

Many-Fruited Sedge – Bladderwort Poor Fen



System: Palustrine

Subsystem: Herbaceous

PA Ecological Group(s): Peatland Wetland

Global Rank: GNR

State Rank: S2

General Description

These are peatlands or “poor fens” influenced to some degree by groundwater and surface water enrichment (pH 5-5.5). They are dominated by sedges, of which many-fruited sedge (*Carex lasiocarpa*) is the most characteristic. Flat-leaved bladderwort (*Utricularia intermedia*) is also characteristic. Other species commonly found in these systems include the sedge *Carex lacustris*, leatherleaf (*Chamaedaphne calyculata*), marsh cinquefoil (*Potentilla palustris*), bogbean (*Menyanthes trifoliata*), marsh St. John’s-wort (*Triadenum virginicum*), tussock sedge (*Carex stricta*), meadow-sweet (*Spiraea latifolia*), common cat-tail (*Typha latifolia*), bluejoint (*Calamagrostis canadensis*), marsh fern (*Thelypteris palustris*), and cranberry (*Vaccinium macrocarpon*).

Rank Justification

Critically imperiled in the nation or state because of extreme rarity (often 5 or fewer occurrences) or because of some factor(s) such as very steep declines making it especially vulnerable to extirpation from the state.

Identification

- Dominated by many-fruited sedge (*Carex lasiocarpa*)
- Has a floating mat comprised of the roots of sedges

- Typically there is open water adjacent to the fen

Characteristic Species

Shrubs

- [Leatherleaf \(*Chamaedaphne calyculata* var. *angustifolia*\)](#)
- [Sweet-gale \(*Myrica gale*\)](#)

Herbs

- [Many-fruited sedge \(*Carex lasiocarpa*\)](#)
- [Sedge \(*Carex lacustris*\)](#)
- [Flat-leaved bladderwort \(*Utricularia intermedia*\)](#)
- [Twig-rush \(*Cladium mariscoides*\)](#)

International Vegetation Classification Associations:

[Wiregrass Sedge Shore Fen](#) (CEGL005229)

NatureServe Ecological Systems:

[Laurentian-Acadian Alkaline Fen](#) (CES201.585)

Origin of Concept

Fike, J. 1999. Terrestrial and palustrine plant communities of Pennsylvania. Pennsylvania Natural Diversity Inventory. Harrisburg, PA. 86 pp.

Pennsylvania Community Code

HU : Many Fruited Sedge – Bladderwort Peatland

Similar Ecological Communities

Many-Fruited Sedge – Bladderwort Poor Fen differs from the Sphagnum – Beak-rush Peatland in that this community is characterized by a lack of leatherleaf (*Chamaedaphne calyculata*) and many-fruited sedge (*Carex lasiocarpa*) and the Sphagnum – Beak-rush Peatland lacks the groundwater enrichment that characterizes this type. This type lacks the heavy sphagnum layer that characterizes the Sphagnum – Beak-rush Peatland.

Fike Crosswalk

Many fruited sedge - bladderwort peatland

Conservation Value

Several rare plants are known to occur in this community type including many-fruited sedge (*Carex lasiocarpa*) and flat-leaved bladderwort (*Utricularia intermedia*). This community serves as foraging habitat for waterfowl, swallows, rails, and bats, as well as habitat for many species of dragonflies and damselflies.

Threats

Beaver are likely the greatest threat to this type and ironically may be the cause of some of the occurrences as well. Exotic invasive plants such as common reed (*Phragmites australis* ssp. *australis*) and purple loosestrife (*Lythrum salicaria*) may become established as well as aggressive native species like common cat-tail (*Typha latifolia*).

Management

Where disturbances are unavoidable, the wetland should be monitored for changes in vegetation, especially invasive species.

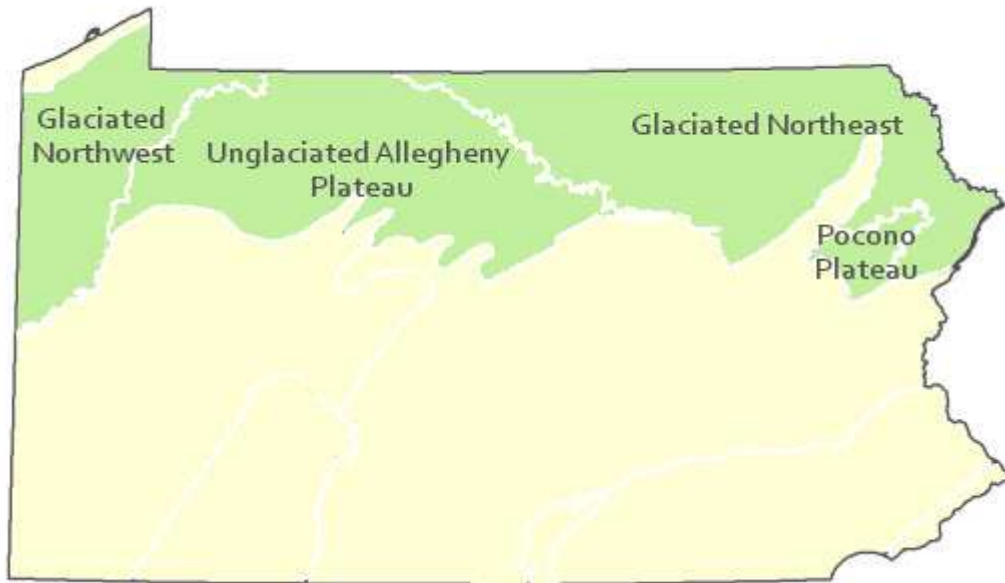
Research Needs

Additional research is needed to document the environmental drivers for the origin and persistence of the community type.

Trends

There are insufficient data to assess whether this community is increasing or decreasing in abundance. Beaver activity and resulting hydrologic alterations to some wetlands may favor the formation of the community type, but trend data are lacking.

Range Map



Pennsylvania Range

Glaciated Northeast, Glaciated Northwest, Pocono Plateau, Unglaciaded Allegheny Plateau.

Global Distribution

Connecticut, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont. This community also extends into Quebec.

References

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