

2022 AGRICULTURE & ENVIRONMENT PROGRAM UPDATE





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INTRODUCTION

It was another successful year for the Wheatland County Agriculture and Environment Department and we are pleased to present this 2022 Agriculture & Environmental Program Update. These annual updates are intended to provide information and to share our yearly achievements with our ratepayers, businesses, neighbors and partners.

2022 brought many staffing changes to the department, the completion of the Rosebud Watershed Funding Program, a 4th edition of the Alberta Invasive Plant Guide, and a wide variety of extension opportunities were provided. Thank you for taking the time to learn more about these accomplishments.



THANK YOU

Russel



**Best wishes for Russel
on a well deserved
retirement!**

Russel Muenchrath served the ratepayers of Wheatland County for 35 years and will be retiring at the end of the year. Russ played a keystone role in the County and has been the driving force of the Agriculture Service Board program for many years.

He started as a Seasonal Weed Controller and then went on to hold numerous other positions from Assistant Agricultural Fieldman, Soil Conservation Coordinator, Land Agent, Agricultural Fieldman and finished in the role of Manager of the Agriculture and Environment Department.

He was dedicated to helping residents with soil erosion and conservation, weed and pest identification and management, agricultural plastic recycling, tree health, watershed health, livestock emergencies and rental equipment (the list goes on). He has driven every road in the County: spraying roads; seeding; reclamation of roadsides; inspecting gravel pits; and pest surveys, you name it, Russ was a great resource for those who live in the County and for those of us lucky enough to have worked with him.



THE AGRICULTURAL SERVICE BOARD

Wheatland County's Agriculture and Environment department is the present day representation of the 78-year history of Agricultural Service Boards in the Province of Alberta as key support for the agricultural industry, more than 30 years of agricultural conservation initiatives, and more recent public, consumer, and municipal attention to general environmental stewardship. Department activities are guided by the directions of the Wheatland County Agricultural Service Board and Council and we work in collaboration with all County departments to advance agricultural and environmental priorities as opportunities arise.

The Agricultural Service Board's specific responsibilities include weed control, agricultural pest management, soil conservation, and animal health as granted by various provincial statutes. The Board also provides our community's agricultural perspective on other matters.

Elected Board Members



Shannon Laprise
Division 1 Councillor
2022 ASB Vice-Chair



Amber Link
Division 2 Councillor
Reeve



Donna Biggar
Division 3 Councillor



Tom Ikert
Division 4 Councillor



Scott Klassen
Division 5 Councillor
Deputy Reeve



Glenn Koester
Division 6 Councillor



Rick Laursen
Division 7 Councillor
2022 ASB Chair



Appointed Members at Large

ASB Vision

The Wheatland County Agricultural Service Board is committed to strengthening; promoting and supporting agriculture and the environment within our municipality with a view to continually improve how we operate in future years.



Barry VanLaar
ASB
Member-at-Large



Sandra Desmet
ASB
Member-at-Large

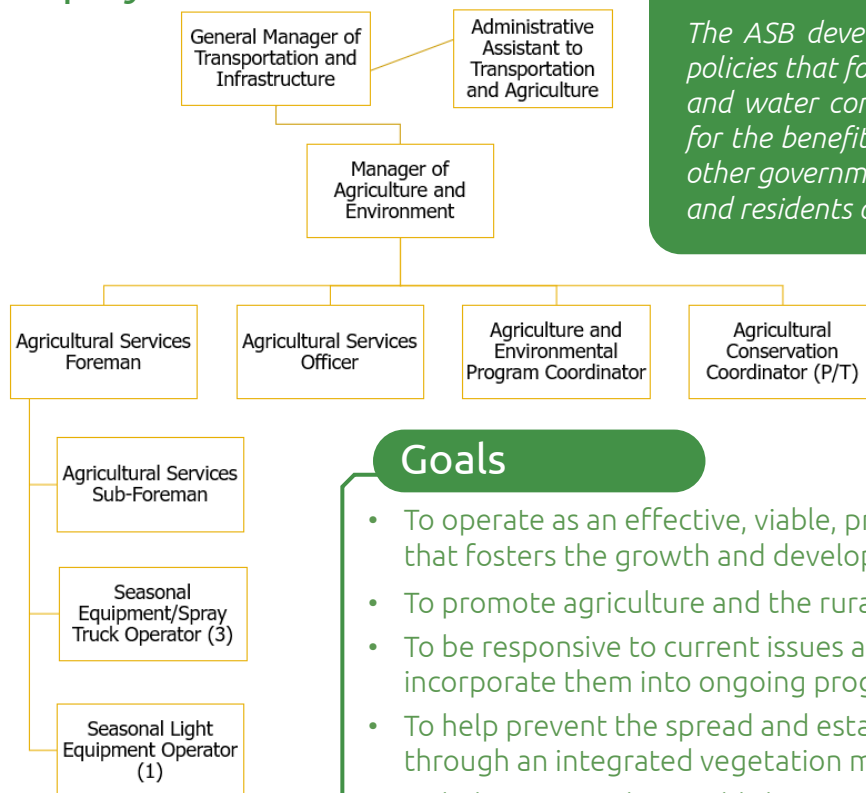
AGRICULTURE & ENVIRONMENT

Agricultural Service Board Strategic Direction



The Agriculture Service Board has unique responsibilities in the areas of weed control, agriculture pest management, soil conservation and animal health. The board also provides our community's agricultural perspective on these and other matters.

Employee Structure



ASB MISSION

The ASB develops and implements programs and policies that focus on the areas of weeds, pests, soil and water conservation and environmental issues for the benefit of all residents, in partnership with other government agencies, the agriculture industry and residents on agricultural programs and issues.

Goals

- To operate as an effective, viable, pro-active Agricultural Service Board that fosters the growth and development of partnerships.
- To promote agriculture and the rural way of life.
- To be responsive to current issues and trends in agriculture and incorporate them into ongoing programs.
- To help prevent the spread and establishment of invasive weed species through an integrated vegetation management program.
- To help prevent the establishment and spread of declared pests and assist with the control of nuisance pests as described in the Agricultural Pests Act.
- To maintain the integrity of agricultural soils through the delivery and support of the Soil Conservation Act.
- To assist in the control of animal diseases under the Animal Health Act.
- Increase awareness, understanding and implementation of environmental agricultural practices and programs, with an emphasis on supporting the agricultural industry.



The Agriculture & Environment Team

The Agriculture and Environment department contains a variety of technical expertise in the natural science fields and also includes knowledge about the agricultural industry in Wheatland County and local agricultural management practices. Knowledge of environmental legislation, local policy, management strategies and environmentally beneficial agricultural and industrial practices serves all County operations and ratepayers.

Our team also contains a high level of skill in equipment operation, vegetation management, pest and weed management, equipment maintenance, soil management, and land improvement, as is necessary for the provision of quality agricultural and environmental field services. Employees are well-integrated in regional and province-wide rural municipal agricultural and environmental programs, increasing information exchange and raising the profile of Wheatland County's agricultural and environmental operations.



Thank you to **Jason Regehr, Agricultural Services Foreman**, for 30 years serving Wheatland County ratepayers. Jason manages the ASB shop, seasonal crews and ensures our roadsides and gravel pits are in tip-top shape! He also provides a wealth of knowledge and leadership to the Agriculture and Environment team.

Congratulations to **George Bloom** In his new role as Manager of Agriculture and Environmental Services

George Bloom is the new Agricultural Fieldman/Manager of Agriculture and Environment for Wheatland County but some people in the area may know him as their former Agricultural Services Officer. George has been employed with Wheatland County since 2015 and was successful in his bid for this new position in the summer of 2022. In this role he supports and manages the Agriculture and Environment Team to complete our various objectives such as: mowing and spraying roadsides, environmental programming, and educational extension events. George is also bound to act as a Designated Officer of the County in fulfilling all responsibilities of the Agricultural Fieldman in accordance with the Alberta Agricultural Service Board Act and any other applicable legislated Acts (Soil, Weeds, and Pests) of Alberta and Bylaws. George resides in Strathmore and can be found in his spare time paddling boats, riding bikes and enjoying time out in the great outdoors.





County Brand Running Bar G

Wheatland County owns Running Bar G brand for the left shoulder of cattle and the left shoulder of horses. This brand was originally registered in 1946 and is unique in that it is the only registered G brand in the forward position. Current G brands are only issued in the reverse position to distinguish it from the letter C.



Welcome to the Team!

A warm welcome to Albert Anderson -Agricultural Services Officer

Albert Anderson is Wheatland County's new Agricultural Services Officer. Albert started out with Wheatland County in 2019 as a Seasonal Light Equipment Operator followed by the role of Heavy Truck Operator in 2022.

Albert successfully applied for the Agricultural Services Officer position late in the summer of 2022. In his new role he will be responsible for enforcement of the Alberta Weed Control Act and accompanying regulations, soil conservation inspections, pest control, inspection of public and private lands, and extension. An important part of his position is to educate landowners about the importance of land stewardship in the prevention of environmental and economic damage caused by the uncontrolled spread of invasive species.

As a Journeyman Welder, a graduate of SAIT's Petroleum Engineering Technology program, and a life-long connection to farming and agriculture through family and community, gives Albert a valuable perspective to help him see issues from both industrial and agricultural points of view. Albert enjoys spending time outdoors, cruising the countryside on his motorcycle in the summer and being out on the farm with his family and friends.



Happy Retirement Gay Mowat!

We wish a happy retirement and congratulations to Gay Mowat who was Wheatland County's Administrative Assistant to the Agriculture and Environment Department from 2015 to 2022.

Thank you for everything you've done for the County over the past 7 years. We'll miss your guidance and support in the office. Now it's time to do what you want to do, and we hope you have a long and happy retirement. It's time to leave the spreadsheets behind to start a new chapter in your life!



Group photo, pg 5. Left to right: Gay Mowat – Administrative Assistant to Agriculture and Environment (Retired May, 2022), George Bloom - Manager of Agriculture and Environment, Jason Regehr, Michelle Van Haarlem – Administrative Assistant to Transportation and Agriculture, Alyssa Hallgrimson (nee Barbero) – Agriculture and Environmental Program Coordinator, Russel Muenchrath – Manager of Agriculture and Environment (Retired October 2022), Ken Otto (need role), Albert Anderson -Agricultural Services Officer, Sheldon Roes – Agriculture Services Sub-Foreman, Kneeling in front: Sarah Schumacher – Agricultural Conservation Coordinator

Supporting Farmers and Ranchers

MENTAL HEALTH

The farm is your life, your life is the farm. In a perfect world, everything would run smoothly - but you know there's always the next thing to fix, feed or care for. Farming requires resilience and focus, and that starts with taking care of yourself.

