



South Saskatchewan River Watershed AEGP

April 2015

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Contact Us Today!

South Sask River Agri-Environmental Group Plan Technicians

Leah Tallis
306-254-4463
306-291-7499
leah.aegp@gmail.com

Kerry Lowndes
306-463-4942
306-460-4987
kerry.wssk@sasktel.net

Off-Site Watering – Make \$sense?

By Jeremy Brown, PAg
Agrologist, Water Security Agency

If we assume that all producers are in agreement on the animal health and water quality benefits to providing water in a trough, what are some other considerations?

Keep in mind that it is not always necessary to fence the water source off completely. This means that livestock can still go to the source (creek, dugout, slough, lake, etc.) in the event that the trough goes dry. In most cases, they will choose clean water with solid footing (at the trough) over tromping in the mud (at the source).

So, what are the economics of pumping water? Can we recover the costs associated with this practice? How can available funding grants help?

Research has shown that cattle getting clean water in a trough can gain anywhere from 3%-20% better than those drinking directly from the source. This seems to be due to the fact that the clean water is more palatable, so the animals drink more (and interestingly, drink faster). The result of higher water intakes is more time spent grazing and higher weight gains. Let's look at an example and consider the cash costs and benefits of providing water in a trough:

Example Off-Site Watering Budget		
Extra Costs:		
Solar Water System (including trough)		\$2,500.00
<i>less: FRWIP Funding (50%)</i>		<i>-\$1,250.00</i>
<i>less: SaskPower Incentive (50% up to \$500)</i>		<i>-\$500.00</i>
		<hr/>
Producers Cost:		\$750.00
Extra Income:		
100 head x 0.1 lbs/day x \$2/lb		\$20.00/day
Days to Recover Costs:	(\$750/\$20 per day)	38 days

Assumptions:

- A 100 head cow-calf operation, summer grazing five months (150 days) a year.
- When provided water in a trough, calves gain 5% (0.10 lb/day) extra.
- Remote solar watering system (including battery, trough) costing \$2,500.
- Weaned calves selling for \$2.00/lb.

In this example, it takes just over a month to pay for the capital cost of the system. After the first grazing season, the economic benefit from the extra calf gains alone equals \$3,000 per year. Now add in the animal health and environmental benefits...does off-site watering make sense in your situation?

Under the Farm and Ranch Water Infrastructure Program there is 50% funding of remote watering systems, for eligible producers and projects. Contact your AEGP tech for details.

Upcoming Events

Leader Weed Tour

June 16, 2015

Elbow Weed Tour

June 22, 2015

Blaine Lake Weed Tour

July 7, 2015

Birch Hills Weed Tour

July 8, 2015

CDISC Field Day Outlook

July 9, 2015

Native Prairie Appreciation Week (NPAW) Tour

June 18 & 19, 2015

Prince Albert, SK

www.pcap-sk.org

Saskatchewan Pasture Tour

August 6, 2015

Earl Grey, SK

www.saskforage.ca

MoA Events

www.agriculture.gov.sk.ca/

Calendar

Resources

Is Your Water Safe?

To test water quality for drinking or livestock contact your RM office or Regional Health Office

For More Information Visit:

www.saskatchewan.ca

Search Water Testing

Phone: 306-787-7138

Rural Water Quality Information Tool

On-line tool assesses the quality and suitability of raw water sources for privately owned and operated water supplies.

<http://www.agric.gov.ab.ca/app84/rwqit>

Grazing Systems

By John Hauer, PAg

Regional Forage Specialist, Ministry of Agriculture

There are numerous types of grazing systems. In the past a common grazing system was the continuous grazing system. In this grazing system the cattle were let into the pasture in the spring and grazed the field until they returned home in the fall. This system requires minimal day-to-day management and low fencing and water development costs. However it is not always best for the health of the desirable forage plants. In this system cattle graze the pasture unevenly.

