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Project Steering Committee

The steering committee for this project included the Jacobusburg Environmental Education Center, Bushkill Stream Conservancy, Lafayette College, and Northampton County Conservation District.

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Cover photo by Rick Wilkoff. All photos by Kate Brandes and David Brandes, except where noted.

A Few Words on Ethical Considerations

Wildlife is a natural resource and should be treated as such. It is not to be hunted or captured for the sake of profit. It is not to be used for entertainment or as a trophy. It is not to be kept in captivity. It is not to be used for research or for any other purpose that would harm the individual or the species. It is not to be used for any purpose that would harm the environment or the public. It is not to be used for any purpose that would harm the future generations.

Using the Map

The map shows the location of the trail and the various habitats. The trail is marked with a red line and the habitats are marked with different colors. The map is a useful tool for finding the various habitats and the trail. It is also a useful tool for finding the various species of plants and animals that are found in the area.

Wildflower Species

Wildflower species include Jewelweed, Bergamot, Joe-Pye Weed, Wood Anemone, Wild Geraniums, Jack-in-the-Pulpit, Fringed Gentian, and Solomon's Seal in a name a few.



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1 Katellen/State Gamelands 168

The Katellen/State Gamelands 168, which lie on the Appalachian Trail, are a unique area with an array of bird, animal, and wildflower species. During migration in the spring, the woods here are often alive with Warblers, Vireos, Thrushes, Orioles, and Tanagers.

KEY HABITATS: Forest; Stream (See Table 1 for Common Species)

NOTABLE SPECIES: Many wood land birds nest here including the Ruffed Grouse, Wild Turkey, and Pileated Woodpecker. Among the neotropical birds breeding here are Yellow-billed and Black-billed Cuckoos, Eastern Wood Pewee, Great Crested Flycatcher, Red-eyed Vireo, Blue-gray Gnatcatcher, Black-and-white Worm-eating and Hooded Warblers, Ovenbird, American Redstart, Scarlet Tanager, Rose-breasted Grosbeak and Indigo Bunting. Some of the more rare species observed here include Olive-sided and Yellow-billed Flycatcher, and Gray-checked Thrush. It is also one of the few places in the area where one can see the elusive Kentucky Warbler.

Wildflowers include Trailing Arbutus, Yellow Star Grass, and White Clover among many others.

SPECIAL VIEWING AREAS: Be sure to check out the spring half way up the mountain on the left. Many birds come here to drink and bathe. This area is also a great spot to see spring wildflowers.

2 Appalachian Trail/Wind Gap Hawk Watch

This local hawk watching site is located at the northern edge of the Bushkill Creek and overlooks the crest of Blue Mountain. A visit to this site requires a short hike and the best time to visit is in the fall, during hawk migration.

KEY HABITATS: Forest (See Table 1 for Common Species)

NOTABLE SPECIES: Migrant raptors can be viewed in the fall (Bald and Golden Eagle, Osprey, Turkey and Black Vulture, Northern Harrier, Sharp-shinned Hawk, Cooper's Hawk, Broad-winged Hawk, Red-tailed Hawk, Red-shouldered Hawk).

Other birds such as Peregrine Falcon, Merlin, and American Kestrel. The ridge is famous for the south-bound as a fall hawk migration flyway at Hawk Mountain. Nesting forest interior birds are present in summer.

3 Graver Arboretum

The Graver Arboretum is used as an outdoor classroom by Muhlenberg College and other educational institutions. The arboretum, which has a wide array of plant and animal life, is also a place for the observant visitor to hike this area to see wildflowers.

KEY HABITATS: Forest; Grassland; Wetlands and Wooded Wetland; Ponds and Streams (See Table 1 for Common Species)

NOTABLE SPECIES: A wide variety of wildflowers, ferns, mushrooms, rhododendrons, azaleas, and native and rare trees, including over 150 species of conifers. The arboretum is also home to many types of amphibians. Special bird species include Green Heron, migrating Warblers, Hawks, Woodpecker, Wood Thrush, and Great Blue Heron.