Wheatland County has held **In the Know** virtual workshops discussing farmers and ranchers' mental health that overlooks stress, anxiety, depression, trauma, suicide and substance abuse. These workshops recognize signs and symptoms you can look out for regarding mental health and the approaches we can take for engaging in safe conversations about mental health with someone who may be struggling. In the Know will help you find appropriate people or organizations that can provide help/support/resources for someone who may be struggling. The course has been developed specially for farmers and ranchers and evaluated by researchers at the University of Guelph.

A bad day, a bad week, or a bad season. The success or struggles of the family farm impact everyone. The stressors might be the same but will affect everyone differently. That's why we are here to provide resources and mental health connection points to support your loved ones on and off the farm.

Please visit the AgKnow website and social media to learn more about upcoming events and for more information www.agknow.ca

AGKNOW
ALBERTA'S MENTAL HEALTH NETWORK

HOW TO START THE CONVERSATION AROUND MENTAL HEALTH WITH OUR FARMERS

It's never easy to start the conversation around mental health, especially in an industry like agriculture, where mental health is so stigmatized. Sometimes, just starting the conversation with the people in your life is the very first step to supporting them.



HERE ARE SOME TIPS TO HELP GET THE CONVERSATION STARTED



Be open about your own mental health struggles and create a space that makes it easy for others to share their own struggles.



Everyone deserves support in mental health, even if they aren't sure how to reach out for it. We must make getting help for mental health normal and even easy.



We're all balancing the stressors in our own lives, but if you notice someone is withdrawn or quieter than usual, that is the time to reach out or offer to catch up over some coffee.



Make sure the farmers in your life know you are there for them, from checking in on what they're up to and tuning in to what's happening in their lives and on their farms.

SOME QUESTIONS TO START THE CONVERSATION:

"How is it going on the farm these days?"

"What's keeping you stressed out on the farm these days?"

"Have you been affected by what's happening in the industry?"

www.agknow.ca



SUPPORTING Agriculture & Environment

WEED MANAGEMENT

The Agriculture and Environment Department includes the Agricultural Fieldman, Agricultural Services Officer and appointed Weed Inspectors, each of whom have responsibilities under the Alberta Weed Control Act. The Weed Management Program is comprehensive, using many different methods to reduce and eliminate the presence of provincially listed Noxious and Prohibited Noxious weed species in our municipality. Inspections of public and private lands are completed, concerns and inquiries from residents are responded to, education about weeds and how to manage them is extended to our community and weed control on County-managed lands is completed when necessary. The County has also participated in biological control projects, releasing insects for the control of specific weeds.

The Agricultural Service Officer, Albert Anderson is dedicated to weed management and is an excellent resource of information about vegetation identification and management.

A total of **223 weed inspections** were completed on public and private lands in summer of 2022. Wheatland County managed lands such as, County waste transfer sites, cemeteries, satellite shops, fire halls, road construction borrows, and sewage lagoons were all inspected and weed control was implemented.

Wheatland County has an agreement with the Villages of Rockyford, Hussar, and Standard for weed inspection services with 5 rounds of inspections occurring in 2022. Inspections also occur throughout the season in all County hamlets.

Wheatland County roads were also inspected with a total of **5470 kilometers of road surveyed**. The roads were followed up on throughout the summer months to ensure control of the most serious weed species was achieved. Follow up inspections from 2021 were also conducted to ensure proper control had occurred.

The Bow River is monitored yearly by Wheatland County staff who look specifically for purple loosestrife. It is optimal to survey and control in mid-August to mid-September when the plant is flowering as it stands out from the surrounding vegetation. All plants were treated with the herbicide Clearview and the flower tops are cut, bagged and disposed of. There were only 9 plants found in 2022 compared to 49 in 2021.



9

Purple Loosestrife plants were controlled in
4 locations along the Bow River

5470

Km of roads were inspected
223 Weed Inspections were completed

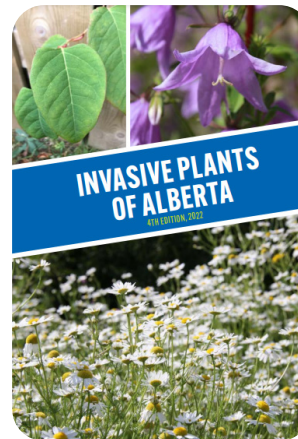
WEED IDENTIFICATION

The Alberta Invasive Plant Identification Guide

This year staff worked closely with the Alberta Invasive Species Council (AISC) to update the Alberta Invasive Plant Identification Guide. Wheatland County began this initiative in 2009 and took on the responsibility of updating it every few years, in 2022 the AISC will take over the distribution and any further editions.

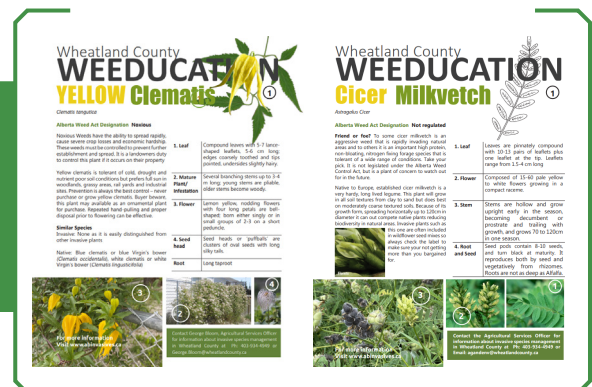
This pocket sized guide is a field-friendly tool to assist with weed identification through plant descriptions, habitat, and management for the 75 provincially regulated invasive plant species that are listed on the Alberta Weed Control Act, as well as select others that are currently unregulated but may require special management.

An acknowledgement was included to pay tribute to Ron Bartholow who was the keen "Weed Man" of Wheatland County from 2001-2015. His efforts were instrumental in the production of this book. His passion, wit and knowledge is fondly missed by all who knew him.



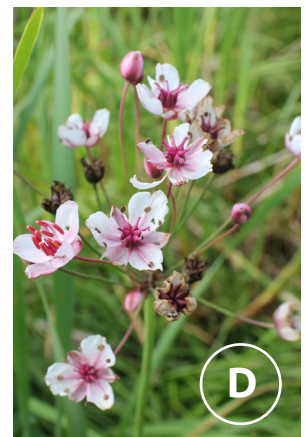
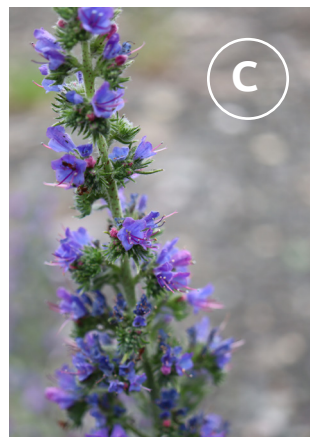
Stop by the County office to pick up a copy or view it at abinvasives.ca

Check out our "Weeducation" series in the County Connector newsletter, containing information about weeds found in Wheatland County and how to manage them!



Can you identify these weeds?

Did you know The Agriculture & Environment staff are available to assist landowners with weed ID. Bring your samples to the ASB shop, main office or by email to agandenv@wheatlandcounty.ca



A = Orange Hawkweed B = Nodding Thistle C = Blueweed D = Flowering Rush



Agriculture pests like Richardson’s ground squirrels (gophers), grasshoppers, wheat midge and clubroot can have devastating impacts of crop yields. The pest management program aims to reduce the prevalence of agriculture pests in our municipality. We also contribute to provincial efforts to forecast pest populations so that our producers can plan accordingly.

Agriculture pest surveys have been a part of Wheatland County’s program for many years. Surveys performed each year include: clubroot, bertha army worms, grasshoppers, and fusarium head blight. In previous years, the department also participated in collecting samples of blackleg, verticillium wilt, wheat midge and dwarf and karnal bunt.

Surveys/ Year	2017	2018	2019	2020	2021	2022
Clubroot	95	108	103	100	127	101
Grasshoppers	42	48	45	43	62	56
Bertha Army Worm	6 Weeks	6 Weeks	6 Weeks	6 Weeks	6 Weeks	6 Weeks



Richardson’s Ground Squirrel Control

Richardson’s Ground Squirrel (or gophers) are a natural cornerstone of food chains on the prairies, but they can be problematic on agricultural lands. Gophers cause crop destruction and create holes that injure livestock. Left unchecked, their populations can grow to large numbers very quickly. Wheatland County has sold 2% liquid strychnine to producers for many years to help reduce gopher infestations, but the Federal Government has opted to discontinue the supply of strychnine as of 2021 with sales to ending in 2022 and use by producers to end in March 2023.

Coyote Predation

Livestock producers facing predation problems can access support at Wheatland County. The Agriculture and Environment Department has programs available when coyotes become an issue, contact the department for more information!

CLUBROOT

Each year Wheatland County aims to survey 100 canola fields for clubroot. Since 2020, survey efforts have concluded that no clubroot has been found in Wheatland County. A provincial Canola Disease Survey was performed collecting 14 samples and were sent to the Crop Diversification Center in Brooks, AB for other disease testing.

Although found in previous years, Clubroot was not found in Wheatland County in 2022.



GRASSHOPPERS

Grasshopper Surveys were completed in the month of August. One survey per township was completed and data collection showed low numbers in majority of the townships in 2022.



FUSARIUM HEAD BLIGHT

Fusarium Head Blight along with Dwarf and Karnal Bunt surveys were completed again this year by collecting wheat (Triticum) heads while in the hard dough stage in the crop i.e., no green heads. 18 fields were surveyed collecting 500 heads per field, and sent to the Crop Diversification Center in Brooks, AB.



BERTHA ARMY WORM

Bertha Army Worm (*Mamestra configurata*) is one of the most significant insect pests of canola in Canada. This moth/larva is native to North America and when weather is unfavorable, such as cold winters and cool, wet weather numbers usually remain low. However, when weather takes a turn population can increase dramatically. This year's surveys were out from June 9th, 2022, until July 14th, 2022, and continued to show low numbers.



