HOWARD PROPERTY BIRD SURVEY

FRANKLIN TOWNSHIP

CONDUCTED BY DEREK STONER

Howard Property Bird Survey Franklin Township, PA

Conducted by Derek Stoner Anas Biodiversity Consulting Hockessin, DE

Funding provided by the White Clay Watershed Association and the National Park Service

Between July and October of the year 2007, eight(8) surveys were conducted on the Howard property in Franklin Township, Pennsylvania. The purpose of these surveys is to determine what birds are utilizing the property for both breeding and migratory stopover habitat. Professional survey techniques were utilized in order to ensure the accuracy and efficiency of this data collection effort.

For the summer breeding bird period(ending in mid-August), a total of 45 species of birds were observed on the property exhibiting evidence of breeding, in accordance to the standards set forth by the Pennsylvania Breeding Bird Atlas(conducted by the Carnegie Museum of Natural History and Powdermill Bird Banding Lab). For a property of 29 acres, this is an exceptional number of breeding species, and an indicator of the richness of the forest habitat, benefiting birds and other wildlife on the property.

Mature, large-diameter Tulip Poplar, Red Oak, White Oak, Red Maple, Hickory, and American Beech are the dominant trees, with an understory layer of Flowering Dogwood, Spicebush and Viburnum. The vegetative structure

Notable breeding species(due to rarity or habitat-specificity) include Cooper's Hawk, Yellow-billed Cuckoo, Warbling Vireo, Pileated Woodpecker, Acadian Flycatcher, Eastern Wood-Peewee, Veery, Wood Thrush, Northern Parula, Ovenbird, Louisiana Waterthrush, Scarlet Tanager, Indigo Bunting, and Baltimore Oriole.

From mid-August until late October, the fall migration period, many special songbirds and were observed utilizing the forest for stopover food and cover— a refueling stop for tired and hungry long-distance travelers.. Notable migrants include Yellow-bellied Sapsucker, Blue-headed Vireo, Brown Creeper, Winter Wren, Swainson's Thrush, Chestnut-sided Warbler, Black-throated Green Warbler, Black-throated Blue Warbler, Black-and-white Warbler, Rose-breasted Grosbeak, and Purple Finch.

The following major species groups of birds had these totals(in parentheses): Raptors(5), Woodpeckers(6), Flycatchers(5), Vireos(3), Thrushes(4), Warblers(10), and Sparrows(4).

In total, 21 hours of surveying effort yielded observations of 68 species of birds over the course of four months. For this area of southeastern Pennsylvania, this represents an excellent total for a relatively small parcel of forest. Birds are perhaps the best(and most visible) indicator of the quality of habitat on a piece of land, and the observations made on this survey indicate that the Howard Property is a highly valuable and rich woodland worthy of protection and conservation efforts.

Species Accounts

* = denotes confirmed or probable breeding within survey area(not necessarily on property itself)

+ = denotes species of Special Conservation Interest(rare and uncommon regional breeders) as defined by the Pennsylvania Breeding Bird Atlas

**Canada Goose*- The most abundant waterfowl in the region, these geese occur both as residents(local breeders) and migrants during the fall through spring. Nesting occurs throughout the White Clay watershed, and the abundant agricultural fields provide plenty of food for these large birds.

Black Vulture- A trio of these vultures observed in late July likely indicated breeding efforts nearby. Found in small numbers during the fall.

Turkey Vulture- A pair seen within the safe date period indicates local breeding by this species. A common year-round resident.

Sharp-shinned Hawk- Observed once in late August, Sharp-shinned Hawk is an uncommon local breeder. This small hawk preys upon songbirds, and prefers a mix of habitat types.

**Cooper's Hawk*- Recorded twice in August, one bird gave a territorial vocalization that may indicate nearby fledglings. A hawk of woodland and field edge, this species is a likely nester in the White Clay watershed.

**Red-tailed Hawk*- These large hawks, observed on two surveys, take a wide range of prey. Rodents, small mammals, and occasionally birds make it onto the menu of this opportunistic hawk. Juvenile birds seen in August are likely the results of local breeding.

**Mourning Dove*- Found on seven surveys, this abundant bird is a confirmed breeder(fledglings observed) on the property. Doves are prolific nesters and the populations in late summer and fall are at their peak.

**Yellow-billed Cuckoo*- Confirmed breeding in August, with a territorial male calling, this species nests high in the treetops in mature woodlands.

**Eastern Screech-owl*- An owl survey conducted at night in October turned up two of these small nocturnal raptors. Typically year-round residents and very territorial, these cavity nesters are certainly breeding on the property.

