ANNUAL GENERAL MEETING

2016 Annual General Meeting and Supper



Do something wonderful, people might imitate it. - Albert Schweitzer





SCHEDULE OF EVENTS

2016 Annual General Meeting and Supper

March 16, 2016

- 4:00 Registration
- 4:30 Annual General Meeting
- 6:00 Supper
- 7:00 Presentations







Manager - Vacant



Forage and Livestock Manager - Fito Zamudio BSc



Conservation Agriculture and Extension Program Manager - Tina Pultz, BSc



BOARD OF DIRECTORS

President – Grant Taillieu

Vice-President – Frank Maddock

Treasurer – Dale Engstrom

Secretary – John Fearnley

Director – Brett Byers

Director – Grant Chittick

Director – Ted Commandeur

Director – Greg Malyk

Director – Stacey Meunier

Director – Therese Tompkins



Annual General Meeting

West-Central Forage Association

March 16, 2016

Agenda

- 1. Call Meeting to Order
- 2. Quorum
- 3. Roll Call Introductions of the Board and Staff
- 4. Adoption of the Agenda
- 5. Minutes from the 2015 Annual General Meeting
- 6. Business Arising from the Minutes
- 7. Reports
 - A. Directors' Report
 - B. Treasurer's Report
 - i. Financial Statements (Hawkings, Epp, Dumont)
 - li. 2015/16 Budget
- 8. Appointment of the Auditor
- 9. Director Election

Annual General Meeting West-Central Forage Association March 5, 2015

1. Call Meeting to Order by Grant Taillieu at 4:11pm										
2014.03.05-AGM-M01 Frank Maddock/Stacey Meunier	Carried									
Motion that the members present constitutes a quorum										
. Roll Call - Introductions of the Board and Staff (listed below)										
Adoption of the Agenda										
a. Additions to the agenda?										
2015.03.05-AGM-M02 Therese Tompkins/Eric Vanderwell	Carried									
Motion to adopt the agenda as presented										
4. Minutes from 2014 Annual General Meeting										
a. Errors or omissions to the minutes:										
i. J. Gamblin stated that she did not nominate T.Buckler	for a Director and would									
like this amended in the minutes.										
2015.03.05-AGM-M03 Clay Armstrong/Wayne Taylor	Carried									
Motion to adopt the minutes as amended										
5. Reports										
a. Director's Report										
2015.03.05-AGM0M04 Wayne Taylor/Brett Byers	Carried									
Motion to receive the Director's report as information										
b. Treasurer's Report	Carried									
i. Financial Statements presented by J. Kennedy of H	awings, Epp, Dumont									
2015.0305-AGM-M05 Frank Kreddig/Larry Kidd	Carried									
c. 2015/2015 Budget - Explanation of the 2014/2015 budge	et as presented (Dale/Carla)									
2015.03.05-AGM-M06 Ted Commandeur/Frank Maddock	Carried									
Motion to adopt the budget as presented										
6. Appointment of the Auditor										
2015.03.05-AGM-M07 Thad Buckler/Brett Byers	Carried									
Motion to re-appoint Hawkings Epp Dumont as the 2014/20	015 auditor									
7. Call for Director Nominations										
8. Board to take into consideration the bylaw regarding fill	lling									
a. Election of Directors										
i. Tom Thompson nominates Eric Vanderwall										
ii. Linda Engstrom nominates Stacey Meunier										
iii. Therese Thompkins nominates Grant Chittick										
iv. John Fearnley nominates Frank Maddock										
v. Betty Buckler nominates Thad Buckler										

2015.03.05-AGM-M011 **Ted Commandeur/Wayne Taylor** Carried Motion that nominations cease 2015.03.05-AGM-M013 **Therese Tompkins/Tom Thompson** Carried Motion that voting be done by closed ballot 2015.03.05-AGM-M0.14 Frank Kreddig/Ted Commandeur Carried Motion that ballots must have four separate names on each ballot to be valid. (Duplicate names and incomplete ballots will be void) Scrutinizers: Linda Hunt (AARD), Pat Vanderwell, Michelle Pompana (AFSC) **Board Elected:** i. Frank Maddock ii. Grant Taillieu iii. Eric Vanderwell iv. Stacey Meunier 2015.03.05-AGM015 Frank Maddock/Eric Vanderwell Carried Motion that all ballots be destroyed 9. Adjournment

10.2015.03.05-AGM-M016 Wayne Taylor Motion to adjourn the meeting

Grant Taillieu - Chair	Pat Vanderwell	Guests:						
John Fearnley—Treasurer	John Vanderwell	Linda Hunt - AARD						
Eric Vanderwell	Thad Buckler	Jason Kennedy - Hawkings Epp Dumont						
Brett Byers	Jackie Gamblin	Deborah Wilson - BIXS2						
There as Taran bine	Betty Buckler	Michelle Pompana - AFSC						
Therese Tompkins	Tom Birkbeck	Jennifer Benson - YHC						
Dale Engstrom	Wayne Taylor	Patti Zamudio						
Greg Malyk	Larry Kidd	Terra Zamudio						
Ted Commandeur	Marie Wallace	Clay Armstrong						
Stacey Meunier	Linda Engstrom	Recording Secretary: Cara Rhyant						
Chad Meunier	Frank Kreddig	Staff: Fito Zamudio						
Frank Maddock	Brenda Rusin	Tina Pultz						
	Stan Rusin	Kelci Norton						
Lorraine Laylor	Kris Commandeur							

DIRECTOR'S REPORT



2015 was a year filled with new challenges and changes to West-Central Forage Association. I would like to start by thanking the rest of the Board for their contributions over the past year. The two newest directors, Frank Maddock and Stacy Meunier have been valuable contributors since their very first meeting. I truly appreciate all of the knowledge and different perspectives that surround the table at Board of Directors meetings. I would like to thank John Fearnley for all of his contributions to the organization over the last 6 tears. This year marks the end of John's second term and he will be taking time away from us. Maybe we can trick him into a few newsletter articles this year.