SEED CLEANING FACILITIES

Seed cleaning facility inspections in 2022 were successful. 20 seed samples were collected from Hussar, Rosebud, and Strathmore respectively, each were checked for quality control (ie removal of weed seeds) and grain grading as per provincial guidelines. SCF inspections yielded exceptional results for each site which began November 2nd, 2022 and ending November 14th, 2022. The Strathmore facility was selected as part of a province wide pilot project to streamline and modernize the current SCF inspection process. All facilities went above and beyond in 2022 as each successfully scored a 99% rating for re-licensing.

A photograph of a ground squirrel, likely a Richardson's ground squirrel, standing in a field of tall, green grass. The squirrel is facing right, looking slightly upwards. Its fur is a mix of brown and tan. The background is a soft-focus field of similar grass.

Ground Squirrel

Strychnine Control Alternatives

Richardson ground squirrels (RGS) are a common sight in Wheatland County and frustratingly taking a bite out of crop and pasture production, digging holes and being a pest. They are unregulated so they may be lawfully shot, trapped or otherwise removed where permitted. Success loves preparation and by correctly identifying populations, considering different control strategies, establishing damage and economic thresholds we can suite our integrated pest management program to reduce current and potential damages caused by these critters.

Best practices and proactive measures of encouraging predation (such as birds of prey nesting boxes), tall vegetation cover/buffers, crop rotations, etc. should be considered in context with the land suitability and characteristics. Users of pest control products should always follow label directions and best practices while considering human and environmental safety concerns.

Strychnine which was once the most popular control agent, has now had the registration canceled by Health Canada and **the last day of permitted use was March 4th, 2023. No sales have been available since 2022.**

Note that the most effective timing of ground squirrel control is after the adult females are impregnated and before the new young emerge (litter size averaging 6 per year). This is after males have fought over territory because females are only available for breeding one day of the year, typically sometime between

mid-March and mid-April. If a complete colony elimination in a particular area is the goal, it's important to note that unless population control of 80% + is achieved; that population will remain unchanged.

There are several different strategies of controlling ground squirrels such as shooting, asphyxiation or poisoning/baiting which are all commonly found being employed. Asphyxiation due to foam from Rocon or smoke from Giant Destroyers is effective along with baiting options using products like Rozol and Ramik Green. Shooting may be an effective component of a program if allowed. Multiple strategies may be ultimately more effective than a singular plan with timing of methods key to long term RGS control.

If baiting programs are being employed, feed before vegetative "green up" conditions occur. Do not bait at first activity in spring, adult males emerge 14 days before females and eat little before mating. Ideally shoot 10 RGS to determine sex and then bait when 50% are females.

Products described below are not meant to be a complete available list of options. These are not recommendations but are being presented as information to integrate with best practices and effective control for your specific needs and conditions.

Always follow Label directions for the product you are using.

Rozol RTU is a premixed, anticoagulant bait that is ready to be used in crop and rangeland areas with a readily available antidote. The bait has a consistent blend, is moisture resistant and can be used without pre baiting. Since vitamin K1 is the antidote to the active ingredient (Chlorophacinone) an infested alfalfa field may have a poor success rate. Purchase 20 or 50 lbs units.

Ramik Green (Diphacinone) is another anticoagulant bait which requires multiple feedings. Bait stations may be used, and the product maintains palatability due to its high protein content and waxy coating which provides resistance to moisture. Bait stations must be secured and labeled. 5-gallon pails are available.

The Giant Destroyer Rodent Gasser eliminates burrowing rodents by suffocating via sulphur gas. The burrow exits need to be closed off to prevent escape and the device lit at the fuse and placed in the last opened entrance, then filled in quickly. This creates an asphyxiating smoke if escape is prevented. Purchase is available in 4 packs.

Rocon is a registered mustard-based pesticide that is a poison free mixture of a biodegradable foaming agent used to asphyxiate ground squirrels in their burrow system. Using an electric pump system, the mixture is injected into the burrow system while escape and other exits are closed off using plastic perforated cones. The cones allow the operator to inject the mixture to enter and spread completely throughout the underground burrow system. The foaming agent greatly reduces the amount of water necessary to fill the cavities and flows from a tank mixed solution through a wand like apparatus. Since Rocon is nontoxic there are reduced concerns about predators and scavengers consuming carcasses and exposure to people. Purchase is available by 4x4L solution and a pump/wand

combo kit.

Burrow Oat Bait and other similar bait products with zinc phosphide as the active ingredient may be a helpful choice in an alfalfa setting since vitamin K1 is not the antidote. It has a very low secondary poisoning risk for scavengers as well. This product is intended for Certified Applicators and Farmers and pre baiting 7 days before using the product is recommended for the best results. The active ingredient is a powder on the bait and when it is exposed to moisture/acid, it starts to release highly toxic phosphine gas. When the gas forms and contacts the rodents stomach acid, even more gas is rapidly generated causing asphyxiation.

Phostoxin Tablets produce phosphine gas which is an odorless gas that enters the rodent's bloodstream and causes death by asphyxiation. Aluminum phosphide is the active ingredient and reacts with moisture when tablets are applied to the burrow. All entrances will need to be sealed to ensure efficacy. Use of this product is only by licensed/certified applicators such as a Farmer Pesticide Certificate along with an Exterior Rodent Control Endorsement and can only be used in conjunction with a detailed fumigation management plan.

Hawk Posts

There are 9 species of hawks in Alberta, many of which call Wheatland County home, including the common Swainson's Hawk and potentially, the provincially endangered Ferruginous Hawk.

Hawks and other birds of prey can provide a valuable service to producers and landowners in the form of pest control. One pair of nesting hawks can consume up to 500 ground squirrels in a single nesting season! Installing a hawk post can encourage hawks to nest and hunt on your land.



AWARDS



Recognizing Agricultural Achievement

Wheatland County has many outstanding producers. The Agriculture and Environment department recognizes leaders in the County who are using innovative management strategies on their farm and who are dedicated to agri-environmental stewardship.

Wheatland County's Agriculture Service Board is proud to see these agriculture achievements continue throughout the County. The Environmental Stewardship Award is a way to recognize and reward notable efforts in the community that practice and promote environmental stewardship and innovation.

Awards Categories

J. Laslo Legacy

Recognizes an agricultural producer that has shown leadership in the implementation of beneficial management practices and dedication to reducing the environmental impacts of their operation.

Youth Stewardship

Recognizes the importance of engaging youth in environmental stewardship initiatives by honoring a young person who has shown leadership or strong interest in environmental stewardship.

Community Stewardship

Recognizes a Wheatland County community member or group that has made an outstanding contribution to environmental sustainability in the municipality. Note: No nominations were submitted in this category in 2022

Winners receive \$250 to put towards their initiatives and a take home award. Their names are added to a plaque that is proudly displayed in the County administration office and they are recognized for their positive efforts through local media promotion.

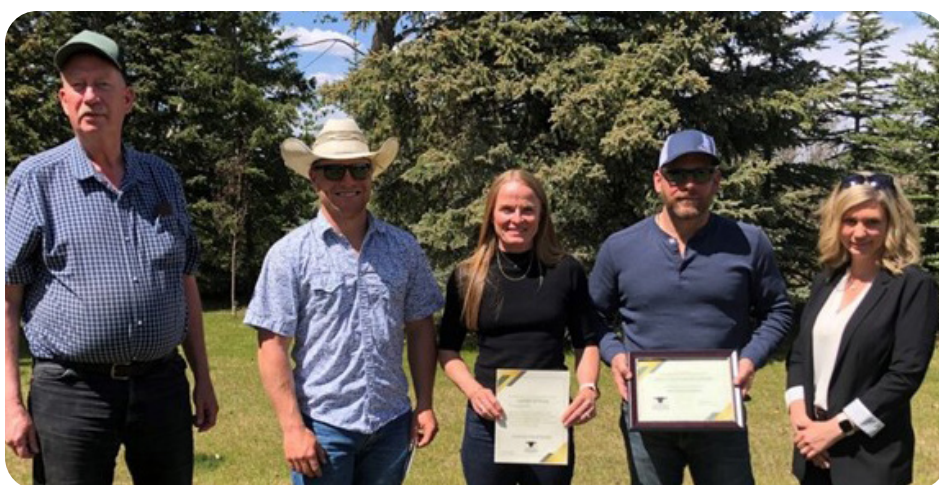
Want to nominate a family member, friend or neighbor? Applications are open year-round, for more information contact **Alyssa. Hallgrimson@wheatlandcounty.ca**

J. Laslo Legacy Award

Presented to the Treacy Family

The J. Laslo Legacy Award is named in honor of the retirement of long-term Wheatland County employee Jim Laslo. During his career, Jim was the Agricultural Fieldman, and then General Manager of Agriculture, Community, and Protective Services. Jim's passion for education and outreach about agricultural conservation initiatives, and dedication to harnessing the innovation of the agricultural community, lead to the uptake of sustainable agriculture practices throughout the municipality.

The J. Laslo Legacy Award is awarded to an agricultural producer in Wheatland County that has shown exemplary leadership in the implementation of beneficial management practices on their farm. The winner will have shown dedication to reducing the environmental impacts of their operation and has an interest in promoting lessons from their efforts to others in the industry.



Left to right:

*Rick Laursen – ASB
Chairman & Division 7
Councillor*

Cade Treacy

Rhonda Treacy

Mitch Treacy

*Amber Link – Reeve and
Division 2 Councillor*

The Treacy family operates Indian Springs Land and Cattle in the Wintering Hills of Wheatland County. Mitch and Rhonda, along with their daughter Abbey and son Cade and wife Shae (the sixth generation to live and work here), use responsible management practices to steward the land, through practices such as no till seeding of legume cover crops, managed grazing, and conservation of native grassland. This in turn contributes to soil quality, increasing water absorption, decreasing runoff, building drought resistance, and recycled nutrients, while mitigating soil and water erosion, soil compaction, and loss of pollinating insect species. Native grasslands play a critical role in carbon sequestration and in maintaining habitat for wildlife and ecological biodiversity. The Treacy family also works with renewable energy developers to facilitate wind energy projects in co-existence with their ranching operations.

