Provided in this document is a bibliography of selected materials addressing the interface between forestry and the social sciences. Materials are primarily from United States and foreign professional journals and publication lists of United States Forest Service extension stations. A subject-matter classification scheme, in outline format, is provided at the beginning of the document. Entries (numbered 2967-3354) are listed alphabetically by author according to the topics indicated in this scheme. Major topic areas include social science applied to: (1) forestry at large; (2) forestry's productive agents; (3) forest production, (4) manufacturing; and (5) marketing, trade, and demand for forest output. Each entry includes citation number, author(s), title, source, year, number of pages, and a code related to specific sections in the subject-matter classification scheme. In addition, if the publication is not in English, the language used is indicated. Brief annotations are provided for most entries. An author index with reference to citations in this issue is included. Also included in an appendix is a list of theses/dissertations in progress in the United States and Canada. These citations include student's name, topic, institution where the degree is being completed, the degree, and anticipated date of completion. (JN)
SOCIAL SCIENCES in FORESTRY
A CURRENT SELECTED BIBLIOGRAPHY

SPECIAL APPENDIX:
Theses and Dissertations in Progress

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SOCIAL SCIENCES IN FORESTRY

Subject-Matter Classification Scheme

Note: This outline is regarded as working for the most part from the general to the specific. Material covering two or more sections of this outline is classified in the most general of these sections. Material which is classifiable in any of two or more sections is classified in the most specific of these sections. *Asterisks mark those subjects which are not represented in this issue.

I. SOCIAL SCIENCE APPLIED TO FORESTRY AT LARGE

A. General principles, scope, content, method

B. History, status, prospects of forestry in an area, society in an area (This section includes material on forest resources alone, as opposed to that on consumer or intermediate resources alone, for which see appropriate sections.)
   1. General
   2. United States, Canada
   3. Other north-temperate nations
   4. South-temperate nations
   5. Nations in lower latitudes

C. Law, politics, policy, plan, program, and their administration

D. Other influences
   1. Taxation
      a. General
      b. Property, general and special; severance; lieu payment
      c. Income, inheritance, other
   2. Valuation (See also IIIA5f)
   *3. Insurance
   4. Social interest, value system, custom, folklore, culture
   *5. Characteristics of the individual
   6. Public relations, other

E. Research (For research on specific topics, see those topics.)
F. Professional and subprofessional affairs, education, employment of foresters

G. Social and economic development (See also IB)

H. Environmental concern

II. APPLIED TO FORESTRY'S PRODUCTIVE AGENTS
(See also the individual operation or type of output in III, IV, V)

A. Labor (Some material on labor will be found in IF, IV)
   1. General, employment, demand
   2. Supply, union
   3. Wage, cost hours, productivity technology, training, return, benefit
   4. Working condition, turnover, absenteeism, safety, insurance
   5. Characteristics of the worker

B. Owner, ownership, manager, entrepreneur, holding (See also IC, IIC3)
   1. General
   2. Public
      a. General
      b. Federal, central
      c. Regional, local
   3. Private
      a. General
      b. Industrial
      c. Nonindustrial

C. Land
   *1. Context of supply, requirement, etc.
   2. Description, use trend and status, interpreted description
   3. Management, use prospect and plan, planning, marketing, tenure
   *4. Research method

D. Capital
   1. General, investment, interest, finance
      (For investment in forest production, see IIIE; for that in manufacturing, see IVA4)
   2. Credit
III. APPLIED TO FOREST PRODUCTION (See also IIB, C)

A. Production including nontimber commodities and services

1. General, supply, multipurpose management
   *2. Christmas trees, greens
   *3. Range and livestock
   4. Naval stores, maple product
   5. Recreation
      a. General
      *b. Research
      c. Decision making, planning, policy, law
      d. Demand, consumer, market
      e. Parks and wilderness areas
      f. Interpretation
      g. Aesthetic values
      h. Consumer activities such as driving, walking, camping, etc.
      i. Valuation

6. Water, soil, watershed management, shelterbelts
   *7. Wildlife, hunting, fishing
   8. Urban forestry

B. Production chiefly of timber

1. General, supply
   *2. Soil, site, site improvement
   3. Tree regeneration and improvement; plantation
   4. Intermediate cutting, pruning, stand improvement
   *5. Harvest cutting, rotation, cutting cycle, stocking, regulation, allowable cut
      (For harvesting treated as engineering, see IVB)

*C. Roads, other forest-management transportation
   (For transportation in harvesting, see IVB4; in manufacturing and marketing, VD)

D. Damage and protection

1. From fire
   *2. Prescribed burning
   *3. From insects
   *4. From other agencies
      (For water damage and soil erosion, see IIIA6)

E. Decision making, planning, investment, accounting, inventorying
   (For investment in general, see IID1)
IV. APPLIED TO MANUFACTURING
(For material on forestry in general, including forest land resources, see IB)

A. The industry in general

1. Status and trend
   *a. General
   b. United States, Canada
   c. Other north-temperate nations
   *d. South-temperate nations
   e. Nations in lower latitudes

2. Directory
   (Includes those covering specific branches of industry.)
   *3. History
   4. Decision making, planning, investment, accounting, inventorying
      (For a specific branch of industry, see that branch, "Operation
      of firm"; for investment in general, see IIID1)

B. Timber-harvesting industry
   (Includes roundwood in general; for specific types, see IV C, "raw material." For harvesting as silviculture, see IIIB4, 5)

   *1. Status and trend
   *2. Operation of firm
   *3. Utilization of the stand or tree
      (For utilization of a specific product, see the branch of industry in question.)

