

Why Is Dyke Marsh Significant?

The Dyke Marsh Wildlife Preserve is a 480-acre complex with several habitats — a freshwater tidal wetland, swamp forest, floodplain forest and open water. It is on the Virginia side of the Potomac River in Fairfax County and has been seriously degraded by dredging, dumping, filling, trash and non-native species. Congress added Dyke Marsh to the national park system in 1959 “so that fish and wildlife development and their preservation as wetland wildlife habitat shall be paramount.” (Public Law 86-41)

What is it? What’s there?

Dyke Marsh is —

- a freshwater, tidal marsh; freshwater, tidal marshes are rare.
- at least 2,200 years old, in the southern part.
- one of the largest remaining freshwater, tidal wetlands in the Washington metropolitan area.
- one of the largest, most significant temperate, climax, riverine, narrow-leafed cattail marshes in the national park system.
- habitat for 300 known species of plants, 6,000 arthropods, 38 fish, 16 reptiles, 14 amphibians and over 270 species of birds, and possibly 20,000 species of insects.
- home to the narrow-leafed cattail (*Typha angustifolia*), a plant more common to brackish, salty water.
- one of the best studied wetlands in the U.S. and an outdoor laboratory.



Three plants found in Dyke Marsh are considered “critically imperiled” or “imperiled” in Virginia:¹

- Davis’s sedge (*Carex davisii*)
- River bulrush (*Bolboschoenus fluviatilis*, also known as *Schoenoplectus fluviatilis*)
- Rough avens (*Geum laciniatum*)

Two bird species found in Dyke Marsh are among Virginia’s rarest known native animals:

over

¹ Plant and bird rankings developed by Virginia Department of Conservation and Recreation, Division of Natural Heritage, and Virginia Department of Wildlife Resources

- The American bittern (*Botaurus lentiginosus*). In Virginia, this bird is “extremely rare and critically imperiled” for breeding occurrences and “very rare and imperiled” for non-breeding occurrences.
- The coastal species of the swamp sparrow (*Melospiza georgiana georgiana*). In Virginia, this bird is “extremely rare and critically imperiled” for breeding occurrences.
- In Virginia, the least bittern (*Ixobrychus exilis*) is listed as a “species of greatest conservation need.”

Until 2015, the marsh was the only known nesting area of the marsh wren (*Cistothorus palustris*) in the upper Potomac River tidal zone. This bird has not been observed breeding in Dyke Marsh since 2015.

Two species of carabid beetles previously unknown in Virginia were found in 2012.

A species of rove beetle and a species of tumbling flower beetle new to science were discovered here in 2019 and 2020.

Dyke Marsh has survived years of abuse and impacts from surrounding dense development, a rare freshwater, tidal wetland in a suburban/urban area that provides an outdoor classroom for all ages, a laboratory for scientific study and opportunities for recreation and nature study.



Saving Dyke Marsh

Until 2020, Dyke Marsh was disappearing. An average of around 0.3 acres of the wetland vanished every year between 1940 and 2020, a rate so severe that U.S. Geological Survey scientists concluded that Dyke Marsh would be gone by 2035, without action.

Dredging between 1940 and 1972 reduced what was once 200 acres of emergent marsh to 83 acres and destabilized the whole system, spurring the loss of another 24 acres. Today fewer than 60 acres remain. From 2019 to 2022, the National Park Service invested over \$34 million in *stabilizing* the remaining marsh. The U.S. Congress, in the authorizing legislation’s justification and in later bills, called for *restoring* Dyke Marsh. The National Park Service built a breakwater and sills to stem erosion by protecting the marsh from occasional hurricane-force storm waves and to encourage accretion.

Dyke Marsh has been featured on PBS television’s *This American Land*, National Public Radio/WAMU’s “Metro Connection,” in the *Washington Post*, the *Beacon* and *Zebra* newspapers and in *Virginia Wildlife* magazine. A feature film about Dyke Marsh, *On the Edge*, premiered at the Kennedy Center for the Performing Arts.

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