Farming and ranching are inherently tied to the earth. Agricultural producers are masters of sustainability and some of the foremost, oldest stewards of the land, utilizing practices that have significant positive environmental impacts. Not just because their livelihoods depend on protecting the ecosystems they operate on, but because they have a deep connection to the land. However, they are also humble, hard workers who focus their time on growing and raising the food the world relies on. Their sustainability efforts are largely unacknowledged, while the agriculture industry battles criticism and misinformation. The role agriculture plays is irreplaceable for our future. What seems basic to our agricultural producers, like tilling technique and responsible grazing management, has a profound long-term impact on our environment and our society as a whole and we need to tell the world.



Youth Stewardship Award

Mrs. Wades 5/6 Class

Mrs. Wades grade 5/6 class with their partners at Nutrient and Alyssa Barbero Wheatland County's Agriculture and Environmental Program Coordinator

The Youth Stewardship Award aims to recognize the importance of engaging youth in environmentally beneficial initiatives, as the youth of today represent future generations of the Wheatland County community. We are proud to acknowledge the achievements and involvement of our youngest community members, as they inspire us to lead by example and sustain the environment for their benefit.

While partnering with Nutrien as well as a Siksika Elder Darrell Breaker, Mrs. Wades 5/6 class created the Ik Ka Nutsi at Wyndham Park Program. Through this program the students have created QR codes along a trail at Wyndham Park. Not only do these codes teach history and a Blackfoot connection, but they also tell an overall message about the coded trail and how to take better care of our planet.



Accepting the award for Mrs. Wades grade 5/6 class Halo Water Chief and Alyssa Hallgrimson Wheatland County's Agriculture & Environmental Program Coordinator

Community Stewardship Award

No submissions in 2022

On behalf of Wheatland County and the Agricultural Service Board, we thank the 2022 award winners for being stewards of our land and leaders in the community.

We commend you for your efforts and look forward to seeing the results of your work reflected in the county for generations to come. Our sincerest congratulations to everyone involved.

ASB Bursary Program

Congratulations to the 2022 Bursary Recipients!

The Wheatland County Agricultural Service Board (ASB) invites students furthering their education in the field of agriculture or environmental science to apply for the 2023 ASB Bursary.

ASB will provide up to \$6000 in Bursaries annually with a minimum award of \$500 and a maximum award of \$1500 depending upon the number of applicants that meet the criteria. Bursaries are available to students who reside within the boundaries of Wheatland County including recent graduates (within 3 years). Funding is not available to persons qualifying for or participating in job training assistance grants or previous bursary recipients.

Contact:

Ph: 403-934-3321

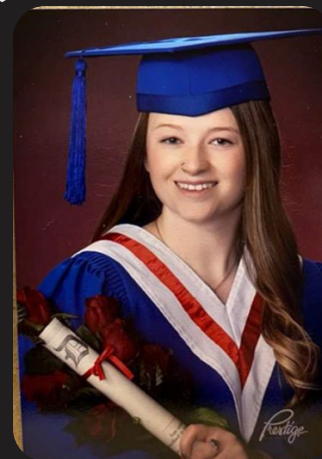
Email: AgandEnv@wheatlandcounty.ca

The next intake deadline is September 15th, find the 2023 application forms at

wheatlandcounty.ca/documents/asb-bursary



Grace Gregory
Agriculture Sciences -
Agronomy



Taylor Van Verdegem
Agricultural
Management



Aliera Chernoff
Agricultural
Management



Gavin Smith
Mechanical Engineering
Technology



Kai Nelson
Engineering





**GENERATION
LAND & GRAIN CO.**
PRAIRIE GROWN • FAMILY OWNED

— 2022 BMO FARM FAMILY AWARDS —

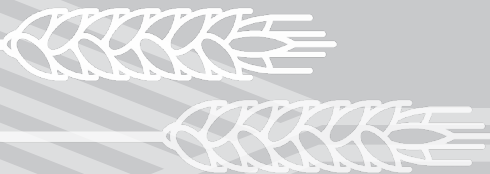
Every year, the Calgary Stampede and BMO Bank of Montreal recognize outstanding farm families in southern Alberta. The awards program was created to promote a renewed urban-rural relationship and to recognize outstanding southern Alberta farm families who best typify the value of the family farmer to our society. The program focuses on recognizing the contribution to the enhancement of quality of life as a family unit. Each year, the municipal districts in southern Alberta nominate one family. The families are brought to the Stampede for the BMO Farm Family Awards, which includes a reception, greetings from Alberta's Minister of Agriculture, brunch, awards presentation, and family photograph session. The winning families are then treated to an afternoon Stampede Rodeo performance.

**Wheatland County 2022 Nomination
Generation Land and Grain Co Ltd.**

*Sheila & Eldon Konschuh, Hannah Konschuh
& Casey O'Grady*

Before meeting and marrying, Sheila grew up on a farm near Gleichen Alberta, and Eldon grew up on a farm a few miles down the road from their current farm site, near Cluny. After what was a challenging start to their farming careers, Sheila and Eldon set up their home quarter and new farm operation where it is now, overlooking the Crowfoot Creek valley east of Cluny, with beautiful views down to the Bow River Valley on Siksika Nation.

Generation Land and Grain Company Ltd is a dryland grain farm, growing wheat, barley canola, and pulses. The farm is operated by Sheila and Eldon Konschuh, their daughter Rachel, and their daughter Hannah Konschuh and husband Casey O'Grady. Sheila and Eldon's eldest daughter Megan, is a professional violinist. She and her husband Denis Dufresne make their home in Calgary and are principals in performance group Duo Grande. In addition, they are owners and operators of YYC String Machine, a live streaming and recording studio.





Eldon was and still is passionate about soil conservation, being one of the first in the immediate area to implement no till or one pass seeding. He sits on the Hussar Seed Cleaning Plant Board as a director. Successful farm transitions, innovation on the farm, and keeping up with world markets are all things that Eldon is dedicated to. He has been asked many times to sit on farmer panels and to participate in feedback events with AFSC. He was awarded the Master Seeder award by Seedmaster for advancing the practice of zero till.

Sheila has made many contributions to the community that have worked to enhance the lives of rural children and adults with disabilities in Wheatland County and beyond, including co-founding Project Hope, a non-profit that is integrated into the Golden Hills School Division. She also co-founded Hope Bridges Society; a community-based, not-for-profit organization that connects adults in community and works to change hearts and minds through the universal language of music and art. Through her hard work and dedication, she was awarded the Gary McKinnon Champion of Children award in 2011 for her contributions.

Sheila also runs a local cut flower business called Blue Eggs and Blooms that grows and provides seasonal flowers to folks in Wheatland

County and neighboring communities. This has shown to be a fantastic way to connect urban folks with farming. Rachel raises the hens who lay the blue eggs, and she is a passionate gardener and “foodie”.

Eldon and Sheila’s youngest daughter, Hannah Konschuh, joined the family farm as part of the Konschuh succession plan after completing a Msc. in Soil Science from the U of S, and brought her husband Casey O’Grady with her. When she made the decision to become a full-time farmer, she quickly got involved in serving as a farmer director on a number of provincial and national boards, including Cereals Canada. Hannah was the first woman to serve on the board of the Alberta Wheat Commission, and has been a strong voice for encouraging and inspiring other women to follow in her footsteps. Recently, Hannah was one of the recipients of AFSC’s Women in Ag Award for her passion, dedication and commitment to agriculture and agribusiness.

Hannah is driven by the value that our most important resource in the agriculture sector is people. Hannah co-hosts a podcast called The Diversity Imperative, a podcast about unearthing the agriculture sectors diversity potential. Hannah and her co-host discuss leadership strategies with esteemed guests and endeavor to have rich and candid conversations that explore ways to overcome barriers and make diversity and inclusion a topic that everyone is comfortable talking about in the agriculture sector.

Despite the uncertainty and complexity that the agriculture sector faces, Generation Land and Grain Co Ltd. will continue to grow as a family business, to innovate, and further our commitment to sustainability and to our community.



Send your nominations for the 2023 BMO Farm Family Award to agandenv@wheatlandcounty.ca



4-H SUPPORT

For more than 100 years, 4-H has been a highly respected and one of the world's largest positive youth development organizations. 4H is operating in more than 70 countries, and in Canada there are more than 23,500 members and 7,800 volunteers.

4-H believes in nurturing responsible, caring and contributing leaders who are committed to positively impacting their communities.

The four H's represent core values:

- **Head - managing, thinking**
- **Heart - relating, caring**
- **Hands - giving, working**
- **Health - being, living**

This year, Wheatland County's Agricultural Service Board was pleased to support the Rockyford 4-H Beef and Standard 4-H Sheep Sales in 2022. Wheatland County is proud to see young agricultural farmers and ranchers grow in the industry and take on these challenges.

By purchasing Duncan Lawn's Beef and Blaze Martens Sheep this past year, we are excited to continue our engagement with local 4-H Clubs in the future. Wheatland County is honored to be supporters of such an amazing program. Congratulations to all 4-H members on your achievements.

4-H Pledge

I pledge

My **head** to clearer thinking,

My **heart** to greater loyalty

My **hands** to large server,

My **health** to better living.

***For my club, my community,
my country, and my world.***



Celebrating Young Producers!



DUNCAN LAWN
*and his steer at the
Rockyford 4-H Beef Club
Show*



BLAZE MARTENS
*Standard 4-H Sheep Sale
(no photo provided)*

For More Information Visit
WWW.4HAB.COM



PROTECTING OUR ENVIRONMENT

Wheatland County recognizes the necessity of meeting increased environmental challenges in a way that best suits our community, responding with the development of our environmental activities.



Operational Environmental Compliance

Ensure that all aspects of County operations comply with, and exceed where possible, applicable environmental legislation.



Environmental Communications

Incorporate environmental communications into general Wheatland County communications to raise awareness about environmental initiatives and current issues, topics, and events, and to promote achievements and programs.



Environmental Education

Educate staff, Council and the public on matters of local and regional environmental importance to increase community knowledge of relevant topics and issues.



Technical Support

Provide a source of local or internal information and support for staff and the public on matters related to the environment.



Advancing Environmental Sustainability

Support, maintain, improve, and coordinate programs, activities and partnerships that act to advance environmental sustainability locally or regionally and benefit Wheatland County and its residents.

LANDOWNER SUPPORT

A core component of Agriculture and Environment's Department suite of services is our education and extension programs. Through a variety of funding programs and educational opportunities, Wheatland County works hard to ensure that supports are available to our producers and landowners as they strive to manage their lands, homes and businesses sustainably.