2015 has brought some changes in the staff of West-Central Forage as well. Kelci Norton, the WCFA Project Manager, moved on in midsummer. I would like to thank her for our time with us. Perhaps the biggest change that many people will notice within our organization is the absence of Carla Rhyant. In January 2016, Carla left West-Central Forage Association to pursue other interests. For over 8 years she was the face of the organization and is the biggest reason WCFA is what it is today. All of us on the Board of Directors would like to thank Carla for all of her service. Her absence is felt by all of us on the Board, as well as our two great staff members Fito Zamudio and Tina Pultz. They have exceeded all expectations during this adjustment period and have picked up all of the slack due to lack of manpower. In December, we hired Tammy Zinyk as our new bookkeeper. Tammy has been a great addition to the team.

A great deal of time was spent in 2015 attempting to build and strengthen relationships, at many levels, between our organization and the 6 counties within our service region. Myself and many of the directors gave numerous presentations at Council meetings and to the different Ag Service Boards. Much of this was an attempt to increase awareness of the services that West-Central provides to their residents, and in return to increase funding and support from the Counties. Staff has done a fantastic job of driving collaboration on many events held in conjunction with various counties.

The quality of work put out by WCFA staff in 2015 was once again top of the line. Later this evening we will highlight some of that work. As a board and staff, one of the most challenging things can be to find new ideas and topics to highlight. I would encourage all of our members to bring ideas forward and let us know what you want to see.



FINANCIAL STATEMENTS

For the year ending November 30, 2015

Management's Responsibility for Financial Reporting

To the Members of West-Central Forage Association

The management of West-Central Forage Association prepared these financial statements and is responsible for their reliability, completeness and integrity. They conform in all material respects to Canadian accounting standards for private enterprises.

Management maintains the necessary accounting and internal control systems designed to ensure: the timely production of reliable and accurate financial information, the protection of assets (to be a reasonable extent) against loss or unauthorized use, and the promotion of operational efficiency. The Board of Directors oversees management's responsibilities for the financial reporting and internal control systems.

The auditors, appointed by the membership, conducted an audit of these financial statements in accordance with Canadian generally accepted auditing standards. The Manager and President reviewed these financial statements with the auditors in detail before recommending their approval to the Board of Directors.

Entwistle, Alberta

March 16, 2016

WCFA OPERATING BUDGET 2016:		Budg	et	
Revenue			2016	5
Government Grants:				
	AOF		\$	182,000.00
	SACA		\$	30,600.00
	HRDC Student funding			
	SACA matching		\$	13,140.00
	Counties		\$	18,000.00
	GF2			
		\$ 2	243,7	40.00
General Revenue				
	Corporate Sponsorship		\$	500.00
	ABP			
	ACA Lobstick			
	Land Stewardship Centre			
	Winter Site Assessments			
	Sales		\$	2,000.00
	Contract Work		\$	12,500.00
	Fee for Service		\$	1,200.00
	Interest		\$	550.00
	Memberships		\$	1,600.00
	Newsletter Advertising		\$	200.00
	Donations		\$	200.00
	Rent		\$	15,000.00
	Other (Airshed, Silage Trial),		\$	6,000.00
	Weyerhaeuser		\$	-
	FRIAA			
	Seed Growers Cooperative		\$	400.00
	Winter Cereals Trial		\$	18,100.00
	Workshop Registrations		\$	5,000.00
			\$	63,250.00
	Revenue Total		\$	306,990.00

Expense		Budget
		2015
Core Function Expenses		
Manpower		
Full-Time Staff (Manager & Staff)	\$	195,510.00
		\$
Professional Development & Fees		3,000.00 خ
Staff Meals/Accomodations		ڊ 2,000.00
Staff Travel/Vehicles	Ś	14.000.00
Manpower total	\$	214,510.00
Office Expenses		
Advertising	\$	300.00
Audit/Accounting Fees	\$	12,250.00
Building Maintenece & Repairs	\$	2,000.00
Computer Maintenance	\$	2,200.00
Dues & Memberships	\$	500.00
Furniture & Equipment	\$	500.00
Insurance	\$	4,450.00
Interest & Bank Charges	\$	1,000.00
Office Supplies	\$	4,000.00
Permits		
Postage & Freight	\$	2,500.00
Printing & Copying	\$	2,000.00
Promotional materials		
Rent	\$	24,600.00
Resources	\$	200.00
Utilities	\$	800.00
Telephone	\$	4,400.00
Volunteer Recog/Gifts & Donations	\$	200.00
Total Office Expenses	\$	61,900.00
Consultant/Professional Foos		ې ۱ ۵۵۵ ۵۵
consultant/ Professional Pees		1,000.00
Board Expenses		
Meetings/Travel	Ś	200.00
Training	Ś	200.00
Total Board Expenses	\$	400.00
Total Adminstrative Expenses	\$	277,810.00
•		

Project Expenses

Plots Expenses	
Consultant/Professional Fees	\$ 1,000.00
Equipment	\$ 4,000.00
Soil/Feed/Water Testing	\$ 7,500.00
Tools & Supplies	\$ 2,500.00
Total Plots Expenses	\$ 15,000.00
Extension Expenses	
Consultant/Professional Fees	\$ 3,000.00
Client extension registration	
Extension materials	
Facilities	\$ 1,000.00
Newsletters	\$ 3,000.00
Meals	\$ 5,000.00
Travel	\$ 1,400.00
Website	\$ 500.00
Total Extention Expenses	\$ 13,900.00
Total Plots & Extension	\$ 28,900.00
Total Expenses	\$ 306,710.00

Excess of Revenue Over Expenses

\$280.00

WHAT DOES WCFA DO?

