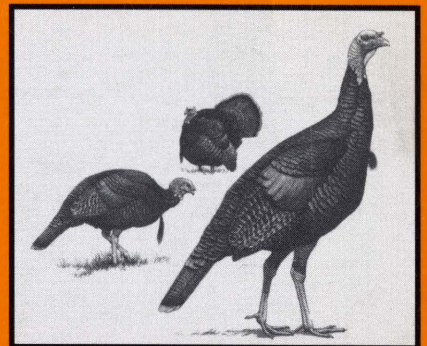


**ALABAMA
FOREST
OWNER'S
GUIDE TO
INFORMATION
RESOURCES**

**Help for the
Small Landowner**



John H. Sandy

*** ON THE COVER ***

Photograph of loblolly pine, courtesy of the Alabama Forestry Commission, and an illustration of wild turkey reproduced from *Harper & Row's Complete Field Guide to North American Wildlife*, Eastern Edition, Harper & Row, 1981.

John H. Sandy is Head of the Rodgers Library for Science and Engineering,
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Introduction

Much of Alabama's forests are owned by private individuals, often in small acreages. They are usually a part of diversified farms or simply free-standing operations. The forests are seen in many ways: as a scenic landscape, a place for recreation and outdoor sports, a habitat for wildlife

and plants, and an economic resource. All of these values are appropriate for use of the forest resource.

A productive forest is a major goal of most owners. Achieving this goal is not a matter of chance. Rather, the best results are obtained when sound management practices are applied. Management involves two broad objectives: caring for the resource and getting a good return from the land. These two objectives ought not be viewed separately, if the full potential of the forest is to be realized.

Success in forest management requires a basic understanding of the resource, as well as the principles and practices of forestry, wildlife management, and some aspects of farming. Also important is an awareness of the ideas related to multiple use, environmental protection, and good stewardship of the land.

Information is the key to successful forest management. As such, this publication aims to help forest owners understand and use information resources. Initially, this publication describes the kind and scope of available information, the organization of information, and the tools for finding information. Emphasis is put on the processes commonly used in searching for information.

A second part of this work explains how and where to get source documents, such as reports, articles, and books, which contain valuable information.

Special attention is given to the role of libraries and other organizations in meeting forest owners' information needs.

A final section identifies forestry and forestry-related publications and other re-

sources which are useful for managing a woodlot or small forest. Some of the books are intended for reading by professionals in natural resources; however, all contain material suitable for laymen.

Readers of this guide will become aware of a wide range of information resources. It's hoped that, with knowledge gained, forest owners will become more self-sufficient in the management of their woodlands. At the least, with the content of this guide, owners will have added confidence as they work with consultants and other professionals in forestry and the forest industry.

Forestry research is predominately done by scientists working for universities and government agencies. At the national level, the United States Forest Service is heavily involved in forestry research. Work is done in Washington, D.C., at regional centers such as Atlanta, and at regional Forest Experiment Stations such as in Asheville, NC.

In Alabama, the School of Forestry at Auburn University has an active research program. The Alabama Cooperative Extension System, with offices at Auburn University, prepares educational materials aimed at helping the public.

Professionals at the Alabama Forestry Commission and other state agencies, as well as experts in professional and commercial organizations, also create significant new information.

Much forestry research is characterized as applied studies: the purpose is to get answers to real questions. When in the hands of foresters and others, results from applied research bring immediate improvement to the forest resource.

Laboratory research and field studies/trials are primary ways to discover new knowledge in forestry. Findings from this kind of work and other studies are published in technical reports, books, and

Understanding
the
Information
Process

periodicals. Research presented at professional meetings is published in conference proceedings.

When faced with a forestry issue, it's desirable to find what information is available. This involves first-hand searching for information or asking for help from people who are experienced in the field. For an individual, the process begins with asking a question and ends with doing a literature search, using tools such as indexes and library catalogs.

STEPS IN SEARCHING FOR INFORMATION

- Ask a question
- Interpret the question in terms of one or more ideas
- Decide on keywords which relate to each idea
- Search indexes/catalogs using the keywords

One major index is commonly used for locating information in forestry and allied fields. It's called AGRICOLA. Published by the National Agricultural Library, AGRICOLA is an electronic database which lists and indexes thousands of publications, with emphasis on articles which appear in journals. Libraries in Alabama access this database online through a computer connection to a remote database vendor or by using a CD-ROM (compact disc) from within the library.

Many libraries use DIALOG, an online information service provided by Knight-Ridder Information, Inc. of Mountain View, California, to search for items in AGRICOLA. Once connected to DIALOG, references to technical information in AGRICOLA are easily retrieved. Increasingly, various government agencies and independent consultants have the capability to use AGRICOLA online.

A basic computer is needed to connect to an information service such as DIALOG. The computer should be equipped with telecommunications software (such as

PROCOMM PLUS) and a modem. With this setup, a dial-access connection to DIALOG is made over standard phone lines. This same technology is used for searching remote library catalogs, discussed below.

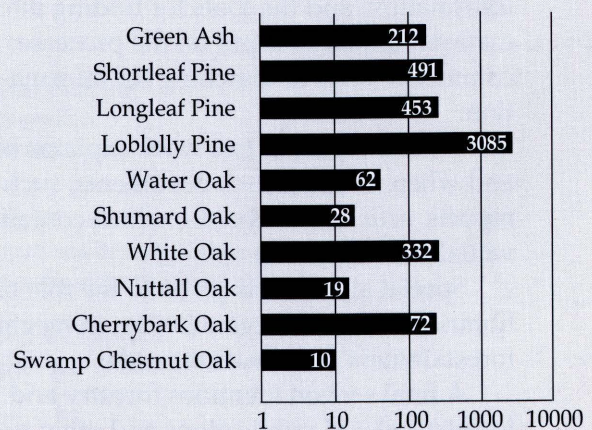
Copies of AGRICOLA on CD-ROM are found in the Library at Auburn University, the Learning Resources Center at Alabama A&M University, and the Library at Tuskegee University. These CD-ROMs are not networked and must, therefore, be used onsite.

MARCIVE GPO/PAC is the name of another CD-ROM index which covers forestry materials and other natural resources topics. It's used primarily for finding documents of U.S. federal agencies, such as the U.S. Forest Service and the U.S. Fish and Wildlife Service, which have been distributed to libraries by the U.S. Government Printing Office. MARCIVE is found in college and university libraries, which have large collections of U.S. government documents.

The catalogs of public, college and university libraries in Alabama and other states are important for finding books and technical reports. Library catalogs list and describe locally owned materials, not the universe of what is available. Therefore, it's necessary to search more than one library catalog to get the best results.

AGRICOLA and library catalogs are complementary finding tools. Both should be consulted, when it's important to find all

NUMBER OF PAPERS IN AGRICOLA ON HIGH-VALUE TREES WHICH GROW IN ALABAMA



available information. In the Southeast, the strongest forestry collections are found in the libraries of Auburn and Mississippi State Universities and the Universities of Georgia and Florida. One can travel to these universities and use their collections; however, a dial-access computer connection is an easier way to discover what's in these libraries.

The Internet offers another way to connect to remote library catalogs. Individuals may access the Internet through a gateway provided by a commercial Internet provider. Private experts with knowledge of how to make an Internet connection are listed under Computers-System Designers & Consultants in the *Yellow Pages* of many city phone books.

For people living near larger Alabama communities, Internet access may be as close as the local public, college, or university library. For example, at the Huntsville-Madison County Public Library in Huntsville and

the University Libraries at The University of Alabama in Tuscaloosa, the Internet is used to connect to the library catalog at the University of Georgia.

When using the dial-access approach for connecting to a remote library catalog, communications software is usually configured as follows: BAUD: 2400; Protocol: NONE; Terminal: VT100; Full Duplex; 8 data bits; NONE parity; one stop bit.

Forestry publications are available from many sources. The question of how to get books, reports, or other materials is answered, in part, by who is the publisher. Items published by the U.S. Forest Service are sold or distributed free-of-charge to the public.

The U.S. Forest Service, Southern Region, distributes its documents from offices in Atlanta. Some U.S. Forest Service publications, which carry a price, are ordered from the U.S. Government Bookstore in Atlanta.

The Alabama Cooperative Extension System makes its educational materials available from offices at Auburn University and in each county seat. For documents produced by an Alabama state agency, the source is the agency itself.

Publications of commercial publishers, professional bodies, and other organizations are purchased through local bookstores or directly from publishers. A publication called *Books in Print*, found in bookstores and libraries, gives price information for ordering books from commercial publishers and some societies and professional organizations.

Alabama's libraries are a primary source for all forestry publications. This is true because libraries collect works from all types of publishers: commercial, non-profit, and governmental agencies.

