

Online Plant Tools

Welcome to the fall issue of *Marilandica*. Here we summarize native plant websites and apps that we find useful.

Plant Identification. We often get asked which plant identification (ID) app is the best. The answer is ... it depends. Are you looking for an immediate response or an accurate ID, to contribute to conservation, or to learn botany?

Rankings for plant ID apps' accuracy are entirely dependent on which plants are in a given study and even on what day you check - the apps are constantly improving. For instance, **Plant Net** ranked highest in a study of herbaceous plants (Campbell et al. 2023), whereas **iNaturalist** and **Flora Incognita** did best in a study of mixed plant types (Garden Myths). Other identification apps that correctly identified 65% or more of plants in one or both of these studies were **Leaf Snap**, **Google Lens**, and **Picture This**.

iNaturalist (iNat) is our favorite. iNat is the only plant app that has human-assisted ID, providing a place for learning and botanizing. And perhaps most importantly, verified iNat observations are used by conservationists, researchers, invasive species watch programs, and the Maryland Biodiversity Project. iNat is available in three flavors: **iNaturalist Classic** is the original community-science platform with detailed observation tools and expert-driven identifications; the **iNaturalist app**, released in 2025, has Artificial Intelligence (AI) species suggestions and automatic metadata; and **Seek** is a kid-friendly app that gives instant IDs without accounts or data sharing.

If you want to botanize, we highly recommend **FloraQuest: Northern Tier App**. With graphic and dichotomous keys, habitat descriptions, range maps, and about 30,000 diagnostic photos, FloraQuest is an excellent botanical companion. You can even use it without ongoing internet access by downloading the data for your region. The **Flora of Virginia** app is similar to FloraQuest, but just for Virginia.

Native Range. In Maryland, nativity of plants is often drawn from Knapp & Naczi's **Vascular Plants of Maryland, USA:**

A Comprehensive Account of the State's Botanical Diversity, which is an herbarium-based record of plant species. For instance, the **Maryland Plant Atlas** bases nativity status on Knapp's and Naczi's work, but the Atlas is online, so it is regularly updated with new plant observations. The Maryland Plant Atlas shows plant distributions by county, or drills down to smaller "quads" and includes observation dates.

The Maryland Plant Atlas shares a database with the **Maryland Biodiversity Project** (MBP). Their shared database considers all iNaturalist observations in Maryland and observations submitted directly to MBP. These reports are then checked by expert MBP

curators for accuracy. MBP has more user features than the Atlas and iNat, and is an excellent resource for conservationists, citizen scientists, and plant nuts.

A third website for Maryland nativity is **bplant.org**, a nationwide database of plant distributions that provides range maps for native and introduced plants at various ecoregion levels, making it useful for conservation planning and climate-tolerance forecasting.

Native Plants for Ecoregions.

The **Maryland Native Plants Program** is creating native plant guides for the State's three main ecoregions. These publications provide excellent guidance for choosing native plant species appropriate for each ecoregion, based on the Maryland Plant Atlas. The **Piedmont Guide** is available now at mdflora.org; the **Coastal Plain Guide** is expected this fall and the **Mountain Guide** is being planned for the fall of 2027.

Once you've decided you want a native garden, finding plants can be a chore. So, we are really pleased with the **Commercial Native Plant List** (go.umd.edu/CommercialMDNativePlantList) and the NEW user-friendly companion app **Maryland Native Plant Finder** (mdnative-plants.umd.edu).

Both the List and the Finder give appropriate plant suggestions based on site conditions, deer resistance, and biodiversity benefits, making it useful for both home and commercial landscapers. The Finder then directs you to certified nurseries that sell native plants (go.umd.edu/NativePlantCertProgram). The Finder then directs you to certified nurseries that sell native plants (go.umd.edu/NativePlantCertProgram).



Vernonia noveboracensis (New York Ironweed) at the Lower Meadow at Locust Grove Nature Center. Photo taken on MNPS Field Trip lead by Anne De Novo, August 23, 2026. Photo by P. Foster.

REFERENCES

- Campbell, N.I., J. Peacock & K.L. Bacon. 2023. A repeatable scoring system for assessing Smartphone applications ability to identify herbaceous plants. *Plos ONE*, 18(4-15).
- Pavlis, R. The Best Plant ID App – We Tested 7 Different Ones. www.gardenmyths.com/the-best-plant-id-app-we-tested-7-different-ones/. Accessed on September 3, 2026.