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Have an interesting topic you want discussed in the Newsletter or municipal meeting? Send suggestions to Asst. Agricultural Fieldman Tanis Ponath, asb@mdwainwright.ca or 780-842-4454

Municipal District of Wainwright No.61

The Municipal Agricultural Connection

Alberta Agriculture and Forestry

Partners in Rural Conservation

www.mdwainwright.ca

Be Mindful of your Water Wells this season. Remember to test all water wells on your property once or twice a year. These test will determine if your well has been contaminated with coliform or Ecoli bacteria. Shock chlorination should also be done at the time of testing, this will clean the well of any biofouling material and help prevent deadly bacteria. Keep the area around your well clean and free of debris. Do not add decorative structures as they can create microclimates that may attract unwanted critters. In addition to the above test , every 2-3 years a chemical analysis should be completed. To test your well visit your local public health office and they will provide you with sample bottles, instructions, and will send your samples away for testing. Lastly, attending a working well workshop will provide you with information and resources to properly care for your well.

Feed Wastage Facts!!

- Livestock trample, over consume , foul, and use for bedding approx 25-45 percent of hay when it is fed free choice.
- Feed daily to reduce wastage. Provide only enough for a daily feeding as this will force livestock to eat feed that might otherwise be refused or trampled
- Over consumption of feed is a form of wastage. A dry, pregnant cow will eat 20-30 percent more hay than is required for her to meet her nutritional requirements. Over a 200 day feeding period, a 1300 pound cow can consume 1560 pounds of extra feed.
- Proper feeder design reduces waste. A round bale feeder with a sloped entry bar design saves feed when cows back away from the feeder. A solid lower section in the feeder prevents feed from being pulled out of the bottom.
- When feeding large round bales, ensure adequate numbers of cattle are present to clean up feed on a daily basis. All cattle should have space at the feeder at the same time. Too much or too little competition for feed increases waste.
- Feed outside, older hay first. Hay stored outside usually has more spoilage during storage and reduced palatability than covered feed. Cattle will waste a greater percentage of poor quality hay than of good quality hay.
- Feed using an electric fence to minimize access and trampling. This is particularly important during times when the ground is soft or wet, by exposing only a portion of the daily feed, cattle will reach under the electric wire and gather the hay by mouthful. Wastage by trampling and soiling only occurs on that hay that they pull out from under the wire.
- When feeding on the ground, select clean areas daily to improve palatability of feed that has been trampled on.
- During the winter months, select feeding sites that are separate from the cows resting area. Purposely select areas that are somewhat exposed to limit the amount of time cows loiter in the feeding area. Typically cattle will come to feed and then return to more protected areas for resting.
- Depending on the market value of feed, the use of a tub grinder or hay processor may be feasible to reduce wastage and increase consumption of an other unpalatable feed.

Saving Energy On– Farm

Energy costs play a significant role in day to day operating expenses on farm. Cost for energy sources such as natural gas, diesel, electricity, and gasoline can vary and sometimes spike unexpectedly leaving you behind. Knowing your energy cost and implementing an energy management plan can help lessen the blow of cost fluctuations and it is better for our environment.

Energy management involves the following 5 main steps:

1. Adding up your energy consumption cost, called energy accounting
2. Assessing your options to reduce energy use and costs
3. Developing an action plan to make your priority changes
4. Implementing your plan
5. Beginning the process again to asses the effects of implementing your plan

First gather all energy bills pertaining to the last 12 months of billing, sort bills by energy sources. If you have several meters for the same energy source also sort them by meter. Lastly, complete bill trackers for each of your energy sources. Examples of bill trackers can be found on the Alberta Agriculture and Forestry Website in the "First Steps to Energy Management" publication. Once you have the bill trackers and summary completed look at what these results show in terms of your energy use and what changes you might look at considering.

