N90-092

United States
Department of
Agriculture

Forest Service

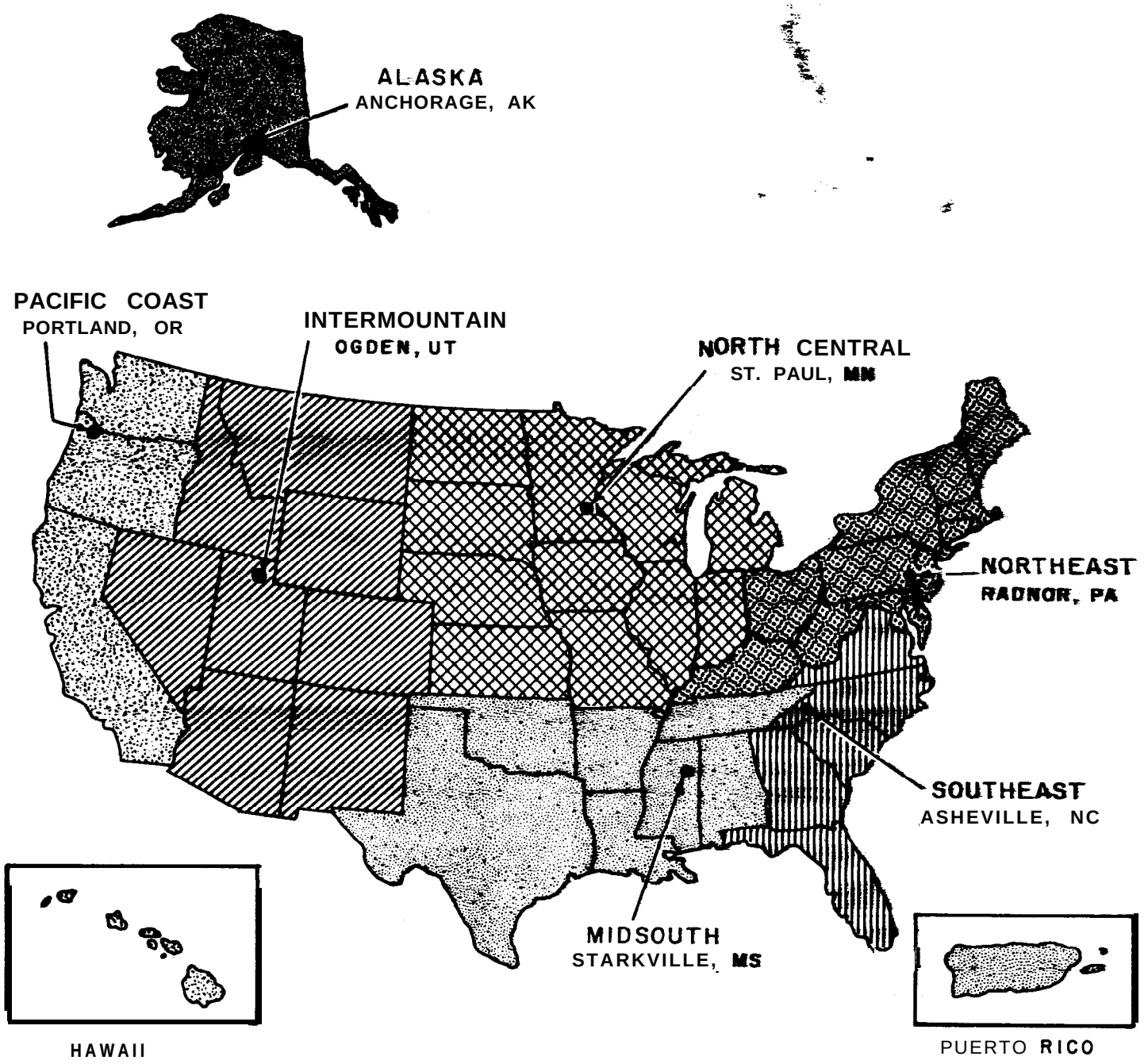
Southern Forest
Experiment Station

New Orleans,
Louisiana

General Technical Report
SO-84

Wildlife Habitat, Range, ReRecreatio, Hydrology, and Related Research Using -- Forest Inventory and Analysis Surveys: A 12-Year Compendium

Victor A. Rudis



SUMMARY

A compendium of more than 400 citations of literature published between 1979 and 1990 on wildlife habitat, range, recreation, hydrology, and related research is presented. This review is restricted to studies that use the extensive-area sample design and data from the U.S. Department of Agriculture, Forest Service, Forest Inventory and Analysis units for the continental United States. A brief list of selected studies between 1974 and 1978 is included for historical importance. The list for the principal subjects—wildlife habitat, range, recreation, and hydrology-is designed to be comprehensive for the period from 1979 to 1990.

Citations of related research topics are included, specifically those from noncommercial wood resources (i.e., woodlands, fencerows, shrubs, and noncommercial trees), field sampling techniques, herbaceous biomass, insect and disease studies, forest landowner surveys, satellite image interpretation, inventory sampling design, and classification of land area by vegetation and land uses. Such topics often touch on hydrologic, range, wildlife habitat, or recreation resource values of forests. Rather than a comprehensive list for related topics, citations have been selected to represent the range of published reports. These citations are contained in a data base maintained by the Forest Inventory and Analysis unit in Starkville, Mississippi.

ACKNOWLEDGMENTS

Special thanks are accorded to Fran Hunt and Rudy Rosen of the National Wildlife Federation, Richard Rice of the Wilderness Society, and William Shands of the Conservation Foundation for the spark that led to the preparation of this document. Assistance from the following people is gratefully acknowledged: Richard Birdsey, Robert Brooks, Noel Cost, Curt Flather, Mark Hansen, Linda Joyce, Vernon "Jim" LaBau, H. Gyde Lund, Bert Mead, Renee O'Brien, and Douglas Powell of the Forest Service. My thanks to these and other scientists and clerical staff who helped in preparing the list of citations.

Cover illustration:
United States Forest Inventory and Analysis Regions and Unit Headquarters

September 1991

Wildlife Habitat, Range, Recreation, Hydrology, and Related Research Using Forest Inventory and Analysis Surveys: A 12-Year Compendium

Victor A. Rudis

INTRODUCTION

In 1984, the United States Department of Agriculture, Forest Service, Inventory Integration Workshop made a recommendation to

> ...keep current a list of nontimber vegetation inventory techniques used by Forest Inventory and Analysis (FIA) units. (Rudis 1984).

Researchers, planners, and natural resource managers from a variety of disciplines and agencies have expressed similar thoughts, which led to the creation of a bibliographic data base. The data base contains citations ofscientific literature that draw upon forest surveys conducted by the U.S. Department of Agriculture, Forest Service, FIA units as a basis for analysis of wildlife habitat, range, recreation, hydrology, and related natural resources.

Compilation of the data base is one step in assessing data needs from an interdisciplinary perspective. Citations provide examples of the kinds of topics being addressed, the data and techniques available, and the uses to which they have been, or can be, put. The data base organizes information already available, provides a handy reference to examine past accomplishments, and can guide future efforts toward more fruitful investigation.

Because FIA surveys are the only source of detailed statistics on aboveground private forest resources for extensive areas, and because comparable data are gathered for public forests, they can be extremely valuable for regional planning in a wide variety of disciplines-not just those concerned with timber resources. Like everything else, the cost to conduct FIA surveys (approximately $13 million in 1990 for seven FIA units nationwide) is increasing. Such public expenditures and the priorities attached to them require the support of informed and involved users.

Identifying and involving users and making the sampling design and the data meaningful and available to a diverse audience are necessary, yet daunting, tasks. The barrage of information in FIA reports easily can overwhelm the average planner, consultant, or researcher. Few individuals are likely to sift through the information in surveys or reports that are not directly addressed to their discipline or agency. Neither are they likely to define their needs in terms relevant to the forest resource data needs of other disciplines and agencies.

The following review, and the citations listed in the appendix, are a compendium of publications that focus on water, range, wildlife habitat, recreation, and related studies that use data from FIA surveys for the continental United States. The list of publications on these subjects is designed to be comprehensive for the period 1979 to 1990. Also included are citations selected for their historical importance for the period 1974 to 1978. Lund and McNutt (1979) provide an annotated list of citations prior to 1979.

REVIEW

History

The Forest Service is responsible for assessing conditions and trends in public and private forest resources. Since the 1930's, the Forest Service has promulgated FIA research work units to conduct these surveys on private land and non-federal public land. The FIA units also survey many of the smaller Federal land parcels, Federal land in Alaska, and all national forest land in the Eastern United States. FIA units coordinate with regional offices of the National Forest System, the Bureau of Land Management, and other landholding Federal agencies to ensure that information is compiled for all forest resources in the United States.

Early efforts by FIA units focused on measurement of commercial wood characteristics to assess timber

Victor A. Rudis is research forester, U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station, Starkville, MS 39759-0906.

supplies in terms of forested area and timber volume. Although a few studies in the 1950's and 1960's linked FIA forest surveys with other resources to quantify wildlife habitat (Barnes and Barnard 1979), most cross-disciplinary investigations were limited to descriptive geography on forest cover and land use changes. With growing concern for describing timber's availability and increased environmental awareness by the general public, the United States Congress broadened the scope of the survey effort with the passage of the Forest and Rangeland Renewable Resources Planning Act of 1974 (Public Law 93-378 [88 Stat. 476]) and the Forest and Rangeland Renewable Resources Research Act of 1978 (Public Law 95-307 [92 Stat. 353]). Under these laws, FIA units—along with other Federal agencies-were mandated to conduct a *comprehensive* assessment of forest resources.

In 1975, a meeting scheduled to discuss the 1976 survey of South Carolina was chosen as the time to launch a

> . . crash techniques development program to expand the ongoing timber-oriented forest survey into a more complete .. inventory. (McClure 19791.

Initial findings appeared in "Multiresource Inventories-A New Concept for Forest Survey" (McClure and others 1979). In South Carolina and elsewhere, pioneering studies focused on appraisal of forestland grazing (Pearson and Sternitzke 1974, Sternitzke 1976, Sternitzke and Pearson 1974, 1975), recreation use (Saunders 1979), soils and hydrology (Dissmeyer 1979), vegetation structure (Cost 1979), and the multiple objectives of nonindustrial private landowners (Birch and Kingsley 1978; Birch and Powell 1978; Kingsley 1975, 1976; Kingsley and Birch 1977; Kingsley and Finley 1975).

Several wildlife habitat studies were initiated in the 1970's. These included an inventory of deer browse in Louisiana (Pearson and Sternitzke 1976), breeding habitat for woodpeckers in West Virginia (Barnes and Barnard 1979), red-cockaded woodpecker nesting habitat in the Southeastern United States (Lennartz and McClure 1979), and winter deer browse in southern New Hampshire forests (Barnes 1975). Other studies included simulation of wildlife habitat with changes in forest conditions (Boyce and Cost 1978) and estimation of trends in woodcock habitat (Cushwa and others 1977).

Along with, and subsequent to, these new initiatives, Forest Service scientists and cooperators at research institutions modified basic inventory procedures for FIA data collection and analysis and developed other techniques to address emerging issues. Basic forest resource characteristics expected to be reported or inventoried by each FIA unit were compiled in 1984 (LaBau 1984). Priorities attached to characteristics inventoried and the issues addressed have shifted over the years. Nevertheless, the 1984 report documents FIA efforts to supply information not only on timber resources, but also on many of the associated components of forest ecosystems, including water, range, wildlife habitat, and recreation resources.

Many of the modifications and new techniques have been aided by reports of research applications from a variety of disciplines and by assessment reports concerned with multiresource inventories. Important guides to these documents have been published as bibliographies and conference proceedings. A valuable reference is an annotated bibliography of integrated inventory studies (Lund and McNutt 1979), as it compiles many citations for inventories conducted by other United States agencies and foreign countries. Most documents cited in the annotated bibiliography were published between.1970 and 1978, in addition to a few historically important references of the 1960's.

Other helpful collected works include multiagency and multidiscipline Conference proceedings on such topics as integrated inventories (Lund and others 1978), forest resource inventories (Frayer 1979), wildlife habitat inventories (Cushwa and Petoskey 1979), in-place resource inventories (Brann and others 1982), renewable resource inventories (Bell and Atterbury 1983), and global natural resource monitoring (Lund and Preto 1990). Forest Service workshop proceedings in inventory integration (Schlatterer and Lund 1984) and forest land inventories (Lund 19841 also have been invaluable.

More recently, studies have appeared in journals and conference proceedings associated with other disciplines. Many of these studies are annotated in the proceedings of a workshop entitled "Integrating Multiple Value Forest Surveys Into Timber Survey," held in Syracuse, New York, on August 2, 1989, as part of the state-of-the-art conference on forest inventory methodology (LaBau and Cunia 1990).

Data Collection and Dissemination

The sample designs used by each FIA unit vary slightly because each unit encounters different forest conditions, constituents in need of data, and priority issues to be addressed. In general, forest area is estimated by means of aerial photography and verified in the field at the ground level. Detailed observations are taken in the field on 0.5 acre to 8 acre plots that are distributed across the area being surveyed. In many cases, plots are permanent; most occur on private land. Field observations represent samples of the resource and are expanded statistically to assess forest conditions for entire counties, States, and regions.

Data are compiled by State and region every 6 to 12 years and published as Forest Service Experiment Station Resource Bulletins. National compilations are

reported periodically, most recently in 1989 (Haynes 1990, USDA FS 1977, 1980, 1989).

Typically, forest area, tree species, and timber volume are reported in summary form. The current status of the resource and the trends, if available, are noted in statistical documents that include graphs and standardized tables. Additional analyses are presented in State assessment reports. Further information is offered through specialized analytical studies in research journals, popular articles, and proceedings by FIA scientists and cooperators. (See USDA Forest Service 1987 for more details.)

Specialized field data collection efforts and access to detailed statistics have been part of FIA unit research activities for some time. The FIA units support such activities as part of cooperative funding arrangements with State and regional forestry agencies, universities, and other research institutions. More recently, online data bases and customized tables of frequently requested information have been made available at nominal cost to a wide variety of users, including planners, the forest industry and other natural resource consultants, and even private citizens.

Of particular interest to a wide audience are mapped FIA plot information (Beltz and Bertelson 1990, Kingsley 1985), geo-referenced data analyses (McWilliams and Faulkner 1990, Oswald 1988, Rudis 1986, Tosta and Marose 1987), an online data base for the Eastern United States, and customized tables for ownership and forest characteristics at the regional, county, plot, and tree level of resolution. Details on a data base for the Eastern United States are provided in Hahn and Hansen (1990), Hansen (1990), McWilliams (1990), and Sheffield (1990). Use of FIA data in a geographic information system, while nascent (Newton and Bower 1990), should prove helpful in regional planning, geography, and related disciplines in the near future.

The User Audience Dilemma

The major users for the data and analytical reports have been National, State, and county forestry agencies, forest industries, and forest industry consulting organizations. There is a continuing need to update the surveys and reports for use by timber companies, forestry consultants, State and Federal planners concerned with forest resource issues and an expressed need for *more, better, and faster* timber inventory data. To fathom what constitutes strategically important components of a *comprehensive* survey, information from-and involvement by-other agencies and disciplines are also needed.

Outside traditional State and regional forest resource interests, however, there is limited knowledge that periodic field surveys of forested areas are conducted in the United States. One problem may be that FIA forest surveys are largely unpublished in the more general scientific literature (Abernethy and Turner 1987).

Unlike traditional users, wildlife, range, recreation, water, and timber (i.e., multiple-value) resource data users are not limited to a single discipline or agency. Even within the forestry profession, analytical studies on national multiple-forest resource trends (Flather and Hoekstra 1989, Joyce 1989, USDA FS 1989) are only beginning to receive wider attention (Rockwell 1990).

Recent State-level forest resource assessment reports (Bechtold and others 1990, Bolsinger 1980, Considine 1984, Kelly and Sims 1989, Spencer and others 1990, Van Hooser 1990) list multiple-value resources of forests. But much of the data, terminology, and analyses in these and similar reports at the county level of &solution reflect the needs of timber interests-the traditional audience for these reports.

Needs exist for' timber and other forest resource information, and comprehensive assessments are mandated by law at the national level. However, the relative importance of these needs remains unresolved.

The range of data, analyses, and potential audience for multiple-value forest resource information-both outside and inside the Forest Service-is broad. Data dissemination and involvement across disciplines at the technical level and across agency jurisdictional boundaries at the administrative level are poorly coordinated. Partly as a result of this situation, priorities attached to the FIA survey effort by natural resource disciplines and agencies vary widely.

The need for timber resource information has been expressed in numerous publications (Irland Group 1989, Tarbet and Cashwell 1990, USDA FS 1987). User needs other than those expressed by timber interests, and progress in meeting those needs, are summarized in the following section.

Addressing Other User Needs

Studies by a few technical experts outside timber resource interests and outside the Forest Service have documented the utility of FIA data at the regional level. These studies include the analysis of aesthetics (Buhyoff and others 1986), air pollution (Guenther and others 1989), climate and tree distribution patterns (Denton and Barnes 1987), forest pests (Jacobi and others 1981), forest soils (David and others 1988, 1989), forested wetlands (Abernethy and Turner 1987, Langdon and others 1981, Turner and others 1981), landowner social psychology (Fortmann 1990), land use (Clawson 1979; Healy 1984, 1985; Klopatek and others 1979; Olson and others 1983), recreation potential and use (Johnson and others 1988, Saunders 1979, 1981, Saunders and others 1979), regional ecosystem

ranking (Klopatek and others 1981), snag and den inventories (McComb and others 1986a, 1986b), status of individual tree species (Ward 19891, and vegetation structure (Hamel and others 1986).

FIA data also have been used as ground-based estimates of forest condition to help classify vegetative cover from satellite images (Cook and others 1989, Iverson and Risser 1987, Iverson and others 1989, 1990).

Users outside the Forest Service (Barnard and others 1985, Chalk and others 1984, Hirsch and others 1979, Hunt 1990, Irland Group 1989, Lewis 1988, Porter and others 1983, Rice 1990, Shands 19851 have documented the need for selected data and analyses from FIA units. Needs also are expressed, though not documented fully, in data requests made to individual FIA units. Selected stand characteristics and species information obtained from FIA surveys on private land, and on national forest land in the Eastern United States, have been of particular interest to State natural heritage agencies, wildlife agencies, and conservation groups.

Within the Forest Service, there has been periodic interest at the national level for incorporating interdisciplinary data collection and analysis efforts with FIA surveys (Barnard 1990, Barnard and others 1985, Bones 1990, Hoekstra and Flather 1986, Hoekstra and others, 1979, Kaiser 1987, LaBau and Schreuder 1983, Schlatterer and Lund 1984, Wikstrom and Hoekstra 1981). At the regional level, studies have noted the importance in including assessments of aesthetics (Rudis 1983, Rudis and others 1988), biodiversity (Ohmann and Bolsinger, in press), and forest characteristics, including edges (Brooks and Scott 1983, LaBau and others 19861, health (Cost 1990a, Hornbeck and Smith 1985), nongame bird habitat (Brooks 1990b, Brooks and Porter 1983, Lennartz and others 1983, Sheffield 1981), insect and disease damage (Anderson and others 1986, 1988, May and Kauffman 1990), soils (Dissmeyer and Cost 1984, Grigal and Ohmann 1989, van Hees 1988), stand type changes by landowner (Alig and Wyant 1985), understory disturbances (Joyce and Baker 1987, Rudis and Skinner 1990), and vegetative structure (Cost 1984, O'Brien and Van Hooser 1983, Rudis 1990b).

Many FIA-related studies focus on resource characteristics measured on timberland. Some studies do incorporate data from nontimberland areas, nonforest resources, and from user groups associated with forest resources. Among these are comparisons with data on animal populations (Flather and others 1989; Flebbe and others 1988), atmospheric deposition (Ohmann and Shifley 1989), land development (Gedney and Hiserote 1989), landowners (Birch 1983), land use change (Birch and Wharton 1982), nonindustrial wood resources (Born 1990, Castonguay and Hansen 1984, Collins 1989), nontree biomass (Cost and others 1990, Joyce and Mitchell 1989), recreation users (Rudis 19871, and U.S. Department of Agriculture, Soil Conservation Service estimates of land use and land cover (Flather and others 1989).

Progress by FIA units in meeting other user needs is discussed in more detail by Born (19901, Brooks (1990a), Cost (1990b), Mead and LaBau (19901, O'Brien (1990), Ohmann (19901, and Rudis (1990a). In general, progress has been made by discussing inventoried characteristics relevant to the perceived needs of selected user groups. Some of the forest area and tree characteristics are repackaged, supplemented with additional data on forest characteristics, and presented in tabular form (DiGiovanni and Scott 1990), examined in multiple-value forest resource assessment reports (Bolsinger 1988, 1989; Castonguay and Hansen 1984, Ohmann and others 1988; Rudis 1988a, 1988b; USDA FS and others 19861, or analyzed in regional level assessments (Flather and others 1990, Joyce and Flather 1990). Other analyses have targeted specialized audiences, with articles in regional conference proceedings, subject-matter journals, and technical research reports.

Additional information-not always published-is made available as specific user needs are defined. Examples include (1) assessment of the extent, distribution, and trends in potentially threatened forest ecosystems, such as forested wetlands, natural forest communities (versus intensively-managed plantations), old-growth stands, and roadless areas; (2) estimates of biomass from noncommercial timber sources; e.g., pinyon-juniper woodlands (Chojnacky 1985); (3) habitat assessments of white-tailed deer and other game; (4) estimation of habitats for sensitive, threatened, and endangered woodland animals, such as the North Central States' Kirtland's warbler, the South's red-cockaded woodpecker, and the pileated woodpecker for Intermountain States; and (5) notes on the presence of native or naturalized plant species (e.g., Pacific yew) of biological or economic importance. A number of these data requests have come from the Nature Conservancy's regional headquarters, the Natural Heritage Program agencies (Nature Conservancy State-level affiliates), and from State botanists and nongame wildlife agencies.

Opportunities for Future Involvement

Few management or planning agencies can afford the cost of timber resource surveys like those conducted by FIA units, let alone satisfy the field data needs for monitoring and basic research in wildlife, recreation, range science, and hydrology at the regional level. Simple examination of FIA data can suggest hypotheses for the geographic distribution of forested ecosystems, associated characteristics and habitats for forest-dwelling species, and trends in

regional ecological landscape dynamics and land-use practices. FIA data also can be used to compare other sampling techniques by providing an independent estimate of forest cover, e.g., rising FIA data in global monitoring models (Iverson and others 1990, Lund 1990, Teuber 1990, Van Hooser and others 1990). Further evaluation and critical assessment at appropriate levels of aggregation are encouraged. For more details, contact the FIA unit that surveys the State or region of interest; a list of these units is provided in the Additional Information section in the appendix.

As other disciplines, agencies, and private institutions in hydrology, soils, range science, botany, ecology, zoology, wildlife planning, and recreation become familiar with forest survey data, there are likely to be more opportunities for interdisciplinary collaboration in data collection and analyses. In the near future, linkage of FIA data with a geographic information system and satellite imagery can further FIA data use by making spatially oriented data retrievals easier—not only for forest resource analysts, but also for decisionmakers and advocacy groups in a variety of disciplines. Integration of past and current FIA data with other land-use data should provide users with an improved information data base with which to test hypotheses and become better informed about regional impacts of agency policies or industry decisions.

LITERATURE CITED

Abernethy, Y.; Turner, R.E. 1987. U.S. forested wetlands: 1940-1980. Bioscience. 37(10): 721-727.

Alig, Ralph J.; Wyant, James G. 1985. Projecting regional area changes in forestland cover in the U.S.A. Ecological Modelling. 29: 27-34.

Anderson, Robert L.; Cost, Noel D.; McClure, Joe P.; Ryan, George. 1986. Predicting severity of fusiform rust in young loblolly and slash pine stands in Florida, Georgia, and the Carolinas. Southern Journal of Applied Forestry. 10: 38-42.

Anderson, Robert L.; McCartney, Thomas C. [and others]. 1988. Fusiform-rust-hazard maps for lob-, lolly and slash pines. Res. Note SE-351. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 7 p.

Barnard, Joseph E. 1990. Environmental health concerns: a role for forest inventory and monitoring. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 341-348.

Barnard, Joseph; Myers, Wayne; Pearce, John [and others]. 1985. Surveys for monitoring changes and trends in renewable resources: forest and marine fisheries. The American Statistician. 39(4): 363-373.

