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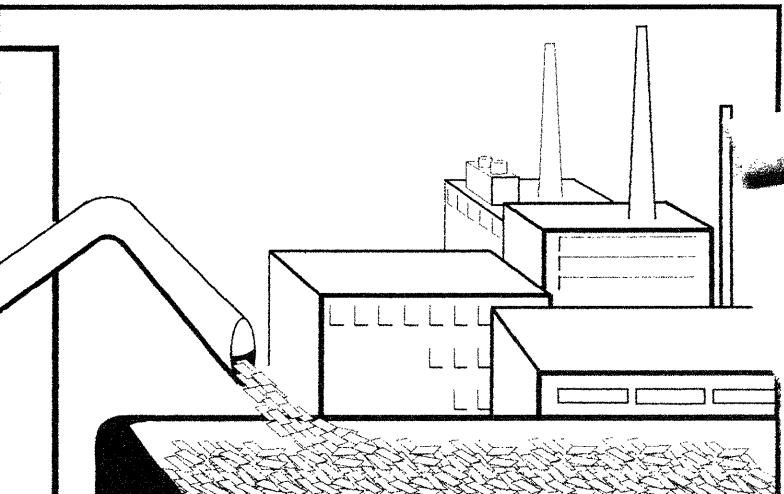
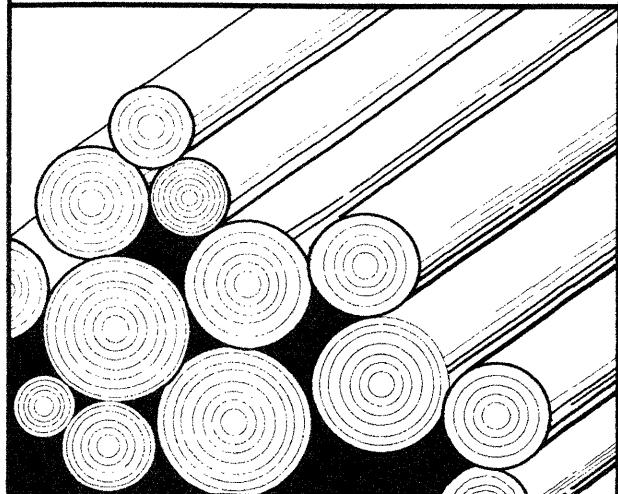
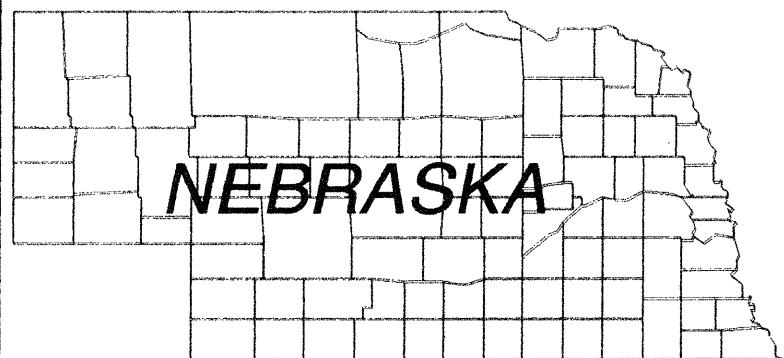
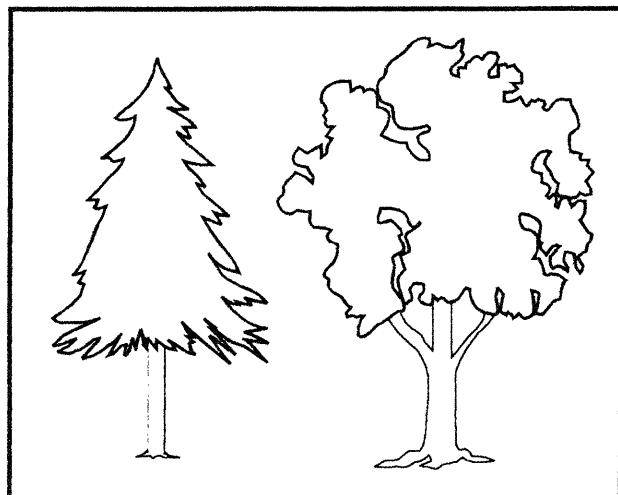
North Central
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Nebraska Timber Industry - An Assessment of Timber Product Output and Use, 1993

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FOREWORD

This bulletin reports findings of a survey of all primary wood-using mills in Nebraska in 1993 and details the industry's size and composition, its use of roundwood, and its generation and disposition of wood residues. Such detailed information is necessary for intelligent planning and decisionmaking in wood procurement, forest resource management, forest industry development, and forest research.

Special thanks are given to primary wood-using firms that responded to the survey and to the Nebraska Forest Service for canvassing the respondents. Their cooperation is greatly appreciated.

In this bulletin, all volumes are reported in product-specific standard units and/or cubic feet. When necessary, volumes reported by mills in nonstandard units were converted to standard units using regional conversion factors. Reported trends and changes in Nebraska's primary wood-using industry are based on comparisons with previous surveys of the State's primary wood-using industry conducted in 1980 and 1953. Row and column data of tables may not sum due to rounding, but data in each table cell are accurately displayed.

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HIGHLIGHTS

PRIMARY WOOD-USING INDUSTRY

- The number of active primary wood-using mills in Nebraska dropped from 46 in 1980 to 35 in 1993. Thirty-two of the 35 mills in 1993 were sawmills; three-quarters of the mills were in the Eastern Forest Survey Unit (table 1 and fig. 1).
- In 1993, all the primary wood-using mills in Nebraska processed a total of 6.8 million cubic feet of roundwood into lumber and other various products (table 2).
- More than 85 percent of the roundwood processed was cut from Nebraska's forest lands; the remainder, mostly cottonwood, was imported from neighboring States.

WESTERN UNIT

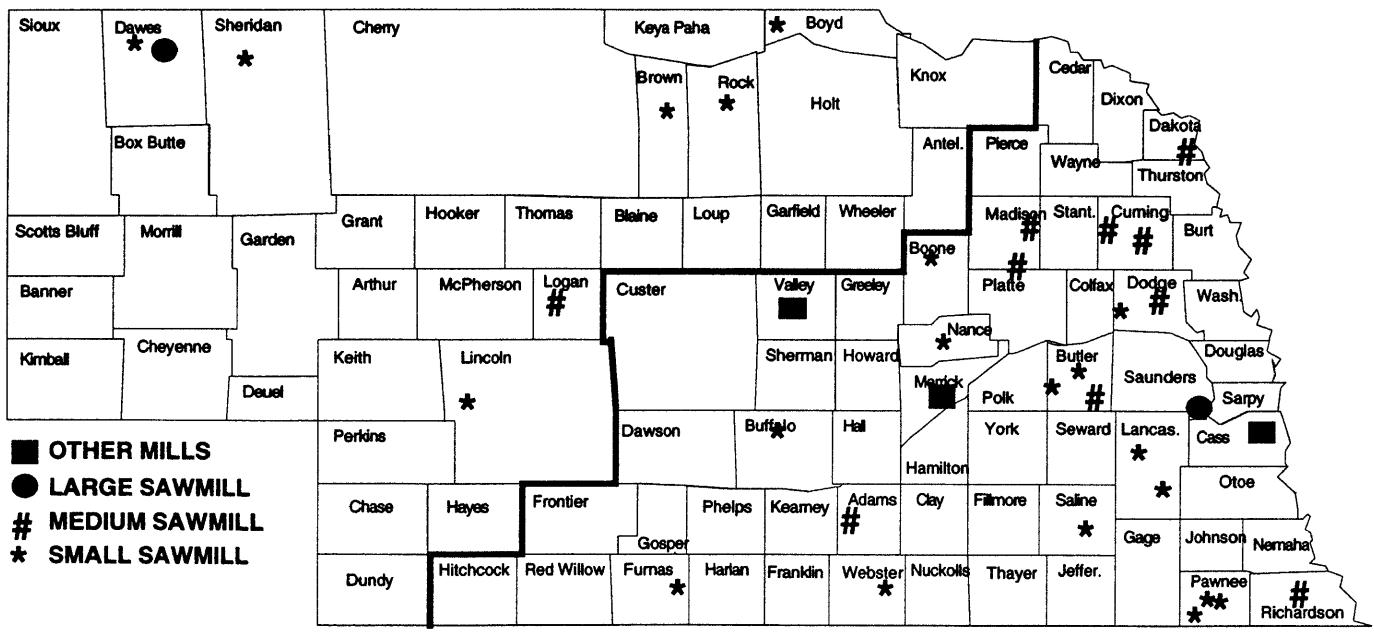


Figure 1.—Active sawmills and other primary wood-using mills and Forest Survey Units in Nebraska, 1993. Sawmills are classed by volume of lumber produced in 1993: Large sawmills = more than 5 million board feet reported; medium sawmills = 1 to 5 million board feet reported; small sawmills less than 1 million board feet reported. Forest Survey Units are the geographic areas used by the Forest Inventory and Analysis Unit to report results of inventories and use of the Nation's forest resources.

Ronald L. Hackett, Research Forester, received a B.S. degree in forest resources from the University of Minnesota. He joined the Forest Service in December 1974, and has been working with the North Central Station's Forest Inventory and Analysis Unit since.

Dennis M. Adams, Assistant State Forester, received a B.S. degree in forest management from Iowa State University and an M.S. degree in horticulture and forestry from the University of Nebraska. He has been employed by the University of Nebraska, State and Extension Forestry, since 1973.

INDUSTRIAL ROUNDWOOD PRODUCTION

- In 1993, more than 8.9 million cubic feet of industrial roundwood products were cut from Nebraska's forest lands, three times the level in 1980 (table 3 and fig. 2).

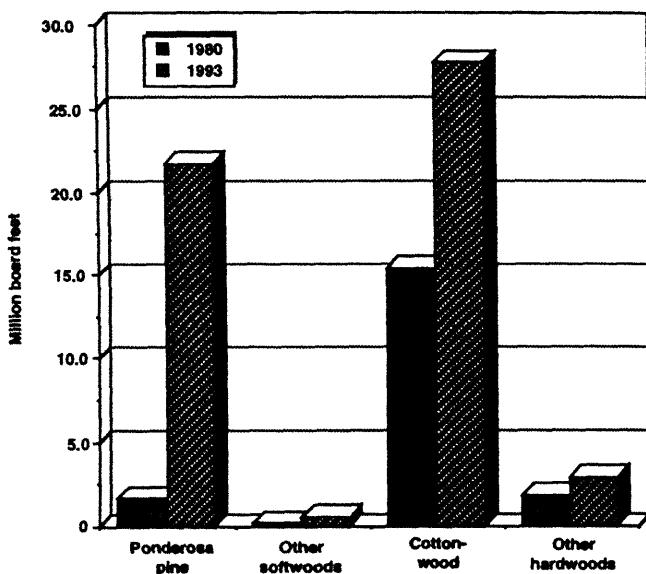


Figure 2.—Saw-log production by major species group, Nebraska, 1980-1993.

- Saw logs continued to be the main form of industrial roundwood harvested from Nebraska's forests. The only other roundwood products cut in 1993 were small volumes of veneer logs and other products. The major species for these other products were cottonwood and redcedar. Since 1980, the State's use of ponderosa pine for saw-log products has increased.
- In 1980, about four-fifths of the industrial roundwood production came from the Eastern Unit. By 1993, the industrial roundwood production totals from the Eastern and the Western Units were about equal.
- Saw-log production in 1993 was 52.7 million board feet, nearly 2.5 times the production in 1980. Ponderosa pine and cottonwood accounted for most of the increase, as well as 94 percent of the harvest in 1993. Other

important species cut for saw logs were white oak, black walnut, and redcedar (table 4).

- More than two-thirds of the saw-log production in 1993 was processed in Nebraska. Of the State's saw-log production, 18.2 million board feet was exported, primarily to South Dakota and Wyoming. The Eastern Unit led in total production with 27 million board feet. Ponderosa pine was the major species cut for saw logs in the Western Unit, and cottonwood was the major species cut in the Eastern Unit.
- Counties producing more than 4 million board feet of saw logs each were Sheridan, Dawes, and Saunders. These counties furnished 43 percent of the Nebraska saw logs harvested in 1993 (table 5).
- Nebraska sawmills received 41.4 million board feet of logs in 1993. Iowa supplied 5.5 million board feet; small amounts were provided by South Dakota, Missouri, and Kansas. More than 90 percent of the imported volume was cottonwood (table 6).
- Sawmills in the Eastern Unit received 85 percent of all saw-log receipts in Nebraska. Western Unit sawmills processed mainly ponderosa pine, and Eastern Unit mills processed mainly cottonwood.
- Veneer-log production in Nebraska accounted for 623 thousand board feet, a 15-percent increase from 1980. Cottonwood and white oak accounted for an over 80 percent increase in veneer-log production in 1993. Cottonwood accounted for nearly 64 percent of the total veneer-log production (table 7).
- Counties each producing more than 100 thousand board feet of veneer logs were Cass and Sarpy in the Eastern Unit along the Missouri River. These two counties furnished 48 percent of the State's veneer log harvest.

TIMBER REMOVALS FOR INDUSTRIAL ROUNDWOOD

- Harvest of industrial roundwood in 1993 totaled 13.9 million cubic feet of timber cut. Only 35 percent or 5.0 million cubic feet was left in the woods as harvest residues (tables 8, 9 and fig. 3).

