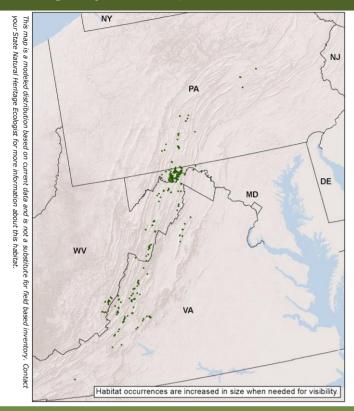
Appalachian Shale Barrens

The Nature Conservancy Protecting nature. Preserving life.

Macrogroup: Glade, Barren and Savanna



State Distribution: MD, PA, VA, WV

Total Habitat Acreage: 5,169 **Percent Conserved:** 61.5%

	State	State	GAP 1&2	GAP 3	Unsecured
State	Habitat %	Acreage	(acres)	(acres)	(acres)
MD	42%	2,163	375	1,200	588
VA	33%	1,728	874	469	385
WV	17%	871	64	132	674
PA	8%	407	40	23	345

Crosswalk to State Name Examples:

Shale Barren (MD), Virginia Pine - Mixed Hardwood Shale Woodland (PA), Central Appalachian Shale Barren (Northern Type) (VA), Shale Barrens (WV)



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Description:

A mosaic of woodlands, shrublands, and large open areas of sparse vegetation formed on dry, exposed, steep slopes of unstable shale scree. Dominant trees are primarily stunted red and chestnut oak, scrub oak, pignut hickory, and Virginia pine; on higher-pH substrates the common trees include redcedar and white ash. Many of these may occur as shrubs, along with prickly pear and various heaths. Shale barren endemics such as shale barren rockcress, shale barren evening primrose and Kate's mountain clover, are diagnostic in the herb layer. This is the distinctive shale barrens of the central Appalachians.

Ecological Setting and Natural Processes:

Occurs at low to mid elevations (about 800 to 2500 feet) on dry, rocky, steep slopes of fissile shale or solid rock. Slopes are often above steeply cut stream or river beds, commonly with south to west aspects. The lack of soil creates extreme conditions for plant growth. Introduced weeds and quarrying pose the most serious threats to this system.

Similar Habitat Types:

Similar in form and structure to this system, though lacking its many endemics and near endemics, are barrens and talus systems to the west and south, such as Southern Appalachian Montane Cliff and Talus, Central Interior Highlands Dry Acidic Glade and Barrens, and Southern and Central Appalachian Mafic Glade and Barrens.

Crosswalk to State Wildlife Action Plans:

Barrens and Dry Glades (MD), Rock Habitats (PA), Forest Habitat - Mixed Forest (VA), Shale Barrens (WV)

Places to Visit this Habitat:

C & O Canal National Historical Park | MD Green Ridge State Forest | MD Shawnee State Park | PA George Washington and Jefferson National Forest | VA Monongahela National Forest | WV

Associated Species: Appendix lists scientific names

BIRDS: eastern whip-poor-will, pine warbler, prairie warbler, worm-eating warbler

INSECTS: barrens moth, lead colored lichen moth, Packard's lichen moth, silvery blue, yellow-headed lichen moth

PLANTS: bigseed dodder (Cuscuta indecora), bluntleaf spurge (Euphorbia obtusata), eaton's lipfern (Cheilanthes eatonii), goose-foot corn-salad (Valerianella chenopodiifolia), michaux's stitchwort (Minuartia michauxii), narrowleaf bluecurls (Trichostema setaceum), ozark milk-vetch (Astragalus distortus), ozark milk-vetch (Astragalus distortus), prairie violet (Viola pedatifida), slender goldenrod (Solidago erecta), virginia mountainmint (Pycnanthemum virginianum), white meadowsweet (Spiraea betulifolia), woodland agrimony (Agrimonia rostellata)

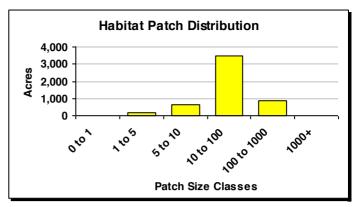
Species of Concern (G1-G4): Appendix lists scientific names

INSECTS: Allegheny river cruiser, Appalachian grizzled skipper, northern oak hairstreak, Olympia marble

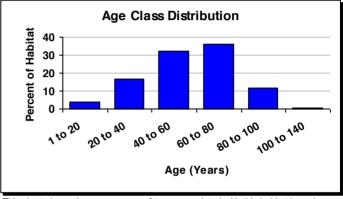
PLANTS: alleghany plum (Prunus alleghaniensis), allegheny stonecrop (Sedum telephioides), appalachian woodsia (Woodsia appalachiana), kate's mountain clover (Trifolium virginicum), moss phlox (Phlox subulata), shale barren bindweed (Calystegia spithamaea), shale barren evening-primrose (Oenothera argillicola), shale barren rockcress (Arabis serotina), shalebarren goldenrod (Solidago arguta), shale-barren skullcap (Scutellaria parvula), shalebarren wild buckwheat (Eriogonum allenii), whitehair leatherflower (Clematis albicoma), yellow nailwort (Paronychia virginica)



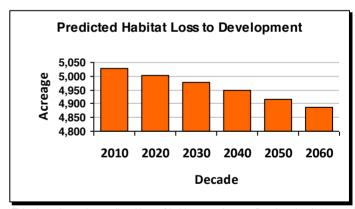
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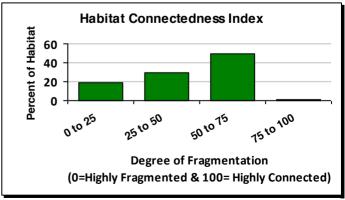
The average patch size for this habitat is 14 acres and the largest single patch is 296 acres. This chart shows the proportion of the habitat that is in each patch-size class.



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 (141 acres) if loss continues at the same rate as 1990-2000. The average rate of loss is 3 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.