Chicken Tractors
Agri-Technology Team

This series of blog posts come from the Ag-Tech program and will look at agricultural technologies being used around the world! While many of these technologies have not yet made their way to Nova Scotia, or in some cases, even to Canada, they may still be of interest to local producers. The purpose of these posts aren't to promote any one technology or provider, but to share agricultural innovations from around the globe.

In this post, we will be looking at chicken tractors. It seems like a good place to start because it is a great reminder that there are many different levels of complexity in technology. Some of these tractors are extremely high tech and use automation and robotics, while some have been put together at home. You don't need to master machine learning in order to innovate!

Unlike a traditional coop, most of these tractors do not have a floor. This lets the animals have access to grass and insects, while still providing shelter from the elements and a constant supply of food and water. They can be moved throughout a field, so waste doesn't build up in one spot and the birds have fresh areas to peck around in. Instead of cleaning out a coop, nutrients from the bird's waste can go back to the soil. This article from UKKO Robotics describes how systems like these can be beneficial in regenerative agriculture, while also saving labor, reducing feed costs and improving animal welfare.

Since we have already introduced UKKO Robotics, we will start with the high-tech end of things. UKKO's ROVA|BARN comes in different sizes and is not just for poultry. Powered by solar panels, it moves on its own and includes automatic feeding and watering systems with a 7-day capacity. They have a mobile app that allows for remote opening and closing of the wall flaps and an electrified skirt to protect the animals from predators. You can see it in action on their YouTube page.

Figure 1: The ROVA|BARN 200 from UKKO Robotics. Photo owned by UKKO Robotics

Another company making these products is The Mobile Chicken House. Their products are moved with a tractor instead of being self-propelled. They also offer custom egg collection systems. Unlike the previous example, some of these systems do have a floor. Chickens are trained to reenter the trailer when it is

moved around. This video from Greenacres Foundation shows how one egg producer has incorporated their Mobile Chicken House into their practice and trained their chickens to get on board.

Figure 2: Inside of a Mobile Chicken House tractor. Photo owned by Mobile Chicken House

Despite the high-tech nature of the last two examples, these tractors don't necessarily need to be automated. You can get the benefits of allowing your poultry safe access to fields without computerizing a single thing. There are several online resources about how to build your own poultry tractor that can be moved either by hand or pulled with a tractor. For example, Green Willow Homestead has built some A-frame tractors on wheels and even sells the plans online.

Figure 3: Homemade A-frame chicken tractor from Green Willow Homestead. Photo owned by Green Willow Homestead

Sources:

https://www.ukkorobotics.com/
https://mobilechickenhouse.com/
https://green-acres.org/
https://www.greenwillowhomestead.com/