, T. 1989. Response of longleaf pine to varying intensity of silvicultural treatments. In: Miller, J.H. comp. Proceedings - 5th biennial southern silvicultural research conference; 1988 November 1-3; Memphis, TN: Gen. Tech. Rep. SO-74. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:159-164.

DESCRIPTORS: site preparation; survival; mechanical methods; diammonium phosphate; herbicides; vegetation management.

Michael, J.L.; Neary, D.G.; Wells, M.J.M. 1989. Picloram movement in soil solution and streamflow from a coastal plain forest. Journal of Environmental Quality. 18(1):89-95.

DESCRIPTORS: weed control; picloram; leaching; pesticide persistence; mineral soils; soil solution; stream flow; environmental pollution; aerial application.

FS 89029

Murphy, P.A.; Farrar, R.M. Jr. 1989. A new mortality (or survival) function for longleaf pine plantations. In: Miller, J.H. comp. Proceedings - 5th biennial southern silvicultural research conference; 1988 November 1-3; Memphis, TN: Gen. Tech. Rep. SO-74. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:427-432.

DESCRIPTORS: plantations; mortality; height; mathematical models.

FS 89030

Noss, R.F. 1989. Longleaf pine and wiregrass: keystone components to an endangered ecosystem. Natural Areas Journal. 9(4):234-235.

DESCRIPTORS: wiregrass; ecosystem; silviculture; conservation; preservation; biodiversity.

FS 89031

Ostmeyer, J.G.; Elder, T.J.; Winandy, J.E. 1989. Spectroscopic analysis of southern pine treated with chromated copper arsenate. II. Diffuse reflectance Fourier transform infrared spectroscopy (DRIFT). Journal of Wood Chemistry and Technology. 9(1):105-122.

DESCRIPTORS: copper arsenate; infrared spectroscopy; wood preservatives.

FS 89032

Rebertus, A.J.; Williamson, G.B.; Moser, E.B. 1989. Fire-induced changes in *Quercus laevis* spatial pattern in Florida sandhills. Journal of Ecology. 77(3):638-650. *DESCRIPTORS:* forest fires; ecology; synecology; fires

FS 89033

Rebertus, A.J.; Williamson, G.B.; Moser, E.B. 1989. Longleaf pine pyrogenicity and turkey oak mortality in Florida xeric sandhills. Ecology. 70(1):60-70.

DESCRIPTORS: fire; mortality; pyrogenicity; sandhills; turkey oak.

FS 89034

Ruark, G.A.; Bechtold, W.A. 1989. Characterization of the hardwood component in southern pine cover types in the southeast. In: Waldrop, T.A. ed. Proceedings of pine hardwood mixture: a symposium on management and ecology of the type: 1989 April 18-19, Atlanta, GA: Gen. Tech. Rep. SE-58; Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station: 38-42.

DESCRIPTORS: hardwood component, natural pine stands

FS 89035

Sirmon, G.A.; Dennington, R.W. 1989. Longleaf pine management on the DeSoto National Forest — a case study.

Southern Journal of Applied Forestry. 13(1):34-40.

DESCRIPTORS: national forests; natural regeneration; artificial regeneration; site preparation; shelterwood; stand establishment; planting.

FS 89036

Thill, R.E.; Martin, A., Jr. 1989. Deer and cattle diets on heavily grazed pine-bluestem range. Journal of Wildlife Management. 53(3):540-548).

DESCRIPTORS: feeding habits; pastures; cattle; deer; diets; browse; seasonal variation; forbs; wild animals; grasses; botanical composition; range management; management; rangelands; grazing.

FS 89037

Vozzo, J.A. 1989. Comparative morphology of seed coat surfaces for seven species of Pinus. Journal of the Mississippi Academy of Sciences. 34:5-10.

DESCRIPTORS: seeds; seed morphology.

FS 89038

Vozzo, J.A. 1989. Examining seed coat characteristics with energy dispersive X-ray spectroscopy. ACIAR Proc. Series No. 28:41-43.

DESCRIPTORS: plant composition; seeds; chemistry; testas; composition.

FS 89039

Wood, J.C.; Blackburn, W.H.; Pearson, H.A.; Hunter, T.K. 1989. Infiltration and runoff water quality response to silvicultural and grazing treatments on a longleaf pine forest. Journal of Range Management. 42(5):378-381.

DESCRIPTORS: silviculture; grazing effects; interrill erosion; runoff; water quality.

FS 89040

Zahner, R. 1989. Tree-ring series related to stand and environmental factors in south Alabama longleaf pine stands. In: Miller, J.H. comp. Proceedings - 5th biennial southern silvicultural research conference; 1988 November 1-3; Memphis, TN: Gen. Tech. Rep. SO-74. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station: 193-197.

DESCRIPTORS: growth rings; tree age; stand density; prescribed burning; site factors; climatic factors.

FS 90001

Amundson, R.G.; Belsky, A.J.; Dickie, R.C. 1990. Fluoride deposition via litterfall in a coastal-plain pine plantation in South Carolina. Water, Air, and Soil Pollution. 50(3-4):301-310.

DESCRIPTORS: pollution; fluorine; fluoride; deposition; forest litter; soil morphology; habit; defoliation; decomposition; plant composition; aluminum; foliage; chemistry.

FS 90002

Barnett, J.P.; Lauer, D.K.; Brissette, J.C. 1990. Regenerating longleaf pine with artificial methods. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:72-93.

Beasley, J.L. 1990. Longleaf pine's place in the South's fourth forest. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:259-262.

FS 90004

Boyer, W.D. 1990. Growing-season burns for control of hardwoods in longleaf pine stands. Res. Pap. SO-256.
New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 7 p.

DESCRIPTORS: vegetation management; prescribed burning; hardwoods; spring burns; summer burns.

FS 90005

Boyer, W.D. 1990. Longleaf pine. In: Burns, R.M.; Honkala, B.H. tech. coord. Silvics of North America, Volume I Conifers. Agric. Hndbk. 654. Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington, Office:405-412.

FS 90006

Boyer, W.D.; White, J.B. 1990. Natural regeneration of longleaf pine. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS.Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:94-113.

FS 90007

Brissette, J.C.; Elliott, M.; Barnett, J.P. 1990. Producing container longleaf pine seedlings. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:52-70.

FS 90008

Clark, A. III; Saucier, J.R. 1990. Tables for estimating total-tree weights, stem weights, and volumes of planted and natural southern pines in the southeast. Georgia For. Res. Pap. 79. Georgia Forestry Commission, Research Division. 23 p.

DESCRIPTORS: weight tables.

FS 90009

Coleman, T.L.; Gudapati, L.; Derrington, J. 1990. Monitoring forest plantations using Landsat Thematic Mapper data. Remote Sensing of Environment. 33(3):211-221.

DESCRIPTORS: remote sensing; thematic mapper; stand characteristics; land use; plantations.

