

H2C– We Have Plastic Mulch!

In the spring of 2012, H2C successful placed 17 rolls of plastic mulch into the arms of area ratepayers. This mulch was used on new shelterbelt establishments and this spring, we have more plastic mulch for more ratepayers!

Shelterbelts can be of great value to farm operations, acreages and for aesthetics. Plastic mulch helps lessen the cost and time involved in getting newly planted trees off to a very important strong start.

With the aide of Agriculture and Agri-Food Canada– Science and Technology Branch, mulch is applied to trees and reduces watering and weed control needs.

Contact H2C at (780) 349-3346 ext. 249 for details and to book your mulch today!

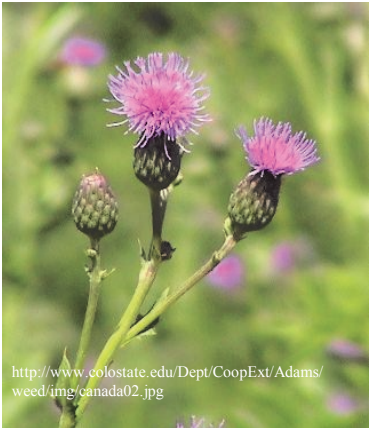
Thistle Stem-Mining Weevil: A Different Option

In the fall of 2012, thistle stem-mining weevils were purchased from West Central Conservation Association for use in Highway Two Conservation municipalities. Five locations were selected for release with the intention of monitoring the development of these helpful insects in 2013 for possible use in the on-going war against Canada Thistle. These sites will be re-visited in the coming season to determine if the insects overwintered, if they have spread, if they are thriving and most importantly, if there is a notable difference in Canada Thistle populations.

Though this particular bio-control agent has been in North America for many years, no populations within north-central Alberta have been successfully established.

If producers are considering a bio-control option in their operations, it is important to understand that the control these beneficial insects offer is not an overnight solution. For the insect to have high impact on the weed infestations, populations must be high. Thistle Stem-Mining Weevils are effective but for quick control, the number introduced must be high or producers must use another Integrated Management Technique.

Highway Two Conservation will be ordering weevils in the fall of 2013. Those interested in participating can call (780)349-3346 ext.249 and be added to a list. The price of these wonderful little bugs cannot be quoted until it is established in the coming season.



ISSUE

04

Spring/Summer

A SEASONAL

NEWSLETTER ON

AGRICULTURAL

CONSERVATION IN NORTH

CENTRAL ALBERTA

Conservation Tidbits

this issue

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EFP Workshop- Coming to the County of Barrhead

Times are changing and the reasons a producer has for completing an EFP are changing as well. As markets shift to an increased focus on sustainability, it makes sense to be prepared.

In March of 2013, Highway Two Conservation and The County of Barrhead will host an EFP Workshop. Whether a producer is looking at updating their EFP, completing one initiated long ago or just starting the EFP process, all producers from H2C municipalities are invited to attend.

Lunch has been generously sponsored by Neerlandia Co-op. Details still to come. It is not too early to register though. Call (780)674-3331 and get your name on the list. Workshop registration is limited to the first 25 registrants.

Westlock County– Last Year for Tansy Incentive

Common Tansy is a persistent weed that grows in areas that do not see tillage on a regular basis. As such, it is frequently seen in pastures, hayfields and ringing fields where the cultivator cannot get at it. In response to this growing issue, Westlock County launched the “Tansy Incentive Program” in the spring of 2011. The program offered a three year term and provided approved participants a 50% incentive on the cost of the herbicide they used to control common tansy infestations on their land. The first year was slow as word got out to County ratepayers about the program but participation grew quickly. This past summer, there were over 35 participants in the program and many infestations were brought under control.

This growing season is slated to be the last for the program and Westlock County Agricultural Services Manager Jacolyn Tigert, is urging ratepayers to sign up early to avoid disappointment. Many ratepayers have already signed up for 2013 season and the program is offered on a first-come-first-served basis.

It is important to remember that Common Tansy is not a one year problem. After an infestation has been brought under control, the seed bank can keep throwing more tansy at a land owner for as much as twenty five years. After control of the original infestation has begun, it is in landowners best interest to remain aware of the plant and deal with new ones as soon as possible.

Common Tansy begins growing early and is easily identified in late May to early June.



Recognizing the plant early gives landowners the most options for control and if caught in the seedling stage, the cost of control is significantly reduced.

If you would like to participate in Westlock County’s “Tansy Incentive Program”, call (780)349-3346 and get your application filled out early!



