

WHAT IT TAKES TO GROW TIMOTHY¹

There is a constant demand for quality timothy hay at California race tracks and for export to Japan. It is not unusual for quality timothy hay to sell for prices exceeding \$150 per ton.

The challenge is to establish clean, pure stands of timothy and to produce consistent yields of quality timothy hay that meet the expectations of the race track, and export hay markets.

Stand Establishment

Growers throughout the intermountain region of northern California have attempted to establish and grow timothy hay for many years. The first and often most frustrating hurdle has been to get a pure, weed-free, stand of timothy established.

Field Selection

It is essential to start with a weed-free field in which a firm and uniform seed bed can be prepared. Perennial grass weeds create a serious problem for growers because there are no selective herbicides available to take perennial grasses out of timothy stands.

Uniform, firm, seedbeds are required because timothy is a small seeded grass which requires precise shallow seed placement.

Seedling Vigor

Many perennial grass seedlings are slow to develop into mature, established plants. Therefore, during the germination and seedling development stages they are vulnerable to competition from aggressive weeds. Timothy is perhaps the most difficult perennial grass to establish in northeastern California.

Irrigation

Uniform, and frequent, irrigation is required to germinate and establish a timothy stand. Most timothy fields in the intermountain area are flood irrigated. Some growers have used wheel line sprinklers to establish uniform seedling stands before switching to their flood systems.

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Weed Control

Broadleaf weeds can be selectively controlled by using appropriate selective herbicides in young timothy stands. Grass weeds, however, present a serious problem and can prevent the successful establishment of uniform, clean timothy stands. Most growers have resorted to selective hand weeding to remove unwanted grass weeds when feasible.

Stand Management

Once established, most timothy stands are cut twice each season for hay in our region.

Research conducted at the Intermountain Research and Extension Center at Tulelake identified timothy varieties which are adapted to the intermountain region and are capable of producing hay yields exceeding 5 tons per acre in a two cutting system.

Fertility Management

Timothy requires a balanced nutrient environment for optimum yields. In northeastern California, sulphur and phosphorus deficiencies need to be corrected and annual nitrogen applications ranging from 100 to 200 units of N per acre are often used.

Stand Life

Uniform, clean timothy hay fields are difficult to maintain for more than four or five years of productive stand life in northeastern California.