Forage Fact #2

Date:
September, 2000

Wisdom from Watering Holes

Considering Alternatives to Dugout Watering

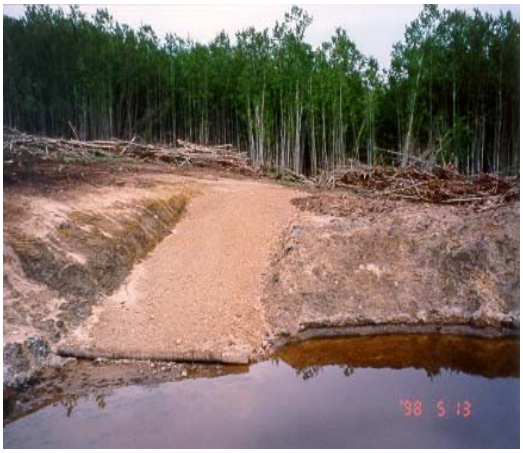
Water Wisdom:

* Animal health/nutrition advantages are a major bonus of offsite watering systems.
* Funding is regularly available to assist livestock owners to set up watering systems.
* Good water is essential to good pasture & livestock management for a proper economic return.

The watering systems of a ranch play a key role in the pasture management plan. Several options exist when planning a water system. Animals can be watered directly from the dugout or the water can be removed from the dugout and placed in a trough or tub for the animals.

There are 3 main problems with watering livestock directly from dugouts without a ramp, or some sort of offsite watering system. First of all, they will be forced to drink muddy water, due to the disturbance they cause, which can lead to intestinal problems. Secondly, they are also more susceptible to foot rot, because they are exposed to the conditions which are favorable to this illness. Thirdly, livestock tend to destroy the dugout by tramping soil back into the dugout.

Horst David, of Tomslake, built a ramp with geo-grid plastic and crushed gravel. Horst says, "The cows seem to do better and prefer to drink the water from the gravel ramp rather than from the muddy edge of the dugout."



Horst David built a ramp with geo-grid plastic and crushed gravel.

Nose Pumps and Gravel Foundations

For more information about water systems call :

* Glenn Hogberg at (250) 843-7653,
* Ben Hansen of Taylor at (250) 789-3484, or
* Garth or Brett at the PFRA office in Dawson Creek at (250) 782-3116.

To remove the water from the source and provide it for the animals in a trough or tub, several different systems are available that have been successfully used in the Peace River area.

Nose Pumps: A nose pump is a small pump which enables the cows to pump with their nose as they desire water. The Peace River Forage Association of BC (PRFA of BC) has 3 nose pumps for rent, a Lister, Ider and Aquamat. These water pumps can water approximately 35 head.

Glenn Hogberg, of Progress, has laid down a foundation of grade one gravel on a snow fence around the nose pump. The gravel allows the water to filter though and penetrate the soil without making it muddy around the waterer. The snow fence prevents the gravel from being worked into the ground and disappearing. In essence this foundation prevents erosion around the waterer.

Published by P.R.F.A. of BC:

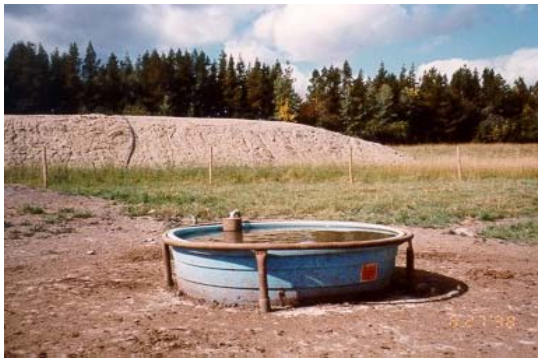
P.O. Box 908

Dawson Creek, B.C.

V1G 1L6

Peace River Forage Association of British Columbia

Methods of removing water from the dugout



A gravity fill watering system filling a water tub on a ranch in Cecil Lake area .

Glenn Hogberg also has a gravity watering system. Glenn said, "My dugout fills 7 water tubs, four 300 gallon (gal) tanks and three 100 gal tanks. The tubs' water flow is governed by a Gallagher float and fills by gravity from a PFRA assisted dugout. I think that the 300 gal tubs are better than the 100 gal tubs because more cows can water at one time."

Ben Hansen, Taylor, has a solar pump, but his solar pump fills a water tub that is controlled by a float. As the cows have access to this tub, it fills. He would like to add a holding tank to his system. The holding tank would be located close to the solar pump; therefore, less pressure would be needed to fill this tank than the cows' water tank further away from the dugout.

Ben Hansen has also developed a foundation to go under his watering tubs. "I like to lay geo-grid, plastic that pulp mills use to strain pulp, then a layer of used rubber tires (any old size will do), then I pour crushed gravel overtop of the tires and carefully fill them. The finished product is a packed, stable watering foundation for the cows, that resists erosion due to the traffic and water spillage." His 450 gallon water tub sits in the middle of his foundation.

Arnold & Nelda Bennett of Two Rivers, use a windmill to pump water from their dugouts.

Arnold & Nelda Bennett, of Two Rivers use a windmill to pump water from their dugout.

Fred Burres, of Farmington, pumps his water out of his dugout with a solar water pump. He has a completely portable system that moves between several dugouts during the course of the grazing season.

Fred Burres of Farmington, uses a solar pump to pump stock water to a tank loaded on his truck.

Ben Hansen's foundation of geo-grid and rubber tires filled with crushed gravel.

Summary Comments about Watering Systems

When developing a watering system one must plan whether they are going to water directly from their source of water or at a separate offsite location. If one wishes to move the water then a plan must be made as to how the water will be removed and where it will be stored. There are many options available to the forage manager for improving their watering systems. Our advice is: go out, look at what other ranchers have done, then consider how it could work in your own situation.

This Forage Fact is the first of a series dealing with water. In future ones we will cover in depth other offsite delivery systems such as:

* gravity flow Mirafonts,
* gravity flow out of dugouts using centrifugal gas pumps and storage tanks,
* windmill pumps, sling pumps for rivers more on geogrid/ gravel pads and
* other methods of stabilizing watering areas for cattle.

Compiled by: Julie Robinson and Sandra Burton in the Fall of 2000
Water Projects Financially Assisted by: Prairie Farm Rehabilitation Administration office in Dawson Creek
Forage Fact s Project Funding: The PRFA of BC thank all the donators and supporters at their Forage Goods & Services Auction on Feb. 5, 2000.