



March 2023 Agricultural Plastics Pilot Program Report Grant Agreement: ESB-047715

Reporting period: January 1 to March 31, 2023 |





The pilot project is led by the multi-stakeholder Agricultural Plastics Recycling Group; funds were granted by the Government of Alberta and are administered by Alberta Beef Producers.

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1 Introduction

The Alberta Ag-Plastic. Recycle It! program is a government funded pilot project that helps farmers recycle used grain bags and twine. The program started in 2019 and has been granted an extension to August 2023. In addition to on-the-ground pilots that divert used grain bags and twine out of landfills and into new products, the program delivers a number of research projects that will help transition the pilot into a long-term, sustainable and self-funded program.

This report summarizes the key activities from the pilot that took place between January 1 and March 31, 2023, namely the operation of pilot collections.

The Alberta Ag-Plastic. Recycle It! program is led by the multi-stakeholder Agricultural Plastics Recycling Group (APRG). The APRG, a group made up of over 20 stakeholder organizations from sectors across Alberta, representing municipalities, producers, non-profits, recyclers and retailers among others, provides oversight of the program and a network to disseminate information and build support.

The program is funded through a grant from the Government of Alberta and funds are administered by Alberta Beef Producers.

Cleanfarms is the program operator, responsible for identifying and accessing end markets, handling program logistics including the collection and transportation to recycle the materials and leading the research projects.

We understand that there is a strong appetite for data and stakeholder feedback about the pilot. The pilot collections have now operated for forty-one months (collection started in October 2019) and there is sufficient data to report on the majority of the plastic quantities collected.

Program Key Highlights - January 1 to March 31, 2023

Collection rates for grain bags continued to increase compared to the lower numbers across the prairies in early 2022 due to drought, low crop yield and less storage needs in the Fall of 2021. Based on anecdotal accounts and harvest reports, it is anticipated that grain bag collections will continue to increase throughout the next quarter. The MD of Willow Creek was added as a collection partner (Table 1) in January of 2023, adding one new grain bag and twine collection site at the Willow Creek Regional Landfill. There is still a strong appetite throughout the province from new municipalities to join the pilot program to manage and recycle these products. Cleanfarms is currently working with three potential new partners which would fill additional geographic gaps in the province.

Three twine micro-pilot municipal partners hosted ag-plastic roundup collection days in May and June 2023. To increase participation, Cleanfarms leveraged the collection of bale wrap, and silage plastic offered via a separate Cleanfarms collection program and were accepted with grain bags and twine at the events.

Table 1 - Alberta Pilot January to March 2023.

Table 1 Miberta I not bandary to Maron 2020.										
Material type	Tonnes collected									
	Total	Legacy material ¹	Pilot material							
Grain bags	104	-	104							
Twine	22	-	22							
Total tonnage collected ²	126	-	126							

^{1&#}x27;Legacy material' is defined as grain bags and/or twine that were collected and stored onsite by the collection sites prior to becoming a pilot collection site.

²The total tonnage excludes disposal waste contained in legacy material.

See Appendix A for a list of collection partners and a map of their locations in Alberta.





Collection site summary

Total number of collection sites	147
Sites collecting grain bags only	1
Sites collecting twine only	101
Sites collecting grain bags and twine	45

Total collection partners: 47 partners with 147 collection locations for either grain bags or twine or both.

1.2 Communications & Twine Collection Micro-Pilot

In the second quarter of 2022, Alberta Agriculture and Irrigation encouraged the implementation of an integrated communication program deployed through late spring, late summer and fall of 2022 to build awareness among farmers/producers about the 'Alberta Ag Plastic. *Recycle it!*' program. The goal is to gather enough data and spread awareness to transition the program from a pilot to a permanent program at a later date. As a result, Cleanfarms developed an extensive communications plan and a twine micro-pilot work plan to be operated within the 'Alberta Ag Plastic. *Recycle it!*' program.

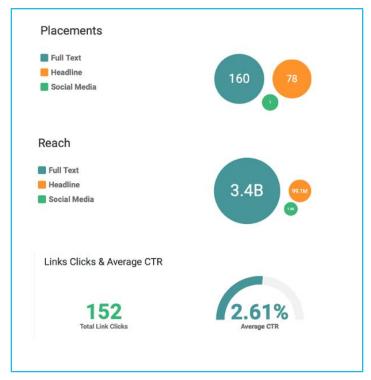
Communication activities since the last report include:

- January: earned advertising, Alberta Dressage Association created a FB post advertising twine recycling (Appendix D).
- January/February: paid advertising (Appendix D)
 - Alberta Beef/ACFA Anniversary (Print)
 - Alberta Wheat & Barley (Print)
- January-March: seasonal program webpage updates, including a new collection site map to simplify locating collection sites (Appendix D).
- Woodlands County: interview for 2023 publication to come in spring.
- March: Twine recycling article published in Alberta Bites Equestrian Magazine.
- March: News release <u>Alberta Ag-Plastic. Recycle It!</u> Gaining Ground Recovering Ag <u>Plastics for Recycling</u>.





Media contact from the news release: Lethbridge



New release statistics (CTR = Click Through Rate)

1.2.1 Micro-Pilot Overview

In April 2022, Cleanfarms developed a work plan for the micro-pilot to investigate and test two perceived barriers to farmer participation in baler twine collection:

- 1. A lack of awareness of the program and how to participate; and,
- 2. Density/availability of collection locations.

The plan will advance direct outreach, municipal-wide communications, as well as advertised popup collection events in several municipalities across the province. Pre- and post-surveys in various municipalities are also planned to evaluate program awareness and participation. Section 1.2.3 presents the communication activities to date in further detail.

1.2.2 Site Selection

The pilot team worked to identify several municipalities to fill geographic collection gaps in the province for twine-only collection sites.

Four collection partners (Lethbridge County, Starland County, Clearwater County, and Lac La Biche County) have been selected to participate in an enhanced twine collection strategy. The sites were selected based on the following criteria:

- two existing and two new twine collection partners;
- geographic distribution to cover south, central, and northern Alberta; and,
- municipalities willing to display and help place road signage.