Accepting Soil onto Agricultural Land

This fact sheet outlines risks associated with accepting soil onto agricultural lands, how to mitigate those risks

RISK Crop Disease
Regulated under the Agricultural Pests Act for its ability to have devastating effects on cruciferous crops like canola, chickpea has been discovered in Wheatland County and three neighboring municipalities. But increased movement of soil into our municipality greatly increases the risk of further spread.

RISK Weeds
The potential movement of weed infestations into or throughout the County through bulk soil transfer is a cause for concern. Weeds cause economic and biodiversity losses, affecting our agricultural community. Depending on the type of weed and severity of an infestation when found, weeds can be very difficult to eradicate.

RISK Soil Quality
The quality of soil offered by companies hauling to land on agricultural lands will not always meet a standard expected by the farmer. Soil quality issues associated with this type of soil transfer include low organic matter content, high clay content, salinity, rocks, and garbage.

RISK Drainage
Where the objective of placing bulk soil is to improve drainage or reduce standing water, landowners must be aware of potential impacts to neighbours and rules. Displaced water can flood or damage other properties, and landowners may be reported for potentially unauthorized activities leading to regulatory problems for the landowner.

Producers must be vigilant when accepting any bulk soil onto agricultural lands to ensure that productivity is not impacted and weeds and pests are not introduced. We must work together to ensure that the high quality agricultural land base in Wheatland County is maintained.



Site inspections help to ensure that materials on County sites are piled neatly and in a way that ensures any possible contaminants would be contained in case of rainfall or accidental spills.



Canada Agriculture Partnership (CAP)



The CAP **Water Program** assists primary producers in enhancing agricultural water management for continued growth and long-term success of the agriculture industry. There are two streams under the Water Program: 1) on-farm irrigation projects, and 2) on-farm water supply projects. Retroactive to April 1st, 2018. Eligible expenses will be cost-shared at 25% grant and 75% applicant, except for special incentives at 50% grant and 50% applicant.

The most common project in 2022 was drilling new wells. Others included well abandonment projects, off-site watering systems (dugouts), fencing dugouts, new dugouts, and upgrades to low pressure center pivot systems. Many of the programs closed mid-2022 as they were fully allocated. All programs will close as of March 31, 2023 and a new program Sustainable Canada Agriculture Partnership (SCAP) will take its place after April 1st. It is expected that a valid Environmental Farm Plan (completed and approved in the last 10 years) will be required from some of the programs (similar to previous programs).

In 2022

We assisted
21 producers
with CAP
applications

cap.alberta.ca

Environmental Farm Plan (EFP)

The Environmental Farm Plan (EFP) is a voluntary, whole farm, self-assessment tool that helps producers identify their environmental risks and develop plans to mitigate identified risks.

Wheatland County Partners with Alberta Environment and Agricultural Research and Extension Council of Alberta (ARECA) to promote the program as a social license tool and encourages producers in Wheatland County to complete an Environmental Farm Plan. Technical assistance is also provided to any producer who wishes to complete an Environmental Farm Plan in Wheatland County.



Sample Question

2. Water testing for household use *

Select n/a for any water sources that are NOT used for HOUSEHOLD use

1	2	3	4
Monitoring and testing of water quality on a regular basis (1 to 2 years). Records kept and used for comparison.	Monitoring and testing of water quality on a regular basis (1 to 2 years).	Monitoring and testing of water quality done occasionally.	Water is never monitored or tested for water quality.

Sample Action Plan

2. Water testing for household use

Go to Question

Approved

1	2	3	4
Monitoring and testing of water quality on a regular basis (1 to 2 years). Records kept and used for comparison.	Monitoring and testing of water quality on a regular basis (1 to 2 years).	Monitoring and testing of water quality done occasionally.	Water is never monitored or tested for water quality.

Resource	Rating	Area of Concern
Water Source: Drilled Wells	3	Monitoring and testing of water quality done occasionally.

Short Term Action * (within 2 years)

Test well water quality annually

www.albertaefp.com

In 2022

- 16 EFP Started
- 12 EFP's Completed
- Technical assistance is provided to any producer who wishes to complete an Environmental Farm Plan in Wheatland County.



Creating Healthy Landscapes that Sustain Agriculture,
Wildlife and Natural Spaces for all Canadians
ONE ACRE AT A TIME

ALUS Wheatland

ALUS Canada is a charitable organization with an innovative community-developed and farmer-delivered program that produces, enhances and maintains ecosystem services and nature-based solutions on agricultural lands. Projects such as wetland restoration and enhancement, riparian buffers, shelterbelts, ecobuffers and native prairie grass restoration. These projects provide cleaner water and air, habitat, carbon sequestration and climate resiliency. Sustaining agriculture, wildlife and natural spaces for communities and future generations. In 2018, Wheatland County signed the first Memorandum of Understanding with ALUS Canada. This partnership allows producers in our municipality to access national funding sources from ALUS.

ALUS provides expertise, resources and direct financial support to communities where farmers and ranchers build nature-based solutions on their land to deliver ecosystem services to sustain agriculture, help build community resilience and fight climate change and biodiversity loss for the benefit of future generations.

ALUS Wheatland is governed by the local **Partnership Advisory Committee (PAC)**, who makes decisions about how available funds are spent within the County.

Thank you for supporting the 2022 ALUS Wheatland program

- the Canada Nature Fund for Aquatic Species at Risk (DFO),
- Grazing Forward (Cargill and A&W Canada),
- Sustainable Development Technology Canada (SDTC)
- ALUS Canada



The 2022 ALUS Wheatland Partnership Advisory Committee (PAC)

- Rick Larsen, Wheatland County Councillor (Chair)
- Kayla Minor, Foothills Forage & Grazing Association (PAC Vice-Chair)
- Graydon Garner, Ducks Unlimited Canada
- Barry VanLaar, ASB Producer
- Sandra Desmet, ASB Producer
- Shannon Laprise, Wheatland County Councillor (Alternate)



ALUS Wheatland Vision

ALUS Wheatland PAC promotes sustainable management of water and soil resources, and biodiversity for the benefit of our landscape and community.

ALUS Wheatland Mission

ALUS Wheatland PAC supports producers to improve management of water quality, soil health and biodiversity for the benefit of our landscape and community.



Thank you to the producers who took part in the ALUS Wheatland Tour

- **6 farms** joined the ALUS Wheatland program in 2022
- **625 Acres** were enrolled into the ALUS program, these acres been enhanced through projects that provide ecological benefits on the landscape
- Funding received from ALUS Canada \$88,360.00

Farmers Wanted! Are you planning a project that will benefit marginal lands or sensitive areas?

For more information about ALUS contact:
Sarah Schumacher, Wheatland County Agricultural Conservation Coordinator

Ph: 403-333-6943

Email: sarah.schumacher@wheatlandcounty.ca



Wheatland Agriculture Stewardship Program



This program provides financial assistance to farmers and ranchers in Wheatland County who want to produce clean air, clean water, provide soil protection, to promote biodiversity and other ecosystem services in our community. Annual payments are available for approved projects through the ALUS Wheatland program.

Project Examples

The following are project examples only, the program is not limited to the list below.

- Riparian Streambank Fencing
- Offsite Watering Systems
- Wetland Restoration, Enhancement and Creation
- Riparian Streambank Buffers
- Native Prairie Establishment
- Pollinator Habitat Projects
- Riparian Streambank Enhancements
- Field Shelterbelts
- Wildlife Friendly Fencing
- Nesting Structures
- Modified Agricultural Activities to promote Wildlife Habitat
- Tree and Shrub Planting for Ecobuffers
- Other projects which provide ecosystem services and are approved by either the Wheatland County Agriculture and Environment Department or ALUS Wheatland Partnership Advisory Committee.

Off-site watering systems like this one help to steer cattle away from direct use of water bodies. Studies have shown that cattle gain better when using the off-site watering system rather than drinking directly from the source of water.

In 2022

- Landowners received a maximum of \$5000 at a cost share of 50%.
- Applications were approved by the Agriculture and Environment Department on a first-come, first-served basis
- 6 applications received and approved, 3 projects completed
- Total cost \$12,088.00
- This program is not retroactive.

Wheatland Safe Water Wells Action Program

This program provides financial assistance to landowners who are protecting groundwater quality in Wheatland County.

Abandoned Wells

Abandoned (un-used) water wells pose a serious threat to ground water quality and are a safety hazard on farms and acreages.

Under the Alberta Water Act, all abandoned wells must be decommissioned by an approved water well drilling contractor and is the responsibility of the landowner.

Funding Level: 75% up to \$2500 per well

Well Pits

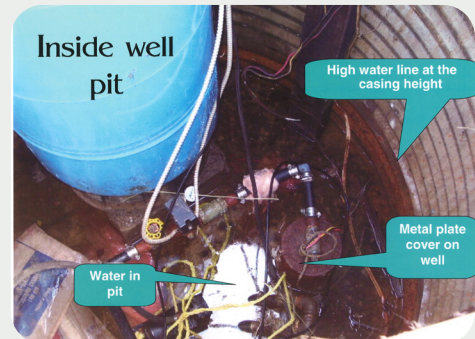
Well pits increase the risk of contamination to groundwater because they provide a place for water and contaminants to collect. Well pits often have dangerous air quality conditions.

Well pits can be eliminated by relocating the pressure system, extending the existing well casing above ground level, installing a pitless unit on the well casing and backfilling the pit.

Funding Level: 75% up to \$3500 per well

In 2022

- Landowners could receive a maximum of \$6000 over a three-year period on a combination of projects.
- Applications were approved by the Agriculture and Environment Department on a first-come, first-served basis
- Work on groundwater wells was completed by a certified well driller
- 5 applications received and approved, 3 projects completed
- Total cost \$8,843.00
- This program is not retroactive.



Well pit showing contaminated surface water draining into a well and a corroded well casing (coated in mouse hair) from an abandoned well.



WHEATLAND
COUNTY

Shelterbelt & Ecobuffer Seedling Program

Up to \$2000 in funding!

Wheatland County Agriculture & Environment Department agandenv@wheatlandcounty.ca Ph: 403-361-2000

This program supports landowners planting trees and shrubs throughout the County. There are many benefits of planting trees and shrubs which include:

- Improved building energy efficiency
- Adds aesthetic value to yard and landscape
- Provides wildlife and pollinator habitat
- Decreases soil erosion and crop damage
- Reduces standing water
- Snow capture for drift management and improved moisture retention.