Very importantly, libraries have current publications as well as collections of older materials. The archival function is significant, since most publications ultimately go

Sources of Publications

USE A COMPUTER TO MAKE A CONNECTION TO REMOTE LIBRARY CATALOGS

• Auburn University

Dial-access with computer & modem:
Telephone: (334) 844-9126; press ENTER;
type TELNET IBM; tab to application; type LUIS.
Internet Access:
telnet AUDUCACD.DUC.AUBURN.EDU;
press tab thrice; type LUIS.

• University of Florida

Dial-access with computer & modem:
Telephone: (904) 392-9621; type LUIS;
type LUIS; type 1; type 7.
Internet Access:
telnet NERMVS.NERDC.UFL.EDU;
type LUIS; type 1; type 7.

• University of Georgia

Dial-access with computer & modem:
Telephone: (706) 542-7510 or 542-7375;
press enter twice; type VT100; type L; type 1.
Internet Access:
telnet UGA.CC.UGA.EDU;
press tab twice; type DIAL VTAM; type L.

• Mississippi State University

Dial-access with computer & modem:
Telephone (601) 325-2830; type LIBSERV; type MSU.
Internet Access:
telnet LIBSERV.MSSTATE.EDU; type MSU.

out-of-print, making libraries, in such cases, the only source for these materials.

In Alabama, important collections in forestry are found in libraries at Auburn University, The University of Alabama, and Auburn University at Montgomery. The Auburn University Library is the strongest as it supports on-campus forestry education and research. Notably, the Auburn University Library maintains a collection of publications produced by the Alabama Cooperative Extension System.

The universities mentioned above acquire federally-produced forestry publications as a result of the United States Government Depository Program. Under this program, the U.S. Government Printing Office sends publications of the U.S. Forest Service to selected Alabama libraries for archiving and ultimate use by the public.

Alabama state documents (including the publications of the Alabama Forestry Commission) are collected, on a selective basis, by the Alabama Public Library Service in Montgomery, as well as other libraries around Alabama.

Alabama's libraries work together to help the public obtain books, reports, articles, and other publications. When requested, an item not owned by a local library is borrowed from another library somewhere in the state or from a library outside Alabama. This is possible because libraries across Alabama and the United States participate in networks, where the resources of any one library are shared with other libraries, regardless of location.

The way this works, in practical terms, is for a forest owner to visit, say, the Cullman County Library or the Thomasville Public Library and request one or more publications. If not owned locally, the library borrows the item from another library for local use. When borrowing a book or article, it takes from five to ten working days to have an item in hand. A book may be used for a period of, say, one month, before it must be returned to the lender. Usually, there is no charge for this service.

A list of major information providers is found at the end of this publication.

This section identifies some of the key publications in forestry and allied fields which are especially useful to owners of woodlots or small forests in Alabama. For some topics, it may be important to do some research to see if more or later information is available.

ABOUT WOODLOTS/SMALL FORESTS

Several publications provide overall guidance for managing small woodlands. Contents of specific titles vary with geographic emphasis and the perspectives of the authors.

Beattie, Mollie; Thompson, Charles; and Levine, Lynn. *Working with Your Woodland: A Landowner's Guide*. Hanover, N.H.: University of New England Press, 1993. 279 p. \$19.95

Contains valuable information applicable to any area of the country. Includes sections on management plans, woodland management techniques, harvesting forest products, and financial aspects of forest management.

Developing Farm Woodlands in Alabama.

Montgomery, Ala.: Alabama Forestry Commission and the Division of Vocational Education Services, Alabama State Department of Education, 1986. Fourth Printing. 93 p.

Major units include establishing the forest, protecting woodlands from fire, controlling insects and diseases, wildlife management, marketing, improvement of the forest by cutting, and other topics. A valuable read for beginners, even though the main audience is teachers and students in public schools.

Fazio, James R. *The Woodland Steward: A Practical Guide to the Management of Small Private Forests*, 2nd ed. Moscow, Id.: The Woodland Press, 1994. 211 pp. \$14.95

Key
Publications
in Forestry
and
Allied Fields

An easy-to-read primer with advice on measuring trees, planning, characteristics of trees, planting trees, harvesting, Christmas trees, and other topics

Forbes, Reginald D. *Woodlands for Profit and Pleasure*, 2nd ed. Washington, D.C.: The American Forestry Association, 1976. 84 p.

For hobby forest landowners and farmers who want to get some income from small woodlots. The goal is to enable owners to become more self-sufficient in managing their land. Filled with practical information.

Forestry in Alabama. Auburn, Ala.: Alabama Cooperative Extension Service, n.d. A video. Time: 20 min.

An educational video. Describes, in general terms, uses of the forest, forest ownership, role of consulting and county foresters, forestry industry, timber harvesting, environmental protection, planning, and other topics.

Landowners: Don't Miss out. Birmingham, Ala.: The Alabama Conservancy, 1994 (?) 23 p.

"This guide is an overview for landowners who want to know more about the range of options for managing forests." Emphasizes economic and environmental management. Well-written and essential reading.

Minckler, Leon S. *Woodland Ecology: Environmental Forestry for the Small Owner*, 2nd ed. Syracuse, N.Y.: Syracuse Univ. Press, 1980. 241 p. \$15.95

Written to help non-professionals understand concepts related to ecological, economic, and social aspects of woodland management.

Walker, Laurence C. *Farming the Small Forest: A Guide for the Landowner*. San Francisco: Miller Freeman Publications, 1988. 176 p.

Chapters discuss silviculture, harvesting, administration, uses other than wood, and stewardship.

FOREST RESOURCES

Management involves inventory of forest resources and an accounting of how resources are cared for, improved, and utilized.

Alabama's World Class Forest Resource Fact Book. Montgomery, Ala.: Alabama Forestry Commission, 1995. (AFC-RE-04) 14 p.

Has valuable information and data on forest acreage and inventory, ownership, tree planting, recreation, wildfire, health, and forest industry and economy. Contains a directory of Alabama Forestry Commission District and County Offices.

Forests of Alabama. Montgomery, Ala.: Alabama Forestry Commission, 1992. (AFC-RE-O1) 20 p.

An excellent overview of the forest resource. Covers characteristics, ownership, inventory, health, economics, industry, urban forests, and non-timber uses. Has beautiful color photos and helpful charts. A must read.

McWilliams, William H. *Forest Resources of Alabama*. New Orleans: U.S.D.A. Forest Service. Southern Forest Experiment Station, 1992. (Resource Bulletin SO-170) 71 p.

This is an inventory of Alabama's forest resource. Covers forest area, stand structure, inventory volume (softwood and hardwood), sawtimber volume, harvest/management activity, changes from earlier inventories, and more.

Information on forest acreage, timber volume, and forest ownership, by county, is found in *Forest Statistics for Alabama Counties - 1990*, by John S. Vissage and Patrick E. Miller, published in 1991 by the U.S.D.A. Forest Service. Southern Forest Experiment Station. (Resource Bulletin SO-158) 67 p.

PLANTS AND ANIMALS OF THE FOREST

A great variety of plants and animals are found in Alabama's forests. A few, well-done books are valuable for understanding these resources.

■ Trees

Barrett, John W. *Regional Silviculture of the United States*. 3rd ed. New York: Wiley, 1995. 643 p. \$79.95

Useful for a broad understanding of growing trees and managing wildlife and other forest resources in three forest regions found in Alabama: southern Appalachian hardwood region, southern bottomland hardwood region, and the southern pine region.

Burns, R. M. *Silvics of North America*. Vol. 1, *Conifers*; Vol. 2, *Hardwoods*. Washington D.C.: U.S.D.A. Forest Service, 1990. (Agriculture Handbook No. 654) Vol. 1, 675 p.; Vol. 2, 877 p. Vol. 1, \$32; Vol. 2, \$33

Discusses habitat, life history, special uses, and other characteristics of 200 forest trees. Includes species found in Alabama. An excellent source.

Davis, Donald Echard. *Guide and Key to Alabama Trees*, 3rd edition. Dubuque, Ia.: Kendall/Hunt Pub., Co., 1975. 135 p.

Has pictures along with descriptions and gives information on distribution and uses. Includes valuable botanical keys for identification of genera and species.

Duncan, Wilbur H., and Duncan, Marion B. *Trees of the Southeastern United States*. Athens, Ga.: University of Georgia Press, 1992. 336 p. \$19.95

A first-rate guide (with botanical keys) to identification of trees. Features color illustrations, descriptions, and distribution maps for 276 species, many found in Alabama.

York, Harlan H. *100 Forest Trees of Alabama*, 2nd ed.. Montgomery, Ala.: Alabama Forestry Commission and Division of Vocational Education, Alabama State Department of Education, 1995. 111 p.

Gives brief descriptions and illustrations of common or significant trees in Alabama. Information includes: common names, form, bark, twigs, leaves, flowers, fruit, winter

buds, wood, uses, habitat, distribution, and distinguishing characteristics. B & W plates.