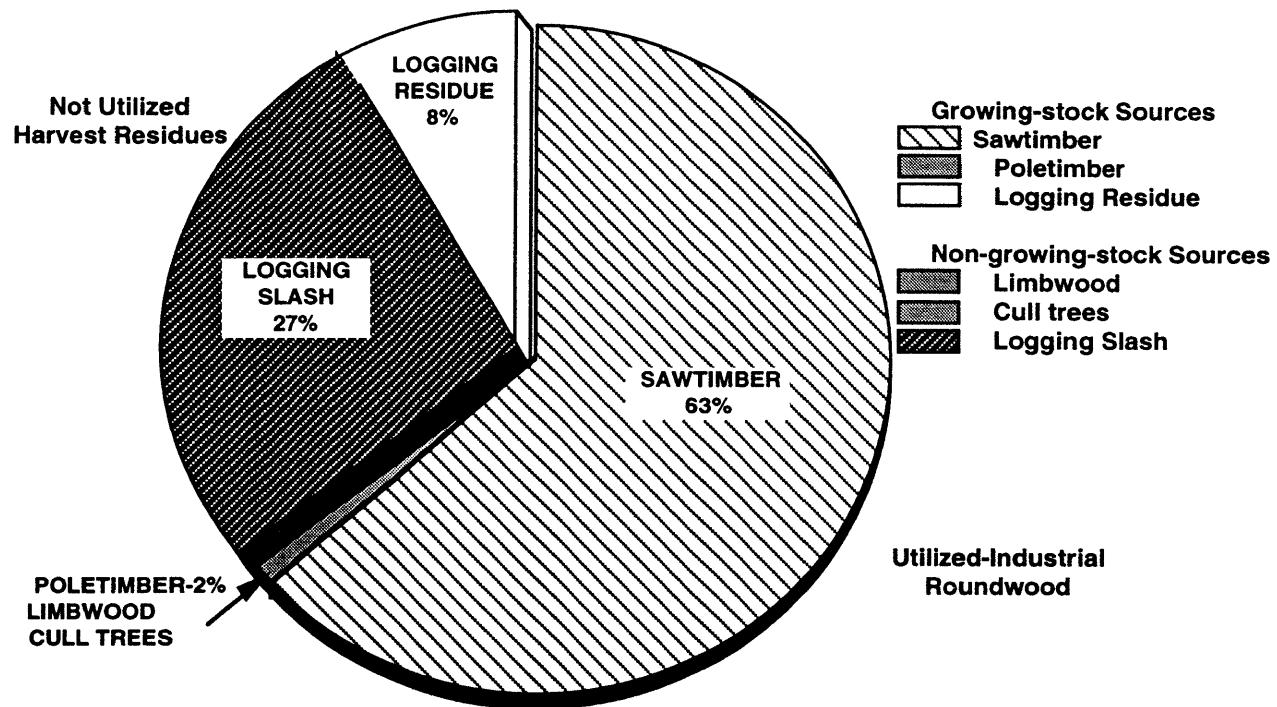


Figure 3.—*Distribution of timber removals for industrial roundwood by source of material, Nebraska, 1993.*

- Harvest residues included 1.2 million cubic feet of growing-stock portions of live trees on timberland (logging residues) and 3.8 million cubic feet in tops and cull material (logging slash).
- With Nebraska's primary forest industry dominated by sawmills, sawtimber removals supplied most of the volume for industrial roundwood products. Some product volume was also extracted from poletimber and non-growing stock sources such as limbwood, cull trees, dead trees, and nonforest trees from windrows, windbreaks, and pastures.
- Ninety-eight percent of the woody material removed in 1993 was harvested from growing-stock sources (sawtimber, poletimber, and harvest residues).
- Timber harvested for industrial roundwood and the resulting generation of logging residues extracted nearly 10 million cubic feet of growing-stock volume from Nebraska's timberland inventory in 1993 (table 10). In board foot equivalents, 55.6 million board feet of the total was cut from the sawtimber portion of the growing-stock inventory (table 11).

PRIMARY MILL RESIDUE

- During 1993, Nebraska's primary wood-using mills generated 57,900 tons of coarse (chippable) wood residue, 32,700 tons of fine wood residue, and 24,300 tons of bark (table 12).
- More than half of this volume was in the form of coarse wood residue, such as slabs and edgings, which is suitable for chipping (table 12 and fig. 4).
- Eighty-one percent or more of all residues (coarse, fine, bark) generated at Nebraska primary mills was used (table 12 and fig. 5).
- The bulk of the coarse and fine wood residues, such as slabs, edgings, shavings, and sawdust, was used for miscellaneous purposes such as small dimension specialty boards, animal bedding, litter, and mulch.
- Nineteen percent of the mill residues generated in the State still remained unused, but this was an improvement from 1980 when 33 percent of all residues generated went unused.

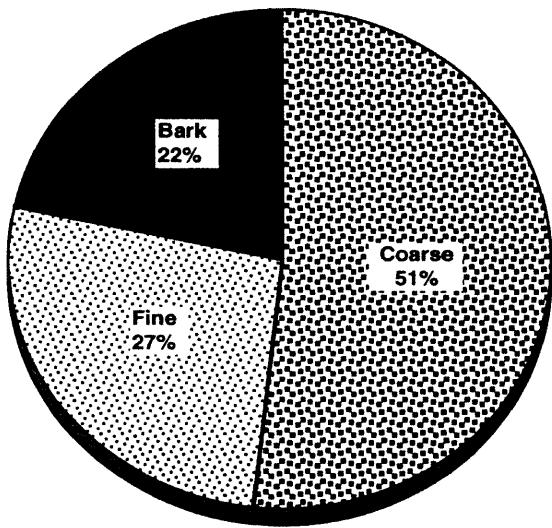


Figure 4.—*Distribution of residues generated by primary wood-using mills by type of residue, Nebraska, 1993.*

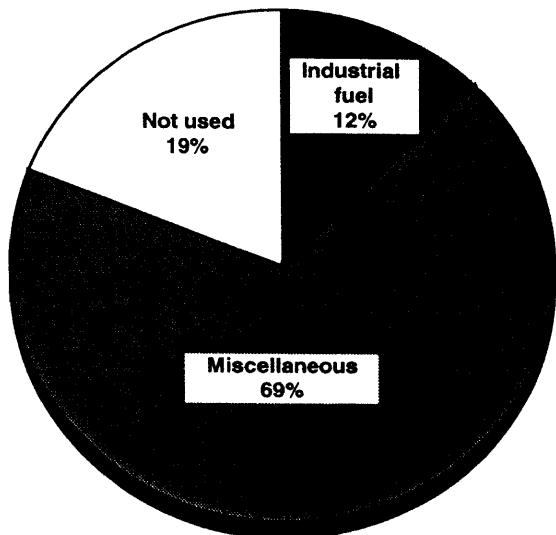


Figure 5.—*Distribution of residues generated by primary wood-using mills by method of disposal, Nebraska, 1993.*

APPENDIX

STUDY METHODS

This study was a cooperative effort of the Nebraska Forest Service (NFS) and the North Central Forest Experiment Station (NCFES). Using mail questionnaires supplied by NCFES and designed to determine the size and composition of the State's primary wood-using industry, its use of roundwood, and its generation and disposition of wood residues, the NFS canvassed all primary wood-using mills within the State. Followups to selected nonresponding mills, e.g., those thought to have significant activity, using additional mailings, telephone, and personal contacts were made by NFS. Completed questionnaires were sent to NCFES for editing and processing.

As part of data editing and processing, all industrial roundwood volumes reported on the questionnaires were converted to standard units of measure using regional conversion factors. Timber removals by source of material and harvest residues generated during logging were estimated from standard product volumes using factors developed from logging utilization studies previously conducted by NCFES. Finalized data

on Nebraska's industrial roundwood receipts were loaded into a regional timber removals database where they were supplemented with data on out-of-State uses of Nebraska roundwood to provide a complete assessment of Nebraska's timber product output.

DEFINITION OF TERMS

Board foot.—Unit of measure applied to roundwood. It relates to lumber that is 1 foot long, 1 foot wide, and 1 inch thick (or its equivalent).

Central stem.—The portion of a tree between a 1-foot stump and the minimum 4.0-inch top diameter outside bark or point where the central stem breaks into limbs.

Coarse mill residue.—Wood residue suitable for chipping such as slabs, edgings, and veneer cores.

Commercial species.—Tree species presently or prospectively suitable for industrial wood products. (Note: Excludes species of typically small size, poor form, or inferior quality such as hophornbeam, Osage-orange, and redbud.)

Cull removals.—Net volume of rough and rotten trees plus the net volume in sections of the central stem of growing-stock trees that do not meet regional merchantability standards, harvested for industrial roundwood products.

Dead removals.—Net volume of dead trees harvested for industrial roundwood products.

Diameter at breast height (d.b.h.).—The outside bark diameter at 4.5 feet above the forest floor on the uphill side of the tree. For determining breast height, the forest floor includes the duff layer that may be present, but does not include unincorporated woody debris that may rise above the ground line.

Fine mill residue.—Wood residue not suitable for chipping such as sawdust and veneer clippings.

Forest land.—Land at least 16.7 percent stocked by forest trees of any size, or formerly having had such tree cover, and not currently developed for nonforest use. (Note: Stocking is measured by comparing specified standards with basal area and/or number of trees, age or size, and spacing.) The minimum area for classification of forest land is 1 acre. Roadside, streamside, and shelterbelt strips of timber must have a crown width of at least 120 feet to qualify as forest land. Unimproved roads and trails, streams, or other bodies of water or clearings in forest areas shall be classed as forest if less than 120 feet wide.

Growing-stock removals.—The growing-stock volume removed from the timberland inventory by harvesting industrial roundwood products. (Note: Includes sawtimber removals, poletimber removals, and logging residues.)

Growing-stock tree.—A live timberland tree of commercial species that meets specified standards of size, quality, and merchantability. (Note: Excludes rough, rotten, and dead trees.)

Growing-stock volume.—Net volume of growing-stock trees 5.0 inches d.b.h. and over, from 1 foot above the ground to a minimum 4.0-inch top diameter outside bark of the central stem or to the point where the central stem breaks into limbs.

Hardwoods.—Dicotyledonous trees, usually broad-leaved and deciduous.

Harvest residues.—The total net volume of unused portions of trees cut or killed by logging. (Note: Includes both logging residues and logging slash.)

Industrial fuelwood.—A roundwood product with or without bark, used to generate energy at non-manufacturing facilities such as schools, correctional institutions, or electric generating plants.

Industrial roundwood products.—Saw logs, pulpwood, veneer logs, poles, commercial posts, piling, cooperage logs, particleboard bolts, shaving bolts, lath bolts, charcoal bolts, and chips from roundwood used for pulp or board products.

Industrial roundwood production.—The quantity of industrial roundwood harvested in a geographic area.

Industrial roundwood receipts.—The quantity of industrial roundwood received by commercial mills in a geographic area.

International 1/4-inch rule.—A log rule or formula for estimating the board foot volume of logs, allowing one-half inch of taper for each 4-foot length. The rule appears in a number of forms that allow for kerf. In this form, a one-quarter inch of kerf is assumed. This rule is used as the USDA Forest Service standard log rule in the Eastern United States.

Limbwood removals.—Net volume of all portions of a tree other than the central stem, (including forks, large limbs, tops, and stumps) harvested for industrial roundwood products.

Logging residue.—The net volume of unused portions of the merchantable central stem of growing-stock trees cut or killed by logging.

Logging slash.—The net volume of unused portions of the unmerchantable (non-growing-stock) sections of trees cut or killed by logging.

Merchantable sections.—Sections of the central stem of growing-stock trees that meet either pulpwood or saw-log specifications.

Net volume.—Gross volume less deductions for rot, sweep, or other defects affecting use for roundwood products.

Noncommercial species.—Trees species of typically small size, poor form, or inferior quality that normally do not develop into trees suitable for industrial roundwood products. Classified in volume tables as rough trees.

Nonforest land.—Land that has never supported forests, and land formerly forested where use for timber management is precluded by development for other uses. (Note: Includes areas used for crops, improved pasture, residential areas, city parks, improved roads of any width and adjoining clearings, powerline clearings of any width, and 1 to 39.9-acre areas of water classified by the Bureau of the Census as land. If intermingled in forest areas, improved roads and nonforest strips must be more than 120 feet wide and more than 1 acre to qualify as nonforest land.)

Nonforest land removals.—Net volume of trees on nonforest lands harvested for industrial roundwood products.

Poletimber.—A growing-stock tree at least 5.0 inches d.b.h. but smaller than sawtimber size (9.0 inches d.b.h. for softwoods, 11.0 inches d.b.h. for hardwoods).

Poletimber removals.—Net volume in the merchantable central stem of poletimber trees harvested for industrial roundwood products.

Primary wood-using mills.—Mills receiving roundwood or chips from roundwood for processing into products such as lumber, veneer, and pulp.

Primary wood-using mill residue.—Wood materials (coarse and fine) and bark generated at manufacturing plants from roundwood processed into principal products. These residues include wood products

(byproducts) obtained incidental to production of principal products and wood materials not utilized for some product.

Rotten tree.—A tree that does not meet regional merchantability standards because of excessive unsound cull.

Rough tree.—A tree that does not meet regional merchantability standards because of excessive sound cull. Includes noncommercial tree species.

Roundwood.—Logs, bolts, or other round sections cut from trees (including chips from roundwood).

Sapling.—A live tree between 1.0 and 5.0 inches d.b.h.

Sapling removals.—Net volume in saplings harvested for industrial roundwood products.

Saw-log portion.—That portion of the central stem of sawtimber trees between the stump and the saw-log top.

Saw-log top.—The point on the central stem of sawtimber trees above which a saw log can not be produced. The minimum saw-log top is 7.0 inches d.o.b. for softwoods and 9.0 inches d.o.b. for hardwoods.

Sawtimber removals.—As used in table 8, sawtimber removals refers to the net volume in the merchantable central stem of sawtimber trees harvested for industrial roundwood products. (Note: Includes the saw-log and upper-stem portions of sawtimber trees.) When referring to the sawtimber volume removed from the timberland inventory as in table 11, sawtimber removals refers to the net volume in the saw-log portion of sawtimber trees harvested for roundwood products or left on the ground as harvest residue, and is usually expressed in thousands of board feet (International 1/4-inch rule).

