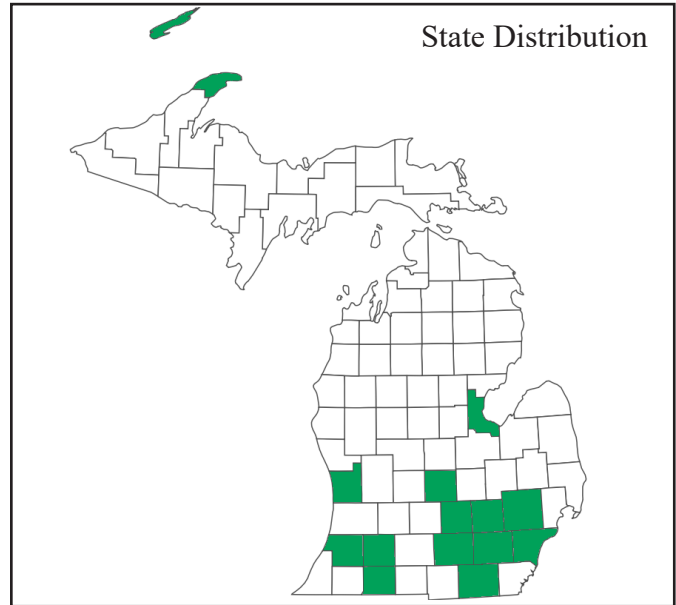
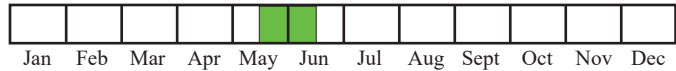


Photograph by John Wilty, [Illinois Wildflowers](https://illinoiswildflowers.org/)



Best Survey Period



Legal status: State Special Concern

Global and state rank: G5 (Globally Secure) / SNR (State Not Ranked)

Other common name(s): Spring forget-me-not, early forget-me-not, Virginia forget-me-not, spring scorpion grass

Family: Boraginaceae

Synonyms: *Myosotis virginica* auct. non (L.) Britton, Sterns & Poggenb.

Taxonomy: The genus *Myosotis* comprises about 100 species found in two main centers of diversity with about 60 species distributed throughout Western Eurasia and about 35 described species in New Zealand. Outside of these two regions fewer than 10 species are distributed in North America, South America, Africa, and Australia (Al-Shehbaz 1991). The morphological variability of pollen in the Boraginaceae family proved taxonomically useful in distinguishing the species within the genus *Myosotis* (Grau and Leins 1968, Grau and Schwab 1982). The genus *Myosotis* is divided

into two sections: *Myosotis* section *Exarrhena* which encompasses species located in the Southern Hemisphere (New Zealand) and *Myosotis* section *Myosotis* which encompasses species located in the Northern Hemisphere (Western Eurasia) including *M. verna* (Meudt 2016). *Myosotis verna* was originally diagnosed by Linnaeus as *Lycopsis virginica*. Later Britton, Sterns & Poggenb. brought it into the genus *Myosotis* as *Myosotis virginica* placing *M. verna* Nutt. as its synonym. Fernald 1941 brought up the ambiguity of *M. virginica* being based on a blue-flowered plant compared to *M. verna* which Nuttall based upon a white-flowered plant. In the 70+ years after Fernald brought up the issue of using *M. virginica*, *M. verna* has been used more extensively. Currently *M. virginica* is cited as a synonym for *M. verna*, noted as misapplied, or ignored (Goldman 2024, Fernald 1941).

Total Range: *Myosotis verna* (white forget-me-not) is a North American species distributed in two distinct regions, one being in the Northwest ranging from British Columbia to Oregon and Idaho, and south to California and Nevada. The second encompasses the eastern half of the country ranging from Maine west to South Dakota, south to Georgia and



Texas, and north to Ontario and Quebec. It is considered vulnerable (S3) in Kansas, Maryland, New Jersey, and South Carolina; critically imperiled (S1) in Quebec, District of Columbia, Nebraska, Vermont, and Wyoming; and possibly extirpated (SH) in Delaware. Of the 44 states where *M. verna* has been observed, 29 of them are recorded as having a no status rank (SNR) with Michigan being one of them (NatureServe 2026), due to its recent listing.

