

**NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD**

**RESTORATION AND MANAGEMENT
OF RARE OR DECLINING HABITATS**

(Ac.)
Code 643



LONGLEAF PINE HABITAT

DEFINITION

Restoring, conserving, and managing unique or diminishing native terrestrial and aquatic ecosystems.

PURPOSE

To return aquatic or terrestrial ecosystems to their original or usable and functioning condition and to improve biodiversity by providing and maintaining habitat for fish and wildlife species associated with the ecosystem.

CONDITIONS WHERE PRACTICE APPLIES

Sites or areas that once supported or currently support a unique, dwindling, or imperiled native plant and animal community.

CRITERIA

Design methods to protect the soil resource from erosion and compaction. Plan and manage all habitat manipulations according to soil capabilities, recommendations for management and avoiding excessive soil loss.

Control invasive-exotic plant and animal species and noxious weeds. Design methods to control undesirable species that minimize impacts to habitats that benefit native pollinators and other fish and wildlife species that depend on the site for food, cover, and water.

Control all Category-I invasive-exotic plant

species, as listed by the Florida Exotic Pest Plant Council, and state and federal noxious weeds (see Florida NRCS FOTG Section I, Laws, 4).

Undisturbed areas shall be conserved on a sufficient extent of the area to sustain disturbance-intolerant species; limit Prescribed Burning, Code 338 and/or Brush Management, Code 314 to 50% of the available habitat per year with consideration of adjacent properties.

Prepare plant species and seeding rate specifications to achieve desired habitat condition.

Select only viable, high quality, and adapted seed or plant stock suitable for the planned purpose.

Site preparation, planting dates and methods, and plant material care and handling shall optimize vegetation survival and growth. For planting native herbaceous plants, grasses, forbs and grass-like use Range Planting, Code 550, For planting native trees and shrubs use Tree/Shrub Establishment, Code 612.

Selected fertilizers, pesticides and other chemicals shall not compromise the intended purpose of this practice.

Techniques to maintain, enhance or create early successional habitat include, but are not limited to: light disking, mowing, roller chopping, chipping, web-plowing, herbicides, prescribed grazing, use exclusion and prescribed burning.

Where applicable, plan in accordance with Florida NRCS conservation practice standards Upland and Wetland Wildlife Habitat Management, Codes 645 and 644; Brush Management, Code 314; Herbaceous Weed Control, Code 315; Prescribed Grazing, Code 528; Use Exclusion, Code 472 and Prescribed Burning, Code 338 other facilitating/supporting practices.

If grazing is used as a management tool to achieve the intended purpose of this practice, an annual livestock forage inventory and grazing

management plan is required.

Impact to cultural resources, wetlands, and Federal and State protected species shall be evaluated and avoided or minimized to the extent practical during planning, design and implementation of this conservation practice in accordance with established National and Florida NRCS policy, General Manual (GM) Title 420-Part 401, Title 450-Part 401, and Title 190-Parts 410.22 and 410.26; National Planning Procedures Handbook (NPPH) FL Supplements to Parts 600.1 and 600.6; National Cultural Resources Procedures Handbook (NCRPH); and The National Environmental Compliance Handbook (NECH).

Comply with applicable federal, state and local laws and regulations, during the installation, operation (including product harvesting), and maintenance of this practice.

CONSIDERATIONS

Confer with other agencies and organizations to develop guidelines and specifications to conserve declining habitats.

Design herbicidal control applications using a "spot treatment" method to protect native plants that benefit native pollinators and other wildlife.

Perform follow-up habitat assessments on a regular basis. In many cases, threatened and endangered species or species of concern will benefit from conservation and sustainability of rare or declining habitats.

Evaluate how current land use and habitat in the associated landscape may influence the ability to achieve restoration and management objectives.

Encourage plant species diversity that provides cover for nesting, escape and rearing of young as well as an abundance of food, applicable to the desired plant community.

Evaluate the likelihood of being able to maintain or establish important ecological disturbances such as burning, flooding, or grazing, or protection from disturbances that would diminish rare or declining habitat functions and values.

