

Bird Inventory for Cumberland Gap National Historical Park

Final Report

Submitted by

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**National Park Service
Cumberland Piedmont Network
Cumberland Gap National Historical Park
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Background and Objectives

A project was undertaken by the National Park Service Natural Resource Challenge initiative to document the occurrence of at least 90% of the species of vertebrates and vascular plants in each National Park unit. This particular piece of the project looked at the avifauna on Cumberland Gap National Historical Park along Cumberland Mountain at the Kentucky, Tennessee, and Virginia juncture.

As part of the project for the park, point counts were conducted park-wide during the breeding season using a statistically valid study design using plots placed in different vegetative communities to get a picture of breeding species and densities within the park, walking and driving surveys were conducted during migration and winter to generate lists of birds using the parks with emphasis on grasslands and water bodies when applicable, and hawk-watching during migration where applicable. Additionally, incidental information on species of conservation concern was noted.

Overall Summary

A total of 2030 individuals representing 145 species were found on or adjacent to Cumberland Gap National Historical Park (Table 1) during the survey period. The geography presented by Cumberland Mountain creates a natural funneling mechanism that keeps numbers of migrants, raptors and songbirds alike, quite high particularly in autumn. Woodland species were the best represented both during the breeding species and during migration. Raptor diversity and numbers were high as Pinnacle Overlook offers one of the best hawk-watching locations in the region. Waterfowl, with the exception of flyovers, and grassland species were virtually absent from the park due to a lack of habitat. Historically the park did not have quite as mature a forest that allowed some second-growth species to persist in larger numbers, but the park likely was never a significant location for grassland species.

Barbour (1979) listed eight species on Cumberland Gap during the breeding season that were not detected during the survey. Two of them, Bachman's Sparrow and Red-cockaded Woodpecker are extirpated from the region and should not be expected to occur again. Prothonotary Warbler represents a single morning observation of one individual that represents either a very rare vagrant, as the species does not occur regularly in the Cumberland Plateau, or a misidentification. Golden-winged Warblers were probably an uncommon to rare breeder on the park, but prefer more scrubby and secondary growth than is present on the park currently. However, Golden-winged Warbler was detected as a migrant within the park and therefore is included in the 146 species detected. Grasshopper Sparrow was reported from Hensley Settlement where the species could occur since suitable habitat is present. Although frequent mowing throughout the breeding season prevents the likelihood of this species from establishing a population on the park, its potential as a migrant or brief visitor exists. The remaining three species (Green Heron, Northern Bobwhite, and Common Nighthawk) do not have

much suitable habitat at present on the park but all can be found in close proximity and should be expected on the park from time to time.

An additional ten species were not found that could be regular visitors to, or over, the park. Golden Eagle, Rough-legged Hawk, and Sandhill Crane are all rare but possible flyovers during hawk-watching. Wilson's Warbler, Connecticut Warbler, Mourning Warbler and Yellow-bellied Flycatcher are all uncommon to rare migrants that should occur regularly on the park. Wood Duck and White-crowned Sparrow both likely occur near or on the park but were not detected. Northern Saw-whet Owl is a secretive species that potentially could be present year round in some remote rhododendron thickets in the park. The addition of these ten species, along with the four species reported by Barbour that are likely to re-occur, presents a probable species total of 159 species for the park (Table 8).

Breeding Bird Results

Notes on Points Surveyed

A total of 49 points were surveyed within the park (Figure 1). Two established points (46 and 47) were eliminated based on their close proximity to another point. Four other points (21, 33, 37, 38) were not surveyed because accessibility issues made them safety hazards and virtually impossible to survey before 10:15 am. Finally, two other points 29 and 31 were also inaccessible and in repetitive habitat so were moved due south (i.e. new points established with the same longitude) to their intersection with the ridgeline trail to add more ridgetop surveys since these were relatively underrepresented in comparison (referred to as 29S and 31S in the data file). Finally, two other points were established to represent the only two significant open areas within the park that were not surveyed (the third, the Visitor Center, is within hearing range of point 1). These points were located in the field along the road to the campground on the southern side of the park (called MM1) and in the primary meadow at Hensley Settlement (called MM2).

Summary

A total of 924 individuals representing 71 species were detected on the point counts with the most common being Red-eyed Vireo, Ovenbird, and Scarlet Tanager (Table 2). The most frequently detected species were the same three (Table 3) with a range of 5 to 19 species and a mean of 11.8 species detected on each point (Table 4). An additional 22 species that were not detected on points were detected on the park during the breeding season. These mainly represented soaring birds, nocturnal birds, or very rare and local species (Table 5).

The park is amazingly rich with species of mature forests (Ovenbirds, Red-eyed Vireos, Scarlet Tanagers, etc.) suggesting that the park is quite healthy in that regard. Conversely, there are virtually no openings of significance within the boundaries. This makes the overall diversity of the park lower than other areas but allows several rare species and species of special concern to thrive here. The single most telling 'find' was the detection of only a single, flyover Brown-headed Cowbird. This species, often considered one of the greatest threats to many other birds due to its parasitic nature,

simply does not seem to occur unless there are disturbances within the forest. This bodes well for many species of conservation concern such as Wood Thrushes, Acadian Flycatchers, Hooded Warblers, Kentucky Warblers, Cerulean Warblers, Louisiana Waterthrush, Worm-eating Warbler, as well as many others that are heavily parasitized by cowbirds. Of these mentioned, all are uncommon to common across the park, can be found in multiple locations, and are well-established breeders within park boundaries. Whip-poor-wills were noted calling from most locations within the park at night and appeared to be quite common. Another species of emphasis, Black-billed Cuckoo, was noted calling from one point in the eastern part of the park. This species is likely a rare to uncommon breeder within the park, but is known to vary in abundance from year to year. Another species of note, Prairie Warbler, was detected just off of the park during the breeding season. This species is likely not a regular breeder within park limits due to lack of habitat, but can be found in surrounding disturbed areas and roadsides.

Additionally, there are many high elevation species present that are quite rare breeders in the region. Three of these (Rose-breasted Grosbeak, Blackburnian Warbler, and Dark-eyed Junco) are at the limit of their range or range extensions based on the Kentucky Breeding Bird Atlas. Blackburnian Warbler and Dark-eyed Junco were previously only reported in Kentucky from Big Black Mountain and from the high elevations in Tennessee and Virginia, while Palmer-Ball did report Rose-breasted Grosbeak potentially breeding as far southwest as Cumberland Gap. The other species known only from Big Black Mountain in Kentucky that was not located was Least Flycatcher. However, this species prefers early successional habitat, which there is very little of on the park. A handful of other species known only from high elevation were also detected within the park including Veery, Black-throated Blue Warbler, Chestnut-sided Warbler, Common Raven, and Canada Warbler.

There were other species of note located as well. Two Swainson's Warblers were found along the Sugar Run Trail (one of which likely would have been heard on the survey if not for the water noise from the stream, the other could be heard from the Sugar Run Trail parking lot) and this species is likely present in small numbers in some of the ravines in the park where there is flowing water and rhododendrons. A single Blue Grosbeak was noted singing from the park boundary in Tennessee. This species is considered uncommon to rare in the Cumberland Plateau, but recently has begun to show up in more open habitats. Along the same lines, the presence of Chuck-will's-widows in the campground is a bit interesting as this species too is rare on the Cumberland Plateau, but likely benefits from the proximity of open farmland nearby.

The lack of openings does make it difficult to locate many of the 'peripheral' species within park boundaries. The majority of the habitat has obviously been allowed to grow undisturbed for sometime and the composition of the birds is telling on this point. A few species that were considered common by Palmer-Ball in 1990 now are far more difficult to find. Most notably was Chestnut-sided Warbler. This species prefers early to mid-successional habitat at high elevations and was found easily near Hensley Settlement in 1990. However, now it is quite difficult to find adequate habitat and only two locations produced this species, one in an opening one mile west of White Rocks along the ridgeline and a pair carrying food in a powerline cut just east of Hensley Settlement. It is this lack of early successional habitat that I believe makes it unlikely that species such as Least Flycatcher and Golden-winged Warbler, found within the park by J. Croft

in the 1950's, can be found today. Conversely, species of mature forests such as Blackburnian Warbler and Rose-breasted Grosbeak were not located in 1990 but were both found with little difficulty along the ridgeline from Hensley Settlement to White Rocks.

