Historic, archived document

Do not assume content reflects current scientific knowledge, policies, or practices.

PUBLICATIONS OF THE
LAKE STATES FOREST EXPERIMENT STATION
1949-1951

(Station Paper No. 15 issued January 1949 lists
publications for the period 1923-1948)

LAKE STATES FOREST EXPERIMENT STATION
U. S. DEPARTMENT OF AGRICULTURE - FOREST SERVICE
University Farm, St. Paul 1, Minnesota
M. E. DICKEMAN, Director

PUBLICATIONS OF THE
LAKE STATES FOREST EXPERIMENT STATION^{1/}
1942-1951

TABLE OF CONTENTS

<u>Class No.</u>		<u>Page</u>
	Foreword	ii
1.	Forest management and silviculture	1
2.	Regeneration (seed, nursery, planting)	4
3.	Mensuration (growth, volume, yield, sampling).	8
4.	Protection	9
	a. Fire	9
	b. Insects and diseases	9
	c. Wildlife	9
5.	Forest Survey (forest resources)	11
6.	Forest economics	13
7.	Forest influences (streamflow, erosion control, climate, shelterbelts).	15
8.	General	16
	Index (by author).	18

^{1/} Maintained by the U. S. Department of Agriculture, Forest Service, in cooperation with the University of Minnesota, at University Farm, St. Paul 1, Minnesota.

FOREWORD

In January 1949 the Lake States Forest Experiment Station released Station Paper No. 15 which included a complete list of the publications issued by the Station during its first 25 years, 1923 through 1948. Three years have passed and there is a real need to bring this list up to date. Supplement No. 1, therefore, lists all publications issued by the Station from January 1949 through December 1951.

This supplement has been compiled by Helen A. Woodworth, in charge of files and library at the Lake States Forest Experiment Station. The titles have been arranged into eight classes according to subject matter. Within each class the titles have been listed alphabetically by authors, and the writings of each author have been arranged in chronological order. Each publication has been assigned a number. At the end of the supplement there is an index giving the numbers of the articles published by each author.

All publications available for general distribution are designated by *. Those in limited supply, which can be supplied only to schools, libraries, or conservation agencies are designated by **. All other publications listed are no longer available for distribution.

1. FOREST MANAGEMENT AND SILVICULTURE

- *989. Arbogast, Carl, Jr. How much does felling large cull trees damage the understory? Tech. Note No. 337, 2 pp., mimeo. July 1950. Pulp & Paper Mag. of Canada 51(12): 190. Nov. 1950.
- *990. Arend, John L., and Gysel, Leslie W. Some effects of soil and topography on oak yields in southern Michigan. Tech. Note No. 365, 1 p., mimeo. Oct. 1951.
991. _____ Can hardwood roots transmit chemical herbicides? Forest Farmer 11(1): 15. Oct. 1951.
- *992. Engle, LaMont G. Cutting aspen overstory improves growth of young hardwoods. Tech. Note No. 314, 1 p., mimeo. April 1949.
- *993. _____ Releasing white pine from oak and aspen. Tech. Note No. 346, 2 pp., mimeo., illus. Jan. 1951.
- *994. _____ and Smith, Norman F. Height growth of thinned red pine. Tech. Note No. 351, 1 p., mimeo. April 1951.
- *995. Eyre, F. H., and Zillgitt, W. M. Size-class distribution in old-growth northern hardwoods twenty years after cutting. Sta. Paper No. 21, 15 pp., mimeo., illus. July 1950.
- *996. _____, and Longwood, F. R. Reducing mortality in old-growth northern hardwoods through partial cutting. Sta. Paper No. 24, 13 pp., mimeo. April 1951.
- *997. Longwood, F. R. Ingrowth following cutting in northern hardwoods. Tech. Note No. 352, 1 p., mimeo. April 1951.
- *998. _____ Why release young maple from pin cherry? Tech. Note No. 360, 2 pp., mimeo. July 1951.
- *999. Meetzel, John R. Farm-woods management in southern Minnesota. Misc. Report No. 6, 28 pp., mimeo. July 1949.
- *1000. Neff, L. P. Classifying black spruce by tree vigor and dominance can aid the tree marker. Tech. Note No. 344, 2 pp., illus., mult. Oct. 1950.
- *1001. Ralston, R. A. Red pine seedling survival under different levels of stocking. Tech. Note No. 334, 1 p., mimeo. April 1950. Pulp & Paper Mag. of Canada 51(12): 186. Nov. 1950.
- *1002. _____ Successful natural jack pine regeneration. Tech. Note No. 363, 1 p., mimeo. Oct. 1951.

