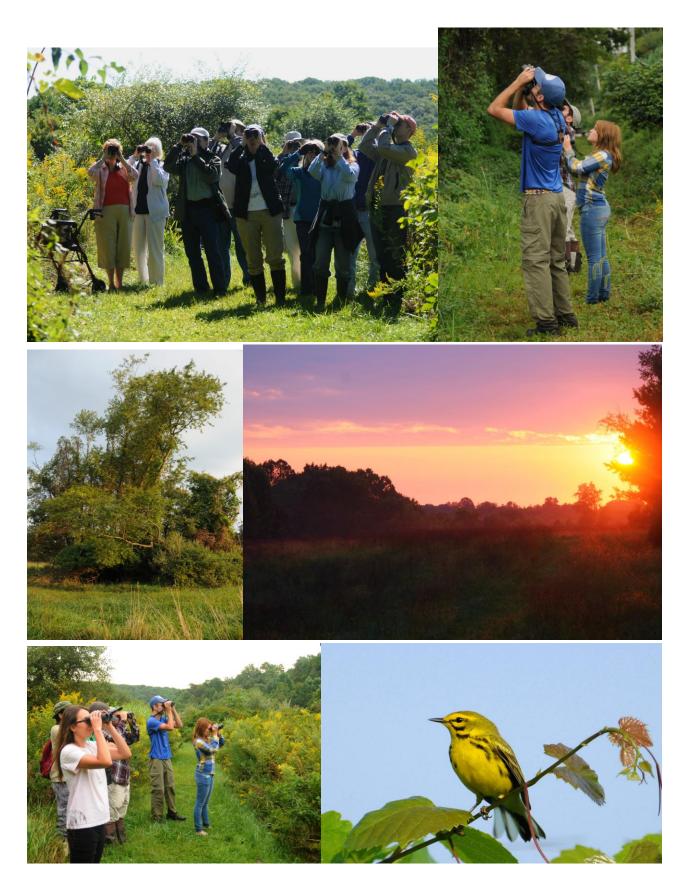
Middle Run Birding Trail:

Connecting Conservation, Education, and Recreation





Objective of the Middle Run Birding Trail

To maximize diversity of habitats, increase biodiversity, and provide outstanding wildlife viewing opportunities for visitors, by balancing removal of selected invasive plant species with planting of native species that provide food, shelter, and nesting cover for birds and other wildlife throughout the seasons.

Overview of the Middle Run Birding Trail

The Middle Run Birding Trail is a one-mile loop that takes the visitor through carefully-managed and diverse habitats: from meadow to scrub-thicket to early-successional forest to intermediate forest to mature woodland.

The trail begins at the Middle Run parking lot, and then descends into the valley where the trail crosses Waterthrush Run, an intermittent stream. Next the main branch of Middle Run is encountered and a bridge guides visitors across this second-order stream—a major tributary of the White Clay Creek.

Numbered Trail Markers are placed every 100 to 200 yards to guide the visitor and denote places of interest to stop and linger. Visitors are encouraged to stop at these places and observe the plants, the wildlife, and the scenery.

Middle Run Natural Area is owned by New Castle County, and at 860 acres is the largest property in the county park system. The Delaware Nature Society has a partnership with the Department of Special Services to manage the park to maximize biodiversity of species, improve the quality of habitat, and provide environmental education opportunities for the public.

Trail Marker Names and Descriptions

1. Sky Watch

Spend time at this location and you are sure to see a wide variety of birds flying by in the sky. The Middle Run Valley is a major travel corridor for birds, especially in Spring and Fall migration.

Raptors and waterfowl navigate through the valley while following the creek. During the March through August time period, wading birds from the rookery on Pea Patch Island (just 12 miles away as the heron flies) are seen commuting each day as they search for food in the streams and ponds in this fertile valley. Scanning above the far hillsides is a good tactic to locate soaring birds as they gain lift from the warming land.

The meadow surrounding this location is a fantastic place to study butterflies in the summer, as the native wildflowers attract more than 30 species of colorful Lepidoptera. Dragonflies are also abundant in late summer, and are readily photographed perching on the tall grass stems.