      *a. General
      *b. Logging residue and its disposal

   *4. Transportation (Skidding, yarding, loading, hauling to mill.
      For transportation in forest management, see IIIC; in manufacturing and marketing, see VD)

C. Wood-using industry

1. Lumber, allied product, pallet
   a. Industry status and trend
   *b. Production, consumption, stocks, other statistics
      (For sawtimber, see IB, IVB; for sawlogs, see IVC1d)
   *c. Operation of firm
   d. Raw material

2. Pulp, paper, board
   a. Industry status and trend
   *b. Operation of firm
   c. Raw material
   *d. By-products
3. Veneer, plywood, panel
   a. Industry status and trend
   b. Operation of firm
   c. Raw material

4. Bark, chips other residue
   (See also IVB3 and the industry branch in question, "Operation of firm.")

5. Furniture
   a. Particleboard, hardboard, fibreboard, flakeboard

7. Construction

8. Charcoal, fuelwood, other combustibles; energy

9. Other wood-using industry (including pole, piling, post, mine timber, railway tie)

D. Other forest industry
   a. Decorative product
   b. Naval stores
   c. Maple product
   d. Other

V. APPLIED TO MARKETING, TRADE, DEMAND FOR FOREST OUTPUT
   (For marketing and demand for productive agents, see II)

A. Consumption
   1. General; history of consumption; consumption-production relationships
   2. Consumption or production prospect, goal, requirement, prediction (For material on short-term requirement, see the industry in question in IV, "Industry status and trend.")
   3. Consumer demand and preference (For material on specific forest resources, see also IIIA, B)

B. Market, marketing, trade, export, import
   1. General
   2. Futures, hedging
   3. Stumpage, roundwood
   4. Lumber, plywood, composition board
   5. Pulp, paper, paperboard
      a. Product
      b. Raw material
   6. Other wood products
      7. Christmas trees, greens
      8. Other type of output (See also IIC3)
C. Price, value

*1. General
2. Stumpage, roundwood
*3. Other type of output
*4. Price reporting

*D. Transportation (Includes transportation in manufacturing.)
(For transportation in forest management, see IIIIC; in harvesting see IVB4)


2979. 60 IB2 HEGG K.M. Timber Resource Statistics for the Kantishna Block, Tanana Inventory Unit; Alaska, 1973. USDA Forest Service Resource Bulletin PNW-95 (1982), 32 pages. This report for the 2.9 million acre Kantishna block is the second of four on the 14 million acre Tanana Valley inventory unit. Comments are made on general landform, timber use, recreational potential, agricultural developments, forest defect, regeneration, and inventory methodology. Tables are provided for commercial forest land and for operable noncommercial forest land.

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2983. 60 IB3 ALEKSEEV V.A., DOLGOR N. "Present Situation of
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Russian. Pages 69-70. Cited in Bibliography of
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Management of Forestry and Woodworking Industries,
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7-9, 1982, Zvolen, CSSR (1982) In Czech with summaries
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2987. 60 IB3 BUIS J. "Forest History of the Netherlands As a
Subject for Study: A Survey." In, Groeneveld Number:
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Abstracts, Vol.43, No. 5.

2988. 60 IB3 ENGELMANN M. "Revision of National Accounts,
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National accounts in the Federal Republic of Germany have
been revised. This publication gives a survey of the
revised data for a period of twenty years, containing also
statistics on agriculture and forestry.

2989. 60 IB3 GARMUS V. "Forest Management in Slovenia."
Sodobno Kmetijstvo, Vol. 13, No. 11 (1980) In
Slovenian, pages 454-456. Cited in Bibliography of
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2990. 60 IB3 GRUNIANSKII I.I. "Effective Use of Forest
Resources (Carpathian Areas)." Derevoobrab Prom-st', No.
5 (1981) In Russian, pages 3-4. Cited in
Bibliography of Agriculture, Vol.46, No. 9.


2993. 60  IB3  HILLIS W.E.  "Forest Products and People - Some Thoughts on USSR, China and Japan."  Australian Forestry, Vol. 45, No. 2 (1982), pages 78-88. Supply and consumption of forest products in the USSR, China, and Japan is summarized. One country has ample domestic forest resources, another inadequate local resources, but money to buy what is needed, and the third has severe shortages of wood and little international exchange. Attitudes of governments and people in these countries are compared with those in Australia.


2997. 60  IB3  JAMES N.D.G.  A Forestry Centenary. Oxford: Basil Blackwell (1982), 208 pages. History of the Royal Forestry Society of England, Wales and Northern Ireland which describes the development of forestry in these countries during the period 1882 - 1982, the part played by the society and its members in forestry education and training, and, particularly since 1945, in championing private forestry.


