

SOUTH TWIN LAKE

- Agalinis tenuifolia* (Vahl) Raf., **common agalinis**. c=6. Shore. 1995.
- Andromeda glaucophylla* Link, **bog-rosemary**. c=10. Bog. 1981.
- Aronia melanocarpa* (Michx.) Ell., **black chokeberry**. c=7. Shore and bog margin. 2003.
- Asclepias incarnata* L., **swamp milkweed**. c=5. Shore. 2003.
- Aster lanceolatus* Willd., **white paniced aster**. c=4. Shore. 2003.
- Bidens cernuus* L, **nodding beggar-ticks**. c=4. Shore. 2003.
- Calamagrostis canadensis* (Michx.) Beauv., **blue-joint grass**. c=5. Shore. 1965, 2003.
- Carex oligosperma* Michx., **few-seeded sedge**. c=10. Bog. 2003.
- Carex pellita* Muhl., **woolly sedge**. c=4. Shore. 2003.
- Chamaedaphne calyculata* (L.) Moench, **leather-leaf**. c=9. Bog. 1981, 2003.
- Cicuta bulbifera* L, **bulblet water-hemlock**. c=7. Shore. 1988, 2003.
- Cladium mariscoides* (Muhl.) Torrey, **twig-rush**. c=10. Shore and emergent. 1977, 1988, 2003.
- Cyperus erythrorhizos* Muhl., **red-root sedge**. c=3. Shore. 1998.
- Drosera rotundifolia* L., **round-leaved sundew**. c=7. Bog. 1974, 2003.
- Dryopteris cristata* (L.) Gray, **crested shield-fern**. c=7. Bog margin. 2003.
- Eleocharis acicularis* (L.) R. & S., **needle spikerush**. c=5. Submersed, emergent, and on shore. 1977, 1981, 1995, 2003.
- Eleocharis obtusa* (Willd.) Schultes, **blunt spikerush**. c=3. Shore. 1977.
- Eriocaulon aquaticum* (Hill) Druce, **white buttons**. c=9. Submersed, emersed, and on shore. 2003.
- Eriophorum vaginatum* L., **tussock cottongrass**. c=10. Bog. 1965.
- Eriophorum virginicum* L., **rusty cottongrass**. c=10. Bog. 1984, 2003.
- Fimbristylis autumnalis* (L.) R. & S., **slender fringe-rush**. c=8. Shore. 1977, 1988.
- Glyceria borealis* (Nash) Batch., **northern mannagrass**. c=8. Rooted with floating leaves, or emergent. 1965, 2003.
- Glyceria canadensis* (Michx.) Trin., **rattlesnake mannagrass**. c=7. Shore. 1965, 2003.
- Hypericum boreale* (Britton) Bickn., **northern St. John's-wort**. c=6. Submersed and emergent. 2003.

Hypericum majus (Gray) Britton, **large St. John's-wort**. c=5. Shore. 1977.

Ilex mucronata (L.) PSA., **mountain holly**. c=8. Bog margin. 1979, 2003.

Ilex verticillata (L.) Gray, **winterberry holly**. c=7. Bog margin. 2003.

Isoetes echinospora Dur., **stiff quillwort**. c=8. Submersed. 1977.

Juncus effusus L, **common rush**. c=4. Shore. 1965.

Juncus pelocarpus E. Mey., **brown-fruited rush**. c=8. Submersed, emergent, and on shore. 1977, 1981, 2003.

Juncus tenuis Willd., **path rush**. c=1. Shore. 1965.

Larix laricina (DuRoi) K.Koch, **tamarack**. c=8. Bog. 2003.

Ledum groenlandicum Oeder, **Labrador-tea**. c=8. Bog. 2003.

Lycopus uniflorus Michx., **northern water-horehound**. c=4. Shore. 1981.

Lysimachis terrestris (L.) BSP., **swamp candles**. c=7. Emergent and in bog. 1977.

Myriophyllum farwellii Morong, **Farwell's water-milfoil**. c=9. SPECIAL CONCERN. Submersed. 1981, 2003.

Myriophyllum tenellum Bigelow, **dwarf water-milfoil**. c=10. Submersed and on shore. 1977, 1988, 1996, 2003.

Osmunda cinnamomea L., **cinnamon fern**. c=7. Bog margin. 2003.

Osmunda regalis L., **royal fern**. c=7. Shore and bog margin. 2003.

Phalaris arundinacea L., **reed canary-grass**. alien; c=0. Shore. 1965, 2003.