These partners received electoral-sized road signage (Appendix E) in late October/early November, advertising the twine recycling within their respective municipalities. Additionally, they have been provided with a newsletter article (adapted from the <u>Ag Forward Article 5</u>) advertising twine recycling and spring ag plastic roundup collection events (Appendix E). Work is underway to





coordinate and advertise the spring ag-plastic roundup collection events to be held in May/June 2023

Lastly, it is well understood that twine users won't participate in the program if they must travel significant distances for recycling. Therefore, Cleanfarms has been working with all current collection partners and those recently added to increase the number of twine collection sites throughout the province. Several municipalities now offer twine collection at most, if not all, their waste transfer sites (Appendix A). All collection partners have received an updated newsletter article (Appendix E) to help advertise twine recycling in addition to the resources in Appendix E.

2 Agricultural Plastics Recycling Group (APRG)

The multi-stakeholder APRG aims to meet in person/virtually to keep members informed on the pilot updates and allow for feedback and engagement from members on key topics. The APRG committee has a board meeting twice a year. An executive of five representatives is elected each year by the members and the executive meets monthly to interact with and oversee the program operator, advocate for a permanent program and report back to the group. All APRG members provide valuable input to the pilot from their unique perspectives and also play a key role in disseminating information back out to their members and partners.

The Committee mandate is to assist in the development of recommendations to manage ag plastics including:

- Promote ag plastics recycling actions and programs that are sustainable, and
- Implement the terms as set out in the Alberta ag plastics pilot program business plan.

A list of members of the APRG is included in Appendix B.

2.2 APRG Executive Activities

The executive met three times during this reporting period in addition to one committee-wide virtual meeting in early January.

APRG activities and communication outreach included continued work and support for Cleanfarms' implementation of the pilot as well as outreach to a new minister, stakeholder groups and teams to brief and bring groups up to speed on the pilot and next steps.

This group will be a key stakeholder when the Government conducts consultation about including ag plastics in provincial Extended Producer Responsibility (EPR) legislation.

3 Pilot

The background for how the pilot is intended to operate can be found in the *December 2020 Agricultural Plastics Pilot Program Report*.

3.2 Overall Pilot Quantities Collected

A total of 2,732 tonnes of material has been collected since the program's inception.

Table 2 – Alberta Pilot October 2019 through March 2023

Motorial Type	Tonnes Collected						
Material Type	Total	Legacy Material ¹	Pilot Material				
Grain bags	2374	526	1848				
Twine	358	38	320				
Total tonnage collected ²	2732	564	2168				





Legacy material was transported to end markets under the pilot program. 'Pilot material' is defined as grain bags and twine that have been collected after site agreements were executed. Please see Appendix C for a detailed breakdown of the quantity collected by the collection sites.

As of this report, two of the original twenty collection partners have yet to collect enough grain bags to constitute a full truckload for recycling; one of the sites has a partial load, while the other (MacKenzie Regional Waste Landfill) is in a transition phase with site management.

Limited locations for twine drop off is a perceived barrier amongst farmers. With the Twine micro-pilot underway, work continues to fill geographic collection gaps for twine-only collection.

3.3 Next Steps

- Cleanfarms will work with collection sites to monitor the quantities stockpiled for efficient collection and consider additional sites for twine collection.
- Cleanfarms will implement the micro-pilot communications and collection plan.
- A top priority for the APRG includes communication outreach to stakeholder groups about the program.
- Continued engagement with individual farmers and commodity groups is planned in 2023 at events as well as to pursue more media coverage about the pilot program through commodity group news and magazine publications.
- Continued engagement with government to extend the current program expansion past August of 2023 and look for bridge funding to a permanent program.
- A follow up survey of producers from the original 2019 survey to assess participation and attitudes about the pilot will take place in the summer of 2023.

4 Cleanfarms Presentations and Discussions

Collection Site Communications

- In-person events:
 - January 17-19 Alberta Association of Agricultural Fieldmen Agricultural Service Board Conference - tradeshow booth in Grande Prairie.
 - February 16 MD of Willow Creek grain bag rolling demonstration.
 - February 22-24 Alberta CARE Spring Seminar tradeshow booth and presentation on ag-plastics and grain bag recycling.
 - February 28 March 2 Ag Expo Lethbridge tradeshow booth.
 - March 15 APRA Alberta Circular Plastics Day presentation and tradeshow booth.
- Remote Events/Webinars:
 - March 9 MD of Lesser Slave River ASB presentation grain bag and twine recycling.





^{&#}x27;Legacy material' is defined as grain bags and/or twine that were collected and stored onsite by the collection sites prior to becoming a pilot collection site.

²The total tonnage excludes disposal waste contained in legacy material.

5 Budget Details January 1 to March 31, 2023

Balance spent in Q1 2023 \$ (71,102) Balance as of March 31, 2023 \$ (582,027)

Revenue	Jan-Mar			
Funds Transferred to Cleanfarms from Alberta Beef Producers				
Studies	-			
Communications	\$	19,024		
Net Collection Costs	\$	18,682		
Program Admin (Cleanfarms)	\$	17,322		
Total Revenue from Alberta Beef Producers	\$	55,028		
Recycling Revenue				
Revenue from Marketing Materials	\$	16,004		
Total Program Revenue	\$	71,032		
_				
Expenses				
Studies				
Ag Waste Characterization Study	-			
Stakeholder Groups Survey	-			
Market Analysis	-			
Communications				
Brand Development	\$	19,024		
Printing Costs	-			
Design Costs				
Collection Costs				
Contractor Expenses	\$	20,959		
Collection Bags	\$	10,836		
Incentive Payments	\$	2,891		
Total Collection Costs	\$	34,686		
Program Admin (Cleanfarms)	\$	17,322		
Total Cleanfarms and Operational Expenses	\$	71,032		
Committee				
Secretariat - APRA	\$	3,168		
Technical Oversite - RCA	-	·		
ABP Accounting/Grant administrator	\$	1,200		
Total Committee and Administrator Expenses	\$	4,368		
Total Program Expenses	\$	75,401		

Project inception until March 31, 2023

 Expenses
 \$ (579,627)