For the year ending November 30, 2015

Since 1978, West-Central Forage Association has served the needs of forage and livestock producers in the region by demonstrating new agricultural, technology, and production practices through extension activities, knowledge sharing, and applied research.

What is Applied Research?

We are often asked, "What is applied research?" When discussing research, it is important to distinguish between pure and applied research. One way to distinguish between these methodologies is to ask, "What will this research be used for?"

Pure Research

Pure research (also called basic research) is conducted without a specific application or end goal in mind. It is driven by curiosity, focuses on fundamental principles and testing theories, and is carried out for the purpose of developing knowledge, understanding fundamental concepts, and making predictions.

This information can then be used as the scientific foundation for applied science.

Applied Research

The goal of applied research is to provide data to support existing knowledge, fill information gaps or develop new methods. It seeks to solve practical problems, and focuses on the development of innovative technology and techniques. This may be accomplished by testing the theories of pure research by applying them to real-life situations, or by testing how well technologies or techniques work in improving current conditions.

Because their research investigates realistic problems, applied researchers are often concerned with the external validity of their studies, because they want to be able to apply the results to a problem that applies to individuals who are not part of the study.



"Applied [agricultural] research experiments can involve any aspect of farming, such as crop production, livestock production, soil and water conservation, machinery and economics. Research associations, producer groups and agricultural service boards often establish applied research sites to collect meaningful data for their local area. " (CAESA, 1993)

To put it into the perspective of what we do here at WCFA, let's look at our Sainfoin trial. Reports indicate that Sainfoin is ideal for fall grazing, and that 20-30% Sainfoin in an alfalfa pasture can, in certain cases, eliminate the risk of bloat.

A new cultivar, was developed by Agriculture and Agri-Food Canada (AAFC) in Lethbridge and announced in 2013 as the first that will survive in alfalfa pasture and grow back at the same rate after cutting or grazing. According to lead researcher Dr. Surya Acahrya, this new variety "represents an exciting new opportunity for (livestock) producers."

WCFA is always looking for exciting new forage information to pass along to our members; however, Sainfoin had previously only ben grown for the purpose of research in the brown soil zones of the province. So, we saw a great applied research topic – to determine suitability to gray soil.

The data produced from this research project will be used to offer producers information about suitability, nutrition, yield, and winter survivability. Producers can then use this information to decide whether to apply this research to their own operation.

What is Extension?

As mentioned, WCFA serves the needs of forage and livestock producers in the region through applied research and extension activities. We have discussed what applied research is, but what is extension?

The definition of the term extension quite neatly sums itself up – the act of expanding in scope. Extension is essentially knowledge sharing, or as we in the business like to call it, information dissemination. It is a program offering instruction and/or information outside of a traditional academic setting.

Extension activities can vary from newsletter articles, to field days where you learn to determine the body condition score of your animals, to a classroom session learning how beavers impact the landscape, and also include one-on-one information sharing with subject matter experts.

Don't miss out on our events! Be the first to know by signing up for our email list, or check out our website (<u>www.westcentralforage.com</u>), Facebook page (West-Central Forage Association), or Twitter (@WestCentralFor).



Pond Days



Field Tours



Farm Tours



West-Central Forage Association Extension Events

Spring 2016

March

- 16 WCFA Annual General Meeting (Carvel)
- 23 Innovative Solutions to Fencing and Watering (Magnolia)

UPCOMING EVENTS

- 30 Soil Testing Workshop (Entwistle)
- 31- Soil Testing Workshop (Leduc)

April

- 16 Growing into the Future (Breton)
- 21 Integrated Pest Management (Calmar)
- 26 Mature Shelterbelt Restoration (Location TBD)
- TBA Alternative Energy Event (Blue Ridge)

(***Dates subject to change)



For information, or to register: WCFA Office: (780) 727-4447 Email: info@westcentralforage.com Website: www.westcentralforage.com/events Facebook: West-Central Forage Association



LOBSTICK RIVER STEWARDSHIP PROJECT

West-Central Forage Association and Yellowhead County, as partners in the Stewardship Alliance for Conservation Agriculture (SACA), secured funding with Alberta Conservation Association to initiate a Lobstick River Stewardship Project, focusing on concerns regarding the environmental condition of the Lobstick River, the riparian area along the river, and its adjacent landholdings.

Healthy riparian areas provide habitat for fish and wildlife, improve water quality for livestock and downstream water users, and can mitigate the impacts of drought or floods.

The need for investigation into the health of the Lobstick River became apparent in 2012, during the Chip Lake Stewardship Project, when the assessed areas on the Lobstick showed a great deal of variation in riparian health; some sites were quite healthy and others were very heavily and negatively impacted.

There are 58 quarter-sections of land adjacent to the river, which flows out of Chip Lake and into the Pembina River. The river winds its way through a variety of land-scapes, including agricultural land and muskeg (organic, poor draining soils), eventually draining into the Pembina River. There are a number of fish species in the Lob-stick River including northern pike, walleye, burbot, whitefish and goldeye. There are more than 120 species of birds and waterfowl in addition to moose, whitetail and mule deer, and elk recorded in the area. This region is used by many hunters for deer and other ungulates and by the general public for recreational purposes.