2. Serviceberry Circles

Serviceberries (*Amelanchier* species) are a native berry-producing shrub that are also known as Shadbush or Juneberry. The white flowers burst into bloom in April, when the shad are spawning in the local creeks. The berries reach full ripeness in June, and are a prime attractant for local birds— especially Gray Catbirds, American Robins, and Cedar Waxwings. These planted circles of Serviceberries will produce thousands of fruits for birds each season, and will become dense thickets that provide cover for nesting.

3. Cherry Tree Island

A stand of Black Cherry trees surrounded by open meadow, this location is a magnet for birds flying over the expanse of open space. Birds perch atop the trees (especially the dead snags) to gain a good view of their surroundings. The trees are draped in extensive vines of Poison Ivy, which produce white berries that are a favored food of many birds— especially Yellow-rumped Warblers and Eastern Bluebirds. In Spring and Fall migration, more than 15 species of birds have been observed in this small patch of trees at one time!

4. Meadow Mosaic

You are standing in a managed meadow featuring multiple vegetative layers and many examples of the "edge effect." Most bird species (and mammals, too) are attracted to edges, where vegetative communities transition and the selection of food and cover is at its highest level.

The meadow is mowed throughout the growing season at different intervals, and at different heights. The dominant wildflower is Goldenrod (*Solidago* species), but there is a rich mix of other forbs and grasses throughout the meadow.

The meadow is transitioning into a scrub-thicket habitat with the invasion of the exotic Autumn Olive shrub, introduced to the region decades ago as an ideal plant for overall wildlife benefit. Now these shrubs are mechanically-removed in order to limit the expansion of this shrub community. This is an important location for Field Sparrows, a species of conservation concern that prefers "old field" habitat.

Nearby thickets are a favorite nesting location of the Yellow-breasted Chat, a large warbler named for its incredible vocal repertoire. "Perching posts" made of dead trees planted into the ground are strategically placed in these areas to encourage birds to pose in optimal positions for viewing.

Note: There is a Spur trail linking Trail Markers 4 and 5. You will walk by several large planted circles of trees and shrubs, as well as snags of Black Walnut and Tree of Heaven—popular perches for birds.

5. Chokeberry Circles

Black Chokeberry (*Aronia melanocarpa*) is a native berry-producing shrub that is very attractive to birds. Fruits ripen in late summer and early fall, and the dark berries provide the fats that sustain birds through the rigors of migration. Brush piles in this location are made from Autumn Olive bushes that are removed to make room for the chokeberry plants.

In the summer, the adjacent thickets are the nesting grounds for specialty species like Prairie Warbler, White-eyed Vireo, Orchard Oriole, and Indigo Bunting.

6. Successional Layers

A transitional zone between meadow and mature forest habitats, this location shows the successional layers of vegetation that are a hallmark of the reforestation process. Tulip Poplars, Black Cherries, and Flowering Dogwoods in the 20 to 40 foot height range are bordered by the massive 70 to 90 foot tall mature trees in the forest behind them. In early morning, this edge habitat is a prime location to spot birds feeding on insects made active by the sun's warmth.

7. Sunshine Spot

A small opening in the intermediate age forest, this spot receives enough sunlight to encourage the growth of wildflowers like Bull Thistle and Joe-Pye Weed. Pausing in this location will often yield looks at birds foraging in the surrounding vegetation as they take advantage of a small oasis in the midst of the forest.

In the Winter, the Sunshine Spot is a favorite location of birds like Hermit Thrush and Fox Sparrow, while nesting species like Ovenbird and Eastern Towhee may be found here during the summer months.

8. Grapevine Gully

A deeply-eroded ravine that separates two sections of old farm field, the gully here shows signs of past farming activities. Osage Orange, a tree introduced from the Great Plains as a hedgerow planting, grows here as a reminder of the days when farmers planted them in abundance. Also known as Hedge Apple, these trees produce the softball-sized green fruits that are commonly called "Monkey Brains."

The impressively twisted grapevine wrapped around an oak tree here is very unique, as its four-inch diameter indicates the vine is more than 50 years old. The oak tree is dying, but the ancient (for a vine) grape keeps on growing and producing fruits that attract birds.

9. Waterthrush Run

An intermittent stream that may dry up during the heat of summer, the tiny tributary is named for the Louisiana Waterthrush. The waterthrush relies on healthy populations of macro-invertebrates (like stoneflies and mayflies) that catches from clean, high-quality streams. This warbler species likes to nest along streams, building a mossy nest on the ground under a rock or log. Christmas Ferns form a layer on the steep banks that stays green year-round.

