

NATURAL RESOURCES CONSERVATION SERVICE
CONSERVATION PRACTICE STANDARD

ANIMAL TRAILS AND WALKWAYS

(Ft.)
CODE 575

DEFINITION

Established lanes or travel ways that facilitate animal movement.

PURPOSES

- Provide or improve access to forage, water, working/handling facilities, and/or shelter,
- Improve grazing efficiency and distribution, and/or
- Protect ecologically sensitive, erosive and/or potentially erosive sites.

CONDITIONS WHERE THIS PRACTICE APPLIES

On lands where control of animal movement is needed to facilitate access, improve grazing, prevent erosion, and/or protect ecologically sensitive areas.

CRITERIA

General Criteria Applicable to All Purposes

All planned work shall comply with all federal, state, and local laws and permit conditions and requirements. The landowner shall obtain all necessary permits prior to construction or any land clearing activities.

Location. Animal trails or walkways shall be located to make the best use of topographic features. Trails shall generally follow natural contours to the extent practical and minimize disturbance of drainage patterns.

Drainage and Erosion Control. Provisions shall be made for surface and subsurface drainage, as needed, and for disposal of runoff water without causing excessive erosion.

Culverts, bridges, fords, or rolling dips shall be provided at all natural drainageways as appropriate. The capacity and design shall be consistent with sound engineering principles and shall be adequate for the intended use. When a culvert or bridge is

installed in a drainageway, its minimum capacity shall convey the 10-year 24-hour design storm runoff without causing erosion or overtopping.

Trails shall be constructed in such a manner that accelerated erosion of the trail surface will not occur:

- Avoid excessively steep pitches and geologically unstable or otherwise highly erodible terrain.
- Outslope construction along hillsides shall be used whenever possible. Additional drainage measures such as water bars, rolling dips or subdrainage shall be used as needed.
- When inslope or crowned construction is required, inboard ditches with sufficient capacity and erosion protection shall be constructed. Additional measures shall be installed as needed to convey ditch flows across the road without excessive erosion.

Dimensions and Surface Materials. Animal trails or walkways shall be constructed wide enough to accommodate movement of animals and access by operator for management and maintenance.

Sensitivity of the animal's feet, with respect to the intended purpose of the trail or walkway, will be included as a design parameter in selecting the surface material for trails or walkways.

Trails or walkways seeded or planted to vegetative cover will be protected from grazing until the vegetation is fully established and capable of withstanding grazing and/or trampling. Vegetative cover shall be established in accordance with Conservation Practice Standard 342, Critical Area Planting. Where maintaining vegetative cover is necessary but not possible, Conservation Practice Standard 561, Heavy Use Area Protection, will be used to provide adequate surface protection.

Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact the Natural Resources Conservation Service.

Additional Criteria Applicable to Providing or Improving Access to Forage, Water, Working/Handling Facilities and/or Shelter

Trails and walkways will be designed and constructed of sufficient size to accommodate the expected frequency of use and animal type(s) planned for the operation.

Conservation practice standard 382, Fence, will be used when needed to keep animals confined to the trail or walkway until the desired destination is reached.

When needed to facilitate movement of animals through a series of paddocks or pastures, gate openings and lane layouts shall allow for efficient flow of animals with the least amount of stress.

Additional Criteria Applicable to Improving Grazing Efficiency and Distribution

Fenced or unfenced animal trails or walkways will be used to distribute grazing to overcome terrain features causing uneven grazing distribution and pressure.

Additional Criteria Applicable to Protection of Ecologically Sensitive Areas.

Cultural resources, threatened and endangered species, wetlands, streambanks, floodways or other ecologically sensitive areas, and areas of special scenic value will be protected through the proper design of trail(s) or walkway(s).

CONSIDERATIONS

Other practices that facilitate grazing distribution and proper intensity and reduce potential erosion should be implemented along with this practice as appropriate:

- Conservation Practice Standard 528A, Prescribed Grazing, can be used to further improve grazing distribution and pressure.
- Conservation Practice Standard 472, Use Exclusion, and other conservation practices can be used in conjunction with trails or walkways to minimize the impact on sensitive areas.
- For areas of high livestock concentration, such as around ponds, tanks, troughs, or other feeding areas, use Conservation Practice Standard 561, Heavy Use Area Protection.

