

## BIRD CWCS SPECIES (94 SPECIES)

Common name	Scientific name
<a href="#">American Bittern</a>	<i>Botaurus lentiginosus</i>
<a href="#">American Black Duck</a>	<i>Anas rubripes</i>
<a href="#">American Golden-plover</a>	<i>Pluvialis dominica</i>
<a href="#">American Kestrel</a>	<i>Falco sparverius</i>
<a href="#">American White Pelican</a>	<i>Pelecanus erythrorhynchos</i>
<a href="#">American Woodcock</a>	<i>Scolopax minor</i>
<a href="#">Bachman's Sparrow</a>	<i>Aimophila aestivalis</i>
<a href="#">Bald Eagle</a>	<i>Haliaeetus leucocephalus</i>
<a href="#">Bank Swallow</a>	<i>Riparia riparia</i>
<a href="#">Barn Owl</a>	<i>Tyto alba</i>
<a href="#">Bell's Vireo</a>	<i>Vireo bellii</i>
<a href="#">Bewick's Wren</a>	<i>Thryomanes bewickii</i>
<a href="#">Black Tern</a>	<i>Chlidonias niger</i>
<a href="#">Blackburnian Warbler</a>	<i>Dendroica fusca</i>
<a href="#">Black-crowned Night-heron</a>	<i>Nycticorax nycticorax</i>
<a href="#">Black-necked Stilt</a>	<i>Himantopus mexicanus</i>
<a href="#">Black-throated Green Warbler</a>	<i>Dendroica virens</i>
<a href="#">Blue-winged Warbler</a>	<i>Vermivora pinus</i>
<a href="#">Bobolink</a>	<i>Dolichonyx oryzivorus</i>
<a href="#">Brown Creeper</a>	<i>Certhia americana</i>
<a href="#">Buff-breasted Sandpiper</a>	<i>Tryngites subruficollis</i>
<a href="#">Canada Warbler</a>	<i>Wilsonia canadensis</i>
<a href="#">Cerulean Warbler</a>	<i>Dendroica cerulea</i>
<a href="#">Chuck-will's-widow</a>	<i>Caprimulgus carolinensis</i>
<a href="#">Common Moorhen</a>	<i>Gallinula chloropus</i>
<a href="#">Common Raven</a>	<i>Corvus corax</i>
<a href="#">Common Tern</a>	<i>Sterna hirundo</i>
<a href="#">Dickcissel</a>	<i>Spiza americana</i>
<a href="#">Dunlin</a>	<i>Calidris alpina</i>
<a href="#">Golden-winged Warbler</a>	<i>Vermivora chrysoptera</i>
<a href="#">Grasshopper Sparrow</a>	<i>Ammodramus savannarum</i>
<a href="#">Great Egret</a>	<i>Ardea alba</i>
<a href="#">Greater Prairie-chicken</a>	<i>Tympanuchus cupido</i>
<a href="#">Greater Scaup</a>	<i>Aythya marila</i>

<a href="#">Henslow's Sparrow</a>	<i>Ammodramus henslowii</i>
<a href="#">Hooded Merganser</a>	<i>Lophodytes cucullatus</i>
<a href="#">Horned Grebe</a>	<i>Podiceps auritus</i>
<a href="#">Interior Least Tern</a>	<i>Sterna antillarum athalassos</i>
<a href="#">Kentucky Warbler</a>	<i>Oporornis formosus</i>
<a href="#">King Rail</a>	<i>Rallus elegans</i>
<a href="#">Lark Sparrow</a>	<i>Chondestes grammacus</i>
<a href="#">Least Bittern</a>	<i>Ixobrychus exilis</i>
<a href="#">Least Flycatcher</a>	<i>Empidonax minimus</i>
<a href="#">Lesser Scaup</a>	<i>Aythya affinis</i>
<a href="#">Lesser Yellowlegs</a>	<i>Tringa flavipes</i>
<a href="#">Little Blue Heron</a>	<i>Egretta caerulea</i>
<a href="#">Loggerhead Shrike</a>	<i>Lanius ludovicianus</i>
<a href="#">Long-eared Owl</a>	<i>Asio otus</i>
<a href="#">Louisiana Waterthrush</a>	<i>Seiurus motacilla</i>
<a href="#">Mississippi Kite</a>	<i>Ictinia mississippiensis</i>
<a href="#">Northern Bobwhite</a>	<i>Colinus virginianus</i>
<a href="#">Northern Harrier</a>	<i>Circus cyaneus</i>
<a href="#">Northern Pintail</a>	<i>Anas acuta</i>
<a href="#">Osprey</a>	<i>Pandion haliaetus</i>
<a href="#">Peregrine Falcon</a>	<i>Falco peregrinus</i>
<a href="#">Pied-billed Grebe</a>	<i>Podilymbus podiceps</i>
<a href="#">Piping Plover</a>	<i>Charadrius melodus</i>
<a href="#">Prairie Warbler</a>	<i>Dendroica discolor</i>
<a href="#">Prothonotary Warbler</a>	<i>Protonotaria citrea</i>
<a href="#">Red-breasted Nuthatch</a>	<i>Sitta canadensis</i>
<a href="#">Red-cockaded Woodpecker</a>	<i>Picoides borealis</i>
<a href="#">Red-headed Woodpecker</a>	<i>Melanerpes erythrocephalus</i>
<a href="#">Rose-breasted Grosbeak</a>	<i>Pheucticus ludovicianus</i>
<a href="#">Ruffed Grouse</a>	<i>Bonasa umbellus</i>
<a href="#">Rusty Blackbird</a>	<i>Euphagus carolinus</i>
<a href="#">Sanderling</a>	<i>Calidris alba</i>
<a href="#">Sandhill Crane</a>	<i>Grus canadensis</i>
<a href="#">Savannah Sparrow</a>	<i>Passerculus sandwichensis</i>
<a href="#">Sedge Wren</a>	<i>Cistothorus platensis</i>
<a href="#">Semipalmated Sandpiper</a>	<i>Calidris pusilla</i>
<a href="#">Sharp-shinned Hawk</a>	<i>Accipiter striatus</i>
<a href="#">Short-billed Dowitcher</a>	<i>Limnodromus griseus</i>

[Short-eared Owl](#)  
[Solitary Sandpiper](#)  
[Sora](#)  
[Spotted Sandpiper](#)  
[Stilt Sandpiper](#)  
[Swainson's Warbler](#)  
[Swallow-tailed Kite](#)  
[Trumpeter Swan](#)  
[Tundra Swan](#)  
[Upland Sandpiper](#)  
[Tundra Swan](#)  
[Vesper Sparrow](#)  
[Virginia Rail](#)  
[Western Sandpiper](#)  
[Whooping Crane](#)  
[Whip-poor-will](#)  
[Willow Flycatcher](#)  
[Wilson's Phalarope](#)  
[Wilson's Snipe](#)  
[Wood Thrush](#)  
[Worm-eating Warbler](#)  
[Yellow Rail](#)  
[Yellow-crowned Night-heron](#)

*Asio flammeus*  
*Tringa solitaria*  
*Porzana carolina*  
*Actitis macularius*  
*Calidris himantopus*  
*Limnithlypis swainsonii*  
*Elanoides forficatus*  
*Cygnus buccinator*  
*Cygnus columbianus*  
*Bartramia longicauda*  
*Cygnus columbianus*  
*Pooecetes gramineus*  
*Rallus limicola*  
*Calidris mauri*  
*Grus americana*  
*Caprimulgus vociferus*  
*Empidonax traillii*  
*Phalaropus tricolor*  
*Gallinago delicata*  
*Hylocichla mustelina*  
*Helmitheros vermivorus*  
*Coturnicops noveboracensis*  
*Nyctanassa violacea*

**CLASS AVES**

**American Bittern**

*Botaurus lentiginosus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	H	G4	SHB	G4	S1

**G-Trend** Decreasing

**G-Trend** Widespread distribution but populations are declining (NatureServe 2004).

**Comment** Population estimate due pending Version 2 of the Waterbird Plan (Kushlan et

al. 2002).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a transient bird that uses dense, emergent marshes with patches of open

**Life History** water. It will also use lake and pond edges with cattails and sedges for stop  
over habitat.

**Key** Habitat condition is POOR (emergent marshes) to FAIR (lake and pond edges)

**Habitat** overall in Kentucky.

No key habitat to identify; the species will use appropriate habitat where  
available range wide.

**Guilds** Emergent and shrub-dominated wetlands, grassland/agricultural, standing water.

**Statewide** [AmericanBittern.pdf](#)

**Map**

## **CLASS AVES**

### **American Bittern**

*Botaurus lentiginosus*

### **Conservation Issues**

#### Aquatic habitat degradation

2H Wetland loss/drainage/alteration . Loss of dense emergent shallow water wetlands

2N Eutrophication (eg. of wetlands)

#### Point and non-point source pollution

4A Acid mine drainage other coal mining impacts

4E Agricultural runoff – including fertilizers/animal waste, herbicides,

4F Urban runoff

#### Siltation and increased turbidity

1B Agriculture

1D Urbanization/Development General Construction

#### Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc).

Conversion to, draining of wetlands

3F Urban/residential development. Recreational development

3G Shoreline development

3H Habitat loss outside of Kentucky

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

3T Suppression of disturbance regimes. Natural succession of wetlands

**CLASS AVES**

**American Black Duck** *Anas rubripes*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S4N	G5	S4

**G-Trend** Decreasing

**G-Trend** Declined from 7 million in 1955 to 3 million in 1985 (NatureServe 2004).

**Comment**

**S-Trend** Decreasing

**S-Trend** Waterfowl harvest data show declines in the Mississippi Flyway (Fronczak

**Comment** 2004).

**Habitat /** This is a wintering duck that primarily uses forested wetlands: buttonbush

**Life History** sloughs, flooded bottomland hardwoods, and beaver ponds. It will also use shallow water wetlands and flooded fields, as well as loaf on larger bodies of water (which provide little foraging habitat).

**Key Habitat** Habitat condition ranges from POOR (forested wetlands, shallow water wetlands) to GOOD (larger bodies of water).

No key habitat to identify; this species will use appropriate habitat statewide.

**Guilds** Emergent and shrub-dominated wetlands, forested wetland, running water, standing water.

**Statewide** [AmericanBlackDuck.pdf](#)

**Map**

## **CLASS AVES**

### **American Black Duck**

*Anas rubripes*

### **Conservation Issues**

#### Aquatic habitat degradation

2H Wetland loss/drainage/alteration

#### Biological/ consumptive uses

5D Competition from introduced/invasive or native species. With Mallards

5E Hybridization with closely related species. With Mallard on breeding

5N Hunting. Possible effects of over harvest, especially in areas where hybridization commonly occurs

#### Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc).

Conversion of wetlands

3H Habitat loss outside of Kentucky

3M Timber harvest

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain).

Acid precipitation



**CLASS AVES**

**American Golden-plover**

*Pluvialis dominica*

<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
N	N	G5	SZN	G5	S3

**G-Trend** Decreasing

**G-Trend** Species thought to be in decline in the U.S. but statistical verification is lacking

**Comment** (Brown et al. 2001).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a transient bird that uses shallow water wetlands, wet prairies, flooded

**Life History** agricultural fields, and shoreline, mudflat, and sandbar habitat of lakes and rivers.

**Key** Habitat condition ranges from POOR (shallow water wetlands, wet praries) to

**Habitat** FAIR (flooded agricultural fields, shoreline habitats).

Key Habitat Locations (and their conditions):

1. Transient lakes in Warren (good) and Christian (unknown) counties.

2. Shoreline of Kentucky and Barkely lakes (good). Extending summer pool to

Labor Day (as proposed Tennessee Valley Authority) would leave the

shoreline unexposed until after peak shorebird migration (Ritchison and Ranalli

2004).

**Guilds** Emergent and shrub-dominated wetlands, grassland/agricultural, standing water.

**Statewide** [AmericanGolden-plover.pdf](#)

**Map**

## **CLASS AVES**

**American Golden-plover**

*Pluvialis dominica*

### **Conservation Issues**

Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations. Alteration of natural drawdown cycle
- 2H Wetland loss/drainage/alteration
- 2N Eutrophication (eg. of wetlands)

Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc).  
Conversion of wetlands
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes. Of wetlands

**CLASS**    **Aves**

**American Kestrel**

*Falco sparverius*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S5B,S 5N	G5	S5

**G-Trend**    Decreasing

**G-Trend**    Breeding Bird Surveys show a significant decrease of 0.7% survey-wide for the  
**Comment**    period 1966-2007 with a relative abundance of 0.86 individuals per route (Sauer et al. 2008). An analysis of migration counts of American Kestrels suggest declines in the northeastern, midwestern and western regions of the continent (Farmer and Smith 2009). Declines have also been documented in monitored populations of kestrels using nest boxes. Related analyses which take into account the timing of disease and predator population increases suggest that causes for decline may be on wintering/migration grounds (Smallwood et al 2009).

**S-Trend**    Unknown

**S-Trend**    Breeding Bird Surveys in Kentucky show a nonsignificant decrease of 0.6% for  
**Comment**    the period 1966-2007 with a relative abundance of 1.63 individuals per route (Sauer et al. 2008).

**Habitat / Life**    American Kestrels are usually found in semi-open and open habitats. They are most abundant in rural farmland where they hunt over fields and pastures

**History** (Palmer-Ball 1996). However, they are also found in native grasslands and altered habitats such as urban areas, city parks, golf courses, industrial parks, and reclaimed surface mines.

**Key** Habitat condition throughout Kentucky is FAIR for this species.

**Habitat**

No key habitat to identify: the species will use appropriate habitat statewide.

**Guilds** grassland/agricultural, urban/suburban.

**Statewide** [American Kestrel.pdf](#)

**Map**

**Conservation Issues**

Biological/ consumptive uses

- 5D Competition from introduced/invasive or native species. Competition for cavities with starlings and other species.
- 5K Lack of suitable habitat for spawning, nesting, or breeding. Suitable nest site availability- lack of natural cavities.
- 5Q Declining prey base. Pesticide use, over-grazed pasture and row-cropping.

Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc). Results in lower prey populations in open habitat.
- 3F Urban/residential development
- 3N Removal of dead trees
- 3S Fire suppression/fire regime management

**CLASS AVES**

**American White Pelican**

*Pelecanus erythrorhynchos*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G3	SZN	G3	S4

**G-Trend** Stable

**G-Trend** Kushlan et al. (2002) lists the species as having an apparently stable

**Comment** population. North American breeding bird estimate: >120,000 breeders (Kushlan et al. 2002).

**S-Trend** Increasing

**S-Trend** Species has been observed in increasing numbers over the past several decades

**Comment** (Palmer-Ball 2003).

**Habitat /** This is a transient bird that primarily uses reservoirs, but will also use other

**Life History** bodies of water that support fish, such as bald cypress wetlands.

**Key** Habitat condition ranges from POOR (bald cypress wetlands) to GOOD

**Habitat** (reservoirs).

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** running water, standing water.

**Statewide** [AmericanWhitePelican.pdf](#)

**Map**

## **CLASS AVES**

### **American White Pelican**

*Pelecanus erythrorhynchos*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2H Wetland loss/drainage/alteration

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites)
- 6D Human disturbance (spelunking, destruction/disturbance of nest sites). at feeding site
- 6E Illegal killing

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,
- 4F Urban runoff

#### Terrestrial habitat degradation

- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)



**CLASS AVES**

**American Woodcock**

*Scolopax minor*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S4S5B ,SZN	G5	S4

**G-Trend** Decreasing

**G-Trend** Species thought to be in decline in the U.S. but statistical verification is lacking

**Comment** (Brown et al. 2001).

**S-Trend** Stable

**S-Trend** Kentucky Department of Fish and Wildlife Resources singing ground surveys

**Comment** indicate stable populations.

**Habitat /** Resident bird that breeds in young forests and other early successional habitats

**Life History** that are a result of forest disturbance. Habitat structure for adequate feeding cover, display/roosting grounds and nesting must be provided during the breeding season and a diversity of habitat types must be provided for wintering birds (NatureServe 2004).

**Key Habitat** Habitat condition ranges from UNKNOWN (young forests) to POOR (early successional forests).

No key habitat to identify; the species will use appropriate habitat statewide.

**Guilds** grassland/agricultural, savanna/ shrub-scrub, upland forest.

**Statewide** [AmericanWoodcock.pdf](#)

**Map**

## **CLASS AVES**

### **American Woodcock**

*Scolopax minor*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2H Wetland loss/drainage/alteration

#### Terrestrial habitat degradation

- 3B Mowing regimes. During nesting
- 3C Lack of newly abandoned farmland
- 3E Livestock grazing. Especially of woodland edges and through forests
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3I Conversion of native forest to short-rotation crop trees (pine, sycamore, cottonwood, etc.)
- 3M Timber harvest. Lack of timber harvest
- 3O Reforestation
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain).  
Prey contamination
- 3T Suppression of disturbance regimes

**CLASS AVES**

**Bachman's Sparrow** *Aimophila aestivalis*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	E	G3	S1B	G3	S1

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data show decreases survey-wide but

**Comment** were not significant (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 250,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Decreasing

**S-Trend** Species has declined substantially in the past 35 years. The atlas survey

**Comment** yielded only one probable record in priority blocks surveyed (Palmer-Ball 1996).

**Habitat /** The species is a habitat specialist (NatureServe 2004). In Kentucky, it is a

**Life History** breeding bird that formerly inhabited a variety of early successional habitats, including old fields and pastures, young pine plantations, and regenerating clear-cuts (Palmer-Ball 1996). Mengel (1965) described the species as having rather rigid habitat requirements, inhabiting an area only if it possessed the right combination of conditions: preferably (but not always) a hillside, some bare ground, some native grasses and forbs, patches of blackberry briars, and scattered small trees. Although the presence of pines was not essential, red

cedars and other evergreens were frequently associated with such habitats. In the young pine plantations where the species was once found, the trees ranged from 1 to 10 feet in height, and ground cover included a mixture of grasses, forbs, and patches of bare ground. NatureServe (2004) describes the species as requiring a well-developed grass and herb layer with limited shrub and hardwood midstory components. The species is able to colonize recent clearcuts and early seral stages of old field succession but such habitat remains suitable only for a short time.

**Key** Habitat condition is POOR overall in Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Only known current nesting population is on Fort Campbell Military Reservation, Trigg County (fair); subject to military maneuvers and burning.

**Guilds** savanna/ shrub-scrub.

## CLASS AVES

### Bachman's Sparrow

*Aimophila aestivalis*

Statewide [Bachman'sSparrow.pdf](#)

Map

### Conservation Issues

Terrestrial habitat degradation

- 3C Lack of newly abandoned farmland
- 3F Urban/residential development
- 3H Habitat loss outside of Kentucky
- 3I Conversion of native forest to short-rotation crop trees (pine, sycamore, cottonwood, etc.). Conversion to short-rotation pines (planted too densely)
- 3M Timber harvest. Long-term rotation incompatible
- 3S Fire suppression/fire regime management. Negative impacts by fire suppression
- 3T Suppression of disturbance regimes. Of early successional habitat

**CLASS AVES**

**Bald Eagle**

*Haliaeetus leucocephalus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
PS:LT, PDL	T	G4	S2B,S 2S3N	G4	S2

**G-Trend** Increasing

**G-Trend** Compared to 1974, the number of occupied breeding areas in the lower 48

**Comment** States has increased by 462 percent, and since 1990, there has been a 47 percent increase. The species is doubling its breeding population every 6-7 years since the late 1970's (U.S. Fish and Wildlife Service Federal Register 1995). Partners in Flight North American Landbird Conservation Plan gives population estimate of 330,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Increasing

**S-Trend** Numbers of nesting pairs has increased from 0 in early 1980's to 40 known

**Comment** nesting pairs in 2003 (Vorisek 2003).

**Habitat /** This is a resident and wintering bird that utilizes forested floodplains,

**Life History** bottomland hardwoods, bald cypress wetlands, and riparian forests along large rivers and reservoirs. Breeding season requirements include adequate nest site and food availability. Utilizes similar habitat during winter where food availability and winter roost sites are important.

**Key** Habitat condition ranges from FAIR (forested wetlands) to GOOD (reservoirs).

**Habitat**

Key Habitat Locations (and their condition):

1. Wetland forests along the Mississippi and Ohio Rivers (fair)
2. Land Between the Lakes National Recreation Area (good)
3. Ballard and Sloughs Wildlife Management Areas (good)
4. Winter roosts at Turner Lake Ballard Wildlife Management Area and Duncan Lake/Bay at Land Between the Lakes (good)

**Guilds** forested wetland, running water, standing water.

**Statewide** [BaldEagle.pdf](#)

**Map**



## **CLASS AVES**

### **Bald Eagle**

*Haliaeetus leucocephalus*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development). Riparian corridor development
- 2G Water level fluctuations
- 2H Wetland loss/drainage/alteration

#### Biological/ consumptive uses

- 5L Parasitism and disease. West Nile virus, possible Avian vacuolar myelinopathy (AVM)

#### Miscellaneous Mortality Factors

- 6C Powerlines
- 6D Human disturbance (spelunking, destruction/disturbance of nest sites). At nest and roost sites
- 6E Illegal killing
- 6G Stochastic events (droughts, unusual weather, pine beetle damage, flooding etc.). Nest loss during storms, decrease food sources during floods, etc.

#### Terrestrial habitat degradation

- 3F Urban/residential development
- 3G Shoreline development. Riparian corridor development
- 3H Habitat loss outside of Kentucky

3M Timber harvest

3N Removal of dead trees

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain).

Heavy metals, poisoning (direct and indirect)

**CLASS AVES**

**Bank Swallow**

*Riparia riparia*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	S	G5	S3B	G5	S3

**G-Trend** Unknown

**G-Trend** North American Breeding Bird Survey data show nonsignificant decreases in the

**Comment** eastern and western regions and increases in the central Breeding Bird Survey region for 1966-2003 (Sauer et al. 2004).

