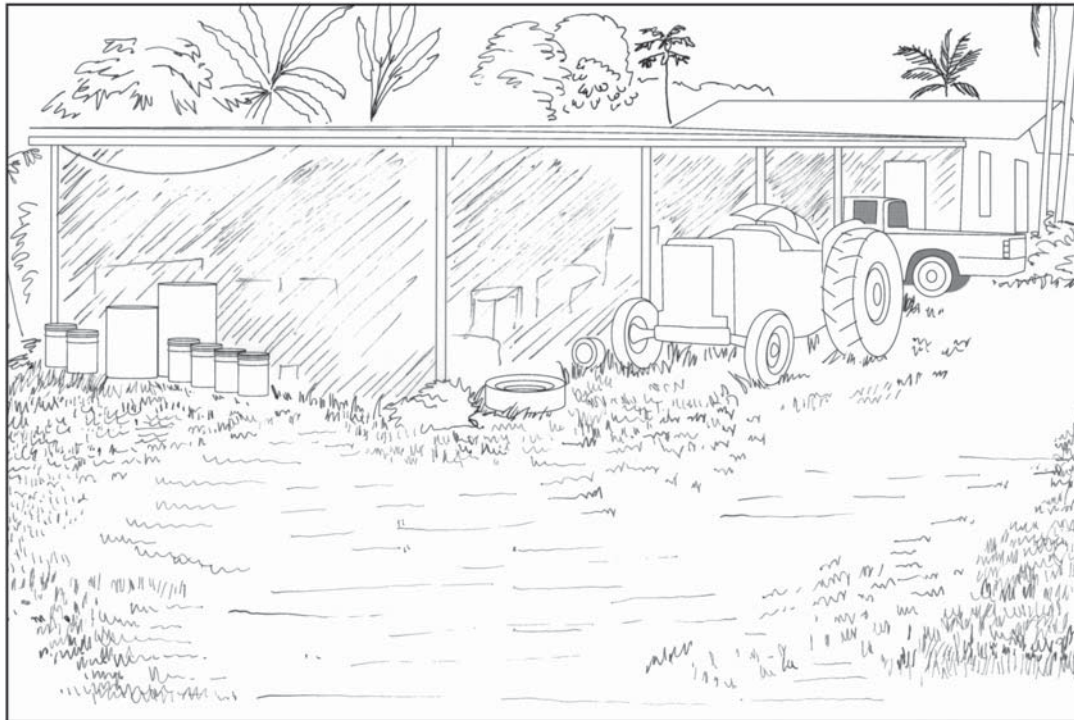


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# Heavy Use Area Protection

USDA NRCS Practice (561)



*In areas with foot, animal and vehicle traffic, stabilize bare soil to get rid of mud puddles, dust, and wash outs. This will save money and make life on the farm more pleasant.*

## What is heavy use area protection?

Some areas on the farm get a lot of frequent and intense use by people, animals and vehicle traffic, which leaves bare patches of dirt for long periods of time. When it is very dry, these areas produce dust. When it rains, these areas form big puddles or wash downhill. Pacific Island farmers can reduce dust, puddles, and wash-outs by strengthening or reinforcing these heavy use areas.

To be stable under intense long-term use, heavy use areas may need a thick layer of mulch, ground coral or gravel, or even a coating of asphalt, cement or concrete.

## Why protect heavy use areas?

Pacific Island farmers can benefit from stabilizing heavy traffic areas on the farm. Using this practice can:

- improve drainage and dry out standing water.
  - prevent erosion problems.
  - reduce long-term labor and maintenance costs.
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- improve farm appearance and quality of life.