IB3 LINNARD W. Welsh Woods and Forests: History and Utilization. Cardiff: National Museum of Wales (1982), 203 pages. Development of Welsh forests since the last ice age. Emphasizes military significance of forests as well as their function as providers of employment, of raw material for developing rural industries. Also notes the changes from period to period in silvicultural techniques and forest management patterns.


| IB4 | SALEM B.B., EREN T.M. | Forestry in a Sandy World. | Unasylva, Vol. 34, No. 135 (1982), pages 8-12. The creation of forestry policies and practices that suit the ecological conditions and support the agricultural needs of Western Asia are among the major concerns of the UN Economic Commission for West Asia. |
| IB5 | BELL G.S. | Forestry Development Corporations in Papua New Guinea. | Commonwealth Forestry Review, Vol. 61, No. 2 (1982), pages 99-106. As a result of a small domestic market for timber-products, a less favorable species composition than its neighbors and a government decision to maintain a hard currency, the policy of encouraging processing for export has been temporarily modified in favor of log exports. The Forestry Development Corporations represent an attempt to satisfy both the needs of Papua New Guinea and of foreign companies whose expertise is essential in the creation of a visible timber industry. |

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3042. 60 IB5 MUNOZ M.T. Forestry Development, Paraguay. Basic Frame for the Reorganization and Functioning of Forest Districts with Particular Reference to the Itapua-Forest


3049. 60 IB5 SHIVA V., SHARATCHANDRA H.C., BANDYOPADHYAY J. "Social Forestry - No Solution within the Market." (1982), pages 158-168. To combat deforestation, the Indian government has adopted an ambitious program of social forestry, the aim being to rebuild the country's wealth through the active participation of village communities. The program has turned out to be little more than an extension of earlier forestry practices. Industry has benefited and it has not helped the situation of the rural poor.


3077. 60 IC PALO M.S., OLOJEDE A.A. Forest Sector Statistical Information System for Nigeria: A Strategic Development Plan. FO:NIR/77/008. Project Technical Paper No. 2: FAO and Federal Dept. of Forestry, Ibadan, Nigeria. Author's address: The Finnish Forest Research Inst. Dept. of Forest Economics, Box 37, 00381 Helsinki 38, Finland. (1982), pages 1-65. The future information requirements were analyzed with particular reference to the needs of the national forest sector policy. The requirements were derived from the policy objectives in order to facilitate appropriate forest sector policy planning, decision-making, execution and follow-up. A wide range of environmental, economic and social statistical information needs were identified.


3085. 60 IC SAGOFF M. "We Have Met the Enemy and He Is Us or Conflict and Contradiction in Environmental Law." Environmental Law, Northwestern School of Law of Lewis and Clark College, Vol. 12, No. 2 (1982), pages 283-315.


3087. 60 IC SCHWAB J.L. Law, Policy, Planning and Administration in Forestry. Public Administration Series: Bibliography P-1095. Vance Bibliographies, P.O. Box 229, Monticello, IL 61856 $5.25 (1982), 34 pages.


3099. 60 ID1B HICKMAN C.A. "Emerging Patterns of Forest Property and Yield Taxes." Proceedings, Forest Taxation Symposium II. Publication FWS-4-82. School of Forestry and Wildlife Resources, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061. (1982), pages 52-69.

A productivity tax accurately based on a typical forest valuation formula could be more discouraging to purchase of bare land than an unmodified ad valorem tax because the common productivity valuation approach capitalizes mean annual value increment and gives the combined value of land and timber in a fully regulated forest. In terms of present value on one acre, the burden on land purchase and reforestation decisions tend to be heightened because productivity taxes are distributed more toward rotation-start than the ad valorem tax. Improper procedures for selecting capitalization rate often cause productivity valuations to vary inversely with the inflation rate.


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3111.  60  ID1C  MILLIKEN R. B.  "Recent Legislation and Administrative Changes -- Implications for Corporate and non-Industrial Landowners."  Proceedings, Forest Taxation Symposium II.  Publication FWS-4-82.  School of Forestry and Wildlife Resources, Virginia Polytechnic Institute and State University, Blacksburg, VA 24061.  (1982), pages 1-10.


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discipline distribute evenly among the subfields, timber production economics has become most important during the past 10 to 20 years. The new forest products market development requires the focus be shifted from pulpwod to high quality sawntimber production. Maintaining the current market share calls for effective measures to control wood costs. This article proposes nine research projects relating to these market demands.


3126. 60 IE ROMM J. "A Research Agenda for Social Forestry." The International Tree Crops Journal, Vol. 2, No. 1 (1982), In English with French and Spanish summaries. pages 25-59. Priorities for social forestry research are considered under three main headings: (1) System Design, identification of cropping systems which are most productive for different conditions of soil and climate. (2) Economics of Design and Management, development of criteria for the selection of those cropping systems which will produce sufficient net economic benefits in different social and ecological conditions to justify investment requirements. (3) Role of Government; legal, administrative, and policy changes which a government needs to make in order to create a social climate that will favor the widespread adoption of social forestry.