**S-Trend** Decreasing

**S-Trend** Numbers have most likely decreased during the last century (Palmer-Ball 1996).

**Comment**

**Habitat /** This is a breeding bird that is a colonial nester and uses natural riverbanks for

**Life History** nest burrows. Gravel pits have been colonized in recent years (Palmer-Ball 1996).

**Key** Habitat condition ranges from FAIR (gravel pits) to POOR (riverbanks).

**Habitat**

Key Habitat Locations (and their condition):

1) Banks of Mississippi and Ohio Rivers (poor).

**Guilds** running water.

**Statewide** [BankSwallow.pdf](#)

**Map**

## **Conservation Issues**

### Aquatic habitat degradation

- 2B Gravel/sand removal or quarrying (e.g., mineral excavation)
- 2E Stream channelization/ditching
- 2F Riparian zone removal (Agriculture/development)

### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites). Of colonies

### Terrestrial habitat degradation

- 3G Shoreline development
- 3U Loss, lack and degradation of special and unique microhabitats. Nesting at gravel pits

**CLASS AVES**

**Barn Owl**

*Tyto alba*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	S	G5	S3	G5	S3

**G-Trend** Decreasing

**G-Trend** Population declines have been evident in the Midwest and Northeast U.S. and

**Comment** have been reported in several other areas (NatureServe 2004).

**S-Trend** Increasing

**S-Trend** Observations of breeding pairs has increased over the last few years.

**Comment**

**Habitat /** This is a resident bird that inhabits a variety of semi-open and open habitats.

**Life History** Mengel (1965) considered them to be most frequently found in farm country, and it is likely that rural farmland continues to harbor a persistent breeding population. Today these owls are also reported regularly from older residential areas of cities and towns, where large shade trees provide nest sites. Small numbers are also reported occasionally from larger cities (Palmer-Ball 1996) and recently young birds have been documented from grain silos. The species requires large tree cavities and old structures for nesting.

**Key** Habitat condition throughout Kentucky is UNKNOWN for this species.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** grassland/agricultural, savanna/ shrub-scrub, urban/suburban.

**Statewide** [BarnOwl.pdf](#)

**Map**

## **CLASS AVES**

### **Barn Owl**

*Tyto alba*

### **Conservation Issues**

#### Biological/ consumptive uses

- 5D Competition from introduced/invasive or native species. For nest sites
- 5K Lack of suitable habitat for spawning, nesting, or breeding. Nest site availability

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites). Of nest sites (i.e., silos, buildings, etc.)

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3B Mowing regimes
- 3C Lack of newly abandoned farmland
- 3D Switch to cleaner agricultural practices
- 3E Livestock grazing
- 3F Urban/residential development
- 3H Habitat loss outside of Kentucky
- 3N Removal of dead trees
- 3Q Invasive/exotic plants (including fescue). Fescue
- 3S Fire suppression/fire regime management
- 3T Suppression of disturbance regimes

3U Loss, lack and degradation of special and unique microhabitats. Abandoned building and other structures for nesting



**CLASS AVES**

<b>Bell's Vireo</b>						<i>Vireo bellii</i>
	<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
	<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
	PS	S	G5	S2S3B	G5	S2

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data from 1966-2003 indicate significant  
**Comment** survey wide declines averaging 2.9 percent per year (Sauer et al. 2004).

Partners in Flight North American Landbird Conservation Plan gives population estimate of 1,100,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a breeding bird found in large tracts of early successional habitat

**Life History** dominated by deciduous shrubs and small trees. All such sites represent altered habitats that have been cleared and are in early stages of reforestation (Palmer-Ball 1996).

**Key** Habitat condition is generally GOOD (reclaimed mines), although the habitats  
**Habitat** are altered from their original composition.

Key Habitat Locations (and their condition):

1. Muhlenburg County (good)--Peabody Wildlife Management Area and the  
Wendell H. Ford Regional Training Center.

**Guilds** savanna/ shrub-scrub.

**Statewide** [Bell's Vireo.pdf](#)

**Map**

## **CLASS AVES**

**Bell's Vireo**

*Vireo bellii*

### **Conservation Issues**

Biological/ consumptive uses

5B Predation from native species

5M Brood parasitism (Brown-headed Cowbird)

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3B Mowing regimes

3C Lack of newly abandoned farmland

3D Switch to cleaner agricultural practices

3E Livestock grazing

3F Urban/residential development

3H Habitat loss outside of Kentucky

3K Surface mining. Re-mining of reclaimed mine lands

3S Fire suppression/fire regime management

3T Suppression of disturbance regimes

**CLASS AVES**

**Bewick's Wren**

*Thryomanes bewickii*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	S	G5	S3B	G5	S3

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data reveal that the species has been

**Comment** declining in parts of the U.S. for some time. Populations in the central and eastern parts of the range are smaller than they were in the past. Eight states (Wisconsin, Michigan, Ohio, Pennsylvania, West Virginia, Virginia, North Carolina, and South Carolina) reported declines between the 1950s and the 1980s from rare or local breeders (or "common" in the case of North Carolina) to near or certain extirpation. During the period of 1965 to 1979 severe declines occurred in Eastern and Central regions while the West was stable. In the 1980's the decline in the central states subsided, while the population in the eastern states continued to decline to the point that Breeding Bird Survey data was no longer reliable for use in trend analysis (NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives Global population estimate of 6,000,000 (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Decreasing

**S-Trend** North American Breeding Bird Survey data for the period 1966-2003 show

**Comment** declines of 9.1% per year (Sauer et al. 2004). Kentucky Breeding Bird Atlas resulted in confirmed nesting in 7 priority blocks (Palmer-Ball 1996). Partners in Flight estimates a population of 1,800 individuals (see Rosenberg 2004 for assumptions); however, recent studies documented only one breeding pair and a few unpaired males in the state (Ritchison and Hodge 2003).

**Habitat /** Although this species can occur year round, recent observations are limited to the breeding season. **Life History** Bewick's Wrens are encountered in a variety of semi-open habitats. Although evidence suggests that the species formerly inhabited natural forest openings, it is primarily a bird of altered habitats today. These wrens are most conspicuous in rural farmland and settlement, but small numbers also inhabit suburban yards of towns, brushy forest margins, and forest clear-cuts (Palmer-Ball 1996). The most recent nesting record came from a pair utilizing a grill in Scott County (Ritchison and Hodge 2003). Although suitable habitat seems to persist, it is unknown why the species continues to decline. The Appalachian subspecies has most likely been extirpated from the state.

## CLASS AVES

### Bewick's Wren

*Thryomanes bewickii*

**Key** Habitat condition appears FAIR, except for Appalachian subspecies where

**Habitat** habitat is likely POOR.

No key habitat to identify; the species will use appropriate habitat in the western and central part of the state.

**Guilds** savanna/ shrub-scrub.

**Statewide** [Bewick'sWren.pdf](#)

**Map**

### Conservation Issues

Biological/ consumptive uses

5D Competition from introduced/invasive or native species. Competition from House Wren, Starlings, House Sparrows, Carolina Wrens, and Song Sparrows are all potential competitors

5F Low population densities

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3B Mowing regimes

3C Lack of newly abandoned farmland

3D Switch to cleaner agricultural practices

3E Livestock grazing

- 3F Urban/residential development
- 3H Habitat loss outside of Kentucky
- 3K Surface mining. Valley fills, reclaiming to grasses
- 3S Fire suppression/fire regime management
- 3T Suppression of disturbance regimes. Lack of early successional forest

**CLASS AVES**

**Black Tern**

*Chlidonias niger*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	X	G4	SXB,S	G4	S1
			ZN		

**G-Trend** Decreasing

**G-Trend** Decline is virtually range-wide, though greater in the U.S. than in Canada

**Comment** (NatureServe 2004).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** Transient bird that primarily uses reservoir habitat. Will also use larger lakes

**Life History** and rivers and occasionally shallow water wetlands.

**Key** Habitat conditions are POOR (shallow water wetlands), FAIR (larger lakes and

**Habitat** rivers), and GOOD (reservoir habitat).

No key habitat to identify; the species will use appropriate habitat statewide.

**Guilds** running water, standing water.

**Statewide** [BlackTern.pdf](#)

**Map**



## **CLASS AVES**

### **Black Tern**

*Chlidonias niger*

### **Conservation Issues**

#### Aquatic habitat degradation

2H Wetland loss/drainage/alteration

2N Eutrophication (eg. of wetlands)

#### Point and non-point source pollution

4E Agricultural runoff – including fertilizers/animal waste, herbicides,

4F Urban runoff

#### Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc).

Conversion to by draining of wetlands

3G Shoreline development

3H Habitat loss outside of Kentucky

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

3Q Invasive/exotic plants (including fescue). Potentially by purple loosestrife

3T Suppression of disturbance regimes. Wetlands advanced successional stages, and poor habitat

**CLASS AVES**

**Blackburnian Warbler**

*Dendroica fusca*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	T	G5	S1S2B	G5	S1

**G-Trend** Stable

**G-Trend** North American Breeding Bird Survey data indicate an increase of 1.0 percent

**Comment** annually survey-wide from 1966-2003 (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 5,900,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a breeding bird that occurs in deciduous forests in the Cumberland

**Life History** Mountains, especially within the highest elevations (2,800-3,800 feet) of Black Mountain in Harlan County. They are most numerous in fairly mature forest of maple-beech-basswood associations on the mountain (Palmer-Ball 1996). Its habitat in Kentucky is subject to mining and other habitat alterations.

**Key** Habitat condition is FAIR overall in Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Deciduous forests of Black Mountain in Harlan County (fair).

**Guilds** Cumberland highland forest.

**Statewide** [BlackburnianWarbler.pdf](#)

**Map**

## **Conservation Issues**

Terrestrial habitat degradation

3H Habitat loss outside of Kentucky

3K Surface mining

3M Timber harvest

**CLASS AVES**

**Black-crowned Night-heron**

*Nycticorax nycticorax*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	T	G5	S1S2B	G5	S1

**G-Trend** Decreasing

**G-Trend** Kushlan et al. (2002) lists the species as having apparent population declines.

**Comment**

**S-Trend** Decreasing

**S-Trend** Heronry surveys in 2004 showed declines in active nests of as much as 50% or

**Comment** more at some sites (Palmer-Ball and Ciuzio 2005). The survey estimated 196 breeding pairs occurred at known heronries throughout the state.

**Habitat /** Breeding bird that primarily uses reservoir habitat (good), but will also use fish

**Life History** hatcheries as well as larger lakes and rivers (fair) and occasionally shallow water wetlands (poor).

**Key Habitat** Habitat conditions are POOR (shallow water wetlands), FAIR (larger lakes and rivers), and GOOD (reservoirs).

Key Habitat Locations (and their conditions):

1. Islands on the north end of Lake Barkley and Kentucky Lake (fair)
2. scattered localities throughout Louisville near Preston Highway (poor) and

Lexington (unknown)

**Guilds** running water, standing water, urban/suburban.

**Statewide** [Black-crownedNight-heron.pdf](#)

**Map**

## **CLASS AVES**

### **Black-crowned Night-heron**

*Nycticorax nycticorax*

### **Conservation Issues**

#### Aquatic habitat degradation

2H Wetland loss/drainage/alteration

2N Eutrophication (eg. of wetlands)

#### Biological/ consumptive uses

5K Lack of suitable habitat for spawning, nesting, or breeding. sites for nesting colonies

5L Parasitism and disease. Potential for parasitism from Eustrongilides spp.

#### Miscellaneous Mortality Factors

6D Human disturbance (spelunking, destruction/disturbance of nest sites).

Human disturbance at rookeries and foraging areas

#### Point and non-point source pollution

4E Agricultural runoff – including fertilizers/animal waste, herbicides,

4F Urban runoff

#### Siltation and increased turbidity

1B Agriculture

1D Urbanization/Development General Construction

#### Terrestrial habitat degradation

3F Urban/residential development

3G Shoreline development

- 3H Habitat loss outside of Kentucky
- 3M Timber harvest
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

**CLASS Aves**

**Black-necked Stilt**

*Himantopus mexicanus*

<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
PS	N	G5	SAB	G5	N

**G-Trend** Increasing

**G-Trend** Breeding Bird Surveys show a significant increase of 3.04% survey-wide for the  
**Comment** period 1966-2007 with a relative abundance of 1.91 individuals per route (Sauer et al. 2008).

**S-Trend** Stable

**S-Trend** Black-necked stilts first nested in Kentucky in 1993. Since that time, they have  
**Comment** nested sporadically in far western Kentucky when proper habitat conditions are present (Palmer-Ball 2003)

**Habitat /** Black-necked stilts generally nest in flooded agricultural fields along the  
**Life** Mississippi and Ohio Rivers in western Kentucky. The sporadic nature of this

**History** flooding means that habitat may not be available in all years (Palmer-Ball  
 personal communication).

**Key** Habitat condition throughout Kentucky is POOR for this species.

**Habitat**

KY. No key habitat to identify: the species will use appropriate habitat in western

**Guilds** standing water.

**Statewide** [Black-neckedStilt.pdf](#)

**Map**

## **Conservation Issues**

Aquatic habitat degradation

2F Riparian zone removal (Agriculture/development)

2H Wetland loss/drainage/alteration

Biological/ consumptive uses

5B Predation from native species

Siltation and increased turbidity

1B Agriculture. plowing of nesting areas



**CLASS**    **Aves**

**Black-throated Green Warbler**

*Dendroica virens*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S4B	G5	S4

**G-Trend**    Stable

**G-Trend**    The Breeding Bird Survey shows a significant increase of 1.2% survey-wide  
**Comment**    (USA and Canada) for the period 1980-2007. Partners in Flight estimates a population of 9,600,000 individuals (see Rosenberg 2004 for assumptions).

**S-Trend**    Unknown

**S-Trend**    Only a limited number of Breeding Bird Survey routes exist in the southeast part  
**Comment**    of the state; thus, the species is detected only on 5 routes. Analysis of these routes show a nonsignificant increase of 5.4% per year for the period 1966-2007 with an average of 0.95 individuals per route (Sauer et al. 2008) . Partners in Flight estimates a population of 24,000 individuals (see Rosenberg 2004 for assumptions).

**Habitat / Life History**    Black-throated Green Warblers are typically found in association with hemlock stands, although they are found occasionally in deciduous or mixed pine-hardwood forests. They are most numerous in fairly mature forest, but will also use regenerating second-growth forests and forest edges (Palmer-Ball).

**Key**    Habitat condition in eastern Kentucky range is FAIR.

**Habitat**

The species will use appropriate habitat in the Cumberland Plateau and Mountains.

**Guilds** Cumberland highland forest, upland forest.

**Statewide** [Black\\_throated\\_Green\\_Warbler.pdf](#)

**Map**

## **Conservation Issues**

### Biological/ consumptive uses

- 5B Predation from native species
- 5M Brood parasitism (Brown-headed Cowbird)
- 5Q Declining prey base. From insecticides

### Miscellaneous Mortality Factors

- 6G Stochastic events (droughts, unusual weather, pine beetle damage, flooding etc.). Potential loss of habitat due to hemlock woolly adelgid infestation.

### Terrestrial habitat degradation

- 3G Shoreline development. Riparian corridor removal/development
- 3H Habitat loss outside of Kentucky
- 3K Surface mining. Loss of forest habitat from mining
- 3M Timber harvest
- 3R Habitat and/or Population Fragmentation. Forest fragmentation



**CLASS AVES**

**Blue-winged Warbler**

*Vermivora pinus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S4S5B	G5	S4

**G-Trend** Unknown

**G-Trend Comment** North American Breeding Bird Survey data show a non-significant increasing trend survey-wide of 0.6% during the period 1966-2003 (Sauer et al. 2004).

Partners in Flight North American Landbird Conservation Plan gives population estimate of 390,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Species encountered infrequently on Kentucky Breeding Bird Survey routes.

**Comment** The average number of individuals per Breeding Bird Survey route for the period 1966-2003 was 1.07. In part due to small sample sizes, trend analysis of these data does not reveal statistically significant results (Palmer-Ball 1996, Sauer et al. 2004). Partners in Flight estimates a population of 39,000 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** Blue-winged Warblers are typically found in early successional habitats. They

**Life History** are most frequent in low, moist areas, but they also can be found on drier slopes. The species formerly used natural forest openings and woodland borders, which may have been rather common because of fire and storm damage.

Today, altered situations, including overgrown fields, reclaimed strip mines, and regenerating forest clear-cuts, provide most nesting habitat. This warbler does not occupy these areas unless a good scattering of small trees, shrubs, and dense herbaceous growth is present. In contrast, the species is typically absent if the ground cover is reduced by grazing or shading from a closed tree canopy (Palmer-Ball 1996).

**Key** Habitat condition is UNKNOWN overall in Kentucky, but is likely in FAIR  
**Habitat** condition.

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** savanna/ shrub-scrub.

**Statewide** [Blue-wingedWarbler.pdf](#)

**Map**

## **CLASS AVES**

### **Blue-winged Warbler**

*Vermivora pinus*

### **Conservation Issues**

#### Biological/ consumptive uses

- 5E Hybridization with closely related species. Hybridization with Golden-winged Warbler (although this threatens Golden-winged Warbler more than it does the Blue-winged Warbler)
- 5M Brood parasitism (Brown-headed Cowbird)

#### Terrestrial habitat degradation

- 3C Lack of newly abandoned farmland
- 3E Livestock grazing. Especially in woods or along edges
- 3F Urban/residential development
- 3H Habitat loss outside of Kentucky
- 3K Surface mining. Removing early successional habitat
- 3O Reforestation
- 3T Suppression of disturbance regimes. Loss of early successional habitat

**CLASS AVES**

**Bobolink**

*Dolichonyx oryzivorus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	S	G5	S2S3B	G5	S2

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data indicate a significant population

**Comment** decline in North America in recent decades, particularly in central North America (Sauer and Droege 1992, NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives Global population estimate of 11,000,000 (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** The species was first documented nesting in Kentucky in 1969 and since then

**Comment** has been reported annually in scattered localities in Central Kentucky. The atlas survey yielded 5 records in priority blocks in Kentucky (Palmer-Ball 1996)

**Habitat /** During the breeding season, Bobolinks occur in a variety of grassy habitats. In

**Life History** Kentucky, the species is found entirely in artificial situations, including hayfields, pastures, and other unmowed or infrequently mowed fields of grasses and forbs. Very open situations seem to be favored, as is vegetation that is neither especially thick nor closely mowed or grazed (Palmer-Ball 1996). Such habitat is constantly threatened by mowing practices.



**Key** Habitat condition is POOR overall in Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Bluegrass Region of central Kentucky (fair).

**Guilds** grassland/agricultural.

**Statewide** [Bobolink.pdf](#)

**Map**

## **CLASS AVES**

**Bobolink**

*Dolichonyx oryzivorus*

### **Conservation Issues**

Biological/ consumptive uses

5K Lack of suitable habitat for spawning, nesting, or breeding. For nesting

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3B Mowing regimes

3D Switch to cleaner agricultural practices

3E Livestock grazing

3F Urban/residential development

3H Habitat loss outside of Kentucky

3Q Invasive/exotic plants (including fescue)

**CLASS AVES**

**Brown Creeper**

*Certhia americana*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	E	G5	S1S2B ,S4S5 N	G5	S1

**G-Trend** Unknown

**G-Trend** It is difficult to get an adequate assessment of population trends range-wide for

**Comment** this species because it shows up infrequently in standard surveys such as Breeding Bird Survey (NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives Global population estimates of 5,400,000 (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Nesting populations known from only 3 locations (Palmer-Ball 2003).

**Comment**

**Habitat /** This species winters in a variety of forested and semi-open habitats, especially

**Life History** mature woodlands. During the breeding season, Brown Creepers occupy permanently inundated swamp forest dominated by bald cypress and water tupelo where it builds nests under exfoliating bark, especially of dead trees. Although originally thought to be restricted to permanently inundated swamp forests, birds found in Henderson and Union counties were in seasonally

inundated bottomland forest and the margins of open water sloughs. These observations indicate that breeding creepers may be more widespread than formerly believed (Palmer-Ball 1996).

**Key** Habitat condition is FAIR (breeding and wintering) overall in Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Cypress Creek Swamp in Marshall County (fair)
2. Sloughs Wildlife Management Area in Henderson County (good)
3. Axe Lake Swamp in Ballard County (good)

**Guilds** forested wetland.

**Statewide** [BrownCreeper.pdf](#)

**Map**

## **CLASS AVES**

### **Brown Creeper**

*Certhia americana*

### **Conservation Issues**

#### Aquatic habitat degradation

2F Riparian zone removal (Agriculture/development)

2H Wetland loss/drainage/alteration

#### Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc).

Conversion to by draining of wetland forests

3G Shoreline development. Riparian corridor development

3M Timber harvest. Of bottomland forests

3N Removal of dead trees

3R Habitat and/or Population Fragmentation. Requires large blocks of habitat

**CLASS AVES**

**Buff-breasted Sandpiper**

*Tryngites subruficollis*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G4	SZN	G4	S3

**G-Trend** Decreasing

**G-Trend** Species thought to be in decline in the U.S. but statistical verification is lacking

**Comment** (Brown et al. 2001).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a transient bird that uses shallow water wetlands, wet prairies, flooded

**Life History** agricultural fields, and shoreline, mudflat, and sandbar habitat of lakes and rivers.

**Key** Habitat conditions range from POOR (shallow water wetlands, wet prairies) to

**Habitat** FAIR (flooded agricultural fields, shoreline, mudflat, and sandbar habitats of larger lakes and rivers).

Key Habitat Locations (and their conditions):

1. Transient lakes in Warren (good) and Christian (unknown) counties.
2. Shoreline of Kentucky and Barkely lakes (good). Extending summer pool to Labor Day (proposed by Tennessee Valley Authority) would leave the

shoreline unexposed until after peak shorebird migration (Ritchison and Ranalli 2004).

