

NEW ADDITIONS AND NOTEWORTHY RECORDS FOR THE FLORA OF INDIANA (U.S.A.) INCLUDING A NEW NORTH AMERICAN RECORD

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ABSTRACT

Recent collections by the authors and others have yielded a new North American record, 38 additional new vascular plant state records for Indiana, and an additional five collections deemed noteworthy due to being recent observations of species that were considered extirpated from Indiana when they were discovered. Voucher specimens for all new records reside at various herbaria.

KEY WORDS: Indiana flora, *Cyperus nipponicus*, county records, state records, North American record

RESUMEN

Las recolecciones recientes de los autores y otros han producido un nuevo registro norteamericano, 38 nuevos registros estatales de plantas vasculares para Indiana y otras cinco recolecciones consideradas dignas de mención por ser observaciones recientes de especies que se consideraban extirpadas de Indiana cuando se descubrieron. Las muestras de todos los nuevos registros se encuentran en varios herbarios.

INTRODUCTION

Documenting collections of new and noteworthy records provides valuable data for understanding biodiversity patterns and tracking changes in the range of taxa over time. Reports of species in new locations help to refine our knowledge of species distributions. This information can also be important for conservation planning and management as well as agricultural weed control efforts.

Collections reported here were made while conducting surveys for the Indiana Department of Natural Resources—Division of Nature Preserves, during contracted fieldwork, and during ongoing searches for new plants along city streets and parks, roadsides, public waterways, and in similar places. One of the documented species, *Cyperus nipponicus* Franch. & Sav., collected from Switzerland County, Indiana, is a new North American record in addition to being new to Indiana. The collections listed as well as the photographs in the figures are those of the authors or their associates. All records are listed alphabetically by scientific name within the categories of North American records, Indiana state records, and Indiana noteworthy collections.

MATERIALS AND METHODS

Determination of state or county record status was made by researching both on the internet and in published literature for available data on plant distributions and collections in sanctioned herbaria for this area. The primary source of known voucher collections for the areas involved is the Consortium of Midwest Herbaria portal website (Consortium of Midwest Herbaria 2024). Other available online sources of distributional data were also checked; these include the USDA-NRCS Plants Database (USDA, NRCS 2023), Biota of North America Program (BONAP) (Kartesz 2015), and Flora of the Southeastern United States (Weakley &

Southeastern Flora Team 2025). Additionally, scientific publications such as *Proceedings of the Indiana Academy of Science* were researched online to eliminate any dubious records.

RESULTS AND DISCUSSION

Table 1 presents documentation of a new vascular plant North American record, 38 additional new state records for Indiana, and five noteworthy rediscoveries of species previously considered extirpated from the state.

NORTH AMERICAN RECORD

Cyperus nipponicus Franch. & Sav. [Cyperaceae] Japanese Flat Sedge

In its native range, the Asian annual *Cyperus nipponicus* occurs on mountain slopes, in disturbed areas including trails, and in open fields (Dai et al. 2010).

The first North American record of *Cyperus nipponicus* was collected along the Ohio River just below the Markland Locks and Dam in Switzerland County, Indiana (Fig. 1). This area is subject to frequent inundation and is submerged most of the spring. A single clump-forming plant was growing well above the current water line in an open, dry, sandy area with scattered large rocks. Paul Rothrock of Indiana University Bloomington and Gordon Tucker of Eastern Illinois University verified the identification of the collection. In addition to our 2011 Indiana collection, herbarium data available at the Consortium of Midwest Herbaria (2024) indicate only one additional United States collection of the species, from 2019 in Richmond County, New York (Wang 89 [NY]). Werier (2020) mentions a 2016 collection from Connecticut made by Robert Naczi. In addition, numerous reports from iNaturalist from 2018 to present in the northeastern United States (GBIF 2025a) suggest a potentially broader yet undocumented distribution.

Voucher Specimens: **INDIANA. Switzerland Co.:** Markland Locks and Dam, Ohio River shoreline, sandy soil, 38.779601°, -84.968484°, 27 Aug 2011, W.E. Thomas 3992 (JEF, IND, EIU).

INDIANA STATE RECORDS

Alternanthera philoxeroides (Mart.) Griseb. [Amaranthaceae] Alligator-Weed

Alternanthera philoxeroides is an invasive tap-rooted perennial herb native to South America that produces no viable seed in its northern introduced range; reproduction is vegetative from transient loose fragments (Keener et al. 2024; Thayer & Pfingsten 2024). In the United States, it is most abundant in the southeast coastal states where it is considered a major invasive problem (Buckingham 1996); it has the potential to become a serious threat to native species in Indiana, where it has been observed blooming from about mid-June to November.

The Indiana state record was collected in Floyd County, from along the sandy banks of the Ohio River just west of the New Albany boat ramp (Fig. 2). Multiple large mats of the species, each covering 40 square feet or more, were encountered. Similar extensive infestations were later found upriver in Jefferson County along the Madison riverfront. The collections from Harrison, Vanderburgh, and Spencer counties were from smaller populations, consisting of one to three plants. The closest previous collections of *Alternanthera philoxeroides* seem to be from the southwest lake region of Kentucky (Consortium of Midwest Herbaria 2024), although it is noted in Alexander County, Illinois (Kartesz 2015).

Voucher Specimens: **INDIANA. Floyd Co.:** New Albany riverfront, Edge of Ohio River boat ramp, 38.281452°, -85.821708°, 31 Jul 2016, W.E. Thomas 4622 (JEF). **Harrison Co.:** TNC 'Narrows' tract SE of Laconia, Ohio River sandy shoreline, just west of the mouth of Mosquito Creek, 37.990478°, -86.032751°, 29 Sep 2022, W.E. Thomas 6649 (JEF). **Jefferson Co.:** Madison riverfront area, west end, open shoreline of Ohio River, 38.735018°, -85.393733°, 7 Oct 2016, W.E. Thomas 6660 (JEF). **Spencer Co.:** Rockport Riverfront Park, open sandy shore of Ohio River, 37.882926°, -87.044721°, 2 Aug 2023, W.E. Thomas 7061 (JEF). **Vanderburgh Co.:** Dogtown boat ramp area, open sandy shore of Ohio River, 37.921061°, -87.627993°, 15 Jun 2023, W.E. Thomas 6966 (JEF).

Aphanes australis Rydb. [Rosaceae] Slender Parsley Piert

Aphanes australis is an introduced, inconspicuous weed of mowed lawns and other turf areas; it is native to

TABLE 1. Summary of new and noteworthy vascular plant records for Indiana, including a new North American record.

Scientific Name	Common Name	Family	Nativity	Indiana Status
New North American Record				
<i>Cyperus nipponicus</i>	Japanese Flat Sedge	Cyperaceae	Asia	Introduced
New Indiana State Records				
<i>Alternanthera philoxeroides</i>	Alligator-Weed	Amaranthaceae	South America	Introduced
<i>Aphanes australis</i>	Slender Parsley Piert	Rosaceae	Europe	Introduced
<i>Calibrachoa parviflora</i>	Seaside Petunia	Solanaceae	Mexico, USA	Adventive
<i>Carduus acanthoides</i>	Spiny Plumless Thistle	Asteraceae	Eurasia	Introduced
<i>Carex cherokeensis</i>	Cherokee Sedge	Cyperaceae	USA	Adventive
<i>Corydalis incisa</i>	Purple Keman	Papaveraceae	Asia	Introduced
<i>Cyperus compressus</i>	Poorland Flat Sedge	Cyperaceae	USA	Adventive
<i>Cyperus difformis</i>	Variable Flat Sedge	Cyperaceae	Africa, Eurasia	Introduced
<i>Cyperus fuscus</i>	Brown Flat Sedge	Cyperaceae	Eurasia	Introduced
<i>Cyperus iria</i>	Ricefield Flat Sedge	Cyperaceae	Asia	Introduced
<i>Cyrtomitium fortunei</i>	Asian Netvein Holly Fern	Dryopteridaceae	Asia	Introduced
<i>Dichanthelium malacophyllum</i>	Soft-Leaf Witch Grass	Poaceae	USA	Native
<i>Diplachne fusca</i> subsp. <i>uninervia</i>	Mexican Sprangletop	Poaceae	Central America, South America, USA	Adventive
<i>Eleocharis atropurpurea</i>	Purple Spikerush	Cyperaceae	USA	Native
<i>Eleocharis parvula</i>	Dwarf Spikerush	Cyperaceae	Eurasia	Adventive
<i>Epilobium parviflorum</i>	Small-flower Hairy Willowherb	Onagraceae	North America	Native
<i>Equisetum sylvaticum</i>	Woodland Horsetail	Equisetaceae	North America	Native
<i>Eriophorum tenellum</i>	Few Nerve Cotton-Grass	Cyperaceae	North America	Undetermined
<i>Galium palustre</i>	Marsh Bedstraw	Rubiaceae	Europe	Introduced
<i>Lathyrus hirsutus</i>	Singletary Vetchling	Fabaceae	Central America, USA	Adventive
<i>Lepidium oblongum</i>	Veiny Pepperwort	Brassicaceae	Asia	Introduced
<i>Lespedeza daurica</i>	Dahurian Bush-Clover	Fabaceae	Europe	Introduced
<i>Lythrum hyssopifolia</i>	Hyssop Loosestrife	Lythraceae	Africa, Asia	Introduced
<i>Macrothelypteris torresiana</i>	False Maiden Fern	Thelypteridaceae	North America	Adventive
<i>Montia linearis</i>	Linear-Leaf Candy-Flower	Montiaceae	Asia, Europe	Introduced
<i>Odontarrhena muralis</i>	Yellowtuft	Brassicaceae	Asia	Introduced
<i>Oenanthe javanica</i>	Java Water-Celery	Apiaceae	South America	Introduced
<i>Paspalum dilatatum</i>	Dallisgrass	Poaceae	USA	Adventive
<i>Paspalum distichum</i>	Jointed Crown Grass	Poaceae	Asia	Introduced
<i>Pericaria extremiorientalis</i>	Far Eastern Smartweed	Polygonaceae	Asia	Introduced
<i>Pilosella officinarum</i>	Mouseear Hawkweed	Asteraceae	Asia, Europe	Introduced
<i>Potentilla supina</i>	Bushy Cinquefoil	Rosaceae	Africa, Central America, North America	Adventive
<i>Rumex fugiunus</i>	Tierra del Fuego Dock	Polygonaceae	Central America, North America, South America	Adventive
<i>Taraxacum palustre</i>	Marsh Dandelion	Asteraceae	Europe	Introduced
<i>Tridens strictus</i>	Long-Spike Fluff Grass	Poaceae	USA	Adventive
<i>Trifolium fragiferum</i>	Strawberry Clover	Fabaceae	Eurasia	Introduced

TABLE 1. continued.

