

# Map Unit Description

Douglas-Plateau Area, Colorado, Parts of Garfield and Mesa Counties

## 47 Hesperus-Empedrado, moist-Pagoda complex 5 to 35 percent slopes

### Setting

Elevation: 6200 to 8500 feet  
Mean annual precipitation: 18 to 20 inches  
Mean annual air temperature: 42 to 44 degrees F  
Frost-free period: 85 to 100 days

### Composition

Hesperus and similar soils: 35 percent  
Empedrado, moist, and similar soils: 30 percent  
Pagoda and similar soils: 20 percent

### Description of Hesperus

#### Setting

Landform: Mountainsides  
Down-slope shape: Concave  
Across-slope shape: Linear  
Parent material: Residuum weathered from sandstone and shale

#### Properties and Qualities

Slope: 5 to 35 percent  
Drainage class: Well drained  
Capacity of the most limiting layer to transmit water (Ksat): Moderately high (0.20 to 0.60 in/hr)  
Frequency of flooding: None  
Frequency of ponding: None  
Calcium carbonate maximum: 0 percent  
Gypsum maximum: 0 percent  
Available water capacity: High (about 11.2 inches)

#### Interpretive Groups

Land capability (non irrigated): 6e  
Ecological site: Brushy Loam (R048AY238CO)

#### Typical Profile

0 to 7 inches: loam  
7 to 60 inches: clay loam, loam

### Description of Empedrado, moist

#### Setting

Landform: Benches  
Down-slope shape: Linear  
Across-slope shape: Linear  
Parent material: Colluvium derived from sandstone and shale and/or residuum weathered from sandstone and shale

#### Properties and Qualities

Slope: 5 to 35 percent  
Drainage class: Well drained  
Capacity of the most limiting layer to transmit water (Ksat): Moderately high or high (0.57 to 1.98 in/hr)  
Frequency of flooding: None  
Frequency of ponding: None  
Calcium carbonate maximum: 10 percent  
Gypsum maximum: 0 percent  
Available water capacity: High (about 9.7 inches)

#### Interpretive Groups

Land capability (non irrigated): 6e  
Ecological site: Brushy Loam (R048AY238CO)

#### Typical Profile

0 to 10 inches: loam  
10 to 21 inches: clay loam  
21 to 28 inches: gravelly sandy clay loam  
28 to 60 inches: loam

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## Description of Pagoda

### Setting

Landform: Benches, mountains

Down-slope shape: Concave, linear

Across-slope shape: Linear

Parent material: Colluvium derived from shale

### Properties and Qualities

Slope: 5 to 35 percent

Drainage class: Well drained

Capacity of the most limiting layer to transmit water (Ksat): Moderately low or moderately high (0.06 to 0.20 in/hr)

Frequency of flooding: None

Frequency of ponding: None

Calcium carbonate maximum: 15 percent

Gypsum maximum: 0 percent

Available water capacity: High (about 10.9 inches)

### Interpretive Groups

Land capability (non irrigated): 6e

Ecological site: Brushy Loam (R048AY238CO)

### Typical Profile

0 to 6 inches: clay loam

6 to 17 inches: clay loam

17 to 27 inches: clay loam, clay

27 to 60 inches: clay loam, clay

# Rangeland Productivity and Plant Composition

Douglas-Plateau Area, Colorado, Parts of Garfield and Mesa Counties

| Map symbol<br>and soil name | Ecological site | Total dry-weight production |                |                     | Characteristic vegetation | Rangeland<br>composition |
|-----------------------------|-----------------|-----------------------------|----------------|---------------------|---------------------------|--------------------------|
|                             |                 | Favorable<br>year           | Normal<br>year | Unfavorable<br>year |                           |                          |
|                             |                 | <i>Lb/Ac</i>                | <i>Lb/Ac</i>   | <i>Lb/Ac</i>        |                           | <i>Pct</i>               |
| 47:                         |                 |                             |                |                     |                           |                          |
| Hesperus                    | Brushy Loam     | 3,000                       | 2,000          | 1,500               | Gambel oak                | 25                       |
|                             |                 |                             |                |                     | Big bluegrass             | 10                       |
|                             |                 |                             |                |                     | Elk sedge                 | 10                       |
|                             |                 |                             |                |                     | Nodding brome             | 10                       |
|                             |                 |                             |                |                     | Arizona fescue            | 5                        |
|                             |                 |                             |                |                     | Mountain snowberry        | 5                        |
|                             |                 |                             |                |                     | Needleandthread           | 5                        |
|                             |                 |                             |                |                     | Saskatoon serviceberry    | 5                        |
|                             |                 |                             |                |                     | Western wheatgrass        | 5                        |
| Empedrado, moist            | Brushy Loam     | 3,000                       | 2,000          | 1,500               | Big bluegrass             | 15                       |
|                             |                 |                             |                |                     | Gambel oak                | 15                       |
|                             |                 |                             |                |                     | Elk sedge                 | 10                       |
|                             |                 |                             |                |                     | Mountain brome            | 10                       |
|                             |                 |                             |                |                     | Saskatoon serviceberry    | 10                       |
|                             |                 |                             |                |                     | Slender wheatgrass        | 7                        |
|                             |                 |                             |                |                     | Mountain snowberry        | 5                        |
|                             |                 |                             |                |                     | Muttongrass               | 5                        |
|                             |                 |                             |                |                     | Needleandthread           | 5                        |
|                             |                 |                             |                |                     | Western wheatgrass        | 5                        |

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| Map symbol<br>and soil name | Ecological site | Total dry-weight production |                |                     | Characteristic vegetation | Rangeland<br>composition |
|-----------------------------|-----------------|-----------------------------|----------------|---------------------|---------------------------|--------------------------|
|                             |                 | Favorable<br>year           | Normal<br>year | Unfavorable<br>year |                           |                          |
|                             |                 | <i>Lb/Ac</i>                | <i>Lb/Ac</i>   | <i>Lb/Ac</i>        |                           | <i>Pct</i>               |
| 47:<br>Pagoda               | Brushy Loam     | 3,000                       | 2,000          | 1,500               | Gambel oak                | 15                       |
|                             |                 |                             |                |                     | Mountain brome            | 10                       |
|                             |                 |                             |                |                     | Saskatoon serviceberry    | 10                       |
|                             |                 |                             |                |                     | Elk sedge                 | 5                        |
|                             |                 |                             |                |                     | Letterman's needlegrass   | 5                        |
|                             |                 |                             |                |                     | Mountain snowberry        | 5                        |
|                             |                 |                             |                |                     | Nodding brome             | 5                        |
|                             |                 |                             |                |                     | Slender wheatgrass        | 5                        |