Importance of Wet Meadow/Grassland Protection and Management Recommendations

Wet meadows have been a component of land acquisition in the Program since its establishment. Initially, the Program attempted to obtain 640 acres of wet meadow at every habitat complex. Land acquisition has been successful and mostly complete. While all areas deemed as wet meadow are grasslands, the quality of those grasslands is highly variable, as is the topographic and hydrologic conditions.

The EDO has presented to the GC several times about the discrepancy in interpretation of whooping crane (WHCR) use of wet meadows as well as the variability seen in what is classified as a wet meadow. Regardless of these discrepancies and lack of consensus on how to interpret results, the TAC is in agreement that additional research related to wet meadows and WHCR use of wet meadows to resolve these issues will likely be unproductive and unnecessary. Instead, the TAC recommends to the GC:

1. **Retaining current definition of wet meadows as provided in the Land Plan Table 1**. Additional research to further define wet meadows is unnecessary. However, for better clarification, we recommend this category should be renamed in future Program documents as wet meadow/grassland.
2. **Retaining Program wet meadow/grassland land holdings**. Although current use of wet meadows by WHCR is variable by site, but generally low along the AHR as a whole, the TAC agrees that the wet meadows/grasslands are still a key component of Program habitat complexes.
3. **Improving on Program’s management of wet meadow/grasslands**. Currently, many of the Program’s wet meadow/grasslands areas are being managed to be in short stature for WHCR use. The TAC believes that due to lower than anticipated documented WHCR use of Program grasslands/wet meadows, the Program should shift management practices to provide for better overall ecological health and to benefit other species of concern, while still providing suitable whooping crane habitat during certain times. The Program document states that one of the Program purposes is to help prevent the need to list more species and specifically states that:

“When doing so will not reduce resources available to target species, the Program will also manage Program lands to benefit non-target listed species and non-listed species of concern and to reduce the likelihood of future listing. When feasible, the Program will provide regulatory certainty with respect to those non-target, listed species.” [Program Document, Section I.B., pg 2]

Managing Program lands for the benefit of other species may include modifications to current grazing regimes and inter-seeding practices, but specific tract-by-tract management actions will be identified based on-site characteristics and ecological values. Modifications to grazing regimes may reduce leasing income for the Program. The grassland working group has drafted a grassland/wet meadow general land management framework that will be used in conjunction with input from the TAC, LAC, and EDO to determine specific management actions on each land parcel. The TAC believes that shifting management in these areas will still provide an important disturbance buffer and loafing/foraging areas for whooping cranes, while also not impacting the target species. Further, the TAC believes that these changes to management actions are in line with Program goals of reducing the likelihood of future listings.

1. **Prioritize riverine habitats over creating additional wet meadows mechanically**. Past efforts to mechanically improve ponding and saturation (back water and slough creation) have diversified available habitats, but have largely not received the anticipated response by the target species. The TAC believes that future management decisions should prioritize preserving and improving riverine habitats with Program water and direct future efforts away from mechanically creating/improving ponding in wet meadows/grasslands.

**ATTACHMENT A- GENERAL LAND MANAGEMENT FRAMEWORK FOR PRRIP WET MEADOW/GRASSLANDS**

The Program’s current approach to grassland management is to provide short statured grasslands for cranes on 25% of the area and 75% in heterogeneous structure for grassland breeding birds and other species achieved through a May-October grazing regime, with a 1 out of 4 year burn schedule. Given the current knowledge of whooping crane use and the potential for numerous pollinator species to become listed under the Endangered Species Act, the Grassland Working Group believes that current approach to season long grazing needs to be examined and would like to see grazing actions implemented that we believe will achieve the goals listed below:

1) Increase the relative abundance of warm season grass species verses cool season grass species.

Management Action: -Shift away from annual May-October grazing toward early and late season grazing rotations which should gradually promote and increase the proportion of warm season species while reducing cool season species.

2) An increasing trend in diversity as measured by FQI-

Management Action: Annual management changes from the previous year, and elimination of multiple consecutive years with the same management should allow FQI to be maintained or increased.

3) Reduction of Invasive/Exotic/woody species vs. Native grasslands

Management Action: The combination of continued targeted application of herbicide on invasive species along with the formerly mentioned management strategies should discourage exotic species in place of natives, though this problem will never go away completely. Actively remove undesirable woody species.

4) Increase availability of flowering plants.

Management Action: Rest each grazing unit at least one year out of 4 or have 20-25% of any parcel in rest at one time.

**General Guidelines:**

* When developing grazing plans, all pastures on a property should be considered and a multi-year plan developed. This will allow for renters to plan ahead.
* Management application (e.g. grazing/haying), timing, and intensity shall not be repeated in two consecutive years (e.g. no heavy graze two years in a row during the same time period).
* Intermediate season long (May-September) grazing in any one unit should not occur more than once every 4 to 5-year management cycle. Rotational grazing may be applied where rotational grazing infrastructure allows moving cattle to multiple units throughout the growing season. Rotational grazing should rotate the grazing timeframe in any one unit every year such that no unit is grazed at the same time in consecutive years. Where larger management units exist with perimeter fence, incorporation of single strand electric fence allowing multiple grazing units with rotation may be applied.
* Haying should not occur on consecutive years. Hay meadows without grazing infrastructure could be broken into ½ or 1/3 haying on a rotational annual basis and intermixed with fire. Haying twice in any calendar year should not occur and haying should occur prior to June 15.
* Rest should not occur more than 2 years consecutively. Flexibility should be applied to modify management on a given year if Rx could not be completed.
* Stocking rates can and should be varied based upon desired condition.
* Areas that are dominated by undesirable species will be evaluated for different management goals. There has been multiple decades worth of different approaches to achieving the goals stated above with limited success in those areas. It is understood that not all grasslands will shift toward highly diverse native grassland communities.