Scientific Name	Common Name	Family	Nativity	Indiana Status
New Indiana State Records continued				
<i>Veronica sublobata</i>	False Ivy-Leaved Speedwell	Plantaginaceae	Eurasia	Introduced
<i>Veronica triphylllos</i>	Finger Speedwell	Plantaginaceae	Eurasia	Introduced
Indiana Noteworthy Collections				
<i>Coleataenia longifolia</i> subsp. <i>longifolia</i>	Long-Leaf Cut-Throat Grass	Poaceae	North America	Native
<i>Dryopteris clintoniana</i>	Clinton's Wood Fern	Dryopteridaceae	North America	Native
<i>Fimbristylis puberula</i>	Hairy Fimbry	Cyperaceae	North America	Native
<i>Lonicera canadensis</i>	American Fly-Honeysuckle	Caprifoliaceae	North America	Native
<i>Scheuchzeria palustris</i> subsp. <i>americana</i>	Rannoch-Rush	Scheuchzeriaceae	North America	Native

Europe (Keener et al. 2024). Because of its habitat and small size, this species is easily overlooked and may be more widely distributed than has been documented (Keener et al. 2024). Current distribution data indicate that *A. australis* occurs mainly in the Pacific Northwest and southeastern United States, extending north to Kentucky and Maryland (Kartesz 2015; Consortium of Midwest Herbaria 2024).

The first Indiana collection of *Aphanes australis* was made in 2010 in Jackson County within a large grassy lawn near the beach at Starve Hollow State Recreation Area. The plants were scattered in small patches around the property in similar habitats. Observations made in early 2022 indicated that the population was still extant and perhaps more widespread. Additional collections were also made in Clark, Floyd (Fig. 3), Harrison, and Lawrence counties. Based on its common occurrence southwards combined with nearly complete absence from natural situations, this species is not expected to represent a significant threat to native biodiversity (A. Weakley, pers. comm.).

Voucher Specimens: **INDIANA: Clark Co.:** Clarksville near Penn RR bridge, open grassy area, 38.273215°, -85.759663°, 10 Apr 2016, W.E. Thomas 4572 (JEF). **Floyd Co.:** New Albany Riverfront Park, mowed grassy area near amphitheater, 38.282231°, -85.820705°, 11 Apr 2022, W.E. Thomas 6106 (JEF). **Harrison Co.:** Corydon, 4-H fairgrounds, open grassy/gravelly field, 38.206159°, -86.129795°, 5 Mar 2017, W.E. Thomas 4704 (JEF). **Jackson Co.:** Starve Hollow SRA, open field, grassy areas, 38.816117°, -86.080264°, 6 May 2010, W.E. Thomas 3437 (JEF). **Lawrence Co.:** Williams Dam Fishing Area, mowed grassy area, 38.801418°, -86.646453°, 13 Apr 2024, W.E. Thomas 7259 (JEF).

***Calibrachoa parviflora* (Juss.) D'Arcy [Solanaceae] Seaside Petunia**

Calibrachoa parviflora is a creeping, autogamous, annual herb found mainly in the southwestern United States and Mexico, where it is native (Tsukamoto et al. 2002; Weakley & Southeastern Flora Team 2025). It forms mat-like clumps in wet sand and riparian habitats (Keener et al. 2024). Current distributional data indicate there are collections of this species from nearby sites in Ohio and Illinois (Consortium of Midwest Herbaria 2024).

Three Indiana collections of *Calibrachoa parviflora* were taken from moist, sandy soil along the open shoreline of the Ohio River. The first Indiana collection was made in 2015 in Harrison County in the Mauckport area just east of the Matthew Welsh Bridge (Fig. 4). A second collection was made two weeks later in Floyd County from similar habitat along the New Albany riverfront area just west of the I-64 bridge, about 50 kilometers straight line distance away. In 2023, a third collection was made from the same type of habitat in Clark County. Each of these occurrences was represented by a single plant. This species is considered adventive in Indiana.

Voucher Specimens: **INDIANA: Clark Co.:** Clarksville, Ashland Park, open sandy banks of Ohio River, 38.271372°, -85.758419°, 21 Oct 2023, W.E. Thomas 7215 (JEF). **Floyd Co.:** New Albany boat ramp, sandy/muddy Ohio River shoreline, 38.281265°, -85.822416°, 26 Oct 2015, W.E. Thomas 4562 (IND). **Harrison Co.:** Mauckport area E of bridge, sandy/muddy beach of Ohio River, 38.018269°, -86.19460°, 11 Oct 2015, W.E. Thomas 4560 (JEF).

***Carduus acanthoides* L. [Asteraceae] Spiny Plumeless Thistle**

Carduus acanthoides, native to Eurasia (Fernald 1950), is an annual or biennial herb of ruderal areas including roadsides, pastures, fallow fields, farmyards, railroads and waste places (Fernald 1950; Gleason & Cronquist 1991; Voss 1996). It was first discovered in the United States in Camden, New Jersey in 1878 (Invasive.org 2010) and has since spread throughout much of the United States and into the southern tier of Canadian provinces, though it is currently absent from much of the southeastern United States and the desert southwest (Kartesz 2015).

The first Indiana collection of *Carduus acanthoides* was made in Steuben County in 2009 (Fig. 5). It was occasional in recently vegetated soils along a road constructed as part of a new housing development. Its introduction at this site may be the result of windblown seeds from a nearby site in Michigan, or it could have been unintentionally introduced with straw used to keep seed in place, as it is often found in areas where hay, straw, or soil have been introduced (Swink & Wilhelm 1994). It has been collected more recently in Steuben County, growing vigorously among roadside weeds at the intersection of IN-120 and N 750 W on the edge of Ropchan Memorial Nature Preserve in Orland, and as a single plant on an upland oak kame at Marsh Lake Nature Preserve.



FIG. 1. *Cyperus nipponicus*, W.E. Thomas 3992. Image from Consortium of Midwest Herbaria. FIG. 2. *Alternanthera philoxeroides* W.E. Thomas 4622. FIG. 3. *Aphanes australis*, W.E. Thomas 6106.

Voucher Specimens: **INDIANA: Steuben Co.:** Hamilton, various locations along subdivision road to the N of Hamilton Lake Lane 280, 41.5500°, -84.9167°, 1 Aug 2009, S.A. Namestnik 858 (OSC), S.A. Namestnik 860 (MO); Ropchan Memorial Nature Preserve, Orland, dozen individuals in open roadside edge, 41.73989°, -85.131651°, 21 Jul 2022, N.J. Pilla NJP 2207.2102.p (BUT); Marsh Lake Nature Preserve, on edge of oak kame, 41.723025, -84.979628, 27 Aug 2024, S.A. Namestnik 6473, with N. Simons and T. Swinford (BUT).

Carex cherokeensis Schwein. [Cyperaceae] Cherokee Sedge

Carex cherokeensis is a common sedge native to the southeastern and south-central United States, ranging from Texas to Virginia and north to Illinois and Ohio (Kartesz 2015). It was recently discovered in both Illinois and Ohio (Hill 2010; Vincent et al. 2011). The Ohio collection was made well north of the core of the range of the species, on an island in Lake Erie, where it is expected to have been accidentally introduced (Vincent et al. 2011). In Illinois, it is unclear whether populations should be considered native or adventive (P. Marcum, pers. comm.). It was also recently discovered in Virginia, where its occurrence as a remnant native plant or an adventive species has been questioned (Belden et al. 2004). Given that it has been found as an introduction in Ohio and potentially in Illinois and Virginia, and that the habitat where the collection was made in Indiana was degraded and unnatural, it is likely adventive in Indiana. This distinctive sedge is known to occur in floodplain forests, mesic forests, swamps, clearings, acid seeps, and dolomite glades, as well as along streams and sinkholes (Waterway 2002); it has also been collected on roadsides (McKinney et al. 2000).

This species is reported as new to Indiana based on a collection in 2023 in Posey County (Fig. 6). A single robust clump of *Carex cherokeensis* was discovered in a degraded area within a flatwoods where invasive species including *Alliaria petiolata* and *Achyranthes japonica* have been treated with herbicides in the past.

Voucher Specimens: **INDIANA: Posey Co.:** Twin Swamps Nature Preserve, in degraded portion of flatwoods near old oil lane road, in area heavily treated with herbicide for *Alliaria petiolata* and *Achyranthes japonica* in past, 37.823678°, -87.994977°, 17 May 2023, S.A. Namestnik 5734, with R. Keller (BUT, IND).

Corydalis incisa (Thunb.) Pers. [Papaveraceae] Purple Keman

Corydalis incisa is an introduced annual or biennial spring ephemeral herb native to Asia (Atha et al. 2014). It occurs in alluvial soils and poses a threat to ephemeral native understory plants. *Corydalis incisa* was first found in the United States along a riverbank in New York (Atha et al. 2014). Collections of this species in the United States are scattered, including the states of Tennessee, North Carolina, Virginia, and New York (Kartesz 2015; Weakley & Southeastern Flora Team 2025).

The first Indiana record of *Corydalis incisa* was collected from a state nature preserve near Charlestown by Indiana Department of Natural Resources—Division of Nature Preserves ecologist Jason Larson (Fig. 7). Over 2,000 ramets were observed growing in an old growth mesic upland forest. Given its introduction to this natural area, and that it has been found in several other states in recent years, this species may become invasive in mesic upland forests and woodlands.

Voucher Specimens: **INDIANA: Clark Co.:** Nine Penny Branch Nature Preserve, forested understory, 38.47523°, -85.63567°, 5 Apr 2024, J. Larson 7 (JEF).

Cyperus compressus L. [Cyperaceae] Poorland Flat Sedge

Cyperus compressus is an annual sedge native to the United States commonly found in disturbed areas such as ditches, roadsides, and lawns (Tucker et al. 2002; Rothrock 2009). It is widely distributed mainly in the southeastern states, becoming rarer northward into Tennessee and Kentucky (Weakley & Southeastern Flora Team 2025).

The first Indiana record of *Cyperus compressus* was collected in Clark County from a narrow strip of the Ohio River riverbank along the greenway in Jeffersonville (Fig. 8). An additional Clark County, Indiana collection was made the following year about 1.6 kilometers west in Clarksville. The Jeffersonville site had a population of perhaps 4 plants with the Clarksville site being larger with more than 20 or so. Several collections of this species were made a few years prior directly across the river in the Louisville, Kentucky area, where it was growing in good numbers. All of the northern Kentucky collections have been made fairly recently

(Consortium of Midwest Herbaria 2024), indicating that it is likely spreading northward. This implies that it should be considered adventive in Indiana.

