



Grow With Us

Lakeland Agricultural Research Association

May/June 2021

Regional Silage Trials AB Wrangler

Stephanie Bilodeau

In the **Regional Silage Barley Trials** that we are participating in here at **LARA**, there have been a few varieties that have been added over the previous years. This year our barley silage trials has 18 different varieties.

One of the newer varieties that was added to our Regional Silage Trials last year is **AB Wrangler**. This variety is also established again in our trials this year.

AB Wrangler is a 2 row barley which is mainly used for grain and silage production. This variety is a medium maturing as it only takes 91 days to mature. It is a short variety that tolerates lodging very well and it has good disease resistance especially when dealing with fusarium.

We look forward to seeing how this variety does in our Regional Silage Trials.

Look for AB Wrangler in our trials that are located at our LARA site in Fort Kent as well as our St. Paul site in Mallaig.

You can view these trials at our upcoming **2021 summer field days**.

Fort Kent—July 28, 2021

St. Paul—August 5, 2021

Website:

<https://canterra.com/varieties/barley/ab-wrangler/>

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Regional Silage trial Barley 2021

Amisk	CDC Maverick
CDC Cowboy	CDC Churchill
AB Wrangler	Claymore
CDC Austenson	AB Cattlelac
SR17515/AB Tofield	TR18647/AB Hauge
Canmore	SR18645/AB Prime
Altorado	Sundre
Esma	AB Advantage
CDC Bow	Stockford

2021 Calendar of Events

Dugout Webinar Series	July 20th & 27th, 2021	Webinar
Smoky Lake field Day	July 22, 2021	Smoky Lake County
Fort Kent Field Day	July 28, 2021	Fort Kent
St. Paul Field Day	August 5, 2021	County of St. Paul
Lac La Biche Field Day	August 11, 2021	Lac La Biche County

Call the LARA Office for help with:

Age Verification, Feed Testing, Environmental Farm Plans, Growing Forward Stewardship Applications and more.

780.826.7260

Feed Testing

We offer two free feed tests to all producers in the MD of Bonnyville, Lac La Biche County, Smoky Lake County and the County of St. Paul.

Call the office to borrow a bale probe or to drop off a sample: 780.826.7260



Find us on Facebook



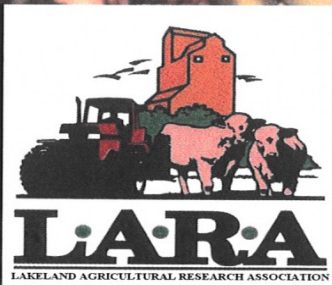
Follow us on Twitter

Lakeland Agricultural Research Association
Smoky Lake Summer Field Day

July 22nd 2021

Come and check out the 2021 trials

- ESN Cereal Trial
- LARA Regional Variety Trial
- Winter/Spring Regional Silage Trial
- Hemp Demonstration
- Flax Demonstration



Register By
Calling
(780) 826-7260

Weed and Brush Control in Pasture

Beef Cattle Research Council

Healthy and productive pastures are the foundation of a successful and sustainable beef cattle operation. When weeds and brush spread into hay fields, rangelands and pastures, desirable forage species are replaced, reducing productivity and profitability.

Pastures can be impacted by annual, biennial and perennial weeds, and each region across Canada will have different weeds that are problematic. Weeds can be introduced through many ways including:

- purchasing feed such as baled hay, greenfeed, or straw that contains weed seeds
- seed distribution by wind (e.g., kochia or baby's breath)
- flooding that carries seeds onto a pasture (e.g. red bartsia)
- in contaminated soil or gravel
- animals returning from weed-infested pastures that bring back weed seeds in their manure.

While some weeds reduce pasture yield, others are poisonous and present a health risk to livestock. Providing cattle access to healthy, vigorous pastures reduces risk of poisoning, as cattle will usually avoid poisonous plants if adequate forage is available. Examples of toxic plants found in Canada include lupines, death camas, red maple or oak, larkspur, locoweed, henbane, water hemlock and poison hemlock.

Weed management, which includes cultural, mechanical, chemical, and biological methods, must be applied and evaluated over an extended period of time to be successful. A good weed management plan starts with cultural methods and integrates

two or more additional control measures into a complete management system. The system must be applied and evaluated over an extended period of time to be successful.

Example of biological control, leafy spurge beetle.

Classical biological control uses natural enemies of weeds, such as insects or disease organisms. Biological control may also include the use of sheep, cattle, goats, or other large herbivores to manage weeds. While biological control is not intended to eradicate target weeds, it can be an environmentally safe, cost effective way to reduce weed pressures.



