

FEASIBILITY STATEMENTS FOR GRASSHOPPER SPARROW GOALS AND OBJECTIVES

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January 1994*

Goal: Restore a self-sustaining population of breeding grasshopper sparrows in Maine.

Population Objective: Promote expansion of the grasshopper breeding population to an abundance of at least 100 nesting pairs (i.e., singing males) at 5 or more sites in Maine by 2001.

Habitat Objective 1: Manage existing breeding habitats to improve their suitability for grasshopper sparrows and inventory habitats with or potentially having similar characteristics.

Information Objective 1: Determine the parameters of a self-sustaining breeding population of grasshopper sparrows in Maine, including evaluations of population recruitment.

Information Objective 2: Identify and evaluate management practices for creating and maintaining suitable breeding habitat for grasshopper sparrows.

Desirability: The themes of endangered species conservation and protection of biodiversity are generally accepted by the public. Species that are exhibiting regional declines beyond state boundaries, such as the grasshopper sparrow, often attract increased attention and priority. The association of this species to a unique ecological community (including rare plant associations) should be stressed to promote and understanding for the key management strategy: maintenance of suitable grasslands.

Feasibility: Continuing management at all breeding habitats is necessary to achieve population objectives. Controlled burning and mowing are basic methods to perpetuate the characteristics of sandplain grasslands required by grasshopper sparrows on each site. The success of managing existing habitats will provide insights into the feasibility of creating or enhancing potential habitats for range expansion of the species.

Grasshopper Sparrow Feasibility Statements

Managing this species in Maine is complicated by the fact that most of the state is beyond the species' northerly range limits. Also, the overall rarity of this community creates concern for several species of grassland birds, other fauna dependent on these habitats, and some rare plants. Thus, measures to optimize grasshopper sparrow habitat in these settings may have to be compromised in order to accommodate other resource concerns.

Capability of Habitat: In order to achieve the population objective, grasshopper sparrows must (1) increase in abundance on the four existing breeding habitats now in use and (2) colonize a new, fifth site.

There may be no potential habitats within the current range in Maine which are now suitable for expanding grasshopper sparrow distribution. Sandplain grasslands are naturally limiting in southern Maine, the current northern range limits of the species. Habitat suitability can be enhanced by site reclamation (e.g., an abandoned sand or gravel pit, blueberry barren, etc.) or by appropriate vegetation management at certain airfields.

The abundance objectives also present a difficult challenge. Management prescriptions must optimize vegetation structure at the four settings now occupied by grasshopper sparrows. Increased densities at these sites are also likely to be a prerequisite for colonization of a fifth breeding location.

Possible Consequences: Controlled fires are often prescribed for grassland management. Public safety, training of personnel, compliance with burning ordinances, and educational efforts are essential to general acceptance of this technique. Vegetation management at airfields, especially the timing and vegetative height and pattern resulting from the mowing, should address the habitat preferences of grassland birds in balance with consideration of aircraft safety from bird collisions. Herbicide applications on commercial blueberry barrens kill bunch grasses favored by grasshopper sparrows.