Sawtimber tree.—A growing-stock tree containing at least a 12-foot saw log or two noncontiguous saw logs 8 feet or longer, and meeting regional specifications for freedom from defect. Softwoods must be at least 9.0 inches d.b.h., and hardwoods must be at least 11.0 inches d.b.h.

Sawtimber volume.—Net volume in the saw-log portion of sawtimber trees.

Softwoods.—Coniferous trees, usually evergreen, having needles or scale-like leaves.

Timber product output.—The volume of roundwood products produced from an area's forests.

Timberland.—Forest land that is producing, or is capable of producing, in excess of 20 cubic feet per acre per year of industrial roundwood products under natural conditions, is not withdrawn from timber utilization by statute or administrative regulation, and is not associated with urban or rural development.

Tree.—A woody plant usually having one or more perennial stems, a more or less definitely formed crown of foliage, and a height of at least 12 feet at maturity.

Upper stem portion.—That portion of the central stem of sawtimber trees between the saw-log top and the minimum top diameter of 4.0 inches outside bark, or to the point where the central stem breaks into limbs.

Veneer log.—Log to be used in the production of plywood, finished panels, or veneer sheets, both rotary cut and sliced.

COMMON AND SCIENTIFIC NAMES OF TREE SPECIES MENTIONED IN THIS REPORT

SOFTWOODS

Ponderosa pine *Pinus ponderosa*
Eastern redcedar *Juniperus virginiana*

HARDWOODS

Ash
White ash *Fraxinus americana*
Green ash *Fraxinus pennsylvanica*
Quaking aspen *Populus tremuloides*
Balsam poplar *Populus balsamifera*
American basswood *Tilia americana*
Boxelder *Acer negundo*
Black cherry *Prunus serotina*
Northern catalpa *Catalpa speciosa*
Cottonwood
Eastern cottonwood *Populus deltoides*
Plains cottonwood *Populus sargentii*

| | |
|-------------------------|------------------------------|
| Elm | |
| American elm | <i>Ulmus americana</i> |
| Rock elm | <i>Ulmus thomasii</i> |
| Siberian elm | <i>Ulmus pumila</i> |
| Slippery elm | <i>Ulmus rubra</i> |
| Hackberry | <i>Celtis occidentalis</i> |
| Hickory | |
| Bitternut hickory | <i>Carya cordiformis</i> |
| Mockernut hickory | <i>Carya tomentosa</i> |
| Pignut hickory | <i>Carya glabra</i> |
| Shagbark hickory | <i>Carya ovata</i> |
| Honeylocust | <i>Gleditsia triacanthos</i> |
| Silver maple | <i>Acer saccharinum</i> |
| Red mulberry | <i>Morus rubra</i> |
| White oaks | |
| Bur oak | <i>Quercus macrocarpa</i> |
| Chinkapin oak | <i>Quercus muehlenbergii</i> |
| Swamp white oak | <i>Quercus bicolor</i> |
| Red oaks | |
| Black oak | <i>Quercus velutina</i> |
| Blackjack oak | <i>Quercus marilandica</i> |
| Northern red oak | <i>Quercus rubra</i> |
| Osage-orange | <i>Maclura pomifera</i> |
| Sycamore | <i>Platanus occidentalis</i> |
| Black walnut | <i>Juglans nigra</i> |
| Black willow | <i>Salix nigra</i> |

TABLE TITLES

Table 1.—Number of active primary wood-using mills in Nebraska, 1980 and 1993

Table 2.—Industrial roundwood receipts by species group and State of origin, Nebraska, 1993

Table 3.—Industrial roundwood production by Forest Survey Unit, species group, and type of product, Nebraska, 1993

Table 4.—Saw-log production by Forest Survey Unit, species group, and State of destination, Nebraska, 1993

Table 5.—Saw-log production from roundwood by Forest Survey Unit, county, and species group, Nebraska, 1993

Table 6.—Saw-log receipts by Forest Survey Unit, species group, and State of origin, Nebraska, 1993

Table 7.—Veneer-log production by Forest Survey Unit, county and species group, Nebraska, 1993

Table 8.—Timber removals for industrial roundwood by source of material and species group, Nebraska, 1993

Table 9.—Harvest residues generated by industrial roundwood harvesting from timberland, by Forest Survey Unit, county, and species group, Nebraska, 1993

Table 10.—Growing-stock removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Nebraska, 1993

Table 11.—Sawtimber removals from timberland for industrial roundwood production by Forest Survey Unit, county, and species group, Nebraska, 1993

Table 12.—Residue produced at primary wood-using mills by type of material, type of use, and Forest Survey Unit, Nebraska, 1993

Table 1.—Number of active primary wood-using mills in Nebraska, 1980 and 1993

| Kind of mill | 1980 | 1993 |
|---------------------|------|------|
| Sawmills | | |
| > 5000 mbf 1/ | -- | 2 |
| 1000 to 5000 mbf 1/ | 7 | 10 |
| 50 to 1000 mbf 1/ | 35 | 13 |
| < 50 mbf 1/ | -- | 7 |
| Total | 42 | 32 |
| Other mills 2/ | 4 | 3 |
| All mills | 46 | 35 |

1/ Thousand board feet, International 1/4-inch rule.

2/ Fence post, excelsior, cooperage, charcoal, veneer, etc.

Table 2.—Industrial roundwood receipts by species group and State of origin,
Nebraska, 1993

(In thousand cubic feet)

| Species group | Total | Iowa | Kansas | Missouri | Nebraska | South Dakota |
|------------------|--------------|------------|-----------|-----------|--------------|--------------|
| SOFTWOODS | | | | | | |
| Redcedar | 225 | -- | -- | -- | 225 | -- |
| Spruce | 1/ | -- | -- | -- | 1/ | -- |
| Ponderosa pine | 843 | -- | -- | -- | 843 | -- |
| Total | 1,068 | -- | -- | -- | 1,068 | -- |
| HARDWOODS | | | | | | |
| Soft maple | 10 | 3 | -- | 3 | 5 | -- |
| Hackberry | 20 | 2 | -- | 2 | 16 | -- |
| Ash | 51 | 7 | -- | 5 | 39 | -- |
| Black walnut | 42 | 4 | -- | 11 | 27 | -- |
| Osage-orange | 1 | -- | -- | -- | 1 | -- |
| Cottonwood | 5,325 | 746 | 11 | 29 | 4,406 | 134 |
| Red oak group | 56 | 5 | 5 | 16 | 29 | -- |
| White oak group | 161 | 14 | 5 | 18 | 124 | -- |
| Willow | 1 | -- | -- | -- | 1 | -- |
| Basswood | 3 | 2 | -- | -- | 2 | -- |
| Elm | 55 | 9 | -- | -- | 46 | -- |
| Total | 5,725 | 792 | 20 | 84 | 4,695 | 134 |
| All species | 6,794 | 792 | 20 | 84 | 5,763 | 134 |

1/ Less than 500 cubic feet.

Rows and columns may not sum due to rounding.

Table 3.—Industrial roundwood production by Forest Survey Unit, species group, and type of product, Nebraska, 1993 1/

| Species group | ALL UNITS | | | | Other products | All products |
|------------------|-----------|--------|--------|--------|----------------|--------------|
| | MBF 2/ | MCF 3/ | MBF 2/ | MCF 3/ | | |
| SOFTWOODS | | | | | | |
| Redcedar | 497 | 106 | -- | -- | 119 | 225 |
| Spruce | 1 | 4/ | -- | -- | -- | 4/ |
| Ponderosa pine | 21,704 | 3,770 | -- | -- | -- | 3,770 |
| Total | 22,202 | 3,876 | -- | -- | 119 | 3,995 |
| HARDWOODS | | | | | | |
| Soft maple | 60 | 9 | -- | -- | -- | 9 |
| Hickory | -- | -- | 1 | 4/ | -- | 4/ |
| Hackberry | 99 | 16 | -- | -- | -- | 16 |
| Ash | 235 | 40 | -- | -- | -- | 40 |
| Black walnut | 563 | 86 | 73 | 10 | -- | 96 |
| Osage-orange | 4 | 1 | -- | -- | -- | 1 |
| Cottonwood | 27,686 | 4,272 | 398 | 91 | 75 | 4,438 |
| Red oak group | 184 | 33 | 43 | 10 | -- | 43 |
| White oak group | 1,260 | 225 | 105 | 24 | -- | 249 |
| Willow | 7 | 1 | -- | -- | -- | 1 |
| Basswood | 124 | 20 | 1 | 4/ | -- | 20 |
| Elm | 291 | 46 | -- | -- | -- | 46 |
| Other hardwoods | -- | -- | 1 | 4/ | -- | 4/ |
| Total | 30,515 | 4,749 | 623 | 136 | 75 | 4,960 |
| All species | 52,717 | 8,626 | 623 | 136 | 194 | 8,955 |

(Table 3 continued on next page)

(Table 3 continued)

EASTERN UNIT

| Species group | Saw logs | | Veneer logs | | Other products | All products |
|------------------|----------|--------|-------------|--------|----------------|--------------|
| | MBF 2/ | MCF 3/ | MBF 2/ | MCF 3/ | | |
| SOFTWOODS | | | | | | |
| Redcedar | 188 | 40 | -- | -- | 111 | 151 |
| Ponderosa pine | 8 | 1 | -- | -- | -- | 1 |
| Total | 196 | 42 | -- | -- | 111 | 152 |
| HARDWOODS | | | | | | |
| Soft maple | 60 | 9 | -- | -- | -- | 9 |
| Hickory | -- | -- | 1 | 4/ | -- | 4/ |
| Hackberry | 97 | 15 | -- | -- | -- | 15 |
| Ash | 233 | 40 | -- | -- | -- | 40 |
| Black walnut | 559 | 86 | 73 | 10 | -- | 96 |
| Osage-orange | 4 | 1 | -- | -- | -- | 1 |
| Cottonwood | 23,904 | 3,688 | 398 | 91 | 63 | 3,843 |
| Red oak group | 184 | 33 | 43 | 10 | -- | 43 |
| White oak group | 1,255 | 224 | 105 | 24 | -- | 248 |
| Willow | 7 | 1 | -- | -- | -- | 1 |
| Basswood | 124 | 20 | 1 | 4/ | -- | 20 |
| Elm | 264 | 42 | -- | -- | -- | 42 |
| Other hardwoods | -- | -- | 1 | 4/ | -- | 4/ |
| Total | 26,689 | 4,159 | 623 | 136 | 63 | 4,358 |
| All species | 26,885 | 4,200 | 623 | 136 | 174 | 4,510 |

WESTERN UNIT

| Species group | Saw logs | | Veneer logs | | Other products | All products |
|------------------|----------|--------|-------------|--------|----------------|--------------|
| | MBF 2/ | MCF 3/ | MBF 2/ | MCF 3/ | | |
| SOFTWOODS | | | | | | |
| Redcedar | 309 | 66 | -- | -- | 8 | 74 |
| Spruce | 1 | 4/ | -- | -- | -- | 4/ |
| Ponderosa Pine | 21,695 | 3,769 | -- | -- | -- | 3,769 |
| Total | 22,006 | 3,835 | -- | -- | 8 | 3,843 |
| HARDWOODS | | | | | | |
| Soft Maple | 5/ | 4/ | -- | -- | -- | 4/ |
| Hackberry | 3 | 4/ | -- | -- | -- | 4/ |
| Ash | 3 | 4/ | -- | -- | -- | 4/ |
| Black Walnut | 4 | 1 | -- | -- | -- | 1 |
| Cottonwood | 3,783 | 584 | -- | -- | 12 | 596 |
| White Oak Group | 6 | 1 | -- | -- | -- | 1 |
| Basswood | 5/ | 4/ | 5/ | 4/ | -- | 4/ |
| Elm | 28 | 4 | -- | -- | -- | 4 |
| Total | 3,826 | 591 | 5/ | 4/ | 12 | 602 |
| All species | 25,832 | 4,425 | 5/ | 4/ | 20 | 4,445 |

1/ Based on utilization studies in the region.

2/ Thousand board feet, International 1/4-inch rule.

3/ Thousand cubic feet.

4/ Less than 500 cubic feet.

5/ Less than 500 board feet.

Rows and columns may not sum due to rounding.

