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## The Vascular Flora of the Area to be Submerged by Lake MacBride

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## THE VASCULAR FLORA OF THE AREA TO BE SUBMERGED BY LAKE MACBRIDE

EDGAR F. PIERSON

Lake Macbride, an artificial lake located in Johnson county, Iowa, a few miles north of Iowa City, was established by building a dam below the junction of two small creeks. The resulting basin is somewhat V-shaped with approximately 8 miles of shoreline. The lake bed is for the most part loess excepting a few small sandy areas and the alluvial deposits next to the old creek channels. The shoreline toward the dam is rather abrupt, the south shore being of the exposed limestone type. With few exceptions the rest of the shoreline is either loess or loess-capped. The border lands of the lake are still mostly wooded, the cleared portions having been pastured or cultivated.

A study of the vascular flora of this region was made during the years 1934-35. The area involved in this survey was that which is to be submerged, together with the immediate shoreline. The flora of this region was somewhat varied, each ecological region yielding characteristic species. The aquatic and semi-aquatic associations are of greatest interest since plants of these types will probably increase in number as the lake matures. Following is a list of the species represented:

### PTERIDOPHYTA

<i>Adiantum pedatum</i> L.	<i>C. fragilis</i> (L.) Bernh.
<i>Asplenium Filix-femina</i> (L.) Bernh.	<i>Equisetum arvense</i> L.
<i>Botrychium virginicum</i> (L.) Sw.	<i>Equisetum laevigatum</i> A. Br.
<i>Camptosorus rhizophyllus</i> (L.) Link.	<i>Onoclea sensibilis</i> L.
<i>Cystopteris bulbifera</i> (L.) Bernh.	<i>Osmunda Claytoniana</i> L.

### MONOCOTYLEDONEAE

<i>Agrostis alba</i> L.	<i>C. cristata</i> Schwein.
<i>A. hymenalis</i> (Walt.) BSP.	<i>C. Davisii</i> Schwein. and Torr.
<i>Allium canadense</i> L.	<i>C. festucacea</i> var. <i>brevior</i> (Dewey) Fernald.
<i>A. tricoccum</i> Ait.	<i>C. granularis</i> Muhl.
<i>Andropogon furcatus</i> Muhl.	<i>C. gravida</i> var. <i>laxiflora</i> Bailey.
<i>Arisaema triphyllum</i> (L.) Schott.	<i>C. grisea</i> Wahlenb.
<i>Asperella hystrix</i> (L.) Humb.	<i>C. hystericina</i> Muhl.
<i>Bromus pürgans</i> L.	<i>C. Jamesii</i> Schwein.
<i>Carex blanda</i> Dewey.	<i>C. lanuginosa</i> Michx.
<i>C. cephalophora</i> Muhl.	<i>C. laxiflora</i> var. <i>latifolia</i> Boott.
<i>C. conjuncta</i> Boott.	

- C. longirostris* Torr.  
*C. mirabilis* Dewey.  
*C. oligocarpa* Schkuhr.  
*C. pennsylvanica* Lam.  
*C. pubescens* Muhl.  
*C. rosea* Schkuhr.  
*C. sparganioides* Muhl.  
*C. stipata* Muhl.  
*C. tribuloides* Wahlenb.  
*C. trichocarpa* Muhl.  
*C. vulpinoidea* Michx.  
*Cenchrus carolinianus* Walt.  
*Cinna arundinacea* L.  
*Cyperus esculentus* L.  
*C. sirigosus* L.  
*Diarrhena diandra* (Michx.) Wood.  
*Digitaria sanguinalis* (L.) Scop.  
*Echinochloa crusgalli* (L.) Beauv.  
*Eleocharis palustris* (L.) R. and S.  
*Elymus australis* Scribn. and Ball.  
*E. virginicus* L.  
*Eragrostis megastachya* (Koeler)  
 Link.  
*E. pilosa* (L.) Beauv.  
*Erythronium albidum* Nutt.  
*Festuca nutans* Spreng.  
*Glyceria nervata* (Willd.) Trin.  
*Hordeum jubatum* L.  
*Iris virginica* L.  
*Juncus tenuis* Willd.
- Leersia oryzoides* (L.) Sw.  
*L. virginica* Willd.  
*Lemna minor* L.  
*Muhlenbergia mexicana* (L.) Trin.  
*M. Schreberi* J. F. Gmel.  
*Oryzopsis racemosa* (Sm.) Ricker.  
*Panicum capillare* L.  
*P. clandestinum* L.  
*P. dichotomiflorum* Michx.  
*P. lanuginosum* var. *fasciculatum*  
 (Torr.) Fernald.  
*P. oligosanthes* var. *Scribnerianum*  
 (Nash.) Fernald.  
*P. virgatum* L.  
*Phleum pratense* L.  
*Poa compressa* L.  
*P. pratensis* L.  
*Polygonatum biflorum* (Walt.) Ell.  
*Sagittaria latifolia* Willd.  
*Scirpus atrovirens* Muhl.  
*S. validus* Vahl.  
*Setaria glauca* (L.) Beauv.  
*S. viridis* (L.) Beauv.  
*Smilax herbacea* L.  
*S. hispida* Muhl.  
*Sphenopholis pallens* (Spreng.)  
 Scribn.  
*Tradescantia reflexa* Raf.  
*Trillium nivale* Riddell.  
*Triticum aestivum* L.  
*Uvularia grandiflora* Sm.