Also useful is a pamphlet called *A Key to Common Trees of Alabama*, by Frank A. Roth, II and Larkin H. Wade, published in 1993 (Circular ANR-509) by the Alabama Cooperative Extension Service. 16 p. Leaflets called *The Southern Pine: Alabama's State Tree* and *What Do Alabama's Forests Look Like?* are available from the Alabama Forestry Commission.

■ Birds

DeGraaf, Richard M. and others. *Forest and Rangeland Birds of the United States: Natural History and Habitat Use*. Washington, D.C.: U.S.D.A. Forest Service, 1991. (Agriculture Handbook No. 688) 625 p.

Gives information on range, habitat, nest and food, along with a color illustration of each species. A useful table shows birds found in predominant southeastern forest types.

Imhof, Thomas, A. *Alabama Birds*, 2nd ed. Tuscaloosa, Ala.: University of Alabama Press, 1976. 445 p.

For each species, gives description, nesting, food, distribution, occurrence in Alabama, and time of breeding. Includes color plates of birds.

■ Wildflowers

Duncan, Wilbur H., and Foote, Leonard E. *Wildflowers of the Southeastern United States*. Athens, Ga.: The University of Georgia Press, 1975.

A field guide for identifying wildflowers. For each species, gives common and scientific names, recognition characteristics, abundance, ecological and geographic distribution, flowering period, economic value (if any), and danger (such as poison).

■ Mammals

Choate, Jerry R.; Jones, J. Knox, Jr.; and Jones, Clyde. *Handbook of Mammals of the South-Central States*. Baton Rouge, La.: Louisiana State Univ. Press, 1994. 304 p. \$30.00

Gives distribution, description, and natural history of mammals in Alabama. B & W photos included.

PLANNING THE RESOURCES

A management plan is essential for every forest, big and small. A plan ensures that the forest owner will get high productivity and optimal results. Specific objectives are important.

Decker, D. J., and others. *Wildlife and Timber from Private Lands: A Landowner's Guide to Planning*. Ithaca, N.Y.: Cooperative Extension, New York State College of Agriculture and Life Sciences, 1983. (Information Bulletin No. 193) 56 p.

Outlines topics such as needs of wildlife, forest-wildlife management approaches, small-scale wildlife management practices, special wildlife habitat components, and timber stand improvement. Provides a sample woodland wildlife plan.

Balmer, William E., and Williston, Hamlin L. *Forest Management by Objectives*. Atlanta: U.S.D.A. Forest Service. Southeastern Area. State and Private Forestry, 1975. (Forest Management Bulletin) 4 p.

Outlines ways and means to manage young pine stands for various objectives, including wood production, wildlife, range, landscape, and water resources.

MANAGEMENT FOR TREES

Decades of research has contributed to an understanding of how to grow and manage trees.

Balmer, William, E., and Williston, Hamlin L. *Early Considerations in Pine Management*. Atlanta: U.S.D.A. Forest Service. Southeastern Area. State and Private Forestry, 1975. (Forest Management Bulletin) 8 p.

Covers mechanical site preparation, water control, planting and seeding techniques, fertilization, thinning, stand improvement, insect and disease damage, and use of prescribed fire.

Beck, Donald E., and Della-Bianca, Lino. *Yellow-Poplar: Characteristics and Management*. Washington, D.C.: U.S.D.A. Forest Service, 1981. (Agriculture Handbook No. 583) 91 p.

Describes site requirements, regeneration, enemies such as insects and other hazards, stand management, growth, yield, and cultural practices.

Dennington, Roger W., and Farrar, Robert M., Jr. *Longleaf Pine Management*. Atlanta: U.S.D.A. Forest Service. Southern Region, 1983. (Forestry Report R8-FR 3) 17 p.

Covers planting, direct seeding, natural regeneration, tree improvement, growth and yield, insects and diseases, and fire management. Describes uses such as poles and piling, pulpwood, wildlife, and grazing.

Growing Walnut for Profit and Pleasure. Indianapolis: Fine Hardwoods/American Walnut Association, 1978. 12 p.

Provides guidance for managing existing walnut trees and establishing and caring for new plantings.

Hunt, Ron. *Hardwood Management Guide*. Bainbridge, Ga.: International Paper Co., Southlands Experiment Forest, 1976. (Technical Bulletin No. 9). 18 p.

Basic information on regeneration, cutting methods, site types, and plantation management.

Jones, Bob. *Hardwood Trees to Plant in Alabama*. Auburn, Ala.: The Alabama Cooperative Extension Service, 1990. (Natural Resources Series) 2 p.

A list of hardwood timber species which may be considered when planting in Alabama. For each species, gives uses, type of soil needed, growth characteristics, and general remarks.

Langdon, O. Gordon, and Bennett, Frank A. *Management of Natural Stands of Slash Pine*. Asheville, N.C.: U.S.D.A. Forest Service. Southeastern Forest Experiment station, 1976. (Forest Service Research Paper SE - 17). 12 p.

Discusses systems for natural regeneration along with specifics on precommercial and commercial thinning. Also describes silvical characteristics and silvicultural systems, and provides data for comparing yields of planted and natural stands.

Moorhead, David J., and Coder, Kim D., eds. *Southern Hardwood Management*. Atlanta: U.S.D.A. Forest Service. Southern Region. With the Cooperative Extension Services for the Southern Region, 1994. (Management Bulletin R8-MB 67) 142 p.

Describes hardwood forest types and gives valuable information on a wide range of topics including site and stand inventory, stand improvement, silviculture, artificial regeneration, economics, logging practices, harvesting techniques, products and uses, wildlife considerations, water management, and product quality and marketing. A very good book.

Also useful is a pamphlet called *Management of Hardwood Forests for Timber in Alabama*, by Robert H. Jones, published in 1995 (Circular ANR-581), by the Alabama Cooperative Extension System. 6 p. A leaflet called *Oaks of Alabama*, is produced by the Alabama Forestry Commission. (AFC-ED-07).

Putnam, John A. *Management of Bottomland Hardwoods*. New Orleans: U.S.D.A. Forest Service. Southern Forest Experiment Station, 1951. (Occasional Paper No. 116) 60 p.

Sections on: survey of the resource, basics of early management, utilization and management, regeneration, and stabilized management.

Putnam, John A.; Furnival, George M.; and McKnight, J. S. *Management and Inventory of Southern Hardwoods*. Washington, D.C.: U.S.D.A. Forest Service, 1960. (Agriculture Handbook No. 181) 102 pp.

Treats in some detail the nature and management of hardwoods. A major table shows characteristics (occurrence, growth rate, tolerance, value, and uses) of each species. Elementary management information is followed by a discussion of detailed management practices.

Shropshire, Frank W., Johnson, Robert L., and Sims, Donald H. *Sweetgum Management*. Atlanta: U.S.D.A. Forest Service. Southern Region. 1987. (Management Bulletin R8-MB 12) 12 p.

Indicates uses, site selection, regeneration, management choices for natural stands such as sawtimber and pulpwood. Gives detailed advice on establishment and management of plantations. Also describes effect of fire, insects and other harmful influences.

Wahlenberg, W. G. *Loblolly Pine: Its Use, Ecology, Regeneration, Protection, Growth and Management*. Durham, N.C.: The School of Forestry, Duke University, 1960. 603 p. \$169.30 for a facsimile ed. from Books on Demand.

A major reference source on all aspects of loblolly pine. Also, lists several hundred articles and reports, many with a focus on small woodlands. Recent research adds to the understanding of this species.

Also useful are pamphlets called *Loblolly Pine Management*, by Frank A. Roth II, published in 1987 and reprinted in 1996 (Circular ANR-490) 4 p.; *Natural and Artificial Regeneration of Loblolly Pine*, by Bill McKee, published in 1987 (Circular ANR-408) 10 p.; and *Site Stocking and Expected Yields of Loblolly Pine Plantations*, by Bill McKee and David Moorhead, published in 1987 (Circular ANR-398) 8 p. by the Alabama Cooperative Extension Service. An article called "Growing Loblolly Pine in Alabama," by Lou Hyman, is found in *Alabama's TREASURED Forests*, Vol. 3, No. 3 (fall 1986), p. 13-17.

Williston, Hamlin L., and Balmer, William E. *Management of Virginia Pine*. Atlanta: U.S.D.A. Forest Service. Southeastern Area. State and Private Forestry, 1980. (Forestry Report SA-FR 7) 6 p.

Covers site characteristics, regeneration, culture, growth and yield, plus management problems.

Williston, Hamlin L.; Balmer, William E.; and Sims, Donald H. *Managing the Family Forest in the South*. Atlanta: U.S.D.A. Forest Service. Southern Region, 1993. (Management Bulletin R8-MB 1, slightly revised) 92 p.