**Great-horned Owl*- The owl survey in October turned up one individual that "hooted" from the middle of the forest. Requiring a large territory for hunting, these magnificent raptors are well-established breeders in the watershed.

**Ruby-throated Hummingbird*- A suspected breeder on the property, our only native species of hummingbird is a common breeder in the watershed. Found on seven surveys, with peak numbers(high count of 8) found during late August migration.

**Red-bellied Woodpecker*- This flashy black, white, and red woodpecker was found on most surveys, with fledglings confirming breeding.

Yellow-bellied Sapsucker- A total of three birds noted in October are good evidence of this uncommon winter visitor for the survey.

*Downy Woodpecker- Seen on all surveys, this tiny woodpecker is an abundant breeding bird in the forest.

**Hairy Woodpecker*- Found on all surveys, this woodpecker likely has a couple pairs breeding on the property.

*Northern Flicker- Found on all surveys, flickers are abundant in forests. Breeding confirmed on site by fledglings observed.

**Pileated Woodpecker*- Spotted twice, our largest native woodpecker requires vast acreage of mature forest in order to find adequate amounts of insect prey in decaying trees. Very likely breeding in the area and found within safe dates, this species is indicative of healthy woodland ecosystems.

**Eastern Wood-peewee*- Preferring healthy forest habitats, this small flycatcher is a local breeder and 5 territorial males were found during surveys.

*⁺*Acadian Flycatcher*- A declining species preferring wet woodland habitats, the forest supports at least 6 breeding pairs of this species.

**Eastern Phoebe*- One pair bred along the creek, and migrant phoebes were observed during the fall migration as well.

*Great Crested Flycatcher- At least a couple pairs of this large cavity-nesting flycatcher breed on the property, with territorial males defending their nest cavities. Large standing snags are necessary for the breeding success of this bird. **Eastern Kingbird*- At least two pairs of this species breed on the property, with a couple of territorial males being located during summer surveys.

Blue-headed Vireo- An individual noted in mid-October is typical of the migrational timing of this boreal forest breeding bird.

**Warbling Vireo*- Territorial males found singing within safe dates indicate that this species is breeding along the White Clay Creek. A declining species that prefers riparian habitats, these vireos occur in low densities in the watershed.

**Red-eyed Vireo-* A common woodland nester, a count of 15 during mid-July is indicative of the breeding density of this species. Territorial singing males and fledglings both provide breeding confirmation, and the mature forest provide ideal foraging habitat for these high-canopy feeding specialists.

*Blue Jay- A common woodland breeder often found in flocks, jays thrive on the abundant nut and seed crop produced in the forest.

**American Crow*- Found on the majority of surveys, these highly-social birds breed in the area and can be found foraging in woodlands for a wide variety of foods. Adults with fledglings indicate breeding in the vicinity.

Fish Crow- Recorded on the property during safe dates, this species is distinguished from the more-common American Crow by its nasal two-part "caw-aw" vocalization. Likely breeds near the property.

**Tree Swallow*- Found throughout the breeding period, these colorful cavity-nesting swallows are common breeders in the watershed. As these birds left the area and migrated south in early fall, a flock of 15 birds was observed passing overhead in late August.

**Carolina Chickadee*- This common songbird is a year-round resident that can be reliably found in the forest. Found on all surveys, with a high count of 9 in July during the breeding period.

Black-capped Chickadee- Found during a late October survey, three individuals of this species are notable, as they do not occur often in this particular region of Pennsylvania. A chickadee of more northern latitudes, Black-cappeds occasionally fly south in the wintering period in search of better food resources. The winter of 2007-2008 is a major "irruption" year, meaning that these and many other northern birds are heading south in search of food.

**Tufted Titmouse*- This common songbird is a year-round resident that can be reliably found in the forest. Found on all surveys, with a high count of 18 in July during the breeding period.

Red-breasted Nuthatch- Another "irruptive" species, this nuthatch was recorded in September and October. Generally uncommon in the region, the fall of 2007 saw the arrival of many of these tiny woodland songbirds.

*White-breasted Nuthatch- Several pairs of these nuthatches likely breed on the property, and require nest cavities previously excavated by woodpeckers. Quite common in the forest and often found with chickadees and titmice in small flocks.

Brown Creeper- Found in October, this shy and camouflaged brown woodland bird occurs only during the wintering period. These birds depend upon large stands of mature trees where they search under bark for insects.

**Carolina Wren*- Found on all surveys, this highly-vocal wren is often located by its cheery song. A year-round resident on the property.