DICOTYLEDONEAE

- Abutilon Theophrasti* Medic.  
*Acalypha virginica* L.  
*Acer saccharum* Marsh.  
*Achillea Millefolium* L.  
*Actinida tuberculata* Moq.  
*Actaea alba* (L.) Mill.  
*Actinomeris alternifolia* (L.) DC.  
*Agastache nepetoides* (L.) Ktze.  
*Agrimonia mollis* (T. and G.) Brit-  
 ton.  
*Amaranthus gracilis* L.  
*A. retroflexus* L.  
*Ambrosia artemisiifolia* L.  
*A. trifida* L.  
*Amorpha fruticosa* L.  
*Androsace occidentalis* Pursh.  
*Anemone canadensis* L.  
*A. quinquefolia* L.
- A. virginiana* L.  
*Anemonella thalictroides* (L.) Spach.  
*Antennaria neglecta* Greene.  
*Anthemis Cotula* L.  
*Anychia polygonoides* Raf.  
*Apocynum androsaemifolium* L.  
*A. cannabinum* L.  
*Aquilegia canadensis* L.  
*Arabis canadensis* L.  
*Arabis Drummondii* Gray.  
*Asarum canadense* L.  
*Asclepias incarnata* L.  
*A. purpurascens* L.  
*A. syriaca* L.  
*A. verticillata* L.  
*Aster azureus* Lindl.  
*A. cordifolius* L.  
*A. lateriflorus* (L.) Britton.