State Distribution: *Myosotis verna* has been documented in 13 counties in Lower Michigan, primarily in southeast Michigan; and one county in the Upper Peninsula. The first record was collected by Lewis Foote in Washtenaw County in 1862. Since then, there have been 17 more occurrences in Washtenaw County; one in each Bay, Clinton, Oakland, Ottawa, and St. Joseph counties; two in each Jackson, Lenawee, Van Buren, and Wayne counties; three in Ingham and Kalamazoo counties; and 5 in Livingston County. There are two historical occurrences recorded in Keweenaw County, one from 1935 and the other in 1950 at the summit of Mt. Bohemia; these were the only recorded occurrences of *M. verna* from a county in the Upper Peninsula. The most recently documented population of *M. verna* in Michigan was from a collection in 1990 in Lenawee County (Reznicek et al. 2024).

Recognition: One of two native *Myosotis* species found in Michigan, *M. verna* is an erect annual or winter annual with a fibrous taproot ranging in from 5–40 cm (2–16 in). Stems are round, slender and covered in spreading and appressed, white hairs and typically, unbranched below the inflorescence. Leaves are alternate, simple, and sessile, 1–5 cm (0.4–2 in) long and 0.2–1 cm (0.08–0.4 in) wide, oblong or narrowly elliptic with blunt tips and covered with appressed stiff hairs. Lower leaves are oblanceolate, tapering to petiole-like base. The central stems and upper lateral stems terminate into elongated racemes of 8–24 small white flowers 1–2 mm (0.04–0.08 in) broad. The **white corolla** is funnel shaped with 5 rounded lobes fused for up to half their length. The calyx as a whole is 4–7 mm (0.2–0.3 in) long, with **unequal lobes where the**

two lower lobes are longer than the three upper lobes creating a two lipped appearance. The calyx is densely covered in spreading hairs, some with hooked tips. Calyces are spaced 0.5–2 cm (0.2–0.8 in) apart along the inflorescence axis (e.g., rachis). The fruit is a schizocarp splitting into four compressed or somewhat flattened, greenish brown to dark brown **nutlets 1.2–1.5 mm (0.05–0.06 in) long**, enclosed by the two lipped sepal lobes on short stalks (Gleason and Cronquist 1991, Hilty 2020, Reznicek et. al. 2024, Yatskievych 2026).

M. verna is the most similar to *Myosotis macrosperma*, a more southern species which historically has been treated as a variety of *M. verna*. Where *M. verna* favors dry sandy soils *M. macrosperma* prefers areas of with moist to wet, loamy to sandy, mostly calcareous soils along stream bottoms, woodlands, and floodplain forests. The two species are easily distinguishable by the distance between flowers with *M. verna* flowers usually spaced less than 1 cm (0.4 in) apart along the rachis and by the smaller 1.2–1.5 mm (0.5–0.6 in) sized nutlets where *M. macrosperma* flowers are spaced farther apart and the nutlets are slightly larger (Fernald 1941, Al-Shehbaz 1991). Another species that can be mistaken for *M. verna* is smaller specimens of *Hackelia virginiana*. *M. verna* has a thinner stem, narrower leaves, and blooms earlier in the year compared to *H. virginiana*.

Best survey time/phenology: Flowers can bloom as early as March in more southern states and continue blooming through July with the peak flowering during May. Fruits follow soon after flowering. Most herbarium specimens from Michigan were collected from the third week of May to the second week of June, with a few collected in July and one collection from August.