Voucher Specimens: **INDIANA: Clark Co.:** Jeffersonville riverfront, open sandy shore of Ohio River, 38.26796°, -85.741749°, 10 Oct 2019, W.E. Thomas 5068 (IND), W.E. Thomas 5068B (JEF); Clarksville, Woerner Ave. at Riverside Drive, 38.269937°, -85.753287°, 29 Aug 2020, W.E. Thomas 5378 (JEF), W.E. Thomas 5379 (IND).

Cyperus difformis L. [Cyperaceae] Variable Flat Sedge

Cyperus difformis is an introduced annual flat sedge native to southern Europe, Africa, and Asia, where it grows in the muddy soils of ditches and shorelines (Keener et al. 2024).

The first Indiana collection of *Cyperus difformis* was made by David Ketzner in Gibson County from a disturbed, wet area near the parking lot for Maucks Pond. Most of the plants were in tire ruts and were associated with disturbance adapted wetland species. The population at the site consisted of one hundred or more plants localized within an area less than 0.05 hectare. Subsequent collections of *C. difformis* were made in several southern Indiana counties, including Clark, Floyd (Fig. 9), Pike, and Warrick.

Voucher Specimens: **INDIANA: Clark Co.:** Clarksville, Emery Crossing Road, wet mudhole roadside, 38.300666°, -85.787283°, 6 Sep 2016, W.E. Thomas 4655 (JEF). **Floyd Co.:** New Albany riverfront, sandy beach of Ohio River, 38.283133°, -85.815003°, 30 Sep 2015, W.E. Thomas 4541 (JEF). **Gibson Co.:** SW of East Mount Carmel and State Route 64, along primitive road in disturbed wet area, 38.391527°, -87.746666°, 27 Sep 2004, D. Ketzner 3522 (JEF). **Pike Co.:** Interlake State Recreation Area, near Lynnville, open muddy ditch, roadside, 38.237708°, -87.233766°, 23 Aug 2023, W.E. Thomas 7100 (JEF). **Warrick Co.:** Bluegrass FWA, edge of persistent mudhole, 38.065267°, -87.458973°, 14 Aug 2016, W.E. Thomas 4627 (JEF).

Cyperus fuscus L. [Cyperaceae] Brown Flat Sedge

Cyperus fuscus, an introduced Eurasian annual, thrives in moist soils near ponds, ditches, and shorelines (Tucker et al. 2002). This species is similar to *C. difformis*, *C. bipartitus*, and *C. diandrus*. The latter two species are distinguished from *C. fuscus* by their possession of two stigmas instead of three. *Cyperus difformis* can be differentiated from *C. fuscus* by its higher number of spikelets per head (30–120 vs. <12, respectively) (Tucker et al. 2002). All four species coexist in Indiana, sharing similar habitats and often growing in close proximity.

The first Indiana collection of *Cyperus fuscus* was made in Floyd County along the Ohio River just upstream from the New Albany boat ramp. It was growing in open, wet, sandy soil late in the growing season during a period of prolonged low water. A later collection was also made from Clark County in the same habitat directly below the McAlpine Locks (Fig. 10). Both populations consisted of approximately a half-dozen plants.

Voucher Specimens: **INDIANA: Clark Co.:** Clarksville, wickets area, under Penn RR Bridge, open wet sandy soil along Ohio River, 38.271961°, -85.761205°, 2 Oct 2017, W.E. Thomas 4843 (JEF). **Floyd Co.:** New Albany riverfront, wet seep, sandy soil along Ohio River, 38.283792°, -85.812454°, 16 Sep 2016, W.E. Thomas 4667 (JEF).

Cyperus iria L. [Cyperaceae] Ricefield Flat Sedge

Cyperus iria is an introduced annual sedge native to Asia that is often found in moist to dry waste areas and is known for posing a significant threat to rice fields (Tucker et al. 2002; Awan et al. 2022). It is common in Kentucky and is found in most of the southeastern states (Kartesz 2015; Weakley & Southeastern Flora Team 2025).

The first Indiana collection of *Cyperus iria* was made in Switzerland County from a boat ramp along the Ohio River just east of Patriot. The plants were abundant and growing in wet, muddy tire tracks around the paved parking lot. Subsequent collections have expanded the known distribution of this species to seven additional southern Indiana counties (Fig. 11).

Voucher Specimens: **INDIANA: Clark Co.:** Clarksville, McCullough Pike, open roadside ditch, 38.298685°, -85.788276°, 14 Sep 2016, W.E. Thomas 4663 (JEF). **Floyd Co.:** New Albany 4-H fairgrounds, wet depression in open field, 38.318855°, -85.832850°, 22 Aug 2019, W.E. Thomas 5006 (JEF). **Jefferson Co.:** Marble Hill Rd. at abandoned old 'Nuke' plant, open overgrown, weedy lot once paved, 38.597076°, -85.442764°, 28 Aug 2019, W.E. Thomas 5011 (JEF). **Ohio Co.:** Arnold Creek boat ramp along SR-156, open drain ditch in parking lot, 38.923217°, -84.878854°, 15 Aug 2015, W.E. Thomas 4488 (JEF). **Perry Co.:** Cannelton Riverfront Park northwest end, mud holes along

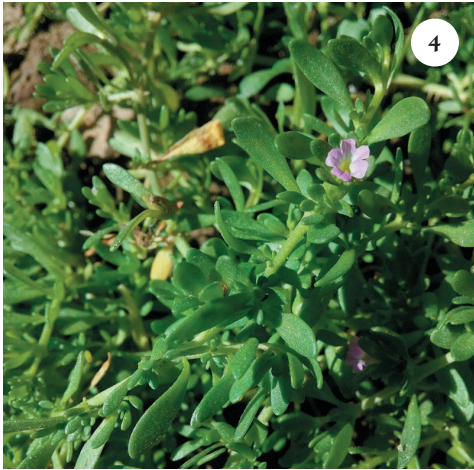


FIG. 4. *Calibrachoa parviflora*, W.E. Thomas 4560. **FIG. 5.** *Carduus acanthoides*, S.A. Namestnik 858. **FIG. 6.** *Carex cherokeensis*, S.A. Namestnik 5734. **FIG. 7.** *Corydalis incisa*, J. Larson 7. **FIG. 8.** *Cyperus compressus*, W.E. Thomas 5068. **FIG. 9.** *Cyperus difformis*, W.E. Thomas 4541.

open gravel/dirt road [1st St.], 37.915974°, –86.751321°, 26 Sep 2020, W.E. Thomas 5477 (JEF). **Switzerland Co.:** Patriot boat ramp just N of town, wet muddy ruts–open field, 38.843059°, –84.819967°, 12 Sep 2009, W.E. Thomas 3347 (JEF). **Vanderburgh Co.:** Dogtown Boat Ramp on Ohio River, open field, 37.922165°, –87.629681°, 30 Aug 2015, W.E. Thomas 4502 (JEF). **Warrick Co.:** Bluegrass FWA, edge of persistent mudhole, 38.089668°, –87.465067°, 14 Aug 2016, W.E. Thomas 4625 (JEF).

Cyrtomium fortunei J. Sm. [Dryopteridaceae] Asian Netvein Holly Fern

Cyrtomium fortunei, a garden escape, is an introduced evergreen fern native to Asia now found in forests, ravines, and along streambanks in the United States (Keener et al. 2024). Previous collections of this species are few and scattered, mainly from the southern states, with the closest known occurrence to Indiana in central Kentucky (USDA, NRCS 2023). However, *C. fortunei* may be increasing and expanding its range northward due to warmer winters, as it has been collected in Union County, Illinois in 2013 (Benda 2018) and at four locations in southern Missouri since 2020 (Aaron 2024).

The first Indiana record of *Cyrtomium fortunei* was collected in 2010 from a population of approximately 8 plants growing in a state nature preserve just east of North Vernon in Jennings County by Indiana Department of Natural Resources–Division of Nature Preserves ecologist Jason Larson (Fig. 12). A year later Indiana Department of Natural Resources–Division of Nature Preserves personnel made a collection of this species at Charlestown State Park in Clark County.

Voucher Specimens: **INDIANA: Clark Co.:** Charlestown State Park, rocky slope just below (S of) limestone glade, 38.446306°, –85.642583°, 6 Jun 2011, M. Homoya 11-07-06-06, with J. Larson (IND). **Jennings Co.:** Calli Nature Preserve, on limestone boulder, 39.005792°, –85.605083°, 3 Dec 2010, J. Larson 1 (JEF).

Dichanthelium malacophyllum (Nash) Gould [Poaceae] Soft-Leaf Witch Grass

Dichanthelium malacophyllum is a perennial grass found in portions of the southeast and south-central United States, from Texas, Oklahoma, and Kansas east to Ohio, Kentucky, Tennessee, and Alabama (Kartesz 2015). Given its presence as a native species in Saline County, Illinois (Kartesz 2015), approximately 185 kilometers from the Indiana site, it is expected that the Indiana population is naturally occurring.

Dichanthelium malacophyllum is reported as new to Indiana in Sullivan County based on a collection in 2023 (Fig. 13). It was discovered by Rich Hull and was reported as common in a small old field that is suspected to be a sand prairie remnant. Continued succession of the old field habitat threatens this population. Throughout its geographical range, *D. malacophyllum* primarily occurs in cedar glades (Freckmann & Lelong 2003a), but it also occurs in a range of open to shaded habitats in alkaline and acidic soils, including sand prairies, banks of intermittent streams, margins of ponds and seeps, mesic to dry upland forests, roadsides, and old fields (Yatskievych 1999).

Voucher Specimens: **INDIANA: Sullivan Co.:** Fairbanks Landing Fish and Wildlife Area, in a sandy, open area, 39.20916°, –87.567674°, 2 Jun 2023, R.M. Hull 6694, with T. Zambiasi (IND).

Diplachne fusca (L.) P. Beauv. ex Roem. & Schult. subsp. **uninervia** (J. Presl) P.M. Peterson & N. Snow [Poaceae] Mexican Sprangletop

Diplachne fusca subsp. *uninervia* (syn. *Leptochloa fusca* subsp. *uninervia* (J. Presl) N. Snow) is primarily an annual grass that is questionably native to the southern half of the United States with collections in the northern half of the country viewed as adventive or waifs (Snow et al. 2018; Weakley & Southeastern Flora Team 2025). Notably, this subspecies has a reputation for being more invasive than the other subspecies within *D. fusca* (Snow et al. 2018). Collection data indicate small populations in Illinois and Kentucky with the most recent collection being from the 1980s (Consortium of Midwest Herbaria 2024).