Table 4.—Saw-log production by Forest Survey Unit, species group,
and State of destination, Nebraska, 1993

(In thousand board feet) 1/

| ALL UNITS | | | | | | | |
|------------------|--------|------|--------|----------|----------|--------------|---------|
| Species | Total | Iowa | Kansas | Missouri | Nebraska | South Dakota | Wyoming |
| SOFTWOODS | | | | | | | |
| Redcedar | 497 | -- | -- | -- | 497 | -- | -- |
| Spruce | 1 | -- | -- | -- | 1 | -- | -- |
| Ponderosa pine | 21,704 | -- | -- | -- | 4,856 | 10,800 | 6,048 |
| Total | 22,202 | -- | -- | -- | 5,354 | 10,800 | 6,048 |
| HARDWOODS | | | | | | | |
| Soft maple | 60 | -- | -- | 30 | 30 | -- | -- |
| Hackberry | 99 | -- | -- | -- | 99 | -- | -- |
| Ash | 235 | 5 | -- | -- | 230 | -- | -- |
| Black walnut | 563 | 185 | 101 | 103 | 174 | -- | -- |
| Osage-orange | 4 | -- | -- | -- | 4 | -- | -- |
| Cottonwood | 27,686 | -- | -- | 133 | 27,503 | 50 | -- |
| Red oak group | 184 | 10 | -- | 10 | 164 | -- | -- |
| White oak group | 1,260 | -- | -- | 565 | 696 | -- | -- |
| Willow | 7 | -- | -- | -- | 7 | -- | -- |
| Basswood | 124 | -- | -- | 115 | 10 | -- | -- |
| Elm | 291 | -- | -- | -- | 291 | -- | -- |
| Total | 30,515 | 200 | 101 | 956 | 29,208 | 50 | -- |
| All species | 52,717 | 200 | 101 | 956 | 34,562 | 10,850 | 6,048 |
| EASTERN UNIT | | | | | | | |
| SOFTWOODS | | | | | | | |
| Redcedar | 188 | -- | -- | -- | 188 | -- | -- |
| Ponderosa pine | 8 | -- | -- | -- | 8 | -- | -- |
| Total | 196 | -- | -- | -- | 196 | -- | -- |
| HARDWOODS | | | | | | | |
| Soft maple | 60 | -- | -- | 30 | 30 | -- | -- |
| Hackberry | 97 | -- | -- | -- | 97 | -- | -- |
| Ash | 233 | 5 | -- | -- | 228 | -- | -- |
| Black walnut | 559 | 185 | 101 | 103 | 170 | -- | -- |
| Osage-orange | 4 | -- | -- | -- | 4 | -- | -- |
| Cottonwood | 23,904 | -- | -- | 133 | 23,770 | -- | -- |
| Red oak group | 184 | 10 | -- | 10 | 164 | -- | -- |
| White oak group | 1,255 | -- | -- | 565 | 690 | -- | -- |
| Willow | 7 | -- | -- | -- | 7 | -- | -- |
| Basswood | 124 | -- | -- | 115 | 10 | -- | -- |
| Elm | 264 | -- | -- | -- | 264 | -- | -- |
| Total | 26,689 | 200 | 101 | 956 | 25,433 | -- | -- |
| All species | 26,885 | 200 | 101 | 956 | 25,629 | -- | -- |

(Table 4 continued on next page)

(Table 4 continued)

| Species | Total | WESTERN UNIT | | | | | |
|------------------|--------|--------------|--------|----------|----------|--------------|---------|
| | | Iowa | Kansas | Missouri | Nebraska | South Dakota | Wyoming |
| SOFTWOODS | | | | | | | |
| Redcedar | 309 | -- | -- | -- | 309 | -- | -- |
| Spruce | 1 | -- | -- | -- | 1 | -- | -- |
| Ponderosa pine | 21,695 | -- | -- | -- | 4,847 | 10,800 | 6,048 |
| Total | 22,006 | -- | -- | -- | 5,158 | 10,800 | 6,048 |
| HARDWOODS | | | | | | | |
| Soft maple | 2/ | -- | -- | -- | 2/ | -- | -- |
| Hackberry | 3 | -- | -- | -- | 3 | -- | -- |
| Ash | 3 | -- | -- | -- | 3 | -- | -- |
| Black walnut | 4 | -- | -- | -- | 4 | -- | -- |
| Cottonwood | 3,783 | -- | -- | -- | 3,733 | 50 | -- |
| White oak group | 6 | -- | -- | -- | 6 | -- | -- |
| Basswood | 2/ | -- | -- | -- | 2/ | -- | -- |
| Elm | 28 | -- | -- | -- | 28 | -- | -- |
| Total | 3,826 | -- | -- | -- | 3,776 | 50 | -- |
| All species | 25,832 | -- | -- | -- | 8,934 | 10,850 | 6,048 |

1/ International 1/4-inch rule.

2/ Less than 500 board feet.

Rows and columns may not sum due to rounding.

Table 5.—Saw-log production from roundwood by Forest Survey Unit, county, and species group,
Nebraska, 1993

(In thousand board feet) 1/

| Unit and county | Red-cedar | Spruce | Ponde-roza pine | Total soft-woods | Soft maple | Hickory | Hack-berry | Ash | Black walnut | Osage-orange |
|---------------------|-----------|--------|-----------------|------------------|------------|---------|------------|-----|--------------|--------------|
| EASTERN UNIT | | | | | | | | | | |
| Boone | 16 | -- | -- | 16 | 1 | -- | 11 | 2/ | 125 | -- |
| Buffalo | -- | -- | -- | -- | -- | -- | -- | -- | 1 | -- |
| Burt | -- | -- | -- | -- | -- | -- | -- | -- | 2 | -- |
| Butler | 3 | -- | 7 | 10 | 1 | -- | 1 | 3 | 3 | -- |
| Cass | 3 | -- | 2/ | 4 | 4 | -- | 2 | 18 | 10 | 1 |
| Cedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Colfax | 55 | -- | -- | 55 | -- | -- | -- | -- | -- | -- |
| Cuming | 3 | -- | -- | 3 | 28 | -- | 3 | 4 | 16 | -- |
| Dakota | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Dixon | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Dodge | 3 | -- | -- | 3 | -- | -- | 3 | -- | 3 | -- |
| Franklin | 7 | -- | -- | 7 | -- | -- | -- | 7 | 3 | -- |
| Fumas | 7 | -- | -- | 7 | -- | -- | -- | 7 | 3 | -- |
| Gage | 3 | -- | 2/ | 4 | 4 | -- | 2 | 3 | 95 | 1 |
| Hall | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Harlan | 7 | -- | -- | 7 | -- | -- | -- | 7 | 3 | -- |
| Howard | 1 | -- | -- | 1 | -- | -- | 2/ | 2/ | 1 | -- |
| Jefferson | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Johnson | -- | -- | -- | -- | -- | -- | 4 | 7 | 29 | -- |
| Lancaster | 3 | -- | 2/ | 4 | 4 | -- | 2 | 3 | 17 | 1 |
| Madison | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Merrick | 1 | -- | -- | 1 | -- | -- | 2/ | 2/ | 1 | -- |
| Nance | 1 | -- | -- | 1 | -- | -- | 2/ | 43 | 1 | -- |
| Nemaha | -- | -- | -- | -- | -- | -- | 17 | 21 | 20 | -- |
| Nuckolls | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Otoe | 3 | -- | 2/ | 4 | 6 | -- | 16 | 3 | 77 | 1 |
| Pawnee | -- | -- | -- | -- | -- | -- | -- | 14 | 21 | -- |
| Platte | 58 | -- | -- | 58 | 1 | -- | 1 | 1 | 1 | -- |
| Polk | 3 | -- | -- | 3 | 1 | -- | 1 | 1 | 1 | -- |
| Richardson | -- | -- | -- | -- | -- | -- | 14 | 14 | 92 | 1 |
| Saline | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Saunders | 3 | -- | -- | 3 | 1 | -- | 1 | 73 | 3 | -- |
| Thurston | 8 | -- | -- | 8 | 8 | -- | 21 | -- | 32 | -- |
| Webster | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 188 | -- | 8 | 196 | 60 | -- | 97 | 233 | 559 | 4 |

(Table 5 continued on next page)

(Table 5 continued)

| Unit and county | Red-cedar | Spruce | Ponde-rosa pine | Total soft-woods | Soft maple | Hickory | Hack-berry | Ash | Black walnut | Osage-orange |
|---------------------|-----------|--------|-----------------|------------------|------------|---------|------------|-----|--------------|--------------|
| WESTERN UNIT | | | | | | | | | | |
| Antelope | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Boyd | 3 | -- | -- | 3 | -- | -- | -- | 1 | 1 | -- |
| Brown | 14 | -- | 62 | 76 | -- | -- | 1 | -- | 1 | -- |
| Dawes | -- | -- | 5,462 | 5,462 | -- | -- | -- | -- | -- | -- |
| Holt | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Keya Paha | -- | -- | 216 | 216 | -- | -- | -- | -- | -- | -- |
| Knox | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Lincoln | 279 | 1 | 19 | 299 | 2/ | -- | 1 | 1 | 1 | -- |
| Rock | 14 | -- | 93 | 106 | -- | -- | -- | -- | -- | -- |
| Sheridan | -- | -- | 13,843 | 13,843 | -- | -- | -- | -- | -- | -- |
| Sioux | -- | -- | 2,001 | 2,001 | -- | -- | -- | -- | -- | -- |
| Total | 309 | 1 | 21,695 | 22,006 | 2/ | -- | 3 | 3 | 4 | -- |
| State total | 497 | 1 | 21,704 | 22,202 | 60 | -- | 99 | 235 | 563 | 4 |

(Table 5 continued on next page)

(Table 5 continued)

| Unit and county | Cotton-wood | Red oak group | White oak group | Willow | Bass-wood | Elm | Other hard-woods | Total hard-woods | All species |
|---------------------|-------------|---------------|-----------------|--------|-----------|-----|------------------|------------------|-------------|
| EASTERN UNIT | | | | | | | | | |
| Boone | 1,877 | -- | 221 | -- | -- | 1 | -- | 2,236 | 2,252 |
| Buffalo | 11 | -- | 18 | -- | -- | -- | -- | 30 | 30 |
| Burt | 524 | -- | -- | -- | -- | -- | -- | 526 | 526 |
| Butler | 147 | 3 | 3 | -- | 9 | 1 | -- | 171 | 180 |
| Cass | 554 | -- | 31 | -- | -- | 28 | -- | 647 | 651 |
| Cedar | 552 | -- | -- | -- | -- | -- | -- | 552 | 552 |
| Colfax | 1,390 | -- | -- | -- | -- | -- | -- | 1,390 | 1,445 |
| Cuming | 3,191 | -- | 3 | 7 | -- | 17 | -- | 3,268 | 3,271 |
| Dakota | 552 | -- | -- | -- | -- | -- | -- | 552 | 552 |
| Dixon | 552 | -- | -- | -- | -- | -- | -- | 552 | 552 |
| Dodge | 366 | -- | 3 | -- | -- | 3 | -- | 377 | 380 |
| Franklin | 2,836 | -- | -- | -- | -- | -- | -- | 2,846 | 2,853 |
| Fumas | 110 | -- | -- | -- | -- | 3 | -- | 123 | 130 |
| Gage | 176 | -- | 61 | -- | -- | 1 | -- | 342 | 346 |
| Hall | 792 | -- | -- | -- | -- | -- | -- | 792 | 792 |
| Harlan | 110 | -- | -- | -- | -- | 3 | -- | 123 | 130 |
| Howard | -- | -- | 1 | -- | -- | 1 | -- | 3 | 3 |
| Jefferson | 166 | -- | 21 | -- | -- | -- | -- | 186 | 186 |
| Johnson | 138 | 5 | 41 | -- | 35 | 3 | -- | 262 | 262 |
| Lancaster | 9 | -- | 3 | -- | -- | 1 | -- | 39 | 43 |
| Madison | 820 | -- | -- | -- | -- | -- | -- | 820 | 820 |
| Merrick | 345 | -- | 1 | -- | -- | 1 | -- | 348 | 348 |
| Nance | 1,390 | -- | 42 | -- | -- | 56 | -- | 1,532 | 1,533 |
| Nemaha | 193 | 50 | 61 | -- | 53 | 4 | -- | 419 | 419 |
| Nuckolls | 80 | -- | -- | -- | -- | -- | -- | 80 | 80 |
| Otoe | 102 | 43 | 60 | -- | -- | 1 | -- | 309 | 313 |
| Pawnee | 380 | 31 | 97 | -- | -- | -- | -- | 543 | 543 |
| Platte | 1,391 | 3 | 3 | -- | 9 | 1 | -- | 1,412 | 1,470 |
| Polk | 277 | 2 | 3 | -- | 9 | 1 | -- | 296 | 299 |
| Richardson | 248 | 46 | 229 | -- | -- | -- | -- | 645 | 645 |
| Saline | 166 | -- | 21 | -- | -- | -- | -- | 186 | 186 |
| Saunders | 3,754 | 2 | 141 | -- | 9 | 139 | -- | 4,124 | 4,126 |
| Thurston | 584 | -- | 194 | -- | -- | -- | -- | 839 | 847 |
| Webster | 120 | -- | -- | -- | -- | -- | -- | 120 | 120 |
| Total | 23,904 | 184 | 1,255 | 7 | 124 | 264 | -- | 26,689 | 26,885 |

(Table 5 continued on next page)

(Table 5 continued)

| Unit and county | Cotton-wood | Red oak group | White oak group | Willow | Bass-wood | Elm | Other hard-woods | Total hard-woods | All species |
|---------------------|---------------|---------------|-----------------|----------|------------|------------|------------------|------------------|---------------|
| WESTERN UNIT | | | | | | | | | |
| Antelope | 370 | -- | -- | -- | -- | -- | -- | 370 | 370 |
| Boyd | -- | -- | -- | -- | -- | -- | -- | 3 | 6 |
| Brown | 7 | -- | 6 | -- | -- | -- | -- | 15 | 91 |
| Dawes | -- | -- | -- | -- | -- | -- | -- | -- | 5,462 |
| Holt | 2,070 | -- | -- | -- | -- | -- | -- | 2,070 | 2,070 |
| Keya Paha | 28 | -- | -- | -- | -- | -- | -- | 28 | 244 |
| Knox | 25 | -- | -- | -- | -- | -- | -- | 25 | 25 |
| Lincoln | 787 | -- | -- | -- | 2/ | 28 | -- | 818 | 1,117 |
| Rock | 497 | -- | -- | -- | -- | -- | -- | 497 | 603 |
| Sheridan | -- | -- | -- | -- | -- | -- | -- | -- | 13,843 |
| Sioux | -- | -- | -- | -- | -- | -- | -- | -- | 2,001 |
| Total | 3,783 | -- | 6 | -- | 2/ | 28 | -- | 3,826 | 25,832 |
| State total | 27,686 | 184 | 1,260 | 7 | 124 | 291 | -- | 30,515 | 52,717 |

1/ International 1/4-inch rule.

2/ Less than 500 board feet.

Rows and columns may not sum due to rounding.

