



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 call 780-842-4454

With many unharvested crops left in the fields we are urging ATV enthusiasts to be mindful of crops that are left out in the field. Many areas may not be harvested until spring. Riding on top of crops under the snow can further damage crops.



The Municipal Agricultural Connection



Partners in Rural Conservation
www.mdwainwright.ca



Canadian Agriculture Partnership

Have you been interested in applying to the Canadian Agriculture Partnership (CAP) but don't know if you are eligible for funding or what activities are funded under CAP. The Environmental Stewardship and Climate Change Producer program is available to primary producers and commercial manure applicators who make \$10,000 (gross) of commodity farm income per year and have an up-to-date Environmental Farm Plan (EFP). Cost shares range from 30%-50% and the funding maximum per producer is \$100,000.00 for the life of the program. There are various activities codes under this program that producers can apply to.

Category A– Riparian Management

Riparian Area Fencing and Management: Permanent fencing for controlled access or exclusion as part of a riparian area fencing and management project. Cross fencing is covered only if it is part of a riparian management project.

Year-Round Watering Systems: Portable watering systems for natural water bodies. Installation and setup of summer and winter watering systems. This supports winter feeding management, reduces the build-up and off-site transport of manure nutrients and pathogens and provides greater protection of natural water sources.

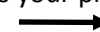
Watercourse Crossings: Construction materials and supplies to construct a watercourse crossing in accordance with the *Water Act*. Managing livestock access across a watercourse by maintaining bank stability and reducing the time cattle spend in the waterbody will reduce impacts on riparian areas and maintain or improve water quality.

Riparian Management Strategies (Open Category): This is an innovative category for grazing management solutions that address an environmental risk. Projects funded in this category are not listed as eligible activities under the above activity codes.

Wetland and Riparian Assessments: This activity code covers costs for engineering and consultant fees to conduct riparian and or wetland health assessments. The information collected can be used to evaluate solutions that will improve surface water management for agriculture operations.

Category B– Manure and Livestock Facilities Management

This activity code covers costs related to engineering, investigation and/or feasibility assessments, construction or updates to a surface water management system and improved manure storage facilities. Relocation of a livestock facility, permanent wintering site or confined feeding operation and improved land applications of manure. An open category is also available to producers for activities which are not covered in the above programs or considered ineligible. If you are interested in any of these categories contact Chris Ullmann the extension specialist for Red Deer East, to discuss your projects before applying.



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CAP (continued)

Category C—Agricultural Input and Waste Management

Improved Pesticide Management: Spray boom remote controls, on-board rinse-water tanks, chemical injection systems, recirculating booms and sectional control systems. The purpose of the program is to reduce the risk of movement of agrochemicals to non-target areas and reduce the amount of agrochemicals released into the environment.

Improved Nutrient Management: Sectional control systems for application of granular, liquid or gaseous fertilizers.

Plastic Roller and Compactors: Stand alone grain bag roller or grain bag rollers as an attachment to an existing grain bag extractor. Rolling and compacting agricultural plastics allows for more convenient and safe storage on farm prior to being transported to an approved recycling site.

Shelterbelt and Eco-buffers: Purchase of trees and shrubs and first year establishment costs. The purpose is to establish permanent shelterbelts which supports winter feeding management, reduced manure nutrient build-up and protects water sources.

Agriculture Input and Waste Management Strategies (Open Category): This is an innovative category for agriculture inputs and waste management solutions that address an environmental risk and/or reduces the impacts of climate change.

Category D—Innovation

Innovation has been defined as the following; the introduction of a proven technology, process or service that is new to the agricultural sector in Alberta; significant modifications to the application of existing technologies, processes or services that are applied in a setting or condition for which current applications are not generally accepted or practiced; an improvement in existing technology, process or service that represents a significant improvement in functionality, cost or performance of goods and services that are considered new to the agriculture sector in Alberta.

Category E—Commercial Manure Applicators

Improved Land Application of Manure: Aimed to increase safety and public awareness during field application activities. To adopt technologies that result in more efficient nutrient use and decrease nutrient loss through run-off and volatilization. To adopt management practices that improve record keeping, nutrient management and compliance with AOPA legislations.

