

## NATURAL RESOURCES CONSERVATION SERVICE CONSERVATION PRACTICE STANDARD

### Animal Trails and Walkways

(Feet)

Code 575

#### DEFINITION

Established lanes or travel ways that facilitate animal movement.

#### PURPOSES

This practice may be applied as part of a conservation management system to accomplish one or more of the following purposes:

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



#### CONDITIONS WHERE THIS PRACTICE APPLIES

This practice applies on lands where animal movement is needed to facilitate access, improve grazing, prevent erosion, and/or protect ecologically sensitive areas.

#### General Criteria Applicable to All Purposes.

All planned work shall comply with all federal, state, and local laws, rules and regulations. 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 surface material for trails and walkways.

Indiana (IN) Natural Resources Conservation Service (NRCS) Electronic Field Office Technical Guide (eFOTG) Standard (382) Fence will be used when needed to keep animals confined to the trail or walkway until the desired destination is reached.

#### Cross Section

Trails, walkways (i.e. lanes, raceways) shall be constructed wide enough to accommodate movement of livestock and access by operator but shall be a minimum of four (4) feet wide.

Trails or walkways shall be constructed in such a manner that accelerated erosion will not occur. Where necessary, diversions with a safe outlet will be provided.

Walkways shall be constructed with a crown or sloped in one direction to drain water. The crown or slope shall be a minimum of 5 percent measured perpendicular to the direction of travel.

Cut and fill side slopes for walkway construction shall be stable. The maximum slope shall be 2:1 (Horizontal:Vertical). Livestock shall be excluded from side slopes under wet conditions.

Trails or walkways including cut and fill slopes seeded or planted to vegetative cover will be protected from grazing until planting material is fully established and capable of withstanding grazing and/or trampling. Critical areas shall be protected as directed in IN NRCS eFOTG Standard (561) Heavy

**Conservation practice standards are reviewed periodically, and updated if needed. To obtain the current version of this standard, contact your Natural Resources Conservation Service State Office, or visit the electronic Field Office Technical Guide.**

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Use Area Protection. Vegetative cover shall be established in accordance with IN NRCS eFOTG Standard (342) Critical Area Planting.

Walkway grades should not exceed 10 percent except for short lengths.

### **Drainage Structures**

Drainage structures such as culverts, open top culverts, broad or narrow based dips for cross drains, and diversion ditches and berms may be required to safely dispose of runoff water. These structures shall have stable outlets and convey runoff at non-erosive velocities.

### **Crossings**

Trails or walkways that cross natural drainage patterns or constructed channels shall be designed to be stable for design velocities computed for a 10-year, 24-hour duration storm or bank-full flow, whichever is less.

Trails or walkways that ford perennial streams shall be constructed according to the criteria contained in IN NRCS eFOTG Standard (578) Stream Crossing.

### **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 system.

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 or endangered species, wetlands, stream-banks, 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 such as prescribed grazing should be implemented along with this practice.

The time required to move livestock from one area to another shall be considered when planning the trail or walkway width.

Trail and walkway design should consider the expected frequency and contact pressure of livestock and any vehicle traffic.

A layer of Ag-lime or other materials to provide cushioning for livestock hoof contact should be considered.

Ditches or subsurface drains should be considered to remove excess water adjacent to walkways.

### **PLANS AND SPECIFICATIONS**

Each trail or walkway shall have a site specific design based on the criteria in this standard to achieve its intended purpose. Minimum requirements in the plans are:

- Plan view of the site.
- Vegetation Specifications (as applicable).
- Cuts/grade and structures (as applicable).
- Quantities and bill of materials.

### **OPERATION AND MAINTENANCE**

An operation and maintenance plan shall be developed that is consistent with the purpose of this practice, intended life of the components, and criteria for design. The plan shall include but is not limited to:

Periodic grading or shaping of walkways to maintain the designed dimensions or grades.

Periodic addition of surfacing materials where used.

Re-seeding of areas in which the vegetation has been damaged or destroyed.

Periodic removal and management of manure accumulations.

### **REFERENCES**

National Range and Pasture Handbook 1997, Chapter  
5 Section 2, Conservation Practices for pasture (g)  
Facilitating practice – Stock walkways or trail 5.2-43