*House Wren- A confirmed breeder on the property, this tiny wren nests in cavities and migrates south in early fall.

Winter Wren- As the name suggest, this wren species shows up during our winter period. Found in mid-October, this dark wren will spend the winter months along small streams foraging for insects. Strictly a winter resident.

Ruby-crowned Kinglet- A few of these songbirds visited the property in October during the fall migration.

*⁺*Veery*- At least 5 pairs of this secretive thrush breed in the forest, with seven birds recorded in late July. A species of Special Concern that requires undisturbed woodlands, this bird appears to be thriving on the property.

Swainson's Thrush- Found during mid-October, a migrant of this species is an indicator of the importance of forests for migrant songbird stopover habitat.

*⁺*Wood Thrush*- A conservative estimate of 12 pairs of this woodland thrush breed on the property, with territorial males and fledglings both noted. The last migrants passed through in mid-September. A species of special conservation concern, these birds require healthy woodland habitat in order to successfully breed.

*American Robin- A year-round resident and abundant breeder on the property, robins also could be found in migratory flocks numbering in the dozens during fall migration.

**Gray Catbird*- Nests in thickets on the margins of the forest, with possibly four breeding pairs noted during the summer survey period. Migrants found through mid-October.

***Northern Parula*- An individual noted in late August is likely a migrant, although the species breeds locally.

Chestnut-sided Warbler- A lone individual of this species passed through in late August as part of a mixed flock of warblers.

Magnolia Warbler- Record in late August, this species breeds in the boreal forest and is commonly found during fall migration.

Black-throated Blue Warbler- Migrant pairs seen during late August and early September provide evidence of migrational timing by this species.

Black-throated Green Warbler- Observed in late august and mid-October, this warbler species has a prolonged fall migration period.

Palm Warbler- Found in early October, two individuals of this species were observed associating with other migrant warblers.

Black-and-white Warbler- Individuals noted in late August and early September are typical of this early fall migrant warbler.

American Redstart- A migrant redstart was found during a survey in late August

**Ovenbird*- A ground-nesting warbler of the woods, at least a three pairs of these birds nest in the forest. Mature, open woodlands are the preferred habitat of this brown-and-white neotropical migrant.

*⁺Louisiana Waterthrush- Singing male waterthrushes in early August are likely indicative of breeding attempts by this species of special concern. Nesting along clean free-flowing streams, these birds require healthy streams containing the aquatic insects that they feed upon.

***Scarlet Tanager*- With nine individuals noted in mid-July, it is likely that there are at least four pairs of this brightly-colored neotropical migrant breeding on the property. A Species of Special Concern that needs large tracts of mature woodland, the tanager's presence indicates a healthy forest ecosystem.

**Eastern Towhee*- At least two pairs of this large sparrow could be found breeding on the property.

*Song Sparrow- One pair of these sparrows during safe dates is likely breeding on the property. Not typically found in mature forest habitat.

White-throated Sparrow- Arriving in October, this sparrow is abundant in flocks during the winter and scratches the woodland floor for seeds and insects.

Dark-eyed Junco- Observed in mid-October, a flock of fifteen of these gray and white sparrows is typical of their flocking tendencies in the winter period.

*Northern Cardinal- A large number of these colorful songbirds nest on the property, with fledglings observed through late summer. A high count of 14 in mid-July provides a sense of the abundance of this common breeding bird.

Rose-breasted Grosbeak- A migrant grosbeak in late August is the only individual of this species recorded for the survey.

**Indigo Bunting*- At least one pair of these bright-blue neotropical migrants bred in the thickets on the property.

**Common Grackle*- Breeding on the property not confirmed but suspected, while large flocks observed in October fed upon the abundant acorn and beech mast crop in the forest.

***Brown-headed Cowbird-** This species commonly lays its eggs in the nests of other songbirds(nest parasitism), and thus may be contributing to the decline of many local breeders. Fortunately, only a few of these birds were spotted during surveys.

**Baltimore Oriole*- A pair of these colorful songbirds found during early August may indicate that this beautiful orange, black, and white neotropical bird nests within the forest in low densities.

Purple Finch- Four birds in October are an excellent find of this northern finch that makes rare visits to our region.

**House Finch*- Found on three surveys, this abundant finch nests nearby and prefers the areas near human habitation for feeding and nesting.

*American Goldfinch- A late-nesting songbird with a safe date of August 31, these yellow, black, and white seed-eating birds visit the forest to feed upon a variety of seeds. A high count of 13 in August included adults and juvenile birds.

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