#### August 2016

#### Volume 10, Issue 5



Partners in Ru<u>r</u>al Conservation www.mdwainwright.ca



#### Blue Green Algae

**The Municipal Agricultural Connection** 

**Municipal District of Wainwright No.61** 

Conditions have been favourable this year for blue green algae or Cyanobacteria blooms. We encourage producers to manage their water bodies and if they suspect algae, to take action.

Cyanobacteria is a naturally occurring water inhabitant, it becomes an issue when rapid growth occurs followed by death and decomposition. Blue green algae causes water to become less palatable, causes distress, illness and can eventually lead to death of livestock, pets, and humans. There are many factors that can cause a bloom in dugouts and sloughs. Nutrient accumulation from manure and run-off of nitrogen and phosphorus are notorious for feeding blue green algae. Water temperature and depth also contribute to blooms. Warm, shallow, still waters are more susceptible to blooms.

Proper diagnostics is important to determine an outbreak. Cyanobacteria can be difficult to identify visually so water testing is the only way to determine if the cells and toxins are present in your water body. The most common way to treat an outbreak is with copper sulphate. You can also add dye to your water to prohibit the process of photosynthesis. Other options include installing an aeration system or digging a larger dugout.

An Alberta Water Specialist can work with you and develop a treatment plan. They can be reached by calling 310-FARM.



Clean farms will be stopping in our area early October for the Obsolete Pesticide Round-up. Farmers can safely dispose of unwanted agricultural pesticides and equine/livestock medications at one of the designated collection sites. **Tuesday, October 4th**— Provost, Richardson Pioneer, 780-753-2511 **Thursday, October 6th**—Vermilion, Crop Production Services, 780-853-4711 Wainwright, Andruko Group Solutions, 780-842-3306 **Friday, October 7th**—Viking, Andruko Group Solutions, 780-336-3180 Lloydminster, Crop Production Services, 780-871-4601 **Visit cleanfarms.ca for more pick-up locations.** 

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

Summer will be over before we know it and harvest will be in full swing. If you haven't checked out any of the parks and attractions the M.D. has to offer make sure you do!

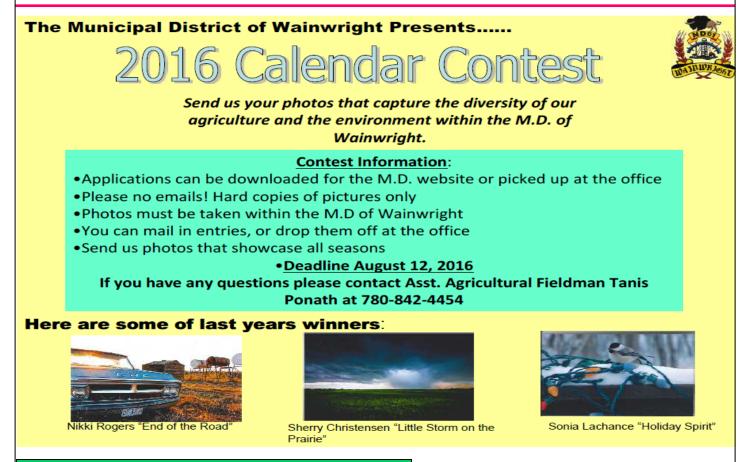
- Arm Lake
- Battle River Railway Trestle
- Clear Lake
- Salt Lake
- Dillberry Lake
- Fabyan Campsite
- Koroluk Landslide
- Ribstone Campsite
- Riverdale Mini-Park

These are great places to have a fun weekend getaway with the family.