In addition to the above-mentioned Golden-winged Warbler, a few species are listed as breeders (or potential breeders) for the park by Barbour that I did not detect. Some of these, such as Red-cockaded Woodpecker and Bachman's Sparrows (the latter of which is represented by a single calling male found by Croft at Hensley Settlement in the early 1950's) have been extirpated from the region and therefore are not likely to be found, while others such as Grasshopper Sparrow have become less abundant in the region since the 1950's when they were found at Hensley Settlement. Still others, such as Green Heron and Northern Bobwhite, are peripheral species, and although not likely to breed within the park, might from time to time enter or overfly the park. The inclusion of another species, Prothonotary Warbler, on Barbour's list is a mystery. Since the park is out of range for this species and offers absolutely no habitat for it, I can only assume that this is an error or a very odd one-day occurrence. The only other species listed that I did not detect during the summer months, American Woodcock, was detected on the southern side of the park during March.

The following nine species were found but not included on the Barbour list: Great Blue Heron, Mallard, Baltimore Oriole, Dark-eyed Junco, Rose-breasted Grosbeak, Blackburnian Warbler, Sharp-shinned Hawk, Blue Grosbeak, and Northern Rough-winged Swallow. It is likely that Mallard, Great Blue Heron, Baltimore Oriole and Blue Grosbeak are peripheral species, while the other five are breeders within the park.

Wintering Birds

Wintering priorities for this project were aimed at waterfowl and grassland species. However, habitat is insufficient at Cumberland Gap to attract notable numbers of these groups. In fact, the only waterfowl noted on the park were flyovers, primarily from Pinnacle Overlook, and grassland species were represented only by the most common species, such as Field and Song Sparrow, being present in very small numbers in the few openings present within the park. Instead, emphasis was shifted simply towards walking and driving surveys to detect as many wintering species as possible.

The park supports a fair number of woodland species in winter, particularly at lower elevations, with virtually all expected winter residents in woodland habitats noted. Notable birds found lingering into mid-November included Eastern Phoebe and Brown Thrasher, both found near the Visitor Center. These two species are rare winter residents in the region. Additionally, a Chipping Sparrow detected in November may have simply represented a late fall migrant. The only probable wintering species not detected was Pine Warbler, a species that is often found wintering in southern Kentucky, Virginia, and Tennessee in areas where they breed.

The park also seemed to be a fairly good location for winter 'finches'. This group of birds that primarily feed on various cone crops are erratic in their winter distributions, ranging from abundant to absent in any given year. During the survey period, Purple Finches, Pine Siskins, and Red-breasted Nuthatches were all noted in the region, and were in fact found on the park as well. Numbers were not high of these species and

frequently were flyovers, perhaps of birds cruising the ridgelines looking for suitable conifer stands. The park was hit hard by Southern Pine Beetles around the turn of the century, reducing the overall cone crop within the park, but likely still supports a fair population of finches during invasion years.

Migration Birds

Walking and driving surveys for transients were conducted during the fall and spring. The park proved to be an outstanding location for migrant songbirds, particularly during the fall migration where waves of migrants seemed to use the ridgeline as a migration corridor. September 25, 2003, proved to be one such day as (conservatively) hundreds of individuals were noted, including 17 species of warbler. Virtually every expected transient species for a woodland area was detected on the park over the course of the survey period (Table 1 and 6), with only a very few notable rarer exceptions such as Yellow-bellied Flycatcher, Wilson's Warbler, Connecticut Warbler, and Mourning Warbler being missed that are to be expected on a regular basis. Additionally, some very unusual migrants were noted, particularly during hawk-watching. Horned Lark, American Pipit, Snow Goose, Ring-billed Gull, and Greater White-fronted Goose were all noted as flyovers during fall migration over Pinnacle Overlook.

Some species of conservation note were detected during migration only. Red-headed Woodpeckers appeared to use the ridge during migration and have been noted frequently passing hawk-watch locations on Black and Pine Mountains. During the survey, an individual was noted flying past Pinnacle Overlook while hawk-watching. Olive-sided Flycatcher and Blue-winged Warbler were both also noted during migration and potentially could be found virtually anywhere within the park.

Raptors

Pinnacle Overlook at Cumberland Gap presents one of the best hawk-watching locations in the area. Cumberland Mountain is a ridge that runs northeast to southwest and acts as a natural funnel for raptors using updrafts as lift during migration, primarily on wind conditions that are perpendicular to the ridge (southeast or northwest). A total of 11 species of diurnal raptor, not including two species of vulture, were noted using the ridge during fall migration (Table 7). The most numerous raptor to pass the park is Broad-winged Hawk, with the largest numbers passing between the 20th and 25th of September. A September 23, 2003, visit produced 124 Broad-winged Hawks in just a few hours, but a day with thousands passing the lookout is easily conceivable. Other early season (September) raptors noted included Cooper's Hawks, Sharp-shinned Hawks, Osprey, Northern Harrier, American Kestrel, Peregrine Falcon, Red-tailed Hawk (resident), and Red-shouldered Hawk (resident). Other soaring birds notable throughout the migration season include both Black and Turkey Vultures, as well as Common Raven. Ravens are very rare in the region with Cumberland Gap near the limit of their range. Although present year round, they are most easily found during winter and migration along the ridge.

October viewing added a few more species to the list. Bald Eagle and Merlin were both noted passing the lookout in October. Eagles are possible anytime during

migration from August to December, but falcons, including Merlins, are usually present only in September and October. *Accipiters*, such as Cooper's and Sharp-shinned Hawks are most numerous in October and are easily seen at this time of year. The larger hawks, such as Red-tailed and Red-shouldered, begin migrating in earnest in October with a notable peak in November. Two other species, Golden Eagle and Rough-legged Hawk are at the southern limit of their range and were not noted, but could possibly be seen as very rare migrants from Pinnacle Overlook in November and December.

Nocturnal raptor species consisted of the three common owl species in the area; Barred Owl, Great Horned Owl, and Eastern Screech-Owl. A fourth, Northern Saw-whet Owl is a very secretive species that, although never found in summer in Kentucky, is possibly a year-round resident in thickets within the park.

Habitat Availability

The park consists almost exclusively of mature woodland habitat. Due to the large size of the park, as well as the relative uniformity of the habitat, and the altitude within the park, it is an excellent location for many species of uncommon songbirds in the region, including many that are at the limits of their range. Waterbodies are virtually non-existent and no location within the park is likely to ever be a significant location for waterbirds due to the steep elevation on the park. Grasslands are also virtually absent, with the closest thing to a grassland being the meadows at Hensley Settlement that are mowed to maintain them as they historically were. However, no notable or significant numbers of grassland species were detected within the park during the survey period. Additionally, very little edge, second-growth, or scrubby habitat is available either making species that prefer these locations also uncommon within the park proper, although most of those species not present within the park are found easily in nearby communities and farmland.

Management Implications

As far as avifauna is concerned, Cumberland Gap Historical Park is an excellent location for mature woodland species, including many species of regional and national concern as mentioned previously. By allowing the forest to mature throughout most of the park, it has aided many of these species. Although the lack of openings may reduce the overall biodiversity, most species of birds that may be excluded are common and not necessarily of significant management concern. Additionally, the lack of Brown-headed Cowbirds within the park boundaries should not be overlooked, as this nuisance species can have incredible negative impacts over a large variety of songbirds. Studies have shown that the size and uniformity of a forest, in reverse relation to the number and size of openings, can have an impact on cowbird populations and indirectly songbird breeding success. At present, the only significant openings within the parks occur near the boundaries and Hensley Settlement, thus likely keeping Cowbirds from thriving.

Regionally, many parks are attempting to maximize waterfowl and grassland habitat as well. However, no real potential for waterfowl exists as the park occurs on a ridge. With grasslands, Hensley Settlement is the only location with any potential to attract these species. To keep it open, and to maintain some historical accuracy, the fields

are mowed frequently likely preventing any grassland species that might occur there from successfully breeding. However, the park does not lie in a geographically advantageous spot to ever be a haven for grassland species, nor should this group be considered as the main class of birds using the park, and thus management towards them should not be a primary concern.

Clearly, the park is best suited as an Appalachian forest ecosystem, with many uncommon and regionally significant species present. Simply allowing the forest to mature where possible is likely the best course of action for maintaining the largest numbers of these species within the park. Managing for diversity by opening up too many areas, which may increase the total species diversity, should be done with caution as they may also have some negative effects to many of the warbler species present within the park.

Figure 1. Breeding Bird Survey Points.

