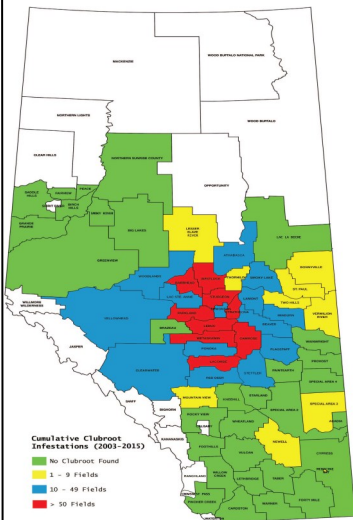
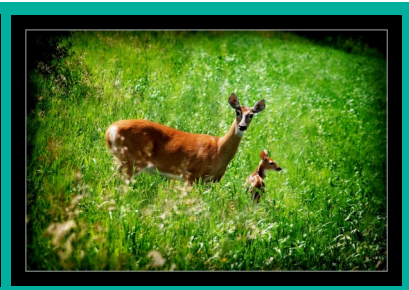


The Municipal Agricultural Connection



Partners in
Rural
Conservation
www.mdwainwright.ca



CLUBROOT Found in the M.D of Wainwright

The M.D. of Wainwright has received third party confirmation of its first case of Clubroot. Producers should be vigilant in scouting their fields and checking for symptoms of the disease.

Clubroot is a serious soil-borne disease of canola, mustard and other crops in the cabbage family as well as cruciferous weeds. Clubroot affects the roots of the plants exhibiting club-like appearances. However, overall symptoms will vary depending on the growth stage of the crop when it becomes infected. Infection at the seedling stage can result in wilting, stunting and yellowing symptoms by the late rosette to early podding stage, while premature ripening or death can be observed in canola or mustard plants nearing maturity. Plants infected at later growth stages may not show wilting, stunting or yellowing but may still ripen prematurely and seeds may shrivel, thus reducing yield and quality. Above ground symptoms may be confused with drought, nutrient deficiencies or other diseases, so suspected plants should be dug up and checked for your typical clubroot galls on the roots.



Figure 2. Very severe clubroot on canola.



Figure 3. Severe clubroot galls or "clubs" on canola root.



Figure 4. Moderately infected canola root.



Figure 5. Patches, premature ripening.



Figure 6. Decayed clubroot galls and whitish stem appearance.

Most varieties of canola, mustard and cole crop vegetables are currently being grown in Alberta are highly susceptible to clubroot. This disease is capable of significantly reducing yield and quality of crops and may destroy a crop if infestation levels are high enough. Clubroot is spread mainly through soil infestation with resting clubroot spores. Infested soil can be carried from field to field by machinery, personal clothing, wind and water erosion. Seeds from various crops, as well as hay and straw, can also become contaminated with resting spores via dust or earth tag when they are grown in clubroot infested fields. The resting spores are extremely long lived and may survive in the soil for up to 20 years. The longevity of spores is the key factor contributing to the seriousness of the clubroot disease, especially under short crop rotations.

Clubroot is declared a pest under *Alberta's Agriculture Pest Act*. Guidelines are set out according to the Clubroot Management Plan, in addition, municipalities have their own clubroot policies which follow the management plan but may also impose stricter restrictions on producers.

Here are the best management practices as they are outlined in the Clubroot Management Plan:

- Grow clubroot resistant varieties when growing canola in areas where the disease is established. Alternate growing clubroot-resistant varieties with difference sources of resistance when they become available
- A 1 in 4 year rotation. Crop rotation will not prevent introduction of clubroot to clean fields but it will lower subsequent disease buildup and severity and reduce other diseases, such as blackleg.
- Growing clubroot-resistant variety in fields without known clubroot but in areas where the disease is prevalent can help slow the establishment of the disease.
- Control volunteer canola and cruciferous weeds in infested fields to prevent the production of new resting spores on these host plants
- Practice good sanitation of machinery and equipment to restrict the movement of contaminated soil. Remove

all soil with a pressure washer then clean equipment with a 1-2% bleach solution. Producers or anyone accessing the land should use disposable boot covers when entering the field or wash footwear with the bleach solution before entering and when exiting the field.

