

Jason Burroughs

Crop Manager/Owner
Aurora Ridge Dairy



About me

- Grew up on a small Dairy Farm on the east side of Skaneateles Lake.
- Came to Aurora Ridge Dairy in 1995
- Passion for crops, soils, and the environment



About Aurora Ridge Dairy

- 2,600 acres on home farm
- 2,600 acres neighboring farms
- Began in 1984 with 65 cows
- Today 2,300 cows on home farm; manage additional 2,000 cows at another location



Environmental Mission Statement

- Aurora Ridge Dairy will strive to be excellent stewards of the soils, water and air. We will farm in a manner that utilizes the natural advantages of these soils to grow high quality forages utilizing nutrients produced by the dairy. We will work hard to control nutrients, pathogens and odors from leaving our dairy and crop operations.
- We are aware that every decision we make as managers has an impact on the environment. We will make every effort to make environmentally informed decisions.
- We will work to maximize and reuse our inputs. We will recycle as much of the material that comes on to the farm as possible including the paper, plastics, metals, oils and tires.
- We will keep the farm buildings and properties clean, neat and well repaired. We will work to have the farm blend in with the natural beauty of the area.
- We are committed to meet and exceed environmental regulations to protect the health of our families, employees and neighbors.
- We will move forward preserving and improving soil productivity, recycling nutrients for crop use, recycling other consumables, and considering any technology that helps to reuse inputs. We will especially consider technologies that will have a positive impact on our neighbors.
- We are committed to continual improvement in everything that we do.

We take Stewardship Seriously

- High level of management
- Recipient of multiple awards and recognized for the good job we do
- One of the first farms to participate in Cornell's mass nutrient balance
- Have followed a nutrient management plan backed up by soil samples for 30+ years
- Invested heavily in environmentally friendly practices





How Aurora Ridge Protects Local Watersheds

It's All About Nutrient Management

- Anaerobic digester
- Manure separation
- Manure incorporation
- Cover crops



Anaerobic Digester

- Went on-line in 2009
- Generates 600 Kwh, enough energy to run the farm and around 300 homes



Benefits:

- The digestion process kills off pathogens – reducing the potential to enter surface or ground water
- Generates Green energy used to power farm and neighbor homes
- Helps minimize odor, helps allow us to apply manure as a fertilizer to growing crops.
- Dried solids used for bedding
- Destroys methane- a green house gas

Manure separation and composting

- Removes 20% of the volume.
- Recycle and reuse of bedding
- Heating to 170 degrees kills pathogens and bacteria



Composted Manure solids

- ❑ Recycled fiber to be used for bedding
- ❑ Cleaner than sawdust



Manure Dragline System

- Manure incorporated directly into the soil
- Reduced chance for runoff
- Apply manure to a growing crop



Benefits:

- Nutrients are incorporated faster than top-spreading
- Reduces chance for runoff
- Reduced soil compaction



Top dressing growing crops

- Replaces chemical fertilizers
- Recycle nutrients on a growing crop



Cover Crops



Cover crop history

- Experimenting with different methods over the last 20 years
- More aggressive in the last 10
- Started originally for soil erosion purposes but has many more benefits
- Types: Annual Ryegrass, Tillage Radish, Oats, Wheat, Rye, Clover, Barley



Benefits:

- Helps stop erosion “Soil Armor”
- Reduce the amount of nutrients entering water bodies
- Cover crops “tie up” nutrients and hold them in place for use for the next crop.
- Improved soil health



Is Climate Change Real? How do we adapt?



Managing our nutrients keeps our cows, crops, and waterways healthy