4 Jacobusburg Environmental Education Center

Because of its variety of habitat, Jacobusburg's 1,200 acres of riparian, brushy field and mature forest ecosystems is home to many species of birds, animals, and wildflowers. The forest is composed mainly of tall oaks, hemlock, beech, maple, tulip poplar and white pine.

KEY HABITATS: Forest; Hedgehog and Edges; Grassland; Stream (See Table 1 for Common Species)

NOTABLE SPECIES: Forest birds, including the elusive Pileated Woodpecker raptors such as the Broad-winged Hawk, Cooper's Hawk, Great Horned Owl and Eastern Screech Owl breed here. Neotropical birds present at Jacobusburg include Yellow-billed and Black-billed Cuckoos, Ruby-throated Hummingbird, Eastern Kingbird, Eastern Wood Pewee, Great Crested Flycatcher, Willow Flycatcher, White-eyed Vireo, Red-eyed Vireo, Prairie Vireo, Blue-gray Gnatcatcher, Blue-winged Tanager, and Yellow Warblers, Yellow-billed Chat, Common Nighthawk, Baltimore and Orchard Orioles, Scarlet Tanager, and Indigo Bunting. The Bushkill Creek creates nesting and feeding areas for such birds as the Wood Duck, Common Merganser, Belted Kingfisher, Eastern Phoebe, Ruby-throated Hummingbird, Swainson's Thrush, and American Woodcock. Special bird species are present in our area. The Woodcock's special diet is made up of earthworms and occasionally, American Woodcock.

Neotropical species nesting Eastern Kingbird, Swainson's Thrush, and occasionally, American Woodcock.

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5 Plainfield Park Path/Gall Farm (Furniture Company Park)

The abandoned Plainfield rail trail parallels the Little Bushkill Creek from Stockertown to Ten Argos (approximately 7 miles), providing easy access to high quality floodplain forest along the stream. The trail is popular with cyclists. A future county park will be located along the trail at Gall Road. The future park is currently accessible for recreation.

KEY HABITATS: Forest; Edges; Stream (See Table 1 for Common Species)

NOTABLE SPECIES: Bird species include the Belted Kingfisher, Wood Duck, Willow Flycatcher, Louisiana Waterthrush, and numerous migrant songbirds. Eastern Screech Owls can also be heard (and seen if you are lucky).

6 Green Pond

Historically, the wet fields at Green Pond have been one of the best spots in the Lehigh Valley area to see migrating shorebirds.

KEY HABITATS: Wetland (See Table 1 for Common Species)

NOTABLE SPECIES: Over 20 species of shorebirds have been observed at the site including Black-bellied and Semipalmated Plover, Short-billed Dowitcher, Greater and Lesser Yellowlegs, Spotted, Solitary, Pectoral, Least and Semipalmated Sandpipers. It is also a great spot to see migrating Snow Geese, Wood Ducks, Pintails, Green-winged Teal and many other species of waterfowl. Watch for wading birds such as Great Blue Heron, Green Heron and Great Egrets. In spring, watch for concentrations of Lesser Black-billed Gulls in the fields, and occasionally, Bonaparte's Gull. (Note: Future development here may alter the site significantly and thus the status of birds here may change).

7 Louise Moore Park/Matson's Woods

In the southern extension of Louise Moore park lies a five acre old growth forest. This site rest grew here before the coming of the first Moravian settlers to the Lehigh Valley. Its trees may have provided food and cover for the local Native American known as the Lenape Lenape Indians.

KEY HABITATS: Forest (See Table 1 for Common Species)

NOTABLE SPECIES: Common breeding birds include the Red-bellied Woodpecker, Downy Woodpecker, American Robin, Turfed Titmouse, Carolina Wren and Black-capped Chickadee. Abundant Poison Ivy native for yellow-rumped Warblers. Native flowers and shrubs provide additional food and cover for migrating songbirds.

8 Hackett Park/Binney and Smith woods

The visitor to this mature 150-year hardwood forest will be struck by the degree of ecological integrity rarely found in the Lehigh Valley. Visitors will delight in this natural area nestled in an otherwise urban setting, which contains a mix of riparian and upland forests that are home to a great variety of native plants and songbirds.