Assessing your numbers is the next step. Here are some questions that you can begin to ask yourself:

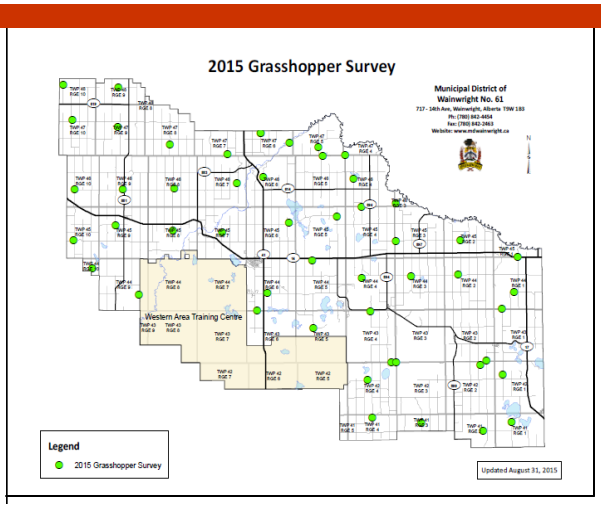
- Has the equipment and buildings been regularly maintained?
- Does the equipment need to run as long?
- Can more efficient equipment be installed?
- Can insulation be added or windows and doors be improved?
- Can operating temperature be reduced?

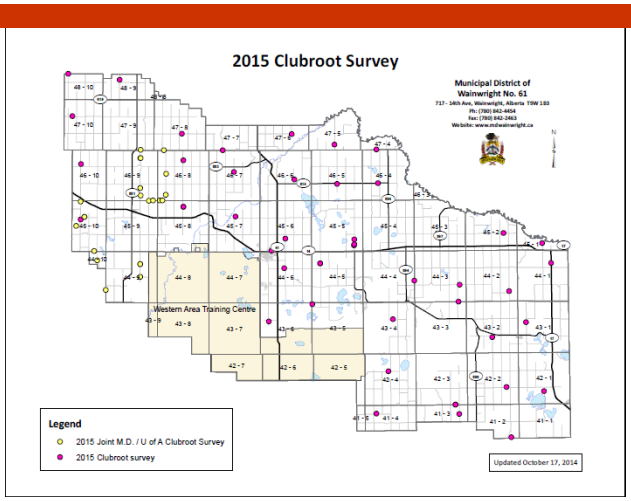
Once you have assessed you numbers, identify the areas where you would like to conserve energy. All family members and farm staff should be included in this step because each person may have different ideas on areas that can save energy. From this you will develop your action plan. The On Farm Energy Management program is offered through Growing Forward 2, it provides funding to help producers become more energy efficient. Listed below are some energy saving tips as wells as eligible expenses under the program

- Switching to T5, CFL or LED lights compared to the widely used incandescent lights
- High volume, low speed circulation fans
- Energy free outdoor livestock watering fountains
- Timers, photo-sensors, motion sensors, and programmable logic controllers for energy saving (for controlling lighting, block heaters, ventilation, heating etc).
- Submeters
- Adding insulation to barns, shops etc
- Installing energy efficient windows

You can contact Tanis at 780-842-4454, if you have questions regarding the On Farm Energy Management Program.

Now that you have developed your plan it is time to implement it. Your entire action plan does not need to be implemented all at once. Different action items can be applied as you go so you can determine what works and what doesn't. The last step is to assess your action plan to determine if it is benefiting your operation.





These two maps showcase where the 2015 grasshopper and 2015 clubroot surveys were conducted in the M.D. To date no clubroot has been found within the municipality. Grasshopper numbers varied from site to site with numbers ranging from low to severe infestations.

Managing Black Knot

Fall , winter, and early spring is a great time to manage black knot on trees. Black knot is caused by the fungus *Apiosporina morbosa* and is a common disease of plants in the genus *Prunus,* examples of these plants are chokecherry and pin cherry. The fungus does not kill trees right away. However, if not managed properly it can result in death.

The most common symptom of black knot is the tar-like swellings that develop on branches of the infected plant. Once a tree has contracted the fungus, it will initially develop small olive green galls or swelling. These galls develop at the growing point of a succulent. The growths will continue to grow and develop until maturity at approx 2-3 years. It is the mature galls that are hard and black. Mature galls produce and release spores during the bloom period, this will result in a massive increase in infection. If not removed, the fungus will continue to grow internally and externally eventually killing the tree.

What can you do to manage black knot?

