

**NATURAL RESOURCES CONSERVATION SERVICE
MONTANA CONSERVATION PRACTICE SPECIFICATION**

STRUCTURES FOR WILDLIFE (NUMBER)

CODE 649

GENERAL SPECIFICATION

The conservation practice Structures for Wildlife Conservation (Code 649) is intended to supply missing wildlife habitat elements that cannot, at least in the short-term, be supplied by vegetative practices – such as installing bird nest boxes in areas that are lacking in snags. It is also used to reduce hazards to wildlife – such as improving the visibility of fence wires to flying birds, allowing for wildlife passage through a fence and installing wildlife escape ramps in stock water tanks.

GENERAL DESIGN CRITERIA

The need for this practice must be based on a habitat assessment such as the Wildlife Habitat Evaluation Guide or other assessment approved by the State Biologist or an Area Biologist. The practice must be based on the habitat needs of a specifically identified target wildlife species or species group (i.e., cavity nesting birds).

NEST BOXES AND WATERFOWL NEST STRUCTURES

Use artificial nest boxes where tree cavities are limited to provide nesting habitat for such diverse wildlife species as mountain bluebirds and wood ducks. See **NRCS Wildlife Habitat Management Institute – Fish and Wildlife Habitat Management Leaflet: Artificial Nesting Structures, Biology Technical Note, MT-31** for specific design criteria for a variety of nest boxes and structures. Songbirds, raptors, waterfowl, small mammals and bats are included.

BRUSH PILES

Use brush piles where downed logs and rock outcrops are limiting habitat for cottontails, small mammals and some birds. Specific design criteria can be found in **NRCS Wildlife Habitat Management Institute – Wildlife Habitat Management Leaflet: Managing Forests for Fish and Wildlife, Biology Technical Note MT-27, page 8**. Consider using 6- to 8-inch diameter clay tile to create tunnels within the brush pile. Where existing cover is very sparse, use 3-4 brush piles per acre. Otherwise, space brush piles 200-300 feet apart along the edge between existing cover types.

PERCHING STRUCTURES

Perching structures provide resting and hunting habitat for raptors (birds of prey – hawks, falcons, eagles, owls) where large trees or poles are limited. For suggested design criteria see: [Http://tommy51.tripod.com/perch.html](http://tommy51.tripod.com/perch.html).

IMPROVING FENCE VISIBILITY TO BIRDS

Research has shown that marking fence wires to improve visibility can reduce sage grouse collisions (usually fatal) by over 80 percent. White vinyl “undersill” markers, or pairs of one white-one black marker are placed at 3- to 4-foot intervals on the top wire of the fence. The following fence segments will be marked:

- All “red” fence segments identified by the Fence Collision Risk Tool.
- All fence segments located in high use sage grouse winter and brood habitat identified by NRCS and partner agency/NGO biologists.

See Field Office Technical Guide, Section IV, Job Sheet for Structures for Wildlife (Code 649), Wildlife Visibility - Fence Marking for specific design criteria.

Specification MT649-2

MODIFY EXISTING FENCES TO FACILITATE WILDLIFE PASSAGE

Fences cause two problems for wildlife passage:

1. Pronghorn may have difficulty passing underneath the fence. The bottom wire must be a minimum of 16 inches above the ground (preferably smooth wire) to facilitate passage.
2. Deer and elk may get their hind legs caught between the top two wires while attempting to jump the fence. See **Fence, Barbed and Smooth (Code 382) Specification, page 8** for specific design alternatives for this and Number 1 above.

MODIFY AN EXISTING WATERING FACILITY BY INSTALLING ONE OR MORE ESCAPE RAMPS

Numerous wildlife species may become trapped and drown in livestock water tanks. Escape ramps are required in all new watering facilities. Retrofitting existing tanks with escape ramps can save many birds and small mammals and prevent water quality degradation caused by dead animals in the tank. See Field Office Technical Guide, Section IV, Job Sheet for Structures for Wildlife (Code 649), Wildlife Escape Ramps for specific design criteria.