Barnes, Robert B. 1975. A quanitative evaluation of winter deer browse in southern New Hampshire forests. Durham, NH: University of New Hampshire. 96 p. M.S. thesis.

Barnes, Robert B.; Barnard, Joseph E. 1979. A wildlife habitat survey as part of a multi-resource evaluation procedure. In: Frayer, W.E., ed. Forest resource inventories: workshop proceedings; 1979 July 23-26; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forestry and Wood Science, 1: 77-89.

Bechtold, William A.; Brown, Mark J.; Sheffield, Raymond M. 1990. Florida's forests, 1987. Resour. Bull. SE-110. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 83 p.

Bell, John F.; Atterbury, Toby, eds. 1983. Renewable resource invent&es for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis, OR: Oregon State University, College of Forestry. 737 p.

Beltz, Roy C.; Bertelson, Daniel F. 1990. Distribution maps for Midsouth tree species. Resour. Bull. SO-151. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 56 p.

Birch, Thomas W. 1983. The forest-land owners of New York. Resour. Bull. NE-78. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 80 p.

Birch, Thomas W.; Kingsley, Neal I? 1978. The forestland owners of West Virginia. Resour. Bull. NE-58. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 76 p.

Birch, Thomas W.; Powell, Douglas S. 1978. The forestland owners of Kentucky. Resour. Bull. NE-54. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 101 p.

Birch, Thomas W.; Wharton, Eric W. 1982. Land use change in Ohio, 1952 to 1979. Resour. Bull. NE-70. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 24 p.

Bolsinger, Charles L. 1980. California forests: trends, problems, and opportunities. Resour. Bull. PNW-89. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 138 p.

Bolsinger, Charles L. 1988. The hardwoods of California's timberlands, woodlands, and savannas. Resour. Bull. PNW-148. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 50 p.

Bolsinger, Charles L. 1989. Shrubs of California's chaparral, timberland, and woodland: area, ownership, and stand characteristics. Resour. Bull. PNW-160. Portland OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 50 p.

Bones, James T. 1990. Today's concerns about the forest ecosystem and what they suggest for future inventories and monitoring. In: Kaiser, H. Fred, coord. Proceedings: division 4: 19th IUFRO World Congress, 1990 August 5-11; Montreal, Canada. Montreal, Canada: Canadian IUFRO World Congress Organizing Committee: 32-36.

Born, J. David. 1990. Non-industrial wood resources in the Rocky Mountain States. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July SO-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 517-521.

Boyce, Stephen G.; Cost, Noel D. 1978. Forest diversity: new concepts and applications. Res. Pap. SE-194. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 36 p.

Brann, Thomas B.; House, Louis O., IV, Lund, H. Gyde, eds. 1982. In-place resource inventories: principles and practices: Proceedings of a National workshop; 1981 August 9-14; Orono, ME. SAF 82-02. Bethesda, MD: Society of American Foresters. 1101 p.

Brooks, Robert T. 1990a. State-of-the-art methodology of forest inventory: wildlife habitat assessment in the Northeastern United States. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30–August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 538-543.

Brooks, Robert T. 1990b. Wildlife habitat evaluation tools: the U.S. Forest Service's forest inventory and analysis. In: Oswald, Helfried, coord. Proceedings: division 1: 19th IUFRO World Congress: 1990 August 5-11; Montreal, Canada. Montreal, Canada: Canadian IUFRO World Congress Organizing Committee. 2: 163-172.

Brooks, Robert T.; Porter, William F. 1983. Development of a procedure to establish conditions and monitor changes in regional wildlife habitat quality. In: Bell, John F.; Atterbury, Toby, eds. Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis, OR: Oregon State University, College of Forestry: 223-226.

Brooks, Robert T.; Scott, Charles T. 1983. Quantifying land-use edge from aerial photographs. Wildlife Society Bulletin. 11(4): 389-391.

Buhyoff Gregory J.; Hull, R. Bruce, IV, Lien, John N.; Cordell, H. Ken. 1986. Prediction of scenic quality for southern pine stands. Forest Science. 32(3): 769-778.

Castonguay, Thomas L.; Hansen, Mark H. 1984. Wooded strips and windbreaks in Kansas-1981. Res. Note NC-313. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 8 p.

Chalk, David E.; Miller, Stephen A.; Hoekstra, Thomas W. 1984. Multiresource inventories: integrating information on wildlife resources. Wildlife Society Bulletin. 12: 357-364.

Chojnacky, David C. 1985. Pinyon-juniper volume equations for the Central Rocky Mountain States. Res. Pap. INT-339. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 27 p.

Clawson, Marion. 1979. Forests in the long sweep of American history. Science. 204: 1168-1174.

Collins, Dennis C. 1989. Timberland and woodland resources outside National Forests in Arizona-1985. Resour. Bull. INT-66. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 61 p.

Considine, Thomas J., Jr. 1984. An analysis of New York's timber resources. Resour. Bull. NE-80. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 70 p.

Cook, Elizabeth A.; Iverson, Louis R.; Graham, Robin L. 1989. Estimating forest productivity with thematic mapper and biogeographical data. Remote Sensing of Environment. 28: 131-141.

Cost, Noel D. 1979. Ecological structure of forest vegetation. In: Frayer, W.E., ed. Forest resource inventories: workshop proceedings; 1979 July 23-26; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forestry and Wood Sciences. 1: 29-37.

Cost, Noel D. 1984. FIA understory measurement techniques in the Southeast. In: Schlatterer, Ed; Lund, H. Gyde, eds. Proceedings of the inventory integration workshop; 1984 October 15-19; Portland, OR. Washington, DC: U.S. Department of Agriculture, Forest Service, Range and Timber Management Staffs: 101-110.

Cost, Noel D. 1990a. A case for forest damage assessment using permanent forest inventory plots. In: Lund, H. Gyde; Preto, Giovanni, tech. coords. Global natural resource monitoring and assessments: preparing for the 21st century: Proceedings of the international conference and workshop; 1989 September 24-30; Venice, Italy. Bethesda, MD: Ameri-

can Society for Photogrammetry and Remote Sensing: 479-487.

Cost, Noel D. 1990b. Expanding conventional timber inventories into a broader, multiresource inventory in the Southeastern States. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 505–511.

Cost, Noel D.; Howard, James 0.; Mead, Bert land others]. 1990. The forest biomass resource of the United States. Gen. Tech. Rep. WO-57. Washington, DC: U.S. Department of Agriculture, Forest Service. 21 p.

Cushwa, Charles T.; Barnard, Joseph E.; Barnes, Robert B. 1977. Trends in woodcock habitat in the United States. In: Keppie, David; Owen, Ray B., Jr., eds. Proceedings of the 6th woodcock symposium; 1977 October 4-6; Fredericton, New Brunswick: Canadian Wildlife Service, New Brunswick Department of Wildlife Resources, and U.S. Fish and Wildlife Service: 31-38.

Cushwa, Charles T.; Petoskey, Merrill L., chairmen. 1979. Coordinating wildlife habitat inventories and evaluations. In: Sabol, Kenneth, ed. Transactions of the 44th North American and natural resources conference; 1979 March 24-28; Toronto, Canada. Washington, DC: Wildlife Management Institute: 337-467.

Czaplewski, Raymond L.; Cost, Noel D. 1985. Photointerpretation of wildlife, recreation, and livestock-grazing variables on one-acre forest plots in South Carolina. In: Oderwald, Richard G.; Burkhart, Harold E.; Burk, Thomas E., eds. Use of auxiliary information in natural resource inventories: proceedings; 1985 October 1-2; Blacksburg, VA. Society of American Foresters Publication No. SAF 86-01. Blacksburg, VA: Virginia Polytechnic Institute and State University, School of Forestry and Wildlife Resources: 24-37.

David, Mark B.; Gertner, George Z.; Grigal, David F.; Ohmann, Lewis F. 1989 Sulfur accumulation and atmospherically deposited sulfate in the Lake States. Res. Pap. NC-290. St. Paul, MN U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 7 p.

David, Mark B.; Grigal, David F.; Ohmann, Lewis F.; Gertner, George Z. 1988. Sulfur, carbon, and nitrogen relationships in forest soils across the northern Great Lake States as affected by atmospheric deposition and vegetation. Canadian Journal of Forest Research. 18: 1386-1391.

Denton, Shirley R.; Barnes, Burton V. 1987. Tree species distributions related to climatic patterns in Michigan. Canadian Journal of Forest Research. 17: 613-629.

DiGiovanni, Dawn M.; Scott, Charles T. 1990. Forest statistics for New Jersey-1987. Resour. Bull. NE-112. Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 97 p.

Dissmeyer, George E. 1979. Analysis of soils and hydrological data taken by renewable resources evaluation in South Carolina. In: Frayer, W.E., ed. Forest resource inventories: workshop proceedings; 1979 July 23-26; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forestry and Wood Sciences. 1: 38-47.

Dissmeyer, George E.; Cost, Noel D. 1984. Multiresource inventories: watershed condition of commercial forest land in South Carolina. Res. Pap. SE-247. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 26 p.

Flather, Curtis H.; Hoekstra, Thomas W. 1989. An analysis of the wildlife and fish situation in the United States: 1989-2040. Gen. Tech. Rep. RM-178. Ft. Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 147 p.

Flather, Curtis H.; Hoekstra, Thomas W.; Chalk, David E. land others]. 1989. Recent historical and projected regional trends of white-tailed deer and wild turkey in the Southern United States. Gen. Tech. Rep. RM-172. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 22 p.

Flather, Curtis H.; Joyce, Linda A.; King, Rudy M. 1990. Linking multiple resource analyses to land use and timber management: applications and error considerations. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5, Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 478-485.

Flebbe, Patricia A.; Cost, Noel D.; Hoekstra, Thomas W. 1988. Recent historical and projected regional trends of trout in the Southeastern United States. Gen. Tech. Rep. RM-160. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 19 p.

Fortmann, Louise. 1990. The role of professional norms and beliefs in the agency-client relations of natural resource bureaucracies. Natural Resources Journal 30.(2):361–380.

Frayer, W.E., ed. 1979. Forest resource inventories: workshop proceedings; 1979 July 23-26; Fort Col-

lins, CO. Fort Collins, CO: Colorado State University, Department of Forest and Wood Sciences. Vol. 1: 1-513. Vol. 2: 514-1037.

Gedney, Donald R.; Hiserote, Bruce A. 1989. Changes in land use in western Oregon between 1971-74 and 1982. Resour. Bull. PNW-165. Portland, OR U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 21 p.

Grigal, D.F.; Ohmann, L.F. 1989. Spatial patterns in elemental concentrations of the forest floor across the North Central United States. Journal of Environmental Quality. 18: 368-373.

Guenther, A.; Lamb, B.; Westburg, H. 1989. U.S. national biogenic sulfur emissions inventory. In: Saltzman, Eric S.; Cooper, William J., eds. Biogenic sulfur in the environment: Symposium proceedings: 194th meeting of the American Chemical Society; 1987 August 30-September 4; New Orleans, LA. Washington, DC: American Chemical Society: 14-30. Chapter 2.

Hahn, Jerold T.; Hansen, Mark H. 1990. North Central forest inventory data on a microcomputer. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 558-564.

Hamel, Paul B.; Cost, Noel D.; Sheffield, Raymond M. 1986. The consistent characteristics of habitats: a question of scale. In: Verner, Jared; Morrison, Michael L.; Ralph, C. John, eds. Wildlife 2000: modeling habitat relationships of terrestrial vertebrates: International symposium; 1984 October 7-11; Fallen Leaf Lake, CA. Madison, WI: University of Wisconsin Press: 121-128.

Hansen, Mark H. 1990. The eastwide forest inventory database. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 545-552.

Haynes, Richard W. 1990. An analysis of the timber situation in the United States: 1989-2040. Gen. Tech. Rep. RM-199. Ft. Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 268 p.

Healy, Robert G. 1984. Forests in an urban civilization: land use, land markets, ownership, and recent trends. In: Bradley, Gordon A., ed. Land use and forest resources in a changing environment: the urban/forest interface: Proceedings of the national symposium on the urban/forest interface; 1982 October 27-29; Seattle, WA. Seattle, WA: University of Washington Press: 17-35.

Healy, Robert G. 1985. Competition for land in the American South: agriculture, human settlement, and the environment. Washington, DC: The Conservation Foundation. 334 p.

Hirsch, Allan; Krohn, William B.; Schweitzer, Dennis L.; Thomas, Carl H. 1979. Trends and needs in federal inventories of wildlife habitat. In: Sabol; Kenneth, ed. Transactions of the North American wildlife and natural resources conference: consolidating conservation efforts; 1979 March 24-28; Toronto, Canada. Washington, D.C.: Wildlife Management Institute: 340-359.

Hoekstra, Thomas W.; Flather, Curtis H. 1986. Theoretical basis for integrating wildlife in renewable resource inventories. Journal of Environmental Management. 24: 95-110.

Hoekstra, Thomas W.; Schweitzer, Dennis L.; Cushwa, Charles T. [and others]. 1979. Preliminary evaluation of a national wildlife and fish data base. In: Sabol, Kenneth, ed. Transactions of the 44th North American wildlife and natural resources conference: consolidating conservation efforts; 1979 March 24-28; Toronto, Canada. Washington, DC: Wildlife Management Institute: 380-391.

Hornbeck, James W.; Smith, Robert B. 1985. Documentation of red spruce growth decline. Canadian Journal of Forest Research. 15: 1199-1201.

Hunt, Frances A. 1990. The forest inventory: incorporating fisheries and wildlife values. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July SO-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 475-477.

Irland Group, The. 1989. Forest inventory and related needs to 1992 and beyond. Report to the Maine Forest Service. Augusta, ME: The Irland Group, Forestry Consultants, 7 North Chestnut Street, Augusta, ME 04330.98 p.

Iverson, L.R.; Cook, E.A.; Graham, R.L. 1989. A technique for extrapolating and validating forest cover across large regions: calibrating AVHRR data with TM data. International Journal of Remote Sensing. 10(11): 1805-1812.

Iverson, Louis R.; Cook, Elizabeth A.; Graham, Robin L. 1990. Estimating forest cover over Southeastern United States using TM-calibrated AVHRR data. In: Lund, H. Gyde; Preto, Giovanni, tech. coords. Global natural resource monitoring and assessments: preparing for the 21st century: Proceedings of the international conference and workshop; 1989 September 24-30; Venice, Italy. Bethesda, MD: American Society for Photogrammetry and Remote Sensing: 1252-1262.

Iverson, Louis R.; Risser, Paul G. 1987. Analyzing long-term changes in vegetation with geographic

information system and remotely sensed data. Advances in Space Research. 7(11): 183-194.

Jacobi, William R.; Anderson, Robert L.; Cost, Noel D. 1981. Multiresource inventories: procedures for assessing the damage caused by insects and diseases. Res. Pap. SE-221. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 11 p.

Johnson, Rebecca L.; Bacon, Warren; White, Kenneth; Eixenberger, Don. 1988. Assessment of Oregon's forest-related recreation. In: Lettman, Gary J., tech. ed. Assessment of Oregon's forests: a collection of papers published by the Oregon State Department of Forestry. Salem, OR: Oregon State Department of Forestry, Forest Resources Planning Section: 1-16.

Joyce, L.A.; Baker, R.L. 1987. Forest overstory-understory relationships in Alabama forests. Forest Ecology and Management. 18: 49-59.

Joyce, Linda A. 1989. An analysis of the range forage situation in the United States: 1989-2040. Gen. Tech. Rep. RM-180. Ft. Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 137 p.

Joyce, Linda A.; Flather, Curtis H. 1990. Using land base inventories to assess range and wildlife resources nationally. In: LaBau, Vernon J.; Cunia, Tiberius; tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July SO-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 486-494.

Joyce, Linda A.; Mitchell, John E. 1989. Understory cover/biomass relationships in Alabama forest types. Agroforestry Systems. 9: 205-210.

Kaiser, H. Fred. 1987. The importance of multiple use value in designing inventories. In: Lund, H. Gyde; Caballero-Deloya, Miguel; Villarreal-Canton, Raul, eds. Land and resource evaluation for national planning in the tropics: Proceedings of the international conference and workshop; 1987 January 25-31; Chetumal, Mexico. Gen. Tech. Rep. WO-39. Washington, DC: U.S. Department of Agriculture, Forest Service: 168-171.

Kelly, John F.; Sims, Mike. 1989. Forest resources of Mississippi. Resour. Bull. SO-147. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 63 p.

Kingsley, Neal I? 1975. The fore&land owners of New Jersey. Resour. Bull. NE-39. Broomall, PA; U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 24 p.

Kingsley, Neal I? 1976. The forest-land owners of Southern New England. Resour. Bull. NE-41. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 27 p.

Kingsley, Neal P. 1985. A forester's atlas of the Northeast. Gen. Tech. Rep. NE-95. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 96 p.

Kingsley, Neal P.; Birch, Thomas W. 1977. The forestland owners of New Hampshire and Vermont. Resour. Bull. NE-51. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 47 p.

Kingsley, Neal I?; Finley, James C. 1975. The forest land owners of Delaware. Resour. Bull. NE-38. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 78 p.

Klopatek, J.M.; Kitchings, J.T.; Olson, R.J. [and others]. 1981. A hierarchical system for evaluating regional ecological resources. Biological Conservation. 20: 2711290.

Klopatek, Jeffrey M.; Olson, Richard J.; Emerson, Craig J.; Joness, Jan L. 1979. Land-use conflicts with natural vegetation in the United States. Environmental Conservation. 6(3): 191-199.

LaBau, Vernon J. 1984. A review of nontimber data collection. and information reported by the Forest Inventory and Analysis Projects in the U.S. In: Schlatterer, Ed; Lund, H. Gyde, eds. Proceedings of the inventory integration workshop; 1984 October 15-19; Portland, OR. Washington, DC: U.S. Department of Agriculture, Forest Service, Range and Timber Management Staffs: 59–63, 153–165.

LaBau, Vernon J.; Cunia, Tiberius, tech. eds. 1990. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 592 p.

LaBau, Vernon J.; Mead, Bert R.; Herman, David A. 1986. Quantification of vegetation edge for the Tanana River Basin, Alaska. In: 1986 ASPRS-ACSM fall convention-ASPRS technical papers; 1986 September 28-October 3; Anchorage, AK. Falls Church, VA: American Society for Photogrammetry and Remote Sensing: 335-341.

Langdon, 0. Gordon; McClure, Joe P.; Hook, Donald D. [and others]. 1981. Extent, condition, management, and research needs of bottomland hardwood-cypress forests in the Southeastern United States. In: Clark, J.R.; Benforado, J., eds. Wetlands of bottomland hardwood forests: Proceedings of a workshop on bottomland hardwood forest wetlands of the Southeastern United States; 1980 June 1-5; Lake Lanier, GA. New York: Elsevier Scientific Publishing Company: 71-85.

Lennartz, Michael R.; Knight, Herbert A.; McClure, Joe P.; Rudis, Victor A. 1983. Status of red-cockaded woodpecker nesting habitat in the South. In: Wood, Don A., ed. Red-cockaded woodpecker symposium II;

1983 January 27-29; Panama City, FL. Tallahassee, FL: Florida Game and Fresh Water Fish Commission: 13-19.

Lennartz, Michael R.; McClure, Joe P. 1979. Estimating the extent of red-cockaded woodpecker habitat in the Southeast. In: Frayer, W.E., ed. Forest resource inventories: workshop proceedings; 1979 July 23-36; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forestry and Wood Science. 1: 48-62.

Lewis, David K., compiler. 1988. 1988 Review of United States Forest Service research by conservation organizations. Report to Station Directors of the Southern and Southeastern Forest Experiment Stations, November 23, 1988. On file at the Southern Forest Experiment Station, Room T-10210, 701 Loyola Avenue, New Orleans, LA 70113.7 p.

Lund, H. Gyde, ed. 1984. Preparing for the 21st century: proceedings of the forest inventory workshop; 1984 March 26-30; Denver, CO. Washington, DC: U.S. Department of Agriculture, Forest Service, Division of Timber Management. 334 p.

Lund, H. Gyde. 1990. From terras incognitas to illuminations. In: Lund, H. Gyde; Preto, Giovanni, tech. coords. Global natural resource monitoring and assessments: preparing for the 21st century,: Proceedings of the international conference and workshop; 1989 September 24-30; Venice, Italy. Bethesda, MD: American Society for Photogrammetry and Remote Sensing: 32-40.

Lund, H. Gyde; LaBau, Vernon J.; Ffolliott, Peter D.; Robinson, David W., eds. 1978. Integrating inventories of renewable natural resources: Proceedings of a workshop; 1978 January 8-12; Tucson, AZ. Gen. Tech. Rep. RM-55. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 482 p.

Lund, H. Gyde; McNutt, Elise. 1979. Integrating inventories: an annotated bibliography. Tech. Note 333. Denver, CO: U.S. Department of the Interior, Bureau of Land Management. 183 p.

Lund, H. Gyde; Preto, Giovanni, tech. coords. 1990. Global natural resource monitoring and assessments: preparing for the 21st century: Proceedings of the international conference and workshop; 1989 September 24-30; Venice, Italy. Bethesda, MD: American Society for Photogrammetry and Remote Sensing. Vol. 1: 1-516. Vol. 2: 517-986. Vol. 3: 518-1495.

May, Dennis M.; Kauffman, Bruce W. 1990. Status and trends in gypsy moth defoliation hazard in Tennessee. Res. Note SO-361. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 8 p.

McClure, Joe I? 1979. Multiresource inventories-a new concept for forest survey in the Southeast. In: Frayer, W.E., ed. Forest resource inventories: workshop proceedings; 1979 July 23-26; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forestry and Wood Sciences. 1: 23-28.

McClure, Joe P.; Cost, Noel D.; Knight, Herbert A. 1979. Multiresource inventories-a new concept for forest survey. Res. Pap. SE-191. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 68 p.

McComb, William C.; Bonney, Stephen A.; Sheffield, Raymond M.; Cost, Noel D. 1986a. Den tree characteristics and abundance in Florida and South Carolina. Journal of Wildlife Management. 50(10): 584-591.

McComb, William C.; Bonney, Stephen A.; Sheffield, Raymond M.; Cost, Noel D. 1986b. Snag resources in Florida-are they sufficient for average populations of primary cavity-nesters? Wildlife Society Bulletin. 14(1): 40-48.

McWilliams, William, H. 1990. Interactive access to forest inventory data for the South Central United States. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 556-557.

McWilliams, William H.; Faulkner, Joanne L. 1990. Spatial analysis using a systematic grid of forest inventory plots: selected examples for the South Central United States. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 379-383.

Mead, Bert; LaBau, Vernon J. 1990. Multi-resource inventories in Alaska. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 522-528.

Mead, Bert; Yarie, John; Herman, David. 1987. Biomass estimates for nontimber vegetation in Tanana River Basin of interior Alaska. In: Wharton, Eric H.; Cunia, Tiberius, compilers. Estimating tree biomass regressions and their error: Proceedings of the workshop on tree biomass regression functions and their contribution to the error of forest inventory estimates; 1986 May 26-30; Syracuse, NY. Gen. Tech. Rep. NE-117. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station: 149-153.

Newton, Carlton M.; Bower, Steven T. 1990. Spatial analysis of forest inventory data. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 369-378.

O'Brien, Renee. 1990. Developing integrated forest surveys for the Rocky Mountain States. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 512-516.

O'Brien, Renee A.; Van Hooser, Dwane D. 1983. Understory vegetation inventory: an efficient procedure. Res. Pap. INT-323. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 6 p.

Ohmann, Janet L. 1990. Multiresource inventories in the Pacific Coast States-progress and future direction. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 529-537.

Ohmann, Janet L.; Bolsinger, Charles L. [In press] Monitoring biodiversity with permanent plots—landscape, stand structure, and understory species. In: Ruggiero, Leonard F.; Aubry, Keith B.; Carey, Andrew B.; Huff, Mark H., tech. coords. Wildlife and vegetation of unmanaged Douglas-fir forests; 1989 March 29-31; Portland, OR. Gen. Tech. Rep. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 12 p.

Ohmann, Janet L.; Carleson, Dan; Lee, Philip L.; Oakley, Art L. 1988. Status of fore&related wildlife and fish resources in Oregon. In: Lettman, Gary J., tech. ed. Assessment of Oregon's forests: a collection of papers published by the Oregon State Department of Forestry. Salem, OR: Oregon State Department of Forestry, Forest Resources Planning Section: 17-32.

