MANITOBA AGRICULTURE / FEBRUARY 2023

Beef and Forage Technical Bulletin 9th Edition

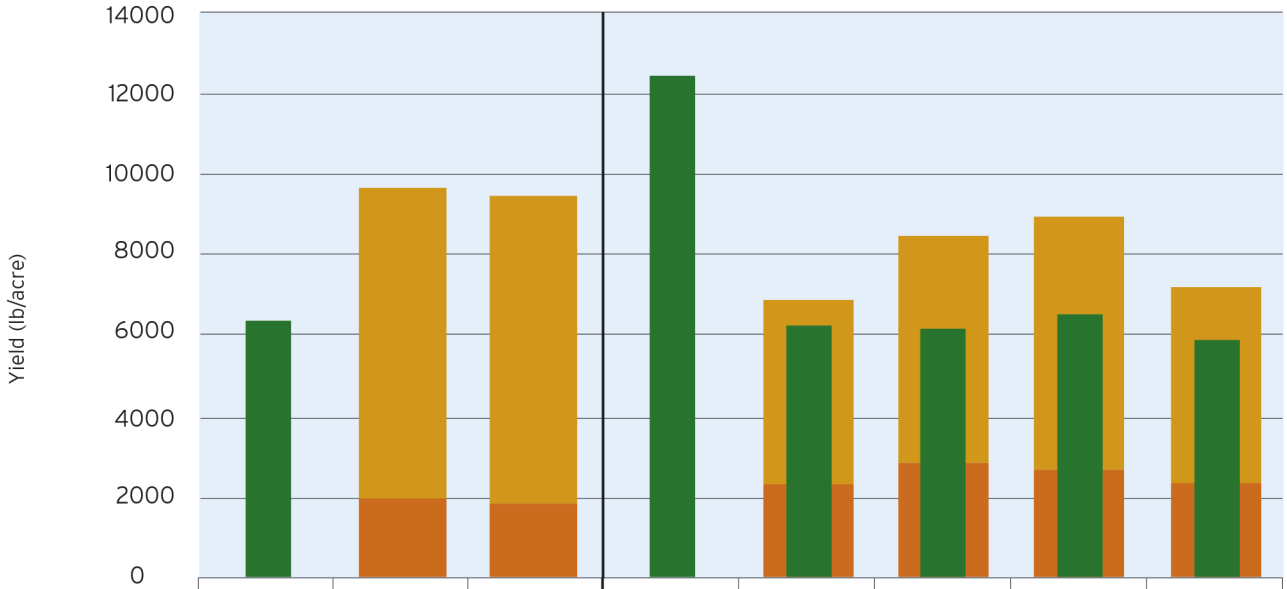
"Teff Grass" A new high quality forage option for the Canadian Prairies

Teff is a warm-season annual grass that originates in northeast Africa, where it is commonly grown for forage production and grain, which is ground into flour to make *injera*, a staple flatbread in northeast African cuisine. As a forage, the crop is notable for its high protein content and palatability, as well as its potential for high yields.

Since 2020, the Manitoba Diversification Centres have grown teff, seeded at various rates, and compared it with the yield and feed quality of barley greenfeed. Testing is also underway to determine its suitability as a grain crop in Manitoba, and to identify best management practices.

As shown below, in 2021 all teff treatments produced more forage than barley in 2021, but the barley forage out yielded the teff treatments in 2022. The difference is likely due to lower rainfall in 2021.

Teff Forage Yield, Roblin, 2021-2022 (lbs/acre) @85% DM



	2021			2022				
	Barley	Teff-5	Teff-7	Barley	Teff-4	Teff-5	Teff-6	Teff-7
2nd cut		7470	7506		4444	5512	5932	4689
1st cut		1997	1892		2315	2694	2602	2466
One cut only	6176			12814	6094	6077	6222	5895

Harvest dates for the first cut were July 15, 2021 and July 28, 2022. Second cut was taken September 29, 2021 and October 6, 2022. Note that teff was only seeded at five and seven pounds/acre in 2021, while in 2022 seeding rates of four to seven pounds/acre were used.