- A. novae-angliae* L.  
*Betula nigra* L.  
*Bidens cernua* L.  
   *B. frondosa* L.  
*Brassica nigra* (L.) Koch.  
*Cacalia reniformis* Muhl.  
*Campanula americana* L.  
*Cannabis sativa* L.  
*Capsella Bursa-pastoris* (L.) Medic.  
*Cardamine parviflora* var. *arenicola*  
   (Britton.) O. E. Schulz.  
*Carpinus caroliniana* var. *virginiana*  
   (Marsh.) Fernald.  
*Carya cordiformis* (Wang.) K.  
   Koch.  
   *C. ovata* (Mill.) K. Koch.  
*Cassia Medsgeri* Shafer.  
*Castilleja coccinea* (L.) Spreng.  
*Caulophyllum thalictroides* (L.)  
   Michx.  
*Cerastium vulgatum* L.  
*Chenopodium album* L.  
   *C. hybridum* L.  
*Circea latifolia* Hill.  
*Cirsium arvense* (L.) Scop.  
   *C. lanceolatum* (L.) Hill.  
*Claytonia virginica* L.  
*Clematis Pitcheri* T. and G.  
*Comandra umbellata* (L.) Nutt.  
*Convolvulus sepium* L.  
*Cornus alternifolia* L.f.  
   *C. asperifolia* Michx.  
*Corylus americana* Walt.  
*Crataegus* spp.  
*Cryptotaenia canadensis* (L.) DC.  
*Cuscuta Cephalanthi* Engelm.  
*Datura Stramonium* L.  
*Desmodium canadensis* (L.) DC.  
   *D. grandiflorum* (Walt.) DC.  
*Dicentra Cucullaria* (L.) Bernh.  
*Ellisia Nyctelca* L.  
*Erigeron annuus* (L.) Pers.  
   *E. canadensis* L.  
   *E. philadelphicus* L.  
   *E. pulchellus* Michx.  
   *E. ramosus* (Walt.) BSP.  
*Erysimum cheiranthoides* L.  
*Eupatorium purpureum* L.  
   *E. urticacfolium* Reichard.  
*Euphorbia corollata* L.
- Euphorbia heterophylla* L.  
   *E. maculata* L.  
   *E. Preslii* Guss.  
*Evonymus atropurpureus* Jacq.  
*Fragaria virginiana* Duchesne.  
*Fraxinus americana* L.  
*Galium Aparine* L.  
   *G. circaezans* Michx.  
   *G. concinnum* T. and G.  
   *G. triflorum* Michx.  
*Geranium maculatum* L.  
*Gerardia flava* L.  
*Geum canadense* Jacq.  
*Gleditsia triacanthos* L.  
*Gnaphalium polycephalum* Michx.  
*Gratiola virginiana* L.  
*Hedcoma hispida* Pursh.  
*Helenium autumnale* L.  
*Helianthus strumosus* L.  
*Heliopsis scabra* Dunal.  
*Houstonia minima* Beck.  
*Humulus japonicus* Sieb. and Zucc.  
   *H. Lupulus* L.  
*Hydrophyllum appendiculatum*  
   Michx.  
   *H. virginianum* L.  
*Hypericum Ascyron* L.  
   *H. punctatum* Lam.  
*Ilysanthes dubia* (L.) Barnhart.  
*Impatiens biflora* Walt.  
   *I. pallida* Nutt.  
*Isopyrum biternatum* (Raf.) T. and  
   G.  
*Juglans cinerea* L.  
   *J. nigra* L.  
*Krigia amplexicaulis* Nutt.  
*Lactuca canadensis* L.  
   *L. scariola* L.  
   *L. villosa* Jacq.  
*Laportea canadensis* (L.) Gaud.  
*Lappula virginiana* (L.) Greene.  
*Leomurus Cardiaca* L.  
*Lepidium virginicum* L.  
*Lippia lanceolata* Michx.  
*Lobelia inflata* L.  
   *L. siphilitica* L.  
*Lonicera Sullivantii* Gray.  
*Lycnis alba* Mill.  
*Lycopus virginicus* L.  
*Malva rotundifolia* L.  
*Medicago sativa* L.

- Melilotus alba* Desr.  
*M. officinalis* (L.) Lam.  
*Menispermum canadense* L.  
*Mentha arvensis* var. *canadensis* (L.) Briquet.  
*Mertensia virginica* (L.) Link.  
*Mimulus ringens* L.  
*Mitella diphylla* L.  
*Mollugo verticillata* L.  
*Monarda mollis* L.  
*Nepeta Cataria* L.  
*Oenothera biennis* L.  
*Osmorhiza Claytoni* (Michx.) Clarke  
*Ostrya virginiana* (Mill.) K. Koch.  
*Oxalis corniculata* L.  
*O. stricta* L.  
*Panax quinquefolium* L.  
*Parietaria pennsylvanica* Muhl.  
*Penthorum sedoides* L.  
*Pentstemon laevigatus* Ait.  
*Phlox divaricata* L.  
*Phryma Leptostachya* L.  
*Physalis heterophylla* Nees.  
*Plantago aristata* Michx.  
*P. major* L.  
*Podphyllum petatum* L.  
*Polanisia graveolens* Raf.  
*Polemonium reptans* L.  
*Polygonum acre* HBK.  
*P. aviculare* L.  
*P. Convolvulus* L.  
*P. Hydropiper* L.  
*P. pennsylvanicum* L.  
*P. Persicaria* L.  
*P. ramosissimum* Michx.  
*P. scabrum* Moench.  
*P. scandens* L.  
*P. virginianum* L.  
*Portulaca oleracea* L.  
*Potentilla monspeliensis* L.  
*P. recta* L.  
*P. simplex* Michx.  
*Prenanthes alba* L.  
*Prunella vulgaris* L.  
*Prunus serotina* Ehrh.  
*P. virginiana* L.  
*Psedera quinquefolia* (L.) Greene.  
*Pycnanthemum pilosum* Nutt.  
*Quercus borealis* Michx.  
*Q. alba* L.
- Radicula palustris* (L.) Moench.  
*Ranunculus abortivus* L.  
*R. septentrionalis* Poir.  
*Rhus glabra* L.  
*R. Toxicodendron* L.  
*Ribes Cynosbati* L.  
*Rosa pratincola* Greene.  
*Rubus allegheniensis* Porter.  
*R. occidentalis* L.  
*Rudbeckia hirta* L.  
*R. laciniata* L.  
*R. triloba* L.  
*Ruellia ciliosa* Pursh.  
*Rumex Acetosella* L.  
*R. altissimus* Wood.  
*R. crispus* L.  
*Salix amygdaloides* Anders.  
*S. longifolia* Muhl.  
*S. nigra* Marsh.  
*Sambucus canadensis* L.  
*Sanguinaria canadensis* L.  
*Sanicula gregaria* Bicknell.  
*Scrophularia marilandica* L.  
*Scutellaria lateriflora* L.  
*S. versicolor* Nutt.  
*Senecio plattensis* Nutt.  
*Silphium perfoliatum* L.  
*Sisymbrium officinale* (L.) Scop.  
*Solanum carolinense* L.  
*S. nigrum* L.  
*Solidago canadensis* L.  
*S. latifolia* L.  
*Specularia perfoliata* (L.) A. DC.  
*Stachys palustris* L.  
*Staphylea trifolia* L.  
*Steironema ciliatum* (L.) Raf.  
*Strophostyles helvola* (L.) Britton.  
*Taraxacum erythrospermum* Andrz.  
*Taraxacum officinale* Weber.  
*Teucrium canadense* L.  
*Thalictrum dasycarpum* Fisch. and Lall.  
*Thaspium barbinode* (Michx.) Nutt.  
*Tilia americana* L.  
*Trifolium pratense* L.  
*T. procumbens* L.  
*T. repens* L.  
*Ulmus americana* L.  
*U. fulva* Michx.  
*Verbascum Thapsus* L.  
*Verbena hastata* L.