Ohmann, Lewis F.; Shifley, Stephen R. 1989. Relations between forest conditions and atmospheric deposition along the northwestern Minnesota-to-southeastern Michigan deposition gradient. In: Noble, Reginald D.; Martin, Juri L.; Jensen, Keith F., eds. Air pollution effects on vegetation including forest ecosystems: proceedings of the 2nd US-USSR symposium; 1988, September 13-25; Corvallis, OR, Raleigh, NC, and Gatlinburg, TN, Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station: 225-232.

Olson, R.J.; Klopatek, J.M.; Emerson, C.J. 1983. Regional environmental analysis and assessment utilizing the geoecology data base. In: Teichholz, E.; Berry, B.L., eds. Computer graphics and environmental planning. Englewood Cliffs, NJ: Prentice-Hall, Inc.: 102-118. (Part II, Chapter 7.)

Oswald, Daniel D. 1988. Use of sample photo-plot data for forest resource mapping. Western Journal of Applied Forestry. 3(2): 52-54.

Pearson, Henry A.; Sternitzke, Herbert S. 1974. Forest-range inventory: a multiple-use survey. Journal of Range Management. 27(5): 404-407.

Pearson, Henry A.; Sternitzke, Herbert S. 1976. Deer browse inventories in the Louisiana Coastal Plain. Journal of Wildlife Management. 40(2): 326-329.

Porter, William F.; Mathews, Nancy E.; Doyle, Terence J.; Brooks, Robert T. 1983. The U.S. Forest Service inventory: an approach for assessing wildlife habitat. In: Bell, John F.; Atterbury, Toby, eds. Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis, OR: Oregon State University, College of Forestry: 628-631.

Rice, Richard E. 1990. The importance of forest inventories to the conservation of biological diversity. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July SO-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S Department of Agriculture, Forest Service, Pacific Northwest Research Station: 467-474.

Roberts, John C. 1988. Summary: innovations and incentives for integrated management of woodlands. [A summary of special session 1: 9 papers, pages 33-1071. In: McCabe, Richard E., ed. Transactions of the 53rd North American wildlife and natural resources conference; 1988 March 18-23; Louisville, KY. Washington, DC: Wildlife Management Institute: 108-113.

Rockwell, H. William, Jr. 1990. RPA-the sleeping giant awakes. Journal of Forestry. 88(8): 11, 15.

Rudis, Victor A. 1983. Dispersed recreation inventory on commercial timberland. In: Bell, John F.; Atterbury, Toby, eds. Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis, OR: Oregon State University, College of Forestry: 214-218.

Rudis, Victor A., comp. 1984. Work group H: vegetation management techniques. In: Schlatterer, Ed; Lund, H. Gyde, eds. Proceedings of the inventory integration workshop; 1984 October 15-19; Portland, OR. Washington, DC: U.S. Department of Agriculture, Forest Service, Range and Timber Management Staffs: 145-149.

Rudis, Victor A. 1986. Emerging patterns in the dis-

tribution of roadless forested areas in the Midsouth. In: Kulhavy, David L.; Conner, Richard N., eds. Wilderness and natural areas in the Eastern United States: a management challenge: Symposium proceedings; 1985 May 13-15; Nacogdoches, TX. Nacogdoches, TX: Stephen F. Austin State University, Center for Applied Studies, School of Forestry, 265-270.

Rudis, Victor A. 1987. Recreational use of forested areas by Alabama residents. Res. Pap. SO-237. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 37 p.

Rudis, Victor A. 1988a. Nontimber values of east Texas timberland. Resour. Bull. SO-139. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 34 p.

Rudis, Victor A. 1988b. Nontimber values of Louisiana's timberland. Resour. Bull. SO-132. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 27 p.

Rudis, Victor A. 1990a. Multiple value forest surveys in the Midsouth States. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 495-504.

Rudis, Victor A. 1990b. Sampling and modelling visual component dynamics of forested areas. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 84-85.

Rudis, Victor A.; Gramann, James H.; Ruddell, Edward J.; Westphal, Joanne M. 1988. Forest inventory and management-based visual preference models of southern pine stands. Forest Science. 34(4): 846-863.

Rudis, Victor A.; Skinner, Thomas V. 1990. Distribution of fire evidence in South Central U.S. forests. In: Nodvin, Stephen C.; Williams, Ellen M.; Paces, Janet B., eds. Fire and the environment: ecological and cultural perspectives: an international symposium; 1990 March 20-24; Knoxville, TN. Program and abstracts. Knoxville, TN The University of Tennessee: 33.

Saunders, Paul R. 1979. Results of a multiresource inventory: analysis of undeveloped rural recreation sites in South Carolina. In: Frayer, W.E., ed. Forest resource inventories; 1979 July 23-26; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forest and Wood Science. 1: 63-71.

Saunders, Paul Richard. 1981. Application of multiresource data to recreation planning: Nantahala and Pisgah National Forests, North Carolina. Res. Report No. 29. Clemson, SC: Clemson University, Department of Recreation and Park Administration. 17 p.

Saunders, Paul R.; Stachoviak, William V.; Howard, Gordon E. 1979. Inventory of nondeveloped, rural recreation resources in South Carolina. Res. Report No. 12. Clemson, SC: Clemson University, Department of Recreation and Park Administration. 132 p.

Schlatterer, Ed; Lund, H. Gyde, eds. 1984. Proceedings of the inventory integration workshop; 1984 October 15-19; Portland, OR Washington, DC: U.S. Department of Agriculture, Forest Service, Range and Timber Management Staffs. 165 p.

Shands, William E. 1985. Nontimber resources: a challenge for Forest Inventory and Analysis. In: Proceedings: national workshop on applications of Forest Inventory and Analysis research to hardwood research issues; 1985 October 29-30; Alexandria, VA. Washington, DC: U.S. Department of Agriculture, Forest Service: 93-98.

Sheffield, Raymond M. 1981. Multiresource inventories: techniques for evaluation of nongame bird habitat. Res. Pap. SE-218. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 28 p.

Sheffield, Raymond M. 1990. Access to forest inventory data for the Southeast. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 553-555.

Spencer, John S.; Kingsley, Neal I?; Mayer, Robert V. 1990. Indiana's timber resource, 1986: an analysis. Resour. Bull. NC-113. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 85 p. + map (major forest types).

Sternitzke, Herbert S. 1976. Grazing potential of Louisiana pine forest-ranges. Res. Note SO-203. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 2 p.

Sternitzke, Herbert S.; Pearson, Henry A. 1974. Forest-range resource statistics for southwest Louisiana parishes. Resour. Bull. SO-50. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 22 p.

Sternitzke, Herbert S.; Pearson, Henry A. 1975. Forest-range resources of southwest Louisiana. Journal of Range Management. 28(4): 264-266.

Tarbet, Don D.; Cashwell, John H. 1990. Forest information needs of concerned groups in the State of

Maine. In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. Gen. Tech. Rep. PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 17-22.

Teuber, Kurt B. 1990. Use of AVHRR imagery for large-scale forest inventories. In: Jackson, Ben D., ed. Special issue: the international forested wetlands resource: identification and inventory: Proceedings of the international conference; 1988 September 19-22; Baton Rouge, LA. Forest Ecology and Management. 33/34: 621-631.

Tosta, Nancy; Marose, Robin 1987. The distribution of California hardwoods: results of a statewide geographic information system. In: Plumb, Timothy R.; Pillsbury, Norman H., tech. coords. Proceedings of the symposium on multiple-use management of California's hardwood resources; 1986 November 12-14; San Luis Obispo, CA. Gen. Tech. Rep. PSW-100. Berkeley, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Forest and Range Experiment Station: 304-308.

Turner, R. Eugene; Forsythe, Stephen W.; Craig, Nancy J. 1981. Bottomland hardwood forest land resources of the Southeastern United States. In: Clark, J.R.; Benforado, J., eds. Wetlands of bottomland hardwood forests: Proceedings of a workshop on bottomland hardwood forest wetlands of the Southeastern United States; 1980 June 1-5; Lake Lanier, GA. New York, NY: Elsevier Scientific Publishing Company: 13-28.

U.S. Department of Agriculture Forest Service. 1977. The Nation's renewable resources-an assessment, 1975. U.S. Department of Agriculture, Forest Service, Forest Resource Report No. 21. Washington DC: U.S. Government Printing Office. 243 p.

U.S. Department of Agriculture Forest Service. 1980. The report to Congress on the Nation's renewable resources. U.S. Department of Agriculture, Forest Service, FS-347. Washington DC: U.S. Government Printing Office. 155 p.

U.S. Department of Agriculture Forest Service. 1987. Forest Service resource inventory: an overview. Forest Inventory and Economics Research. U.S. Department of Agriculture, Forest Service. Washington, DC: U.S. Government Printing Office. 29 p.

U.S. Department of Agriculture Forest Service. 1989. An analysis of the land base situation in the United States: 1989-2040. Gen. Tech. Rep. RM-181. Ft. Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 77 p.

U.S. Department of Agriculture Forest Service; USDA Soil Conservation Service; State of Alaska, Department of Natural Resources. 1986. Timber and vegetation resources of the Susitna River Basin—Alaska. Vegetation resource descriptions and statistics for the Susitna River Basin Multi-resource Inventory Unit of Alaska, 1986. ASD-FPP 4550-86. Ft. Richardson, AK: U.S. Army Publications Center. 49 p. + appendices.

van Hees, Willem W.S. 1988. An approach to soil productivity assessment in southeast Alaska. In: Slaughter, Charles W.; Gasbarro, Tony, eds. Proceedings of the Alaska forest soil productivity workshop; 1987 April 28–30; Anchorage, AK. Gen. Tech. Rept. PNW-219. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 81-83.

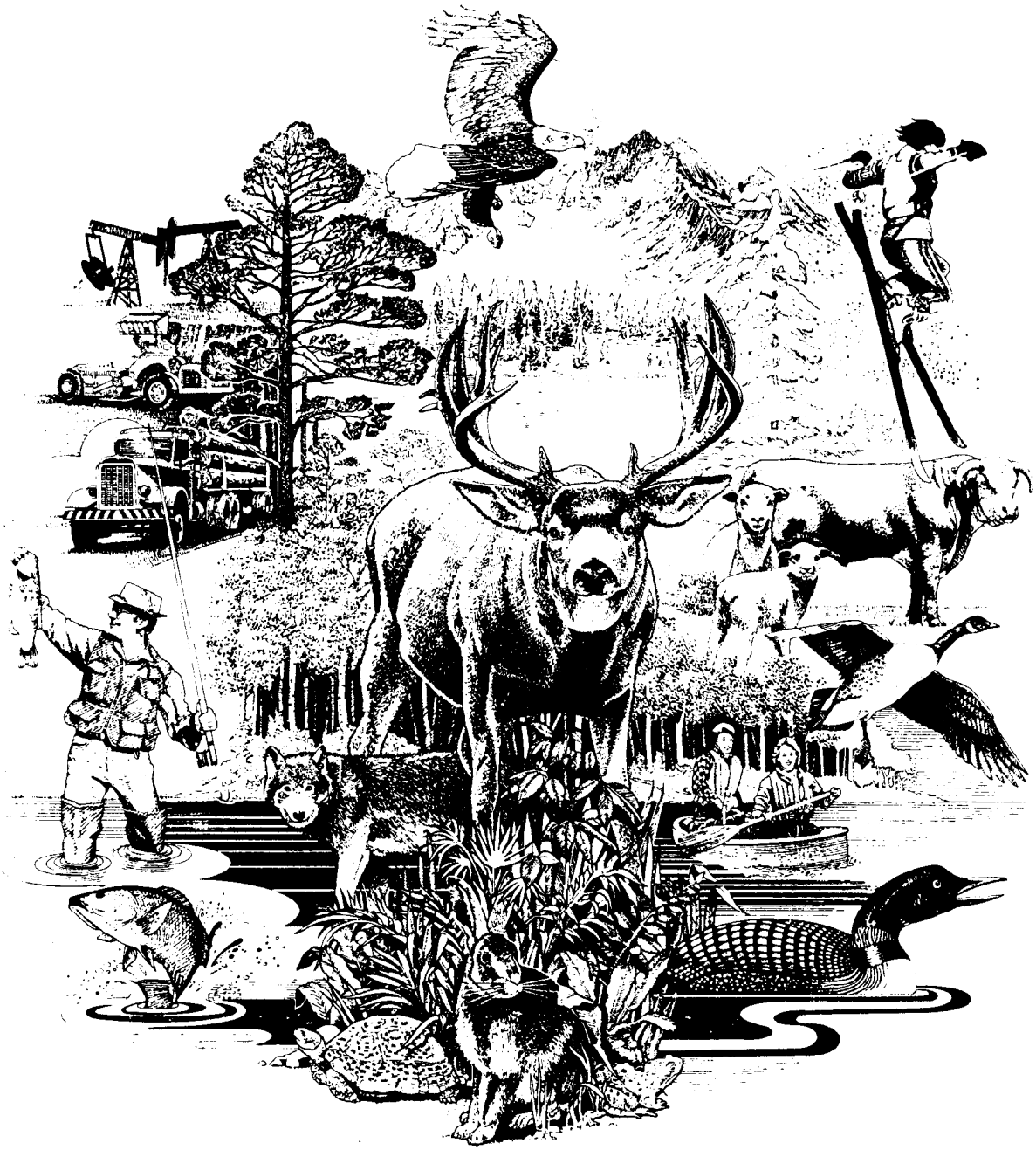
Van Hooser, Dwane D. 1990. Timberland and woodland resources outside National Forests in New Mexico, 1987. Resour. Bull. INT-68. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 72 p.

Van Hooser, Dwane D.; Tymcio, Ronald P.; Rowland, Bruce D. 1990. INFORS: a comprehensive inventory system with international implications. In: Lund, H. Gyde; Preto, Giovanni, tech. coords. Global natural resource monitoring and assessments: preparing for the 21st century: Proceedings of an international conference and workshop; 1989 September 24-30; Venice, Italy. Bethesda, MD: American Society for Photogrammetry and Remote Sensing: 536-545.

Ward, Daniel B. 1989. Commercial utilization of Atlantic white cedar (Chamaecyparis thyoides, Cupressaceae). Economic Botany. 43(3): 386-415.

Wilkstrom, John H.; Hoekstra, Thomas W. 1981. The analytical basis for integrated forest and rangeland ecosystem inventory. In: Arid land resource inventories: developing co&efficient methods: Proceedings of an international workshop; 1980 November 30-December 6; La Paz, Mexico. Gen. Tech. Rep. WO-28. Washington, DC: U.S. Department of Agriculture, Forest Service: 56-61.

Appendix



NOTES ON THE BIBLIOGRAPHY

To assist researchers, planners, and forest managers involved in other disciplines, a bibliographic data base has been prepared. The contents of the data base as of December 31, 1990, are listed in table 1. An index is provided. Citations can be retrieved in other formats.

To ease updating, entries of senior authors with more than one publication in a single year are not distinguished by lowercase letters. Titles beginning with "A", "And", or "The" are not ignored in alphabetizing. Department series publications (e.g., Resource Bulletin) are not abbreviated.

Due to data base software limitations, the order of bibliographic entries follows a modified alphabetical order as follows: space, uppercase letters (A, B, C, ... Z), punctuations (",", ".", ";"), lowercase letters (a, b, c, ... z). Entries are listed first in modified alphabetical order and then chronological order. With the above exceptions, entries follow ANSI standards (American National Standards Institute. 1977. American national standard for bibliographic references. ANSI 239.29. New York. 92 p.).

The information in any citation can be used to match citations with the same terms. Each citation lists author, year, title, location (i.e., journal, proceedings, United States Government publication number, etc.), and keywords. Keywords augment information in the titles.

Capitalized keywords list the major FIA unit from which the data were drawn. The words *United States* or the standard two-digit State postal codes are listed if the reference covers only a portion of States served by the listed FIA unit. The other keywords list subject matter not mentioned in the title.

The subject matter keyword is one of the following:

(1) the principal subject matter, e.g., *water* (hydrology), *range* (includes livestock grazing), *wildlife* habitat, or *recreation;*
(2) *multivalue*, where the principal subject matter encompasses more than one of the above;
(3) a related topic associated with one of the above.

Related topics are: land *area* classification, *biomass, land use, owner* surveys, *satellite* image interpretation, *soils,* and *technique. Biomass* includes nontraditional wood products such as firewood as well as herbaceous biomass from tree crowns, shrubs, and nonwoody plants. *Design* studies include discussion of the multiple values to be considered in sampling, analysis, and design of inventories. *Owner* surveys include landowner surveys as well as forest land characteristics described by landowner type. *Technique* studies generally involve statistical model development of inventoried forest characteristics to assess a forest attribute, or field sampling of a forest attribute that is compatible with the existing sample design. Examine the references carefully for more detailed information.

ADDITIONAL INFORMATION

The codes associated with the FIA units, the postal codes for the States that they survey, and whom to contact for further information about forest survey data and analyses are provided:

INTFIA: AZ, CO, ID, MT, NM, NV, UT, WY.
Address: Project Leader, Forest Survey Unit, Intermountain Research Station, Forestry Sciences Laboratory, 507 25th Street, Ogden, UT 84401. Telephone (801) 625-5388

NCFIA: KS, IL, IN, IA, MI, MN, MO, ND, NE, SD, WI.
Address: Project Leader, Forest Inventory and Analysis Unit. North Central Forest Experiment Station, 1992 Folwell Avenue, St. Paul, MN 55108. Telephone (612) 649-5139

NEFIA: CT, DE, KY, MD, ME, MA, NH, NJ, NY, OH, PA, RI, VT, WV
Address: Project Leader, Forest Inventory and Analysis Unit, Northeastern Forest Experiment Station, 5 Radnor Corporate Center, Suite 200, 100 Matsonford Road, Radnor, PA 19087. Telephone (215) 975-4075

PNWFIA: OR, WA, CA. Also conducts surveys in the Hawaiian Islands and other United States territories in the Pacific Ocean.
Address: Project Leader, Forest Inventory and Analysis Unit, Pacific Northwest Research Station, Forestry Sciences Laboratory, PO. Box 3890, Portland, OR 97208. Telephone (503) 321-5800

PNWFIA: AK.
Address: Project Leader, Forest Inventory and Analysis Unit, Pacific Northwest Research Station, Forestry Sciences Laboratory, 201 East 9th Avenue, Suite 303, Anchorage, AK 99501. Telephone (907) 271-2585

RM: Not responsible for individual States. Focus is on the analysis of regional resources, national issues, and statistical sampling techniques. Data are obtained in cooperation with a number of Federal and State agencies, in addition to FIA units. There are two units:

(1) Renewable Resource Ecology and Management Science Research Unit. Telephone (301) 498-1850.

(2) Multiresource Inventory Techniques Unit. Telephone (303) 4981294.

Address: Project Leader (of the unit of interest), Rocky Mountain Forest and Range Experiment Station, 240 West Prospect, Fort Collins, CO 80526-2098.

SEFIA: FL, GA, NC, SC, VA.
Address: Project Leader, Forest Inventory and Analysis Unit, Southeastern Forest Experiment Station, 200 Weaver Boulevard, PO. Box 2680, Asheville, NC 28802. Telephone (704) 257-4350

SOFIA: AL, AR, LA, MS, OK, TN, TX. Also conducts surveys in Puerto Rico and other U.S. territories in the Caribbean Basin.
Address: Project Leader, Forest Inventory and Analysis Unit, Southern Forest Experiment Station, 201 Lincoln Green, PO. Box 906, Starkville, MS 39759. Telephone (601) 324-1611

WO: Federal coordination for FIA units, under the Director for Research; U.S. Department of Agriculture, Forest Service; Forest Inventory, Economics, and Recreation Research Staff.
Address: Branch Chief, Forest Inventory and Analysis Unit, PO. Box 96090, Auditors Building, 201 14th Street, SW, Washington, DC 20250. Telephone (202) 382-9343

Table 1 Index

Subjects and page numbers for citations with the subject in a title or keyword:

area class 18-21, 23–25, 28, 30, 32, 36, 38, 40, 43–45, 47–54, 56–59, 61
biomass 22, 23, 25–28, 37, 40, 41, 43, 45, 50, 51, 55, 60
design 19, 22–25, 28, 31–35, 37–43, 45–54, 56, 58–60
hydrology 30
INTFIA 18, 22, 25–27, 33, 39, 45–46, 48–49, 58–59
land use 18, 20, 21, 24, 26, 29, 31, 32, 34, 36, 39, 48, 49, 51, 54
multivalue 18-34, 37–40, 42–45, 48, 50–54, 56, 58, 60, 61
NCFIA 18, 23, 25–30, 34–36, 39, 42, 45, 47–49, 54–56, 58, 59
NEFIA 18–21, 23–32, 34–36, 38, 39, 42, 45, 48–50, 53–56, 58-60
owner 18, 20, 24, 25, 29, 30, 32, 34, 36, 38, 49–51, 56, 60
PNWFIA 18, 21, 22, 27, 31, 32, 34–36, 39, 40, 43, 45–50, 55, 57-61
range 31, 36, 37, 45, 48, 52, 54, 56, 58, 60
recreation 29, 30, 36, 51-53
RM 19, 25, 28, 29, 31, 34, 35, 37, 50, 58, 60
satellite 22, 36, 57, 60
SEFIA 18–20, 23, 25–31, 33–41, 43, 45, 48–50, 53, 54, 56–59
SOFIA 18–21, 25, 27, 28, 31, 33, 34, 36–39, 41–45, 48–54, 56-59
soils 29, 30, 33, 55, 61
technique 19–30, 33–37, 39, 40, 42–57, 60
water 30, 37, 52, 55, 59
wildlife 19, 23-25, 28, 29, 31, 33–39, 41, 43, 46–50, 52, 54, 59
WO 21, 22, 28, 33, 34, 37, 41, 42, 53, 54, 58
United States: 18-24, 26-28, 31–37, 39–42, 44–50, 52–59
AL 37, 49, 51, 52,57
AK 31, 34, 39–41, 45, 55,58,60, 61
AZ 22, 26
AR 36, 52
CA 21, 22, 31, 32, 36, 43, 47, 50, 57
co 39
CT 24, 30, 32, 35, 38, 55
DE 24, 38
FL 19, 20, 28, 43
GA 19, 28, 36
ID 39, 59
IL 26, 36
IN 36, 56
IA 36
KS 25, 34, 56
KY 18, 20, 24, 36, 38
LA 26, 48, 51, 52, 56–58
ME 24, 31, 32, 35, 36, 48, 49, 55, 56, 60
MA 24, 30, 32, 35, 38, 55
MD 24, 38
MI 25, 29, 30, 33, 35, 36, 42, 47, 55
MN 23, 25, 29, 33, 35, 36, 47, 55, 56
MO 36, 48
MS 25, 32, 38, 50, 52
MT 33, 39
NH 19, 20, 24, 30, 32, 35, 38, 55
NJ 30, 38
NM 59
NV 25
NY 20, 24, 26, 35, 42, 49
NC 19, 26, 27, 36, 53
OH 20, 21, 23, 24, 29
OR 32, 36, 47
PA 20, 24, 50
RI 24, 30, 32, 35, 38, 55
SC 19, 28–30, 33, 36, 39, 43, 53
TN 26, 33, 36, 43
TX 19, 44, 51, 52
UT 25, 39
VT 24, 30, 32, 35, 38, 45, 54, 55, 60
VA 25, 27, 41, 59
WA 48
WV 20, 30, 38
WI 29, 33, 35, 36, 47, 50, 55, 56
WY 39

Table 1.--Citations of studies using U.S. Department of Agriculture, Forest Service, Forest Inventory and Analysis data for the continental United States, 1974-1990, by author, year, title, publication source, and keywords.