Targeted browsing of weeds by goats or

sheep has been used with some success in larger areas of infestation where herbicide control is not practical. While cattle tend to avoid leafy spurge and thistle, targeted grazing as part of an integrated management plan can reduce weed density. Goats and sheep will also graze undesirable plants such as thistle, absinthe, buckbrush and aspen suckers. Fencing, herding, and predator control are required to keep goats and sheep grazing targeted areas, and safe from predators such as coyotes.

Bushes, forbs and shrubs provide habitat for wildlife, and can make up over 20% of livestock's diet on rangelands, as cattle graze the desirable forbs and forage plants. Undesirable or invasive brush can impact wildlife habitat when encroachment alters native ecosystems. Proper identification is important to ensure that desirable plants are not targeted for weed and brush control.

Weed and Brush Control in Pasture Continued...

In many areas of Canada, brush encroachment by trees such as trembling aspen, willow, and shrubs such as buffaloberry, hazelnut, and snowberry, reduces forage yields and availability to cattle. When determining methods to control or reduce brush, consider the cost of control relative to the increased forage production gained. Since production improvements will vary greatly from one operation to another a helpful tip is to create a budget to estimate costs of brush removal versus the anticipated gains of increased forage yield and grazing days.



Example of biological control, leafy spurge beetle.

Palatability of Common Trees and Shrubs for Grazing Cattle	
✓ PALATABLE	✗ UNPALATABLE
<ul style="list-style-type: none">■ Aspen Poplar■ Chokecherry■ Pin Cherry■ Red Osier Dogwood■ Saskatoon■ Wild Gooseberry■ Wild Raspberry■ Wild Rose■ Most Willows	<ul style="list-style-type: none">■ Alder■ Balsam (Black) Poplar■ Buffaloberry■ All Conifers■ Hazelnut■ Oak■ Shrubby Cinquefoil■ Silverberry (Wolf Willow)■ Snowberry (Buckbrush)

BEEFRESEARCH.CA

Website:

http://www.beefresearch.ca/blog/weed-and-brush-control-in-pastures/?utm_source=BCRC+Blog+Subscribers&utm_campaign=96a363c9e1-EMAIL_CAMPAIGN_2021_05_25_07_22&utm_medium=email&utm_term=0_8c6acbd1df-96a363c9e1-369026508

Resources for Drought Management

Beef Cattle Research Council



Recurring drought is a natural part of the climate in many areas of Canada and creates a challenge when managing grazing and forage resources. Although droughts are often unpredictable, they are inevitable, meaning they are often at the back of every producer's mind. Long-term farm and ranch management must include planning for and consideration of how drought will affect the entire system – including plants, livestock and water sources.

Eight tips for drought management

- o When managing through a drought, consider combining groups of animals to encourage grazing of less desirable plants and grazing pastures with species that are more tolerant of increased grazing pressure. It is important to monitor for toxic or poisonous plants, which are more likely to be grazed during dry years.
- o Sources of water for grazing animals can quickly become limited or unavailable during drought periods. It is recommended that any pastures that could possibly run out of water be grazed first.

In some cases, it may become necessary to use a portable stock water supply in order to continue grazing a forage source where water has become limited.

- o Producers should consider pumping water from the source to a trough to help extend water supplies, maintain water quality and prevent cattle from getting stuck in watering sites that are drying up.
- o Stock water quality can deteriorate rapidly. Even if water quantity appears adequate, poor water quality can quickly cause health and production problems and even death. Test stock water sources frequently when animals are grazing.
- o Extended rest periods and increased recovery times are necessary to protect plants during dry periods.
- o Consider planting annual crops, supplementing pastures with alternate feeds, or creep feeding, to help extend grazing resources. Feed testing is an important consideration during dry conditions.
- o Drought management strategies should be a permanent part of every grazing plan. The benefits of rotational grazing and managing pastures to retain litter (plant residue) are especially evident during drought.
- o Drought plans should identify the order of groups or classes of livestock to be de-stocked, if necessary, and at what point each group will be moved if the drought persists.

Website:

<http://www.beefresearch.ca/blog/resources-for-drought-management/>





***2021 Growing
Season***



Your 2020 canola insect roundup GrainNews

Reports of spraying for diamond-back moths were very low in Alberta and Saskatchewan in 2020 and limited to only a few fields in Manitoba.

Mother Nature rarely gives an easy ride on the Prairie pest front. And 2020 was no exception, said James Tansey, Saskatchewan Agriculture's provincial insect and vertebrate pest specialist, at Canola Council of Canada's Canola Week 2020 held last December.