- *1003. Roe, Eugene I. Balsam fir in Minnesota - a summary of present knowledge. Misc. Report No. 13, 25 pp., mimeo. Sept. 1950.
- *1004. _____, and Stoeckeler, Joseph H. Thinning over-dense Jack pine seedling stands in the Lake States. Jour. For. 48(12): 861-865. illus. Dec. 1950.
1005. _____ Early release from aspen improves yield of pine plantations. Timber Prod. Bul. (Duluth) 7(2): 10. Oct. 1951.
- *1006. Rudolf, Paul O. Handling northern white-cedar stands for wood and wildlife in the Lake States. Misc. Report No. 3, 6 pp., mimeo. Jan. 1949.
- *1007. _____ 1949 a poor tree seed year in the Lake States. Tech. Note No. 333, 2 pp., mimeo. April 1950.
- *1008. _____ Lake States forest trees produce good seed crop in 1950. Tech. Note No. 349, 2 pp., mimeo. Jan. 1951.
- *1009. _____ Chemical control of brush and tree growth for the Lake States. Misc. Report No. 15, 30 pp., mimeo. Jan. 1951.
- **1010. Young, Leigh J., and Scholz, Harold F. Some results of selection cutting in the Eber White Woods, Ann Arbor, Michigan. Papers Mich. Acad. Sci., Arts, and Letters 33: 39-56. 1947. (Publ. 1949.)
1011. Scholz, Harold F., and DeVriend, A. J. Improvement cuttings pay dividends in Wisconsin farm wood lots. Lake States Timber Digest 5(10): 1. Aug. 1951.
- **1012. Stoeckeler, Joseph H. Alkali tolerance of drought-hardy trees and shrubs in the seed and seedling stage. Proc. Minn. Acad. Sci. 14 (1946): 79-83. (Publ. 1950).
- *1013. _____, and Heinselman, M. L. The use of herbicides for the control of alder brush and other swamp shrubs in the Lake States. Jour. For. 48(12): 870-874. Dec. 1950.
1014. _____ Review of "A Research on the Regeneration of Birch in South Finland," by Risto Sarvas. 91 pp., illus. Metsätieteellisen Tutkimuslaitoksen Julkaisuja 35(4). Forest Research Institute, Helsinki, Finland. 1948. Jour. For. 49(6): 458-459. June 1951.
- *1015. _____ Chemical sprays reduce right-of-way maintenance costs. Tech. Note No. 359, 1 p., mimeo. July 1951.

- *1016. Zasada, Z. A. Aspen management problems of the Lake States. Misc. Report No. 10, 23 pp., mimeo. June 5, 1950.
- *1017. Zehngraft, Paul. Growth of a managed pine forest. Tech. Note No. 310, 2 pp., mimeo. Jan. 1949.
- *1018. _____, and von Bargen, John. Chemical brush control in forest management. Jour. For. 47(2): 110-112. Feb. 1949.
1019. _____ A method of regulating cut in individual stands. 6 pp., mimeo. March 8, 1949.
- *1020. _____ Aspen as a forest crop in the Lake States. Jour. For. 47(7): 555-565. July 1949.
- *1021. _____ Monetary yields from a managed pine forest. Tech. Note No. 330, 1 p., mimeo. Jan. 1950.
- *1022. Zillgitt, W. M. Basal area in merchantable trees as an expression of stocking in northern hardwoods. Tech. Note No. 324, 1 p., mimeo. Oct. 1949.
- *1023. _____ Quality of reproduction following partial cutting of northern hardwoods. Jour. For. 48(5): 324-325. May 1950.
- *1024. _____ Does the partial cutting of northern hardwoods result in inferior reproduction? Tech. Note No. 340, 1 p., mimeo. July 1950.
- *1025. _____ Disking to increase stocking in aspen stands. Tech. Note No. 357, 1 p., mimeo. July 1951.
- *1026. _____ Converting mature northern hardwood stands to sustained yield. Jour. For. 49(7): 494-497. July 1951.