It is very important when applying to these programs that producers identify an environmental risk that is currently affecting their operation. The goal of the program is to reduce environmental risk and support the implementation of best management practices. Make sure to read the terms and conditions and ineligible costs under each program before applying.

The Farm Water Supply Program is another avenue that producers can access funding through. The program offers grant money for man-made water systems. Cost shares are 1/3 of expenses up to \$5000.00.

Some of the standard incentives for new or expanded water source developments includes new well construction, dugouts, cisterns, off-site watering systems and aeration systems. Special incentives include well decommissioning, well pit conversions, water use meters and wetland assessments. Cost shares vary depending on the project for special incentives. When applying to the Farm Water Supply program you must have an completed long term water management plan approved by a Water Specialist.

Changes to the Climate Change Leadership Programs

The Government of Alberta has discontinued the Climate Change Leadership Programming and have terminated the following programs:

- ◆ Farm Energy and Agri-Processing Program (both producer and processor streams)
- ◆ On-Farm Solar PV Program
- ◆ Energy Savings for Agri-Processors (large projects)

All websites associated with this program have been taken down and any applications received after October 24th will be returned to the applicant.

For program applicants who have received confirmation letters, processing of reimbursement claims forms will continue as usual. For applicants who applied before October 24 but did not received an approval letter, your application will not be processed.

Black Knot

Now that the leaves have fallen and winter is upon us, you may notice black knot infected trees in Wainwright and the surrounding areas. Black knot is a fairly common fungal infection that affects trees in the genus *Prunus*. This includes, maydays, chokecherries, cherry, apricot and plum trees. The fungus deforms branches and reduces growth. In addition, black knot puts the tree under stress which makes it vulnerable to other diseases and pests. Once a tree has been infected with black knot it will spread throughout the tree quickly. It will eventually spread to other trees in your yard or your neighbours yard. The fungus flourishes in warm, wet springs. There are control options available to residents who have black knot. The most reliable and effective treatment is pruning. The ideal time to prune trees is in the winter. Do not prune black knot in the spring. Prune branches 6-10 inches down from the infection. Disinfect cutters before each pruning. You do not want to leave behind any trace amounts of spores. If trees are severely infected you may consider having the entire tree removed to prevent the spread of black knot. Diseased materials can be burned or buried or taken to a landfill. If taken to a landfill wrap the infection in a plastic bag to decrease the chances of spread. Do not compost infected materials because diseased limbs can produce and release spores up to 4 months after removal.



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Planting a Shelterbelt? Start Planning Now

If you are planning to plant a new shelterbelt in the spring, you need to start planning now. Most nurseries start taking orders in January and if you want to avoid missing out on your chosen species, order early. There are multiple factors that should be considered before ordering. What type of soil do you have? Does this area receive large amounts of runoff? What is the land use around the potential trees? These answers will influence what species you

plant. Different species thrive in different conditions. Several kinds of trees and shrubs have different growth characteristics and provide different foliage density at various heights over a period of years. Deciduous trees lose their leaves in the winter. To fill that void, you may want to consider adding evergreens to your design. The taller your shelterbelt, the more area that is protected. The M.D. of Wainwright has shelterbelt packages, a tree planter and a plastic mulch applicator available to producers. Our tree packages include information on a variety of nurseries, a design and species guide, weed control. Stop by the office and pick up a package today.

Winter Wetland Functions



Beavers and muskrats spend countless hours during the summer building their houses for winter in wetlands. While beavers store enough food in their house for winter, muskrats feed on the shoots and roots of wetland plants.



Roots of different vegetative species such as cattails remain dormant till spring when they re-establish themselves. In the meantime, the bent over, brown stalks provide habitat and cover for waterfowl.



Vegetation in and surrounding the wetland traps snow in the winter leading to moisture retention in the spring. Moisture retention lowers flood peaks and recharges ground water.

Amphibians such as the threatened Northern Leopard frog hibernate in the mud at the bottom of water bodies.



Mice and small mammals create underground tunnels and homes, insulated by the snow cover.