The first Indiana record of *Diplachne fusca* subsp. *uninervia* was collected in 2015 in Clark County from a large persistent mudhole on the shoulder of a gravel strewn, crumbling city street in Jeffersonville (Fig. 14). It was collected two years later from a ditch in Floyd County.

Voucher Specimens: **INDIANA: Clark Co.:** Jeffersonville, W. Market St., open muddy road shoulder, 38.269632°, –85.750613°, 27 Jun 2015, W.E. Thomas 4464 (JEF). **Floyd Co.:** New Albany riverfront area, wet ditch along RR track, 38.284658°, –85.816065°, 14 Sep 2017, W.E. Thomas 4825 (JEF).

***Eleocharis atropurpurea* (Retz.) J. Presl & C. Presl [Cyperaceae] Purple Spikerush**

Eleocharis atropurpurea is a small, annual spikerush native to the United States, where it grows on pond shores (Svenson 1929; Reznicek 1994). It has a broad distribution across temperate and tropical climates, occurring globally and throughout the United States from California to Florida and north to Michigan (Svenson 1929; Kartesz 2015). In the Great Lakes region, *E. atropurpurea* was previously only known from Michigan (Kartesz 2015), where it is critically imperiled (S1) and state-endangered (SE) with only four known occurrences from coastal sand plains (Michigan Natural Features Inventory 2020). Notably, the Michigan populations represent the northernmost extent of its range in the Midwestern United States, with the closest populations hundreds of kilometers away in southeastern Iowa and Missouri (Consortium of Midwest Herbaria 2024). A collection made in 1961 (Henderson, 138044 FSU) reported *E. atropurpurea* in Cass County, Indiana, on the south shore of Lake Cicott. However, upon re-examination, the specimen was misidentified and is actually *E. acicularis*.

The first Indiana collection of *Eleocharis atropurpurea* was made in an acidic coastal sand plain scrape within Coulter Nature Preserve in Porter County (Fig. 15). Thousands of individuals were observed forming a dense carpet intermixed with *E. engelmannii* following a water drawdown. Additional collections were made in similar conditions in the same week in Porter County. Later that year, a population consisting of hundreds of individuals of *E. atropurpurea* was discovered in adjacent Lake County. In Indiana, the conservation status of *E. atropurpurea* is S1, as the species has only ever been recorded at these reported locations, which are considered natural occurrences (IDNR-DNP 2023).

Voucher Specimens: **INDIANA: Lake Co.:** Tolleston Ridges, hundreds of plants in several scattered colonies (dense in places) in moist sand of wet sand prairie in former sand scrape, 41.59939°, -87.23325°, 4 Aug 2020, S.A. Namestnik 4474, with R. L. Hedge, T. Davis, M. Griffin, and M. Wyrick (IND). **Porter Co.:** Shirley Heinze Land Trust's John Merle Coulter Preserve, wet mesic sand prairie within a mowed fire break; very wet year with high water, 41.601477°, -87.21325°, 10 Jul 2020, N.J. Pilla NJP 2007.1001.p, with R. Hawksworth (IND, BUT, MOR); Dune Acres Playground, hundreds of individuals around the merry-go-round and under the swing set, 41.650244°, -87.085168°, 16 Jul 2020, N.J. Pilla NJP.2007.1601.p, with D. Botka and B. Slaughter (BUT).

***Eleocharis parvula* (Roem. & Schult.) Link ex Bluff et al. [Cyperaceae] Dwarf Spikerush**

Eleocharis parvula is a small perennial native to the United States (USDA, NRCS 2023). While widely distributed across the Midwest region of the United States, only a few collections are known from the neighboring states of Michigan, Ohio, and Illinois, and there are no collections from Kentucky (USDA, NRCS 2023; Consortium of Midwest Herbaria 2024). In Michigan, it is rare in natural brackish marshes and is considered endangered (Voss & Reznicek 2012). In Ohio, it occurs in Lake and Wayne counties, with the Lake County location being considered native and endangered, and the Wayne County location being considered adventive; the Lake County plants grow in exposed wet sandy flats bordering a pond, whereas the Wayne County plants are in a man-made saltmarsh (ODNR 2025). In Illinois, this species has been collected from the margins of excavated ponds and is considered adventive (P. Marcum, pers. comm.).

Two Indiana collections of this diminutive plant were made from the Bluegrass Fish and Wildlife Area, a repurposed strip mine site just northeast of Evansville in Warrick County (Fig. 16). In the first instance dozens of *Eleocharis parvula* plants were found growing atop a large floating mat of algae near the shore of one of the many artificially created lakes on the property. The subsequent collection was made four years later from the same general area where 30 or more of the plants were rooted in the moist clay soil along the shore. These occurrences of *E. parvula* are considered adventive in Indiana given the habitat and manipulated landscape where it has been discovered and that it is common in the aquarium trade.

Voucher Specimens: **INDIANA: Warrick Co.:** Bluegrass FWA, floating on algae mat in lake, 38.092236°, -87.465072°, 23 Jul 2008, W.E. Thomas 3001 (JEF); Bluegrass FWA, moist mud at edges of lake, common in area, 38.089714°, -87.464703°, 14 Jul 2012, W.E. Thomas 4187 (JEF).

***Epilobium parviflorum* Schreb. [Onagraceae] Small-Flower Hairy Willowherb**

Epilobium parviflorum is a Eurasian forb that was first introduced in North America in the late 1800s, with collections made in New Jersey, New York, and Pennsylvania from 1877 to 1880; however, it was not collected again in North America until it was discovered in Ontario, Canada in 1976 (Hoch 2021). More recent collections

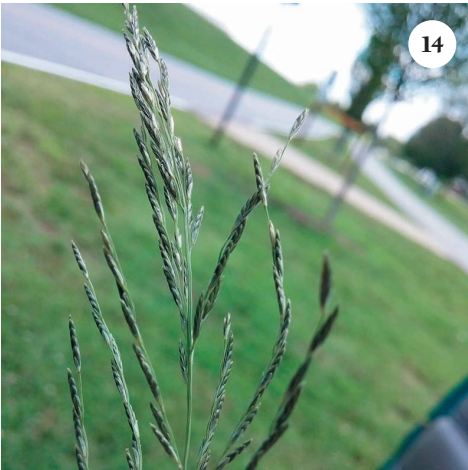
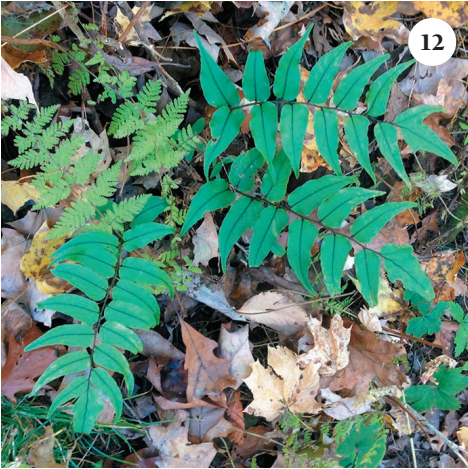


FIG. 10. *Cyperus fuscus*, W.E. Thomas 4843. **FIG. 11.** *Cyperus iria*, W.E. Thomas 5006. **FIG. 12.** *Cyrtomium fortunei*, J. Larson 1. **FIG. 13.** *Dichanthelium malacophyllum*, from location of R.M. Hull 6694. **FIG. 14.** *Diplachne fusca* subsp. *uninervia*, W.E. Thomas 4464. **FIG. 15.** *Eleocharis atropurpurea*, NJP.2007.1001.p.

and reports at iNaturalist have documented the rapid spread of this weedy species in the Great Lakes region (Voss & Reznicek 2012; Kartesz 2015; Wilhelm & Rericha 2017; Hoch 2021; GBIF 2025b) and in the Pacific Northwest (Hoch 2021). This often-overlooked perennial species can be found in wet, disturbed areas in swamps and bogs, as well as in ditches and on shores; it also occurs in wetland restorations (Voss & Reznicek 2012; Wilhelm & Rericha 2017; Hoch 2021).

The first Indiana record of *Epilobium parviflorum* was a collection made from a population with occasional individuals in 2015 at a site in Porter County, as reported in Wilhelm and Rericha (2017). Subsequent to the original collection, it has been documented in several places in Porter County (two without collections) and in Steuben County (Fig. 17) in the northern part of the state, as well as in a yard in Clinton County in the central part of the state. The species is expected to continue to spread.

Voucher Specimens: **INDIANA: Clinton Co.:** East Boone Street, Frankfort, 1 Jul 2019, S. Plunkitt s.n. (BUT). **Porter Co.:** in wet prairie at Cowles Bog wet-mesic prairie restoration, W of Mineral Springs Road and N of the Calumet Trail, 41.6388°, -87.0869°, 29 Jul 2015, S.A. Namestnik 2639 (MOR); Michigan St., in unmowed area of lawn where boots are cleaned; only other known location is 2 mi away at Cowles Prairie collected by S. Namestnik; all specimens were removed and disposed of, 41.61822°, -87.075225°, 7 July 2018, N.J. Pilla NJP.201807.071.p (MOR); scattered in seepy roadside wetland south of Meska Road within the Moraine Nature Preserve, 41.542417°, -87.025472°, 20 Aug 2024, N.J. Pilla NJP 2408 2005 (BUT). **Steuben Co.:** Marsh Lake Nature Preserve, in recovering fen that is undergoing ecological restoration, 41.723681°, -84.978751°, 27 Aug 2024, S.A. Namestnik 6469, with N. Simons and T. Swinford (BUT, IND).

***Equisetum sylvaticum* L. [Equisetaceae] Woodland Horsetail**

Equisetum sylvaticum is a distinctive horsetail found in moist forests throughout the northern parts of North America (Hauke 1993); it is common in Canada and Alaska, reaching south into the northern part of the contiguous United States, with greatest frequency in the New England and upper Great Lakes regions (Kartesz 2015; NatureServe 2024). The conservation status of *E. sylvaticum* in Indiana is S1, as the species has only ever been recorded at the reported location, where it is considered to be a natural occurrence (IDNR-DNP 2023).

The first Indiana record of *Equisetum sylvaticum* was a collection made in 2009 in LaPorte County, as reported in Wilhelm and Rericha (2017). It was discovered in a small population in a swampy portion of a flatwoods natural community (Fig. 18).