KEY HABITATS: Forest; Edges; Stream (See Table 1 for Common Species)

NOTABLE SPECIES: This diverse forest is home to a great number of breeding and migration songbirds. Wood Thrushes, Ovenbirds, Veeries, and Worm-eating Warblers are common. Other species include the Red-eyed Vireo, Eastern Wood Pewee, Scarlet Tanager, and Baltimore Oriole more abundant in the forest canopy. Yellow Warblers, American Redstarts, and Common Yellowthroats fly about while Great Blue Herons, Wood Ducks, and Common Merganser can be found in the nearby Bushkill Creek. Six species of Woodpeckers can be observed in this forest including the occasional sighting of the Pileated Woodpecker. Great Horned Owl can also be observed in the woodlands. Spring wildflower enthusiasts will find Hepatica, Bloodroot, May Apple, and Wild Ginger blooming under Spruce, Birch, and Hazel and Arno Wood Viburnum. Giant Red Oaks and Tulip trees over Dogwood, Norway Spruce, Norway Larch and other under story trees. Fall wildflowers include Great Blue Lobelia and Bottled Gentian.

9 Forks Township Rail Trail

This trail is an easy 1.5 mile walk on a former rail spur near the Delaware River.

KEY HABITATS: Hedgehog and Edges; River (See Table 1 for Common Species)

NOTABLE SPECIES: Bird life includes Indigo Buntings, Baltimore Orioles, and migrant songbirds including Scarlet Tanager, Red-eyes, and occasionally seen near the river. Wildflowers are also present and include Solomon's Seal and Wild Ginger.

SPECIAL VIEWING AREAS: Limestone outcrops near the north end of the trail contain interesting and unique forms and wildflowers including Madadder Fern and Columbine.

10 Golphub Park

This park is located in Forks Township on the Chestnut Hill ridges just north of Easton and contains deciduous forest slopes above the Delaware River that form one of the largest tracts of forest in the Easton area. The ridge is also a hot raptor migration corridor in spring and fall.

KEY HABITATS: Forest; River (See Table 1 for Common Species)

NOTABLE SPECIES: The area contains nesting Rose-breasted Grosbeak, Scarlet Tanager, Yellow-throated Vireo, Worm-eating Warbler, Great Horned Owl, and migrant raptors. Golphub Park also has some wildflowers including Vernal Looking Glass.

SPECIAL VIEWING AREAS: The rock outcrop at the end of the ridge (known as "St. Anthony's Rock") overlooking the Delaware River is a great spot to look for raptors (Bald Eagle, Osprey, Broad-winged Hawk) and Common Nighthawks during migration.

11 Palmer Rail Trail

This abandoned rail trail parallels the middle Bushkill Creek. A spur trail leads west along the tributary Schoenbeck Creek.

KEY HABITATS: Forest; Edges; Stream (See Table 1 for Common Species)

NOTABLE SPECIES: Bird species include Green Heron, Belted Kingfisher, Wood Duck, Common Merganser, Eastern Kingbird, Great Crested Flycatcher, Warbling Vireo, Baltimore and Orchard Orioles, Yellow Warbler, and migrant songbirds.

SPECIAL VIEWING AREAS: Wooded bluffs, limestone outcrops, and undisturbed patches of floodplain contain many interesting ferns and wildflowers in spring.

12 Scott Park

This small park overlooking the Forks of the Delaware at Easton is a great place to watch for water birds that live along the Lehigh and Delaware Rivers.

KEY HABITATS: River (See Table 1 for Common Species)

NOTABLE SPECIES: Other water birds here include Herring Ring-billed, Great and Lesser Black-backed and occasionally sea species such as Glaucous and Iceland. Other birds to watch for are Great Blue and Green Herons, Common Merganser, Spotted Sandpiper, Belted Kingfisher, and Barn and Rough-winged Swallows. During migration, watch for Red-billed Grebe, Bald Eagle, and Osprey.

13 Delaware Canal State Park/ Wy-Hi-Tuk Park

The Delaware Canal State Park is a 60-mile long greenway that parallels the Delaware River much of its length. Wy-Hi-Tuk Park is adjacent to the Canal State Park. In combination with the wooded hillsides and protected riparian islands, the canal and vegetated towpath make for an excellent migratory pathway.