Author(s)	Year	Title	Source	Keywords
Abernethy, Y.; Turner R.E.	1987	U.S. forested wetlands 1940-1980.	Bioscience. 37(10): 721-727.	area class, INTFIA, NCFIA, NEFIA, PNWFIA, SEFIA, SOFIA
Alerich, Carol L.	1990	Forest statistics for Kentucky--1975 and 1988.	Resource Bulletin NE-117. Radnor, PA: U.S. Department of Agriculture,. Forest Service, Northeastern Forest Experiment Station. 295 p.	KY, multivalue, NEFIA
Alig, Ralph J.	1983	Impacts of forest land conversion: an overview.	Renewable Resources Journal. 1(4) and 2(1): 8-13.	land use, SEFIA
Alig, Ralph J.	1984	Econometric analysis of forest acreage trends in the Southeast.	Forest Science. 32: 119-134.	SEFIA, technique
Alig, Ralph J.	1984	Forest acreage trends in the Southeast: econometric analysis and policy simulations.	Ph.D. dissertation. Corvallis, OR: Oregon State University. 156 p.	land use, SEFIA
Alig, Ralph J.	1985	Modeling acreage changes in forest ownerships and cover types in the Southeast.	Research Paper RM-260. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 14 p.	land use, SEFIA
Alig, Ralph J.; Adams Darius M.; Haynes, Richard W.	1983	Long-range projections of forest area change: new approaches are needed.	Journal of Forestry. 81(11): 723-727.	land use, United States
Alig, Ralph J.; Hohenstein, William G.; Murray, Brian C.; Haight, Robert G.	1990	Changes in area of timberland in the United States, 1952-2040, by ownership, forest type, region, and State.	General Technical Report SE-64. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 34 p.	area class, INTFIA, NCFIA, NEFIA, PNWFIA, SEFIA, SOFIA
Alig, Ralph J.; Knight, Herbert A.; Birdsey, Richard A.	1986	Recent area changes in southern forest ownerships and cover types.	Research Paper SE-260. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 10 p.	land use, SEFIA, SOFIA
Alig, Ralph J.; Lee, Karen J.; Moulton, Robert J.	1990	Likelihood of timber management on nonindustrial private forests: evidence from research studies.	General Technical Report SE-60. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 17 p.	owner, United States
Alig, Ralph J.; White, Fred C.; Murray, Brian C.	1988	Economic factors influencing land use changes in the South-Central United States.	Research Paper SE-272. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 23 p.	owner, SOFIA

Author(s)	Year	Title	Source	Keywords
Alig, Ralph J.; Wyant, James G.	1985	Projecting regional area changes in forestland cover in the U.S.A.	Ecological Modelling. 29: 27-34.	RM, SEFIA, technique
Anderson, Robert L.; Cost, Noel D.; McClure Joe P.; Ryan, George	1986	Predicting severity of fusiform rust in young loblolly and slash pine stands in Florida, Georgia, and the Carolinas.	Southern' Journal of Applied Forestry. 10: 38-42.	area class, FL, GA, NC, SC, SEFIA
Anderson, Robert L.; McCartney, Thomas C.; Cost, Noel D.; Devine, Hugh; Botkin, Martin.	1988	Fusiform-rust-hazard maps for loblolly and slash pines.	Research Note SE-351. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 7 p.	area class, SEFIA
Baker, R.L.; Pearson, H.A.	1981	Plot delineation with a pin-and-chain.	Journal of Range Management. 34(4): 336-337.	SOFIA, technique
Baker, Robert D.	1982	Sampling and mapping for use-value taxation--a Texas example.	In: Brann, Thomas B.; House, Louis O., IV; Lund, H. Gyde, eds. In-place resource inventories: principles and practices: Proceedings of a national workshop; 1981 August 9-14; Orono, ME. SAF 82-02. Bethesda, MD: Society of American Foresters: 805-810.	SOFIA, soils, TX
Barnard, Joseph E.	1990	Environmental health concerns: a role for forest inventory and monitoring.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 341-348.	multivalue, United States
Barnard, Joseph; Myers Wayne; Pearce, John; Ramsey, Fred; Sissenwine, Michael; Smith, Woollcott	1985	Surveys for monitoring changes and trends in renewable resources: forest and marine fisheries.	The American Statistician. 39(4): 363-373.	design, United States
Barnes, Robert B.	1975	A quantitative evaluation of winter deer browse in southern New Hampshire forests.	MS. thesis. Durham, NH: University of New Hampshire. 96 p.	NEFIA! NH, wildlife
Barnes, Robert B.	1979	Wildlife habitat from a forest resource inventory: is it possible?	In: Healy, W.H., ed. Transactions of the Northeast Section. The Wildlife Society: proceedings of the 36th northeast fish-and wildlife conference; 1979 April 1-4; Providence, RI: 151-159. Available from: Robert T. Brooks, USDA-FS, Holdsworth Hall, University of Massachusetts, Amherst, MA 01003.	design, NEFIA
Barnes, Robert B.; Barnard, Joseph E.	1979	A wildlife habitat survey as part of a multi-resource evaluation procedure.	In: Frayer, W.E., ed. Forest resource inventories: workshop proceedings; 1979 July 23-26; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forestry and Wood Science. 1: 77-89.	design, NEFIA

Author(s)	Year	Title	Source	Keywords
Bechtold, William A.; Brown,, Mark J.; Sheffield, Raymond M.	1990	Florida's forests, 1987.	Resource Bulletin SE-110. Asheville, NC: U.S. Department of Agriculture,, Forest Service, Southeastern Forest Experiment Station. 83 p.	area class, FL, SEFIA
Bell, John F.; Atterbury, Toby, eds.	1983	Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR.	Corvallis, OR: Oregon State University, College of Forestry. 737 p.	multivalue, United States
Beltz, Roy C.; Bertelson, Daniel F.	1990	Distribution maps for Midsouth tree species.	Resource Bulletin SO-151. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 56 p.	area class, SOFIA
Binkley, Clark S.	1983	Private forestland use: status, projections, and policy implications.	In: Royer, Jack P.; Risbrudt, Christopher D., eds. Nonindustrial private forests: a review of economic and policy studies: Symposium proceedings; 1983 April 19-20; Durham, NC. Durham, NC: Duke University, School of Forestry and Environmental Studies: 51-70.	owner, United States
Binkley, Clark Shepard	1981	Timber supply from private nonindustrial forests: a microeconomic analysis of landowner behavior.	Bulletin 92. New Haven, CT: Yale University, School of Forestry and Environmental Studies. 97 p.	technique, NEFIA. NH
Birch, Thomas W.	1982	The forest-land owners of Ohio.	Resource Bulletin NE-74. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 84 p.	multivalue, NEFIA, OH
Birch, Thomas W.	1983	The forest-land owners of New York.	Resource Bulletin NE-78. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 80 p.	multivalue, NEFIA, NY
Birch, Thomas W.; Dennis, Donald F.	1980	The forest-land owners of Pennsylvania.	Resource Bulletin NE-66. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 90 p.	multivalue, NEFIA, PA
Birch, Thomas W.; Kingsley, Neal P.	1978	The forest-land owners of West Virginia.	Resource Bulletin NE-58. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 76 p.	multivalue, NEFIA, WV
Birch, Thomas W.; Powell, Douglas S.	1978	The forest-land owners of Kentucky.	Resource Bulletin,NE-54. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 101 p.	KY, multivalue, NEFIA
Birch, Thomas W.; Pywell, Nancy A.	1986	Communicating with nonindustrial private forest-land owners: getting programs on target.	Research Paper NE-593. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 11 p.	multivalue, NEFIA, PA

Author(s)	Year	Title	Source	Keywords
Birch, Thomas W.; Wharton, Eric W.	1982	Land use change in Ohio, 1952 to 1979	Resource Bulletin NE-70. Broomall, PA: U.S. Department of Agriculture,, Forest Service, Northeastern Forest Experiment Station. 24 p.	area class, NEFIA, OH
Birdsey, Richard	1990	Updating methods for forest inventories--an overview.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 429-435.	technique, WO
Birdsey, Richard A.	1990	Inventory of carbon storage and accumulation in U.S. forest ecosystems.	In: Kaiser, H. Fred, coord. Proceedings: division 4: 19th IUFRO World Congress; 1990 August 5-11; Montreal, Canada. Montreal! Canada: Canadian IUFRO World Congress Organizing Committee: 462.	multivalue, United States, WO
Birdsey, Richard A.; McWilliams, William H	1986	Midsouth forest area trends.	Resource Bulletin SO-107. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 17 p.	area class, SOFIA
Birdsey, Richard; Schreuder, Hans	1990	Forest change--an assessment of nationwide forest inventory methods.	In: Labau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 119-125.	technique, United States, WO
Bolsinger, Charles L.	1979	Oaks in California's commercial forests--volume, stand structure and defect characteristics.	In: Plumb, Timothy R., tech. coord. Proceedings of the symposium on the ecology, management, and utilization of California oaks; 1979 June 26-28; Claremont, CA. General Technical Report PSW-44. Berkeley, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Forest and Range Experiment Station: 101-106.	area class, CA, PNWFIA
Bolsinger, Charles L.	1980	California forests: trends, problems, and opportunities.	Resource Bulletin PNW-89. Portland OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 138 p.	area class, CA, PNWFIA
Bolsinger, Charles L.	1988	The hardwoods of California's timberlands, woodlands, and savannas.	Resource Bulletin PNW-148. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 50 p.	CA, multivalue, PNWFIA
Bolsinger, Charles L.	1989	Shrubs of California's chaparral timberland, and woodland: area, ownership,, and stand characteristics.	Resource Bulletin PNW-160. Portland OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 50 p.	CA, multivalue, PNWFIA

Author(s)	Year	Title	Source	Keywords
Bolsinger, Charles L.	1990	California's western juniper and pinyon-juniper woodlands: area, stand characteristics, wood volume, and fenceposts.	Resource Bulletin PNW-166. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 37 p.	CA, multivalue, PNWFIA
Bolsinger, Charles L.; Jaramillo, Annabelle E.	1990	Taxus brevifolia Nutt.: Pacific yew.	In: Burns, Russell M.; Honkala, Barbara H., tech. coords. Silvics of North America: volume 1, conifers. Agriculture Handbook 654. Washington, DC: U.S. Department of Agriculture, Forest Service: 573-579.	PNWFIA, technique
Bones, James T.	1990	Today's concerns about the forest ecosystem and what they suggest for future inventories and monitoring.	In: Kaiser, H. Fred, coord. Proceedings: division 4: 19th IUFRO World Congress: 1990 August 5-11; Montreal, Canada. Montreal! Canada: Canadian IUFRO World Congress Organizing Committee: 32-36.	design, United States, WO
Born, J. David	1984	Forest survey status at the Inter-mountain Station: part II--techniques.	In: Lund, H. Gyde, ed. Preparing for the 21st century: proceedings of the forest land inventory workshop; 1984 March 26-30; Denver, CO. Washington, DC: U.S. Department of Agriculture, Forest Service, Timber Management Staff: 100-108.	INTFIA, multivalue
Born, J. David	1987	Comparing LANDSAT thematic mapper imagery with alternative data sources for woodland inventory of the Prescott National Forest.	In: Remote sensing for resource inventory,, planning, and monitoring: 2nd Forest Service remote sensing applications conference; 1988 April 11-15; Slidell, LA. Falls Church, VA: American Society for Photogrammetry and Remote Sensing: m-1a5.	INTFIA, technique
Born, J. David	1990	Non-industrial wood resources in the Rocky Mountain States.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 517-521.	design, INTFIA
Born, J. David; Chojnacky, David C.	1985	Woodland tree volume estimation: a visual segmentation technique.	Research Paper INT-344. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 16 p.	biomass, INTFIA
Born, J. David; Pearlberg, C.	1987	Forest inventory and LANDSAT MSS vegetation mapping for Arizona.	In: Symposium on strategies for classification and mangoement of dative veqetation for food production in arid zones; 1987 October 12-16; Tucson. AR. General Technical Report RM-150. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station: 53-58.	AZ, INTFIA, satellite
Born, J. David; Van Hooser, D. D.	1987	Inter-mountain Forest Survey remote sensing, and geographic information.	In: GIS '87': 2nd annual international conference, exhibits and workshops on geographical information systems; 1987 October 26-30; San Francisco, CA. Falls Church, VA: American Society for Photogrammetry and Remote Sensing. 2: 416-422.	INTFIA satellite

Author(s)	Year	Title	Source	Keywords
Boyce, Stephen G.; Cost, Noel D.	1978	Forest diversity: new concepts and applications.	Research Paper SE-194. Asheville, NC: U.S. Department of Agriculture,, Forest Service, Southeastern Forest Experiment Station. 36 p.	SEFIA, wildlife
Brand, Gary J.; Shifley, Stephen R.; Ohmann, Lewis F.	1986	Linking wildlife and vegetation models to forecast the effects of management.	In: Verner, Jared; Morrison, Michael L.; Ralph, C. John, eds. Wildlife 2000: modeling habitat relationships of terrestrial vertebrates: International symposium; 1984 October 7-11; Fallen Leaf Lake, CA. Madison, WI: University of Wisconsin Press: 383-387.	NCFIA, technique
Brand, Gary J.; Smith, W. Brad	1985	Evaluating allometric shrub biomass equations fit to generated data.	Canadian Journal of Botany. 63(1): 64-67.	MN, NCFIA, technique
Brann, Thomas B.; House, Louis O., IV; Lund, H. Gyde, eds.	1982	In-place resource inventories: principles and practices: Proceedings of a national workshop; 1981 August 9-14; Orono, ME.	SAF 82-02. Bethesda, MD: Society of American Foresters. 1101 p.	multivalue, United States
Brooks, Robert T.	1986	Forest land wildlife habitat resources of south-central Ohio.	Resource Bulletin NE-94. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 32 p.	NEFIA! OH, wildlife
Brooks, Robert T.	1989	An analysis of regional forest growth and atmospheric deposition patterns, Pennsylvania (USA).	In: Bucher, Juerg B.; Bucher-Wallin, Inga, eds. Air pollution and forest decline: Proceedings of the 14th international meeting for specialists in air pollution effects on forest ecosystems; 1988 October 2-8; Interlaken, Switzerland. IUFRO P2.05. Birmensdorf, Switzerland: Eidgenoessische Anstalt fuer das forstliche Versuchswesen [Swiss Federal Institute of Forestry Research]. 1: 283-288.	NEFIA, PA, technique
Brooks, Robert T.	1989	History and future trends for wildlife and wildlife habitat in Northeastern United States.	In: Finley, J.C.; Brittingham, M.C., eds. Timber management and its effect on wildlife: forestry resource issues conference: Proceedings; 1989 April 4-6; University Park, PA. University Park, PA: The Pennsylvania State University: 37-54.	area class, NEFIA
Brooks, Robert T.	1990	State-of-the-art methodology of forest inventory: wildlife habitat assessment in the Northeastern United States.	In: LaBau, Vernop J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 538-543.	design, NEFIA
Brooks, Robert T.	1990	Status and trends of raptor habitat in the Northeast.	In: Pendleton, Beth Giron, ed. Proceedings of the northeast raptor management symposium and workshop; 1988 May 16-18; Syracuse, NY. Scientific and Technical Series No. 13. Washington, DC: National Wildlife Federation, Institute for Wildlife Research: 123-132.	NEFIA wildlife

Author(s)	Year	Title	Source	Keywords
Brooks, Robert T.	1990	Wildlife habitat evaluation tools: the U.S. Forest Service's forest inventory and analysis.	In: Oswald, Helfried, coord. Proceedings: division 1: 19th IUFRO World Congress: 1990 August 5-11; Montreal, Canada. Montreal, Canada: Canadian IUFRO World Congress Organizing Committee. 2: 163-172.	design, NEFIA, United States
Brooks, Robert T.; Barnard, Joseph E.	1984	Kentucky's fourth forest inventory: information for wildlife habitat evaluation.	In: McComb, W.C., ed. Management of nongame species and ecological communities: Proceedings of a workshop; 1984 June 11-12; Lexington, KY. Lexington, KY: University of Kentucky: 53-58.	area class, KY, NEFIA
Brooks, Robert T.; Birch, Thomas W.	1986	Opportunities and constraints for wildlife habitat management on private forests of the Northeast.	Northern Journal of Applied Forestry. 3: 109-113.	NEFIA, owner
Brooks, Robert T.; Birch, Thomas W.	1988	Changes in New England forests and forest owners: implications for wildlife habitat resources and management.	In: McCabe, Richard E., ed. Transactions of the 53rd North American wildlife and natural resources conference; 1988 March 18-23; Louisville, KY. Washington, DC: Wildlife Management Institute: 78-87.	CT, MA, ME, multivalue, NEFIA, NH, RI, VT
Brooks, Robert T.; DiGiovanni, Dawn M.	1989	Forest wildlife habitat statistics for Maryland and Delaware--1986.	Resource Bulletin NE-110. Broomall, PA: U.S. Department of Agriculture,, Forest Service, Northeastern Forest Experiment Station. 171 p.	area class, DE, MD, NEFIA
Brooks, Robert T.; Frieswyk, Thomas S.; Malley, Anne M.	1987	Forest wildlife habitat statistics for New Hampshire--1983.	Resource Bulletin NE-97. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 107 p.	area class, NEFIA, NH
Brooks, Robert T.; Frieswyk, Thomas S.; Malley, Anne M.	1987	Forest wildlife habitat statistics for Vermont--1983.	Resource Bulletin NE-100. Broomall, PA: U.S. Department of Agriculture! Forest Service, Northeastern Forest Experiment Station. 118 p.	area class, NEFIA, VT
Brooks, Robert T.; Frieswyk, Thomas S.; Ritter, Arthur	1986	Forest wildlife habitat statistics for Maine--1982.	Resource Bulletin NE-96. Broomall, PA: U.S. Department of Agriculture,, Forest Service, Northeastern Forest Experiment Station. 146 p.	area class, ME, NEFIA
Brooks, Robert T.; Porter, William F.	1983	Development of a procedure to establish conditions and monitor changes in regional wildlife habitat quality.	In: Bell, John F.; Atterbury, Toby, eds. Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis, OR: Oregon State University, College of Forestry: 223-226.	area class, NEFIA
Brooks, Robert T.; Rowntree, Rowan A.	1984	Forest area characteristics for metropolitan and nonmetropolitan counties of three Northeastern States of the United States.	Urban Ecology. 8: 341-346.	land use, NEFIA, NY, OH, PA
Brooks, Robert T.; Scott, Charles T.	1983	Quantifying land-use edge from aerial photographs.	Wildlife Society Bulletin. 11(4): 389-391.	NEFIA! technique

Author(s)	Year	Title	Source	Keywords
Brooks, Robert T.; Sykes, Karen J.	1984	Sampling land use edge from aerial photographs--line transect vs. circular pattern.	Research Note NE-321. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 6 p.	NEFIA, technique
Buhyoff, Gregory J.; Hull R. Bruce, IV; Lien: John N.; Cordell, H. Ken.	1986	Prediction of scenic quality for southern pine stands.	Forest Science. 32(3): 769-778.	SEFIA technique, VA
Bullard, Steven H.; Weaver, G.H.; van Hees, Willem W.S.	1981	Stand-age analysis of timber on Mississippi's private, nonindustrial forests.	Bulletin 896. Mississippi State, MS: Mississippi Agricultural and Forestry Experiment Station. 11 p.	area class, MS, SOFIA
Carpenter, Eugene M.; Hansen, Mark H.	1986	The private forest landowners of Minnesota--1982.	Resource Bulletin NC-95. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 55 p.	MN, multivalue, NCFIA
Carpenter, Eugene M.; Hansen, Mark H.; St. John, Dennis M.	1985	The private forest landowners of Michigan.	Resource Bulletin NC-93. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 55 p.	MI, multivalue, NCFIA
Castonguay, Thomas L.; Hansen, Mark H.	1984	Wooded strips and windbreaks in Kansas--1981.	Research Note NC-313. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 8 p.	KS, NCFIA, technique
Chalk, David E.; Miller, Stephen A.; Hoekstra, Thomas W.	1984	Multiresource inventories: integrating information on wildlife resources.	Wildlife Society Bulletin. 12: 357-364.	design, RM
Chojnacky, David C.	1984	Volume and biomass for curlleaf cercocarpus in Nevada.	Research Paper INT-332. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 8 p.	INTFIA, multivalue, NV
Chojnacky, David C.	1985	Pinyon-juniper volume equations for the Central Rocky Mountain States.	Research Paper INT-339. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 27 p.	biomass, INTFIA
Chojnacky, David C.	1986	Pinyon-juniper site quality and volume growth equations for Nevada.	Research Paper INT-,372. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 4 p.	biomass, INTFIA, NV
Chojnacky, David C.	1987	Estimating singleleaf pinyon and Utah juniper volumes for several utilization standards.	Western Journal of Applied Forestry. 2(2): 51-55.	biomass, INTFIA, UT
Chojnacky, David C.	1987	Volume and growth prediction for pinyon-juniper.	In: Everett, R.L., comp. Pinyon-juniper conference: Proceedings; 1986 January 13-16; Reno, NV. General Technical Report INT-215. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station: 207-215.	INTFIA, multivalue

Author(s)	Year	Title	Source	Keywords
Chojnacky, David C.	1988	Juniper, pinyon, oak and mesquite volume equations for Arizona.	Research Paper INT-391. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 11 p.	AZ, biomass, INTFIA
Chojnacky, David C.	1988	Modeling volume growth for Arizona's pinyon and juniper forests.	In: Ek, Alan R.; Shifley, Stephen R.; Burk, Thomas E.,, eds. Forest growth modelling and prediction: proceedings of the IUFRO conference; 1987 August 23-27; Minneapolis, MN. Society of American Foresters Publication No. 87.12. General Technical Report NC-120. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 1: 247-254.	AZ, biomass, INTFIA
Chojnacky, David C.	1988	Woodland volume equations for Arizona Fort Apache and San Carlos Indian Reservations.	Research Paper INT-379. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 7 p.	AZ, biomass, INTFIA
Chojnacky, David C.; Ott, Janet S.	1986	Pinyon-juniper volume equations for Arizona Hualapai and Havasupai Indian Reservations.	Research Note INT-363. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 4 p.	AZ, INTFIA, technique
Clawson, Marion	1979	Forests in the long sweep of American history.	Science. 204: 1168-1174.	land use, United States
Collins, Dennis C.	1989	Timberland and woodland resources outside National Forests in Arizona--1985.	Resource Bulletin INT-66. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 61 p.	AZ, INTFIA, multivalue
Conner! Roger C.; Born, J. David; Green, Alan W.; O'Brien, Renee A.	1990	Forest resources of Arizona.	Resource Bulletin INT-69. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 92 p.	AZ, INTFIA, multivalue
Conner, William H.; Toliver, John R.	1990	Long-term trends in the bald-cypress (Taxodium distichum) resource in Louisiana (U.S.A.).	In: Jackson, Ben D., ed. Special issue: the international forested wetlands resource: identification and inventory: Proceedings of the international conference; 1988 September 19-22; Baton Rouge, LA. Forest Ecology and Management. 33/34: 543-557.	area class, LA, SOFIA
Considine, Thomas J., Jr.	1984	An analysis of New York's timber resources.	Resource Bulletin NE-80. Broomall, PA: U.S. Department of Agriculture; Forest Service, Northeastern Forest Experiment Station. 70 p.	multivalue, NEFIA, NY
Cook, Elizabeth A.; Iverson, Louis R.; Graham, Robin L.	1989	Estimating forest productivity with thematic mapper and biogeographical data.	Remote Sensing of Environment. 28: 131-141.	IL, NC, NCFIA, NY, TN
Cost, Noel D.	1978	Multiresource inventories--a technique for measuring volume in standing trees.	Research Paper SE-196. Asheville, NC: U.S. Department of Agriculture,, Forest Service, Southeastern Forest Experiment Station. 18 p.	biomass, SEFIA

Author(s)	Year	Title	Source	Keywords
Cost, Noel D.	1979	Ecological structure of forest vegetation.	In: Frayer, W.E., ed. Forest resource inventories: workshoo oroceedings: 1979 July 23-26; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forestry and Wood Sciences. 1: 29-37.	SEFIA! technique
Cost, Noel D.	1984	Current inventory situation of the FIA unit in the Southeast.	In: Lund, H. Gyde, ed. Preparing for the 21st century: proceedings of the forest land inventory workshop; 1984 March 26-30; Denver, CO. Washington, DC: U.S. Department of Agriculture, Forest Service, Timber Management Staff: 65-75.	multivalue, SEFIA
Cost, Noel D.	1984	FIA understory measurement techniques in the Southeast.	In: Schlatterer, Ed; Lund, H. Gyde, eds. Proceedings of the inventory integration workshop; 1984 October 15-19; Portland! OR. Washington, DC: U.S. Department of Agriculture, Forest Service, Range and Timber Management Staffs: 101-110.	multivalue, SEFIA
Cost, Noel D.	1986	Multiresource inventories: woody biomass in North Carolina.	Research Paper SE-261. Asheville, NC: U.S. Department of Agriculture,, Forest Service, Southeastern Forest Experiment Station. 36 p.	multivalue, NC, SEFIA
Cost, Noel D.	1988	Multiresource inventories: woody biomass in Virginia.	Research Paper SE-269. Asheville, NC: U.S. Department of Agriculture! Forest Service, Southeastern Forest Experiment Station. 35 p.	multivalue, SEFIA, VA
Cost, Noel D.	1990	A case for forest damage assessment using permanent forest inventory plots.	In: Lund, H. Gyde; Preto, Giovanni, tech. coords. Global natural resource monitoring and assessments: preparing for the 21st century: Proceedings of the international conference and workshop; 1989 September 24-30; Venice, Italy. Bethesda, MD: American Society for Photogrammetry and Remote Sensing: 479-487.	multivalue, SEFIA
Cost, Noel D.	1990	Expanding conventional timber inventories into a broader, multiresource inventory in the Southeastern States.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 505-511.	multivalue, SEFIA
Cost, Noel D.; Howard, James O.; Mead, Bert; McWilliams, William H.; Smith, W. Brad; Van Hooser, Dwane D.; Wharton, Eric H.	1990	The forest biomass resource of the United States.	General Technical Report WO-57. Washington, DC: U.S. Department of Agriculture, Forest Service. 21 p.	INTFIA, multivalue, NCFIA, NEFIA, PNWFIA SEFIA, 'SOFIA, United States