Voucher Specimens: **INDIANA: LaPorte Co.:** Near Michigan City Airport, approximately 15 plants in 15' × 25' area in flatwoods, 41.7000°, -86.8167°, 26 Jun 2009, S.A. Namestnik 831, with J. von Wahlde and A. Fenedick (MOR).

***Eriophorum tenellum* Nutt. [Cyperaceae] Few Nerve Cotton-Grass**

Eriophorum tenellum is a sedge found throughout the northeastern portion of North America; it is common in parts of Canada and the upper Great Lakes, reaching its southern limits in Illinois, Pennsylvania, and New Jersey (Kartesz 2015). This species is known to grow in bogs and in wet, peaty substrates (Ball & Wujek 2002). In Indiana, the conservation status of *E. tenellum* is S1, as the species has only ever been recorded at the reported location, where it is considered a natural occurrence (IDNR-DNP 2023). The closest known locations to the Indiana collection site are in Kalamazoo County, Michigan to the northeast and Lake County, Illinois to the northwest, with both sites being approximately 130 kilometers from the Indiana site (Consortium of Midwest Herbaria 2024).

Eriophorum tenellum is reported as new to Indiana in LaPorte County based on a collection in 2021 (Fig. 19). A small population was discovered growing intermixed with the very similar *Eriophorum gracile* in a bog, on the perimeter of a small pond.

Voucher Specimens: **INDIANA: LaPorte Co.:** Pinhook Bog, in bog around spatterdock and watershed pond, 41.61548°, -86.85074°, 4 Jun 2020, S.A. Namestnik 4358, with R.L. Hedge (IND); Pinhook Bog, 41.61548°, -86.85074°, 7 Jun 2021, S.A. Namestnik 4923, with T. Clark and C. Satkoski (MICH).

***Galium palustre* L. [Rubiaceae] Marsh Bedstraw**

Galium palustre is a wetland species found throughout the New England States and into Canada, as well as in the upper Great Lakes, with a disjunct natural occurrence in Tennessee; it is also present in the Pacific Northwest, with questionable native status (Kartesz 2015). It occurs in wet gravelly, rocky, or sandy shores

and banks, in moist ground, and in meadows and swampy hollows (Voss & Reznicek 2012). A report from Greene County, Indiana, based on a collection at Friesner Herbarium (BUT), is based on a misidentification of *G. tinctorium*.

This species is reported as new to Indiana based on a 2023 collection in St. Joseph County (Fig. 20). It was discovered by Doug Botka in a wet, depressional area within an undeveloped city park. The area where it is growing as a dominant species was planted as a mitigation wetland in the late 1990s or early 2000s, and mitigation wetland development was monitored in this area during that time. *Galium palustre* and similar species were not observed during the mitigation wetland monitoring, but the wetland was consistently mowed at that time (Namestnik pers. obs.). *Galium palustre* was not intentionally planted in this area as part of the mitigation project. The native status of this species is still being determined, as the discoverer of this population plans to search for additional populations in nearby natural areas.

Voucher Specimens: **INDIANA: St. Joseph Co.:** Ponader Park, in a low depressional emergent wetland, 41.708488°, -86.213413°, 12 Jun 2023, D. Botka s.n. (ND).

Lathyrus hirsutus L. [Fabaceae] Singletary Vetchling

Lathyrus hirsutus is an annual climbing vine native to Europe that has escaped in the United States in fields and on roadsides (Gleason & Cronquist 1991). Distribution data show this species in the western Kentucky lake region and along the western border of Illinois (USDA, NRCS 2023).

The first Indiana collection of *Lathyrus hirsutus* was made in Jennings County from a shallow open drainage ditch near the boat ramp at Nighthawk Lake (Fig. 21) where perhaps six plants were growing.

Voucher Specimens: **INDIANA: Jennings Co.:** Nighthawk Lake off SR-7, open drainage ditch, 38.955524°, -85.582053°, 5 Jul 2011, W.E. Thomas 3920A (JEF).

Lepidium oblongum Small [Brassicaceae] Veiny Pepperwort

Lepidium oblongum is a tap-rooted annual herb native to Central America, Mexico, and the western and south-central United States (Keener et al. 2024). It occurs in a range of open habitats including prairies, pastures, floodplains, roadsides, disturbed areas, and waste ground (Al-Shehbaz & Gaskin 2010). The only previously known collections of *L. oblongum* in adjacent states were from Fayette, Todd, and Jessamine counties in Kentucky (Consortium of Midwest Herbaria 2024).

The first Indiana record of *Lepidium oblongum* was collected in 2016 from a grassy road shoulder in an industrial area of New Albany, Floyd County (Fig. 22). Subsequent collections were made years later along the riverwalk in Jasper in Dubois County and in a park in Scottsburg in Scott County. The plants were abundant at the sites in Floyd and Dubois counties, where they occurred near railroad tracks; approximately 12 individuals were observed at the Scott County site. This species is adventive in Indiana.

Voucher Specimens: **INDIANA: Dubois Co.:** Jasper, along the riverwalk, between paved trail and RR track, 38.391525°, -86.924376°, 10 Apr 2023, W.E. Thomas 6728 (JEF). **Floyd Co.:** New Albany south end of 10th St., open roadside shoulder, 38.285607°, -85.811910°, 26 Mar 2016, W.E. Thomas 4565 (JEF). **Scott Co.:** Scottsburg, Linza Graham Park, weedy edges of parking lot, 38.683425°, -85.762533°, 16 Apr 2025, W.E. Thomas 7839 (JEF).

Lespedeza daurica (Laxm.) Schindl. [Fabaceae] Dahurian Bush-Clover

Lespedeza daurica, a perennial herb native to East Asia, was introduced to the United States as winter food crop for wildlife and game birds such as the Northern Bobwhite (*Colinus virginianus*), oftentimes as part of reclamation efforts in strip-mining sites (Riley 1963; Robel et al. 1979; Ohashi et al. 2009).

The first Indiana collection of *Lespedeza daurica* was made in LaGrange County in a sandy old field north of the Nasby Fen Complex (Fig. 23). This population was discovered by Blue Heron Ministries' Executive Director Nathan Simons, who had been trying to manage it for the previous two years. When collected it was still locally abundant and oftentimes intermixed with the similar non-native, invasive *L. cuneata*. Its introduction is likely attributed to wildlife seed mixes.

Voucher Specimens: **INDIANA: LaGrange Co.:** Nasby Fen Complex, collected in sandy old field where it is common to locally abundant especially in over-grown access roads, 41.698452°, -85.317548°, 13 Aug 2024, N.J. Pilla NJP.2408.1302 (BUT).



FIG. 16. *Eleocharis parvula*, W.E. Thomas 3001. **FIG. 17.** *Epilobium parviflorum*, S.A. Namestnik 6469. **FIG. 18.** *Equisetum sylvaticum*, S.A. Namestnik 831. **FIG. 19.** *Eriophorum tenellum*, S.A. Namestnik 4923. **FIG. 20.** *Galium palustre*, from location of *D. Botka* s.n.. **FIG. 21.** *Lathyrus hirsutus*, W.E. Thomas 3920A.

***Lythrum hyssopifolia* L.** [Lythraceae] Hyssop Loosestrife

Lythrum hyssopifolia is an annual herb of ruderal, seasonally flooded to wet habitats (Preston & Whitehouse 1986). It is native to Europe and questionably the British Isles but has spread globally (Preston & Whitehouse 1986; Marcum & Ketzner 2012). *Lythrum hyssopifolia* is self-compatible and a single plant can produce on average 3200 seeds, which can germinate nearly immediately (Preston & Whitehouse 1986; Les 2017); long-distance dispersal is thought to be from waterfowl (Les 2017).

The first Indiana collection of *Lythrum hyssopifolia* was made about 60 meters east of Kemil Road on the Northern Indiana Public Service Company right-of-way in Porter County, where two individuals were found in moist, sandy substrate south of the Calumet Bike Trail in a drawn-down swale near a large transmission tower (Fig. 24).

Voucher Specimens: **INDIANA: Porter Co.:** Beverly Shores, in mudflat south of Calumet Bike Trail, 41.663926°, -87.008966°, 23 Aug 2019, N.J. Pilla NJP.1908.2302.p (BUT).

***Macrothelypteris torresiana* (Gaudich.) Ching** [Thelypteridaceae] False Maiden Fern

Macrothelypteris torresiana is an introduced fern native to the tropical areas of Asia and Africa; it was first found in the United States in Florida and is now spreading north (Wyatt 2020; Keener et al. 2024). This large, rhizomatous fern does well in disturbed wooded areas such as logging roads and horse trails and has the potential to become a serious threat to natural areas in Indiana. Collections of this species from the northern two-thirds of the United States are few. Current data indicate there are collections from western Kentucky and southern Illinois (USDA, NRCS 2023; Weakley & Southeastern Flora Team 2025). The Indiana collections reported here appear to be the most northern collections in North America.

The first Indiana collection was made in 2019 in the Combs Creek area in Brown County, where it seemed rather isolated and occupied a small area. It has since been documented in Clark, Crawford (Fig. 25), Harrison, Orange, and Pike counties, and should be expected in other southern Indiana counties.

Voucher Specimens: **INDIANA: Brown Co.:** Combs Creek Watershed, mesic woods near seasonal stream, 39.057333°, -86.234757°, 1 Jun 2019, P. Rothrock, 5179B (IND). **Clark Co.:** Clark State Forest, along Franke Lk. Road, open area, recently used as logging yard, 38.55728°, -85.78892°, 3 Jul 2019, W.E. Thomas 4972 (JEF). **Crawford Co.:** Wyandotte Cave, in old logging road through second growth woods, 38.23384°, -86.28899°, 21 Jul 2020, S.A. Namestnik 4458, with R.L. Hedge and W.E. Thomas (IND). **Harrison Co.:** Buck Creek Forest, mesic floodplain woods, 38.100262°, -86.055156°, 27 Jul 2023, R.L. Hedge 23-07-27-121 (JEF). **Orange Co.:** Stoler Creek Forest, Sam Shine Foundation, open weedy site just S of small pond, 38.467841°, -86.345249°, 18 Jul 2024, R.L. Hedge 24-07-18-86, with S.A. Namestnik (JEF). **Pike Co.:** Sugar Ridge FWA area 6, open grassy roadway-easement, 38.272455°, -87.173133°, 18 Sep 2023, W.E. Thomas 7190 (JEF).

