Presented is a bibliography of over 300 publications related to the application of the social sciences to various aspects of forestry. The major categories under which documents are classified involve social science as it applies to: (1) forestry in general; (2) forestry's productive agents; (3) forest production; (4) manufacturing; and (5) marketing, trade, and the demand for forest output. Each entry includes a brief abstract and listing of the author, date, source, and number of pages. Compiled documents are primarily from United States and foreign professional journals, and publication lists of United States Forest Service experiment stations. A subject index and author index are provided.
SOCIAL SCIENCES IN FORESTRY
A Current Selected Bibliography

No. 53 October 1980

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With support from the United States Department of Agriculture, Forest Service
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 IIIA5i)
   *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
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
   *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 IITA6)

   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 IID1)

   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 IID1)

   B. Timber-harvesting industry
      (Includes roundwood in general; for specific types, see IVC,
      "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 manufac-
      turing 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 IVClid)
**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**
**6. 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
   **1. Decorative product**
   **2. Naval stores**
   **3. Maple product**
   **4. Other**

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

A. Demand (See also IF)

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 and his preference**
   (For material on specific forest resources, see also IIIA,B)

B. Market, marketing, trade, export, import
1. General
  2. Futures, hedging
  3. Stumpage, log
  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, log
   3. Other type of output
   4. Price reporting

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


458. 53 IB2 BOYCE STEPHEN G., KNIGHT HERBERT A. Prospective Ingrowth of Southern Hardwoods Beyond 1980. USDA Forest Service Research Paper SE-203. (1980), 33 pages. In contrast with a prospective decrease in the ingrowth of southern pine, prospective ingrowth for southern hardwoods is equal to or greater after 1980 than before. Investments in cultural practices to favor pines have not been as effective as the biological, social, and economic forces that favor hardwoods, especially on nonindustrial private forestlands. A rational response to these trends is to increase the use of hardwoods for marketable products.

459. 53 IB2 CONKIN MERLE E. "Findings from Industry's Recent Productivity Studies." Forest Farmer, Vol. 39, No. 9 (1980), pages 13, 24, 26. Opportunities will be lost without more intensive regeneration effort to offset increasing demand and shrinking forest land base.


463. 53 IB2  MCCLORE JOE P.  "Multiresource Inventories—A New Concept for Forest Survey in the Southeast." Selected Reprints from the 1979 Workshop on Forest Resource Inventories, Colorado State Univ. (July 22-27, 1979), pages 1-6. Key concepts of South Carolina pilot study which consists of a brief historical review showing why Forest Service Renewable Resource Units are capable of multiresource surveys and a practical approach to such surveys.

464. 53 IB2  MCCLORE JOE P., KNIGHT HERBERT A.  "South Carolina's Forest Resources at a 'Turning Point.'" In, The Turning Point. South Carolina's Forestry Assoc. Annual Meeting. (1979), pages 12 and 13. An increase in pine volume in South Carolina over the past 10 years results from rapid growth of trees that seeded on abandoned fields. Future increases will depend upon efforts to reproduce pine after timber harvests.


forest industries, and importance of timber to Maryland's economy; outlook for timber supplies through 2006, forest management opportunities in the state, and the status and importance of nontimber forest resources.

468. 53 IB2 SHEFFIELD RAYMOND M. Forest Statistics for Northwest Florida, 1979. USDA Forest Service Resource Bulletin SE-52 (1980), 33 pages. Since fourth inventory (1969), area of commercial forestland has declined by over 266,000 acres and occupies 75 percent of the land area. Inventory of softwood and hardwood growing stock increased by 21 and 13 percent, respectively. Slash pine increased in volume by 43 percent. Net annual growth of growing stock totaled 236 million cubic feet, 43 percent more than annual timber removals.


IB2  An Analysis of the Timber Situation in the United States 1952-2030. (Review Draft) USDA Forest Service (1980), 541 pages plus 5 appendices. Prospective trends in demands and supplies of timber; the economic, social, and environmental implications of these trends; the land and timber resource base; and the opportunities to manage and use this resource base to enhance the quality of life for present and future generations.


IB3  EHRENREICH JOHN H. "Chinese Forestry and Forestry Education: An Overview." Journal of Forestry, Vol. 78, No. 8 (1980), pages 484-486. Much reforestation has been accomplished in the
People's Republic of China since 1956, and additional programs have recently been instituted. Forestry practices are considerably behind the times and efforts to modernize them are handicapped by lack of well-trained scientists and educators.


IB3 FARRELL E.R. "Swedish Forestry, A Question of Balance." Irish Forestry, Vol. 37, No. 1 (1980), pages 36-47. Growing stock in the Swedish forests has increased greatly over the past 50 years. A large increase in industrial productive capacity in recent years has given rise to concern over a possible wood shortage. After considerable debate the government adopted a policy of aiming to achieve a high level of productivity, while giving close consideration to environmental aspects and the public interest.

IB3 GOWDY JAMES T. "Forestry in the German Democratic Republic." Journal of Forestry, Vol. 78, No. 5 (1980), pages 283-284. Forestry in the German Democratic Republic is almost entirely government controlled and operated. Management is intensive, even-aged systems and artificial regeneration prevail. The need for steadily increased productivity is the foremost challenge.

IB3 HOLMES G.D. "The Ecology of Even-aged Plantations: An Introduction to Forestry in Upland Britain." Quarterly Journal of Forestry, Vol. 74, No. 2 (1980), pages 73-81. The need for even-aged forests. Present structure, productivity, and history of upland forests in Britain. Rural land use and the prospects for more afforestation. Ecological changes and problems and the reconciliation of the needs of silviculture, environmental management, and operational efficiency. Importance of research and the need for sound knowledge of the forest ecosystem as a basis for management decisions.


IB3 HUEN-PU WANG "Nature Conservation in China:
The Present Situation. Parks, Vol. 5, No. 1 (1980), pages 1-10. Map and table identify vegetation regions of China and the locations of natural protected areas, province and geographic location, size, date of establishment, and main protected object of each area.

486. 53 IB3 HUMMEL FRED "Forestry in the European Communities." Allgemeine Forstzeitschrift, Munich, No. 1/2 (1980), pages 5-27. In German. Problems and objectives of forest policy in the EC and a concise survey of forestry, laws, and forest organization for the nine member states of the EC.


488. 53 IB3 JOHNSTON D.R. "Forestry in China: I. Administration." Commonwealth Forestry Review, Vol. 59, No. 1 (1980), pages 41-52. About half of the forest area is controlled by the Ministry of Forestry, the other half by the communes and by Heilongjiang Province. Forest management and research suffered greatly as a result of the 1966 Cultural Revolution.

489. 53 IB3 KEMP RONALD H. "Forestry in China: II. A Commonwealth Connection." Commonwealth Forestry Review, Vol. 59, No. 1 (1980), pages 53-60. Farmland trees, villages and urban areas, agro-forestry in a commune in the Pearl River delta, a remnant of natural forest, activities of the provincial Forest Research Institute, as observed on a brief visit to the tropical zone of Guangdong Province.