Picea mariana (Miller) BSP., **black spruce**. c=8. Bog. 2003.

Poa palustris L., **marsh bluegrass**. c=5. Shore. 1965, 2003.

Polygonum amphibium L., **amphibious smartweed**. c=5. Shore and rooted with floating leaves. 2003.

Potamogeton bicupulatus Fern., **threadleaf pondweed**. c=9. Submersed. 1977, 1981, 1996, 2003.

Potamogeton spirillus Tuck., **snail-seed pondweed**. c=8. Submersed. 2003.

Potamogeton vaseyi Robbins, **Vasey's pondweed**. c=10. SPECIAL CONCERN. Submersed. 2003.

Sagittaria cristata Engelm., **crested arrowhead**. c=9. Submersed and emergent. 2003.

Sagittaria latifolia Willd., **broadleaved arrowhead**. c=3. Emergent and on shore. 1958, 2003.

Schoenoplectus smithii (Gray) Sojak, **Smith's bulrush**. c=10. Emergent and on shore. 1977.

Schoenoplectus subterminalis (Torrey) Sojak, **limp bulrush**. c=9. Submersed and emergent. 1981, 2003.

Scirpus atrocinctus Fern., **black-girdled woolgrass**. c=7. Shore. 1965.

Scirpus cyperinus (L.) Kunth, **common woolgrass**. c=4. Shore. 1958.

Spartina pectinata Link., **prairie cord-grass**. c=5. Shore. 1977, 2003.

Sphagnum spp., **peat mosses**. [mosses]. No c values given. Bog. 2003.

Spiraea alba DuRoi, **meadowsweet**. c=4. Shore. 2003.

Spiraea tomentosa L., **steplebush**. c=6. Bog margin. 2003.

Triadenum fraseri (Spach) Gleason, **bog St. John's-wort**. c=8. Bog margin. 1981.

Typha latifolia L., **broad-leaved cattail**. c=1. Shore. 2003.

Utricularia cornuta Michx., **naked bladderwort**. c=10. Emergent and on shore. 1977.

Utricularia resupinata B.D.Greene, **violet bladderwort**. c=9. SPECIAL CONCERN. Emergent. 1988, 2003.

Vaccinium macrocarpon Aiton, **large cranberry**. c=9. Bog. 1981.

There are **60** species of vascular plants, plus several species of peatmoss, that have been found in South Twin Lake, on shore, or in the bog on the northeast shore. This is above average for Portage County lakes. The average index of conservatism (**c** value) of the 60 species of vascular plants is **6.8**, which is above average. The floristic quality index, adding 3 points for the three special concern species, is **55.7**, which is also above average for Portage County lakes.

South Twin Lake holds a rich and unusual aquatic flora. The c value of 6.8 ties Becker Lake for the highest rating in Portage County and the floristic quality index of 55.7 places it second highest of the 31 lakes for which this index has been calculated.

Many of the plants of South Twin Lake are characteristic of soft-water lakes of northernmost Wisconsin, and rarely occur as far south as Portage County. South Twin Lake is the only known location in Portage County for dwarf water-milfoil, threadleaf

pondweed, and naked bladderwort; and one of two known locations for twig-rush, slender fringe-rush, stiff (spiny-spored) quillwort, Farwell's milfoil, Vasey's pondweed, limp bulrush, and violet bladderwort. Three of these species - Farwell's milfoil, Vasey's pondweed, and violet bladderwort - are rare throughout Wisconsin and thus are on the state list of Special Concern species.

Most of the submersed and emergent species have been found in shallow water throughout the lake, but are best represented near the east shore. Only during years of low water when parts of the shallow water zone are exposed do several normally submersed species, such as dwarf milfoil, limp bulrush, needle spikerush, white buttons, northern St. John's-wort, brown-fruited rush, and naked bladderwort flower and produce seed. This newly exposed lake bottom is vulnerable to invasion by weedy annuals which could easily displace these rare native plants. Therefore, native vegetation should be maintained on the shoreline and monitored for the appearance of alien species.

The small bog on the northeastern shore appears to be an intact high-quality bog, but has received little study prior to 2003. It needs to be surveyed for rare species.

Although most of the rare or notable species of this lake were still present in 2003, many of them appear to be declining in abundance. Unlike the observations made between 1968 and around 2000, filamentous algae, silt, and suspended material are becoming problems. Most of the rare or notable plants of South Twin Lake require clear soft water and low nutrient levels for their survival.