List of Publications on
LOGGING, MILLING, AND UTILIZATION
OF TIMBER PRODUCTS

November 1960

No. 790
TABLE OF CONTENTS

This list includes publications that present the results of research by the Forest Products Laboratory on methods and practices in the lumber producing and wood-consuming industries; standard lumber grades, sizes, and nomenclature; production and use of small dimension stock; specifications for small wooden products; utilization of little-used species and commercial woods; and low-grade and wood-waste surveys. Included also are other Government and commercial publications on these subjects.

<table>
<thead>
<tr>
<th>Instruction</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instructions for Obtaining Publications</td>
<td>2</td>
</tr>
<tr>
<td>Harvesting</td>
<td>3</td>
</tr>
<tr>
<td>Barking and Chipping</td>
<td>4</td>
</tr>
<tr>
<td>Milling</td>
<td>4</td>
</tr>
<tr>
<td>Machining</td>
<td>6</td>
</tr>
<tr>
<td>(See also Utilization, by species)</td>
<td></td>
</tr>
<tr>
<td>Marketing (Farm and Woodlot Timber)</td>
<td>7</td>
</tr>
<tr>
<td>Grades, Specifications, and Standardization</td>
<td>7</td>
</tr>
<tr>
<td>Utilization:</td>
<td></td>
</tr>
<tr>
<td>Waste</td>
<td>8</td>
</tr>
<tr>
<td>General</td>
<td>9</td>
</tr>
<tr>
<td>By Industries</td>
<td>10</td>
</tr>
<tr>
<td>By Species</td>
<td>11</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>15</td>
</tr>
<tr>
<td>Statistics of Production and Consumption</td>
<td>15</td>
</tr>
<tr>
<td>Other Lists of Publications</td>
<td>16</td>
</tr>
<tr>
<td>Other Publication Lists Issued by the Forest Products Laboratory</td>
<td>16</td>
</tr>
</tbody>
</table>
INSTRUCTIONS FOR OBTAINING PUBLICATIONS

Publications available for distribution at this Laboratory are marked with an asterisk (*).

Single copies of technical notes, reprints, and processed reports may be obtained free upon request from the Director, Forest Products Laboratory, Madison 5, Wisconsin.

Federal Government bulletins, circulars, and leaflets, if not available for free distribution at this Laboratory may be purchased at the price indicated from the Superintendent of Documents, Government Printing Office, Washington 25, D. C. Send money order, draft, or cash; stamps or personal checks are not accepted.

Trade journals containing articles herein listed may often be purchased from the publishers or may be consulted in various libraries.

The Forest Products Laboratory reserves the right to furnish only those publications which in its judgment will give the information requested. Blanket requests or requests for a large number of copies of any individual article will not be filled except in unusual cases.
HARVESTING


*Improved harvesting studies--equipment survey notes:

<table>
<thead>
<tr>
<th>Rept. No.</th>
<th>Item Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1637-1</td>
<td>Arch mounted on crawler tractor. Inf. Rev. &amp; Reaf. 1960.</td>
</tr>
</tbody>
</table>
*Improved harvesting studies--equipment survey notes: (continued)

Rept. No.  
-57 Transportation and handling of whole trees. 1958.

**BARKING AND CHIPPING**


**MILLING**


MILLING (continued)


*Advances in sawing from forest to shop, by L. H. Reineke. FPL Report No. 2100. 1958.


