

APPENDIX IV

SEED PRODUCTION AREAS AND SEED ORCHARDS IN THE LAKE STATES - 1963

Owner or manager ^{1/} and location	Expected annual cone production	Stand age	Area occupied		Dates	
			Total	Minus isolation zone	Established	First seed production
SEED PRODUCTION AREAS						
	<u>Bushels</u>	<u>Years</u>	<u>Acres</u>	<u>Acres</u>	<u>Year</u>	<u>Year</u>
			<u>Red Pine</u>			
Wisconsin Conservation Dept. Vilas Co., Wis.	50	75	23	23	1957	1957
USFS, Chequamegon N.F. Bayfield Co., Wis.	100	70	43	10	1961	1963
USFS, Chippewa N.F. Itasca Co., Minn.	450	50	65	32	1959	--
Cass Co., Minn.	400	65	64	24	1961	--
USFS, Hiawatha N.F. Schoolcraft Co., Mich.	350	60	60	20	1961	--
Chippewa Co., Mich.	300	70	60	20	1961	---
USFS, Manistee N.F. Lake Co., Mich.	65	60	5	5	1959	1960
USFS, Huron N.F. Crawford Co., Mich.	100	50	50	15	1960	1963
Crawford Co., Mich.	300	45	60	20	1960	1963
Oscoda Co., Mich.	20	60	4	4	1959	1963
Oscoda Co., Mich.	15	100	20	5	1958	1960

1/ In addition to those listed in this table there are several more partially completed seed production areas on National Forest, and we have information to indicate that the following companies have begun to develop seed production areas or seed orchards, but we have no details as to species, areas involved, etc: Kimberly-Clark and Nekoosa-Edwards Paper Co. Furthermore, Consolidated Water Power and Paper Company and Marathon Division of American Can Company are obtaining seed from phenotypically superior spruce trees, and Packaging Corporation of America is getting seed from phenotypically superior aspen clones.

APPENDIX IV (Continued)

Owner or manager and location	Expected annual cone production	Stand age	Area occupied		Dates	
			Total	Minus isolation zone	Established	First seed production

SEED PRODUCTION AREAS

	<u>Bushels</u>	<u>Years</u>	<u>Acres</u>	<u>Acres</u>	<u>Year</u>	<u>Year</u>
			<u>Red Pine</u>			
USFS, Nicolet N.F. Forest Co., Wis.	250	65	28	24	1962	--
Forest Co., Wis.	400	40	109	24	1961	--
Rhineland Paper Division Ashland Co., Wis.	50?	40-60	30	20	1962	1963+
			<u>White Pine</u>			
USFS, Manistee N.F. Lake Co., Mich.	92	70	5	5	1960	1963
Newaygo Co., Mich.	750	60-100	20	20	1961	1963
			<u>White Spruce</u>			
USFS, Chequamegon N.F. Ashland Co., Wis.	50	65	85	28	1959	1960
USFS, Chippewa N.F. Beltrami Co., Minn.	25	35	40	10	1959	--
USFS, Hiawatha N.F. Schoolcraft Co., Mich.	15	70	30	5	1962	--
USFS, Huron N.F. Oscoda Co., Mich.	4	70	2	2	1959	--
Alcona Co., Mich.	8	80	5	1	1959	--
USFS, Nicolet N.F. Oconto Co., Wis.	50	60	26	4	1960	1962
USFS, Superior N.F.	50	59	46	13	1961	1962

APPENDIX IV (Continued)

Owner or manager and location ^{2/}	Kind of stock		Area occupied		Dates	
	Grafted	Seedling	Total	Minus isolation zone	Established	First seed production
SEED ORCHARDS						
	<u>Year</u>	<u>Year</u>	<u>Acres</u>	<u>Acres</u>	<u>Year</u>	<u>Year</u>
	<u>White Spruce</u>					
Rhineland Paper Division, St. Regis Paper Co., Oneida Co., Wis.	1961	--	1	1	1961	Unknown
	<u>Red Pine</u>					
Wisconsin Conservation Dept. Juneau Co., Wis.	1960	--	40	40	1960	?
Waukesha Co., Wis.	1959	--	10	10	1959	?
Waukesha Co., Wis.	1961	--	8	8	1962	?
	<u>Several Species^{3/}</u>					
Wilderness Research Foundation	1952	--	10	10	1952	1955

2/ In addition to the orchards listed the Ottawa National Forest set out root stock plants for a white spruce seed orchard in 1963, and plans have been firmied for six more seed orchards to be established during the next four years on Lake States National Forests.

3/ White pine, cembra pine, Balkan pine, and Korean white pine scions on white pine and red pine root stocks; white pine and cembra pine on Scotch pine, mugho pine and balsam fir root stocks; white spruce on black spruce root stocks; and black spruce on Norway pine root stock.