10. Cherry Prairie

Black Cherries and Eastern Red Cedar dominate this habitat, and provide an example of natural succession. These plants grew up in the remnants of an old farm field, and in a little over 20 years have created a unique early-successional thicket. During songbird migration, this is a popular concentration point for warblers, vireos, kinglets, and other songbirds that feed on the variety of insects attracted to the cherry trees.

11. Towering Tulips

A mature woodland dominated by Tulip Poplar, this section of habitat along the creek is classic Piedmont forest ecosystem. Mosses and Christmas Ferns dominate the floor layer, while Spicebush is the primary understory plant.

The bridge over Middle Run at this location is the best place to see Louisiana Waterthrush during their nesting season here (April to July). Eastern Phoebes build their mossy nests on the underside of the bridge, while many other bird species come to the water's edge to drink and bathe.

The north-facing steep slope on the opposite side of the bridge is dominated by oak trees, and there is very little understory layer in this dry and sun-starved habitat. This woodland type is home to nesting neo-tropical species like Scarlet Tanager, Wood Thrush, and Red-eyed Vireo.

12. Possum Hollow Powerline

The Possum Hollow Road used to cross the creek here, back when the corridor was an old stage road leading to the city of Wilmington. Several large Green Ash trees are dying at this location right now, and are highly-attractive to woodpecker searching for insects.

13. Twin Walnuts

A pair of young Black Walnut trees flank this location, and the surrounding hedgerow features "roadside" trees like Sassafras. A nest box mounted on a walnut is often the home for House Wrens or Carolina Chickadees, and the box is the product of youth participants in the "Bird Experience at Middle Run" summer camp— an introduction to the world of birds for young conservationists.

14. Succession Spur Trail

Along this short diversion from the main trail, the habitat is a savannah-like expanse of grasses interspersed with patches of trees: Oak, Ash, and Sycamores planted in the early 1990's at the very beginning of the Middle Run Reforestation Project. Little Bluestem and Indiangrass are the native warm-season grasses at this location, and are prime food sources for sparrows and other seed-eating songbirds. This location in a primary nesting area for Blue-winged Warbler.

15. Princess Point

From this vantage point, you can view up and down the powerline and the old Possum Hollow roadbed. There are several Princess Trees (*Pawlonia sp.*) here, a large-leaved tree from Asia whose wood is prized as a building material for princess's chests and wedding gifts. Birds often travel up and down along the hedgerows lining the powerline, and the Princess Point is an ideal location to spot these avian commuters.

In five years of intensive habitat management and bird surveying, more than 170 species of birds have been observed along the Middle Run Birding Trail, which encompasses an area of roughly 50 acres. The species total for the entire 860-acre park is 185 species.

Specialty Species of Early-Successional Habitat at Middle Run Natural Area



Prairie Warbler



Blue-winged Warbler



Indigo Bunting



Orchard Oriole



Yellow-breasted Chat



White-eyed Vireo



Greeting Garden at Beginning of Middle Run Birding Trail:
Native Plants in a hundred-square foot space



Tree Swallows approve of the design of the Birding Trail Markers

All photos and text by Derek Stoner, Delaware Nature Society Conservation Project Coordinator and creator of the Middle Run Birding Trail.

Middle Run Birding Trail Map



The start of the **Middle Run Birding Trail** is from the parking lot located at the end of the gravel driveway, reached by turning left off Possum Hollow Road. The trail is one mile in length, over terrain that is moderately sloped. Trail markers are labeled #1 through #15, and spaced every 100 to 200 yards apart. These brown-colored markers indicate excellent places to stop and look for birds, based upon the habitat features and the viewing opportunities at that location. Between Trail Markers #9 and #12, this is an active biking trail, so please share the trail with those on wheels.

For any questions about the trail, please contact Derek Stoner at 484-723-3348 or derek@delawarenaturesociety.org. Enjoy your experience on the Middle Run Birding Trail!

Please share your bird observations from the Middle Run Birding Trail by posting them on the E-Bird website and selecting Middle Run Natural Area as the location from the "Birding Hotspot" toolbar.