***Montia linearis* Greene** [Montiaceae] Linear-Leaf Candy-Flower

Montia linearis is an annual herbaceous plant native to the western portion of North America, from British Columbia to California and east to Saskatchewan and Wyoming (Kartesz 2015; NatureServe 2024). The species is considered adventive in several states in the southeastern United States, as well as in New Jersey (Weakley et al. 2023) and Pennsylvania (Kartesz 2015; Weakley & Southeastern Flora Team 2025). It is reported for Indiana by Weakley and Southeastern Flora Team (2023) based on a 2022 collection in Dearborn County (Weakley et al. 2023). *Montia linearis* is considered adventive in Indiana. In its native range, *M. linearis* grows in moist grasslands, scrub, open woodlands, and fields (Miller & Chambers 2012), but where it is adventive, it has been found growing in lawns and disturbed areas (Weakley & Southeastern Flora Team 2025), as well as in fallow cropland (P. Marcum, pers. comm.).

The first Indiana collection of *Montia linearis* was made in St. Joseph County in 2019, where it grew abundantly in mowed turf and in cracks in pavement in a parking lot (Fig. 26). It continues to persist in this habitat, as it was observed at this location in 2024.

Voucher Specimens: **INDIANA: St. Joseph Co.:** Potato Creek State Park, between Trail 3 heads, near pavilion, abundant, mostly in full sun, in sandy clay loam lawn near parking area and in pavement cracks nearby, 41.543289°, -86.358040°, 23 Apr 2019, S.A. Namestnik 3820, with L. Namestnik and C.T. Namestnik (IND, MOR, ND).

***Odontarrhena muralis* (Waldst. & Kit.) Endl. [Brassicaceae] Yellowtuft**

Odontarrhena muralis (syn. *Alyssum murale* Waldst. & Kit.) is a perennial mustard of waste areas and roadsides; it is native to Europe and southwest Asia (Al-Shehbaz 2010). It is known as an introduction in the western United States, Canada, and northern Michigan (Al-Shehbaz 2010; Voss & Reznicek 2012). *Odontarrhena muralis* is considered a noxious weed in Oregon (as *A. murale*) (Oregon Department of Agriculture 2022) and has the potential to become a serious threat to native species in Indiana.

Odontarrhena muralis is reported as new to Indiana from Porter County based on a collection in 2022 (Fig. 27). It was discovered growing in sandy soil, where it was frequent on a stabilizing sand dune within 160 m of homes within the Ogden Dunes development. Its presence at this location suggests that it likely escaped from cultivation. Where it was discovered, it appeared to have invasive tendencies.

Voucher Specimens: **INDIANA: Porter Co.:** Portage Lakefront Park, on stabilizing sand dune, mostly in full sun, 41.628046°, -87.181975°, 16 Jun 2022, S.A. Namestnik 5452, with D. Nimetz and C. Satkoski (BUT, IND, MOR).

***Oenanthe javanica* (Blume) DC. [Apiaceae] Java Water-Celery**

Oenanthe javanica is an introduced perennial native to Asia, where it is grown as a culinary herb (Yatskievych & Raveill 2001). This invasive species is found in wet areas (Yatskievych & Raveill 2001).

The first Indiana record of *Oenanthe javanica* was collected in a roadside ditch in the Jeffersonville area of Clark County near a large farming operation. At the time of the collection there were hundreds of individuals; the population has since been destroyed for the construction of a subdivision. This specimen was examined by George Yatskievych. Subsequent collections were made from Porter, Hendricks, Scott (Fig. 28), Monroe, and Johnson counties.

Voucher Specimens: **INDIANA: Clark Co.:** intersection of Holmans Lane at Charlestown-New Albany Pike, Roadside ditch, 38.33483°, -85.724761°, 11 Aug 2003, H.C. Curtis 184 (JEF). **Hendricks Co.:** abundant in a drainage ditch running west from Hornaday Road, 39.824062°, -86.382417°, 9 Aug 2020, M. Homoya 20-08-09-01, with B. Homoya (BUT). **Johnson Co.:** Atterbury FWA, along Pisgah Rd. at old Sugar Ck. dam, seep area along creek bank, 39.381168°, -86.00617°, 27 Aug 2021, W.E. Thomas 5913 (JEF). **Monroe Co.:** in creek at SE park, shallow drainage, 39.1501981°, -86.5040192°, 14 Jul 2021, N. Garza 10 (IND). **Porter Co.:** E of cul-de-sac at end of Shorewood Drive in Shorewood Forest Subdivision, S of US-30, W of Valparaiso, in moist woods that was historically floodplain, 41.4500°, -87.1333°, 13 Aug 2009, S.A. Namestnik 865 (MO), S.A. Namestnik 866 (MOR), S.A. Namestnik 867 (ILL); same population, 17 Oct 2009, S.A. Namestnik 905 (MO), S.A. Namestnik 906 (MOR), S.A. Namestnik 907 (ILL), determined by J.R. Thomas, Institute of Botanical Training, LLC; identification verified based on molecular analysis by S. Downie, University of Illinois at Urbana-Champaign. **Scott Co.:** Clark State Forest, Bowen Lake area, growing in shallow outflow stream, 38.57422°, -85.83226°, 15 Aug 2020, W.E. Thomas 5360 (JEF).

***Paspalum dilatatum* Poir. [Poaceae] Dallisgrass**

Paspalum dilatatum is a perennial grass species introduced from Brazil and often considered a weed (Allen & Hall 2003). Distributional data show this species to be common and widely scattered in Kentucky and southwestern Illinois (Kartesz 2015; Weakley & Southeastern Flora Team 2025).

The first Indiana collection of *Paspalum dilatatum* was made in Perry County on a roadside at the base of a high bluff line just across Indiana SR-66 from the visitor parking lot for the Cannelton Locks and Dam along the Ohio River (Fig. 29), where it was abundant. It was recollected from the same site in 2020.

Voucher Specimens: **INDIANA: Perry Co.:** along SR-66 near the Cannelton Dam, open roadside shoulder, 37.900591°, -86.706594°, 12 Aug 2010, W.E. Thomas 3647A (JEF).

***Paspalum distichum* L. [Poaceae] Jointed Crown Grass**

Paspalum distichum is a rhizomatous perennial grass native to the southern and western United States (Allen & Hall 2003). This species typically inhabits wet areas, shorelines, and particularly ditches (Allen & Hall 2003). The closest known location for this species to Indiana is in the western Kentucky lake region (Kartesz 2015; Weakley & Southeastern Flora Team 2025).

The first Indiana collection of *Paspalum distichum* was made in 2022 in Clark County at a boat ramp along the Ohio River in eastern Jeffersonville (Fig. 30). The plants were abundant on the top shoulder and down the sides of a drainage ditch flowing directly into the river. It was subsequently collected two years later in Warrick County along the Ohio River. It may be moving along the Ohio River and colonizing disturbed



FIG. 22. *Lepidium oblongum*, W.E. Thomas 4565. FIG. 23. *Lespedeza daurica*, NJP.2408.1302. FIG. 24. *Lythrum hyssopifolia*, NJP.1908.2302.p.
FIG. 25. *Macrothelypteris torresiana*, from location of S.A. Namestnik 4458. FIG. 26. *Montia linearis*, S.A. Namestnik 3820. FIG. 27. *Odontarrhena muralis*,
S.A. Namestnik 5452.

areas where habitat is available, or it could be being moved via recreational activities along the Ohio River. Due to its nature of exploiting disturbed areas and a gap in its distribution between the western Kentucky lake region and where it is known in Indiana, it should be treated as adventive in Indiana.

Voucher Specimens: **INDIANA: Clark Co.:** Jeffersonville, Duffy's Landing, open ditch along riverfront, 38.291855°, -85.693530°, 23 Jul 2022, W.E. Thomas 6346A (JEF, IND). **Warrick Co.:** Yankeetown Beach, forming dense, stoloniferous colony in mudflat along Ohio River, 37.897967°, -87.299981°, 13 Aug 2024, S.A. Namestnik 6447 (BUT, IND).

Persicaria extremiorientalis (Vorosch.) Tzvelev [Polygonaceae] Far Eastern Smartweed

Persicaria extremiorientalis is an annual forb native to Japan, the Russian Far East, China, and Korea (Atha et al. 2010). It was first recognized as occurring in the United States based on an herbarium specimen from 1961 in New York (Atha et al. 2010) and is currently known from all states on the east coast of the United States from New York and Pennsylvania south to South Carolina (Weakley & Southeastern Flora Team 2025). It is known to occur in various disturbed and early successional habitats (Atha et al. 2010).

The first Indiana record of *Persicaria extremiorientalis* was discovered in 2020 growing abundantly in a disked sand fire break at Winamac Fish and Wildlife Area in Pulaski County (Fig. 31). This species should be sought out in Indiana and in states eastward where it is currently not documented, as it is expected to be present and misidentified, possibly as *P. maculosa* or *P. lapathifolia*. Although it may not invade natural areas, it appears that it can become prevalent in disturbed habitats.

Voucher Specimens: **INDIANA: Pulaski Co.:** Winamac Fish and Wildlife Area, abundant in disked sand fire break along road, 41.122425°, -86.640898°, 1 Sep 2020, S.A. Namestnik 4569 (BUT, IND, NY).

Pilosella officinarum F.W. Schultz & Sch. Bip. [Asteraceae] Mouseear Hawkweed

Pilosella officinarum (syn. *Hieracium pilosella* L.) is a short, perennial herb native to Europe and northern Asia (Chapman et al. 2000; Ferrer-Gallego & Mateo 2012). It reproduces asexually through stolon fragmentation, aposporous apomictic seed production, and haploid parthenogenesis, as well as sexually (Asker & Jerling 1992; Krahulcová et al. 2000). It is now widely established in eastern and northwestern North America, and also occurs in much of Europe, New Zealand, and Australia (POWO 2024).

The first vouchered population of *Pilosella officinarum* in Indiana was collected on a north facing slope within the Town of Dune Acres, growing in sand along a social trail colloquially called “Lupine Lane” (Fig. 32). The species was locally abundant under a *Quercus velutina* canopy within the greater oak savanna system.

Voucher Specimens: **INDIANA: Porter Co.:** Dune Acres, population found on top of north facing slope of dune off Lupine Lane trail, 41.648939°, -87.076965°, 30 Jun 2020, N.J. Pilla NJP.2006.3001.p, with S.A. Namestnik (BUT).