More information can be found at www.mdwainwright.ca or you can call the main office. Page 2

The Municipal Agricultural Connection

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# Update from the ASB Department

Summer is in full swing here in the M.D. of Wainwright's ASB department. With the amount of moisture we have had the weeds are growing like crazy. Our weed inspectors are very busy out inspecting roadsides and spraying. If you come across a suspicious plant either on our roadsides or in your field, stop into the main office and either myself or James would be a happy to take a look at if for you. We urge you to report any weed sightings to myself, James or one of our weed inspectors. Their contact information is as follows: Division 1&2: Ray Enstrom: 780-842-8461

Division 3,4 & 5: Laine Maron, 780-842-8579

Division 5, 6 & 7: Dennis Fuder, 780-842-7060

Weeds at large this year are not limited to but include: Hoary Alyssum, Nodding Thistle, Tall Buttercup, Diffuse Knapweed, Spotted Knapweed, Toadflax, and Tansy.



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 <u>NOT</u>** to leave an area if you plan to hay it. If you have any questions or concerns please phone the office.

Pest monitoring for 2016 will be coming to an end soon. Both bertha-army worms and diamond back moths showed low numbers again this year. We will not know if any swede midge were present until the results come back from the lab, hopefully in September. Wheat midge will be surveyed in the fall after harvest. James and I will be conducting our grasshopper and clubroot surveys in August/September. For each survey, 1 field in each township is selected at random and surveyed. We still have not found clubroot in our municipality but that doesn't mean it isn't here yet. We encourage producers to stay vigilant and use best management practices to keep infection levels low. With the amount of rain we have received this year we are expecting lower grasshopper numbers.

## Growing Forward Update

Have you benefitted from Growing Forward 2 funding? If not you should take advantage while the program is still running. Growing Forward 2 is closing in 2017 and we are unsure what's in-store for Growing Forward 3. There is still a long list of programs that are currently open that you can receive funding from:

- <u>Agri Processing Automation and Efficiency ~Livestock</u> ~ Eligible applicants include agri-processing companies with a physical manufacturing or processing presence in Alberta or producers who are adding economic value to their products past the farm gate.
- <u>Agri Processing Product and Market Development ~ Livestock ~</u> Eligible applicants include established or new processing companies, products/groups of producers/value chains adding economic value to products.
- <u>Animal Health Biosecurity Delivery Agent -</u> The purpose of this program is to create awareness, educate, and train individuals, determine risk and implement mitigations on biosecurity and disease risk manage- ment. This program is currently closed.
- <u>Animal Health Biosecurity Producer</u> Assists Alberta producers to assess, determine and reduce biosecurity risks for disease in their operations through the implementation of robust biosecurity practices. This program is closed till further notice.
- <u>Business Management Skills Development ~</u> Help Alberta's new or established producers, agri-processing companies and agriculture organizations improve their business management skills.
- <u>Business Opportunity</u> To help Alberta's new or established producers, agri-processing companies and agricultural organizations enhance their competitiveness and growth prospects by connecting them with expert business advice.
- <u>Confined Feeding Operation Stewardship</u> This program helps Alberta's livestock operations and commercial manure applicators assess their potential risk to water quality and make improvements to minimize risk and, to benefit their business and the environment.
- <u>Food Safety System Processor</u> For processors with facilities in Alberta to invest or improve food safety systems and production practices.
- <u>Food Safety System Producer -</u> Helps producers invest in equipment and tracking systems to improve On-Farm Food Safety Practices.
- <u>Irrigation Efficiency</u> Assist producers with irrigation systems to invest in new or upgrade their lowpressure center pivot irrigation equipment. This will improve efficiency of energy and water use on farm.
- <u>Livestock Welfare Processor</u> Help meat processors improve animal handling and ensure humane slaughter at licensed meat and poultry facilities.
- <u>Livestock Welfare Produce</u> This program provides financial support for livestock producers to adopt best management practices and technologies to improve livestock welfare. This program is currently closed.
- <u>On-Farm Energy Management</u> This program shares the costs of investments that improve energy efficiently on Alberta farms. Producers can conserve energy and reduce their environmental footprint.
- <u>On-Farm Solar Photovoltaic's -</u> This program is for producers who are interested in using solar energy.
- <u>On-Farm Stewardship</u> This program funds projects to help livestock and crop producers to implement on-farm practices in five areas that positively impact water quality and promote sustainable management of inorganic agricultural wastes. You must have an environmental farm plan for this program.
- <u>On-Farm Water Management</u>— Provides technical assistance to agriculture producers to complete Long-Term Water Management Plan and share costs related to the enhancement of their on-farm water supply
- <u>Traceability Pilot</u> The purpose of this program is to help producers, agribusinesses and non-profit organizations evaluate and recommend ideal traceability technologies that are practical and cost effective.
- <u>Traceability Technology Adaption</u> This program reimburses eligible producers for approved costs for equipment and software that capture animal data for management and traceability purposes.
- <u>Traceability Training</u> ~ Will reimburse approved costs for educational programs and resources related to traceability.

