Managing perennial pastures

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The Prime Pasture Program over the last 2 years has demonstrated and evaluated practices for managing perennial pasture to provide guidelines about management of pastures which ensure persistence and deliver high productivity and profitability.

Field Demonstrations

24 paired paddock demonstration sites have been established throughout the slopes and tablelands. In conjunction with landholders, district practice is compared against 'improved managment' at each site, *e.g.* regular or high fertiliser inputs, liming, strategic grazing or various forms of rotational grazing. Sites are located at: Ben Lomond, Boorowa (3), Cowra, Harden (2), Man-dagery, Oberne Creek, Tarago, Binalong, Bungendore, Cundumbul, Holbrook, Morven, Scone, Walcha, Bombala, Collector, Delungra, Lad-smith, Newbridge, Somerton, and Yeoval.

Early results

Water use by pastures has been monitored using gypsum blocks (placed at 200, 500 and 900 mm) at four sites (Cundumbul, near Wellington; Boorowa; Ladysmith and Morven, near Culcairn). Lucerne dried out the profile to 900 mm, perennial grasses to 500 mm, whilst winter growing annuals were only effective to 200 mm. Both lucerne and perennial pastures make use of ground water all year round and particularly in the critical summer period.

Strategic grazing - Binalong A fescue and sub clover pasture sown in 1989 and badly over-run by Yorkshire Fog had been conservatively set stocked @ 5 DSE/ha with mobs of 200 sheep in the paddock for long periods. A flexible rotation with larger mobs (1,200 or 30/ha) grazing for shorter periods commenced in 1994. Cattle were also used to control the Yorkshire fog. After 12 months the fescue component rose from 3.5% to 18% and sub clover from 18% to 24% with Yorkshire fog reducing from 50% to 22%. Carrying capacity has risen to 9 DSE/ha for the year and yet the paddock has been grazed for 25% fewer days.

Topdressing pastures with lime - Binalong Lime was applied as a topdressing at Nil, 1.25 and 2.5 t/ha in June 1994 onto a pasture with soil pH of 4.3 $CaCl_2$. After 12 months 2.5 tonnes of lime raised the soil pH to 5.05 with the lower 10 cm having a pH of 4.6. However, 1.25 tonnes of lime was only effective down to 5 cm. These results suggest topdressing with lime can have beneficial effects in acidic soils.

High versus low fertiliser strategy at Bombala A new fescue/phalaris/sub clover/white clover pasture was sown March 1993 on low fertility coarse granite country. The paddock was split in two in March 1994 and either 125 or 375 kg/ha superphosphate was applied. Stocking rates were one third greater on the high fertiliser paddock. In September, despite dry conditions, (9 mm since mid June), weaners on the heavily supered side maintained their weight while those in the low super paddock, weaners lost over ½ kg/hd in 6 weeks.

Prime pasture management guide

A management guide is currently being written and will soon be available at a cost of $25.00. This guide contains information from NSW Agriculture's district staff, outlining practical aspects on more than 30 topics involved in pasture management. The original pasture establishment guide, providing a simple 8-step plan to ensure successful establishment (conventional or direct drill), contains practical 'hands-on' information on all aspects involved in sowing pastures successfully. Like the new pasture management guide, it is available from NSW Agriculture, PO Box 408, Queanbeyan, 2620 as outlined in the Prime Pasture brochures.