# NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

# STRUCTURES FOR WILDLIFE

(No.)

#### **CODE 649**

## **DEFINITION**

A structure installed to replace or modify a missing or deficient wildlife habitat component.

#### **PURPOSE**

To provide structures, in proper amounts, locations and seasons to:

- Enhance or sustain non-domesticated wildlife (by providing structure for loafing, escape, nesting, rearing, roosting, perching and/or basking).
- Modify existing structures that pose a hazard to wildlife.

## **CONDITIONS WHERE PRACTICE APPLIES**

This practice applies to all lands where planting or managing vegetation fails to meet the short-term needs of the species or guild under consideration and/or where the NRCS Idaho State-approved wildlife habitat assessment identifies the need to:

- Provide loafing, escape, nesting, rearing, roosting, perching and/or basking habitat for terrestrial and aquatic species.
   Examples are nesting islands, nesting boxes, roosting boxes, rock piles, perching structures, LUNKERS, root wads, log jams, and brush piles.
- Modify existing structures to minimize the risks of injury or mortality to wildlife.
   Examples are the need to:
  - Retrofit an existing fence with fence markers,

- Modify an existing fence by removing wire or adding wildlife-friendly wire at appropriate spacing, or
- Modify an existing watering facility by installing escape ramps or removing obstacles that impede safe access to water.

Do not use this practice to:

- Install new structures or modify existing structures for the control of nuisance animal species.
- Install new structures or modify existing structures for the benefit of captive, feral, or domesticated animals.

## **CRITERIA**

#### **General Criteria Applicable to all Purposes**

Construct and install wildlife structures when the NRCS Idaho State habitat appraisal method identifies limiting habitat component(s) that cannot be provided within the desired time period with implementation of a vegetation management strategy.

Use the following criteria to design, install or modify structures for wildlife.

- Select the location of structures to meet the needs of the targeted species and not subject individuals to increased risks of injury or mortality (e.g. away from areas with high vehicle traffic).
- Select materials that are durable and safe for wildlife. Avoid caustic, dangerous, debilitating, and/or irritating materials.

- Utilize ultraviolet resistant materials and/or coatings made with non-toxic substances for additional protection from deterioration when exposed to sunlight.
- Construct habitat structures to withstand normal environmental conditions and meet the needs of the targeted wildlife for the life span of the structure.
- Locate structures with access capability if monitoring or management of the structure is needed.

#### **CONSIDERATIONS**

Consider the following, prior to implementation of this standard and implement mitigation measures as appropriate.

- Potential negative impacts to target species and non-target species through an increase in predation, disease transmission, nest parasitism or other means.
- Modification of existing onsite and offsite infrastructure that may inhibit safe daily and seasonal movement of wildlife.
- Establish or manage native vegetation to supplement and/or eventually replace installed habitat structures.
- Risks associated with the use of structures by non-target or nuisance species.
- Safe passage strategies for non-target species including elk jumps, and road crossings.
- Modifications to structures to inhibit access to the structure by predators.
- Select appropriate color, orientation and exposure to support thermal regulation.

# **PLANS AND SPECIFICATIONS**

Develop plans and specifications for wildlife structures within the criteria of this standard. Within the plan, describe the biological and physical requirements for applying the practice. Specify the number, location, spacing, grade, quantities, dimensions, materials and timing of installation of new or modification of existing structures.

Develop specifications for construction and installation of habitat structures by using updated science, following State technical notes or cited literature.

## **OPERATION AND MAINTENANCE**

Provide an operation and maintenance plan that is customary and reasonable for the wildlife structures being installed or modified. Provide the timing, scope and intensity of operation and maintenance, with consideration of the needs of the target and associated species. As a minimum, the O&M will include a schedule (timing, frequency, duration) to:

- Monitor condition and/or usage of structures.
- Implement adaptive management by relocating, modifying or repairing structures as needed during the season with the least disturbance to target species.
- Conduct needed maintenance of structures such as removal of old nesting materials, nests of non-target species, undesirable debris, or abandoned structures.
- Install, modify and/or monitor during the season of year or time of day to minimize disturbance to wildlife.
- Remove all structures if they are determined (i.e. upon abandonment) as being potentially detrimental to the target species.

#### **REFERENCES**

USDA, Natural Resources Conservation Service and Wildlife Habitat Council. 2008. Artificial Nesting Structures. Fish and Wildlife Habitat Management Leaflet No 20 (revised) Washington, D.C.