491. 53 IB3 LINNARD W. The History of Forests and Forestry in Wales up to the Formation of the Forestry Commission. Thesis, Univ. of Wales, UK (1979), viii + 364 pages. The period from the last Ice Age to 1919, based on palynological and archaeological
SIRAKOV KR. "Development of Forestry in Bulgaria over the Last Hundred Years." Nauchni Trudove, Vissh Lesotekhnicheskii Institut, Sofiya (Gorsko Stapanstvo) No. 24 (1979), pages 9-15. In Bulgarian with summaries in Russian and German. Three stages of development since the Russo-Turkish war of 1877-78: The legislative stage, the organizational/instructional stage, and the economic/management stage.


"Forest Resource Base, Policy and Legislation of Sarawak." The Malaysian Forester, Vol. 42, No. 4 (1979), pages 311-327. Paper read at the seventh Malaysian Forestry Conference, Sept. 24-26, 1979 at Penang, covers: landuse policy; forest resources, management and silviculture; forest harvesting and utilization; forest economics and industries; conservation and environment; sustaining forest resources.

National position of Peninsular Malaysia as well as global situations.

498. 53  COLE N.H. AYODELE  "The Gola Forest in Sierra Leone: A remnant Primary Tropical Rain-Forest in Need of Conservation." Environmental Conservation, Vol. 7, No. 1 (1980), pages 33-40. The Gola Forest is different from the common mature secondary forests situated elsewhere in the country, and as controlled exploitation of the forest reserve is now progressing, adequate conservation management is needed.


501. 53  EREMEEV A.G.  "Classification of the Forests of Cuba." Leznoe Khozyaistvo, No. 4 (1979), pages 74-76. In Russian. Wood properties of various native tree species; density and hardness for eight species; and distribution of the main tree species, by economic value, in the main forest formations.


504. 53  HARDIE A.D.K.  "Developments in the Western Caspian Forests of Iran." Commonwealth Forestry Review, Vol. 59, No. 1 (1980), pages 69-79. Lack of protection and management coupled with a dense stocking of grazing animals continues to cause...
decline in forest area and density.

505. 53 IB5  HOENNINGER TH.  "Silvicultural Aspects of the Philippines."  Forstwissenschaftliches Centralblatt, Vol. 99, No. 1 (1980), pages 39-45. In German with an English summary. Lumber companies in the southern islands produce wood, oil (extracted from nuts), and cattle. This system has been adapted to the arid northern Philippines. Bureau of Forest Development and the College of Forestry are working on the problems of reforestation on those islands most affected by typhoons.


508. 53 IB5  LANLY J.P., CLEMENT J.  "Present and Future Natural Forest and Plantation Areas in the Tropics."  Unasylva, Vol. 31, No. 123. (1979), pages 12-20. By the year 2000 net removals from tropical forests should be 2.5 times those of 1975 and economic and population pressures, especially those for fuelwood, will cause local shortages.

509. 53 IB5  MAHMUD MOHD. DARUS BIN HAJI  "Forest Resource Base, Policy and Legislation of Peninsular Malaysia."  The Malaysian Forester, Vol. 42, No. 4 (1979), pages 328-347. Paper read at the seventh Malaysian Forestry Conference Sept. 24-26, 1979 at Penang, covers: landuse policy; forest resources, management and silviculture; forest harvesting and utilization; forest economics and industries; conservation and environment; and sustaining the forest resource.


511. 53 IB5  MUNANG M.  "Forest Resource Base, Policy and Legislation of Sabah."  The Malaysian Forester, Vol. 42, No. 4 (1979), pages 286-310. Paper read at the seventh Malaysian Forestry Conference, Sept. 24-26, 1979 at Penang, covers: landuse policy; forest resources, management and silviculture; forest harvesting and utilization; forest economics and industries; conservation and environment; sustaining the forest resource.

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513. 53 IB5 MYERS N. Tropical Moist Forests: We All Gain or Lose Together. IDRC Reports, Vol. 8, No. 3 (1979), pages 3-5. Logging damage in tropical moist forests caused by over-exploitation and clearing for cattle grazing; hydrological effects of deforestation, soil erosion and elimination of plant and animal species.


515. 53 IB5 SANTOS V. Rural Communities Participation in Forest Improvement in Mexico. FAO, Rome, Forestry Dept. (1979), 16 pages. In Spanish.

516. 53 IB5 SHEPHERD K.R., RICHTER H.V. Forestry in National Development: Production Systems, Conservation, Foreign Trade and Aid. Monograph, Development Studies Center, Australian National University, No. 17 (1979), 245 pages. Nineteen papers from an international conference held at Australian National Univ. in July 1978 to consider problems of forestry production in less developed countries.

517. 53 IB5 WIRADINATA S., SOEDERMA H., SOERIANEGARA I., MANAN S., COTO Z. "Forestry for Industrial and Rural Development in Indonesia: a Study on the Role of Forest Resources in the Long-Term Development of Indonesia." Bogor Agricultural University, Indonesia (1979), 168 pages. First part of a research study consisting of a literature review covering: forest resources; forest products (with special reference to pulp and paper projects); and soil and water conservation. Recommendations are made on subjects in need of further study, including details of 4 specific research projects in W. Java which will form the second part of the study (survey of fuelwood consumption and utilization in rural areas; evaluation of extension education in rural soil conservation; research on the economy and efficiency of different methods of terracing; management of the Ciliwung-Cisadane watershed above Jakarta.

519. 53  IB5 ZOBELE B. "Timber Supply Trends in Latin America." Investigación Forestal, Colombia, No. 51 (1979), 15 pages. Tree Improvement Cooperative Program, North Carolina state Univ., Raleigh, NC. Prospects for forestry expansion, wood production and export from Brazil, Venezuela, Chile and other Latin American countries. Excess of hardwood pulp is predicted unless fuel and chemical uses are developed. Future timber supplies from Latin America could be a significant factor in setting world timber and pulp practices.


523. 53  IC BAKER R.M. "Alternative Forestry - An Environmental Appraisal of British Forest Policy." Quarterly Journal of Forestry, Vol. 74, No. 2 (1980), pages 90-97. Current British forest policy is dominated by economic considerations which have resulted in a quasi-agricultural approach to forestry. Environmental problems may be anticipated from this approach where ecological factors are given a relatively minor role compared with that of sustainable land management system that increases overall production, combines crop production (including tree crops) and forest plants and/or animals simultaneously or sequentially, and applies management practices compatible with the cultural patterns of the local population. Examples from Latin and Central America, Java, Nicaragua, Malaysia, Belize, Fiji, and Nigeria.
economics, when management decisions are made. Forestry may be practiced in accordance with ecological factors without abandoning economic considerations.


525. 53 IC BOUVAREL P., BOURGENOT L. "New Government Decisions on Forest Policy." Revue Forestière Française, Vol. 31, No. 3 (1979), pages 179-182. In French with English, German, and Spanish summaries. Due to the conclusions of the reports by the Bertrand De Jouvenel group and Meo-Betolaud, the French government decided to increase timber production and improve industrial processing and marketing.

526. 53 IC BOWMAN J.C. "A Forestry Strategy for Great Britain." In: A National Forest policy, proceedings of a conf. held June 7, 1979 by the Committee for the Environment and the Forestry Committee of Great Britain. London. (1979), pages 6-21. Preliminary report of a study coordinated by the Center for Agricultural Strategy. An annual planting rate of 60,000 ha (including restocking) is proposed to give a productive forest area of approx. 3.5 million ha by 2020-2030. Recommendations for increasing afforestation include: more use of partnership and land leasing between the Forestry Commission and landowners; an increase in advisory services to help landowners allocate land between agriculture and forestry; and more financial incentives to small landowners.


