

General Considerations of the mt. Timpanogas problem are: The aspen grove area is located on the east side of mt. Timpanogas at the base of a range of majestic Alpine Peaks. The mountain peaks themselves tower up to 12,000 feet and support permanent snow banks. The precipitous nature of the mountain allows for distinct zonation but because of the instability of the slopes a typical zonation is inhibited in many places. The evidence topographically indicates a relatively young mountain with recent glacial action, erosion etc. Many of the present physical factors as seasonal snowslides, rock slides, exposures, winds and moisture play an interesting part. The area represents the Canadian zone with the Hudsonian zone tinging down along favorable exposures and stream channels.

Research Area A-5-17-40

Established research area A-5-17-40 in a climax montane forest at aspen grove. While the area is typical climax, is rather limited in extent. It represents a north exposure and adjacent to a creek lined with spruce and Cottonwood. Considerable evidence of human interference in the form of established trails and habitation. Area supports stand of conifers in all sizes with evidence of some tree which having reached maturity have fallen over. Others felled by man. Shrub layer poorly developed. Surface of ground supporting an accumulation of conifer needles, dead stems and normal debris accumulation. Soil dry. Examined three conifer with ages of 100-134 and 102. The *Symphoricarpos rotundifolia* and *Physocarpa* were the dominant shrubs among the conifers particularly where the sun rays allowed for greater penetration of foliage. In many places the conifers were in such a dense stand that they excluded all types of ground vegetation. The *Amelanchier alnifolia* presented a most elegant site with their conspicuous white flowers contrasting against the dark green of the conifer background. The following plants were observed in the 5 acre area:

Abies concolor

Pseudotsuga mucronata

Physocarpus malvaceus.

Polemonium albidiflorum.