2. REGENERATION (SEED, NURSERY, PLANTING)

1027. Aldous, Shaler E. Experimental planting of food and cover for deer. USDI, Fish & Wildlife Service, Wildlife Leaflet No. 320, -9 pp., mult., illus. May 1949.
1028. Krefting, Laurits W., and Roe, Eugene I. The role of some birds and mammals in seed germination. Ecol. Monog. 19(3): 269-286. July 1949.
- *1029. Ralston, R. A. Is jack pine tree growth affected by age of parent seed? Tech. Note No. 358, 1 p., mimeo. July 1951.
- *1030. Roe, E. I. Dense seed spots produce spindly jack pine seedlings. Tech. Note No. 306, 1 p., mimeo. Jan. 1949. Jour. For. 476: 480. June 1949.
1031. _____ Frozen red pine planting stock shows fair survival. Jour. For. 47(7): 566. July 1949.
- *1032. _____ Sphagnum moss retards black spruce regeneration. Tech. Note No. 321, 1 p., mimeo. Oct. 1949. Jour. For. 47(12): 960. Dec. 1949.
1033. _____ Pine plantations a good investment. Blackduck American (6th Annual Forest Fire Prevention Ed.) 49(21): 2. April 20, 1950.
- *1034. _____ Early release from aspen improves yield of pine plantations. Tech. Note No. 353, 1 p., mimeo. April 1951.
- *1035. _____ Seeding jack pine after fire. Forest and Outdoors 47(10): 20-22. illus. Oct. 1951.
1036. Chapman, Arthur G., McQuilkin, William E., Hiron, N. T., Roe, Eugene I., Rudolf, Paul O., and Wakeley, Philip C. (co-authors). WOODY-PLANT SEED MANUAL. USDA Misc. Publ. No. 654, 416 pp., illus. June 1948.
- *1037. Rudolf, Paul O. Hybrid poplar planting in the Lake States. Sta. Paper No. 14, 17 pp., mimeo. Dec. 1948.
- *1038. _____ Scotch pine seed sources for northeastern Minnesota. Proc. Minn. Acad. Sci. 16(1948): 25-26. (Publ. 1950.)
1039. _____ Review of "Boomzaden: Handleiding Inzake Het Oogsten, Behandelen, Bewaren en Uitzaaien van Boomzaden (Tree seed: a guide to its collection, treatment, storage, and sowing.) By Nederlandsche Boschbouw Vereeniging. 171 pp. Ponsen and Looijen, Wageningen. 1946. Jour. For. 47(3): 225-226. March 1949.

- *1040. Rudolf, Paul O. Pelleted seed for reforestation. Misc. Report No. 5, 13 pp., mimeo. June 14, 1949.
- 1041. _____ Review of "Seed Storage with Particular Reference to the Storage of Seed of Indian Forest Plants," by T. V. Dent. Indian Forest Records (New Series) Silviculture, 7(1): 1-134. Dehra Dun, India. 1947. Jour. For. 47(8): 656-657. Aug. 1949.
- *1042. _____ Recovery of winter injured pines. Tech. Note No. 323, 1 p., mimeo. Oct. 1949.
- *1043. _____ Winter damage and seed source of planted pines in northern Minnesota. Proc. Minn. Acad. Sci. 17(1949): 74-79. (Publ. 1951.)
- *1044. _____ First the seed, then the tree. 1949 Yearbook of Agric.: 127-135.
- *1045. _____ Variation in Scotch pine. Papers Mich. Acad. Sci., Arts, & Letters 34(1948): 57-68. (Publ. 1950.)
- *1046. _____ Cold soaking - a short-cut substitute for stratification? Jour. For. 48(1): 31-32. Jan. 1950.
- *1047. _____ Forest seed collectors, processors, and dealers in the Lake States. Misc. Report No. 8, 3 pp., mimeo. March 15, 1950.
- *1048. _____ Forest plantations in the Lake States. USDA Tech. Bul. No. 1010, 171 pp., illus. Aug. 1950.
- *1049. _____ Certifying forest seeds. Misc. Report No. 14, 6 pp., mimeo. Sept. 1950.
- *1050. _____ A test of pelleted jack pine seed. Jour. For. 48(10): 703-704. Oct. 1950.
- *1051. _____ Stand density and the development of young jack pine. Jour. For. 49(4): 254-255. April 1951.
- 1052. _____ Nursery behavior of red pine stock of different seed origins. USDA, Forest Service, Tree Planters' Notes No. 8, pp. 3-4. Nov. 1951.
- 1053. Stoeckeler, J. H. Killing weeds with mineral spirits. Amer. Nurseryman 89(7): 11, 55, 56. April 1, 1949.
- 1054. _____ Mineral spirits as selective herbicides in conifer nurseries. Sci. Monthly 68(6): 419-420. June 1949.

