

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD
EARLY SUCCESSIONAL HABITAT DEVELOPMENT/MANAGEMENT

(Ac.)

CODE 647

DEFINITION

Manage plant succession to develop and maintain early successional habitat to benefit desired wildlife and/or natural communities.

PURPOSE

To provide habitat for species requiring early successional habitat for all or part of their life cycle.

CONDITIONS WHERE PRACTICE APPLIES

On all lands that are suitable for the kinds of desired wildlife and plant species.

CRITERIA

I. Management will be designed to achieve the desired plant community structure (e.g., density, vertical and horizontal cover) and plant species diversity (composition).

II. If planting, regionally adapted plant materials (local ecotypes) will be used.

- Planting of noxious weeds and invasive species is prohibited.
- Site preparation, planting dates, and planting methods shall optimize vegetation survival and growth.

III. Measures must be provided to control noxious weeds and invasive species:

- Utilize Integrated Pest Management (a combination of Biological, Mechanical and/or Chemical) using environmentally sensitive methods. *Example:* prevention, scouting, spot treatment, and follow-up. Refer to NRCS practice Integrated Pest Management (595).
- If using chemical methods of control, [Pesticide Screening Tool \(WinPST\)](#) shall be used to assess risks, and appropriate mitigation to reduce known risks shall be employed.
- If using chemical methods of control, spraying will be in a targeted manner through the use of spot spraying, mechanical or hand wick applicators, or other approved methods to

protect grasses, forbs and legumes; to benefit insect food sources for birds and other wildlife, and to benefit native pollinators and other wildlife.

- Refer to USDA Plants Database, NM invasive and noxious weeds. www://plants.usda.gov
- Refer to [NRCS Fish and Wildlife Habitat Management Leaflet No. 24, Integrated Pest Management \(IPM\) and Wildlife](#)

IV. Management will be timed to minimize negative impacts to wildlife. Disturbance to habitat shall be restricted during critical periods of wildlife nesting, brood rearing, fawning or calving seasons.

V. When grazing is used as a management tool, a prescribed grazing plan developed to specifically meet the intent and objective(s) of this practice standard is required. Refer to NRCS practice Prescribed Grazing (528).

VI. Minimize soil disturbance. Especially where soil integrity is essential: steep slopes, highly erodible soil, saturated soils, and/or where establishment of invasive species is likely.

VII. A baseline (pre-treatment) assessment will be evaluated and documented to assist in conservation plan development; and for comparison with post-treatment habitat conditions.

VIII. Successional management will not be implemented on an annual (or less than annual) basis unless approved by the State Biologist.

CONSIDERATIONS

Early successional habitats are highly dynamic and complex systems which require some disturbance to set back succession. When that disturbance is not longer provided naturally or when more frequent disturbance is necessary, vegetative techniques may be used to set back or manage the plant community succession. USDA practices that may be used include:

- Brush Management - Code 314
- Forest Stand Improvement - Code 666
- Herbaceous Weed Control - Code 315
- Prescribed Burning - Code 338
- Prescribed Grazing - Code 528
- Shallow Water Management - Code 646

Determining the practices and technique will depend upon the site potential and goals. Refer to the practice specifications for more information.

Several practices or techniques used together will generally be required to provide the desired effect.

When using early successional habitat to benefit targeted wildlife (species, group or guild) a habitat appraisal or evaluation should be used to 1] identify if early successional plant stages will benefit the targeted wildlife and 2] to identify what type, extent and timing of succession is needed.

Wildlife Habitat Evaluation/Appraisal Guides are found online in the [NRCS New Mexico FOTG Section II](#). If one is not provided for the desired target species or habitat, contact the NRCS NM State Biologist for assistance.

If the early successional stage will require frequent disturbance (every 2-3 years) consider the likelihood or feasibility of being able to maintain the planned disturbances long-term.

Consider the accessibility of the site for installation, management and maintenance.

Consider how land use and habitat in the associated landscape may influence the ability to achieve objectives.

Consider the spatial scale of the project area and determine whether management activities should be rotated throughout the managed area to mimic natural disturbance regimes (to create a mosaic).