Table 6.—Saw-log receipts by Forest Survey Unit, species group, and State of origin,
Nebraska, 1993

(In thousand board feet) 1/

| Species | Total | Iowa | Kansas | Missouri | Nebraska | South Dakota |
|------------------|--------|-------|--------|----------|----------|--------------|
| SOFTWOODS | | | | | | |
| Redcedar | 497 | -- | -- | -- | 497 | -- |
| Spruce | 1 | -- | -- | -- | 1 | -- |
| Ponderosa pine | 4,856 | -- | -- | -- | 4,856 | -- |
| Total | 5,354 | -- | -- | -- | 5,354 | -- |
| HARDWOODS | | | | | | |
| Soft maple | 63 | 17 | -- | 17 | 30 | -- |
| Hackberry | 127 | 14 | -- | 14 | 99 | -- |
| Ash | 299 | 41 | -- | 28 | 230 | -- |
| Black walnut | 243 | 19 | -- | 50 | 174 | -- |
| Osage-orange | 4 | -- | -- | -- | 4 | -- |
| Cottonwood | 33,746 | 5,208 | 69 | 207 | 27,503 | 759 |
| Red oak group | 313 | 30 | 28 | 91 | 164 | -- |
| White oak group | 901 | 79 | 28 | 99 | 696 | -- |
| Willow | 7 | -- | -- | -- | 7 | -- |
| Basswood | 21 | 11 | -- | -- | 10 | -- |
| Elm | 346 | 55 | -- | -- | 291 | -- |
| Total | 36,071 | 5,474 | 124 | 505 | 29,208 | 759 |
| All species | 41,425 | 5,474 | 124 | 505 | 34,562 | 759 |

(Table 6 continued on next page)

(Table 6 continued)

| EASTERN UNIT | | | | | | |
|------------------|--------|-------|--------|----------|----------|--------------|
| Species | Total | Iowa | Kansas | Missouri | Nebraska | South Dakota |
| SOFTWOODS | | | | | | |
| Redcedar | 188 | -- | -- | -- | 188 | -- |
| Ponderosa pine | 8 | -- | -- | -- | 8 | -- |
| Total | 196 | -- | -- | -- | 196 | -- |
| HARDWOODS | | | | | | |
| Soft Maple | 63 | 17 | -- | 17 | 30 | -- |
| Hackberry | 124 | 14 | -- | 14 | 97 | -- |
| Ash | 297 | 41 | -- | 28 | 228 | -- |
| Black Walnut | 239 | 19 | -- | 50 | 170 | -- |
| Osage-Orange | 4 | -- | -- | -- | 4 | -- |
| Cottonwood | 32,429 | 5,208 | 69 | 207 | 26,185 | 759 |
| Red Oak Group | 313 | 30 | 28 | 91 | 164 | -- |
| White Oak Group | 896 | 79 | 28 | 99 | 690 | -- |
| Willow | 7 | -- | -- | -- | 7 | -- |
| Basswood | 21 | 11 | -- | -- | 10 | -- |
| Elm | 319 | 55 | -- | -- | 264 | -- |
| Total | 34,710 | 5,474 | 124 | 505 | 27,848 | 759 |
| All species | 34,906 | 5,474 | 124 | 505 | 28,044 | 759 |

| WESTERN UNIT | | | | | | |
|------------------|-------|------|--------|----------|----------|--------------|
| Species | Total | Iowa | Kansas | Missouri | Nebraska | South Dakota |
| SOFTWOODS | | | | | | |
| Redcedar | 309 | -- | -- | -- | 309 | -- |
| Spruce | 1 | -- | -- | -- | 1 | -- |
| Ponderosa pine | 4,847 | -- | -- | -- | 4,847 | -- |
| Total | 5,158 | -- | -- | -- | 5,158 | -- |
| HARDWOODS | | | | | | |
| Soft maple | 2/ | -- | -- | -- | 2/ | -- |
| Hackberry | 3 | -- | -- | -- | 3 | -- |
| Ash | 3 | -- | -- | -- | 3 | -- |
| Black walnut | 4 | -- | -- | -- | 4 | -- |
| Cottonwood | 1,318 | -- | -- | -- | 1,318 | -- |
| White oak group | 6 | -- | -- | -- | 6 | -- |
| Basswood | 2/ | -- | -- | -- | 2/ | -- |
| Elm | 28 | -- | -- | -- | 28 | -- |
| Total | 1,361 | -- | -- | -- | 1,361 | -- |
| All species | 6,519 | -- | -- | -- | 6,519 | -- |

1/ International 1/4-inch rule.

2/ Less than 500 board feet.

Rows and columns may not sum due to rounding.

Table 7.—Veneer log production by Forest Survey Unit, county, and species group,
Nebraska, 1993

(In thousand board feet) 1/

| Unit and county | Hickory | Black walnut | Cotton-wood | Red oak group | White oak group | Bass-wood | Other hard-woods | All species |
|---------------------|---------|--------------|-------------|---------------|-----------------|-----------|------------------|-------------|
| EASTERN UNIT | | | | | | | | |
| Boone | -- | 21 | -- | -- | 35 | -- | -- | 55 |
| Buffalo | -- | -- | -- | -- | 3 | -- | -- | 3 |
| Butler | 2/ | -- | -- | 1 | -- | 2/ | 2/ | 1 |
| Cass | -- | 2 | 150 | -- | -- | -- | -- | 151 |
| Cuming | -- | 3 | -- | -- | -- | -- | -- | 3 |
| Douglas | -- | -- | 36 | -- | -- | -- | -- | 36 |
| Gage | -- | 15 | -- | -- | 7 | -- | -- | 22 |
| Johnson | 2/ | 3 | -- | 1 | -- | 2/ | 2/ | 5 |
| Lancaster | -- | 2 | -- | -- | -- | -- | -- | 2 |
| Nemaha | 2/ | 3 | -- | 12 | -- | 2/ | 2/ | 16 |
| Otoe | 2/ | 12 | 28 | 10 | 3 | -- | 2/ | 53 |
| Pawnee | 2/ | -- | -- | 7 | -- | -- | 2/ | 8 |
| Platte | 2/ | -- | -- | 1 | -- | 2/ | 2/ | 1 |
| Polk | 2/ | -- | -- | 2/ | -- | 2/ | 2/ | 2/ |
| Richardson | 2/ | 7 | -- | 11 | 28 | -- | 2/ | 46 |
| Sarpy | -- | -- | 150 | -- | -- | -- | -- | 150 |
| Saunders | 2/ | -- | -- | 2/ | -- | 2/ | 2/ | 2/ |
| Thurston | -- | 5 | -- | -- | 30 | -- | -- | 36 |
| Washington | -- | -- | 36 | -- | -- | -- | -- | 36 |
| Total | 1 | 73 | 398 | 43 | 105 | 1 | 1 | 623 |
| WESTERN UNIT | | | | | | | | |
| Lincoln | -- | -- | -- | -- | -- | 2/ | -- | 2/ |
| Total | -- | -- | -- | -- | -- | 2/ | -- | 2/ |
| State total | 1 | 73 | 398 | 43 | 105 | 1 | 1 | 623 |

1/ International 1/4-inch rule.

2/ Less than 500 board feet.

Rows and columns may not sum due to rounding.

Table 8.—Timber removals for industrial roundwood by source of material and species group, Nebraska, 1993 1/
(In thousand cubic feet)

| Species group | Growing stock | | | Non-growing stock | | | Total material used for products | | | Total material not used | | | Total material harvested | | |
|------------------|-------------------|-------------|----------------------------|-------------------|-----------|----------|----------------------------------|------------|-----------------|--------------------------|---------|---------------|--------------------------|--------------------------|--|
| | Used for products | | Logging residue (not used) | Total | Limb-wood | Saplings | Cull trees | Dead trees | Nonforest trees | Logging slash (not used) | Total | material used | not used | Total material harvested | |
| | Saw-timber | Pole-timber | | | | | | | | | | | | | |
| SOFTWOODS | | | | | | | | | | | | | | | |
| Redcedar | 213.0 | 10.8 | 11.4 | 235.2 | -- | -- | 0.7 | -- | -- | 41.3 | 42.0 | 224.6 | 52.7 | 277.2 | |
| Spruce | 0.2 | -- | 2/ | 0.3 | -- | -- | 2/ | -- | -- | 0.1 | 0.1 | 0.2 | 0.1 | 0.4 | |
| Ponderosa pine | 3,765.6 | -- | 403.7 | 4,169.3 | -- | -- | 4.3 | -- | -- | 1,625.6 | 1,630.0 | 3,769.9 | 2,029.3 | 5,799.2 | |
| Total | 3,978.9 | 10.8 | 415.1 | 4,404.7 | -- | -- | 5.1 | -- | -- | 1,667.0 | 1,672.1 | 3,994.7 | 2,082.1 | 6,076.8 | |
| HARDWOODS | | | | | | | | | | | | | | | |
| Soft maple | 8.2 | -- | 0.9 | 9.1 | -- | -- | 1.0 | 0.3 | -- | 3.5 | 4.8 | 9.5 | 4.5 | 13.9 | |
| Hickory | 0.2 | -- | 2/ | 0.2 | -- | -- | -- | -- | -- | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | |
| Hackberry | 13.6 | -- | 1.5 | 15.1 | -- | -- | 1.7 | 0.4 | -- | 5.9 | 8.0 | 15.8 | 7.4 | 23.2 | |
| Ash | 36.4 | -- | 15.0 | 51.4 | 1.0 | -- | 2.8 | -- | -- | 19.0 | 22.9 | 40.2 | 34.0 | 74.3 | |
| Black walnut | 80.9 | -- | 7.6 | 88.5 | 1.6 | -- | 2.3 | -- | -- | 11.7 | 32.9 | 48.5 | 96.5 | 40.5 | |
| Osage-orange | -- | -- | -- | 2/ | -- | -- | 0.7 | -- | -- | 0.6 | 1.3 | 0.7 | 0.6 | 1.3 | |
| Cottonwood | 4,431.3 | 6.8 | 659.1 | 5,097.3 | -- | -- | -- | -- | -- | 1,954.2 | 1,954.2 | 4,438.2 | 2,613.3 | 7,051.5 | |
| Red oak group | 30.8 | 1.1 | 7.5 | 39.4 | 2/ | -- | 10.9 | -- | -- | 15.4 | 26.2 | 42.8 | 22.9 | 65.7 | |
| White oak group | 166.9 | 7.8 | 48.2 | 222.8 | 0.1 | -- | 74.2 | -- | -- | 86.8 | 161.1 | 249.0 | 134.9 | 384.0 | |
| Willow | 0.9 | -- | 0.1 | 1.1 | -- | -- | 0.1 | 2/ | -- | 0.4 | 0.6 | 1.1 | 0.5 | 1.6 | |
| Basswood | 17.2 | -- | 1.9 | 19.1 | -- | -- | 2.1 | 0.6 | -- | 7.4 | 10.1 | 19.9 | 9.3 | 29.2 | |
| Elm | 39.9 | -- | 4.4 | 44.3 | -- | -- | 5.0 | 1.3 | -- | 17.3 | 23.6 | 46.2 | 21.7 | 67.9 | |
| Other hardwoods | 0.3 | -- | 0.0 | 0.3 | -- | -- | -- | -- | -- | 0.1 | 0.1 | 0.3 | 0.2 | 0.5 | |
| Total | 4,826.6 | 15.8 | 746.3 | 5,588.7 | 2.8 | -- | 100.9 | 2.6 | 11.7 | 2,143.6 | 2,261.6 | 4,960.4 | 2,889.9 | 7,850.3 | |
| All species | 8,805.5 | 26.5 | 1,161.4 | 9,993.5 | 2.8 | -- | 106.0 | 2.6 | 11.7 | 3,810.6 | 3,933.7 | 8,955.1 | 4,972.0 | 13,927.1 | |

(Table 8 continued on next page)

(Table 8 continued)