- *1055. Stoeckeler, J. H. Control of weeds in conifer nurseries by mineral spirits. Sta. Paper No. 17, 23 pp., mimeo. May 1949.
- *1056. _____, and Rudolf, Paul O. Winter injury and recovery of conifers in the upper midwest. Sta. Paper No. 18, 20 pp., mimeo. June 1949.
- *1057. _____ Correction of soil acidity in conifer nurseries. Tech. Note No. 319, 1 p., mimeo. July 1949.
- **1058. _____ Bigger and better forest trees for Sweden. Sci. Monthly 70(5): 328-332. Illus. May 1950.
- 1059. _____ Review of "Preliminary Report on Results of Italian Researches on the Races of Scotch Pine," by Ernesto Allegri and Riccardo Morandini. (Reprinted from Annals of Agric. Res. New Series 3(4). Rome 1949.) Jour. For. 48(7): 507. July 1950.
- *1060. _____ Can nurserymen produce white pine seedling stock comparable to transplants? Tech. Note No. 339, 1 p., mimeo. July 1950.
- *1061. _____ How long can conifers be held in spring by cold storage? Tech. Note No. 343, 1 p., mimeo. Oct. 1950.
- 1062. _____, Roe, E. I., and Sowash, R. O. Allyl alcohol for weed control in forest nurseries. 3 pp., mimeo. Nov. 8, 1950. USDA, Forest Service, Tree Planters' Notes No. 7: 10-12. Sept. 1951.
- *1063. _____, and Limstrom, G. A. Reforestation research findings in northern Wisconsin and upper Michigan. Sta. Paper No. 23, 34 pp., mimeo., illus. Dec. 1950.
- *1064. _____ Proper watering in the nursery produces drought-hardy jack pine. Tech. Note No. 348, 1 p., mimeo. Jan. 1951.
- 1065. _____ Experimental plots reveal growth rate of pine and spruce. Tree Tips, p. 2, illus. Feb. 1951.
- 1066. _____ Survival experiments show Norway pine, white spruce transplant stock values. Tree Tips, p. 4, illus. March 1951.
- 1067. _____ Killing weed seeds. Amer. Nurseryman 93(8): 10. April 15, 1951.
- 1068. _____ Control of weeds in the nursery by chemicals. USDA, Forest Service, Tree Planters' Notes No. 7: 14-17. Sept. 1951.

- *1069. Stoeckeler, J. H. Hydrocarbon content and storage period affect toxicity of mineral spirits used as selective herbicides for red pine nursery beds. Jour. For. 49(9): 647-649. Sept. 1951.

3. MEASUREMENT (GROWTH, VOLUME, YIELD, SAMPLING)

- *1070. Arend, John L., Gunderson, Wallace R. E., and Monroe, A. F. Growth of unmanaged oak-hickory wood lots in southern Michigan. Tech. Note No. 327, 2 pp., mimeo. Jan. 1950.
- *1071. _____, and Monroe, A. F. Growth in two oak woodlots following an improvement cut. Tech. Note No. 342, 1 p., mimeo. Oct. 1950.
- *1072. Govorkiantz, S. R. Proportion of various rough products in second-growth stands. Tech. Note No. 308, 1 p., mimeo. Jan. 1949.
- *1073. _____ Converting International 1/4-inch gross sawlog scale to peeled total volume in cubic feet. Tech. Note No. 329, 1 p., mimeo. Jan. 1950.
- *1074. _____, and Guilkey, P. C. Lake States pulpwood cruisers table. Tech. Note No. 338, 1 p., mimeo. July 1950.
- *1075. _____, and Olson, Lucille P. Growth and yield of upland balsam fir in the Lake States. Sta. Paper No. 22, 24 pp., mimeo. July 1950.
- *1076. _____ Distribution of volume in Lake States trees. Tech. Note No. 347, 1 p., mimeo., illus. Jan. 1951.
- *1077. _____, and Olson, L. P. Bark percent in Lake States trees. Tech. Note No. 362, 1 p., mimeo. Oct. 1951.
- *1078. Guilkey, Paul C. Cordwood in tops of conifers and aspen in the Lake States. Tech. Note No. 315, 1 p., mimeo. April 1949.
1079. Stoeckeler, J. H., and Stoltz, E. R. Caliper-gauges for measuring diameters of small trees. Jour. For. 49(10): 738-739. Illus. Oct. 1951.