FS 90010

Cordell, C.E.; Gramling, C.; Lowman, B.; Brown, D. 1990. A precision seed sower for longleaf pine bareroot nursery seedlings. Tree Planters' Notes. 41(4)33-38.

DESCRIPTORS: seedlings; nurseries; sowing; seeder cultivators.

FS 90011

Cordell, C.E.; Hatchell, G.E.; Marx, D.H. 1990. Nursery culture of bare-root longleaf pine seedlings. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:38-51.

FS 90012

Croker, T.C., Jr. 1990. Longleaf pine - myths and facts. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:2-10.

FS 90013

Cubbage, F.; Hodges, D. 1990. The economics of managing longleaf pine. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:215-229.

FS 90014

Daubenmire, R. 1990. The *Magnolia grandiflora-Quercus.* virginiana forest of Florida. American Midland Naturalist. 123(2):331-347.

DESCRIPTORS: vegetation types; synecology; fires.

FS 90015

Dennington, R.W. 1990. Regenerating longleaf pine with the shelterwood method. R8-MB47. Atlanta, GA: U.S. Department of Agriculture, Forest Service, Southern Region. 2 p.

FS 90016

Farrar, R.M., Jr. 1990. Predictions of volume and volume growth in naturally-regenerated longleaf pine stands. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine.1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:170-192.

FS 90017

Fatzinger, C.W.; Muse, H.D.; Miller, T.; Bhattacharyya, H. 1990. Survey and pest monitoring system for southern pine seed orchards. Southern Journal of Applied Forestry. 14(3):147-154.

DESCRIPTORS: seed orchards; insect pests; monitoring; cones; yield.

FS 90018

Fox, T.R.; Comerford, N.B. 1990. Low-molecular-weight organic acids in selected forest soils of the southeastern USA. Soil Science Society of America Journal. 54(4):1139-1144.

DESCRIPTORS: rhizosphere; organic compounds; organic acids; forest soils; soil types (ecological); soil organic matter; soil chemistry.

FS 90019

Harrington, C.A. 1990. PPSITE — a new method of site evaluation for longleaf pine: model development and

user's guide. Gen. Tech. Rep. SO-80. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 31 p.

DESCRIPTORS: site factors; site preparation; computer software; models.

FS 90020

Hatchell, G.E.; Muse, H.D. 1990. Nursery cultural practices and morphological attributes of longleaf pine bareroot stock as indicators of early field performance. Res. Pap. SE-227. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 34 p.

DESCRIPTORS: seedling quality; bareroot seedlings; field experiments.

FS 90021

Jewell, F.F., Sr. 1990. Histopathology of longleaf pine needles infected by *Ploioderma hedgcockii*(Dearn.) Darker. European Journal of Forest Pathology. 20(1):24-31.

DESCRIPTORS: histopathology; foliage; diseases; fungal diseases.

FS 90022

Johnson, B.; Jackson, R. 1990. Durability of heartwood in treated southern pine bulkheads. Forest Products Journal. 40(7/8):41-46.

DESCRIPTORS: heartwood; wood preservatives; durability; marine structures; marine borers; creosote; penetration.

FS 90023

Jones, F.E. 1990. Long term management of longleaf pine - T.R. Miller Mill Company. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:237-240.

FS 90024

Kelly, J.F.; Bechtold, W.A. 1990. The longleaf pine resource. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station: 11-22.

FS 90025

Kraus, J.F.; Sluder, E.R. 1990. Gynecology of longleaf pine in Georgia and Florida. Res. Pap. SE-278. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 31 p. *DESCRIPTORS:* geographic variation; survival and growth traits; adaptability.

FS 90026

Landers, J.L.; Byrd; N.A.; Komarek, R. 1990. A holistic approach to managing longleaf pine communities. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:135-167.

FS 90027

Linde, F.V.; Hodges, J. 1990. Prescriptions for successful longleaf management in south Georgia. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:241-246.

FS 90028

Marx, D.H.; Cordell, C.E. 1990. Inoculation of fall- and spring-sown longleaf pine seedlings with *Pisolithus tinctorius*. Res. Note SE-358. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 5 p.

DESCRIPTORS: seedlings; inoculation; Pisolithus tinctorius; nurseries.

FS 90029

Outcalt, K.W.; Lewis, C.E. 1990. Response of wiregrass (Aristida stricta) to mechanical site preparation. In: Duever, L.C.; Ross, R.F. eds. Proceedings of symposium wiregrass biology and management: maintaining groundcover integrity in longleaf pine ecosystems; 1988, 13 October; Valdosta, GA: KBN Engineering, Gainesville, FL:1-12.

FS 90030

Owston, P.W.; Miller, R.G.; Rietveld, W.J.; McDonald, S.E. 1990. A quality-control system for improving conifer nursery stock. Tree Planters' Notes. 41(1):3-7.

DESCRIPTORS: planting stock; quality controls.

FS 90031

Page, H.H., Jr. 1990. Six-year growth response of longleaf pine (*Pinus palustris* Mill.) seedlings to varying intensities of site preparation treatments. For. Res. Rep. No. 4. Smurfit Group. 10 p.

DESCRIPTORS: site preparation; mechanical methods; fertilizers; weed control; nitrogen; phosphorus; plantations; burning; weed control; plant competition; growth rate.

FS 90032

Pasek, E.A.; McIntyre, C.R. 1990. Heat effects on fire retardant-treated wood. Journal of Fire Sciences. 8(6):405-420.

DESCRIPTORS: flame retardant finishes; monoammonium phosphate; organophosphorus compounds; boric acid; wood strength; thermal degradation; weight losses; dehydration; strength testing; temperature; relative humidity; hygroscopicity; acidity; heat; thermogravimetry; calorimetry.

FS 90033

Roise, J.; Chung, J.; Lancia, R.; Lennartz, M. 1990. Red-cockaded woodpecker habitat and timber management: production possibilities. Southern Journal of Applied Forestry. 14(1):6-12.

DESCRIPTORS: forest management; multiple use; birds; decision making.

FS 90034

Rudolph, D.C.; Conner, R.N.; Turner, J. 1990. Competition for red-cockaded woodpecker roost and nest cavities: effects of resin age and entrance diameter. Wilson

Bulletin. 102(1):23-36.

DESCRIPTORS: tree cavities; birds; biology; ecology.

FS 90035

Rudolph, D.C.; Kyle, H.; Conner, R.N. 1990. Red-cockaded woodpeckers vs rat snakes: the effectiveness of the resin barrier. Wilson Bulletin. 102(1):14-22.

DESCRIPTORS: resins; snakes; tree cavities; birds; biology; ecology.

FS 90036

Sasnett, P.; Larson, D.; Foster, J.W., Jr. 1990. Establishment of longleaf pine at Gulf States Paper Corporation. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:232-236.