| Species group | Growing stock | | | Non-growing stock | | | | | | Total material used for products | | |
|---------------------|-------------------|-------------|-----------------|-------------------|-------------------|------|------------|-----------------|-----------------|----------------------------------|---------|--------------------------|
| | Used for products | | Logging residue | Limb wood | Used for products | | Cull | Dead trees | Nonforest trees | Logging slash (not used) | Total | Total material not used |
| | Saw-timber | Pole-timber | (not used) | Total | Saplings | Cull | Dead trees | Nonforest trees | | | | Total material harvested |
| SOFTWOODS | | | | | | | | | | | | |
| Redcedar | 140.3 | 10.1 | 10.3 | 160.7 | -- | -- | 0.3 | -- | -- | 15.6 | 15.9 | 150.7 |
| Ponderosa pine | 1.4 | -- | 0.2 | 1.6 | -- | -- | 2/ | -- | -- | 0.6 | 0.6 | 1.4 |
| Total | 141.8 | 10.1 | 10.4 | 162.3 | -- | -- | 0.3 | -- | -- | 16.2 | 16.5 | 152.1 |
| HARDWOODS | | | | | | | | | | | | |
| Soft maple | 8.2 | -- | 0.9 | 9.1 | -- | -- | 1.0 | 0.3 | -- | 3.5 | 4.8 | 9.5 |
| Hickory | 0.2 | -- | 2/ | 0.2 | -- | -- | 0.1 | -- | -- | 0.1 | 0.1 | 0.2 |
| Hackberry | 13.2 | -- | 1.5 | 14.7 | -- | -- | 1.7 | 0.4 | -- | 5.7 | 7.8 | 15.3 |
| Ash | 36.0 | -- | 14.9 | 50.8 | 1.0 | -- | 2.8 | -- | -- | 18.8 | 22.6 | 39.8 |
| Black walnut | 80.4 | -- | 7.5 | 87.9 | 1.6 | -- | 2.3 | -- | -- | 11.6 | 32.7 | 48.2 |
| Osage-orange | -- | -- | -- | 2/ | -- | 0.7 | -- | -- | -- | 0.6 | 1.3 | 0.7 |
| Cottonwood | 3,836.9 | 5.7 | 569.9 | 4,412.5 | -- | -- | -- | -- | -- | 1,692.4 | 1,692.4 | 3,842.6 |
| Red oak group | 30.8 | 1.1 | 7.5 | 39.4 | 2/ | -- | 10.9 | -- | -- | 15.4 | 26.2 | 42.8 |
| White oak group | 166.2 | 7.8 | 48.0 | 222.0 | 0.1 | -- | 73.9 | -- | -- | 86.4 | 160.5 | 248.1 |
| Willow | 0.9 | -- | 0.1 | 1.1 | -- | -- | 0.1 | 2/ | -- | 0.4 | 0.6 | 1.1 |
| Basswood | 17.2 | -- | 1.9 | 19.1 | -- | -- | 2.1 | 0.6 | -- | 7.4 | 10.1 | 19.9 |
| Elm | 36.1 | -- | 4.0 | 40.1 | -- | -- | 4.5 | 1.2 | -- | 15.6 | 21.3 | 41.9 |
| Other hardwoods | 0.3 | -- | 2/ | 0.3 | -- | -- | -- | -- | -- | 0.1 | 0.1 | 0.2 |
| Total | 4,226.4 | 14.7 | 656.2 | 4,897.3 | 2.8 | -- | 100.0 | 2.5 | 11.6 | 1,879.2 | 1,996.1 | 4,357.9 |
| All species | 4,368.1 | 24.7 | 666.7 | 5,059.5 | 2.8 | -- | 100.3 | 2.5 | 11.6 | 1,895.5 | 2,012.6 | 4,510.0 |
| WESTERN UNIT | | | | | | | | | | | | |
| SOFTWOODS | | | | | | | | | | | | |
| Redcedar | 72.7 | 0.7 | 1.1 | 74.5 | -- | -- | 0.5 | -- | -- | 25.7 | 26.2 | 73.9 |
| Spruce | 0.2 | -- | 2/ | 0.3 | -- | -- | 2/ | -- | -- | 0.1 | 0.1 | 0.1 |
| Ponderosa pine | 3,764.2 | -- | 403.5 | 4,167.7 | -- | -- | 4.3 | -- | -- | 1,625.0 | 1,629.3 | 3,768.5 |
| Total | 3,837.1 | 0.7 | 404.7 | 4,242.5 | -- | -- | 4.8 | -- | -- | 1,650.8 | 1,655.6 | 3,842.6 |
| HARDWOODS | | | | | | | | | | | | |
| Soft maple | 2/ | -- | 2/ | 2/ | -- | -- | 2/ | -- | -- | 2/ | 2/ | 2/ |
| Hackberry | 0.4 | -- | 2/ | 0.4 | -- | -- | 2/ | -- | -- | 0.2 | 0.2 | 0.4 |
| Ash | 0.4 | -- | 0.2 | 0.6 | 2/ | -- | 2/ | -- | -- | 0.2 | 0.3 | 0.4 |
| Black walnut | 0.5 | -- | 0.1 | 0.6 | 2/ | -- | 2/ | -- | -- | 0.1 | 0.2 | 0.3 |
| Cottonwood | 594.5 | 1.1 | 89.2 | 684.8 | -- | -- | -- | -- | -- | 261.8 | 261.8 | 595.6 |
| White oak group | 0.6 | 2/ | 0.2 | 0.9 | 2/ | -- | 0.3 | -- | -- | 0.3 | 0.7 | 1.0 |
| Basswood | 2/ | -- | 2/ | 2/ | -- | -- | 2/ | -- | -- | 2/ | 2/ | 2/ |
| Elm | 3.8 | -- | 0.4 | 4.2 | -- | -- | 0.5 | 0.1 | -- | 1.6 | 2.2 | 4.4 |
| Total | 600.2 | 1.1 | 90.1 | 691.5 | 2/ | -- | 0.9 | 0.1 | 0.1 | 264.4 | 265.5 | 602.5 |
| All species | 4,437.4 | 1.8 | 494.8 | 4,933.9 | 2/ | -- | 5.7 | 0.1 | 0.1 | 1,915.1 | 1,921.1 | 4,445.1 |

1/ Based on utilization studies in the region.

2/ Less than 100 cubic feet.

Rows and columns may not sum due to rounding.

Table 9.—Harvest residues generated by industrial roundwood harvesting from timberland, by Forest Survey Unit, county, and species group, Nebraska, 1993

(In thousand cubic feet)

| Unit and county | Red-cedar | Spruce | Ponde-rosa pine | Total soft-woods | Soft maple | Hickory | Hack-berry | Ash | Black walnut | Osage-orange |
|---------------------|-----------|--------|-----------------|------------------|------------|---------|------------|-----|--------------|--------------|
| EASTERN UNIT | | | | | | | | | | |
| Boone | 1 | -- | -- | 1 | 1/ | -- | 1 | 1/ | 9 | -- |
| Buffalo | -- | -- | -- | -- | -- | -- | -- | -- | 1/ | -- |
| Burt | -- | -- | -- | -- | -- | -- | -- | -- | 1/ | -- |
| Butler | 1/ | -- | 1 | 1 | 1/ | 1/ | 1/ | 1/ | 1/ | -- |
| Cass | 1/ | -- | 1/ | 1/ | 1/ | -- | 1/ | 3 | 1 | 1/ |
| Cedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Colfax | 5 | -- | -- | 5 | -- | -- | -- | -- | -- | -- |
| Cuming | 1/ | -- | -- | 1/ | 2 | -- | 1/ | 1 | 1 | -- |
| Dakota | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Dixon | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Dodge | 1/ | -- | -- | 1/ | -- | -- | 1/ | -- | 1/ | -- |
| Douglas | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Franklin | 1 | -- | -- | 1 | -- | -- | -- | 1 | 1/ | -- |
| Furnas | 1 | -- | -- | 1 | -- | -- | -- | 1 | 1/ | -- |
| Gage | 1/ | -- | 1/ | 1/ | 1/ | -- | 1/ | 1/ | 7 | 1/ |
| Hall | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Harlan | 1 | -- | -- | 1 | -- | -- | -- | 1 | 1/ | -- |
| Howard | 1/ | -- | -- | 1/ | -- | -- | 1/ | 1/ | 1/ | -- |
| Jefferson | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Johnson | -- | -- | -- | -- | -- | 1/ | 1/ | 1 | 2 | -- |
| Lancaster | 1/ | -- | 1/ | 1/ | 1/ | -- | 1/ | 1/ | 1 | 1/ |
| Madison | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Merrick | 5 | -- | -- | 5 | -- | -- | 1/ | 1/ | 1/ | -- |
| Nance | 1/ | -- | -- | 1/ | -- | -- | 1/ | 6 | 1/ | -- |
| Nemaha | -- | -- | -- | -- | -- | 1/ | 1 | 3 | 1 | -- |
| Nuckolls | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Otoe | 1/ | -- | 1/ | 1/ | 1/ | 1/ | 1 | 1/ | 6 | 1/ |
| Pawnee | -- | -- | -- | -- | -- | 1/ | -- | 2 | 1 | -- |
| Platte | 5 | -- | -- | 5 | 1/ | 1/ | 1/ | 1/ | 1/ | -- |
| Polk | 5 | -- | -- | 5 | 1/ | 1/ | 1/ | 1/ | 1/ | -- |
| Richardson | -- | -- | -- | -- | -- | 1/ | 1 | 2 | 6 | 1/ |
| Saline | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Sarpy | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Saunders | 1/ | -- | -- | 1/ | 1/ | 1/ | 1/ | 11 | 1/ | -- |
| Thurston | 1 | -- | -- | 1 | 1 | -- | 2 | -- | 2 | -- |
| Valley | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Washington | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Webster | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 26 | -- | 1 | 27 | 4 | 1/ | 7 | 34 | 40 | 1 |

(Table 9 continued on next page)

(Table 9 continued)

| Unit and county | Red-cedar | Spruce | Ponde-rosa pine | Total soft-woods | Soft maple | Hickory | Hack-berry | Ash | Black walnut | Osage-orange |
|---------------------|-----------|--------|-----------------|------------------|------------|---------|------------|-----|--------------|--------------|
| WESTERN UNIT | | | | | | | | | | |
| Boyd | 1/ | -- | -- | 1/ | -- | -- | -- | 1/ | 1/ | -- |
| Brown | 1 | -- | 6 | 7 | -- | -- | 1/ | -- | 1/ | -- |
| Dawes | -- | -- | 511 | 511 | -- | -- | -- | -- | -- | -- |
| Garfield | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Holt | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Keya Paha | -- | -- | 20 | 20 | -- | -- | -- | -- | -- | -- |
| Knox | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Lincoln | 23 | 1/ | 2 | 25 | 1/ | -- | 1/ | 1/ | 1/ | -- |
| Loup | 1/ | -- | -- | 1/ | -- | -- | -- | -- | -- | -- |
| Rock | 1 | -- | 9 | 10 | -- | -- | -- | -- | -- | -- |
| Sheridan | -- | -- | 1,294 | 1,294 | -- | -- | -- | -- | -- | -- |
| Sioux | -- | -- | 187 | 187 | -- | -- | -- | -- | -- | -- |
| Wheeler | 1/ | -- | -- | 1/ | -- | -- | -- | -- | -- | -- |
| Total | 27 | 1/ | 2,029 | 2,055 | 1/ | 1/ | 1/ | 1/ | 1/ | 1/ |
| State total | 53 | 1/ | 2,029 | 2,082 | 4 | 1/ | 7 | 34 | 40 | 1 |

(Table 9 continued on next page)

(Table 9 continued)

| Unit and county | Cotton-wood | Red oak group | White oak group | Willow | Bass-wood | Elm | Other hard-woods | Total hard-woods | All species |
|---------------------|-------------|---------------|-----------------|--------|-----------|-----|------------------|------------------|-------------|
| EASTERN UNIT | | | | | | | | | |
| Boone | 174 | -- | 26 | -- | -- | 1/ | -- | 209 | 211 |
| Buffalo | 1 | -- | 2 | -- | -- | -- | -- | 3 | 3 |
| Burt | 49 | -- | -- | -- | -- | -- | -- | 49 | 49 |
| Butler | 14 | 1/ | 1/ | -- | 1 | 1/ | 1/ | 16 | 17 |
| Cass | 68 | -- | 3 | -- | -- | 2 | -- | 77 | 78 |
| Cedar | 51 | -- | -- | -- | -- | -- | -- | 51 | 51 |
| Colfax | 129 | -- | -- | -- | -- | -- | -- | 129 | 133 |
| Cuming | 295 | -- | 1/ | 1 | -- | 1 | -- | 301 | 301 |
| Dakota | 51 | -- | -- | -- | -- | -- | -- | 51 | 51 |
| Dixon | 51 | -- | -- | -- | -- | -- | -- | 51 | 51 |
| Dodge | 34 | -- | 1/ | -- | -- | 1/ | -- | 35 | 35 |
| Douglas | 4 | -- | -- | -- | -- | -- | -- | 4 | 4 |
| Franklin | 262 | -- | -- | -- | -- | -- | -- | 264 | 264 |
| Fumas | 10 | -- | -- | -- | -- | 1/ | -- | 12 | 12 |
| Gage | 16 | -- | 7 | -- | -- | 1/ | -- | 31 | 31 |
| Hall | 73 | -- | -- | -- | -- | -- | -- | 73 | 73 |
| Harlan | 10 | -- | -- | -- | -- | 1/ | -- | 12 | 12 |
| Howard | -- | -- | 1/ | -- | -- | 1/ | -- | 1/ | 1/ |
| Jefferson | 15 | -- | 2 | -- | -- | -- | -- | 17 | 17 |
| Johnson | 13 | 1 | 4 | -- | 3 | 1/ | 1/ | 24 | 24 |
| Lancaster | 1 | -- | 1/ | -- | -- | 1/ | -- | 3 | 4 |
| Madison | 76 | -- | -- | -- | -- | -- | -- | 76 | 76 |
| Merrick | 34 | -- | 1/ | -- | -- | 1/ | -- | 34 | 39 |
| Nance | 129 | -- | 4 | -- | -- | 4 | -- | 143 | 143 |
| Nemaha | 18 | 6 | 6 | -- | 4 | 1/ | 1/ | 40 | 40 |
| Nuckolls | 7 | -- | -- | -- | -- | -- | -- | 7 | 7 |
| Otoe | 13 | 5 | 6 | -- | -- | 1/ | 1/ | 32 | 32 |
| Pawnee | 35 | 4 | 9 | -- | -- | -- | 1/ | 52 | 52 |
| Platte | 129 | 1/ | 1/ | -- | 1 | 1/ | 1/ | 131 | 135 |
| Polk | 28 | 1/ | 1/ | -- | 1 | 1/ | 1/ | 29 | 35 |
| Richardson | 23 | 6 | 25 | -- | -- | -- | 1/ | 64 | 64 |
| Saline | 15 | -- | 2 | -- | -- | -- | -- | 17 | 17 |
| Sarpy | 17 | -- | -- | -- | -- | -- | -- | 17 | 17 |
| Saunders | 347 | 1/ | 14 | -- | 1 | 10 | 1/ | 383 | 383 |
| Thurston | 54 | -- | 22 | -- | -- | -- | -- | 81 | 82 |
| Valley | 1 | -- | -- | -- | -- | -- | -- | 1 | 1 |
| Washington | 4 | -- | -- | -- | -- | -- | -- | 4 | 4 |
| Webster | 11 | -- | -- | -- | -- | -- | -- | 11 | 11 |
| Total | 2,262 | 23 | 134 | 1 | 9 | 20 | 1/ | 2,535 | 2,562 |

(Table 9 continued on next page)

(Table 9 continued)

| Unit and county | Cotton-wood | Red oak group | White oak group | Willow | Bass-wood | Elm | Other hard-woods | Total hard-woods | All species |
|---------------------|--------------|---------------|-----------------|----------|-----------|-----------|------------------|------------------|--------------|
| WESTERN UNIT | | | | | | | | | |
| Boyd | -- | -- | -- | -- | -- | -- | -- | 1/ | 1 |
| Brown | 1 | -- | 1 | -- | -- | -- | -- | 1 | 8 |
| Dawes | -- | -- | -- | -- | -- | -- | -- | -- | 511 |
| Garfield | 1/ | -- | -- | -- | -- | -- | -- | 1/ | 1/ |
| Holt | 191 | -- | -- | -- | -- | -- | -- | 191 | 191 |
| Keya Paha | 3 | -- | -- | -- | -- | -- | -- | 3 | 23 |
| Knox | 2 | -- | -- | -- | -- | -- | -- | 2 | 2 |
| Lincoln | 73 | -- | -- | -- | 1/ | 2 | -- | 75 | 101 |
| Loup | 1 | -- | -- | -- | -- | -- | -- | 1 | 1 |
| Rock | 46 | -- | -- | -- | -- | -- | -- | 46 | 56 |
| Sheridan | -- | -- | -- | -- | -- | -- | -- | -- | 1,294 |
| Sioux | -- | -- | -- | -- | -- | -- | -- | -- | 187 |
| Wheeler | -- | -- | -- | -- | -- | -- | -- | -- | 1/ |
| Total | 351 | -- | 1 | -- | 1/ | 2 | -- | 354 | 2,410 |
| State total | 2,613 | 23 | 135 | 1 | 9 | 22 | 1/ | 2,890 | 4,972 |

1/ Less than 500 cubic feet.

