

**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; or modify existing structures that pose a hazard to wildlife.

**CONDITIONS WHERE PRACTICE APPLIES**

This practice applies to all lands where (1) planting or managing vegetation fails to meet the short-term needs of the species, group or guild under consideration; and (2) where a State-approved wildlife habitat evaluation or assessment identifies the need to:

- Provide loafing, escape, nesting, rearing, roosting, perching and/or basking habitat.
- Examples:* nesting islands, nesting boxes, roosting boxes, rock piles, perching structures and brush piles.
- Modify existing structures to minimize the risks of injury or mortality to wildlife.

*Examples:*

- i. Retrofit existing fence with markers,
- ii. Modify existing fence by removing wire or adding wildlife-friendly wire at appropriate spacing, or
- iii. Modify an existing watering facility by installing escape ramps or removing obstacles that impede safe access to the water (i.e. wires or cross bars above the water).

Do not use this practice to:

- Install new structures or modify existing structures for the control of nuisance animal species (e.g. installing raptor perches for prairie dog control).
- 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 State-approved habitat evaluation or assessment identifies it as a habitat-limiting factor 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:

- Avoid potential negative impacts to the target species or to non-target species (i.e. increase in predation or parasitism, disease transmission, or collision risk).
- Select materials that are durable and safe for wildlife. Avoid caustic, dangerous, debilitating, and/or irritating materials.
- Utilize non-toxic ultraviolet resistant materials if the structure is exposed to sunlight.
- Construct habitat structures to withstand normal environmental conditions for the target period of time.
- If monitoring/management is identified as a requirement, the structure will be built and placed to allow the capability for access.

## CONSIDERATIONS

Consider the following, prior to implementation of this standard and implement mitigation measures as appropriate. Contact a biologist for assistance, as needed.

- Evaluate and mitigate any risks associated with the use of structures by non-target or nuisance species.
- Evaluate and mitigate any human risks (i.e. careful placement of bat boxes to avoid guano contact).
- Evaluate and mitigate safe passage strategies for non-target species, and to avoid access to the structure by predators.

## 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.

When providing loafing, escape, nesting, rearing, roosting, perching and/or basking habitat; establish or manage native habitat conditions to supplement and eventually replace the need for installed habitat structures.

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 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. Provided 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.

USDA, Natural Resources Conservation Service. 2015. [Fence Visual Markers to Reduce Wildlife Collisions or Entanglement](#). Range Technical Note, No. 39. Colorado.

USDA, Natural Resources Conservation Service. 2015. [Wildlife Escape Ramps for Watering Facilities & Open Storage Tanks](#). Biology Technical Note, No. 43. Colorado.