4. PROTECTION

- *1080. Christensen, Clyde M., Anderson, Ralph L., Hodson, A. C., and Rudolf, Paul O. Enemies of aspen. Lake States Aspen Report No. 22, 16 pp., mult. Jan. 1951.

a. Fire

- *1081. Crosby, John S. Forest fire burning conditions in the Lake States. Sta. Paper No. 16, 17 pp., mimeo. March 1949.
1082. _____ Vertical wind currents and fire behavior. Fire Control Notes 10(2): 12-15. April 1949.
- *1083. _____ Is fire prevention effective? Tech. Note No. 326, 2 pp., mimeo. illus. Jan. 1950.
1084. _____ Burning index is modern tool of forest fire suppression. Blackduck American (6th Annual Forest Fire Prevention Ed.) 49(21): 5. April 20, 1950.
- *1085. Mitchell, J. A. The 1948 forest fire season in the Lake States. Tech. Note No. 312, 1 p., mimeo. April 1949. Timber Prod. Bul. (Duluth) 4(10): 8. June 1949.
- **1086. _____, and Robson, D. Forest fires and forest fire control in Michigan. Mich. Dep't. of Cons. in coop. USDA, Forest Service, 82 pp., illus. 1950.

b. Insects and Diseases

- *1087. Gunderson, Wallace R. H., and Monroe, A. F. Home-treated fence posts serve well. Tech. Note No. 325, 1 p., mimeo. Oct. 1949.
- *1088. Rudolf, Paul O. Red pine and the European pine-shoot moth in southern Michigan. Papers Mich. Acad. Sci., Arts, and Letters 35: 61-67. Illus. 1949. (Publ. 1951.)

c. Wildlife

- *1089. Arbogast, Carl, Jr., and Hoinselman, Miron L. Damage to natural reproduction by deer browsing. Tech. Note No. 332, 1 p., mimeo. April 1950.
- *1090. Krefting, Laurits W. Construction of the Lake States deer exclosure. Tech. Note No. 361, 2 pp., mimeo., illus. Oct. 1951.
1091. _____, and Stenlund, M. H. Poor winter yards -- fewer deer. Conservation Volunteer 14(80): 16-20. illus. 1951.

1092. Krefting, Laurits W. What is the future of the Isle Royale moose herd? Trans. 16th North Amer. Wildlife Conference, pp. 461-472., illus. Wildlife Management Institute, Washington, D. C. 1951.
- *1093. Rudolf, Paul O. Porcupine damage to forest plantations. Tech. Note No. 307, 1 p., mimeo. Jan. 1949.
- *1094. _____ Porcupines' preferences in pine plantations. Jour. For. 47(3): 207-209. March 1949.
1095. Scholz, Harold F. The case against cows: 73 percent of Wisconsin farm woodlands subject to destructive pasturing. Tree Tips, pp. 3-4, illus. Sept. 1951. Wisc. Cons. Bul. 16(12): 3-5. Illus. Dec. 1951.
- *1096. Stoeckeler, J. H. Porcupine damage in a northern hardwood-hemlock forest of northeastern Wisconsin. Tech. Note No. 326, 1 p., mimeo. Jan. 1950.
- *1097. _____, and Heinselman, M. L. Deer damage may be reduced by use of repellents. Tech. Note No. 355, 1 p., mimeo. April 1951.

