

August 2015

Volume 9, Issue 5

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

Municipal District of Wainwright No.61

The Municipal Agricultural Connection



**Partners in
Rural
Conservation**
www.mdwainwright.ca



Attention Cattle Producers!!!

**Federal Government Announces Tax Relief for Western
Livestock Producers.**

Visit <http://www.agr.gc.ca/eng/?id=1326403245181> for
more information.

2015 M.D. of Wainwright Photo 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 for 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

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

Deadline for photo submission is Aug 14, 2015



Blue Green Algae

Blue-green algae is common term used for Cyanobacteria, this deadly bacteria is showing up more and more in our water bodies, this includes dugouts. 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.

Rapid growth of Cyanobacteria is intensified when there is an accumulation of nutrients in the water. Nitrogen and phosphorus are notorious for feeding blue-green algae blooms. Nutrient accumulation can come from manure and run-off from adjacent fields where fertilizer has been applied. You can prevent nutrient accumulation by implementing best management practices that include creating a buffer strip around water source, grass water ways, or implementing an offsite watering system.

Nutrient accumulation is not the only factor that causes outbreaks, water temperature and depth of dugouts can add to the probability of a bloom occurring. The water temperature for maximum growth is 25 degrees Celsius. Still and confined waters are prime habitats for Cyanobacteria blooms, that is what makes dugouts more susceptible. The ability of sunlight to penetrate all the way to the bottom of the dugout will fuel algae blooms, therefore, the shallower your dugout is the more likely a bloom is to occur. Temperature can be the limiting factor to whether a bloom will occur.

It is very important to have proper diagnostics to determine if you have a blue-green algae outbreak. Cyanobacteria can be difficult to visually identify so identification can really only be done by proper sampling and testing to determine if the cells and toxics exist in your dugout.

The most common way to treat Cyanobacteria is by a copper treatment. Copper is toxic to other aquatic life so it is important to make sure that Cyanobacteria is present. After you treat your dugout with copper the bacteria cells will burst, releasing a high concentration of toxins. With this in mind remove livestock from that area for up to a month because toxins can remain viable for that period of time. Keep in mind that you cannot apply copper products in areas where water may overflow and enter a public stream. Timing of your treatments is also crucial to killing bacteria. Avoid treatment before a run-off event, runoff can wash away your copper treatment as well as bring new contaminants into your water source. Another option is to add blue dye to your water to prevent photosynthesis which will inhibit the initial growth stages. If treatment with copper is not an option and you have a shallow dugout that is susceptible to blooms installing an aeration system or constructing a deeper dugout will inhibit the growth of this deadly bacteria.



The above pictures are all examples of blue-green algae outbreaks.

As you can see outbreaks vary that's why it is important to have your water tested. If you have any further questions please contact

Alberta Health Services at 780-842-4077

Drought affect on Trees

This year we are experiencing drier than normal conditions. Not only are crops affected but your trees can also take a beating. Dry conditions can favour insect and disease not only for this year but years to come.



So far this year there have been some concern for outbreaks of spider mites, yellow headed spruce saw-

fly, and aphids. Monitoring your trees is key to ensuring an outbreak does not occur. Inspect your trees weekly for any signs. If you would like more information or think you may have a pest you can contact me at 780-842-4454. Watering may also be necessary for your trees during these dry conditions.

Diffuse Knapweed

**W
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D** Diffuse Knapweed is a new weed that has been discovered in our municipality. It was noticed on a high use quad trail west of town. This weed is highly invasive and is on the Prohibited Noxious list which makes control mandatory. If you see this weed or another plant that may look suspicious you can contact Asst. Ag Fieldman Tanis Ponath or Ag Fieldman James Schwindt at 842-4454.

**W
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H** We also have 3 weed inspectors/spray operators that can assist in identification and control options

Division 1, 2 & 3, Ray Enstrom
780-842-8461

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

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

Cooks Corner

Easy Coleslaw Salad (Delicious)

Ingredients:

- 8 cups of shredded cabbage and carrots
- 1/2 cup sour cream
- 1/2 mayonnaise
- 2 tbsp vinegar
- 4 tbsp sugar
- 3/4 tsp salt
- 1 tsp pepper



Directions:

- Combine vegetables into a bowl
- Combine all other ingredients into smaller bowl and mix well
- Pour mixture over vegetables
- Cover ad chill in fridge for 40 minutes

SERVE AND ENJOY!!!

Grasshopper and Clubroot Surveys

Near the end of July and into the beginning of August us fieldman will start conducting grasshopper surveys. This will continue on for a couple of weeks and 1 field per township within the M.D. will be sampled. Grasshopper counts and species will be sent to Alberta Agriculture and they will use that information to forecast 2016 numbers.

Clubroot inspections will start near the end of August. One field per township is used with two separate locations sampled within that field.



Nicole Kimmel, ABD

Minimizing Heat Stress in Beef Cattle

During July to mid-August bring some of the hottest days of the year. Those hot humid days have you running for the nearest shady tree or swimming hole. Did you know that your livestock can also be extremely affected by those warm temperatures? High temperatures joined with high humidity can cause heat stress in cattle. Heat stress is most common when temperatures have reached over 27 degrees and relative humidity is high, for example after a thunderstorm. Humidity is key to whether heat stress may become an issue, if we experienced high temperatures with low humidity it will not have as big of an affect on cattle. Below is a chart that helps producers determine if heat stress will become a problem. In cattle heat stress can reduce breeding efficiency, milk production, feed intake, and weight gains. In mild heat stress cases cattle will show signs of shallow rapid breathing. When cattle start to feel uncomfortable they will move around to try and find an area where the least amount of body surface area is in direct sunlight. They may also try and group together to get shade off each other. Keeping the animals in a confined space or transporting them will only add more stress to the animal.



Here are a few management techniques that can decrease stress in your animals:

- Changing your feeding pattern, feeding at night instead of in the morning will encourage more feed intake.
- Provide shade, whether it be a building, trees, or sunshades
- Avoid handling cattle during the day, the best time is early morning till approx 10 am
- Always provide them with 24 hour access to water.

Keeping these few things in mind will help keep your cattle comfortable this summer!

Table 1. Livestock Temperature Humidity Index* (THI) at specific temperatures and relative humidity levels.

Ambient air Temp. °F	Temp. °C	Relative Humidity (%)					
		20	30	40	50	60	70
100	37.8	26	29	30	31	33	34
98	36.7	26	28	29	31	32	33
96	35.6	26	27	28	30	31	32
94	34.4	26	27	28	29	31	32
92	33.3	25	26	27	28	29	30
90	32.2	25	26	26	27	28	29
88	31.1	24	24	26	27	27	28
86	30	23	24	25	26	27	27
84	28.9	22	23	24	25	26	27
82	27.8	22	23	23	24	25	26
80	26.7	21	22	23	23	24	24
78	25.6	20	21	22	23	23	24
76	24.4	19	21	21	22	22	23
Livestock Safety Index (°C)		Normal <23	Alert 24-25.5	Danger 26-28	Emergency >29		

* The Livestock THI was adapted from the human Humidex Chart, which can be found at : http://www.ccohs.ca/oshanswers/phys_agents/humidex.html.