Habitat: *Myosotis verna* grows in a variety of open and semi-open environments including dry to mesic forests, upland open woodlands, barren wooded slopes, sandy savannas, sand and tall grass prairies, bases and edges of bluffs, scrub oak barrens and areas with history of disturbance including roadside



embankments, fallow and cultivated fields, woodland paths, powerline clearings, and areas around railroads. *M. verna* favors dry habitats and areas with well-drained soil but can be found in areas along stream banks, river bottoms, and seasonally moist lowlands. (Al-Shehbaz 1991, Hilty 2020, Yatskievych 2026). There are also records of *M. verna* growing in rocky areas including temperate calcareous outcrops in Vermont, crystalline bedrock outcrop (prairie) in Minnesota, basaltic cliffs in Connecticut, and an alvar on Manitoulin Island in Lake Huron of the North American Great Lakes. (Minnesota Biological Survey 2007, Reznicek 1985, Tiffney 1981).

In Michigan, *M. verna* has been recorded growing on dry wooded hillsides, dry sand or rocky banks (both grassy and forested), meadows and pastures, oak savanna, and on bedrock in the Keweenaw Peninsula (Reznicek 2024).

Species noted growing alongside *M. verna* in Michigan include serviceberry (*Amelanchier* sp.), Jack pine (*Pinus banksiana*), oak sp. (*Quercus* sp.), Robin's plantain (*Erigeron pulchellus*), common wood rush (*Luzula multiflora*), and false Solomons seal (*Maianthemum racemosum*). In other parts of its range, *M. verna* has been associated with marsh bellflower (*Campanula aparinoides*), flat-topped white aster (*Doellingeria umbellata*), sharp-angled spike rush (*Eleocharis tenuis* var. *pseudoptera*), soapwort gentian (*Gentiana saponaria*), common frostweed (*Helianthemum canadense*), round-headed bush clover (*Lespedeza capitata*), white clover (*Trifolium repens*).

Biology: *Myosotis verna* is an annual herb flowering in early spring. *M. verna* is capable of self-pollination and cross-pollination by small insects. *Augochlorella striata* (golden green sweat bee) and *Pontia protodice* (checkered white) were observed as visitors to *M. verna* by Charles Robertson in Illinois in 1928. *M. verna* relies primarily on sexual reproduction and annual reseeding like most annuals. It seeds early to mid-summer shortly after flowering. Seeds are dispersed by gravity and by

clinging to the fur of mammals. LeConte's sparrow and likely other birds eat the seeds (Easterla 1962). The foliage can be used as a food source for the flea beetle *Longitarsus melanurus* which feeds primarily on species from the Boraginaceae family. *M. verna* is a host for a species of rust fungus *Aecidium myosotidis*, and *Peronospora myosotidis* an oomycete (fungus-like organism) in the mildew family that causes downy mildew disease in the *Myosotis* genus (Farlow and Seymour 1888).

Conservation/management: Populations of *M. verna* in Michigan have yet to have their seed viability assessed. Many records are historical with vague locality information. *Myosotis verna*'s preference of dry, open to semi-open habitats can leave it vulnerable to natural succession processes and fire suppression, as well as being outcompeted by invasive species. The best course of action until more research can be done on the ecology of *M. verna* would be ecologically managing oak openings, and other areas in southern Michigan with the preferred habitat of *M. verna*. Tolerance of *M. verna* towards human disturbance and development is unclear thus developing areas where it is present should be avoided until more is understood.

Comments: *Myosotis verna* is derived from the Ancient Greek words *mys* meaning "mouse", and *otis* meaning "ear" which refers to the shape and texture of its leaves resembling a mouse ear. The species name *verna* is Latin for "spring" or "vernal" which represents its early bloom time.

Research needs: With the most recent recorded collection of *M. verna* dating back to 1990, more surveys are needed to determine the full extent of *M. verna* in Michigan and assess the viability of the populations and species within Michigan. Research on the biology and ecology of this species would be beneficial to understand conservation and management needs. Research that focuses on demographic data, response to natural succession, and response to invasive species and disturbances would provide useful for future conservation.



Related abstracts: Oak barrens, oak openings, alvar, bastard-pennyroyal, creeping whitlow grass, shortstalk chickweed.

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