Rows and columns may not sum due to rounding.

Table 10.—Growing-stock removals from timberland for industrial roundwood by Forest Survey Unit, county, and species group, Nebraska, 1993

(In thousand cubic feet)

| Unit and county | Red-cedar | Spruce | Ponde-rosa pine | Total soft-woods | Soft maple | Hickory | Hack-berry | Ash | Black walnut | Osage-orange |
|---------------------|-----------|--------|-----------------|------------------|------------|---------|------------|-----|--------------|--------------|
| EASTERN UNIT | | | | | | | | | | |
| Boone | 3 | -- | -- | 3 | 1/ | -- | 2 | 1/ | 20 | -- |
| Buffalo | -- | -- | -- | -- | -- | -- | -- | -- | 1/ | -- |
| Burt | -- | -- | -- | -- | -- | -- | -- | -- | 1/ | -- |
| Butler | 1 | -- | 1 | 2 | 1/ | 1/ | 1/ | 1 | 1/ | -- |
| Cass | 1 | -- | 1/ | 1 | 1 | -- | 1/ | 4 | 2 | 1/ |
| Cedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Colfax | 12 | -- | -- | 12 | -- | -- | -- | -- | -- | -- |
| Cuming | 1 | -- | -- | 1 | 4 | -- | 1/ | 1 | 3 | -- |
| Dakota | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Dixon | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Dodge | 1 | -- | -- | 1 | -- | -- | 1/ | -- | 1/ | -- |
| Douglas | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Franklin | 1 | -- | -- | 1 | -- | -- | -- | 2 | 1/ | -- |
| Furnas | 1 | -- | -- | 1 | -- | -- | -- | 2 | 1/ | -- |
| Gage | 1 | -- | 1/ | 1 | 1 | -- | 1/ | 1 | 15 | 1/ |
| Hall | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Harlan | 1 | -- | -- | 1 | -- | -- | -- | 2 | 1/ | -- |
| Howard | 1/ | -- | -- | 1/ | -- | -- | 1/ | 1/ | 1/ | -- |
| Jefferson | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Johnson | -- | -- | -- | -- | -- | 1/ | 1 | 2 | 4 | -- |
| Lancaster | 1 | -- | 1/ | 1 | 1 | -- | 1/ | 1 | 3 | 1/ |
| Madison | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Merrick | 60 | -- | -- | 60 | -- | -- | 1/ | 1/ | 1/ | -- |
| Nance | 1/ | -- | -- | 1/ | -- | -- | 1/ | 9 | 1/ | -- |
| Nemaha | -- | -- | -- | -- | -- | 1/ | 3 | 5 | 3 | -- |
| Nuckolls | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Otoe | 1 | -- | 1/ | 1 | 1 | 1/ | 2 | 1 | 12 | 1/ |
| Pawnee | -- | -- | -- | -- | -- | 1/ | -- | 3 | 3 | -- |
| Platte | 12 | -- | -- | 12 | 1/ | 1/ | 1/ | 1/ | 1/ | -- |
| Polk | 61 | -- | -- | 61 | 1/ | 1/ | 1/ | 1/ | 1/ | -- |
| Richardson | -- | -- | -- | -- | -- | 1/ | 2 | 3 | 14 | 1/ |
| Saline | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Sarpy | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Saunders | 1 | -- | -- | 1 | 1/ | 1/ | 1/ | 16 | 1/ | -- |
| Thurston | 2 | -- | -- | 2 | 1 | -- | 3 | -- | 5 | -- |
| Valley | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Washington | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Webster | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 161 | -- | 2 | 162 | 9 | 1/ | 15 | 51 | 88 | 1/ |

(Table 10 continued on next page)

(Table 10 continued)

| Unit and county | Red-cedar | Spruce | Ponde-rosa pine | Total soft-woods | Soft maple | Hickory | Hack-berry | Ash | Black walnut | Osage-orange |
|---------------------|-----------|--------|-----------------|------------------|------------|---------|------------|-----|--------------|--------------|
| WESTERN UNIT | | | | | | | | | | |
| Antelope | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Boyd | 1 | -- | -- | 1 | -- | -- | -- | 1/ | 1/ | -- |
| Brown | 3 | -- | 12 | 15 | -- | -- | 1/ | -- | 1/ | -- |
| Dawes | -- | -- | 1,049 | 1,049 | -- | -- | -- | -- | -- | -- |
| Garfield | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Holt | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Keya Paha | -- | -- | 42 | 42 | -- | -- | -- | -- | -- | -- |
| Knox | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Lincoln | 59 | 1/ | 4 | 63 | 1/ | -- | 1/ | 1/ | 1/ | -- |
| Loup | 4 | -- | -- | 4 | -- | -- | -- | -- | -- | -- |
| Rock | 3 | -- | 18 | 21 | -- | -- | -- | -- | -- | -- |
| Sheridan | -- | -- | 2,659 | 2,659 | -- | -- | -- | -- | -- | -- |
| Sioux | -- | -- | 384 | 384 | -- | -- | -- | -- | -- | -- |
| Wheeler | 4 | -- | -- | 4 | -- | -- | -- | -- | -- | -- |
| Total | 75 | 1/ | 4,168 | 4,242 | 1/ | -- | 1/ | 1 | 1 | -- |
| State total | 235 | 1/ | 4,169 | 4,405 | 9 | -- | 15 | 51 | 88 | 1/ |

(Table 10 continued on next page)

(Table 10 continued)

| Unit and county | Cotton-wood | Red oak group | White oak group | Willow | Bass-wood | Elm | Other hard-woods | Total hard-woods | All species |
|---------------------|-------------|---------------|-----------------|--------|-----------|-----|------------------|------------------|-------------|
| EASTERN UNIT | | | | | | | | | |
| Boone | 333 | -- | 43 | -- | -- | 1/ | -- | 399 | 402 |
| Buffalo | 2 | -- | 3 | -- | -- | -- | -- | 6 | 6 |
| Burt | 93 | -- | -- | -- | -- | -- | -- | 93 | 93 |
| Butler | 26 | 1 | 1/ | -- | 1 | 1/ | 1/ | 30 | 32 |
| Cass | 135 | -- | 5 | -- | -- | 4 | -- | 151 | 151 |
| Cedar | 98 | -- | -- | -- | -- | -- | -- | 98 | 98 |
| Colfax | 247 | -- | -- | -- | -- | -- | -- | 247 | 259 |
| Cuming | 567 | -- | 1/ | 1 | -- | 3 | -- | 579 | 579 |
| Dakota | 98 | -- | -- | -- | -- | -- | -- | 98 | 98 |
| Dixon | 98 | -- | -- | -- | -- | -- | -- | 98 | 98 |
| Dodge | 65 | -- | 1/ | -- | -- | 1/ | -- | 67 | 67 |
| Douglas | 9 | -- | -- | -- | -- | -- | -- | 9 | 9 |
| Franklin | 504 | -- | -- | -- | -- | -- | -- | 506 | 507 |
| Furnas | 20 | -- | -- | -- | -- | 1/ | -- | 22 | 23 |
| Gage | 31 | -- | 11 | -- | -- | 1/ | -- | 59 | 60 |
| Hall | 141 | -- | -- | -- | -- | -- | -- | 141 | 141 |
| Harlan | 20 | -- | -- | -- | -- | 1/ | -- | 22 | 23 |
| Howard | -- | -- | 1/ | -- | -- | 1/ | -- | 1/ | 1 |
| Jefferson | 29 | -- | 3 | -- | -- | -- | -- | 33 | 33 |
| Johnson | 25 | 1 | 6 | -- | 5 | 1/ | 1/ | 45 | 45 |
| Lancaster | 2 | -- | 1 | -- | -- | 1/ | -- | 6 | 7 |
| Madison | 146 | -- | -- | -- | -- | -- | -- | 146 | 146 |
| Merrick | 87 | -- | 1/ | -- | -- | 1/ | -- | 88 | 148 |
| Nance | 247 | -- | 7 | -- | -- | 9 | -- | 271 | 272 |
| Nemaha | 34 | 11 | 9 | -- | 8 | 1 | 1/ | 74 | 74 |
| Nuckolls | 14 | -- | -- | -- | -- | -- | -- | 14 | 14 |
| Otoe | 25 | 9 | 10 | -- | -- | 1/ | 1/ | 61 | 62 |
| Pawnee | 67 | 7 | 15 | -- | -- | -- | 1/ | 95 | 95 |
| Platte | 247 | 1 | 1/ | -- | 1 | 1/ | 1/ | 251 | 263 |
| Polk | 75 | 1/ | 1/ | -- | 1 | 1/ | 1/ | 78 | 139 |
| Richardson | 44 | 10 | 43 | -- | -- | -- | 1/ | 116 | 116 |
| Saline | 29 | -- | 3 | -- | -- | -- | -- | 33 | 33 |
| Sarpy | 37 | -- | -- | -- | -- | -- | -- | 37 | 37 |
| Saunders | 667 | 1/ | 22 | -- | 1 | 21 | 1/ | 729 | 729 |
| Thurston | 104 | -- | 38 | -- | -- | -- | -- | 151 | 153 |
| Valley | 17 | -- | -- | -- | -- | -- | -- | 17 | 17 |
| Washington | 9 | -- | -- | -- | -- | -- | -- | 9 | 9 |
| Webster | 21 | -- | -- | -- | -- | -- | -- | 21 | 21 |
| Total | 4,413 | 39 | 222 | 1 | 19 | 40 | 1/ | 4,897 | 5,060 |

(Table 10 continued on next page)

(Table 10 continued)

| Unit and county | Cotton-wood | Red oak group | White oak group | Willow | Bass-wood | Elm | Other hard-woods | Total hard-woods | All species |
|---------------------|--------------|---------------|-----------------|----------|-----------|-----------|------------------|------------------|--------------|
| WESTERN UNIT | | | | | | | | | |
| Antelope | 66 | -- | -- | -- | -- | -- | -- | 66 | 66 |
| Boyd | -- | -- | -- | -- | -- | -- | -- | 1/ | 1 |
| Brown | 1 | -- | 1 | -- | -- | -- | -- | 2 | 17 |
| Dawes | -- | -- | -- | -- | -- | -- | -- | -- | 1,049 |
| Garfield | 4 | -- | -- | -- | -- | -- | -- | 4 | 4 |
| Holt | 368 | -- | -- | -- | -- | -- | -- | 368 | 368 |
| Keya Paha | 5 | -- | -- | -- | -- | -- | -- | 5 | 46 |
| Knox | 4 | -- | -- | -- | -- | -- | -- | 4 | 4 |
| Lincoln | 140 | -- | -- | -- | 1/ | 4 | -- | 145 | 208 |
| Loup | 9 | -- | -- | -- | -- | -- | -- | 9 | 13 |
| Rock | 88 | -- | -- | -- | -- | -- | -- | 88 | 109 |
| Sheridan | -- | -- | -- | -- | -- | -- | -- | -- | 2,659 |
| Sioux | -- | -- | -- | -- | -- | -- | -- | -- | 384 |
| Wheeler | -- | -- | -- | -- | -- | -- | -- | -- | 4 |
| Total | 685 | -- | 1 | -- | 1/ | 4 | -- | 691 | 4,934 |
| State total | 5,097 | 39 | 223 | 1 | 19 | 44 | 1/ | 5,589 | 9,993 |

1/ Less than 500 cubic feet.

Rows and columns may not sum due to rounding.