Emphasis is on southern pines: natural regeneration and starting a new forest by planting and seeding are described. Advice is offered on wildlife habitat improvement and forest economics. Tables give data for estimating board-foot volume of timber. An excellent book.

Useful pamphlets are: *Site Preparation Methods for Regenerating Southern Pines*, by Frank A. Roth II, reprinted in 1996 (Circular ANR-275) 4 p., and *Reforestation Contracts*, by Frank A. Roth, II, published in 1988 (Circular ANR-504) 4 p., by the Alabama Cooperative Extension Service.

Williston, Hamlin L., and Balmer, William E. *Shortleaf Pine Management*. Atlanta: U.S.D.A. Forest Service. Southeastern Area. State and Private Forestry, 1980 (Report SA-FR6) 9 p.

A report on planting, direct seeding, natural regeneration, growth and yield of planted stands, growth and yield of second-growth stands, tree improvement, damaging problems (diseases and insects), and management opportunities for the small landowner.

Williston, Hamlin L., and Shropshire, F. W. *Cypress Management: A Forgotten Opportunity*. Atlanta: U.S.D.A. Forest Service. Southeastern Area. State and Private Forestry, 1980. (Forestry Report SA-FR 8) 8 p.

Information on regeneration, growth, general management, management for natural stands, and uses.

Zobel, B. J., and Davey, C. B. *Simplified Guide to Hardwood Management in the Southeast*. Raleigh, N.C.: School of Forest Resources, 1978. 21 p.

Indicates which land may be used for hardwoods, suitability of land for plantation or natural stands, and which species are best for a given environment. Written for non-specialists.

■ Starting a Forest

Starting a forest involves seeding, planting seedlings, or natural regeneration.

A Guide to the Care and Planting of Southern Pine Seedlings. Atlanta: U.S.D.A. Forest Service. Southern Region, 1989. (Management Bulletin R8-MB 39) 44 p.

Practical information about planting, nursery operations, storage, shipping, planting, and safety. Also gives advice for working with a tree planting contractor and describes guidelines for handling seedlings.

Lantz, Clark W., and Kraus, John F. *A Guide to Southern Pine Seed Sources*. Asheville, N.C.: U.S.D.A. Forest Service. Southeastern Forest Experiment Station, 1987. (General Technical Report SE-43) 34 p.

Information on seed sources for loblolly, longleaf, shortleaf, slash, Virginia, and sand pines. Gives special advice for areas with a high rust hazard.

McGee, C. E.; Beck, D. E.; and Sims, D. H. *Natural Regeneration of Upland Hardwoods in the South*. Asheville, N.C.: U.S.D.A. Forest Service. Southern Forest Experiment Station, 1979. 8 p.

A brief description of how stands regenerate and cutting for natural regeneration.

A leaflet called *Oak Seedling Selection and Planting*, published by the Alabama Forestry Commission, describes major oak species and indicates availability of seedlings.

McWilliams, William H. *Recent Trends in Afforestation and Reforestation of Nonindustrial Private Pine Forests in Alabama*. New Orleans: U.S.D.A. Forest Service. Southern Forest Experiment Station, 1992. (Resource Bulletin SO-164) 12 p.

An analysis of trends in afforestation and reforestation on nonindustrial private pine forests over two decades. Mostly for policy makers.

Seedling Care and Planting Guide. Montgomery, Ala.: Alabama Forestry Commission, 1988. 8 p.

A handy pocket-size pamphlet with basic information on transportation, storage, and planting (both hand and machine) of seedlings.

Also useful is a leaflet called *Storing, Handling, and Planting Southern Pine Seedlings*, by Fred Holemo, published in 1981 (Circular ANR-242) by the Alabama Cooperative Extension Service.

Seedling Care and Reforestation Standards.

Montgomery, Ala.: Alabama Forestry Commission, 1995. 16 p.

Gives practical guidance for care and handling of seedlings before planting, evaluating seedling quality, and planting seedlings. Also gives criteria used to determine if tree plantings meet minimum standards for cost-sharing programs. A directory shows locations of Alabama Forestry Commission Seedling Distribution Coolers.

Williston, H. L., and Balmer, W. E. *Direct Seeding of Southern Pines – A Regeneration Alternative.* Atlanta: U.S.D.A. Forest Service. Southern Region, rev. 1983. (Forestry Bulletin R8-FB/M 1) 6 p.

Advice on direct seeding: advantages and disadvantages, when to use, species selection, site preparation, seed handling and treatment, and sowing methods and techniques.

■ **Forest Soils**

The growth and health of trees and other plants is greatly influenced by the type and condition of soils.

Considerations for Forest Management on Alabama Soils. Montgomery, Ala.: Alabama Forestry Planning Committee, 1993. 100 p.

Describes soil interpretations for forest land use and management. For each soil series and phase, gives management concerns such as limiting factors for forest management (slope, stoniness, wetness, etc.), erosion hazard, and seedling mortality. Lists pines, hardwoods and other species that are suitable to plant or manage and indicates productivity.

A leaflet entitled *Soils of Alabama*, by Charles C. Mitchell, Jr. and John C. Meetze, published in 1994, revised (Circular ANR-340) by the Alabama Cooperative Extension Service gives a brief overview of the state's soils. 2 p. Detailed

soil surveys, with maps, are produced by the U.S.D.A. Soil Conservation Service for each county in Alabama.

Williston, H. L., and LaFayette, Russell. *Species Suitability and pH of Soils in Southern Forests.* Atlanta: U.S.D.A. Forest Service. Southeastern Area. State and Private Forestry, 1978. (Forest Management Bulletin) 4 p.

Data show the soil pH range for southern tree species and the effect of soil pH on availability of plant nutrient elements.

■ **Pests and Diseases**

Trees are often susceptible to pests and diseases. Management practices control problems and reduce the harm and losses.

Belanger, Roger P., and Malac, Barry, F. *Silviculture Can Reduce Losses from the Southern Pine Beetle.* Washington, D.C.: U.S.D.A. Forest Service. Combined Forest Pest Research and Development Program, 1980. (Agriculture Handbook No. 576) 17 p.

Describes types of stands that are susceptible to the southern pine beetle and recommends cultural practices, such as removal of high-hazard trees, mixing pines and hardwoods, thinning, and prescribed burning to reduce losses.

Insects and Diseases of Trees in the South.

Atlanta: U.S.D.A. Forest Service. Southern Region, 1989. (Protection Report R8-PR 16) 98 p.

For each pest, gives information on: nature of problem(s), identifying the pest, identifying the injury, biology of the pest, and how to control. Color photos. A good book.

Important pamphlets are: *How to Identify and Control Brown-Spot Disease on Longleaf Pine*, by C. E. Cordell and als., published in 1989 (Protection Report R8-PR 15) 9 p.; *How to Identify and Control Annosus Root Rot in the South*, by Samuel A. Alexander and Robert L. Anderson, published in 1985 (Forestry Bulletin R8-FB/P 19) 5 p.; and *How to Identify and Control Littleleaf Disease*, by Steven W. Oak and Frank H. Tainter, published in 1988 (Protection Report R8-PR 12) 15 p. All by the U.S.D.A. Forest Service. Southern Region.

Other titles: *Gypsy Moth*, by M. McManus and others, published in 1989, revised (Forest Insect & Disease Leaflet 162) 13 p.; *Southern Pine Beetle*, by Robert C. Thatcher, published in 1982, revised (Forest Insect & Disease Leaflet 49) 7 p.; *Ips Bark Beetles in the South*, by Michael D. Connor, published in 1983, revised (Forest Insect & Disease Leaflet 129) 8 p.; *Littleleaf Disease*, by Paul A. Mistretta, published in 1984, revised (Forest Insect & Disease Leaflet 20) 6 p.; *Pine Spittlebug: Its Ecology and Management*, by Louis F. Wilson, published in 1991 (Agriculture Handbook No. 695) 18 p.; and *Variable Oakleaf Caterpillar*, by Louis F. Wilson, published in 1979, revised (Forest Insect & Disease Leaflet 67) 4 p. All by the U.S.D.A. Forest Service.

Pest and Pesticide Management on Southern Forests. Atlanta: U.S.D.A. Forest Service. Southern Region, 1994. (Management Bulletin R8-MB 60) 46 p.

Covers principles of forest pest management, vegetation control using herbicides, chemical insect and disease control, and ground applications of forestry herbicides. Written as a training manual for pesticide applicators.

Solomon, J. D. and others. ***Oak Pests: A Guide to Major Insects, Diseases, Air Pollution, and Chemical Injury.*** Atlanta: U.S.D.A. Forest Service. State and Private Forestry. Southeastern Area, 1980. (General Report SA-GR11) 69 p.

For each pest, gives information on: nature of problem(s), identifying the pest, identifying the injury, biology of the pest, and how to control. Color photos. A good book.