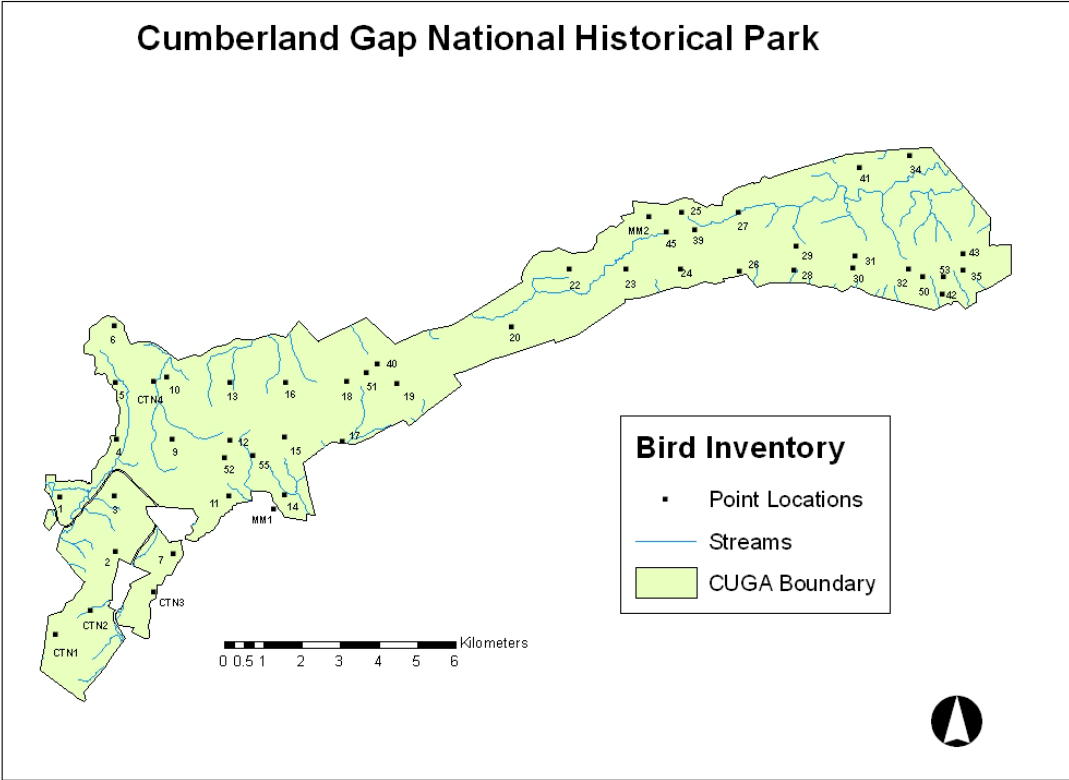


Table 1. Birds Noted on Cumberland Gap NHP during 2003-2004 Survey.

Common	Alpha	Number of Detection	Number of Individuals Detected
Ring-billed Gull	RBGU	1	2
Mallard	MALL	1	2
Lesser Snow Goose (White phase)	LSGO	1	75
Greater White-fronted Goose	GWFG	1	2
Canada Goose	CAGO	1	25
Great Blue Heron	GBHE	2	2
American Woodcock	AMWO	1	1
Killdeer	KILL	1	1
Ruffed Grouse	RUGR	2	2
Wild Turkey	WITU	1	1
Mourning Dove	MODO	5	5
Rock Pigeon	ROPI	1	2
Turkey Vulture	TUVU	5	38
Black Vulture	BLVU	4	12
Northern Harrier	NOHA	2	3
Sharp-shinned Hawk	SSHA	5	11
Cooper's Hawk	COHA	4	4
Red-tailed Hawk	RTHA	7	18
Red-shouldered Hawk	RSHA	4	6
Broad-winged Hawk	BWHA	3	126
Bald Eagle	BAEA	1	1
Peregrine Falcon	PEFA	1	2
Merlin	MERL	1	1
American Kestrel	AMKE	3	6
Osprey	OSPR	1	2
Barred Owl	BDOW	2	4
Eastern Screech-Owl	EASO	1	1
Great Horned Owl	GHOW	3	3
Yellow-billed Cuckoo	YBCU	7	7
Black-billed Cuckoo	BBCU	1	1
Belted Kingfisher	BEKI	1	1
Hairy Woodpecker	HAWO	10	11
Downy Woodpecker	DOWO	19	27
Yellow-bellied Sapsucker	YBSA	3	3
Pileated Woodpecker	PIWO	21	24
Red-headed Woodpecker	RHWO	1	2
Red-bellied Woodpecker	RBWO	9	11
Yellow-shafted Flicker	YSFL	5	7
Chuck-will's-widow	CWWI	1	2
Whip-poor-will	WPWI	1	3
Chimney Swift	CHSW	4	9
Ruby-throated Hummingbird	RTHU	8	8
Eastern Kingbird	EAKI	1	2
Great Crested Flycatcher	GCFL	3	3
Eastern Phoebe	EAPH	8	9
Olive-sided Flycatcher	OSFL	1	1
Eastern Wood-Pewee	EAWP	17	24

Common	Alpha	Number of Detection	Number of Individuals Detected
Acadian Flycatcher	ACFL	15	19
Least Flycatcher	LEFL	1	1
Horned Lark	HOLA	1	1
Blue Jay	BLJA	13	18
Common Raven	CORA	3	3
American Crow	AMCR	22	34
European Starling	EUST	1	1
Brown-headed Cowbird	BHCO	1	1
Red-winged Blackbird	RWBL	1	1
Eastern Meadowlark	EAME	2	2
Orchard Oriole	OROR	1	1
Baltimore Oriole	BAOR	1	1
Common Grackle	COGR	1	1
Purple Finch	PUFI	1	2
House Finch	HOFI	2	5
American Goldfinch	AMGO	4	5
Pine Siskin	PISI	1	3
White-throated Sparrow	WTSP	3	23
Chipping Sparrow	CHSP	4	4
Field Sparrow	FISP	2	4
Slate-colored Junco	SCJU	6	38
Song Sparrow	SOSP	6	8
Swamp Sparrow	SWSP	2	2
Fox Sparrow	FOSP	1	1
Eastern Towhee	EATO	5	8
Northern Cardinal	NOCA	20	35
Rose-breasted Grosbeak	RBGR	8	24
Blue Grosbeak	BLGR	1	1
Indigo Bunting	INBU	14	22
Scarlet Tanager	SCTA	37	73
Summer Tanager	SUTA	1	1
Purple Martin	PUMA	1	1
Barn Swallow	BARS	1	1
Tree Swallow	TRES	1	25
Northern Rough-winged Swallow	NRWS	1	2
Cedar Waxwing	CEDW	7	18
Red-eyed Vireo	REVI	51	164
Philadelphia Vireo	PHVI	1	1
Warbling Vireo	WAVI	2	2
Yellow-throated Vireo	YTVI	4	8
Blue-headed Vireo	BHVI	25	35
White-eyed Vireo	WEVI	2	2
Black-and-White Warbler	BAWW	20	31
Swainson's Warbler	SWWA	1	2
Worm-eating Warbler	WEWA	14	15
Blue-winged Warbler	BWWA	2	9
Golden-winged Warbler	GWWA	1	1
Nashville Warbler	NAWA	3	15
Orange-crowned Warbler	OCWA	1	1
Tennessee Warbler	TEWA	5	44
Northern Parula	NOPA	3	5

Common	Alpha	Number of Detection	Number of Individuals Detected
Cape May Warbler	CMWA	1	12
Yellow Warbler	YWAR	1	1
Black-throated Blue Warbler	BTBW	10	22
Myrtle Warbler	MYWA	4	23
Magnolia Warbler	MAWA	3	28
Cerulean Warbler	CERW	5	5
Chestnut-sided Warbler	CSWA	3	22
Bay-breasted Warbler	BBWA	2	37
Blackpoll Warbler	BLPW	1	2
Blackburnian Warbler	BLBW	6	18
Yellow-throated Warbler	YTTA	4	4
Black-throated Green Warbler	BTNW	24	82
Pine Warbler	PIWA	2	2
Western Palm Warbler	WPWA	4	13
Prairie Warbler	PRAW	1	1
Ovenbird	OVEN	52	166
Northern Waterthrush	NOWA	1	1
Louisiana Waterthrush	LOWA	3	3
Kentucky Warbler	KEWA	4	4
Common Yellowthroat	COYE	5	14
Yellow-breasted Chat	YBCH	1	3
Hooded Warbler	HOWA	24	39
Canada Warbler	CAWA	1	1
American Redstart	AMRE	6	21
House Sparrow	HOSP	2	10
American Pipit	AMPI	1	1
Northern Mockingbird	NOMO	2	3
Gray Catbird	GRCA	2	2
Brown Thrasher	BRTH	3	3
Carolina Wren	CARW	16	19
House Wren	HOWR	2	3
Winter Wren	WIWR	2	2
Brown Creeper	BRCR	2	3
White-breasted Nuthatch	WBNU	14	14
Red-breasted Nuthatch	RBNU	1	2
Eastern Tufted Titmouse	ETTI	27	40
Carolina Chickadee	CACH	25	39
Golden-crowned Kinglet	GCKI	4	21
Ruby-crowned Kinglet	RCKI	5	13
Blue-gray Gnatcatcher	BGGN	9	12
Wood Thrush	WOTH	31	46
Veery	VEER	4	10
Gray-cheeked Thrush	GCTH	1	1
Swainson's Thrush	SWTH	2	6
Hermit Thrush	HETH	1	2
American Robin	AMRO	8	10
Eastern Bluebird	EABL	2	6
		Total # of Detections	847
		Total # Individuals	2030

Table 2. Total Numbers of Individuals Recorded on Breeding Point Counts.