3131. 60  IF LEHTO J. Forest Education Evaluated by White-Collar Groups and Organizations of Forestry." Univ. of Helsinki, Dept. of Education Investigations. Author's address: Lehto Jaakko KY, Consultancy, Unioninkatu 39 A 00170 Helsinki 17, Finland. (1982) In Finnish with English summary, pages 1-59. Results of the investigation reflect the opinions of 1,213 forestry professionals concerning their education.

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3134. 60  IF SELBY A., KUULUVAINEN J. Some Observations on the Workings of the Nordic Forest Economics Seminar. Norges Landbrukshogskole, Inst. for Skogokonomi, Proceedings, Scandinavian Society of Forest Economics. Author's address: The Finnish Forest Research Inst. Dept. of Forest Economics, Box 37, 00381 Helsinki 38, Finland. (1982), pages 1-7. Critical but constructive views of the Nordic Forest Economics Seminar. The need for a flexible structure, divorced from the IUFRO model, is stressed in order to give every opportunity to forest economics researchers in the Nordic countries to actively participate in the scientific discussions that the constructive atmosphere of the Seminar can create.


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I1A1 SHARMA L. C. "Employment Potential of Forestry Sector in India." Indian Journal of Industrial Relations, Vol. 15, No. 4 (1980), pages 577-597. Cited in Forestry Abstracts, Vol. 43, No. 6. Analysis of labor in: forest management, forest harvesting, forest industries. It is estimated that the sector will be able to achieve self-sufficiency and employment for an extra 5 million people (3 million are employed now) by 1990.


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A Survey of Socio-Economic Conditions of Manpower Engaged in Forestry and Wood-Based Industries in Pakistan. Pakistan Forest Institute Peshawar (1981). 268 pages. Statistics on workers in the following areas: afforestation and regeneration, timber harvesting in the coniferous forests, wood harvesting in the broad-leaved forests, minor forest produce, marketing of timber, marketing of firewood, sawmilling, village carpentry, boat building, building construction, manufacture of bus and truck bodies, furniture industry, matches, paper and paperboard, particle and hardboard, pencils, plywood, railway carriages and sleepers, sports goods, timbering in coal mines, wood artifacts, wood containers.


IIB3B O'LAUGHLIN J., ELEFSON P.V. "Strategies for Corporate Timberland Ownership and Management."
Corporate timberland strategies changed between 1969 and 1978. Financial returns were deemphasized in favor of a more long-range perspective toward productivity and fiber supply security. A surveyed sample of wood-based subsidiaries of large diversified companies with a different main line of business managed their timberlands no differently than did a sample of similarly sized companies dependent on wood for their basic business.


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3177. 60 IIB3C FOSTER B.B. "Four Horsemen of the NIPF Apocalypse." Journal of Forestry, Vol. 80, No. 11 (1982), pages 706-708,716. Investments in timber production generally return at rates as high as or higher than those for most alternatives. The risk in these investments is often overstated. Rotations that yield profitable timber crops are not unduly long; they are comparable to periods for Individual Retirement Accounts. Regeneration costs need not be prohibitive if available management and cost-share assistance is accepted.


3179. 60 IIB3C HANNELLUS S. "Who Is the Non-Farmer Forest Owner? The Semantic Influences of the Non-Farmer Forest Owner-Concept to Research Results and Published Statistics." Silva Fennica, Vol. 14, No. 2 (1980) In Finnish with English summary. Pages 122-135. In various research reports private forest owners have been dichotomously classified into two groups, farmers and non-farmers. The recommended concept of farmer forest owner is understood as a forest owner who has taxable net income (state taxation) from farming. Other private forest owners are classified as non-farmers.

3181. 60 IIB3C HOWLETT D. The Small Woodland Owner in Maine. Technical Notes No. 85, College of Forest Resources, University of Maine. (1982), 69 pages.

3182. 60 IIB3C JARVELAINEN V.P. "Cutting Behavior in Finnish Private Woodlots." Folia Forestalia No. 499 (1981) In Finnish with English abstract. Pages 1-54. Describes and explains the cutting behavior of private forest owners considering both cuttings for sale and for private use.


3188. 60 IIB3C ZINN G.W., MILLER G.W. The Increment Contract: a Potential Means of Increasing Timber Production from Nonindustrial Private Forests in the Central Appalachians. West Virginia University Agric. & Forestry Exp. Stn. Bulletin 675 (1982), 26 pages. Nearly 500,000 acres of nonindustrial private forestland have been brought into higher levels of timber production through long-term increment-based cutting contracts involving local woodland
owners and large wood products firms in the South. Interviews in the Central Appalachians (Pennsylvania, West Virginia, Virginia, and North Carolina) indicate most nonindustrial private forest owners in that region are receptive to the guaranteed annual payment provided through the contract.


