



*We wish everyone a
blessed holiday season
filled with
happiness and joy.
May the new year bring
less stress in our lives and
more kindness around the
world. Merry Christmas
from the CARA Staff and
Board Members.*



Grain, Grass & Growth

December 2023

www.chinookappliedresearch.ca and www.carasoilhealthlab.ca

2023 In the Rear View

Weather was the biggest story from 2023 for CARA and most producers in the Special Areas and MD of Acadia. The impact on production was significant, especially in the central and southern regions, where grasshoppers robbed yields as well. We were unable to collect any data from our Madge crop trial site east of Hanna or our Grudecki site in the MD of Acadia. Although trials at the rest of our sites were harvested, yields were significantly reduced and some of the results have high variability. The provincial Regional Variety Testing program does not allow reporting of data that doesn't meet certain criteria so there will be limited varietal information that we can share from our 2023 sites. An overall summary of other projects will be available early in the new year.

CARA, along with the other eleven applied research and forage associations in the province, received a boost in our core grant for 2023 from RDAR, Alberta's research funding arm. We are hoping to secure a long term agreement regarding the future of these funds which, combined with the Special Area Board's grant, enables us to maintain a base capacity of staff and equipment. A strong foundation is critical in accessing grant money and/or partnerships with industry, commissions and others interested in adaptive research and knowledge sharing projects.

CARA's Strategic Plan was updated by our Board members and staff in March. Key focus areas of the plan are:

- Renowned Soil, Crop and Forage Research for Dryland Sustainability
- Locally Trusted Agriculture Knowledge Leaders

· Thriving Organization with Highly Engaged Board, Staff and Producers

The Soil Health Lab has received approximately 8000 samples of soil, compost and manure to date from projects and producers across western Canada. Grant money allowed purchase of an Inductively Coupled Plasma Optical Emission Spectroscopy (ICP-OES) which will enable us to analyze a number of minerals and reduce our dependence on outside labs for chemistry assessments. We've had to do some renovations to the lab space to best utilize this equipment and also to expand our basic processing area. Once the renovations are complete and the new equipment in operation, we will be pursuing accreditation of the lab facility which will lead to even more demand on lab services.

Project highlights during the past year include establishment of a trial evaluating production of perennial wheat and rye grain, a canola agronomics trial supported by the Canola Council of Canada as well as durum fertility and barley agronomics trials (and field day) sponsored by Alberta Grains. 50 crop sites were surveyed for weed growth and species to support Agriculture and Agri-food Canada's weed monitoring data base. Forage growth on 100 sites were verified for the Canadian Forage and Grasslands Association ground-truthing survey.

During the past year Karin and Lacey assisted over 80 producers with applications to participate in the On-Farm Climate Action Fund (OFCAF) and Canadian Forage and Grassland Association (CFGGA) programs. Approval and completion of all projects could bring over 4 million dollars into our region.

CARA Soil Health Lab awarded \$10,000 from Prairie Crocus Community Fund

We are excited to announce the CARA Soil Health Lab has been awarded \$10,000 by the Prairie Crocus Community Fund. These funds will go towards a differential interphase contrast microscope which will be used for analysis of various soil micro-biological components and will also be a tool for teaching students and farmers when they join Dr. Zavala in the lab to look at their own soil samples.



to right in the photo: Lois Bedwell (LAC), Helene Nicholson (Regional Development Coordinator). Elaine Michaels (LAC), Dianne Westerlund (CARA Manager), Linda Bingeman (LAC Chair), Dr. Yamily Zavala (CARA Soil Health Lab Manager), Landon Olsen (CARA Board Member) and Cindy Goodine (LAC). The Prairie Crocus Community Fund is a part of the Community Foundation of

Local Advisory Committee (LAC) members were on hand for the presentation to CARA. Left

Southeastern Alberta which focuses on the Special Areas and MD of Acadia.

COMING SOON: Environmental Farm Plan Workshop



Renew or complete a new EFP to:

- ✔ Secure Sustainable Canadian Agricultural Partnership funding
- ✔ Increase environmental sustainability awareness
- ✔ Use as a tool for future planning
- ✔ Marketing strategy and for sustainable sourcing programs
- ✔ Increase efficiencies and reduce production costs

Visit albertaefp.com to register for an EFP, renew, or update your current EFP!