Red-eyed Vireo	151
Ovenbird	137
Scarlet Tanager	66
Wood Thrush	43
American Crow	32
Carolina Chickadee	28
Tufted Titmouse	28
Black-throated Green Warbler	27
Hooded Warbler	27
Blue-headed Vireo	25
Eastern Wood-Pewee	22
Acadian Flycatcher	20
Pileated Woodpecker	18
Black-and-White Warbler	17
Indigo Bunting	17
Blue Jay	16
Northern Cardinal	16
Downy Woodpecker	14
Carolina Wren	14
Black-throated Blue Warbler	14
Worm-eating Warbler	14
White-breasted Nuthatch	12
Hairy Woodpecker	10
Blue-gray Gnatcatcher	9
Rose-breasted Grosbeak	9
Cedar Waxwing	8
Common Yellowthroat	8
Yellow-billed Cuckoo	7
Ruby-throated Hummingbird	7
Eastern Towhee	7
Eastern Phoebe	6
Veery	6
Mourning Dove	5
Red-bellied Woodpecker	5
American Goldfinch	5
American Robin	4
Northern Flicker	3
Great Crested Flycatcher	3
Yellow-throated Vireo	3
Northern Parula	3
Blackburnian Warbler	3
Yellow-throated Warbler	3
Cerulean Warbler	3

Kentucky Warbler 3
Yellow-breasted Chat 3
Red-shouldered Hawk 2
Brown Thrasher 2
Pine Warbler 2
American Redstart 2
Louisiana Waterthrush 2
Chipping Sparrow 2
Field Sparrow 2
Song Sparrow 2
Wild Turkey 1
Black-billed Cuckoo 1
Belted Kingfisher 1
White-eyed Vireo 1
Gray Catbird 1
European Starling 1
Canada Warbler 1
Summer Tanager 1
Blue Grosbeak 1
Baltimore Oriole 1

(FLYOVERS ONLY)

Chimney Swift 4
Rough-winged Swallow 2
Broad-winged Hawk 1
Barn Swallow 1
Purple Martin 1
Common Grackle 1
Red-winged Blackbird 1
House Finch 1

Table 3. Distribution of Species On Breeding Counts (49 possible points).

Red-eyed Vireo	47
Ovenbird	47
Scarlet Tanager	36
Wood Thrush	28
Tufted Titmouse	23
Hooded Warbler	23
Blue-headed Vireo	21
American Crow	21
Black-throated Green Warbler	21
Carolina Chickadee	19
Pileated Woodpecker	17
Eastern Wood-Pewee	16
Acadian Flycatcher	16
Black-and-White Warbler	15
Downy Woodpecker	13
Carolina Wren	13
Worm-eating Warbler	13
Blue Jay	12
White-breasted Nuthatch	12
Northern Cardinal	12
Indigo Bunting	12
Hairy Woodpecker	9
Black-throated Blue Warbler	9
Yellow-billed Cuckoo	7
Ruby-throated Hummingbird	7
Blue-gray Gnatcatcher	7
Cedar Waxwing	6
Rose-breasted Grosbeak	6
Mourning Dove	5
Red-bellied Woodpecker	5
Eastern Phoebe	5
American Robin	4
Eastern Towhee	4
American Goldfinch	4
Northern Flicker	3
Great Crested Flycatcher	3
Veery	3
Blackburnian Warbler	3
Yellow-throated Warbler	3
Cerulean Warbler	3
Kentucky Warbler	3
Common Yellowthroat	3
Yellow-throated Vireo	2

Brown Thrasher 2
Northern Parula 2
Pine Warbler 2
American Redstart 2
Louisiana Waterthrush 2
Chipping Sparrow 2
Song Sparrow 2
Red-shouldered Hawk 1
Wild Turkey 1
Black-billed Cuckoo 1
Belted Kingfisher 1
White-eyed Vireo 1
Gray Catbird 1
European Starling 1
Canada Warbler 1
Yellow-breasted Chat 1
Summer Tanager 1
Field Sparrow 1
Blue Grosbeak 1
Baltimore Oriole 1

(FLYOVERS ONLY)

Chimney Swift 3
Rough-winged Swallow 1
Broad-winged Hawk 1
Barn Swallow 1
Purple Martin 1
Common Grackle 1
Red-winged Blackbird 1
House Finch 1

Table 4. # Species Detected Per Plot	
PlotNumber	Species Detected
1	19
2	10
3	11
4	13
5	13
6	13
7	15
9	13
10	10
11	14
12	9
13	13
14	16
15	9
16	10
17	12
18	13
19	11
20	7
22	10
23	8
24	13
25	13
26	14
27	11
28	13
29S	7
30	14
31S	12
32	18
34	9
35	13
39	8
40	9
41	9
42	16
43	14
45	10
50	12
51	10
52	8
53	19

55	13
CTN1	6
CTN2	10
CTN3	12
CTN4	5
MM1	16
MM2	15

**Table 5. Species Recorded Incidentally on Park during Breeding Season
(FO = Flyover Only).**

Great Blue Heron (FO only)
Black Vulture (FO only)
Turkey Vulture (FO only)
Mallard (FO only)
Sharp-shinned Hawk
Cooper's Hawk
Red-tailed Hawk (FO only)
Ruffed Grouse
Eastern Screech-Owl
Great Horned Owl
Barred Owl
Chuck-will's-widow
Whip-poor-will
Eastern Kingbird
Common Raven
Eastern Bluebird
Chestnut-sided Warbler
Swainson's Warbler
Dark-eyed Junco
Eastern Meadowlark
Brown-headed Cowbird (FO)
House Sparrow

Table 6.

	Checklist of Birds of Cumberland Gap National Historical Park				
Species	Sp	Su	F	W	
Ring-billed Gull			V		
Canada Goose	U	R	U	R	
Snow Goose			V	V	
Greater White-fronted Goose			O		
Wood Duck	R	R	R		
Mallard	U	U	U	V	
Wild Turkey	U	U	U	U	
Northern Bobwhite	V	V	V	V	
Ruffed Grouse	U	U	U	U	
Great Blue Heron	R	R	R	V	
Green Heron	V	V	V		
Black Vulture	U	U	U	U	
Turkey Vulture	C	C	C	C	
Osprey	R		U		
Bald Eagle	V	V	R	V	
Golden Eagle			O	O	
Northern Harrier	R		U	V	
Sharp-shinned Hawk	C	U	C	U	
Cooper's Hawk	C	U	C	U	
Red-shouldered Hawk	C	C	C	U	
Broad-winged Hawk	C	C	C		
Red-tailed Hawk	C	U	C	C	
Rough-legged Hawk			O		
American Kestrel	U	V	C	U	
Merlin	R		U		
Peregrine Falcon	V		U		
Sandhill Crane	O		V		
Killdeer	V	V	V		
American Woodcock	R	V			
Rock Pigeon	R	R	R	R	
Mourning Dove	C	C	C	C	
Black-billed Cuckoo	R	R	R		
Yellow-billed Cuckoo	C	C	C		
Eastern Screech-Owl	U	U	U	U	
Great Horned Owl	C	C	C	C	
Barred Owl	U	U	U	U	
Northern Saw-whet Owl	O		O	O	
Common Nighthawk	R	V	R		
Chuck-will's-widow	R	R			
Whip-poor-will	C	C			
Chimney Swift	C	C	C		
Ruby-throated Hummingbird	C	C	C		
Belted Kingfisher	R	R	R	R	
Red-headed Woodpecker	U	V	U	V	
Red-bellied Woodpecker	C	C	C	C	
Yellow-bellied Sapsucker	U		U	U	
Downy Woodpecker	C	C	C	C	
Hairy Woodpecker	C	C	C	C	
Northern Flicker	C	C	C	R	
Pileated Woodpecker	C	C	C	C	
Olive-sided Flycatcher	R		R		
Eastern Wood-Pewee	C	C	C		
Yellow-bellied Flycatcher	V		V		
Acadian Flycatcher	C	C	C		
Least Flycatcher	U	O	U		
Eastern Phoebe	C	C	C	R	
Great Crested Flycatcher	U	U	U		
Eastern Kingbird	R	R	R		
White-eyed Vireo	R	R	R		
Yellow-throated Vireo	C	U	C		