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Teff 1st cut July

Teff 2nd cut September

Teff at maturity October

Feed analysis taken from teff cut as hay shows promising results with high protein levels outlined below. Also the straw remaining after grain harvest tested well with higher levels of energy and protein than one would expect from a cereal straw or corn stover. It is also important to note that in 2021, the first cut of teff hay had comparable energy to the barley, but the crude protein was 10 per cent higher with the teff.

Feed Values for Teff Hay, 2021

	Roblin 2022			Roblin 2021	
	Hay	Straw		Hay	
Dry matter values	**First cut (July 28)**	**Hayed (Oct 6)**	**Not Hayed (Oct 6)**	**First cut (July 15)**	**Second cut (Sept 28)**
Crude protein (%)	18.02	10.33	8.43	20.85	11.38
TDN (%)	63.53	55.35	51.66	69.17	59.85
ADF (%)	32.86	40.52	43.97	27.58	36.31
NDF (%)	60.53	70.31	70.46	59.67	65.75
Relative Feed Value	97	76	72	105	86

Using teff for stockpiling grazing, is also being investigated by Manitoba Beef and Forage Initiatives. Initial findings show teff is quite palatable to the animals when left to grow all season, and then grazed in the fall. In 2021, barley yield was compared to harvesting two cuts of teff, whereas in 2022 the treatments also included a comparison to one cut of teff.

Although additional testing is necessary, the possibility of cultivating teff for grain, as well as high quality forage and straw, presents an exciting new opportunity for Manitoba's agriculture sector. For further information including complete trial results visit mbdiversificationcentres.ca/

Livestock – Upcoming Stock Talk Webinars

Manitoba Agriculture is offering another series of livestock and forage presentations, packed with information, featuring leading experts, aimed at helping Manitoba beef producers best manage their cattle operations. Find out the latest news on research and production for beef and forage management by participating in these virtual sessions.

Date: Feb 9, 2023
Time: 1 – 2 p.m.
Place: Your computer, smartphone™ or tablet

Register for StockTalk webinar

https://us06web.zoom.us/webinar/register/WN_U6k8yuJ-QLG9eFOXVAeHKg

Future webinars

Feb. 9	**Cattle Market 2023 Update**
March 9	**Ask the Vet: Bull Soundness and Bull Selection**
April 13	**Forage and Pasture Management**

For more information, call Manitoba Agriculture
1-844-769-6224 or email shawn.cabak@gov.mb.ca or lori.forbes@gov.mb.ca.

Submit your questions prior to, or during, the talk. Or visit our website at
manitoba.ca/agriculture/online-resources/stock-talk.html.

SURVEY TIME!

A research team led by Emma Stephens (AAFC-Lethbridge) and Kathy Larsen (University of Saskatchewan) have launched an online Feed Testing survey: https://surveys.insightrix.com/feedtestingsurvey

The survey is funded by the Beef Cattle Research Council and the Saskatchewan Agriculture Development Fund.

They are looking for commercial cow-calf producers from Manitoba, Saskatchewan, Alberta and British Columbia with at least 25 cows to complete the survey.

Questions are about winter feeds used, use of feed testing/ration balancing, use of other methods to assess feed quality and animal nutrition status.

Note: Producers do not have to be regular users of feed testing to complete the survey. We're looking for perspectives from adopters and non-adopters.

Let's Talk about Transition!

Transition planning is often a difficult subject for farm families to discuss as it can be a cause of stress and grief.. The conversation is often avoided because of the complex emotions and feelings involved. How does the heir to the farm suggest their predecessor step down or relinquish control? How is it possible to suggest a change in ownership to someone who has worked so hard their entire life to establish what they have? On the other hand, why doesn't the owner want to slow down and look towards a relaxing retirement, especially if they have a successor who is willing to take control?

Every farm, regardless of stage, should have a transition plan. One tool for building momentum is the Transition Planning Guide - a manual outlining step-by-step the process of creating a transition plan for the farm business. Successful transition planning involves looking ahead and planning for the future. Leaving behind a healthy business is important to keep it viable and profitable for the long term. If determined the farm will be sold rather than transitioned within a family, use the Guide to Farm Estate Planning in Manitoba to create dialogue and financial decisions for retirement and estates.

