CHECKLIST OF VASCULAR AQUATIC PLANTS OF TENNESSEE
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The present list has been compiled as a phase of the state flora project and incidental to work on aquatic vegetation of the Cumberland Plateau done by Robinson for the State Game and Fish Commission, which also resulted in a thesis in botany at The University of Tennessee (Robinson, 1956).

The species included are those which grow partially or entirely covered by water. Many of the plants listed are typically riparian species, and may be found either in the water or in moist terrestrial habitats. The distributional information cited for these species is that for specimens collected from aquatic habitats.

Distribution is cited by counties and unless otherwise stated is based on specimens in the State Herbarium at The University of Tennessee. References to other sources of distributional data are given in the accompanying bibliography. Names follow the usage of Fernald (1950) in Gray's Manual of Botany, eighth edition. Arrangement is alphabetical by families and within families.

While it is likely that most aquatic species which occur in the state are represented in the checklist, the distribution data are far from complete. This is due partly to very local distribution in the typically well-drained topography of most of the state, but even more due to absence of adequate collections from large portions of the state. The part of the Cumberland Plateau from Anderson County northward and all of Middle Tennessee except the southeastern and northwestern Highland Rim are very poorly represented in available collections, and there are few collections from the southern half of West Tennessee.

It is hoped that publication of this list in its present incomplete form will prove useful to those working with aquatic plants in the region, and will stimulate further collections and contributions toward a better understanding of the aquatic vegetation of Tennessee.

ACANTHACEAE

Justicia americana (L.) Vahl — Bedford, Dickson, Grainger, Humphreys, Marion, Shelby, Union and Wayne. (Listed by Robinson from Cumberland and Fentress.)

Contribution from the Botanical Laboratory, The University of Tennessee, N. Ser. 186.
ALISMATAEAE

Aliisma subcordatum Raf. — Carter, Cocke, Hawkins, Lake, Marion, Montgomery, Obion, Sullivan, Union and Warren. (Listed by Robinson from Cumberland and Grundy.)

Echinodorus cordifolius (L.) Griseb.—Davidson, Lake, Obion and Shelby.

Lephotocarpus calycinus (Engelm.) J. G. Sm. — Montgomery.

Sagittaria australis (J. G. Sm.) Small — Benton, Cheatham, Cumberland and Montgomery. (Listed by Robinson from Fentress.)

S. engelmanniana J. G. Sm. — Anderson.

S. falcata Pursh — Cumberland.


S. latifolia var. obtusa (Muhl.) Wieg. — (Listed by Eyles and Eyles from Lake and Obion.)

S. platyphylla (Engelm.) J. G. Sm. — Lake and Obion.

S. rigida Pursh — (Credited to Tennessee by Fernald.)

ARACEAE

Acorus calamus L. — Johnson, Knox, Stewart and Tipton.

Orontium aquaticum L. — Johnson, Morgan and Washington. (Listed by Robinson from Fentress.)

Pellanda virginica (L.) Schott and Endl. — Reported by Gattinger as scattered over the state.

CALLITRICHACEAE

Callitriche deflexa A. Br. — Coffee.

C. heterophylla Pursh — Benton, Bledsoe, Carroll, Carter, Cumberland, Dyer, Franklin, Gibson, Hardin, Johnson, Knox, Lawrence, Madison, Maury, McNairy, Roane and Warren. (Listed by Gattinger from Davidson.)

CAMPANULACEAE

lobelia cardinalis L. — Benton, Carter, Fentress, Grundy, Hawkins, Morgan, Monroe, Polk, Tipton and Warren. (Listed by Robinson from Cumberland and Putnam.)

L. nuttallii R. & S. — Fentress and Morgan. (Listed by Robinson from Cumberland.)

CERATOPHYLLACEAE

Ceratophyllum demersum L. — Obion. (Listed by Eyles and Eyles from Lake.)

C. echinatum Gray — (Credited to Tennessee by Muenscher.)

CRUCIFERAE

Armoracia aquatica (Eat.) Wieg.— (Listed by Eyles and Eyles from Obion.)

Nasturtium officinale R. Br. — Anderson, Blount, Grainger, Hawkins, Knox, Lawrence, Lincoln, and Roane. (Listed by Robinson from Cumberland.)

