Kenai Peninsula Sulfur Trial on Forage Grasses

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Alaska Cooperative Extension Agronomy Specialist Ray Gavlak, and Kenai Peninsula District Agent Tom Jahns, have enhanced the Kenai Peninsula local environment while increasing yields and profits for timothy growers.

For nearly a decade declining yields were seen by Kenai Peninsula timothy hay growers, whose product is important feed for the area’s horses. Many growers applied higher and higher rates of locally available urea fertilizer with little yield improvements, but with potentially damaging environmental contamination from runoff.

To address the problem, Gavlak and Jahns conducted sulfur-based fertilizer supplement experiments. The trials showed that excessive nitrogen applications had created a chemical imbalance within the timothy plants, reducing their yield. Based on the trials, Gavlak and Jahns recommended a fertilizer rate of 80-60-60-16 lb. per acre (nitrogen-phosphorus-potassium-sulfur).

The new fertilizer application has paid off for the hay growers. Several are getting double and sometimes triple yields with the use of the recommended fertilizer. Although the new fertilizer costs $30-40 more per ton, profits are up by as much as 200%. In 1998 3,700 tons of hay were harvested on 2,300 acres, worth $780,000, the highest values ever for this area.

Gavlak and Jahns work with the farmers on this project through forage workshops and word-of-mouth, and Kenai Peninsula Farm Bureau helped coordinate and support workshops.