CARA GRAZING CLUBS

January 2024 Meetings:

“LIVESTOCK NUTRITION & HEALTH”

**JANUARY 10TH - HAND HILLS HALL
6-9PM**

BARRY YAREMCIO - 2024 NUTRITION OVERVIEW
ARNO DOERKSON - RIOMAX PRODUCT OVERVIEW
KARIN SCHMID - "TIPS FOR EXTENDED GRAZING TO REDUCE
WINTER FEED COSTS"
FUNDING OPPORTUNITY OVERVIEW

**JANUARY 17TH - POLLOCKVILLE
HARDGRASS HUB COMMUNITY CENTRE
6-9 PM**

BARRY YAREMCIO - 2024 NUTRITION OVERVIEW
ARNO DOERKSON - RIOMAX PRODUCT OVERVIEW
KARIN SCHMID - "TIPS FOR EXTENDED GRAZING TO
REDUCE WINTER FEED COSTS"

**JANUARY 24TH - CONSORT
50TH AND MAIN RESTAURANT
6-9 PM**

BARRY YAREMCIO - 2024 NUTRITION OVERVIEW
BLUE ROCK ANIMAL NUTRITION - MINERAL OPTIONS AND ALBERTA
PASTURE SAMPLING PROGRAM PRELIMINARY RESULTS
SEAN MCGRATH - PRODUCER HIGHLIGHT



\$20/Ticket
Must pre-register by calling 403-664-3777 or emailing cara-3@telus.net



Producer Highlights – Over the Fenceline

In the next few editions of the Grain, Grass and Growth newsletters, we are planning to feature one or two producers who have incorporated some innovative technologies into their operations. A very effective method of accessing information is learning from our neighbours or others in the community who have tried a new practice and perhaps even modified it to fit our local environment. Those who are trying something new don't necessarily adopt new practices with the intention of hosting a field day or making a presentation on their experience, but we certainly appreciate those who do.

Our first feature is Clay Ridge Farms – Kirby and Renee Laughlin of the Big Stone area south of Youngstown. Kirby has been a valued member of the CARA Board since 2011. He and Renee hosted a winter grazing/winter watering field day back in 2010. For readers who are Olds College graduates, guest speaker for the day was Jim Stone, a former instructor at the College who also travelled the country discussing electric fencing as a tool for improving grazing management. Kirby shared his experience in watering systems which use less energy than traditional setups. He has since added an energy efficient 1/6 hp circulation pump to keep the openings in his large tire trough from freezing up.



A new waterer was installed since the field day – a wind geothermal unit which uses wind power to circulate floating pop bottles in the water to keep the ice from building up.

In addition to reducing energy use in winter watering, Kirby and Renee's cows have also been treated to very strong repurposed windbreaks during the past few years. These structures are a great use of old tires from local tire

dealers and are virtually bull proof. They have built them as portable units (pictured) or permanent and in different heights. The wind breaks also double as indestructible back scratchers and the black tires provide a warm space for new calves once the sun hits those black tires in the spring.

Thanks to Clay Ridge Farms for sharing what you're doing in your operation to reduce energy costs.

Gould Ranching Ltd, based just south of Consort in Special Area 4, have incorporated some innovative practices in their operation to preserve and better utilize the limited moisture available for farming and ranching here in the Palliser Triangle. Gould Ranching is a family operation, including Matthew, Farley and Zoe as well as their parents and spouses. They have recognized that things like the weather are entirely out of their control when it comes to farming in this challenging environment so have focused on what they can manage.

A few things within our control are: equipment, how equipment is utilized, timing of seeding and preserving as much moisture as possible.

Matthew and Farley's view on equipment is to buy used, proven implements that are still reliable but have already been depreciated down from new value. Their time and investment in annual maintenance is less than upgrading to new equipment every two years, especially since they don't have the size to earn large fleet discounts.

They try to use their equipment to a maximum level of efficiency, for example 140 acre/ft of their seed drill and 125 acre/ft on their corn planter. Hired help and GPS allows them to seed 24 hours a day, covering as many acres in a day as possible. They have added a grain dryer to their operation which they feel will serve to replace a combine. Depreciation on the dryer is a fraction of that for a combine so they can afford to keep the combine rolling longer hours, possibly taking grain off at a higher moisture level. The dryer is also in place in the event of wet conditions during harvest.

As their crop acreage has increased during the past few years, Matthew and Farley Gould are testing the concept of seeding wheat in early April, encouraged by research work conducted by Graham Collier, PhD Candidate and Nufarm Agronomist as well as some small plot trials carried out by CARA. Graham's work is showing that wheat can tolerate lower spring temperatures than traditionally thought. They have seen some benefits in yield from the early seeding but have not had a lower average yield when compared to later seeded crops. They have learned early seeding means seed and equipment must all be ready earlier than in the past. The early seeding also allows them to get more acres per seeder and increases the likelihood their canola and corn are seeded at the optimal time.