FS 90037

Schmidtling, R.C.; White, T.L. 1990. Genetics and tree improvement of longleaf pine. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:114-127.

FS 90038

Shoulders, E. 1990. Identifying longleaf pine sites. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:23-37.

FS 90039

Sirmon, G.A. 1990. A prescription for successful management of longleaf pine. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:247-257.

FS 90040

Snow, G.A.; Hoffard, W.H.; Cordell, C.E.; Kais, A.G. 1990. Pest management in longleaf pine stands. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:128-134.

FS 90041

Thomas, C.E.; Lohrey, R.E. 1990. A diameter distribution model for thinned longleaf pine plantations: a beginning. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:193-208.

FS 90042

Williams, C.E. 1990. The pines of Virginia: identification, distribution and ecology. Virginia Journal of Science. 41(4B):478-486.

DESCRIPTORS: keys; distribution.

FS 90043

Williston, H.L.; Guthrie, J.G.; Hood, C.A. 1990. Managing and harvesting longleaf pine for specialty products. In: Farrar, R.M., Jr. ed. Proceedings - Symposium on the management of longleaf pine. 1989 April 4-6; Long Beach, MS. Gen. Tech. Rep. SO-75; New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:209-214.

FS 91001

Barnett, J.P. 1991. Effects of morphological grade on field performance of container-grown southern pine seedlings. In: Coleman, S.S.; Neary, D.G. eds. Proceedings - 6th biennial southern silvicultural research conference; 1990 October 30-November 1; Memphis, TN: Gen. Tech. Rep. SE-70; Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:94-99.

FS 91002

Barnett, J.P. 1991. Seedbed densities and sowing and lifting dates affect nursery development and field survival of longleaf pine seedlings. Tree Planters' Notes. 42(3):28-31.

DESCRIPTORS: nurseries; sowing; lifting; spacing; seedling growth; sowing date.

FS 91003

Boyer, W.D. 1991. Effects of a single chemical treatment on long-term hardwood development in a young pine stand. In: Coleman, S.S.; Neary, D.G. eds. Proceedings - 6th biennial southern silvicultural research conference; 1990 October 30-November 1; Memphis, TN: Gen. Tech. Rep. SE-70; Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:599-606.

FS 91004

Bucholtz, G.A.; Lockey, R.F.; Wunderlin, R.P.; Binford, L.R.F.; Stablein, J.J.; Serbousek, D.; Fernandez-Caldas, E. 1991. A three-year aerobiologic pollen survey of the Tampa Bay area, Florida. Annals of Allergy. 67(5):534-540.

DESCRIPTORS: weeds; pollen analysis; biology; pollen; production.

FS 91005

Clark, A. III; Souter, R.A.; Schlaegel, B.E. 1991. Stem profile equations for southern tree species. Res. Pap. SE-282. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 113 p.

FS 91006

Conner, R.N.; Rudolph, D.C. 1991. Forest habitat loss, fragmentation and red-cockaded woodpecker populations. Wilson Bulletin. 103(3):446-457.

DESCRIPTORS: cutting; foraging habitat; habitat fragmentation; Texas.

FS 91007

Conner, R.N.; Snow, A.E.; O'Halloran, K.A. 1991. Red-cockaded woodpecker use of seed-tree/shelterwood cuts in eastern Texas. Wildlife Society Bulletin. 19(1):67-73.

Devall, M.S.; Grender, J.M.; Koretz, J. 1991.

Dendroecological analysis of a longleaf pine (*Pinus palustris*) forest in Mississippi. Vegetatio. 93(1):1-8.

DESCRIPTORS: dendrochronology; climate; simulation; dendroclimatology.

FS 91009

Duryea, M.L.; Dougherty, P.M. (Editors). 1991. Forest regeneration manual. Dordrecht, Netherlands; Kluwer Academic Publishers. 433 p.

DESCRIPTORS: artificial regeneration.

FS 91010

Farrar, R.M., Jr.; Boyer, W.D. 1991. Managing longleaf pine under the selection system — promises and problems. In: Coleman, S.S.; Neary, D.G. eds. Proceedings - 6th biennial southern silvicultural research conference; 1990 October 30-November 1; Memphis, TN: Gen. Tech. Rep. SE-70; Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:357-368.

FS 91011

Gilliam, F.S. 1991. Stand structure and longleaf pine regeneration of an old-growth longleaf pine forest under chronic fire exclusion. Supplement - Bulletin of the Ecological Society of America. 72(2):124.

DESCRIPTORS: long-term fire exclusion; xeric area; mesic area; stand structure; Sandhills vegetation; North Carolina.

FS 91012

Gilliam, F.S.; Richter, D.D. 1991. Transport of metal cations through a nutrient-poor forest ecosystem. In: Metals in spoils, waters, plants, and animals - proceedings of an international conference; 1990 April 30-May 3; Orlando, FL: Water, Air and Soil Pollution. 57-58:279-287.

DESCRIPTORS: ecosystems; groundwater; streams; precipitation; coastal plain soils; transport processes; cations; soil; water; hydrology; water pollution; soil chemistry; ion exchange capacity; leaching.

FS 91013

Jones, E.P., Jr.; Bramlett, D.L.; Sluder, E.R. 1991. Initial prospects for natural regeneration of pine in coastal South Carolina after hurricane Hugo. In: Coleman, S.S.; Neary, D.G. eds. Proceedings - 6th biennial southern silvicultural research conference; 1990 October 30-November 1; Memphis, TN: Gen. Tech. Rep. SE-70; Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:18-26.

FS 91014

Kulhavy, D.L.; Ross, W.G.; Conner, R.N.; Mitchell, J.H.; Chrismer, G.M. 1991. Silviculture and the red-cockaded woodpecker: where do we go from here? In: Coleman, S.S.; Neary, D.G. eds. Proceedings - 6th biennial southern silvicultural research conference; 1990 October 30-November 1; Memphis, TN: Gen. Tech. Rep. SE-70; Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:786-794.

FS 91015

Langevin, S.A.; Platt, W.J. 1991. Plant size and fuel characteristics influence survival of fire by juvenile longleaf pines. Supplement - Bulletin of the Ecological Society of America. 72(2):168.

DESCRIPTORS: juveniles; survival of fire; fuel load.

FS 91016

Lantz, C.W.; Barnett, J.P. 1991. Container seedlings may be the answer for that difficult site. R8-MB52. Atlanta, GA: U.S. Department of Agriculture, Forest Service, Southern Region. 2 p.

FS 91017

Mushinsky, H.R.; Gibson, D.J. 1991. The influence of fire periodicity on habitat structure. Department of Biology, University of South Florida, Tampa, FL: Chapman and Hall:237-259.

DESCRIPTORS: forest fires; fire ecology; synecology fires; reviews.

FS 91018

Olson, M.S.; Platt, W.J. 1991. Recovery of shrubs in longleaf pine forests and embedded seepage savannas following early and late growing season burns. Supplement - Bulletin of the Ecological Society of America. 72(2):209-210.