Thatcher, R. C.; Mason, G. N.; and Hertel, G. D. ***Integrated Pest Management in Southern Pine Forests.*** Washington, D.C.: U.S.D.A. Forest Service. Cooperative State Research Service, 1986. (Agriculture Handbook No. 650) 38 p.

Identifies major pests that attack pine trees during various stages of growth and recommends management practices to reduce losses. Also describes techniques (various technologies) used to measure and predict impact of pests, determine use potential, measure and predict changes in pest populations, rate host susceptibility and suitability, and make control decisions.

Williston, Hamlin L.; Rogers, Terrence J.; and Anderson, Robert L. ***Forest Management Practices to Prevent Insect and Disease Damage to Southern Pine.*** Atlanta: U.S.D.A. Forest service, 1981. (Forestry Report SA-FR-9) 8 p.

Advice on limiting southern pine beetle, fusiform rust, brown spot and other problems.

MANAGEMENT FOR WILDLIFE

Alabama has a rich diversity of game and nongame birds and animals. The presence of wildlife adds enormous value to woodlands.

Byrd, Nathan A., and Holbrook, Herman L. ***How to Improve Forest Game Habitat.*** Atlanta: U.S.D.A. Forest Service. Southern Region, rev. 1988. (Management Bulletin R8-MB 19) 6 p.

Covers habitat and food needs of wild turkey, ruffed grouse, white-tailed deer, gray squirrel, and bobwhite quail. Also provides timber prescription guides by stages of stand development (seedling/open, sapling, pole, young sawtimber, mature sawtimber) for each species.

Davis, James R. ***Gray Squirrel Management in Alabama.*** Montgomery, Ala.: Alabama Department of Conservation and Natural Resources. Game and Fish Division, 1978. (Special Report No. 7) 29 p.

Describes life history and ways to manage gray squirrels.

Also useful is a pamphlet called *Gray Squirrel Management*, by H. Lee Stribling, published in 1992 (Circular ANR-768) by the Alabama Cooperative Extension Service. 3 p.

Davis, James R. ***Management for Mourning Doves in Alabama.*** Montgomery, Ala.: Alabama Department of Conservation and Natural Resources. Game and Fish Division, 1977. (Special Report, No. 6) 28 p.

Discusses life history and management practices including food production.

Also useful is a leaflet called *Mourning Dove Management in Alabama*, by H. Lee Stribling, published in 1988 (Circular ANR-513) by the Alabama Cooperative Extension Service.

Dickson, James G. *The Wild Turkey: Biology and Management*. Harrisburg, Penn.: Stackpole Books, 1992. 463 p. \$59.95

In-depth information on the biology, habitat, and management of wild turkeys. One chapter describes the eastern wild turkey in southern pine-oak forests.

Another important book is called *Management for Alabama Wild Turkeys*, by James R. Davis, published in 1976 (Special Report No. 5) by the Alabama Department of Conservation and Natural Resources. Game and Fish Division. 53 p. Also useful is a pamphlet called *Wild Turkey Management in Alabama*, by H. Lee Stribling, published in 1988 (Circular ANR-512) by the Alabama Cooperative Extension Service. 4 p.

Hunter, William C. *Handbook for Nongame Bird Management and Monitoring in the Southeast Region*. Atlanta: U.S. Fish and Wildlife Service. Southeast Region, 1990. 198 p.

Identifies problems and opportunities and makes suggestions for management of birds within broadly-defined habitats. All bird species are treated in habitat tables.

Kroll, James C. *A Practical Guide to Producing and Harvesting White-Tailed Deer*. Nacogdoches, Tex.: Center for Applied Studies. College of Forestry. Stephen F. Austin State University, 1994. 591 p. \$43

The foreword says this book is "everything you ever wanted to know about the white-tailed deer." A major part of the book covers biology and management of white-tails.

Also useful are pamphlets called *White-Tailed Deer Management*, by H. Lee Stribling, published in 1993 (Circular ANR-521), 4 p.; *Alabama White-Tailed Deer: Collecting Herd Management Information*, by H. Lee Stribling, published in 1990 (Circular ANR-561), 7 p.; and a leaflet called *Cool-Season Food Plots for Deer*, by H. Lee Stribling, published in 1991 (Circular ANR-592), by the Alabama Cooperative Extension Service.

Another valuable source is *The White-Tailed Deer in Alabama*, by James R. Davis, published in 1979 (Special Report No. 8), by the Alabama Department of Conservation and Natural Resources. Game and Fish Division. 60 p. A video called *White-Tailed Deer Management 1994* is produced by the Alabama Cooperative Extension Service. Time: 28 min. \$15.

Proceedings of the Workshop on Management of Southern Forests for Nongame Birds. Asheville, N.C.: U.S.D.A. Forest Service. Southeastern Forest Experiment Station, 1978. (General Technical Report SE-14) 176 p.

Papers cover forest structure and function and its effect on birdlife and management practices which influence bird habitat.

Landers, J. Larry, and Mueller, Brad S. *Bobwhite Quail Management: A Habitat Approach*. Tallahassee, Fla.: Tall Timbers Research Station, 1986. (Miscellaneous Publication No. 6) 39 p.

Describes life history, habitat needs, and diet of quail along with ways to manage the land for quail.

Another important book is *Bobwhite Quail Management: Fact and Fiction*, by Ralph H. Allen and Robert E. Waters, published in 1963 (Bulletin No. 5) by the Alabama Department of Conservation. Division of Fish and Game. 41 p. Also useful is a pamphlet called *Bobwhite Quail Management*, by H. Lee Stribling, published in 1994 (Circular ANR-511), 7 p.; and a leaflet called *Planting Partridge Pea for Bobwhite Quail*, by H. Lee Stribling, published in 1991 (Circular ANR-610) by the Alabama Cooperative Extension Service.

Rogers, Randall, and Easley, Mickey. *Wildlife Planting Guide*. Montgomery, Ala.: Alabama Wildlife Federation, 1990. (AWF-1989) 50 p. \$10

For each plant, gives description, varieties, use by wildlife, soil requirements, and cultural specifications.

Waters, Robert E. *Some Things You Should Know About Wildlife in Alabama*. Auburn, Ala.: Alabama Forestry Planning Committee. Productivity Subcommittee, 1988, revised in 1994. 162 p.

Gives life histories, habitat needs, and management advice for beaver, nongame birds, bobwhite quail, cottontail rabbit, gray squirrel, mourning dove, white-tailed deer, wild ducks, wild turkey, and wood ducks. A must read.

Also useful is a pamphlet called *Wood Duck Management in Alabama*, by H. Lee Stribling, published in 1988 (Circular ANR-519) 4 p.; and a leaflet called *Cottontail Rabbit Management*, by H. Lee Stribling, published in 1991 (Circular ANR-636) by the Alabama Cooperative Extension Service.

Wild Plantings and Practices. Auburn, Ala.: The Alabama Cooperative Extension Service, 1994. (Circular ANR-485) 8 p.

Provides management tips for white-tailed deer, ducks, bobwhite quail, rabbits, squirrels, and turkeys. Lists native plants used for food by various species. A planting guide lists domestic plants (and when and how to plant) which make good wildlife food.

Also useful is a leaflet called *Wildlife Plantings* published in 1994 by the Alabama Forestry Commission.

MANAGEMENT FOR ALTERNATIVE USES

Forests can provide added income and enjoyment when used for farming activities and recreation.

Byrd, Nathan A.; Lewis, Clifford E.; and Pearson, Henry A. **Management of Southern Pine Forests for Cattle Production.** Atlanta: U.S.D.A. Forest Service. Southern Region, 1984. (General Report R8-GR 4) 22 p.

General information on livestock grazing and management of pine timber. Also advice on using the forest for production of beef cattle.

Rudis, Victor A. **Recreational Use of Forested Areas by Alabama Residents.** New Orleans: U.S.D.A. Forest Service. Southern Forest Experiment Station, 1987. (Research Paper SO-237) 37 p.

Gives details on types of activities in forested areas and characteristics of forest users. Information is helpful for assessing a forest's recreational value.

BUSINESS INFORMATION

In many ways, owning a small forest or woodlot is like owning a small business. Management decisions lead to specific outcomes, often with financial consequences.

Anderson, Steven, and O'Hara, Tim J. "**Timber Marketing 101: The Basics.**" *Forest Farmer* Vol. 54 (March/April 1995), p. 42-48. (30th Manual Edition) Entire manual for \$28

A step-by-step guide on what to consider and do when marketing timber. Describes selling methods (negotiated sale and sealed bid) and methods of payment (lump sum sale and scaled sale). Includes a sample timber contract.

Also useful are pamphlets called *Selling Timber Successfully*, by Richard W. Brinker and John C. Bliss, published in 1991 (Circular ANR-626) 4 p.; and *Timber Sale and Harvesting Contracts*, by Richard W. Brinker and Charles F. Raper, published in 1994 (Circular ANR-560) 4 p. by the Alabama Cooperative Extension Service.