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<td>National Trust Fund for Public Lands Promotion in Mexico.</td>
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<td>(1981), 17 pages</td>
<td>Cited in FAO Documentation Current Bibliography 82/5-6.</td>
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<td>3201</td>
<td>60</td>
<td>COMBE J.</td>
<td>&quot;Agroforestry Techniques in Tropical Countries: Potential and Limitations.&quot;</td>
<td>Agroforestry Systems</td>
<td>Vol. 1, No. 1 (1982)</td>
<td>In English with English and French summaries</td>
<td>Pages 13-27. It is no longer tolerable to consider separately forestry and agriculture in the tropics, and to manage forest resources in an isolated ecosystem. A classification of the principal agroforestry techniques is proposed and some traditional practices are described. The outstanding advantages of agroforestry in the social, economic and ecological fields suggest some principles for future investigation programs, which will still have many problems to solve.</td>
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<td>FILIUS A.M.</td>
<td>&quot;Economic Aspects of Agroforestry.&quot;</td>
<td>Agroforestry Systems</td>
<td>Vol. 1, No. 1 (1982), pages 29-39.</td>
<td>Agroforestry can be an appropriate technology in areas with fragile ecosystems and subsistence farming. Objectives of participants in an agroforestry program may not coincide with social objectives, and so do not lead to the socially optimum combination of agriculture and forestry. For that social optimum institutional arrangements will often be required.</td>
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<td>HUANG TSENG-CHIENG, HSU SU-JEN</td>
<td>&quot;The Problems of Taiwan's Mangrove Forest.&quot;</td>
<td>Quarterly Journal of Chinese Forestry</td>
<td>Vol. 15, No. 3 (1982)</td>
<td>In Chinese</td>
<td>Pages 77-83. Presents the status of Taiwan's mangrove forest, ecological threats to its survival and explains an appeal proposed for its preservation.</td>
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3211. 60 111A1 "Managing Forests is Maintaining Forests - a Theme Discussed from Several Points of View." Allgemeine Forstzeitung, Vienna, No. 8 (1982) In German, pages 197-209. Five articles discussing Austrian forest management from the viewpoints of forestry, nature and environment protection, the general public, and the administration.

3212. 60 111A1 "Principles for the Management of Forests in the Bavarian Alps." Edited by the Bavarian State Dept. of Nutrition, Agriculture and Forestry. (1982) 72 pages. Alpine forests function as protective and recreational areas besides producing timber. These principles give regulations for selecting tree species, management, and natural regeneration of alpine forests. They are mandatory for public forests and recommended for private owners.


3221. 60 IIIA5A  SCHWAB J.L. Recreation As a Forest Product. Public Administration Series: Bibliography P-1096. Vance Bibliographies, P.O. Box 229, Monticello, IL 61856 $8.25 (1982), 57 pages.


3224. 60 I1A5C OSTAPENKO YA. V. "Criteria and Indices for Forward Planning of Forest Recreation Zones." Lesn Zhurnal, No. 6 (1980) In Russian, pages 106-109. Cited in Forestry Abstracts, Vol.43, No. 5. A system of 21 indices was developed for evaluating a recreation development plan so as to maximize the ecological/economic effect.


3232. 60 IIIA5E MILLER K.R. "Parks and Protected Areas: Considerations for the Future." Ambio, Vol. 11, No. 5 (1982), pages 315-317. Key questions confront those responsible for the stewardship of society's natural heritage which challenge the capacity of established areas to maintain biological resources and the capacity of management institutions to carry out their commitments. The options and opportunities to meet the challenge are considerable.


3234. 60 IIIA5E PADUA M.T.J., QUINTAO A.B. "Parks and Biological Reserves in the Brazilian Amazon." Ambio, Vol. 11, No. 5 (1982), pages 309-314. Although the first Brazilian national park was established in 1937, until the last decade there were no protected areas in the Brazilian Amazon. Since 1974 fourteen new protected areas have been added to the Brazilian parks system, most of them in the previously-neglected Amazon and northeast regions. Total area under management has risen to almost 10 million ha. Further planning is being developed to give continuity to a process which aims to protect significant samples of Amazonian ecosystems.

3235. 60 IIIA5E PARSONS D.J., STOHLGREN T.J., KRAUSHAAR J.M. "Wilderness Permit Accuracy: Differences between Reported and Actual Use." Environmental Management, Vol. 6, No. 4 (1982), pages 329-335. Wilderness permits are valuable tools for recording backcountry use patterns and provide a basis for management decisions. Significant inaccuracies in reporting permit data result from noncompliance, transmission errors, and changes in visitor plans.

3236. 60 IIIA5E ROGGENBUCK J.W., WATSON A.E., STANKEY G.H. "Wilderness Management in the Southern Appalachians." Southern Journal of Applied Forestry, Vol. 6, No. 3 (1982), pages 147-152. Wilderness managers need information about visitor preferences and behavior if they are to protect wilderness experiences and resources. Wilderness users expect few contacts with other groups. Use controls are generally supported, and visitors favor unobtrusive management strategies over direct regulations.


WASHBURNE R.F. "Wilderness Recreational Carrying Capacity: Are Numbers Necessary?" Journal of Forestry, Vol. 80, No. 11 (1982), pages 726-728. Amount of use is only one factor related to wilderness conditions. In most situations, setting standards and monitoring specific conditions would be more effective than calculating use capacities. Such monitoring would seem to meet requirements of the National Forest Management Act pertaining to wilderness management.


ANDERSON L.M., LEVI D.J., DANIEL T.C., DIETERICH J.H. The Esthetic Effects of Prescribed Burning: A Case Study. USDA Forest Service Research Note RM-413 (1982), 5 pages. Scenic values were compared for two 10 acre ponderosa pine plots, both logged, but one with a prescribed burn to remove slash. The burned plot was significantly less attractive immediately following the burn, but significantly more attractive one year later. Recovery on both plots reached an apparent asymptote after 3 years.