 Grant Received – April 2022
 \$ 115,000

 Interest earned (since inception)
 \$ 29,410

 Balance
 \$ 582,027



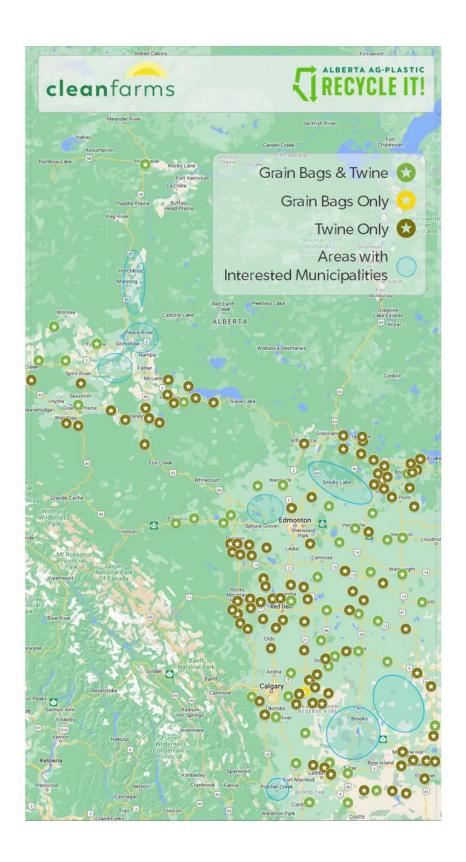


Appendix A - Collection Partners and Location (Maps)

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Collection Partner	Site Number	Year Joined Program					
Cardston County	1	2019					
MD of Taber	2	2019					
Lethbridge County/DBS Environmental	3	2019					
MD of Foothills/Foothills Regional Services Comm.	4	2019					
Wheatland County	5	2019					
Rocky View County	6	2019					
Mountain View County (twine only)	7	2019					
Drumheller & District Solid Waste Mgmt. Assoc.	8	2019					
Special Areas 2,3,4/Big Country Waste Mgmt. Comm.	9	2019					
County of Paintearth/Paintearth Regional Waste Mgmt.	10	2019					
Lacombe County	11	2019					
Camrose County	12	2019					
Claystone Waste/Ryley Landfill	13	2019					
County of Vermilion River	14	2019					
MD of Bonnyville	15	2019					
Westlock County/Westlock Regional Waste Mgmt. Comm.	16	2019					
County of Barrhead	17	2019					
Yellowhead County/Edson & District Recycling Society	18	2019					
County of Grande Prairie	19	2019					
MD of Fairview/North Peace Regional Landfill	20	2019					
Mackenzie County/Mackenzie Regional Waste Mgmt. Comm.	21	2019					
County of Forty Mile/South Forty Waste	1	2020					
Cypress County	2	2020					
MD of Provost	3	2020					
Flagstaff County/Flagstaff Regional Solid Waste Mgmt.	4	2020					
County of Minburn	5	2020					
Clear Hills County	6	2020					
County of Warner	1	2021					
Vulcan County	2	2021					
County of Stettler	3	2021					
MD of Wainwright/Wainwright Regional Waste to Energy Authority	4	2021					
County of Two Hills	5	2021					
Lamont County/St. Michael Regional Solid Waste Commission	6	2021					
Lac La Biche County (twine only)	7	2021					
Kneehill County (twine only)	1	2022					
Starland County	2	2022					
Red Deer County	3	2022					
Clearwater County (twine only)	4	2022					
Ponoka County	5	2022					
Leduc County (twine only)	6	2022					
Sturgeon County (twine only)	7	2022					
County of St. Paul (twine only)	8	2022					
Big Lakes County	9	2022					
MD of Greenview (twine only)	10	2022					
Saddle Hills County	11	2022					
Brazeau County (twine only)	12	2022					
MD of Willow Creek	1	2023					

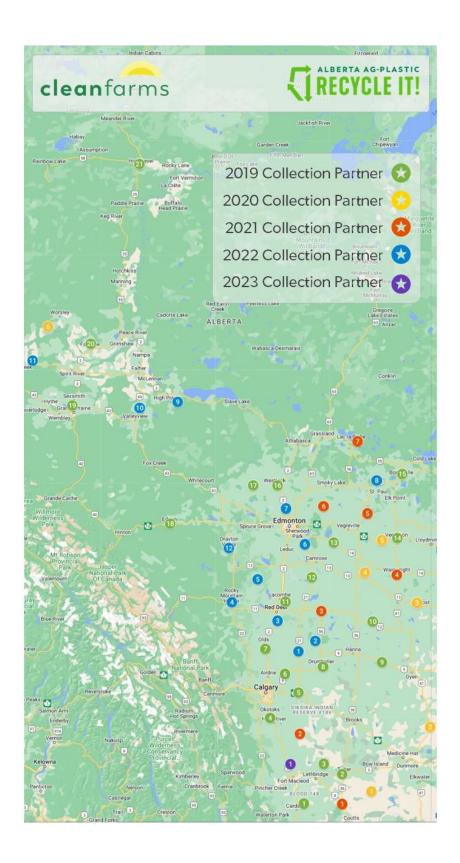
















Appendix B – APRG Member Organizations

Organization	Sector/Representation
Agricultural Service Board	Board Representation
AB Association of Agricultural Fieldmen	Agricultural Fieldmen
Alberta Agriculture and Irrigation	Government (ex officio)
Alberta Barley	Barley Producers
Alberta Beef Producers	Livestock
Alberta Cattle Feeders Association	Livestock
Alberta CARE	Recycling and Waste Management
Alberta Environment & Parks	Government (ex officio)
Alberta Federation of Agriculture	Producers
Alberta Milk Producers	Dairy Producers
Alberta Plastics Recycling Association	Plastics Recycling
Alberta Urban Municipalities Association (AUMA)	Urban Municipalities
Berry BPI Agriculture	Material Manufacturer
Committed Ag Supply	Retailer
Crop Sector Working Group	Crop Producers
Merlin Plastics	Recycler
Olds College	Academia
Peavey Mart	Retailer
PolyAg	Recycler
Recycling Council of Alberta	Recycling and Resource Conservation
Rural Municipalities of Alberta (RMA)	Municipalities
South/Central Waste Collaboration Group	Rural Municipalities
TAMA Canada	Retailer
The Jungle Farm	Crop Producer

APRG Executive include:

Assar Grinde, Alberta Beef Producers; Christina Seidel, Recycling Council of Alberta; Kevin Wirsta, Rural Municipalities of Alberta; Dean Hubbard, Alberta Wheat Barley; Molly Fyten, Alberta Plastics Recycling Association