- Seed and establish an area with grass near the field entrance/exit. A well sodded grass will retain soil removed during equipment cleaning.
- Use direct seeding and other soil conservation practices to reduce soil erosion.
- Minimize vehicle and equipment traffic to and from fields.
- In situations where fields are lightly infested only near the current access, create a new exit at another distant edge of the field if possible.
- Scout canola fields regularly and carefully. Identify causes of wilting, stunting, yellowing and premature ripening
- Avoid the use of straw, hay or greenfeed, silage and manure from infested or suspicious area. Clubroot spores may survive through the digestive tracts of livestock.
- Avoid common untreated seed (including canola, cereals and pulses). Earth tag on seed from infested fields could introduce resting spores to clean fields.

The M.D. of Wainwright policy follows the Clubroot Management Plan set out by Alberta Agriculture, in addition, random inspections will be conducted within the M.D. by the Agricultural Fieldman, Assistant Agriculture Fieldman or by an inspector appointed by the M.D. of Wainwright. If clubroot is suspected a positive identification will be obtained by an approved laboratory test. When the land has been verified positive for clubroot the landowner will be notified in writing with a legal notice in accordance with the *Alberta Agriculture Pest Act*. The notice will prohibit the growth of canola, mustard or any other clubroot susceptible crop on the affected land for a period of 3 years (1 in 4). The seeding prohibition includes clubroot resistant varieties and they will not be permitted to be grown during this period. Any land sown to such crop in contravention to the terms of a written notice will be destroyed as per the *Agriculture Pest Act*. All adjacent landowners and/or occupants to the affected land will be notified in writing that clubroot is present. It is the landowners and/or occupants responsibility to follow best management guidelines set out by Alberta Agriculture and Forestry to reduce the spread of the disease with the movement of soil and equipment.

If you have questions or would like more information on the M.D. of Wainwright's policy you can contact Agricultural Fieldman James Schwindt or Asst. Agricultural Fieldman Tanis Ponath at 780-842-4454.

Monitoring Dutch Elm Disease

The Society to Prevent Dutch Elm Disease (STOPDED) is reminding all Albertans to check their elm trees for Dutch Elm Disease (DED) symptoms. All species of elm trees are susceptible to DED, if a tree is infected with the fungus it must be removed immediately to prevent further spread. Symptoms of DED infection are leaves initially wilting followed by curling, turning yellow and then brown. Leaf symptoms are usually accompanied by brown staining under the bark. Suspected elms must be tested at a lab for the presence of the fungus, all lab costs are covered by STOPDED.

The fungus is primarily spread from one tree to another by the elm bark beetles. Beetles are attracted to weak and dying trees, which serve as breeding sites for the beetles. Once the beetles have pupated and turned into adults they leave the brood gallery and fly to healthy elms to feed, thus transporting the fungus on their bodies from one tree to the next. STOPDED monitors annually for the vectors throughout the province. In the last few years, elm bark beetle numbers have not only increased, but the numbers of municipalities, especially along the Alberta-Saskatchewan border, finding beetles is increasing. It is important that elm firewood is not transmitted into or within Alberta as the wood may be harbouring the bark beetles, firewood is confiscated at all Alberta-Montana border crossings. All elm trees that are showing DED symptoms must be reported immediately. To report or for more information call the toll free provincial STOPDED hotline at 1-877837-3567 or you can visit their website at www.stopded.org.

The Municipal District of Wainwright Presents.....

2017 Calendar Contest

Send us your photos that capture the diversity of our agriculture and the environment within the M.D. of Wainwright.



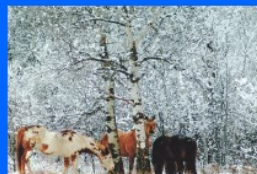
Contest Information:

- Applications can be downloaded on the M.D. website or picked up at the office
- Please no emails! Hard copies of pictures only
- Photos must be taken within the M.D. of Wainwright
- You can mail in entries, or drop them off at the office
- Send us photos that showcase all seasons

• **Deadline August 18, 2017**

If you have any questions please contact Asst. Agricultural Fieldman Tanis Ponath at 780-842-4454

Here are some of last years winners:




M.D. of Wainwrights collaboration with Battle River Watershed Alliance

The M.D. of Wainwright has a exciting opportunity to collaborate with the Battle River Watershed Alliance (BRWA) on the Buffalo Trail Riparian Restoration Project. BRWA received funding through Watershed Resiliency and Restoration Program (WRRP) to run the program in the Battle River Watershed, Blackfoot and Ribstone sub-watersheds, in the M.D. of Wainwright, M.D. of Provost, County of Vermilion River and County of Paintearth. The project officially kicked off in April 2017 and has a projected end date of March 2020. This program will run similar to the Ponoka and Ferry Point restoration projects where producers implemented beneficial management practices for the conservation or restoration of riparian areas along the river. Projects include planting trees along the banks, fencing off portions of the river and off-site watering systems. Another key part of the program will be conducting riparian health inventories done by Cows and Fish. This will help participating landowners understand the current health of their riparian areas. BRWA plans to host information sessions, field days and one-on-one meetings with landowners from now till the end of the project. If you are interested in participating in this program you can give me a call at 780-842-4454. To kick start the project we will be hosting a Riparian and Invasive Species Field Day at the Riverdale Mini-Park, see poster below for more details. You can also join the M.D. for our toadflax trial field day (see poster below for more details).

FIELD DAY

Invasive Species and Riparian Areas

August 22, 2017, 10am-3pm
Riverdale Mini-Park, MD of Wainwright

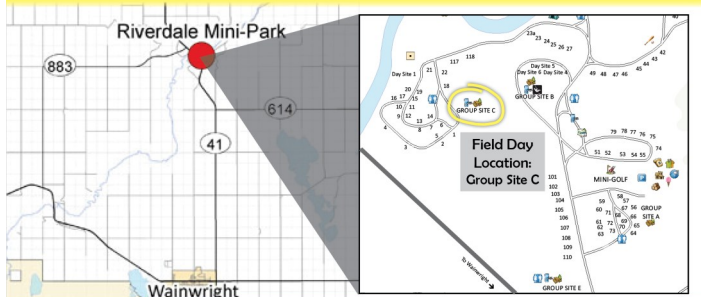


Join us on the banks of the Battle River to learn about:

- the health of the Battle River
- measuring the health of riparian areas
- riparian and aquatic plant ID
- riparian management, including fencing, watering and grazing options
- mechanical and biological control of invasive weeds

Free lunch included!
Register now to secure your spot by calling 780-672-0276 or emailing Sarah at sarah@battleriverwatershed.ca

Map of Field Day Location




About the Buffalo Trail Riparian Restoration Program

The goal of the Buffalo Trail Riparian Restoration Program is to work with landowners to implement on-the-ground projects that support the health of the Battle River and the many creeks and wetlands in the program area. This, in turn, will help improve water quality and fish habitat in the watershed.

Projects may include:

- Riparian health assessments
- Creating a buffer zone of native plants along waterways
- Installing off-site watering systems for livestock
- Fencing to manage livestock access to waterbodies
- Enhanced crop, grazing or manure management practices
- Other ideas you have!

To learn more or chat about a potential project:
Visit www.battleriverwatershed.ca/buffalo-trail-riparian
Contact Program Coordinator Sarah Skinner at 1-888-672-0276 or sarah@battleriverwatershed.ca




Schedule at a Glance: BRWA Field Day

10:00am– Meet at Riverdale Mini-Park—Welcome and Introductions along with a brief intro into BRWA and the Riparian Restoration Program

10:30am– Riparian Plant Identification

11:30am – Riparian Health Assessments and Management Strategies

12:00am - Lunch

1:00pm - Rake Tossing and Aquatic Plant Identification

2:00pm - Biological and Mechanical Control Methods for Invasive Plants

2:25pm - Flagstaff County showcase on Leafy Spurge Goats and Beetle Programs

2:45pm - Wrap-up

Lakeland College and MD of Wainwright Field Tour:

Managing Toadflax in Pasture with Nitrogen and Herbicide use

August 10th 1:00-3:30pm

Come tour a field experiment aimed to control toadflax in pasture, in your local conditions

Bus departments MD of Wainwright office at 1pm to field site (near Hwy 17 & 14)

Topics include:

- Why is toadflax so pervasive?
- Which herbicide options are avail. in pasture?
- When should the herbicide be applied?
- Does N fertilization increase toadflax control?