DESCRIPTORS: savannas; resprouts; Kisatchie National Forest.

FS 91019

Platt, W.J.; Glitzenstein, J.S.; Streng, D.R. 1991. Evaluating pyrogenicity and its effects on vegetation in longleaf pine savannas. Proceedings - 17th Tall Timbers Fire Ecology Conference; Tallahassee, FL: Tall Timbers Research Station. 17:143-162.

FS 91020

Repasky, R.R.; Doerr, P.D. 1991. Home range and substrate use by two family groups of red-cockaded woodpeckers in the North Carolina Sandhills. Brimleyana. 17:37-52. *DESCRIPTORS:* birds; ecology.

FS 91021

Roise, J.P.; Chung, J.; Lancia, R. 1991. Red-cockaded woodpecker habitat management and longleaf pine straw production; an economic analysis. Southern Journal of Applied Forestry. 15(2):88-92.

DESCRIPTORS: pine straw.

FS 91022

Runion, G.B.; Kelley, W.D.; Land, D.H. 1991. Effects of triadimefon and thiram seed treatments on emergence of southern pines. Seed Science and Technology. 19(1):57-66.

DESCRIPTORS: fungicides; seed germination; seed treatment; thiram; phytotoxicity; triadimefon; germination; seeds; diseases; triadimefor.

FS 91023

Salwasser, H. 1991. New perspectives for sustaining diversity in U.S. National Forest ecosystems. Conservation Biology. 5(4):567-569.

DESCRIPTORS: environmental quality; soil; water; air; biological diversity; ecological process; resource; land.

Shaw, D.J.; Meldahl, R.S.; Kush, J.S.; Quicke, H.E.; Farrar, R.M., Jr. 1991. Pole availability from naturally regenerated longleaf pine stands: preliminary data. In: Coleman, S.S.; Neary, D.G. eds. Proceedings - 6th biennial southern silvicultural research conference; 1990 October 30-November 1; Memphis, TN: Gen. Tech. Rep. SE-70; Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:260-264.

FS 91025

Somers, G.L.; Farrar, R.M., Jr. 1991. Biomathematical growth equations for natural longleaf pine stands. Forest Science. 37(1):227-244.

DESCRIPTORS: increment; basal area; growth models; simulation; stand characteristics; mortality.

FS 91026

Streng, D.R.; Glitzenstein, J.S.; Platt, W.J. 1991. Results of a long-term experiment: the effects of season and frequency of burning on ground-cover vegetation in longleaf pine savannas in north Florida. Supplement - Bulletin of the Ecological Society of America. 72(2):260-261.

DESCRIPTORS: ground-cover; growing season fire; dormant season fire; biomass; fire-tolerant.

FS 91027

Tracey, W.D.; Kulhavy, D.L.; Ross, W.G. 1991. Land and resource management on typic quartzipsamments. In: Coleman, S.S.; Neary, D.G. eds. Proceedings - 6th biennial southern silvicultural research conference; 1990 October 30-November 1; Memphis, TN: Gen. Tech. Rep. SE-70; Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station: 475-484.

FS 91028

Walker, L.C. 1991. The Southern Forest: A Chronicle. Austin, TX: University of Texas Press. 322 p.

FS 91029

Wyant, J.G.; Alig, R.J.; Bechtold, W.A. 1991. Physiographic position, disturbance and species composition in North Carolina Coastal Plain forests. Forest Ecology and Management. 41:1-19.

FS 92001

Bailey, M.A. 1992. Fire & our natural heritage: rare plants, animals, and natural communities. Alabama's Treasured Forests. 11(1):28-30.

FS 92002

Baker, W.L. 1992. Effects of settlement and fire suppression on landscape structure. Ecology. 73(5):1879-1887. *DESCRIPTORS:* landscape; fire suppression; historical changes; GIS; prescribed burning.

FS 92003

Barnett, J.P. 1992. The south's longleaf pine: it can rise again. Forests and People 42(4): 14-17.

FS 92004

Beltz, R.C.; Cost, N.D.; Kingsley, N.P.; Peters, J.R. 1992. Timber volume distribution maps for the eastern United States. Gen. Tech. Rep. WO-60, Washington, D.C.: U.S. Department of Agriculture, Forest Service, Washington, DC. 59 p.

FS 92005

Binkley, D.; Richter, D.; David, M.B.; Caldwell, B. 1992.
Soil chemistry in a loblolly/longleaf pine forest with interval burning. Ecological Applications. 2(2):157-164

 $\ensuremath{\textit{DESCRIPTORS:}}$ acidity; cations; pH; prescribed fire.

FS 92006

Dobrowolski, J.P.; Blackburn, W.H.; Pearson, H.A. 1992. Changes to infiltration and interrill erosion from long-term prescribed burning in Louisiana. Water Resources Bulletin. 28(2):287-298.

DESCRIPTORS: soil water movement; infiltration; burning; soil types (textural); erosion; interrill erosion.

FS 92007

Doggett, C.A.; Smith, T. 1992. Pales weevil: a serious threat to longleaf pine production. Tree Planters' Notes. 43(3):87-88.

FS 92008

Hedrick, L. 1992. Tree 249-3. Alabama's Treasured Forests, 11(2):18-21.

DESCRIPTORS: longleaf pine; old-growth; red-cockaded woodpecker; history.

FS 92009

Jones, J.P.; Pantone, D.J.; Barnett, J.P.; Brisette, J.C. 1992. The relationship between fungal population development and root damage of cold-stored longleaf pine seedlings. Bull. No. 832. Baton Rouge, LA: Louisiana Agricultural Experiment Station. 23 p.

DESCRIPTORS: control; benomyl; metalaxyl; planting stock; diseases; storage; fungal diseases; fungicides.

FS 92010

Kessler, W.B.; Salwasser, H.; Cartwright, C.W., Jr.; Caplan, J.A. 1992. New perspectives for sustainable natural resources management. Ecological Applications. 2(3):221-225.

DESCRIPTORS: national forest management; public land; resource.

FS 92011

Loeb, S.C.; Pepper, W.D.; Doyle, A.T. 1992. Habitat characteristics of active and abandoned red-cockaded woodpecker colonies. Southern Journal of Applied Forestry 16(3):120-125.

FS 92012

Muse, H.D.; Hatchell, G.E. 1992. A preliminary identification of morphological indicators of field performance in bare-root nursery stock. Res. Pap. SE-283. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station.

DESCRIPTORS: early field performance; seedlings.

FS 92013

Nelson, C.D.; Linghai, Z; Hamaker, J.M. 1992. Propagation of loblolly, slash, and longleaf pine from needle fascicles. Tree Planters' Notes. 43(3):67-72.

Nepal, S.K.; Somers, G.L. 1992. A generalized approach to stand table projection. Forest Science. 38(1):120-133. DESCRIPTORS: diameter; equations; increment; stand tables.

