June 2019

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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 call 780-842-4454

Please remember that strychnine is only sold on Tuesday's from 1—3 p.m at the M.D. rec shop located at 2010-15 ave N. After June 25, strychnine will be sold by appointment only by calling the office at 842-4454. Cost is $252.00/ case or $10.50/bottle.

Start thinking about the 2019 Calendar Contest! The M.D. of Wainwright's annual calendar photo contest is fast approaching. Submissions are due the Friday after the Rural Routes supper (Aug 16). Showcase the diversity in the M.D. of Wainwright. Can' t wait to see your submission this year!

Municipal District of Wainwright No.61

The Municipal Agricultural Connection

Alberta Agriculture and Forestry

Partners in Rural Conservation
www.mdwainwright.ca

You Think You May Have Found an Invasive Species?

You have come across a suspicious plant in your yard, pasture or roadside and you may be wondering what it is and if you should be concerned. Alberta is home to many native grasses, forbs and shrubs, but we are also home to invasive species that threaten our own biodiversity. Part of our job at the M.D. of Wainwright is to eradicate and control invasive species that are present. We abide by the *Alberta Weed Control Act* and control weeds on the Prohibited Noxious and Noxious weed lists. **If you have a suspicious plant that you need identified, call James or Tanis and we would be happy to identify it for you.** In addition, the weed inspector/spray operator for your division is available to assist with identification. We also have available for pick up quick ID guides for Prohibited Noxious and Noxious weeds. Once the plant has been correctly identified there are a few ways to control it.

If the weed is found on an M.D. of Wainwright right-of-way, call the office or your divisions weed inspector/sprayer and we will look after it. We offer weed control for Prohibited Noxious and Noxious weeds, except Canada and sow thistle on pasture land, at the cost of chemical and $20.00/hr for the spray operator. We will not spray entire fields that have been mismanaged but will assist with new infestation or small patches. There are various herbicides available to producers for purchase for weed control. If the infestation is small with only a few plants, mechanical control such as handpicking is also an option.

There are many not-for-profit associations such as the Alberta Invasive Species Council who are dedicated to informing and educating Albertans about the destructive impacts invasive species have on our environment, economy and society. They travel the province spreading the message of invasive species identification and awareness. One of the programs they promote is Clean Drain Dry, which is run by the Alberta Government. You will see a station in Wainwright set up at the weigh scales east of town. If you are traveling with a boat, pull in and they will inspect your equipment for free. What are they looking for? They are looking for zebra and quagga mussels, an invasive aquatic organism that has already wrecked havoc on Ontario's lake systems and is moving west. There have already been confirmed cases in Manitoba.

The M.D. of Wainwright's spray program begins on June 1 and will continue until fall. Roadside mowing will begin July 15 or later and go until August 31. If you have any questions contact James or Tanis at 780-842-4454.

M.D. Of Wainwright Weed Inspectors

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

Forest Tent Caterpillars

Forest tent caterpillars are native to North America . Forest tent caterpillars cause severe defoliation on species such as trembling aspen, oak, ash, maple, and white birch. Outbreaks usually occur at intervals of 10-12 years and can last 3-6 years. Forest tent caterpillar outbreaks are dependant on factors such as weather, host-parasitoid interactions and forest structure. Trees can be weakened by repeated defoliations, causing significant impacts by reducing the radial growth, causing branch and twig mortality and reducing leaf size.

In late April to early May, eggs hatch and larvae emerge. Larvae are black, hairy and around 2-3mm long. Initially, larvae feed on tree buds and later on, leaves. Defoliation occurs from the outside in and larvae will feed on the vegetation till June. When not feeding, larvae rest on silken mats which were spun on the trunk and branches. Larvae feed and rest in large masses for protection from predators. If all foliage is consumed before development they will migrate and feed on understory shrubs and other vegetation. Once matured, the caterpillars are about 5cm long, hairy (resembles brown fur) and have bluish lateral lines. The mature caterpillars will spin cocoons, usually between leaves, and pupate. Moths emerge approximately 10 days later. Moths are yellowish brown, hairy and have two oblique dark bands on the fore wings. Female moths deposit eggs on twigs. Embryos will become fully developed larvae in approximately a month; however, they do not emerge until the following spring.

