NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

UPLAND WILDLIFE HABITAT MANAGEMENT

(acre)

Code 645

DEFINITION

Creating, restoring, maintaining or enhancing areas for food, cover, and water for upland wildlife and species which use upland habitat for a portion of their life cycle.

PURPOSES

This practice may be applied as part of a resource management system to:

- Provide a variety of food for wildlife ;
- Provide a variety of cover types for wildlife, examples of wildlife use include nesting in dense shrubs, fawning in tall grass, resting in snags, escape from predation along travel lanes, and thermal buffering created by conifer stands;
- Provide water for wildlife.
- Arrange habitat elements in proper amounts and locations to benefit wildlife.

CONDITIONS WHERE PRACTICE APPLIES

On any property where there is a potential to enhance, improve or management wildlife habitat.

CRITERIA

General Criteria Applicable to all Purposes

- Habitat development and management necessary, to achieve the purpose(s), shall be based on an Aquatic & Terrestrial Wildlife Habitat Evaluation (Technical Note 14) or other suitable habitat evaluation. Technical Note 14 or another suitable evaluation procedure shall be used to determine 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:

- The evaluation will result in a quality rating or habitat suitability index (hsi). This will consider the type, amount, and distribution of habitat elements required. The quality rating or hsi will be compared to the quality criteria in Section III of the FOTG.
- If the evaluation indicates habitat below the Resource Management System (RMS) level, alternatives will be recommended that will result in the necessary changes in habitat elements or their management to bring the rating up to the RMS level or above.
- If the evaluation is at the RMS level 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
- Timing of haying and livestock grazing will avoid periods when upland wildlife are nesting, fawning, etc. and will allow the establishment, development, and management of upland vegetation for the intended purpose.

Habitat Elements

- The following habitat elements will be considered when assessing wildlife habitat. Not all may apply to every habitat type.

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. Identify the types, amount, and distribution of habitat. Evaluate the quality of the habitat components for each habitat type identified, and apply the management actions necessary to achieve the objectives for wildlife.
- The amount and kinds of habitat components planned, their location and management shall be identified in a management plan.
- The use of native plant materials shall be encouraged.
- 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.
- Where feasible prescribed burning shall be utilized instead of mowing.
- Where livestock grazing or haying occurs, it 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.
- Integrated pest management shall be used when planning for wildlife habitat.
- When present, state and Federal Threatened and Endangered species habitat concerns will take priority over other wildlife species.
- The landowner shall obtain all necessary local, state and federal permits that apply.
- The landowner shall ensure that water rights exist to achieve the management objectives.

CONSIDERATIONS

Soils

Soil type will be considered for species which live or nest in or on the ground. Slope and aspect will be considered for temperature regimes and expose to weather.

Consider soil type when establishing wildlife plantings.

Water Quantity

The amount of available water within a given area will strongly affect the diversity and population size of a species. Water will even determine the home range of most animals, defining its shape and size. Consider a

permanent, reliable water source as necessary to ensure consistent breeding and rearing on an annual basis.

Consider developing or supplementing a water supply in areas where water is a limiting factor.

Water Quality

The water available for wildlife use must be of sufficient quality as not to have an adverse affect on their survival or reproduction

Hazardous materials such as lead, cyanide, arsenic, and radioactive substances which are expected or known to occur on the site could effect wildlife or human activities related to wildlife.

Consider effects to groundwater and surface water from movement of dissolved substances such as nitrates, salts, and phosphates. Levels of pathogens (e.g. fecal coliform), and organic matter (e.g. manure) should also be considered.

Plant Communities

Wildlife will utilize one or more plant community types to complete their lifecycles. When planning for wildlife, habitat with diverse plant communities is usually preferred.

Consider effects of maintaining early serial stages, over establishing late serial stages. Early serial stage vegetation often requires higher management and maintenance.

Consider short-term supplements to plant establishment in order to ensure a healthy and vigorous stand of desired species (e.g. animal damage protection and seedling release).

Domestic Animals

If improperly managed, livestock can have negative impacts on wildlife habitat. When managed properly, livestock can be used as a management tool in areas where invasive vegetation will out-compete native species.

Consider effects of livestock grazing on runoff, infiltration, and soil compaction.

Consider alternatives for excluding livestock from wetland and associated buffer areas.

Fish and Wildlife

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.

Consider effects of management on non-native, invasive animal species (e.g. bullfrogs, starlings, house sparrows, and nutria) currently or potentially on-site.

Consider using artificial nesting structures that are designed for the region as a temporary practice until natural habitat features are restored.

Habitat Diversity

Consider locating the management practice adjacent to existing wetlands, other water bodies, or uplands related to wetlands.

Consider adding structural complexity by placing brushpiles.

Snag creation should be considered where risks to human and forest health are minimal.

Habitat Corridors

Corridors contribute to upland habitat complexity and diversity, decrease habitat fragmentation, and maximize use of the site at the landscape level by upland wildlife. Consider connections to adjacent wetlands, riparian areas, or water bodies.

Human Considerations

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

Consider the impact of increased wildlife uses on adjacent lands (e.g., crop damage, decreased water quality and damage to buffer areas).

Consider the effects of management actions on cultural resources that may exist on-site.

Consider the long-term costs associated with operation and maintenance of any applied practices.

PLANS AND SPECIFICATIONS

Development of management options will be based on the use of the Aquatic & Terrestrial Habitat Evaluation Guide (Biology Technical Note 14). This habitat evaluation process will result in a quality rating for habitat based on a Resource Management System (RMS). The RMS must meet the minimum acceptable level as listed in Section III of the Field Office Technical Guide.

Specifications will be developed for each site. The specifications will be prepared in accordance with the criteria for the Standard and shall describe the requirements for applying the Practice to achieve its intended use. Appropriate job sheets, narrative statements in the conservation plan, or other acceptable documentation, will be used to record the items needed to carry out this practice.

Requirements for operation and maintenance of the practice will be incorporated into site specifications.

The conservation plan will:

1. Designate the location and amount of land managed for upland wildlife.

2. List the target plant community types (e.g. grassland, shrub steppe, forested) and their dominant species.

3. List those practices necessary to retain, manage, or create sufficient food, water and cover for wildlife.

OPERATION AND MAINTENANCE

This practice will be inspected periodically and restored as needed to maintain the stated purpose. Additional operation and maintenance requirements will be developed on a site-specific basis to assure performance of the practice as intended over time.

REFERENCES

Oregon NRCS, 1997. Wildlife Upland Habitat Management, Conservation Practice Standard, Field Office Technical Guide, Section IV.

Dring, Timothy, Rachel Maggi, Martha Chaney and Mark Schuller, 2000. Biology Technical Note 14, Aquatic & Terrestrial Habitat Evaluation Guide, NRCS Washington.

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