The rationale behind this project is to determine the overall health of the river and to identify primary issues where agricultural practices have potentially had impacts on the ecosystem such as channel incisement, the presence of invasive and disturbance-caused plant species, and human or livestock altered stream banks.

The primary disturbance along the river is from unrestricted cattle grazing, resulting in significant consequences on the riparian area. It was observed that invasive weeds are present, and in some areas vegetation is degenerated, woody vegetation is non-existent or supplanted by non-preference species (i.e. rosebush, buckbrush, etc), soils are compacted and eroded, and bank stability is undermined.

The Lobstick River Stewardship Project has three goals:

- Carry out detailed riparian health inventories along the Lobstick River to measure stream health and overall impact on the ecosystem, and develop physical benchmarks by which to design future project;
- Conduct water quality sampling, to establish benchmarks;
- Initiate the formation of, and maintain support of, a group of stakeholders around the Lobstick River to create awareness and gain feedback in regards to the river and ecosystem health as well as beneficial management practices to maintain or improve the environmental health of the river.

WCFA sees riparian health inventories (RHI) as a part of the pathway to identifying and addressing the challenges of human interaction in and around riparian ecosystems. RHIs also have the potential to identify where landowners are being successful with their riparian management. It is an important step for community-based action, future planning and monitoring.

RHI is not just about collecting data. Once the field work, data analysis and reporting are complete, the landowners will have a baseline of the current condition of the riparian areas in their region, which will be a building block for future projects to address issues. Once this information is gathered it can also be used for comparison in future years, as we would hope to repeat the RHIs in five years to monitor changes.

It is also anticipated that through the RHIs we will be able to identify possible demonstration and profile sites. Our plan is that the demonstrations or profiles would be developed as future projects so that we are able to showcase what can be done to keep the riparian areas in good shape. These future projects could include installing exclusion fencing, planting trees and shrubs to stabilize riverbanks, and reducing invasive weeds using biological control methods.

Work completed to date

Riparian Health Inventories (RHIs): RHIs were conducted by the Alberta Habitat Management Society (also known as Cows and Fish). The inventories were delayed by one year due to early snow in 2014, and were completed in 2015. The sites were assessed for their vegetative characteristics (including canopy cover, invasive and disturbance increaser vegetation, tree and shrub establishment/regeneration, browse utilization, woody vegetation removal, human alterations to vegetation) and physical characteristics (including percentage of human caused alteration, severity of alteration, human caused bare ground, and degree of artificial water level changes). Developing scores for each of these qualities allowed the assessors to determine the overall health of the selected sites. This report is currently being finalized.

Water sampling: Water samples were taken twice each season, at 4 sites along the East stretch of the river. These samples are in the process of being collated and a report will be generated after sampling is completed in 2016.

Any activities arising from this study will lead to mitigation strategies that will enhance water quality, fish and wildlife habitat and improve the overall health of the river and adjacent riparian areas, which will benefit landowners and others who use and value the Lobstick River for livelihood or recreational use.



2015 REGIONAL SILAGE VARIETY TRIAL

ST-CENTRAL

Annual forages make up a large component of the yearly feed supply for many cattle producers in the form of silage, green feed and swath grazing. Selection of varieties which produce the highest forage yield and/or nutritional quality becomes increasingly important. Silage is an integral forage source in feedlots across the province and has become more prevalent in cow herds as well. With many producers trying to lower production costs, swath grazing of cow herds has increased dramatically in the last few years. It could be argued that there is more grain forage than cereal grain fed to take many market animals from conception to plate.

Participating Organizations

Eight applied research groups performed the project at 12 locations throughout the province.

Battle River Research Group, Forestburg, AB, (780) 582-7308 Chinook Applied Research Association, Oyen, AB, (403) 664-3777 Gateway Research Organization, Westlock, AB, (780) 349-4546 Lakeland Agricultural Research Association, Bonnyville, AB, (780) 826-7260 Smoky Applied Research and Demonstration Association, Falher, AB, (780) 837-2900 West-Central Forage Association, Evansburg, AB, (780) 727-4447 North Peace Applied Research Association, Manning, AB, (780) 836-5230 Peace Country Beef and Forage, Fairview, AB, (780) 836-3354

Major Sponsors

Government of Alberta (ARD) — Fred Young AOF Coordinator A & L Canada Laboratories Inc. Association of Alberta Co-op Seed Cleaning Plants Alberta Seed Growers' Association CPS Canada Canterra Seeds SeCan

Trial Information

This is the seventh year the regional silage trials have been conducted by groups across Alberta. The objective of the trials was to determine yield and nutritional values of the various crops and cereal/pulse combinations. The tables below show a summary of data from 2012 through 2015 as compared to the control variety (in bold). Yield of the test varieties are expressed as wet tons/acre (ie. 65 per cent moisture, typical of silage production). Data sets which did not meet minimum quality standards (variance levels) were excluded.

Varieties of barley, oats, triticale and peas commonly used for silage, green feed and swath grazing were included in the trial, as well as new varieties showing good potential for these uses. The cereal trials, (barley, oats and triticale), were seeded at recommended seeding density rates and recommended fertility. The pulse mixture trial looked at increasing the nutritional value of silage, with a potential side benefit of decreasing future nitrogen costs. The pulse mix plots were seeded with 50 pounds of 11-52- 0-0 only, while the monoculture cereal comparison plots were fertilized with 50 per cent of the recommended cereal rates. Peas were seeded at 75 per cent of their recommended seeding rate and cereals at 50 percent when in mixtures.

