Project Subject/Title: Crystal Oak Shelterwood cut County: Washburn TRS: T39N, R10W Sec. 27

Contact Person: Jim Halvorson, 715-635-4081 Type Of Prescription: Shelterwood Year Initiated: 1984

# Abstract/Prescription:

This study was initiated in 1984 to evaluate oak shelterwood cut, seedling establishment on AVDe habitat types following first shelterwood cut, evaluate release if needed. This site is slightly drier than the Dugan lake oak trial.

## **Results:**

After the initial shelterwood cut regeneration plots were established. In 1991, 7 years following the harvest 1633 red oak seedlings/ac with 70% millacre plot stocked. Many seedlings were still under 1 foot in height. Aspen appears to be the biggest competitor. In 1991, a 1 acre parcel was identified for final harvest. After the harvest, competition was monitored.

### **Discussion/Recommendations:**

- Cutting of aspen during the shelterwood cut should be avoided if possible due to sprouting
- Better growth and less competition was noted on this site compared to the Dugan Lk site (AA habitat type)

Site statistics: Habitat Type AVDe

See enclosed Document

JA 3/92

#### CRYSTAL OAK, SHELTERWOOD (SEC 27-39-11)

#### <u>Background</u>

This oak site originated in 1914. A shelterwood cut was completed on the area in 1984. The site is a AVDe habitat type. The site was selected to replicate the shelterwood cut located on Dugan Lake firelane. This site is more xeric, nutrient poor as compared to the Dugan site. It is also a site that may not require release work but possibly a non-commercial TSI in 15 years. Specific questions addressed with this site include:

- seedling establishment on AVDe habitat types following 1st shelterwood cut
- evaluate release needs if needed, monitor response following clearcut

Treatments carried out to date include:

- 1st shelterwood cut
- final cut marked and scheduled for cutting

#### <u>Discussion</u>

After the initial shelterwood cut, regeneration plots were established and monitored. As of 1991, 7 years following the cut, 1633 NRO seedlings/ac with 70% of the millacre plots stocked. Many seedlings were still under 1 ft. in height but it was not uncommon to find many seedlings 4-5' tall. Aspen appears to be the biggest competitor. In 1991 a 1 acre parcel was identified for final harvest. This area overall has the least amount of competition. After the cut regeneration and competition will be monitored.

#### **Recommendation**

Better than average growth was noted on this site vs. the Dugan site. This was due to less competition and heavier initial shelterwood cut. Aspen was removed also in this cut which normally should have been removed in earlier improvement cuts. Sprouting of aspen can be severe and cutting of this species in most cases should be avoided during the shelterwood. After the 1 acre cut is completed decisions on the remaining parcel will be made and may include portions being maintained in an aspen-hardwood mix, with the remaining area requiring mechanical release (due to size of area) prior to final removal.