

White Clay Creek West Branch Bird Survey

TAKEN ON A PROPERTY WITH DIVERSE HABITATS IN FRANKLIN TOWNSHIP, PA

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FIELDWORK: 2007
REPORT: APRIL 2008



This report was prepared for the White Clay Creek Watershed Management Committee with funding provided by the National Park Service Wild and Scenic Rivers Program. In October 2000 Public Law 106-357 designated 190 miles of the White Clay Creek and its tributaries into the National Wild and Scenic River System.

Survey Summary

Between July and October of the year 2007, eleven (11) surveys were conducted on [a] property in Franklin Township, Pennsylvania [that has diverse habitats]. 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 69 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 81 acres, this is an exceptional number of breeding species, and an indicator of the richness and diversity of habitats available to birds and other wildlife living there.

Large expanses of hayfield and meadow attract a number of grassland-specific birds. Mature forest, a pristine freshwater wetland, and many acres of early-successional and thicket habitat provide a mosaic of landscapes and vegetation that is most attractive to birds, and thus a wide variety of wildlife.

Notable breeding species(due to rarity or habitat-specificity) include Yellow-billed Cuckoo, Belted Kingfisher, Yellow-throated Vireo, Warbling Vireo, Wood Duck, Pileated Woodpecker, Willow Flycatcher, Acadian Flycatcher, Eastern Wood-Pee-wee, Veery, Wood Thrush, Yellow-breasted Chat , Ovenbird, Louisiana Waterthrush, Prairie Warbler, Blue Grosbeak, Scarlet Tanager, Baltimore Oriole, and Orchard Oriole.

From mid-August until mid-November, the fall migration period, many special songbirds and raptors were found utilizing the fields, marsh, creek, and forest for valuable feeding habitat and cover. Notable migrants include Black-billed Cuckoo, Yellow-bellied Sapsucker, Least Flycatcher, Philadelphia Vireo, Brown Creeper, Winter Wren, Hermit Thrush, Nashville Warbler, American Redstart, Black-throated Green Warbler, Black-throated Blue Warbler, Rose-breasted Grosbeak, Eastern Meadowlark, and Purple Finch.

The following major species groups of birds had these totals(in parentheses): Raptors(6), Woodpeckers(6), Flycatchers(7), Vireos(5), Swallows(3), Thrushes(5), Warblers(16), Sparrows(9), and Blackbirds(6).

In total, thirty-two hours of surveying effort yielded observations of 108 species of birds over the course of four months. For this area of southeastern Pennsylvania, this represents an excellent total for a piece of property of this size. 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 ... property is a highly valuable and rich habitat worthy of protection and conservation efforts.

Species Accounts

* denotes confirmed or probable breeding within survey region (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.

***Wood Duck**- A beautiful and shy duck, this bird nests throughout the watershed in tree cavities and nest boxes constructed by people. Observed on three occasions flying along the creek corridor, these birds prefer the slow backwaters of streams, where they can feed upon acorns, seeds, and other plant matter. Undisturbed and undeveloped stretches of stream are important to this bird's breeding success.

***Mallard**- Observed once as a flyover flock, these ground-nesting ducks require thick grassy areas for nesting cover. They nest throughout the watershed along streams and near ponds. These ducks are frequently found feeding and resting along the White Clay Creek.

Great Blue Heron- Observed fishing in the White Clay Creek and flying over the property on four different occasions, these birds typically nest in colonies, and there is a known location where about fifteen pairs of these birds breed in the northern part of the White Clay watershed.

Green Heron- Observed once as a flyover, this small and secretive heron prefers hunting along streams and wetlands with plenty of small fish. This species is a potential breeder in the area, although finding nesting locations is quite difficult.

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

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

Sharp-shinned Hawk- Observed on five surveys from August to October, Sharp-shinned Hawk is an uncommon local breeder. Individuals counted on the survey are likely migrants through the area. This small hawk preys upon songbirds, and thrives in locations with a mix of habitat types.

Cooper's Hawk- Recorded on three surveys during September and October, the larger counterpart of the Sharp-shinned Hawk is a bird-eating specialist. 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 six 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.

