

## Fraxinus pennsylvanica - Ulmus americana / Prunus virginiana Woodland

COMMON NAME Green Ash - American Elm / Choke Cherry Woodland  
SYNONYM Green Ash - Elm Woody Draw  
PHYSIOGNOMIC CLASS Woodland (II)  
PHYSIOGNOMIC SUBCLASS Deciduous woodland (II.B)  
PHYSIOGNOMIC GROUP Cold-deciduous woodland (II.B.2)  
PHYSIOGNOMIC SUBGROUP Natural/Semi-natural (II.B.2.N)  
FORMATION Cold-deciduous woodland (II.B.2.N.a)  
ALLIANCE FRAXINUS PENNSYLVANICA - (ULMUS AMERICANA) WOODLAND ALLIANCE

CLASSIFICATION CONFIDENCE LEVEL 2

USFWS WETLAND SYSTEM Terrestrial

### RANGE

#### **Badlands National Park**

Green ash - American elm woodlands are distributed throughout Badlands NP, occupying mesic draws, small drainages, and the outer edge of river floodplains. A more specialized habitat supporting this type is the interface between the base of sandhills and clay soils, where seeps and springs emerge.

#### **Globally**

This community is reported from Montana, North Dakota, and South Dakota; it is found in four sections of two ecoregion provinces.

### ENVIRONMENTAL DESCRIPTION

#### **Badlands National Park**

Green ash - American elm woodlands are found in less-steep, mesic draws, small perennial drainages, base of sandhills, and edge of floodplains within the park.

#### **Globally**

In western South Dakota and North Dakota, this community occurs in upland ravines and broad valleys or on moderately steep slopes. It also occurs along small permanent or ephemeral streams. In central North Dakota, this community is also found along the north slopes of end moraines or kames and along lakeshores (Williams 1979 and Godfred 1976). On these sites, soil and topography permit greater than normal moisture conditions. In south-central South Dakota this community occurs on steep, north-facing escarpments and around boulder outcrops. In the western Dakotas soils are clay loams, sandy clay loam, silty clay, and sandy loam. Soil pH ranges from 6.3 to 7.5 in South Dakota, while soils in North Dakota have pH of 6.0-8.1. Slopes range from 0 to 40 percent. In south-central South Dakota soils are dry to moist, and moderately drained (Hansen and Hoffman 1988, Girard *et al.* 1989).

### MOST ABUNDANT SPECIES

#### **Badlands National Park**

<u>Stratum</u>	<u>Species</u>
Tree	<i>Populus deltoides</i> , <i>Juniperus scopulorum</i> , <i>Ulmus americana</i> , <i>Fraxinus pennsylvanica</i>
Shrub	<i>Toxicodendron rydbergii</i> , <i>Rosa arkansana</i> , <i>Ribes odoratum</i> , <i>Prunus virginiana</i> , <i>Rhus trilobata</i>
Herbaceous	<i>Maianthemum stellatum</i> , <i>Pascopyrum smithii</i> , <i>Andropogon gerardii</i> , <i>Poa pratensis</i>

#### **Globally**

<u>Stratum</u>	<u>Species</u>
Tree canopy	<i>Fraxinus pennsylvanica</i>
Tall shrub	<i>Prunus virginiana</i>
Graminoid	<i>Carex sprengelii</i>

### CHARACTERISTIC SPECIES

#### **Badlands National Park**

*Fraxinus pennsylvanica*, *Ulmus americana*, *Juniperus scopulorum*, *Prunus virginiana*, *Rhus trilobata*, *Pascopyrum smithii*, *Poa pratensis*, *Andropogon gerardii*

#### **Globally**

*Fraxinus pennsylvanica*, *Prunus virginiana*

### OTHER NOTABLE SPECIES

#### **Globally**

<u>Stratum</u>	<u>Species</u>
Tree canopy	<i>Ulmus americana</i>
Tall shrub	<i>Prunus americana</i>
Shrub	<i>Amelanchier alnifolia</i> , <i>Amelanchier sanguinea</i> , <i>Elaeagnus angustifolia</i> , <i>Rosa woodsii</i> , <i>Shepherdia</i>



**USGS-NPS Vegetation Mapping Program**  
**Badlands National Park**

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