NATURAL RESOURCES CONSERVATION SERVICE

CONSERVATION PRACTICE STANDARD

UPLAND WILDLIFE HABITAT MANAGEMENT

(Ac.)

CODE 645

DEFINITION

Provide and manage upland habitats and connectivity within the landscape for wildlife.

PURPOSE

Treating upland wildlife habitat concerns identified during the conservation planning process that enable movement, or provide shelter, cover, and food in proper amounts, locations and times to sustain wild animals that inhabit uplands during a portion of their life cycle.

CONDITIONS WHERE PRACTICE APPLIES

Land where the decision maker has identified an objective for conserving a wild animal species, guild, suite or ecosystem.

Land within the range of targeted wildlife species and capable of supporting the desired habitat.

CONDITIONS WHERE PRACTICE DOES NOT APPLY

This practice may be utilized to plan upland buffers surrounding wetlands. However, wetland dependent habitats shall not be planned under this standard. Refer to (644) Wetland Wildlife Habitat Management for information regarding the management of those species and habitats.

CRITERIA

General Criteria Applicable to all Purposes

This practice shall be utilized to develop an overall comprehensive management plan for upland wildlife species. Other conservation practices that may be utilized as component practices to create and facilitate a wildlife management plan include but are not limited to:

- Access Control (472)
- Conservation Cover (327)
- Conservation Crop Rotation (328)
- Early Successional Habitat Development/Management (647)
- Field Border (386)
- Forage and Biomass Planting (512)
- Forage Harvest Management (511)
- Forest Stand Improvement (666)
- Hedgerow Planting (422)
- Prescribed Burning (338)
- Prescribed Grazing (528)
- Residue Management, Seasonal (344)
- Restoration and Management of Rare or Declining Habitats (643)
- Riparian Forest Buffer (391)
- Riparian Herbaceous Cover (390)
- Tree/Shrub Establishment (612)

This practice may be utilized to plan upland buffers surrounding wetlands. However, wetland dependent habitats shall not be planned under this standard. Refer to (644) Wetland Wildlife Habitat Management for information regarding the management of those species and habitats.

A habitat evaluation or appraisal, approved by the NRCS state office, shall be used to identify habitat-limiting factors in the planning area. In Kentucky, plans should be developed utilizing the Kentucky Habitat Evaluation Procedure (KHEP).

Other habitat appraisal methods and/or specifications developed by the Kentucky Department of Fish and Wildlife Resources (KDFWR) wildlife biologists are also acceptable. Specifications developed by the KDFWR do not require a habitat appraisal and those

specifications shall be considered to meet the wildlife resource concern requirements outlined in Section III of the eFOTG and this standard.

Application of this practice shall remove or reduce limiting factor(s) in their order of significance, as indicated by results of the habitat evaluation or as prescribed by the KDFWR.

Application of this practice as a governing practice in combination with other supporting and facilitating practices shall result in a conservation system that will enable the planning area to meet or exceed the minimum quality criteria for wildlife habitat established in Section III of the eFOTG.

Where planting is required, plant material specifications shall include only high quality and adapted species. Refer to the specifications outlined in the appropriate conservation standards (612) Tree/Shrub Establishment, (327) Conservation Cover, etc. The use of native plant materials shall always be encouraged and utilized where available and feasible.

Site preparation, planting dates, and planting methods shall optimize vegetation survival and growth.

Equipment travel, grazing, haying and other disturbance to habitat shall be restricted during critical periods such as nesting, brood rearing or fawning (May 15 - Aug 1). Infrequent exceptions may occur when certain disturbance causing activities are necessary to maintain the health of the plant community and control noxious weeds.

Control of regulated noxious weeds and invasive plants shall be specified.

Additional Criteria for Establishment of Pollinator Habitat

For evaluation of habitat and limiting factors for pollinators, utilize the evaluation or appraisal methods outlined in the Native Bee Conservation Pollinator Habitat Assessment form and Guide (The Xerces Society) or the assessment outlined in the Kentucky Pollinator Handbook (if available). Specifications developed by the KDFWR do not require a habitat appraisal and those specifications shall be considered to meet the requirements outlined in Section III of the eFOTG.