530. 53 IC GREGERSEN H., HOUGHTALING T., RUBENSTEIN A. Economics of Public Forestry Incentive Programs: A Case Study of Cost-sharing in Minnesota. Agricultural Experiment Station, Univ. of Minnesota, Technical Bulletin 315. (1979), 65 pages. Results of an economic analysis of REAP-A7 cost-sharing: development of a method to evaluate forestry incentive programs; expost evaluation of effectiveness and efficiency of a specific program; discussion of application of the method and results in PIP and alternatives which need to be analyzed.


534. 53 IC LAVERACK M.D. "The Evolution of the Countryside Commission's Forestry Policy." In: A National Forest Policy, proceedings of a conf. held June 7, 1979 by the Committee for the Environment and Forestry Committee of Great Britain. London. (1979), pages 26-35. Countryside Commission's viewpoint: (1) major afforestation subject to planning control, (2) areas of scenic sensitivity to be the subject of management plans similar to those for national parks, (3) more emphasis on dispersed forestry integrated with agriculture and recreation, (4) planting an increased proportion of broadleaves, (5) more control over small-scale felling.

Successful forestry policy would have to institute measures to reverse the decline in planting rate, and to encourage retention of older size classes with uneven aged management systems.

Role of forestry in Soviet planning in each of the successive five-year plans since the 1920s. General development and improvement in economic forest planning in recent years.

FLDA (Felda program), a land settlement and development program, and the possibilities for a Felda system of forest plantation development.

Of 357,805 acres originally planted to trees under the program, an estimated 297,908 acres are still a part of the state's forest land base. Timber from this land has the potential to produce $5.88 billion of manufactured goods, and to provide 93,716 man-years of employment over a rotation period of 40 years.

Forestry accounts for 62% of GNP in Brazil. Need for restatement and realignment of forest policy and assessment of obstacles to development. Afforestation rate of over half a million ha per year (pines and...
eucalypts) is proposed and average productivity is to be raised. Increased efficiency of wood use, exploitation of social benefits of afforestation, etc. Separate policy to be devised for Amazonia which will emphasize the importance of preservation and conservation of that region.


546. 53 IC The 1980 Report to Congress on the Nation's Renewable Resources. USDA Forest Service FS-347 (1980), 155 pages. Divided into three parts: (1) Recommended program, including role of the forest service and pertinent laws and policies; the program; and effects on the environment. (2) Assessment in the categories of forest and rangeland, recreation, wilderness, wildlife and fish, timber, water, mineral-bearing land, etc. (3) Program development divided into developing the alternatives, involving the public, and developing the recommended program; and alternative programs.


548. 53 ID1C BRIGGS CHARLES W., CONDRELL WILLIAM K. "Tax Treatment of Timber, under Section 631 and Other Pertinent Sections of the Internal Revenue Code of
Sixth edition of "Taxation of Timber. Concerned primarily with those provisions of the Internal Revenue Code of 1954 which accord capital gains treatment to the cutting of timber (section 631(a)) and to the disposal of timber under a contract which retains in the seller an economic interest in such timber (section 631(b)).


IDIC POSTLEWAITE PHILIP F. "Timber Capital Gains - The Option Rule of Section 631(b)." Timber Tax Journal, Vol. 14, No. 1 (1978), pages 113-132. Review of the case law dealing with the application of section 631(b) to timber cutting options, the legislative history and tax policy of section 631(b), and the judicial attitude regarding such agreements prior to the enactment of section 631. Supports the conclusion that the courts, and consequently the I.R.S., have been unduly restrictive in interpreting the disposal requirement of section 631(b). Option agreements meet the requirements of this section, and gains derived from such disposals of timber should receive capital gains treatment, provided the other requisites of section 631(b) are met.


Income tax laws as they apply to timber sales are explained, as are new provisions for estate and gift taxes.

Although it is too early to predict success of a tax cut bill, several proposals have been offered. Congress is studying revision of inheritance tax rules.

Proposed method of valuation: base values reflect combined characteristics of the stand as regards quality and d.b.h. with separate base values calculated for sawlog value, pulpwood value and harvesting costs. Base values are then multiplied by variable factors (prices, costs and tax) to give the net revenue per cubic meter of merchantable wood.

Valuation theories and the question of the rate of interest in forest valuation.

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Valuation theories and the question of the rate of interest in forest valuation.
Experience with public involvement in RARE I and RARE II indicates that multiple use decision making on Federal lands requires managers with well-developed public involvement skills. Public input is required in various stages of decision making, and in each case the ways in which comments will be used should be defined. Thereafter, considerable skill is required in analyzing and evaluating public comments as well as in collecting them.

561. 53  IE CHEN C.M. "A Study of Timber Resource Management Research Work." Technic Bulletin of the Experimental Forest and Department of Forestry, National Taiwan University, No. 123. (1979), pages 1-22. In Chinese with an English summary. Literature published in Taiwan and foreign countries on problems related to timber resource management systems was reviewed in order to examine the problems and research priorities.

562. 53  IE EVANS PETER A. Directory of Selected Forestry-related Bibliographic Data Bases. USDA Forest Service General Technical Report PSW-34. (1979), 42 pages. 117 bibliographic data bases maintained by scientists of the USDA Forest Service. Information for each data base: name of the data base; originator; date started; coverage by subject, geographic area, and size of collection; Base format; retrieval format; ways to query; whom to query, and availability. Four indices: subject, originator, geographic coverage, and Forest Service and other locations.


565. 53  IE SALLEH MOHD NOR "A Change Towards Developmental Research in Forestry." The Malaysian Forester, Vol. 42, No. 4 (1979), pages 423-429. Early forestry research emphasized collection, and classification. This was followed by experimentation with provenance trials, species trials, wood and timber investigations. Scarcity of future resources and pressures of the social and economic environment present new dimensions to research priorities and promote developmental research.


570. 53 IF JUNGST STEVEN F., COLLETTI JOE P. "Forest Management Instruction with Computer Assistance and Role Playing." Journal of Forestry, Vol. 78, No. 8 (1980), page 472. An interactive computer program has been combined with an introductory laboratory problem in an effort to stimulate student interest in and awareness of benefits of computer usage in forestry problems.

571. 53 IF KURTH H., HARZMANN L.J. "Education and Research in Tropical Forestry at the Forestry Section of the Dresden Polytechnic Institute as a Means of Developing Forestry and Timber Industries in Tropical Countries." Beiträge für die Forstwirtschaft, Vol. 13, No. 3 (1979), pages 86-91. In German with Russian and English summaries. Graduate education and research program in tropical forestry and research objectives in tropical forestry and forest products carried out at Tharandt and abroad.

572. 53 IF LYNCH DENNIS L., CREWS DONALD L. "Students Need a Proper Introduction to Forestry." Journal of Forestry, Vol. 78, No. 4 (1980), pages 206-207. In an attempt to improve the balance between forestry graduates and job openings, an introductory course has been developed at Colorado State University to clarify professional requirements and opportunities.