Haney, Harry L., Jr., and Siegel, William C. **Estate Planning for Forest Landowners: What Will Become of Your Timberland?** New Orleans: U.S.D.A. Forest Service. Southern Forest Experiment Station, 1993. (General Technical Report SO-97) 186 p.

Covers forestry estate planning for nonindustrial private landowners. Content provides landowners with "a working knowledge of the Federal estate and gift tax law."

An article "Preserving Your Family Forest by Estate Planning," by Barry Bledsoe, is published in *Alabama's TREASURED Forests*, Vol. 12, No. 1 (spring 1993) p. 12-13.

Hoover, William L. and others. **Forest Owners' Guide to Timber Investments, the Federal Income Tax, and Tax Record-keeping.** Washington D.C.: U.S. D.A. Forest Service, 1989. (Agriculture Handbook No. 681). 96 p.

Provides information for analyzing a timber investment and explains income tax law related to timber.

Other sources are: *Federal Income Tax Planning for Timberland Owners*, by John Bliss and Warren A. Flick, published in 1992 (Circular ANR-671) by the Alabama Cooperative Extension Service. 12 p.; *Tax Tips for Alabama Landowners*, published in 1990, by the Alabama Forestry Commission. 6 p.; and *Tax Tips for Forest Landowners for the 1995 Tax Year*, by Larry M. Bishop, published in 1996 (Management Bulletin R8-MB 74) by the U.S.D.A. Forest Service, Southern Region. 2 p.

McKee, C. William. *Frequently Asked Questions About Forestry Investments*. Auburn, Ala.: Alabama Cooperative Extension Service, 1985. (Circular ANR-426) 11 p.

An economic analysis of the value of cut-over forest land, site investment for preparation and planting, rate of return on investment, and profitability of forestry with borrowed funds. Includes data for loblolly pine.

Brief investment information is found in a leaflet called *Forestry as an Investment in the South*, by Keith A. Utz, published in 1981 (General Report SA-GR 20) by the U.S.D.A. Forest Service, Southeastern Area.

McKee, C. William. "Leasing Hunting Rights: How Much Should I Charge?" *Alabama's TREASURED Forests*, Vol. 11, No. 3 (summer 1992), p. 11-13.

Detailed guidelines on what to consider when leasing forest land for hunting.

Also useful are pamphlets called *Lease and Fee Hunting: Supplemental Income from Wildlife on your Land*, by H. Lee Stribling, published in 1989 (Circular ANR-532) 2 p.; and *Hunting Leases and Permits*, by H. Lee Stribling, published in 1994 (Circular ANR-541) 4 p. by the Alabama Cooperative Extension Service.

Main, Alden C., and Mills, Robert H. *How to Market Your Timber for More Money*. Baton Rouge, La.: Louisiana Cooperative Extension Service, 1991. (Publication No. 1805, revised) 11 p. \$.75

Advice on planning the sale, identifying what's for sale, and marketing the sale. Includes sample bid form and sales agreement, plus tally sheet and volume tables.

"Timber & Timberland Companies." In: *The Real Yellow Pages*: BellSouth Advertising and Publishing Corp., 1994.

The Yellow Pages of local telephone books, includes a list of companies and individuals which buy timber and provide management services, such as marketing, appraisals, and management plans, to landowners.

Timber Mart-South. Highlands, N.C.: Timber Marts, Inc. A quarterly newsletter of Timber Mart-South, P.O. Box 1278, Highlands, NC 28741. Single State Report (e.g. Alabama) for \$90/yr. Regional Report (13 states) \$225/yr. 4 p. (704) 526-3653

A quarterly market price survey and report giving prices paid for: stumpage (standing timber) and delivered FOB mill prices for major raw forest products. Prices for saw-timber (pine & hardwood), chips, pine ply logs, pulpwood (pine & hardwood), chip-n-saw, poles, cross ties, firewood, and hog fuel.

FOREST INDUSTRY

The Forest industry is a leading component of Alabama's economy. Harvesting, marketing, manufacturing, and exporting are all major activities in the state.

Alabama Timber Seller's Guide and Directory of Timber Buyers by County. Montgomery, Ala.: Alabama Forestry Commission, 1994. (AFC-RE-03) 44 p.

For each county, lists names and addresses of timber buyers. Indicates type of operation (logging, pulpwood).

Directory of Alabama's Forest Industries: Primary and Secondary Forest Products. Montgomery, Ala.: Alabama Forestry Commission., 1990. 219 p.

An important tool for marketing timber and forest products. Updated every few years.

An Export Directory of Alabama Wood Products. Montgomery, Ala.: Alabama Forestry Commission, 1995 (?). 48 p.

List firms that supply wood products for export by product category, such as hardwood lumber, treated wood, millwork and furniture. Tables show export products and markets. Also gives general physical properties, relative working properties, and description and use of major species.

Forest Products Utilization & Marketing Assistance. Montgomery, Ala.: Alabama Forestry Commission, n.d. 4 p.

Describes types of assistance available from the Utilization and Marketing Section, Alabama Forestry Commission, in economic development, international trade, wood energy, and technical utilization.

Kenna, Karen M. ***Grading Hardwood Logs for Standard Lumber.*** Atlanta: U.S.D.A. Forest Service. Southern Region, 1981 (revised). 19 p.

Provides details on grading hardwood logs. Explains that grading is used to determine the value of a log based on quality and volume.

1994 Forest Product Production by County. Montgomery, Ala.: Alabama Forestry Commission with the Alabama Development Office and the Alabama Center for Commerce, 1994. 37 p.

Statistical data, by county, on volume of production of forest products, such as pine lumber, hardwood chips, cross ties, pulpwood (pine and hardwood), and hardwood lumber.

Planning Your Timber Harvest. Auburn, Ala.: Alabama Cooperative Extension Service, n.d. A video. Time: 15 min.

Outlines five steps: know your forest management objectives, decide harvesting techniques, get involved in marketing and selling, develop harvesting plan, and follow through on plan.

Southern Forest Products. Tallahassee, Fla.: Florida Department of Agriculture and Consumer Services, 1987.

A brochure that lists major categories of wood products, such as lumber and construction components, and identifies specific products within each category.

■ Calculators

Curtis, A. B., Jr. ***Fuel Value Calculator.*** Atlanta: U.S.D.A. Forest Service. Southern Region, 4th ed., 1992.

A device to show the comparative value of various types of fuel, such as wood chips, oven dry wood, and natural gas. Tables show fuel required for equivalent heat and fuel storage approximations for southern pine.

Delaski, David A. ***Firewood Worth Calculator.*** Atlanta: U.S.D.A. Forest Service. Southeastern Area. State and Private Forestry, 1981.

A device to show the value of firewood, compared to electricity, natural gas, LP gas, and fuel oil. Charts show heating value of numerous species and heating efficiencies of selected heating systems.

More details on firewood are described in *Firewood: What You Should Know Before You Buy or Cut*, by Bill McKee, published in 1986, (Circular ANR-476) by the Alabama Cooperative Extension Service. 10 p.

Foster, Bennett B. ***Southern Pine Growth Rate Dial.*** Atlanta: U.S.D.A. Forest Service. Southern Region. State and Private Forestry, n.d.

Used to calculate the average rate of volume increase (percent) of individual trees.

ENVIRONMENTAL PROTECTION

Man's activities in the forest often have an impact on the landscape and ecology of the forest. Best Management Practices (BPMs) serve to prevent or lessen potential harm from such activities.

Alabama's Best Management Practices for Forestry 1993. Montgomery, Ala.: Alabama Forestry Commission, 1993. 30 p.

Outlines Best Management Practices (BPMs) for maintaining water quality while conducting forestry operations. Gives specifications for: streamside management zones, stream crossings, forest roads, timber harvesting, reforestations/stand management, and other areas.

Also useful are recent pamphlets by the Alabama Cooperative Extension Service: *BPMs for Stream Crossings*, by Bobby L. Lanford and Don Burdette (Circular ANR-641), 1994. 4 p.; *Best Management Practices for Timber Harvesters*, by Richard W. Brinker (Circular ANR-539), 1992. 4 p.; *Forest Roads and Construction of Associated Water Diversion Devices*, by Richard W. Brinker and Robert A. Tufts (Circular ANR-916), 1995. 4 p.; and *BMP Pocket Guide for Logging*, by Richard W. Brinker (Circular ANR-806), 1994. 23 p.

An article "Best Management Practices for Forested Wetlands," by Don Burdette, is published in *Alabama's TREASURED Forests*, Vol. 11, No. 4 (fall 1992), p. 13-17.

Hausman, Richard F., and Pruett, Emerson W. *Permanent Logging Roads for Better Woodlot Management*. 3rd ed. Broomall Penn.: U.S.D.A. Forest Service. State and Private Forestry. Northeastern Area, 1978. (NA-FR-18) 43 p.

