

VARIATION IN AND ECOLOGY OF ASPEN

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Objectives involve studying the reasons for variation between aspen populations in Wyoming; studying the variability of aspen within specific populations; and determining the significance of this variation in relation to soil, water, wind and spacing characteristics.

In pursuit of these objectives the stands along Pacific Creek have been used as samples. These have been studied on an individual clone, tree and sucker basis for the past ten years.

A May visit to the Jackson Hole Biological Research Station was used to determine the distribution of sex classes in aspen clones. It was found that clones were uniformly of one sex or the other. Male clones were more common but both male and female clones were found at all elevations on both favorable and unfavorable sites. During June the maturation and dispersal of seed was watched in detail. Viable seed (determined in the State Seed Lab.) was produced near Moose. In late September another visit to the Biological Research Station was used to determine if the production of fall colors and the dropping of leaves was also clonal. Clones were found to differ in the time they turned, the color they turned, and in the persistence of leaves on the trees.

Since aspen are the barometer, from the point of view of the range manager, of elk management practices, the better the understanding of the aspen the easier will be the task of maintaining a healthy elk herd.

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