

Salix exigua Shrubland [Provisional]

COMMON NAME	Narrow-Leaf Willow Shrubland
SYNONYM	Sandbar Willow Shrubland
PHYSIOGNOMIC CLASS	Shrubland (III)
PHYSIOGNOMIC SUBCLASS	Deciduous shrubland (III.B)
PHYSIOGNOMIC GROUP	Cold-deciduous shrubland (III.B.2)
PHYSIOGNOMIC SUBGROUP	Natural/semi-natural (III.B.2.N)
FORMATION	Temporarily flooded cold-deciduous shrubland (III.B.2.N.d.)
ALLIANCE	<i>Salix exigua</i> Temporarily Flooded Shrubland Alliance

CLASSIFICATION CONFIDENCE LEVEL 1

USFWS WETLAND SYSTEM Palustrine

RANGE

Globally

This community is found along rivers and streams in Oregon, Washington, Idaho, Montana, southern Manitoba, Wyoming, Colorado, Oklahoma, Nebraska, South Dakota. It probably extends into North Dakota.

Agate Fossil Beds National Monument

This community occurs along the Niobrara River primarily in the eastern half of the Monument.

ENVIRONMENTAL DESCRIPTION

Globally

This community is found near lakes and streams on recently deposited or disturbed alluvial material. The parent material is alluvial sand, although silt, clay, or gravel may be present. Soil development is poor to absent (Steinauer 1989).

Agate Fossil Beds National Monument

This community occurs on lower floodplain terraces, usually bordering the river. Soils are sandy loams overlying sand and are poorly to somewhat poorly drained.

MOST ABUNDANT SPECIES

Globally

<u>Stratum</u>	<u>Species</u>
Shrub	<i>Salix exigua</i>
Herbaceous	<i>Carex pellita</i> , <i>Scirpus americanus</i>

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<u>Stratum</u>	<u>Species</u>
Shrub	<i>Salix exigua</i> var. <i>interior</i> , <i>Salix lutea</i> var. <i>famelica</i> , <i>Ribes americanum</i>
Herbaceous	<i>Agrostis stolonifera</i> , <i>Carex pellita</i> , <i>Juncus balticus</i>

DIAGNOSTIC SPECIES

Globally

Salix exigua

USGS-NPS Vegetation Mapping Program
Agate Fossil Beds National Monument

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Echinocystis lobata, Ribes americanum, Salix exigua var. *interior, S. lutea* var. *famelica*

VEGETATION DESCRIPTION

Globally

The dominant vegetation in this community is short shrubs, usually not more than 4 meters tall. The most common of these is *Salix exigua*. *Salix irrorata* and saplings of *Populus deltoides* or *S. amygdaloides* are also frequently found in the shrub layer. This stratum can have moderate to high stem density in the community as a whole (Bellah and Hulbert 1974). The species in the shrub layer do not form a closed canopy, allowing significant light to reach the groundlayer. There are often patches where the shrub layer is absent. The herbaceous cover is sparse to moderate. Older stands and places with less competition from the shrubs have greater herbaceous cover (Wilson 1970). The composition of the herbaceous layer can vary greatly. Species that are often found in this community are *Carex pellita*, *Cenchrus longispinus*, *Polygonatum lapathifolium*, *Scirpus americanus*, *Triglochin maritimum*, and *Xanthium strumarium*.

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This community is dominated by a dense to usually slightly open stand of *Salix exigua* 1-2 m tall, with *Salix lutea* sometimes present in older stands. A sparse short-shrub underlayer of *Ribes americanum* is sometimes additionally present in these older stands. The herbaceous understory is often fairly dense and consists primarily of graminoids common to *Juncus balticus* Herbaceous Vegetation, including *Agrostis stolonifera*, *Carex pellita*, *Juncus balticus*, *Leersia oryzoides*, *Muhlenbergia mexicana*, and *Scirpus pungens*. Forb species frequently present include *Bidens frondosa*, *Cicuta maculata*, *Epilobium leptophyllum*, *Lycopus americanus*, and *Mentha arvensis*. Species diversity is relatively high.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G5Q

RANK JUSTIFICATION

DATABASE CODE C EGL001197

COMMENTS

Agate Fossil Beds National Monument

This community is best developed near the eastern end of the Monument. No occurrences were seen on grazed lands bordering the Monument.

REFERENCES

Bellah, R. G. and L. C. Hulbert. 1974. Forest succession on the Republican River floodplain in Clay County, Kansas. *The Southwestern Naturalist* 19(2):155-166.

Steinauer, G. 1989. Characterization of the natural communities of Nebraska. Pp. 103-141, *in* M. Clausen, M. Fritz, and G. Steinauer. *The Nebraska Natural Heritage Program, Two Year Progress Report, Appendix D*. Lincoln, NE.

Wilson, R. E. 1970. Succession in stands of *Populus deltoides* along the Missouri River in southeastern South Dakota. *American Midland Naturalist* 83(2):330-342.