Potentilla supina L. [Rosaceae] Bushy Cinquefoil

Potentilla supina is a late flowering, tap-rooted, annual herb that in the broad sense (as *P. supina*) is native to Eurasia, Africa, Central America, and North America, where it is commonly found on sandy moist soils of stream banks and shorelines (Knoke & Giblin 2003). North American plants have been variously treated by some at the infraspecific level as *P. supina* subsp. *paradoxa* and by others at the species level as *P. paradoxa*. Current distributional data indicate that the closest known populations to Indiana are in northeast Ohio and southwest Illinois (Kartesz 2015; USDA, NRCS 2023).

The first Indiana collection of *Potentilla supina* was made in Harrison County from the Mauckport area along the open, moist, sandy shoreline of the Ohio River, east of the Matthew Welsh Bridge (Fig. 33). Only a single plant was found at this site. The species is being considered adventive in Indiana.

Voucher Specimens: **INDIANA: Harrison Co.:** Mauckport area E of bridge, sandy/muddy beach of Ohio River, 38.018269°, -86.19460°, 11 Oct 2015, W.E. Thomas 4559A (JEF).

Rumex fuginus Phil. [Polygonaceae] Tierra Del Fuego Dock

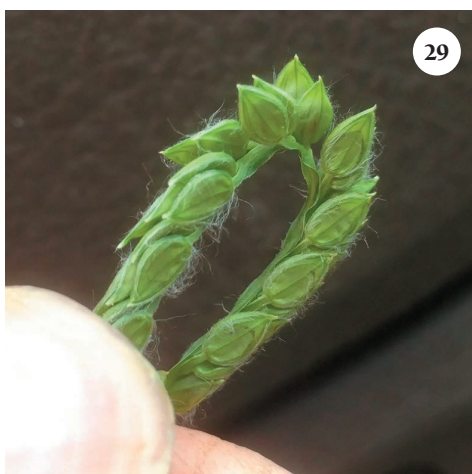


FIG. 28. *Oenanthe javanica*, W.E. Thomas 5360. FIG. 29. *Paspalum dilatatum*, W.E. Thomas 3647A. FIG. 30. *Paspalum distichum*, W.E. Thomas 6346A. FIG. 31. *Persicaria extremiorientalis*, S.A. Namestnik 4569. FIG. 32. *Pilosella officinarum*, NJP.2006.3001.p. FIG. 33. *Potentilla supina*, W.E. Thomas 4559A.

Rumex fueginus is a wetland species found throughout South America, Central America, and North America, except in the southeastern portion of the United States and the northeastern portion of Canada; it is most common in the western United States and Canada (Mosyakin 2005; Kartesz 2015). Although it is a native species in North America, including being considered native in adjacent Illinois, *R. fueginus* is believed to be adventive in Indiana. This distinctive dock occurs in alluvial, riparian, and ruderal places, as well as on shores and in marshes, bogs, wet meadows, and dry streambeds (Mosyakin 2005).

Rumex fueginus is reported as new to Indiana in Lake, Cass (Fig. 34), and Porter counties based on collections in 2014, 2020, and 2023, respectively; it was collected at a second location in Cass County in 2023. It was originally discovered in the state in a marshy restoration area in Lake County, where scattered plants were observed growing in saturated soil; this collection, at The Morton Arboretum (MOR), is shown at Consortium of Midwest Herbaria as *Rumex maritimus* L. but is referenced by Wilhelm and Rericha (2017) as *R. fueginus*. The subsequent collections were made from populations where the species was occasional in marshy habitat.

Voucher Specimens: **INDIANA: Cass Co.:** Lake Cicott, in mucky sand on margin of lake, 40.76501°, -86.53176°, 19 Aug 2020, S.A. Namestnik 4514, with R.L. Hedge (IND); Rance Property, in marshy edge of pond at W end of Lake Cicott, 40.767036°, -86.539483°, 18 Jul 2023, S.A. Namestnik 5898, with W. Williams and D. Williams (BUT, IND). **Lake Co.:** Roxana Marsh, in restored marsh, 41.616391°, -87.485408°, 8 Aug 2014, S.A. Namestnik 2131 (MOR). **Porter Co.:** NIPSCO Cowles Ponds, in southern NIPSCO pond E of Bailly Station and W of Cowles wetland complex adjacent to the Indiana Dunes National Park, growing on sandy, mucky pond edge after a dry year and drawdown, 41.637983°, -87.104127°, 20 Sep 2023, N.J. Pilla NJP.2309.2001, with M. Harmon (BUT).

Taraxacum palustre (Lyons) Symons [Asteraceae] Marsh Dandelion

Taraxacum palustre is a widespread European species complex which includes numerous apomictic micro-species within the section *Palustria* (Aquaro et al. 2008; Aquaro & Peruzzi 2012). Over 160 such species have been described in Europe (Rewicz et al. 2020). However, North American treatments typically group these species into a few broader taxa (Brunton 1989). Following Brouillet (2006), we adopt the name *T. palustre* for this complex group until a more definitive taxonomic assignment of North American specimens can be made.

Taraxacum palustre was first documented in Indiana in 2024 in Marion County, growing in landscape rock adjacent to Clowes Memorial Hall at Butler University in Indianapolis (Fig. 35). A dozen or so individuals with erect leaves were observed with only one plant bearing flowerheads. A month later, an additional population was discovered (but not collected) at Pine Station Nature Preserve in Lake County growing on the edge of a dune and swale near N. Clark Road in Gary.

Voucher Specimens: **INDIANA: Marion Co.:** dozen or so growing in landscape rock alongside the N side of Clowes Memorial Hall; all leaves were erect; only one individual (collected) had flowerheads; it was an unusually warm spring, 39.840778°, -86.169947°, 18 Mar 2024, N.J. Pilla NJP.2403.1801, with S.A. Namestnik (BUT).

Tridens strictus (Nutt.) Nash [Poaceae] Long-Spike Fluff Grass

Tridens strictus is a North American native perennial grass that does well in a variety of habitats (Shadow 2013). Locally it is found in southern Illinois and western Kentucky (USDA, NRCS 2023).

The first Indiana record of *Tridens strictus* was made in 2015 in Washington County, in an open field (Fig. 36). The following year it was collected in Jackson County growing along a dry roadside shoulder. The plants were abundant at both sites. Because the sites were highly disturbed, the species is being considered adventive in Indiana.

Voucher Specimens: **INDIANA: Jackson Co.:** along SR-256 E of the Muscatatuck River, roadside shoulder, 38.742184°, -85.897525°, 17 Oct 2016, W.E. Thomas 4687 (JEF). **Washington Co.:** Austin Bottoms FWA tract C-2, open field, 38.74192°, -85.902051°, 26 Sep 2015, W.E. Thomas 4524 (JEF).

Trifolium fragiferum L. [Fabaceae] Strawberry Clover

Trifolium fragiferum is a Eurasian perennial herb of meadows, fields, roadsides, and sandy and saline soils that has been introduced and has spread throughout much of the United States; it is also known from southern Canada, southern South America, New Zealand, and Australia (Kartesz 2015; Vincent & Gillett 2023).

The first Indiana record of *Trifolium fragiferum* was discovered in 2020 growing in dense patches on a

roadside in Lake County near Hoosier Prairie Nature Preserve (Fig. 37).

Voucher Specimens: **INDIANA: Lake Co.:** Hoosier Prairie Nature Preserve, along N and S sides of E 53rd Avenue, in dense patches in dry gravelly sand along roadside, 41.52293°, –87.44696°, 14 Jul 2020, S.A. Namestnik 4431, with D. Nimetz (BUT, IND, MOR).

Veronica sublobata M.A.Fisch. [Plantaginaceae] False Ivy-Leaved Speedwell

Veronica sublobata is an annual Eurasian native (Adanick 2023) that closely resembles *V. hederifolia*; without a close inspection it is easily mistaken for the latter. Both species are found mainly in open fields and disturbed areas and often grow side by side. The main diagnostic characteristic for separating the two species in the field is the abundant long spreading hairs on the pedicel of *V. sublobata* rather than a thin single abaxial line of short hair (Adanick 2023). Distributional data show the plant to be in Kentucky and Ohio (Weakley & Southeastern Flora Team 2025).

The first Indiana record of *Veronica sublobata* was collected in Harrison County, where it was growing at the base of a steep bluff in an open field along Indian Creek in Corydon (Fig. 38). *Veronica hederifolia* was also growing in the area and was far more abundant. It has since also been collected in Floyd and Clark counties. It is likely more frequent than indicated, as it is easily overlooked.

Voucher Specimens: **INDIANA: Clark Co.:** Clarksville, Origin Park area, open weedy field, 38.292768°, –85.784978°, 30 Mar 2025, W.E. Thomas 7793 (JEF). **Floyd Co.:** New Albany waterfront, weedy waste area, 38.283336°, –85.820326°, 25 Mar 2025, W.E. Thomas 7787 (JEF). **Harrison Co.:** Corydon, Indian Creek Greenway, N of SR-62, open field at base of steep wooded bluff, 38.213545°, –86.129518°, 16 Mar 2024, W.E. Thomas 7226 (JEF).

Veronica triphyllos L. [Plantaginaceae] Finger Speedwell

Veronica triphyllos is an annual to biennial Eurasian forb with a sparse and scattered distribution in North America, known from Washington, Oregon, California, Idaho, Kansas, Oklahoma, Missouri, Arkansas, North Carolina, and South Carolina (Kartesz 2015; Albach 2019; Weakley & Southeastern Flora Team 2025). It occurs in a range of habitats, including pine forests, rocky pastures, sandy fields, gardens, and roadsides (Albach 2019).

The first Indiana record of *Veronica triphyllos* was discovered in 2020 growing as an occasional weed in dry sand near a parking area at Pigeon River Fish and Wildlife Area in Steuben County (Fig. 39). When it was discovered, the deep blue flowers and strongly lobed leaves with deep purple undersides stood out as being unique. It was collected several years later on the other side of the state in Clark County.

Voucher Specimens: **INDIANA: Clark Co.:** Charlestown S.P. W of boat ramp, depressed area of open field, 38.399285°, –85.632884°, 13 Mar 2024, W.E. Thomas 7224 (JEF). **Steuben Co.:** Pigeon River Fish and Wildlife Area, in sparsely vegetated dry sand at edge of parking area L5, in mowed area, 41.652099°, –85.189266°, 8 Apr 2020, S.A. Namestnik 4183 (BUT, IND).

