

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE SPECIFICATION
RESTORATION AND MANAGEMENT
OF RARE OR DECLINING HABITATS
(Ac.)
CODE 643

PURPOSE OF SPECIFICATION

This Specification provides guidance for the installation of the practice Restoration and Management of Rare or Declining Habitats. Guidance may include information about applying different methods listed in the Conservation Practice Standard, details of site preparation and protection, instructions for use of materials described in the Standard, and other information not directly addressed in the Standard.

Specifications for the installation, operation and maintenance of the practice shall be prepared for each habitat type and treatment unit in accordance with the requirements in the Conservation Practice Standard and the guidance in this Specification. The site specifications shall be recorded in the Conservation Practice Jobsheet and given to the client.

HABITAT ELEMENTS

The types, amount, and distribution of the following upland habitat elements have been identified for native forest and sea birds; the native bat and invertebrates; and upland game birds in Hawaii and other Pacific Islands Area locations:

- Food (type)
- Nesting cover (types of plants, trees, forest, etc.)
- Escape cover (types of plants, trees, forest, etc.)
- Island occurrence (where found)
- Elevation range (where found)
- Breeding habits
- Threats (disease, habitat loss, other animal species, etc.)

The habitat elements for the animal species in Hawaii are included in the Upland Wildlife Habitat Management (645) tables in the Hawaii Vegetative Guide, available online at: <ftp://ftp-fc.sc.egov.usda.gov/HI/pub/technotes/vegetative/>. Planners in other Pacific Islands Area locations, may use the information in the Hawaii Vegetative Guide if appropriate, however they should also consult the NRCS Pacific Islands Area State Biologist for verification of the information.

The types, amount, and distribution of the following wetland habitat elements have been identified for waterfowl and migratory birds; native freshwater fishes; and other aquatic vertebrates and invertebrates in Hawaii:

- Island occurrence (where found)
- Elevation range (where found)

- Food (type)
- Nesting cover (types of plants, trees, forest, etc.)
- Nesting habits
- Escape cover (types of plants, trees, forest, etc.)
- Threats (disease, habitat loss, other animal species, etc.)

The habitat elements for the animal species in Hawaii are included in the Wetland Wildlife Habitat Management (644) tables in the Hawaii Vegetative Guide, available online at: <ftp://ftp-fc.sc.egov.usda.gov/HI/pub/technotes/vegetative/>. Planners in other Pacific Islands Area locations, may use the information in the Hawaii Vegetative Guide if appropriate, however they should also consult the NRCS Pacific Islands Area State Biologist for verification of the information.

MANAGEMENT ACTIONS

The Restoration and Management of Rare or Declining Habitats practice may include the implementation of the following types of management actions:

- vegetation establishment for shelter, food and to enable movement;
- installation of structural measures to provide shelter, food or enable movement; and/ or
- manipulation and protection of vegetation to sustain desirable habitat conditions over time.

VEGETATION ESTABLISHMENT

Other conservation practices that may be utilized in conjunction with the Restoration and Management of Rare or Declining Habitats practice to establish (preferably native) vegetation to provide shelter, food and to enable movement include:

Pasture & Hay Planting (512)

This practice may be used to establish native or introduced forage species (native species are preferred for this practice).

Tree/Shrub Establishment (612)

This practice may be used to establish woody plants by planting seedlings or cuttings, direct seeding, or natural regeneration.

Range Planting (550)

This practice may be used to establish adapted perennial vegetation such as grasses, forbs, legumes, shrubs and trees.

Riparian Forest Buffer (391)

This practice may be used to establish and manage an area predominantly trees and/or shrubs located adjacent to and up-gradient from watercourses or water bodies.

Riparian Herbaceous Cover (390)

This practice may be used to establish and manage grasses, grass-like plants and forbs that are tolerant of intermittent flooding or saturated soils in the transitional zone between terrestrial and aquatic habitats.

Field Border (386)

This practice may be used to establish plant species that provide wildlife food and cover for the target wildlife species.

Conservation Cover (327)

This practice may be used to establish and maintain permanent vegetative cover to protect soil and water resources.

STRUCTURAL MEASURES

Structural practices that may be utilized in conjunction with the Restoration and Management of Rare or Declining Habitats practice to provide shelter, food and to enable movement include:

Wildlife Watering Facility (648)

Watering facilities for game birds may be installed to meet the water requirements of the wildlife species being managed and to supplement existing habitat conditions. The Wildlife Watering Facility (648) practice may be used to install the watering facilities.

Facilities will be designed to provide water at the approximate ground level, or by containing overflows from tanks and troughs at ground level. Facilities that may be damaged by domestic livestock will be protected by fencing.

Design and application assistance can be coordinated with the Hawaii Department of Land and Natural Resources to insure that locations and designs will complement the habitat of the wildlife species of concern.

Types of Facilities

- Raintraps – Impervious catchments with storage tank and drinking troughs
- Dugouts, pits or drinking troughs supplied by surface runoff, stream diversion, spring flow or a well.
- Drinking troughs supplied from a pipeline.

MANIPULATION OF VEGETATION

Other conservation practices that may be utilized in conjunction with the Restoration and Management of Rare or Declining Habitats practice to sustain desirable habitat conditions over time include:

Forage Harvest Management (511)

This practice is the timely cutting and removal of forages from the field as hay, green-chop or ensilage. Purposes include: to promote vigorous plant re-growth; maintain stand life; manage for the desired species composition; control insects, diseases and weeds; and/or maintain and/or improve wildlife habitat.

Prescribed Grazing (528)

Prescribed Grazing (528) is defined as managing the controlled harvest of vegetation with grazing animals. Purposes include: to improve or maintain the health and vigor of plant communities and to improve or maintain the quantity and quality of food and/or cover available for wildlife.

Domestic ungulates should be removed and excluded from the management area during nesting or roosting times. See the Upland Wildlife Habitat Management tables in the Hawaii Vegetative Guide for the proper times to exclude domestic ungulates.

Grazing should take place after the area has been inventoried and determined to have no impacts to threatened and endangered plant species.

Prescribed Burning (338)

A controlled fire applied to a predetermined area may be used to improve wildlife habitat and control undesirable vegetation.

The Prescribed Burning (338) practice is not approved for use by NRCS in the Pacific Islands Area. If a client wishes to implement a prescribed burn, he/she must work with the appropriate government agencies and the local fire department.

Brush Management (314)

This practice may be used to enhance wetland wildlife habitat by removing, reducing, or manipulating non-herbaceous plants through mechanical or chemical treatment.

Pest Management (595)

This practice should be included as part of the conservation plan or Rare or Declining Management plan to ensure that environmentally sensitive prevention, avoidance, monitoring and suppression strategies are used to manage weeds, insects, diseases, and other organisms (including invasive and non-invasive species), that directly or indirectly cause damage or annoyance.

Fence (382)

The practice Fence (382) is defined as a constructed barrier to animals or people. Fence may be installed to protect wetland wildlife habitat from damage from feral ungulates, including pigs, goats, deer, sheep, mouflon, and cattle. They may also serve to restrict the introduction of non-native, invasive plants, which may be spread by feral animals.

Use Exclusion (472)

This practice may be used to temporarily or permanently exclude animals, people or vehicles from an area. Use exclusion involves the installation of barriers which may consist of either natural and/or artificial structures such as logs, vegetation, earth-fill, boulders, fences, gates, electronic and sonic devices, or signs.

Forest Stand Improvement (666)

This practice may be used to improve forested habitat restore natural plant communities, achieve a desired native understory plant community, or to improve wildlife habitat.