CYPERACEAE

Carex comosa Boott — Montgomery. (Listed by Eyles and Eyles from Obion.)

C. decomposita Muhl. — Cocke and Lake. (Listed by Eyles and Eyles from Obion.)

C. lanuginosa Michx. — (Credited to Tennessee by Muenscher.)

C. leptalea Wahlenb. — Campbell, Carroll, Cheatham, Chester, Hardeman, Johnson and McNairy.
C. lacustris Willd. — Montgomery. (Listed by Eyles and Eyles from Dyer.)

Cyperus strigosus L. — Carter, Giles, Hardeman, Hickman, Knox Marion, Monroe, Roane and Shelby. (Listed by Robinson from Grundy.)

Duichichium arundinaceum (L.) Brit. — Chester, Cumberland, Henry, Johnson, Putnam and White. (Listed by Robinson from Fentress, Grundy and Morgan.)

Eleocharis acicularis (L.) R. & S. — Coffee, Franklin, Grundy, Lawrence and Warren. (Listed by Robinson from Cumberland and Putnam.)


E. equisetoides (Ell.) Torr. — Fentress and Putnam.

E. intermedia (Muhl.) Schultes — Grainger and Union.

E. microcarpa Torr. — Fentress, Sequatchie and Union.


E. quadrangulata (Michx.) R. & S. — Franklin and Grundy. (Listed by Robinson from Cumberland, Fentress and Putnam.)

E. smallii Britt. — Johnson and Sequatchie.

Rhynchospora alba (L.) Vahl — Johnson.

R. corniculata (Cam.) Gray — Grundy, Lauderdale and Marion.

R. globularis (Chapm.) Small — Bledsoe, Coffee, Fentress and Lincoln.

Sicrpus acutus Muhl. — (Credited to Tennessee by Muenchser.)


S. atrovirens Willd. — Benton, Cumberland, Grainger, Hawkins, Knox, Meigs, Montgomery, Roane, Sullivan and Union.

S. cyperinus (L.) Kunth — Hamilton and Knox.

S. koiololepis (Steu.) Gleason — Benton, Coffee, Cumberland, Fayette, Franklin, Henderson, Lauderdale, Lincoln, Shelby and Tipton.


S. purshianus Fern. — Putnam. (Listed by Robinson from Cumberland.)

S. rubricosus Fern. — Benton, Johnson, Roane and White.

S. smithii Gray — (Credited to Tennessee by Muenchser.)

S. validus Vahl — Campbell, Carter, Johnson, Roane and Unicoi. (Listed by Eyles and Eyles from Lake and Obion.)

DROSERACEAE

Drosera intermedia Hayne — Bledsoe, Fentress and Morgan.

ELATINACEAE

Elatine americana (Pursh) Arn. — (Credited to Tennessee by Muenchser.)

GENTIANACEAE

Bartonia paniculata (Michx.) Mush. — Fentress. (Listed by Svenson from Coffee and Grundy, by Jennison from Carroll.)

B. virginica (L.) BSP. — Coffee, Cumberland, Marion and Morgan. (Listed by Svenson from Franklin and Sequatchie.)

GRAMINEAE

Echinochloa walteri (Pursh) Nash — (Listed by Eyles and Eyles from Obion.)

G. grandis S. Wats. — (Credited to Tennessee by Muenscher.)
G. pallida (Torr.) Trim. — (Credited to Tennessee by Muenscher.)
G. septentrionalis Hitchc. — Franklin and Grainger.
G. striata (Lam.) Hitch. — Cumberland, Grainger, Johnson, Knox and Roane. (Listed by Eyles and Eyles from Lake and Obion.)
Leersia hexandra Sw. — Grundy, Hardeman, Hardin and Wayne.
L. lenticularis Michx. — (Listed by Steenis and Cottam from Lake and Obion.)
L. oryzoides (L.) Sw. — Cumberland, Johnson, Monroe, Polk and Roane. (Listed by Eyles and Eyles from Obion.)
L. virginica Willd. — Knox, Montgomery and Roane.
Panicum agrostoides Spreng. — Grundy.
Paspalum dissectum L. — (Credited to Tennessee by Muenscher.)
P. fluitans (Ell.) Kunth — (Credited to Tennessee by Muenscher.)
[Zizania aquatica L. — (Credited to Gibson by Gattinger, but the report is believed to be based on a misidentification.)]
Zizaniopsis miliacea (Michx.) Doll. and Aschers — Lake and Obion.