KEY HABITATS: Hedgehog and Edges; River (See Table 1 for Common Species)

NOTABLE SPECIES: Several unique species of neotropical migrants like Louisiana Waterthrushes, Yellow-throated and Blue-winged Cuckoos, Yellow-billed Cuckoo, and Yellow-throated Vireo are present in this area. More common neotropical migrants that can be found nesting along this corridor include Warbling Vireos, Baltimore Orioles, Brown Thrashers, Rose-breasted Grosbeaks, Scarlet Tanagers, Indigo Buntings, American Redstarts, Ruby-throated Hummingbirds, Blue-gray Gnatcatchers, and Eastern Kingbirds. At Wy-Hi-Tuk County Park, the canal towpaths through the lower end of this park you can observe species like Common Merganser, Common Yellowthroat, Veeries, Wood Thrushes, Red-tailed Hawk, Eastern Phoebe, Rough-winged Swallow, Red-eyed Vireo, and the ubiquitous Yellow Warbler.

TABLE 1 • COMMON SPECIES OF FLORA AND FAUNA FOR KEY HABITATS

FOREST	GARDEN, HEDGEROW, EDGES	FARMLAND, GRASSLAND	WETLANDS, FLOODED AREAS	PONDS, STREAMS, RIVERS						
BIRD SPECIES American Crow 5 American Redstart 6 American Robin 1 Black-and-white Warbler 6 Black-capped Chickadee 2 Black-throated Blue Warbler 1,3 Black-throated Green Warbler 1,3 Blackcap Warbler 1 Blue Jay 1 Blue-gray Gnatcatcher 6 Broad-winged Hawk 1,3 Brown Creeper 2 Carolina Wren 5 Cooper's Hawk 1 Dark-eyed Junco 7 Downy Woodpecker 5 Eastern Screech Owl 5 Eastern Wood Pewee 9 Golden-crowned Kinglet 1,3 Great Crested Flycatcher 6 Great Horned Owl 5 Hairy Woodpecker 5 Hooded Warbler 1 Magnolia Warbler 1,3 Northern Flicker 1 Northern House Wren 5 Ovenbird 6 Pileated Woodpecker 5 Red-bellied Woodpecker 5 Red-eyed Vireo 5 Rose-breasted Grosbeak 6 Ruby-crowned Kinglet 1,3 Ruby-throated Hummingbird 6 Rufed Grouse 5 Scarlet Tanager 6 Sharp-shinned Hawk 1 Tufted Titmouse 5 White-breasted Nuthatch 5 Wood Thrush 6 Worm-eating Warbler 6 Yellow-billed Cuckoo 6 Yellow-rumped Warbler 1,3	BIRD SPECIES Red Fox 5 Red Squirrel 5 Red-backed Salamander 6 Ring-necked Snake 4 Spotted Salamander 6 Striped Skunk 5 White-footed Mouse 5 White-tailed Deer 5 Wood Frog 6 Wood Turtle 6	BIRD SPECIES American Goldfinch 5 American Robin 1 American Crow 5 Baltimore Oriole 6 Blue Jay 5 Blue-winged Teal 6 Brown-headed Cowbird 5 Carolina Wren 5 Cedar Waxwing 5 Chipping Sparrow 7 Common Crow 7 Common Grackle 6 Common Nighthawk 6 Common Yellowthroat 5 Cooper's Hawk 1 Dark-eyed Junco 7 Downy Woodpecker 5 Eastern Kingbird 6 Eastern Phoebe 4 Eastern Towhee 6 European Starling 5 Field Sparrow 6 Gray Catbird 6 Hairy Woodpecker 5 House Sparrow 5 Indigo Bunting 6 Kingbird 6 Killdeer 6 Mockingbird 6 Nighthawk 6 Northern Cardinal 5 Northern Flicker 1 Northern House Wren 5 Red-bellied Woodpecker 5 Red-tailed Hawk 6 Ruby-throated Hummingbird 