Cattle graze small patches of forage at a time. Under favorable conditions forage plants in this patch will re-grow in as little as three to seven days. This re-growth is lush and nutritious. Cattle will search out and re-graze this lush re-growth possibly several times during the growing season. To remain strong and healthy, plants need several weeks of effective rest before they are re-grazed. If plants are allowed to be re-grazed before they have had this rest they will become weak, produce less and even die. These desirable forage species will be replaced in the forage stand by less desirable species and the productivity of the pasture will decrease.

One way to improve pasture health is to adopt a rotation type of grazing system. The cattle are grazed on a smaller paddock for a shorter time. The cattle remove the forage uniformly, and then are moved to the next paddock. The forage in the grazed paddock then has a period of effective rest to replenish its root reserves.

Let's look at our first example of a continuous grazing system. By building a cross-fence down the middle, the field has been split in two. If one half is grazed then the cows are rotated to the other half, a simple rotation grazing system has just been created. The cattle are on each paddock for 1/2 of the grazing season instead of the whole season. The amount of effective rest for the forage plants has just been doubled. Similarly splitting the field into four paddocks would give four times the rest. For more information contact your Regional Forage Specialist, Sask. Ministry of Agriculture.

Under the **Farm Stewardship Program** there is 50% funding of Native Rangeland Grazing Management and Fencing, to a maximum of \$10,000 for eligible producers and projects. Contact your AEGP technician for details.



Photo Credit: Jeremy Brown

Recycling Agricultural Materials

Grain Bag and Twine Collection Sites:

Unity- 306-228-2893

Humbolt- 306-682-1955

Rush Lake- 306-784-3121

Cudworth- 306-682-1955

Prince Albert- 306-960-5299

Saskatoon- 306-933-2343

Empty Pesticide and Fertilizer Containers:

For collection site locations visit www.cleanfarms.ca

Used Oil Recycling, Batteries and Household Waste:

www.saskwastereduction.ca

Pesticides & Vet Supplies:

Clean Farms picks up obsolete or unwanted pesticides and certain vet supplies every 3 years at designated local retailers. Sites vary depending on the year.

A Significant Threat to Native Prairie

Reprinted from Beef Business magazine's Sept 2014

Invasive plant species are non-native plants introduced outside of their natural habitats. In this new environment, free from their natural 'enemies', they have an advantage that allows them to out-compete native plants for space, moisture and nutrients. On native rangeland, invasive species pose a significant threat to grassland biodiversity, and are often extremely difficult to remove once they're established. Examples of invasive species found in Saskatchewan native grassland include weeds such as leafy spurge, common tansy, burdock and downy brome, as well as introduced agronomic grass species such as crested wheatgrass and smooth brome grass.

Many of the invasive species we battle today first appeared in Canada's grasslands as early as the mid-19th century, when European settlers began importing seeds - both deliberately for agricultural use and accidentally through contamination by weed seeds. Unfortunately, some of these imported seeds have become invaders of native grassland, due to their aggressive growth habits and lack of natural predators. Other routes of entry for invasive species have come more recently and include grassland recreation, such as camping, hiking, and motorized vehicles, all of which can contribute to the inadvertent spread of invasive seeds.

As cattle producers, we get upset when invasive species show up in our grasslands as we know their spread reduces the carrying capacity and forage quality of pastures and thus impacts our bottom line. There is also the associated cost of controlling these weeds, both in terms of management time and potentially expensive control methods. But did you also know that the spread of invasive species can have a negative impact on biodiversity and on the habitat for many native prairie species?

Invasive species move into native rangeland and can alter the plant community and structure of native prairie, upsetting the fine balance in these ecosystems and reducing their ability to function to their potential. In areas of native rangeland where species at risk may be present, invasive species can be devastating to populations of plants or animals that are already under stress.

A recent, extreme example was taking place in an Environmental Reserve near Medicine Hat where protected, critical habitat for an endangered plant, Tiny Cryptanthe (*Cryptantha minima*), was becoming dominated by the invasive plant baby's breath (*Gypsophila paniculata*). A project in May of 2014 saw cooperators come on to the site where they removed nearly 22,000 baby's breath plants in a massive effort to control this highly invasive weed. The intent will be to continue monitoring the site to locate and remove weeds as well as gauge the impact on Tiny Cryptanthe and other native plants.