FS 92015

Outcalt, K.W. 1992. Factors affecting wiregrass (*Aristida stricta* Michx.) cover on uncut and site prepared sandhill areas in central Florida. Ecological Engineering. 1:245-251.

DESCRIPTORS: reforestation.

FS 92016

Quicke, H.E.; Meldahl, R.S. 1992. Predicting pole classes for longleaf pine based on diameter breast height. Southern Journal of Applied Forestry. 16(2):79-82. DESCRIPTORS: height; stump height; poles.

FS 92017

Robbins, L.E., Myers, R.L. 1992. Seasonal effects of prescribed burning in Florida: a review. Tall Timbers Research Station Misc. Pub. No.8.

FS 92018

Skroch, W.A.; Powell, M.A.; Bilderback, T.E.; Henry, P.H. 1992. Mulches: durability, aesthetic value, weed control, and temperature. Journal of Environmental Horticulture. 10(1):43-45.

DESCRIPTORS: control; physical control; mulching; ecology; soil temperature; weeds.

FS 92019

Smith, W.R.; Farrar, R.M., Jr.; Murphy, P.A.; Yeiser, J.L.; Meldahl, R.S.; Kush, J.S. 1992. Crown and basal area relationships of open-grown southern pines for modeling competition and growth. Canadian Journal of Forest Research. 22(3):341-347.

DESCRIPTORS: increment; basal area; growth models; diameter; plant competition; stand characteristics.

FS 92020

Wagner, D.B.; Nance, W.L.; Nelson, C.D.; Li, T.; Patel, R.N.; Govindaraju, D.R. 1992. Taxonomic patterns and inheritance of chloroplast DNA variation in a survey of *Pinus echinata*, *Pinus elliottii*, *Pinus palustris*, and *Pinus taeda*. Canadian Journal of Forest Research. 22(5):683-689.

DESCRIPTORS: genetics; molecular genetics; chloroplast genetics; biotechnology; restriction fragment length polymorphism; genetic resources.

FS 92021

Waldrop, T.A.; White, D.L.; Jones, S.M. 1992. Fire regimes for pine-grassland communities in the southeastern United States. Forest Ecology and Management 47: 195-210.

FS 92022

Walkinshaw, C.H.; Barnett, J.P. 1992. Fusiform rust in longleaf pines. Forest Farmer 52(1): 10-13.

FS 92023

Watts, W.A.; Hansen, B.C.S.; Grimm, E.C. 1992. Camel Lake: a 40,000-year record of vegetational and forest history from north Florida. Ecology. 73(3):1056-1066.

FS 93001

Barnard, E.L.; Cordell, C.E.; Gilly, S.P.; Kais, A.G. 1993.

Comparative performance of sand and longleaf pines on a *Phytopthora cinnamomi*-infested sandhill in west Florida. Southern Journal of Applied Forestry. 17(2):90-95. *DESCRIPTORS:* sandhill; susceptibility; disease; infection; mortality.

FS 93002

Barnett, J.P.; Jones, J.P. 1993. Response of longleaf pine to storage conditions and pregermination treatments. Southern Journal of Applied Forestry. 17(4): 174-179. DESCRIPTORS: regeneration; seed storage; stratification; moisture content; seed quality.

FS 93003

Barnett, J.P.; Pesacreto, T.C. 1993. Handling longleaf pine seeds for optimal nursery performance. Southern Journal of Applied Forestry. 17(4):180-187.

DESCRIPTORS: regeneration; artificial means; seed quality.

FS 93004

Boyer, W.D. 1993. Long-term development of regeneration under longleaf pine seedtree and shelterwood stands. Southern Journal of Applied Forestry 17(1):10-15.

FS 93005

Boyer, W.D. 1993. Season of burn and hardwood development in young longleaf pine stands. In: Brissette, J.C., ed. Proceedings - 7th biennial southern silvicultural research conference; 1992 November 17-19; Mobile, AL. Gen. Tech. Rep. SO-93. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:511-515.

FS 93006

Boyles-Sprenkel, C. 1993. Restoring a "grass-roots" forest. American Forests. 99(5-6):43-45, 60, 61.

DESCRIPTORS: wiregrass; sandhill pine; Apalachicola Bluffs; ravine pressure.

FS 93007

Brockway, D.G.; Outcalt, K.W. 1993. Restoration of longleaf pine/wiregrass ecosystem. Supplement - Bulletin of the Ecological Society of America. 14(2):175-176.

DESCRIPTORS: forb cover; wiregrass; ecosystem; species diversity; species richness; species evenness; hexaxinone.

FS 93008

Busby, R.L.; Thomas, C.E.; Lohrey, R.E. 1993. Potential product values from thinned longleaf pine plantations in Louisiana. In: Brissette, J.C., ed. Proceedings - 7th biennial southern silviculturalresearch conference; 1992 November 17-19; Mobile, AL. Gen. Tech. Rep. SO-93. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:645-650.

FS 93009

Cahal, R.R.,III; Kulhavy, D.L.; Ross, W.G.; Tracy, W.D.; Hacker, W.D. 1993. Forest pest management on typic quartzipsamments: a management dilemma. In: Brissette, J.C., ed. Proceedings - 7th biennial southern silvicultural research conference; 1992 November 17-19; Mobile, AL. Gen. Tech. Rep. SO-93. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:541-546.

FS 93010

Carey, W.A.; Kelley, W.D. 1993. Seedling production trends and fusiform rust control practices at southern nurseries, 1981-1991. Southern Journal of Applied Forestry. 17(4):207-211.

DESCRIPTORS: fusiform rust; fungicide; triadimefon; infection; production.

FS 93011

Clark, A., III. 1993. Characteristics of timber stands containing sufficient heartwood for cavity excavation by red-cockaded woodpecker clans. In: Brissette, J.C., ed. Proceedings - 7th biennial southern silvicultural research conference; 1992 November 17-19; Mobile, AL. Gen. Tech. Rep. SO-93. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:621-626.

FS 93012

Eriksson, M.; Lin, Chii-Dean; Thomas, C.E.; Lohrey, R.E. 1993. Dendroecological modelling of thinned and unthinned longleaf pine stands in the western Gulf region. In: Brissette, J.C., ed. Proceedings - 7th biennial southern silvicultural research conference; 1992 November 17-19; Mobile, AL. Gen. Tech. Rep. SO-93. New Orleans, LA: U.S. Department of Agriculture, ForestService, Southern Forest Experiment Station:585-592.

FS 93013

Gilliam, F.S.; Yurish, B.M.; Goodwin, L.M. 1993. Community composition of an old growth longleaf pine forest: relationship to soil texture. Bulletin of the Torrey Botanical Club. 120(3):287-294.

DESCRIPTORS: old-growth; soil texture; hard-wood species; xeric type; mesic type; North Carolina; sandhills; Boyd Tract.