Though some key canola pest species showed relatively low population densities in 2020, other pests caused economic feeding damage, even forcing some farmers to reseed.

Diamondback moths interrupted

Tansey and other provincial insect specialists Carter Peru, John Gavloski, Shelley Barkley and various collaborators (including regional specialists and agronomists) set up diamondback moth sentry sites across the Prairies. Altogether, the team set up 45 sites in Saskatchewan, 42 in Alberta and 84 in Manitoba. The glue board-loaded delta traps lure in male diamondback moths with a synthetic sex pheromone, giving pest experts an estimate of the numbers of diamondback moths arriving from

Southern United States and the U.S. Pacific Northwest and Mexico.



Photo: Canola Council of Canada

The traps, which began their captures in early May and peaked in mid-June, showed high numbers early in Saskatchewan. The totals included 106 moths trapped at Indian Head, 116 at Loon Lake and 151 at Cadillac. Meadow Lake led the Prairies in captures with 521 moths.

The captures suggested the potential for major diamondback moth issues in-crop. Luckily,

however, that did not occur. Tansey said he suspected high winds interrupted key stages in the

moths' reproductive cycles, limiting egg-laying. Consequently, reports of spraying for diamondback moths were very low in Alberta and Saskatchewan and limited to only a few fields in eastern and central Manitoba.



Photo: Canola Council of Canada

Bertha army worm, mostly good news

Prairie pest specialists used a synthetic sex pheromone in Uni-traps (bucket traps) to monitor bertha army worm numbers between early June and early August. They set up 345 traps in Alberta, 257 traps in Saskatchewan and 84 in Manitoba.

Your 2020 canola insect roundup Continued....

There were no reports of intensive spraying for bertha army worm in Saskatchewan or Manitoba. There were some regions in Alberta that required spraying, however, populations appear to be dropping in the Peace region.

Results, which were posted weekly as maps to the Prairie Pest Monitoring Network and provincial ag ministry websites, showed mostly good news. Populations appear to be dropping in Alberta's Peace region and throughout Saskatchewan and they were low and below economic thresholds in Manitoba. In Alberta, farmers sprayed for bertha army worm in the municipal districts of Spirit River and Smoky River, as well as the counties of Birch Hills and Northern Sunrise. There were no reports of intensive spraying in Saskatchewan or Manitoba.

Mixed news on cabbage seedpod weevil

Last year was a good news-bad news story for farmers tackling cabbage seedpod weevil. While the invasive pest's range showed continued expansion in 2020, overall numbers were relatively low in most regions, said Tansey. Little spraying occurred in Alberta. Moving east, Tansey said he knew of just one site in southern Saskatchewan where the weevil population hit economic levels.

"Importantly, these samples are still being processed, so maps and a clearer view of the overall population will be produced soon," he said in a follow-up conversation.

Cabbage seedpod weevil continues to gain ground, though slowly, in the Prairies.

Cabbage seedpod weevil is also now present in Manitoba, unfortunately, albeit at very low levels. Tansey reports colleague John Gavloski sampled 26 fields and captured seven weevils in



Photo: Canola Council of Canada

total.

Canola flower midge, no fields in 2020 at economic levels

Canola flower midge was once again monitored by Agriculture and Agri-Food Canada in 2020, although surveys were somewhat limited because of COVID-19 restrictions. Canola flower midge is widely distributed across the Prairies and as in 2017, 2018 and 2019, population densities in 2020 were highest in northeastern Saskatchewan.



Though canola flower midge larvae or damage were detected in most fields surveyed, only one field in 2019 and no fields in 2020 reported potentially economic levels of damage. Canola flower midge (*Contarinia brassicola*) is not the same as swede midge (*Contarinia nasturtii*), though the similarity

Your 2020 canola insect roundup

Continued from previous page...

“We still have no swede midge on the Prairies,” said Tansey.

Canola flower midge is widely distributed across the Prairies. Although canola flower midge larvae or damage were detected in most fields surveyed, only one field in 2019 met economic thresholds and there were no fields in 2020 at those levels.

Cutworms in 2020

Alberta enjoyed relatively low incidence of cutworms in 2020, while both Saskatchewan and Manitoba reported some damage, some spraying and, in Manitoba, some necessary reseeding. Saskatchewan’s populations are primarily rebacked with some pale western cutworms. In Manitoba, populations are mostly rebacked with some dingy cutworms reported as well.

Red bugs in Sask.