Tiny Cryptanthe (*Cryoatantha minima*)
Photo Credit: Candace Elchuk ©
Environment Canada

So what can land managers do to reduce the impact of invasive species? The most effective, economical, and ecologically sound approach to managing invasive plants is to prevent them from invading in the first place. Land managers often concentrate on fighting well-established infestations, at which point management is expensive and eradication is unlikely. Infestations

must be managed to limit the spread of invasive plants, but weed management that controls existing infestations while focusing on prevention and early detection of new invasions can be far more cost-effective.

Under the Invasive Plant Control Program administered by SARM, there is funding available to assist rural municipalities and private land owners control Prohibited Weeds and certain Noxious Weeds.

The **South Saskatchewan River Agri-Environmental Group Plan** is a producer based group dedicated to raising watershed awareness among local area farmers and ranchers. Producers within the boundaries of the South Sask River Watershed are able to

access the **Canada-Saskatchewan Farm Stewardship Program.**

The CSFSP provides **cost-shared funding** to encourage the implementation of **Beneficial Management Practices.** The BMPs help address issues of water quality, nutrient management and soil erosion within the watershed.



Website Links

South Saskatchewan River Watershed Stewards
www.southsaskriverstewards.ca

Ministry of Agriculture Webinars
www.agriculture.gov.sk.ca/Webinars

Water Security Agency
www.wsask.ca

Saskatchewan Forage Council
www.saskforage.ca

Sask Invasive Species Council
www.saskinvasives.ca

Prairie Conservation Action Plan (PCAP) www.pcap-sk.org

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306-254-4463

306-291-7499

leah.aegp@gmail.com

Kerry Lowndes

306-463-4942

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kerry.wssk@sasktel.net

We can direct you to technical support and help with applications for the **Farm Stewardship Program, the Farm & Ranch Water Infrastructure Program, and the Invasive Plant Control Program.**

**CONTACT US
TODAY!**

**Environmental
Farm Plans on-line
April 1, 2015**

Farm Stewardship Program

Beneficial Management Practice	Funding Level	Pre-Approval/ Rebate
Livestock Site Management		
Relocation of Livestock Confinement*	60% to \$50,000	Pre-Approval
Fencing to Protect Surface Water*	50% to \$10,000	Rebate
Farmyard Runoff Control*	50% to \$30,000	Pre-Approval
Riparian Area Grazing Management and Fencing*	50% to \$10,000	Pre-Approval
Native Rangeland Grazing Management and Fencing*	50% to \$10,000	Pre-Approval
Carcass Disposal Planning	75% to \$30,000	Pre-Approval
Manure Management		
Manure Storage Enhancements	30% to \$50,000	Pre-Approval
Manure Application Equipment and Technologies	30% to \$30,000	Rebate
Land Management		
Natural Waterway Erosion Control*	75% to \$30,000	Pre-Approval
Creek and Stream Crossing*	50% to \$20,000	Pre-Approval
Native Plant Establishment*	75% to \$10,000	Pre-Approval
Protecting High Risk Erodible and Saline Soils*	50% to \$10,000	Rebate
Shelterbelt Establishment	\$1200/mile to \$5,000	Rebate
Water Flow and Erosion Control*	50% to \$20,000	Pre-Approval
Weather Data Collection & Monitoring	50% to \$1,000	Rebate
Irrigation Management		
Irrigation Management Planning	50% to \$2,000	Rebate
Irrigation Equipment Modification	30% to \$50,000	Pre-Approval
Variable Rate Irrigation Technology	30% to \$15,000	Pre-Approval
Precision Farming		
Variable Rate Fertilizer Equipment	30% to \$5,000	Rebate
Variable Rate Mapping	30% to \$2,000	Rebate
Agricultural Wastes		
Used Oil Storage	50% to \$2,000	Rebate
Plastic Grain Bag Roller	50% to \$5,000	Rebate
Environmental Solutions		
Environmental Solutions	20-50% of \$50,000	Pre-Approval

***Available through AEGP without EFP, all BMPs available with an EFP**
There is a Multi-Producer Erosion Control BMP. Contact AEGP tech for details.