Author(s)	Year	Title	Source	Keywords
Cost, Noel D.; Knight, Herbert A.	1983	Forest classification considerations for monitoring changes and trends.	In: Bell, John F.; Atterbury, Toby, eds. Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis, OR: Oregon State University, College of Forestry: 157-161.	multivalue, SEFIA
Cost, Noel D.; McClure, Joe P.	1982	Multiresource inventories--forest biomass in Florida.	Research Paper SE-235. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 24 p.	FL, multivalue, SEFIA
Cost, Noel D.; McClure, Joe P.	1982	Multiresource inventories: techniques for estimating biomass on a statewide basis.	Research Paper SE-228. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 31 p.	multivalue, SEFIA
Cost, Noel D.; McClure, Joe P	1984	Biomass inventory and assessment in the Southern United States.	Biomass. 6: 15-24.	multivalue, SEFIA, SOFIA
Cost, Noel D.; Tansey, John B.	1985	Multiresource inventories: woody biomass in Georgia.	Research Paper SE-248. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 32 p.	GA, multivalue, SEFIA
Craver, Gerald C.	1982	Multiresource inventories--a technique for determining the distribution and extent of honeysuckle on commercial forest land in South Carolina.	Research Note SE-317. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 11 p.	area class, SC, SEFIA
Cushwa, Charles T.; Barnard, Joseph E.; Barnes, Robert B.	1977	Trends in woodcock habitat in the United States.	In: Keppie, Daniel; Owen, Ray B., Jr., eds. Proceedings of the 6th woodcock symposium; 1977 October 4-6; Fredericton, New Brunswick, Canada. Fredericton, New Brunswick: Canadian Wildlife Service, New Brunswick Department of Natural Resources, and U.S. Fish and Wildlife Service: 31-38.	NCFIA, NEFIA, SEFIA, SOFIA, wildlife
Cushwa, Charles T.; Petoskey, Merrill L., chairmen.	1979	Coordinating wildlife habitat inventories and evaluations.	In: Sabol, Kenneth, ed. Transactions of the 44th North American and natural resources conference; 1979 March 24-28; Toronto, Canada. Washington, DC: Wildlife Management Institute: 337-467.	design, United States, WO
Czaplewski, Raymond L.; Alig, Ralph J.; Cost, Noel D.	1988	Monitoring land/forest cover using the Kalman filter: a proposal.	In: Ek, Alan R.; Shifley, Stephen R.; Burk, Thomas E., eds. Forest growth modelling and prediction: proceedings of the IUFRO conference: 1987 August 23-27, Minneapolis, MN. Society of American Foresters Publication No. 87.12. General Technical Report NC-120. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 2: 1089-1096.	design, RM, SEFIA

Author(s)	Year	Title	Source	Keywords
Czaplewski, Raymond L.; Cost, Noel D.	1985	Land use cover classification using large, medium, and small scale photographs in South Carolina.	In: Color aerial photography in the plant sciences and related fields: Proceedings of the 10th biennial workshop on color aerial photography in the plant sciences; 1985 May 21-24; Ann Arbor, MI. Falls Church, VA: American Society for Photogrammetry and Remote Sensing: 35-44.	RM, SEFIA, technique
Czaplewski, Raymond L.; Cost, Noel D.	1985	Photointerpretation of wildlife, recreation, and livestock-grazing variables on one-acre forest plots in South Carolina.	In: Oderwald, Richard G.; Burkhart, Harold E.; Burk, Thomas E., eds. Use of auxiliary information in natural resource inventories: proceedings; 1985 October 1-2; Blacksburg, VA. Society of American Foresters Publication No. SAF 86-01. Blacksburg, VA: Virginia Polytechnic Institute and State University, School of Forestry and Wildlife Resources: 24-37.	multivalue, RM, SC, SEFIA
Czaplewski, Raymond L.; Cost, Noel D.; Bernu, Gregory J.; Moore, Richard A.	1986	Interpreting physiography, slope, aspect, operability, and accessibility of forest plots using large, medium, and small scale aerial photography in So. Carolina.	In: 1986 ASPRS-ACSM fall convention--ASPRS technical papers; 1986 September 28-October 3; Anchorage, AK. Falls Church, VA: American Society of Photogrammetry and Remote Sensing: 309-321.	RM, SC, SEFIA technique
Czaplewski, Raymond L.; Cost, Noel D.; Moore Richard A.; Bernu, Gregory J.	1990	Photointerpreting forest type and stand characteristics in South Carolina.	In: 12th biennial workshop on color aerial photography and videography in the plant sciences and related fields: Proceedings; 1989 May 23-26; Sparks, NV. Bethesda, MD: American Society for Photogrammetry and Remote Sensing: 51-60.	RM, SC, SEFIA, technique
David, Mark B.; Gertner, George Z.; Grigal, David F.; Ohmann, Lewis F.	1989	Sulfur accumulation and atmospherically deposited sulfate in the Lake States.	Research Paper NC-290. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 7 p.	MI, MN, NCFIA technique, WI
David, Mark B.; Grigal, David F.; Ohmann, Lewis F.; Gertner, George Z.	1988	Sulfur, carbon! and nitrogen relationships in forest soils across the northern Great Lake States as affected by atmospheric deposition and vegetation.	Canadian Journal of Forest Research. 18: 1386-1391.	MI, MN, NCFIA, technique, WI
DeBald, Paul S.	1982	Small-farm woodlands: other forest interests for small-scale agriculture.	In: Kerr, Howard W.; Knutson, Lloyd, eds. Research for small farms: Proceedings of the special symposium; 1981 November 15-18; Beltsville, MD. Miscellaneous Publication No. 1422. Beltsville, MD: U.S. Department of Agriculture, Agricultural Research Service: 245-251.	NEFIA, owner
Dennis, Donald F.	1983	An analysis of Ohio's forest resources.	Resource Bulletin NE-75. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 46 p.	multivalue, NEFIA, OH

Author(s)	Year	Title	Source	Keywords
Dennis, Donald F.	1989	An economic analysis of harvest behavior: integrating forest and ownership characteristics.	Forest Science. 35(4): 1088-1104.	NEFIA, NH, technique
Dennis, Donald F.	1990	Factors influencing posting of private nonindustrial forests in the Northeast.	In: More, Thomas A.; Donnelly, Maureen P.; Graefe, Alan R.; Vaske, Jerry J., eds. Proceedings of the 1990 Northeastern recreation research symposium; 1990 February 25-28; Saratoga Springs, NY. General Technical Report NE-145. Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station: 191-194.	NEFIA, owner, VT
Dennis, Donald F.	1990	Factors influencing recreational use of private woodland.	Research Note NE-341. Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 3 p.	NEFIA, owner, VT
Denton, Shirley R.; Barnes, Burton V.	1987	Tree species distributions related to climatic patterns in Michigan.	Canadian Journal of Forest Research. 17: 613-629.	area class, MI, NCFIA
DiGiovanni, Dawn M.	1990	Forest statistics for West Virginia--1975 and 1989.	Resource Bulletin NE-114. Radnor, PA: U.S. Department of Agriculture! Forest Service, Northeastern Forest Experiment Station. 172 p.	multivalue, NEFIA, WV
DiGiovanni, Dawn M.; Scott, Charles T.	1990	Forest statistics for New Jersey--1987.	Resource Bulletin NE-112. Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 97 p.	multivalue, NEFIA, NJ
Dickson, David R.; McAfee, Carol L.	1988	Forest statistics for Connecticut--1972 and 1985.	Resource Bulletin NE-105. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 102 p.	CT, multivalue, NEFIA
Dickson, David R.; McAfee, Carol L.	1988	Forest statistics for Massachusetts--1972 and 1985.	Resource Bulletin NE-106. Broomall, PA: U.S. Department of Agriculture! Forest Service, Northeastern Forest Experiment Station. 112 p.	MA, multivalue, NEFIA
Dickson, David R.; McAfee, Carol L.	1988	Forest statistics for Rhode Island--1972 and 1985.	Resource Bulletin NE-104. Broomall, PA: U.S. Department of Agriculture! Forest Service, Northeastern Forest Experiment Station. 96 p.	multivalue, NEFIA, RI
Dissmeyer, George E.	1979	Analysis of soils and hydrological data taken by renewable resources evaluation in South Carolina.	In: Frayer, W.E., ed. Forest resource inventories: workshop proceedings; 1979 July 23-26; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forestry and Wood Sciences. 1: 38-47.	SC, SEFIA, water
Dissmeyer, George E.; Cost, Noel D.	1984	Multiresource inventories: watershed condition of commercial forest land in South Carolina.	Research Paper SE-247. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 26 p.	multivalue, SC, SEFIA

Author(s)	Year	Title	Source	Keywords
Eck, Katherine C.	1984	Forest characteristics and associated deer habitat values, Prince William Sound Islands.	In: Meehan, William R.; Merrell, Theodore R.; Hanley, Thomas A., eds. Fish and wildlife relations in old-growth forests: Proceedings of a symposium; 1982 April 12-15; Juneau, AK. Morehead City, NC: American Institute of Fishery Research Biologists (available from John W. Reintjes, Rt. 4, Box 85, Morehead City, NC 28557): 235-245.	AK, PNWFIA, wildlife
Ewing, Robert A.; Tosta, Nancy; Tuazon, Raul; Huntsinger, Lynn; Marose, Robin; Nielson, Ken; Motroni, Robert; Turan, Sarah	1988	California's forests and rangelands: growing conflict over changing uses.	Sacramento, CA: California Department of Forestry and Fire Protection. Forest and Rangeland Resources Assessment Program (FRRAP). 348 p. + appendices.	CA, multivalue, PNWFIA
Ferwerda, J.A.	1982	Cooperative effort of the U.S. Forest Service and the Soil Conservation Service inventory of natural resources in Maine, 1980-1982.	In: Brann, Thomas B.; House, Louis O., IV; Lund, H. Gvde, eds. In-place resource inventories: priniipies and practices: Proceedings of a national workshoo: 1981 Auaust 9-14; Orono, ME. SAF 82-02. Bethesda, MD: Society of American Foresters: 603-606.	ME,, NEFIA, soils
Flather, Curtis H.	1988	Wildlife abundance and occurrence models: application in regional resource planning.	In: Gelinas, R.; Bond, D.; Smit, B., eds. Perspectives on land modelling: workshop proceedings; 1986 November 17-20; Toronto, Canada. Montreal, Canada: Polyscience Publications Inc.: 37-47.	design, RM
Flather, Curtis H.; Hoekstra, Thomas W.	1989	An analysis of the wildlife and fish situation in the United States: 1989-2040.	General Technical Report RH-178. Ft. Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 147 p.	multivalue, RM, United States
Flather, Curtis H.; Hoekstra, Thomas W.; Chalk, David E.; Cost, Noel D.; Rudis, Victor A.	1989	Recent historical and projected regional trends of white-tailed deer and wild turkey in the Southern United States.	General Technical Report RM-172. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 22 p.	RM, SEFIA, SOFIA, wildlife
Flather, Curtis H.; Joyce, Linda A.; King, Rudy M.	1990	Linking multiple resources analyses to land use and timber management: applications and error considerations.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5, Syracuse, NY. General Technical Report PNW-263. Portland, OR: .U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 478-485.	design, RM, SEFIA, SOFIA
Flebbe, Patricia A.; Cost, Noel D.; Hoekstra, Thomas W.	1988	Recent historical and projected regional trends of trout in the Southeastern United States.	General Technical Report RM-160. Fort Collins CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 19 p.	RM, SEFIA, wildlife

Author(s)	Year	Title	Source	Keywords
Fortmann, Louise	1990	The role of professional norms and beliefs in the agency-client relations of natural resource bureaucracies.	Natural Resources Journal. 30(2): 361-380.	CA, owner, PNWFIA
Fortmann, Louise; Huntsinger, Lynn	1985	California's oak lands: owners, use, and management.	Berkeley, CA: University of California, Department of Forestry and Resource Management. 78 p.	CA, multivalue, PNWFIA
Fortmann, Louise; Huntsinger, Lynn	1987	Mana ing California's oak wood3ands: a sociological study of owners.	In: Plumb, Timothy R.; Pillsbury, Norman H., tech. coords. Proceedings of the symposium on multiple-use management of California's hardwood resources; 1986 November 12-14; San Luis Obispo, CA. General Technical Report PSW-100. Berkeley, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Forest and Range Experiment Station: 379-384.	CA, multivalue, PNWFIA
Frayer, W.E., ed.	1979	Forest resource inventories: workshop proceedings; 1979 July 23-26; Fort Collins, CO.	Fort Collins, CO: Colorado State University, Department of Forest and Wood Sciences. Vol. 1: 1-513. Vol. 2: 514-1037.	multivalue, United States
Frayer, W.E.; Beltz, Roy C.	1985	Loss of bottomland hardwoods in the Mississippi Alluvial Plain.	In: Schmid-Haas, Paul, ed. Inventorying and monitoring endangered forests: Proceedings of the IUFRO conference; 1985 August 19-24; Zurich, Switzerland. Birmensdorf, Switzerland: Eidgenoessische Anstalt fuer das forstliche Versuchswesen [Swiss Federal Institute for Forestry Research]: 307-309.	design, MS, SOFIA
Gansner, David A.; Birch, Thomas W.; Arner, Stanford L.; Zarnoch, Stanley J.	1990	Cutting disturbance on New England timberlands.	Northern Journal of Applied Forestry. 7(3): 118-120.	CT, MA, ME, NEFIA, NH, owner, RI, VT
Gansner, David; Birch, Thomas; Frieswyk, Thomas	1988	Those resilient Yankee forests.	American Forests. July/August: 32-33,85-86.	area class, NEFIA
Gedney, Donald R.	1983	Diverse owners of nonindustrial private timberland in western Oregon.	Journal of Forestry. 81(11): 727-729.	area class, PNWFIA, OR
Gedney, Donald R.; Hiserote, Bruce A.	1989	Changes in land use in western Oregon between 1971-74 and 1982.	Resource Bulletin PNW-165. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 21 p.	area class, OR, PNWFIA
Gedney, Donald R.; Wall, Brian R.	1983	Changes in forest inventory objectives and their translation into inventory design in the Pacific Northwest.	In: Bell, John F.; Atterbury, Toby, eds. Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis, OR: Oregon State University, College of Forestry: 162-165.	multivalue, PNWFIA

Author(s)	Year	Title	Source	Keywords
Gering, Lawrence R.; May, Dennis M.; Teuber, Kurt B.	1990	The use of aerial photographs and angle-gauge sampling of tree crown diameters for forest inventory.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodolo y of forest inventory: a symposium proceedings; 1389 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 286-289.	SOFIA, technique, TN
Green, Alan W.; O'Brien, Renee A.; Schaefer, James C.	1985	Montana's forests.	Resource Bulletin INT-38. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 70 p.	INTFIA, MT, multivalue
Grigal, D.F.; Brovold, Nord, W.S.; Ohmann, L.F.	1989	Bulk density of surface soils and peat in the North Central United States.	Canadian Journal of Soil Science. 69: 895-900.	MI, MN, NCFIA, technique, WI
Grigal, D.F.; Ohmann, L.F.	1989	Spatial patterns in elemental concentrations of the forest floor across the North Central United States.	Journal of Environmental Quality. 18: 368-373.	MI, MN, NCFIA, technique, WI
Guenther, A.; Lamb, B.; Westberg, H.	1989	U.S. national biogenic sulfur emissions inventory.	In: Saltzman, Eric S.; Cooper, William J., eds. Biogenic sulfur in the environment: Symposium proceedings: 194th meeting of the American Chemical Society; 1987 August 30-September 4; New Orleans, LA. Washington, DC: American Chemical Society: 14-30. (Chapter 2).	technique, United States
Hahn, Jerold T.; Hansen, Mark H.	1990	North Central forest inventory data on a microcomputer.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodolo gy of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 558-564.	multivalue, NCFIA
Hamel, Paul B.; Cost, Noel D.; Sheffield, Raymond M.	1986	The consistent characteristics of habitats: a question of scale.	In: Verner, Jared; Morrison, Michael L.; Ralph, C. John, eds. Wildlife 2000: modeling habitat relationships of terrestrial vertebrates: International symposium; 1984 October 7-11; Fallen Leaf Lake, CA. Madison, WI: University of Wisconsin Press: 121-128.	SC, SEFIA, wildlife
Hamilton, Thomas E.	1987	Introduction to national land and resource management planning concepts.	In: Lund, H. Gyde; Caballero-Deloya, Miguel; Villarreal-Canton, Raul, eds. Land and resource evaluation for national planning in the tropics: Proceedings of the international conference and workshop; 1987 January 25-31; Chetumal, Mexico. General Technical Report WO-39. Washington, DC: U.S. Department of Agriculture, Forest Service: 15-20.	design, United States, WO

Author(s)	Year	Title	Source	Keywords
Hansen, Mark H.	1985	Line intersect sampling of wooded strips.	Forest Science. 31(2): 282-288.	KS, NCFIA, technique
Hansen, Mark H.	1990	The eastwide forest inventory database.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse: NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 545-552.	multivalue, NCFIA, NEFIA, SEFIA, SOFIA
Hawkes, Clifford L.; Chalk, David E.; Hoekstra, Thomas W.; Flather, Curtis H.	1983	Prediction of wildlife and fish resources for national assessments and appraisals.	General Technical Report WO-100. Washington, DC: U.S. Department of Agriculture, Forest Service. 21 p.	design, RM, United States
Haynes, Richard W., coordinator.	1990	An analysis of the timber situation in the United States: 1989-2040.	General Technical Report RM-199. Ft. Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 268 p.	multivalue, United States, WO
Healy, Robert G.	1984	Forests in an urban civilization: land use, land markets, ownership, and recent trends.	In: Bradley, Gordon A., ed. Land use and forest resources in a changing environment: the urban/forest interface: Proceedings of the national symposium on the urban/forest interface; 1982 October 27-29; Seattle, WA. Seattle, WA: University of Washington Press: 17-35.	multivalue, United States
Healy, Robert G.	1985	Competition for land in the American South: agriculture, human settlement, and the environment.	Washington, DC: The Conservation Foundation. 334 p.	land use, SEFIA, SOFIA
Hegg, Karl M.; Larson, Frederic R.; Mead, Delbert R.; Winterberger, Kenneth C.	1981	Multiresource inventories in Alaska..	In: Color aerial photography in the plant sciences and related fields: Proceedings of the 8th biennial workshop on color aerial photography in the plant sciences; 1981 April 21-23; Luray, VA. Falls Church, VA: American Society of Photogrammetry: 59-65.	AK, design, PNWFIA
Hirsch, Allan; Krohn, William B.; Schweitzer, Dennis L.; Thomas, Carl H.	1979	Trends and needs in federal inventories of wildlife habitat.	In: Sabol, Kenneth, ed. Transactions of the 44th North American wildlife and natural resources conference: consolidating conservation efforts; 1979 March 24-28; Toronto, Canada. Washington, DC: Wildlife Management Institute: 340-359.	design, United States
Hoekstra, Thomas W.; Flather, Curtis H.	1986	Theoretical basis for integrating wildlife in renewable resource inventories.	Journal of Environmental Management. 24: 95-110.	design, RM
Hoekstra, Thomas W.; Flather, Curtis H.; Flebbe, Patricia A.	1987	Regional fish and wildlife habitat models: application for natural multiple resource planning.	In: Lund, H. Gyde; Caballero-Deloya, Miguel; Villarreal-Canton, Raul, eds. Land and resource evaluation for national planning in the tropics: Proceedings of the international conference and workshop; 1987 January 25-31; Chetumal, Mexico. General Technical Report WO-39. Washington, DC: U.S. Department of Agriculture, Forest Service: 404-409.	RM, SEFIA, SOFIA, technique

Author(s)	Year	Title	Source	Keywords
Hoekstra, Thomas W.; Joyce, Linda A.: Hamilton, Thomas E.	1987	Estimation of regional multiresource interactions.	In: Lund, H. Gyde; Caballero-Deloya, Miguel; Villarreal-Canton, Raul, eds. Land and resource evaluation for national planning in the tropics: Proceedings of the international conference and workshop; 1987 January 25-31; Chetumal, Mexico. General Technical Report WO-39. Washinaton. DC: U.S. Department of Agriculture, Forest-Service: 386-391.	design, RM
Hoekstra, Thomas W.; Schweitzer, Dennis L.; Cushwa, Charles T.; Anderson, Stanley H.; Barnes, Robert B.	1979	Preliminary evaluation of a national wildlife and fish data base.	In: Sabol, Kenneth, ed. Transactions of the 44th North American wildlife and natural resources conference: consolidating conservation efforts; 1979 March 24-28; Toronto, Canada. Washington, DC: Wildlife Management Institute: 380-391.	design, RM, United States
Holdaway, M.R.	1988	The relationship between tree diameter growth and climate in the Lake States.	In: Ek, Alan R.; Shifley, Stephen R.; Burk, Thomas E.. eds. Forest growth modelling and prediction: proceedings of the IUFRO conference; 1987 August 23-27; Minneapolis, MN. Society of American Foresters Publication No. 87.12. General Technical Report NC-120. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 1: 490-497.	MI, MN, NCFIA,, technique, WI
Holdaway, Margaret R.	1990	Correlation analysis of tree growth, climate, and acid deposition in the Lake States.	Research Paper NC-294. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 21 p.	MI, MN, NCFIA, technique, WI
Hornbeck, J.W.	1987	Growth patterns of red oak and red and sugar maple relative to atmospheric deposition.	In: Hay, Ronald L.; Woods, Frank W.; DeSelm, Hal. Proceedings of the central hardwood forest conference VI; 1987 February 24-26; Knoxville, TN. Knoxville, TN: The University of Tennessee: 277-282.	CT, MA, ME, NEFIA, NH, RI, technique, VT
Hornbeck, J.W.; Smith, R.B.; Federer, C.A.	1986	Growth decline in red spruce and balsam fir relative to natural processes.	Water, Soil, and Air Pollution. 31: 425-430.	ME, NEFIA, NH, technique, VT
Hornbeck, J.W.; Smith, R.B.; Federer, C.A.	1988	Growth trends in 10 species of trees in New England, 1950-1980.	Canadian Journal of Forest Research 18: 1337-1340.	CT, MA, ME, NEFIA, NH, RI, technique, VT
Hornbeck, James W.; Smith, Robert B.	1985	Documentation of red spruce growth decline.	Canadian Journal of Forest Research. 15: 1199-1201.	ME. NEFIA., NH; NY, technique, VT
Hunt, Frances A.	1990	The forest inventory: incorporating fisheries and wildlife values.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 475-477.	design, PNWFIA, RM, SEFIA