3247. 60 I1IA5G SAVOLAINEN R., KELLOMAKI S. "Scenic Value of Forest Landscape." Acta Forestalia Fennica, Vol. 170. Author's address: University of Joensuu, Box 111, 80101 Joensuu 10, Finland. (1981) In Finnish with English summary and abstract. Pages 1-80. Scenic value of forest landscapes was studied on the basis of an empirical material representing scenic preferences among forestry students and city dwellers. Stands of moderate density containing individual tall trees and a coniferous undergrowth had the greatest scenic value, independently of the tree species composition. Measurements made in the field by means of interviews, and measurements in the laboratory made on the basis of photographs, gave very similar results. Photographs seem to represent a reliable tool for estimating scenic value of forest landscape.


Implications of these reduced benefit estimates include less than optimal treatment of these species in land use resource allocations and in allocation of wildlife management funds.


3256. 60 IIIA6 PANCEL L., WIEBECKE C. "Project - Evaluation under Extreme Political and Economical Site Conditions - Demonstrated in the Example of the Soil-Rehabilitation Project PERTT in the Trija Valley, Bolivia." Forstarchiv, Hannover, No. 3 (1982) In German, English and Spanish summaries. Pages 102-110: PERTT is a forestry project with a main objective of erosion control. Special political and economic presuppositions are considered in the project evaluation. The analysis of the objectives, and the planning and organization make possible a statement on the political stability of the project.


3258. 60 IIIA8 ANDRESEN J.W., JOHNSON C. "Is Urban Forestry Education Ready for the Future?" Journal of Forestry, Vol. 80, No. 10 (1982), pages 658-659. Between 1975 and 1980 the number of North American university courses identified by "urban forestry" in the course title or catalogue description increased. More attention must be given to recruiting and retaining minority students who could promote social solidarity through inner-city "greening" programs.


3265. 60 111B1 LEDOUX C.B., BRODIE J.D. "Maximizing Financial Yields by Integrating Logging and Silvicultural Techniques." Journal of Forestry, Vol. 80, No. 11 (1982), pages 717-720. Substantial gains in merchantable volume yields and profits from Douglas-fir stands in mountainous terrain can be achieved by considering logging and silvicultural techniques simultaneously. To maximize financial yields, managers must consider not only the length of the rotation, timing of entries, and volume removal per entry but also the proper harvesting equipment, precommercial and commercial thinning treatments, and fertilizer applications. The joint returns from combinations of techniques are greater than the sum of returns from each technique applied independently.


Before the late 1960's, Finland's land-use policy encouraged land owners to expand agricultural production. The policy had to be changed drastically in 1969 because of problems in marketing considerable agricultural surpluses. Various measures, including reduction of arable land area, were taken to restore the balance between production and consumption of domestic foodstuffs. Afforestation was considered at this time as one alternative for the utilization of surplus agricultural land. This investigation describes the field afforestation policy in the context of reducing agricultural production.

In the end, the solution lies in reduction of stands to more human dimensions. Forestry should be brought to the level of the village and of local agriculture.

The National Forest System's tree improvement program for ponderosa pine in the Pacific Southwest and the "progressive tree improvement program" for Douglas-fir in the Pacific Northwest appear capable of returning at least an 8 percent real rate of return on investment if short rotations are used or if tree improvement is accompanied by thinnings.

Between 1952-1979, trends of nine forest practices cost increases have ranged from 6.55 percent annually for planting by hand to 11.19 percent annually for mechanical site preparation in the South. These figures represent an increase over the wholesale price index of 3.21 percent annually for planting by hand and 7.70 percent for mechanical site preparation.

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3276. 60 IIB3 SELBY A.J. "Hierarchical Levels in Spatial Analysis." Fennia, Vol 160, No. 2. Author's address: The Finnish Forest Research Inst., Dept. of Forest Economics, Box 37, 00381 Helsinki 38 Finland. (1981), pages 295-301. Spatial variations in the intensity of field afforestation in Finland were examined at four spatial levels, or scales. On the basis of theories and concepts concerning social and economic degrees of development, supplemented by locational and behavioral considerations, an a priori model was constructed for empirical estimation. The a priori model established the maintained hypotheses for the investigation at each level. The model contained agricultural structural, farm ownership, socio-economic and institutional elements.

3277. 60 IIB3 VALSTA L. "Profitability Comparison of Growing Densities in Spruce Plantations." Folia Forestalia No. 504 (1982) In Finnish with English summary. Pages 1-33. Economic profitability of growing densities in Norway spruce plantations in southern Finland is evaluated by using partial investment criteria as real net present value and the real internal rate of return. Yield data, covering whole rotations, are based on permanent plots and yield predictions. Unit prices and costs are held constant over time. Optimal density varied from 85 to 60 percent of the maximum and seems to be lowered with increasing site fertility, increasing rate of interest, increasing unit price ratio timber: pulpwood and decreasing cost level.


