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**Delaware Table 1.** Multi-Resolution Land Classification (MRLC) land cover classifications and corresponding percent cover in the Delaware Basin.

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<b>Classification</b>	<b>% Cover</b>
Deciduous Forest	45.01
Mixed Forest	36.32
Evergreen Forest	5.07
Pasture/Hay	5.01
Row Crops	4.44
Water	1.88
Low Intensity Residential	0.73
Woody Wetlands	0.67
Parks, Lawns, Golf Courses	0.26
High Intensity Commercial/Industrial	0.13
High Intensity Residential	0.13
Barren; Quarries, Strip Mines, Gravel Pits	0.03
Emergent Wetlands	0.02
Uncoded	0.01

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**Delaware Table 2. NYSDEC land units within the Delaware Basin**

<b>Unit Name (DEC Region)</b>	<b>Acres</b>	<b>Primary Natural Habitats</b>
ARCTIC CHINA STATE FOREST	2959	forest
BALSAM LAKE MOUNTAIN WILD FOREST	26849	forest
BARBOUR BROOK STATE FOREST	786	forest
BASHAKILL WMA	2946	upland, riparian habitat, wetlands
BEALS POND STATE FOREST	617	forest
BEAR SPRING MOUNTAIN WMA	14491	upland
BEARPEN MOUNTAIN STATE FOREST	814	forest
BEAVERKILL CAMPGROUND	268	forest preserve
BELLEAYRE SKI AREA	641	forest preserve
BIG INDIAN WILDERNESS	26830	forest
CAT HOLLOW STATE FOREST	758	forest
CHERRY RIDGE WILD FOREST	19015	forest
COLUMBIA LAKE STATE FOREST	687	forest
CRYSTAL LAKE WILD FOREST	502	forest preserve
DRY BROOK RIDGE WILD FOREST	9515	forest preserve
HALCOTT MOUNTAIN WILD FOREST	1760	forest preserve
HICKOK BROOK MUA	1046	forest
HUCKLEBERRY RIDGE STATE FOREST	507	forest
KERRYVILLE STATE FOREST	677	forest
LITTLE POND CAMPGROUND	457	forest preserve
MARSH POND STATE FOREST	891	forest
MELONDY HILL STATE FOREST	3459	forest
MICHIGAN HILL STATE FOREST	605	forest
MIDDLE MOUNTAIN WILD FOREST	10668	forest preserve
MONGAUP POND CAMPGROUND	682	forest preserve
MONGAUP VALLEY WMA	6408	upland, wetland
MURPHY HILL STATE FOREST	597	forest
NEVERSINK RIVER UNIQUE AREA	6483	riparian and in-stream habitat
PAGE POND STATE FOREST	820	forest
PLATTEKILL STATE FOREST	1747	forest
RELAY FOREST STATE FOREST	1278	forest
ROOSA GAP STATE FOREST	513	forest
SLIDE MOUNTAIN WILDERNESS	11769	forest preserve, streams
STEAM MILL STATE FOREST	5162	forest
SUNDOWN WILD FOREST	2274	forest preserve
TOMANNEX STATE FOREST	104	forest
WHITTACKER SWAMP STATE FOREST	810	forest
WILLOWEMOC WILD FOREST	15674	forest preserve
WOLF BROOK MUA	569	forest
WOLF HOLLOW WMA	68	?
WURTSBORO RIDGE OPEN SPACE	1140	forest

**Delaware Table 3.** Species of Greatest Conservation Need currently occurring in the Delaware Basin. Species are sorted alphabetically by taxonomic group and species common name. The Species Group designation is included, indicating which Species Group Report in the appendix will contain the full information about the species. The Stability of this basin's population is also indicated for each species.