Peritrechus convivus has been nicknamed “red bug” by farmers as the juvenile form is a bright red colour as shown in the photo to the right. There have been some reports of red bugs in a few Saskatchewan fields and no reports of widespread distribution in Manitoba or Alberta in 2020. *photo: Canola Council of Canada* Saskatchewan farmers reported some incidence in 2020 of *Peritrechus convivus*, which has no common name. It is the juvenile form of *Peritrechus convivus* that has the conspicuous red colouring — farmers have nicknamed them “red bugs.” This pest is a member of the family of insects called the “dirt-coloured seed bugs.”



Specifically, there were two reports of red bugs in seedling canola in Saskatchewan, as well as one report in a cereal crop last November, a finding Tansey said is “very odd.” There were no reports of any kind of widespread red bug distribution in Manitoba or Alberta in 2020, said Tansey.

Red bug nymphs come above ground early in the growing season to feed on the epicotyl (a seedling’s shoot above the cotyledons), the seedling’s stem and its leaves. Red bug adults are thought to feed on

seeds underground. In some cases, there can be very dense populations of red bugs just below the soil surface.

Flea beetle issues across the Prairies

Flea beetles continued to be a major concern across Alberta again in 2020. Tansey said the species distribution is still changing. In 2020, striped flea beetles were dominant in most regions other than in the south, where crucifer flea beetles are

still dominant.

In Saskatchewan, flea beetles caused some localized damage. Together with sandblasting caused by a very windy spring, the bugs forced some reseeding in that province, said Tansey. In Manitoba, localized frost damage combined with flea beetle feeding, which forced the reseeding of certain fields in the Interlake, Swan Valley, Dauphin, Fork River, Portage la Prairie and Notre Dame de Lourdes areas.

Your 2020 canola insect roundup GrainNews

of their names can cause confusion.

Fall 2020 populations of crucifers were high in both Alberta and Saskatchewan. How that will affect this year's populations is currently unknown. "We and others in the entomology community in Western Canada are still working out any connection between fall populations and spring damage," said Tansey.

Even if your area reported low populations of specific pests in 2020, remain vigilant in the coming season. Different conditions from year to year can

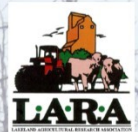
affect populations, causing problems to blow up unexpectedly.

Resources:

<https://www.grainnews.ca/crops/your-2020-canola-insect-roundup/?module=under-carousel&pgtype=section&i=>

Grainnews

Dugout Webinar Series



Dugouts serve many uses: for livestock watering, household water, outdoor and greenhouse irrigation, recreation, and a source of water for pesticide application and fire fighting. They are a great source of water, but may encounter problems over their lifespan. As dugouts age they fill with sediment, their water storage capacity becomes smaller, and water quality deteriorates. Proper dugout management is essential to having a long lasting supply of quality water.

If you have issues such as black smelly water, algae, vegetation and poor water capture/retention or are looking to build a new dugout then this two part webinar is for you!

This webinar series will cover:

- * Planning Considerations
- * Dugout Design and Construction
- * Dugout Operations, Maintenance and Protection
- * Water Quality Issues and Treatment Solutions
- * Dugouts as Fish Habitat

July 20th and 27th

7 PM - 8:30 PM

To register: <https://bit.ly/3jajGlb>

More info email: sustainag.lara@mcsnet.ca



Presented by Shawn Elgert, Agricultural Water Engineer with Alberta Agriculture and Forestry.

LAKELAND
AGRICULTURAL
RESEARCH
ASSOCIATION

Box 7068
Bonnyville, Alberta
T9N 2H4

Phone: 780-826-7260
Fax: 780-826-7099

E-mail:
livestock.lara@mcsnet.ca
sustainag.lara@mcsnet.ca
cropping.lara@mcsnet.ca
technician.lara@mcsnet.ca

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Mission Statement:

The Lakeland Agricultural Research Association (LARA)
conducts innovative unbiased applied research and extension

LARA Staff

Alyssa Krawchuk
livestock.lara@mcsnet.ca
Forage and Livestock Program

Kellie Nichiporik
sustainag.lara@mcsnet.ca
Environmental Program

Amanda Mathiot
cropping.lara@mcsnet.ca
Cropping Program

Stephanie Bilodeau
technician.lara@mcsnet.ca
Agronomy Technician

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Upcoming Events

*See events calendar on page 2!
Don't forget to keep an eye on www.laraonline.ca
for more event details as they become available.*

This publication is made possible in part by:



Thank you to our municipal and county partners:

