Ecological Conservation and Stewardship

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Status of Grasslands and Avifauna

- Populations of 15 out of 19 grassland birds of eastern NA are experiencing declines.
- In New Jersey, 41% of state endangered birds are grassland species; 29% are threatened birds.
- Twenty percent of New Jersey’s rare and declining species rely on grassland habitat.
Market-based Solutions

- Traditional agricultural systems:
  - Bird seed
  - Biofuels

- Forested systems:
  - Mulch
  - Horse bedding
Establishing Critical Grassland Habitat for Endangered Species through Biofuel Crops

The development of a warm-season grass (WSG) pellet biofuel industry has amazing potential to revitalize rural economies by absorbing the surplus production of the agricultural sector and reducing the economic and environmental costs associated with fossil fuel use. The rising price of heating oil and natural gas will increasingly make the replacement of these fuels with biomass energy more financially attractive to consumers. Relative to heating oil systems, grass pellets have the potential to reduce fuel heating costs and greenhouse gas emissions by up to 30% and 90%, respectively. As the economic benefits of grass pellets are recognized, production of the grasses will be providing natural resource protection of our soils, water, air, and critical grassland habitat.

FACT: Native grasslands are one of the most endangered ecosystems in the Northeast. They are also one of the only habitats in New Jersey that face an almost immediate threat of disappearing from the state. As a result, grassland-dependent bird species (like the Bobolink) that rely on quality native, early successional habitat have experienced significant declines in population.

This Conservation Innovation Grant will...
- Establish a viable alternative energy option for farms,
- Diversify the farm economy and availability of local products,
- Provide nesting habitat for state threatened and endangered grassland-dependent bird species,
- Sequester increased amounts of carbon in the soil,
- Reduce need for chemical fertilizer, and
- Improve soil health by increasing soil organic matter.

Harvesting warm-season grass (WSG) for pellets, Voorhees, New Jersey

WSG Pellets

Bobolinks at Voorhees, Atlantic Co., New Jersey

Pulling carbon out of the air. Wood pellets made from forest residues.

Laurel Farms

New Jersey Audubon Society
www.njaudubon.org
Producers: Development and Marketing

NRCS
United States Department of Agriculture
Natural Resources Conservation Services
Recommendations

- Understand and prioritize the critical role that agricultural lands play in sustaining biodiversity.
- Identify market-based solutions that provide incentives to land managers to include considerations for native wildlife in their farm plans.