GUTTIFERAE

Hypericum boreale (Britt.) Bickn. — (Listed by Robinson from Cumberland, Fentress and Grundy.)

HALORAGACEAE

Myriophyllum brasiliense Camb. — Franklin, Monroe, Perry and Sullivan. (Listed by Robinson from Cumberland, Fentress and Grundy.)
M. heterophyllum Michx. — (Listed by Gattinger from Coffee as M. verticillatum, by Svenson from Coffee.)
M. humile (Raf.) Morong — Coffee and Grundy. (Listed by Robinson from Cumberland and Morgan.)
M. pinnatum (Walt.) BSP. — (Listed by Gattinger from Haywood.)
M. scabratum Michx. (Listed by Svenson from Franklin.)
Proserpinaca palustris L. — Coffee, Cumberland, Grundy, Knox, Marion, Montgomery and Putnam. (Listed by Robinson from Morgan.)
P. pectinata Lam. — Fentress and Hamilton. (Listed by Gattinger from Coffee, by Robinson from Cumberland, by Svenson from Coffee and Van Buren.)

HYDROCHARITACEAE

Elodea canadensis Michx. — Lake, Montgomery and Sullivan. (Listed by Eyles and Eyles from Obion.)
E. densa (Planch.) Caspary — Chester and Knox, an introduced species.
E. nuttallii (Planch.) St. John — Lake.
Linnobiurn spongia (Bose) Steud. — Lake and Obion.
Vallisneria americana Michx. — Cumberland and Marion. (Reported by Davis from Lake and Obion, by Robinson from Morgan.)

ISOETACEAE

Isoetes butleri Engelm. — Davidson and Wilson.
I. engelmannii A. Br. — Cumberland, Grundy, Johnson, Marion, Morgan, Sullivan and VanBuren.

JUNCACEAE

Juncus acuminatus Michx. — Scattered over the state.
Juncus canadensis Gray — Benton, Blount, Cheatham, Cumberland, Davidson, Franklin, Grundy, Morgan, Putnam and White.
Juncus debilis Gray – Scattered over the state.
Juncus effusus L. – Scattered over the state.
Juncus marginatus Rostk. – Scattered over the state.
Juncus repens Michx. – Coffee, Cumberland, Fentress, Grundy and Putnam.

Labiatae

Lycaenops virginicus L. – Fentress, Grainger, Lake, Marion, Polk and Roane. (Listed by Robinson from Morgan.)

Lemnaceae

Lemna minor L. – Coffee, Lake, Lauderdale and Obion.

L. perpusilla Torr. – Lake, Maury, and Obion. (Listed by Gattinger from Davidson.)

L. trisulca L. – (Reported by Davis from Lake and Obion.)

L. valdiviana Phil. – Maury and Shelby.

Spirodea oligorhiza (Kurtz) Hegelm. – Haywood. (Listed by Eyles and Eyles from Lake and Obion.)

S. polyrrhiza (L.) Schleid. – Humphreys, Maury, Obion and Tipton.

Wolfia columbiana Karst. – Lake and Obion. (Listed by Gattinger from Davidson.)

Wolfiella floridana (J. D. Sm.) C. H. Thompson – (Listed by Eyles and Eyles from Lake and Obion.)

Lentibulariaceae

Utricularia biflora Lam. – (Listed by Gattinger from Carroll, by Davis from Lake and Obion.)

U. gibba L. – (Listed by Gattinger from Hamilton, by Robinson from Morgan, by Svenson from Coffee and Warren.)

U. inflata Walt. – (Listed by Gattinger from Madison.)

U. subulata L. – Fentress.

U. vulgaris L. – Obion.

Lythraceae

Decodon verticillatus (L.) Ell. – Lake, Obion and Warren.

Melastomataceae

Rhynia virginica L. – Scattered over central and western parts of the state.