Blue-headed Vireo	C	C	C		
Warbling Vireo	U	R	U		
Philadelphia Vireo	U		U		
Red-eyed Vireo	C	C	C		
Blue Jay	C	C	C	C	
American Crow	C	C	C	C	
Common Raven	U	R	U	U	
Horned Lark	V		R	V	
Purple Martin	R	R	R		
Tree Swallow	R		U		
Northern Rough-winged Swallow	U	U	U		
Barn Swallow	U	U	U		
Carolina Chickadee	C	C	C	C	
Tufted Titmouse	C	C	C	C	
Red-breasted Nuthatch	U		U	U	
White-breasted Nuthatch	C	C	C	C	
Brown Creeper	U		U	U	
Carolina Wren	C	C	C	C	
House Wren	R	V	R		
Winter Wren	U		U	U	
Golden-crowned Kinglet	C		C	C	
Ruby-crowned Kinglet	C		C	U	
Blue-gray Gnatcatcher	C	C	C		
Eastern Bluebird	R	R	R	R	
Veery	U	U	U		
Gray-cheeked Thrush	U		U		
Swainson's Thrush	C		C		
Hermit Thrush	U		U	U	
Wood Thrush	C	C	U		
American Robin	C	C	C	U	
Gray Catbird	R	R	V		
Northern Mockingbird	V	V	V	V	
Brown Thrasher	R	R	V	O	
European Starling	U	U	U	U	
American Pipit	V		V	V	
Cedar Waxwing	C	C	C	C	
Blue-winged Warbler	U	O	U		
Golden-winged Warbler	U	O	U		
Tennessee Warbler	C		C		
Orange-crowned Warbler	V		V		
Nashville Warbler	C		C		
Northern Parula	C	C	C		
Yellow Warbler	U	V	U		
Chestnut-sided Warbler	C	R	C		
Magnolia Warbler	U		C		
Cape May Warbler	U		C		
Black-throated Blue Warbler	C	C	C		
Yellow-rumped Warbler	C		C	C	
Black-throated Green Warbler	C	C	C		
Blackburnian Warbler	C	R	C		
Yellow-throated Warbler	U	U	U		
Pine Warbler	U	U	U	V	
Prairie Warbler	R	V	R		
Palm Warbler	C		C		
Bay-breasted Warbler	U		C		
Blackpoll Warbler	C		R		
Cerulean Warbler	U	U	V		
Black-and-White Warbler	C	C	C		
American Redstart	C	R	C		
Worm-eating Warbler	C	C	C		
Ovenbird	C	C	C		
Swainson's Warbler	R	R			
Northern Waterthrush	R		R		
Louisiana Waterthrush	C	C	O		
Kentucky Warbler	C	C	U		
Connecticut Warbler	V		V		

Mourning Warbler	V		V		
Common Yellowthroat	C	C	C		
Hooded Warbler	C	C	U		
Wilson's Warbler	R		R		
Canada Warbler	U	R	U		
Yellow-breasted Chat	R	R	R		
Summer Tanager	U	R	U		
Scarlet Tanager	C	C	C		
Eastern Towhee	U	U	U	U	
Chipping Sparrow	R	R	R	O	
Field Sparrow	R	R	R	V	
Grasshopper Sparrow	O	O	O		
Fox Sparrow	R		R	R	
Song Sparrow	U	R	U	U	
Swamp Sparrow	V		V	R	
White-throated Sparrow	C		C	C	
White-crowned Sparrow	R		R	R	
Dark-eyed Junco	C	R	C	C	
Northern Cardinal	C	C	C	C	
Rose-breasted Grosbeak	C	R	C		
Blue Grosbeak	V	V	V		
Indigo Bunting	C	C	R		
Red-winged Blackbird	R	R	R	O	
Eastern Meadowlark	U	U	U	R	
Common Grackle	R	R	R	O	
Brown-Headed Cowbird	R	R	O	O	
Orchard Oriole	R	V			
Baltimore Oriole	U	V	R		
Purple Finch	U		U	U	
House Finch	U	U	U	U	
Pine Siskin	U		U	U	
American Goldfinch	C	C	C	C	
House Sparrow	R	R	R	R	
C = common – easily found U = uncommon – usually present but may not be seen R = rare – only a few individuals, if any, may be present V = very rare – not always present O = occasional – unusual visitor not located most years					

Table 7. Raptor Observations from Pinnacle Overlook.

September 23, 2003

Broad-winged Hawk 124
Red-tailed Hawk 3 (locals)
Red-shouldered Hawk 1 (local)
Osprey 2
Northern Harrier 1
Peregrine Falcon 2
American Kestrel 2
Sharp-shinned Hawk 3
Cooper's Hawk 1
Black Vulture 4 (local)
Turkey Vulture 10 (local)

October 16, 2003

Red-tailed Hawk 4
Red-shouldered Hawk 2
Bald Eagle 1
Merlin 1
Northern Harrier 1
Sharp-shinned Hawk 5
Cooper's Hawk 1
Black Vulture 2
Turkey Vulture 15

November 13, 2003

Red-tailed Hawk 6
Red-shouldered Hawk 1
Sharp-shinned Hawk 1
Cooper's Hawk 1

Table 8. Species Summaries (* denotes evidence of breeding found)

Great Blue Heron– Noted on two occasions flying over the park. Most likely not a true resident within the boundaries, but possible year round.

Green Heron – Present in surrounding areas. Possibly a rare visitant inside park boundaries during summer months.

Canada Goose – Present year round in surrounding areas. Possibly a rare visitor, primarily over the park. Most likely during migration while hawk-watching.

Snow Goose – Noted during fall migration from Pinnacle Overlook. Not likely to be seen frequently.

Greater White-fronted Goose – Noted flying in a flock of Snow Geese over Pinnacle Overlook while hawk-watching. The most unusual bird noted during the survey period and not likely to be seen with any regularity.

Black Vulture – Noted on multiple occasions over the forest and from lookouts on the ridge. This species possibly breeds on remote cliffs within the park and can be found year round.

Turkey Vulture – Easily seen over the forest and from all lookouts. Likely breeds on cliffs within the park and present year round.

Mallard – One drake noted flying over the park. Likely breeds in surrounding areas but not regularly within the park. Possible year round.

Bald Eagle – An uncommon to rare migrant over the park. Most likely to be seen in September and November, but possible at any time of year as a migrant. One young bird was noted while hawk-watching in October.

Golden Eagle – Not noted during survey period. Possibly a very rare migrant past Pinnacle Overlook in November.

Northern Harrier – Uncommon migrant, primarily in fall while hawk-watching. Small numbers to be expected September through November.

Osprey – Fairly common migrant while hawk-watching primarily in September and April.

*Sharp-shinned Hawk – Common as a migrant and probable year round resident. A single male was noted carrying food into a pine thicket in Virginia near point 11 during breeding season. It is likely that a few pairs breed in scattered areas throughout the park.

*Cooper's Hawk – Common migrant over the park and uncommon year-round resident. Noted on a three occasions within the park during breeding season including an individual carrying a European Starling that it captured in Middlesboro into a pine thicket along the border of the park on the Kentucky side. Likely that several pairs breed within the park.

Red-shouldered Hawk – Common to uncommon migrant through the park, uncommon to rare resident. Two individuals were found near the beaver dam near point 5 likely representing a breeding pair. No others of this species were noted during breeding season, but a few pairs may be scattered throughout the park particularly in the lower elevations.

*Broad-winged Hawk – Abundant migrant in September, common breeder. Noted on five occasions throughout the park during breeding season, including an individual carrying food near the town of Tipwell in Tennessee (the bird was actually carrying food out of the park). A species common in mature forests of the Appalachian Mountains, it is likely that many pairs breed throughout the park.

Red-tailed Hawk – Surprisingly only noted on one occasion during the breeding season. A single bird was noted soaring from the Pinnacle Overlook. Although most common in open areas and farmland, this species is likely to breed within the park boundaries and in surrounding property.

Rough-legged Hawk – Not noted during survey period. Possibly a very rare late fall migrant while hawk-watching.

American Kestrel – Common migrant, rare year-round resident. Easily noted while hawk-watching in September. Breeds and winters commonly in surrounding areas but lacks much habitat on the park.

Merlin – Rare migrant past the park primarily in October. A single individual was noted in October.

