

Salix exigua Shrubland

COMMON NAME	Sandbar willow Shrubland
SYNONYM	Sandbar Shrubland
TNC SYSTEM	Terrestrial
PHYSIOGNOMIC CLASS	Shrubland
PHYSIOGNOMIC SUBCLASS	Deciduous shrubland
PHYSIOGNOMIC GROUP	Cold-deciduous shrubland
FORMATION	Temporarily flooded cold-deciduous shrubland
ALLIANCE	<i>Salix exigua</i> Temporarily Flooded Shrubland Alliance

CLASSIFICATION CONFIDENCE LEVEL 2

RANGE

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

Scotts Bluff National Monument

This community is found along the margins of the North Platte River and in isolated areas in the first floodplain terrace.

ENVIRONMENTAL DESCRIPTION

Globally

This community is found 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.

Scotts Bluff National Monument

This community occurs on recently deposited alluvial sands along shores of the river. A small area just below Scotts Seep may also be placed in this community.

USFWS WETLAND SYSTEM Palustrine

MOST ABUNDANT SPECIES

Globally

<u>Strata</u>	<u>Species</u>
Short shrub	<i>Salix exigua</i>
Herbaceous	<i>Cenchrus longispinus</i> , <i>Polygonatum lapathifolium</i> , <i>Scirpus americanus</i> , <i>Triglochin maritimum</i> , <i>Xanthium strumarium</i>

USGS-NPS Vegetation Mapping Program
Scotts Bluff National Monument

Scotts Bluff National Monument

Strata Species

Short shrub *Elaeagnus angustifolia*, *Populus deltoides*, *Salix amygdaloides*, *Salix exigua*

Herbaceous *Phalaris arundinacea*, *Spartina pectinata*

DIAGNOSTIC SPECIES

Globally

Salix exigua, *Polygonatum lapathifolium*

Scotts Bluff National Monument

Salix exigua

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. 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. The composition of the herbaceous layer can vary greatly. Species that are often found in this community are *Cenchrus longispinus*, *Polygonatum lapathifolium*, *Scirpus americanus*, *Triglochin maritimum*, and *Xanthium strumarium*.

Scotts Bluff National Monument

The overall physiognomy and the shrub layer composition are similar to the general global description. The shrub layer is dominated by *Salix exigua* with small *Populus deltoides* scattered throughout. *Elaeagnus angustifolia* is common in some places. The herbaceous layer is nearly absent (where recently flooded) to moderately developed. *Phalaris arundinacea* is the most common herbaceous species. Other herbaceous species include *Carex* spp., *Pascopyrum smithii*, *Poa pratensis*, and *Spartina pectinata*. Some exotic forbs, such as *Lepidium latifolium*, are locally common.

OTHER NOTEWORTHY SPECIES Information not available.

CONSERVATION RANK G5

RANK JUSTIFICATION

This is a globally common community on sandbars and newly deposited alluvium.

COMMENTS

This community is a primary or early secondary community and requires floods to create new areas on which it can develop. Once established, this community may not exist for more than 10-20 years before it is replaced by a later seral stage.

Both globally and at Scotts Bluff NM, this community intergrades with the Riverine Sand Flats-Bar Sparse Vegetation.

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.

The Nature Conservancy (TNC). 1991a. Nebraska State Community Abstract , Sandbar. Midwest Regional Office, Minneapolis, MN.

The Nature Conservancy (TNC). 1991b. North Dakota , Pioneer Riparian Community. Midwest Regional Office, Minneapolis, MN.

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.