573. 53 IF MOSQUEIRA C. Forestry Development, Paraguay. Report of the Refresher Seminar for the New Staff of

574. 53 IF NISSAN A.H. “University Education for the Paper Industry.” Tappi, Vol. 63, No. 7 (1980), pages 26-28. Industry needs the products of universities (graduates and research results) and is duty-bound to help solve university problems. Industry is entitled to demand from the universities and their graduates, excellence in quality, breadth, depth of knowledge of special value to industry and a well-rounded education.


582. 53 IC Forestry for Rural Communities. FAO Forestry Dept. (undated), 56 pages. Appropriate forestry; rural people's needs for forests; forestry systems; community forestry (policies and projects); advancing rural forestry.


589. 53 II A1 GREIG PETER "Employment Coefficients for Forestry Planning and Management." Australian Forestry, Vol. 42, No. 3 (1979), pages 181-189. Employment coefficients estimated for forestry and wood manufacturing firms in Victoria, and logging in Australia. A change of 10,000 cubic meters per year in the net volume of sawlogs will result in a long run change of 4.1 jobs in logging, 11.2 jobs in sawmilling, and 1.2 jobs in forest management. A
change of 100,000 recreational visitor days per year will result in a long run change of 4.4 jobs in recreation management, and a smaller change in jobs in the recreation service industry.


IIA3 WHITE DAVID E. Manpower Training in Eastern Forest Industry: A Review and Assessment. USDA Forest Service Research Paper NE-453. (1980), 20 pages. Most training takes place on the job and is more effective in sawmilling than in logging. An upgrading of pay and working conditions might attract workers of higher quality, thus reducing the need for training. There is an increasing need for training of mechanics and managers.


IIA4 DUPUIS M. "An Accident-Prevention Policy in the Forestry Sector." Revue Forestiere Francaise, Vol. 31, No. 4 (1979), pages 312-317. In French with author and title listed in English, German, and


599. 53 IIA4 TEIKARI E. "Job Satisfaction among Forest Workers." Julkaisuja, Työtehoseura, Helsinki, No. 208 (1979), 110 pages. In Finnish with summary in English. Of six occupational groups interviewed, job satisfaction was lowest among fellers. Mechanization of forest work, although found to increase psychological stress, is considered important in decreasing physical strain, health hazards and accident risks.

600. 53 IIB1 BERGER E.P. "The Ownership Structure of the Forests of the Netherlands." Nederlands Bosbouw Tijdschrift, Vol. 50, No. 5 (1978), pages 146-149. In Dutch. Data on total forest area and size of units owned by the state, local authorities, nature conservation, private individuals, etc. for the whole country and its regions. Total area in public ownership and ownership of nature conservation organizations shows a strong upward trend.


602. 53 IIB2 MOHAPATRA C.H. "The Role of Forest Corporations in Indian Forestry." Beiträge für die Forstwirtschaft, Vol. 13, No. 3 (1979), pages 92-94. In German with Russian and English summaries. Historical background and economic and social aims of state forest corporations which combine the advantages of state and private enterprise and the functions of harvesting, industrial development, primary processing and marketing, and the development of plantations and other forestry activities.

603. 53 IIB2B National Forest Land Ownership: Some Questions and Answers. USDA, Forest Service.
(1980), 16 pages.


605. 53 IIB2B Your Rights and Benefits under the Forest Service Relocation Assistance Program. USDA Forest Service, USGPO Stock Number 001-001-00499-5. (1979), 21 pages. Relocation services and payments for people displaced as a result of the acquisition of their land for a federal project.

606. 53 IIB2C BARRETT JAMES D. "Recreational and Timber Opportunities on Swiss and German Town Forests." Forest Notes, No. 140 (1980), pages 2-5. Values of town forests of Switzerland and Germany and the possibility of establishing town forests in the U.S.


608. 53 IIB3A MOHAMED DAHAN BIN ABDUL LATIFF "The Role of the Private Sector in Forest Management and Utilization." The Malaysian Forester, Vol. 42, No. 4 (1979), pages 390-399. Historically the public sector has been responsible for forest management while the private sector handled utilization. Recently, a new policy in which only a few manage part of the nation's forest resource has been in effect.


611. 53 IIB3C BROGGER P. "The 25,000 Small Woodlands of Jutland Could Be Better Utilized." Hedeselskabets
Small-scale survey in Birkeback district showed one third of small woodlands were managed well and one third weren't managed at all. Area contains considerable reserves of fuelwood.

612. 53  IIB3C  HEEREMAN C. FREIHERR  "Combining Agriculture and Forestry: A Possible Future."  Allgemeine Forstzeitung, No. 19 (1979), pages 499-501.  In German.  Ownership and income significance of farm woodlands in the German Federal Republic; difficulty of using softwoods from small private woodlands; organization of labor, cultivation and marketing; limits to state assistance through the forest service; improved training and further education.

613. 53  IIB3C  MADIGAN G., JONES A.R.C.  "Provincial Assistance to Private Forest Owners in Eastern Canada- a Survey."  The Forestry Chronicle, Vol. 56, No. 3 (1980), pages 104-108.  To determine the effectiveness of private forestry assistance programs in Ontario, Quebec, New Brunswick, and Nova Scotia, a study was conducted among rural residents, members of woodlot owner associations, and extension forestry personnel.

614. 53  IIB3C  MCCURDY DWIGHT R., VITELLO JOHN  "Owners of Large, Private Forested Tracts in the Shawnee Hills of Illinois."  Journal of Forestry, Vol. 78, No. 4 (1980), pages 211-212.  A majority of owners of large tracts in the Shawnee Hills of Illinois are practicing forestry or are interested in doing so. Since these owners control much of the forest in the region, they should be given priority in programs for increasing timber production from nonindustrial private forests.

615. 53  IIB3C  MINCKER LEON S.  Woodland Ecology, Environmental Forestry for the Small Owner.  (second ed.)  Syracuse, N.Y.  Syracuse Univ. Press.  (1980), 241 pages.  Overview of the ecological, economic, and social considerations of woodland management and ownership.  Timber, wildlife, recreation, aesthetics, watershed, and fuelwood forestry; as applied primarily to the eastern United States.


617. 53  IIC2  COLEMAN ALICE  "The Place of Forestry in a
Maps of the Second Land Utilization Survey of Britain provide an inventory of unproductive land where forestry could expand with little or no disturbance to agriculture, water conservation, wildlife interests, landscape amenity or recreational land use. Total potentially afforestable area proves to be nearly one million hectares in England and Wales alone.

618. 53 11C2 FIORAVANTI-MOLINÉ A., LAMARCHE H.  
"Stock-farming, Reforestation and Tourism in a Deserted Mountain Area. The Case of Barre-des-Cévennes."  Études Rurales, No. 71/72 (1978), pages 159-185.  In French with an English summary.  Various modifications in the local social structure will lead to changes in the production system and consequently to changes in the land use pattern.

619. 53 11C3 Dwyer John F., Baumgartner David C.  


621. 53 IIIA1 Carroll M.R.  
Multiple Use of Woodlands.  Dept. of Land Economy, Univ. of Cambridge, UK.  (1978), 135 pages.  Influences on the decisions regarding woodland uses within a land unit are measured and analyzed under the headings: ownership, environment, economics, and social factors.

