

***On-farm conservation/improvement of forages in Norway***

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The best way to preserve forage genetic resources is to use them. Up until the 1950s many landraces of timothy and red clover existed in Norway. The landraces were, through generations of regeneration by local farmers, adapted to the local climatic and management practices. Almost all of these landraces were lost before we saw the value of preserving them. Our idea is to recreate/produce new landraces by restarting the processes that created them. We want to create landraces that are adapted to a variety of climatic and management practices. The project will start by producing three broad genepools in timothy (*Phleum pratense*), meadow fescue (*Festuca pratensis*) and red clover (*Trifolium pratense*), the three most used forages in Norway. We will use seeds of all the accessions in the Nordic Gene Bank, including some commercial cultivars. These will be intercrossed in two generations followed by one generation of seed multiplication in different parts of Norway.

A suitable mixture of the three species will be made and the seed distributed to selected farmers in different parts of Norway. As a general rule the farmers will harvest their meadow for two production years and harvest seed on part of the meadow the third year. The farmer will use this seed to establish a new meadow with the appropriate mixture. A seed sample will be stored from each generation and location under long-term storage conditions for further reference. The project will start in 2003.