Naajadaceae

Najas flexilis (Willd.) R. & S. – Lake and Obion. (Listed by Robinson from Grundy.)

N. gracillima (A. Br.) Morong – Grundy, Hardeman.

N. minor Allioni – (Listed by Robinson from Grundy.)

N. guadalupensis (Spreng.) Magnus – (Listed by Eyles and Eyles from Lake and Obion.)

Nymphaeaceae

Brasenia schreberi Gmel. – Anderson, Henry and Putnam. (Listed by Gattinger from Sumner, by Eyles and Eyles from Obion.)

Cabomba caroliniana Gray – Obion and Weakley. (Listed by Eyles and Eyles from Lake.)

Nelumbo lutea (Willd.) Pers. – Jefferson and Obion. (Listed by Eyles and Eyles from Lake.)

Nuphar advena (Ait.) Ait. f. – Carroll, Cocke, Obion and Sevier. (Listed by Eyles and Eyles from Lake, by Robinson from Cumberland.)
Nymphaea odorata Ait. — Carroll, Gibson, Obion, Sevier and Weakley. (Listed by Eyles and Eyles from Lake.)

ONAGRACEAE

Jussiæa decurrens (Walt.) DC. — Benton, Blount, Lauderdale and Roane. (Listed by Eyles and Eyles from Obion.)

J. leptocarpa Nutt. — (Listed by Eyles and Eyles from Obion.)

J. repens L. — Fayette, Haywood, Lake, Lauderdale and Obion. (Listed by Gattinger from Davidson.)

Ludwigia alternifolia L. — Benton, Cumberland, Hawkins.

L. glandulosa Walt. — Crockett, Hardeman, Obion, Shelby and White.

L. palustris (L.) Ell. — Scattered over most of the state.

L. sphaeroarpa Ell. — Grainger.

OSMUNDACEAE

Osmunda regalis L. — Scattered over most of the state.

PODOCOTILACEAE

Podostemum ceratophyllum Michx. — Blount, Coffee, Grundy, McMinn, and VanBuren. (Listed by Robinson from Cumberland and Morgan.)

POLYGONACEAE

Polygonum coccineum Muhl. — (Listed by Steenis and Cottam and by Davis from Lake and Obion.)

P. hydrobiperoides Michx. — (Listed by Steenis and Cottam from Lake and Obion.)

Rumex verticillatus L. — Davidson and Knox. (Reported by Eyles, 1942, from Lake and Obion.)

PONTEDERIACEAE

Heteranthera dubia (Jacq.) MacM. — Montgomery and Obion. (Listed by Eyles and Eyles from Lake.)

H. limosa (Sw.) Willd. — Montgomery.

H. reniformis R. & P. — Hardin and Wayne. (Listed by Eyles and Eyles from Lake and Obion.)

Pontederia cordata L. — Cumberland, Cocke and Obion. (Listed by Svenson from Coffee and Grundy, by Gattinger from Robertson.)

PRIMULACEAE

Hottonia inflata Ell.— (Sight record listed by Eyles and Eyles from Obion.)

RANUNCULACEAE

[Caltha palustris Pall. — (Reported from Lake and Obion by Gersbacher and Norton but probably based on misidentification.)]

Ranunculus flabellaris Raf. — (Reported by Eyles, 1942, from Obion, by Svenson from Franklin.)

R. longirostris Godr. — Credited to Tennessee by Fernald and Muenscher.)

R. pusillus Poir. — (Listed by Eyles and Eyles from Obion, by Svenson from Franklin and Grundy.)

R. sceleratus L. — (Listed by Eyles and Eyles from Lake and Obion.)

SALVINIACEAE

Azolla caroliniana Willd. — Lake, Obion and Shelby. (Listed by Gattinger from McMinn.)

SAURURACEAE

Saururus cernuus L. — Scattered over the state.
SAXIFRAGACEAE
Penthorum sedoides L. — Scattered over the state.

SCROPHULARIACEAE
Bacopa acuminata (Walt.) Robins. (Pagesia acuminata (Walt.) Pennell)
— Widely distributed from Meigs and Hamilton west to Benton and McNaury.