622. 53 IIIA1 Lau Buong Tiing  

623. 53 IIIA1 Miegroet M. Van  
"Theory of Forest Management with Reference to Concepts of the Natural and Social Sciences."  Management in Multiple Use Forestry.  IUFRO meeting Div. 1 (Forest Environment


627. 53 IIIA5A SAUNDERS PAUL RICHARD "Results of a Multiresource Inventory: Analysis of Undeveloped Rural Recreation Sites in South Carolina." Selected Reprints from the 1979 Workshop on Forest Resource Inventories, Colorado State Univ. (July 22-27, 1979), pages 43-51. Recreation use or potential for recreation examined in a random sample over a large area using survey plots.


629. 53 IIIA5B SCHREYER RICHARD "Survey Research in Recreation Management - Pitfalls and Potentials." Journal of Forestry, Vol. 78, No. 6 (1980) pages 338-340. While studies of recreation users are numerous, applications of findings are not. Understanding recreation behavior as an experience can increase the utility of survey information. Where decisions may be controversial, survey research will not identify which decision should be made, but may reveal the implications of alternative decision
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<td>631. 53</td>
<td>BURY RICHARD L., FISH C. BEN</td>
<td>&quot;Controlling Wilderness Recreation: What Managers Think and Do.&quot;</td>
<td>Journal of Soil and Water Conservation, Vol. 35, No. 2 (1980), pages 90-93.</td>
<td>Increased use throughout the National Wilderness Preservation System has produced congestion and related problems that threaten the ecosystems and the socio-psychological qualities of people's wilderness experience. As use continues to increase so will the level of control on the intensity and character of visitor use.</td>
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<td>632. 53</td>
<td>DAVIS GEORGE D.</td>
<td>&quot;The Case for Wilderness Diversity.&quot;</td>
<td>American Forester, Vol. 86, No. 8 (1980), pages 24-27, 60-63.</td>
<td>Position for representative ecosystems as opposed to recreation potential as a means for deciding which land will be preserved as wilderness.</td>
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<td>634. 53</td>
<td>LABASTILLE ANNE</td>
<td>Wildland Conservation in Central America. Wildlands and Watershed Management Unit Natural Renewable Resources Program CATIE, Costa Rica (1978), 37 pages.</td>
<td>Publication also available in Spanish. The Wildlands and Watershed Unit within the Natural Renewable Resources Program at CATIE (Centro Agronómico Tropical de Investigación y Enseñanza) in an effort to prevent environmental damage, assists the governments of the Central American Isthmus in the management of their natural and cultural resources.</td>
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<td>635. 53</td>
<td>MANN D.L., NELSON J.G.</td>
<td>&quot;Ideology and Wildlands Management: The Case of Rondeau Provincial Park, Ontario.&quot;</td>
<td>Environmental Management, Vol. 4, No. 2 (1980), pages 111-123.</td>
<td>Critical examination of basic concepts that have guided management of parks and related reserves. Vague or general concepts such as wilderness or preservation should be strongly complemented by precise statements</td>
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of objectives, a learning attitude, and experimentation and research. As a result of the technical uncertainties and value judgements frequently involved, management should also be based upon the expressed preferences and continuing involvement of citizens.

636. 53 IIIA5E STANKEY GEORGE H. A Comparison of Carrying Capacity Perceptions Among Visitors to Two Wildernesses. USDA Forest Service Research Paper INT-242 (1980), 34 pages. Visitors to lightly and heavily used wilderness areas had common images of wilderness in a general sense. Those in the heavily used area were more tolerant of higher use, more likely to define the area as overused, and more willing to accept use controls.


641. 53 IIIA5G LITTON R. BURTON JR., TETLOW ROBERT J. A Landscape Inventory Framework: Scenic Analyses of the Northern Great Plains. USDA Forest Service Research Paper PSW-135. (1978), 83 pages. Set of four visual inventories of the Northern Great plains designed to document scenic resources for varied scales of application, and based on: (1) study of previously developed landscape analysis methods and their terminology; (2) examination of high altitude imagery and topographic maps as sources of visual information; (3) field observations in the Northern Great Plains. Criteria include visual characteristics
and patterns of land forms, vegetation cover, water, and land use.


94-97. Two photographic methodologies that provide forest resource managers with a tool for incorporating hiker perceptions and preferences into trail designs.

648. 53 IIIA5H LAPAGE WILBUR F., COLE GERALD L. National Camping Market Survey. USDA Forest Service Research Paper NE-450 (1979), 34 pages. Estimates size of the potential camping market and divides it into three segments: families with a high, medium, or low potential for entering the camping market. Developed camping market is divided into active and inactive segments. Regional distribution and characteristics of each segment.


increasingly threatened by growing numbers of backcountry recreationists and diminishing wildlands. Possible solutions to be used individually or in combination: people management (spatial, temporal, and behavioral); wildlife management, in the sense of modifying wildlife behavioral responses to certain recreational activities; and habitat modification to affect the spatial distribution of wildlife.

655. 53 IIIA7 ALBRECHT J., WEICHERDING P.J. Urban Forestry: A Bibliography. Agricultural Experiment Station, Univ. of Minnesota Misc. Publication 1-1980 Forestry Series 31 (1980), 100 pages. Revision of Bibliography Series No. 3 published by the Forestry Library in 1977. Topics: urban forestry in contemporary society; social, economic, and physical benefits from urban forests; culture and protection of the urban forest; planning and managing the urban forest; urban forestry programs and research; bibliographies and general works on urban forestry.

656. 53 IIIA7 AMES RICHARD G. "The Sociology of Urban Tree Planting." Journal of Arboriculture Vol. 6, No.5. (1980), pages 120-123. Study of the aggressive tree planting program of Oakland, California shows that sociological factors may be more important than biological factors in determining tree survival in an urban setting.


658. 53 IIIA8 HAGER BARBARA C., CANNON WILLIAM N. JR., WORLEY DAVID P. "Street Tree Policies in Ohio Towns," Journal of Arboriculture, Vol. 6, No. 7 (1980), pages 185-191. Fourteen small-to-medium-size Ohio towns were visited to determine their street tree policies and programs. Trees were assessed for species, size, density, and general condition. Towns with long-term, well-founded
programs had more kinds of trees in better condition, more consistent and greater density, and a more balanced distribution of sizes.


661. 53 IIIB1 BRUCE J. "Why We Must Produce More Timber." In: A National Forest Policy, proceedings of a conf. held June 7, 1979 by the Committee for the Environment and the Forestry Committee of Great Britain. London (1979), pages 58-69. Economic arguments for increasing timber production in Britain by the year 2000, especially of material used in pulping, particleboard and other reconstituted woods which will probably increase from 45 percent to 75 percent of the British industrial wood consumption.


663. 53 IIIB1 KHITRINA G.S. "Differentiated Management in Forestry." Lesnoi Zhurnal, No. 2 (1979), pages 125-127. In Russian. A study of possible ways of improving the organizational structure of forestry, taking into account the level of utilization achieved and the intensity at which forestry is practiced, Sverdlovsk region (Central Urals) as an example.


planting to harvest.

666. 53 IIIB1 YANG Y.C., LIN W.L.  "The Study of Present and Potential Productivity of Forest Resources by Using Timber Resource Analysis System Techniques." Quarterly Journal of Chinese Forestry, Vol. 13, No. 1 (1980), pages 1-42. In Chinese with an English summary. If the sampling design of the forest survey is suitable and the data on radial growth is normal, this method could be applied in the Taiwan forest survey and be as effective as that applied in the U.S.

