

## **Spotted Dog WMA Exchange of Use Grazing Lease – *Tentative* Monitoring Strategy Overview**

### **Introduction**

The following is a summary of anticipated monitoring details that relate to a grazing lease *proposal* associated with Spotted Dog WMA and adjacent private land. This proposal is currently under consideration by the Fish and Wildlife Commission. The lease proposal is intended to manage vegetation in a manner that results in improvements in wildlife habitat. If implemented, monitoring would be used to document specific effects of the grazing treatments on private and WMA lands in a manner that is informative and relatively efficient. This monitoring strategy is tentative, both because of the forthcoming decision by the commission and because various logistics and funding details would need to be worked out if the commission approved the grazing lease proposal. Also, details of this strategy could be adjusted over time to adapt to unanticipated circumstances or to make improvements based on subsequent field experience.

### **Elk Response**

The general approach would be to document elk use of specific areas using cameras that record images at preset times. This would provide a general measure as to the level of elk use during specific seasons as relates to sequences of vegetation management over the 6-year lease period.

- The McQueary Ranch pastures comprise elk winter range. Two of three pastures would be rested and fully available as forage for wintering elk. Images would be recorded approximately December through March to document elk use of all three of these pastures (grazed and rested pastures).
- The WMA pastures occur on elk spring transitional habitat. One of four pastures would be grazed each year during June and July. Images would be recorded during spring green-up, approximately April – through mid-June on all four of the pastures (grazed and rested) and the un-grazed adjacent vicinity, also comprising elk transitional habitat.

### **Short-term Vegetation Response**

Conduct annual photo points at pre-established locations (e.g., representative upland, wetland, riparian sites) over the 6-year lease period, emphasizing herbaceous vegetation, ground, and wetland conditions.

- Images would be recorded at the completion of the grazing treatment and one-year post-grazing treatment.
- Each photo point would involve a type of visual meter board at a standard distance for recording current conditions, showing relative scale, and making year-to-year comparisons.

### **Longer-term Vegetation Response**

- Hansen et al. (2015) established riparian and upland ecological health assessments on Spotted Dog WMA, including in the area that is proposed for leased grazing. Seven upland native vegetation health monitoring polygons and portions of riparian transects are within the 4 grazing lease pastures on the WMA. Upon Year 5 of the grazing lease, FWP would contract to have these vegetation monitoring sites re-read for a comparison of the original baseline condition. Based on boundaries of the proposed grazing area, it may be necessary to re-define and conduct health assessments on stream segments and polygons that are entirely within the grazing lease area during summer 2019. As with many details, this would need to be evaluated and determined

- Similar to what has been established on the WMA, FWP would contract to establish upland and lotic (stream) health assessments using the same techniques (Hansen et al. 2015) on a portion of the McQueary Ranch that is part of the proposed grazing system (comprising 3 pastures). This would occur during the Summer 2019 (which would serve as the baseline condition). These sites would be re-read during year 5 of the grazing lease for making comparisons.

#### **Bird Baseline and Possible Response**

- Montana Audubon has expressed an interest in conducting bird surveys of upland and riparian areas associated with the proposed grazing system. At a minimum, bird surveys would provide an inventory of bird species using the area. If replicated during the grazing lease period, the bird surveys may also provide insights about bird composition as relates to grazing treatments or changes in the plant communities over time.

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