FS 93014

Grace, S.L.; Platt, W.J. 1993. Spatial position influences growth and survival of fire by juvenile longleaf pines in old growth forest. Supplement - Bulletin of the Ecological Society of America. 74(2):255.

DESCRIPTORS: juvenile; fire; fire temperature; juvenile survival.

FS 93015

Guerin, D.N. 1993. Oak dome clonal structure and fire ecology in a Florida longleaf pine dominated community. Bulletin of the Torrey Botanical Club. 120:107-114.

FS 93016

Hunter, W.C.; Pashley, D.N.; Escano, R.E.F. 1993. Neotropical migratory landbird species and their habitats of special concern within the southeast region. In: Finch, D.M., Stangel, P.W. eds. Status and management of neotropical migratory birds; 1992 September 21-25, Estes Park, CO; Gen. Tech. Rep. RM-229; Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station:159-171.

FS 93017

Jermstad, K.D.; Guge, P.A.; Carroll, E.R.; Friedman, S.T.; Neale; D.B. 1993. Genotyping of longleaf pine ramets after hurricane Hugo by using DNA and isozyme markers. Tree Planters' Notes 44(4):157-160.

FS 93018

Martin, W.H.; Boyce, S.G.; Echternacht, H.C. 1993. Biodiversity of the Southeastern United States: Upland terrestrial communities. New York. Wiley and Sons. 373 p.

FS 93019

Menges, E.S.; Abrahamson, W.G.; Givens, K.T.; Gallo, N.P.; Layne, J.N. 1993. Twenty years of vegetation change in five long unburned Florida plant communities. Journal of Vegetation Management. 4:375-394.

FS 93020

Millar, C.I. 1993. Impact of the Eocene on the evolution of *Pinus* L. Annals of the Missouri Botanical Garden 80(2):471-498.

FS 93021

Olson, M.S.; Platt, W.J. 1993. Shrub responses to early and late growing season fires in two longleaf pine savanna habitats. Supplement - Bulletin of the Ecological Society of America. 74(2):379.

DESCRIPTORS: growing season fire; resprouting; shrubs; upland savannas; seepage savannas.

FS 93022

Outcalt, K.W. 1993. Southern pines performance on sandhills sites in Georgia and South Carolina. Southern Journal of Applied Forestry. 17(2):100-102. DESCRIPTORS: productivity; yield.

FS 93023

Outcalt, K.W. 1993. Wiregrass cover following site preparation of sandhills. In: Gjerstad, D.H. ed.Proceedings - International conference on forest vegetation management; 1992, April 27 - May 1; Auburn, AL: Auburn University School of Forestry Report:197-201.

FS 93024

Outcalt, K.W.; Brockway, D.G. 1993. Response of wiregrass to hexazinone treatments on Florida sandhills. Supplement - Bulletin of the Ecological Society of America. 74(2):380.

DESCRIPTORS: wiregrass; herbicide; hexazinone; Ocala National Forest; green tissue; biomass.

FS 93025

Platt, W.J. 1993. Effects of Hurricane Kate on the population dynamics of longleaf pine (*Pinus palustris*) in an old-growth stand on the Wade Tract in Thomas County, Georgia. Supplement - Bulletin of the Ecological Society of America. 74(2):394-395.

DESCRIPTORS: Hurricane Kate; fire; old-growth stand; fire.

FS 93026

Runion, G.B.; Kelley, W.D.; Land, D.H.; Gilly, S.P.; Sharp, D.J. 1993. Chemical control of *Rhizoctonia* seedling blight of longleaf pine. Southern Journal of Applied Forestry. 18(1):5-9.

DESCRIPTORS: benomyl; chlorothalonil; benodanil; triadimefon; diniconazole; SN-84364; RH-3486.

Vanderveer, H.L. 1993. When to use container seedlings. Forest Farmer 52(7): 17-19.

FS 93028

Wade, D.D.; Forbus, J.K.; Saveland, J.M. 1993. Photo series for estimating post-hurricane residues and fire behavior in southern pine. Gen. Tech. Rep. SE-82. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Esperiment Station. 19 p.

FS 93029

Wakamiya, I.; Newton, R.J.; Johnston, J.S.; Price, H.J. 1993. Genome size and environmental factors in the genus *Pinus*. American Journal of Botany. 80(11): 1235-1241.

FS 93030

Walker, J.L.; Waldrop, T.A.; Peet, R.K. 1993. Management effects on plant species diversity in fire-dependent communities of the Southeastern coastal plain. Supplement - Bulletin of the Ecological Society of America. 74(2):475.

FS 93031

Walkinshaw, C.H.; Bryant, R.L.; Barnett, J.P. 1993.
Comparative fusiform rust severity in loblolly, longleaf, and slash pines. In: Brissette, J.C., ed. Proceedings - 7th biennial southern silvicultural research conference; 1992 November 17-19; Mobile, AL. Gen. Tech. Rep. SO-93. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station:293-297.

FS 93032

West, D.C.; Doyle, T.W.; Tharp, M.L.; Beauchamp, J.J.; Platt, W.J.; Downing, D.J. 1993. Recent growth increases in old-growth longleaf pine. Canadian Journal of Forest Research. 23(5):846-853.

DESCRIPTORS: tree-ring; old-growth; biomass; chronology.

FS 94001

Boyer, W.D. 1994. Eighteen years of seasonal burning in longleaf pine: effects on overstory growth. In: Proceedings of the 12th International Conference on Fire and Forest Meteorology, 1993 Oct. 26-28, Jekyll Island, GA. Society of American Foresters:602-610.

FS 94002

Boyer, W.D.; Miller, J.H. 1994. Effect of burning and brush treatments on nutrient and soil physical properties in young longleaf pine stands. Forest Ecology and Management. 70(1-3):311-318.

DESCRIPTORS: prescribed fire; stand growth; hardwood control; herbicide injection; understory clearing.

FS 94003

Brewer, J.S.; Platt, W.J. 1994. Modeling clonal growth of a "pyrophilic" golden aster, *Pityopsis graminifolia*. Supplement - Bulletin of the Ecological Society America. 75(2):23.

DESCRIPTORS: grass-leaf golden aster; growing-season fire; competition.

FS 94004

Brockway, D.G.; Outcalt, K.W. 1994. Plant cover, diver-

sity and biomass in lonleaf pine-wiregrass. Supplement - Bulletin of the Ecological Society of America. 75(2):24.

DESCRIPTORS: wiregrass; turkey oak; herbicides; Hexazinone; hardwood control; ground cover; sandhills.

FS 94005

Drewa, P.B.; Platt, W.J. 1994. Analysis of plant community organization in longleaf pine savanna habitats. Supplement - Bulletin of the Ecological Society of America. 75(2):57.

DESCRIPTORS: plant community; habitat types; fire; savanna; Louisiana; Florida.