667. 53 IIIB1 Forest Industries Council Forest Productivity Report. National Forest Products Association. (1980), 66 pages. Major recommendations: (1) establish a national timber productivity goal that recognizes long-term growing cycles inherent in forestry and manage the nation's commercial forest land to achieve efficient, continuing levels of productivity. (2) establish a favorable economic and sociopolitical investment climate through taxes, assistance and funding, communication, planning and cost control, reduced regulation.


abstracts in English and Spanish. Fourth in a series of articles, this one considers the choice of species to be planted.

| 672. | 53 | IIIIB3 LAAKKONEN OLAVI | Optimal Distribution of Regional Seedling Production by Nurseries: An Economic Study. Commun. Inst. For. Finn. Vol. 95, No. 5 (1979), pages 1-32. Study to minimize combined costs of seedling production and transportation in order to divide market demand for seedlings between nurseries within a region. |
| 673. | 53 | IIIIB3 ZAKHARIEV B. | "Afforestation in Bulgaria." Nauchni Trudove, Vish Lesotekhnichesi Institut, Sofiya (Gorsko Stopanstvo) No. 24 (1979), pages 17-23. In Bulgarian with summaries in Russian and German. Prior to 1944, afforestation in Bulgaria was primarily undertaken as a protection against erosion and flooding. Since 1944, afforestation has increased, 1.2 million ha were afforested between 1947-1975. |
| 676. | 53 | IIIIB6 NAUTIYAL JAGDISH C., FOWLER KENNETH S. | "Optimum Forest Rotation in an Imperfect Stumpage Market." Land Economics, Vol. 56, No. 2 (1980), pages 213-226. Sizeable difference between rotations in regulated and unregulated cases shows that the latter, or traditional forest rotation |
determination model, is unsuitable for determining rotations. The difference also suggests that the proposed degree of regulation, and therefore, any existing distribution of age classes, is also a factor that affects the optimal rotation. More research is needed.

679. 53 IID1 EGGING LOUIS T., BARNEY RICHARD J., THOMPSON RITA P. A Conceptual Framework for Integrating Fire Considerations in Wildland Planning. USDA Forest Service Research Note INT-278 (1980), 11 pages. System for land management planning enabling managers to include and evaluate effects of wildfire or prescribed burning on resources.


682. 53 IID3 DUNLAP THOMAS R. "The Gypsy Moth, A Study in Science and Public Policy." Journal of Forest History, Vol. 24, No. 3 (1980), pages 116-126. History of the introduction, spread, and efforts to control the gypsy moth, one of the three most destructive forest pests in North American history.


process depends on the capability to monitor, assess, and forecast pest abundance, activity, and damage and to take appropriate action when justified. Forest pest management model structure developed to show the linkages among major components and the information flows in the system.

686. 53 CANNON WILLIAM N. JR., WORLEY DAVID P. Dutch Elm Disease Control: Performance and Costs. USDA Forest Service Research Paper NE-457. (1980), 8 pages. Municipal programs to suppress Dutch elm disease have had highly variable results and only those municipalities that conducted a high performance program could be expected to retain 75 percent of their elms for more than 20 to 25 years.

687. 53 SPEIDEL VON G. "Evaluation Methods for Economic Effects and Regulation of Damage by Game." Forst wissenschaftliches Centralblatt, Vol. 99, No. 2 (1980), pages 76-85. In German with an English Summary. Improvement of inventory methods and rating of damage to the forest by deer. Decrease of net revenue during the time between the occurrence of the damage and final harvest was determined assuming various thinning regimes. Yield table models were applied, varying the proportion of damaged trees to be cut during thinnings. Economic suitability of protective measures against debarking.

688. 53 BARTUNČEK J. "Prognostic Modelling in Management of a Forest Firm." Acta Universitatis Agriculturae (Brno) Series C (Facultas silviculturae), Vol. 48 (1979), pages 191-208. In Czech, summaries in Russian and German, English abstract. Problems of introducing forecasting into forest concern management using prognostic modelling. Strategic targets of a forest concern which, with respect to time, are a relatively stable quantity, stand for elements of the forecasting models. Application of the model relies on adequate computer facilities.

689. 53 DRESS PETER E., FIELD RICHARD C. "Multi-Criterion Decision Methods in Forest Resources Management." In Multiple-Use Management of Forest Resources, Proc. Symp. Clemson Univ. (1979), pages 122-157. Optimization methods customarily used to solve single-criterion problems can be extended to cases where more than one criterion
should be used to evaluate management alternatives. The extension in concept and methods required for addressing multiple criterion problems leads to three classes of solution procedures.


691. 53 IIIE HOEFLE HANNS H. "Ideas Fundamental to the Conception and Development of Information-Systems." Beiheft zu den Zeitschriften des Schweizerischen Forstvereins, No. 64, Zurich. (1979), 108 pages. In German. Characterizes information in context of a forest enterprise, develops a management-information system and describes its effects on forestry.

692. 53 IIIE KENT BRIAN M. "Linear Programming in Land-Management Planning on National Forests." Journal of Forestry, Vol. 78, No. 8 (1980), pages 469-471. Recent regulations resulting from the National Forest Management Act of 1976 require that each national forest develop a multiple-use land-management plan by the end of 1983. Included in these regulations is a planning process that must be utilized. Linear programming is one analytical aid that can be used in plan development within the context of this process.


96. 53 IRIE RUPRICH J., SPELLMANN H. "Model Calculations of Net Returns from Important Tree Species and from Timber Production in the State Forests of Lower Saxonia." Der Forst- und Holzwirt, Hannover, No. 8 (1980), pages 153-165. In German.

97. 53 IRIE RUPRICH J. "Modelling the Organization of Managerial Activities in Forestry." Acta Universitatis Agriculturae (Brno) - Series C (Facultas silviculturae), 48. (1979), pages 157-190. In Czech, summaries in Russian and German, English abstract. Example of the model used in organizing forest units by plants and concerns and in determining the activities for each unit and distributing managerial work to individual units.

98. 53 IRIE SIEBENBUERGER FRANK "Earning Capacity of Important Tree Species in the State Forest Enterprise of Baden-Wuerttemberg, 1977." Der Forst- und Holzwirt, Hannover, No. 3/4 (1980), pages 44-52, 61-66. In German. An appropriate selection of tree species requires consideration of biological aspects, requirements of forest policy, and technical productivity. Earning capacity of tree species is influenced by these factors, and is valuable in decision making.


102. 53 IRIE "Forests and Plans." Allgemeine Forstzeitschrift, Munich No. 23, (1980), pages
599-617. In German. Special issue with several articles concerning detailed forest planning and its connection with regional and state-wide planning.

703. 53 IIIE "Recommendations for the Standardization of Accounting in Forestry." Edited by German Council of Forestry, Bonn (1980), 35 pages. In German. Objective of these recommendations is to improve the business statistics of forest enterprises. Terms are defined and an operation sheet for use by larger forest enterprises is developed.

704. 53 IVAl VILLASUSO J.M. "Production Functions of Forestry and Wood Processing in Costa Rica." Turrialba, Vol. 29, No. 3 (1979), pages 207-212. In Spanish with an English summary. Timber extraction is still at a stage of increasing returns while sawmilling is at a stage of decreasing returns.


