## Rotational grazing on the Stony Hill Grazing Co-op

The Stony Hill Grazing Co-op is located on the south side of the Cypress Hills, in southeastern Alberta. Grazing occurs on lease land and the Co-op has worked for many years with Public Lands and PFRA on ways to improve range management. Initially one pasture was a four section field of mostly native rough fescue, with some smooth brome on old cultivation. In the early 1990s the practice of placing salt in the same locations within the field, at the top of drainages, was changed to moving salt to new locations every time a salt block was required. This change in salting, coupled with water development of an upland spring, in 1992, started to show benefits. Cattle distribution became more uniform and less use was made of riparian areas. The condition of woody plants began to improve in coulees, draws and along Grant Creek. In 1999 Co-op members and agency staff decided a cross fence would further improve the initial results. The one large field was divided in half with a fence that followed natural topographic boundaries. Grant Creek flows through both fields.



One of the benefits of rotational grazing has been better water storage in the riparian area and season long flows in Grant Creek.



These fields are grazed with 268 cow/calf pairs and about eight bulls. The sequence of grazing starts about June 1 and the first field is grazed for a month. Cattle are then moved into field two where they stay for two months, until late August. This provides substantial growing season rest to field one, which is then regrazed for the month of September. Field two gets growing season rest both early and late, especially beneficial for woody plants which can suffer heavy browsing in spring and fall.

In this rotational system the sequence of pasture use changes every four to five years to facilitate maximum rest and regrowth of woody plants in the riparian areas of one field, then the other. When one field has had multiple years of growing season rest, in spring and fall, woody plants develop better resilience to grazing. This system of rest and planned use has allowed the recovery of woody plants in field two and the recovery of sedges in both fields, while maintaining the same amount of grazing that occurred before the changes.

The changes in Grant Creek are dramatic with the rotational system, and other management shifts. Forage production increased from about 600 lbs/acre to 6000

lbs/acre, a ten-fold improvement. That forage production is a reflection of the recovery of the riparian sponge that traps and holds moisture. Water flowed in Grant Creek, in the rotational pastures, throughout 2001, the driest on record for 130 years. Water quality is now higher; water is less turbid because the highly erodable soils are glued together with dense growth of sedges. These sedges have trapped substantial amounts of sediment; in places up to 10 cm in four years. Willows are reestablishing and their height and vigour are improving. With woody plant recovery, better snow trapping will occur and the watershed will store more water.