Test Yield Categories

The defined range for each Test Yield Category is provided in tons per acre. Variety yields are reported as average yields in Low, Medium and High Test Yield Categories for comparison with the check for productivity regimes and environments that may be anticipated. Varieties that are statistically higher (+) or lower (–) yielding than the standard check are indicated. No symbol after the yield figure indicates that there is no statistical difference. Caution is advised when interpreting the data with respect to new varieties that have not been fully tested.

Maturity, plant height and lodging were not measured in the trials as they are extensively reported on in the Cereal RVT program.

To make effective use of the yield comparison tables, producers first need to decide if their target yield for the season fits within the Low, Medium or High Test Yield categories. It should be noted that the indicated yield levels are those from small plot trials, which are often 15 to 20 per cent higher than yields expected under commercial production. Also remember that yield is not the only factor that affects net return. Be sure to consider the other important agronomic and disease resistance characteristics. The genetic yield potential of a variety is often masked by various crop management factors, some of which can be controlled.

Site Information

There were 11 sites across the province, representing various agro-ecological zones. Sites were located near Castor, Stettler, Fort Kent, Lac La Biche, High Prairie, Wildwood, Hanna, Manning, Fairview, St. Paul and Westlock. The pulse mixes were not seeded at all sites. The Fairview site contained only the barley and pulse mix trials.

Yield at most sites was reduced in 2015 due to early season drought conditions. Data from the Manning and High Prairie sites were not reported due to poor growth from lack of moisture and grasshopper pressure.

Nutritional Analysis

Nutrition was assessed using wet chemistry analysis. Full nutritional analysis was done on each sample, but only six nutritional categories are reported: crude protein (CP), total digestible nutrients (TDN) which is an estimation of energy, calcium (Ca), phosphorus (P), potassium (K) and magnesium (Mg).

OATS																
				A	rea (t/ac)		Yi	eld Catego	ry		Nu	utritiona	I Data		
Variety	Overall Station Years of Testing	Overall Yield	2	3	4	5	6	Low < 7.0 (t/ac)	Medium 7.1-10.0 (t/ac)	High > 10.1 (t/ac)	CP (%)	TDN (%)	Ca (%)	P (%)	K (%)	Mg (%)
Varieties tested in the 2015 trials (Yield, significant differences and agronomic data only directly comparable to CDC Baler)																
CDC Baler (t/ac)		9.9	7.9	10.7	7.8	11	6.4	5.6	9.1	12.6	9.2	61.8	0.3	0.2	1.8	0.2
CDC Baler		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
AC Morgan	26	101	101	100	90	98	129	114	95-	101	99	102	100	114	98	96
AC Mustang	27	100	101	97	95	102	105	98	100	101	104	99	98	106	102	100
CDC Haymaker	22	99	110	96	98	97	100	108+	94	100	98	100	99	103	105	99
CDC SO-I	27	95-	84-	102	82-	95	103	96	96	94-	105	103	97	108	97	105
Previously tested v	arieties: 20)12-2014 (Yield, s	ignificant	t differen	ces and	agronon	nic data o	only directly	compar	able to N	lurphy)				
Murphy (t/ac)		9.5	8.7	9.2	6	11.2	5.4	5.9	9.1	12.2	8.5	58.9	0.3	0.2	1.8	0.2
Murphy		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
AC Juniper	18	95	99	97	XX	86-	125	112	83	96	123	107	100	118	101	108
Everleaf	5	89	XX	98	106	67-	XX	104	68	67	118	103	112	110	98	102
Foothills	22	97	99	95	101	96	97	95	94	100	122	103	106	110	100	101
Jordan	21	97	103	92	88	97	112	96	100	96	120	105	100	107	97	114
Waldern	21	100	100	104	94	100	104	98	105	98	112	105	109	106	94	97

TRITICALE

			Area (t/ac)				Yield Category				Nutritional Data					
Variety	Overall Station Years of Testing	Overall Yield	2	3	4	5	6	Low < 8.0 (t/ac)	Medium 8.1-12.0 (t/ac)	High > 12.1 (t/ac)	CP (%)	TDN (%)	Ca (%)	P (%)	K (%)	Mg (%)
Varieties tested in	the 2015 trials (Y	ield and ag	ronomic	data only	directl	y compa	arable t	o Taza)								
Taza (t/ac)		10.6	9.7	12.3	8.5	10.7	8.9	6.4	10.8	14.2	8.9	62.7	0.2	0.2	1.3	0.1
Taza	30	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
AAC Chiffon	8	111	124	123	118	92	126	105	113	114	97	101	88	97	106	108
AAC Innova	8	104	121	119	123	83	102	95	107	107	108	100	87	106	109	107
AAC Ryley	8	97	108	104	87	87	110	86	100	101	103	100	95	106	89	117
Pasteur	8	94	110	96	97	84	103	91	99	91	107	103	96	99	107	117
Sadash	8	102	111	102	109	91	121	101	108	97	99	99	88	91	110	105
Sunray	23	98	93	100	101	99	96	95	100	96	104	104	106	100	105	104
Tyndal	29	98	97	105	109	95-	96	101	98	98	103	101	102	103	98	105
Varieties tested in	the 2012-2014 tri	als (Yield a	nd agron	omic da	ta only d	directly	compar	able to Pr	onghorn)							
Pronghorn (t/ac)		10.4	11.9	11.5	5.2	10.5	8.2	6.6	10.7	14.5	9.3	62.4	0.2	0.2	1.5	0.1
Pronghorn	21	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Bunker	21	98	89	92	101	102	98	98	99	94	103	98	116	98	93	110

