Photos courtesy of PxHere

ENVIRONMENTAL BENCHMARKING

CASE STUDY: Buck Farms

Dave Buck and his two sons, Darren and Adam, operate their family's crop farm in Lansing, New York. Up until the mid-1980's, the farm raised registered dairy and registered beef animals. Due to the challenging agricultural livestock and dairy market conditions and the benefit of an off-farm opportunity, Bucks converted their dairy/beef operation to that of only growing hay and grain crops. This change of operation allowed for greater seasonal and production flexibility and schedules. The crops grown now include hay, wheat (used as grain, straw and cover crop), soybeans, and corn (as grain and silage). Many of these crops are sold on the market or provided directly to other farmers for their production needs. Three hundred acres are owned and operated by the Buck family with about two hundred more that is rented for crop production.

Since there are no cattle on the farm, attention is needed to supplement soil fertility with animal manure from another livestock operation. Rotating crop production fields allows for "soil rest". These resting periods help to ensure high production capacities while maintaining and improving soil nutrient levels. Monitoring these levels are critical in the crop business.

Water management is an ongoing challenge for New York farmers. The Buck farm is no exception. Realizing that future projections for increased frequency of heavy rainfall events, as well as projections for more frequent summer droughts and water deficits, will be an ongoing concern and challenge for all farmers. Farm and field specific adaptations to manage water, soil erosion and drainage are continually being refined to keep resources

Farm Details

MUNICIPALITY:
Lansing

FARM SIZE:
486 Acres

PRODUCTS:
Hay and Grain Crops

PRACTICES:

Stream Bank Protection
Field Drainage by Tiles
Field Drainage by Ditches
Rotational Grazing
Variable Rate Fertilizer Application
Crop Monitoring
High Efficiency Lighting
No till
Cover crops

MOST PROUD OF:
Cover crops

Cooperative Extension
Tompkins County
December 2020

in place while maintaining or improving crop yields. A couple of practices that have helped reduce erosion have been to seed grasses into their field low spots keep topsoil in place during heavy rains and to plant cover crops after harvest so that winter winds will not carry soil away from the field. The cover crop practice has been successful as the Bucks noted that not seeing "brown snow in the hedge rows" is a welcome sign. Corn stalks are composted back into the soil, additionally helping to keep soil in place while also returning nutrients and fiber to the soil.

One thing is for sure, the importance of managing any farm operation, with the challenge of unpredictable weather, will be even more intense as our changing climate continues. With the advances of precision agriculture and applying only those necessary soil amendments and nutrients, farmers will continue to evolve into meeting the needs of the consuming public to produce more food with less available land. It is no doubt that Bucks will be part of Tompkins County's farming future.

This is one of eight case studies created as part of Cornell Cooperative Extension's 2020 Agricultural Benchmarking Study, funded through a grant by the Park Foundation. For more information or to read more studies visit our website at www.ccetompkins.org/SustainableAg or contact Graham Savio at gs695@cornell.edu

PARK FOUNDATION

Cooperative Extension Tompkins County