

Timber Management on the Chippewa National Forest

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The Chippewa National Forest is a forest of approximately 661,000 total acres. It has 180,000 acres of nonproductive lands for timber including:

- * Wetlands
- * Experimental forests
- * Special uses
- * Research Natural Areas (RNAs)
- * Miscellaneous other areas not considered appropriate for timber management.

I may as well mention the Superior National Forest too. It is much larger with approximately 2,100,000 acres:

- * 1,450,000 acres are considered unsuitable or inappropriate for timber management
- * Much of this is the Boundary Waters Canoe Area Wilderness (BWCAW)
- * Remainder is the same as the Chippewa National Forest.

Much of the commercial forest land in both National Forests is in the aspen cover types. Years ago, at least in the 1950's and 60's, aspen was considered a weed species for the most part. An area in this cover type:

- * Was often cleared by shearing with a dozer, then plied or windrowed.
- * Pine or spruce was then planted, usually at a 6'x 8' spacing for around 900 trees an acre
- * Many of these plantations have already been thinned one time.

From 1966 to 1972, the Chippewa planting program averaged 3,290 acres a year, and the Superior's averaged 6,150 acres a year.

Our planting programs both peaked in 1968 with the Chippewa planting 4,832 acres and the Superior planting 7,405 acres.

Our present planting programs are much smaller:

- * Chippewa averaged 904 acres the past four years
- * Superior averaged 1,533 acres over this same period.

The main reason for reduced planting is that our first Forest Plan stated that we would no

longer convert one forest type to another:

- * If we cut an aspen stand, we had to regenerate aspen
- * The same for Jack pine, birch, etc..

Table 1 shows our reforestation efforts the past four years. Our replant acreage didn't used to be this high:

- * One reason is that we no longer use herbicides
- * Another is that we do not shear, windrow, and machine plant anymore
- * Disc trenching or spot scalping and hand planting are used to prevent disturbing so much soil as with shearing.

Table 1.

	1997		1996		1995		1994	
	<u>Chip.</u>	<u>Sup.</u>	<u>Chip.</u>	<u>Sup.</u>	<u>Chip.</u>	<u>Sup.</u>	<u>Chip.</u>	<u>Sup.</u>
Plant (acres)	1,096	575/1208 ^{1,2}	839	366/854	899	495/1155	781	523/1225
Seed (acres)	178	100	17	100	116	140	171	80
Nat Regen (acres)	3,000 ²	7,540	3,762	9,118	5,421	5,615	6,461	5,671
M Trees (#)	567	230	543	241	679	223	494	185
M Containers (#)	11	483	—	241	1	408	—	497
Replants ³ (acres)	369	—	165	—	171	—	299	—

¹Estimate

²Seedling/Containers

³Superior does not replant; this encourages mixed stands.

So we lose a sizeable number of seedlings to competition now that years ago were controlled by better site preparation and release with herbicides. Our release now is basically all handcutting:

- * This works for woody species but not grass and forbs
- * Most plantations need a minimum of three releases to get them off to a good start.

Basically, our forest types are managed as follows:

- * **Aspen:** clear-cut/natural regeneration
- * **Hardwoods:** mostly intermediate cuts/natural regeneration
- * **Red and white pine:** even-aged/shelterwood cuts, natural and artificial regeneration
- * **Jack pine:** clear-cut/plant, seed, or natural regeneration
- * **Black spruce:** strip clear-cut/seed or natural regeneration.

I'll be happy to try to answer questions at the designated time.

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