BARLEY

	Overall Station Years of Testing				Area (t/a	c)		Yield Category				Nutritional Data					
Variety		Over- all Yield	2	3	4	5	6	Low < 8.0 (t/ac)	Medium 8.1-12.0 (t/ac)	High > 12.1 (t/ac)	CP (%)	TDN (%)	Ca (%)	P (%)	K (%)	Mg (%)	
Varieties tested in the	2015 trials ((Yield and	agrono	mic data	only dire	ectly com	parable t	o CDC Aus	tenson)								
CDC Austenson (t/ac)		10.5	7.2	12.1	9.7	12	6.7	6.6	9.6	12.5	10.3	68.2	0.3	0.2	1.3	0.2	
CDC Austenson	27	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Amisk	15	90-	102	92-	97	88-	79	87	93	91-	105	99	132	104	106	111	
CDC Maverick	21	103	108	96	101	104	105	111	101	101	97	98	130	104	98	120	
CDC Meredith	8	106	127	106	99	101	XX	127	XX	102	95	95	102	92	99	97	
Canmore	8	103	111	99	98	104	XX	111	XX	102	95	97	127	95	93	106	
Champion	8	105	116	97	109	105	XX	116	XX	104	99	97	113	94	105	105	
Tr12733	8	106	125	102	105	103	XX	125	XX	103	93	93	124	88	103	101	
Tr13740	8	104	109	92	112	106	XX	109	XX	103	99	94	114	92	108	96	
Varieties tested in the	2012-2014	trials (Yie	ld and a	gronomia	c data or	nly directl	y compar	able to Viv	/ar)								
Vivar (t/ac)		8.9	8.5	10.2	5.9	10.3	6.3	6.1	9.5	10.8	10.5	66.2	0.4	0.2	1.3	0.2	
Vivar		100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
Busby	19	101	96	100	91	105+	96	96	97	105	98	100	93	103	97	86	
CDC Coalition	19	99	97	95	115	94	108	104	90	97	100	100	78	109	103	84	
CDC Cowboy	19	111+	106	106	134	112+	109+	115+	111	109	94	98	92	111	111	98	
Chigwell	19	98	84	97	112	94-	106	103	84	98	99	100	108	103	102	96	
Conlon	13	92-	72	92	XX	88-	103	96	76	94	91	99	89	109	95	84	
Gadsby	19	110+	115	110	122	107	112	116+	110	107	95	100	94	103	97	88	
Muskwa	13	95	106	90	XX	91-	101	97	93	95	99	100	111	107	116	101	
Ponoka	19	105	95	103	129	105	104	108	96	104	95	99	108	105	101	96	
Ranger	13	100	114	99	92	99	98	98	100	101	96	98	108	106	113	102	
Seebe	19	105	100	106	118	104	103	107	98	104	101	97	97	111	110	85	
Sundre	19	97	99	95	106	95	102	95	95	99	100	99	100	108	112	97	
Trochu	18	96	XX	93	94	99	93	92	88	99	98	101	103	111	107	100	
Xena	19	103	92	104	108	100	108	107+	92	102	99	100	83	108	98	88	



CORN VARIETY TRIAL

Evaluation of low heat unit corn hybrids from Thunder Seeds compared to Monsanto variety

Partners:

Thunder Seed Yellowhead County Bouius Custom Work West Central Forage Association Har-De Agri Services

Introduction

Variety selection is an important part of production management because it affects yield, maturity and other agronomic characteristics which impact producer's bottom line. Variety testing continues to be important in providing agricultural producers with information on newly registered and established seed varieties. To serve these producers, regional trials need to be conducted in the region to provide local producers and extension staff with reliable agronomic information.

To encourage producers to grow new seed varieties, it is necessary to showcase its advantage within the area. This trail aims to demonstrate Thunder Seed's (TS) new corn varieties ability to establish in the west central region of Alberta, with the purpose of winter feeding cattle. In the 2015 growing season, three TS corn varieties TH4126, TH4574, and TH4578 were seeded along with Monsanto's Hyland 2D093 variety, which was used as a control/check treatment. Weather records, production and quality samples were collected and results will be available to producers to help them make management decisions.

Objectives

To evaluate three different Thunder Seeds corn varieties for maturity, quality and yield To compare these varieties against a control variety in the west central area of Alberta Communicate information from the project to the producers of the areas covered by the association and beyond so they become familiar with the new varieties.

Methodology

The demonstration plots were located at the West Central Forage Association Forage Research Site (SE 27-53-9- W5th) near Wildwood Alberta, which is located 120km west of Edmonton, in the gray wooded soil zone. In this soil zone the surface layer is leached of clay and plant nutrients. Soil and organic matter is low and crusting often reduces seedling emergence. Moisture is not as limiting as elsewhere in Alberta, but the growing season is shorter. Nitrogen is often the major limiting factor to high crop yields on gray wooded soils. The soil was tested for nutrients in the fall and this information was used to make fertilizer applications.

Plots were seeded in a prepared seedbed on June 10th, 2015 using a John Deere corn planter (20 m long 12 rows at 30 inch spacing) and GPS system, at a rate of 30,000 seeds per acre. Glyphosate treatments were administered at 400ml/acre prior to seeding and when the crop was three leaf stage at 480ml/acre.

Once established, rows where trimmed 20 m for uniformity. At harvest, plant population counts and counts of mature and immature cobs were conducted along 17.5m length of 2 rows per treatment. Above ground plant matter was harvested, weighed and subsampled to determine moisture content, dry matter and feed quality by wet.

Weather data was collected from the (Alberta Agriculture) weather station in Evansburg, approximately 20 km from the research plot location, and used to determine Corn Heat Units (CHU) which are calculated using maximum and minimum growing season temperatures, and precipitation levels.