- Remove sources of inoculum.
- Prune out all knot bearing branches during late fall, early winter, or early spring when trees are still dormant.
- Remove infected branches 15-20cm below the knot. The farther you can prune back the better outcome.
- Make sure to disinfect cutting blades after pruning each tree to inhibit any spread.
- If you have any knots on the trunk, cut away the infected areas. Ensure that you cut at lease 1/2 inch beyond the edge of the knot.
- If not all fungus is removed it can result in re-growth.
- All diseased wood must be destroyed immediately. You can burn or bury the wood. Even after removal knots can produce spores for up to 4 months afterwards .

Prevention:

- Ensure plants are healthy and free from stress.
- Regular monitoring.
- Adequate canopy ventilation which is achieved through proper pruning.
- Chemical control.
- Making sure you have an adequate buffer between plantings and wild stock on your property.
- Hire a trained professional for pruning activities.

Cooks Corner

Crock Pot Rice Pudding

- 3 tbsp of Butter
- 6 cups of 2% milk
- 2 cups of rice (uncooked)
- 3/4 cups of sugar
- 1/4 tsp of salt
- 1/2 tsp of cinnamon
- 1/3 tsp of vanilla extract
- 25 tbsp of brown sugar
- 1 cup raisins (optional)

- Grease the inside of your slow cooker with butter (save the rest for later)
- Add all the ingredients except the butter and mix together
- Dot the top with the remaining butter
- Cook on low for 3-4 hours
- Add raisins in the last hour of cooking
- Once rice is cooked the dish is done, the dish will thicken up once it cools

FarmTech™

FarmTech is Canada's premier crop production and farm management conference.

FarmTech 2016 is officially open for registration!! Take a moment and visit their website at http://farmtechconference.com/. There you will find the agenda, speaker lists, and much much more. This years conference is from January 26-28, hope to see you there.

Be Weed Conscious

The M.D. of Wainwright has got a new brochure!! This is a great tool for active gardeners and the role they play in helping prevent the spread of prohibited/noxious weeds. This brochure gives great alternatives to Alberta's unwanted horticulture plants. Instead of planting Himalayan Balsam which is regulated by the Provincial Government on the Prohibited Noxious Weed list you can plant Shining Penstemon or Gas Plant.

Alarm Systems for Off-Site Watering

Remote watering systems are used by producers to provide an alternative watering system without having to directly use creeks and streams. This improves water quality and promotes environmental stewardship. One of the biggest concerns from producers who have implemented this system is their lack of trust in technology. This left them constantly checking their systems to ensure the batteries where charged and the pump was functioning properly. An alert system would be beneficial to producers to decrease time checking and would increase producer's confidence in the watering system. Off-site watering systems are eligible for funding under the On Farm Stewardship program under Growing Forward 2. If you are interested in applying for this program or have any questions you can give Tanis a call at 780-842-4454.

There is no specific alarm system available to producers specific to watering systems, so Alberta Agriculture and Forestry along with Growing Forward 2 conducted a study that would test current alarm systems to determine if any could be applied to the watering systems. Three different alarm systems where chosen, a line system using a beacon light, a cellular system, and a satellite system. Below is a chart summarizing and comparing each model.

Beacon Light	Cellular	Satellite
-Lights up and flashes -Inexpensive, approx $350.00 -Very easy to assemble -Notification is limited to the line off-site to the alarm system	-Must have a mobile phone -This system includes lots of features, may be more than needed -Expensive to install, approx $6000.00 -Has a monthly cell phone charge on top of installation -Can send texts, voicemails, and emails - Used extensively in oilfield production	-Needs a smart phone to be effective -Sends an email when alarm is enabled -Low power consumption -Has better remote coverage then cellular system -Cost approx. $1500-$2000 -Easy to install, however you need an external company set up alarm system

Producers who tested theses systems where pleased that each system reduced the frequency of site visits. The group thought the polling feature on the cellular system was a good tool for producers to manually check battery life. A problem that was noted that affected all three systems was identified with the low water level sensor during freezing conditions. The sensor has potential to freeze into the ice and a low water level alert was not sent.

Alberta agriculture is hopeful that with this project it will raise awareness of alarm system potential with producers, manufacturers, and vendors.