Peregrine Falcon – Uncommon to rare migrant past the park, possibly a rare or historic breeder within the park at White Rocks. Was noted during the survey period in September while hawk-watching. Reports of this species in May and June historically from near White Rocks present the possibility that this species has bred in the park in the past.

Northern Bobwhite – Was not noted on the park during the survey period. Is present in surrounding farmland and is likely to occasionally be seen or heard on or adjacent to the park. Small potential of this species occurring in the meadows at Hensley Settlement.

*Ruffed Grouse – Found on several occasions, particularly along the ridgeline. Due to its secretive nature, it is difficult to get a handle on the abundance of this species. Several

individuals were flushed at various times, particularly around hemlocks, rhododendrons, and laurels. A family group was noted along the ridgeline near Hensley Settlement.

Wild Turkey – This species was noted most days, particularly at dawn along roadsides. Despite its secretive nature, this species is not difficult to find on the park and is widespread in its distribution. Can be found year round.

Sandhill Crane – Possibly a rare migrant over the park from November to March. Most likely to be noted while hawk-watching. Not seen during survey period.

Killdeer – A regular species in surrounding farmland. Lack of habitat makes it unlikely to be seen with any regularity on the park, but individuals could potentially be noted from time to time.

American Woodcock – Rare breeder in the park. Noted calling on the borders of the park on the Virginia side in March. More common in surrounding open and wet areas.

Mourning Dove – Relatively common species year round. Most frequently found in the vicinity of openings, both at low elevations and along the ridgeline. However, a few individuals were heard calling in locations where no openings were noted.

Rock Pigeon – Introduced species. Present commonly in surrounding communities. Can be noted regularly flying over the park.

Black-billed Cuckoo – A single individual was heard in the Tennessee portion of the park near point CTN1. A somewhat difficult species to detect, it is likely that this species is slightly more widespread. This species prefers younger habitat in general, but are sometimes uncommon to common in mature forests in the Appalachian Mountains. Possibly more common in some years than others.

Yellow-billed Cuckoo – Present throughout the park in small numbers. Likely to be found virtually anywhere within the park on most days during breeding season.

Eastern Screech-Owl – Responded to tapes near the campground in Virginia and near the Visitor Center as well as being heard unsolicited from the Pinnacle Overlook parking lot. Possibly more common than indicated. Can be found year round.

Great Horned Owl – Heard on multiple occasions from multiple locations throughout the lower elevations within the park. Can be found year round.

*Barred Owl – Noted on two occasions. A bird was heard near the campground in Virginia and a juvenile was being attended by an adult along the ridgeline between Hensley Settlement and White Rocks. This species is likely spread throughout the park. Can be found year round.

Northern Saw-whet Owl – Not noted during survey period. A very secretive species that can be found on rare occasions virtually anywhere in winter and on migration. A small potential exists for this species to breed in remote rhododendron thickets within the park as the species is known from high elevations in Tennessee.

Chuck-will's-widow – This species is common in the vicinity of the campground in Virginia but I was unable to hear any others elsewhere. This species is considered rare on the Cumberland Plateau and in wooded areas and is likely only present along the fringes of the park closer to where the habitat is more disturbed. Spring and summer only.

Whip-poor-will – This species was heard on numerous occasions throughout the park. Considered a common species in mature woodlands. Spring and summer only.

Common Nighthawk – Rare visitor to the park during migration and summer. One or two pair likely breed in surrounding areas and an occasional bird may enter the park. Most likely to be seen in fall migration in August and September over-flying the park. Not noted during survey period.

Chimney Swift – This species is very common in the vicinity of the Visitor Center and in areas near towns. Additionally, birds are frequently seen and heard flying overhead throughout the park. This species, although most commonly found in towns, is likely to breed in dead snags and perhaps cliffs in various places within the park.

Ruby-throated Hummingbird – A common species within the park during migration and in summer. Numerous males were found throughout during the breeding season, frequently calling as they were defending their territories.

Belted Kingfisher – Noted on only two occasions. A bird was seen and heard in the vicinity of the beaver dam near point 5 and another bird was flying along the stream near the Visitor Center. This species might be found along any stream in the park, but it is unlikely that it breeds within the boundaries due to the lack of muddy banks for them to breed in. Possible, but uncommon, year round.

Red-headed Woodpecker – Found only during migration passing the Pinnacle Overlook. Most common during migration, but possibly a very rare breeder on or near the park.

Red-bellied Woodpecker – Found in small numbers throughout the park. This species is slightly more common in lower elevations and more disturbed habitats, but still can be found with regularity within the boundaries. Present year round.

*Downy Woodpecker – Easily found throughout the park year round. A family group was noted on the northern slope during breeding season.

*Hairy Woodpecker – A species that prefers mature forest. This species was surprisingly found in similar numbers to Downy Woodpeckers, and were common throughout most of

the park. Family groups were noted on two occasions during breeding season. Present year round.

Northern Flicker – A few individuals of this species can be found throughout the park. However, this species prefers disturbances and is most easily found near Hensley Settlement, at the Visitor Center, and along the boundaries of the park as a breeder. Most common during fall migration, rare in winter.

Pileated Woodpecker – A species that prefers mature forest. Pileated Woodpeckers can be found throughout the park, and are easy to detect because of their highly vocal nature. Present year round.

Yellow-bellied Sapsucker – A fairly common migrant and winter resident within the park. Found in multiple habitats.

Olive-sided Flycatcher – An uncommon to rare migrant within the park. Most likely to be noted in late August to early September and in early May. A single individual was noted on a snag on the Virginia side of the park in early May.

Eastern Wood-Pewee – This species was found with relative ease throughout the park. Highest concentrations of this species seemed to be along the ridgeline.

Yellow-bellied Flycatcher – A rare migrant throughout the region and likely within the park. Not noted during the survey period. Can be very difficult to distinguish from the more common Acadian Flycatcher.

*Acadian Flycatcher – A species that prefers moist, mature woodlands. This species was particularly common in locations along streams and at lower elevations, although it can be found virtually anywhere within the park. Two separate females incubating eggs in a nest were found along the Gibson Gap Trail. Common within the park during migration and summer.

Least Flycatcher – A relatively common migrant within the park, although somewhat difficult to distinguish from the more common Acadian Flycatcher. This species breeds at high elevations in second growth and disturbed areas in the region, but was not noted on the park during the survey period during the breeding season. Could possibly occur in areas of disturbance in the future.

*Eastern Phoebe – Found along streams, near buildings, and in boulder fields. Small numbers of this species can be found throughout the park. Nests are easily located around virtually every building and outhouse within the park, but are difficult to find elsewhere. Common during migration and in summer, very rare in winter where individuals may remain by open streams.

Great Crested Flycatcher – A species not common on the Cumberland Plateau. A few individuals were found in varying locations from the campground to the ridgeline of this

species. Easy to detect because of its vocal nature perhaps leads to overestimation of its distribution. Likely not more than a handful of pairs scattered across the park. Present in summer and during migration.

Eastern Kingbird – Only one individual was noted catching insects in the vicinity of the Visitor Center. Likely a peripheral species found only occasionally in openings such as around the Visitor Center and perhaps Hensley Settlement. Present only in summer and migration.

White-eyed Vireo – Only one individual of this species was found in a small opening along the road to the campground. This species is likely primarily a peripheral species only occasionally occurring along the boundaries of the park and at the Visitor Center. Present during breeding months and during migration.

Yellow-throated Vireo – Only found in small numbers scattered through the park during breeding season. Primarily found in wet areas along streams and along the ridgeline. More common during migration than breeding season.

*Blue-headed Vireo – This species is found in large numbers within the interior of the forest at both high and low elevations. Less common in drier portions of the forest and along the edges. A nest of this species was found along the Gibson Gap Trail with an incubating female. Common both in summer and during migration.

Warbling Vireo – Present primarily as a peripheral species in the breeding season in surrounding more open areas. Uses the park during migration as an uncommon to rare migrant.

Philadelphia Vireo – Uncommon to common migrant within the park. Is usually present in large flocks of migrating warblers and other songbirds within the park during fall and spring.

*Red-eyed Vireo – The single most common bird within the park during breeding season, with Ovenbird a close second. Found throughout. Four separate nests were found of this species and several juveniles were noted. Common in migration as well as breeding season.

Blue Jay – A common species throughout the park found in a variety of habitats. Year round resident.

*American Crow – Common species throughout found in a variety of habitats. Many vocal juveniles were noted during breeding season. Present year round.

Common Raven– A single individual was heard in the vicinity of White Rocks during the breeding season. This species is likely only present along the ridgeline. It is unclear whether the species breeds within the park or if this individual was a post breeder from

somewhere else. Species is more common during the remainder of the year when individuals wander over broader areas. Regularly seen from Pinnacle Overlook.

