

# LEAFY SPURGE AERIAL SPRAY PROGRAM

IMPROVING OUR AGRICULTURAL COMMUNITY



# SPURGE INFORMATION

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- Leafy spurge is a long-lived perennial that was introduced in the early 1800's from Eurasia.
- It reproduces primarily by re-sprouting from its extensive, persistent, creeping root system, but also by seed. Leafy spurge roots can extend 4.5 m laterally and about 10 m deep.
- Leafy spurge forms dense stands over time and a large plant can produce up to 130,000 seeds.
- The plant can 'shoot' its seeds up to 15 ft.
- All parts of the plant contain a milky coloured latex that can poison livestock and cause skin irritation on humans.
- Control Methods include grazing (sheep and or goats), cultivation, biological (beetles), and chemical.



# PRIVATE LAND VERSUS EQUIPMENT

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- We have three spray trucks. The newest being our 2012 & 2013 Dodges. And the other is our 1995 chevy.
- Lastly, we use two Rangers, (2011 & 2017) which are best for our spot spraying.



# PRIVATE LAND > PEOPLE

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- 4 Seasonal staff have been hired annually to work as our spray crew. The education for how to spray and become an authorized assistant is a one-day course with a test at the end.
- June is the optimum spray time for spurge > when it is starting to flower, before full flower, and before it goes to seed.  
We currently check and spray Private Land for Spurge on 137 quarter sections.  
This is for 46 landowners / ratepayers.  
This leaves almost 98% of our ratepayers in the MD with little attention or assistance with other issues for the entire month of June and takes away from other roadside spraying as well.
- We currently spray approximately 85 fields in the North Rotation and 52 in the South Rotation.
- We spray about 164 miles of roadsides annually in and surrounding our spurge area as a 'fireguard' to prevent the spread.



# Leafy Spurge in it's growing stage

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## COST INFORMATION

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- In the last two years (2018, 2019) the MD has spent **over \$400,000 on chemical** >**\$125,000** of that was chemical for spurge control for **2%** of our ratepayers.
- This would also reduce the equipment repairs immensely on our trucks.

# HELICOPTER

# BIAIR



# Helicopter Results





2 weeks post helicopter



# Transition out of MD to BiAir on Private Land

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Our Ag Service Board has put a mandate in place that states the following:

The helicopter cost to the ratepayers will be halved between the MD & the ratepayers at \$14.25/acre & farmers will still receive a 50% chemical subsidy.

We, the MD, will have Weed Inspectors visiting all of the sites to assess the spurge. Aerial spraying will likely require spot spraying afterwards which will be done and checked by rangers and spray guns.

If you are not interested in using the new program, then it will be your responsibility to control all of your own spurge infestations and anyone who does not comply will be given a weed notice; contract sprayers will be hired to come in and no subsidy will be permitted.



# Transition Continued

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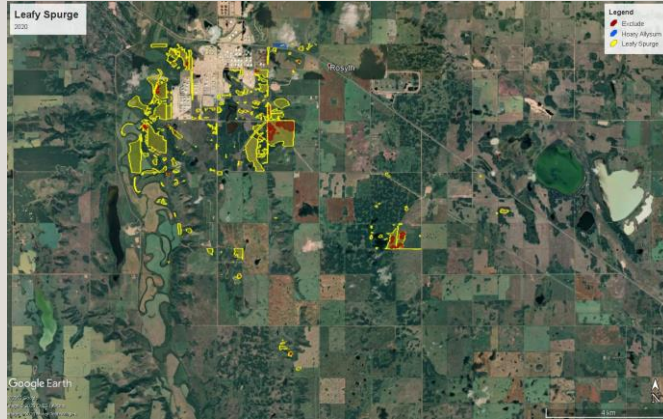
After four more seasons of the MD contracting out aerial spraying, it will be landowner responsibility to spray.

(S of hwy = 2020 & 2022. N of hwy = 2021 & 2023)

- So the MD will not be spraying private land Spurge in 2024.

Land owners will be responsible for spraying their own infestations after the two year rotation. BiAir is more than happy to continue working with you in 2024 and going forward if you choose to hire and contract them out yourself; the MD will no longer be providing subsidies.

Weed inspections will still continue annually



## Our GPS systems >

- Hand drawn / Written explanation of locations
  - Teejet system with google maps
  - Going to have google maps with highlighted locations that are compatible with BiAir's system.
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- The areas currently marked to be aerial sprayed are the same locations that we have sprayed in the past
    - if you have specific “no spray zones” or areas you would like added, please set up a meeting with me or contact me so we can verify the adjusted locations and they can be entered into our GPS program.

# ASPECT (Industrial/Commercial) What we have been using

## GRAZON (Ag) What BiAir is using

### Rates:

For broadleaf weed control, apply 1-1.9 L/acre Grazon in a minimum of 200 L total spray solution.

- For woody plant control, apply up to 4.65 L/acre Grazon in a minimum of 200 L total spray solution.
- For increased efficacy and faster plant uptake for tough to control species such as leafy spurge, toadflax, and coniferous trees such as spruce, use surfactant.

### Application Timing:

- Only weeds and trees present at the time of application will be controlled.
- Apply to actively growing weeds, after emergence, prior to flowering.

### Grazing:

- Do not allow lactating dairy animals to graze the treated areas within 7 days after application.
- Do not harvest forage or cut hay within 30 days after application.
- Withdraw meat animals from treated fields at least 3 days before slaughter.



# FLAGSTAFF COUNTY BORDER

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In early December we met with the Agricultural Fieldmen of Flagstaff to discuss the Leafy Spurge along our borders. Our programs are different, but an Intermunicipal Goal we have with Flagstaff is to ensure that we continue to 1. Monitor and spray our ditches and 2. Inspections are still done annually on the quarter sections that border our MD with the County. This includes looking into control methods along the river. We both want to contain and prevent the spread from affecting our border.

# CFB WAINWRIGHT BORDER



Again, early/mid December we went out to meet with CFB Wainwright and spoke with them about our borders and the spurge issues. They want to explore an aerial spray program. A main focus for them is currently their knapweed. They recognize aerial spraying would be a large benefit due to their safety hazards and their terrain. Funding has been a large issue in the past so different supports are being looked into.



Please ensure I have your phone number & email address so I can keep you updated with further information and inspections. This info will be accessible on our MD website.



# Vaughn Leuschen

M: (780) 721-3469 | F: (780) 349-3732 | E:  
[vaughn.leuschen@corteva.com](mailto:vaughn.leuschen@corteva.com)  
[www.corteva.ca](http://www.corteva.ca)

