Piedmont Hardpan Woodland and Forest



Macrogroup: Central Oak-Pine



State Distribution: MD, VA

Total Habitat Acreage: 49,430

Percent Conse	rved: 2.	4%
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State	State Habitat %	State Acreage	GAP 1&2 (acres)	GAP 3 (acres)	Unsecured (acres)
VA	100%	49,216	78	1,023	48,115
MD	0%	214	47	31	136

Crosswalk to State Name Examples:

Dry Oak-Pine Forests (MD), Southern Piedmont Hardpan Forest (VA)



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Description:

A hardwood woodland that occurs where a particularly dense clay hardpan has developed over a range of mafic rocks (igneous rocks rich in iron and magnesium), creating dry conditions for plants despite the presence of deep soil. Open woodlands and more limited areas of shallow glade-like vegetation are the usual cover. Typical canopy trees include white oak, post oak, pignut hickory, and white ash. The open canopy leads to a better developed herb layer than in most Piedmont forests, one that is usually grassy. Some sites may have once supported open prairies or prairie savannas when they burned more frequently.

Ecological Setting and Natural Processes:

A system of the Virginia and Maryland Piedmont and southward. It is usually on flatter uplands, sometimes on narrow ridges. Most soils that formed on the mafic bedrock are circumneutral to basic. Fire was probably once the most important natural disturbance, but the elimination of fire in the Piedmont makes this difficult to observe on most of the modern landscape. In our region, occurs as small to large patches in a largely agricultural landscape.

Similar Habitat Types:

This system is distinguished from others in the Piedmont by distinctive occurrence on hardpan soils in particular geologic settings. Usually adjacent to Northeast Interior Dry-Mesic Oak Forest or Southern Piedmont Mesic Forest.

Crosswalk to State Wildlife Action Plans:

Dry Oak-Pine Forests (MD), Forest Habitat - Deciduous Forest (VA)

Places to Visit this Habitat:

C & O Canal National Historical Park | MD Bull Run Mountains State Natural Area Preserve | VA Conway Robinson Memorial State Forest | VA Cumberland State Forest | VA

Associated Species: Appendix lists scientific names

PLANTS: bluehearts (Buchnera americana), grove sandwort (Moehringia lateriflora), old-field milkvine (Matelea decipiens), prairies bold goldenrod (Oligoneuron rigidum var. rigidum), purple milkweed (Asclepias purpurascens), southern shagbark hickory (Carya carolinae-septentrionalis), spoon-shape barbara's-buttons (Marshallia obovata var. obovata), susquehanna cherry (Prunus pumila var. susquehanae), tall dropseed (Sporobolus compositus var. compositus), wingedloosestrife (Lythrum alatum)

Species of Concern (G1-G4): Appendix lists scientific names

PLANTS: buffalo clover (Trifolium reflexum), Torrey's mountainmint (Pycnanthemum torrei), winter quillwort (Isoetes hyemalis)



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The average patch size for this habitat is 6 acres and the largest single patch is 1,239 acres. This chart shows the proportion of the habitat that is in each patch-size class.



This chart shows the average age of trees associated with this habitat based on forest Inventory data. For non-forested systems or small habitats the average age is influenced by the surroundings.



This chart shows the predicted loss of habitat over the next five decades (3,984 acres) if loss continues at the same rate as 1990-2000. The average rate of loss is 80 acres per year.



This metric measures how connected or fragmented the land directly surrounding (18 square miles) the habitat is, this the chart shows the proportion of the habitat in each connectedness class.