5. FOREST SURVEY (FOREST RESOURCES)

- *1098. Chase, Clarence D., and Horn, Arthur G. Timber resources, southwestern section, Lower Peninsula, Michigan. 52 pp., mult., illus. 1950.
- *1099. Cunningham, R. N., and Forest Survey Staff. Forest resources of the Lake States region. USDA, Forest Resource Report No. 1, 57 pp., illus. 1950.
- *1100. _____ Changes in forest conditions 1936-1949, north central Minnesota and Upper Peninsula of Michigan (A preliminary analysis). Sta. Paper No. 25, 20 pp., mimeo., illus. July 1951.
- **1101. Dickerman, M. B. Recent trends in Lake States timber resources and industries. Misc. Report No. 17, 9 pp., mimeo. Oct. 1, 1951.
1102. Guilkey, P. C., and Gevorkiantz, S. R. Allowable cut. Misc. Report No. 4, 8 pp. + 4 tables, mimeo. June 7, 1949.
- *1103. _____ Forest resources of Crow Wing County: growth and allowable cut (Suppl.). Iron Range Resources & Rehab., pp. 67-76. n.d. (1949).
- *1104. Horn, A. G. Minnesota leads Lake States in 1947 pole production. Tech. Note No. 309, 1 p. mimeo. Jan. 1949.
- *1105. _____ Lake States mines use large quantity of wood. Tech. Note No. 313, 1 p., mimeo. April 1949.
- *1106. Sandberg, Lynn, Horn, Arthur G., and Guilkey, Paul C. The forest resource of Aitkin County. Iron Range Resources & Rehab., 54 pp., illus. n.d. (1949).
- *1107. Horn, A. G. Near record cut of pulpwood in Lake States - 1948. Tech. Note No. 320, 2 pp., mimeo. July 1949.
- *1108. Sandberg, Lynn, Horn, Arthur G., and Guilkey, Paul C. The forest resource of Carlton County. Iron Range Resources & Rehab., 50 pp., illus. Jan. 1950.
- *1109. _____, _____, and _____ The forest resource of Clearwater County. Iron Range Resources & Rehab., 59 pp., illus. n.d. (1950).
- *1110. Horn, Arthur G. Commodity drain from forests of the Lake States, 1948. Sta. Paper No. 20, 35 pp., mimeo. April 1950.

- *1111. Horn, Arthur G. Commodity drain from forests of the Lake States, 1946. Misc. Report No. 7, 31 pp., mimeo. May 8, 1950.
- *1112. _____ Commodity drain from forests of the Lake States, 1947. Misc. Report No. 9, 31 pp., mimeo. June 1, 1950.
- *1113. _____ Pulpwood harvest declines to prewar level in Lake States - 1949. Tech. Note No. 336, 2 pp., mimeo. July 1950.
- *1114. Sandberg, Lynn, Horn, Arthur G., and Guilkey, Paul C. The forest resource of Cass County. Iron Range Resources & Rehab., 59 pp., illus. 1950.
- *1115. Kittelson, J. Marvin, Horn, Arthur G., and Guilkey, Paul C. The forest resource of Itasca County. Iron Range Resources & Rehab., 66 pp., illus. March 1951.
- 1116. Horn, A. G. Statistics prove timber cutting is big business in Lake States. Marquette Mining Journal (Souvenir Section, 6th Annual Logging Congress), p. 7. Sept. 27, 1951.
- *1117. _____ Lake States pulpwood production reverses trend, 1950. Tech. Note No. 364, 2 pp., mimeo. Oct. 1951.
- 1118. _____ Michigan's pulpwood harvest - 1950. Timber Prod. Bul. (Upper Michigan and Wisconsin), No. 103, p. 17. Oct. 1951.
- 1119. _____ Lake States mills import less Canadian pulpwood. Lake States Timber Digest 5(12): 8. Oct. 1951.
- *1120. Lake States Forest Experiment Station. Forest types and condition classes in the Lake States. Misc. Report No. 2, 7 pp., mimeo. June 1948.
- 1121. _____ A report on the veneer and plywood industry in the Lake States, 1950. 14 pp., mimeo. Feb. 1951.
- *1122. Meetzol, John R. Distribution of lumber cut from southern Minnesota. Tech. Note No. 317, 2 pp., mimeo. July 1949.
- *1123. _____ A survey of the use of native woods and other building materials on southern Minnesota farms. Misc. Report No. 12, 29 pp., mimeo. July 17, 1950.

