

Pasture/ hay field

Location/Site History:

250 total acres of diversified organic hay and dairy production (**increasing**) on this farm. This 25 ac field has been in long term hay production with the alfalfa component decreasing. The naturally well-draining field is easily eroded and there is a pond located at the bottom of the 6% slope. There is a CNMP-required buffer strip around the pond but the family can no longer swim due to excessive algae blooms.

Opportunities, Challenges, Grower Info:

The farm uses most of the land to grow organic hay for sale off-farm. Limited inputs include wood ash and horse manure. The farm now offers eggs, meat, and **more milk** (sold to a local cheesemaker) all with organic certification. Farm goals are to improve soil health and farm productivity, long-term sustainability and the regained use of the pond for recreational uses. The CNMP showed that net nutrient exports off the farm were causing nutrient deficiencies on some of the fields. Diverse equipment is available to the younger generation of farmers who want to use cover crops to improve pastures and enhance the function of the land resource.

Comprehensive Assessment of Soil Health

From the Cornell Soil Health Laboratory, Department of Soil and Crop Sciences, School of Integrative Plant Science, Cornell University, Ithaca, NY 14853. <http://soilhealth.cals.cornell.edu>



Grower:
Ben Fayson
344 Eastview
Groton, NY 12294

Sample ID: RR5249
Field ID: Rolling Acres
Date Sampled: 10/22/2017
Given Soil Type: Palmyra
Crops Grown: pasture/pasture/pasture
Tillage: no till

Agricultural Service Provider:
Mr. Bob Consulting
rrs3@cornell.edu

Measured Soil Textural Class: **fine sandy loam**

Sand: **56%** - Silt: **32%** - Clay: **11%**

Group	Indicator	Value	Rating	Constraints
physical	Available Water Capacity	0.17	56	
physical	Surface Hardness	283	8	Rooting, Water Transmission
physical	Subsurface Hardness	404	17	Subsurface Pan/Deep Compaction, Deep Rooting, Water and Nutrient Access
physical	Aggregate Stability	84.0	99	
biological	Organic Matter	5.3	99	
biological	ACE Soil Protein Index	12.9	94	
biological	Soil Respiration	0.8	75	
biological	Active Carbon	566	63	
chemical	Soil pH	6.1	91	
chemical	Extractable Phosphorus	46.4	9	High Phosphorus, Environmental Impact Risk
chemical	Extractable Potassium	37.8	54	
chemical	Minor Elements Mg: 256.9 / Fe: 0.9 / Mn: 6.7 / Zn: 2.1		100	

Overall Quality Score: **64** / Excellent