



Happy Holidays from all of us at C-Lock to all of you!

Message from CEO Pat Zimmerman:

One more trip around the sun

In Rapid City, South Dakota we are in the grip of winter. Last night the temperatures dipped to zero degrees F (minus eighteen degrees Celsius). As I write this note a light skiff of snow adds a thin veneer to the mostly-white landscape. Here, as in many countries around the world, we are preparing for the holiday season. Like a comma in a sentence, holidays punctuate the year. We are sending this letter to discuss our overarching mission, our progress, and what will be in store for the future.

OUR COMPANY MISSION

A critical imperative looms in humanity's future: How we can sustainably convert millions of acres of marginally-productive land and millions of tons of non-edible (by monogastric animals) biomass into high-quality protein -- meat and milk--in a sustainable way. The answer to this overarching question will be built on research to address more specific issues of importance. For example, which animals in a pasture or a feedlot are failing to flourish? How can we get animals through the lean months in the best condition at the lowest cost? How can we quickly and economically determine which bull and which heifers are most likely to propagate efficient calves? What information do we need for each animal to accurately predict when the maximum rate of weight gain is likely to diminish? How can we deliver and monitor at minimal cost, the intake of critical (and often expensive) supplements to each animal in a herd in order to maximize both animal production and long-term forage sustainability? How can we attain economies of scale and still treat each animal individually, so it can achieve its full production potential?

As we continue to develop new equipment, we always keep the following tenet in the forefront: We realize that those whose lives are entwined with animal agriculture don't need another job. They have no time to ponder another stream of data. Instead they need information to inform decision-making at each stage of the animal production cycle.

GREENFEED

Since the introduction of GreenFeed in late 2010, millions of measurements have been made in more than 30 countries on thousands of ruminant animals. A global family of GreenFeed users has evolved and they have shared their experiences with GreenFeed at international meetings. However maybe the most lasting product of these assemblies is that customers become transformed into a family of valued friends and colleagues. In addition, it is personally gratifying that our colleagues, have used GreenFeed to create an outstanding record of peer-reviewed, published research papers, the list is growing quickly, and we have current publications [here](#). Please email us if you note additional papers to be included in this bibliography.

GLOBAL SMART STANDARD

We have developed the Global-Smart Standardization and Calibration Program to be included as an ongoing service for new GreenFeed systems and available as an enrollment option to all previous GreenFeed customers. This program will provide uniform precise trace gas standards and zero gas standards at optimal concentrations for methane and carbon dioxide measurements of ruminant emissions. Those enrolled in the program will receive pressurized trace gases, zero gases, regulators, tubing, and all recommended replacement filters. This program will eliminate struggles to order the correct gas standards and it will ensure that all filters are replaced at appropriate intervals. The Global-Smart Standardization program will ensure that every measurement made by every GreenFeed system everywhere in the world is comparable to all others in space and time!

We are beginning planning for another GreenFeed Workshop in conjunction with the 7th Greenhouse Gas and Animal Agriculture Conference (GGAA) to be held in August of 2019 in Iguassu, Brazil. To me an important result of these meetings is the open exchange of experiences, results, and new ideas. We will keep everyone updated as time progresses.

SMARTFEED

Now we have applied the GreenFeed technology toward several additional products to benefit those throughout the animal agriculture industry. The new products include SmartFeed, an affordable, modular, portable unit to monitor animal intake; SmartFeed Pro, to monitor and control the amounts of feed and supplement supplied to each animal; SmartScale, a unit that can be retrofit to many commercially-available waterers to monitor and predict animal weight gain; Super SmartFeed, a portable, solar-powered, Highway-towable trailer unit capable of providing supplemental feed for as many as 130 animals for a month before it requires refilling; and Single Super SmartFeed, a budget-priced, unit for those who wish to supplement 20 to 30 animals.

IN SUMMARY

We are excited about our past, and even more excited about our future. We feel fortunate to have the opportunity to build a Company that promises to decrease the environmental footprint of animal agriculture while increasing the bottom line for producers. We wish to thank you for your continued patronage. As we make one more trip around the sun together, we wish each of you and your loved-ones peace, prosperity and good health in 2019. Please, take a look at our website and Facebook pages and call or email us to tell us what you like and how we can improve!

Patrick R. Zimmerman, Ph.D.

CEO

C-Lock Inc.

1350 Concourse Drive

Rapid City, SD 57702

Office: 605-791-5657 X408

Email: pzimmerman@c-lockinc.com

Website: <http://c-lockinc.com>



New Home for C-Lock, Inc



In the last year we outgrew our facilities. We realized that we could no longer efficiently support our manufacturing goals. We therefore acquired a new building with about four times more shop space and we are finally completing the remodeling and moving process. Soon we will be installing several major new pieces of manufacturing equipment to improve quality and speed.

C-Lock Inc.

1350 Concourse Drive

Rapid City, SD 57703



Scott Zimmerman becomes President

This year, Scott Zimmerman, C-Lock Inc. Chief Engineer was promoted to President of C-Lock Inc. in recognition of his vision and drive to help our company evolve from a few people hand-crafting GreenFeed units one at a time, into a full-fledged manufacturing company capable of meeting the pent-up demand for rugged, modular, internet-enabled equipment that can increase the sustainability and profitability of animal agriculture.