Details on planning, constructing, and maintaining forest roads.

FORESTRY LAW

The Alabama State Legislature has enacted laws to protect and foster development of forests.

Barnes, Charles H. *Forestry and Forestry Related Laws*. Montgomery, Ala.: Alabama Forestry Commission, 1971. 63 p.

Laws on control of insects and diseases, timber trespass, conveyance and sales of standing timber, timber floating, and other topics. Current authority is the *Code of Alabama 1975*, with a cumulative supplement for each succeeding year.

10 Facts about Property Rights Legislation. Washington, D.C.: Defenders of Property Rights, 1994. 16 p.

Helps to understand major issues related to property rights. Cites specific court cases involving property rights.

FORESTRY/WILDLIFE REFERENCE SOURCES

A few major reference tools contain basic data and information for professionals and practitioners.

Martin, Alexander, C.; Sim, Herbert S; and Nelson, Arnold L. *American Wildlife & Plants*. New York: Dover Publications, 1951. 500 p. \$8.95

For hundreds of species of birds and mammals, gives data on foods, ranges, habits, and economics. Also, lists plants used by wildlife, and then in a sub-listing shows what birds and mammals use specific plants.

Service Foresters Handbook. Atlanta: U.S.D.A. Forest Service. Southern Region, 1986. (Miscellaneous Report SA-MR-10) 129 p.

An essential reference tool for practicing field foresters and forest owners. Packed with valuable data and information such as hardwood soil suitability tables, guidelines for wildlife habitat management, firewood calculations, tree planting guides, and more.

Wenger, Karl. F., ed. *Forestry Handbook*, 2nd ed. New York: Wiley, 1984. 1335 p. \$125

An indispensable reference book of data and methods for all forestry and related fields. Covers all topics of major interest, such as insect and disease management, fire management, forest products, wildlife and fish management, cultivation of forest crops, and outdoor recreation management.

Evans, David S., ed. *Terms of the Trade: A Reference for the Forest Products Industry*, 3rd ed. Eugene, Ore.: Random Lengths Publications, 1993. 351 p. \$39.95.

A dictionary of words and phrases used in forestry, logging, manufacturing, marketing, construction, and related areas. For veterans and beginners.

SPECIAL METHODS AND MANAGEMENT PRACTICES

The application of special methods and practices conserves and improves the forest resource and makes easier the work of forest managers.

Barry, Patrick J.; Anderson, Robert L.; and Swain, Kenneth M. *How to Evaluate and Manage Storm-Damaged Forest Areas*. Atlanta: U.S.D.A. Forest Service. Southeastern Area. Forest Pest Management, 1982. (Forestry Report SA-FR 20) 15 p.

Discusses managing pest-caused losses, uprooted trees, leaning trees, main stem breakage, broken branches, bent trees, and other storm-related problems.

How to Thin...Your Pine Plantation for More Dollars. Atlanta: U.S.D.A. Forest Service. Southern Region, 1987. (Management Bulletin R8-MB 10) 29 p.

Explains why to thin and when and how to thin pines. Also gives pointers on haul roads and erosion control.

Also useful is a pamphlet called *Thinning Pine Stands for Top Returns*, by Frank A. Roth II, published in 1983 (Circular ANR-396) by the Alabama Cooperative Extension Service. 4 p.

Holemo, Fred. *Methods for Estimating Timber Volume and Value of Pine Trees*. Auburn, Ala.: The Alabama Cooperative Extension Service, 1981. (Circular ANR-263). 7 p.

Describes measurement factors and units, estimating cordwood volume, estimating board-foot volume, and how to compare value of a pine tree as pulpwood or sawtimber.

Also useful is a pamphlet called *How to Determine the Financial Value of Tree Growth*, by Bill McKee, published in 1994 (Circular ANR-446) by the Alabama Cooperative Extension Service. 4 p.

Sims, Daniel H. *Fuelwood From Southern Hardwoods: An Opportunity for Improved Forest Management*. Atlanta: U.S.D.A. Forest Service. Southeastern Area. State & Private Forestry, 1981. (General Report SA-GR 19) 5 p.

The "aim...is to demonstrate how the woodland owner can improve the condition of woodlots while providing wood for home use or sale."

Walker, Laurence C. "Chemicals Used in Forestry Operations." *Forest Farmer*, Vol. 44, No. 5 (March 1985), 40-43. 25th Manual Edition.

Identifies chemicals (herbicides, insecticides, fungicides, and fertilizers) used in forest management.

Other useful pamphlets are: *Herbaceous Weed Control in Young Pine Plantations*, by Robert J. Mitchell, published in 1988 (Circular ANR-515) 4 p.; *Chemical Weed Control in Pine Forests*, by Kenneth L. McNabb, published in 1990 (ANR-421) 5 p.; *Herbaceous Weed Control in Young Hardwood Plantations*, by Kenneth L. McNabb, published in 1992 (Natural Resources Series) 5 p.; *Forestry Herbicide Facts*, by Kenneth L. McNabb, published in 1993 (Circular ANR-629) 16 p.; *Environmental Safety of Forestry Herbicides*, by Ken McNabb, published in 1994 (Circular ANR-846) 4 p.; and *Handling Forest Herbicides Safely*, by Robert J. Mitchell and Talmadge Balch, published in 1987 (Circular ANR-308) 4 p. All by the Alabama Cooperative Extension Service.

Wade, Dale D., and Lunsford, James D. *A Guide for Prescribed Fire in Southern Forests*. Atlanta: U.S.D.A. Forest Service. Southern Region, 1989. (Technical Publication R8-TP 11) 56 p.

Detailed information on benefits, environmental effects, firing techniques, planning, evaluation, and weather conditions as related to prescribed burning.

Also useful is a pamphlet called *Prescribed Burning in Alabama Forests*, by Frank A. Roth II and James R. Hyland, published in 1987 (Circular ANR-331) by the Alabama Cooperative Extension Service. 10 p. How to obtain a burning permit (with toll-free numbers on who to call) is described in a leaflet called *There's Something You Should Know...Before You Burn*, published in 1995 by the Alabama Forestry Commission

(AFC-FP-03). Another useful pamphlet is called *A Smoke Screening System for Prescribed Fires in Alabama*, by C.W. Moody, published in 1992 by the Alabama Forestry Commission. 18 p.

Wiant, Harry V. Jr. *How to Estimate the Value of Timber in Your Woodlot*. Morgantown, W.Va.: Agricultural and Forestry Experiment Station, West Virginia University, 1989 (Circular 148) 55 p.

Explains how to measure trees, estimate log volumes, estimate tree volumes, and estimate grade and defect. Also describes methods for inventorying standing timber. Written for laymen.

BACKGROUND INFORMATION

Technical information is the foundation upon which better forests are developed.

Smith, David M. *The Practice of Silviculture*, 8th ed. New York: John Wiley & Sons, 1986. 527 p. \$75.95

An introductory textbook for learning about the art of developing and caring for a forest.

Stoddard, Charles H., and Stoddard, Glenn M. *Essentials of Forestry Practice*, 4th edition. New York: John Wiley & Sons, 1987. 407 p. \$72.95

An introductory textbook for learning about the full range of forestry subject matter.

Teague, Richard D., and Decker, Eugene, eds. *Wildlife Conservation: Principles and Practices*. Washington, D.C.: The Wildlife Society, 1979. 280 p. \$11.00

A collection of writings by wildlife experts. Covers wildlife management, fisheries management, and man-wildlife relationships.

SUPPLIES & EQUIPMENT

Three companies in the southeastern U.S. offer specialized supplies and equipment for natural resources managers. Catalogs are available upon request from:

Ben Meadows Company, 3589 Broad Street, Atlanta, GA 30341. (800) 241-6401. Offers a catalog of equipment for natural resources managers. FREE

Forestry Supplies Inc., P.O. Box 8397, Jackson, MS 39284. (800) 647-5368. Produces three catalogs of special interest: *Education Catalog [for] Life, Earth and Environmental Sciences*; a catalog called *TreeTools*; and a catalog called *The Aquatic Toolbox*. FREE

TMS Machinery Sales, 301 N. Johnson Ave., P.O. Box 736, Talladega, AL 35161. (800) 289-8672. TMS Machinery Sales offers a catalog, updated monthly, listing new and used forestry equipment. FREE

CURRENT PERIODICALS

By reading current periodicals, forest owners may keep abreast of new developments in forest management. Especially useful titles are:

Alabama's TREASURED Forests, published by the Alabama Forestry Commission. Quarterly. FREE.

Alabama Forests, published by the Alabama Forestry Association. Bi-Monthly. \$24. FREE with membership.

Alabama Wildlife, published by the Alabama Wildlife Federation. Quarterly. \$25.