"Wetlands don't just provide critical functions in the spring and summer months. While they may seem lifeless during the winter months they are actually providing habitat for those who can't fly south"



Municipal District of Wainwright No. 61
...A Thriving Part of Rural Alberta



Gas in your Water Well

The presence of gas in water wells is common in Alberta. Naturally occurring gases include oxygen, carbon dioxide, nitrogen, methane and hydrogen sulphide. Gas is held in groundwater under pressure. When pumping your water well it reduces the pressure, freeing the gas. Even though the presence of gas can affect the operation of your well it is still possible to use your well in a safe manner.

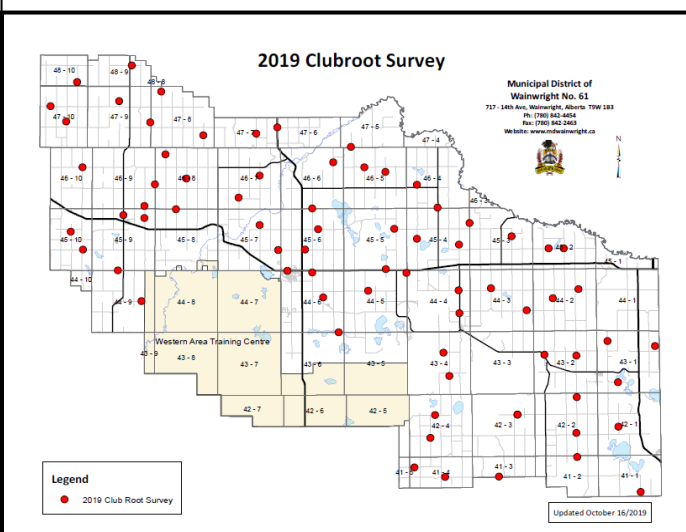
How do you know if you have gas in your well:

- ◆ Spurting taps
- ◆ Problems priming the pump (gas locking)
- ◆ Gurgling noise coming from the well
- ◆ Milky-looking water with fine bubbles

The ability of water to hold gas varies with temperature and pressure. When the temperature increases the amount of gas released also increases. Therefore, symptoms increase when the hot water tap is used compared to the cold water tap. How can you determine what kind of gases you have present? A water test done by a testing laboratory. Follow appropriate procedures when collecting water samples to ensure accurate results.

The presence of carbon dioxide and nitrogen can displace the amount of oxygen in the air in an enclosed space such as a well pit or pump house. An oxygen deficient atmosphere can be dangerous to anyone who enters the space. Although well pits are no longer legal in Alberta, there are still many old pits that do exist. It is recommended to update your well if it is in a pit. In most cases the well casing is extended above ground surface and fitted with a properly vented well cap and the pit is removed. Wells located in a pump house or basement should be properly vented to divert any accumulated gas to the open atmosphere. Methane is hard to detect in water well because it is dissolved in water. Even though it is not hazardous to human health, under the right conditions it can become an explosive hazard. The amount of methane present in a water well can change over time or with an increased pumping rate. Methane forms an explosive mixture at volumes of 5—15 percent in air. Hydrogen sulfide is produced by sulfate reducing bacteria that thrive in water well environments. The “rotten-egg” smell is a good sign of the presence of the bacteria. To reduce the amount of hydrogen sulfide, regular shock chlorination treatments will reduce the growth of the bacteria. Alarm meters can be installed to monitor gas accumulation of different gases in enclosed spaces.

To get rid of gas in your well, if its possible to lower the pump intake to below the depth where the gas is entering the well. This will allow water to be removed without locking the pump. Sometime, a plastic gas sleeve can be installed over the submersible pump to force the gas out of the water before it enters the pump intake. Gas will always accumulate at the top of the well. Well caps should always be vented to release the gas. A licensed water well specialist will be able to recommend the appropriate tools to vent your water well, pressure tank, hot water tank, cistern and home.



The M.D. of Wainwright staff completed 72 random clubroot inspections in 2019. There were no visible signs of clubroot detected. However, the disease is still at large with its spread growing across the Province and reports of resistant breakthrough has increased. The M.D. of Wainwright would like to remind producers to practice best management practices so the disease does not spread throughout the municipality. Rotations, planting resistant varieties and cleaning equipment before entering and leaving the field can greatly reduce your chances of getting clubroot.



Figure 2. Very severe clubroot on canola.