What is a shelterbelt?

Means a row or rows of plantings made up of trees and/or shrubs that are positioned in such a manner as to provide shelter from the wind, snow, and to protect soil from erosion.

What is an Ecobuffer

Eco-Buffers are plantings of perennial species (i.e. trees, shrubs, and/or herbaceous plants) designed to mimic a natural forest habitat that provides specific ecosystem services.

Planting & Maintenance

Mulching and watering (for a minimum of 3 years), planting as early as possible in the spring or late fall, and excluding livestock from the area are essential factors for successful establishment of trees and shrubs.

Additional Funding & Support

- Additional funding may be available through the Wheatland Agricultural Stewardship and ALUS program for projects on agricultural land. For more information about these programs and support for ecobuffer design contact Sarah.Schumacher@wheatlandcounty.ca or Ph:403-333-6943
- Visit the Agroforestry & Woodlot Extension Society awes-ab.ca for factsheets on tree planting in Alberta
- Wheatland County has a tree planter available to rent for \$50/day. Contact agandenv@wheatlandcounty.ca

Program Guidelines

- THIS PROGRAM IS NOT RETROACTIVE Applications must be approved prior to purchase of all project components. Program opens **November 1st.**
- Applicants may receive up to **\$2000** per year for the following
 - **\$2.50 per Seedling (1-2yr old) to a maximum of \$1000**
 - **\$500 for Drip Irrigation supplies**
 - **\$500 Mulch (fibre, wood, plastic etc.)**
- GST and shipping costs are not eligible
- Planting must occur on land within Wheatland County.
- Wheatland County ratepayers are eligible for funding for personal, residential or farm use. Commercial or industrial businesses are not eligible. **Plants or materials purchased through the program may not be used for commercial resale.**
- Applications will be approved by the Agriculture and Environment Department on a first-come, first-served basis.
- The Applicant is responsible for all costs associated with projects over and above the funding maximum, as well as for ongoing project maintenance.
- **Planting projects must be compliant with the Wheatland County Land Use Bylaw setbacks. "no shrub, tree, shelterbelt or any other obstruction shall be erected or placed within:**
 - *i. 15.24 m (50.0 ft) from the nearest limit of a public road rights-of-way.*
 - *ii. 22.86 m (75.0 ft) from an intersection of two or more road rights-of-way."*
- The applicant will be reimbursed when the project is complete.
- Receipts are due by **June 30th**
- Applicants must submit photos of the finished project by **July 31st**
- Non-eligible species include; Autumn and Russian Olive, Common Barberry, Common Buckthorn, and Saltcedar.
- Not recommended: Caragana

Shelterbelt & Ecobuffer Seedling Program

This program offers support for landowners wanting to plant trees and shrubs throughout the municipality. Benefits of shelterbelt and ecobuffer-style planting projects include improved: energy efficiency of homes and farm buildings; wildlife and pollinator habitat; and decreasing soil erosion, as well as the added aesthetic value of our prairie landscape.

In 2022, the program reimbursed landowners \$10,518.30 for 15 shelterbelt planting projects. 3809 seedlings were planted in the County as a result.

In 2022 the Shelterbelt Committee discussed redesigning the shelterbelt application form and funding conditions. Starting in 2023, applications will be accepted as of November 1st for the following year, this allows for more time for applicants to organize, purchase and plan their projects. Also, applicants can now receive up to \$2000 per seedling (1 to 2 years old) to a maximum of \$1000 and \$500 for drip irrigation supplies and mulch (fiber, wood, plastics, etc).

For more information contact

Email: agandenv@wheatlandcounty.ca

Ph: 403-361-2000

What is an EcoBuffer?

Ecobuffers are a little different than the typical 3-row shelterbelts we are used to seeing. Usually they are at least 5 rows and planted with the intent to create a dense, multi-species area that is great for wildlife habitat and pollinators while serving similar functional purposes to shelterbelts!



Traditional Shelterbelt



Eco-buffer Design



Images: AWES-ab.ca

Benefits of shelterbelt and ecobuffer-style planting projects include:

- Improved energy efficiency of homes and farm buildings,
- Provides wildlife and pollinator habitat,
- Decreases soil erosion, and
- Adds to the aesthetic value of our prairie landscape.



ROSEBUD WATERSHED

FUNDING PROGRAM 2019 - 2022



A collaboration between
ROCKY VIEW COUNTY
Cultivating Communities



The issue

Past water quality monitoring on the Rosebud River has identified high levels of sediment, nutrients and fecal coliforms. Riparian inventories completed in the watershed over 20 years have rated riparian health as "healthy with problems to unhealthy" and data from the Agricultural Land Resource Atlas of Alberta identifies that areas within the watershed have the greatest risk for surface water quality, manure production, biodiversity/ species at risk, and wind erosion and water erosion.

Suggested management objectives for the Rosebud River provided by Cows and Fish and water quality experts include reducing livestock access to riverbanks and the active floodplain to allow structurally altered and damaged areas time to restore. This may be accomplished by encouraging the use of off-site water systems and alternative water source development and limited access by livestock.



Project Objectives

- Restore and protect the function of riparian areas in the Rosebud watershed
- Increase the resiliency of the watershed to withstand flood and drought events
- Enhance water quality by reducing livestock impact on riparian areas
- Provide educational opportunities for landowners

Project Types

- Strategic riparian fencing along the Rosebud River or its tributaries
- Riparian exclusion fencing
- Off-site watering systems
- Livestock waterers for new utilization of existing water sources



Restoring the riparian function and watershed resiliency of the Rosebud Watershed

Livestock Watering Systems

Installation of off-site watering systems limit or eliminate direct access by livestock to water bodies and water sources. Off-site watering systems reduce the build-up and off-site transport of manure nutrients and pathogens and provide greater protection of water sources and riparian areas. Additional benefits include improved water quality, reduced manure build-up in the calving areas and wintering sites, decreased manure hauling costs, and improved livestock health.

Fencing

Managing livestock access to riparian areas with the use of permanent or temporary fence can help to improve vegetation health, riparian function, as well as improved habitat and water quality.

What producers in the Rosebud Watershed achieved!

83,346m creek positively impacted in the watershed (including the Rosebud River, Severn Creek, and Serviceberry Creek)

16 projects completed

24 new off-site watering systems in use watershed

12,766m of riparian fence installed

14 Riparian Health Inventories completed by Cows and Fish

1 bioengineering demonstration project



EDUCATIONAL OPPORTUNITIES

Throughout the year, we hosted and partnered on many extension opportunities for landowners and producers. Despite the challenges that came with 2021, we were able to hold a number of virtual and in-person events that were well attended.



Mar 09

Alberta Farmer Pesticide Applicator Certificate Course & Recertification

Farmers wishing to use restricted pesticides are required to have a Farmer Pesticide Certificate.

When and where

Date and time

Location

About this event

The Farmer Pesticide Certification course is a tool intended to help farmers to reduce risks associated with pesticide use. This course is recommended under the Alberta Environmental Farm Plan but is also mandatory for farmers who wish to use restricted pesticides that require certification such as Aluminium Phosphide.

Online home study of the course would be beneficial. The online training is located at the following link: www.alberta.ca/farmer-pesticide-certification.aspx

\$100 + GST - Farmer Pesticide Applicator Certification (\$60 + GST - Recertification Only)

Lunch Provided - Please let us know of any dietary restrictions

COVID-19 Protocol Guidelines will be followed

For more information contact Russ Muenchshagen or Gay Mowat at Wheatland County 403-934-3321.



SOIL HEALTH FIELD TOURS

Odette Menard is an agricultural engineer who has had a major role in the promotion of soil conservation. Odette is an expert in earthworm behaviour and practices that promote health & fertility.



PINCHER CREEK July 11, 2022

STRATHMORE July 12, 2022

MADDEN July 14, 2022

Topics Include:

- Grazing plan long term
- Building soil health over time
- System approach to grazing management
- Cost effective strategies
- Stockpiled forage & bale grazing

Speakers: Iulia Palmer, Uriel Delgado & Odette Menard

Topics Include:

- Enhancing your grazing options
- Adding to the land's natural value
- Reclaiming land for production
- Cover crop silage mix under irrigation
- Soil health

Speakers: Rod Vergouwen, Graydon Garner and Odette Menard

Topics Include:

- Research & technology used on Old College demo sites
- Soil amendments in perennial & annual stands
- Virtual fencing collars
- Grazing & riparian health
- Advanced Ag & soil carbon

Speakers: Sean Thompson, Laio Silva Sobrinho, Graeme Finn & Odette Menard

Registration & details visit: <https://www.foothillsforage.com/events>

COSTS: FYGA Member / \$25.00 + GST Non-Member / \$30.00 + GST

Logos for various agricultural organizations including STARLAND COUNTY, WHEATLAND COUNTY, and KNEECHILL COUNTY.



Two-Part Webinar Series

7-9PM, April 11 & 12, 2022



Part One: Design & Planting (April 11):

Learn all about shelterbelts & ecobuffers, their differences, the ecosystem services they provide, their design and establishment, and how to plant for success.

Part Two: Renovation & Troubleshooting (April 12):

Learn about ageing and degraded shelterbelts, how to restore, enhance, and renovate them, and how to troubleshoot common issues.

To register for these sessions visit:

<https://www.eventbrite.ca/e/shelterbelt-and-ecobuffer-health-from-establishment-to-restoration-tickets-290151078867>

Logos for various agricultural organizations including AWES, STARLAND COUNTY, WHEATLAND COUNTY, and KNEECHILL COUNTY.

Alberta Farmer Pesticide Applicator Certificate
March 9th
In-Person (16)

Soil Health Field Tour
July 12th
In-Person (11)

Shelterbelt & Ecobuffer Webinar
April 11th, 12th
Virtual (35 live views)



June 22, 2022

9:30am @ Gem Community Centre

Lunch Provided

We will be touring Gemstone Cattle Company

3:00pm Wrap up

Cost: Members \$25, Non-Members \$30

Please dress appropriately for the weather & conditions as we will be outside for half of the day.