Author(s)	Year	Title	Source	Keywords
Huntsinger, Lynn; Fortmann, Louise P.	1990	California's privately owned oak woodlands: owners, use, and management.	Journal of Range Management. 43(2):147-152.	CA, PNWFIA, range
Ingram, Richard P.; Wood, Gene W.	1982	Woodcock and woodcock habitat in coastal South Carolina.	Forestry Bulletin No. 34. Clemson, SC: Clemson University, Department of Forestry. 6 p.	SC, SEFIA, wildlife
Irland Group, The.	1989	Forest inventory and related needs to 1992 and beyond.	Report to the Maine Forest Service. Augusta, ME: The Irland Group, Forestry Consultants, 7 North Chestnut Street, Augusta, ME 04330. 98 p.	design, ME, NEFIA
Iverson, L.R.; Cook, E.A.; Graham, R.L.	1989	A technique for extrapolating and validating forest cover across large regions: calibrating AVHRR data with TM data.	International Journal of Remote Sensing. 10(11): 1805-1812.	AR, IA, IL, IN. KY. MI. MN; MO; NCFIA, NEFIA, satellite. SOFIA, TN; WI
Iverson, Louis R.; Cook, Elizabeth A.; Graham, Robin L.	1990	Estimating forest cover over Southeastern United States using TM-calibrated AVHRR data.	In: Lund, H. Gyde; Preto, Giovanni tech. coords. Global natural resource monitoring and assessments: preparing for the 21st century: Proceedings of the international conference and workshop; 1989 September 24-30; Venice, Italy. Bethesda, MD: American Society for Photogrammetry and Remote Sensing: 1252-1262.	GA, KY, NC, NEFIA, satellite, SC, SEFIA, SOFIA, TN
Iverson, Louis R.; Risser, Paul G.	1987	Analyzing long-term changes in vegetation with geographic information system and remotely sensed data.	Advances in Space Research. 7(11): 183-194.	IL, NCFIA, satellite
Jacobi, William R.; Anderson, Robert L.; Cost, Noel D.	1981	Multiresource inventories: procedures for assessing the damage caused by insects and diseases.	Research Paper SE-221. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 11 p.	area class, SEFIA
Jakes, Pamela J.; Spencer, John S., Jr.; Essex, Burton L.	1979	Land use change in Missouri, 1972-1979.	Resource Bulletin NC-40. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 19 p.	area class, MO, NCFIA
Jakes, Pamela J.; Vasilevsky, Alexander	1980	Minnesota land ownership trends, 1962-1977.	Resource Bulletin NC-255. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 4 p.	area class, MN, NCFIA
Johnson, Rebecca L.; Bacon, Warren; White, Kenneth; Eixenberger, Don	1988	Assessment of Oregon's forest-related recreation.	In: Lettman, Gary J., tech. ed. Assessment of Oregon's forests: a collection of papers published by the Oregon State Department of Forestry. Salem, OR: Oregon State Department of Forestry, Forest Resources Planning Section: 1-16.	area class, OR, PNWFIA

Author(s)	Year	Title	Source	Keywords
Joyce, L.A.; Baker, R.L.	1987	Forest overstory-understory relationships in Alabama forests.	Forest Ecology and Management. 18: 49-59.	AL, SOFIA, technique
Joyce, L.A.; McKinnon B.; Hof, J.G.; Hoekstra, T.W.	1983	Analysis of multiresource production for national assessments and appraisals.	General Technical Report RH-101. Ft. Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 20 p.	multivalue, RM
Joyce, Linda A.	1988	Regional forage model.	In: Gelinas, R.; Bond, D.; Smit, B. eds. Perspectives on land modelling: workshop proceedings; 1986 November 17-20; Toronto, Canada. Montreal, Canada: Polyscience Publications Inc.: 17-26.	range, RM, WO
Joyce, Linda A.	1989	An analysis of the range forage situation in the United States: 1989-2040.	General Technical Report RM-180. Ft. Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 137 p.	multivalue, RM
Joyce, Linda A.; Flather, Curtis H.	1990	Using land base inventories to assess range and wildlife resources nationally.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodolo y of forest inventory a symposium proceedings; 1889 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 486-494.	design, RM
Joyce, Linda A.; Flather, Curtis H.; Flebbe, Patricia A.; Hoekstra, Thomas W.; Ursic, Stan J.	1990	Integrating forage, wildlife, water, and fish projections with timber projections at the regional level: a case study in Southern United States.	Environmental Management. 14(4): 489-500.	multivalue, RM, SEFIA, SOFIA
Joyce, Linda A.; Hoekstra, T.W.	1984	A national perspective on information needs from inventories.	In: Lund, H. Gyde, ed. Preparing for the 21st century: proceedings of the forest land inventory workshop; 1984 March 26-30; Denver, CO. Washington, DC: U.S. Department of Agriculture, Forest Service, Timber Management Staff: 218-227.	design, RM
Joyce, Linda A.; Hoekstra, Thomas W.; Alig, Ralph J.	1986	Regional multiresource models in a national framework.	Environmental Management. 20: 761-771.	design, RM, wo
Joyce, Linda A.; Mitchell, John E.	1989	Understory cover/biomass relationships in Alabama forest types.	Agroforestry Systems. 9: 205-230.	AL, RM, SOFIA, technique
Kaiser, H. Fred	1987	The importance of multiple use value in designing inventories.	In: Lund, H. Gyde; Caballero-Deloya, Miguel; Villarreal-Canton, Raul, eds. Land and resource evaluation for national planning in the tropics: Proceedings of the international conference and workshop; 1987 January 25-31; Chetumal, Mexico. General Technical Report WO-39. Washington, DC: U.S. Department of Agriculture, Forest Service: 168-171..	design, United States

Author(l)	Year	Title	Source	Keywords
Kelly, John F.; Bechtold, William A.	1990	The longleaf pine resource.	In: Farrar, Robert M., Jr., ed. Proceedings of the symposium on the management of longleaf pine; 1989 April 4-6; Long Beac, MS. General Technical Report SO-75. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station: 11-22.	area class, SEFIA, SOFIA
Kelly, John F.; Sims Mike	1989	Forest resources of Mississippi.	Resource Bulletin SO-147. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 63 p.	MS, multivalue, SOFIA
Kingsley, Neal P.	1975	The forest-land owners of New Jersey.	Resource Bulletin NE-39. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 24 p.	multivalue, NEFIA, NJ
Kingsley, Neal P.	1976	The forest-land owners of southern New England.	Resource Bulletin NE-41. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 27 p.	CT, MA, multivalue, NEFIA, RI
Kingsley, Neal P.	1979	How important is timber production to small owners.	Forest Farmer. June issue: 8-9. 14-15.	KY, multivalue, NEFIA, WV
Kingsley, Neal P.	1985	A forester's atlas of the Northeast.	General Technical Report NE-95. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 96 p.	area class, NEFIA
Kingsley, Neal P.	1988	Role of the wildlife manager in nonindustrial private forest management.	In: McCabe, Richard E., ed. Transactions of the 53rd North American wildlife and natural resources conference; 1988 March 18-23; Louisville, KY. Washington, DC: Wildlife Management Institute: 33-40.	NEFIA, owner
Kingsley, Neal P.; Birch, Thomas W.	1977	The forest-land owners of New Hampshire and Vermont.	Resource Bulletin NE-51. Broomall, PA: U.S. Department of Agriculture,, Forest Service, Northeastern Forest Experiment Station. 47 p.	multivalue, NEFIA, NH, VT
Kingsley, Neal P.; Birch, Thomas W.	1980	The forest-land owners of Maryland.	Resource Bulletin NE-63. Broomall, PA: U.S. Department of Agriculture! Forest Service, Northeastern Forest Experiment Station. 78 p.	MD, multivalue, NEFIA.
Kingsley, Neal P.; Finley, James C.	1975	The forest-land owners of Delaware.	Resource Bulletin NE-38. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 78 p.	DE, multivalue, NEFIA
Kingsley, Neal P; Powell, Douglas S.	1982	Using resource evaluation data: the potential pitfalls.	In: Brann, Thomas B.; House, Louise O., IV; Lund, H. Gyde, eds. In-place resource inventories: principles and practices: Proceedings of a national workshop; 1981 August 9-14; Orono, ME. SAF 82-02. Bethesda, MD: Society of American Foresters: 994-996.	design, NEFIA

Author(s)	Year	Title	Source	Keywords
Klopatek, J.M.; Kitchings, J.T.; Olson, R.J.; Kumar. K.D.; Mann, L.K.	1981	A hierarchical system for evaluating regional ecological resources.	Biological Conservation. 20: 271-290.	CO, ID, INTFIA. MT. U T , technique, WY
Klopatek, Jeffrey M.; Olson, Richard J.; Emerson, Craig J.; Joness, Jan L.	1979	Land-use conflicts with natural vegetation in the United States.	Environmental Conservation. 6(3): 191-199.	INTFIA, NCFIA, NEFIA, PNWFIA, SEFIA, SOFIA, technique
Knight, Herbert A.; McCure, Joe P.	1981	Multiresource inventories: forest biomass in South Carolina.	Research Paper SE-230. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 22 p.	multivalue, SC, SEFIA
LaBau, Vernon J.	1984	A review of nontimber data collection and information reported by the Forest Inventory and Analysis projects in the U.S.	In: Schlatterer, Ed; Lund, H. Gyde, eds. Proceedings of the inventory integration workshop; 1984 October 15-19; Portland,, OR. Washinaton. DC: U.S. Department of Agriculture. Forest-Service, Range and Timber Management Staffs: 59-63,153-165.	design, INTFIA, NCFIA, NEFIA, PNWFIA, SEFIA. SOFIA
LaBau, Vernon J.	1987	Interagency cooperation in state and subregional inventories.	In: Lund, H. Gyde; Caballero-Deloya, Miguel; Villarreal-Canton, Raul, eds. Land and resource evaluation for national planning in the tropics: Proceedings of the international conference and workshop; 1987 January 25-31; Chetumal, Mexico. General Technical Report WO-39. Washington, DC: U.S. Department of Agriculture, Forest Service: 73-77..	AK, design, PNWFIA
LaBau, Vernon J.; Cunia, Tiberius, tech. eds.	1990	State-of-the-art methodology of forest inventory: a symposium proceedings: 1989 July 30-August 5; Syracuse, NY.	General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 592 p.	multivalue, United States
LaBau, Vernon J.; Fox, Patricia M.	1984	Use of timberlands by moose in the Yakutat area of coastal Alaska.	In: LaBau, Vernon J.; Kerr, Calvin L., eds. Inventorying forest and other vegetation of the high latitude and high altitude reaions: Proceeding of an international symposium; 1984 July 23-26; Fairbanks, AK. SAF 84-11. Bethesda, MD: Society of American Foresters: 249-256.	AK, PNWFIA, wildlife
LaBau, Vernon J.; Kerr, Calvin L., eds.	1984	Inventorying forest and other vegetation of the high latitude and high altitude regions.	Proceedings of an international symposium; 1984 July 23-26: Fairbanks, AK. SAF 84-11. Bethesda, MD: Society of American Foresters. 296 p.	AK, multivalue, PNWFIA
LaBau, Vernon J.; Mead, Bert R.; Herman, David A.	1986	Quantification of vegetation edge for the Tanana River Basin, Alaska.	In: 1986 ASPRS-ACSM fall convention--ASPRS technical papers; 1986 September 28-October 3; Anchorage, AK. Falls Church, VA: American Society for Photogrammetry and Remote Sensing: 335-341.	AK, PNWFIA, technique

Author(s)	Year	Title	Source	Keywords
LaBau, Vernon J.; Schreuder, Hans T.	1983	A multiphase, multiresource inventory procedure for assessing renewable natural resources and monitoring change.	In: Bell, John F.; Atterbury, Toby, eds. Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis, OR: Oregon State University, College of Forestry: 456-459.	AK, design, PNWFIA
LaBau, Vernon J.; Winterberger, Kenneth C.	1988	Use of a four-phase sampling design in Alaska multiresource vegetation inventories.	In: Satellite imageries for forest inventory and monitoring: experiences, methods, perspectives: Proceedings of IUFRO S4.02.05 meeting in Finland; 1988 August 29-September 2; Hytiala, Finland. Helsinki, Finland: University of Helsinki, Department of Forest Mensuration and Management: 89-102.	AK, multivalue, PNWFIA
Langdon, O. Gordon; McClure, Joe P.; Hook, Donald D.; Crockett, Joe M.; Hunt, Ron	1981	Extent, condition, management, and research needs of bottomland hardwood-cypress forests in the Southeastern United States.	In: Clark, J.R.; Benforado, J., eds. Wetlands of bottomland hardwood forests: Proceedings of a workshop on bottomland hardwood forest wetlands of the Southeastern United States; 1980 June 1-5; Lake Lanier, GA. New York: Elsevier Scientific Publishing Company: 71-85.	area class, SEFIA
Larson, Frederic R.	1984	Alaska integrated inventory system.	In: Lund, H. Gyde, ed. Preparing for the 21st century: proceedings of the forest land inventory workshop; 1984 March 26-30; Denver, CO. Washington, DC: U.S. Department of Agriculture, Forest Service, Timber Management Staff: 126-141.	AK, design, PNWFIA
Larson, Frederic R.	1984	Characterizing downed woody fuels by Alaska vegetation strata classes.	In: LaBau,, Vernon J.; Kerr, Calvin L., eds. Inventorying forest and other vegetation of the high latitude and high altitude regions: Proceedings of an international symposium; 1984 July 23-26: Fairbanks, AK. SAF 84-11. Bethesda, MD: Society of American Foresters: 220-224.	AK, biomass, PNWFIA
Larson, Frederic R.	1984	Design, organization, budgeting, and scheduling of natural resource inventories.	In: Schlatterer, Ed; Lund, H. Gyde, eds. Proceedings of the inventory integration workshop; 1984 October 15-19; Portland, OR. Washington, DC: U.S. Department of Agriculture, Forest Service, Range and Timber Management Staffs: 90-99.	AK, multivalue, PNWFIA
Larson, Frederic R.	1984	Planning extensive inventories for vast remote areas.	In: LaBau, Vernon J.; Kerr, Calvin L., eds. Inventorying forest and other vegetation of the high latitude and high altitude regions: Proceedings of an international symposium; 1984 July 23-26; Fairbanks, AK. SAF 84-11. Bethesda, MD: Society of American Foresters: 50-53.	AK, design, PNWFIA
Larson, Frederic R.; Mead, Delbert R.	1983	Designing a comprehensive multi-resource field inventory for Alaska.	In: Bell, John F.; Atterbury, Toby, eds. Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis, OR: Oregon State University, College of Forestry: 313-317.	AK, PNWFIA, technique

Author(s)	Year	Title	Source	Keywords
Larson, Frederic R.; Winterberger, Kenneth C.	1988	Tables and equations for estimating volumes of trees in the Susitna River Basin, Alaska.	Research Note PNW-478. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific,Northwest Research Station. 20 p.	AK, biomass, PNWFIA
Lennartz, Michael R.; Knight, Herbert A.; McClure, Joe P.; Rudis Victor A.	1983	Status of red-cockaded woodpecker nesting habitat in the South.	In: Wood, Don A., ed. Red-cockaded woodpecker symposium II; 1983 January 27-29; Panama City, FL. Tallahassee, FL: Florida Game and Fresh Water Fish Commission: 13-19.	SEFIA, SOFIA, wildlife
Lennartz, Michael R.; McClure, Joe P.	1979	Estimating the extent of red-cockaded woodpecker habitat in the Southeast.	In: Frayer, W.E., ed. Forest resource inventories: workshop proceedings; 1979 July 23-36; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forestry and Wood Science. 1: 48-62.	SEFIA, wildlife
Lewis, David K., compiler.	1988	1988 Review of United States Forest Service research by conservation organizations.	Report to Station Directors of the Southern and Southeastern Forest Experiment Stations, November 23. 1988. On file at the Southern Forest Experiment Station, Room T-10210, 701 Loyola Avenue, New Orleans, LA 70113. 7 p.	design, SEFIA, SOFIA
Liu, C.H.; Leuschner, W.A.; Burkhart, H.E.; de Steiguer, J.E.	1990	A model for assessing the impact of atmospheric deposition on regional forest inventories.	Journal of Environmental Management. 30: 337-351.	SEFIA! technique, VA
Lund, H. Gyde	1986	A primer on integrating resource inventories.	General Technical Report WO-49. Washington, DC: U.S. Department of Agriculture. Forest Service. 64 p.	design, WO
Lund, H. Gyde	1987	Developing resource inventory policies for national land and resource evaluation and planning.	In: Lund, H. Gyde; Caballero-Deloya, Miguel; Villarreal-Canton, Raul, eds. Land and resource evaluation for national planning in the tropics: Proceedings of the international conference and workshop; 1987 January 25-31; Chetumal. Mexico. General Technical Report WO-39. Washington, DC: U.S. Department of Agriculture: Forest Service: 491-498.	design, United States, WO
Lund, H. Gyde	1990	From terras incognitas to illuminations.	In: Lund, H. Gyde; Preto, Giovanni, tech. coords. Global natural resource monitoring and assessments: preparing for the 21st century: Proceedings of the international conference and workshop; 1989 September 24-30; Venice, Italy. Bethesda, MD:. American Society for Photogrammetry and Remote Sensing: 32-40.	design, United States, WO
Lund, H. Gyde	1990	Inventory technology: 'ebb tides', 'flash floods' and 'whirlpools'.	In: Jackson, Ben D., ed. Special issue: the international forested wetlands resource: identification and inventory: Proceedings of the international conference; 1988 September 19-22; Baton Rouge, LA. Forest Ecology and Management. 33/34: 559-570.	design, United States, WO

Author(s)	Year	Title	Source	Keywords
Lund, H. Gyde, ed.	1984	Preparing for the 21st century: proceedings of the forest inventory workshop; 1984 March 26-30; Denver, CO.	Washington, DC: U.S. Department of Agriculture, Forest Service, Division of Timber Hanagement. 334 p.	multivalue, United States
Lund, H. Gyde; LaBau, Vernon J.; Ffolliott, Peter D.; Robinson, David W., eds.	1978	Inteoratina inventories of renewable natural resources: Proceedings of a workshop; 1978 January 8-12; Tucson, AZ.	General Technical Report RM-55. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 482 p.	multivalue, United States
Lund, H. Gyde; McNutt Elise	1979	Integrating inventories: an annotated bibliography.	Technical Note 333. Denver, CO: U.S. Department of the Interior, Bureau of Land Management. 183 p.	multivalue, United States
Lund, H. Gyde; Myers, Charles C.	1982	Integrating inventories.	In: Brann, Thomas B.; House, Louis O., IV; Lund, H. Gyde, eds. In-place resource inventories: principles and practices: Proceedings of a national workshop; 1981 August 9-14; Orono, ME. SAF 82-02. Bethesda, MD: Society of American Foresters: 79-84.	design, WO
Lund, H. Gyde; Preto, Giovanni, tech. coordinators.	1990	Global natural resource monitoring and assessments: preparing for the 21st century.	Proceedings of the international conference and workshop; 1989 September 24-30; Venice, Italy. Bethesda, MD: American Society for Photogrammetry and Remote Sensgn . Vol. 1: 1-516. Vol. 2: 517-986. Vol. 3: 518-1495.	multivalue, United States
Lund, H. Gyde; Thomas, Charles E.	1990	A primer on stand and forest inventory designs.	General Technical Report WO-59. Washington, DC: U.S. Department of Agriculture, Forest Service. 96 p.	technique, United States, WO
Marty, Robert	1983	Retargeting public forestry assistance programs in the North.	In: Royer, Jack P.; Risbrudt, Christopher D., eds. Nonindustrial private forests: a review of economic and policy studies: Symposium proceedings; 1983 April 19-20; Durham, NC. Durham, NC: Duke University, School of Forestry and Environmental Studies: 281-287.	MI, multivalue, NCFIA, NEFIA, OH
Mathews, Nancy E.	1982	The capability of U.S. Forest Service resources evaluation in assessing small mammal habitat.	M.S. thesis. Syracuse, NY: State University of New York, College of Environmental Science and Forestry. 138 p.	NEFIA, NY, wildlife
Hay, Dennis M.	1990	Big trees of the Midsouth forest survey.	Research Note S&359. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 17 p.	SOFIA, technique
May, Dennis M.	1990	Stocking, forest type, and size class--the Southern Forest Inventory and Analysis unit's calculation of three important stand descriptors.	General Technical Report SO-77. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 7 p.	SOFIA, technique

Author(s)	Year	Title	Source	Keywords
May, Dennis M.; Kauffman, Bruce W.	1990	Status and trends in gypsy moth defoliation hazard in Tennessee.	Research Note SO-361. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 8 p.	area class, SOFIA, TN
Mayer, Kenneth E.; Passof, Peter C.; Bolsinger, Charles L.; Grenfell, William E., Jr.; Slack, Harold.	1986	The status of the hardwood resource of California: a report to the Board of Forestry.	Sacramento, CA: State of California, Department of Forestry. 125 p.	area class, CA, PNWFIA
McClure, Joe P.	1979	Multiresource inventories--a new concept for forest survey in the Southeast.	In: Frayer, W.E., ed. Forest resource inventories: workshop proceedings; 1979 July 23-26; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forestry and Wood Sciences. 1: 23-28.	multivalue, SC, SEFIA
McClure, Joe P.; Cost, Noel D.; Knight, Herbert A.	1979	Multiresource inventories--a new concept for forest survey.	Research Paper SE-191. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 68 p.	design, SEFIA
McClure, Joe P.; Knight, Herbert A.	1984	Empirical yields of timber and forest biomass in the Southeast.	Research Paper SE-245. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 75 p.	SEFIA, technique
McComb, William C.; Bonney, Stephen A.; Sheffield, Raymond M.; Cost, Noel D.	1986	Den tree characteristics and abundance in Florida and South Carolina.	Journal of Wildlife Management. 50(10): 584-591.	FL, SC, SEFIA wildlife
McComb, William C.; Bonney, Stephen A.; Sheffield, Raymond M.; Cost, Noel D.	1986	Snag resources in Florida--are they sufficient for average populations of primary cavity-nesters?	Wildlife Society Bulletin. 14(1): 40-48.	FL, SEFIA, wildlife
McKay, Neil	1987	How the Statewide hardwood assessment was conducted.	In: Plumb, Timothy R.; Pillsbury, Norman H., tech. coords. Proceedings of the symposium on multiple-use management of California's hardwood resources; 1986 November 12-14; San Luis Obispo, CA. General Technical Report PSW-100. Berkeley, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Forest and Range Experiment Station: 298-303.	CA, design, PNWFIA
McWilliams, William H.	1986	Data management: a forest survey perspective.	In: Allen, Sherhonda; Cooney, Timothy M., eds. Data management issues in forestry: proceedings of a computer conference and 3rd annual meeting of the Forest Resource Systems Institute; 1986 April 7-9; Atlanta, GA. Florence, AL: Forest Resources Systems Institute: 13-15.	design, SOFIA

Author(s)	Year	Title	Source	Keywords
McWilliams, William H.	1990	Assessing pine regeneration of the South Central United States.	In: Labau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology in forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 133-140.	area class, SOFIA
McWilliams, William H.	1990	Interactive access to forest inventory data for the South Central United States.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 556-557.	multivalue, SOFIA
McWilliams, William H.; Birdsey, Richard A.	1984	Loblolly pine resource of the Hidsouth.	In: Karr, Bob L.; Baker, James B.; Monaghan, Tom, eds. Proceedings of the symposium on the loblolly pine ecosystem (West region); 1984 April 20-22; Jackson, MS. Mississippi State, MS: Mississippi State University, HS Cooperative Extension Service: 41-58.	area class, SOFIA
McWilliams, William H.; Birdsey, Richard A.	1987	Graphic displays for resource analysis.	In: Lund, H. Gyde; Caballero-Deloya, Miguel; Villarreal-Canton, Raul, eds. Land and resource evaluation for national planning in the tropics: Proceedings of the international conference and workshop; 1987 January 25-31; Chetumal, Mexico. General Technical Report WO-39. Washington, DC: U.S. Department of Agricuture, Forest Service: 357-362.	SOFIA, technique
McWilliams, William H.; Doolittle, Larry: Lord, Roger G.	1989	Nonindustrial private forest landowners of the Texas Pineywoods.	Texas Forestry News. 67(4): 7-11.	multivalue, SOFIA, TX
McWilliams, William H.; Faulkner, Joanne L.	1990	Spatial analysis using a systematic grid of forest inventory plots: selected examples for the South Central United States.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 379-383.	area class, SOFIA
McWilliams, William H.; Lord, Roger G.	1988	Forest resources of east Texas.	Resource Bulletin SO-136. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 61 p.	area class, SOFIA, TX
McWilliams, William H.; Rosson, James F., Jr.	1988	Hardwood supply and availability in the midsouth highlands.	In: Availability of hardwoods in the upland south: Proceedings of the conference; 1988 January 7; Charlotte, NC. Hardwood Research Cooperative Series No. 7. Asheville, NC: Hardwood Research Council and NC State University: 47-95.	area class, SOFIA