3279. 60 IIB4 LEE H.K. "Survey on Work Efficiency of Thinning." The Research Reports of the Forest Research Institute, No. 28 (1981) In Korean with English summary, pages 111-126. Work efficiency of thinnings done by manual and chainsaw operations were tested.


3281. 60 I1D1 "Prevention of Catastrophic Forest Fires." Algemeine Forstzeitschrift, Munich, No. 36 (1982) In German, pages 1068-1104. Special issue discussing international development of fire control, aerial control, fire fighting using helicopters and foam extinguishers.

3283. 60 IIIE DENNIS N., TEEGUARDEN D.E. "Identifying Suitable National Forest Timberlands: A Case Study." Journal of Forestry, Vol. 80, No. 11 (1982), pages 712-716. About 15 percent of a 624,200 acre land unit on the Shasta-Trinity National Forest in northern California is both capable of and suitable for timber production under screening criteria required by the National Forest Management Act of 1976. Economic submarginality is not the principal cause of unsuitability: only about 3 percent of the unit's capable timberlands are economically inefficient. Instead, capability screens and the timber production goals are the primary determinants of suitability. Productivity and regenerability standards alone disqualify two-fifths of the area; and another two-fifths would not be needed to meet current programmed harvest.


3286. 60 IIIE HOLLAENDER C. "Forest Area - Planning - Conception of Area - Related Forest Planning." Schriftenreihe des Instituts fuer Landschaftspflege der Universitaet Freiburg, Vol. 1 (1981) In German, 214 pages. This dissertation discusses the problems of forestry in regional planning and makes proposals to better integrate forestry planning.

3287. 60 IIIE KOTEN D.E. "Managerial Skills as Viewed by Forest Supervisors." Journal of Forestry, Vol. 81, No. 1 (1983), pages 19-22. Three skills most important are: anticipating and analyzing critical issues, working with other disciplines, and developing and setting goals and priorities. The first two skills were judged to be best enhanced by on-the-job training, while the third was viewed as a skill readily enhanced by formal development programs.

The decision to reserve fields and the later decisions either to terminate the contract or to afforest the fields was never solely the result of problems of farm structure or manpower, but values and attitudes had an important influence in every decision.


New York Timber Industries - A Periodic Assessment of Timber Output. USDA Forest Service Resource Bulletin NE-73 (1982). Statistics on industrial timber production and receipts, and production and disposition of the manufacturing residues. Comparisons are made with the most recent survey, and trends in industrial wood output are noted.

Production, Prices, Employment, and Trade in Northwest Forest Industries, Fourth Quarter 1981. USDA Forest Service, Pacific Northwest Forest and Range Experiment Station (1982), 49 pages. Current information on timber situation in Alaska, Washington, Oregon, California, Montana, Idaho, and British Columbia, including data on lumber harvest; employment in forest products industries; international trade in logs, pulpwood, chips, lumber and plywood; log prices in the Pacific Northwest; volume and average prices of stumpage sold by public agencies; and other related items.

"The Battered Fortunes of the Forest Products Industry." Business Week, No. 2756 (1982), pages 70-73. 76. The 125 billion dollar forest products industry in the United States has reached a critical point. Operating earnings are fast disappearing for even the most efficient producers, and recession and high interest rates have undercut companies.


3306. 60 IVC1A GREBER B.J., WHITE D.E. "Technical Change and Productivity Growth in the Lumber and Wood Products Industry." Forest Science, Vol. 28, No. 1 (1982), pages 135-147. Technical change in the industry was found to exhibit a labor-saving bias that resulted in a doubling of labor's productive efficiency while capital's productive efficiency declined due to underutilization of capacity. Technical change accounted for most of the growth in productivity in the industry. Elasticity of factor substitution was approximately 0.14 and labor received the larger share of income throughout the 23 year period.

3307. 60 IVC1D SENDAK P.E., HUYLER N.K., GARRETT L.D. Lumber Value Loss Associated with Tapping Sugar Maples for Sap Production USDA Forest Service Research Note NE-306 (1982), 4 pages. Tapping sugar maples for sap production yields an annual income, but there is a loss in timber quality if the tree is cut for factory lumber products. An average loss per tree of $2.87 is based on a sample of 90 trees in Vermont that were formerly tapped.


3318.  60  IVC7  ROCKEL M.L., BUONGIORNO J. "Derived Demand for Wood and Other Inputs in Residential Construction: a Cost Function Approach." Forest Science, Vol. 28, No. 2 (1982), pages 207-219. A translog cost function for residential construction was developed and estimated with United States data for the period of January 1968 to December 1977. Labor costs contributed much more to the rise in construction costs than did other inputs. Rate of growth of the derived demand for each input over the sample period was determined and decomposed into substitution effect, and a residential trend effect.


3328. 60 IVC8 KRAPFENBAUER A. "Is the Forest a Realistic Basis for Research on Alternative Energy Sources?" Allgemeine Forstzeitung, Vol. 93, No. 3 (1982) In German, pages 59, 61-64. Cited in Forestry Abstracts, Vol. 43, No. 8. Total annual usable increment from Austrian forests could cover only 10 percent of the country's heating fuel requirements.

