

are generally wettest in winter and spring and driest in late summer and fall. Hydrology evidence includes stained tree trunks, standing water, and mud flats.

Animals that need these habitats: Seasonal standing water provides important habitat for amphibians, including salamanders and frogs. The rare smallmouth salamander (*Ambystoma texanum*) lives in oak swamps along the Ohio River. Three burrowing crayfish species (*Cambarus pauleyi*, *Fallicambarus fodiens*, and *Procambarus acutus*) are specialists in these habitats in different parts of the state. Rusty blackbirds (*Euphagus carolinus*) congregate in oak swamps. Acorns are important food sources for many mammals and birds, including squirrels and ducks.

Distribution: Bottomland Oak Swamps are known in the floodplains of several rivers across the state, including the Ohio, Kanawha, Tygart Valley, Greenbrier, Meadow, and Potomac Rivers. Total area of Bottomland Oak Swamps known in West Virginia may be less than 2,500 acres.

Places to see and visit: [Johnson T. Janes Park](#), [Meadow River Wildlife Management Area](#), [Winfield Swamp](#)

Conservation issues: Many sites were cleared, then drained or filled for agriculture, industry, or other human development. Secondary forests have returned in some areas where drainage has failed but, depending on the interval without forest and distance from seed sources, the floristic composition is likely to be very different from the original forest. Oak seeds have limited dormancy and do not maintain long-term seed banks. Wildlife populations that depend on small patches of oak swamps in urban, industrial, and agricultural settings may be impacted by pollution and genetic isolation.

Classification:

| USNVC Association WV Scientific Name [Common Name] | Code | G Rank | S Rank | Links |
|---|------------|--------|--------|---|
| <i>Quercus palustris</i> - <i>Quercus bicolor</i> - (<i>Liquidambar styraciflua</i>) / <i>Toxicodendron radicans</i> Forested Swamp [Ohio River oak swamp] | CEGL002432 | G3G4 | S2 |  |
| <i>Quercus palustris</i> / <i>Carex lupulina</i> Sinkhole Swamp [sinkhole pond oak swamp] | CEGL004643 | G2 | S1 |  |
| <i>Quercus bicolor</i> - <i>Nyssa sylvatica</i> / <i>Ilex verticillata</i> / <i>Symplocarpus foetidus</i> Forested Swamp [mountain valley oak swamp] | CEGL006497 | G3G4 | S1 |  |
| <i>Quercus palustris</i> - (<i>Fraxinus nigra</i>) / <i>Cornus amomum</i> / <i>Carex bromoides</i> Forested Swamp [Meadow River oak swamp] | CEGL007399 | GNR | S1 |  |

Key to Associations:

- Swamp forests dominated by pin oak (*Quercus palustris*) that occur around sinkhole depression ponds on sandstone ridges in the Ridge and Valley Ecoregion = ***Quercus palustris* / *Carex lupulina* Sinkhole Swamp** [sinkhole pond oak swamp]

1. Swamp forests dominated by pin oak and/or swamp white oak (*Quercus bicolor*) that occur in floodplains and backwaters of rivers and streams 2
2. Swamp forests along the Ohio River and its tributaries in the Western Allegheny Plateau Ecoregion. Sweetgum (*Liquidambar styraciflua*) is sometimes present = ***Quercus palustris* - *Quercus bicolor* - (*Liquidambar styraciflua*) / *Toxicodendron radicans* Forested Swamp** [Ohio River oak swamp]
2. Swamp forests in the Ridge and Valley and Allegheny Mountain Ecoregions. Sweetgum is absent. 3
3. Swamp Forests in the floodplain of the Meadow River in Greenbrier County. Black ash (*Fraxinus nigra*) is a common associated tree = ***Quercus palustris* - (*Fraxinus nigra*) / *Cornus amomum* / *Carex bromoides* Forested Swamp** [Meadow River oak swamp]
3. Swamp forests in the Potomac drainages in the Ridge and Valley and along the Tygart Valley and Greenbrier Rivers in the Allegheny Mountains. Black ash is absent. Stands at higher elevations are dominated by swamp white oak and lack pin oak = ***Quercus bicolor* - *Nyssa sylvatica* / *Ilex verticillata* / *Symplocarpus foetidus* Forested Swamp** [mountain valley oak swamp]

Photo gallery:



References:

Brumfield, B. P. 1982. Flora and Vegetation of Five Natural Wetlands in the Kanawha and Ohio River Floodplains, Southwestern West Virginia. (1982). *Theses, Dissertations and Capstones*. Paper 155.

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Putnam, N. J. 1995. Plant Communities of the Meadow River Wetlands. WVDNR, Natural Heritage Program, Elkins, WV. 17 pp.

Walton, D. and J. Vanderhorst. 2009. Mountain State flora: bottomland pin oak forests. *West Virginia Wildlife* 9: 21.

<http://www.wvdnr.gov/wildlife/magazine/archive/09spring/Vol9No1msfBottomlandPinOakForests.pdf>