<b>TaxaGroup</b>	<b>Species</b>	<b>SpeciesGroup</b>	<b>Stability</b>
Bird	American bittern	Freshwater marsh nesting birds	Decreasing
Bird	American woodcock	Early successional forest/shrubland birds	Decreasing
Bird	Bald eagle	Bald Eagle	Increasing
Bird	Bicknell's Thrush	High altitude conifer forest birds	Unknown
Bird	Black-billed cuckoo	Early successional forest/shrubland birds	Decreasing
Bird	Black-throated blue warbler	Deciduous/mixed forest breeding birds	Stable
Bird	Blue-winged warbler	Early successional forest/shrubland birds	Decreasing
Bird	Bobolink	Grassland birds	Decreasing
Bird	Brown thrasher	Early successional forest/shrubland birds	Decreasing
Bird	Canada warbler	Early successional forest/shrubland birds	Decreasing
Bird	Cerulean warbler	Deciduous/mixed forest breeding birds	Increasing
Bird	Common nighthawk	Common nighthawk	Decreasing
Bird	Cooper's hawk	Forest breeding raptors	Increasing
Bird	Eastern meadowlark	Grassland birds	Decreasing
Bird	Golden eagle	Forest breeding raptors	Unknown
Bird	Golden-winged warbler	Early successional forest/shrubland birds	Decreasing
Bird	Grasshopper sparrow	Grassland birds	Decreasing
Bird	Horned lark	Grassland birds	Decreasing
Bird	Long-eared owl	Forest breeding raptors	Unknown
Bird	Louisiana waterthrush	Deciduous/mixed forest breeding birds	Unknown
Bird	Northern goshawk	Forest breeding raptors	Increasing
Bird	Northern harrier	Grassland birds	Unknown
Bird	Peregrine falcon	Peregrine falcon	Increasing
Bird	Pied-billed grebe	Freshwater marsh nesting birds	Decreasing
Bird	Prairie warbler	Early successional forest/shrubland birds	Increasing
Bird	Prothonotary warbler	Deciduous/mixed forest breeding birds	Unknown
Bird	Red-headed woodpecker	Deciduous/mixed forest breeding birds	Decreasing
Bird	Red-shouldered hawk	Forest breeding raptors	Increasing
Bird	Ruffed grouse	Early successional forest/shrubland birds	Decreasing
Bird	Scarlet tanager	Deciduous/mixed forest breeding birds	Unknown
Bird	Sharp-shinned hawk	Forest breeding raptors	Increasing
Bird	Upland sandpiper	Grassland birds	Decreasing
Bird	Vesper sparrow	Grassland birds	Decreasing
Bird	Whip-poor-will	Early successional forest/shrubland birds	Decreasing
Bird	Willow flycatcher	Early successional forest/shrubland birds	Decreasing
Bird	Wood thrush	Deciduous/mixed forest breeding birds	Decreasing
Bird	Yellow-breasted chat	Early successional forest/shrubland birds	Unknown
Crustacea/Meristomata	Blue crab	Blue crab	Increasing
Freshwater fish	Brook trout, Heritage strains	Brook trout, Heritage strains	Stable

Delaware Table 3. (continued)

TaxaGroup	Species	SpeciesGroup	Stability
Freshwater fish	Comely shiner	Comely shiner	Unknown
Freshwater fish	Ironcolor shiner	Ironcolor shiner	Stable
Freshwater fish	Swallowtail shiner	Swallowtail shiner	Unknown
Herpetofauna	Black ratsnake	Woodland/grassland snakes	Decreasing
Herpetofauna	Blue-spotted salamander	Vernal pool salamanders	Unknown
Herpetofauna	Eastern hognose snake	Woodland/grassland snakes	Unknown
Herpetofauna	Eastern ribbonsnake	Lake/river reptiles	Unknown
Herpetofauna	Four-toed salamander	Freshwater wetland amphibians	Unknown
Herpetofauna	Jefferson salamander	Vernal pool salamanders	Unknown
Herpetofauna	Longtail salamander	Stream salamanders	Unknown
Herpetofauna	Marbled salamander	Vernal pool salamanders	Unknown
Herpetofauna	Northern copperhead	Woodland/grassland snakes	Unknown
Herpetofauna	Northern red salamander	Stream salamanders	Unknown
Herpetofauna	Smooth greensnake	Woodland/grassland snakes	Unknown
Herpetofauna	Snapping turtle	Snapping Turtle	Unknown
Herpetofauna	Stinkpot	Uncommon turtles of wetlands	Unknown
Herpetofauna	Timber rattlesnake	Woodland/grassland snakes	Decreasing
Herpetofauna	Wood turtle	Lake/river reptiles	Unknown
Insect	A mayfly	Stoneflies/Mayflies of lotic waters	Unknown
Insect	A mayfly	Stoneflies/Mayflies of lotic waters	Unknown
Insect	A tiger beetle	Riparian tiger beetles	Unknown
Insect	American rubyspot	Odonates of rivers/streams	Unknown
Insect	Arrow clubtail	Odonates of rivers/streams	Unknown
Insect	Brook snaketail	Odonates of rivers/streams	Unknown
Insect	Extra-striped snaketail	Odonates of rivers/streams	Unknown
Insect	Frosted elfin	Other butterflies	Decreasing
Insect	Green-faced clubtail	Odonates of rivers/streams	Unknown
Insect	Henry's elfin	Other butterflies	Unknown
Insect	Mottled duskywing	Other butterflies	Decreasing
Insect	Persius duskywing	Other butterflies	Unknown
Insect	Rapids clubtail	Odonates of rivers/streams	Unknown
Insect	Regal fritillary	Other butterflies	Unknown
Insect	Septima's clubtail	Odonates of rivers/streams	Unknown
Insect	Spine-crowned clubtail	Odonates of rivers/streams	Unknown
Insect	Tawny crescent	Other butterflies	Decreasing
Mammal	Eastern red bat	Tree bats	Unknown
Mammal	Hoary bat	Tree bats	Unknown
Mammal	River otter	Furbearers	Stable
Marine fish	American eel	American eel	Unknown
Marine fish	American shad	American shad	Unknown
Mollusk	Alewife floater	Freshwater bivalves	Unknown
Mollusk	Brook floater	Freshwater bivalves	Unknown
Mollusk	Dwarf wedgemussel	Freshwater bivalves	Stable
Mollusk	Eastern pearlshell	Freshwater bivalves	Unknown
Mollusk	Eastern pondmussel	Freshwater bivalves	Unknown

