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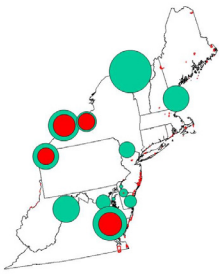
# Grassland Breeding Birds on National Wildlife Refuges in the Northeast U.S.

***The Challenge:*** Grassland breeding birds have declined substantially in the Northeast and Mid-Atlantic States over the last half-century, prompting concern by management agencies and bird conservation partnerships. The National Wildlife Refuge system manages grasslands in this area, and needs to know what contribution the refuges are making to the regional populations as well as whether it is possible to improve their management methods.



Grassland bird abundance on cool-season (aqua) and warm-season (red) grass fields.

***The Science:*** A large-scale experiment was implemented on 13 Refuges within USFWS Region 5 during 2001-2003. Three treatments were compared: annual mowing in fallow fields, dormant-season burning in fallow fields, and dormant-season burning in planted warm-season grass fields. Bird and vegetation surveys were conducted throughout the breeding season.

Photo by Mike Lutmerding

***The Future:*** Refuges in the Northeast can sustain grassland breeding birds at densities similar to what is seen in the Midwest, although the species richness at any one Refuge tends to be low. Densities on warm-season grass fields are not notably higher than on non-native cool-season grass or fallow fields, suggesting that grassland birds respond to vegetation structure more than vegetation composition. The most effective management technique may well be annual mowing in fields that have not been planted to warm-season grass.

**Contact: Michael Runge at (301)497-5748 or mrunge@usgs.gov**