Most tree species can survive a forest tent caterpillar outbreak. If there is tree mortality, it is usually due to other environmental or stress factors. After an outbreak occurs the tree will re-foliate in 3-6 weeks after defoliation. If you have forest tent caterpillars there are a few control options: leave them alone and let them complete their cycle, spray with water until they fall off the tree, or spray with a registered insecticide.

Egg mass on tree branch

Silk mat for larvae

Mature Caterpillar

Spun cocoon

Moth

Alberta Pest Monitoring Network

There are many insects that affect various crops throughout Alberta. Life cycle, type of crop damage, when to monitor and what type of control is necessary varies depending on the species of pest. High risk insect pest species with the potential to cause major crop losses are actively monitored, surveyed and forecasted in Alberta. Bertha armyworm, cabbage seedpod weevil, cutworms, diamondback moth, grasshoppers, pea leaf weevil, wheat midge, wheat stem sawfly and wireworm are all monitored in Alberta. Insect pests with the potential to cause crop loss in isolated fields include cabbage maggot, canola flower midge, cereal leaf beetle, cereal aphid, lesser grain borer, lygus bugs, swede midge and wheat leaf miner. These insects do not yet have an established range. For more information regarding these crop pests, visit the Alberta Pest Monitoring Network (www.alberta.ca/alberta-insect-pest-monitoring-network.aspx). The Alberta Pest Monitoring Network provides timely and accurate insect management information and resources for Alberta's agriculture industry. Producers can look at real-time maps, factsheets and forecast maps.

Rats 101

The M.D. of Wainwright is actively involved in the Alberta Rat Control Program. Rod Gabrielson is employed as the Pest Inspector and inspects divisions 1 and 2 for potential infestations. Rats consume and spoil grain along with other food, damage buildings and electrical wires and carry many diseases . Left on their own, a breeding pair of rats can produce as many as 15 000 offspring in a year. Rats burrows have very round entrances that will be approximately 2.5" in diameter. Trails leading to and from the burrows (runways) will usually be well-worn and 2" wide. Rats like to keep their burrows clean; therefore, there will be no debris around them. You may potentially notice grease marks around the corners of old wooden buildings, which indicate the presence of a rat. If you have any questions regarding pest control contact Rod at 780-842-7285.

Leafy Spurge: This long-lived perennial primarily reproduces by its extensive creeping root system, but also by seed. Roots can extend 4.5m laterally and 9m deep. It grows in a range of soil types and tolerates very dry to very wet conditions. It grows in various location in the M.D. of Wainwright.

Scentless Chamomile: Can behave as an annual, biennial or a perennial but reproduces by seed only. It is well adapted to heavy clay soils and tolerates periodic flooding and dry sites. Can be controlled with herbicide before flowering. After flowering handpicking is the only efficient method.

Toadflax: This is a problem weed in the M.D. of Wainwright. Toadflax primarily reproduces by it extensive creeping root system, but also by seed. The ability of this plant to form large colonies allows it to crowd out other vegetation. Toadflax prefers sandy soils, but it is adapted to other conditions as well. Best time to use herbicide is when the plant is actively growing (flowering).

Common Tansy: Is a perennial forb that reproduces by both seed and short rhizomes. Tansy forms dense stands and the plants contain alkaloids that are toxic to both humans and livestock if consumed in large quantities. Tansy needs well drained, fertile soils and access to full sun to thrive. Tansy can be controlled by various herbicides. There are multiple infestations in the M.D. of Wainwright.

Yellow Clematis: This perennial vine reproduces by seeds and vegetatively from stems and pieces. Vines grow rapidly either along the ground or will climb and cover other shrubs/trees, fences and buildings. It is tolerant of cold, drought and nutrient poor soils. It can thrive in woodlands, grassy areas and industrial areas.

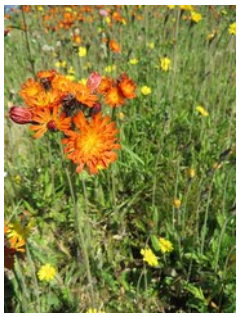
Baby's Breath: Is a perennial weed that reproduces by seed only. It develops a deep taproot than can extend up to 4m. It prefers fine to course textured, alkaline soils. It is drought tolerant once established. The M.D. of Wainwright has several areas with established baby's breath populations.

Invasive Phragmites: It is an erect, aquatic or sub-aquatic, perennial grass with an extensive rhizome system. Plants are highly competitive and form dense (>100 shoots m2), monoculture stands. It can grow in a variety of habitats, from freshwater alkaline waters to highly acidic wetlands. It prefers slow moving waters and irrigation canals. Be on a look out for this invasive plant along the railway. It's hard to miss as stems can grow 2-4m in height. The M.D. of Wainwright has one infestation near Chauvin.