Register at:

<https://www.foothillsforage.com/soilstructureproduction>



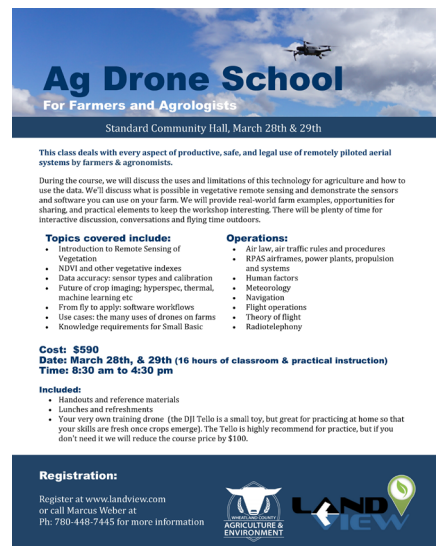
WHEATLAND COUNTY

CONNECTOR

FEBRUARY 2022

6 editions

11,000 copies printed



Standard Community Hall, March 28th & 29th

This class deals with every aspect of productive, safe, and legal use of remotely piloted aerial systems by farmers & agronomists.

During the course, we will discuss the uses and limitations of this technology for agriculture and how to use the data. We'll discuss what is possible in vegetative remote sensing and demonstrate the sensors and software you can use on your farm. We will provide real-world farm examples, opportunities for sharing, and practical elements to keep the workshop interesting. There will be plenty of time for interactive discussion, conversations and flying time outdoors.

Topics covered include:

- Introduction to Remote Sensing of Vegetation
- RPAS airframes, power plants, propulsion and systems
- Data accuracy: sensor types and calibration
- Future of crop imaging: hyperspectral, thermal, machine learning, etc.
- From fly to apply: software workflows
- Use cases: the many uses of drones on farms
- Knowledge requirements for Small Basic

Operations:

- Air law, air traffic rules and procedures
- RPAS airframes, power plants, propulsion and systems
- Human factors
- Navigation
- Flight operations
- Theory of flight
- Radiotelephony

Cost: \$590

Date: March 28th, & 29th (16 hours of classroom & practical instruction)

Time: 8:30 am to 4:30 pm

Included:

- Handouts and reference materials
- Lunches and refreshments
- Your very own training drone (the DJI Tello is a small toy, but great for practicing at home so that your skills are fresh once crops emerge). The Tello is highly recommended for practice, but if you don't need it we will reduce the course price by \$100.

Registration:

Register at www.landview.com or call Marcus Weber at

Ph: 780-445-7445 for more information

Logos for various agricultural organizations including STARLAND COUNTY, WHEATLAND COUNTY, and KNEECHILL COUNTY.

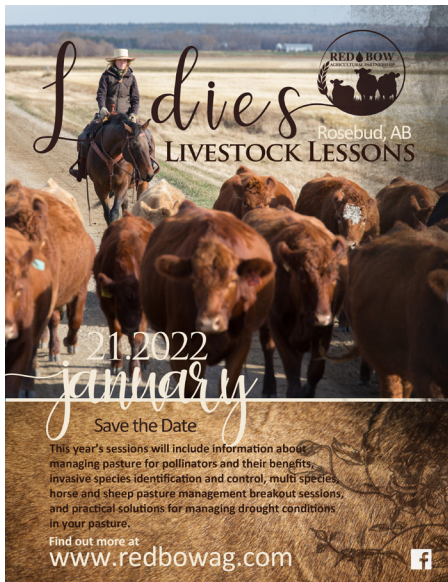
Soil Structure and Production Field Tour
June 22nd
In-Person (41)

County Connector Newsletter
6 editions
11,000 copies printed

Ag Drone School
March 28th-29th
In-Person (15)

Check out the County Connector newsletter, County Facebook page and website for more information on upcoming events in 2023!

Red-Bow Agricultural Partnership



The Red Bow Agricultural Partnership is a municipal collaboration created with the purpose of sharing resources, information, knowledge and facilitating networking opportunities for the benefit of sustainable agriculture within the rural communities in which they operate. The current partnership consists of Clearwater County, Kneehill County, M.D. of Bighorn, Mountain View County, Red Deer County, Rocky View County, and Wheatland County. Cows and Fish, Foothills Forage and Grazing Association, the Grey Wooded Forage Association, Lakeland College, and the Olds College Livestock Technology Access Centre are resource partners.

In 2022, we were fortunate to have both events separately and in person!!

Ladies Livestock Lessons - 51 registered

On January 21, 2022, Ladies Livestock Lessons was hosted in person in Wheatland County at the Rosebud Mercantile. Topics discussed were Tips & Tricks for the Vertically Challenged, Pollinator 101, Establishing pollinator habitat, multi species grazing, best practices for grazing sheep, equine pasture management, grazing through drought and invasive species



Ranching Opportunities - 81 registered

Ranching Opportunities was hosted in person at Olds College on February 3rd, 2022. Topics included Developing an Effective Vaccine Program, Vaccine Tools and Care, Using Technology to predict Forage Yields, Alternative Feeds, ALUS Grazing Forward Program, From the Soil Up, Grassland Research and a producer panel that discussed Regenerative Ag: What it means to you and how to make it pay.



Learn more about the Red-Bow events
www.redbowag.com

OPERATIONAL STEWARDSHIP

One primary focus of the County is to ensure that our operations (such as construction, gravel pits, and utilities) are in compliance with applicable provincial and federal legislation. Through this work, Wheatland County aims to proactively identify areas where improvements need to be made to mitigate environmental risks.

Soil Conservation

Soil conservation responsibilities include grass seeding and soil erosion control of ditches and borrow areas associated with road construction. Reclamation of soils is done in collaboration with staff from the Transportation and Infrastructure Department.

Roadside Seeding & Erosion Control

- **8 km** of road construction Right of Ways seeded.
- **41 Acres** of road construction borrow areas seeded.
- **40 bales** of Eco-Tac used for erosion control on road construction jobs.

Vegetation Management

Wheatland County operates a unique system which allows for simultaneous mowing and spraying. With our vegetation management we aim to control the presence and spread of weeds that can impact agricultural productivity or cause harm to livestock. Mowing our county roadsides has the added benefit of improving safety for the traveling public by increasing sight lines for wildlife and to help reduce snow drifting.

Roadside mowing and spot spraying along municipal roads, in hamlets, parks, cemeteries, waste transfer stations and gravel pits all assist in environmental practices.

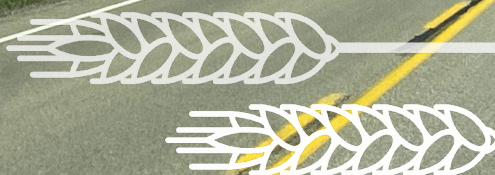
Fun Facts

- Every linear km of road surface has 2 km of ditch. This means ASB mowed 9350 km of road ditches in 2022!
- The Trans-Canada highway across Canada is 7821 km.



4675 km's of roadside mowing completed.

343 Acres spot sprayed for weeds





Agricultural Recycling

Grain Bag Rolling

The grain bag rolling program has been a great success! Since 2015, Wheatland County has had a grain bag rolling program in place. Agriculture and Environment department staff attend farms within Wheatland County to clean, roll and collect the plastic grain bags. The bags will go to a local recycler who processes the material into plastic pellets that can be repurposed. Producers can also drop bags off at the ASB shop as we a grain bag collection site for the CleanFarms Alberta Ag Plastic Recycle It! program.

The Plastic Grain Bag Recycling Program had a very successful year in 2022 with 222 bags rolled for a total of 128 hauled to the recycler (the remainder were transported in the news year). Since the program began in the fall of 2015 keeping over 479.78 tonnes of material out of our landfills.



Pesticide Chemical Container Program

At specific Wheatland County waste transfer sites: Wheatland West; Standard; and Hussar, plastic pesticide contains are collected. In a partnership with CleanFarms, these sites were developed to collect and recycle plastic. Containers will only be accepted if they are empty, and have been triple-rinced.



Twine Recycling

In partnership with the Drumheller and District Solid Waste Management Association, Wheatland County initiated a twine recycling program. Since 2015, twine collection bags have been available at waste transfer sites, where residents can return them to be recycled.



Image: CleanFarms

Accepting Soil onto Agricultural Land



This fact sheet outlines risks associated with accepting soil onto agricultural lands, how to mitigate those risks

RISK



Crop Disease

Regulated under the Agricultural Pests Act for its ability to have devastating effects on cruciferous crops like canola, clubroot has been discovered in Wheatland County and three neighboring municipalities. but increased movement of soil into our municipality greatly increases the risk of further spread.

RISK



Weeds

The potential movement of weed infestations into or throughout the County through bulk soil transfer is a cause for concern. Weeds cause economic and biodiversity losses, affecting our agricultural community. Depending on the type of weed and severity of an infestation when found, weeds can be very difficult to eradicate.

RISK



Soil Quality

The quality of soil offered by companies looking to haul to agricultural lands will not always meet a standard expected by the farmer. Soil quality issues associated with this type of soil transfer include low organic matter content, high clay content, salinity, rocks, and garbage.

RISK



Drainage

Where the objective of placing bulk soil is to improve drainage or reduce standing water, landowners must be aware of potential impacts to neighbours and rules. Displaced water can flood or damage other properties, and landowners may be reported for potentially unauthorized activities leading to regulatory problems for the landowner.

Producers must be vigilant when accepting any bulk soil onto agricultural lands to ensure that productivity is not impacted and weeds and pests are not introduced. We must work together to ensure that the high quality agricultural land base in Wheatland County is maintained.



Suggestions for protecting **agricultural land and landowners** from risky bulk soil decisions



Scrutinize the Source

Find out where soil will be coming from. Are there causes for concern based on the previous use of the land? Has the soil been brought to a site from another site already? Knowing exactly where soil is coming from is the first step in understanding whether it is right for your land. The Alberta Soil Information Viewer can provide information about soil characteristics for most locations. It is recommended that you visit the source site to see what you're being offered before agreeing to accept the material.



Confirm Quality

After gaining an understanding of the source of the material you're being offered, request soil testing proportionate to soil transfer volume. What are the organic matter, sand, silt, and clay contents of the soil? When the soil was stripped, were topsoil and subsoil kept separate or have they been mixed? Is there salinity or sodicity present that will make crop growth difficult? Do not assume you will be given clean topsoil; it is better to understand the quality problems present before soil is left for you to manage.