Appendix C – Quantities of Grain Bags and Twine Sent for Recycling

Grain Bags a	nd Twine Sent for Recycling Oct	2019 - Present	l e			
		Legacy Ma	terial (kg)	Pilot Collection (kg)		
Site Name	County	Grain Bags	Twine	Grain Bags	Twine	
Ryley Landfill	Beaver County	-	-	26,440	1,475	
Youngstown Regional Landfill	Special Areas 2, 3 & 4	-	-	12,970	2,100	
Cardston County Composting Yard	Cardston County	-	-	7,945	-	
Clairmont Landfill	County of Grande Prairie	22,020	-	9,350	-	
Vermilion Waste Transfer Station	County of Vermilion River	9,780	-	65,565	1,440	
Iron Springs Transfer Site	Lethbridge County	-	-	110,826	9,405	
Drumheller & District Regional Landfill	Drumheller	_	6,320	125,008	5,860	
Foothills Regional Landfill & Resource Recovery Centre	M.D. of Foothills	-	-	85,425	2,710	
Prentiss Landfill	Lacombe County	_	7,110	94,970	9,045	
MacKenzie Regional Waste Landfill	Mackenzie No. 23	-		-	-	
Mountain View County Ag Shop Twine Collection	Mountain View County	N/A	_	N/A	8,096	
Municipal District of Bonnyville Public Works Shop	MD of Bonnyville	10,670		24,010	5,100	
MD of Taber Operations and Maintenance Building	MD of Taber			106,240	8,085	
County of Barrhead Public Works Shop	County of Barrhead	_		-		
Westlock Regional Landfill	Westlock County	_	2,000	_	18,664	
-	MD of Fairview	57.870	2,000	95,290	1,110	
North Peace Regional Landfill Coronation Transfer Station		57,670	<u> </u>	13,280		
	County of Paintearth	-			3,702	
Irricana Transfer Site	Rocky View County	64,139	7,800	175,210	17,264	
West Dried Meat Lake Regional Landfill	Camrose County	49,250	1,250	98,430	3 1,189	
Wheatland County Agriculture Service Board Shop	Wheatland County	-	-	226,073		
Edson & District Recycling Society	Yellowhead County	37,860	-	29,480		
Cleardale Transfer Station	Clear Hills County	-	-	-	-	
Foremost Transfer Station - South Forty Waste	County of Forty Mile No. 8	-	-	39,890	240	
Mannville Waste Transfer Station	County of Minburn	33,060	12,970	83,330	7,960	
Hilda Transfer Station	Cypress County	11,520	-	4,810	1,190	
Flagstaff Waste Regional Landfill	Flagstaff County	-	-	73,510	5,965	
Provost Regional Landfill	MD of Provost	33,060	-	6,650	1,069	
County of Warner Ag Service Board Shop	County of Warner	-	-	19,100	1,565	
Vulcan Waste Transfer Station	Vulcan County	-	-	59,940	-	
Beaver Lake Landfill	Lac La Biche County	N/A	493	N/A	-	
Two Hills Regional Landfill	County of Two Hills	-	-	46,015	-	
Wainwright Regional Landfill	MD of Wainwright	62,405	-	8,225	-	
Stettler County Operations Shop	County of Stettler	-	-	-	-	
Horn Hill Transfer Station	Red Deer County	N/A	-	N/A	1,519	
St. Michael Regional Landfill	Lamont County	-	-	1,630	720	
Three Hills Transfer Station	Kneehill County	N/A	-	N/A	664	
New Sarepta/Sunnybrook Waste Transfer Station	Leduc County	N/A	-	N/A	107	
New Fish Creek Transfer Station	MD of Greenview	N/A	-	N/A	-	
Bluffton Landfill	Ponoka County	N/A	-	N/A	-	
Blueberry/Bonanza Transfer Site	Saddle Hills County	134,270	-	35,400	-	
Rumsey/Michichi Transfer Station	Starland County	-	-	2,805	-	
Central Transfer Station	Clearwater County	N/A	-	N/A	630	
Mallaig Transfer Station	County of St. Paul	N/A	-	N/A	-	
Roseridge Landfill	Sturgeon County	N/A	-	N/A	-	
Big Lakes County Regional Landfill	Big Lakes County	-	-	-	-	
Grain Bag Recycler	AB Recyclers	N/A	N/A	N/A	480	
Farm (non-pilot site)	AB Farms	-	- 1 1// 1	160,190	-	
Hay Processing Plants (non-pilot sites)	Southern Alberta	N/A	_	N/A	201,885	
	Totals		37,943	1,848,007	320,161	
	Totals	2,373,911	31,343	1,040,007	320, 101	

Total Grain Bags 2,373,911

Total Grain Bags and Twine 2,732,015





Appendix D – Agricultural Plastics Recycling Group Quarterly Report – Q1 2023













Agricultural Plastics Recycling Group Quarterly Report

2023-Q1 | April 17, 2023 | Final - Revision 1





The pilot project is led by the multi-stakeholder Agricultural Plastics Recycling Group; funds were granted by the Government of Alberta and are administered by Alberta Beef Producers.

APRG Quarterly Report – April 17, 2023

Anecdotally, multiple collection sites have indicated that growers appear to be bringing more and more grain bags and twine to their sites, which is reflected in the volume of these materials being sent for recycling and indicates that we have moved past the drought period of 2021. Collection volumes are expected to continue to increase through the next quarter.

Although pilot collections are scheduled to end on August 31, 2023, work is underway on a term and funding extension proposal to the Government of Alberta, extending the pilot through the end of 2025 - the earliest indicated timeline for a provincially regulated EPR program.

There is still a strong appetite throughout the province from new municipalities to join the pilot program to manage and recycle these products. Cleanfarms is currently working with three potential new partners which would fill additional geographic gaps in the province.

Three twine micro-pilot municipal partners will host ag-plastic roundup collection days in May and June 2023 to collect grain bags & twine, and silage plastic & bale wrap (managed under a separate pilot program).

1. Collection Sites

The MD of Willow Creek was added as a collection partner (Figure 1 & Table 1) in January of 2023, adding one new grain bag and twine collection site at the Willow Creek Regional Landfill.

The province has 47 collection partners and 147 individual collection sites (Figure 2). One site collects grain bags only, 101 collect twine only, and 45 collect grain bags and twine.

Three additional grain bag and twine collection partners (Birch Hills County, Newell County, and MD of Pincher Creek) may join the program in the coming months following approvals from the local Councils. Other geographic gap areas that are being considered and addressed are highlighted in Figure 2.

A detailed map of all current collection locations (not including the high-volume twine users) can be found <u>online</u>.

2. Site Signage

No new site signs are required for development at this time. Site signage and communication material for collection sites (Appendix A & B) are replaced as required.