Creating your plan is dependent on two very important factors, communication and viability. Communication is key to establishing the goals (wants and needs) for all parties involved, and should begin sooner than later. A planning tool to use in an initial family farm transition meeting can be found in the farm management section of the Manitoba Agriculture website.

The second key aspect when planning is the financial viability of the farm. If the farm has struggled in the recent past, how will it fare going forward with possibly a higher debt load? What is the overall farm worth? How much do you need to retire? If passing the farm on to a child, how much can they afford, and are they able to access financing?

With increasing interest rates and land prices, a major component of this equation will be how much the successor can afford, and how important it is to the owner to see them succeed. Farm planning and creation of a viable business plan to determine the feasibility of the farm for the successor will play a very important role in deciding the next steps for everyone involved.

Tax management with capital gains allowance and alternative minimum tax are financially important considerations in the transition process. To protect the wealth of the enterprise, it is critical to build a team of professionals that may include farm management specialists, lawyers, accountants, financial planners, or agriculture transition specialists. The fact sheet *Hiring an Advisor for your Farm* outlines some key points to consider in contracting the right services for your needs.

Start the conversation, begin building a plan, and contact the necessary professionals to implement the steps to reach the goal. Planning doesn't happen overnight, so the sooner, the better. For more information on transition planning, access Manitoba Agriculture's online tools and resources at **manitoba.ca/agriculture/farm-management/transition-planning/index.html** or visit your nearest MASC / Ag service centre.

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Calving Tips – Prepping for the Calving Season – Deanne Wilkinson, Manitoba Ag Extension Veterinarian

Calving season is an exciting time of year, but it can also be a stressful time. The success of a calving season greatly influences the economics of the entire year. Difficult or abnormal calvings, also called dystocias, have a major economic impact on the cow-calf operation, as they are estimated to be the cause of 60 per cent of neonatal mortalities and decrease first service conception rates by 15 per cent.

Proper planning starts months before the calving season begins and can minimize difficulties by managing some of the variables. Genetic selection tools, like calving ease Expected Prodigy Differences (EPDs), allow producers to choose sires with lower birth weight genetics, decreasing the likelihood of having to assist with the birth, or parturition. Proper nutrition also cannot be over emphasized. Cows need to be in a proper body condition, as fewer dystocias occur in cows having a body condition score of 3 to 3.5 out of 5. The ability for cows to have proper uterine contractions and healthy neonatal calves also requires feeds to contain appropriate levels of protein and many macro and micro minerals.

As calving season approaches, it is important to put together a calving kit and prepare the calving area at least a month in advance. With multiples often arriving early and gestation length varying, cows often begin the calving season on their own terms.

Regardless of your calving system, some form of restraint is needed to allow for the examination of a dystocia. A functioning head gate is an essential tool and should be used with a side panel that can be moved if the cow lays down. It contains a segment that opens on the cow's left side, allowing for a caesarean section to be performed. It is important to have enough space behind the restraint system to allow room for a calf puller or fetotomy wires (wires used to disassemble a deceased calf). It is also necessary to have access to means of transportation. Unless cows are down or have prolapsed their uteri, transporting them to a veterinary clinic allows for procedures to be performed in a controlled, clean, and warm setting with proper lighting, increasing the likelihood of a favourable outcome. Producers should speak with their veterinarian prior to the calving season to discuss where their veterinarian prefers to assist with dystocias, as smoothing out these details prevents additional surprises in the middle of an emergency.

