

FEASIBILITY STATEMENTS FOR UPLAND SANDPIPER AND GRASSHOPPER SPARROW GOALS AND OBJECTIVES

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GOAL

Ensure the long-term viability of Upland Sandpipers and Grasshopper Sparrows and their habitat in Maine to prevent extirpation, maintain genetic diversity, and maintain or increase viewing opportunities for these species.

Funding Objective: By 2010, develop a plan and begin to secure funding to accomplish the following objectives.

Feasibility: A brief plan of action to secure funding for conservation of these grassland birds is feasible in the next 6 to 12 months. The likelihood of securing funding within IFW for such efforts, however, is low given agency priorities and current allocation of resources. External funding for long-term management efforts could be equally challenging to secure.

Desirability: A plan of action is desirable, however, it need not be lengthy. A small source of funds for improved monitoring and management will be essential.

Possible Consequences: Failure to dedicate resources to conservation of these species could result in, at the least, loss of occupied sites, or potentially, statewide extinction of Grasshopper Sparrow. Continued partnerships with TNC and perhaps the blueberry industry will be a necessary (and positive) consequence of limited funding. Whether these relationships together with staff time will be sufficient to meet this objective is uncertain.

Outreach Objective: Through 2024, and in conjunction with partners, continue to conduct outreach regarding grassland habitats in Maine. Outreach should target affected towns, landowners, conservation partners, and the general public.

Feasibility: Outreach efforts regarding grassland birds, in general, but especially Upland Sandpiper and Grasshopper Sparrow, are warranted. Cooperation with IFW's I & E Division as well as regional staff improves the feasibility of this objective. Outreach to (through) other agencies such as NRCS will likely be fruitful.

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Desirability: An informed “public” improves the likelihood of success for accomplishing other objectives and ultimately conserving these species.

Possible Consequences: Successful outreach could broaden partnerships especially on private land. Failure to provide adequate outreach among all affected partners could jeopardize conservation efforts.

Upland Sandpiper

Population Objective: By 2024, promote expansion of the Upland Sandpiper breeding population to at least 300 nesting pairs.

Feasibility: This objective is not feasible without significant funding. Two key impediments to success would be whether the population has the capacity to expand (i.e., is the population more than self sustaining?) either naturally or with management and whether we can reliably measure any such expansion. Limiting factors are not well understood.

Desirability: A larger population is desirable as it broadens the conservation “safety net” for this species.

Capability of the habitat: It is uncertain whether there is adequate habitat (or habitat quality) to support a roughly 50% increase in the Upland Sandpiper population. It is likely that additional management, at the least, would be needed to support an increase of this size.

Possible Consequences: Failure to grow the population will result in continued listing of this species. In contrast, a population increase of this magnitude would likely warrant delisting as a Threatened species in Maine.

Habitat Objective: By 2024, improve compatible, long-term management on at least the top 10% of Upland Sandpiper sites in Maine, to encourage population growth.

Feasibility: This objective makes some significant assumptions that have not been tested. The top 10% of Upland Sandpiper sites (about 20), are likely all on commercial blueberry barrens, but have not been ranked. It is unclear what aspects of commercial blueberry production, if any, would need to be modified to enhance Upland Sandpiper habitat. This objective is theoretically feasible in this time frame, but success will depend on outreach to the blueberry industry.

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Desirability: A commitment to long-term management of any Threatened species is a step in the right direction. Improving habitat conditions for Upland Sandpiper should contribute to accomplishing population objective, assuming habitat quality is a limiting factor.

Capability of the habitat: It is unclear what habitat characteristics need to be improved. Furthermore, it is uncertain whether the habitat is capable of being improved.

Possible Consequences: If habitat characteristics that affect limiting factors for this species can be identified and managed, accomplishing the population objective should be easier.

Research Objective: By 2024, determine limiting factors of Upland Sandpiper habitat in order to develop compatible management practices.

Feasibility: This objective is technically feasible but cannot be done without additional funding. The scope of the objective could be accomplished by one or two graduate studies.

Desirability: Understanding the limiting factors facing Upland Sandpipers in Maine is critical to accomplishing the population and habitat objectives identified by this public working group.

Possible Consequences: Understanding the limiting factors for this species improves the efficiency of management efforts. Furthermore, if some habitat features are limiting, it is likely that taking corrective action on behalf of Upland Sandpiper will benefit other species as well. Consequences for landowners are uncertain and would depend on what factors appear limiting.

Grasshopper Sparrow

Population Objective: By 2024, promote expansion of the Grasshopper Sparrow breeding population to a five-year average of at least 100 nesting pairs (i.e. singing males) distributed among at least three sites in Maine.