6 Sharp-shinned Hawk 1 Song Sparrow 5 Tree Sparrow 6 Tufted Titmouse 5 Warbling Vireo 6 Yellow Warbler 6	ANIMAL SPECIES American Toad 6 Black Bat Snake 6 Box Turtle 4 Chipping Mole 6 Common Rattlesnake 5 Deer Mouse 6 Eastern Skink 6 Gray Squirrel 5 Groundhog 6 Long-tailed Weasel 5 Opossum 5 Raccoon 5 Short-tailed Shrew 6 Striped Skunk 7 White-tailed Deer 5	BIRD SPECIES American Woodcock 6 Belted Kingfisher 7 Canada Goose 5 Barn Swallow 6 Common Grackle 4 Common Nighthawk 6 Common Song 1,3 Greater Yellowthroat 6 Great Blue Heron 1 Green Heron 6 Killdeer 6 Least Sandpiper 1,3 Lesser Yellowlegs 1,3 Mallard 5 Solitary Sandpiper 1,3 Spotted Sandpiper 6 Swamp Sparrow 1,3 Wood Duck 6 Yellow Warbler 6	BIRD SPECIES American Black Duck 7 Baltimore Oriole 6 Barn Swallow 6 Belted Kingfisher 5 Bullfinch 1,3 Canada Goose 5 Common Grackle 6 Common Merganser 5 Common Yellowthroat 6 Eastern Kingbird 6 Eastern Phoebe 5 Eastern Wood Pewee 9 Hairy Woodpecker 5 Herring Gull 4 Kingbird 6 Louisiana Waterthrush 6 Mallard 5 Mourning Dove 6 Northern Cardinal 5 Northern Flicker 1 Northern Mockingbird 6 Red-tailed Hawk 6 Red-winged Blackbird 6 Rock Dove 6 Snow Goose 7 Song Sparrow 5 Tree Sparrow 6 Turkey Vulture 6 White-throated Sparrow 7	ANIMAL SPECIES Black Bat Snake 6 Common Nighthawk 6 Common Song 1,3 Milk Snake 6 Raccoon 5 Meadow Vole 5 Spotted Skunk 6 Striped Skunk 5 White-tailed Deer 5	WILDLIFER SPECIES Aster 6 Bergamot 2 Bloodroot 2 Common Milkweed 2 Evening Primrose 2 Fringed Gentian 2 Great Blue Lobelia 2 Goldenrod 2 Ironweed 2,3 Jack-in-the-pulpit 2 Joe-Pye Weed 2,3 Picketweed 2 Smeerweed 2 Trout Lily 1 Virginia Bluebells 1 Wild Geranium 2 Wintersgreen 1 Wood Anemone 1	BIRD SPECIES American Black Duck 7 Baltimore Oriole 6 Belted Kingfisher 5 Bullfinch 1,3 Canada Goose 5 Common Grackle 6 Common Merganser 5 Common Yellowthroat 6 Eastern Kingbird 6 Eastern Phoebe 5 Eastern Wood Pewee 9 Hairy Woodpecker 5 Herring Gull 4 Kingbird 6 Louisiana Waterthrush 6 Mallard 5 Mourning Dove 6 Northern Cardinal 5 Northern Flicker 1 Northern Mockingbird 6 Red-tailed Hawk 6 Red-winged Blackbird 6 Rock Dove 6 Snow Goose 7 Song Sparrow 5 Tree Sparrow 6 Turkey Vulture 6 White-throated Sparrow 7	ANIMAL SPECIES Black Bat Snake 6 Common Nighthawk 6 Common Song 1,3 Milk Snake 6 Raccoon 5 Meadow Vole 5 Spotted Skunk 6 Striped Skunk 5 White-tailed Deer 5	WILDLIFER SPECIES Aster 6 Bergamot 2 Bloodroot 2 Common Milkweed 2 Evening Primrose 2 Fringed Gentian 2 Great Blue Lobelia 2 Goldenrod 2 Ironweed 2,3 Jack-in-the-pulpit 2 Joe-Pye Weed 2,3 Picketweed 2 Smeerweed 2 Trout Lily 1 Virginia Bluebells 1 Wild Geranium 2 Wintersgreen 1 Wood Anemone 1

1 = Spring 2 = Summer 3 = Fall 4 = Winter 5 = Year Round 6 = Spring through Fall 7 = Fall through Spring