**Guilds** Emergent and shrub-dominated wetlands, grassland/agricultural, standing water.

**Statewide** [Buff-breastedSandpiper.pdf](#)

**Map**

## CLASS AVES

### Buff-breasted Sandpiper

*Tryngites subruficollis*

### Conservation Issues

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations
- 2H Wetland loss/drainage/alteration
- 2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites). At feeding sites

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc).  
Conversion to by draining wetlands
- 3E Livestock grazing. Over-grazing, especially along wetlands
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes. Of wetlands



**CLASS AVES**

**Canada Warbler**

*Wilsonia canadensis*

<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
N	S	G5	S3B	G5	S3

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data indicate a survey-wide decrease of

**Comment** 2.0 percent per year from 1966-2003, with a decrease of 3.4 percent per year from 1980-2003. Partners in Flight North American Landbird Conservation Plan gives population estimate of 1,400,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** The atlas survey yielded 4 records of Canada Warblers in priority blocks, and 1

**Comment** incidental observation was reported. Although no confirmed records were obtained, the presence of birds throughout the summer on both Cumberland and Black mountains represented probable evidence of breeding (Palmer-Ball 1996).

**Habitat /** This is a breeding bird found in the higher elevations of the Cumberland

**Life History** Mountains which are threatened by potential mining. This species uses mesic forests with a dense understory and ground cover (Palmer-Ball 1996; C. Hunter, U.S. Fish and Wildlife Service, pers. comm.). On Cumberland Mountain, it is most often found in association with rhododendron. On the summit of Black Mountain, birds are found in the understory of mature deciduous forest as well

as younger, cut-over forest and forest edge (Palmer-Ball 1996).

**Key** Habitat condition is FAIR overall in Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Black and Cumberland Mountains in Harlan and Bell Counties (good)

**Guilds** Cumberland highland forest.

**Statewide** [CanadaWarbler.pdf](#)

**Map**

## **CLASS AVES**

**Canada Warbler**

*Wilsonia canadensis*

### **Conservation Issues**

Biological/ consumptive uses

5B Predation from native species

5M Brood parasitism (Brown-headed Cowbird)

Terrestrial habitat degradation

3F Urban/residential development

3H Habitat loss outside of Kentucky

3K Surface mining. Valley fills

3M Timber harvest. Logging for mining and/or timber harvesting, which  
disrupts contiguous breeding habitat

3R Habitat and/or Population Fragmentation

**CLASS AVES**

**Cerulean Warbler**

*Dendroica cerulea*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G4	S4S5B	G4	S4

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data indicate a significant survey-wide

**Comment** population decline in North America from 1966-2003 of 4.2%. The decline has been most pronounced in the core of the breeding range (Robbins et al. 1992).

Partners in Flight North American Landbird Conservation Plan gives population estimate of 560,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Decreasing

**S-Trend** Cerulean Warblers are not adequately surveyed by Kentucky Breeding Bird

**Comment** Survey surveys. The average number of individuals per Breeding Bird Survey

route for the periods 1966-91 and 1982-91 was 0.95 and 1.23, respectively (Palmer-Ball 1996). Trend analysis shows a nonsignificant decrease of 6.1% per year for the period 1966-2003 (Sauer et al. 2004). Partners in Flight estimates a population of 89,000 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** This is a breeding bird that uses mature deciduous forests where it forages high

**Life History** in the canopy. The species is encountered most frequently in the western part

of the state in mesic situations, especially bottomland forest. The species will also utilize, especially in the east, mesophytic and subxeric forests of slopes (Palmer-Ball 1996). The species is often associated with small canopy gaps such as along ridges, river corridors, and narrow roads. In the Morehead Ranger District, the species seems to persist in areas where the crowns of trees have been damaged by ice storms. While this warbler is occasionally found in relatively isolated tracts of suitable habitat, it occurs with much greater regularity in extensively forested areas (Palmer-Ball 1996).

**Key** Habitat condition ranges from POOR (bottomland forest) to GOOD (upland forests) overall in Kentucky.

Species will use appropriate habitat statewide as long as large forested tracts are available with some canopy gaps.

**Guilds** Cumberland highland forest, forested wetland, upland forest.

**Statewide** [CeruleanWarbler.pdf](#)

**Map**

## **CLASS AVES**

**Cerulean Warbler**

*Dendroica cerulea*

### **Conservation Issues**

Aquatic habitat degradation

2F Riparian zone removal (Agriculture/development)

Biological/ consumptive uses

5B Predation from native species

5D Competition from introduced/invasive or native species. Potential competition with native species

5M Brood parasitism (Brown-headed Cowbird)

Terrestrial habitat degradation

3F Urban/residential development

3G Shoreline development. Riparian corridor development

3H Habitat loss outside of Kentucky

3H Habitat loss outside of Kentucky

3K Surface mining. Logging for mining

3M Timber harvest. Especially species preferred by Cerulean Warbler

3R Habitat and/or Population Fragmentation. Needs large tracts of forest

**CLASS Aves**

**Chuck-will's-widow**

*Caprimulgus carolinensis*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S4S5B	G5	S4

**G-Trend** Unknown

**G-Trend** Breeding Bird Surveys show a significant decrease of 1.7% survey-wide for the

**Comment** period 1966-2007 with a relative abundance of 1.35 individuals per route (Sauer et al. 2008). Partners in Flight estimates a population of 15,000,000 individuals (see Rosenberg 2004 for assumptions).

**S-Trend** Unknown

**S-Trend** Breeding Bird Surveys in Kentucky show a significant decrease of 2.6% for the

**Comment** of period 1980-2007 (Sauer et al. 2008). Partners in Flight estimates a population of 310,400 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** Chuck-will's-widows are found in semi-open and open habitats with scattered

**Life** tracts of forest. They are usually absent in extensively forested areas. Found

**History** more commonly in drier forests with an open mid- and understory, especially in oak and hickory forests with scattered cedars or introduced pines (Palmer-Ball 1996)..

**Key** Habitat conditions in Kentucky are generally FAIR

**Habitat**

Key Habitat Locations (and their condition):

1. Will use appropriate habitat mostly west of the Cumberland Plateau.

**Guilds** grassland/agricultural, savanna/ shrub-scrub, upland forest.

**Statewide** [Chuck Wills Widow.pdf](#)

**Map**

## **Conservation Issues**

Biological/ consumptive uses

5Q Declining prey base. Pesticide use

Miscellaneous Mortality Factors

6A Traffic/road kills

Terrestrial habitat degradation

3F Urban/residential development

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain).

Pesticides



**CLASS AVES**

**Common Moorhen**

*Gallinula chloropus*

<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
PS	T	G5	S1S2B	G5	S1

**G-Trend** Unknown

**G-Trend** Population estimate and trend information due pending Version 2 of the

**Comment** Waterbird Plan (Kushlan et al. 2002).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a breeding bird that uses marshes and emergent wetlands.

**Life History**

**Key** Habitat conditions in Kentucky are POOR overall.

**Habitat**

Key Habitat Locations (and their conditions):

1. Homestead unit of Peabody Wildlife Management Area
2. Paradise Steam Plant in Muhlenberg County
3. Sauerheber unit of Sloughs Wildlife Management Area

All in good condition

**Guilds** Emergent and shrub-dominated wetlands, grassland/agricultural, standing water.

**Statewide** [CommonMoorhen.pdf](#)

**Map**

## **CLASS AVES**

**Common Moorhen**

*Gallinula chloropus*

### **Conservation Issues**

Aquatic habitat degradation

2H Wetland loss/drainage/alteration

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc).

Conversion to by draining of wetlands

3G Shoreline development

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

3Q Invasive/exotic plants (including fescue). Potentially by phragmites

3T Suppression of disturbance regimes. Of wetlands

**CLASS AVES**

**Common Raven**

*Corvus corax*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	T	G5	S1S2	G5	S1

**G-Trend** Increasing

**G-Trend** North American Breeding Bird Survey data indicate a significant population

**Comment** increase in North America between 1966 and 2003 (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives Global population estimate of 16,000,000 (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** The species is not encountered on Breeding Bird Survey routes. Population is

**Comment** likely stable to increasing, although number of nesting pairs is low.

**Habitat /** Although ravens have adapted to human presence in some parts of their range,

**Life History** in Kentucky they are still birds of remote areas. These resident birds are rarely seen away from extensively forested portions of the mountains, where they usually can be found along or near the ridge crests. Although ravens nest and loaf along clifflines and exposed rock outcrops, they are most frequently seen flying along the ridges or soaring overhead. The abundance of suitable nest sites in eastern Kentucky indicates that other factors are responsible for the species's overall scarcity (Palmer-Ball 1996).

**Key** Habitat condition is FAIR overall in Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Cumberland Gap National Historic Park (good)
2. Cumberland, Black, and Pine Mountain (fair)
3. Natural Bridge State Park (good condition)

**Guilds** caves, rock shelters, and clifflines, Cumberland highland forest, upland forest.

**Statewide** [CommonRaven.pdf](#)

**Map**

## **CLASS AVES**

**Common Raven**

*Corvus corax*

### **Conservation Issues**

Miscellaneous Mortality Factors

6E Illegal killing

Terrestrial habitat degradation

3H Habitat loss outside of Kentucky

3M Timber harvest. Logging for mining and timber harvest along clifflines

3U Loss, lack and degradation of special and unique microhabitats. Clifflines  
for nesting

**CLASS AVES**

**Common Tern**

*Sterna hirundo*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	SZN	G5	S3

**G-Trend** Increasing

**G-Trend** Kushlan et al. (2002) lists the species as having an apparent population increase

**Comment** and gives a population estimate of 300,000 breeders.

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a transient bird that uses shallow water wetlands, flooded agricultural

**Life History** fields, and shoreline, mudflat, and sandbar habitat of lakes and rivers.

**Key** Habitat conditions are POOR (shallow water wetlands) and FAIR (flooded

**Habitat** agricultural fields, shoreline, mudflat, and sandbar habitats of lakes and rivers).

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** running water, standing water.

**Statewide** [CommonTern.pdf](#)

**Map**

## **CLASS AVES**

### **Common Tern**

*Sterna hirundo*

### **Conservation Issues**

#### Aquatic habitat degradation

2H Wetland loss/drainage/alteration

2N Eutrophication (eg. of wetlands)

#### Point and non-point source pollution

4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc). Draining  
of wetlands for agriculture

3F Urban/residential development

3G Shoreline development. Along reservoirs, lakes, and rivers

3H Habitat loss outside of Kentucky

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

3T Suppression of disturbance regimes. Of wetlands



**CLASS AVES**

**Dickcissel**

*Spiza americana*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S4S5B	G5	S4

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data indicate a significant population

**Comment** decline in North America from 1966-2003 of 1.2%, although Sauer et al. (2004) recommends that such data be viewed with some skepticism. Partners in Flight North American Landbird Conservation Plan gives population estimate of 22,000,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Dickcissels are reported regularly on only about half of Kentucky's Breeding

**Comment** Bird Survey routes. Trend analysis yields a nonsignificant decrease of 1.7% per year for the period 1966-2003 and a nonsignificant increase of 3.0% per year for the period 1980-2003. It is likely that natural variability in the nesting population is responsible for these trends (Palmer-Ball 1996). The average number of individuals recorded per Breeding Bird Survey route for 1966-2003 was 4.35 (Sauer et al. 2004). Partners in Flight estimates a population of 110,000 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** Dickcissels are a Breeding bird that inhabits open habitats with an abundance of

**Life History** low herbaceous vegetation. Today, natural habitats affording this type of cover have been virtually eliminated, and Dickcissels occur only in artificially created habitats; the species is most frequently found in rural farmland, but it also occurs in other open situations, such as reclaimed strip mines, the unmowed margins of airports, and similarly idle land. Even in areas where they are fairly common, Dickcissels typically are distributed irregularly. Loose colonies are often established in tracts of optimal habitat, while suitable habitat in surrounding areas goes unused, resulting in a very patchy distribution (Whitt 1969). Dickcissels sometimes inhabit grassy fields, but they are most common in habitats with an abundance of forbs, such as fields of clover and alfalfa, as well as well as fields of small grains (especially wheat). Within such areas, territorial males sing from scattered trees, power lines, and tall weed stems (Palmer-Ball 1996).

**Key** Habitat condition is FAIR overall in Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Ft. Campbell Military Reservation (good)
2. Species will use appropriate habitat west of Cumberland Plateau (fair) as

## **CLASS AVES**

### **Dickcissel**

*Spiza americana*

well as reclaimed mined habitat in the east (good)

**Guilds** grassland/agricultural.

**Statewide** [Dickcissel.pdf](#)

### **Map**

## **Conservation Issues**

Biological/ consumptive uses

5B Predation from native species

5K Lack of suitable habitat for spawning, nesting, or breeding. For nesting

5M Brood parasitism (Brown-headed Cowbird)

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3B Mowing regimes

3D Switch to cleaner agricultural practices

3E Livestock grazing

3F Urban/residential development

3H Habitat loss outside of Kentucky

3O Reforestation

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain).

Poisoning on wintering grounds

**CLASS AVES**

**Dunlin**

*Calidris alpina*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	SZN	G5	S4

**G-Trend** Decreasing

**G-Trend** Brown et al. (2001) lists the species as having been documented to be in decline.

**Comment**

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat / Life History** Transient bird that uses shallow water wetlands, flooded agricultural fields, and shoreline, mudflat, and sandbar habitat of lakes and rivers.

**Key Habitat** Habitat conditions are POOR (shallow water wetlands) and FAIR (flooded agricultural fields, shoreline, mudflat, and sandbar habitats of lakes and rivers).

Key Habitat Locations (and their conditions):

1. Transient lakes in Warren (good) and Christian (unknown) counties.
2. Shoreline of Kentucky and Barkley lakes (good). Extending summer pool to Labor Day (proposed by Tennessee Valley Authority) would leave the shoreline unexposed until after peak shorebird migration (Ritchison and Ranalli

2004).

3. Mudflats and sandbar areas on Tennessee, Ohio, Mississippi, and  
Cumberland Rivers.

**Guilds** grassland/agricultural, running water, standing water.

**Statewide** [Dunlin.pdf](#)

**Map**

## **CLASS AVES**

**Dunlin**

*Calidris alpina*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations. Alteration of natural drawdown cycle
- 2H Wetland loss/drainage/alteration . Loss of shallow water wetlands
- 2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites). At feeding sites

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc).  
Converting wetlands
- 3F Urban/residential development
- 3G Shoreline development. Along rivers and reservoirs
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes. Of wetlands

**CLASS AVES**

**Golden-winged Warbler**

*Vermivora chrysoptera*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	T	G4	S2B	G4	S2

**G-Trend** Unknown

**G-Trend** North American Breeding Bird Survey data indicate a significant decline in the

**Comment** U.S. of 3.4% and an insignificant increase of 5.0% in Canada for the period 1966-2003 (Sauer et al. 2004). Recent expansion has been to the north and west and still continues. On the other hand, there has been widespread decline and even local extinction from areas first colonized about a century ago (NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 210,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Kentucky's small nesting population has been poorly documented, making an

**Comment** assessment of trends difficult (Palmer-Ball 1996).

**Habitat /** This is a breeding bird typically encountered in early successional habitats with

**Life History** a predominance of shrubs or small trees. In addition, the presence of a dense layer of herbaceous vegetation appears to be critical, and the species is not found in areas where the ground cover is grazed or the tree canopy is closed to

the point that weeds and grasses are substantially reduced. In Kentucky the species is generally a bird of drier slopes that have been cleared in the recent past, including reverting clear-cuts and old fields, reclaimed strip mines, and utility corridors. Natural fire or storm damage may result in the creation of suitable habitat, and the bird also has been reported in such areas (Palmer-Ball 1996).

**Key** Habitat condition is FAIR overall in Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Reclaimed Surface Mines of Bell, Harlan, and Whitley Counties (good) (L. Patton, pers. comm.)

**Guilds** Cumberland highland forest, savanna/ shrub-scrub.

**Statewide** [Golden-wingedWarbler.pdf](#)

**Map**



## **CLASS AVES**

### **Golden-winged Warbler**

*Vermivora chrysoptera*

### **Conservation Issues**

#### Biological/ consumptive uses

- 5E Hybridization with closely related species. Hybridization with Blue-winged Warbler
- 5M Brood parasitism (Brown-headed Cowbird)

#### Terrestrial habitat degradation

- 3C Lack of newly abandoned farmland
- 3E Livestock grazing
- 3F Urban/residential development
- 3H Habitat loss outside of Kentucky. Deforestation on wintering grounds.
- 3K Surface mining. Remining
- 3O Reforestation
- 3T Suppression of disturbance regimes. Of early successional habitat

**CLASS AVES**

**Grasshopper Sparrow**

*Ammodramus savannarum*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
PS	N	G5	S4B	G5	S4

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data indicate a significant annual

**Comment** population decline of 3.9% per year in North America between 1966 and 2003 (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 14,000,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Decreasing

**S-Trend** North American Breeding Bird Survey data show a significant decrease of 6.5%

**Comment** per year for the period 1966-2003, but a nonsignificant decrease of 1.9% per year for the period 1980-2003. The average number of individuals per Breeding Bird Survey route for the period 1966-2003 was 2.49 (Sauer et al. 2004). Partners in Flight estimates a population of 84,000 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** The Grasshopper Sparrow occurs in natural grasslands throughout parts of its

**Life History** range, but it is restricted to altered situations in Kentucky. In Kentucky, this breeding species inhabits grasslands that are dominated by relatively sparse or short vegetation, and they are typically absent if the vegetation is tall and thick.

Consequently, they are most numerous in lightly grazed pastures, hayfields on dry slopes and poor soil, reclaimed surface mines, and other situations in which vegetation is not profuse. Small numbers also occur in fallow row-crop fields where grassy vegetation is beginning to recolonize bare soil (Palmer-Ball 1996). Pasture and hayfield habitat are generally in fair condition in that they are subject to mowing and grazing; reclaimed mine lands are in good condition since soil conditions tend to limit succession.

**Key** Habitat condition ranges from FAIR (pasture and haylands) to GOOD

**Habitat** (reclaimed mines) overall in Kentucky.

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** grassland/agricultural.

**Statewide** [GrasshopperSparrow.pdf](#)

**Map**

## CLASS AVES

### Grasshopper Sparrow

*Ammodramus savannarum*

### Conservation Issues

#### Biological/ consumptive uses

- 5B Predation from native species. Especially when overgrazed
- 5M Brood parasitism (Brown-headed Cowbird). Levels typically low

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3B Mowing regimes
- 3D Switch to cleaner agricultural practices
- 3E Livestock grazing. Light/moderate grazing beneficial, but overgrazing is not
- 3F Urban/residential development
- 3H Habitat loss outside of Kentucky
- 3O Reforestation
- 3Q Invasive/exotic plants (including fescue)
- 3S Fire suppression/fire regime management
- 3T Suppression of disturbance regimes

**CLASS AVES**

**Great Egret** *Ardea alba*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	E	G5	S1B	G5	S1

**G-Trend** Increasing

**G-Trend** North American population estimate: >180,000 breeding birds (Kushlan et al. 2002).

**S-Trend** Increasing

**S-Trend** State population estimate: 147 breeding pairs (Palmer-Ball and Ciuzio 2004).

**Comment**

**Habitat /** This is a breeding bird that primarily uses floodplain forests and bottomland

**Life History** hardwood forests, but will also nest and feed in association with reservoir habitat.

**Key** Habitat conditions are POOR (floodplain and bottomland hardwood forests)

**Habitat** and GOOD (reservoirs).

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** Emergent and shrub-dominated wetlands, forested wetland, running water, standing water.

**Statewide** [GreatEgret.pdf](#)

## Map

## **CLASS AVES**

### **Great Egret**

*Ardea alba*

### **Conservation Issues**

#### Aquatic habitat degradation

2F Riparian zone removal (Agriculture/development)

2H Wetland loss/drainage/alteration

#### Biological/ consumptive uses

5K Lack of suitable habitat for spawning, nesting, or breeding

5K Lack of suitable habitat for spawning, nesting, or breeding. on islands and reservoirs

#### Miscellaneous Mortality Factors

6D Human disturbance (spelunking, destruction/disturbance of nest sites)

#### Terrestrial habitat degradation

3F Urban/residential development

3G Shoreline development. Reservoirs, lakes and rivers

3M Timber harvest

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

**CLASS AVES**

**Greater Prairie-chicken**

*Tympanuchus cupido*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
PS	X	G4	SX	G4	N

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data shows nonsignificant survey-wide

**Comment** declines of 4.1% for the period 1966-2003 and declines of 6.0% for the period 1980-2003 (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 690,000 in the U.S. (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Currently extirpated from Kentucky. Plans to examine efficacy of

**Comment** reintroduction of species underway.

**Habitat / Life History** Species prefers tall grasslands (prairie), pastures, and hayfields (NatureServe 2004).

**Key** Habitat condition throughout potential Kentucky range is FAIR.

**Habitat**

Key Habitat Locations (and their condition):

1. Ft. Campbell Military Reservation (good if current grassland management practices upheld)



**Guilds** grassland/agricultural.

**Statewide** [GreaterPrairie-chicken.pdf](#)

**Map**

## **Conservation Issues**

Terrestrial habitat degradation

3H Habitat loss outside of Kentucky

Unknown factors/variables

7A Unknown threats

**CLASS Aves**

**Greater Scaup**

*Aythya marila*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S2S3N	G5	S2

**G-Trend** Decreasing

**G-Trend** Populations of both scaup species have seen dramatic declines in recent years.

**Comment** Breeding numbers of scaup have declined 35% from 6.4 million in 1980 to 4.2 million in 2009 (U.S, Fish and Wildlife Service 2009). Reasons for these declines are still largely not understood.

**S-Trend** Decreasing

**S-Trend** Little data exists on wintering populations of scaup. Mid-winter waterfowl

**Comment unpublished** survey data indicates a 85% decline in the 10-year average (USFWS data)

**Habitat / Life** Scaup are generally open water birds being found in large reservoirs and Rivers statewide.

**Life**

**History**

**Key** Habitat condition throughout Kentucky are GOOD for this species.

**Habitat**

No key habitat to identify: the species will use appropriate habitat statewide.