708. 53 IVAlB SAMPSON GEORGE R., BETTERS DAVID R., LOVE ROBERT Processing Potential for Insect-Infected Front Range Forests. USDA Forest Service Resource Bulletin RM-1 (1980), 4 pages. Increased timber harvesting by forest industry, resulting in more intensive forest management, would be a means for combating insect problems such as the current mountain pine beetle outbreak. Existing timber processing capacity is far less than potential annual harvest of live timber for Colorado's Front Range.

710. 53 IVAIB The Forest Products Utilization Program in the Northeastern Area. USDA Forest Service (1980), 26 pages.


China, August 20 – September 17, 1978, including: raw material supply and production; wood processing plants – history, location and current situation; design and development policy for the integrated wood processing industry; technical descriptions of some wood processing plants; labor and working conditions in integrated wood industries; possibilities for transfer of technology.

717. 53  IVAID "Roundwood Processing and Demand in South Africa, 1977-78." South Africa, Dept. of Forestry (1979), 47 pages. In English and Afrikaans. One in a series of annual reports giving details of the primary roundwood processing industries, including roundwood input, sales, capital investment, employment, ownership of plants, and value of assets.

718. 53  IVAIE SAID A., KARSTEDT P., SCHARAI-RAD M., PARSAPAJOUH D. "The Timber Industry of Iran: The Example of the Provincial Capitol of Rasht, on the Caspian Sea." Forstarchiv, Vol. 50, No. 12 (1979), pages 261-265. In German with an English summary. Rasht (pop. 180,000) has the highest concentration of wood industries in Iran. Data from 1975 on: types of enterprises in the city, and their number of employees, wood consumption, capital investment and annual turnover.


720. 53  IVAIE Forestry and Forest Products Development in Indonesia. An Indicative Analysis of Timber Supply Alternatives in Indonesia. FAO No. FO:INSI 73/012, Working Paper 1 (1978), 43 pages. First report of the Forestry and Forest Products Development Project to evaluate prospects for economic development of the forest sector in different regions of Indonesia. Data on forest resources, transport costs, etc. were used to develop a computerized model of timber supply. Input data and results of a preliminary forecast for the period 1981-2000 are tabulated in appendices. Provinces are identified in which forest industries and/or logging should be expanded and suitable ports listed.

Random Lengths Publications, Inc. (1978), 130 pages. Includes: alphabetical listing of trade terms (mainly softwood) with explanations; commonly used abbreviations; illustrations and tabulations for patterns and sizes of panelling and weatherboard, decking and flooring, ceilings and partitions, molding and millling, surfaced lumber, board and plywood footage, and metric conversion factors.

722. 53 IVA4 JOHNSON THOMAS R. LIFO Inventories in the Forest Products Industry. School of Business, Oregon State University (1980), 12 pages. LIFO inventory valuation method can be used for most items in the inventories of a forest products company. LIFO's principal benefit is that it reduces the effect of inflation during periods of rising costs and, therefore, results in lower income taxes. However, it also results in lower reported earnings.


724. 53 IVC1 KILLIAN HERBERT "Tree-Felling Implements from Instruments of Torture to Burglar's Tools." Centralblatt für das Gesamte Forstwesen, Vol. 97, No. 2 (1980), pages 5-101. In German with an English summary. History (assembled from pictorial documentation) of working methods used in cutting trees. First illustration of the felling of a tree is found in an Egyptian wall-painting of the fifteenth century B.C.

725. 53 IVC4 PATRIC JAMES R. Some Environmental Effects of Cable Logging in Appalachian Forests. USDA Forest Service General Technical Report NE-55 (1980), 29 pages. According to forestry literature, cable logging causes fewer unwanted effects on forest soil, water, residual stands, wildlife, and visual appeal than other harvest systems. Cable logging machinery fully suited to harvesting eastern hardwood forest has not been developed.

726. 53 IVC1 SINCLAIR STEVEN A. "SAWMOD: A Tool for Optimizing Potential Profit from Beetle-Killed Southern Pine Sawtimber." Wood and Fiber, Vol. 12, No. 1 (1980), pages 29-39. SAWMOD (SAWmill decision MODEL) is a computer algorithm designed to provide accurate information for decision-making. By using actual lumber grade yields, estimated residue
volumes, current market prices, and readily obtainable production variables, economically optimal processing schemes may be derived from SAWMOD. Structured to be individualized for given sawmills.


728. 53 IVC2A “Australia, Waking Up to Potential.” Pulp and Paper International, Vol. 22, No. 6. (1980), pages 61-67. Paper industry in Australia is just beginning to consider exploiting its vast opportunities to become a world power in the pulp and paper industry. Chips are exported on a wide scale and pulp will be a major export within the next ten years.


731. 53 IVC2C BONES JAMES T., BLYTH JAMES E. “Pulpwood Production in the Northeast and North Central States in 1978.” Northern Logger and Timber Processor, Vol. 28, No. 5 (1979), pages 16-17. Pulpwood production in the 21 Northeastern and North Central states was 13.2 million cords in 1978, up 3 percent from 1977. Production from residue declined nearly 7 percent while the roundwood harvest rose 6 percent. Greater use of residues for energy may be reducing residue availability, especially in the northern states.

exclusive of raw materials costs.


735. 53 IVC8 BROOKS DAVID J., FIELD DAVID B. "Potentials of Charcoal Production for Forest Stand Improvement and Domestic Space Heating in Maine." Coop. For. Res. Unit, Res. Bull. No. 1, Univ. of Maine (1979). If charcoal could capture approximately 16 percent of Maine's total domestic space-heating market, then half of the state's standing volume of low-grade hardwood could potentially be used in 20 years. Charcoal production and marketing could pay for the costs of improved forest practices necessary to significantly improve the present low quality of hardwood stands. Estimates of raw product sources, volumes and weights; analysis of demand and supply characteristics; marketing considerations.


737. 53 IVC8 GARBUTT D.C.F., VAN BREDA P.V. "The Potential in South Africa for Obtaining Fuel from Wood." South African Forestry Journal, No. III. (1979), pages 54-57. With long-term expansion and sufficient investment capital, the forestry industry could make a substantial contribution to the liquid fuel requirements of South Africa. In the short-term, using surplus roundwood and wood waste, a moderate but significant proportion of liquid fuel requirements could be produced on a sustained basis.

738. 53 IVC8 HECK HANS-DIETER "Wood - the Forgotten Source of Energy." Bild der Wissenschaft, Vol. 17, No. 5 (1980), pages 44-59. In German. In industrialized countries wood has been replaced by more easily handled energy carriers. Recently wood
for energy production has come into discussion again even in industrialized countries - can it efficiently support the easing of the energy balance?


740. 53 IVC8 PALMER LYNN, MCKUSICK ROBERT, BAILEY MARK Wood and Energy in New England, a Review and Bibliography. USDA Bibliographies and Literature of Agriculture No. 7 (1980), 71 pages. Reviews of fuelwood feasibility studies, fuelwood's role in the national and regional energy situation, wood availability and demand, energy alternatives, and environmental impact.