American Kestrel- An individual seen flying over the property in August was likely an early migrant, as there are very few Kestrels known to be breeding locally. The open meadow habitat is attractive to this small falcon that feeds upon small rodents and insects spotted from a perch or while hovering.

Killdeer- observed once in August, this chunky shorebird breeds in the region, but not likely on this property.

Ring-billed Gull- A large population of these gulls may be found year-round in the area, due to the number of good feeding and roosting sites. Seen once as a small flock, this bird will often feed upon insects and worms in hayfields and other agricultural fields.

***Rock Dove-** Nearby farms and barnyards are the likely source for a few sightings of flyover birds.

***Mourning Dove-** Found on nine surveys, this abundant bird is a confirmed breeder(fledglings observed) on the property. Often found picking for grit and seeds along the driveway, doves are prolific nesters and the populations in late summer and fall are at their peak.

Black-billed Cuckoo- An observation in September of a migrant bird feeding on caterpillars high in the treetops is the lone evidence of this uncommon migrant bird visiting the property.

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

***Eastern Screech-owl-** An owl survey conducted at night in October turned up eight of these small nocturnal raptors, indicative of ideal hunting habitat for these birds. 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 mature forest in the southern portion of the property. Requiring a large territory for hunting, these magnificent raptors are well-established breeders in the watershed.

Chimney Swift- Found in September as small migrant flocks, this species breeds in chimneys and other man-made structures as its name suggests.

***Ruby-throated Hummingbird-** Confirmed breeding on the property(juveniles observed), 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.

***Belted Kingfisher-** Observations of individuals on four occasions along the White Clay Creek, this year-round resident breeds in low numbers within the White Clay watershed. Patrolling a mile or more of territory along a creek, the kingfisher hunts for fish by sight and plunges underwater to capture prey in its beak.

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

Yellow-bellied Sapsucker- An individual observed in late September in the forest is the only record 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-** Breeding in small numbers on the property, this larger and less-common cousin of the Downy is also a cavity nester.

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

***Pileated Woodpecker-** Spotted on three surveys, 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 several territorial males were found during surveys.

****Acadian Flycatcher-** A declining species preferring wet woodland habitats, the forests on the property support at least a couple breeding pairs of this species.

****Willow Flycatcher-** A declining species that prefers wetland edges, there are at least two pairs of these flycatchers breeding on the property.

Least Flycatcher- Found once in early September, this uncommon migrant flycatcher likes to catch insects along forest edges.

***Eastern Phoebe-** Several pairs breed on the property and fledgling and adults could be found throughout the early fall migration, as well.

***Great Crested Flycatcher-** At least a couple pairs of this large cavity-nesting flycatcher breed on the property. Large standing snags are necessary for the breeding success of this bird, along with other cavity specialists.

***Eastern Kingbird-** Three or more pairs of these black-and-white flycatchers breed on the property, and were found flycatching along the woodland edges.

**** White-eyed Vireo-** A bird that nests in thickets, this declining species finds refuge in the multiflora rose tangles along the field edges. At least a few pairs breed on the property, while the early fall migration saw a high count of 8 individuals.

**** Yellow-throated 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.

***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 (just like the Yellow-throated Vireo), these vireos occur in low densities in the watershed.

Philadelphia Vireo- A rare migrant vireo through the region, this bird observed in late September was an exciting find and the only for the survey.

***Red-eyed Vireo-** A common woodland nester, an estimate of 8 breeding pairs on the property is conservative. Territorial singing males and fledglings both provide breeding confirmation, and the forests 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. A flock of 19 seen in mid-October is indicative of the congregations of migrant jays often found during the fall.

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

Fish Crow- Recorded on several occasions as a flyover, this species is distinguished from the more-common American Crow by its nasal two-part "caw-aw" vocalization. Likely breeds near the property.

***Purple Martin-** A flock of 7 martins recorded in early August are likely from a nearby nesting colony. These large, social swallows prefer to fly above fields and along waterways as they search for insects. The habitat on the property is ideal for this and all other local swallow species.