Author(s)	Year	Title	Source	Keywords
McWilliams, William H.; Rosson, James F., Jr.	1990	Composition and vulnerability of bottomland hardwood forests of the Coastal Plain province in the South Central United States.	In: Jackson, Ben D., ed. Special issue: the international forested wetlands resource: identification and inventory: Proceedings of the international conference; 1988 September 19-22; Baton Rouge, LA. Forest Ecology and Management. 33/34: 485-501.	area class, SOFIA
McWilliams, William H.; Sheffield, Raymond M.; Hansen, Mark H.; Birch, Thomas W.	1986	The shortleaf pine resource.	In: Murphy, Paul A., ed. Symposium on the shortleaf pine ecosystem: proceedings; 1986 March 31-April 2; Little Rock, AR. Monticello, AR: Arkansas Cooperative Extension Service: 9-24.	area class, NCFIA, NEFIA, SEFIA, SOFIA
McWilliams, William H.; Tansey, John B.; Birch, Thomas W..	1990	Taxodium-Nyssa forests along the coast of the Southern United States.	In: Development of ecological perspectives for the 21st century: abstracts of the plenary! symposium papers and posters: 5th International Congress of Ecology: 1990 August 23-30; Yokohama, Japan. Yokohama, Japan: Yokohama National University: 125.	area class, NEFIA, SEFIA, SOFIA
Mead, Bert; LaBau, Vernon J.	1990	Multi-resource inventories in Alaska.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 522-528.	AK, design, PNWFIA
Mead, Bert; Yarie, John; Herman, David	1987	Biomass estimates for nontimber vegetation in Tanana River Basin of interior Alaska.	In: Wharton, Eric H.; Cunia, Tiberius, compilers. Estimating tree biomass regressions and their error. Proceedings of the workshop on tree biomass regression functions and their contribution to the error of forest inventory estimates: 1986 May 26-30; Syracuse, NY. General Technical Report NE-117. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station: 149-153.	AK, multivalue, PNWFIA
Mitchell, J.E.; Bartling, P.N.S.; O'Brien, R.A.	1987	Understory cover-biomass relationships in the front range ponderosa pine zone.	Research Note RH-471. Fort Collins, CD: U.S. Department of Agriculture, Forest Service, Intermountain Research Station: 216-226.	INTFIA, technique
Mitchell, John E.; Bartling, Patricia N.S.; O'Brien, Renee A.	1988	Comparing cover-class macroplot data with direct estimates from small plots.	American Midland Naturalist. 120(1): 70-78.	INTFIA, technique
Newton, Carlton M.; Bower, Steven T.	1990	Spatial analysis of forest inventory data.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 369-378.	NEFIA, technique, VT

Author(s)	Year	Title	Source	Keywords
O'Brien, Renee	1984	Forest survey status at the Intermountain Station: part III--understory vegetation procedure.	In: Lund, H. Gyde, ed. Preparing for the 21st century: proceedings of the forest land inventory workshop; 1984 March 26-30; Denver, CO. Washington, DC: U.S. Department of Agriculture, Forest Service, Timber Management Staff: 109-115.	INTFIA, wildlife
O'Brien, Renee	1984	Understory vegetation inventory in the Intermountain West.	In: LaBau, Vernon J.; Kerr, Calvin L., eds. Inventorying forest and other vegetation of the high latitude and high altitude regions: Proceedings of an international symposium; 1984 July 23-26; Fairbanks, AK. SAF 84-11. Bethesda, MD: Society of American Foresters: 285-288.	INTFIA, wildlife
O'Brien, Renee	1990	Developing integrated forest surveys for the Rocky Mountain States.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodoloav of forest inventorv: a symposium proceedings; 1489 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 512-516.	design, INTFIA
O'Brien, Renee A.	1989	Comparison of overstory canopy cover estimates on forest survey plots.	Research Paper INT-417. Ogden, UT: U.S. Department of Agriculture, Forest Service, Inter-mountain Research Station. 6 p.	INTFIA, technique
O'Brien, Renee A.	1990	Assessment of nongame bird habitat using Forest Survey data.	Research Paper INT-431. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 8 p.	INTFIA, wildlife
O'Brien, Renee A.; Van Hooser, Dwane D.	1983	Understory vegetation inventory: an efficient procedure.	Research Paper INT-323. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Forest and Range Experiment Station. 6 p.	INTFIA, technique
Ohmann, Janet L.	1983	Evaluating wildlife as part of a continuing, extensive forest inventory.	In: Bell, John F.; Atterbury, Toby, eds. Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis. OR: Oregon State University: 623-627.	design, PNWFIA
Ohmann, Janet L.	1984	Meeting wildlife habitat information needs in the Pacific Coast States--a Forest Inventory and Analysis approach.	In: Lund, H. Gyde, ed. Preparing for the 21st century: proceedings of the forest land inventory workshop; 1984 March 26-30; Denver, CO. Washington DC: U.S. Department of Agriculture, Forest Service, Division of Timber Management: 116-125.	design, PNWFIA
Ohmann, Janet L.	1989	Status and trends of coniferous forest habitats on the Western United States.	In: Pendleton, Beth Giron, ed. Proceedings of the western raptor management symposium and workshop; 1987 October; Boise, ID. Washington DC: National Wildlife Federation: 38-50.	PNWFIA, wildlife

Author(s)	Year	Title	Source	Keywords
Ohmann, Janet L.	1990	Multiresource inventories in the Pacific Coast States--progress and future direction.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodolo y of forest inventory: a symposium proceedings; 1389 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 529-537.	design, PNWFIA
Ohmann, Janet L.; Bolsinger, Charles L. [In press]		Monitoring biodiversity with permanent plots--landscape, stand structure, and understory species.	In: Ruggiero, Leonard F.; Aubry, Keith B.; Carey, Andrew B.; Huff, Mark H., tech. coords. Wildlife and vegetation of unmanaged Douglas-fir forests; 1989 March 29-31; Portland, OR. General Technical Report PNW-XXX. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 12 p.	design, PNWFIA
Ohmann, Janet L.; Carleson, Dan; Lee, Philip L; Oakley, Art L.	1988	Status of forest-related wildlife and fish resources in Oregon.	In: Lettman, Gary J., tech. ed. Assessment of Oregon's forests: a collection of papers published by the Oregon State Department of Forestry. Salem, OR: Oregon State Department of Forestry, Forest Resources Planning Section: 17-32.	area class, OR, PNWFIA
Ohmann, Janet L.; Mayer, Kenneth E.	1987	Wildlife habitats of California's hardwood forests--linking extensive inventory data with habitat models.	In: Plumb, Timothv R.: Pillsbury, Norman H., tech. coords. Proceedings of thk symposium on multiple-use manaaement of California's hardwood resources; 1986 N&ember 12-14; San Luis Obispo, CA. General Technical Report PSW-100. Berkeley, CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Forest and Range Experiment Station: 174-182.	area class, CA, PNWFIA
Ohmann, L.F.; Grigal, D.F.	1990	Spatial and temporal patterns of sulfur and nitrogen in wood of trees across the North Central United States.	Canadian Journal of Forest Research. 20(5): 508-513.	MI, MN, NCFIA, technique, WI
Ohmann, Lewis F.; Grigal, David F.; Brovold, Sandra.	1989	Physical characteristics of study plots across a Lake States acidic deposition gradient.	Resource Bulletin NC-110. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 47 p.	MI, MN, NCFIA technique, WI
Ohmann, Lewis F.; Shifley, Stephen R.	1989	Relations between forest conditions and atmospheric deposition along the northwestern Minnesota-to-southeastern Michigan deposition gradient.	In: Noble, Reginald D.; Martin, Juri L.; Jensen, Keith F., eds. Air pollution effects on vegetation including forest ecosystems: proceedings of the 2nd US-USSR symposium; 1988 September 13-25; Corvallis, OR, Raleigh, NC, and Gatlinburg, TN. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station: 225-232.	MI, MN, NCFIA,, technique, WI

Author(s)	Year	Title	Source	Keywords
Olson, R.J.; Emerson, C.J.; Nungesser, M.K.	1980	Geoecology: a county-level environmental data base for the conterminous U.S.	ORNL/TM-7351. Oak Ridge, TN: Oak Ridge National Laboratory. 350 p.	INTFIA, multivalue, NCFIA, NEFIA, PNWFIA, SEFIA, SOFIA
Olson, R.J.; Klopatek, J.M.; Emerson, C.J.	1983	Regional environmental analysis and assessment utilizing the geoecology data base.	In: Teichholz, E.; Berry, B.L., eds. Computer graphics and environmental planning. Englewood Cliffs, NJ: Prentice-Hall, Inc.: 102-118. (Part II, Chapter 7.)	NEFIA, SEFIA, SOFIA technique
Olson, Richard J.; Kumar, K. Deva; Burgess, Robert L.	1982	Analyses of ecoregions utilizing the geoecology data base.	In: Brann, Thomas B.; House, Louis O., IV; Lund, H. Gyde, eds. In-place resource inventories: principles and practices: Proceedings of a national workshop; 1981 August 9-14; Orono, ME. SAF 82-02. Bethesda, MD: Society of American Foresters: 149-156.	technique, United States
Olson, Richard J.; Nungesser, Martna K.; Emerson, Craig J.	1982	Geoecology data base: county-level environmental data for the conterminous United States.	In: Brann, Thomas B.; House, Louis 0.; Lund, H. Gvde. eds. In-place resource inventories: pi-inciples and'practices: Proceedings of a national workshoo: 1981 Auaust 9-14: Orono., ME. SAF 82-02. Bethesda, MD: Society of American Foresters: 1089.	multivalue, United States
Oswald, Daniel D.	1984	Timber resources in areas developed for nonforest use in western Washington.	Resource Bulletin PNW-112. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 20 p.	PNWFIA, technique, WA
Oswald, Daniel D.	1986	Inventories of timber resources in urban and developed rural areas.	Western Journal of Applied Forestry. 1(4): 129-131	PNWFIA, technique
Oswald, Daniel D.	1988	Use of sample photo-plot data for forest resource mapping.	Western Journal of Applied Forestry. 3(2): 52-54.	PNWFIA, technique
Othic, S.T.; Kurtz, W.B.; Baumgartner, D.C.	1982	Conversion of forestland in the Missouri Ozarks.	Transactions of the Missouri Academy of Sciences. 16: 37-42.	land use, MO, NCFIA
Parks, Peter J.; Alig, Ralph J.	1988	Land base models for forest resource supply analysis: a critical review.	Canadian Journal of Forest Research. 18: 965-973.	design, United States
Pearson, Henry A.; Sternitzke, Herbert S.	1974	Forest-range inventory: a multiple-use survey.	Journal of Range-Management. 27(5): 404-407.	area class, SOFIA
Pearson, Henry A.; Sternitzke, Herbert S.	1976	Deer browse inventories in the Louisiana Coastal Plain.	Journal of Wildlife Management. 40(2): 326-329	LA, SOFIA, wildlife
Phillips, Ross A.; Powell, Douglas S.	1985	Timber volume relative to slope.	In: Forest operations in politically and environmentally sensitive areas: a proceedings of the Council on Forest Engineering; 1985 August 18-22; Tahoe City, CA. Corvallis, OR: Council on Forest Engineering: 41-45.	ME, multivalue, NEFIA

Author(s)	Year	Title	Source	Keywords
Plantinga, Andrew J.; Buongiorno, Joseph; Alig, Ralph.	1990	Determinants of changes in non-industrial private timberland ownership in the United States.	Journal of World Forest Resource Management. 5: 29-46.	land use., INTFIA, NCFIA, NEFIA, PNWFIA, SEFIA, SOFIA
Plantinga, Andrew; Buongiorno, Joseph; Alig, Ralph J.; Spencer, John S., Jr.	1989	Timberland area change in the Lake States: past trends, causes, and projections.	Research Paper NC-287. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 17 p.	area class, NCFIA
Popham, Thomas W.; Baker, Roger L.	1987	Ocular and densimeter estimates of understory foliar cover in forests of Alabama.	Research Note SO-334. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 4 p.	AL, SOFIA, technique
Porter, William F.; Mathews, Nancy E.; Doyle, Terence J.; Brooks, Robert T.	1983	The U.S. Forest Service inventory: an approach for assessing wildlife habitat.	In: Bell, John F.; Atterbury, Toby, eds. Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis, OR: Oregon State University, College of Forestry: 628-631.	NEFIA, NY, technique
Powell, Douglas S.	1982	A solution for resolving conflicts between land use and land cover inventories.	In: Brann, Thomas B.; House, Louis O., IV; Lund, H. Gyde, eds. In-place resource inventories: principles and practices: Proceedings of a national workshop; 1981 August 9-14; Orono, HE. SAF 82-02. Bethesda, MD: Society of American Foresters: 665-668.	area class, NEFIA
Powell, Douglas S.	1983	Differentiating real resource change from other concurrent inventory differences.	In: Bell, John F.; Atterbury, Toby, eds. Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis, OR: Oregon State University, College of Forestry: 541-545.	design, NEFIA, SEFIA
Powell, Douglas S.	1985	Forest composition of Maine: an analysis using number of trees.	Resource Bulletin NE-85. Broomall, PA: U.S. Department of Agriculture,. Forest Service, Northeastern Forest Experiment Station. 40 p.	area class, ME, NEFIA
Powell, Douglas S.	1985	The spruce-fir resource in Maine.	In: Spruce-fir management and spruce budworm: Society of American Foresters Region VI technical conference; 1984 April 24-26; Burlington, VT. General Technical Report NE-99. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station: 59-67.	area class, ME, NEFIA
Powell, Douglas S.; Barnard, Joseph E.	1979	Identifying regional management opportunities by computer.	In: Frayer, W.E., ed. Forest resource inventories: workshop proceedings; 1979 July 23-26; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forest and Wood Sciences. 1: 486-98.	NEFIA, technique

Author(s)	Year	Title	Source	Keywords
Powell, Douglas S.; Barnard, Joseph E.	1982	Gypsy moth's impact on the timber resource.	In: Coping with the gypsy moth: Proceedings of a conference; 1982 February 17-18; University Park, PA: The Pennsylvania State University: 72-83.	area class, NEFIA, PA
Powell! Douglas S.; Considine, Thomas J., Jr.	1982	An analysis of Pennsylvania's forest resources.	Resource Bulletin NE-69. Broomall, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 97 p.	multivalue, NEFIA, PA
Rea, James; Barnard, Joseph; Brann, Thomas	1982	Digitizing photo interpretation points for future sample unit determination in decennial forest re-evaluation.	In: Brann, Thomas B.; House, Louis O., IV; Lund, H. Gyde, eds. In-place resource inventories: principles and practices: Proceedings of a national workshop; 1981 August 9-14; Orono, ME. SAF 82-02. Bethesda, MD: Society of American Foresters: 817-820.	NEFIA, technique
Rice, Richard E.	1990	The importance of forest inventories to the conservation of biological diversity.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 467-474.	design, NEFIA, PNWFIA, RM, SEFIA, SOFIA, United States
Roberts, John C.	1988	Summary: innovations and incentives for integrated management of woodlands.	[A summary of special session 1: 9 papers, pages 33-107-J. In: McCabe, Richard E., ed. Transactions of the 53rd North American wildlife and natural resources conference; 1988 March 18-23; Louisville, KY. Washington, DC: Wildlife Management Institute: 108-113.	design, United States, wildlife
Roberts, John C.; Tlusty, Wayne G.; Jordahl, Harold C., Jr.	1986	The Wisconsin private non-industrial woodland owner: a profile.	Occasional Paper Series Paper No. 19. Madison, WI: University of Wisconsin Cooperative Extension Service. 128 p. + appendices.	multivalue, NCFIA, WI
Rockwell, H. William, Jr.	1990	RPA--the sleeping giant awakes.	Journal of Forestry. 88(8):11,15.	design, United States, WO
Romm, Jeff; Tuazon, Raul; Washburn, Courtland	1987	Relating forestry investment to the characteristics of nonindustrial private forestland owners in Northern California.	Forest Science. 33(I): 197-209.	CA, PNWFIA, technique
Rosson, James F., Jr.	1988	Residual woody biomass on harvested timberland in Mississippi.	In: Davids, Robert A.; Watson, W.F.; Savelle, I. Winston. eds. Proceedings of the 9th annual southern forest biomass workshop; 1987 June 8-11; Biloxi, MS. Mississippi State, MS: Mississippi State University: 152-162.	area class, MS, SOFIA
Rosson, James F., Jr.	1989	Potential residual biomass in mature pine stands of the Midsouth, U.S.A..	Biomass. 20: 145-153.	area class, SOFIA

Author(s)	Year	Title	Source	Keywords
Rosson, James F., Jr.; Doolittle, Larry	1987	Profiles of Midsouth nonindustrial private forests and owners.	Resource Bulletin SO-125. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 39 p.	area class, SOFIA
Rosson, James F., Jr.; Thomas, Charles E.	1986	The woody biomass resource of Alabama.	Research Paper SO-228. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 31 p.	AL, area class, SOFIA
Ruddell, Edward J.; Gramann, James H.; Rudis, Victor A.; Westphal, Joanne M.	1989	The psychological utility of visual penetration in forest scenic beauty models.	Environment and Behavior. 21(4): 393-412.	SOFIA,, technique, TX
Rudis, Victor A.	1983	Dispersed recreation inventory on commercial timberland.	In: Bell, John F.; Atterbury, Toby, eds. Renewable resource inventories for monitoring changes and trends: Proceedings of an international conference; 1983 August 15-19; Corvallis, OR. Corvallis, OR: Oregon State University, College of Forestry: 214-218.	AL, design, SOFIA
Rudis, Victor A.	1985	Screenometer: a device for sampling vegetative screening in forested areas.	Canadian Journal of Forest Research. 15: 996-999.	SOFIA, technique
Rudis, Victor A.	1985	Timber surveys: potential for dispersed recreation resource assessments.	In: Anderson, L.M., ed. 6th Annual Southeastern Recreation Research conference; 1984 August 16-17; Asheville, NC. Athens, GA: University of Georgia, Institute for Behavioral Research: 51-58.	AL, design, SOFIA
Rudis, Victor A.	1986	Emerging patterns in the distribution of roadless forested areas in the Midsouth.	In: Kulhavy, David L.; Conner! Richard N., eds. Wilderness and natural areas in the Eastern United States: a management challenge: Symposium proceedings; 1985 May 13-15; Nacogdoches, TX. Nacogdoches, TX: Stephen F. Austin State University, Center for Applied Studies, School of Forestry: 265-270.	multivalue, SOFIA
Rudis, Victor A.	1987	Recreational use of forested areas by Alabama residents.	Research Paper SO-237. New Orleans, LA: U.S. Department of Agrjculture, Forest Service, Southern Forest Experiment Station. 37 p.	AL, design, SOFIA
Rudis, Victor A.	1988	Litter in Alabama's forests.	Alabama's TREASURED forests. 7(1): 15.	AL, land use, SOFIA
Rudis, Victor A.	1988	Nontimber values of Louisiana's timberland.	Resource Bulletin SO-132. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern forest Experiment Station. 27 p.	LA, multivalue, SOFIA
Rudis, Victor A.	1988	Nontimber values of east Texas timberland.	Resource Bulletin SO-139. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern forest Experiment Station. 34 p.	multivalue, SOFIA, TX

Author(s)	Year	Title	Source	Keywords
Rudis, Victor A.	1989	Distribution of selected Mississippi tree species.	Mississippi Native Plant Society Newsletter. August 1989: 1-5.	area class, MS, SOFIA
Rudis, Victor A.	1990	A data base to assess the water, range, wildlife habitat, and biophysical recreation values and uses of forests in the United States.	In: Gramann, James H., comp. Proceedings: the 3rd symposium on social science in resource management; 1990 May 16-19; College Station, TX. College Station, TX: Texas A&M University: 107-118.	design, SOFIA, United States
Rudis, Victor A.	1990	Multiple value forest surveys in the Midsouth States.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 495-504.	design, SOFIA
Rudis, Victor A.	1990	Sampling and modelling visual component dynamics of forested areas.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 84-85.	AL, SOFIA, technique, TX
Rudis, Victor A., compiler.	1984	Work group H: vegetation management techniques.	In: Schlatterer, Ed; Lund, H. Gyde, eds. Proceedings of the inventory integration workshop; 1984 October 15-19; Portland, OR. Washinoton. DC: U.S. Department of Agriculture, Forest-Service, Range and Timber Management Staffs: 145-149.	design, United States
Rudis, Victor A.; Birdsey, Richard A.	1986	Forest resource trends and current conditions in the lower Mississippi Valley.	Resource Bulletin SO-116. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 7 p.	AR, area class, LA, MS, SOFIA
Rudis, Victor A.; Gramann, James H.; Ruddell, Edward J. Westphal, Joanne M.	1988	Forest inventory and management-based visual preference models of southern pine stands.	Forest Science. 34(4): 846-863.	SOFIA, technique, TX
Rudis, Victor A.; Gramann, James H.; Ruddell, Edward J.	1988	Sampling forest vegetative screening with applications to depth perception and scenic beauty of extensive forested areas.	In: The 2nd symposium on social science in resource management; 1988 June 6-9; Urbana-Champaign, IL. IES Research Report No. 11. Urbana-Champaign, IL: University of Illinois: 19-20.	AL, multivalue, SOFIA, TX
Rudis, Victor A.; Rosson, James F., Jr. Kelly, John F.	1984	Forest resources of Alabama.	Resource Bulletin SO-98. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 55 p.	AL, multivalue, SOFIA

Author(s)	Year	Title	Source	Keywords
Rudis, Victor A.; Skinner, Thomas V.	1990	Distribution of fire evidence in South Central U.S. forests.	In: Nodvin, Stephen C.; Williams, Ellen M.; Paces, Janet B., eds. Fire and the environment: ecological and cultural perspectives: an international symposium; 1990 March 20-24; Knoxville, TN. Program and abstracts. Knoxville, TN: The University of Tennessee: 33.	area class, SOFIA
Saunders, Paul R.	1979	Results of a multiresource inventory: analysis of undeveloped rural recreation sites in South Carolina.	In: Frayer, W.E., ed. Forest resource inventories; 1979 July 23-36; Fort Collins, CO. Fort Collins, CO: Colorado State University, Department of Forest and Wood Science. 1: 63-71.	SC, SEFIA, technique
Saunders, Paul R.	1980	Analysis of U.S. forest Service inventory data of the nondeveloped recreation resources in South Carolina: Southern Coastal Plain.	Research Report No. 18. Contract No. 18-409-19. Clemson, SC: Clemson University, College of Forest and Recreation Resources, Department of Recreation and Park Administration. 101 p.	SC, SEFIA, technique
Saunders, Paul R.	1980	Analysis of U.S. Forest Service inventory data of the nondeveloped rural recreation resources in South Carolina: Northern Coastal Plain.	Research Report No. 17. Contract No. 18-409-19. Clemson, SC: Clemson University, College of Forest and Recreation Resources Department of Recreation and Park Administration. 101 p.	SC, SEFIA, technique
Saunders, Paul R.	1980	Characteristics of dispersed recreation from multiresource inventory plots in South Carolina.	RPA 1980-7. Clemson, SC: Clemson University, College of Forest and Recreation Resources, Department of Recreation and Park Administration 15 p.	SC, SEFIA, technique
Saunders, Paul R.; Stachoviak, William V.; Howard, Gordon E.	1979	Inventory of nondeveloped, rural recreation resources in South Carolina.	Research Report No. 12. Contract No. 18-409-15. Clemson, SC: Clemson University, College of Forest and Recreation Resources, Department of Recreation and Park Administration. 132 p.	SC, SEFIA, technique
Saunders, Paul Richard	1981	Application of multiresource data to recreation planning: Nantahala and Pisgah National Forests, North Carolina.	Research Report No. 29. Contract No. 18-409-26. Clemson, SC: Clemson University, College of Forest and Recreation Resources,, Department of Recreation and Park Administration. 17 p.	NC, SEFIA, technique
Schlatterer, Ed; Lund, H. Gyde, eds.	1984	Proceedings of the inventory integration workshop; 1984 October 15-19; Portland, OR.	Washington DC: U.S. Department of Agriculture, Forest Service, Range and Timber Management Staffs. 165 p.	design, United States, WO
Schreuder, H. T.; Thomas, C. E.	1985	Efficient sampling techniques for timber sale surveys and inventory updates.	Forest Science. 31(4): 857-866.	multivalue, SOFIA
Scott, Charles T.	1981	Design of optimal two-stage multiresource surveys.	Ph.D. thesis. St. Paul, MN: University of Minnesota, Department of Forestry. 138 p.	NEFIA, technique
Scott, Charles T.	1982	Plot configurations in the East for multiresource purposes.	In: Brann, Thomas B.; House, Louis O., IV; Lund, H. Gyde, eds. In-place resource inventories: principles and practices: Proceedings of a national workshop; 1981 August 9-14; Orono, ME. SAF 82-02. Bethesda, MD: Society of American Foresters: 379-382.	NEFIA, technique