**Guilds** Large rivers in current, Large rivers in slackwater.

Statewide [GreaterScaup.pdf](#)

Map

## Conservation Issues

Aquatic habitat degradation

2E Stream channelization/ditching

2H Wetland loss/drainage/alteration

Biological/ consumptive uses

5L Parasitism and disease

Terrestrial habitat degradation

3G Shoreline development

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

## CLASS AVES

Henslow's Sparrow

*Ammodramus henslowii*

Federal Status	Heritage Status	GRank	SRank	GRank (Simplified)	SRank (Simplified)
N	S	G4	S3B	G4	S3

**G-Trend** Decreasing

**G-Trend** One of the fastest declining songbirds in North America. It has declined

**Comment** significantly across range and can no longer be considered common anywhere

(NatureServe 2004). North American Breeding Bird Survey data indicate a large

and statistically significant decline of 8.6% per year survey-wide for the period 1966-2003 (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 79,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Numbers of birds in Kentucky fluctuate from year to year, perhaps in response

**Comment** to habitat availability. The atlas survey yielded 24 records of Henslow's Sparrows in priority blocks, and 10 incidental observations were reported (Palmer-Ball 1996). Partners in Flight estimates a population of 2,600 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** This is a breeding bird typically found in open habitats dominated by thick,

**Life History** grassy vegetation. The species favors areas that have been neglected for a year or two and have accumulated a layer of dead plant material at the base of the current year's growth. The lack of disturbance also allows for the presence of dead weed stalks, young saplings, and briars, which are used as singing perches (Wiley and Croft 1964 in Palmer-Ball 1996). Henslow's Sparrows may have occurred at least locally in the native prairies of the East Gulf Coastal Plain and the Highland Rim, but documentation of their presence in such habitat is absent.

Today native grasslands have been virtually eliminated, and the species occurs entirely in altered situations. Although fallow fields and pastures provide most of the habitat used by Henslow's Sparrows in Kentucky, the species is also found on reclaimed surface mines, the margins of airfields, and other unmowed grassy habitats. Hayfields of tall thick grasses like orchard grass and timothy

are also used, although mowing results in abandonment (Palmer-Ball 1996).

**Key** Habitat condition throughout Kentucky range is FAIR.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.

## CLASS AVES

### Henslow's Sparrow

*Ammodramus henslowii*

**Guilds** grassland/agricultural.

**Statewide** [Henslow's Sparrow.pdf](#)

**Map**

### Conservation Issues

Biological/ consumptive uses

5B Predation from native species

5K Lack of suitable habitat for spawning, nesting, or breeding. For nesting

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3B Mowing regimes. Mowing regimes for haying operations (too early destroys nests/eggs/nestlings and too frequent removes litter buildup preferred by species)

3C Lack of newly abandoned farmland. Lack of newly abandoned farmland (stage before saplings and shrubs enter)

3D Switch to cleaner agricultural practices

3E Livestock grazing. >10 head of cattle per 20 acres is too intense

3F Urban/residential development

3H Habitat loss outside of Kentucky

3O Reforestation

3R Habitat and/or Population Fragmentation. Habitat Fragmentation: rarely

found on tracts <100 acres

- 3S Fire suppression/fire regime management. Short-term rotation removes  
litter buildup preferred by species
- 3T Suppression of disturbance regimes

**CLASS AVES**

**Hooded Merganser**

*Lophodytes cucullatus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	T	G5	S1S2B ,S3S4 N	G5	S1

**G-Trend** Stable  
**G-Trend** NatureServe 2004

**Comment**

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a breeding bird that uses shallow water sloughs and ponds of floodplain

**Life History** forests with cavity trees. Non-breeding birds will use a variety of wetland habitats, including reservoirs, marshes, sloughs and ponds.

**Key Habitat** Habitat conditions are POOR (shallow water areas of floodplain forests, marshes), FAIR (sloughs and ponds), and GOOD (reservoirs).

No key habitat to identify; the species will use appropriate habitat statewide.

**Guilds** Emergent and shrub-dominated wetlands, forested wetland, running water,



standing water.

**Statewide** [HoodedMerganser.pdf](#)

**Map**

## CLASS AVES

### Hooded Merganser

*Lophodytes cucullatus*

### Conservation Issues

#### Aquatic habitat degradation

2F Riparian zone removal (Agriculture/development)

2H Wetland loss/drainage/alteration

#### Biological/ consumptive uses

5K Lack of suitable habitat for spawning, nesting, or breeding. cavities for nesting

#### Point and non-point source pollution

4E Agricultural runoff – including fertilizers/animal waste, herbicides,

4F Urban runoff

#### Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc).

Conversion to, through loss of wetlands and potential nest trees

3F Urban/residential development

3G Shoreline development

3H Habitat loss outside of Kentucky

3M Timber harvest. Loss of bottomland hardwood forests with cavity trees

3N Removal of dead trees. Nest trees

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

**CLASS AVES**

**Horned Grebe**

*Podiceps auritus*

Federal Status	Heritage Status	GRank	SRank	GRank (Simplified)	SRank (Simplified)
N	N	G5	SZN	G5	S4

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data gives a significant (p=0.00) survey-

**Comment** wide decrease of -4.7% per year from 1980-2003 (Sauer et al. 2004).

Population estimate due pending Version 2 of the Waterbird Plan (Kushlan et al. 2002).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** Wintering bird that primarily uses reservoir habitat but will occasionally use

**Life History** smaller wetlands.

**Key** Habitat conditions are GOOD (reservoirs) and UNKNOWN (smaller

**Habitat** wetlands).

No key habitat to identify; the species will use appropriate habitat statewide.

**Guilds** running water, standing water.

**Statewide** [HornedGrebe.pdf](#)

## **Map**

### **Conservation Issues**

Aquatic habitat degradation

2H Wetland loss/drainage/alteration

Point and non-point source pollution

4E Agricultural runoff – including fertilizers/animal waste, herbicides,

4F Urban runoff

Terrestrial habitat degradation

3H Habitat loss outside of Kentucky

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

**CLASS AVES**

**Interior Least Tern** *Sterna antillarum athalassos*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
LE	E	G4T2Q	S2B	G2	S2

**G-Trend** Increasing

**G-Trend** Population numbers are improving (NatureServe 2004).

**Comment**

**S-Trend** Decreasing

**S-Trend** Kentucky Department of Fish and Wildlife Resource surveys show that the

**Comment** Ohio River population is decreasing; however, the Mississippi River population is increasing (J. Rumancik, pers. comm).

**Habitat /** Specializes in nesting on sand bars on Ohio

**Key** Habitat Condition in Kentucky is POOR due to ephemeral nature of habitat

**Habitat** substrate and dramatic water fluctuations.

Key Habitat Locations (and their conditions):

1. Isolated sand bars and mudflats on lower Ohio River and Mississippi River (poor)

**Guilds** running water.

**Statewide** [InteriorLeastTern.pdf](#)

## Map

## **CLASS AVES**

### **Interior Least Tern**

*Sterna antillarum athalassos*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2A Navigational dredging/Commercial dredging. Dredging of sandbars
- 2E Stream channelization/ditching
- 2G Water level fluctuations. Loss of natural flooding regime on major river systems led to loss of habitat
- 2N Eutrophication (eg. of wetlands)

#### Biological/ consumptive uses

- 5B Predation from native species. During nesting
- 5K Lack of suitable habitat for spawning, nesting, or breeding

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites). Of nests
- 6G Stochastic events (droughts, unusual weather, pine beetle damage, flooding etc.). Flooding can destroy nests or delay nesting

#### Terrestrial habitat degradation

- 3G Shoreline development. Habitat alteration (river flooding, development). Development along beaches and sandbars.
- 3H Habitat loss outside of Kentucky
- 3T Suppression of disturbance regimes. Remaining habitat threatened by

succession

3U Loss, lack and degradation of special and unique microhabitats. Sand bars and other sandy areas for nesting



**CLASS AVES**

**Kentucky Warbler**

*Oporornis formosus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S5B	G5	S5

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data indicate a significant survey-wide

**Comment** decline averaging 1.0% per year for the period 1966-2003 (Sauer et al. 2004).

Partners in Flight North American Landbird Conservation Plan gives population estimate of 1,100,000 in the U.S. (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Despite their relative abundance, Kentucky Warblers are not reported in large

**Comment** numbers on most Kentucky Breeding Bird Survey routes. Trend analysis shows a nonsignificant increase of 0.3% per year for the period 1966-2003 and a nonsignificant decrease of 0.3% per year for the period 1980-2003. The average number of individuals per Breeding Bird Survey route for the period 1966-2003 was 2.78 (Palmer-Ball 1996). Partners in Flight estimates a population of 95,000 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** This is a breeding bird of forests with a moderate to dense shrub layer.

**Life History** Although the species occurs predominantly in deciduous forest, mixed forest types with pines or hemlocks are also used. A great variety of mesic to

subxeric forests is inhabited, although more xeric forests are often avoided, apparently because of the lack of a well-developed shrub layer. Unlike several other ground-nesting warblers, the Kentucky also occurs regularly in bottomland forests along major river floodplains, apparently nesting successfully despite periodic flooding (Palmer-Ball 1996).

**Key** Habitat condition throughout potential Kentucky range is UNKNOWN, but  
**Habitat** likely FAIR depending on the amount of shrub-layer available.

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** upland forest.

**Statewide** [KentuckyWarbler.pdf](#)

**Map**

## **CLASS AVES**

### **Kentucky Warbler**

*Oporornis formosus*

### **Conservation Issues**

Biological/ consumptive uses

5B Predation from native species

5M Brood parasitism (Brown-headed Cowbird)

Point and non-point source pollution

4A Acid mine drainage other coal mining impacts

Terrestrial habitat degradation

3E Livestock grazing

3F Urban/residential development

3G Shoreline development. Riparian corridor development

3H Habitat loss outside of Kentucky. Deforestation on wintering grounds

3K Surface mining. Valley fills

3M Timber harvest

3R Habitat and/or Population Fragmentation. Forest fragmentation

3W Cervid over-abundance. Grazing by deer

**CLASS AVES**

**King Rail**

*Rallus elegans*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	E	G4G5	S1B	G4	S1

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data for 1980-2003 indicate a significant

**Comment** 9.9 % annual decline survey-wide, although there are statistical problems with this analysis and the Breeding Bird Survey is not well suited for monitoring this species (Sauer et al. 2004, NatureServe 2004). Population estimate due pending Version 2 of the Waterbird Plan (Kushlan et al. 2002).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** Transient and breeding birds use dense, emergent wetlands and marshy edges of

**Life History** lake and ponds dominated by cattails and sedges.

**Key** Habitat Condition in Kentucky is POOR (emergent wetlands) or UNKNOWN

**Habitat** (marshy edges of lakes and ponds).

Key Habitat Locations (and their conditions):

1. Long Point unit of Reelfoot Lake National Wildlife Refuge (unknown)

2. Clear Creek drainage (unknown)

**Guilds** Emergent and shrub-dominated wetlands.

**Statewide** [KingRail.pdf](#)

**Map**

## **CLASS AVES**

### **King Rail**

*Rallus elegans*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2G Water level fluctuations
- 2H Wetland loss/drainage/alteration
- 2N Eutrophication (eg. of wetlands)

#### Point and non-point source pollution

- 4A Acid mine drainage other coal mining impacts
- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,
- 4F Urban runoff

#### Siltation and increased turbidity

- 1B Agriculture
- 1D Urbanization/Development General Construction

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc).  
Conversion to, draining of wetlands
- 3F Urban/residential development. Also recreational development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3Q Invasive/exotic plants (including fescue). Potentially by phragmites

3T    Suppression of disturbance regimes. Of wetlands

**CLASS AVES**

**Lark Sparrow**

*Chondestes grammacus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	T	G5	S2S3B	G5	S2

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data indicate a significant annual

**Comment** population decline in North America of 2.9% during the period 1966-2003, and a decline of 1.6% for the period 1980-2003, although the data set has some deficiencies (Sauer et al. 2004). No significant increases have been recorded in any region or jurisdiction (NatureServe December 6, 2004). Partners in Flight North American Landbird Conservation Plan gives Global population estimate of 9,900,000 (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** North American Breeding Bird Survey routes do not sufficiently detect the

**Comment** species in Kentucky (Sauer et al. 2004). Breeding Bird Atlas coverage was also insufficient to detect most nesting Lark Sparrows and the species was recorded in only 5 priority blocks. Kentucky's placement along the eastern edge of the species' over nesting range probably explains its low density (Palmer-Ball 1996).

**Habitat /** This breeding bird is encountered in semi-open and open habitats with sparse

**Life History** ground cover. Although they have been found in natural cedar glades and prairie



openings, these sparrows are most often observed in altered habitats today. The species occurs most frequently in rural farmland, where it typically inhabits well-grazed pastures with patches of bare ground or rocks, as well as scattered trees. Suitable nesting habitat appears to exist in abundance in much of central and western Kentucky, indicating that the population is probably not limited by habitat availability (Palmer-Ball 1996).

**Key** Habitat condition throughout Kentucky range is FAIR.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide (mostly west of the Cumberland Plateau).

**Guilds** grassland/agricultural.

**Statewide** [LarkSparrow.pdf](#)

**Map**

## **CLASS AVES**

**Lark Sparrow**

*Chondestes grammacus*

### **Conservation Issues**

Biological/ consumptive uses

5M Brood parasitism (Brown-headed Cowbird)

Terrestrial habitat degradation

3B Mowing regimes. Mowing (removes overhead cover and promotes thick

3D Switch to cleaner agricultural practices

3H Habitat loss outside of Kentucky

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

3S Fire suppression/fire regime management. Fires too infrequent or absent to promote bare ground

**CLASS AVES**

**Least Bittern**

*Ixobrychus exilis*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	T	G5	S1S2B	G5	S1

**G-Trend** Unknown

**G-Trend** Population estimate and trend information due pending Version 2 of the

**Comment** Waterbird Plan (Kushlan et al. 2002).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** Breeding bird that uses dense, emergent marshes with patches of open water,

**Life History** but will also use lake and pond edges with cattails and sedges for stop over habitat.

**Key** Habitat condition ranges from POOR (emergent marshes) to FAIR (lake and

**Habitat** pond edges).

No key habitat to identify; the species will use appropriate habitat where available range wide.

**Guilds** Emergent and shrub-dominated wetlands, standing water.

**Statewide** [LeastBittern.pdf](#)

## Map

## **CLASS AVES**

### **Least Bittern**

*Ixobrychus exilis*

### **Conservation Issues**

#### Aquatic habitat degradation

2H Wetland loss/drainage/alteration . Loss of dense emergent shallow water wetlands

2N Eutrophication (eg. of wetlands)

#### Point and non-point source pollution

4A Acid mine drainage other coal mining impacts

4E Agricultural runoff – including fertilizers/animal waste, herbicides,

4F Urban runoff

#### Siltation and increased turbidity

1B Agriculture

1D Urbanization/Development General Construction

#### Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc).

Conversion to, draining of wetlands

3F Urban/residential development. Also recreational development

3G Shoreline development

3H Habitat loss outside of Kentucky

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

3T Suppression of disturbance regimes. Of wetlands

**CLASS AVES**

**Least Flycatcher**

*Empidonax minimus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	E	G5	S1B	G5	S1

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data show significant annual survey-

**Comment** wide declines of 1.1% from 1966-2003 and declines of 1.4% from 1980-2003 (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives Global population estimate of 14,000,000 (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Breeding Bird Atlas work recorded only probable records in 2 priority blocks

**Comment** (Palmer-Ball 1996).

**Habitat /** This is a breeding bird of open woodland and brushy areas, forest borders,

**Life History** thinned woodland, tall second growth; it will nest in poplar woodland, deciduous scrub, forest edge, parks, old orchards, roadside shade trees, and gardens, usually in crotch or on limb of tree (often deciduous) or shrub, often 3-6 m above ground (NatureServe 2004). In Kentucky, it uses various forest habitat types, requiring early successional phase.

**Key** Habitat condition is UNKNOWN for this species..

**Habitat**

Key Habitat Locations (and their condition):

1. Early successional forest of Cumberland Mountains (unknown), especially Black Mountain.

**Guilds** Cumberland highland forest, savanna/ shrub-scrub.

**Statewide** [LeastFlycatcher.pdf](#)

**Map**

## **Conservation Issues**

Terrestrial habitat degradation

3T Suppression of disturbance regimes

Unknown factors/variables

7A Unknown threats

**CLASS Aves**

**Lesser Scaup**

*Aythya affinis*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S4N	G5	S4

**G-Trend** Decreasing

**G-Trend** Populations of both scaup species have seen dramatic declines in recent years.

**Comment** Breeding numbers of scaup have declined 35% from 6.4 million in 1980 to 4.2 million in 2009 (U.S, Fish and Wildlife Service 2009). Reasons for these declines are still largely not understood.

**S-Trend** Decreasing

**S-Trend** Little data exists on wintering populations of scaup. Mid-winter waterfowl

**Comment unpublished** survey data indicates a 85% decline in the 10-year average (USFWS data)

**Habitat / Life** Scaup are generally open water birds being found in large reservoirs and Rivers statewide.

**History**

**Key** Habitat condition throughout Kentucky is GOOD for this species.

**Habitat**

No key habitat to identify: the species will use appropriate habitat statewide.

**Guilds** Large rivers in current, Large rivers in slackwater.



Statewide [LesserScaup.pdf](#)

Map

## Conservation Issues

Aquatic habitat degradation

2E Stream channelization/ditching

2H Wetland loss/drainage/alteration

Biological/ consumptive uses

5L Parasitism and disease

Terrestrial habitat degradation

3G Shoreline development

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

## CLASS AVES

Lesser Yellowlegs

*Tringa flavipes*

Federal Status	Heritage Status	GRank	SRank	GRank (Simplified)	SRank (Simplified)
N	N	G5	SZN	G5	S4

**G-Trend** Decreasing

**G-Trend** Species has been documented to be in decline (Brown et al. 2001).

**Comment**

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** Transient bird that uses shallow water wetlands, flooded agricultural fields, and

**Life History** shoreline, mudflat, and sandbar habitat of lakes and rivers.

**Key** Habitat condition ranges from POOR (shallow water wetlands) to FAIR

**Habitat** (flooded agricultural fields, shoreline habitats).

Key Habitat Locations (and their conditions):

1. Transient lakes in Warren (good) and Christian (unknown) counties
2. Shoreline of Kentucky and Barkley lakes (good). Extending summer pool to Labor Day (proposed by Tennessee Valley Authority) would leave the shoreline unexposed until after peak shorebird migration (Ritchison and Ranalli 2004).
3. Mudflat and sandbar habitat on the Tennessee, Ohio, Mississippi, and Cumberland Rivers

**Guilds** Emergent and shrub-dominated wetlands, grassland/agricultural, running water, standing water.

**Statewide** [LesserYellowlegs.pdf](#)

**Map**

# CLASS AVES

## Lesser Yellowlegs

*Tringa flavipes*

### Conservation Issues

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations. Loss/alteration of natural drawdown cycle
- 2H Wetland loss/drainage/alteration . Loss of wetlands
- 2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites). At feeding sites

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc).  
Converting wetlands to agriculture
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes. Of wetlands

**CLASS AVES**

**Little Blue Heron**

*Egretta caerulea*

Federal Status	Heritage Status	GRank	SRank	GRank (Simplified)	SRank (Simplified)
N	E	G5	S1B	G5	S1

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data indicate a significant population

**Comment** decline survey-wide from 1980-2003 of 3.0% (Sauer et al. 2004).

**S-Trend** Increasing

**S-Trend** Population seems to be increasing but is limited to one breeding site with a

**Comment** small sample size (Palmer-Ball, Kentucky State Nature Preserves Commission, pers. comm.). Heronry surveys in 2004 estimated a population of 12 or more breeding pairs (Palmer-Ball and Ciuzio 2004).

**Habitat /** This is a breeding bird that nests in shallow water wetlands with shrubby

**Life History** habitat.

**Key** Habitat conditions are POOR (shallow water wetlands) overall.

**Habitat**

Key Habitat Locations (and their conditions):

1. Island on the north end of Lake Barkley (good).

**Guilds** forested wetland, running water, standing water.

**Statewide** [LittleBlueHeron.pdf](#)

**Map**

## **CLASS AVES**

### **Little Blue Heron**

*Egretta caerulea*

### **Conservation Issues**

#### Aquatic habitat degradation

2F Riparian zone removal (Agriculture/development)

2H Wetland loss/drainage/alteration

2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

6D Human disturbance (spelunking, destruction/disturbance of nest sites). At feeding and breeding sites

#### Siltation and increased turbidity

1B Agriculture

1D Urbanization/Development General Construction

#### Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3F Urban/residential development

3G Shoreline development

3H Habitat loss outside of Kentucky

3M Timber harvest

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

3T Suppression of disturbance regimes. Of wetlands

**CLASS AVES**

**Loggerhead Shrike**

*Lanius ludovicianus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
PS	N	G4	S4B,S 4N	G4	S4

**G-Trend** Decreasing

**G-Trend** Breeding Bird Survey data for 1980-2003 indicate significant declines of 2.6%

**Comment** annually. Regionally, the declines were 3.6% annually for the eastern region, 2.4% annually for the central region, and 1.4% annually for the west (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives Global population estimate of 4,200,000 (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Decreasing

**S-Trend** The decline in shrikes has been documented by Breeding Bird Survey data in

**Comment** central and western Kentucky (Palmer-Ball 1996). Although sample size is quite low, trend analysis of these data shows a highly significant decrease of 7.0% per year for the period 1966-2003 and a significant decrease of 9.6% per year for the period 1980-2003. The average number of individuals per Breeding Bird Survey route for 1966-2003 was 0.84. Partners in Flight estimates a population of 15,000 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** The Loggerhead Shrike is a resident bird of open and semi-open habitats, being

**Life History** only rarely reported in areas of extensive forest. The species seems to favor areas with short or sparse ground cover, usually avoiding habitats dominated by tall, thick vegetation. In Kentucky shrikes are most frequently encountered in rural farmland, where they forage primarily in bare fields, pastures, mowed hayfields, yards, and roadsides. In addition, the species can be found in developed habitats, including airports, industrial parks, and rural roadway corridors and residential areas (Palmer-Ball 1996).