B. rotundifolia (Michx.) Wettst. — Montgomery, Fayette, Davidson and Madison.

Gratiola brevijolia Raf. — Coffee, Grundy and White. (Reported by Svenson from Franklin.)

G. neglecta Torr. — Widely distributed in every major region of the state.

G. virginiana L. — Widely distributed in every major region of the state.

G. viscidula Pennell — Blount, Carter, Cocke and White.

G. floridana Nutt. — Franklin and Hamilton. (Listed by Gattinger from Davidson and E. Tenn. without locality.)

Lindernia anagallioides (Michx.) Pennell — Montgomery, Franklin, Jackson, Madison and Polk. (Listed by Robinson from Cumberland.)

L. dubia (L.) Pennell — Widely distributed in every major region of the state.

Tragia pilosa (Michx.) S. & P. — Widely distributed in Cumberland Plateau and adjacent Highland Rim counties.

Veronica americana (Raf.) Schwein. — Carter, Knox (Pennell). (Credited to Tennessee by Muenscher, Fernald and Gleason.)

V. angustissima-aquatica L. (Including V. glanduligera Pennell) — Rather general in E. Tenn. west to Anderson and Roane; also in Maury.

V. connata Raf. (V. comosa Richter) — Rutherford.

V. scutellata L. — Johnson.

SPARGANIACEAE
Sparganium americanum Nutt. — Cumberland, Fentress, Johnson, Monroe and Morgan (Listed by Robinson from Grundy and Putnam.)

S. androcladum (Engelm.) Morong— (Listed by Gattinger from Davidson.)

S. chlorocarpum Rybd. — (Listed by Robinson from Cumberland.)

S. eurycarpum Engelm. — (Listed by Gattinger from Bradley, Coffee and Davidson.)

TYPHACEAE
Typha angustifolia L. — Blount. (Listed by Gattinger from Polk.)

T. latifolia L. — Blount, Dickson, Henry and Monroe. (Listed by Eyles and Eyles from Lake and Obion, by Robinson from Cumberland, Fentress and Putnam.)

UMBELLIFERAE
Hydrocotyle americana L. — VanBuren. (Listed by Gattinger from Polk.)

Oxyplis rigidior (L.) C. & R. — Blount, Carter, Cumberland, Fentress, Johnson and Putnam. (Listed by Gattinger from over the state.)

Sium suave Walt. — Coffee and Lake.

XYRIDACEAE
Xyris caroliniana Walt. — Cumberland, Grundy and Morgan. (Listed by Robinson from Fentress.)

ZOSTERACEAE
Potamogeton amplifolius Tuckerm. — (Credited to Tennessee by Muenscher.)
P. berchtoldii Fieber — (Listed by Eyles and Eyles from Lake and Obion.)
P. bicupulatus Fern. — Cumberland and Fentress.
P. epiphyrus var. nutallii (C. & S.) Fern. — (Credited to Tennessee by Fernald.)
P. epiphyrus var. ramosus (Peck) House — Blount and Johnson.
P. filiformis Pers. — (Reported by Davis from Lake and Obion but possibly based on a misidentification; no herbarium specimens seen.)
P. foliosus Raf. var. foliosus — Marion, Rutherford and Sullivan. (Listed by Robinson from Fentress.)
P. foliosus var. macellus Fern. — Cumberland.
P. natans L. — (Listed by Gattinger from West Tennessee.)
P. nodosus Poir. — Dickson, Hawkins, Lake, Montgomery and Obion.
P. pectinatus L. — Grainger and Lake. (Listed by Eyles and Eyles from Obion.)
P. perfoliatus L. — (Listed by Gattinger from Shelby.)
P. pulcher Tuckerm. — Bledsoe, Gibson, Grundy, Morgan and Union.
P. pusillus L. — Claiborne (?), Lake (?). (Listed by Gattinger from Cocke; by Eyles, 1942, from Obion.)
P. tennesseensis Fern — Cumberland, Fentress, Morgan, Polk (?).
P. zostericformis Fern. — (Reported by Davis from Lake and Obion but possibly based on misidentification; no herbarium specimens seen.)
Zannichellia palustris L. — Montgomery. (Listed by Eyles and Eyles, by Davis, and by Steenis and Cottam from Lake and Obion.)

REFERENCES CITED