<i>V. urticaefolia</i> L.	<i>V. papilionacca</i> Pursh.
<i>Vernonia fasciculata</i> Michx.	<i>V. sororia</i> Willd.
<i>Vernonia peregrina</i> L.	<i>Vitis vulpina</i> L.
<i>Viburnum Lentago</i> L.	<i>Xanthium commune</i> Britton.
<i>Viola eriocarpa</i> Schwein.	<i>Zanthoxylum americanum</i> Mill.
<i>V. missouriensis</i> Greene.	<i>Zizia aurea</i> (L.) Koch.

This survey is being carried forward from the standpoint of the lake flora and the establishment of a shoreline flora. Attention will be given both to algae and submersed seed plants.

## BIBLIOGRAPHY

- ANDERSON, EDGAR. The Problem of Species in the Northern Blue Flags. *Iris versicolor* L. and *Iris virginica* L. *Annals Mo. Bot. Gard.* 15:241-332. 1928.
- BAILEY, L. H. *Manual of Cultivated Plants.* 1924.
- BRITTON, NATHANIEL LORD AND BROWN, HON. ADDISON. *Illustrated Flora of the Northern States and Canada.* Ed. No. 2. 1913. Vols. 1-3.
- FERNALD, M. L. Midsummer Vascular Plants of Southeastern Virginia. *Rhodora* 37:423-454. 1935.
- Potentilla canadensis* and *P. simplex.* *Rhodora* 33:180-191. 1931.
- Realignments in the Genus *Panicum.* *Rhodora* 36:61-87. 1934.
- The American *Cardamine parviflora.* *Rhodora* 29:191-192. 1927.
- The Gray Herbarium Expedition to Nova Scotia. *Rhodora* 23:257-278. 1923.
- The Identity of *Circaea latifolia* and the Asiatic *C. quadrisulcata.* *Rhodora* 17:222-224. 1915.
- GRAY'S NEW MANUAL OF BOTANY, Ed. No. 7. 1908. Robinson and Fernald, Editors.
- HUBBARD, F. TRACY. Nomenclatorial Changes Required by Some Graminae of the Seventh Edition of Gray's Manual. *Rhodora* 14:184-188. 1912.
- REHDER, ALFRED. *Manual of Cultivated Trees and Shrubs.* 1927.
- WIEGAND, K. M. *Carex laxiflora* and Its Relatives. *Rhodora* 24:189-201. 1924.

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