MILLING (continued)


*Small sawmill improvement, practical pointers to field agencies:

<table>
<thead>
<tr>
<th>Rept. No.</th>
<th>Title</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>899-2</td>
<td>Waste from variation in sawing precision</td>
<td>1953.</td>
</tr>
<tr>
<td>-3</td>
<td>When to move portable mills</td>
<td>1953.</td>
</tr>
<tr>
<td>-6</td>
<td>Dipping tanks and truck loading scaffolds</td>
<td>1931.</td>
</tr>
<tr>
<td>-11</td>
<td>Setting up a ground mill</td>
<td>1935.</td>
</tr>
<tr>
<td>-14</td>
<td>Plan of semipermanent small mill</td>
<td>1941.</td>
</tr>
<tr>
<td>-16</td>
<td>Methods of loading lumber at the rear of the mill. Inf. Rev. &amp; Reaf. 1960</td>
<td></td>
</tr>
<tr>
<td>-17</td>
<td>A truck-mounted hoist</td>
<td>1944.</td>
</tr>
<tr>
<td>-21</td>
<td>Small mill conveyor</td>
<td>1958.</td>
</tr>
<tr>
<td>-23</td>
<td>Methods of loading lumber at the rear of the mill (second in series). Inf. Rev. &amp; Reaf. 1960</td>
<td></td>
</tr>
<tr>
<td>-25</td>
<td>Burning waste material at small plants remanufacturing wood products. Inf. Rev. &amp; Reaf. 1953</td>
<td></td>
</tr>
<tr>
<td>-26</td>
<td>Summary of tests on power used on insert-point circular headsaws. 1949</td>
<td></td>
</tr>
<tr>
<td>-27</td>
<td>Instructions on sawing hardwood logs and edging and trimming hardwood lumber for grade and value recovery. 1951</td>
<td></td>
</tr>
<tr>
<td>-29</td>
<td>Slab-disposal devices for portable mills. 1951.</td>
<td></td>
</tr>
<tr>
<td>-30</td>
<td>Methods of handling lumber at the rear of the mill (third in series). 1956</td>
<td></td>
</tr>
</tbody>
</table>

MACHINING


MACHINING (continued)


Machining properties of eight Philippine hardwoods, by E. M. Davis and D. G. Faustino. Wood-Worker 76(9):8-10, Nov. 1957.

*Some machining properties of nine Liberian hardwoods, by E. M. Davis. FPL Report No. 2093. 1957.

*Machining tests for particle board; some factors involved, by E. M. Davis. FPL Report No. 2072. 1957.

Developments in woodworking machinery during the last 75 years, by E. M. Davis. The Wood-Worker 76(1):8-11, 22-29, Mar. 1957.


MARKETING (FARM AND WOODLOT TIMBER)


GRADES, SPECIFICATIONS, AND STANDARDIZATION

GRADES, SPECIFICATIONS, AND STANDARDIZATION (continued)


UTILIZATION

Waste

*Waste utilization reports:

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>-5 Chemical composition and uses of bark. 1957.</td>
</tr>
</tbody>
</table>
UTILIZATION (continued)

Waste (continued)

*Waste utilization reports: (continued)

<table>
<thead>
<tr>
<th>Rept. No.</th>
<th>Description</th>
<th>Source</th>
</tr>
</thead>
</table>

**General**


*Timber resources, by J. A. Hall. FPL Report No. 2080. 1957.*


*Prospective wood quality and species requirements in forest industries, by J. A. Hall. Society of American Foresters Proc. 1954, pp. 75-77.*


790 -9-
UTILIZATION (continued)

General (continued)

*How to make a laminated diving board. Technical Note 244. 1953.
*Suitability of woods for use in barns and other farm structures. Technical Note 246. 1953.

By Industries

Buildings


Containers


Species of wood suitable for use in contact with foodstuffs, by R. P. A. Johnson. Cold Storage Locker Operator's Conference Proc. 1939. (Copies of Proceedings available from Prof. Marvin A. Schaars, Room 204, Agriculture Hall, University of Wisconsin, Madison, Wis., for 75 cents.)
Containers (continued)

Tests of wood for butter containers with reference to imparting odor and flavor, by E. M. Davis. USDA Misc. Pub. 250. 1936. 5 cents.

Description of the tests made of southern hardwoods for butter boxes and tubs. Barrel and Box and Packages, Oct. 1934.