Results

Stand establishment of corn was good, regardless the late seeding, and the lack of moisture. Observation showed that the TH4126 variety grew taller than the other varieties, up to 10 inches taller (25.4 centimetres), measuring 35" at 44 days after planting (DAP). It is also noteworthy that this variety had a significantly wider leaf blade than the others, see Picture 1. Variety TH4574 was the second tallest at 28" (Picture 2), followed by TH4578 at 25" (Picture 3), and the check variety Hyland 2D093 at 24' (Picture 4).





Picture 1. TH4126 Treatment show 35 inches height and wider leaf that the other varieties at 44DAP

Picture 2. - TH4574 Treatment show 28 inches height, plot average 44DAP



Picture 3. - TH4578 Treatment shows 25 inches height on plot average 44DAP



Picture 4. – Hyland 2D093 Control treatment show 24 inches at 44DAP

Yields: Two samples were taken from each treatment to determine yield. The highest yielding variety was TH4126 with 7.5 tons and 6.5 tons per acre, followed by TH4574 with 7.0 tons and 5.8 tons per acre, the control treatment Hyland 2D093 with 5.3 tons and 3.8 tons per acre, and TH4578 had the



Tons per acre (dry matter)

Graphic 1. – Dry Yield matter for corn varieties grown in low (CHU) evaluation trail

Feed quality: The beef cow rule of thumb with protein is 7-9-11, which means an average mature beef cow requires a ration with crude protein of 7 per cent in mid pregnancy, 9 per cent in late pregnancy and 11 per cent after calving, (Yurchak, 2004).

The TH4126 and TH4578 varieties showed the highest of crude protein percentage at 11.71% and 11.6% respectively and TH4574 and Hyland 2D093 varieties showed the lowest at 10.96% and 9.71%. This can be seen in Graphic 2.



Graphic 2. - Crude protein percentage found in corn varieties grown in low (CHU) evaluation trail at Wildwood Alberta.

Acid Detergent Fibre (ADF) is the fibrous, least-digestible portion of roughage. An ADF content of less than 30% on DM basis is an indicator that the forage is high quality (Kopp, 2015). Neutral Detergent Fibre (NDF) gives a close estimate of fibre constituents of feedstuffs. A low NDF level is desirable since the lower the NDF value the more of the forage cattle will potentially eat. High quality feedstuff should have less than 40% NDF value (Yaremcio, 2012). Total Digestible Nutrients (TDN) measures available energy of feeds and energy requirements. As a rule of thumb for a mature beef cow to maintain her body condition score (BCS) through the winter, the ration must have a TDN energy reading of 55 per cent in the mid pregnancy. (Yurchak, 2004).

Graphic 3 compares the feed quality of the four varieties grown. TH4574 was the variety with the lowest ADF with 26% ADF value followed by TH4578 and TH4126 with 33% each and the highest ADF value was Hyland 2D093 with 35% ADF value. TH4574 was the variety with the lowest NDF with 52% NDF value followed by TH4578 and TH4126 with 59% each and the highest ADF value was Hyland 2D093 with 60%. TH4574 was also the variety that show higher TDN with 68% TDN value followed by TH4578 and TH4126 with 63% each and the lowest TDN value was Hyland 2D093 with 62%.



Feed Quality Comparison

Graphic 3. - Corn varieties graph showing feed quality comparison between Thunders Seeds varieties TH4574, by TH4578, TH4126 and Monsanto variety Hyland 2D093 (control)

Net Energy Maintenance (NEm) is an estimate of the energy value of a feed used to keep an animal in energy equilibrium, neither gaining weight nor losing weight. A topical Alfalfa silage midbloom is 1.14 NEm Mcal/kg, Corn Grain is 2.24 NEm Mcal/kg, and Wheat straw is .64 NEm Mcal/ kg. TH4574 variety showed the highest (NEm) with 1.70 NEm Mcal/kg followed by TH4578 and TH4126 with 1.55 NEm Mcal/kg for both varieties and the lowest was Hyland 2D093 with 1.50 NEm Mcal/kg value. The NEm values are seen in Graphic 4.



Graphic 4. – Energy (NE Mcal/kg) for all treatments in Wildwood Alberta

CHU: The corn heat units (CHU) is an energy term calculated for each day and accumulated from planting to the harvest date. CHU was calculated from May 1st to October 31st using data from the Evansburg weather station. Graphic 5 shows the historical data from the same weather station between 2012 and 2015 in 2013 show the highest CHU with 1730 CHU, following by 2015 with 2132 CHU on third place 2014 with 1777 CHU and the last place was 2012 with 1730 CHU



Graphic 5. - Historical CHU at the Evansburg weather station from 2012 to 2015

Precipitation: The annual total precipitation of the gray wooded soil zone from 1971 to 2000 was 500mm (Agroclimatic Atlas of Alberta, 2003). Graphic 6 shows the accumulative precipitation from the Evansburg weather station has been collected from 2012 to 2015 from May until October of each year.



Annual Total Precipitation (mm)

Graphic 6. – Annual total precipitation in the Evansburg weather station from 2012 to 2015

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- Alberta Ag-Info Centre (2006) Alberta Ag-Info Centre July 1, 2006, Alberta Agriculture and Rural Development
- Kopp, J. (2015) Ag-Info Centre, May 7, 2015, Alberta Agriculture and Rural Development
- Alberta Agriculture and Forestry and Environment and Parks (2015) AgroClimatic Information Service <u>http://agriculture.alberta.ca/acis/alberta-weather-data-</u> <u>viewer.jsp</u>

Yaremcio, B. (2012) - Alberta Ag-Info Centre June 27, 2006, Alberta Agriculture



RADISH VARIETY TRIAL

Demonstration of TillageRadish, Pickseed Radish and Union Forage Radish Varieties Trial

Partners:

Pickseed Union Forage Yellowhead County Tillage Radish® West Central Forage Association Har-De Agri Services



Introduction

Variety selection is an important part of production management because it affects yield, maturity and other agronomic characteristics which impact producer's bottom line. Variety testing continues to be important in providing agricultural producers with information on newly registered and established seed varieties. To serve these producers, regional trials need to be conducted in the region to provide local producers and extension staff with reliable agronomic information.