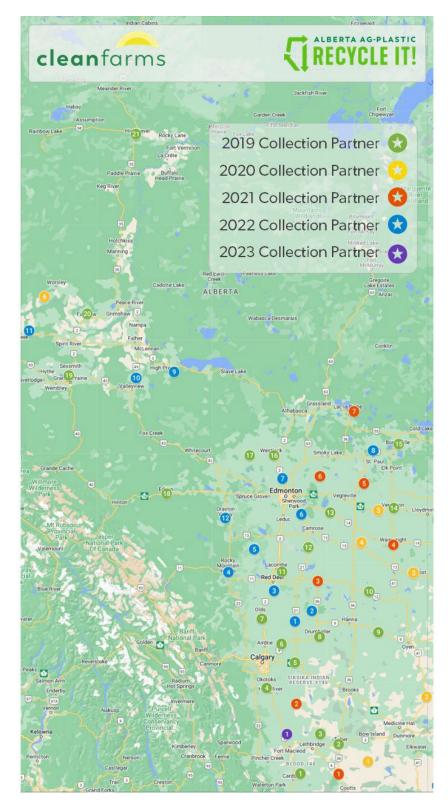


Figure 1. Geographic distribution of collection partners.





Table 1 – List of collection partners

Collection Partner	Site Number	Year Joined Program		
Cardston County	1	2019		
MD of Taber	2	2019		
Lethbridge County/DBS Environmental	3	2019		
MD of Foothills/Foothills Regional Services Comm.	4	2019		
Wheatland County	5	2019		
Rocky View County	6	2019		
Mountain View County (twine only)	7	2019		
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Special Areas 2,3,4/Big Country Waste Mgmt. Comm.	9	2019		
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Mackenzie County/Mackenzie Regional Waste Mgmt. Comm.	21	2019		
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Big Lakes County	9	2022		
MD of Greenview (twine only)	10	2022		
Saddle Hills County	11	2022		
Brazeau County (twine only)	12	2022		
MD of Willow Creek	1	2023		





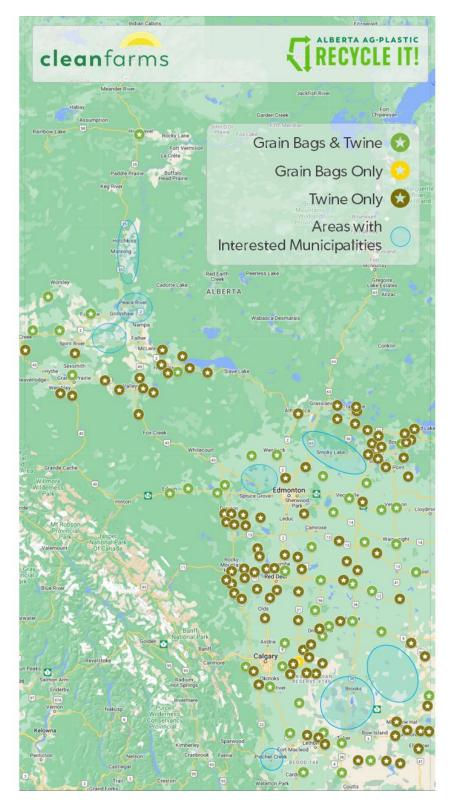


Figure 2. Geographic distribution of collection sites and interested municipalities.





3. Communications & Twine Collection Micro-Pilot

3.1 Micro-Pilot

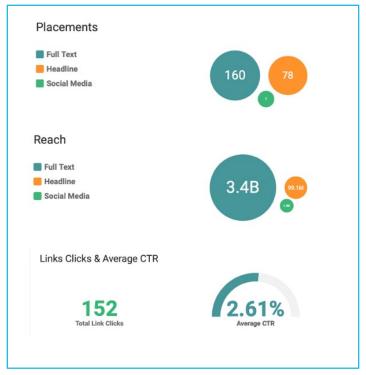
Cleanfarms will host ag-plastic collection events in partnership with three municipalities (Clearwater County, Lac La Biche County, and Starland County) in May and June 2023. To increase participation, Cleanfarms will leverage the collection of bale wrap, and silage plastic offered via a separate Cleanfarms collection program to be accepted with grain bags and twine at the events. The three municipal partners have received a poster (Appendix C) to advertise the collection events. Because the events will accept materials collected under several pilot projects with various funding partners, no program branding was incorporated into the poster material for functional purposes.

3.2 Communications

The provincial communications plan launched in April 2022 to build awareness of the pilot program is wrapping up in the spring of 2023.

Communication activities since the last report include:

- January: earned advertising, Alberta Dressage Association created a FB post advertising twine recycling (Appendix D).
- January/February: paid advertising (Appendix D)
 - Alberta Beef/ACFA Anniversary (Print)
 - Alberta Wheat & Barley (Print)
- January-March: seasonal program webpage updates, including a new collection site map to simplify locating collection sites (Appendix D).
- Woodlands County: interview for 2023 publication to come in spring.
- March: Twine recycling article published in <u>Alberta Bites Equestrian Magazine</u>.
- March: News release <u>Alberta Ag-Plastic. Recycle It!' Gaining Ground Recovering Ag</u> Plastics for Recycling.
 - Media contact from the news release: Lethbridge Herald, Canadian Plastics



New release statistics (CTR = Click Through Rate)





4. Tonnage Collected

To close the loop on ag-plastic recycling, 480 kilograms (kg) of waste twine used to secure grain bags was collected from a grain bag recycler in Alberta and sent for consolidation and baling in Lethbridge to be recycled.

In total, 2,732,015 (kg) of grain bags, twine, and other waste material have been collected for recycling under the pilot program since October 1, 2019. Of this total, collections included 2,373,911 kg of grain bags, 358,104 kg of twine, and 109,760 kg of other waste material. The total of recyclable grain bags and twine is 2,622,255 kg.

During this quarter, 104,630 kg of grain bags were sent to recyclers in Alberta. A total of 21,901 kg of twine was sent for consolidation and baling in Edson or Lethbridge, while 18,470 kg of twine that was previously consolidated and baled in Edson or Lethbridge was sent to a recycler in Minnesota, USA.

Tables 1 and 2 provide a breakdown of materials collected this quarter and collection since program inception, respectively.