Horned Lark – Rare migrant over the park. Species was noted flying over the Pinnacle Overlook while hawk-watching.

Purple Martin – Noted flying above the forest and Visitor Center on multiple occasions. It is likely that this is a peripheral species that breeds in nearby residential areas and these individuals are merely foraging in the park.

Tree Swallow – Regular migrant past Pinnacle Overlook, particularly during the fall.

Northern Rough-winged Swallow – Noted most frequently in the vicinity of the Visitor Center and off the lookouts. This species likely breeds in small numbers on cliffs and ledges within the park and is a regular migrant.

Barn Swallow – Frequently noted flying over the forest during the breeding season. These individuals likely represent foraging individuals that breed in peripheral areas. Can be noted from lookouts in migration as well.

*Carolina Chickadee – Common throughout the park. Multiple family groups were noted in various locations during breeding season. Year round resident.

*Tufted Titmouse – Common throughout the park. Multiple family groups noted during breeding season. Year round resident.

Red-breasted Nuthatch – Regular migrant and winter visitor to the park. Prefers areas with pine stands. Invasive species that can be anywhere from absent to abundant in any given year based on cone crop productivity.

*White-breasted Nuthatch – Can be found in a variety of habitats in the park without much difficulty. A family group was noted along the ridgeline trail during breeding season. Year round resident.

Brown Creeper – Common migrant and winter resident within the park. Found in a variety of habitats.

Carolina Wren – Common species in a variety of habitats. Can be found throughout the park year round.

Winter Wren – Uncommon migrant and winter resident within the park. Prefers areas with thick understory such as rhododendron thickets. Easily found in suitable habitat.

House Wren – Regular breeder in surrounding communities adjacent to the park. Prefers disturbed and developed areas. Not noted within park boundaries during the survey

period, this species potentially could occur during summer or migration within park boundaries, especially near the Visitor Center.

Golden-crowned Kinglet – Common migrant and winter resident within the park. Most abundant near conifers but can be found virtually anywhere.

Ruby-crowned Kinglet – Common migrant and uncommon winter resident within the park. Found in similar habitats to Golden-crowned Kinglet.

Blue-gray Gnatcatcher – Small pockets of this species can be found throughout the park during breeding season. It is most common near small disturbances (i.e. fallen trees) and along roadways, but still can be found in small numbers almost anywhere. Present during summer and migration.

*Eastern Bluebird – Can only be found with regularity in the vicinity of Hensley Settlement where they breed in boxes around the meadow. Otherwise, this is primarily a peripheral species that could occur at the Visitor Center or past Pinnacle Overlook during migration. Possible year-round.

Veery – Present only at the highest elevations. Most numerous along the ridgeline from Hensley Settlement to White Rocks with a few pockets of half a dozen or more pairs, particularly in a few areas where dead pines have made small openings. A single individual was also noted at the Pinnacle Overlook parking lot.

Gray-cheeked Thrush – Uncommon migrant within the park. Possible anywhere.

Swainson's Thrush – Common migrant within the park. Possible anywhere.

Hermit Thrush – Uncommon migrant and winter resident within the park. Prefers thickets.

*Wood Thrush – Widespread and easy to find throughout the park during breeding season. Multiple nests were found.

*American Robin – Only common around the Visitor Center where nests can be found in the trees in the parking lot. Otherwise, this species is uncommon in the rest of the park and seems to be most common around small disturbances in the woods. Possible year round.

Gray Catbird – Only two individuals were found of this species at the Visitor Center and in an opening on the road to the campground. This species is a peripheral species that can be found in small numbers in disturbed areas. Most likely during breeding season and migration.

Northern Mockingbird – Peripheral species. Common in surrounding communities and farmland. Possibly a rare visitant to the park year round. Most likely near the Visitor Center.

Brown Thrasher – Only found in two locations during breeding season. A single individual was present in the opening on the road to the campground, and several pairs are present around the meadow at Hensley Settlement. Otherwise, this is primarily a peripheral species that can occasionally be found in openings. Was also noted near the Visitor Center during the late fall, potentially representing an overwintering bird.

European Starling – Introduced species. A single individual was noted at the Visitor Center during the breeding season, but this species likely is a regular bird around the Visitor Center. Primarily a peripheral species. Possible year round.

American Pipit – Rare migrant over the park. A single individual was noted flying over Pinnacle Overlook during hawk-watching in the fall.

Cedar Waxwing – Common around the Visitor Center and Hensley. Otherwise, this species is uncommon throughout the park, but can be found in small numbers almost anywhere. Is most numerous near openings. Can be found year round.

Blue-winged Warbler – Uncommon migrant through the park. Breeds in the region in open areas. Currently no habitat exists within the park to support this species as a breeder.

Golden-winged Warbler – Uncommon migrant through the park. This species was reported as a potential breeder in the 1960's within the park. It is known from nearby high elevation areas such as Big Black Mountain as well as in some logged and reclaimed mines. Species could potentially breed again within the park in areas of large disturbances, but currently no suitable habitat exists.

Orange-crowned Warbler – Rare transient within the park. A single individual was noted on the Virginia side of the park in early May.

Nashville Warbler – Common migrant within the park. Present within most flocks of warblers in both spring and fall.

Northern Parula – This species is found primarily in lowland, wet forest, particularly in the vicinity of streams as a breeder. However, a few individuals can be found scattered throughout the park including along the ridgeline. Fairly common migrant through the park as well.

Yellow Warbler – Primarily a peripheral species. A single bird was noted singing near the town of Ewing within a few hundred meters of the park boundary during the breeding season. Rare transient within the park.

*Chestnut-sided Warbler – Only noted in two locations during the breeding season, a singing male in a small opening west of white rocks along the ridgeline and a pair carrying food in a powerline cut just east of Hensley Settlement. This species prefers early successional habitat which has decreased in the park over the last few decades. It is likely that numbers of this species will remain small within the park barring a large scale disturbance at high elevation. More common as a migrant.

Magnolia Warbler – Abundant fall migrant, uncommon to common spring migrant within the park. Prefers areas with thick ground cover.

Cape May Warbler – Common migrant through the park. Most numerous near conifers, but possible anywhere.

*Black-throated Blue Warbler – One of the most common birds at the higher elevations within the park during the breeding season. Present in virtually every laurel and rhododendron thicket along the ridgeline, particularly in the eastern two-thirds of the park. A male was noted carrying food at Indian Rock just southwest of Hensley Settlement. Also common in migration.

Yellow-rumped Warbler – Common migrant and winter resident within the park. Not unusual to find flocks with dozens of individuals from time to time.

Black-throated Green Warbler – A common and widespread species in the park both as a breeder and migrant, but most abundant in areas with hemlocks and at higher elevations.

Blackburnian Warbler – One of the most significant finds of the summer. This species was known only from Big Black Mountain in Kentucky as a breeder and thus was a range extension for the species. This species was common above 2700 feet on the Ewing Trail and was present in smaller numbers from Hensley Settlement to White Rocks along the ridgeline. This species prefers mature forest. More common as a migrant.

Yellow-throated Warbler – Only a few individuals of this species were noted during the breeding season. Prefers mature, riparian forest at low elevations particularly with large sycamores or tulip poplars. Was found in the vicinity of the campground (point 14), along a stream near the highway in Virginia (point 11) and near the beaver dam at point 5. Uncommon as a transient as well.

Pine Warbler – A few individuals scattered throughout the park during the breeding season. This species has undoubtedly been affected by the Southern Pine Beetle and the destruction it has caused to pines within the park. Likely more abundant in previous years. Found as a breeder and transient within the park.

Prairie Warbler – Primarily a peripheral species. Relatively easy to find in surrounding disturbed areas. Likely on the park very rarely during summer. More likely as a rare transient.

Palm Warbler – Uncommon to common transient within the park. Small numbers of this season are to be expected most days during migration. Prefers openings and edges.

Bay-breasted Warbler – Very common fall transient, uncommon spring transient within the park.

Blackpoll Warbler – Transient within the park. Common in spring, uncommon to rare in fall. Usually present in mixed species warbler flocks.

Cerulean Warbler – Present in small numbers along streams and slopes in the park. Most numerous at mid-elevations with only one or two individuals noted from the lowest of elevations and along the ridgelines during breeding season. Prefers mature moist forests. Likely in spring migration but virtually absent from the region after August 1.

*Black-and-White Warbler – Present throughout the park. Most numerous around hemlock and rhododendron thickets and near boulder fields where they nest. A female was noted carrying food on the upper portion of the Gibson Gap trail. Common in summer and during migration.