6. FOREST ECONOMICS

- *1124. Stephenson, Joseph R., and Engle, LaMont G. Christmas trees provide early returns from red pine plantations. Tech. Note No. 356, 1 p., mimeo. July 1951.
- *1125. Longwood, F. R. Log grade recovery on a selection cutting in northern hardwoods of Upper Michigan. Tech. Note No. 335, 1 p., mimeo. April 1950.
- *1126. Mayne, Howard W. The place of forestry in the economic development of the Park Falls area, Wisconsin. Sta. Paper No. 19, 24 pp., mimeo. July 1949.
1127. _____ How census data affects forest policy. Marquette Mining Journal (Souvenir Section, 6th Annual Logging Congress), p. 13. Sept. 27, 1951.
- *1128. Neetzel, J. R., and Engene, S. A. What do fence posts cost on an annual basis? Tech. Note No. 341, 2 pp., mimeo. Oct. 1950.
- *1129. _____ Cost of setting fence posts in Minnesota. Tech. Note No. 350, 1 p., mimeo. Jan. 1951.
1130. Neff, L. P. Managed woodlot can bring good returns to farm owner. Blackduck American (Spec. Forest Fire Prevention Ed.) 48(21): 5. April 21, 1949. (Sec. 2.)
1131. _____ Forests produce wealth as well as wood. Blackduck American (6th Annual Forest Fire Prevention Ed.) 49(21): 3. April 20, 1950.
- *1132. Roe, E. I. Sawlogs from a young pine plantation. Tech. Note No. 345, 1 p., mimeo. Oct. 1950.
1133. Stoeckeler, J. H. Pulpwood preparation in Scandinavia. Paper Industry 32(9): 971. Dec. 1950.
1134. Garland, Hereford, and Zasada, Z. A. The increased use of aspen and forest management in the Lake States. Proc. S.A.F. 1948: 69-78.
- *1135. Zasada, Zigmund A. Marketing of aspen. Lake States Aspen Report No. 20, 10 pp., mult. June 1949.
- *1136. _____, and Zehngraft, Paul. Costs of cutting jack pine. Tech. Note No. 318, 2 pp., mimeo. July 1949.
1137. _____, and Richardson, C. A. Logging and pulping black spruce thinnings. Tappi 32(9): 393-396. Sept. 1949.

1138. Zasada, Zigmund A. Portable planers helping small operators in northern Minnesota. Miss. Valley Lumberman 80(41): 12. illus. Oct. 14, 1949.
- *1139. _____, and Zohngraff, Paul. Cost of skidding jack pine. Tech. Note No. 322, 1 p., mimeo. Oct. 1949.
- *1140. Zohngraff, Paul, and Zasada, Zigmund A. When does a red pine reach highest value? Tech. Note No. 311, 2 pp., mult., illus. April 1949. Timber of Canada, p. 47. Jan. 1950.
- *1140a. _____ Monetary yields from a managed pine forest. Tech. Note No. 330, 1 p., mimeo. Jan. 1950.
- *1141. Zillgitt, W. M. Employment possibilities of a northern Michigan forest. Tech. Note No. 331, 1 p., mimeo. April 1950.

7. FOREST INFLUENCES
(STREAMFLOW, EROSION CONTROL, CLIMATE, SHELTERBELTS)

1142. Stoeckeler, Joseph H. Review of "Forest Influences," by Joseph Kittredge. New York, McGraw-Hill Book Co., Inc. 394 pp. Ecology 30(2): 263-264. April 1949.
- *1143. _____, and Williams, Ross A. Windbreaks and shelterbelts. TREES, Yearbook of Agric. 1949: 191-199.
1144. _____ Windbreak and shelterbelt planting in the United States. Proc. of III World Forestry Congress: 253-264. Illus. 1949. (Publ. 1950.)
1145. _____ Shelterbelts in Italy. Foreign Agric. 14(9): 196-198. Sept. 1950.

