# New Vascular Plant Distribution Records for Tippecanoe County, Indiana

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Tippecanoe County, Indiana, lies on the southern edge of the "prairie peninsula" in northwest Indiana (6). To the south and southwest of the prairie openings, the steady-state presettlement vegetation was oak-hickory forest (1,4). On some northand east-facing slopes in the county, a beech-maple association occurs. Thus, the Lafayette area is at the junction of three floristic provinces and, as a result, has a varied flora.

In 1980, I began a catalogue of the vascular plants of Tippecanoe County for use in teaching botany courses at Purdue University. Contrary to the theory that plant distribution records are a function of the distribution of plant collectors (5), there were surprisingly numerous omissions from the resulting checklist for the home county of Indiana's land grant university. Seventy-one new taxa (Table 1) are reported here for Tippecanoe County. Ten other species were listed recently by McCain and Hennen (5).

Table 1. List of new reports of vascular plants for Tippecanoe County, Indiana.

### PTERIDOPHYTES

AZOLLACEAE (new family record): Azolla caroliniana Willd.

LYCOPODIACEAE (new family record): Lycopodium digitatum A. Braun.

OPHIOGLOSSACEAE: Botrychium dissectum Spreng. var. obliquum (Muhl.) Clute\*, Ophioglossum vulgatum L.

OSMUNDACEAE (new family record): Osmunda cinnamomea L.

#### MONOCOTYLEDONS

CYPERACEAE: Carex albursina Sheldon.

HYDROCHARITACEAE (new family record): Elodea canadensis L.C. Rich.

LEMNACEAE: Lemna trisulca L.\*

LILIACEAE: Hemerocallis fulva (L.) L., Ornithogalum umbellatum L., Trillium recurvatum Beck. f. luteum Clute\*.

NAJADACEAE (new family record): Najas flexilis (Willd.) Rostk. & Schmidt.

ORCHIDACEAE: Liparis loeselii (L.) L.C. Rich., Spiranthes lacera (Raf.) Raf. var. gracilis (Bigelow) Luer.

POACEAE: Aristida oligantha Michx., Chloris verticillata Nutt., Cynodon dactylon (L.) Pers., Koeleria cristata (L.) Pers., Lolium perenne L., Setaria faberi Herrn.

POTAMOGETONACEAE (new family record): Potamogeton crispus L., P. foliosus Raf., P. nodosus Poir.

 $SPARGANIACEAE: \textit{Sparganium chlorocarpum} \ \ Rydb.$ 

#### DICOTYLEDONS

APIACEAE: Aegopodruim podagraria L., Heracleum lanatum Michix., Osmorhiza longistylis (Torr.) DC., Torilis japonica (Houtt.) DC.

APOCYNACEAE: Vinca minor L.

ASTERACEAE: Carduus nutans L., Cichorium intybus L., Galinsoga quadriradiata Ruiz & Pavon, Lapsana communis L., Silphium laciniatum L.

BRASSICACEAE: Alliaria petiolata (Bieb.) Cavara & Grande, Cardamine parviflora L. spp. parviflora var. arenicola (Britt.) O.E. Schulz, Hesperis matronalis L., Lepidium campestre (L.) R. Br., Rorippa sylvestris (L.) Bess., Sinapsis arvensis L.

## TABLE 1.—Continued

CERATOPHYLLACEAE (new family record): Ceratophyllum demersum L.

CHENOPODIACEAE: Kochia scoparia (L.) Schrad.

CRASSULACEAE (new family record): Sedum ternatum Michx.

ERICACEAE: Chimaphila maculata (L.) Pursh., Monotropa hypopithys L.

FABACEAE: Coronilla varia L., Lotus corniculatus L., Trifolium hybridum L.

GENTIANACEAE: Frasera caroliniensis Walt.

HALORAGIDACEAE (new family record): Myriophyllum exalbescens Fern.

HYDROPHYLLACEAE: Hydrophyllum canadense L., Phacelia purshii Buckl.

LAMIACEAE: Collinsonia canadensis L.

LENTIBULARIACEAE (new family record): Utricularia gibba L.

MALVACEAE: Malva rotundifolia L.

MORACEAE: Maclura pomifera (Raf.) Schneid.

NYMPHAEACEAE (new family record): Brasenia schreberi J. F. Gmel., Nelumbo lutea (Willd.) Pers., Nuphar luteum (L.) Sibthorp & Sm. ssp. variegatum (Dur.) E. O. Beal.

POLYGALACEAE: Polygala sanguinea L.

ROSACEAE: Rosa multiflora Thunb. ex Murr.

RUBIACEAE: Mitchella repens L.

SALICACEAE: Salix humilis Marsh.

SCROPHULARIACEAE: Veronica catenata Pennell.

SOLANACEAE: Solanum dulcamara L.

VIOLACEAE: Viola incognita Brainerd, V. missouriensis Greene, V. obliqua Hill, V. papilionaceae Pursh. f. albiflora Grover\*, V. triloba Schw.

A majority of these taxa fall into one of two categories: aquatics or weeds. Other than Cyperaceae, not many aquatic plants have been reported until now for this county. Eight families of aquatics are listed for the first time: Azollaceae, Ceratophyllaceae, Haloragidaceae, Hydrocharitaceae, Lentibulariaceae, Najadaceae, Nymphaeaceae, and Potamogetonaceae. A notable species on the list is *Nelumbo lutea*, the American waterlotus. Although it was probably introduced, it has become fully established at the Purdue Wildlife Area.

The other large category, weedy annuals and perennials, includes some species evidently of recent arrival so that they could not have been cited in previous reports. These include Rosa multiflora, Carduus nutans, and Lapsana communis. Three species are adventives along an old railroad track south of West Lafayette: Aristida oligantha, Chloris verticillata, and Kochia scoparia. Other unreported species must have been assumed as reported by most researchers but, surprisingly, no published reports have been located for such species as Setaria faberi, Hemerocallis fulva, Lepidium campestre, Solanum dulcamara, or Cichorium intybus. Introduced species that have become fully established include perennial rye, creeping myrtle, and the three legumes in Table 1.

The Tippecanoe County vascular plant flora list now includes 1040 species, plus 55 additional subspecific taxa (for 1094 total), in 485 genera, representing 120 families. Deam (3) tallied only 829 taxa in the county, so the species collated from this report and other literature (McCain, unpublished manuscript) represent an increase of 266 taxa over Deam's list. The Lycopodiaceae and Osmundaceae are listed for the first time. The citation for the original report and date of the most recent collection are

<sup>\*</sup>taxa not accepted as distinct by Crovello et al. (2) but which were considered separable in this study.

on file for each species, as well as estimates of abundance or rarity. Nomenclature follows Crovello et al. (2).

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