Guarantee Pest-Free

Ensure soil is free of clubroot and other agricultural pests and diseases by requiring testing for soil-borne pests. Not only will your future crop production benefit, but diligence in preventing the spread of clubroot is required under the *Agricultural Pests Act*. You can also ask to have soil tested for presence of regulated weeds seeds.



Insist on an Agreement

Get your expectations assured in writing through use of a contract or other agreement. How much soil are you acquiring? Is the delivery equipment clean, what is its quality, clubroot, and weed status? Whose responsibility is it to remove rocks and garbage that are left on your property? If quality, productivity, disease, or weed issues arise after soil has been placed, who is responsible for correcting them? Who is responsible for dust and other impacts during soil hauling? Who is responsible for obtaining any necessary authorizations for the work?



Read the Regulations

The placement of soil in areas where water flows or is present is regulated under Alberta's *Water Act*. A landowner will be personally liable for any changes to drainage that result in damage to infrastructure or other properties, or for any reported activities that become a compliance matter for Alberta Environment and Parks. Protect yourself by knowing and understanding the rules before deciding where to place soil. Be sure to check with the County regarding road use and development permit requirements.

Watch for Weeds

After soil has been placed, watch for growth of any weed species. Weeds are much easier to manage when infestations are caught early, landowners are legally responsible for managing or controlling regulated weeds on their land. Enlist the assistance of your County Agriculture and Environment team to identify weeds and control measures if needed.

For more information contact the
Agriculture and Environment Department at
Ph: 403-934-3321
Email: agandenv@wheatlandcounty.ca



Agriculture & Environment Programs & Services



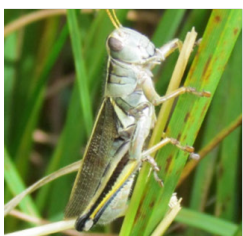
Vegetation Management

- Mowing and spot spraying of County managed lands
- Seeding and reclamation of road construction Right-of-Ways and borrow areas.
- Chemical treatment of cut stumps for brush control in County right of ways



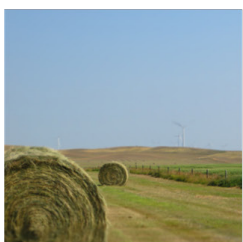
Weed Management

- Mowing and spot spraying along municipal roads, in hamlets, parks, cemeteries, waste transfer stations, and gravel pits.
- Public and private land inspections
- Education programs, identification



Pest Inspection & Control Program

- Staff conduct annual field inspections and surveys of: grasshoppers, Clubroot, Bertha Armyworms and Fusarium Graminearum
- Assistance with identification



Roadside Haying

- Permits
- Landowners wishing to hay Wheatland County's right-of-ways must submit an application to Wheatland County by June 30th.



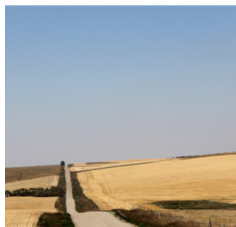
Seed Cleaning Plants

- The ASB is responsible for annual inspection and licensing of three seed cleaning plants: Strathmore, Hussar, and Rosebud.



Agricultural Recycling

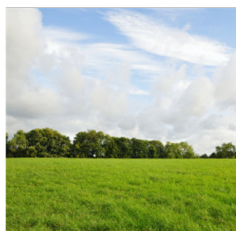
- Free grain bag rolling and hauling program
- Plastic baler twine recycling
- Farm chemical container drop-off sites (Hussar, Standard and Wheatland West facilities)



ASB Bursary

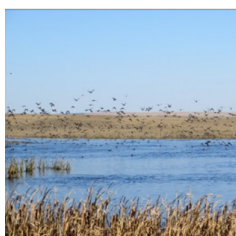
\$500—\$1500

- Available to Wheatland County students furthering their education in the field of agriculture or environmental science
- Application Deadline: September 15th



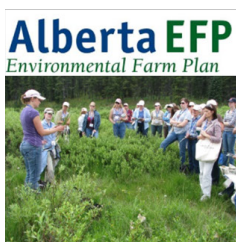
Shelterbelt & Ecobuffer Seedling Program

Wheatland County ratepayers are eligible for funding to purchase trees and shrubs, drip irrigation equipment, and mulch. The deadline for applications is June 30th.



Environmental Program

- Promote environmental stewardship in the County, manage municipal Environmental Action Plans, and available to assist ratepayers with inquiries related to environmental management.
- Environmental Awards - nominations due: November 1st.



Alberta EFP Environmental Farm Plan

Agricultural Conservation

- Assist producers to complete their Environmental Farm Plan
- Assist Producers with Canada Agriculture Program grant applications
- Workshops and conferences



Funding Programs

- Safe Water Wells Action Program for abandoning wells & removing well pits (up to \$6000)
- Wheatland Agricultural Stewardship Program (up to \$5000)
- ALUS Wheatland program



Education Opportunities

- Workshops
- Tours
- Field days
- Pesticide Applicators license
- Classroom Agriculture Program

visit us at wheatlandcounty.ca/agriculture

Rental Equipment



Pasture Sprayer **\$150/Day**

The Boomless pasture sprayer can be utilized to control unwanted weed species and brush on rangeland pastures that are too rough for conventional spray equipment.



Weed Wiper **\$100/Day**

The 30-foot weed wiper can be utilized to selectively control unwanted weed species and brush in pasture and rangeland.



Skunk Traps **Free Rental**

Rental of a skunk trap requires a \$100 deposit and two week rental period.



Magpie Traps **Free Rental**

Rental of a magpie trap requires a \$100 deposit and two week rental period.



Forage Sampler **Free Rental**

Rental of the forage sampler requires a \$100 deposit and two week rental period.



Cattle Moving & Crossing Signs **Free Rental**

Available to producers when moving livestock across County roads.



Tree Sprayer **\$100/Day**

Only registered insecticides are to be used. Slides into the back of a pick up truck.



Tree Planter **\$50/Day**

Available for shelterbelt plantings, towable behind small tractor with 540 PTO shaft.



Grain Bag Roller **Free Service**

Wheatland County offers a free grain bag rolling service to ratepayers.

Contact Information

Administration Office Ph: 403-934-3321

ASB Shop Ph: 403-934-4949

Email: agandenv@wheatlandcounty.ca

George Bloom Manager of Agriculture & Environment	Ph: 403-361-2006
Jason Regehr Agricultural Services Foreman	Ph: 403-361-3238
Albert Anderson Agricultural Services Officer	Ph: 403-361-3240
Sheldon Roes Agricultural Services Sub-Foreman	Ph: 403-934-4949
Sarah Schumacher Agricultural Conservation Coordinator	Ph: 403-361-2027
Alyssa Hallgrimson Agriculture & Environmental Program Coordinator	Ph: 403-361-2007

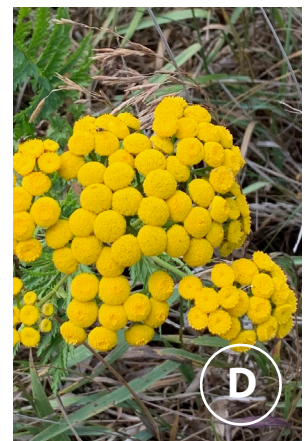
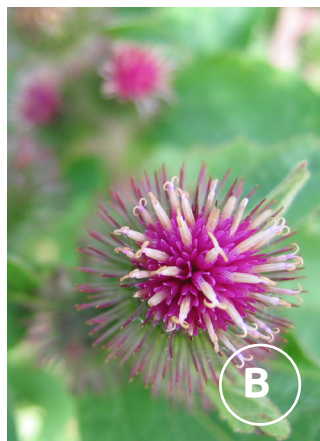
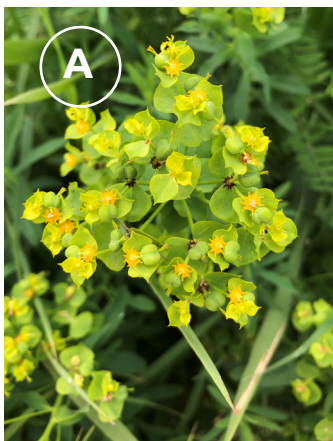
Fun Ag Facts

- Canada is the fifth largest agricultural exporter in the world. We produce about 85% of the world's maple syrup and we are the world's largest grower and exporter of flax seed, canola, pulses (peas, beans, and lentils) and durum wheat (the kind used to make pasta).
- Number of farms and ranches with cattle in Canada (with locations found in every single province: 60,000
- Number of farms in Alberta 40, 6000 – Alberta is also home to one of the worlds most productive agriculture economies.
- Number of eggs produced by Alberta's egg-farming families every year: 780 million
- Number of milk-producing farms in Alberta, producing over 835 million litres of milk in the 2020/21 dairy year: 494
- Contribution by the canola industry to the Canadian economy each year, a sector that also supports 207,000 jobs across the nation: \$30 billion



- Canada one of the world's top 5 wheat exporters, with an average of \$7 billion worth exported each year.
- Wetlands on your land can help your farm reach its full potential, while maintaining a diverse landscape for the future.
- Agriculture is a crucial component of economic success in the province of Alberta, employing more than 75,000 Albertans
- Alberta has one of the world's most productive agricultural sectors, [2] and it stands as Canada's second-largest agricultural producer. In fact, 40% of Canada's cattle are raised in Alberta and 20% of Alberta's cleantech ventures [3] are in the agriculture tech sector.

Can you identify these weeds?



A = Leafy Spurge (Front Cover) B = Common Burdock C = Russian Knapweed (back cover) D = Common Tansy



CONTACT INFORMATION

Any comments or questions regarding the content of this Agriculture and Environment Program Update may be directed to:

George Bloom
Manager of Agriculture and Environment
Email: George.Bloom@wheatlandcounty.ca
Ph: 403-361-2006

You may also contact the main reception to be directed accordingly at Ph: 403-934-3321, or send an email to the department at agandenv@wheatlandcounty.ca

Hard copies of this document are available at the Wheatland County Administration Office: 242006 Range Road 243, Wheatland County, AB T1P 2C4 (approximately 7 km east of Strathmore on the north side Highway 1).

The following documents are part of this series and may also be requested:

- 2019 Environmental Program Update
- 2020 Agriculture & Environment Department Report
- 2021 Agriculture & Environment Department Report