**Key** Habitat condition ranges from FAIR.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide (mostly west of the Cumberland Plateau).

**Guilds** grassland/agricultural.

**Statewide** [LoggerheadShrike.pdf](#)

**Map**

## **CLASS AVES**

### **Loggerhead Shrike**

*Lanius ludovicianus*

### **Conservation Issues**

#### Biological/ consumptive uses

- 5B Predation from native species
- 5K Lack of suitable habitat for spawning, nesting, or breeding. Nest site availability

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3B Mowing regimes
- 3D Switch to cleaner agricultural practices
- 3F Urban/residential development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain).  
Pesticides/Herbicides, mostly by reducing food availability
- 3Q Invasive/exotic plants (including fescue)
- 3R Habitat and/or Population Fragmentation
- 3T Suppression of disturbance regimes. Of openlands to forest



**CLASS AVES**

**Long-eared Owl**

*Asio otus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	E	G5	S1B,S 1S2N	G5	S1

**G-Trend** Unknown

**G-Trend** Trends are difficult to ascertain and population trends are unknown

**Comment** (NatureServe 2004).

**S-Trend** Unknown

**S-Trend** Species occurrence is not well documented and only one nesting record exists

**Comment** for the state (Palmer-Ball 2003).

**Habitat /** Long-eared owls are considered a resident of the native prairies of Kentucky. It

**Life History** is Known to roost in evergreen trees during the day (Palmer-Ball 2003).

**Key** Habitat condition is generally UNKNOWN for Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Peabody Wildlife Management Area for breeding habitat (unknown);

otherwise, can occur in appropriate habitat range wide..

**Guilds** savanna/ shrub-scrub.

**Statewide** [Long-earedOwl.pdf](#)

## **Map**

### **Conservation Issues**

#### Miscellaneous Mortality Factors

6D Human disturbance (spelunking, destruction/disturbance of nest sites)

#### Terrestrial habitat degradation

3H Habitat loss outside of Kentucky

#### Unknown factors/variables

7A Unknown threats

**CLASS AVES**

**Louisiana Waterthrush**

*Seiurus motacilla*

<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
N	N	G5	S5B	G5	S5

**G-Trend** Stable

**G-Trend** Overall population levels are believed to be stable in Canada and the U.S., with

**Comment** local declines due to habitat loss and degradation (McCracken 1991 in NatureServe December 6, 2004). North American Breeding Bird Survey shows a slight but nonsignificant survey-wide increase during the period 1966-2003 of 0.8% per year (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 260,000 in the U.S. (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Louisiana Waterthrushes are typically reported in small numbers on Kentucky

**Comment** Breeding Bird Survey routes. In part due to small sample sizes, trend analysis of these data does not reveal statistically significant results. (Palmer-Ball 1996).

The average number of individuals per Breeding Bird Survey route for 1966-2003 was 0.42 (Sauer et al. 2004). Partners in Flight estimates a population of 18,000 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** In eastern and central Kentucky, this breeding bird is usually encountered along

**Life History** hills and streams with steep to moderate gradients, but it is fairly widespread along slow-moving creeks and swampy areas with standing water in the western part of the state. The Louisiana Waterthrush may also occur in woodlands rather far from permanent water, especially along stream drainages that are dry for most of the year. Louisiana Waterthrushes seem to avoid larger streams, perhaps because of the magnitude of flooding that occurs regularly enough to preclude successful nesting. While the birds are sometimes encountered foraging along narrow forested riparian corridors through otherwise cleared land, it appears that they do not use streams for nesting unless there is a tract of forest along at least one side (Palmer-Ball 1996).

**Key** Habitat condition is FAIR throughout the state.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** forested wetland, running water, standing water.

## CLASS AVES

### Louisiana Waterthrush

*Seiurus motacilla*

Statewide [LouisianaWaterthrush.pdf](#)

Map

### Conservation Issues

Aquatic habitat degradation

- 2E Stream channelization/ditching
- 2F Riparian zone removal (Agriculture/development)
- 2M Valley fills

Point and non-point source pollution

- 4A Acid mine drainage other coal mining impacts

Terrestrial habitat degradation

- 3G Shoreline development. Riparian corridor removal/development
- 3H Habitat loss outside of Kentucky
- 3K Surface mining. Logging along streams for mining
- 3M Timber harvest. Logging for mining (especially along streams)
- 3R Habitat and/or Population Fragmentation. Forest fragmentation

**CLASS AVES**

**Mississippi Kite**

*Ictinia mississippiensis*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	S	G5	S2B	G5	S2

**G-Trend** Unknown

**G-Trend** North American Breeding Bird Survey data from 1980-2003 indicate a non-

**Comment** significant annual population decline of 0.7% throughout its range (Sauer et al. 2004). Parker and Ogden (1979) offer that there is no apparent reason why populations should not continue to increase in both the East and West. Suitable nesting habitat is available in both regions and nesting kites easily tolerate human disturbance. However, in areas where nesting habitat is very localized, disturbance may have drastic long-term impact in that entire region (NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 190,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Breeding is not well documented in the state and nesting records are limited to

**Comment** only a few records (Palmer-Ball 2003). The species proved to be very difficult to confirm as a nesting bird during the atlas survey, and there was only one report for confirmed breeding (Palmer-Ball 1996). Partners in Flight estimates a population of 160 individuals (see Rosenberg 2004 for assumptions), although

actual populations are most likely much lower.

**Habitat /** This breeding bird primarily occurs in floodplain areas where tracts of  
**Life History** bottomland forest are intermixed with or adjacent to farmland. Such habitat is  
in fair condition in that they are threatened by deforestation. These kites  
typically nest within tracts of fairly mature to mature forest, although they  
sometimes build along an isolated corridor of large trees (Palmer-Ball 1996).  
Probably nests at scattered localities throughout the Mississippi and lower  
Ohio River floodplains of the Jackson Purchase (Palmer-Ball 2003). Breeding  
has been documented at the Ballard Wildlife Management Area in Ballard  
County and at Reelfoot Lake National Wildlife Refuge in Fulton County  
(Palmer-Ball 2003, H. Chambers, pers. comm.).

**Key** Habitat condition is generally UNKNOWN for Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Bottomland hardwood forests along the Mississippi and lower Ohio floodplains in Fulton, Hickman, Carlisle, and Ballard Counties (unknown)
2. Reelfoot Lake National Wildlife Refuge (good)

## CLASS AVES

### Mississippi Kite

*Ictinia mississippiensis*

**Guilds** forested wetland.

**Statewide** [MississippiKite.pdf](#)

**Map**

### Conservation Issues

Terrestrial habitat degradation

3F Urban/residential development

3G Shoreline development

3H Habitat loss outside of Kentucky

3M Timber harvest. Timber harvesting, especially bottomland hardwoods and riparian habitats

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)



**CLASS AVES**

**Northern Bobwhite**

*Colinus virginianus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
PS	N	G5	S5	G5	S5

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data indicate that, from 1966-2003,

**Comment** populations underwent a significant rangewide decline of -3.0% per year (Sauer et al. 2004). Significant declines occurred in nearly every state within their geographic range. The rate of decline has increased through time (NatureServe 2004). The species has been nearly extirpated from Ontario, Canada (Page and Austen 1994 in NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives Global population estimate of 9,200,000 (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Decreasing

**S-Trend** Kentucky Department of Fish and Wildlife Resources mail carrier survey

**Comment** shows a declining trend over a greater than 40 year period of about 1.3% per year. Additionally, Breeding Bird Survey trend analysis reveals a significant decrease of 2.5% per year for the period 1966-2003 and a significant decrease of 2.8% per year for the period 1980-2003. The average number of individuals per Breeding Bird Survey route for the period 1966-2003 was 21.28 (Sauer et al. 2004). Partners in Flight estimates a population of 190,000 individuals (see

Rosenberg 2004 for assumptions).

**Habitat /** This is a resident species that uses a great variety of semi-open and open **Life History** habitats. Although the species is found in a few naturally occurring situations, such as patches of remnant prairie, today it is primarily a bird of altered habitats. Northern bobwhite are most frequent in rural farmland that has a good supply of fencerows, brushy borders, and other patches of dense cover. In contrast, numbers are much lower in intensively managed farmland, especially where fescue is the predominant grass. Substantial numbers also occur in a variety of other habitats, including reclaimed surface mines, abandoned homesites, and young pine plantations (Palmer-Ball 1996).

**Key** Habitat condition is generally POOR for Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Peabody Wildlife Management Area
2. West Kentucky Wildlife Management Area
3. Ft. Campbell Military Reservation
4. McLean, Webster, and Graves counties

## CLASS AVES

### Northern Bobwhite

*Colinus virginianus*

**Guilds** savanna/ shrub-scrub.

**Statewide** [NorthernBobwhite.pdf](#)

**Map**

### Conservation Issues

Biological/ consumptive uses

5B Predation from native species

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3B Mowing regimes

3C Lack of newly abandoned farmland

3D Switch to cleaner agricultural practices

3E Livestock grazing

3F Urban/residential development

3H Habitat loss outside of Kentucky

3M Timber harvest. Lack of timber harvest

3Q Invasive/exotic plants (including fescue)

3R Habitat and/or Population Fragmentation

3W Cervid over-abundance. Over-browsing by deer

**CLASS AVES**

**Northern Harrier**

*Circus cyaneus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	T	G5	S1S2B ,S4N	G5	S1

**G-Trend** Unknown

**G-Trend** The Breeding Bird Survey is not the best survey method for this generally

**Comment** sparse raptor, but where data are credible, trends are mixed (NatureServe 2004; Sauer et al. 2004). For the U.S., trend analysis shows nonsignificant declines of 0.6% from 1966-2003 (Sauer et al. 2004). For Canada, trends show a significant annual decline of -4.6% from 1967-2000 (Downes 2003). Partners in Flight North American Landbird Conservation Plan gives Global population estimate of 1,300,000 (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Breeding has been confirmed in only a few counties. During the atlas survey,

**Comment** birds were recorded in only 6 priority blocks (Palmer-Ball 1996).

**Habitat /** These ground-nesting resident birds inhabit reclaimed mines within the first few

**Life History** years after completion of reclamation. These areas are restored approximately to natural contour and reseeded to grasses and forbs. In most areas, trees are also planted during reclamation, and the harriers probably use the mines only for a limited number of years before woody growth begins to predominate. For

this reason their distribution is and may always be somewhat local and temporary, shifting to new areas as prime habitat becomes available (Palmer-Ball 1996). Such habitat, although it may provide good nesting habitat, nest success has been found to be relatively low (21.7%), such as on Peabody Wildlife Management Area (Vukovich 2000).

**Key** Habitat condition is generally FAIR for Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Reclaimed mine lands on Peabody Wildlife Management Area in Ohio and Muhlenburg Counties (fair).

**Guilds** Emergent and shrub-dominated wetlands, grassland/agricultural.

**Statewide** [NorthernHarrier.pdf](#)

**Map**

## **CLASS AVES**

### **Northern Harrier**

*Circus cyaneus*

### **Conservation Issues**

Aquatic habitat degradation

2H Wetland loss/drainage/alteration

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3B Mowing regimes. Mowing/haying regimes (too early and frequent)

3E Livestock grazing

3F Urban/residential development. Draining of wetlands and moist grasslands  
for development

3H Habitat loss outside of Kentucky

3O Reforestation. Reforestation through succession

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

3R Habitat and/or Population Fragmentation. Need large tracts of habitat to  
breed

3T Suppression of disturbance regimes

**CLASS AVES**

**Northern Pintail** *Anas acuta*

Federal Status	Heritage Status	GRank	SRank	GRank (Simplified)	SRank (Simplified)
N	N	G5	SAB,S	G5	S4
			ZN		

**G-Trend** Decreasing

**G-Trend** Wilkins and Otto (2004) show long-term average declines of -48%. North

**Comment** American Breeding Bird Survey data also indicate a significant population decrease of 2.8% survey-wide between 1966 and 2003 (Sauer et al. 2004).

Fronczak (2004) gives a North American breeding bird population estimate of 2,185,000.

**S-Trend** Decreasing

**S-Trend** Waterfowl harvest data show declines in the Mississippi Flyway (Fronczak

**Comment** 2004).

**Habitat /** This is a wintering bird that mainly uses shallow water habitat and flooded

**Life History** agricultural fields, but will also rest on larger lakes and rivers.

**Key** Habitat condition ranges from FAIR (shallow water habitat, flooded agricultural

**Habitat** fields) to GOOD (larger lakes and rivers).

No key habitat to identify; the species will use appropriate habitat where available statewide.

**Guilds** Emergent and shrub-dominated wetlands, forested wetland,  
grassland/agricultural, running water, standing water.

**Statewide** [NorthernPintail.pdf](#)

**Map**

## **Conservation Issues**

Aquatic habitat degradation

2H Wetland loss/drainage/alteration

Terrestrial habitat degradation

3H Habitat loss outside of Kentucky

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)



**CLASS AVES**

**Osprey**

*Pandion haliaetus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	T	G5	S2B	G5	S2

**G-Trend** Increasing

**G-Trend** North American Breeding Bird Survey data show significant increases survey-

**Comment** wide of 6.5% annually from 1966-2003 (Sauer et al. 2004). Population increases and range expansions have been documented for many areas in the U.S. These increases are believed to be due, at least in part, to reduced use of pesticides that apparently caused population declines in the 1960s and 1970s. Osprey populations now appear to be reoccupying their historical habitat and, in some areas, have expanded their range to include habitats around new reservoirs. Some other areas have experienced local declines where nesting habitat has been lost or fish populations have declined (Henny and Anthony 1989 in NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives Global population estimate of 460,000 (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Increasing

**S-Trend** Osprey surveys at Lake Barkley observed increases from 26 nests in 1999 to

**Comment** 47 nests in 2004 (Ray 2004). Only 6 confirmed breeding pairs are known outside of Lake Barkley (Palmer-Ball and McNeely 2003).

**Habitat /** This breeding species is found primarily along rivers, lakes, and reservoirs.

**Life History** Nests in dead and living trees, on utility poles, platforms on poles, etc., usually near or above water. Nests are often used in successive years (NatureServe 2004). Such habitats in Kentucky are available, as long as existing nesting sites are protected or added, such as replacing the use of navigation lights on Lake Barkley with manmade nesting platforms.

**Key** Habitat condition is generally GOOD for Kentucky.

**Habitat**

Key Habitat Locations (all in good condition):

1. Lake Barkley (Lyon and Trigg Counties)
2. Kentucky Lake (Calloway County)
3. riparian corridor along Green River (Muhlenberg and Ohio Counties)

**Guilds** forested wetland, running water, standing water.

**Statewide** [Osprey.pdf](#)

**Map**

## **CLASS AVES**

**Osprey**

*Pandion haliaetus*

### **Conservation Issues**

Aquatic habitat degradation

2F Riparian zone removal (Agriculture/development)

2H Wetland loss/drainage/alteration

Miscellaneous Mortality Factors

6C Powerlines

6D Human disturbance (spelunking, destruction/disturbance of nest sites). Of nest sites

6G Stochastic events (droughts, unusual weather, pine beetle damage, flooding etc.). Flooding at nest platforms

Terrestrial habitat degradation

3F Urban/residential development

3G Shoreline development

3H Habitat loss outside of Kentucky

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

**CLASS AVES**

**Peregrine Falcon**

*Falco peregrinus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
PS:LE	E	G4	S1B	G4	S1

**G-Trend** Increasing

**G-Trend** This species is widespread, with increasing populations in many areas. Since

**Comment** the early 1970s, captive breeding and reintroduction programs have had some success in North America, and reproductive failure due to pesticide contamination has been reduced so that it is no longer a serious threat in most areas. Populations in North America have recovered in some areas and are increasing in most other areas. Populations are increasing in northern Eurasia. Throughout eastern North America, the release of thousands of individuals reared from a variety of captive wild stocks has obscured the former boundaries of the subspecies, *F. p. anatum*. The subspecies had been extirpated in eastern U.S. and southeastern Canada and greatly reduced in numbers over many other portions of its range; numbers are currently increasing and recovery objectives have been met in most areas (NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 340,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Stable

**S-Trend** Since reintroduction efforts began in 1993 when no peregrines nested in the

**Comment** state, the species now nests at 5 locations in the state. Additional territorial birds are also being sighted annually.

**Habitat /** The historic habitat of this resident bird included cliffs along the Cumberland

**Life History** Mountains and Cumberland Plateau, bluffs along the Kentucky and Ohio Rivers, and hollow trees in the cypress swamps of far western Kentucky (Palmer-Ball, 1996; Mengel 1965). Current nesting habitat includes bridges and smokestacks at powerplants along the Ohio River, although the number of potential powerplant and bridge territories is limited. Nonbreeding birds are also known to utilize buildings in cities and cliffs at the Red River Gorge (Vorisek and Carter 2004).

**Key** Habitat condition ranges from FAIR (limited number of bridge and powerplant

**Habitat** sites) to UNKNOWN (clifflines) in Kentucky.

Key Habitat Locations (all in fair condition because juvenile mortality is high):

1. Russell/Ironton Bridge (Greenup County)
2. Kentucky Utilities Ghent Station (Carroll County)
3. Big 4 bridge in Louisville (Jefferson County)

## CLASS AVES

### Peregrine Falcon

*Falco peregrinus*

4. Route 421 Bridge in Milton (Trimble County)
5. smokestack at Louisville Gas and Electric Station (Trimble County)
6. smokestack at Kentucky Utilities Ghent Station (Carroll County).

Additional key habitats include the Cynergy Eastbend Power Plant (Boone County), cliff habitats at the Red River Gorge Geologic Area (Powell and Menifee Counties), and downtown Lexington (Fayette County). Conditions of these sites are unknown since it is unclear to what extent the habitat is being used (Vorisek and Carter 2004; Dzialak et al. 2005).

**Guilds** caves, rock shelters, and clifflines, urban/suburban.

**Statewide** [PeregrineFalcon.pdf](#)

### Map

## Conservation Issues

Biological/ consumptive uses

- 5B Predation from native species. Great-horned Owls
- 5K Lack of suitable habitat for spawning, nesting, or breeding. Nest sites

Miscellaneous Mortality Factors

- 6A Traffic/road kills
- 6B Man-made structures

6C Powerlines

6D Human disturbance (spelunking, destruction/disturbance of nest sites). At nest sites

6E Illegal killing

#### Terrestrial habitat degradation

3F Urban/residential development

3H Habitat loss outside of Kentucky

3J Bridge/Highway construction/maintenance

3M Timber harvest. At clifflines

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

3U Loss, lack and degradation of special and unique microhabitats. Clifflines

**CLASS AVES**

**Pied-billed Grebe**

*Podilymbus podiceps*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	E	G5	S1B,S 4N	G5	S1

- G-Trend** Unknown
- G-Trend** Population estimate and trends due pending Version 2 of the Waterbird Plan
- Comment** (Kushlan et al. 2002).
- S-Trend** Unknown
- S-Trend** Atlas fieldwork yielded one priority block record of the Pied-billed Grebe, and
- Comment** two incidental observations were reported. Confirmed breeding was reported from only one location (Palmer-Ball 1996).
- Habitat / Life History** Resident bird that uses shallow water wetlands with submerged vegetation (unknown), emergent wetland (poor), reservoirs (good), and ephemeral ponds (unknown).
- Key Habitat** Habitat conditions are POOR (emergent wetland), GOOD (reservoirs), and unknown (shallow water wetlands with submerged vegetation).
- No key habitat to identify; the species will use appropriate habitat where available statewide.
- Guilds** Emergent and shrub-dominated wetlands, running water, standing water.



**Statewide** [Pied-billedGrebe.pdf](#)

**Map**

## **CLASS AVES**

### **Pied-billed Grebe**

*Podilymbus podiceps*

### **Conservation Issues**

#### Aquatic habitat degradation

2H Wetland loss/drainage/alteration

2N Eutrophication (eg. of wetlands)

#### Biological/ consumptive uses

5N Hunting. Misidentification for waterfowl

#### Point and non-point source pollution

4E Agricultural runoff – including fertilizers/animal waste, herbicides,

4F Urban runoff

#### Siltation and increased turbidity

1B Agriculture

1D Urbanization/Development General Construction

#### Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc).

Conversion to by draining wetlands

3F Urban/residential development

3G Shoreline development

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

3T Suppression of disturbance regimes

**CLASS AVES**

**Piping Plover**

*Charadrius melodus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
LE,LT	N	G3	SZN	G3	S2

**G-Trend** Increasing

**G-Trend** Generally increasing, but trend varies with region. International censuses in

**Comment** 1991 and 1996 revealed a rangewide increase of 7.7 per cent over that five-year period, from 5488 individuals to 5913 individuals (NatureServe 2004).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a transient bird that uses shallow water wetlands (poor), flooded

**Life History** agricultural fields (fair), and shoreline, mudflat, and sandbar habitat of lakes and rivers (fair).

**Key** Habitat conditions range from POOR (shallow water wetlands) to FAIR

**Habitat** (flooded agricultural fields, shoreline habitats).

Key Habitat Locations (and their conditions):

1. Transient lakes in Warren (good) and Christian (unknown) counties.
2. Shoreline of Kentucky and Barkley lakes (good). Extending summer pool to Labor Day (proposed by Tennessee Valley Authority) would leave the

shoreline unexposed until after peak shorebird migration (Ritchison and Ranalli 2004).

