Forage Research Updates *Compiled and edited by Paul Peterson, University of Minnesota*

Wisconsin - Native Grass Restoration Management

by Julie Doll, Richard Cates, Jr., and Randy Jackson, University of Wisconsin; Geoff Brink, U.S. Dairy Forage Research Center

'Multifunctional agricultural landscapes' and the 'ecosystem services' they provide are gaining attention. Interest in the reintroduction of native species into cool-season pastures is one example. While such efforts have potential agronomic and ecological benefits, little is known about how restoration management affects pasture production and quality.

A study was conducted on a southwestern WI beef farm from 2004-2006. The farm produced beef cattle using a management-intensive rotation system with 0.5- to 3-day grazing periods, and 2- to 5-week rest periods. Treatments included combinations of disturbance (burning vs. grazing), soil amendments (N vs. carbon vs. nothing), and native grass seeding times (November 2003 vs. May 2004). Grazing treatments followed the rotational grazing system and were initiated in early June 2004. The burn treatment occurred in April 2005 and 2006, and burned plots were not defoliated the remainder of the year. Native grass seeding occurred via drilling a 3-species mix of big bluestem, switchgrass, and indiangrass. The carbon amendment was sawdust applied in June and August in 2004 and 2005. The N amendment was 160 lb N/ac/yr split-applied in June and August 2004 and 2005