

New York

Regional objectives: High disturbance; Nutrient management

Production systems: Corn-Soybean-Wheat, Vegetable

Biochar producers: White Feather Farm (wood-based biochar); Ecochar (manure-based biochar)

University Collaborator: *Cornell University*

Eight trials across the Western and Central regions of New York (one privately funded and seven federally funded) will include farmers managing corn-soybean-wheat and high-disturbance vegetable production systems, often on soils of low pH and coarse texture. These types of farms struggle to build soil health due to reliance on tillage and other high disturbance events to manage weed pressure and prepare soils for planting. Opportunities exist for these soils to be responsive to biochar applications, thus increasing the effectiveness of other practices in their soil health management systems transition. Trials will benefit from applying nutrient-rich manure biochar, which helps reduce nutrient loading by removing excess nutrients from waste management. Corn producers may integrate adapted nitrogen management treatments.

Cornell University established an on-farm pyrolysis unit that will convert cow manure from a local dairy and other New York relevant feedstocks into biochar. White Feather Farm established an on-farm pyrolysis unit that converts waste wood from local tree management into biochar, also with relatively high output. The impacts of cow manure and wood manure derived biochar, along with economic optimum N rates, will be evaluated in partnership with Dr. Johannes Lehmann, <u>Dr. Deborah Aller</u>, and other research and extension scientists from Cornell University.

Questions? Contact State Leads:

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