3. Mudflat and sandbar habitat on the Tennessee, Ohio, Mississippi, and Cumberland Rivers.

**Guilds** grassland/agricultural, running water, standing water.

**Statewide** [PipingPlover.pdf](#)

**Map**

## **CLASS AVES**

### **Piping Plover**

*Charadrius melodus*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations. Alteration of natural drawdown cycle and water management
- 2H Wetland loss/drainage/alteration
- 2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites). At feeding sites

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3F Urban/residential development
- 3G Shoreline development. And erosion
- 3H Habitat loss outside of Kentucky. Loss of wetlands
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes. Of wetlands

**CLASS AVES**

**Prairie Warbler**

*Dendroica discolor*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S5B	G5	S5

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data indicate a significant survey-wide

**Comment** annual decline of 2.0% from 1966-2003 (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 1,400,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Decreasing

**S-Trend** North American Breeding Bird Survey data show a significant decline of 2.8%

**Comment** from 1966-2003 and the average number of individuals recorded per route was 3.93 (Sauer et al. 2004). Partners in Flight estimates a population of 140,000 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** The Prairie Warbler is a breeding species that inhabits a variety of semi-open,

**Life History** often successional habitats, including brushy forest edge, but typically avoids mature forest. Although the species can be found in deciduous vegetation, it occurs most frequently in mixed community types where pines or red cedars are present or dominant. Small numbers are sometimes found in natural situations, such the margins of cedar glades, but these warblers occur primarily

in artificially created habitats, including reverting agricultural fields and pastures, regenerating forest clear-cuts, reclaimed strip mines, and young pine plantations (Palmer-Ball 1996). This species requires an early successional component to all forest habitat types.

**Key** Habitat condition is generally UNKNOWN for Kentucky, but is likely in FAIR

**Habitat** condition overall.

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** savanna/ shrub-scrub.

**Statewide** [PrairieWarbler.pdf](#)

**Map**

## **CLASS AVES**

### **Prairie Warbler**

*Dendroica discolor*

### **Conservation Issues**

Biological/ consumptive uses

5B Predation from native species

5M Brood parasitism (Brown-headed Cowbird)

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3B Mowing regimes

3C Lack of newly abandoned farmland

3D Switch to cleaner agricultural practices

3F Urban/residential development

3H Habitat loss outside of Kentucky

3O Reforestation



**CLASS AVES**

**Prothonotary Warbler**

*Protonotaria citrea*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S5B	G5	S5

**G-Trend** Stable

**G-Trend** with Large breeding range in much of eastern U.S. and adjacent southern Ontario

**Comment** numerous occurrences. Species has fairly stable population but with some indications of a small decline (NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 1,800,000 in the U.S. (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Prothonotary Warblers are regularly recorded on only about one-third of

**Comment** Kentucky’s Breeding Bird Survey routes. In part due to small sample sizes, trend analysis of these data does not reveal statistically significant results (Palmer-Ball 1996). Partners in Flight estimates a population of 28,800 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** This breeding species is seldom encountered far from water. Prothonotary

**Life History** Warblers frequent a great variety of natural and artificial habitats including riparian corridors along rivers and streams, floodplain sloughs, swamps, and the margins of reservoirs. In addition, the species uses seasonally flooded

bottomland forest that may be dry throughout the summer, as well as residential areas near bodies of water (Palmer-Ball 1996). The species requires cavities for nesting.

**Key** Habitat condition is generally UNKNOWN for Kentucky, but likely POOR

**Habitat** overall.

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** forested wetland.

**Statewide** [Prothonotary Warbler.pdf](#)

**Map**

## **CLASS AVES**

### **Prothonotary Warbler**

*Protonotaria citrea*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2H Wetland loss/drainage/alteration . Potential to impact aquatic insect community

#### Biological/ consumptive uses

- 5B Predation from native species
- 5D Competition from introduced/invasive or native species. Competition for nest sites
- 5K Lack of suitable habitat for spawning, nesting, or breeding. Nest sites
- 5M Brood parasitism (Brown-headed Cowbird)

#### Miscellaneous Mortality Factors

- 6G Stochastic events (droughts, unusual weather, pine beetle damage, flooding etc.). Flooding

#### Point and non-point source pollution

- 4A Acid mine drainage other coal mining impacts . Not investigated, but potential to impact species if aquatic insect community is destroyed

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc).  
Conversion to by draining of wetlands
- 3F Urban/residential development

- 3G Shoreline development. Associated mostly with bottomland forests or along rivers, streams, and reservoirs
- 3H Habitat loss outside of Kentucky
- 3M Timber harvest
- 3N Removal of dead trees. Removal of dead tree component and older trees along streams (both most likely to develop nesting cavities)

**CLASS AVES**

**Red-breasted Nuthatch**

*Sitta canadensis*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	E	G5	S1B	G5	S1

**G-Trend** Increasing

**G-Trend** North American Breeding Bird Survey data indicate a significant population

**Comment** increase in North America between 1966 and 2003 of 1.6% annually (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 18,000,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Only one small breeding population has been confirmed in the state (Palmer-  
**Comment** Ball 2003).

**Habitat /** Species is found in coniferous and mixed forest where it nests in cavities. In

**Life History** migration and winter, this species is also found in deciduous forest, open woodland, parks, scrub, and riparian woodland (American Ornithologists' Union 1983).

**Key** Habitat condition is generally UNKNOWN for Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Conifers of Red River Gorge in Wolfe County (unknown).

**Guilds** upland forest.

**Statewide** [Red-breastedNuthatch.pdf](#)

**Map**

## **Conservation Issues**

Terrestrial habitat degradation

3M Timber harvest

Unknown factors/variables

7A Unknown threats. Occurrence is infrequent

**CLASS AVES**

**Red-cockaded Woodpecker**

*Picoides borealis*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
LE	X	G3	SX	G3	N

**G-Trend** Unknown

**G-Trend** Population has declined by about 97% over the past 100 years. However,

**Comment** recent management innovations have alleviated threats and resulted in population increases in some areas, although rangewide trends are not precisely known at present (NatureServe 2004). Currently, there are an estimated 14,068 red-cockaded woodpeckers living in 5,627 known active clusters across eleven states (U.S. Fish and Wildlife Service 2003).

**S-Trend** Unknown

**S-Trend** Currently extirpated from Kentucky. Will examine efficacy of reintroduction of

**Comment** species.

**Habitat /** This once resident species was endemic to open, mature and old growth pine

**Life History** ecosystems in the southeastern U.S. (U.S. Fish and Wildlife Service 2003). In Kentucky, these cavity nesters once utilized shortleaf, pitch, and Virginia pines usually 80" years old in the Cliff Section of the Cumberland Plateau (Kentucky Department of Fish and Wildlife Resources 2001). Such mature pine or mixed pine-hardwood forest habitat is currently in poor condition due to damage by the southern pine bark beetle in 2000. After the damage, all existing birds at the

time were relocated in 2001 (Palmer-Ball 2003).

**Key** Habitat condition is generally POOR for Kentucky. No adequate habitat is

**Habitat** currently present.

**Guilds** upland forest.

**Statewide** [Red-cockadedWoodpecker.pdf](#)

**Map**



## **CLASS AVES**

### **Red-cockaded Woodpecker**

*Picoides borealis*

### **Conservation Issues**

#### Biological/ consumptive uses

- 5B Predation from native species
- 5D Competition from introduced/invasive or native species
- 5F Low population densities
- 5H Isolated populations (low gene flow)
- 5K Lack of suitable habitat for spawning, nesting, or breeding

#### Miscellaneous Mortality Factors

- 6G Stochastic events (droughts, unusual weather, pine beetle damage, flooding etc.). Southern pine beetle infestation.

#### Terrestrial habitat degradation

- 3H Habitat loss outside of Kentucky
- 3M Timber harvest. Lack of stand management.
- 3R Habitat and/or Population Fragmentation. Habitat and population fragmentation.

**CLASS AVES**

**Red-headed Woodpecker**

*Melanerpes erythrocephalus*

<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
N	N	G5	S4B,S	G5	S4
			4N		

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data show significant annual declines in  
**Comment** both the U.S and Canada of 4.4% and 4.8%, respectively (Sauer et al. 2004).

Local declines have also been reported, especially in the southeastern U.S (NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 2,500,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Red-headed Woodpeckers are scarce or absent on most Kentucky Breeding Bird  
**Comment** Survey routes. Although the sample size is small, trend analysis of these data indicates a nonignificant increase of 1.7% per year for the period 1966-2003 and a nonsignificant decrease of 1.8% per year for the period 1980-2003 (Sauer et al. 2004). Partners in Flight estimates a population of 50,000 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** These resident cavity nesters are found in a great variety of habitats, but they

**Life History** occur most frequently in semi-open to areas with some large trees. The species

is most conspicuous in western Kentucky, where it inhabits bottomland forests, swamps, and the margins of floodplain sloughs. Elsewhere, this woodpecker most frequently inhabits rural farmland with scattered trees or small woodlots, but it is also regularly found in parkland, riparian corridors, and the margins of reservoirs. The species generally avoids mature, closed-canopy forest during the breeding season, probably because of its active, flycatching habits. The exception to this trend is mature bottomland forest, where the midstory is typically open. In eastern Kentucky, Red-headed Woodpeckers seem to be restricted to altered habitats, including roadway and utility corridors, forest clear-cuts, golf-courses, and the margins of reclaimed strip mines and reservoirs (Palmer-Ball 1996).

**Key** Habitat condition is generally FAIR to POOR for Kentucky.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** forested wetland, savanna/ shrub-scrub.

## CLASS AVES

### Red-headed Woodpecker

*Melanerpes erythrocephalus*

Statewide [Red-headedWoodpecker.pdf](#)

### Map

### Conservation Issues

Aquatic habitat degradation

2F Riparian zone removal (Agriculture/development)

Biological/ consumptive uses

5D Competition from introduced/invasive or native species. Competition for nest sites (with Starlings)

5K Lack of suitable habitat for spawning, nesting, or breeding. Nest sites

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3D Switch to cleaner agricultural practices

3F Urban/residential development

3G Shoreline development

3H Habitat loss outside of Kentucky

3M Timber harvest. Of bottomlands

3N Removal of dead trees

3S Fire suppression/fire regime management. Fire suppression

**CLASS AVES**

**Rose-breasted Grosbeak**

*Pheucticus ludovicianus*

<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
N	S	G5	S3S4B	G5	S3

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data indicate a significant population

**Comment** decline survey-wide of 2.1 % annually from 1980-2003 (Sauer et al. 2004).

Partners in Flight North American Landbird Conservation Plan gives population estimate of 4,600,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** The species is not adequately picked up on Kentucky Breeding Bird Survey

**Comment** routes and breeding populations are limited to a few locations in the state.

**Habitat /** This is a breeding species typically found in deciduous forest and forest edge,

**Life History** where they forage mostly at upper and midstory levels. At higher elevations of Black Mountain, the species is numerous in fairly mature, relatively undisturbed forest as well as forest edge and regenerating, younger forest disturbed by selective logging, resource extraction, or fire. Numbers there probably have fluctuated somewhat, as land use changes have occurred on the mountain. At present, the species is probably about as numerous as ever, given the diversity of forest habitats present near the summit (Palmer-Ball 1996).

**Key** Habitat condition is generally UNKNOWN for Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Deciduous forests above 3,000 feet on Black Mountain (unknown)
2. Cumberland Gap National Historic Park (unknown)
3. Daniel Boone National Forest in Rowan County (unknown)

**Guilds** Cumberland highland forest, upland forest.

**Statewide** [Rose-breastedGrosbeak.pdf](#)

**Map**

## **CLASS AVES**

### **Rose-breasted Grosbeak**

*Pheucticus ludovicianus*

### **Conservation Issues**

#### Terrestrial habitat degradation

- 3H Habitat loss outside of Kentucky
- 3K Surface mining
- 3M Timber harvest
- 3S Fire suppression/fire regime management

#### Unknown factors/variables

- 7A Unknown threats

**CLASS Aves**

**Ruffed Grouse**

*Bonasa umbellus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S4	G5	S4

**G-Trend** Stable

**G-Trend** “The ruffed grouse is a popular gamebird distributed from Alaska across central

**Comment** and southern Canada and the northern United States to the Atlantic Coast, south

into the central Rocky Mountains and Appalachian Mountains. Its distribution coincides closely with that of aspen, except in the Appalachians. Throughout most of the range of the ruffed grouse, aspen is considered a key component of ruffed grouse diet and cover. Limited research conducted in the Appalachian region suggested ruffed grouse ecology and thus potential management differ greatly between the core of the species range (i.e., the Great Lakes and southern Canada region) and the Appalachian Mountains due at least in part to the

absence

of aspen. Breeding bird survey data from the U.S. Fish and Wildlife Service show a significant decline in ruffed grouse indices over the last 35 years in both the Ridge and Valley and Alleghany Plateau regions of the Appalachians. These declines coincide with those of other early-successional bird species, and may be in part a result of changes in forest age over the last 35 years.” Devers et a. 2008



<b>S-Trend</b>	Decreasing
<b>S-Trend</b>	Grouse populations in the Appalachian region have been declining for several
<b>Comment</b>	decades. Habitat loss is a major cause in these declines, largely due to limited timber harvests and long timber rotations resulting in vast acreages of mature timber.
	The Appalachian Cooperative Grouse Research Project (ACGRP) was a multi-state cooperative effort initiated in 1996 to investigate the apparent decline of ruffed grouse and improve management throughout the central and southern Appalachian region (i.e., parts of Ohio, Pennsylvania, Rhode Island, Kentucky, West Virginia, Virginia, and North Carolina, USA) (Devers et al. 2008).
<b>Habitat /</b>	Grouse populations in the Appalachian region have been declining for several
<b>Life</b>	decades. Habitat loss is a major cause in these declines, largely due to limited
<b>History</b>	timber harvests and long timber rotations resulting in vast acreages of mature timber (Whitaker 2003).
	The Appalachian Cooperative Grouse Research Project (ACGRP) was a multi-state cooperative effort initiated in 1996 to investigate the apparent decline of ruffed grouse and improve management throughout the central and southern Appalachian region (i.e., parts of Ohio, Pennsylvania, Rhode Island, Kentucky, West Virginia, Virginia, and North Carolina, USA) (Devers et al. 2007).
<b>Key</b>	Habitat condition is generally POOR for Kentucky.
<b>Habitat</b>	
<b>Guilds</b>	Cumberland highland forest, savanna/ shrub-scrub, upland forest.

**Statewide** [Ruffed Grouse.pdf](#)

**Map**

## **Conservation Issues**

Biological/ consumptive uses

5B Predation from native species

Terrestrial habitat degradation

3C Lack of newly abandoned farmland

3M Timber harvest. Lack of timber harvest

3O Reforestation. Lack of early-successional forest

3R Habitat and/or Population Fragmentation

3S Fire suppression/fire regime management. Limited use of controlled burning  
as a management tool

3T Suppression of disturbance regimes. Limited timber harvests = even-aged  
forests

3V Long-term loss of hard mast trees (American Chestnut, poor oak

**CLASS AVES**

**Rusty Blackbird**

*Euphagus carolinus*

<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
N	N	G4	S3S4	G4	S3
			N		

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data show a statistically significant

**Comment** survey-wide decline of 8.7% per year from 1980-2003 (Sauer et al. 2004). A significant, range-wide decline of approximately 90% has occurred over the past three decades as indicated by data from the Breeding Bird Survey, Christmas Bird Counts, and Quebec Checklist Program (NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 2,000,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Decreasing

**S-Trend** Species has somewhat declined over the past 20 years (Palmer-Ball 2003).

**Comment**

**Habitat /** This is a winter resident that is usually encountered in swampy woods and wet

**Life History** meadows with pools of standing water, but also occurs along stream and pond

margins, feedlots and in grain stubble fields (Palmer-Ball 2003).

**Key** Habitat condition is generally UNKNOWN for Kentucky.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** forested wetland.

**Statewide** [RustyBlackbird.pdf](#)

**Map**

## **CLASS AVES**

### **Rusty Blackbird**

*Euphagus carolinus*

### **Conservation Issues**

#### Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc).

Conversion to by draining of forested wetlands

3F Urban/residential development

3G Shoreline development

3H Habitat loss outside of Kentucky

3M Timber harvest. Of forested wetlands

#### Unknown factors/variables

7A Unknown threats

**CLASS AVES**

**Sanderling** *Calidris alba*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	SZN	G5	S3

**G-Trend** Decreasing

**G-Trend** Species has been documented to be in decline (Brown et al. 2001).

**Comment**

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat / Life History** Transient bird that uses shallow water wetlands, flooded agricultural fields, and shoreline, mudflat, and sandbar habitat of lakes and rivers.

**Key Habitat** Habitat condition ranges from POOR (shallow water wetlands) to FAIR (flooded agricultural fields, shoreline habitats).

Key Habitat Locations (and their conditions):

1. Transient lakes in Warren (good) and Christian (unknown) counties.
2. Shoreline of Kentucky and Barkely lakes (good). Extending summer pool to Labor Day (proposed by Tennessee Valley Authority) would leave the shoreline unexposed until after peak shorebird migration (Ritchison and Ranalli

2004).

3. Mudflat and sandbar habitat on the Tennessee, Ohio, Mississippi, and Cumberland Rivers.

**Guilds** grassland/agricultural, running water, standing water.

**Statewide** [Sanderling.pdf](#)

**Map**

## **CLASS AVES**

### **Sanderling**

*Calidris alba*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations. Alteration of natural drawdown cycle
- 2H Wetland loss/drainage/alteration
- 2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites)

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky. Loss of wetlands
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes



**CLASS Aves**

**Sandhill Crane**

*Grus canadensis*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
PS	N	G5	SZN	G5	N

**G-Trend** Increasing

**G-Trend** The eastern population of sandhill cranes, which migrates through and winters in Kentucky, has increased significantly since USFWS Fall surveys began in 1979. Survey numbers increased from 14,385 in 1979 to 59,876 in 2009 (USFWS unpublished data).

**S-Trend** Increasing

**S-Trend** Wintering/transient numbers are increasing. Winter counts reached their highest levels in Feb 2010 with almost 19,000 birds in two groups in the state (KDFWR unpublished data)

**Habitat / night** Wintering/migrating sandhill cranes roost in shallow water (<20cm deep) at night

**Life feeding** and feed in waste grain fields during the day. Corn stubble is the preferred

**History** site (Tacha et al. 1994)

**Key** Habitat condition throughout Kentucky is FAIR for this species.

**Habitat**

No key habitat to identify: the species will use appropriate habitat in the central portion of the state..

**Guilds** Emergent and shrub-dominated wetlands, grassland/agricultural.

**Statewide** [SandhillCrane.pdf](#)

**Map**

## Conservation Issues

Aquatic habitat degradation

2F Riparian zone removal (Agriculture/development)

2H Wetland loss/drainage/alteration

Miscellaneous Mortality Factors

6C Powerlines

6D Human disturbance (spelunking, destruction/disturbance of nest sites)

Siltation and increased turbidity

1B Agriculture. impacts on shallow roost ponds

Terrestrial habitat degradation

3D Switch to cleaner agricultural practices

## CLASS AVES

**Savannah Sparrow**

*Passerculus sandwichensis*

<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
N	S	G5	S2S3B ,S2S3	G5	S2

<b>G-Trend</b>	Unknown
<b>G-Trend</b>	North American Breeding Bird Survey data analysis shows a significant
<b>Comment</b>	decrease in the eastern and western portions but an increase in the central portion. Survey-wide analysis gives an annual decrease of 0.8% from 1980-2003 (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives Global population estimate of 82,000,000 (see Rich et al. 2004 for accuracy and precision ratings).
<b>S-Trend</b>	Increasing
<b>S-Trend</b>	Atlas work resulted in records in only 10 priority blocks. Results suggest a
<b>Comment</b>	regularly occurring, and probably increasing, nesting population in the northern Blue Grass (Palmer-Ball 1996).
<b>Habitat /</b>	This species is found most frequently during the breeding season in hayfields,
<b>Life History</b>	pastures, and other grassy habitats where the vegetation is not especially tall or thick (Palmer-Ball 1996). In winter, the species is found in extensive weedy and grain stubble fields with some dense ground cover (Palmer-Ball 2003).
<b>Key</b>	Habitat condition is generally FAIR for Kentucky.
<b>Habitat</b>	
	Key Habitat Locations (and their condition):
	1. During breeding: grasslands in the northeastern and north-central counties including Bourbon, Fayette, Lewis, Boyle, Bourbon, Boone, Jefferson, Oldham, and Woodford (fair condition)

No key habitat to identify during the winter since bird will use appropriate habitat state-wide.

**Guilds** grassland/agricultural.

**Statewide** [SavannahSparrow.pdf](#)

**Map**

## **CLASS AVES**

### **Savannah Sparrow**

*Passerculus sandwichensis*

### **Conservation Issues**

Biological/ consumptive uses

5M Brood parasitism (Brown-headed Cowbird)

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3B Mowing regimes

3D Switch to cleaner agricultural practices

3E Livestock grazing

3F Urban/residential development

3O Reforestation

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

3S Fire suppression/fire regime management

3T Suppression of disturbance regimes

**CLASS AVES**

**Sedge Wren**

*Cistothorus platensis*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	S	G5	S3B	G5	S3

**G-Trend** Increasing

**G-Trend Comment** North American Breeding Bird Survey data analysis gives a significant survey-wide annual increase of 2.1% for 1966-2003 and a nonsignificant increase of 1.2% for 1980-2003 (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 6,500,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend Comment** The species does not show up adequately on Kentucky Breeding Bird Survey routes. The atlas survey yielded only four reports of Sedge Wrens in priority blocks, although six incidental observations were reported (Palmer-Ball 1996). Partners in Flight estimates a population of 850 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** This is a breeding species found in wet or boggy grasslands and savannas, sedge

**Life History** marshes, moist meadows with scattered low bushes, upland margins of ponds and marshes, and locally in dry cultivated grainfields (American Ornithologists' Union 1983). In Kentucky, where such habitats are virtually absent, the species inhabits hayfields, overgrown pastures, and fallow fields. Sedge Wrens

seem to prefer moist situations, but they typically avoid marshes. Wherever these wrens occur, they choose only areas with an abundance of thick, herbaceous cover (Palmer-Ball 1996).

