

Sandy Lake-bottom

State Rank S5

Community Description

In this shallow water vegetation type almost all of the plant growth is underwater, with only the flowering portions of the plants above water. The most typical species, pipewort and water lobelia, grow as rosettes on the substrate below the water surface. Associated species may be rosette plants or submerged plants growing in the water column (e.g., leafless water-milfoil). Water-shield, a plant with leaves that float on the surface, may be abundant in patches. Water-lilies and pickerelweed may be present, but at low cover. Vegetation cover ranges from sparse to extensive.

Soil and Site Characteristics

This community type can be found in quiet waters of lakes, ponds, streams, and rivers; sites are usually shallow (depths 0.2-1.1 m). The lake bottom substrate almost always has a predominant mineral soil component, rather than muck.

Diagnostics

The most abundant species are those that grow as rosettes on the lake bottom, especially pipewort and water lobelia. Floating leaved plants are absent or very low in cover.



Pipewort

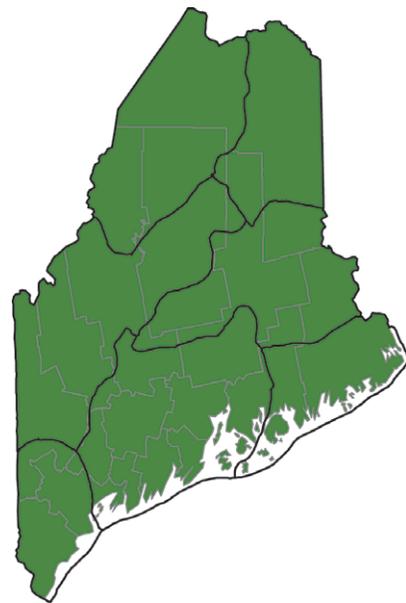
Similar Types

Water-lily - Macrophyte Aquatic Bed vegetation and Pickerelweed - Macrophyte Aquatic Bed vegetation can share many species with this type, but these community types are dominated by floating leaved plants or emergent plants, respectively.

Conservation, Wildlife, and Management Considerations

This aquatic community type is widespread in Maine. It can be found in the quieter portions of streams and rivers as well as in lakeshores and pondshores. It provides habitat for a variety of water-dependent animals. Many examples occur on public lands and private conservation

Location Map



Community is known from this Ecoregion
Community may occur in this Ecoregion
Bailey's Ecoregion
County



Pipewort – Water Lobelia Aquatic Bed

lands; however, because the type is so common it is not always documented. The major threats to this community are water quality degradation from excess nutrients, damage from boat wakes, and the spread of invasive aquatic plants, such as Eurasian water-milfoil and variable water-milfoil.

These aquatic beds, especially where they contain floating-leaved plants like water-shield, may provide habitat for damselflies such as the rare scarlet bluet, which seems to prefer acidic sandy-bottomed habitats with water-shield and rushes. Alkaline ponds with aquatic vegetation may support many of the same wildlife species found in more acidic aquatic communities such as Water-lily Macrophyte Aquatic Bed or Pickerelweed - Macrophyte Aquatic Bed. It is unclear whether any wildlife species prefer the more alkaline conditions that this community provides.

Characteristic Plants

These plants are frequently found in this community type. Those with an asterisk are often diagnostic of this community.

Herb

- Creeping spearwort
- Pipewort*
- Water lobelia*
- Water-shield*

Associated Rare Plants

- Acadian quillwort
- Prototype quillwort
- Shore quillwort
- Spotted pondweed
- Water stargrass

Associated Rare Animals

- Scarlet bluet

Distribution

Statewide; extending southward and westward from Maine, and presumably into Canada.

Landscape Pattern: Small Patch, linear.

Examples on Conservation Lands You Can Visit

- Chemo Pond, Penobscot Experimental Forest – Penobscot Co.
- Kidney Pond, Baxter State Park – Piscataquis Co.
- Pepperpot Pond, Richardson Lake Public Lands – Oxford Co.
- Range Ponds State Park – Androscoggin Co.



Water-shield