Table 2 – Collection summary for Q1 2023

Grain Bags	and Twine Sent for Recycling	Jan - Mar 2023				
		Legacy Ma	terial (kg)	Pilot Collection (kg)		
Site Name	County	Grain Bags	Twine	Grain Bags	Twine	
RyleyLandfill	Beaver County	-	-	-	75	
Youngstown Regional Landfill	Special Areas 2, 3 & 4	-	-	-	-	
Cardston County Composting Yard	Cardston County	-	-	-	-	
Clairmont Landfill	County of Grande Prairie	-	-	-	-	
Vermilion Waste Transfer Station	County of Vermilion River	-	-	-	-	
Iron Springs Transfer Site	Lethbridge County	-	-	8,160	970	
Drumheller & District Regional Landfill	Drumheller	-	-	29,235	-	
Foothills Regional Landfill & Resource Recovery Centre	M.D. of Foothills	-	-	5,380	-	
Prentiss Landfill	Lacombe County	-	-	14,585	55	
MacKenzie Regional Waste Landfill	Mackenzie No. 23	-	-	-		
Mountain View County Ag Shop Twine Collection	Mountain View County	N/A	-	N/A	880	
Municipal District of Bonnyville Public Works Shop	MD of Bonnyville	-	-	-	_	
MD of Taber Operations and Maintenance Building	MD of Taber	-	-	-	_	
County of Barrhead Public Works Shop	County of Barrhead	_	-	-	-	
Westlock Regional Landfill	Westlock County	_	_	_		
North Peace Regional Landfill	MD of Fairview	_	_	_	_	
Coronation Transfer Station	County of Paintearth	_	_	_		
Irricana Transfer Site	Rocky View County	_		13,660		
West Dried Meat Lake Regional Landfill	Camrose County			-		
Wheatland County Agriculture Service Board Shop	Wheatland County	 		23,490	549	
	Yellowhead County			23,490		
Edson & District Recycling Society	,					
Cleardale Transfer Station	Clear Hills County	-	-	-		
Foremost Transfer Station - South Forty Waste	County of Forty Mile No. 8	-	-	-	-	
Mannville Waste Transfer Station	County of Minburn	-	-	-	-	
Hilda Transfer Station	Cypress County	-	-	- 4.000		
Flagstaff Waste Regional Landfill	Flagstaff County	-	-	4,320	-	
Provost Regional Landfill	MD of Provost	-	-		-	
County of Warner Ag Service Board Shop	County of Warner	-	-	-	-	
Vulcan Waste Transfer Station	Vulcan County	-	-	-	-	
Beaver Lake Landfill	Lac La Biche County	N/A	-	N/A	-	
Two Hills Regional Landfill	County of Two Hills	-	-	-		
Wainwright Regional Landfill	MD of Wainwright	-	-	-	-	
Stettler County Operations Shop	County of Stettler	-	-	-		
Horn Hill Transfer Station	Red Deer County	N/A	-	N/A	-	
St. Michael Regional Landfill	Lamont County	-	-	-	-	
Three Hills Transfer Station	Kneehill County	N/A	-	N/A	-	
New Sarepta/Sunnybrook Waste Transfer Station	Leduc County	N/A	-	N/A	107	
New Fish Creek Transfer Station	MD of Greenview	N/A	-	N/A	-	
Bluffton Landfill	Ponoka County	N/A	-	N/A	-	
Blueberry/Bonanza Transfer Site	Saddle Hills County	-	-	-	-	
Rumsey/Michichi Transfer Station	Starland County	-	-	-	-	
Central Transfer Station	Clearwater County	N/A	-	N/A	-	
Mallaig Transfer Station	County of St. Paul	N/A	-	N/A	_	
Roseridge Landfill	Sturgeon County	N/A	-	N/A	-	
Big Lakes County Regional Landfill	Big Lakes County	-	-	-	_	
Grain Bag Recycler	AB Recyclers	N/A	N/A	N/A	480	
Farm (non-pilot site)	AB Farms	-	_	5,800		
Hay Processing Plants (non-pilot sites)	Southern Alberta	N/A	-	N/A	18,785	
,	Quarterly To		_	104,630	21,901	
	additionly 10			. 5 1,000	_ 1,001	

Total Grain Bags and Twine 126,531





Table 3 – Collection summary since program inception

Grain Bags a	nd Twine Sent for Recycling	Oct 2019 - Present				
		Legacy Mat	terial (kg)	Pilot Collection (kg)		
Site Name	County	Grain Bags	Twine	Grain Bags	Twine	
Ryley Landfill	Beaver County	-	-	26,440	1,475	
Youngstown Regional Landfill	Special Areas 2, 3 & 4	-	-	12,970	2,100	
Cardston County Composting Yard	Cardston County	-	-	7,945	_	
Clairmont Landfill	County of Grande Prairie	22,020	-	9,350	-	
Vermilion Waste Transfer Station	County of Vermilion River	9,780	-	65,565	1,440	
Iron Springs Transfer Site	Lethbridge County	-	-	110,826	9,405	
Drumheller & District Regional Landfill	Drumheller	-	6,320	125,008	5,860	
Foothills Regional Landfill & Resource Recovery Centre	M.D. of Foothills	-		85,425	2,710	
Prentiss Landfill	Lacombe County	-	7,110	94,970	9,045	
MacKenzie Regional Waste Landfill	Mackenzie No. 23	-		-		
Mountain View County Ag Shop Twine Collection	Mountain View County	N/A	-	N/A	8,096	
Municipal District of Bonnyville Public Works Shop	MD of Bonnyville	10,670	_	24,010	5,100	
MD of Taber Operations and Maintenance Building	MD of Taber	-	_	106,240	8,085	
County of Barrhead Public Works Shop	County of Barrhead	_	_	-	-	
Westlock Regional Landfill	Westlock County	-	2,000	-	18,664	
North Peace Regional Landfill	MD of Fairview	57.870		95,290	1,110	
Coronation Transfer Station	County of Paintearth	-		13,280	3,702	
Irricana Transfer Site	Rocky View County	64,139	7,800	175,210	17,264	
West Dried Meat Lake Regional Landfill	Camrose County	49,250	1,250	98,430	922	
Wheatland County Agriculture Service Board Shop	Wheatland County	49,230	-	226,073	1,189	
, ,	Yellowhead County	37,860		29,480	1, 103	
Edson & District Recycling Society	· · · · · · · · · · · · · · · · · · ·	' 		29,400		
Cleardale Transfer Station	Clear Hills County	-			- 240	
Foremost Transfer Station - South Forty Waste	County of Forty Mile No. 8	- 22.000	40.070	39,890	240	
Mannville Waste Transfer Station	County of Minburn	33,060	12,970	83,330	7,960	
Hilda Transfer Station	Cypress County	11,520	-	4,810	1,190	
Flagstaff Waste Regional Landfill	Flagstaff County	- 22.000	-	73,510	5,965	
Provost Regional Landfill	MD of Provost	33,060	-	6,650	1,069	
County of Warner Ag Service Board Shop	County of Warner	-	-	19,100	1,565	
Vulcan Waste Transfer Station	Vulcan County	-	-	59,940		
Beaver Lake Landfill	Lac La Biche County	N/A	493	N/A	-	
Two Hills Regional Landfill	County of Two Hills	-	-	46,015	-	
Wainwright Regional Landfill	MD of Wainwright	62,405	-	8,225		
Stettler County Operations Shop	County of Stettler	-	-	-	-	
Horn Hill Transfer Station	Red Deer County	N/A	-	N/A	1,519	
St. Michael Regional Landfill	Lamont County	-	-	1,630	720	
Three Hills Transfer Station	Kneehill County	N/A	-	N/A	664	
New Sarepta/Sunnybrook Waste Transfer Station	Leduc County	N/A	-	N/A	107	
New Fish Creek Transfer Station	MD of Greenview	N/A	-	N/A	-	
Bluffton Landfill	Ponoka County	N/A	-	N/A	-	
Blueberry/Bonanza Transfer Site	Saddle Hills County	134,270	-	35,400	-	
Rumsey/Michichi Transfer Station	Starland County	-	-	2,805	-	
Central Transfer Station	Clearwater County	N/A	-	N/A	630	
Mallaig Transfer Station	County of St. Paul	N/A	-	N/A	-	
Roseridge Landfill	Sturgeon County	N/A	-	N/A	-	
Big Lakes County Regional Landfill	Big Lakes County	-	-	-	-	
Grain Bag Recycler	AB Recyclers	N/A	N/A	N/A	480	
Farm (non-pilot site)	AB Farms	-	-	160,190	-	
Hay Processing Plants (non-pilot sites)	Southern Alberta	N/A	-	N/A	201,885	
	7	otals 525,904	37,943	1,848,007	320,161	