IVC8 MORGAN W.B. "Location in the Commercialization of Fuelwood Production and Supply in Tropical Africa." In, Energy in the Rural Communities of Third World Countries (CEGET - Bordeaux, May 5-10, 1980). In English with French summary, pages 181-197. Cited in Forestry Abstracts, Vol. 43, No. 10. Demand for fuelwood has risen for domestic and industrial use. Fuelwood for the towns provides an extra source of income for the rural poor and a highly organized commercial activity for local entrepreneurs.


3337. 60 VA1 JEN I-AN "An Econometric Analysis of Supply and Demand for Logs in Taiwan." Taiwan Forestry Research Institute Bulletin No. 363 (1982) In Chinese with English summary. 10 pages. Data from 1968 to 1981 is used to investigate the supply and demand relationship of logs in Taiwan. Domestic logs are replaced by imported logs especially hardwood and high quality conifers.


3340  60 VA2 PREVOSTO M. "The Need to Curb the Wood Deficit in Italy." Cellulosa e Carta, Vol. 31, No. 4 (1980) In Italian with French, English, and German summaries. Pages 3-25. Cited in Forestry Abstracts, Vol. 43, No. 11. It is technically possible to remedy the deficit of home-grown timber for industrial use, but an effective forest policy is required to encourage establishment of private forestry and cooperatives capable of working on a large enough scale to be profitable. Present land-use is based on farms that are too small.


3342. 60 VA1 JEN I-AN "Study on the Timber Export of Taiwan Cypress to Japan." Taiwan Forestry Research Institute bulletin No. 348 (1981) In Chinese with English summary. 17 pages. Taiwan’s cypress timber has built up a good reputation in the Japanese market and has been the main source of revenue for Taiwan’s forestry agencies because its price is much higher than that of other timber species. In 1961-70, exports to Japan averaged about 100,000 cubic meters annually, but they have decreased by
one half. Since 1974 the export volume was only 25,000 cubic meters, the lowest level ever. This sharp shrinkage has been due to a rise in the import of North American cypress timber to the Japanese market and the decrease of Japanese housing starts. Reduced exports have caused the domestic price of the timber to fall, thus reducing the income of the forestry agencies and producing an adverse impact on Taiwan's forestry activities.


3346. 60 VB2 MCMAHON R.O. "Futures Trading and Marketing Strategy" Retail Lumberman. (Feb. 1981), pages 11-12. For producers and users of forest products. This paper discusses hedging, defining and illustrating the process to show how retailers might use it to acquire inventory and to protect inventory values.

3347. 60 VB3 DARR D.R. "Pacific Northwest Timberlands." In, Renewable Resources in the Pacific; Proceedings, 12th Pacific Trade and Development Conference. (1981), pages 103-116. The Pacific northwest has been in a unique position to respond to demand for timber in Japan during the past two decades which has linked the Pacific northwest also to Southeast Asia, Siberia, and the rest of the Pacific rim. Withdrawal of land from timber production and uncertainty about maintaining current harvest levels cast doubt on the ability of the Pacific-northwest region to meet any future growth in demand around the Pacific rim. Shifts in the competitive position of Pacific northwest producers of softwood lumber and plywood in the U.S. domestic market may lead to increased efforts to sell in Pacific-rim markets. Although demand will continue to grow for pulp and paper in Japan, demand for softwood lumber and plywood may not grow as before. Countries in Southeast Asia that produce tropical hardwood logs may prohibit log exports, and softwood production in Siberia may not increase as in the past.


3353.  VB6  FENTON R.  "International Wood-Chip Trade (and the South Pacific)"  Commonwealth Forestry Review, Vol. 61, No. 3 (1982),  pages 181-194.  Bulk sea transport of wood chips offers a significant world wide potential for forest utilization and should influence the thinking of both the forester and the industrialist.

APPENDIX

THESES AND DISSERTATIONS
IN PROGRESS IN THE UNITED STATES AND CANADA

The following citations include the student's name followed by the subject of the dissertation or thesis, the institution where the degree is being completed, the degree, and the anticipated date of completion.


8. ID1C D'ANGELO K. Possible effects of value added taxes upon private forestry. Virginia Polytechnic Institute and State University. M.S. August 1983.


17. IIB2C ROUSSEAU DENYSE Optimal management intensity of public forest lands in relation to location factors with special reference to the province of Quebec. Yale University. Ph. D. December 1983.


27. Weisman Geri Lynn Private non-industrial forest landowners and implications for public awareness efforts; owners' perceptions of their management status and the benefits and barriers to woodlot management (survey research). University of New Hampshire. M.S. May 1983.


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<td>Erosion control costs on Clayton Lake watershed, Oklahoma in compliance with PL92-500, section 208: are they worth the benefits?</td>
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<td>Oklahoma State University</td>
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<td>Socioeconomic analysis of big game hunting in the Eastern Slopes region of Alberta</td>
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<td>University of Alberta</td>
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<td>48</td>
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<td>Industry reforestation of company owned lands in the South: determinants of investment.</td>
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<td>A feasibility study of the forestation of surface mined land in West Virginia.</td>
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<td>Economic feasibility of hybrid poplar in Eastern Ontario.</td>
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<td>University of Toronto</td>
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