Author(s)	Year	Title	Source	Keywords
Scott, Charles T.; Voorhis, Nancy G.	1986	Northeastern Forest Survey site index equations and site productivity classes.	Northern Journal of Applied Forestry. 3: 144-148.	multivalue, NCFIA, NEFIA, SEFIA, SOFIA
Sendak, Paul E.; Dennis, Donald F.	1989	Vermont's use value appraisal property tax program: a forest inventory and analysis.	Research Paper NE-627. Broomall, PA: U.S. Deoartmemt of Agriculture, Forest Service. Northeastern Forest Experiment Station. 68 p.	land use, NEFIA, VT
Shands, William E.	1985	Nontimber resources: a challenge for Forest Inventory and Analysis.	In: Proceedings: national workshop on applications of Forest Inventory and Analysis research to hardwood research issues; 1985 October 29-30; Alexandria, VA. Washington, DC: U.S. Department of Agriculture, Forest Service: 93-98.	design, NEFIA, SEFIA
Shands, William E., ed	1981	A citizen's guide to the Forest and Rangeland Renewable Resources Planning Act.	U.S. Department of Agriculture, Forest Service, and The Conservation Foundation. FS-365. Washington, DC: U.S. Government Printing Office. 200 p. + appendices.	design, United States, WO
Sheffield, Raymond M.	1981	Multiresource inventories: techniques for evaluation of nongame bird habitat.	Research Paper SE-218. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station. 28 p.	SEFIA wildlife
Sheffield, Raymond M.	1990	Access to forest inventory data for the Southeast.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 553-555.	multivalue, SEFIA
Sheffield, Raymond M.; Birch, Thomas W.; Leatherberry, Earl C.; McWilliams, William H.	1989	The pine-hardwood resource in the Eastern United States.	In: Waldrop, Thomas A., ed. Proceedings of pine-hardwood mixtures: a symposium on the management and ecology of the type; 1989 April 18-19; Atlanta, GA. General Technical Report SE-58. Asheville, NC: U.S. Department of Agriculture, Forest Service, Southeastern Forest Experiment Station: 9-19.	area class, NCFIA, NEFIA, SEFIA, SOFIA
Sheffield, Raymond M. Birch, Thomas; McWilliams, William H.; Tansey, John B.	1990	Extent and characterization of Atlantic white-cedar stands in the Eastern United States.	In: Development of ecological perspectives for the 21st century: abstracts of the plenary, symposium papers and posters: 5th International Congress of Ecology: 1990 August 23-30; Yokohama, Japan. Yokohama, Japan: Yokohama National University: 126.	area class, NEFIA, SEFIA, SOFIA
Sheffield, Raymond M.; Knight, Herbert A.	1982	Loblolly pine resource--Southeast region.	In: Kellison, R.C.; Gingrich, Samuel, conference cochairmen. Symposium on the loblolly pine ecosystem (East region); 1982 December 8-10; Raleigh,, NC. Raleigh, NC: North Carolina State University, School of Forest Resources: 7-24.	area class, SEFIA

Author(s)	Year	Title	Source	Keywords
Shifley, S.R.	1988	Analysis and modelling of forest growth trends along a sulfate deposition gradient in North Central United States.	In: Ek, Alan R.; Shifley, Stephen R.; Burk, Thomas E., eds. Forest growth modelling and prediction: proceedings of the IUFRO conference; 1987 August 23-27; Minneapolis, MN. Society of American Foresters Publication No. 87.12. General Technical Report NC-120. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 1: 506-513.	MI, MN, NCFIA, technique, WI
Smith, Katherine C.; Larson, Frederic R.	1984	Overstory-understory relationships in the black spruce type of interior Alaska.	In: LaBau, Vernon J.; Kerr, Calvin L., eds. Inventorying forest and other vegetation of the high latitude and high altitude regions: Proceedings of an international symposium; 1984 July 23-26; Fairbanks, AK. SAF 84-11. Bethesda, MD: Society of American Foresters: 103-112.	AK, PNWFIA, technique
Smith, Robert B.; Hornbeck, James W.; Federer, C. Anthony: Krusic, Paul J., Jr.	1989	Regionally averaged diameter growth in New England forests.	Research Paper NE-637. Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 26 p.	CT, MA, ME, NEFIA, NH, RI, technique, VT
Smith, W. Brad	1985	Factors and equations to estimate forest biomass in the North Central region.	Research Paper NC-268. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 6 p.	NCFIA, technique
Smith, W. Brad	1986	Biomass yields for small trees, shrubs, and herbs in Northern Lake States forests.	Research Paper NC-277. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 6 p.	NCFIA, technique
Smith, W. Brad	1990	Inventory updates: overview of the North Central experience.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology in forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 442-448.	NCFIA! technique
Smith, W. Brad; Brand, Gary J.	1983	Allometric biomass equations for 98 species of herbs, shrubs and small trees.	Research Note NC-299. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 8 p.	NCFIA, technique
Snyder, Dale E.	1982	Soil measurements for multiresource inventories.	In: Brann, Thomas B.; House, Louis O., IV; Lund, H. Gyde, eds. In-place resource inventories: principles and practices: Proceedings of a national workshop; 1981 August 9-14; Orono, ME. SAF 82-02. Bethesda, MD: Society of American Foresters: 333-338.	AK, PNWFIA, RM, water
Spencer, John S., Jr.	1987	A method for estimating operability and location of the timber resource.	In: Lund, H. Gyde; Caballero-Deloya, Miguel; Villareal-Canton, Raul, eds. Land and resource evaluation for national planning in the tropics: Proceedings of the international conference and workshop; 1987 January 25-31; Chetumal, Mexico. General Technical Report WO-39. Washington, DC: U.S. Department of Agriculture, Forest Service: 377-380.	NCFIA! technique

Author(s)	Year	Title	Source	Keywords
Spencer, John S., Jr.,; Hansen, Mark, H.; Jakes, Pamela J.	1986	A method for estimating operability and location of the timber resource.	Research Paper NC-273. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 52 p.	MN, NCFIA, technique
Spencer, John S., Jr.; Smith, W. Brad; Hahn, Jerold T.; Raile, Gerhard K.	1988	Wisconsin's fourth forest inventory, 1983.	Resource Bulletin NC-107. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 158 p.	multivalue, NCFIA, WI
Spencer, John S.; Kingsley, Neal P.; Mayer, Robert V.	1990	Indiana's timber resource, 1986: an analysis.	Resource Bulletin NC-113. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 85 p. + map (major forest types).	area class, IN, NCFIA
Spencer, John S.; Strickler, John K.; Moyer, William J.	1984	Kansas forest inventory, 1981.	Resource Bulletin NC-83. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 134 p.	KS, multivalue, NCFIA
Sternitzke, Herbert S.	1976	Grazing potential of Louisiana pine forest-ranges.	Research Note SO-203. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 2 p.	area class, LA, SOFIA
Sternitzke, Herbert S.; Pearson, Henry A.	1974	Forest-range resource statistics for southwest Louisiana parishes.	Resource Bulletin SO-SO. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 22 p.	area class, LA, SOFIA
Sternitzke, Herbert S.; Pearson, Henry A.	1975	Forest-range resources of southwest Louisiana.	Journal of Range Management. 28(4): 264-266.	area class, LA, SOFIA
Stone, Robert N.; McKeever, David B.	1983	Estimating timber production for U.S. farm and other private forests.	In: Royer, Jack P.; Risbrudt, Christopher D., eds. Nonindustrial private forests: a review of economic and policy studies: Symposium proceedings; 1983 April 19-20; Durham, NC. Durham, NC: Duke University, School of Forestry and Environmental Studies: 37-50.	owner, United States
Tansey, John B.	1988	The hardwood resource in the Southeastern States.	In: Availability of hardwoods in the upland south: Proceedings of the conference; 1988 January 7; Charlotte, NC. Hardwood Research Cooperative Series No. 7. Asheville, NC: Hardwood Research Council and NC State University: 4-45.	area class, SEFIA
Tansey, John B.; Cost, Noel D.	1990	Estimating the forested wetland resource in the Southeastern United States with Forest Survey data.	In: Jackson, Ben D., ed. Special issue: the international forested wetlands resource: identification and inventory: Proceedings of the international conference: 1988 September 19-22; Baton Rouge, LA. Forest Ecology and Management. 33/34: 193-214.	area class, SEFIA
Tarbet, Don D.; Cashwell, John H.	1990	Forest information needs of concerned groups in the State of Maine.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1989 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 17-22.	design, ME, NEFIA

Author(s)	Year	Title	Source	Keywords
Teuber, Kurt B.	1987	Use of LANDSAT thematic mapper data for classification of forest lands in Northern Louisiana.	In: Satellite land remote sensing: current programs and a look to the future: Proceedings of the 11th Pecora symposium; 1987 May 5-7; Sioux Falls, SD. Falls Church, VA: American Society for Photogrammetry and Remote Sensing: 451-456.	LA. satellite, SOFIA
Teuber, Kurt B.	1988	Applications of remote sensing technology at the Southern Forest Experiment Station.	In: Proceedings: resource technology 88: international symposium on advanced technology in natural resource management; 1988 June 20-23; Fort Collins, CO. Falls Church, VA: American Society for Photogrammetry and Remote Sensing: 255-256.	satellite, SOFIA
Teuber, Kurt B.	1988	Large-scale forest area estimation using advanced very high resolution radiometer (AVHRR) data.	In: Remote sensing for resource inventory, planning, and monitoring: 2nd Forest Service remote sensing applications conference; 1988 April 11-15; Slidell, LA. Falls Church, VA: American Society of Photogrammetry and Remote Sensing: 145-152.	satellite, SOFIA
Teuber, Kurt B.	1990	Remote sensing techniques for updating forest inventories.	In: LaBau, Vernon J.; Cunia, Tiberius, tech. eds. State-of-the-art methodology of forest inventory: a symposium proceedings; 1489 July 30-August 5; Syracuse, NY. General Technical Report PNW-263. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 436-441.	satellite, SOFIA
Teuber, Kurt B.	1990	Use of AVHRR imagery for large-scale forest inventories.	In: Jackson, Ben D., ed. Special issue: the international forested wetlands resource: identification and inventory: Proceedings of the international conference; 1988 September 19-22; Baton Rouge, LA. Forest Ecology and Management. 33/34: 621-631.	satellite, SOFIA
Thomas, Charles E.; Parresol, Bernard R.	1989	Comparing basal area growth rates in repeated inventories: Simpson's paradox in forestry.	Forest Science. 35(4):1029-1039.	AL, SEFIA, SOFIA, technique
Tosta, Nancy; Marose, Robin	1987	The distribution of California hardwoods: results of a statewide geographic information system.	In: Plumb, Timothy R.; Pillsbury, Norman H., tech. coords. Proceedings of the symposium on multiple-use management of California's hardwood resources; 1986 November 12-14; San Luis Obispo, CA. General Technical Report PSW-100. Berkeley. CA: U.S. Department of Agriculture, Forest Service, Pacific Southwest Forest and Range Experiment Station: 304-308.	area class, CA, PNWFIA
Turner, R. Eugene; Forsythe, Stephen W.; Craig, Nancy J.	1981	Bottomland hardwood forest land resources of the Southeastern United States.	In: Clark, J.R.; Benforado, J., eds. Wetlands of bottomland hardwood forests: Proceedings of a workshop on bottomland hardwood forest-wetlands of the Southeastern United States; 1980 June 1-5; Lake Lanier, GA. New York, NY: Elsevier Scientific Publishing Company: 13-28.	area class, SEFIA, SOFIA

Author(s)	Year	Title	Source	Keywords
Turner, R.E.; Craig, N.J.	1980	Recent areal changes in Louisiana's forested wetland riparian habitat.	Louisiana Academy of Sciences. 43: 61-78.	area class, LA, SOFIA
USDA Forest Service	1977	The nation's renewable resources--an assessment, 1975.	U.S. Department of Agriculture, Forest Service, Forest Resource Report No. 21. Washington DC: U.S. Government Printing Office. 243 p.	area class, WO
USDA Forest Service	1980	A recommended renewable resources program--1980 update.	U.S. Department of Agriculture, Forest Service, FS-346. Washington, DC: U.S. Government Printing Office. 540 p. + appendices.	multivalue, United States, WO
USDA Forest Service	1980	The report to Congress on the nation's renewable resources.	U.S. Department of Agriculture, Forest Service, FS-347. Washington DC: U.S. Government Printing Office. 155 p.	area class, WO
USDA Forest Service	1981	An assessment of the forest and range land situation in the United States.	U.S. Department of Agriculture, Forest Service, Forest Resource Report No. 22. Washington, DC: U.S. Government Printing Office. 352 p.	multivalue, wo
USDA Forest Service	1982	An analysis of the timber situation in the United States: 1952-2030.	U.S. Department of Agriculture, forest Service, Forest Resource Report No. 23. Washington, DC: U.S. Government Printing Office. 499 p.	multivalue, WO
USDA Forest Service	1987	Forest Service resource inventory: an overview.	Forest Inventory and Economics Research. U.S. Department of Agriculture, Forest Service. Washington, DC: U.S. Government Printing Office. 29 p.	design, WO
USDA Forest Service	1988	The South's fourth forest: alternatives for the future.	U.S. Department of Agriculture, Forest Service, Forest Resource Report No. 24. Washington, DC: U.S. Government Printing Office. 512 p.	multivalue, SEFIA, SOFIA
USDA Forest Service	1989	An analysis of the land base situation in the United States: 1989-2040.	General Technical Report RH-181. Ft. Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 77 p.	INTFIA, multivalue, NCFIA, NEFIA, PNWFIA, RM, SEFIA, SOFIA, WO
. USDA Forest Service	1990	The 1989 RPA assessment of the forest and range land situation in the United States, 1989.	U.S. Department of Agriculture, Forest Service, Forest Resource Report No. 26. Washington, DC: U.S. Government Printing Office. 72 p. illus.	mult value, wo
USDA Forest Service; USDA Soil Conservation Service; State of Alaska, Department of Natural Resources	1986	Timber and vegetation resources of the Susitna River Basin--Alaska.	Vegetation resource descriptions and statistics for the Susitna River Basin Multi-resource Inventory Unit of Alaska, 1986. ASD-FPP 4550-86. Ft. Richardson, AK: U.S. Army Publications Center. 49 p. + appendices.	AK, mult. value, PNWFIA
USDA Soil Conservation Service	1987	Basic statistics 1982 National Resources Inventory.	Statistical Bulletin No. 756. Washington DC: U.S. Department of Agriculture, Soil Conservation Service, Iowa State University Statistical Laboratory. 153 p.	multivalue, United States, WO

Author(s)	Year	Title	Source	Keywords
Ursic, Stan	1987	The South's fourth forest: regional water response to timber management.	Supplementary analyses. Fort Collins, CO: U.S. Department of Agriculture, Forest Service, Rocky Mountain Forest and Range Experiment Station. 22 p.	SEFIA, SOFIA, soils
Van Hooser, Dwane D.	1984	Forest survey status at the Intermountain Station: part I--an overview.	In: Lund, H. Gyde, ed. Preparing for the 21st century: proceedings of the forest land inventory workshop; 1984 March 26-30; Denver, CO. Washington, DC: U.S. Department of Agriculture, Forest Service, Timber Management Staff: 94-99.	design, INTFIA
Van Hooser, Dwane D.	1990	Timberland and woodland resources outside National Forests in New Mexico, 1987.	Resource Bulletin INT-68. Ogden, UT: U.S. Department of Agriculture, Forest Service, Intermountain Research Station. 72 p.	INTFIA, multivalue, NM
Van Hooser, Dwane D.; Ciesla, William H.; Conner, Roger C.	1989	Damage assessment and insect and disease incidence on private forest land in northern Idaho.	Resource Bulletin INT-67. Ogden, UT: U.S. Department of Agriculture, Forest Service, Inter-mountain Research Station. 34 p.	area class, ID, INTFIA
Van Hooser, Dwane D.; Tymcio, Ronald P.; Rowland, Bruce D.	1990	INFORS: a comprehensive inventory system with international implications.	In: Lund, H. Gyde; Preto, Giovanni, tech. coords. Global natural resource monitoring and assessments: preparing for the 21st century: Proceedings of an international conference and workshop; 1989 September 24-30; Venice, Italy. Bethesda, MD: American Society for Photograrnmetry and Remote Sensing: 536-545.	design, INTFIA, United States
Waddell, Karen L.; Oswald, Daniel D.; Powell, Douglas S.	1989	Forest statistics of the United States, 1987.	Resource Bulletin PNW-168. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 106 p.	area class, INTFIA, NCFIA, NEFIA, PNWFIA, SEFIA, SOFIA
Wall, Brian R.	1981	Trends in commercial timberland area in the United States by State and ownership, 1952-77, with projections to 2030.	General Technical Report WO-31. Washington, DC: U.S. Department of Agriculture, Forest Service. 28 p.	area class, INTFIA, NCFIA, NEFIA, PNWFIA, SEFIA, SOFIA
Wall, Brian R.	1983	Future timberland area: a crucial but elusive variable in timber economy models.	Journal of Forestry. 81(11): 721-723.	design, United States
Ward, Daniel B.	1989	Commercial utilization of Atlantic white cedar (Chamaecyparis thyoides, Cupressaceae).	Economic Botany. 43(3): 386-415.	area class, SEFIA
Whelan, James B.; Tipton, James B.; Williamson, James F.; Johansen, Paul R.; McClure, Joe P.; Cost, Noel D.	1979	A comparison of three systems for evaluating forest wildlife habitat.	In: Sabol, Kenneth, ed. Transactions of the 44th North American wildlife and natural resources conference: consolidating conservation efforts; 1979 March 24-28; Toronto, Canada. Washington, DC: Wildlife Management Institute: 392-403.	design, SEFIA, VA

Author(s)	Year	Title	Source	Keywords
Widmann, Richard H.; Birch, Thomas W.	1988	Forest-land owners of Vermont--1983.	Resource Bulletin NE-102. Broomall, PA: U.S. Department of Agriculture,, Forest Service, Northeastern Forest Experiment Station. 89 p.	multivalue, NEFIA, VT
Wikstrom, John H.; Hoekstra, Thomas W.	1981	The analytical basis for integrated forest and rangeland ecosystem inventory.	In: Arid land resource inventories: developing cost-efficient methods: Proceedings of an international workshop; 1980 November 30-December 6; La Paz, Mexico. General Technical Report WO-28. Washington, DC: U.S. Department of Agriculture, Forest Service: 56-61.	design, RM
Winterberger, Kenneth C.	1984	LANDSAT data and aerial photographs used in a multiphase sample of vegetation and related resources in interior Alaska.	In: LaBau, Vernon J.; Kerr, Calvin L., eds. Inventorying forest and other vegetation of the high latitude and high altitude regions: Proceedings of an international symposium; 1984 July 23-26; Fairbanks, AK. SAF 84-11. Bethesda, HD: Society of American Foresters: 157-163.	AK, design PNWFIA
Winterberger, Kenneth C.; LaBau, Vernon J.	1988	Remote sensing inventory applications in applied vegetation inventories--the Alaska experience.	In: Remote sensing for resource inventory, planning and monitoring: 2nd Forest Service remote sensing applications conference; 1988 April 11-15; Slidell, LA. Falls Church, VA: American Society of Photogrammetry and Remote Sensing: 163-171.	AK, PNWFIA, satellite
Winterberger, Kenneth C.; Larson, Frederic R.	1985	Multiphase sample of vegetation and related resources using aerial photo, and ground survey data.	In: Remote sensing in forest and range resource management: proceedings of the 10th annual Pecora conference; 1985 August 20-22; Fort Collins, CO. Falls Church, VA: American Society of Photogrammetry and Remote Sensing: 404-405.	AK, PNWFIA, satellite
Winterberger, Kenneth C.; Larson, Frederic R.	1988	Measuring crown cover in interior Alaska vegetation types.	Photogrammetric Engineering and Remote Sensing. 54: 385-387.	AK, PNWFIA, technique
Yarie, John; Mead, Bert R.	1982	Aboveground tree biomass on productive forest land in Alaska.	Research Paper PNW-298. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Forest and Range Experiment Station. 16 p.	AK, multivalue, PNWFIA
Yarie, John; Mead, Bert R.	1988	Twig and foliar biomass estimation equations for major plant series in the Tanana River Basin of interior Alaska.	Research Paper PNW-401. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 20 p.	AK, multivalue, PNWFIA
Yarie, John; Mead, Bert R.	1989	Biomass regression equations for determination of vertical structure of major understory species of southeast Alaska.	Northwest Science. 63(5): 221-231.	AK, PNWFIA, technique
Zarnoch, Stanley J.; Gansner, David A.; Powell, Douglas S.; Birch, Thomas W.	1990	Stand basal-area and tree-diameter growth in red spruce-fir forests in Maine, 1960-80.	Research Paper NE-633. Radnor, PA: U.S. Department of Agriculture, Forest Service, Northeastern Forest Experiment Station. 18 p.	ME, multivalue, NEFIA

Author(s)	Year	Title	Source	Keywords
van Hees, Willem W.S.	1984	Growth rate of western and mountain hemlock on four soil ecosystems in the Petersburg/Wrangell area of southeast Alaska.	In: LaBau, Vernon J.; Kerr, Calvin L., eds. Inventorying forest and other vegetation of the high latitude and high altitude regions: Proceedings of an international symposium; 1984 July 23-26; Fairbanks, AK. SAF 84-11. Bethesda, MD: Society of American Foresters: 225-229.	AK, PNWFIA, soils
van Hees, Willem W.S.	1988	An approach to soil productivity assessment in southeast Alaska.	In: Slaughter, Charles W.; Gasbarro, Tony, eds. Proceedings of the Alaska forest soil productivity workshop; 1987 April 28-30; Anchorage, AK. General Technical Report PNW-219. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station: 81-83.	AK, area class, PNWFIA
van Hees, Willem W.S.	1988	Simulated applications of empirical timber productivity equations for forest soils in southeastern Alaska.	In: Ek, Alan R.; Shifley, Stephen R.; Burk, Thomas E., eds. Forest growth modelling and prediction: proceedings of the IUFRO conference; 1987 August 23-27; Minneapolis, MN. Society of American Foresters 87.12. General Technical Report NC-120. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 2: 921-927.	AK, area class, PNWFIA
van Hees, Willem W.S.	1988	Timber productivity of seven forest ecosystems in southeast Alaska.	Research Paper PNW-391. Portland, OR: U.S. Department of Agriculture, Forest Service, Pacific Northwest Research Station. 10 p.	AK, PNWFIA, soils
van Hees, Willem W.S.	1990	Boreal forested wetlands--what and where in Alaska.	In: Jackson, Ben D., ed. Special issue: the international forested wetlands resource: identification and inventory: Proceedings of the international conference; 1988 September 19-22; Baton Rouge, LA. Forest Ecology and Management. 33/34: 425-438.	AK, multivalue, PNWFIA

Rudis, Victor A. 1991. Wildlife habitat, range, recreation, hydrology, and related research using Forest Inventory and Analysis surveys: a 12-year compendium. Gen. Tech. Rep. SO-84. New Orleans, LA: U.S. Department of Agriculture, Forest Service, Southern Forest Experiment Station. 61 p.

More than 400 publications are listed for the period 1979 to 1990; these focus on water, range, wildlife habitat, recreation, and related studies derived from U.S. Department of Agriculture, Forest Service, Forest Inventory and Analysis unit surveys conducted on private and public land in the continental United States. Included is an overview of problems and progress in conducting multiple-value forest resource surveys since 1974. Information regarding a bibliographic data base containing these citations is provided.

Keywords: bibliography, forest resources, historical synthesis, interdisciplinary studies, multiresource inventories.

Persons of any race, color, national origin, sex, age, religion, or with any handicapping conditions are welcome to use and enjoy all facilities, programs, and services of the USDA. Discrimination in any form is strictly against agency policy, and should be reported to the Secretary of Agriculture, Washington, DC 20250.

"U.S. GOVERNMENT PRINTING OFFICE:1991-666-020/400