***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, high counts of up to 175 individuals could be found feeding on insects above the expanses of hay fields.

***Barn Swallow-** A flock of nine swallows recorded in mid-August is likely from a nearby colony nesting on a barn or outbuilding. This species is a common breeder in the region, and does well in the agricultural landscape.

***Carolina Chickadee-** This common songbird is a year-round resident that can be reliably found in the forests and field edges.

Black-capped Chickadee- Found in the month of October, 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 forests and field edges

Red-breasted Nuthatch- Another "irruptive" species, this nuthatch was recorded in late September. 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 September and October, this shy and camouflaged brown woodland bird was located during September and October surveys. Occurring 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 of forest and field edge on the property.

***House Wren-** A confirmed breeder on the property, this tiny wren nests in cavities and competes with Tree Swallows and Eastern Bluebirds for nesting space. Found on eight surveys from July through the end of their fall migration in late September.

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

Golden-crowned Kinglet- A mid-fall migrant, this tiny songbird was found in October and likely winters on the property in small numbers. Strictly a winter resident

Ruby-crowned Kinglet- Large flocks of these songbirds visited the property in October, with a high count of 16 in mid-October. Strictly a winter resident.

***Blue-gray Gnatcatcher-** Found during safe dates, these insect-eating songbirds breed in thickets along the White Clay Creek. An early-fall migrant, none were recorded after August.

***Eastern Bluebird-** A familiar sight throughout the region, this colorful cavity-nester breeds on the property and can be found feeding in the open hayfields on a variety of insect prey. Large concentrations of fruit-bearing bushes on the property will allow this bird to over-winter here.

****Veery-** At least a couple pairs of this secretive thrush breed in the forest, with two territorial males recorded in late July.

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

Hermit Thrush- A thrush found only during our winter period, this species showed up on surveys in late September and October. They feed upon berries in the winter, and stands of greenbriar, dogwood, and multiflora rose provide this species with food through the long winter.

***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-** Possibly the most abundant breeding bird on the property, with no less than 12 breeding pairs noted during the summer survey period. Thriving in thicket habitat, the field edges and wetland margins are prime nesting grounds for this gray songbird.

***Northern Mockingbird-** Found on all surveys, this year-round resident is a denizen of thickets, finding food and nesting cover in tangles of vegetation. At least three breeding pairs were detected.

***Brown Thrasher-** A pair of thrashers bred in the thickets along the western hay field edge. This declining species is difficult to locate as a breeding bird in this region.

***European Starling-** Abundant, cosmopolitan and highly successful breeders, starlings were found in large flocks throughout the survey period. Mostly they range in the field habitat, but this non-native species also competes for nesting cavities in woodlands with native woodpeckers.

***Cedar Waxwing-** Family groups of waxwings in early August are indicative of local breeding, and larger flocks of these birds were observed during the fall migration period.

Tennessee Warbler- An individual noted in early September provides the only record for this neotropical migrant.

****Northern Parula-** Territorial males noted in early August are indicative of breeding attempts by this species of special concern. Preferring to nest along creek corridors, this warbler is known to nest in the lower reaches of the White Clay system, but may be considered scarce as a breeder in the upper White Clay watershed.

***Yellow Warbler-** A territorial male singing from the freshwater wetland in late July and early August is strong evidence of a breeding attempt by this species.

Chestnut-sided Warbler- Two migrants of this species passed through in late September as part of a mixed flock of warblers.

Magnolia Warbler- Record on surveys in September, this species breeds in the boreal forest and is commonly found during mid-fall migration.

Yellow-rumped Warbler- A common fall migrant, this species was recorded just once in late September, but certainly occurs in larger numbers during migration.

Black-throated Green Warbler- Seen in mid-and late-September, this neotropical migrant warbler is an upper-canopy specialist, and prefers tall trees for feeding opportunities.

****Prairie Warbler-** Territorial males singing in late July and early August are indicative of breeding by this species. Of special conservation concern in Pennsylvania, this warbler nests in the same thicket habitat as Yellow-breasted Chat and Common Yellowthroat.

