

WETLAND WILDLIFE HABITAT MANAGEMENT (ACRE)

CODE 644

MONTANA TECHNICAL GUIDE

SECTION IV

DEFINITION

Retaining, developing, or managing habitat for wetland wildlife.

PURPOSE

To maintain, develop, or improve habitat for waterfowl, fur-bearers, or other wetland associated flora and fauna.

Provide a variety of foods for the desired kinds of wildlife species.

Provide a variety of cover types for the desired kinds of wildlife. Examples include: nesting, loafing, resting, thermal, and escape cover.

Arrange habitat elements in proper amounts and location to benefit desired species.

Manage the wildlife habitats to achieve a viable wildlife population within the species home range.

CONDITIONS WHERE PRACTICE APPLIES

On or adjacent to wetlands, rivers, lakes and other water bodies where wetland associated wildlife habitat can be managed. This practice applies to natural wetlands and water bodies as well as wetlands that may have been previously restored, enhanced, and created. (See **Field Office Technical Guide (FOTG), Section IV, Practice Standards 657–Wetland Restoration; 659–Wetland Enhancement; and 658–Wetland Creation.**)

CRITERIA

Identify species management goals and objectives. Objectives may be:

- 1. To provide for the habitat requirements of particular species.**
- 2. To provide for habitats of a certain quality.**

For the desired species, identify the types, amount, and distribution of habitat elements and the management actions necessary to achieve the management objectives.

Native plants will be used wherever possible.

The landowner shall obtain all necessary local, state and federal permits that apply.

Habitat development and management necessary to achieve the purpose(s), shall be based on a wildlife habitat appraisal or suitable habitat evaluation. The appraisal or evaluation procedure shall be used to determine a habitat suitability for either individual fields, home range areas, habitat type, or natural community; as well as to provide an overall evaluation for the entire property or operating unit.

Habitat Appraisal or Habitat Evaluation

Wildlife habitat evaluations may be done using any of the following:

- USFWS Habitat Evaluation Procedure Models (HEP);**

NOTE: This type of font (**AaBbCcDdEe 123..**) indicates NRCS National Standards.

This type of font (**AaBbCcDdEe 123..**) indicates Montana Supplement.

- NRCS or other formally developed species specific models;
- NRCS state developed wildlife habitat appraisal guide;
- Minimum habitat requirements outlined by species below under “Habitat Requirements;”
- Wildlife habitat quality criteria contained in FOTG, Section III, Resource Quality Criteria.

The evaluation will result in a quality rating or habitat suitability index (hsi) that will consider the type, amount, and distribution of habitat elements required. The quality rating or hsi will be compared to the quality criteria in the FOTG, Section III, Resource Quality Criteria.

If the evaluation indicates a level below the acceptable quality, alternatives will be recommended that will result in the necessary changes in habitat elements or their management to improve the rating to the minimal acceptable level or above.

If the evaluation is at the minimum or above, alternatives will be recommended that will result in the necessary management to preserve, maintain or improve the existing habitat in its present state or toward optimum conditions.

Habitat Requirements

The following habitat requirements will be considered when assessing wildlife habitat. Not all may apply to every habitat type or species.

1. Food
 - a. Type
 - b. Amount
2. Cover
 - a. Type
 - b. Amount
3. Water
 - a. Quality
 - b. Quantity
 - c. Accessibility
 - d. Seasonal availability

4. Interspersion and Distance to:
 - a. Crops
 - b. Grasses and/or legumes
 - c. Shrubs
 - d. Trees
 - e. Water
 - f. Openings
5. Migration
 - a. Routes
 - b. Season of use
 - c. Corridors

Development and Management of Wildlife Habitat

As indicated by the wildlife habitat evaluation, certain habitat elements may be weak or missing. For the desired species, identify the types, amount, and distribution of habitat elements and management actions necessary to achieve the management objectives.

The amount and kinds of habitat elements planned, their location, and management shall be identified in a management plan.

Vegetative manipulations to restore plant and/or animal diversity shall be accomplished by prescribed burning or mechanical, biological or chemical methods, or a combination of the four. These treatments shall not be implemented during the primary nesting season (April 15–August 1).

Where feasible, prescribed burning shall be utilized instead of mowing.

Livestock grazing or haying shall be conducted to maintain or improve vegetation structure and composition so as to improve the desired wildlife habitat.

Management measures shall be provided to control invasive species and noxious weeds.

To protect forbs and legumes that benefit native pollinators and other wildlife and to provide insect food sources for grassland nesting birds, spraying or other control of noxious weeds shall be done on a “spot” basis.

See attached FOTG, Section IV, Practice Standards and Specifications, 644–Wetland Wildlife Habitat Management–General Specification and Planning/Implementation

Guide for technical support in establishing this practice.

CONSIDERATIONS

Wildlife population control, which is the responsibility of state and federal wildlife agencies and the landowner, may be necessary to protect and maintain certain habitats.

Consider that manipulations of habitat may impact more than the desired kinds of wildlife. These possible effects shall be evaluated and taken into consideration during the planning process.

This practice may be used to promote the conservation of declining species, including threatened and endangered species.

For species requiring large blocks of habitat, consider the problems of habitat fragmentation.

Consider habitat linkages and habitat corridors when developing upland wildlife habitat.

The use of native plant materials shall be encouraged.

Consider effects of movement of dissolved substances on groundwater and on downstream surface waters

Consider effects of hazardous materials expected or known to occur on the site on wildlife or human use related to wildlife.

Consider effects of management actions on compliance with state and federal hunting regulations (e.g., baiting).

Consider effects of management on non-target fish and wildlife species and threatened and endangered species in the FOTG, Section I, Threatened and Endangered Species.

Consider effects of livestock grazing on runoff, infiltration, and wetland vegetation.

Consider using artificial nesting structures that are designed for the region.

Consider locating the management practice adjacent to existing wetlands and other water bodies.

Consider the impact of elevated wildlife uses on adjacent lands (e.g., crop depredation).

Consider the effect of volume and rates of runoff, infiltration, evaporation, and transpiration on the water budget.

Consider effects on down stream flows or aquifers that would effect other water uses or users.

Consider adjacent wetlands or water bodies that contribute to wetland system complexity and diversity, decrease habitat fragmentation, and maximize use of the site by wetland associated wildlife.

Consider effects on movement of soluble and sediment attached substances carried by runoff and/or wind.

Consider using an appropriate Hydro-Geomorphic model (HGM) to identify missing components needed to improve wetland functioning.

Consider the season of use for the target wildlife species.

PLANS AND SPECIFICATIONS

Document how habitat needs will be met for the desired target wildlife such as: required depth of water during the growing season; types and sizes of structures required; desired plant species and the means of establishing and maintaining them.

Specific information may be provided using appropriate job sheets or written documentation in the conservation plan.

OPERATION AND MAINTENANCE

The purpose of operation, maintenance and management is to insure that the practice functions as intended over time.

A plan for operation and maintenance of wildlife habitat at a minimum should include monitoring and management of structural and vegetative measures.

Timing of haying and livestock grazing should avoid periods when wildlife are nesting, fawning, etc., and will allow the establishment, development and management of vegetation for the intended purpose.

Biological control of undesirable plant species and pests (e.g., using predator or parasitic species) should be implemented where available and feasible.

Water level fluctuations may be necessary to make food resources available to the target species.

Conservation practice specifications are reviewed periodically, and updated if needed. To obtain the current version of this specification, contact the Natural Resources Conservation Service.

REFERENCES

U.S. Fish and Wildlife Service. 1988. Waterfowl Management Handbook. Fish and Wildlife Leaflet 13. Washington DC.