Evaluate energy consumption when developing the conservation plan; plan and design practices in a manner that requires the least amount of energy to accomplish the desired outcomes.

Encourage plant species diversity that provides cover for nesting, escape and rearing of young as well as an abundance of food, applicable to the desired plant community.

Plan treatment design to facilitate the use of proper equipment, make use of natural features and facilitate the safe use of prescribed burning to achieve the intended purpose. Where burning is applicable, plan according to Prescribed Burning, Code 338.

PLANS AND SPECIFICATIONS

Plans and specifications need to be in keeping with this standard and need to describe the details adequately so the practice can be applied to meet intended purpose for each habitat type.

Planned restoration and management of rare or declining habitats shall:

- be based on an assessment of watershed conditions that affect the physical, biological and chemical conditions of the habitat area.
- be based on an assessment of current habitat conditions. Evaluate vegetation, threatened and endangered species present and habitat limitations.
- include a pretreatment assessment of the targeted habitat and document to provide a baseline.
- include a site map or sketch of current and planned practices and resource inventoried on the site.
- include approved specification sheets, job sheets and narrative statements, and
- Include established goals and success criteria using local reference sites for guidance and comparison. Use NRCS ecological site descriptions, 26 Ecological Communities of Florida, FNAI Guide to the Natural Communities of Florida, Edition 2010 or other published historic data to establish vegetative community composition and structure.

OPERATION AND MAINTENANCE

An operation and maintenance (O&M) plan shall be prepared and provided to the landowner to ensure that the practice functions as intended over time.

Document a pretreatment assessment of the targeted habitat to provide a baseline for comparison with post-treatment habitat assessment.

Plan and manage haying, grazing and other management activities (including prescribed grazing and use exclusion) as necessary to achieve and maintain the intended purpose.

Do not conduct vegetation management and maintenance activities during the nesting season except when necessary to achieve the desired habitat condition.

Evaluate habitat conditions on a regular basis to monitor habitat function, determine if management goals are being met and adapt the conservation plan and maintenance schedule as needed to ensure the desired habitat condition is achieved.

Rotate management and maintenance activities to mimic natural ecological disturbance regimes.

Inform client to apply herbicides according to label instructions and select herbicides designed for habitat restoration applications.

Inform client to obtain all necessary local, state, and federal permits prior to implementing the planned practices.

REFERENCES

Barbour, M.G., and W. D. Billings (eds.). 2000. North American Terrestrial Vegetation. Cambridge University Press, New York, Second Edition, 695 pp.

Guide to the Natural Communities of Florida, Florida Natural Areas Inventory (FNAI), 2010. http://www.fnai.org/pdf/nc/FNAI_NatComGuide_2010.pdf

Kuchler, A.W. 1964 Potential Natural Vegetation of the Conterminous United States. American

Geography Society, Special Publication 36. 116 pp. + map Second edition (revised), 1975.

Noss, R.F., E.T. LaRoe III, and J.M. Scott. 1995. Endangered ecosystems of the United States: a preliminary assessment of loss and degradation. Biological Report 28; National Biological Service, Washington, D.C.

NRCS. 1979. Management for Wildlife: a Supplement to Wildlife Standards and Specifications for Florida. Gainesville, FL. 89pp.

Myers, R. and J. Ewel. 1990. Ecosystems of Florida. University of Central Florida Press, Orlando, FL. 765pp

Pfaff, Sharon, M.A. Gonter, and C. Maura. 2002. Florida native seed production manual. USDA-NRCS, Plant Materials Center, Brooksville, FL. 76pp.

Threatened & Endangered Species Information,

- 1) FL Fish & Wildlife Conservation Comm., <http://myfwc.com/imperiledspecies/>
- 2) FL Natural Areas Inventory Field Guides, <http://www.fnai.org/FieldGuide/index.cfm>
- 3) NRCS, FOTG Section II: Threatened and endangered Species, http://efotg.sc.egov.usda.gov/efotg_locator.aspx
- 4) USFWS, Florida Regional Offices: Jacksonville, <http://www.fws.gov/northflorida/> Vero Beach, <http://www.fws.gov/verobeach/> Panama City, <http://www.fws.gov/panamacity/>