Table 11.—Sawtimber removals from timberland for industrial roundwood production by Forest Survey Unit, county, and species group, Nebraska, 1993

(In thousand board feet) 1/

| Unit and county | Red-cedar | Spruce | Ponde-rosa pine | Total soft-woods | Soft maple | Hickory | Hack-berry | Ash | Black walnut | Osage-orange |
|---------------------|-----------|--------|-----------------|------------------|------------|---------|------------|-----|--------------|--------------|
| EASTERN UNIT | | | | | | | | | | |
| Boone | 15 | -- | -- | 15 | 1 | -- | 10 | 2/ | 128 | -- |
| Buffalo | -- | -- | -- | -- | -- | -- | -- | -- | 1 | -- |
| Burt | -- | -- | -- | -- | -- | -- | -- | -- | 2 | -- |
| Butler | 3 | -- | 7 | 10 | 1 | 2/ | 1 | 3 | 2 | -- |
| Cass | 3 | -- | 2/ | 4 | 3 | -- | 2 | 19 | 10 | -- |
| Cedar | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Colfax | 53 | -- | -- | 53 | -- | -- | -- | -- | -- | -- |
| Cuming | 3 | -- | -- | 3 | 25 | -- | 2 | 4 | 17 | -- |
| Dakota | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Dixon | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Dodge | 3 | -- | -- | 3 | -- | -- | 2 | -- | 2 | -- |
| Douglas | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Franklin | 7 | -- | -- | 7 | -- | -- | -- | 7 | 2 | -- |
| Furnas | 7 | -- | -- | 7 | -- | -- | -- | 7 | 2 | -- |
| Gage | 3 | -- | 2/ | 4 | 3 | -- | 2 | 4 | 97 | -- |
| Hall | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Harlan | 7 | -- | -- | 7 | -- | -- | -- | 7 | 2 | -- |
| Howard | 1 | -- | -- | 1 | -- | -- | 2/ | 2/ | 1 | -- |
| Jefferson | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Johnson | -- | -- | -- | -- | -- | 2/ | 4 | 7 | 28 | -- |
| Lancaster | 3 | -- | 2/ | 4 | 3 | -- | 2 | 4 | 16 | -- |
| Madison | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Merrick | 322 | -- | -- | 322 | -- | -- | 2/ | 2/ | 1 | -- |
| Nance | 1 | -- | -- | 1 | -- | -- | 2/ | 45 | 1 | -- |
| Nemaha | -- | -- | -- | -- | -- | 2/ | 15 | 22 | 21 | -- |
| Nuckolls | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Otoe | 3 | -- | 2/ | 4 | 6 | 2/ | 14 | 4 | 79 | -- |
| Pawnee | -- | -- | -- | -- | -- | 2/ | -- | 15 | 19 | -- |
| Platte | 56 | -- | -- | 56 | 1 | 2/ | 1 | 1 | 1 | -- |
| Polk | 324 | -- | -- | 324 | 1 | 2/ | 1 | 1 | 1 | -- |
| Richardson | -- | -- | -- | -- | -- | 2/ | 12 | 15 | 87 | -- |
| Saline | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Sarpy | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Saunders | 3 | -- | -- | 3 | 1 | 2/ | 1 | 78 | 3 | -- |
| Thurston | 8 | -- | -- | 8 | 7 | -- | 18 | -- | 33 | -- |
| Valley | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Washington | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Webster | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total | 824 | -- | 8 | 832 | 53 | 1 | 86 | 246 | 556 | -- |

(Table 11 continued on next page)

(Table 11 continued)

| Unit and county | Red-cedar | Spruce | Ponde-roza pine | Total soft-woods | Soft maple | Hickory | Hack-berry | Ash | Black walnut | Osage-orange |
|---------------------|-----------|--------|-----------------|------------------|------------|---------|------------|-----|--------------|--------------|
| WESTERN UNIT | | | | | | | | | | |
| Antelope | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Boyd | 3 | -- | -- | 3 | -- | -- | -- | 1 | 1 | -- |
| Brown | 13 | -- | 63 | 77 | -- | -- | 1 | -- | 1 | -- |
| Dawes | -- | -- | 5,606 | 5,606 | -- | -- | -- | -- | -- | -- |
| Garfield | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Holt | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Keya Paha | -- | -- | 222 | 222 | -- | -- | -- | -- | -- | -- |
| Knox | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Lincoln | 268 | 1 | 19 | 288 | 2/ | -- | 1 | 1 | 1 | -- |
| Loup | 23 | -- | -- | 23 | -- | -- | -- | -- | -- | -- |
| Rock | 13 | -- | 95 | 108 | -- | -- | -- | -- | -- | -- |
| Sheridan | -- | -- | 14,209 | 14,209 | -- | -- | -- | -- | -- | -- |
| Sioux | -- | -- | 2,054 | 2,054 | -- | -- | -- | -- | -- | -- |
| Wheeler | 23 | -- | -- | 23 | -- | -- | -- | -- | -- | -- |
| Total | 343 | 1 | 22,268 | 22,612 | 2/ | -- | 2 | 3 | 4 | -- |
| State total | 1,166 | 1 | 22,277 | 23,444 | 53 | 1 | 88 | 248 | 560 | -- |

(Table 11 continued on next page)

(Table 11 continued)

| Unit and county | Cotton-wood | Red oak group | White oak group | Willow | Bass-wood | Elm | Other hard-woods | Total hard-woods | All species |
|---------------------|---------------|---------------|-----------------|----------|------------|------------|------------------|------------------|---------------|
| EASTERN UNIT | | | | | | | | | |
| Boone | 1,966 | -- | 166 | -- | -- | 1 | -- | 2,273 | 2,288 |
| Buffalo | 12 | -- | 13 | -- | -- | -- | -- | 26 | 26 |
| Burt | 549 | -- | -- | -- | -- | -- | -- | 551 | 551 |
| Butler | 154 | 3 | 2 | -- | 8 | 1 | 2/ | 175 | 184 |
| Cass | 730 | -- | 19 | -- | -- | 25 | -- | 807 | 811 |
| Cedar | 578 | -- | -- | -- | -- | -- | -- | 578 | 578 |
| Colfax | 1,457 | -- | -- | -- | -- | -- | -- | 1,457 | 1,510 |
| Cuming | 3,343 | -- | 2 | 6 | -- | 15 | -- | 3,414 | 3,416 |
| Dakota | 578 | -- | -- | -- | -- | -- | -- | 578 | 578 |
| Dixon | 578 | -- | -- | -- | -- | -- | -- | 578 | 578 |
| Dodge | 383 | -- | 2 | -- | -- | 2 | -- | 392 | 395 |
| Douglas | 36 | -- | -- | -- | -- | -- | -- | 36 | 36 |
| Franklin | 2,971 | -- | -- | -- | -- | -- | -- | 2,981 | 2,988 |
| Fumas | 116 | -- | -- | -- | -- | 2 | -- | 128 | 135 |
| Gage | 184 | -- | 43 | -- | -- | 1 | -- | 333 | 337 |
| Hall | 830 | -- | -- | -- | -- | -- | -- | 830 | 830 |
| Harlan | 116 | -- | -- | -- | -- | 2 | -- | 128 | 135 |
| Howard | -- | -- | 2/ | -- | -- | 1 | -- | 2 | 3 |
| Jefferson | 173 | -- | 12 | -- | -- | -- | -- | 186 | 186 |
| Johnson | 145 | 4 | 25 | -- | 32 | 2 | 2/ | 247 | 247 |
| Lancaster | 9 | -- | 2 | -- | -- | 1 | -- | 36 | 40 |
| Madison | 859 | -- | -- | -- | -- | -- | -- | 859 | 859 |
| Merrick | 499 | -- | 2/ | -- | -- | 1 | -- | 502 | 824 |
| Nance | 1,457 | -- | 25 | -- | -- | 50 | -- | 1,577 | 1,578 |
| Nemaha | 202 | 41 | 36 | -- | 48 | 4 | 2/ | 389 | 389 |
| Nuckolls | 84 | -- | -- | -- | -- | -- | -- | 84 | 84 |
| Otoe | 135 | 36 | 38 | -- | -- | 1 | 2/ | 312 | 316 |
| Pawnee | 398 | 26 | 58 | -- | -- | -- | 2/ | 515 | 515 |
| Platte | 1,457 | 3 | 2 | -- | 8 | 1 | 2/ | 1,475 | 1,531 |
| Polk | 428 | 1 | 2 | -- | 8 | 1 | 2/ | 444 | 769 |
| Richardson | 260 | 39 | 164 | -- | -- | -- | 2/ | 577 | 577 |
| Saline | 173 | -- | 12 | -- | -- | -- | -- | 186 | 186 |
| Sarpy | 150 | -- | -- | -- | -- | -- | -- | 150 | 150 |
| Saunders | 3,934 | 1 | 84 | -- | 8 | 124 | 2/ | 4,233 | 4,235 |
| Thurston | 612 | -- | 146 | -- | -- | -- | -- | 817 | 825 |
| Valley | 92 | -- | -- | -- | -- | -- | -- | 92 | 92 |
| Washington | 36 | -- | -- | -- | -- | -- | -- | 36 | 36 |
| Webster | 126 | -- | -- | -- | -- | -- | -- | 126 | 126 |
| Total | 25,810 | 153 | 853 | 6 | 111 | 235 | 1 | 28,111 | 28,943 |

(Table 11 continued on next page)

(Table 11 continued)

| Unit and county | Cotton-wood | Red oak group | White oak group | Willow | Bass-wood | Elm | Other hard-woods | Total hard-woods | All species |
|---------------------|---------------|---------------|-----------------|----------|------------|------------|------------------|------------------|---------------|
| WESTERN UNIT | | | | | | | | | |
| Antelope | 388 | -- | -- | -- | -- | -- | -- | 388 | 388 |
| Boyd | -- | -- | -- | -- | -- | -- | -- | 3 | 5 |
| Brown | 7 | -- | 3 | -- | -- | -- | -- | 13 | 90 |
| Dawes | -- | -- | -- | -- | -- | -- | -- | -- | 5,606 |
| Garfield | 23 | -- | -- | -- | -- | -- | -- | 23 | 23 |
| Holt | 2,169 | -- | -- | -- | -- | -- | -- | 2,169 | 2,169 |
| Keya Paha | 29 | -- | -- | -- | -- | -- | -- | 29 | 251 |
| Knox | 26 | -- | -- | -- | -- | -- | -- | 26 | 26 |
| Lincoln | 824 | -- | -- | -- | 2/ | 25 | -- | 853 | 1,141 |
| Loup | 46 | -- | -- | -- | -- | -- | -- | 46 | 69 |
| Rock | 520 | -- | -- | -- | -- | -- | -- | 520 | 629 |
| Sheridan | -- | -- | -- | -- | -- | -- | -- | -- | 14,209 |
| Sioux | -- | -- | -- | -- | -- | -- | -- | -- | 2,054 |
| Wheeler | -- | -- | -- | -- | -- | -- | -- | -- | 23 |
| Total | 4,032 | -- | 3 | -- | 2/ | 25 | -- | 4,069 | 26,682 |
| State total | 29,842 | 153 | 856 | 6 | 111 | 259 | 1 | 32,180 | 55,624 |

1/ International 1/4-inch rule.

2/ Less than 500 board feet.

Rows and columns may not sum due to rounding.

Table 12.—Residues produced at primary wood-using mills by type of material,
type of use, and Forest Survey Unit, Nebraska, 1993

(In thousand tons, green weight)

| Survey Unit and type of use | Wood residues | | | | | | | |
|--------------------------------|---------------|----------|-----------|----------|----------|----------|----------|----------|
| | Total | | Coarse 1/ | | Fine 2/ | | Bark | |
| | Softwood | Hardwood | Softwood | Hardwood | Softwood | Hardwood | Softwood | Hardwood |
| EASTERN UNIT | | | | | | | | |
| Industrial fuel-mill | 1.48 | 0.64 | 0.94 | 0.4 | 0.55 | 0.23 | 0.24 | 0.17 |
| Domestic fuel | 4/ | 0.13 | 4/ | 0.13 | -- | -- | -- | 4/ |
| Miscellaneous 3/ | 0.38 | 61.79 | 0.24 | 38.43 | 0.14 | 23.36 | 0.06 | 16.94 |
| Not used | 0.12 | 12.63 | 0.08 | 8.94 | 0.04 | 3.69 | 0.02 | 3.19 |
| Total | 1.99 | 75.19 | 1.27 | 47.9 | 0.72 | 27.28 | 0.32 | 20.3 |
| WESTERN UNIT | | | | | | | | |
| Industrial fuel-sold | 9.38 | -- | 5.93 | -- | 3.45 | -- | 2.52 | -- |
| Domestic fuel | 0.18 | 0.09 | 0.18 | 0.09 | 4/ | 4/ | 4/ | 0.03 |
| Miscellaneous 3/ | 0.73 | 0.63 | 0.48 | 0.59 | 0.25 | 0.04 | 0.24 | 0.19 |
| Not used | 0.53 | 1.88 | 0.32 | 1.14 | 0.21 | 0.74 | 0.11 | 0.56 |
| Total | 10.82 | 2.61 | 6.91 | 1.82 | 3.91 | 0.79 | 2.87 | 0.78 |
| ALL UNITS | | | | | | | | |
| Industrial fuel-mill | 1.48 | 0.64 | 0.94 | 0.4 | 0.55 | 0.23 | 0.24 | 0.17 |
| Industrial fuel-sold | 9.38 | -- | 5.93 | -- | 3.45 | -- | 2.52 | -- |
| Domestic fuel | 0.18 | 0.23 | 0.18 | 0.22 | 4/ | 4/ | 4/ | 0.03 |
| Miscellaneous 3/ | 1.11 | 62.42 | 0.72 | 39.02 | 0.39 | 23.4 | 0.3 | 17.12 |
| Not used | 0.66 | 14.52 | 0.41 | 10.09 | 0.25 | 4.43 | 0.13 | 3.75 |
| Total | 12.81 | 77.8 | 8.18 | 49.73 | 4.63 | 28.07 | 3.19 | 21.07 |

1/ Suitable for chipping such as slabs, edgings, veneer cores, etc.

2/ Not suitable for chipping such as sawdust, veneer clippings, etc.

3/ Livestock bedding, mulch, small dimension, and specialty items.

4/ Less than 10 tons.

Rows and columns may not sum due to rounding.

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Hackett, Ronald L.; Adams, Dennis M.

1996. **Nebraska timber industry—an assessment of timber product output and use, 1993.** Resour. Bull. NC-177. St. Paul, MN: U.S. Department of Agriculture, Forest Service, North Central Forest Experiment Station. 35 p.

Reports findings of a survey of all primary wood-using mills in Nebraska in 1993 and compares those findings with earlier surveys. Reports production and receipts of industrial roundwood by product, species, and county. Also reports the quantity, type, and disposition of wood and bark residues generated by Nebraska's primary wood-using industry.

KEY WORDS: Bark, mill, production, roundwood, residues, saw logs, veneer logs.

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