Total Grain Bags and Twine 2,732,015





5. Quarterly Financial Report

The income statement for 2019-Q2 through 2023-Q1 follows:

Alberta Ag-Plastic. Recycle It! Pilot Program - Cleanfarms Financial Report													
April 2022 - I	April 2022 - March 2023					Year 1, 2, & 3 8	& Program Total			Budget Estimates			
Revenue	Apr - Jun	July - Sep	Oct - Dec	Jan - Mar	Total	Apr '19 - Mar '20	Apr '20 - Mar 21'	Apr '21 - Mar 22'	Program Total	Apr '19 - Mar '22	Apr '22 - Aug '23	Total of Budget Estimates	Program Total Budget Difference
Funds Transferred to Cleanfarms from Alberta Beef Producers													
Studies	-	-	-	-	-	45,590	-	-	45,590	78,000	-	78,000	32,410
Communications	15,125	8,359	24,990	19,024	67,499	23,496	10,200	8,161	109,356	36,500	100,000	136,500	27,144
Net Collection Costs	3,157	- 3,899	24,422	18,682	42,363	38,838	71,469	44,070	196,740	978,000	300,315	1,278,315	1,081,575
Program Admin (Cleanfarms)	17,322	17,322	17,322	17,322	69,289	65,000	50,000	50,000	234,289	165,000	92,700	257,700	23,411
Total Revenue from Alberta Beef Producers	\$ 35,604	\$ 21,783	\$ 66,735	\$ 55,028	\$179,151	\$ 172,924	\$ 131,670	\$ 102,231	\$ 585,975	\$ 1,257,500	\$ 493,015	\$ 1,750,515	\$ 1,164,540
Recycling Revenue													
Revenue from Marketing Materials	25,927	33,777	32,329	16,004	108,038	6,260	68,427	105,181	287,906	336,000	156,217	492,217	204,311
Total Program Revenue	\$ 61,532	\$ 55,560	\$ 99,064	\$ 71,032	\$287,188	\$ 179,184	\$ 200,097	\$ 207,412	\$ 873,881	\$ 1,593,500	\$ 649,232	\$ 2,242,732	\$ 1,368,851
Expenses													
Studies													
Ag Waste Characterization Study	-	-	-	-	-	10,000	-	-	10,000	10,000	-	10,000	-
Stakeholder Groups Survey	-	-	-	-	-	28,090	-	-	28,090	58,000	-	58,000	29,910
Market Analysis	-	-	-	-	-	7,500	-	-	7,500	10,000	-	10,000	2,500
Communications													
Brand Development / 2022 Communication Plan	14,508	5,359	20,318	19,024	59,209	10,000	55	7,936	77,200	10,000	93,000	103,000	25,800
Printing Costs	242	3,000	4,673	-	7,915	3,496	10,145	255	21,811	14,500	7,000	21,500	- 311
Design Costs	375	-	-	-	375	10,000	-	-	10,375	12,000	7,000	12,000	1,625
Collection Costs													
Contractor Expenses	26,689	25,428	45,102	20,959	118,178	24,120	74,048	111,416	327,762	781,300	211,765	993,065	665,303
Collection Bags	180	437		10,836	11,453	17,884	23,776	278	53,391	96,000	22,000	118,000	64,609
Incentive Payments	2,215	4,014	11,649	2,891	20,770	3,093	42,072	37,556	103,491	100,700	66,550	167,250	63,759
Total Collection Costs	29,085	29,878	56,751	34,686	150,401	45,098	139,897	149,251	484,646	978,000	300,315	1,278,315	793,669
Program Admin (Cleanfarms)	17,322	17,322	17,322	17,322	69,289	65,000	50,000	50,000	234,289	165,000	92,700	257,700	23,411
Total Cleanfarms and Operational Expenses	\$ 61,532	\$ 55,560	\$ 99,064	\$ 71,032	\$287,188	\$ 179,184	\$ 200,097	\$ 207,442	\$ 873,911	\$ 1,257,500	\$ 493,015	\$ 1,750,515	\$ 876,604
Committee													
Secretariat - APRA ¹	-	881	1,275	3,168	5,324	17,638	4,722	11,177	38,861	75,000	35,417	110,417	65,488
Technical Oversite - RCA 1	-	-	-	-	-	3,054	687	2,327	6,068	75,000	33,417	110,417	05,488
ABP Accounting/Grant administrator ¹	-	-	-	1,200	1,200	900	1,200	1,200	4,500	22,500	10,625	33,125	28,625
Total Committee and Administrator Expenses	\$ -	\$ 881	\$ 1,275	\$ 4,368	\$ 6,524	\$ 21,592	\$ 6,609	\$ 14,704	\$ 49,428	\$ 97,500	\$ 46,042	\$ 143,542	\$ 94,113
Total Program Expenses	\$ 61.532	\$ 56.441	\$100.339	\$ 75.401	\$293.712	\$ 200.775	\$ 206.706	\$ 222.146	\$ 923.339	\$ 1.355.000	\$ 539.057	\$ 1.894.057	\$ 970.717

Notes: 1. As reported to Cleanfarms.