Under each one of these programs are different pillars that you can apply to, as well as a large range of eligible equipment and activities. Each program does have different pre-requisites that you must have in order to apply. If you have any questions about the programs and want to apply you can contact Tanis at the M.D. office 780-842-4454 or visit the growing forward website at www.growingforward.alberta.ca. Page 4

## Fungal Diseases In Crops

#### Pea Root Rot

Pea root rot is on the rise in Alberta fields. This fungus is soil borne and can affect the plant at any development stage. There are a number of stress factors that can lead to root rot:

- Wet conditions and cool temperatures in early spring
- Shortened rotations and heavy textured soils
- Soil compaction and nutrient deficiency

Depending on the type of pathogen root rot can affect various crops in rotation. It can also survive as a saprophyte (feeding on dead plant material) until the next susceptible crop is grown or conditions are favourable for the disease.

Since 2016 has been such a wet year, scouting your pea fields should be done regularly. Look for stunted, yellowing patches, these outbreaks would most likely occur in areas that have been flooded or water logged. Nodules will be pale in colour or may not have developed at all. If the conditions are right, the disease will spread to other parts of the crop.

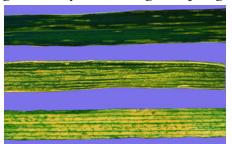


Unfortunately there are no treatment options available for this fungus. The best way to prevent and control root rot is to treat it as you would clubroot in canola. Using resistant varieties and rotations are key.

### Wheat Streak Mosaic

Wheat streak mosaic has been found in southern Alberta winter wheat crops and it may spread to spring wheat. In the areas where the disease has been identified the cases are severe. Wheat streak mosaic is caused by a virus carried by the wheat curl mite. The virus first enters the plant through the leaves then spreads to the rest of the plant. The initial symptoms are light green dashes or streaks caused by the destruction of chlorophyll. As the disease progresses the streaks will turn a yellow colour. Affected plants will appear stunted and produce fewer seeds which are usually shrivelled . The virus destroys the chlorophyll cells in the leaves which is responsible for feeding the plant. There are three main points to remember when scouting for the disease: younger plants have yellow streaks on them, older plants appear stunted and disease plants are found intermingled with healthy plants. Damage in crops can range from complete crop failure to severe reduction in yield. As previously mentioned the virus spreads due to the wheat curl mite. It carries the disease from infected to healthy plants. Conditions that favour the mites also favour the disease. The conditions that favour the spread of the disease is the presence of a source of infection and early planting of fall wheat. The virus and its carrier need living plant tissue to survive throughout the year. During the spring

and early summer they can spread from winter wheat on which they overwintered to other winter or spring wheat nearby. They can spread continuously throughout the summer as long as the infected wheat plants remain green. There is no chemical control for the virus or to treat infected plants. There are however, sprays to kill the mites that carry the disease.



#### Stripe Rust



Stripe rust is a systemic infection of cereal crops that causes defoliation and shrivelled kernels in wheat, barley and triticale. It thrives in areas that have mild winters and cool summers. It is most common in southern Alberta but has been known to be found in central Alberta. The disease travels by spores on clothing and animals, but primarily travels by wind currents. Once the spores have landed on a plant they need several hours of moisture on the leaves to be able to germinate and infect the host. The identifying factor is the very prominent yellow strip that extends the entire length of the blade. There is chemical control available however, it is viewed as a short term strategy. Using resistant and appropriate cultural practices help effectively control the disease.