INDIANA NOTEWORTHY COLLECTIONS

Coleataenia longifolia (Torr.) Soreng subsp. **longifolia** [Poaceae] Long-Leaf Cut-Throat Grass

Coleataenia longifolia subsp. *longifolia* is a perennial grass that occurs primarily along the coastal plains of the Atlantic Ocean and Gulf of Mexico, with scattered occurrences throughout the eastern half of the United States north to the Great Lakes region (Kartesz 2015). In Indiana, the species was historically known from Starke County; a Tippecanoe County record, as reported by Kartesz (2015), is based on a misidentification of *Dichanthelium linearifolium* at Friesner Herbarium (BUT). Indiana and Michigan occurrences represent disjunct populations from the core of the range of the species. It is known to occur in moist to wet open, sandy habitats (Freckmann & Lelong 2003b).

Coleataenia longifolia subsp. *longifolia* was considered extirpated from Indiana until 2020, when it was discovered in an inland coastal plain marsh in Pulaski County (Fig. 40). This area had recently undergone habitat restoration to remove native tree species and create a flyway for waterfowl to an open water area on the property. This collection is also a Pulaski County record.

Voucher Specimens: **INDIANA: Pulaski Co.:** Winamac Fish and Wildlife Area, abundant along margin of inland coastal plain marsh, 41.1470°, –86.6338°, 1 Sep 2020, S.A. Namestnik 4584, with R.L. Hedge (BUT, IND, MOR, ND).

Dryopteris clintoniana (D.C. Eaton) Dowell [Dryopteridaceae] Clinton's Wood Fern

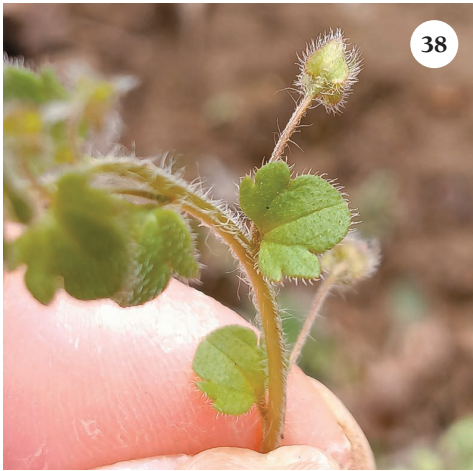
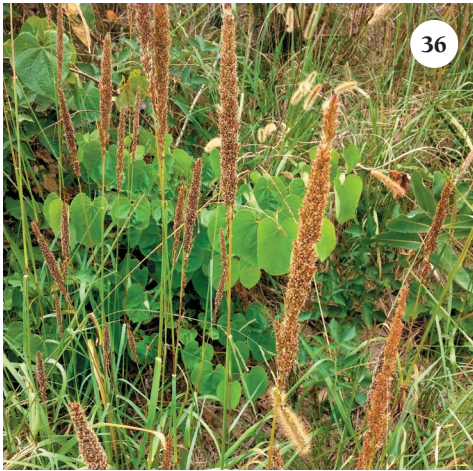
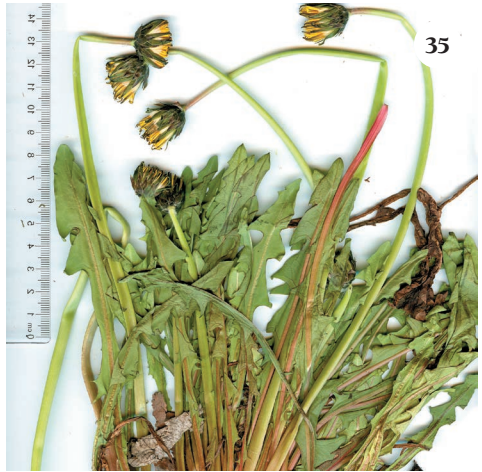


FIG. 34. *Rumex fueginus*, S.A. Namestnik 4514. **FIG. 35.** *Taraxacum palustre*, NJP2403.1801. **FIG. 36.** *Tridens strictus*, W.E. Thomas 4524. **FIG. 37.** *Trifolium fragiferum*, S.A. Namestnik 4431. **FIG. 38.** *Veronica sublobata*, W.E. Thomas 7226. **FIG. 39.** *Veronica triphyllus*, S.A. Namestnik 4183.

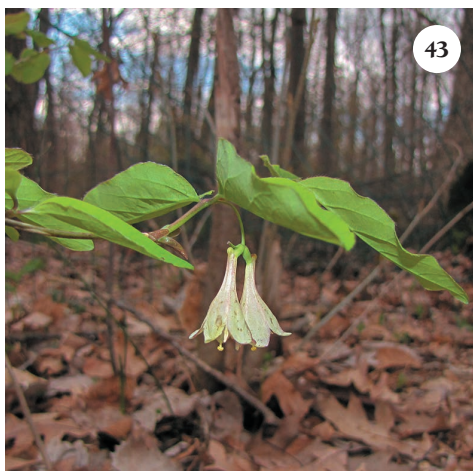


FIG. 40. *Coleataenia longifolia* subsp. *longifolia*, S.A. Namestnik 4584. **FIG. 41.** *Dryopteris clintoniana*, S.A. Namestnik 2055. **FIG. 42.** *Fimbristylis puberula*, N.J.P.1908.0701.p. **FIG. 43.** *Lonicera canadensis*, from location of S.A. Namestnik 152. **FIG. 44.** *Scheuchzeria palustris* subsp. *americana*, from location of S.A. Namestnik 4912.

Dryopteris clintoniana is a fern that occurs primarily in the northeastern portion of North America, including New Brunswick, Quebec, and Ontario in Canada and the New England and upper Great Lakes regions of the United States, with a disjunct occurrence in southern Illinois (Kartesz 2015; NatureServe 2024). In Indiana, the species was historically known from Porter, LaPorte, and Noble counties in the northern part of the state (Kartesz 2015). It is known to occur in swampy woods (Montgomery & Wagner 1993) and is much more frequent just north of the state line in Michigan (Voss 1972).

Dryopteris clintoniana was considered extirpated from Indiana until 2014, when a small population was discovered in a circumneutral seep in Noble County (Fig. 41).

Voucher Specimens: **INDIANA: Noble Co.:** Art Hammer Wetland Preserve, in circumneutral seep, 41.489104°, -85.425472°, 16 Jul 2014, S.A. Namestnik 2055, with T. Fleming (BUT).

Fimbristylis puberula (Michx.) Vahl [Cyperaceae] Hairy Fimbry

Fimbristylis puberula is a loosely caespitose perennial sedge that primarily inhabits the eastern United States, reaching its northwestern limit in Ontario; its core distribution spans the eastern Great Plains and coastal Gulf states (Kartesz 2015). Notably, Indiana populations represent a disjunct occurrence from the main range. Historically in Indiana, *F. puberula* inhabited wet to wet-mesic sand prairies (Wilhelm & Rericha 2017), with a 1934 record from Daviess County growing in what was described as a “grassy clearing in low woods” (Hermann 6153 [MICH]).

In 2019, a population of about a dozen *Fimbristylis puberula* ramets was discovered in Porter County in an unmowed soccer field that was historically a sand prairie (Fig. 42). Prior to this discovery the species was considered extirpated from Indiana. The field remained unmowed in 2019 due to heavy spring rains. By 2020, the population had grown to over 100 individuals. A second population of 19 individuals was discovered in 2020 at Howes Prairie within the Indiana Dunes National Park. This aligns with Wilhelm’s (1990) report of its presence there based on a 1952 specimen collected by Floyd Swink. A large population was also discovered in a moist sand prairie in Newton County in 2022.

Voucher Specimens: **INDIANA: Newton Co.:** locally common in moist sand prairie, 41.085°, -87.426, 24 May 2022, M. Homoya 22-05-24-01, with L. Casebere, C. Hedge, R. Hedge, and T. Post (BUT). **Porter Co.:** Dune Acres, several large clumps in a former soccer field not mowed this year, 41.650793°, -87.086173°, 7 Aug 2019, N.J. Pilla NJP.1908.0701p, with D. Pilla and B. Slaughter (BUT).

Lonicera canadensis Bartram ex Marsh. [Caprifoliaceae] American Fly-Honeysuckle

Lonicera canadensis is a shrub that occurs in the northeastern portion of North America, including Manitoba, New Brunswick, Nova Scotia, Prince Edward Island, Quebec, and Ontario in Canada and the New England and upper Great Lakes regions of the United States, as well as extending south along the Appalachian Mountains (Kartesz 2015; NatureServe 2024). In Indiana, the species was historically known from four northern tier counties: Lake, LaPorte, Elkhart, and Steuben (Kartesz 2015). The Indiana occurrences generally represent the southern extent of the global distribution of the species, with the exception of occurrences at higher elevations in the Appalachian Mountains (Kartesz 2015). *Lonicera canadensis* occurs in various forest types just north of Indiana throughout most of Michigan (Voss 1996).

Lonicera canadensis was considered extirpated from Indiana until 2008, when a small population was discovered in an upland area within a flatwoods community in LaPorte County (Fig. 43). This discovery was the basis for the report of an extant population in LaPorte County by Wilhelm and Rericha (2017).

Voucher Specimens: **INDIANA: LaPorte Co.:** Sebert County Park, 6 mi NE of Michigan City, on the S side of CR 925 N, ca. 0.6 mi W of CR 300 W, five small plants growing in upland area within swamp forest, 41.737712°, -86.768782°, 26 Apr 2008, S.A. Namestnik 152 (MOR).

Scheuchzeria palustris L. subsp. **americana** (Fernald) Hultén [Scheuchzeriaceae] Rannoch-Rush

Scheuchzeria palustris subsp. *americana* is a wetland forb that occurs throughout the northern portion of North America (Kartesz 2015; NatureServe 2024). In Indiana, the species was historically known from four northern counties: LaPorte, St. Joseph, Lagrange, and Noble (Kartesz 2015). The Indiana occurrences are near the southern extent of the global distribution of the subspecies (Kartesz 2015). It occurs in sphagnum bogs,

marshes, and lake margins throughout its North American range (Nienaber 2000).

Scheuchzeria palustris subsp. *americana* was moved from state endangered to state extirpated in Indiana in 2020, after a survey of the last known population in the state revealed that the site had become dominated by shrubs and that *S. palustris* subsp. *americana* was no longer present at the site (Namestnik pers. obs.). In 2021, a survey of a bog in Kosciusko County resulted in the discovery of a thriving population of *S. palustris* subsp. *americana* (Fig. 44). The species is now considered critically imperiled (S1) in Indiana (IDNR-DNP 2023). This collection is also a Kosciusko County record.

Voucher Specimens: **INDIANA: Kosciusko Co.:** Burket Bog, in leatherleaf bog, 41.21342°, -85.96940°, 2 Jun 2021, S.A. Namestnik 4912, with N. Herbert and S. Orr (BUT).

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