## Michigan SAF Spring Conference Field Tour Northern Hardwood Regeneration Nick Thoney Property



Nick owns and very actively manages about 2000 acres of forestland consisting of many forest types common to this area. A few years ago, he

was named Michigan's Tree Farmer of the Year and the following year became the U.S. Regional Tree Farmer of the Year. Over the years, he has used many resource professionals ranging from private consultants, public foresters, and corporate foresters to advise him in the management of his forest lands.

The stand we will view today is predominately sugar maple but does have a mix of other hardwood species. Perhaps, a bit unusual for northern hardwood stands in central Menominee County, was the inclusion of bitternut hickory in the stand. Unfortunately, in the summer of 2012, hickory wilt killed nearly all of the hickory. This past fall, the hickory was harvested and most of it was marketed as firewood. Much of the hickory split apart after harvest.

The southern part and much of the central part of the property is a Cunard-Onaway Fine Sandy Loam, with 0-6% slope. The primary habitat type for both of these soils is AVO (Acer-Viola-Osmorhiza). It has a high northern hardwood and aspen production potential. It could also grow fine red pine if the vegetation competition can be controlled. The secondary habitat type is TM (Tsuga-Maianthemum).

Across the northern edge, is what appears to be an esker that travels in a general

northeasterly direction. Adjacent forties have been mined for gravel. It is classified as a Nadeau Fine Sandy Loam, with 15-35% slopes. The primary habitat type is TM. The production potential for northern hardwoods is moderate, moderately high for aspen, and high for red pine and jack pine. Indicator species such as sweet cicely, maidenhair fern, and blue cohosh have been observed on this property.

Nick's father purchased the land in 1948 and the following year, using a cross-cut saw, produced bowling pin blocks for a factory that I believe used to exist in Escanaba. In 1972, Wally Gunderson provided management advice. Nicks' dad was seriously considering clearing the land, as these soil types are among the best for agricultural production in Menominee County. As Wally marked the stand, he recognized that there was an abundance of what appeared to be good quality sugar maple poles. In the thinning process, a heavy harvest was made of white birch. He suggested that it might be wise to manage the stand for timber rather than clearing it. The stand has been thinned a little bit until about 2003. At this point, Gus Erdmann provided the next step in the management planning for the

stand marking the stand for a selection harvest. In 2012, the dead hickory was removed. The last two thinning operations were conducted with a Ponsse cut-to-length system.





A year or so after the 2003 harvest, Nick erected an exclosure in the southern part of the stand. The southern half was sprayed with Roundup in the fall to control sedge and the northern half was not sprayed. No scarification was performed. It appears that there has been a little better regeneration on the untreated portion. During the summer and fall, it

was quite obvious that something is eating the vegetation outside the exclosure and this is not apparent inside the exclosure. Aspen and ash are coming in and there is some maple regeneration from stump sprouts but it doesn't appear that there is much or any maple regeneration from seeds. Why? Has dry spring weather shortly after germination had an effect of survival?

Up to this point in time, Nick has entered his hardwood stands on about 10 year intervals. He is now wondering if this will need to be altered due to changing weather patterns, forest health, windthrow, etc. He strongly feels that deer are having a major negative impact upon forest regeneration and questions whether current hardwood stands will regenerate. Maybe maple will go the route of elm, ash, and beech but not due to an exotic pest.