Upcoming Events– Watch your local paper for dates and times or call Highway

Two Conservation for more information and early registration!!

Athabasca County

- Highland Feeders Tour
- Grazing and Animal Behaviour
- Weed Wise/ Weed Incentive Program
- Pond Days
- Pasture Tour

County of Barrhead

- Explore Local Seminar
- EFP Workshop
- Working Well Workshop
- Pruning and Shelterbelt Establishment
- Highland Feeders Tour
- Pasture Tour
- Pond and Farm Safety Day
- Septic Workshop

Sturgeon County

- Shelterbelt Establishment
- Canning Workshop
- Pruning Workshop
- Highland Feeders Tour
- Pond Days
- Richardson Ground Squirrel Control
- Grazing Small Pastures Effectively
- Weed Wise
- Shock Chlorination
- Septic Workshop

Westlock County

- Tansy Incentive Meeting
- Canning Workshop
- Highland Feeders Tour
- Pond Days
- Septic Workshop



For More Information Contact:
Highway Two Conservation
Sheila Wooten
Conservation Coordinator
Ph: 780-349-3346 ext. 249
Cell: 780-206-7326
swooten@westlockcounty.com

A Partnership Between:



Sturgeon County–
Shocking Water
Wells

New for 2013, Sturgeon County Agricultural Services Department will be offering a clean water tank for County residents to rent in order to shock chlorinate their water wells.

Shocking a well is a step outlined in the working well program as good well maintenance in action! This process can help eliminate bio-fouling and coupled with yearly water testing, can ensure the water you drink is uncontaminated.

The tank will be available for bookings in the spring of 2013, along with information on how to properly shock a well, contact numbers for assistance and aide from Sturgeon County Agricultural Services.

With Shock Chlorination, it is vital that steps are properly followed. If the wrong concentration of chlorine is added, it can be ineffective or corrosive to well equipment. As well, it is important to have a clean hose that is the right length for your well.

The first step in shocking is to find your water well drillers report. This report is full of important information as to the particular nature of your well. No two wells are identical and it is best to go in with as much knowledge as possible.

If you are interested in shock chlorinating your well, you may want to give Shawn Elgert a call. Shawn is an Agricultural Water Engineer with Alberta Agriculture. He is available at (780)674-8215.

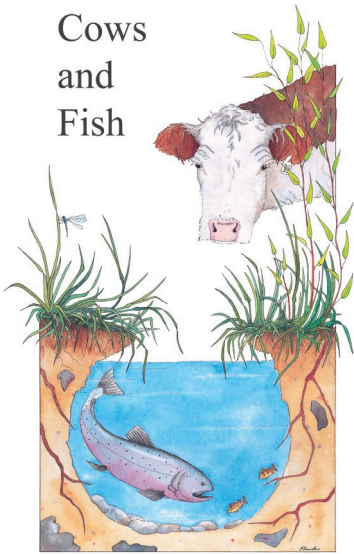
A Word About Water

Lorne Fitch, P. Biol.
Provincial Riparian Specialist
Cows and Fish

Water is important! It's not just grass that makes beef; it also takes water to help process food during digestion. Water is the most important nutrient and is often overlooked. Water shortage seriously affects the productivity of livestock. A cow eats about 12 kg of forage a day (measured as dry material) and requires 40 to 60 litres of water to digest that forage. Water quantity is one factor affecting livestock performance; water quality is also an important consideration. Livestock prefer to drink clean water. Cattle that drink clean water spend more time grazing and ingest more forage. Cattle gain more weight, when clean water is available to them, compared to watering directly from a pond or dugout. In Agriculture and Agri-Food Canada research trials, clean water produced 23% greater weight gains for yearlings compared with direct access to dugouts our ponds. Calves, with cows drinking clean water, gained 9% more weight than those with cows with direct access to ponds. (*Agriculture and Agri-Food Canada; Effects of Water Quality on Cattle Performance, Willms, W.D.*) This research also suggests water palatability, or taste, determines how much water cattle will drink and how long they will spend drinking, to meet their needs.

When livestock have unrestricted access to surface water they can contaminate that supply. While drinking, cattle will drop a load in that water about 25% of the time. Given a choice, cattle avoid

water fouled by even small amounts of manure. Animal manure in water encourages algae growth. A kilogram of phosphorous, derived from animal manure, will spark the growth of 500 kg of algae. Coupled with other nutrient sources, lakes, ponds, dugouts and sometimes rivers and streams can experience large algae blooms. This strongly influences water palatability and some algae may be toxic to livestock. How can we improve water quality, aid livestock distribution and increase livestock performance?