3. GENERAL

1146. Arbogast, Carl F. A field mapping device. Jour. For. 47(6): 475-477. June 1949.
1147. Arend, John L. Forestry isn't just "planting trees!" Grand Rapids Press, Feb. 10, 1951.
- *1148. Creighton, J. W. Lead adjusting device for circular sawmills. Tech. Note No. 316, 2 pp., mimeo., illus. July 1949.
- **1149. Demmon, E. L. Forestry in North Dakota. Misc. Report No. 11, 8 pp., mimeo. July 7, 1950. Miss. Valley Lumberman 81(30): 6-7. July 28, 1950. 81(31): 8. August 4, 1950.
- **1150. _____ A national policy for timber lands. Trans. 16th North American Wildlife Conference: 64-71. 1951. Misc. Report No. 16, 5 pp., mimeo. March 1951.
1151. _____ Wood waste in the Lake States. Miss. Valley Lumberman 82(33): 8-9. April 20, 1951.
- *1152. _____ Reducing wood waste in the Lake States. Tech. Note No. 354, 2 pp., mimeo. April 1951.
- *1153. Lake States Forest Experiment Station. Publications of the Lake States Forest Experiment Station, 1923-1948. Sta. Paper No. 15, 70 pp., mimeo. Jan. 1949.
- *1154. Neetzel, John R. A survey of farm-forestry research and demonstration needs in southern Minnesota - 1947. Misc. Report No. 1, 22 pp., mimeo. 1948.
1155. _____, and Engene, S. A. Fencing is big business. Minn. Agric. Ext. Serv., Farm Business Notes, No. 318, p. 3. July 29, 1949. The Wood Saver (Dow Chem. Co.) 2(4): 1-2. May 1950.
1156. Engene, S. A., and Neetzel, J. R. Minnesota farmers spend one week each year fencing. Minn. Farm & Home Sci. 7(1): 11. Oct. 1949.
- *1157. Panshin, Alexis J. Dimension stock and other uses of aspen. Lake States Aspen Report No. 12, 18 pp., mult. Jan. 1950. Timber Prod. Bul. (Duluth) 5(7): 6-7, 11. March 1950.
1158. Stoeckeler, J. H., and Samson, N. T. Iron stakes from army surplus stocks useful for permanent sample plots. Jour. For. 46(7): 530. July 1948.
1159. _____ Oslo community forest. Tree Tips, p. 4. May 1950.

1160. Stoeckeler, J. H. The work and findings of Northern Lakes Forest Research Center. Timber Prod. Bul. (Upper Michigan and Wisconsin) 91: 10-12. Oct. 1950.
1161. Zehngraff, Paul J. Forestry in Denmark. Jour. For. 48(10): 681-684. Oct. 1950.

INDEX

Aldous, S. E.	1027.
Arbogast, C. F.	989, 1089, 1146.
Arend, J. L.	990, 991, 1070, 1071, 1147.
Chase, C. D.	1098.
Creighton, J. W.	1148.
Crosby, J. S.	1081-1084.
Cunningham, R. N.	1099, 1100.
Demmon, E. L.	1149-1152.
Dickerman, M. B.	1101.
Engle, L. G.	992-994, 1124.
Eyre, F. H.	995, 996.
Gevorkiantz, S. R.	1072-1077, 1102.
Guilkey, P. C.	1074, 1078, 1102, 1103, 1106, 1108, 1109, 1114, 1115.
Gunderson, W. R. H.	1070, 1087.
Gysel, L. W.	990.
Heinselman, M. L.	1013, 1089, 1097.
Horn, A. G.	1098, 1104-1119.
Krefting, L. W.	1028, 1090-1092.
Lake States	1120, 1121, 1153.
Limstrom, G. A.	1063.
Longwood, F. R.	996-998, 1125.
Mayne, H. W.	1126, 1127.
Mitchell, J. A.	1085, 1086.
Neetzel, J. R.	999, 1122, 1123, 1128, 1129, 1154-1156.
Neff, L. P.	1000, 1130, 1131.
Olsen, L. P.	1075, 1077.
Panshin, A. J.	1157.
Ralston, R. A.	1001, 1002, 1029.
Roe, E. I.	1003-1005, 1028, 1030-1036, 1062, 1132.
Rudolf, P. O.	1006-1009, 1036-1052, 1056, 1080, 1088, 1093, 1094.
Samson, M. T.	1158.
Scholz, H. F.	1010, 1011, 1095.
Stoeckeler, J. H.	1004, 1012-1015, 1053-1059, 1079, 1096, 1097, 1133, 1142-1145, 1158-1160.
Stoltz, E. R.	1079.

Zasada, Z. A.
Zehngraff, P. J.
Zillgitt, W. M.

1016, 1134-1140.
1017-1021, 1136, 1139-1140a, 1161.
995, 1022-1026, 1141.