The following is a list of outstanding line items from 2023-Q1 which are not included in the above income statement; all pending invoices are within budget:

- Incentive payments (\$509 waiting to receive invoices).
- Contractor expenses (estimated \$7,315 waiting to receive invoices).

Several key factors contribute to the 'Program Total' underspend compared to the 'Total of Budget Estimates', including lower than anticipated twine collection rates, several direct-to-farm pickups requiring no incentive payment, and lower than estimated grain bag and twine collection costs because of realized program efficiencies. Additionally, there are five months of programming remaining in the listed budget.





6. Other Activities and Key Dates

Events & Collection Site Communications

- In-person events:
 - January 17-19 Alberta Association of Agricultural Fieldmen Agricultural Service Board Conference – tradeshow booth in Grande Prairie.
 - February 16 MD of Willow Creek grain bag rolling demonstration.
 - February 22-24 Alberta CARE Spring Seminar tradeshow booth and presentation on ag-plastics and grain bag recycling.
 - February 28 March 2 Ag Expo Lethbridge tradeshow booth.
 - March 15 APRA Alberta Circular Plastics Day presentation and tradeshow booth.
- Remote Events/Webinars
 - March 9 MD of Lesser Slave River ASB presentation grain bag and twine recycling.





Appendix A – Signage







Twine Site Sign



Combined Grain Bag and Twine Site Sign





Appendix B – Communication Assets

Grain Bag Recycling

3 steps to ensure your used grain bags can be accepted and recycled:

Grain bags that are returned loosely rolled require more space, are time consuming and difficult to manage with equipment, and they weigh very little, which is inefficient for transportation to a recycling facility.

Remove Debris

Grain bags need to be free of as much foreign material (spoilage, dirt, rocks, etc.) as possible.

Using a proper grain bag roller will help achieve that objective.



Grain bags must be rolled tightly with a standalone mechanical grain bag roller* or old hay baler, and then secured tightly with twine.



Bring grain bags that are rolled and tied securely to your local pilot collection site.



 $^*\mbox{\it Most}$ grain bag extractors roll the bags too loosely. Collection sites cannot accept unrolled, extractor rolled, or hand-rolled grain bags. Any improperly rolled bags may be rejected, subject to a landfill tipping fee or to additional charges at drop off.



Cleanfarms.ca

403.942.6012 | 877.622.4460 info@cleanfarms.ca 🔞 😈 @cleanfarms







Alberta The pilot project is led by the multi-stake holder Agricultural Plastics Recycling Group; funds were granted by the Government of Alberta and are administered by Alberta Beef Producers.

Updated Grain Bag Preparation Brochure

Twine Recycling

3 steps to ensure your used twine can be accepted and recycled:

Pick up, free, twine collection bags from collection sites and select County/

Shake

Remove as much debris, snow, or ice as possible.

Run the twine through a gloved hand to help remove debris.



Bag

Place loose twine* in a collection bag & secure tightly closed with twine or a zip tie.



Return

Bring full bags of twine to your local collection site.

For your nearest collection site, visit AlbertaAgPlastics.ca



*Plastic twine only. Bags of twine mixed with netting, sisal twine, or other materials may be rejected, subject to a landfill tipping fee or to additional



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Updated Twine Preparation Brochure









Recycle Used Baler Twine

Preparing twine for recycling

Pick up, free, twine collection bags from pilot collection sites and select County/MD offices.

- 1. Shake to remove debris, snow or ice.
- 2. Place loose twine in a collection bag.

 Plastic twine only. Bags of twine mixed with netting, sisal twine, or other materials will be rejected.
- 3. Return to an **Alberta Ag Plastic**. *Recycle It!* pilot collection site. Call ahead for unloading assistance.

Find recycling details and a collection site near you:

- For more about **Alberta Ag Plastic.** Recycle It! go to **AlbertaAgPlastics.ca** or scan the QR code.
- To see what other ag materials Cleanfarms recycles, go to Cleanfarms.ca











The pilot project is led by the multi-stakeholder Agricultural Plastics Recycling Group; funds were granted by the Government of Alberta and are administered by Alberta Beef Producers.

Twine Retailer/Municipal Poster







Got used plastic baler twine? Recycle it: AlbertaAgPlastics.ca for details and collection sites





Twine 1920x1080 Retailer/Municipal TV Placement



Got used plastic baler twine?



Recycle it! AlbertaAgPlastics.ca for details and collection sites

Twine Retailer/Municipal 728x90 Web Banner



Twine 800x800 Retailer/Municipal Web Capsule





Appendix C – Ag-Roundup Posters



Example agricultural plastic collection event poster.





Appendix D - Special Communication Activities



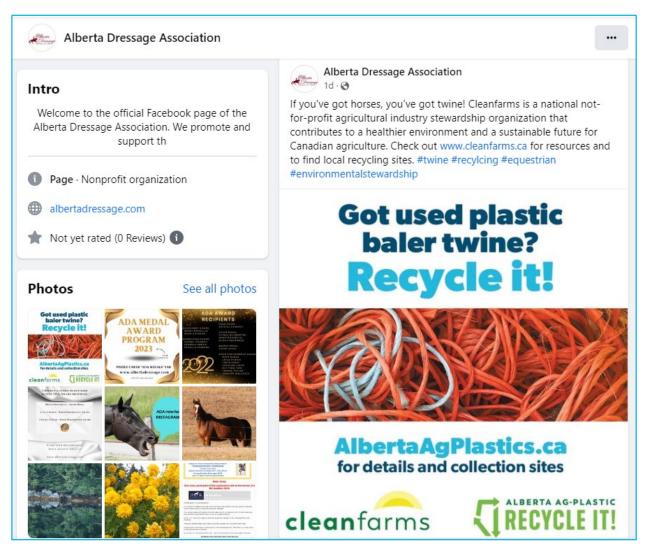
Advertisement for Alberta Wheat and Barley



Website updates and new collection site mapping.







January Facebook post by Alberta Dressage Association