**Key** Habitat condition is generally FAIR for Kentucky.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** grassland/agricultural.

**Statewide** [SedgeWren.pdf](#)

**Map**

## **CLASS AVES**

**Sedge Wren**

*Cistothorus platensis*

### **Conservation Issues**

Miscellaneous Mortality Factors

6B Man-made structures. Communication towers

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc).

Conversion of wet meadows and herbaceous wetlands

3B Mowing regimes

3C Lack of newly abandoned farmland

3D Switch to cleaner agricultural practices

3E Livestock grazing

3F Urban/residential development

3T Suppression of disturbance regimes. To woody cover



**CLASS AVES**

**Semipalmated Sandpiper**

*Calidris pusilla*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	SZN	G5	S4

**G-Trend** Decreasing

**G-Trend** Species has been documented to be in decline (Brown et al. 2001).

**Comment**

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat / Life History** This is a transient bird that uses shallow water wetlands, flooded agricultural fields, and shoreline, mudflat, and sandbar habitat of lakes and rivers.

**Key Habitat** Habitat condition ranges from POOR (shallow water wetlands) to FAIR (flooded agricultural fields, shoreline habitats).

Key Habitat Locations (and their conditions):

1. Transient lakes in Warren (good) and Christian (unknown) counties.
2. Shoreline of Kentucky and Barkely lakes (good). Extending summer pool to Labor Day (proposed by Tennessee Valley Authority) would leave the shoreline unexposed until after peak shorebird migration (Ritchison and Ranalli

2004).

3. Mudflat and sandbar habitat on the Tennessee, Ohio, Mississippi, and Cumberland Rivers.

**Guilds** grassland/agricultural, running water, standing water.

**Statewide** [SemipalmatedSandpiper.pdf](#)

**Map**

# CLASS AVES

## Semipalmated Sandpiper

*Calidris pusilla*

### Conservation Issues

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations. Alteration of natural drawdown cycle
- 2H Wetland loss/drainage/alteration
- 2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites). At feeding sites

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc).  
Conversion of wetlands
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes. Of wetlands

**CLASS AVES**

**Sharp-shinned Hawk**

*Accipiter striatus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
PS	S	G5	S3B,S 4N	G5	S3

**G-Trend** Unknown

**G-Trend** Current trends are difficult to discern from migration data and no consistent trends are known. North American Breeding Bird Survey data are also of limited use because this species is only rarely detected (NatureServe 2004).

**Comment** Partners in Flight North American Landbird Conservation Plan gives Global population estimate of 1,100,000 (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** The atlas survey yielded 39 records of Sharp-shinned Hawks in priority blocks, and eight incidental observations were reported (Palmer-Ball 1996).

**Habitat /** This is a resident bird encountered in a variety of semi-open and forested

**Life History** habitats. They are most frequently found in heavily forested areas, but small numbers also occur in semi-open conditions where forest has been fragmented (Palmer-Ball 1996).

**Key** Habitat condition is generally FAIR for Kentucky.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** upland forest.

**Statewide** [Sharp-shinnedHawk.pdf](#)

**Map**

## **Conservation Issues**

Terrestrial habitat degradation

3F Urban/residential development

3M Timber harvest

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

**CLASS AVES**

**Short-billed Dowitcher**

*Limnodromus griseus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	SZN	G5	S3

**G-Trend** Decreasing

**G-Trend** Species has been documented to be in decline (Brown et al. 2001).

**Comment**

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a transient bird that uses shallow water wetlands, flooded agricultural

**Life History** fields, and shoreline, mudflat, and sandbar habitat of lakes and rivers.

**Key** Habitat condition ranges from POOR (shallow water wetlands) to FAIR

**Habitat** (flooded agricultural fields, shoreline habitats).

Key Habitat Locations (and their conditions):

1. Transient lakes in Warren (good) and Christian (unknown) counties.
2. Shoreline of Kentucky and Barkely lakes (good). Extending summer pool to Labor Day (proposed by Tennessee Valley Authority) would leave the shoreline unexposed until after peak shorebird migration (Ritchison and Ranalli

2004).

3. Mudflat and sandbar habitat on the Tennessee, Ohio, Mississippi, and Cumberland Rivers.

**Guilds** grassland/agricultural, running water, standing water.

**Statewide** [Short-billedDowitcher.pdf](#)

**Map**

## **CLASS AVES**

### **Short-billed Dowitcher**

*Limnodromus griseus*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations. Alteration of natural drawdown cycle
- 2H Wetland loss/drainage/alteration
- 2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites)

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes



**CLASS AVES**

**Short-eared Owl** *Asio flammeus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	E	G5	S1B,S 2N	G5	S1

**G-Trend** Unknown

**G-Trend** North American Breeding Bird Survey data indicate a significant survey-wide

**Comment** decline between 1966 and 2003 of 4.9%, although erratic population fluctuations make trend detection difficult (Sauer et al. 2004; NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 710,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Extent to which the species nests in Kentucky is unclear and annual numbers

**Comment** most likely fluctuates in response to prey abundance (Palmer-Ball 1996).

**Habitat /** This species occurs year-round and is found most often in open farmland and

**Life History** reclaimed surface mines (Palmer-Ball 2003). Broad expanses of open land with low vegetation for nesting and foraging are required (NatureServe 2004).

**Key** Habitat condition is generally UNKNOWN for Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Reclaimed mine lands on Peabody Wildlife Management Area in Ohio and  
Muhlenburg Counties (fair)

**Guilds** grassland/agricultural.

**Statewide** [Short-earedOwl.pdf](#)

**Map**

## **CLASS AVES**

### **Short-eared Owl**

*Asio flammeus*

### **Conservation Issues**

Biological/ consumptive uses

5B Predation from native species

Miscellaneous Mortality Factors

6B Man-made structures. Communication towers

6C Powerlines

6D Human disturbance (spelunking, destruction/disturbance of nest sites). At roost and nest sites

6E Illegal killing

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3B Mowing regimes

3C Lack of newly abandoned farmland

3D Switch to cleaner agricultural practices

3E Livestock grazing

3F Urban/residential development

3H Habitat loss outside of Kentucky

3O Reforestation

3T Suppression of disturbance regimes

**CLASS AVES**

**Solitary Sandpiper**

*Tringa solitaria*

Federal Status	Heritage Status	GRank	SRank	GRank (Simplified)	SRank (Simplified)
N	N	G5	SZN	G5	S4

**G-Trend** Unknown

**G-Trend** Insufficient information exists to assess population trends (Brown et al. 2001).

**Comment**

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a transient bird that uses shallow water wetlands (poor), flooded

**Life History** agricultural fields, and shoreline, mudflat, and sandbar habitat of lakes and rivers, but will also use streams, creeks, and the edges of larger bodies of water.

**Key** Habitat condition ranges from POOR (shallow water wetlands) to FAIR

**Habitat** (flooded agricultural fields, shoreline habitats); condition of stream and creek edges is UNKNOWN.

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** grassland/agricultural, running water, standing water.

**Statewide** [SolitarySandpiper.pdf](#)

## Map

## **CLASS AVES**

### **Solitary Sandpiper**

*Tringa solitaria*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations. Alteration of natural drawdown cycle
- 2H Wetland loss/drainage/alteration
- 2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites)

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3M Timber harvest
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes

## **CLASS Aves**

**Sora***Porzana carolina*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	SZN	G5	N

**G-Trend** Stable**G-Trend** Breeding Bird Surveys show a nonsignificant increase of 0.9% survey-wide for  
**Comment** the period 1966-2007 with a relative abundance of 1.04 individuals per route (Sauer et al. 2008).**S-Trend** Unknown**S-Trend** No data exists for migrating Sora Rails.**Comment****Habitat /** Sora rails inhabit stands of emergent vegetation within freshwater wetlands.**Life** Shallow water, emergent cover, and substrate with high invertebrate abundance  
**History** are the most important components of rail habitat (Melvin and Gibbs 1994).

High

interspersion of water to and emergent vegetation are important. Sora rails avoid emergent stands with high stem densities and seem to select larger size wetlands (Melvin and Gibbs 1994).

**Key** Habitat condition throughout Kentucky is FAIR for this species.**Habitat**

No key habitat to identify: the species will use appropriate habitat statewide.

**Guilds** Emergent and shrub-dominated wetlands.

Statewide [Sora.pdf](#)

Map

## Conservation Issues

Aquatic habitat degradation

2H Wetland loss/drainage/alteration

Terrestrial habitat degradation

3Q Invasive/exotic plants (including fescue). Phragmites invasion



**CLASS Aves**

**Spotted Sandpiper**

*Actitis macularius*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	E	G5	S1B	G5	S1

**G-Trend** Decreasing

**G-Trend** Breeding Bird Surveys show a significant decrease of 0.81% survey-wide for the period 1966-2007 with a relative abundance of 0.48 individuals per route (Sauer et al. 2008).

**S-Trend** Unknown

**S-Trend** The spotted sandpiper is a rare and sporadic breeding bird in Kentucky (Palmer-Ball 1996) but no survey data exists for the species in the state.

**Habitat / Life History** Spotted sandpipers utilize a wide variety of wetland habitats statewide from stream and river shorelines, to shores of ponds and large reservoirs, to managed shallow water impoundments (Palmer-Ball 1996). For nesting, spotted sandpipers generally nest in disturbance free areas of thick vegetation close to exposed shorelines, but may nest some distance from water in pastures (Palmer-Ball 1996).

**Key** Habitat condition throughout Kentucky is FAIR for this species.

**Habitat**

No key habitat to identify: the species will use appropriate habitat statewide.

**Guilds** Emergent and shrub-dominated wetlands, Lowland Streams in slackwater.

**Statewide** [SpottedSandpiper.pdf](#)

**Map**

## **Conservation Issues**

Aquatic habitat degradation

2E Stream channelization/ditching

Biological/ consumptive uses

5F Low population densities

Siltation and increased turbidity

1B Agriculture

**CLASS AVES**

**Stilt Sandpiper**

*Calidris himantopus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	SZN	G5	S3

**G-Trend** Unknown

**G-Trend** Insufficient information exists to assess population trends (Brown et al. 2001).

**Comment**

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat / Life History** This is a transient bird that uses shallow water wetlands, flooded agricultural fields, and shoreline, mudflat, and sandbar habitat of lakes and rivers.

**Key Habitat** Habitat condition ranges from POOR (shallow water wetlands) to FAIR (flooded agricultural fields, shoreline habitats).

Key Habitat Locations (and their conditions):

1. Transient lakes in Warren (good) and Christian (unknown) counties.
2. Shoreline of Kentucky and Barkely lakes (good). Extending summer pool to Labor Day (proposed by Tennessee Valley Authority) would leave the shoreline unexposed until after peak shorebird migration (Ritchison and Ranalli

2004).

3. Mudflat and sandbar habitat on the Tennessee, Ohio, Mississippi, and Cumberland Rivers.

**Guilds** grassland/agricultural, running water, standing water.

**Statewide** [StiltSandpiper.pdf](#)

**Map**

# CLASS AVES

## Stilt Sandpiper

*Calidris himantopus*

### Conservation Issues

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations. Alteration of natural drawdown cycle
- 2H Wetland loss/drainage/alteration
- 2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites)
- 6D Human disturbance (spelunking, destruction/disturbance of nest sites). at feeding sites

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes

**CLASS AVES**

**Swainson's Warbler** *Limnothlypis swainsonii*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G4	S3S4B	G4	S3

**G-Trend** Increasing

**G-Trend** North American Breeding Bird Survey trend analysis indicate increases across

**Comment** most of its range. However, is likely the species is under-sampled because of difficulty in surveying in its dense thicket habitat (NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 84,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Few Breeding Bird Survey routes pick up the species in Kentucky (Sauer et al.

**Comment** 2004). Atlas survey yielded only 10 records in priority blocks (Palmer-Ball 1996). Partners in Flight estimates a population of 3,800 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** The Swainson’s Warbler is a breeding bird of mesic forests with a dense

**Life History** understory. In western and south-central Kentucky, the species is typically found in lowland situations, especially floodplain forests with an abundance of giant cane (Palmer-Ball 1996). Such habitat has greatly declined and is in poor condition. The species is also found in thickets of young trees in wet

bottomlands, regenerating after logging or agricultural use. In southeastern Kentucky, the species frequents forested ravines and lower slopes, and it is most often encountered where a dense understory of rhododendron is present. As in southwestern Kentucky, however, Swainson's Warblers are also found in regenerating forest where the understory is thick and dense (Palmer-Ball 1996). Such habitats are subject to succession.

**Key** Habitat condition is generally POOR to FAIR for Kentucky.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** forested wetland, upland forest.

**Statewide** [Swainson's Warbler.pdf](#)

**Map**

## **CLASS AVES**

### **Swainson's Warbler**

*Limnothlypis swainsonii*

### **Conservation Issues**

#### Aquatic habitat degradation

2F Riparian zone removal (Agriculture/development)

2M Valley fills

#### Biological/ consumptive uses

5K Lack of suitable habitat for spawning, nesting, or breeding. Lack of breeding habitat

5M Brood parasitism (Brown-headed Cowbird)

#### Miscellaneous Mortality Factors

6D Human disturbance (spelunking, destruction/disturbance of nest sites). Recreation, audio lures to make birds visible

#### Terrestrial habitat degradation

3F Urban/residential development

3H Habitat loss outside of Kentucky

3I Conversion of native forest to short-rotation crop trees (pine, sycamore, cottonwood, etc.). Conversion to short-rotation pine plantations

3K Surface mining. Valley fills, logging

3M Timber harvest



**CLASS AVES**

**Swallow-tailed Kite**

*Elanoides forficatus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	X	G5	SXB,S	G5	N
AN					

**G-Trend** Unknown

**G-Trend** Large range makes this species apparently secure on a global basis, but range

**Comment** and abundance have declined in the north and regional trends elsewhere are poorly known (NatureServe 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 3,700 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Currently extirpated from Kentucky. Plans to examine efficacy of

**Comment** reintroduction of species underway.

**Habitat /** Similar habitat requirements as Mississippi Kite (*Ictinia mississippiensis*).

**Life History**

**Key** Habitat condition is generally UNKNOWN for Kentucky.

**Habitat**

**Guilds** forested wetland.

**Statewide** [Swallow-tailedKite.pdf](#)

## **Map**

### **Conservation Issues**

Terrestrial habitat degradation

3H Habitat loss outside of Kentucky

Unknown factors/variables

7A Unknown threats

**CLASS AVES**

**Trumpeter Swan**

*Cygnus buccinator*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	X	G4	SXN	G4	S4

**G-Trend** Increasing

**G-Trend** NatureServe (2004) lists the North American population as increasing with an

**Comment** estimate of 24,000 individuals.

**S-Trend** Unknown

**S-Trend** Restoration project north of Kentucky; potential to get transient and/or

**Comment** wintering birds.

**Habitat /** This is a wintering bird that uses shallow water wetlands with submerged

**Life History** vegetation (poor) as well as larger lakes, rivers, and ponds (good).

**Key** Habitat condition ranges from POOR (shallow water wetlands) to GOOD (large

**Habitat** lakes, rivers, and ponds).

No key habitat to identify; the species will use appropriate habitat where available statewide.

**Guilds** Emergent and shrub-dominated wetlands, running water, standing water.

**Statewide** [TrumpeterSwan.pdf](#)

**Map**

## **CLASS AVES**

### **Trumpeter Swan**

*Cygnus buccinator*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2H Wetland loss/drainage/alteration . Draining of shallow-water wetlands

#### Biological/ consumptive uses

- 5D Competition from introduced/invasive or native species. Competition for foraging/loafing areas (overcrowding)
- 5F Low population densities
- 5L Parasitism and disease. Disease (could cause catastrophic loss given low population size)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites)
- 6E Illegal killing. Poaching may be a threat, but no evidence

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc). Of shallow-water wetlands
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

**CLASS AVES**

**Upland Sandpiper**

*Bartramia longicauda*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	H	G5	SHB	G5	S3

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data indicate a 20 per cent decline from

**Comment** 1980-2000 across all regions (NatureServe 2004).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a transient bird that uses short grasslands (poor) and wet prairies (poor).

**Life History**

**Key** Habitat conditions are generally POOR (short grasslands and wet prairies).

**Habitat**

No key habitat to identify; the species will use appropriate habitat where available statewide.

**Guilds** grassland/agricultural.

**Statewide** [UplandSandpiper.pdf](#)

**Map**

**CLASS AVES**

**Upland Sandpiper**

*Bartramia longicauda*

**Conservation Issues**

Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3B Mowing regimes
- 3C Lack of newly abandoned farmland
- 3D Switch to cleaner agricultural practices
- 3E Livestock grazing
- 3F Urban/residential development
- 3H Habitat loss outside of Kentucky
- 3O Reforestation
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3R Habitat and/or Population Fragmentation
- 3T Suppression of disturbance regimes

**CLASS Aves**

**Tundra Swan**

*Cygnus columbianus*

<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
N	N	G5	SZN	G5	N

**G-Trend** Increasing

**G-Trend** Breeding populations have increased during the period 1980 -2009. Populations

**Comment** have increased 25% from 164,500 in 1980 to 205,400 in 2009 (U.S. Fish and Wildlife Service 2009).

**S-Trend** Stable

**S-Trend** Little evidence exists for abundance of wintering populations in Kentucky.

**Comment** Christmas Bird Count data has recorded Tundra Swans in 5 years since 1980.

**Habitat / Life** This is a wintering bird that uses shallow water wetlands with submerged vegetation (poor) as well as larger lakes, rivers, and ponds (good).

### **History**

**Key Habitat** Habitat condition ranges from POOR (shallow water wetlands) to GOOD (large lakes, rivers, and ponds).

available No key habitat to identify; the species will use appropriate habitat where statewide.

**Guilds** Emergent and shrub-dominated wetlands, grassland/agricultural, standing water.

**Statewide** [TundraSwan.pdf](#)

### **Map**

## **Conservation Issues**

Aquatic habitat degradation

2E Stream channelization/ditching

2H Wetland loss/drainage/alteration . Draining of shallow water wetlands

Biological/ consumptive uses

- 5D Competition from introduced/invasive or native species. introduced mute swans and resident Canada geese

Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc). of shallow water wetlands
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky





**CLASS AVES**

**Vesper Sparrow**

*Pooecetes gramineus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	E	G5	S1B	G5	S1

- G-Trend** Decreasing
- G-Trend** North American Breeding Bird Survey data analysis show annual survey-wide declines of 1.1% (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 30,000,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).
- Comment**
- S-Trend** Decreasing
- S-Trend** Once considered to be locally fairly common in the 1950's, the species now appears to have virtually disappeared as a breeding bird (Palmer-Ball 1996).
- Comment**
- Habitat / Life History** Vesper Sparrows can be found year round. The species historically occupied well-grazed pastures on moderate to steep slopes with scattered rock outcrops and patches of bare ground, a few scattered trees, and usually a nearby pond (Palmer-Ball 1996). They are now found in a variety of open to semi-open habitats including grain stubble fields, pastures, and open roadsides (Palmer-Ball 2003). Although such habitat appears common in Kentucky, only 2 recent records during the breeding season exist.
- Key** Habitat condition is generally UNKNOWN for Kentucky.

**Habitat**

Key Habitat Locations (and their condition):

1. Farmland of Nicholas and Bourbon counties (unknown).

No key habitat to identify during the winter since bird will use appropriate habitat state-wide.

**Guilds** grassland/agricultural.

**Statewide** [VesperSparrow.pdf](#)

**Map**

## **CLASS AVES**

**Vesper Sparrow**

*Pooecetes gramineus*

### **Conservation Issues**

Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3B Mowing regimes
- 3D Switch to cleaner agricultural practices
- 3E Livestock grazing
- 3F Urban/residential development
- 3H Habitat loss outside of Kentucky
- 3O Reforestation
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3S Fire suppression/fire regime management
- 3T Suppression of disturbance regimes. To woody cover

**CLASS**    **Aves**

**Virginia Rail**

*Rallus limicola*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S1B?, SZN	G5	S1

**G-Trend**    Stable

**G-Trend**    Little data exists for population trends in the secretive marsh birds. The best

**Comment**    piece of information for Virginia rails is the Breeding Bird Survey . Breeding Bird

Surveys show an increase of 2.16% survey-wide for the period 1967-2007 with a relative abundance of 0.04 individuals per route (Sauer et al. 2008).

Unfortunately, the BBS is not designed to detect marsh birds so data is lacking.

**S-Trend**    Unknown

**S-Trend**    No data exists.

**Comment**

**Habitat /**    Virginia rails inhabit stands of emergent vegetation within freshwater wetlands.

**Life**        Shallow water, emergent cover, and substrate with high invertebrate abundance

**History**    are the most important components of Virginia rail habitat (Conway and Eddleman 1994). Moderate water to cover ratios are important. Virginia rails avoid emergent stands with high stem densities and seem to select larger size wetlands (Conway and Eddleman 1994).

**Key** Habitat conditions in Kentucky are likely FAIR.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** Emergent and shrub-dominated wetlands.

**Statewide** [VirginiaRail.pdf](#)

**Map**

**Conservation Issues**

Aquatic habitat degradation

2H Wetland loss/drainage/alteration . Wetland Losses

Terrestrial habitat degradation

3Q Invasive/exotic plants (including fescue). Phragmites monocultures in wetlands

**CLASS AVES**

<b>Western Sandpiper</b>						<i>Calidris mauri</i>
	<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
	<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
	N	N	G5	SZN	G5	S3

**G-Trend** Decreasing

**G-Trend** Brown et al. (2001) lists the species as being in decline with a population

**Comment** estimate of 3,500,000.

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a transient bird that uses shallow water wetlands, flooded agricultural

**Life History** fields, and shoreline, mudflat, and sandbar habitat of lakes and rivers.

**Key** Habitat condition ranges from POOR (shallow water wetlands) to FAIR

**Habitat** (flooded agricultural fields, shoreline habitats).

Key Habitat Locations (and their conditions):

1. Transient lakes in Warren (good) and Christian (unknown) counties.
2. Shoreline of Kentucky and Barkely lakes (good). Extending summer pool to

Labor Day (proposed by Tennessee Valley Authority) would leave the shoreline unexposed until after peak shorebird migration (Ritchison and Ranalli 2004).