**Delaware Table 4.** SGCN that historically occurred in Delaware Basin, but are now believed to be extirpated from the basin.

<b>Taxa Group</b>	<b>Species</b>	<b>Species Group</b>
Bird	Barn owl	Barn owl
Bird	American black duck	Breeding waterfowl
Bird	Blue-winged teal	Breeding waterfowl
Bird	Sedge wren	Grassland birds
Crustacea/Meristomata	Piedmont groundwater amphipod	Freshwater crustacea
Insect	Karner blue	Karner blue butterfly
Insect	Southern grizzled skipper	Other butterflies
Insect	Melsheimer's sack bearer	Other moths
Insect	Cobblestone tiger beetle	Riparian tiger beetles
Mammal	Eastern cougar	Extirpated large mammals
Mammal	Gray wolf	Extirpated large mammals
Mammal	Least shrew	Small mammals of uncertain/questionable residency
Mammal	Silver-haired bat	Tree bats
Marine fish	Atlantic sturgeon	Atlantic sturgeon

**Delaware Table 5.** Delaware Basin species diversity relative to the total number of SGCN statewide.

<b>Taxa Group</b>	<b># Species Groups in the Basin</b>	<b># Species in the Basin</b>	<b>Total # SGCN Statewide</b>	<b>% of Total SGCN for this Group</b>
<b>BIRDS</b>	<b>9</b>	<b>35</b>	<b>118</b>	<b>29.7</b>
Bald Eagle		1		
Common Nighthawk		1		
Deciduous/Mixed Forest Breeding Birds		5	9	55.6
Early Successional Forest Breeding Birds		11	12	91.7
Forest Breeding Raptors		6	6	100.0
Freshwater Marsh Nesting Birds		2	6	33.3
Grassland Birds		7	11	63.6
Peregrine Falcon		1		
<b>FRESHWATER FISH</b>	<b>4</b>	<b>4</b>	<b>40</b>	<b>10.0</b>
Heritage-Strain Brook Trout		1		
Comely Shiner		1		
Ironcolor Shiner		1		
Swallowtail Shiner		1		
<b>HERPETOFAUNA</b>	<b>7</b>	<b>15</b>	<b>44</b>	<b>34.1</b>
Freshwater Wetland Amphibian		1	5	20.0
Lake/River Reptiles		2	5	40.0
Snapping Turtle		1		
Stream Salamanders		2	2	100.0
Uncommon Turtles of Wetlands		1	5	20.0
Vernal Pool Salamanders		3	4	75.0
Woodland/Grassland Snakes		5	8	62.5
<b>INSECT</b>	<b>4</b>	<b>17</b>	<b>197</b>	<b>8.6</b>
Odonates of Rivers/Streams		8	19	42.1
Other Butterflies		6	18	33.3
Riparian Tiger Beetles		1	2	50.0
Stoneflies/Mayflies - Lotic		2	20	10.0
<b>MAMMAL</b>	<b>2</b>	<b>3</b>	<b>21</b>	<b>14.3</b>
Furbearers		1	2	50.0
Tree Bats		2	3	66.7
<b>MARINE FISH</b>	<b>2</b>	<b>2</b>	<b>51</b>	<b>3.9</b>
American Eel		1		
American Shad		1		
<b>MOLLUSK</b>	<b>1</b>	<b>5</b>	<b>59</b>	<b>8.5</b>
Freshwater Bivalves		5	39	12.8
<b>TOTAL</b>	<b>28</b>	<b>80</b>	<b>537</b>	<b>14.9</b>
<b>% of all spp groups statewide</b>	<b>21.9</b>			

**Delaware Table 6.** Critical habitats found in Delaware basin classified at the system and subsystem level, adapted from Edinger et al. (2002). The number of SGCN that use each system/subsystem association as a critical habitat is indicated.