741. 53 IVC8 PRINS KIT "Energy Derived from Wood in Europe, the USSR, and North America." Unasylva, Vol. 31, No. 123 (1979), pages 26-31. Without far-reaching measures such as allocation of large areas of fertile land to energy plantations, and with the exception of certain forest-rich regions, wood cannot become more than a supplementary source of energy for Europe, the USSR, and North America.

742. 53 IVC8 YOUNGS ROBERT L. Meeting the Energy Demand through Efficient Use of Wood. USDA Forest Service, Forest Products Laboratory. Presented at the 69th Western Forestry Conference of the Western Forestry and Conservation Association, Sacramento, Calif. (1978), 6 pages. Although direct production of energy from wood will be increasingly important in the U.S., indirect conservation of energy through current use of wood as a material is more important. This indirect contribution can become significantly larger than it now is through improvements in utilization technology which will enhance the competitive position of forest products. Many of the possible improvements involve increased use of small stems, low quality hardwoods and dead trees, and thus would enhance silviculture in the US.

743. 53 IVC8 ZERBE JOHN I. "Impacts of Energy Developments on Utilization of Timber in the Northwest." In, The Impact of Change on the
Management of Private Forest Lands in the Northwest. Proc. of Northwest Private Forestry Forum, Oregon. (1978), pages 47-49. Through production of more forest products for use as materials and greater use of wood residue for fuel, the forests of the West can play an increasingly important role in combating US balance of payments problems resulting from imports of foreign oil.


747. 53 VA1 OLLMANN H. "World Production of and Demand for Wooden Sleepers." Forstarchiv, Vol. 50, No. 7/8 (1979), pages 165-168. In German. Tables, based on FAO statistics: production, consumption, export or import of crossties in different countries and regions of the world in 1957, 1967, and 1977. Overall trend has been decline in production and consumption due to reduced demand, competition from concrete and steel crossties. Possible future developments in demand are considered.


749. 53 VB1 ANDERSON WALTER C. "Research in Foreign Trade for Southern Timber Products." In, North America's Forests: Gateway to Opportunity. Proc. Joint Convention of the Soc. of Am. For. and Can. Inst. For. (1978), pages 366-368. Forest economics research can no longer ignore foreign trade, especially in the U.S. South, which is one of the few remaining wood surplus regions in the world. World-wide demands for solid wood products and pulp
and paper are expected to increase substantially in coming years.

750. 53 VB1 DARR DAVID R., LINDELL GARY R. "Prospects for U.S. Trade in Timber Products." Forest Products Journal, Vol. 30, No. 4 (1980), pages 16-20. Second paper in a series of four examining U.S. trade prospects and their implications to the year 2030. After 2000, the ability of the U.S. to increase and perhaps maintain imports of timber products will depend on the willingness and ability of other countries to manage their timber resources more intensively. Over the next 2 decades, Western Europe and Japan will tend to be more competitive for Canadian and Southeast Asian supplies of both solid and fiber-base products.


752. 53 VB1 DARR DAVID R., LINDELL GARY R. "Prospects for US Trade in Timber Products." Forest Products Journal, Vol. 30, No. 6 (1980), pages 16-20. Fourth paper in a series of four examining US trade prospects and their implications to the year 2030. Although unique trade policy situations may develop over time, projections of trade and domestic markets suggest that domestic rather than foreign supply and demand conditions increasingly will determine prices, employment, and other market characteristics usually considered critical for trade policy formulation. Prices for timber products in the US are projected to continue to increase, thereby continuing interest in expanding domestic timber supplies. The condition of the domestic timber resource will tend to become especially important after 2000 when the ability of import sources to expand supplies becomes more uncertain.

753. 53 VB1 GARDINER JOHN J. "Future Markets for Irish Wood Products." Irish Forestry, Vol. 37, No. 1 (1980), pages 23-30. Users of small roundwood have all experienced very difficult market conditions over the past few years. However, there are indications that these difficulties are now easing
and that the markets for processed wood products are set for renewed growth.


756. 53  VBI  WINDHORST P.W.  "The Southeastern USA: Is It Really a Region of Growing Importance for the Export of Wood Products?"  Forstarchiv,  Vol. 50, No. 11  (1979),  pages 240-245.  In German with an English abstract.  Development of forests and associated industries in the region in relation to changes in land-use patterns following the decline in agriculture since the 1940s.  Shortage of pine timber for mills in the region is predicted in the next 10-20 years because of failure by private owners to regenerate sufficient pine after felling the secondary forests.  Present increase in the wood-processing industry can probably maintain a growing export volume in the short term, but exports will probably decline in the longer term.  Economic problems are predicted unless the wood-processing industry can adapt to using more hardwood.

757. 53  VB3  CALLAHAN JOHN C., TOTH JOHN M., O'LEARY JOSEPH T.  The Timber Marketing process in Indiana.  USDA Forest Service Research Paper NC-177.  (1979),  7 pages.  Examines the sale experience of 159 woodland owners who had recently sold timber.


outside bidders increased the prices over those received under localized patterns of oral bidding during the period from July 1974 through June 1976.

760. 53 VB4 VALTONEN K. End-Use Information for Marketing in Sawmill and Woodbased Panel Industries. Folia Forestalia, No. 391 (1979), 26 pages. In Finnish with an English summary. Types of end-use information on wood products and how it is being used in marketing, planning, and management in sawmill and woodbased panel industries. Methods for classifying end-use data and for conducting practical end-use studies that meet the needs of users of this information.


762. 53 VB6 SCHULER ALBERT T., WALLIN WALTER B. An Econometric Model of the U.S. Pallet Market. USDA Forest Service Research Paper NE-449 (1979), 11 pages. Demand was affected by real pallet price, industrial and food production levels, and slipsheet prices. Supply was affected by real price, housing starts, and productivity within the pallet industry. Consumption and price projections were developed to illustrate the model's use for providing long-term investment and resource planning information.

763. 53 VB6 SCHULER ALBERT T., WALLIN WALTER B. "Report on an Econometric Model for Domestic Pallet Markets." Forest Products Journal, Vol. 30, No. 7 (1980), pages 27-29. Investment and market planning by the pallet industry can benefit from quantitative market information in the form of demand-supply models and price and consumption projections. Estimates of future demand are also needed by forest resource planners to evaluate current forest programs, establish timber growth goals, and aid in formulating forest policies and proposed programs. With an econometric model of the aggregate US pallet market, demand is found to be affected by pallet price, industrial and food production, and the relation of pallet price to wage rates for laborers in materials handling. Supply is affected by pallet price, hardwood lumber prices, and pallet manufacturing labor costs.

764. 53 VC3 BUONGIORNO JOSEPH, GILLESS JAMES K. "Effects of Input Costs, Economies of Scale, and Technological Change on International Pulp and Paper Prices."
A theory of price formation which rests on the assumption of a generalized Cobb-Douglas production function, coupled with monopolistic competition in international markets, and cost-minimizing behavior on the part of producers. Resulting price equations were estimated for wood pulp, paper and paperboard, and their major components, using data from eighteen OECD countries observed from 1961 to 1976.
This index is best used in conjunction with the Subject-matter Classification Scheme at the front of this issue. For example, if the user enters the index at Administration, forest, he is referred to Section III of the bibliography, because to be more specific would require subdividing the topic essentially as the Classification Scheme does. The user's next step is to turn to the Scheme, where he finds that forest administration in general is IIIA1, administration pertaining to forest roads is IIIC, and so on.

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