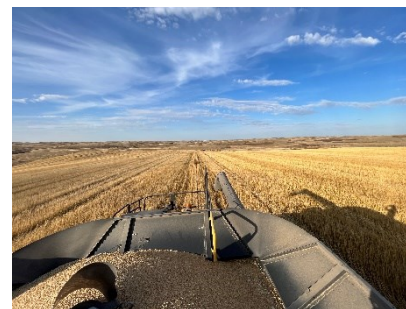
Early Seeded Wheat Field Day 2022

The fourth point of management the Gould's focus on is moisture management. Early seeding increases the likelihood of utilizing more moisture. Matthew and Farley also consider maintaining as much residue as possible when deciding crop rotations. For example, they do not grow a pulse after a brassica. They have also invested in stripper headers to harvest our cereals, retaining the maximum stubble height left in field. This stubble slows down the wind speed, traps the maximum amount of snow possible, reduces moisture loss and creates a micro-climate for future plants. Their goal is to stop the movement of snow so it spreads evenly over the field, especially hilltops, and have it soak into the ground. Stripper headers do come with an added cost but they don't depreciate as fast as a traditional header as there is much less to wear out on them. The moisture trap was obvious in 2023 as the stripper stubble contained at least 2 more inches of moisture than short stubble and higher yield in the fall. Another strategy to conserve moisture in the Gould operation includes seeding their corn with a planter equipped to band the fertilizer at the same time, this reduces moisture loss from making a second field pass. Although the Gould brothers acknowledge these strategies come with a cost, maximizing equipment efficiency and preserving as



much moisture as possible will make a difference in most years. As a banker once told them, *"I foreclose on just as many farms on the Number 2 corridor as I do in the Palliser Triangle, it all comes down to management."*

Stripper header leaving good stubble for snow trap



A huge Thank You to the Gould Families for hosting a Farm Safety Camp for the Consort School back in June.

SUSTAINABLE CANADIAN AGRICULTURAL PARTNERSHIP

SCAP is a government-funded cost-share program for Alberta producers, for

projects including:

WATER DEVELOPMENTS

FARM TECHNOLOGY

FARM SECURITY

EFFICIENT GRAIN HANDLING

RESILIENT AGRICULTURAL LANDSCAPE PROGRAM

For more information on available grants call the CARA office at 403-664-3777 or email cara-3@telus.net

Please Note:

Applications for eligible Farm Technology, Farm Security, and Efficient Grain Handling projects (retroactive to April 3, 2023) close on **December 22, 2023**.

Applications will resume in April 2024 for costs incurred after April 1, 2024.

"The SCAP programs include funding for the development of water sources like dugouts, dams, wells, and water pipelines under the Water Program. For projects like digging a dugout, dam, or spring development the producer will need to contact an Alberta Agriculture Water Specialist to review a pre-construction document to ensure the water development meets all legislative requirements. Other funding streams in SCAP include Farm Technology and Farm Security, Efficient Grain Handling, On-Farm Value Added funding, and the Resilient Agricultural Landscape

Program (RALP). The funding categories under RALP include pasture management projects like cross-fencing and water systems powered by wind or solar for rotational grazing, adding legumes to existing stands, riparian area management, and targeted grazing for weed control. Other eligible projects under RALP include cropland conversion to native or tame forages, shelterbelt and ecobuffer establishment, perennial forage establishment in saline areas or water runs, intercropping with pulses or cover crops, and wetland restoration and construction as a part of the Wetland

Replacement Program. The RALP, Farm Technology, and Farm Security streams require an Environmental Farm Plan for approval. All of these programs have different cost-share and maximum expenses that can be found by going to www.alberta.ca/sustainable-cap-programs.aspx or the CARA website under "Producer Funding". We are available to assist producers with applying or with any questions they may have." Please call the office for assistance 403-664-3777.

CARA Soil Health Lab Renovations

Nearing Completion!!

We are excited that renovation activities will be completed early in the new year. Although lab activities carried on almost as normal during the construction, staff is looking forward to the additional space, installation of new equipment and improved efficiencies the renos will bring. Many thanks to Phil Bourque and Jed Janzen for their contributions to the project as well as all the local producers who have donated towards expenses. A full list of acknowledgements will be presented in our next newsletter.



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