Palm Warbler- Found in late September, five individuals of this species were observed feeding along field edges. (see photo)

Black-and-white Warbler- Found once in late September as part of a flock of migrant songbirds.

American Redstart- Migrant redstarts were found on surveys from late August to mid-September, with a high count of 4 individuals.

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

****Louisiana Waterthrush-** A pair of waterthrush feeding a fledgling in late July are proof of breeding 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.

***Common Yellowthroat-** At least several pairs of these tiny warblers breed in the thickets and wetlands on the property

****Yellow-breasted Chat-** The largest member of the warbler family, this bright yellow songster is in great decline due to loss of the thicket habitat it requires for nesting. Singing male chats found in August indicate a breeding attempt on the property. This is very notable for this region of Pennsylvania.

****Scarlet Tanager-** Two territorial male Scarlet Tanagers observed in early August are indicative of breeding by this species 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-** Breeding on the property in moderate numbers, this large sparrow of thicket habitats could be found in larger numbers(12) in fall migration along with other sparrows in the thicket habitats.

***Chipping Sparrow-** At least several pairs of these sparrows breed on the property, with fledglings and singing males present during the safe dates.

***Field Sparrow-** At least two pairs of this declining grassland breeder were found during safe dates. A species of special concern in Pennsylvania, this gentle-looking sparrow nests in fields that are often mowed before the nesting cycle is completed. Nine birds found in late October were part of a migrant flock.

Fox Sparrow- One individual of this colorful and uncommon sparrow was observed in mid-October, typical arrival time for this winter resident.

***Song Sparrow-** Breeding in the thickets and around the freshwater wetland, this is the most common breeding sparrow on the property. Observed on all surveys, with higher numbers(15-20) found during the peak fall migration period of October.

Swamp Sparrow- Arriving in late September, this wintering sparrow had a peak count of 9 birds that were found in the thickets around the west hay field.

White-throated Sparrow- First arriving in late September, peak migratory flocks of this wintering sparrow numbered over 50 in mid-October.

White-crowned Sparrow- One individual of this uncommon species was found in mid-October, a typical arrival time for this wintering sparrow.

Dark-eyed Junco- Observed in late October, this gray and white sparrow winters in the region and prefers a mix of woodland and field habitats

***Northern Cardinal-** A large number of these colorful songbirds nest on the property, with fledglings observed through late summer. A high count of 18 in mid-October is likely indicative of fall movement of this short-distance migrant.

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

****Blue Grosbeak***- One pair of this uncommon breeding bird was observed nesting on the property, in the thick hedgerow on the south edge of the west hay field. Maintaining thicket habitat is necessary to ensure the breeding success of this species and many others.

****Indigo Bunting***- At least a few pairs of these bright-blue neotropical migrants breed in the thickets on the property. Feeding on seeds and insects along field edges, the buntings could be found in August in numbers as high as eight individuals.

****Red-winged Blackbird***- Breeding in small numbers around the freshwater wetland on the property, these blackbirds gather in large flocks in the fall, with a high count of 125 in late September. Wetlands and meadows with cattails and other thick grasses are preferred nesting habitat for this species.

****Eastern Meadowlark***- A flock of three meadowlarks foraging in a hay field in October is an excellent sighting of this grassland-breeding species whose population has declined significantly in the past few decades.

****Common Grackle***- Fledgling grackles in August confirmed breeding on the property, 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.

*****Orchard Oriole***- A pair of this species found in a thicket in early August is indicative of breeding by this declining species of special conservation concern.

****Baltimore Oriole***- Found during the breeding period as well as early fall migration, this beautiful orange, black, and white neotropical songbird nests within the forest in low densities.

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

****House Finch***- Found on all surveys, this abundant finch nests on the property and prefers the open fields and edges for feeding.

****American Goldfinch***- A late-nesting songbird with a safe date of August 31, these yellow, black, and white seed-eating birds thrive in the meadows and field

edges on the property. A high count of 23 individuals in late August gives an idea of the nesting density of this species on the property.

***House Sparrow-** An abundant "urban" bird, this species was observed in closed proximity to houses and yards adjoining the property.