This practice may affect non-target habitats which could occur within the target habitat (such as the understory) or adjacent to the target habitat (small

grassy opening within a tree stand). Consider the potential negative effects of this practice on all impacted plant communities.

Consider the wildlife that utilize the current habitat, as well as, the wildlife that will utilize the early successional habitat. Each habitat type will likely host different wildlife species. Ensure that the effects to both are addressed.

When selecting plants and designing management for this practice, consider the needs of pollinators and incorporate to the maximum extent practicable.

The [Ecological Site Description \(ESD\)](#) state and transition models should be used when available. Found in NM FOTG Section II.

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

Consider the effects on unique or rare upland flora. Refer to the New Mexico Rare Plants list, found at <http://nmrareplants.unm.edu>

Refer to NRCS practice Shallow Water Development and Management (646) for information on developing and managing moist soil habitat; an early successional management technique to produce waterfowl forage habitat.

Soil disturbance associated with the installation of this practice may increase the potential of invasion or spread of invasive plant species. Use mitigation techniques to prevent or reduce any negative effects. (in addition to the criteria requirement).

Maintain dead standing or downed large trees to provide important structure and cover for a diversity of wildlife and to serve as a carbon source for food-chain support.

Refer to the NRCS leaflet: [Early Successional Habitat](#). Fish and Wildlife Habitat Management Leaflet No. 41. Technical Note 190-67

PLANS AND SPECIFICATIONS

Site specific planning for this practice shall follow the Standard and Specifications, and be recorded using the appropriate, approved job sheet(s). Narrative statements in the conservation plan or other documentation may provide supplemental information.

In addition to conservation plan requirements, the plan shall identify and describe:

- the baseline (pre-treatment) condition, with focus on any factors which may influence the planned early succession,
- the targeted wildlife species/group or guild and/or the desired natural plant community,
- identify the ecosystem type,
- identify the natural disturbances (frequency, duration, and/or severity),
- identify which disturbance(s) have been restricted or altered,
- identify the successional stages anticipated to occur following implementation,
- structural and vegetative implementation actions necessary to achieve the goals and objectives,
- management actions necessary to achieve the goals and objectives. Including the method, timing and intensity of each action (i.e. a prescribed grazing plan etc.).

OPERATION AND MAINTENANCE

The following actions shall be carried out to ensure that this practice functions as intended. These actions include normal repetitive activities in the application and use of the practice (operation), and repair and upkeep of the practice (maintenance):

- Habitat conditions shall be evaluated and compared to desired conditions on a regular basis; to be able to quickly adjust the conservation plan and ensure the desired habitat conditions are met. Specify the appropriate timing in the Operation & Maintenance schedule.
- Annually inspect and repair structural or vegetative components of this practice.
- Any adjustments to treatments and/or management must be made in consultation with the local NRCS conservationist.

REFERENCES

- New Mexico Department of Game and Fish. 2006. [Comprehensive Wildlife Conservation Strategy for New Mexico](#). New Mexico Department of Game and Fish. Santa Fe, New Mexico. 526 pp + appendices.
- New Mexico Rare Plant Technical Council. 1999. New Mexico Rare Plants. Albuquerque, NM: New Mexico Rare Plants Home Page. <http://nmrareplants.unm.edu>
- USDA. Plants Database. [New Mexico Invasive and Noxious Weeds](#). Online: [www://plants.usda.gov](http://plants.usda.gov)
- USDA, NRCS. 2003. [National Biology Manual](#). Title 190, Washington, DC.
- USDA, NRCS, Wildlife Habitat Management Institute. 2007. [Early Successional Habitat](#). Fish and Wildlife Habitat Management Leaflet No. 41. Technical Note 190-67
- USDA, NRCS, Wildlife Habitat Management Institute. 2006. [Importance of Disturbance in Habitat Management](#). Fish and Wildlife Habitat Management Leaflet No. 37. Technical Note 190-52
- USDA, NRCS, Wildlife Habitat Management Institute. 2002. [Integrated Pest Management \(IPM\) and Wildlife](#). Fish and Wildlife Habitat Management Leaflet No. 24. Technical Note 190-27