To encourage producers to grow new seed varieties, it is necessary to showcase its advantage within the area. This trail aims to demonstrate new radish varieties ability to establish in the west central region of Alberta, with the purpose of feeding cattle. In the 2015 growing season, three radish varieties Union Forage (UF), TillageRadish (TR), and Pickseed (PS) were seeded. .Visual records were collected and results will be available to producers to help them make management decisions.

Objectives

To compare growth of TillageRadish®, Union Forage and Pick Seed Radish. Document tuber and plant size for each variety.

Methodology

The demonstration plots were located at the West Central Forage Association Forage Research Site (SE 27-53-9- W5th) near Wildwood Alberta, which is located 120km west of Edmonton, in the gray wooded soil zone. In this soil zone the surface layer is leached of clay and plant nutrients. Soil and organic matter is low and crusting often reduces seedling emergence. Moisture is not as limiting as elsewhere in Alberta, but the growing season is shorter. Nitrogen is often the major limiting factor to high crop yields on gray wooded soils. The soil was tested for nutrients in the fall and this information was used to prescribe fertilizer applications.

Plots were seeded to a prepared seedbed on May 21st, 2015 using a small plot Fabro disc seeder (18 m long 5 rows at 22.5 cm) at a rate of 6 pound per acre. A glyphosate treatment was administered prior to seeding. Pictures were taken on June 30th, July 20th and August 20th to determine the differences in growth.

Observations

Stand establishment was good for all radish varieties despite pest and weed pressure and lack of moisture. See Picture 1 and Picture 2.

Growth at 44DAP was uniform with all three varieties at equivalent growth stages. By 60DAP growth stage differences become more apparent Picture 4 illustrate the difference showing (TR), and (PS) in the full bloom, while (UF) had not began to bloom yet.

On September, the plants were measure. The (PS) variety showed the harvest about the ground, with tops measure 1.1 m. (TR) and (UF) followed at 0.90 meters and 0.40 meters respectively. It is noteworthy to add that the tuber diameter was reversible correlated with about ground plant mat-



Picture 1. – Radish plant showing pest damage at 20DAP in radish variety demonstration plots at Wildwood Alberta.



Picture 2. -Weed pressure 20DAP in radish variety demonstration plots at 20DAP





Picture 4. – Radish variety demonstration trial at Wildwood Alberta at 60DAP (TR) and (PS) show full bloom, (UF) had yet to bloom

Picture 3. – Picture showing no difference in growth on 44dap in Radish varieties demonstration trial at Wildwood Alberta.



Picture 5. –Difference between in leaf and bloom production between (UF), (TR) and (PS) at 81DAP.



Picture 6. – Picture show the differences in height and tuber size difference of the Radish varieties grown in demonstration trial at Wildwood Alberta.



Picture 7. -Tuber diameter of radish varieties A).- TillageRadish, B).- Union Forage and c).- Pickseed







Parkland County Stewardship Grant Programs

Parkland County provides two funding opportunities for residents looking to take on stewardship projects on their land. The Alternative Land Use Services program and the Green Acreages Program both provide support for planning a project and money to complete projects that bring benefits to the shared landscape.

The **Alternative Land Use Services (ALUS) program** pays agricultural producers and landowners for producing ecosystem services within their working farm. Compensation for the production of ecosystem services is an annual per-acre payment and is in addition to 50% cost-sharing of project establishment costs. Eligible projects include grazing management structures for riparian areas (exclusion fence or off-site waterer), revegetating marginal farmland (ex. steep slopes), wetland restoration, native prairie establishment, or other beneficial projects.

Since its initial pilot began in 2012, the program has expanded by accessing over \$1.0M in external grant funding and by hiring an ALUS Coordinator in July 2015 to administer the program. In 2015, the ALUS program experienced a year of many developments including its first annual tour of local participating farms and the tripling of program participation by local producers! The number of projects implemented across the County is also on the rise, with numbers increasing three-fold over 2015. These upsurges mean a total of 284.7 acres of marginal agricultural land is now being managed to enhance the production of ecosystem services; a huge development from previous years.

Parkland County is looking to further expand this growth in 2016 with over \$430,000 available to local producers for project implementation and annual payments. As of February, Parkland ALUS has over 200 project acres already planned for implementation in 2016. Over the course of 2015, the program was also introduced in Lac Ste. Anne County through the Lake Isle and Headwaters Partnership which was sponsored by a grant of over \$500,000 from the Province.

The **Green Acreages program** was initiated to provide stewardship assistance to acreage owners who were ineligible for the agricultural ALUS program support. Through this program, money (60% coverage up to \$2,000) and project planning support is available for acreage owners who want to manage their property to produce enhanced environmental outcomes.

To get involved or for more information on stewardship programs in Parkland County contact:

Darren Haarsma, ALUS Coordinator

Phone: 1-780-968-8888 ext.8286



Thank You!

West-Central Forage Association would like to take a moment to thank you for your support over the last year, and we look forward to working with/for you over the next year to come. If there is anything that we can do to help you reach your agricultural goals, please don't hesitate to contact us.

Wishing you continued success, The WCFA Team

Contact Us

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