FS 94006

Duncan, R.P. 1994. A model of mast seeding in forest trees.
Supplement - Bulletin of the Ecological Society of America. 75(2):58.

FS 94007

Farrar, R.M.; Matney, T.G. 1994. A dual growth simulator for natural even-aged stands of longleaf pine in the South's east Gulf region. Southern Journal of Applied Forestry. 18(4):147-155.

FS 94008

Grace, S.L.; Platt, W.J. 1994. Neighborhood effects on juveniles in an old-growth longleaf pine stand (*Pinus palustris* Mill.). Supplement - Bulletin of the Ecological Society of America. 75(2):79.

FS 94009

Hainds, M.J.; Mitchell, R.J.; Boring, L.R.; Palik, B.J. 1994. Temporal and spatial dynamics of legume populations in a frequently burned longleaf pine/wiregrass savanna. Supplement - Bulletin of the Ecological Society of America. 75(2):85.

FS 94010

Harcombe, P.A.; Liu, C.X. 1994. Can current vegetation be used to infer presettlement patterns? Supplement - Bulletin of the Ecological Society of America. 75(2):87. DESCRIPTORS: fire; oak-pine; succession; grass; phytolith; Texas.

FS 94011

Hendrix, P.F.; Callaham, M.A.; Kirn, L. 1994. Ecological relationships and effects of harvesting on native earthworm communities in Apalachicola National Forest. Supplement - Bulletin of the Ecological Society America. 75(2):92.

DESCRIPTORS: earthworm harvesting; wiregrass; soil nutrient cycling.

FS 94012

Jacqmain, E.I.; Mitchell, R.J.; Jones, R.H. 1994. Oak distribution along an edaphic moisture gradient in fire-maintained longleaf pine-wiregrass ecosystems. Supplement - Bulletin of the Ecological Society of America. 75(2):120.

DESCRIPTORS: oaks; community structure; wiregrass; fire; soil moisture.

FS 94013

Landsberg, J.D. 1994. A review of prescribed fire and tree growth response in the genus *Pinus*. In: Proceedings of the 12th International Conference on Fire and For-

est Meteorology, 1993 Oct. 26-28, Jekyll Island, GA. Society of American Foresters:326-346.

FS 94014

Mitchell, R.; Miller, M. 1994. Shade and nutrient addition effects on wiregrass growth and demography. Supplement - Bulletin of the Ecological Society of America. 75(2):156.

DESCRIPTORS: wiregrass; shade; nutrients; fire.

FS 94015

Oultcalt, K.W. 1994. Seed production of wiregrass in central Florida following growing season prescribed burns. International Journal of Wildland Fire. 4(1):123-125.

FS 94016

Outcalt, K.W. 1994. The effect of within-gap position on precipitation and seedling survival in longleaf pine forests. Supplement - Bulletin of the Ecological Society of America. 75(2):171.

FS 94017

Palik, B.J.; Pederson, N. 1994. Landscape variation in overstory mortality in longleaf pine ecosystems. Supplement - Bulletin of the Ecological Society of America. 75(2):172.

DESCRIPTORS: slash pine; mortality; stand dynamics; site; lightning; windthrow; fire.

FS 94018

Peet, R.K. 1994. Restoration of plant community structure: the importance of old-growth systems. Supplement - Bulletin of the Ecological Society of America. 75(2):177.

DESCRIPTORS: Southeastern USA; piedmont; coastal plain; ecosystem restoration; old-growth.

FS 94019

Platt, W.J. 1994. The importance of evolutionary models of plant population and community dynamics in conservation biology. Supplement - Bulletin of the Ecological Society of America. 75(2):182.

DESCRIPTORS: Plant succession; evolution; models; disturbance regimes; plant community dynamics; ecosystem restoration; old-growth.

FS 94020

Quicke, H.E.; Meldahl, R.S.; Kush. J.S. 1994. Basal area growth of individual trees: a model derived from a regional longleaf pine growth study. Forest Science. 40(3):528-542.

FS 94021

Rice, J.R. 1994. Longleaf seedlings bareroot vs. containerized. Alabama's Treasured Forests. 13(3):24-25.

FS 94022

Schwartz, M.W. 1994. Natural distribution and abundance of forest species and communities in northern Florida. Ecology. 75(3):687-705.

DESCRIPTORS: bearing tree; community composition; forest history; historical plant ecology; mixed deciduous forest; presettlement; land survey; vegetation; wetland tree species distribution.

FS 94023

South, D.B.; Loewenstein, N.J. 1994. Effects of Viterra root dips and benomyl on root growth potential and sur-

vival of longleaf pine seedlings. Southern Journal of Applied Forestry. 18(1): 19-23.

DESCRIPTORS: benomyl; root growth potential; Viterra gel; survival.

FS 94024

Thomas, M. 1994. Longleaf pine as a planting option: an analysis. Alabama's Treasured Forests. 13(2):15.

DESCRIPTORS: rotation; yield; income; economics.

FS 94025

Walker, J.L.; Boyer, W.D. 1994. An ecological model and information needs assessment for longleaf pine ecosystem restoration. In: Foley, L.H., comp. Silviculture: from the cradle of forestry to ecosystem management: Prodeedings of the National Silviculture Workshop; 1993 November 1-4; Hendersonville, NC. Gen. Tech. Rep. SE-88. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station:138-147.

FS 94026

Walker, J.L; White, D. 1994. Morphological and flower production changes with time since burning in *Macbridea alba*. Supplement - Bulletin of the Ecological Society of America. 75(2):240.

DESCRIPTORS: fire effects; flowering; Florida.

FS 95001

Abrahamson, W.G. 1995. Effects of the reintroduction of fire to long-unburned Florida scrub, scrubby flatwoods, and flatwoods. Supplement - Bulletin of the Ecological Society of America. 76(2):1.

FS 95002

Brockway, D.G.; Clifford, E.L. 1995. Long-term effects of variable frequency fire on plant community diversity, structure and productivity in a longleaf pine wiregrass flatwoods ecosystem. Supplement - Bulletin of the Ecological Society of America. 76(2):30.

FS 95003

Camann, M.G.; Berisford, C.W. 1995. Potential habitat competition between southern pine beetle and red-cockaded woodpecker in forested landscapes of the southeastern U.S. Supplement - Bulletin of the Ecological Society of America. 76(2):38.

FS 95004

Demeo,T.; Hamazaki, T.; Parker, A.; Sigler, J.; Tucker, M.; Williams, J.; Wuichet, J. 1995. An interdisciplinary approach to ecosystem management in Northwest Florida. Supplement - Bulletin of the Ecological Society of America. 76(2):62.

FS 95005

Horton, T. 1995. Longleaf pine: a southern revival. Audubon. 97(2): 74-80, 92.

