# Alfalfa Plant Loss in Relation to Time After Establishment and Environment. (C03-barta104723-Poster)

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### **Abstract:**

Alfalfa plots were established at three sites in 2000. Within each plot a drilled row was thinned to 25 plants, a minimum of 2.5 cm to their nearest neighbors. Each plant was numbered and the average distance to its nearest neighbor recorded (DNN). Selected plots were destructively harvested at each clipping event and at plant dormancy (Nov.) and initiation of spring (April) growth. Number of plants lost over the interval from the previous harvest, environmental conditions, and harvested plant parameters were recorded. Plant loss was minimal the seeding year and during the first winter. Loss of plants accelerated at sites 1 and 2 during spring 2001. Rate of loss declined during the dry summer period. Loss of plants at all sites during spring 2002 was high. Although the soil was very wet during spring 2001and 2002, rainfall amounts were not excessive. Plant loss appears to correspond to soil moisture extremes and probable damage from root disease. Plant loss during springearly summer appears higher than over-winter plant loss. Plant loss does not appear to be correlated with DNN suggesting competetion in the thinned plots is not a major factor in determining loss.

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