American Redstart– Surprisingly uncommon as a breeder. Prefers mid-successional forest. Only a few individuals of this species were found within the park at lower to mid elevations during the summer. However, many redstarts were heard singing just off the property on Brush Mountain where the forest is not quite as mature as within the park boundary. More common as a migrant.

*Worm-eating Warbler – Found throughout the park wherever there is thick ground cover such as in rhododendron or laurel thickets. Multiple juveniles were noted, frequently being fed by attentive parents, in several locations. Present in summer and during migration.

*Ovenbird– Along with Red-eyed Vireo, the most abundant species in the park during summer. Found virtually everywhere within the park boundaries. Multiple nests and juveniles were found of this species. Prefers mature forest. Common in migration as well.

Swainson's Warbler – Two individuals were noted along the Sugar Run Trail, one of which could be heard from the parking area during the breeding season. This species prefers rhododendron thickets along streams on forested slopes. This species is likely present in several of these areas throughout the park but accessibility to these habitats is limited. Noted in spring near breeding areas, but almost impossible to find in the fall.

Northern Waterthrush – Uncommon transient within the park. Prefers low-lying wet areas. A single individual was noted during the fall along a creek near the Visitor Center.

*Louisiana Waterthrush – Found in small numbers along most forested streams throughout the park during breeding season. A family group was noted near the parking

area of the Lewis Hollow Trail. Species leaves breeding grounds early and is not to be expected regularly during fall migration.

*Kentucky Warbler – Present in small numbers throughout the park, but primarily at lower elevations. Prefers areas with dense ground cover. A male was noted carrying food near the beaver dam (near point 5). Present during migration as well as summer.

Connecticut Warbler – Very rare transient through the region. Prefers areas with thick ground cover. Was not noted during the survey period.

Mourning Warbler – Uncommon to rare transient through the region. Prefers areas with thick ground cover. Was not noted during the survey period.

Common Yellowthroat – Only present in a few disturbed areas in the park such as the opening on the road to the campground, near Hensley Settlement, and at the Visitor Center. Primarily a peripheral species as it prefers open habitats. Possible in spring as well as summer.

Hooded Warbler – Perhaps the thickest concentration of Hooded Warblers I have ever experienced. Found throughout the park wherever there is thick ground cover, often with multiple birds calling from one location. Common at both low and high elevations within the park. Common during migration as well as summer.

Wilson's Warbler – Rare transient through the region. Was not noted during the survey period.

Canada Warbler – One of a few very rare breeding species in Kentucky located within the park. Only found in thick rhododendron patches near the ridgeline. Three males were heard widely scattered along the ridgeline from Gibson Gap to White Rocks, but all from rhododendron thickets. Uncommon as a migrant through the park.

*Yellow-breasted Chat – Only found in disturbed areas such as the opening along the road to the campground, Hensley Settlement, and the Visitor Center. However, a nest was located in the field along the road to the campground.

Summer Tanager – A single individual was heard from a ridgeline in Tennessee near CTN3 during the breeding season. This species is uncommon in the Cumberland Plateau, but can be found along ridgelines particularly in more disturbed areas. Likely a few individuals scattered along the ridgelines within the park. Slightly more common as a migrant.

*Scarlet Tanager – Surpassed only by Red-eyed Vireos and Ovenbirds in abundance as a breeder. This species is found throughout the park in large numbers. Prefers mature forests. On two occasions juveniles were noted being fed by adults. Common in migration and summer.

*Eastern Towhee – Present in small numbers near disturbances. Most common along the ridgeline, but also present in areas such as the Visitor Center. Fledglings barely able to fly were noted near Hensley Settlement. Present year round.

Chipping Sparrow – Primarily a peripheral species. Prefers open habitats. Present only in the vicinity of Hensley Settlement and the Visitor Center during summer. A bird noted near the Visitor Center in November represented either a late migrant or a potential wintering bird.

Field Sparrow – A single pair was found in the opening along the road to the campground during breeding season. This species prefers fields and is primarily a peripheral species. Can be found in very small numbers year round.

Grasshopper Sparrow – Reported historically from the meadows near Hensley Settlement. Possible to occur again as a migrant or summer visitor to this location. Not likely to breed.

Fox Sparrow – Uncommon migrant and winter visitor. Prefers scrubbiest areas. Was noted near the Visitor Center but could potentially occur in many locations.

Song Sparrow – Primarily a peripheral species. This species was found at the Visitor Center and in the opening along the road to the campground. Possible year round within the park.

Swamp Sparrow – Rare migrant and winter visitor. Prefers grassy areas as well as fallow fields. Species was noted in some brushy habitat near the Visitor Center.

White-throated Sparrow – Common migrant and winter resident. Most numerous in brushy areas, but present in scattered flocks wherever ground cover is thick within the park.

White-crowned Sparrow – Primarily a peripheral wintering species. Prefers fencerows in farmlands. Present in small numbers in surrounding areas and may possibly occur from time to time in migration or winter within the park at Hensley Settlement or the Visitor Center.

*Dark-eyed Junco – Perhaps the single best find during the breeding season. This species is known to breed in Kentucky only from above 4000 ft on Big Black Mountain. However, six singing males were found along approximately a three-mile stretch from the Chadwell Gap Campground to White Rocks. Additionally, a juvenile was being fed by both a male and female in a rhododendron thicket within 10 meters of the trail east of the Chadwell Gap Campground (275243 E x 4060782 W). Species is common as a migrant and winter resident, rare as a breeder.

*Northern Cardinal – Found in small numbers throughout the park, but most abundant near openings, trails, and roads. A nest was found along the Gibson Gap Trail. Present year round.

Rose-breasted Grosbeak – Another significant find as a breeder. Formerly only known as a Kentucky breeder from Big Black Mountain. This species was relatively common above 2700 on the Ewing Trail and was present in good numbers from Hensley Settlement to White Rocks. Prefers mature forests and high elevations. Common during migration as well.

Blue Grosbeak – A single bird was noted singing near the south end of the highway tunnel from point 7. This species is rare in the Cumberland Plateau, but does breed in farmland in the area. This species is unlikely to occur anywhere on the park outside of the Visitor Center or the edges of the park. Possible in summer or migration.

Indigo Bunting – Present around most openings and disturbed areas in the park, with a few individuals scattered around in less disturbed areas, primarily along the ridgeline. Most common in spring and summer, rare in fall.

Red-winged Blackbird – Only one flyover was noted near the Visitor Center during the breeding season. This species prefers fields and marshes and therefore is better considered a peripheral species. Migrant flocks are likely to be seen during migration past overlooks from time to time.

Eastern Meadowlark – A species of fields. Only noted from one individual near the Visitor Center during the breeding season. This species is primarily a peripheral species. Possible year round.

Common Grackle – Only noted as a flyover at the Visitor Center and from a single bird foraging in the canopy along the ridgeline during breeding season. This species prefers moist fields and early successional areas and likely is only a peripheral species. Possible as a migrant past overlooks as well.

Brown-headed Cowbird – Amazingly only noted from a single flyover during the breeding season. This species possibly is more regular within the park, primarily around openings such as Hensley Settlement and the Visitor Center. However, the lack of abundance of this species suggests that the forest is mostly intact and that parasitism may not be as extreme an issue for birds within the park as it is in many other places within the Eastern United States. Species is possible year round, but most likely in spring and summer.

Orchard Oriole – Primarily a peripheral species. Noted singing in nearby communities during the breeding season. Possible on the park occasionally during the breeding season, particularly in locations such as the Visitor Center. Possible as a rare spring migrant as well.

Baltimore Oriole – Only noted from a single female/immature foraging on the upper slope during the breeding season. This species is very uncommon on the Cumberland Plateau and prefers riparian habitat and more open areas. It is likely that this bird was a post-breeder/disperser and the species is more likely a peripheral species than a breeder within the park. Possible in migration as well.

Purple Finch – Erratic migrant and winter visitor. Numbers are dependent on cone crops and other mast production. Likely uncommon to common most winters within the park. Was found easily during the survey period.

House Finch – Noted only from around the Visitor Center area. This species is primarily peripheral, but likely breeds around the Visitor Center. Possible year round.

Pine Siskin – Erratic migrant and winter visitor. Abundance is dependant on cone crops. Was common during the survey period.

American Goldfinch – Present in small numbers throughout the park. This species prefers more disturbed areas, but will breed within forest interior. This is likely the latest breeding Passerine species in Eastern North America and although it is still easy to detect, its exact breeding distribution may be difficult to discern from June surveys. Present year round.

House Sparrow – Introduced species. Noted from around the Visitor Center only. This species is one of residential and urban areas and generally will not be found away from human habitation. Present year round.