### **Where is heavy use area protection used?**

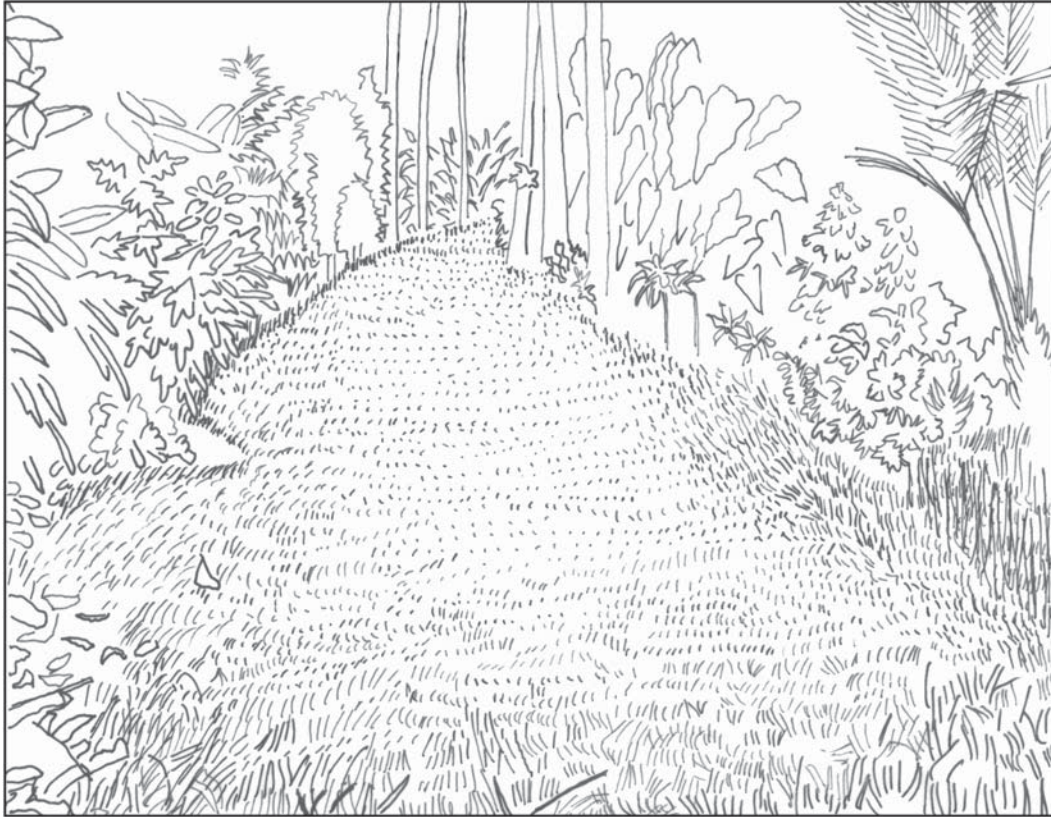
- In bare areas around farm buildings where there is a lot of foot, animal, or vehicle traffic (such as corrals, livestock holding areas, vehicle and equipment parking areas, loading and unloading areas, and post-harvest processing areas)
- As a working surface at plant nurseries
- In pastures with grazing animals, near water and mineral sources, under shade trees and along animal trails and walkways.

### **Examples of Heavy Use Area Protection Measures**

**Vegetation:** For light use areas, sometimes a very strong and thick grass can be grown or sod put down. If using grass, choose one that can survive some foot and animal traffic, plus some light machinery and vehicles driving on it.



*Often heavy use protection is needed in pastures with grazing animals, near water and mineral sources, under shade trees and along animal trails and walkways.*



*For light use areas, sometimes a very strong and thick grass can be grown or sod put down. If using grass, choose one that can survive some foot and animal traffic, plus some light machinery and vehicles driving on it.*

**Mulch:** For moderate use areas, sometimes a 3-4 inch (8-10 cm) layer of natural material such as chipper waste, betel nut waste, or wood chips will work well. A 2-inch (5 cm) layer of crushed coral, cinder, brick chips, shredded rubber, or sawdust can be used to cover and protect heavy use areas.

**Gravel:** Moderate to heavy use areas may need a layer of 3-4 inches (8-10 cm) of cinders, gravel, or crushed coral to provide good protection. These materials last between 1-2 years.

**Pavement, Concrete, Asphalt/Tar and other Cementing Materials:** Areas with very heavy use may need a hard layer to protect them. Materials like bituminous pavement and concrete are generally expensive to buy and install.

**Foundation:** Sometimes heavy use areas need a very strong foundation to last a long time while carrying heavy loads from vehicle and truck traffic. It may be necessary to dig out the existing soil and replace it with a

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layer of gravel (or crushed stone) and a geotextile (a special barrier cloth). Again, work with a qualified professional to plan and build these farm improvements.

**Downslope Filter Strips and Buffers:** Clean the dirty water draining downhill from a heavy use area by letting it slowly filter through a wide strip of living plants. Direct dirty runoff water to natural undisturbed areas planted with thick vegetation. If there is no natural area downhill, grow a strip of plants across the slope. Plant the filter strip with thick grasses or grow a buffer with a combination of grasses, shrubs, and trees.

For assistance to plan, design or construct heavy use area protection, contact your local USDA NRCS field office.

For the best results, combine **heavy use area protection** with other conservation practices:

- **Mulching** (484): bringing in material to cover and protect the soil
- **Prescribed Grazing** (528): using grazing animals to control plant growth
- **Fence** (382): a constructed barrier to animals or people
- **Use Exclusion** (472): protecting an area by keeping animals, people, or vehicles out
- **Critical Area Planting** (342): planting permanent vegetation on problem sites
- **Filter Strip** (393): a band of vegetation planted between working lands and environmentally sensitive areas

Additional information is available from your local USDA Service Center or at [www.pb.nrcs.usda.gov](http://www.pb.nrcs.usda.gov) and [www.hi.nrcs.usda.gov](http://www.hi.nrcs.usda.gov).



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