Veneer and Plywood


*Veneer cutting and drying properties:

|-----------|-----------------------|-------------|

By Species

*U. S. Forest Service American woods series:

Alder, red
Ash
Aspen
Baldcypress
Basswood, American
Beech, American
Buckeye
Butternut
Cedar, incense-
  eastern red
  western red
Atlantic white-
  northern white-
  Port Orford white-
  Alaska
Cherry, black
Chestnut
Cottonwood
Dogwood, flowering
Elm

Fir, balsam
Douglas-
  noble
  white
Hackberry
Hemlock, eastern
  western
Hickory
Holly, American
Larch, western
Locust, black
Magnolia
Maple
Oaks
Osage-orange
Pecan
Persimmon
Pine, jack
  lodgepole
  ponderosa
By Species (continued)

*U. S. Forest Service American woods series: (continued)

Pine, red
  southern
  sugar
  eastern white
  western white
Poplar, balsam
  yellow-
Redwood
Spruce, eastern

Spruce, Engelmann
  Sitka
Sweetgum
Sycamore, American
Tamarack
Tupelo
Walnut, black
Willow, black

*Lake States aspen reports. Lake States Forest Experiment Station, St. Paul 1, Minnesota. A series of twenty-two reports on the utilization of aspen.

*Northeastern Forest Experiment Station beech utilization reports. Northeastern Forest Experiment Station, 102 Motors Avenue, Upper Darby, Pa. A series of nineteen reports on the utilization of beech.


*Southeastern Forest Experiment Station Hickory Task Force reports. Southeastern Forest Experiment Station, P. O. Box 2570, Asheville, N. C. A series of eight reports on the utilization of hickory.

*Some publications on domestic and foreign woods (a list). FPL Report No. 1479. 1956.

*Red hickory as strong as white hickory. Technical Note 171. 1953.


UTILIZATION (continued)

By Species (continued)


*Utilization of black locust, by J. B. Cuno. USDA Circ. 131. 1930.


*Engelmann spruce reports:

*U. S. Forest Service foreign woods series:
  *Balsa, Ochroma lagopus Sw., by W. D. Brush. Unnumbered leaflet. 1945.
By Species (continued)

*U. S. Forest Service foreign woods series: (continued)


*Greenheart, Ocotea rodioei (Schomb.) Mez-Nectandra rodioei Schomb., by W. D. Brush. Unnumbered leaflet. 1944.


*Yemeri, Vochysia hondurensis Sprague, by Jeannette M. Kryn. FPL Report No.
MISCELLANEOUS

*Opportunities for graduate studies in forest products. 1960.


*Some common fallacies about wood. FPL Report No. 1167. 1959.


Check list of native and naturalized trees of the United States (including Alaska), by Dr. Elbert L. Little, Jr., USDA Agricultural Handbook No. 41. 1953. $2.25 (cloth) from Government Printing Office, Washington 25, D. C.

*A hundred definitions pertaining to wood and other forest products. Technical Note 240. 1952.


STATISTICS OF PRODUCTION AND CONSUMPTION


OTHER LISTS OF PUBLICATIONS


Same . . . . . . . . . Supplement, 1926-30, 1935. $1.50
      Supplement, 1931-35, 1937. $1.25
      Supplement, 1936-40, 1943. $1.50

OTHER PUBLICATION LISTS ISSUED BY THE FOREST PRODUCTS LABORATORY

The following lists of publications, which deal with the other investigative projects of the Forest Products Laboratory, are obtainable upon request:

Boxing and Crating—Strength and serviceability of shipping containers, methods of packing.

Building Construction Subjects—Partial list of Government publications of interest to architects, builders, retail lumbermen, and engineers.

Chemistry of Wood and Derived Products—Chemical properties and uses of wood and chemical products from wood, such as sugars, turpentine, alcohol, charcoal, and acetic acid; chemical stabilization of wood.

