

Illinois Flora Updates: New Distribution Records and other Noteworthy Finds by INPS Flora Update Committee

Illinois flora updates is a new feature in *Erigenia* and we hope it becomes a regular feature in subsequent issues. We propose this feature as a solution to several problems: 1) many new distribution records, especially county distribution records, are never published; 2) there have been rediscoveries of many species and populations considered rare or extirpated but not tracked by the Illinois Endangered Species Protection Board; 3) several non-native plant species are now spreading explosively across Illinois and parts of North America; and 4) no one individual in Illinois is tracking or verifying all new finds and rediscoveries. We hereby initiate this feature with the hope that it will act as a clearinghouse for new and updated information on the distribution of plants in Illinois, and thus stimulate further botanical discoveries and floristic work in Illinois.

The first published compilation of vascular plant distribution by county for Illinois was in 1955 (Jones and Fuller 1955), with added records in 1960 (Winterringer and Evers 1960). In the past, *Erigenia* has published updates (Mohlenbrock and Ladd 1983; Mohlenbrock 1985) to Distribution of Illinois Vascular Plants (Mohlenbrock and Ladd 1978). Recent works on the Illinois vascular flora have generally lacked precise information on species distribution (Mohlenbrock 2002) or deal with a limited region of Illinois (Swink and Wilhelm 1994) or one plant family (Lynn 2001). Recent publications in the Transactions of the Illinois State Academy of Science (Basinger 2001; Ketzner 1996; Wilm and Taft 1998e) have publicized species new to Illinois, but generally have omitted new distribution records of species previously known from the state. In few cases, recently published floristic studies require close reading to determine if any new distribution records were made!

At present, we want the updates to focus on vascular plants (flowering plants, conifers, ferns, and fern allies). This is the only group for which state-wide distribution data are widely available, primarily through the publications cited in the previous paragraph. We will also summarize publications elsewhere concerning additions to the Illinois flora, where pertinent collection data are included. We request that authors inform us of the new finds (after publication, of course) with relevant information. Given the current lack of stability in scientific names, we also propose to alert Illinois plant enthusiasts to published changes in these names. We will provide a citation and, if possible, a brief statement citing the reason for these changes.

We hope this feature will assist in tracking the spread of non-native plants. At present, many widespread exotics are under-recorded, and we encourage the collection of voucher specimens to document this spread. Among the under-collected exotics are two invasive shrubs, autumn-olive (*Elaeagnus umbellata*) and the Amur or red honeysuckle (*Lonicera maackii*); they may now be present in every county. We also need documentation for certain invasive species that are now just arriving in Illinois or will probably appear here within the near future, such as giant hogweed (*Heracleum mantegazzianum*) or mile-a-minute (*Polygonum perfoliatum*). As human-mediated climate and landscape change proceeds, this feature could become an invaluable resource for land managers and invasive species biologists.

We will only accept records that are based on voucher specimens deposited at an institutional herbarium. We strongly suggest the herbaria of the Illinois Natural History Survey (all Illinois plants) and Morton Arboretum (plants collected in northeastern Illinois) as appropriate places to deposit specimens. Their addresses are included below. Other herbaria that specialize in the Illinois flora include those at Illinois' universities and large colleges, museums (Field Museum and Illinois State Museum), and public gardens (Chicago Botanical Garden and Missouri Botanical Garden).

The only exception to the above restriction will be made for certain endangered, threatened, or otherwise rare species, for which an archival photograph should be presented to a herbarium as a voucher. Two good rules of thumb for vouchering rare herbaceous species are: 1) do not collect a specimen if the population is below twenty individuals; and 2) do not collect an entire plant unless the population is above fifty individuals (or stems). Hopefully, this will also prompt a more careful survey of the population and its environs for additional plants and will result in a more accurate population census. We also encourage all botanists (both professional and amateur) to limit collections of rare species to the minimal material needed to confirm the plant's identity. We will not publish sight records, aside from rediscoveries of previously verified populations belonging to species of conservation concern (listed as federal T&E, state E&T, FS sensitive species (USDA FS, on Midewin and Shawnee). All other records must be accompanied by a specimen or verifiable photograph.

When collecting known or potentially invasive species, carefully dispose of any viable seed not incorporated into the specimen; please do not unintentionally assist in the spread of exotics! We may question reports (even with vouchers) of certain cultivated plants reported as "new to Illinois" or "new to _____ County"; we don't want this feature to become a horticultural record for Illinois. Only genuine escapes and plants persisting long after cultivation (>40 years) at abandoned house sites and gardens should be considered part of the spontaneous flora. For supplementary opinions on the rationale and ethics involved in plant collecting, read Raviell (1982) and Stritch (1982). Be aware that wild plants belong to the landowner, and we recommend obtaining written permission before collecting on private land. It is illegal to collect in nature preserves and most other public lands without a permit.

There are several publications available on the proper methodology and equipment for collecting voucher specimens (Hill 1996; Oskins 1982; Robertson 1980; Smith 1971). These publications also include some sources of plant presses and other equipment, and the Internet is another source with on-line catalogs for plant collecting and herbarium supplies. Several textbooks on plant taxonomy and systematics also include information on making plant specimens.

All records (*not specimens*) should be mailed (hard copies or electronic mail) to:

Illinois Flora Updates
Erigenia Editor

4252 Humphrey Street
St. Louis, Missouri 63116
mvogt@accessus.net

The editor will forward the records to the INPS Flora Updates coordinator a few months before publication of *Erigenia*. The coordinator will work with botanists at the Illinois Natural History Survey and other institutions to confirm the significance of these reports. The coordinator will then organize the reports into a format suitable for *Erigenia*.

We recommend that all submissions should include the following information. If any of the fields below marked with an asterisk is omitted, we may refuse to publish the record.

- Scientific name*
- The identification manual or source of nomenclature being used* (Mohlenbrock 2002, Swink and Wilhelm 1994, Yatskievych 1999, or others)
- Common name
- Family
- County*
- Date of collection* (or sighting, for species of conservation concern)
- Collector's name*
- Collection number*
- Herbarium* where specimen or copy of photograph is deposited
- Accession number (from herbarium where specimen is deposited; we highly recommend including this number, if available)
- Locality information (legal location, township, state park, forest preserve, or national forest should be included; however, precise locality info will be omitted for rare plants or those vulnerable to unsustainable harvest, e.g., orchids, goldenseal, or ginseng).
- Habitat, can include associates.
- Comments on population size (especially if the species is of conservation concern).
- If the information is published in full elsewhere, please cite publication.*
- Significance – a brief statement or short paragraph discussing the importance of this find. Is this a new state record, a new county record, a major range extension, a rare species, the rediscovery of a historic specimen, or a rapidly spreading exotic? (If this discussion is lengthy, we will edit it.)
- Please indicate whether the plants are native or alien (non-native). Be aware that plants native in one part of Illinois may be escaping from cultivation in other regions (e.g., redbud).

Please include your telephone number, e-mail address, or postal address so the coordinator can contact you if any questions arise. At present, there will not be any page charges for publishing records.

Herbaria:

Dr. L. R. Phillippe, Herbarium Manager
Center for Biodiversity
Illinois Natural History Survey
607 East Peabody
Champaign IL 61820

Herbarium Curator
Research Department
The Morton Arboretum
Lisle IL 60532

Literature Cited:

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