Putting together a calving kit prior to the calving season also ensures that producers have proper supplies available. It is important that items in the kit are kept clean through proper washing and disinfection, minimizing the spread of disease between animals. A calving kit should contain most of the following items:

- easy to clean pail (smooth plastic or stainless steel)
- clean water
- long, plastic palpation sleeves -- regular latex or thin nitrile gloves can be worn over the palpation sleeves for easier manipulation of the calf
- waterproof clothing – a short-sleeved waterproof top with elastic in the sleeve hem helps hold up palpation sleeves; waterproof pants or overalls keep pants dry
- a container to hold smaller tools and supplies – (plastic toolbox or tote)
- medical supplies – needles, syringes, local anesthetic, a bottle of antiseptic soap (chlorhexidine or iodine scrub), lubricant, and any pharmaceuticals recommended by the herd veterinarian (which may include non-steroidal and steroidal anti-inflammatories, antibiotics, oxytocin, epinephrine and local anesthetics)
- calving tools – include one 60 inch chain or two 30 inch chains, chain handles, and often a calf puller (or jack)
- flashlights or headlamps
- halters and extra ropes – Halters can be used to tie the cow's head to the side of the head gate, preventing the cow from laying down on her incision during a caesarean section. The ropes assist positioning the cow's legs into a "frog-legged" position, allowing for maximum space in the cow's pelvis if she is laying down.
- calf supplies – towels, colostrum, tube feeder, ear tags and tagger, and any pharmaceuticals given to calves at birth

Although producers cannot prepare their way out of every difficult situation, having facilities and supplies ready for the calving season can minimize the challenges. For excellent resources on beef cattle reproduction and parturition, producers should visit the following Beef Cattle Research Council website www.beefresearch.ca/categories/reproduction-calving/

Manitoba's Environmental Farm Plan is now Online!

Out with the old and in with the new! Manitoba's Environmental Farm Plan (EFP) is now online! In October 2022, Manitoba Agriculture along with Keystone Agricultural Producers (KAP) launched the Online EFP system, replacing paper workbooks and in-person workshops.

The Online EFP is fully self-serve through the online platform. The system is modern, efficient and easy for producers to use, with updated and streamlined content and several features that allow producers to customize EFP workbooks to specific farm operations. Producers can create an account, set up and complete their EFP workbook, submit it online for a confidential review and receive their Statement of Completion all from the comfort of their home through the online system. Throughout the system there are "How to" videos that show producers how to complete specific tasks within the workbook. As well, there is a detailed FAQ section to help answer any questions.

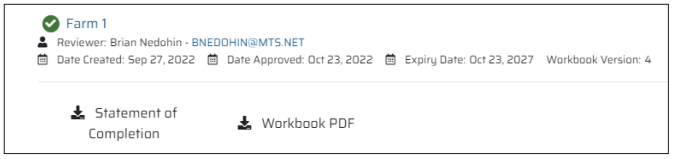
6,663
EFPs Completed

10,794,039
Acres Assessed

Since the EFP began in 2004, there have been 6,657 EFPs completed assessing over 10.7M acres of agricultural land! These program statistics are updated live and can be viewed on the EFP landing page. The content within the workbook was fully revised, and duplicate or repetitive topics were removed. This resulted in the overall number of questions being reduced by almost half! The workbook has a similar layout to the paper version, with the content divided into three sections. Section A is an introduction to soils and landscapes, which uses soil and landscape properties to identify inherent environmental risks on yard sites and fields. Section B focuses on farm management practices. Section C is the action plan that addresses the risks identified in Sections A and B so that improvements can be prioritized and timelines estimated.

When a producer is setting up their workbook, the system allows them to customize the workbook to their specific operation. During the Farm Business Profile set up, producers can select which EFP chapters apply to their operation. Only these chapters will be visible to them during the completion of their workbook. This streamlines the process by hiding the topics that are not applicable. For example, if a producer only produces crops, the livestock and manure related chapters will be hidden when they complete Section B of the workbook.

Once a workbook is approved by a KAP reviewer, producers can download the Statement of Completion and a PDF of their completed Workbook



If you would like to be added to our information-sharing list, please email or text Juanita Kopp Juanita.Kopp@gov.mb.ca, 204-825-4302. Your input or topic ideas are always welcome.

Contact us

- Go to manitoba.ca/agriculture and click on Livestock
- Email us at agriculture@gov.mb.ca
- Follow us on Twitter@MBGovAg
- Visit your local Manitoba Agriculture/MASC Service Centre