Additional Criteria for Establishment of Artificial Nesting Structures for Upland Wildlife

Artificial nesting structures may be created and installed when it has been determined by a habitat appraisal method that a limiting factor of habitat is cover or shelter for a particular upland species.

Appropriate animal species that could require installation of artificial nesting structures include:

- native bees
- bats
- barn owls
- squirrels
- raptors
- other species as identified by the NRCS State Biologist or KDFWR.

Refer to the Fish and Wildlife Habitat Management Leaflet Number 20 entitled Artificial Nesting Structures or subsequent guidance for construction, installation and placement of artificial nesting structures. Other guidance may be appropriate if approved by the State Biologist.

Artificial nesting structures for wetland dependent species such as wood duck shall not be planned under this standard. Refer to (644) Wetland Wildlife Habitat Management for information regarding the installation of nesting structures for those species.

CONSIDERATIONS

This practice may affect the target species as well as non-target species though mechanisms such as hunting, predation, disease transmission, nest parasitism, etc. Consider effects of this practice on species with declining populations.

Wildlife population control may be necessary to protect and maintain certain habitats. This is a responsibility of the landowner. State and federal regulations may apply to population control methods.

Undisturbed areas conserved at a sufficient extent during management activities, may sustain disturbance-intolerant animals and plants.

Consider the use of this practice to promote the conservation of declining species, including threatened and endangered species. Contact the state staff biologist to coordinate these activities.

Consider the problems of habitat fragmentation when using this practice; create large blocks of habitat verses isolated pockets.

Consider offsite conditions or barriers that may inhibit daily and seasonal movement of selected wildlife.

Consider effects of pesticides and nutrient use on surface and ground water quality.

Consider modified methods of grain harvest to provide supplemental food sources.

Consider artificial nesting structures to increase potential availability of shelter and cover.

PLANS AND SPECIFICATIONS

NRCS shall ensure that plans and specifications for this practice are prepared by persons with adequate training in the fields of wildlife management, biology or ecology as appropriate.

Plans and specifications for this practice shall be prepared for each site. Plans and specifications shall be transmitted to clients using NRCS approved specification sheets, job sheets, or customized narrative statements included in the conservation plan.

Each management plan will contain at a minimum the following (as appropriate):

- Identified targeted specie(s) or guild
- A completed Kentucky Habitat Evaluation Procedure (KHEP)or Pollinator Habitat Assessment (if applicable)
- Any seeding, fencing or other specifications required with component practices either in customized narratives, attachments, job sheets or other approved format

Operation and maintenance plan for required supplemental practices incorporated into those specifications, and; if required, any necessary operation and maintenance resulting from installation of the overall system of practices.

OPERATION AND MAINTENANCE

The following actions shall be carried out to ensure that this practice functions as intended throughout its expected life:

Evaluate habitat conditions on a regular basis in order to adapt the conservation plan and schedule of implementation.

A plan for operation and maintenance of upland wildlife habitat at a minimum shall include monitoring and management of all component structural and vegetative measures.

Annually inspect and repair structural or vegetative components of this practice.

Evaluate habitat conditions on a regular basis in order to adapt the conservation plan and schedule of implementation.

Timing of disturbance, haying and livestock grazing will avoid periods when upland wildlife are nesting season (May 15 – Aug 1) and will allow the establishment, development, and management of upland vegetation for the intended purpose.

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

REFERENCES USED IN THE PREPARATION OF THIS STANDARD

Bolen, Eric and William Robinson. 2002. Wildlife Ecology and Management 5th Edition. Prentice Hall, 656 pp.

Bookhout, T.A. (ed.). 1996. Research and Management Techniques for Wildlife and Habitats, 5th Ed. Wildlife Society, 740 pp

Rayne, Neil F. and Fred C. Bryant. 1994. Techniques for Wildlife Habitat Management of Uplands. McGraw-Hill, Inc., 841 pp.

United States Department of Agriculture, Natural Resources Conservation Service. National Biology Manual. Title 190, Washington, DC.

USDA, NRCS Wildlife Habitat Management Institute. Wildlife Habitat Council. Fish and Wildlife Habitat Management Leaflet, Number 20. Artificial Nesting Structures. April 2004.

The Xerces Society. Native Bee Conservation Pollinator Habitat Assessment form and Guide. January 2013

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