<b>Habitat System</b>	<b>Subsystem</b>	<b># of Species</b>
Terrestrial	open upland	38
Terrestrial	forested	36
Riverine	coldwater stream	17
Palustrine	mineral soil wetland	15
Terrestrial	barrens/woodlands	14
Riverine	warmwater stream	8
Riverine	deepwater river	7
Lacustrine	warm water shallow	5
Palustrine	peatlands	4
Lacustrine	cold water deep	3
Terrestrial	alpine/mountain	3
Lacustrine	cold water shallow	2
Lacustrine	warm water deep	2
Riverine	cultural	1
Riverine	unknown	1
Subterranean	natural	1

**Delaware Table 7.** Summary of threats, number of (and percent of all) species groups affected, and percentage of all threats for SGCN in the Delaware Basin. For details on threats, see Appendix: *Threats Characterization for Wildlife and Their Habitats*.

Threats	# of Species Groups Affected	% of All Spp Groups in Basin	% of All Threats in Basin
Multiple	29	100.0	13.8
Loss of habitat to human development	20	69.0	9.5
Toxics	12	41.4	5.7
Water quality degradation	12	41.4	5.7
Illegal or unregulated harvest	12	41.4	5.7
Vehicle/structure collisions	11	37.9	5.2
Altered hydrology - dams	9	31.0	4.3
Disturbed predator/prey cycles	9	31.0	4.3
Habitat fragmentation	8	27.6	3.8
Disease	7	24.1	3.3
Insensitive agriculture/forestry	6	20.7	2.9
Interspecific competition for resources	6	20.7	2.9
Habitat succession	6	20.7	2.9
General human disturbance	5	17.2	2.4
Habitat alteration by exotic species (aquatic)	7	24.1	3.3
Alteration of natural processes (fire, flooding)	5	17.2	2.4
Loss of streamside buffers	4	13.8	1.9
Altered hydrology - water withdrawal	4	13.8	1.9
Sedimentation	4	13.8	1.9
Reduction of patch size	3	10.3	1.4
Loss of connectivity between metapopulations	3	10.3	1.4
Entanglement, entrainment	3	10.3	1.4
Detrimental hybridization	3	10.3	1.4
Isolated populations	3	10.3	1.4
Roads and other terrestrial barriers	2	6.9	1.0
Habitat alteration by exotic species (terrestrial)	2	6.9	1.0
Deer browse	2	6.9	1.0
Susceptibility to stochastic events (weather)	2	6.9	1.0
Susceptibility to stochastic events (rare spp.)	2	6.9	1.0
Climate change (terrestrial)	2	6.9	1.0
Unknown	2	6.9	1.0
Acid rain (terrestrial)	1	3.4	0.5
Aquatic habitat overuse by beaver, geese, etc.	1	3.4	0.5
Negative edge effects	1	3.4	0.5
Loss of host species	1	3.4	0.5
Erosion	1	3.4	0.5

**Delaware Table 8.** Existing natural resources management plans and agreements within the Delaware Basin

Plan/Agreement Name	Involved Parties	Information
Delaware River Basin Commission Comprehensive Plan, July 2001	State of New York, City of New York, State of Pennsylvania, State of Delaware, US Army Corps of Engineers, National Park Service, US Fish & Wildlife Service	Regulates timing and volume of water flows in the Delaware River, improvement projects in the river system, set water quality standards
A Fishery Management Plan for the Upper Delaware Tailwaters, March 1992	NYSDEC	Fish stocking and management policies for the East Branch, West Branch, and mainstem Delaware River
New York City Watershed Memorandum of Agreement	New York State, New York City, USEPA, local gov'ts in the reservoir watersheds, citizen groups	water quality protection strategies for the NYC water supply reservoirs
<b><u>DEC Lands Unit Management Plans:</u></b>		
ARCTIC STATE FORESTS BALSAM LAKE MOUNTAIN BEAR SPRING UMP BIG INDIAN CHERRY RIDGE DELAWARE STATE FORESTS DRY BROOK RIDGE EAST BRANCH STATE FORESTS HALCOTT MOUNTAIN MIDDLE MOUNTAIN NEVERSINK RIVER UNIQUE AREA SHAWANGUNK RIDGE MANAGEMENT UNIT SLIDE MOUNTAIN SOUTHERN TIER SULLIVAN MANAGEMENT UNIT SUNDOWN TREATY LINE WILLOWEMOC	NYSDEC	Land use policies and resource management goals for the DEC-owned properties in the basin, including non-consumptive recreation, hunting, fishing, and forest harvest. Plans are on file at DEC.