

Ag Forward:

managing on-farm plastics



Compactor Presses Proving Useful to Manage On-farm Used Silage and Bale Wrap Plastics

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Many beef and dairy producers in Alberta protect livestock feed by covering it with special plastic film widely used in agriculture today.

Whether it's silage bags or tubes, large tarps that cover the top of the silage piles, or plastic stretch film used to wrap hay bales, once the plastic is removed and no longer useful, it becomes waste. Historically, the only disposal options for these materials were landfilling or piling them behind the farm gate in hopes of a future recycling program.

Fortunately, a recycling option is now available for farmers in several parts of the province.

Through a multi-year, federally-funded pilot program called '[Building a Zero-Plastic-Waste Strategy for Agriculture](#)', Alberta farmers in select municipalities can recycle these used plastic materials by taking them to a local collection site or contacting their ag department.

One challenge with recycling these plastics is densifying the material, in this case, bale wrap and silage plastic, to improve efficiencies in transporting them to an end market. Generally, plastics that are collected loose take up a large amount of space and are time-consuming and difficult to handle with equipment. To quickly and inexpensively densify these plastics for storage, handling, and transport, Cleanfarms is testing the use of a manual compacting system.

The compactors in use were designed by Full Circle

Plastics of Nobleford, Alberta. Cleanfarms initially commissioned 25 of them for Alberta and loaned several of them to beef and dairy farmers throughout the province. Through its 'Here For Tomorrow' partnership, Dairy Farmers of Canada has provided funding to supply some compactors to a group of dairy farmers around Olds, Alberta.



Silage plastic, densified & prepared for transport using the manual compacting system. Source: Cleanfarms



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Each compactor takes approximately 22,000 square feet or about 300 kg of loose material at one time and compresses it into a 2' x 4' x 4' bale. The bales are easy to store and transport to a local collection site and from there to a recycling facility in Alberta or the US.

“This compactor is a ‘made in Alberta’ solution to a problem all livestock producers face. So far, it demonstrates that managing our used silage plastic can be easy and it saves us time. Farmers love practical solutions and the compactor is a practical answer, plus it’s the right thing to do,” said Dan Deboer of Monarch Feeders.

How to access a manual compactor

Compactors are currently available year-round for public use during regular operating hours in several municipalities throughout Alberta (see the Cleanfarms [Alberta map and contact details](#)). Additional sites may be added as the pilot program expands.

Some municipalities (listed in the map above) also offer mobile compactors that can be delivered directly to farm. Those interested can contact the

municipality or agricultural department to inquire if the mobile option is available.

The Cleanfarms project to reduce ag plastic waste is funded in part by the Government of Canada

through Agriculture and Agri-Food Canada’s Canadian Agricultural Strategic Priorities Program (CASPP), a \$50.3 million, five-year investment to help the agricultural sector adapt and remain competitive.

Recycling silage covers and bale wrap so they can be turned into new plastic products such as new agricultural film plastics, plastic bags, plastic dimensional lumber, or plastic ag fence posts, adds to farm operation sustainability, a goal which is a priority for many farm families.

View the compactor in action... *Managing ag plastics: Compaction with a manual baler*



<https://bit.ly/3hDxoOr>

The video for this project was funded by:



About

Ag Forward is a series of information articles for Alberta farmers to promote a shared understanding of the importance of used agricultural plastics resource management. It began with a selection of articles sponsored by the ‘Alberta Ag-Plastic. Recycle It!’ pilot program for grain bag and baler twine recycling in Alberta. That pilot project is led by the multi-stakeholder [Agricultural Plastics Recycling Group \(APRG\)](#). Funds for the grain bag and twine pilot were granted by the Government of Alberta and are being administered by Alberta Beef Producers.

The series is produced by Cleanfarms, and continues to explore how ag plastics, once used, can be recycled to reclaim the natural resources and the invested energy, returning them to the economy for remanufacturing into new products. This practice is vital to Alberta farmers because it contributes to agricultural sustainability that begins and ends on the farm, providing stewardship for future generations, as well as environmental health.

Find out more:



[Alberta Ag-Plastic. Recycle-It!](#)



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Upcoming edition: About recycling small (under 23L) ag containers