



FLORASCOPE

Occasional News from the Flora of Virginia Project

Introducing Natural Communities

The hard work needed to incorporate Natural Communities data into the Flora App is nearly complete. This has been our primary project all year, and we've talked about it a lot, because information about Natural Communities helps all Flora users understand WHERE and WHY Virginia's native plants assemble as they do. [The classification system developed by Vegetation Ecologists with Virginia Natural Heritage Program](#), our longtime partners and collaborators, provides a framework to describe natural communities at a scale that is meaningful for conservation and land protection and management. It gives context to the importance of protecting certain habitats and species, guiding efforts to restore landscapes to functioning ecosystems that support native flora and fauna. The Natural Communities data in the Flora app will:

- **Describe** in detail 80 Natural Community groups with over 1,000 new captioned photos;
- **Illustrate** the diverse and unique habitats where our native flora grow and why certain species are always found together;
- **Provide** range maps to direct you to where you are most likely to find these groups; and,
- **Include** abbreviated lists of species frequently found in the each community group.

In addition to this amazing work, since our June issue we've also:

- [Added a form to our website](#) so you can easily report issues and inconsistencies you may find in the App; and,
- [Launched an App Review program](#) for post-secondary botany, biology, environmental science and related instructors.

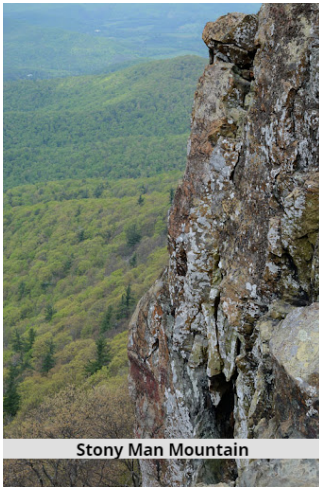
As you explore the Natural Communities data launching at the end of August, consider that our work to Keep the Science Current relies on generous donations from our app users and longtime supporters

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Natural Communities Hierarchy*

Let's explore how DCR organizes natural communities so we can understand the information that will soon be available in the app:

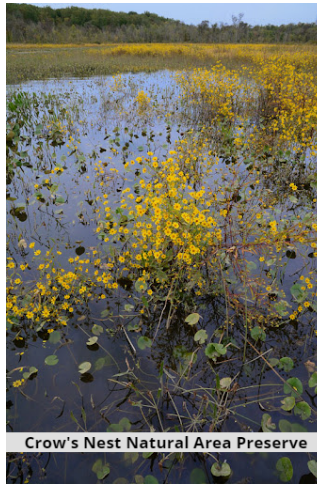
- 5 Systems
 - 14 Classes
 - 80 Groups
 - 300+ Types



Stony Man Mountain

Terrestrial System

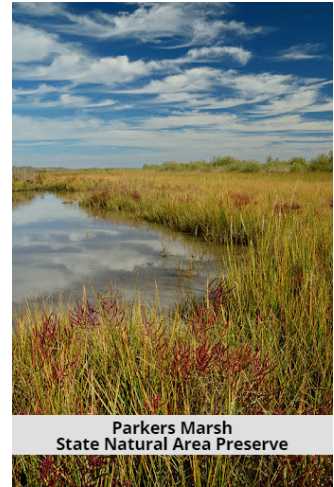
Encompasses all upland, non-wetland habitats that occur across the spectrum of Virginia's geography, topography, and elevation. Vegetation structure, elevation, soil chemistry, and sunlight help define classes and community types. Hardwood trees dominate, often stunted by exposure to harsh elements. Understories includes ferns, asters, and rhododendron, and a wide array of lichen.



Crow's Nest Natural Area Preserve

Palustrine System

Palus is Latin for marsh, an apt description of this system of inland, non-tidal wetlands. The classes in this system are defined by how long the habitat stays wet. Communities not associated with moving water include some of the most unique in Virginia. Fens, bogs, seeps and depression ponds support some of our rarest plant species.



Parkers Marsh
State Natural Area Preserve

Estuarine System

Estuarine communities are shaped by flooding caused by wind or lunar tides. The single Tidal Wetlands Class includes 11 distinct Groups. These communities are found exclusively in eastern Virginia, although not only on the coast. Salinity even in freshwater marshes defines plant life, which may include dogwoods, climbers like Virginia Creeper, as well as Wild Rice and Partridge Pea.



Riverine System

The Riverine System includes floating and submerged freshwater vegetation like like Water Stargrass, Horn-leafed Riverweed and Eastern Mosquito Fern. The Natural Heritage Program notes sites are poorly inventoried in Virginia, but are known to be present in the Shenandoah, James and Roanoke Rivers.



Marine System

This unique community is only found on the southeast coast and islands. The Virginia classification addresses a small part of this system - sparsely vegetated ocean shores and flats that are flooded by ocean tides and only includes vegetation of the splash zone. This habitat, limited to pioneering, salt-tolerant, succulent annuals, like Saltwort and Bitter Seabeach Grass, supports some very rare and protected species like Loggerhead Turtles and Piping Plovers.

We are Grateful for Partnerships

[The Virginia Department of Conservation and Recreation Natural Heritage Program](#), the [Virginia Academy of Science](#), the [Virginia Botanical Associates](#), [Lewis Ginter Botanical Garden](#), [Virginia Native Plant Society](#), and many volunteers and organizations work tirelessly to protect Virginia habitat.

The Flora of Virginia is evergreen, requiring ongoing attention to keep our data up-to-date and add new features and functionality to the Flora App. We rely on the generous, tax-deductible donations of our users and supporters to get our work done.

* Fleming, G.P., K.D. Patterson, and K. Taverna. 2021. The Natural Communities of Virginia: a Classification of Ecological Community Groups and Community Types. Third approximation. Version 3.3. Virginia Department of Conservation and Recreation, Division of Natural Heritage, Richmond, VA. www.dcr.virginia.gov/natural-heritage/natural-communities/ [Accessed: March 28, 2023]

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