Hoary Alyssum: Is an annual, biennial or short-lived perennial but reproduces by seed only. It is adapted to cold winters and hot dry summers and develops a long taproot to access moisture. Hoary alyssum is toxic to horses. The M.D. of Wainwright has populations SE and SW of Wainwright.

Nodding Thistle: Is a biennial or winter annual that reproduces by seed only. Growing up to 2.5m in height, nodding thistle prefers disturbed areas but can invade healthy plant communities. They can be easily identified by their single, large, flower head. The M.D. of Wainwright has a infestation around the Irma area and previously in Edgerton and Chauvin.

Diffuse Knapweed: Is a biennial, short –lived perennial that reproduces by seed only. It is a highly competitive plant that establishes quickly on disturbed sites and can invade undisturbed plant communities. A single plant can produce 18,000 seeds. Its roots exude a chemical which inhibits the root growth of surrounding plants.



Orange Hawkweed: This perennial herb reproduces by seeds and vegetatively by stolons and rhizomes underground. Hawkweeds prefer well drained, course textured soils. The leaves and stems are covered in hairs. The M.D. of Wainwright has identified one location with orange hawkweed, and control is ongoing.

Woolly Burdock: Is a biennial that reproduces by seed only. Flowers have both male and female parts and therefore it is self fertile. It grows in most soil types but prefers moist, loamy, well drained soils in full sun. The M.D. of Wainwright has found a few burdock plants in the municipality. There is also great and lesser burdock species.

Spotted Knapweed: Is a biennial plant that is a prolific seed producer. It can produce over 140 000 seeds a year making control very difficult. Spotted knapweed produces a chemical from its roots that prohibits the root growth of the plants around it causing degradation of native rangelands. Infestations form monocultures, displacing forage for wildlife and livestock

2018 Insect Survey Results

Bertha Armyworms

In 2018, there were 7 bertha armyworm sites in Wainwright with four of those sites having a moth catch at or over the first warning threshold of 300 moths. This is an indication of a potential outbreak in 2019. Producers should plan to scout fields and potentially use control measures if populations become unmanageable. The number of moths caught in the traps informs us of the risk of damaging populations 3-5 weeks ahead of time. Producers can look-up the real time bertha armyworm reporting on the Alberta Insect Pest Monitoring Network. Trap numbers will be updated weekly. The M.D. of Wainwright will have 3 trap locations. Scouting will start the beginning of June and go for 6 weeks.

Twp/Rge	Trap Average
45-8	154
45-9	133
46-7	53

Twp/Rge	Trap Average
46-8	**666.5**
46-4	**448**
45-4	**416.5**
44-3	**293.5**

Swede Midge and Canola Blossom Midge

Swede midge traps were located at 2 locations in the M.D. of Wainwright. All traps were tested by Agriculture and Agri-Food Canada and all traps reported negative for swede midge. We will continue to monitor this insect with 4 trapping locations this year.

Canola blossom midge was surveyed in one field in the M.D. of Wainwright. No midge was observed at the site; however, there was positive identification in other counties in the central and southern Peace regions.

Cabbage Seedpod Weevil

Five fields were surveyed for cabbage seedpod weevil. All surveys came back negative. The population in central Alberta seems to have reduced and the range expansion has contracted.

Diamondback Moth

One diamondback moth trap was set up in the M.D. of Wainwright. Moth counts were extremely low. The trap is used to indicate if the moths have arrived from their wintering areas in the south. (USA, Mexico).

Twp/Rge	Trap Average
46-8	7

Pea Leaf Weevil

Five fields were surveyed for the pea leaf weevil. Damage was low in all 5 fields.

Wheat Midge

Wheat midge numbers increased from 2017. Midge was found in 4 of the 5 samples that were taken. One location does show a risk (4 midge) and that field and the fields around it should be monitored closely as the wheat heads out. Individual fields may be higher than the ones we surveyed, so it will be important for producers to be aware and monitor their fields.

Twp/Rge	Total Midge	Viable	Not Viable	Parasitoid
47-9	0	0	0	0
46-8	**6**	**4**	**0**	**2**
43-2	1	1	0	0
43-4	1	1	0	0
46-4	2	1	0	1