Lakeland COLLEGE Please RSVP: tponath@mdwainwright.ca or 780-842-4454

Prohibited/Noxious Weed Update

Land owners and occupiers are responsible for controlling noxious weeds and destroying prohibited noxious weeds under the *Alberta Weed Control Act*. Listed plants in the Act cause problems for the environment, health and economy. Know your responsibilities under the act. Regardless of where plants are located, prevention is always the most effective approach in dealing with invasive plants.

Acreages offer the opportunity to enjoy gardening, hobby farming while being within reach of the amenities of urban life. Some acreage owners may not have the agricultural background and may be less familiar with invasive plants than those who grew up in rural areas. Some prohibited/noxious weeds are sold as ornamental plants, which can escape from gardens and become invasive, spreading into natural areas or agriculture land. One of the easiest ways to determine if you have a weed is how “easily” a plant increases where it is growing. If a plant in your flower bed seems to be spreading out of control and displacing other perennials you can assume that this plant is a weed. Key indicators that a plant has the ability to take over quickly is if it has spreading roots, abundance seed production, or some plants are known to exude produced bio-chemicals to inhibit the growth of other plants called alleopathy. Spotted Knapweed and Leafy Spurge both have this characteristic. Toadflax spreads not only by seed but by creeping rhizomes which means it can reproduce by a single root fragment. Dames Rocket is a popular plant among gardeners for its beautiful colour and wonderful fragrance, however, the seed is produced during a 3 month period and it can quickly take over a pasture.

Acreage owners are not able to use the commercial herbicides that are available to farmers unless they have proper certification. Currently the herbicides that are available to acreage owners have the following active ingredients, acetic acid, glyphosate and 2,4-D alone or in combination with dicamba or mecoprop or both. Acreage owners can purchase these products in domestic as well as commercial class products and sizes.

Species to watch out for that are common on both agriculture land and acreages. Yellow toadflax, common tansy, ox-eye daisy, purple loosestrife, creeping bellflower, yellow clematis, dame’s rocket, Himalayan balsam and baby’s breath.

What can you do? Be alert for new and unfamiliar plants growing on your property and get them identified. Know which weeds are invasive. You local Agricultural Fieldman has great resources for you to reference. Hand pull or dig out small patches before they go to seed or start to spread, re-vegetate disturbed ground with grasses, shrubs or trees to provide strong competition for weeds. Contact myself or James at 780-842-4454 if you have any questions or stop by the office and we can help you ID any plants you are unsure about.



Leafy Spurge



Dames Rocket



Hoary Alyssum



Spotted Knapweed



Toadflax



Tall buttercup has been spreading in the M.D. Keep an eye out for this!!

What’s in the Field??

Have you heard of Ag for Life? Ag for Life is an organization where their mission is aimed to help all Albertans understand agriculture. They work with various stakeholders including corporations, not-for-profits, farmers, ranchers, educators and Government. They deliver multiple agriculture education programs that reach over 300 communities in Alberta. Some of their programs include the Classroom Agriculture Program, Ag 101: Food and Farming School, Alberta Open Farm Days and What’s in the Field.

What’s in the Field is a campaign that runs from July to October targeting consumers so they can learn where their food comes from. With many different individuals and families travelling to Alberta from all over this is a great educational opportunity for Alberta producers. Participation in the program is free, just visit agricultureforlife.ca to sign up and for more information.

Alberta Open Farm Days is coming up on August 19-20, 2017. The main objective is to provide both urban and rural residences an opportunity to learn about your farm. Grain producers, livestock producers, farm gate agri-businesses and ag-tourism all participate in this province wide two day event. Alberta Open Farm Days is about developing a solid, positive connection between urban and rural life. For events and tours in your area please visit albertafarmdays.com, you can also call 780-638-4302 or email openfarmdays@gov.ab.ca. If you are a producer that is interested in showcasing your operation stayed tuned for details in 2018.

Roadside mowing will be starting soon, approximately the beginning of August. We would like to remind producers that our contracted mowers will honour the existing swath however, **they have been instructed NOT to leave an area if you plan to hay it.** Designated roads to be mowed have already been pre-determined. Not all M.D. roads are mowed. If you have any questions or concerns please phone the office.