FS 95006

Houhoulis, P.F.; Michner, W.K.; Blood, E.R.; Boring, L.R.; Golladay, S.W.; Kirkman, L.K.; Mitchell, R.J.; Palik, B.J. 1995. Effects of flooding associated with Tropical Storm Alberto on the longleaf pine-wiregrass ecosystem. Supplement - Bulletin of the Ecological Society of America. 76(2):121.

Kush, J.S.; Meldahl, R.S. 1995. Composition of an old-growth longleaf pine ecosystem prior to restoration efforts. Supplement - Bulletin of the Ecological Society of America. 76(2):147.

FS 95008

Mitchell, R.J.; Boring, L.R.; Houseal, G.A. 1995. Fire and nutrient losses in longleaf pine woodlands. Supplement - Bulletin of the Ecological Society of America. 76(2):186.

FS 95009

Outcalt, K.W. 1995. The effect of cultural treatments on survival and growth of under-planted wiregrass (*Aristida stricta*). Supplement - Bulletin of the Ecological Society of America. 76(2):373.

FS 95010

Palik, B.J.; Mitchell, R.J.; Houseal, G.A. 1995. Gap processes in the longleaf pine ecosystem: responses of resources, litter, and seedlings to variation in overstory structure. Supplement - Bulletin of the Ecological Society of America. 76(2):204.

FS 95011

Pederson, N.; Palik, B.J.; Parker, P. 1995. Disturbance history of a Coastal Plain longleaf ecosystem. Supplement - Bulletin of the Ecological Society of America. 76(2):376.

FS 95012

Provencher, L.; Hardesty, J.; Gordon, D.; Tanner, G. 1995. Analysis and spatial scale of biotic and abiotic variables in burned old-growth and fire-suppressed longleaf pine xeric sanhills. Supplement - Bulletin of the Ecological Society of America. 76(2):218.

FS 95013

Thomas, C.E.; Parresol, B.R.; Le, K.H.N.; Lohrey, R.E. 1995. Biomass and taper for trees in thinned and unthinned longleaf pine plantations. Southern Journal of Applied Forestry. 19(1):29-35.

FS 95014

Turchin, P. 1995. Theoretical ecology and management of the southern pine beetle. Supplement - Bulletin of the Ecological Society of America. 76(2):268.

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Malcolm, R.L.: 68004. O'Meara, T.E.: 87032. Schiff, A.L.: 62004. Mann, W.F., Jr.: 69003. Orzell, S.L.: 89006. Schiltze-Dewitz, G.: 70003, 70004. Manwiller, F.G.: 69009. Ostmeyer, J.G.: 88016, 89031. Schlaegel, B.E.: 91005. Marquez, A.C.: 89004. Outcalt, K.W.: 85025, 90029, 92015, Schmidt, R.A.: 86009. Martin, A., Jr.: 86031, 89036. 93007, 93022, 93023, 93024, 94004, Schmidtling, R.C.: 85030, 87038, 89011, Martin, R.E.: 68005. 94015, 94016, 95009. 90037. Martin, W.H.: 93018. Owston, P.W.: 84014, 90030. Schoenike, R.E.: 79002. Marx, D.H.: 84001, 85019, 86022, Page, H.H.: 90031. Schroeder, R.A.: 85012, 86008. 87018, 90011, 90028. Pait, J.A., III: 89027. Schultz, R.P.: 69018, 73005, 74004. Matney, T.G.: 94007. Palik, B.J.: 94009, 94017, 95006, 95010, Schwartz, M.W.: 94022. McClanahan, T.R.: 86023. 95011. Serbousek, D.: 91004. McConnel, J.L.: 69013. Pantone, D.J.: 92009. Shain, W.A.: 80005. McCracken, R.J.: 68004. Parker, A.: 95004. Sharp, D.J.: 93026. McDonald, J.K.: 69009. Parker, J.A.: 81008. Shaw, D.J.: 91024. McDonald, S.E.: 90030. Parker, P.: 95011. Sheffield, R.M.: 81001. Parresol, B.R.: 87033, 95013. McElwain, T.: 89027. Shellnutt, H.E., Jr.: 86025. McGilvv, J.M.: 86003. Pasek, E.A.: 90032. Shigematsu, Y.: 59002. McIntyre, C.R.: 90032. Pashley, D.N.: 93016. Shoulders, E.: 85031, 86007, 89008, McKee, W.H., Jr.: 82005. Patel, R.N.: 92020. 89009, 89010, 90038. Siegfried, B.D.: 87013. McMillin, C.W.: 86007. Paul, B.H.: 63001. McReynolds, R.D.: 85020, 87022. Pearson, H.A.: 82007, 84002, 87033, Sigler, J.: 95004. 87034, 87048, 89039, 92006. Sirmon, G.A.: 87010, 89035, 90039. Means, D.B.: 85022. Meeker, J.R.: 87023. Pederson, N.: 94017, 95011. Skroch, W.A.: 92018. Meldahl, R.S.: 87024, 89024, 91024, Pehl, C.E.: 86025. Sluder, E.R.: 86026, 90025, 91013. Peet, R.K.: 83004, 93030, 94018. 92016, 92019, 94020, 95007. Smith, D.M.: 86027. Menges, E.S.: 93019. Pepper, W.D.: 86004, 92011. Smith, T.: 92007. Smith, W.P.: 85033. Pesacreto, T.C.: 93003. Mergen, F.: 61002. Merkel, E.P.: 72001. Peters, J.R.: 92004. Smith, W.R.: 92019. Mexal, J.G.: 84011. Platt, W.J.: 88017, 88018, 89018, 91015, Snow, G.A.: 90040. Michael, J.L.: 80004, 89028. 91018, 91019, 91026, 93014, 93021, Somers, G.L.: 91025, 92014. 93025, 93032, 94003, 94005, 94008, Sommer, H.E.: 84013, 85032. Michner, W.K.: 95006. Millar, C.I.: 93020. 94019 Souter, R.A.: 91005. Miller, J.H.: 84012. Ploetz, R.C.: 86005. South, D.B.: 85033, 86028, 86029, Miller, M.: 94014. Powell, M.A.: 92018. 87039, 88023, 88024, 94023. Miller, R.G.: 90030. Precythe, H.W.: 88027. Sparks, R.C.: 80006. Miller, T.: 90017. Price, H.J.: 93029. Sprinz, P.T.: 88025. Mitchell, J.H.: 88009, 91014. Provencher, L.: 95012. Stablein, J.J.: 91004. Mitchell, R.J.: 94009, 94012, 94014, Stanton, W.M.: 87040. Pyne, S.J.: 82008. 95006, 95008, 95010. Quarterman, E.: 62003. Stewart, A.W.: 87041. Quicke, H.E.: 91024, 92016, 94020. Moehler, F.A.: 88027. Stine, M.: 84013, 85032. Mohlenbock, R.H.: 85022. 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Wright, V.L.: 87033.

Wuichet, J.: 95004.

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Wyant, J.G.: 91029.

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Yeiser, J.L.: 92019.

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