- For travelways used by vehicles or equipment for purposes other than management and maintenance of animal trails or walkways, use Conservation Practice Standard 560, Access Road.
- Consider salting, water development, or other methods to facilitate proper grazing distribution.

Water Quantity

1. Avoid locations and layouts that would result in diversion of surface runoff and other hydrologic modifications that could alter flow paths, modify channel hydrology, and/or trigger concentrated flow erosion or mass wasting.
2. Where applicable, consider the effects of snowcatch and melt on the water budget.

Water Quality

1. Improving grazing distribution using this practice in combination with others should improve water quality, although increased bedding on the walkways will increase manure concentrations locally.
2. If this practice is used to gain livestock access to previously inaccessible water sources, the water quality of those sources may be degraded by increased livestock use. Prescribed Grazing, Fencing or other livestock management measures may be needed to prevent excessive degradation.

Endangered Species Considerations

Determine if installation of this practice with any others proposed will have any effect on any federal or state listed Rare, Threatened or Endangered species or their habitat. NRCS's objective is to benefit these species and others of concern or at least not have any adverse effect on a listed species. If the Environmental Evaluation indicates the action may adversely affect a listed species or result in adverse modification of habitat of listed species which has been determined to be critical habitat, NRCS will advise the land user of the requirements of the Endangered Species Act and recommend alternative conservation treatments that avoid adverse effects. Further assistance will be provided only if the landowner selects one of the alternative conservation treatments for installation; or at the request of the landowners, NRCS may initiate consultation with the Fish and Wildlife Service, NOAA Fisheries

(formerly the National Marine Fisheries Service) and/or California Department of Fish and Game. If the Environmental Evaluation indicates the action will not affect a listed species or result in adverse modification of critical habitat, consultation generally will not apply and usually would not be initiated. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Some species are year-round residents in some streams, such as freshwater shrimp. Other species, such as steelhead and salmon, utilize streams during various seasons. Be aware that critical periods, such as spawning, eggs in gravels, and rearing of young may preclude activities in the stream that may directly affect the stream habitat during those periods. For example there should be no disturbance of stream gravel beds that may have eggs in them. That could include any equipment in the stream or even walking in the stream or work upstream that may result in sediment depositing in the gravel beds. Document any special considerations for endangered species in the Practice Requirements Worksheet.

Cultural Resources

NRCS's objective is to avoid any effect to cultural resources and protect them in their original location. Determine if installation of this practice will have any effect on any cultural resources.

Document any specific considerations for cultural resources in the design docket and the Practice Requirements worksheet.

GM 420, Part 401, the California Environmental Handbook and the California Environmental Assessment Worksheet provide guidance on how the NRCS must account for cultural resources. The Field Office Technical Guide, Section II contains general information, with Web sites for additional information.

PLANS AND SPECIFICATIONS

Plans and specifications for installing animal trails and walkways shall be in keeping with this standard. A site-specific design and construction plan is required to describe the requirements for applying this practice to achieve its intended purpose.

Plans and specifications shall include construction plans, drawings, job sheets, or other similar documents. These documents shall specify the requirements for installing the practice, including the

location and the kind, amount, and quality of materials to be used.

OPERATION AND MAINTENANCE

The operation and maintenance (O&M) plan shall specify that the trails or walkways and associated practices be inspected annually and after significant storm events to identify repair and maintenance needs.

The O&M plan shall detail the level of repairs needed to maintain the effectiveness and useful life of the practice. These repairs should include, but are not limited to, the following:

- Periodic grading or re-shaping trails or walkways to maintain the designed grade and dimensions;
- Periodic addition of surfacing materials where used;
- Re-seeding of areas in which the vegetation has been damaged or destroyed;
- Mending of fences and replacement of gates; and/or

Periodic removal and management of manure accumulations will be addressed in the O&M plan.

For multiple adjacent vegetated walkways, the O&M plan should provide guidance as to the rotation of walkways to allow for recovery of vegetation and for improvement of traffic -supporting conditions.