Forest Farmer, published by the Forest Farmers Association. Bi-Monthly. \$40.

Outdoor Alabama, published by the Alabama Department of Conservation and Natural Resources. Quarterly. \$8.

Perpetual Harvest, published by MacMillian Bloedel, P.O. Box 336, Pine Hill, AL 36769. FREE. Call (334) 963-4391.

PROFESSIONAL FORESTERS

Universities in the Southeast graduate many well-trained natural resources professionals. These experts, working from universities, government agencies, companies and as private consultants provide

top-quality advice and assistance to small forest owners.

"Foresters." In: *Working With Your Woodland*, by Mollie Beattie, Charles Thompson, and Lynn Levine, p. 65-83. Hanover, N.H.: University of New England Press, 1993.

Describes services provided by foresters. Distinguishes the types of foresters (county, consulting, industrial, and extension) available and relates what each can do for the landowner.

"Foresters-Consulting." In: *The Real Yellow Pages*: BellSouth Advertising and Publishing Corp., 1994.

The Yellow Pages of local telephone books, includes a list of private and industrial professionals who provide various consulting services to landowners. A list of consulting foresters is also available from the Association of Consulting Foresters of America - Alabama Chapter.

Roster of Registered Foresters. Montgomery, Ala.: The Board. Published semi-annually. Current edition is 1994-1995.

A list of foresters licensed to practice in Alabama. Gives job title, employer, home and business addresses.

PROGRAMS FOR LANDOWNERS

Special programs provide landowners with assistance and support for developing and managing forest resources.

Forestry and Multiple-use Cost-Sharing in Alabama. Montgomery, Ala.: Productivity Subcommittee. Alabama Forestry Planning Committee, 1993.

Gives important information on key programs: Stewardship Incentives Program (SIP), Forestry Incentives Program (FIP), Agricultural Conservation Program (ACP), and Alabama Agricultural and Conservation Development Commission Program (AACDCP). A convenient table shows forestry, wildlife, soil and water quality, and recreation and aesthetic practices covered by each program.

The Alabama Forestry Commission recognizes significant trees in two special programs described in leaflets called *Alabama's Champion Tree Program* and *Famous and Historic Tree Program*. An article called "Industry Sponsored Landowner Assistance Programs," by Sue Shaddeau, is found in the *Forest Farmer* Vol. 54, No. 3 (March/April 1995), p. 55-59. A brochure called *Openland Tree-Planting Program* describes assistance offered by the Alabama Power Company, P.O. Box 2641, Birmingham, AL 35291 or call (205) 250-4622.

TREASURE Forest: An Opportunity for Stewardship. Montgomery, Ala.: Alabama Forestry Commission, n.d. 19 p.

A colorful, well-illustrated brochure on how to participate in the TREASURE Forest Program. Outlines benefits of the program for the landowner.

TREASURE Forests. Montgomery, Ala.: Alabama Treasure Forest Landowners Association, 1994. 4 p.

A colorful brochure promoting benefits of the TREASURE Forest Program and membership in the Alabama TREASURE Forest Landowners Association.

General information about the TREASURE Forest Program is found in a leaflet called *TREASURE Forest*, published by the Alabama Forestry Commission.

GUIDES AND PUBLICATION LISTS

More information for forest owners is identified in guides and publications lists by various organizations. Important are:

AES Publications Catalog. Auburn, Ala.: Alabama Cooperative Extension System, 1995. (Circular EX-19) 38 p.

A list of pamphlets by the Alabama Cooperative Extension System covering natural resources, including forestry and wildlife. Call Publications at (334) 844-1592 for a copy.

AFC List of Publications. Montgomery, Ala.: Alabama Forestry Commission, 1996. 7 p. Annual.

Lists publications of the Alabama Forestry Commission and other publishers. Includes titles on safety, urban forestry, utilization, management, economics, environment, planting/ reforestation, wildlife, and other topics. Call (334) 240-9355 for a copy.

Clarke County Landowner's Directory: A Multiple-Use Manager's Guide. Grove Hill, Ala.: Clarke County Forestry Planning Committee, 1995. 67 p.

Focus is on Clarke County but this book contains an abundance of information (such as an extensive list of wildlife and forestry publications, a good explanation of agency services, and listings of fisheries consultants and tree nurseries) for other areas, as well. Address: P.O. Box 40, Grove Hill, AL 36451.

[List of Publications]. Auburn, Ala.: Auburn University. School of Forestry. Forestry Extension. 12 p.

A list of forestry publications, many technical in nature. Includes titles on insects, diseases, weed control, and other subjects. Call Forestry Extension at (334) 844-1002 for a copy. Also available from the Alabama Forestry Commission.

Publications of the Geological Survey of Alabama and State Oil and Gas Board. Tuscaloosa, Ala.: Geological Survey of Alabama. State Oil and Gas Board, 1995. 64 p.

Lists topographic, orthophotoquad, and wetland inventory maps for Alabama. Topo maps show, in detail, physical characteristics and cultural features. (\$4.00 each) From: Publications Sales, P.O. Box 0, Tuscaloosa, AL 35486. (205) 349-2852.

Recent Publications of the Southern Research Station. Asheville, N.C.: U.S.D.A. Forest Service. Southern Research Station. Frequency varies.

Lists and describes recent publications in forestry. This title and the papers it lists are available from the Southern Research Station, P.O. Box 2680, 200 Weaver Blvd., Asheville, NC 28802. Call (704) 257-4830.

Landowners should view the information resources described in this publication as a starting point to answer the many questions which inevitably arise when working with woodlands. Obviously, many more information resources exist, covering the full range of forestry topics. The challenge is finding just the right information for solving the problem or issue at hand.

It's also important to remember that getting information may be an easier and more efficient process when assistance is sought from professionals, such as librarians and foresters. In Alabama, an abundance of expertise, both in public and private service, is available upon asking.

Private landowners in Alabama can play a major role in improving the state's forest resources. But first, it's essential to gain some knowledge about forest management.

As a guide, this booklet will help landowners get started. Finally, insight and specific suggestions on how to improve this booklet, in any future revision, are welcome.



Conclusion

Important Organizations

Alabama Cooperative Extension System

222 Duncan Hall Annex Auburn University, AL 36849-5623 (334) 844-1592

Alabama Department of Conservation and Natural Resources

60 North Union Street Montgomery, AL 36130
(334) 242-3151

Alabama Department of Education Division of Vocational Education Agribusiness Education Field Office

Auburn University, AL 36849
(334) 844-4401

Alabama Department of Environmental Management

1751 Cong. W.L. Dickinson Drive Montgomery, AL 36130
(334) 271-7700

Alabama Environmental Council

2717 7th Ave. S., Ste. 207 Birmingham, AL 35233
(205) 322-3126

Alabama Forest Owners' Association

Box 316434 Birmingham, AL 35236
(205) 987-8811

Alabama Forestry Association

555 Alabama Street Montgomery, AL 36104
(334) 265-8733

Alabama Forestry Commission

513 Madison Ave. P.O. Box 302550 Montgomery, AL 36130-2550
(334) 240-9300

Alabama Public Library Service

6030 Monticello Drive Montgomery, AL 37130
(334) 213-3900

Alabama TREASURE Forest Landowners Association

P.O. Box 210476 Montgomery, AL 36121
(334) 264-3236

Alabama Wildlife Federation

46 Commerce Street Montgomery, AL 36104
(334) 832-9453

Association of Consulting Foresters of America - Alabama Chapter

P.O. Box 684 Opelika, AL 36803
(334) 745-7530

Auburn University at Montgomery Library

7300 University Drive Montgomery, AL 36117
(334) 244-3650

Auburn University RBD Library

Auburn University, AL 36894
(334) 844-1702

Forest Farmers Association

P.O. Box 95385 Atlanta, GA 30347
(800) 325-2954

Forestry Extension.

School of Forestry.

Auburn University

Auburn University, AL 36849
(334) 844-1002

Knight-Ridder Information Inc.

2440 El Camino Real Mountain View, CA 94040
(800) 334-2564

Stephen F. Austin State University College of Forestry

Box 610, SFA Station Nacogdoches, TX 75962
(409) 468-3301

Tuskegee University Library

Tuskegee Institute, AL 36088
(334) 727-8896

U.S.D.A. Forest Service.

Southern Region

1720 Peachtree Road, N.W., Suite 951, Atlanta, GA 30367
(404) 347-2384

U.S.D.A. Forest Service.

Southern Research Station

P.O. Box 2680, 200 Weaver Blvd., Asheville, NC 28802
(704) 257-4830

U.S. Government Bookstore

First Union Plaza, Suite 120 999 Peachtree Street, NE Atlanta, GA 30309
(404) 347-1900

University Libraries

The University of Alabama Box 870266 Tuscaloosa, AL 35487
(205) 348-6047