Research suggests that choice can be provided to livestock, often without fencing, by piping or pumping water from surface sources to troughs. In the trials livestock overwhelmingly selected troughs over surface water supply, even though no fences were present to restrict access. When given a choice, cattle drank from a trough eight times out of ten, even if they had access to surface water. Often cattle would walk

further to water at a trough than drink from a stream. Some of this must have to do with the difficulty of access to some surface water- wading through mud on the edge of a dugout or negotiating a steep stream bank. It may also be related to animal security and comfort- the ability to see the surrounding area while drinking. Whatever the reason, it seems to work. Because off-site water changes livestock distribution, it reduces the risk of water contamination and better captures nutrients for plant growth in the pasture.

About 65% of the manure produced will be deposited within 30 meters of bedding and loafing sites. These tend to be riparian areas, so moving water and providing shelter and shade away from streams, ponds, wetlands and lakes will improve water quality. Changing livestock distribution will improve the vegetation in the riparian fringe, which is the zone of critical filtering and buffering. Off-site water is also a way to extend the life of constructed dugouts and ponds, reducing cleaning and re-excavation costs. Conservation of water supply can be another benefit.

If you have surface supplies of water (a stream, river, lake, wetland, or spring) consider building an offsite water system to maintain the supply and the quality. It's good for you, your cattle, and downstream water users. For more information on the information provided in this article, contact Cows and Fish at (403) 381-5538.

Well Users have False Sense of Security
says Survey

by Barb Glen
Western Producer
June 2012

An Alberta study on rural water wells found that most people don't know.

Responses from 1,014 surveys returned in 2010 showed only 10 percent of Alberta water well users test their water well quality at least annually and only 30 percent regularly shock chlorinate it, which involves flushing large amounts of chlorine into the water system.

Approximately 450,000 households in the province rely on wells for their household needs.

Krista Tremblett is the former program co-ordinator for Working Well, an Alberta Environment program initiated in 2007.

She said she was not surprised by the survey results, having learned about the infrequency of water well testing from organizing focus groups and workshops.

"That and the survey told us people don't necessarily see the need or the value in testing," Tremblett said.

The survey, done by the University of Alberta on behalf of the provincial environment department, resulted in eight key findings, among them that 36 percent of respondents with abandoned wells on their properties had properly de-commissioned them.

It also found a low level of knowledge about water sources and a false sense of security about drinking water safety. Lack of money wasn't usually a reason for poor well maintenance.

"It gave us more information on the current stewardship practices of well owners in Alberta, and what were the factors that would encourage or discourage them from adopting certain best management practices like shock chlorination or water testing," Tremblett said.

The survey's executive summary indicates water quality should be a concern for well water users. "Research projects on private water well quality across Canada suggest that about 20 to 40 percent of private wells fall outside of safe drinking water guidelines," it said.

"In a 1997 study of water wells on rural farmsteads in Alberta, more than 32 percent of wells tested exceeded at least one health related contaminant, with 14 percent having total coliform bacteria exceeding limits and six percent showing presence of fecal coliforms."

Tremblett said co-ordinators would use survey results in the next phase of the Working Well program when deciding where to focus their resources.

Key findings of water well survey:

- There is a low level of well maintenance and stewardship.
- Most respondents had little knowledge about the source of well water and well function.
- Most people have a false sense of security about well water safety and unjustified confidence in their water supply knowledge.
- Knowledge of good water well care does not motivate people to practice good well care.
- Health and aesthetic concerns were key motivators for those who did take proper care of water wells.
- Cost is not a significant barrier to good well care.
- Many respondents want more information on taking care of water wells.
- Those wanting information on well care tend to seek it from water well contractors or others in the community.

<http://www.producer.com/2011/06/well-users-have-false-sense-of-water-safety-survey/>

Athabasca County–
Highland Feeders
Tour ;
Grazing Workshop

In the spring of 2013, it may pay to keep an eye out for advertisements!

Athabasca County and H2C will be hosting a tour of Highland Feeders Ltd.– Winner of the National Environmental Stewardship Award for Feedlots in 2001. Since that time, the operation has grown and includes bio-digesters for on– farm energy generation. As Canada's sixth largest feedlot operation, Highland Feeders meets the high standards demanded by today's consumer.

In March, join H2C and Athabasca County in welcoming Cows and Fish Riparian Specialist, Kerri O'Shaughnessy as she provides a Cows and Fish Workshop detailing how the effects of livestock on riparian areas can be lessened by using animal behavior and grazing to your advantage.

Call (780)675-2273 early for more details, with questions and to register!