

## Pinus ponderosa / Pseudoroegneria spicata Woodland

COMMON NAME	Ponderosa Pine / Bluebunch Wheatgrass Woodland
SYNONYM	Ponderosa Pine / Bluebunch Wheatgrass Woodland
PHYSIOGNOMIC CLASS	Woodland (II)
PHYSIOGNOMIC SUBCLASS	Evergreen woodland (II.A)
PHYSIOGNOMIC GROUP	Temperate or subpolar needle-leaved evergreen woodland (II.A.4)
PHYSIOGNOMIC SUBGROUP	Natural/semi-natural (II.A.4.N)
FORMATION	Rounded-crowned temperate or subpolar needle-leaved evergreen woodland (II.A.4.N.a.)
ALLIANCE	<i>Pinus ponderosa</i> Woodland Alliance

CLASSIFICATION CONFIDENCE LEVEL 1

USFWS WETLAND SYSTEM Upland

### RANGE

#### *Globally*

This community is found in eastern Washington, eastern Oregon, western, central and southeastern Montana, northern Wyoming, western South Dakota, and southwestern North Dakota. It has not yet been identified in Idaho.

#### *Devils Tower National Monument*

This community was found only in two locations: on slopes north and east of Devils Tower. The stand north of the Tower was too small to be sampled or mapped.

### ENVIRONMENTAL DESCRIPTION

#### *Globally*

This community occurs mostly on steep southerly aspects. It is found on coarse soils derived from sandstone, porcellanate, or limestone (Thilenius et al. 1995). These include sandy alluvium, gravelly or sandy till, and loams with high stone content. Rock and mineral soil are commonly exposed.

#### *Devils Tower National Monument*

The single sampled stand of this community was found on a relatively-steep northerly slope underlain by sandstone.

### MOST ABUNDANT SPECIES

#### *Globally*

<u>Strata</u>	<u>Species</u>
Tree canopy	<i>Pinus ponderosa</i>
Herbaceous	<i>Pseudoroegneria spicata</i> , <i>Carex filifolia</i> , <i>Carex inops</i> ssp. <i>heliophila</i> , <i>Stipa comata</i>

#### *Devils Tower National Monument*

<u>Strata</u>	<u>Species</u>
Tree canopy	<i>Pinus ponderosa</i>
Subcanopy	<i>Pinus ponderosa</i>
Herbaceous	<i>Pseudoroegneria spicata</i>

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DIAGNOSTIC SPECIES

*Globally*

*Pinus ponderosa*, *Pseudoroegneria spicata*, *Carex* spp., *Festuca idahoensis*, *Balsamorhiza sagittata*, *Koeleria macrantha*

*Devils Tower National Monument*

*Pinus ponderosa*, *Pseudoroegneria spicata*

VEGETATION DESCRIPTION

*Globally*

This community is dominated by the tree and herbaceous strata. On three stands in the eastern portion of its range, Hansen and Hoffman (1988) found that total cover by understory strata was 55%. Shrubs made up only 1.3% of this total. *Pinus ponderosa* is often the only tree in the overstory. The tree coverage can vary from open to moderately closed. In northeastern Wyoming, most of the trees were less than 15 m tall and 60 cm dbh (Thilenius et al. 1995). The herbaceous stratum is also open to moderately dense. *Pseudoroegneria spicata* is the dominant species. Other species that are often found in the central and eastern portions of its range are *Achillea millefolium* var. *occidentalis*, *Carex filifolia*, *Carex inops* ssp. *heliophila*, *Koeleria macrantha*, and *Stipa comata*. In the western portion of the range of this community *Festuca idahoensis* may be present (Daubenmire 1952). When shrubs are present they typically include *Rhus aromatica* and, especially on sandy soils, *Chrysothamnus nauseosus*.

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This vegetation type is dominated by *Pinus ponderosa* in both the canopy and subcanopy. In the single stand sampled, canopy coverage was estimated at 5 to 25%; subcanopy coverage was estimated at 25 to 50%. *Pseudoroegneria spicata* dominates the herbaceous stratum, with coverage estimated at 5 to 25%. A variety of other graminoids were found, but none had coverages greater than 1%.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G4

RANK JUSTIFICATION

DATABASE CODE CEGL000865

COMMENTS

*Globally*

Periodic fires are probably important in maintaining the open grassland understory of this type.

The stands used to document the *Pinus ponderosa* / *Pseudoroegneria spicata* Habitat Type described by Hansen and Hoffman (1988) and Hoffman and Alexander (1976) had very high basal area and densities for a woodland, possibly due to their sampling procedure. The dense structure may have affected the floristic makeup of the stands and made the list of dominant species a poor reflection of the community as a whole.

REFERENCES

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- Hansen, P. L. and G. R. Hoffman. 1988. The vegetation of the Grand River/ Cedar River, Sioux, and Ashland Districts of the Custer National Forest: a habitat type classification. General Technical Report RM-157, USDA Forest Service, Rocky Mountain Forest and Range Experiment Station, Fort Collins, CO. 68 p.

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