Fire Protection—Fire test methods, fire retarding chemicals and treatments and fire behavior of treated and untreated wood, wood products, and wood structures.

Fungus Defects in Forest Products—Decay, stains, and molds in lumber, buildings, and various wood products; antiseptic properties of protective materials.

Furniture Manufacturers, Woodworkers and Teachers of Woodshop Practice—Partial list of publications on growth, structure, and identification of wood; moisture content, physical properties, air seasoning, and kiln drying; grading, manufacturing, and waste utilization; strength and related properties and joints and fastenings; glues and gluing, veneer and plywood fabrication; box and crate construction.

Glue, Glued Products, and Veneer—Development of waterproof glues, preparation and application of various glues, plywood manufacturing problems.

Growth, Structure, and Identification of Wood—Structure and identification of wood; the effect of cellular structure of wood on its strength, shrinkage, permeability, and other properties; the influence of environmental factors, such as light, soil, moisture, and fire, on the quality of wood produced; and secretions of economic value produced by trees and their exploitation.
Mechanical Properties and Structural Uses--Strength of timber and factors affecting strength; design of wooden articles or parts where strength or resistance to external forces is of importance.

Pulp and Paper--Suitability of various woods for pulp and paper; fundamental principles underlying the pulping and bleaching processes; methods of technical control of these processes; relation of the chemical and physical properties of pulps and the relation of these properties to the papermaking qualities of the pulps; waste in the industry, for example, decay in wood and pulp, utilization of bark, white water losses, etc.

Seasoning of Wood--Experimental and applied kiln drying, physical properties, air drying, steam bending.

Structural Sandwich, Plastic Laminates, and Wood-Base Aircraft Components--Strength, selection, and character of aircraft wood, plywood, and wood and composite laminated and sandwich materials; fabrication and assembly problems; methods of calculating the strength.

Wood Finishing Subjects--Effect of coatings in preventing moisture absorption; painting characteristics of different woods, and weathering of wood.

Wood Preservation--Preservative materials and methods of application; durability and service records of treated and untreated wood in various forms.

Note: Since Forest Products Laboratory publications are so varied in subject matter no single big list is issued. Instead a list is made up for each Laboratory division. Twice a year, December 31 and June 30, a list is made up showing new reports for the previous 6 months. This is the only item sent regularly to the Laboratory's mailing list. Anyone who has asked for and received the proper subject lists and who has had his name placed on the mailing list can keep up to date on Forest Products Laboratory publications. Each subject list carries descriptions of all other subject lists.
ORGANIZATIONAL DIRECTORY

of the

Forest Products Laboratory, Forest Service
U. S. Department of Agriculture
Madison 5, Wisconsin

---

<table>
<thead>
<tr>
<th>Name</th>
<th>Position</th>
</tr>
</thead>
<tbody>
<tr>
<td>Edward G. Locke</td>
<td>Director</td>
</tr>
<tr>
<td>Gardner H. Chidester, Chief</td>
<td>Pulp and Paper</td>
</tr>
<tr>
<td>Donald G. Coleman, Chief</td>
<td>Research Publications and Information</td>
</tr>
<tr>
<td>Herbert O. Fleischer, Chief</td>
<td>Timber Processing</td>
</tr>
<tr>
<td>Kenneth W. Kruger, Chief</td>
<td>Packaging Research</td>
</tr>
<tr>
<td>Ralph M. Lindgren, Chief</td>
<td>Wood Preservation</td>
</tr>
<tr>
<td>Joseph A. Liska, Chief</td>
<td>Physics and Engineering</td>
</tr>
<tr>
<td>Gordon D. Logan, Chief</td>
<td>Administrative Management</td>
</tr>
<tr>
<td>Harold L. Mitchell, Chief</td>
<td>Timber Growth and Utilization Relations</td>
</tr>
<tr>
<td>Jerome F. Saeman, Chief</td>
<td>Wood Chemistry</td>
</tr>
</tbody>
</table>