Feasibility: This objective will be difficult to accomplish for a number of reasons. Habitat availability aside, the population at Kennebunk Plains appears to be in decline at least temporarily. Surveys in 2009 suggest some recovery from what was thought to be a significant downward trend. Turning this trend around will be critical to success. Currently, we are poorly

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equipped to monitor every site where this species occurs. However, with strengthened partnerships, we may be able to accomplish this over time.

Desirability: Increasing the Grasshopper Sparrow population by any measure would be desirable.

Capability of the habitat: The amount and quality of the habitat may be the key limiting factor. With impending loss of habitat at Brunswick NAS, and the uncertainties at Sanford Municipal Airport, we may not have sufficient habitat to meet this goal without increased management at other areas.

Possible Consequences: Based on a population viability analysis conducted in the 1980s, failure to increase the population (and number of occupied sites) is likely to result in extinction of the species from Maine. Increasing the population or at least stabilizing it through some form of management will be necessary.

Habitat Objective 1: By 2024, maintain or enhance habitats for existing populations of Grasshopper Sparrows.

Feasibility: With so few occupied sites, this objective would seem quite feasible. At Kennebunk Plains it is, however, at Brunswick and Sanford, habitat conservation is far more problematic. A current inventory at Sanford is lacking and redevelopment at Brunswick is complex. Furthermore, this objective overlooks ongoing habitat improvements at Wells Barren which is likely to be recolonized during the current planning period.

Desirability: Habitat conservation will be the key to maintaining Grasshopper Sparrow populations in Maine. Although we don't fully understand what drives population fluctuations of this species in Maine, having high quality habitat available would seem to be a step in the right direction for ensuring long-term presence of the species.

Capability of the habitat: The habitat should be capable of improvement and habitat improvement in some capacity is clearly warranted even at the best of sites. The methods used (e.g., prescribed fire), however, may not be acceptable to some neighboring landowners.

Possible Consequences: Efforts to maintain or improve habitat for Grasshopper Sparrow at currently occupied sites could result in slight increases in populations. It is equally likely that such management could result in no measurable change in local populations. The latter would suggest new sites must be created to significantly improve status of Maine Grasshopper Sparrow populations.

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Habitat Objective 2: By 2024, investigate, and if possible, identify at least one new area that can be realistically managed to help meet the population objective for Grasshopper Sparrows.

Feasibility: This objective is clearly feasible and has been partially accomplished between the time the public working group set these goals and objectives and the drafting of these feasibility statements. What remains is whether landowners can be convinced to adopt management practices favorable to this species on their land.

Desirability: This objective is highly desirable. Adding new populations would improve the viability of Maine's population.

Capability of the habitat: There appears to be very few patches of warm-season grasses large enough to support this species in any number. The quality of these may be marginal, and therefore, active management will be especially important.

Possible Consequences: Accomplishing this objective could lead to improved viability of Maine's Grasshopper Sparrow population.

Research Objective: Determine minimum viable population size for Grasshopper Sparrow.

Feasibility: There are insufficient inputs to complete a PVA for Grasshopper Sparrow in Maine. Population estimates at Sanford airport would be needed (or some assumptions made) to complete such an analysis. It is unclear if the working group actually desired another PVA or the calculation of minimum viable population size given a series of assumptions.

Desirability: Jeff Wells addressed this objective in 1994. His results suggested a roughly 50% chance of Maine's population persisting beyond 50 years (2044) given populations at Kennebunk Plains, Sanford Airport and Wells Barren. A similar analysis today would most certainly yield more dire predictions. Alternatively, a determination of minimum viable population size would depend on many dynamic variables and would seem to offer little additional value.

Possible Consequences: How would we change our approach to conserving this species if the result of a PVA were especially grim? Conducting a second PVA could inform our agency about the urgency of conserving this species. These results could help with justification and landowner relations under Habitat Objective #2.

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Author's notes:

- 1) The public working group set no objectives related to multi-state partnerships. Given the population in the northeast is small and scattered. A multi-state approach to conservation might make the most sense. Failure to recognize this despite limited discussion could have negative consequences on Maine's population.
- 2) Mapping of Upland Sandpiper occurrences (primary and secondary habitat) within the spatial data of the ETSC database has consumed a large amount of agency time for this species over the past 18+ months. The working group did not address continuing needs of this effort or it's effectiveness. This is not the working groups fault. This mapping effort took place between the time that the UPSA assessment was completed and the working group met. Furthermore, the presentation to the working should have included this information but did not.