3. Mudflat and sandbar habitat on the Tennessee, Ohio, Mississippi, and Cumberland Rivers.

**Guilds** grassland/agricultural, running water, standing water.

**Statewide** [WesternSandpiper.pdf](#)

**Map**



# CLASS AVES

## Western Sandpiper

*Calidris mauri*

### Conservation Issues

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations. Alteration of natural drawdown cycle
- 2H Wetland loss/drainage/alteration
- 2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites). At feeding sites

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes

**CLASS AVES**

**Whooping Crane** *Grus americana*

Federal Status	Heritage Status	GRank	SRank	GRank (Simplified)	SRank (Simplified)
LE,XN	X	G1	SXN	G1	S4

**G-Trend** Increasing

**G-Trend** Whooping crane numbers at the end of September, 2004, both captive and wild,

**Comment** totaled a record 452 (Stehn 2004).

**S-Trend** Increasing

**S-Trend** Observations in the state have been increasing due to the restoration project.

**Comment**

**Habitat /** This is a transient bird that primarily uses agricultural fields as stop over

**Life History** habitat, but will also use shallow wetlands (poor) and river bottoms (poor).

**Key** Habitat condition ranges from POOR (shallow water wetlands, river bottoms)

**Habitat** to GOOD (agricultural fields).

Key Habitat Locations:

1. Cranes have been observed in several counties--Hardin, Monroe, Larue,

Nelson

**Guilds** Emergent and shrub-dominated wetlands, grassland/agricultural.

**Statewide** [WhoopingCrane.pdf](#)

## Map

## **CLASS AVES**

### **Whooping Crane**

*Grus americana*

### **Conservation Issues**

Aquatic habitat degradation

2H Wetland loss/drainage/alteration

Biological/ consumptive uses

5F Low population densities

Miscellaneous Mortality Factors

6C Powerlines

6D Human disturbance (spelunking, destruction/disturbance of nest sites)

6E Illegal killing

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc)

3F Urban/residential development

3H Habitat loss outside of Kentucky

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

**CLASS Aves**

**Whip-poor-will**

*Caprimulgus vociferus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S5B	G5	S5

**G-Trend** Unknown

**G-Trend** Breeding Bird Surveys show a significant decrease of 2.1% survey-wide for the period 1966-2007 with a relative abundance of 0.25 individuals per route (Sauer et al. 2008). Partners in Flight estimates a population of 2,100,000 individuals (see Rosenberg 2004 for assumptions).

**S-Trend** Unknown

**S-Trend** Breeding Bird Surveys in Kentucky show a nonsignificant decrease of 2.3% for the period 1980-2007 (Sauer et al. 2008). Breeding Bird Surveys in Kentucky Partners in Flight estimates a population of 86,200 individuals (see Rosenberg 2004 for assumptions).

**Habitat / Life History** Whip-poor-wills are found in areas with greater forest cover than Chuck-will's-widows and in a greater range of habitats, from mesic slopes to subxeric, upland forests. They are found more commonly in disturbed forests and forest edges where they can forage in openings for insect prey (Palmer-ball 1996).

**Key** Habitat conditions in Kentucky are likely FAIR.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** grassland/agricultural, savanna/ shrub-scrub, upland forest.

**Statewide** [Whip\\_poor\\_will.pdf](#)

**Map**

**Conservation Issues**

Biological/ consumptive uses

5Q Declining prey base. Pesticide Use

Miscellaneous Mortality Factors

6A Traffic/road kills

Terrestrial habitat degradation

3A Row-crop agriculture (conversion to, annual reuse of fields, etc).

Conversion of forests to agriculture

3F Urban/residential development

3M Timber harvest

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain).

Pesticides

3R Habitat and/or Population Fragmentation

**CLASS AVES**

**Willow Flycatcher**

*Empidonax traillii*

<b>Federal</b>	<b>Heritage</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank</b>	<b>SRank</b>
<b>Status</b>	<b>Status</b>			<b>(Simplified)</b>	<b>(Simplified)</b>
PS	N	G5	S3S4B	G5	S3

**G-Trend** Unknown

**G-Trend** North American Breeding Bird Survey data analysis show nonsignificant

**Comment** declines of 0.1% (Sauer et al. 2004). NatureServe (2004) lists the species as being stable or increasing over most of its range but with declined in the Southwest subspecies. Partners in Flight North American Landbird Conservation Plan gives population estimate of 3,300,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Increasing

**S-Trend** Once listed as only a single migrant, the species has increased dramatically as a

**Comment** summer resident and is now recorded in scattered localities throughout the state (Palmer-Ball 2003). Partners in Flight estimates a population of 3,100 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** This breeding species occurs in a variety of early successional habitats. The

**Life History** Willow Flycatcher is encountered most often in patches of young trees along open stream corridors or in marshy areas, but it is also found occasionally in drier areas, especially in old fields and pastures regenerating from past agricultural use. As its name implies, this small flycatcher is often found in willows, but it also can be seen in thickets of other species, including alder, mulberry, black locust, indigo bush, and maple. In general, Willow Flycatchers are found much more frequently in patches of young trees situated in fairly open areas than in those surrounded predominantly by forest (Palmer-Ball 1996).

**Key** Habitat condition is generally FAIR for Kentucky.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.



**Guilds** Emergent and shrub-dominated wetlands, savanna/ shrub-scrub.

**Statewide** [WillowFlycatcher.pdf](#)

**Map**

## **CLASS AVES**

### **Willow Flycatcher**

*Empidonax traillii*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development). Water developments and poor water management either destroy riparian habitat or prevent it from establishing
- 2G Water level fluctuations

#### Biological/ consumptive uses

- 5M Brood parasitism (Brown-headed Cowbird)

#### Terrestrial habitat degradation

- 3C Lack of newly abandoned farmland
- 3E Livestock grazing
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3T Suppression of disturbance regimes

**CLASS AVES**

**Wilson's Phalarope** *Phalaropus tricolor*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	SZN	G5	S3

**G-Trend** Decreasing

**G-Trend** Breeding Bird Survey data indicate a significant population decline (41%)

**Comment** between 1984 and 1993, though the Breeding Bird Survey may not be a good technique for determining the status of this species (NatureServe 2004).

Additionally, Brown et al. (2001) lists the species as having been documented to be in decline.

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a transient bird that uses shallow water wetlands, flooded agricultural

**Life History** fields, and shoreline, mudflat, and sandbar habitat of lakes and rivers.

**Key** Habitat condition ranges from POOR (shallow water wetlands) to FAIR

**Habitat** (flooded agricultural fields, shoreline habitats).

Key Habitat Locations (and their conditions):

1. Transient lakes in Warren (good) and Christian (unknown) counties.
2. Shoreline of Kentucky and Barkely lakes (good). Extending summer pool to

Labor Day (proposed by Tennessee Valley Authority) would leave the shoreline unexposed until after peak shorebird migration (Ritchison and Ranalli 2004).

3. Mudflat and sandbar habitat on the Tennessee, Ohio, Mississippi, and Cumberland Rivers.

**Guilds** running water, standing water.

**Statewide** [Wilson's Phalarope.pdf](#)

**Map**

## **CLASS AVES**

### **Wilson's Phalarope**

*Phalaropus tricolor*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations. Alteration of natural drawdown cycle
- 2H Wetland loss/drainage/alteration
- 2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites)

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes

**CLASS AVES**

**Wilson's Snipe**

*Gallinago delicata*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S3S4	G5	S3
			N		

**G-Trend** Decreasing

**G-Trend** Species has been documented to be in decline (Brown et al. 2001).

**Comment**

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat / Life History** This is a wintering bird that uses shallow water wetlands, flooded agricultural fields, and shoreline habitat, but will also use short grasslands and wet prairies.

**Key Habitat** Habitat condition ranges from POOR (shallow water wetlands, short grasslands, wet prairies) to FAIR (flooded agricultural fields, shoreline habitats).

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** Emergent and shrub-dominated wetlands, grassland/agricultural, standing water.

**Statewide** [Wilson'sSnipe.pdf](#)

## Map

## **CLASS AVES**

**Wilson's Snipe**

*Gallinago delicata*

### **Conservation Issues**

#### Aquatic habitat degradation

- 2F Riparian zone removal (Agriculture/development)
- 2G Water level fluctuations
- 2H Wetland loss/drainage/alteration
- 2N Eutrophication (eg. of wetlands)

#### Miscellaneous Mortality Factors

- 6D Human disturbance (spelunking, destruction/disturbance of nest sites)

#### Point and non-point source pollution

- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3B Mowing regimes
- 3E Livestock grazing
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3T Suppression of disturbance regimes



**CLASS AVES**

**Wood Thrush**

*Hylocichla mustelina*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S5B	G5	S5

**G-Trend** Decreasing

**G-Trend** North American Breeding Bird Survey data analysis shows a significant

**Comment** annually decline survey-wide of 1.8% for the period 1966-2003. NatureServe (2004) lists the species as having a large range in eastern North America with many occurrences and a decreasing population trend but still common in many areas. Partners in Flight North American Landbird Conservation Plan gives population estimate of 14,000,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Unknown

**S-Trend** Wood Thrushes are reported in small to moderate numbers on most Kentucky

**Comment** Breeding Bird Survey routes. Trend analysis of these data yields a nonsignificant decrease of 0.3% per year for the period 1966-2003. The average number of individuals per Breeding Bird Survey route for the period 1966-2004 was 11.45. (Sauer et al. 2004). Partners in Flight estimates a population of 86,000 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** This is a breeding bird common in most mesic and subxeric forest types with a

**Life History** well-developed shrub and midstory layer. Substantial numbers also occur in drier deciduous and mixed forests of ridges and slopes, as long as the understory is not too open. Occurrence is greatly reduced in very young forest as well as disturbed forest lacking understory cover. Although Wood Thrushes are most common in areas of extensive forest, they tolerate moderate disturbance and fragmentation. Owing to this adaptability, the species is often found in semi-open habitats, as long as forested tracts are not reduced to narrow strips or small, isolated woodlots (Palmer-Ball 1996).

**Key** Habitat condition is generally FAIR for Kentucky.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** upland forest.

**Statewide** [WoodThrush.pdf](#)

**Map**

## **CLASS AVES**

### **Wood Thrush**

*Hylocichla mustelina*

### **Conservation Issues**

Biological/ consumptive uses

5M Brood parasitism (Brown-headed Cowbird)

Terrestrial habitat degradation

3E Livestock grazing. Grazing (by cattle and deer in forests because it removes shrubby understory)

3F Urban/residential development

3H Habitat loss outside of Kentucky

3I Conversion of native forest to short-rotation crop trees (pine, sycamore, cottonwood, etc.)

3K Surface mining. Valley fills

3M Timber harvest. Logging for mining/timber harvest

3W Cervid over-abundance. Removes shrubby understory

**CLASS AVES**

**Worm-eating Warbler**

*Helmitheros vermivorus*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G5	S4S5B	G5	S4

**G-Trend** Stable

**G-Trend** NatureServe (2004) lists this species as having a large breeding range in the

**Comment** eastern U.S. with a relatively stable population in recent decades. North American Breeding Bird Survey data give nonsignificant annual increases of 0.5% survey-wide for the period 1966-2003. Due to the small sample size in most areas, Breeding Bird Survey may not give reliable trends for this species (Sauer et al. 2004). Partners in Flight North American Landbird Conservation Plan gives population estimate of 750,000 in the U.S. and Canada (see Rich et al. 2004 for accuracy and precision ratings).

**S-Trend** Stable

**S-Trend** Worm-eating Warblers are reported in small numbers on most Kentucky

**Comment** Breeding Bird Survey routes. Trend analysis of these data reveals that the population was relatively stable for the period 1966-2003 and a nonsignificant increase of 1.9% per year for the period 1980-2003. The average number of individuals per Breeding Bird Survey route for the period 1966-2003 was 0.75 (Sauer et al. 2004). Partners in Flight estimates a population of 76,800 individuals (see Rosenberg 2004 for assumptions).

**Habitat /** This is a breeding bird of forests, especially favoring moderate to steep slopes.

**Life History** The species uses a wide variety of forest types, including subxeric oak-hickory and mixed pine-hardwood communities, but it is most common in more mesic deciduous and mixed types of lower slopes and ravines. Like many other ground nesters, this warbler typically avoids floodplain forests. While the Worm-eating Warbler usually inhabits mature or fairly mature forest, it also uses younger forest and forest edge created by natural or artificial disturbance. The species is regularly encountered in areas of dissected woodland, but it generally avoids small, isolated tracts (Palmer-Ball 1996).

**Key** Habitat condition is generally FAIR for Kentucky.

**Habitat**

No key habitat to identify; the species will use appropriate habitat range wide.

**Guilds** upland forest.

## CLASS AVES

### Worm-eating Warbler

*Helmitheros vermivorus*

Statewide [Worm-eating Warbler.pdf](#)

Map

### Conservation Issues

Terrestrial habitat degradation

- 3F Urban/residential development. Causes habitat fragmentation
- 3H Habitat loss outside of Kentucky. Habitat is highly susceptible to loss on wintering grounds
- 3K Surface mining. Valley fills and logging for mining
- 3M Timber harvest
- 3R Habitat and/or Population Fragmentation. Caused by urban/residential development

**CLASS AVES**

**Yellow Rail**

*Coturnicops noveboracensis*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	N	G4	SZN	G4	S3

**G-Trend** Unknown

**G-Trend** Information on population trends and historic data is scant due to difficulty of

**Comment** detecting birds. Becoming rare in some parts of its range, but is still common in others (NatureServe 2004). Population estimate due pending Version 2 of the Waterbird Plan (Kushlan et al. 2002).

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a transient bird that uses dense, emergent wetlands, and marshy edges of

**Life History** lakes and ponds dominated by cattails and sedges.

**Key** Habitat conditions are POOR (emergent wetlands) or UNKNOWN (marshy

**Habitat** edges of lakes and ponds).

No key habitat to identify; the species will use appropriate habitat where available statewide, however western counties can be considered higher priority.

**Guilds** Emergent and shrub-dominated wetlands.

**Statewide** [YellowRail.pdf](#)

**Map**



# CLASS AVES

## Yellow Rail

*Coturnicops noveboracensis*

### Conservation Issues

#### Aquatic habitat degradation

- 2H Wetland loss/drainage/alteration . Loss of emergent wetlands
- 2N Eutrophication (eg. of wetlands)

#### Point and non-point source pollution

- 4A Acid mine drainage other coal mining impacts
- 4E Agricultural runoff – including fertilizers/animal waste, herbicides,
- 4F Urban runoff

#### Siltation and increased turbidity

- 1B Agriculture
- 1D Urbanization/Development General Construction

#### Terrestrial habitat degradation

- 3A Row-crop agriculture (conversion to, annual reuse of fields, etc)
- 3E Livestock grazing. Around and in wetlands
- 3F Urban/residential development
- 3G Shoreline development
- 3H Habitat loss outside of Kentucky
- 3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)
- 3Q Invasive/exotic plants (including fescue). Potentially by phragmites
- 3T Suppression of disturbance regimes. Of wetlands

**CLASS AVES**

**Yellow-crowned Night-heron**

*Nyctanassa violacea*

<b>Federal Status</b>	<b>Heritage Status</b>	<b>GRank</b>	<b>SRank</b>	<b>GRank (Simplified)</b>	<b>SRank (Simplified)</b>
N	T	G5	S2B	G5	S2

**G-Trend** Stable

**G-Trend** Kushlan et al. (2002) lists the species as having an apparently stable population.

**Comment**

**S-Trend** Unknown

**S-Trend**

**Comment**

**Habitat /** This is a breeding bird that uses bottomland and river floodplain forests (poor),

**Life History** bald cypress swamps (fair), and marshy areas (poor).

**Key** Habitat condition ranges from POOR (forested wetlands, marshy areas) to

**Habitat** FAIR (bald cypress swamps).

No key habitat to identify; the species will use appropriate habitat where available statewide.

**Guilds** forested wetland, running water.

**Statewide** [Yellow-crownedNight-heron.pdf](#)

**Map**

## **CLASS AVES**

### **Yellow-crowned Night-heron**

*Nyctanassa violacea*

### **Conservation Issues**

#### Aquatic habitat degradation

2F Riparian zone removal (Agriculture/development)

2H Wetland loss/drainage/alteration

#### Biological/ consumptive uses

5K Lack of suitable habitat for spawning, nesting, or breeding

#### Miscellaneous Mortality Factors

6D Human disturbance (spelunking, destruction/disturbance of nest sites). At rookeries

#### Point and non-point source pollution

4E Agricultural runoff – including fertilizers/animal waste, herbicides,

4F Urban runoff

#### Terrestrial habitat degradation

3F Urban/residential development

3G Shoreline development

3H Habitat loss outside of Kentucky

3M Timber harvest

3P Pollution/toxicity (e.g., heavy metals, pesticides, herbicides, acid rain)

## **BIRD LITERATURE CITED**

American Ornithologists' Union (AOU), Committee on Classification and Nomenclature. 1983. Check-list of North American Birds. Sixth Edition. American Ornithologists' Union, Allen Press, Inc., Lawrence, Kansas.

Brown, S., C. Hickey, B. Harrington, and R. Gill, eds. 2001. The U.S. Shorebird Conservation Plan, 2nd ed. Manomet Center for Conservation Sciences, Manomet, MA.

Buehler, D.A., E.P. Linder, and S. Vorisek. 2004. Analysis of the Kentucky avian point-count monitoring database. KDFWR report for grant number T-10-1.

Conway, C. J. and W.R. Eddleman. 2004. Virginia rail. Pages 193-206 in Tacha, T.C and C.E. Braun. Eds. Migratory Shore and Upland Game Bird Management in North America. Allen Press, Lawrence KS.

Devers, P. K., D. F. Stauffer, G. W. Norman, D. E. Steffen, D. M. Whitaker, J. D. Sole, T. J. Allen, S. L. Bittner, D. A. Buehler, J. W. Edwards, D. E. Figert, S. T. Friedhoff, W. H. Giulliano, C. A. Harper, W. K. Igo, R. L. Kirkpatrick, M. H. Seamster, H. A. Spiker Jr., D. A. Swannson, and B. C. Tefft. 2008. Ruffed grouse population ecology in the Appalachian Region. Wildlife Monographs, Vol. 168: 1-36.

Downes, C.M. 2003. Population trends in raptors from the Breeding Bird Survey. Bird Trends (Canadian Wildlife Service) 9:9-12.

Dimmick, R.W., M.J. Gudlin, and D.F. McKenzie. 2002. The northern bobwhite conservation initiative. Miscellaneous publication of the Southeastern Association of Fish and Wildlife Agencies, South Carolina. 96 pp.

Dzialak, M.R., L.S. Burford, S. Vorisek, M.J. Lacki, and B.L. Palmer-Ball, Jr. 2005. The Peregrine Falcon and its recovery in Kentucky. Kentucky Warbler 81:39-46.

Farmer, C. J. and J. P. Smith. 2009. Migration monitoring indicates widespread declines of American kestrels (*Falco sparverius*) in North America. Journal of Raptor Research 43:263-273

Fitzgerald, J.A., G. Wathen, M.D. Howery, W.P. Lisowsky, D. F. McKenzie, and D.N. Pashley. 2003. The Central Hardwoods Joint Venture Concept Plan. Tennessee Wildlife Resources Agency. 114 pp.

Fronczak, David. 2004. Waterfowl Harvest and Population Survey Data: Estimates of U.S. Harvest, Hunting Activity, and Success Derived from the State-Federal Cooperative Harvest Information Program. USFWS, Division of Migratory Bird Management, Columbia, MO, USA.

Hunter, W.C. 2004. Proposed state lists of priority bird species for FWS Southeast Region States, Commonwealth of Puerto Rico and U.S. Virgin Islands. Unpublished document. USFWS, Atlanta, GA.

Kushlan, J.A, M.J. Steinkamp, K.C. Parsons, J. Capp, M.A. Cruz, M. Coulter, I. Davidson, L. Dickson, N. Edelson, R. Elliot, R. M. Erwin, S. Hatch, S. Kress, R. Milko, S. Miller, K. Mills, R. Paul, R. Phillips, J.E. Saliva, B. Sydeman, J. Trapp, J. Wheeler, and K. Wohl. 2002. Waterbird Conservation for the Americas: The North American Waterbird Conservation Plan, Version 1. Waterbird Conservation for the Americas. Washington, DC, U.S.A.

KDFWR. 2001. Kentucky's threatened and endangered species. Ed. By T. Slone and T. Wethington.

Kentucky State Nature Preserves Commission. Rare and extirpated biota of Kentucky. KSNPC. World Wide Web . 2004. November 17th, 2004 >

Melvin, S. M. and J.P. Gibbs. 2004. Sora. Pages 209-217 in Tacha, T.C and C.E. Braun. Eds. Migratory Shore and Upland Game Bird Management in North America. Allen Press, Lawrence KS.

Mengel, R.M. 1965. The birds of Kentucky. American Ornithologists' Union Monograph no. 3. The Allen Press, Lawrence, Kansas.

NatureServe. 2004. NatureServe Explorer: An online encyclopedia of life [web application]. Version 4.0. NatureServe, Arlington, Virginia. Available <http://www.natureserve.org/explorer>. (Accessed: October 27, 2004 ).

NatureServe. 2010. NatureServe homepage. <<http://www.natureserve.org/>>. Accessed 8 March 2010.

North American Waterfowl Management Plan (NAWMP), Plan Committee. 2004. North American Waterfowl Management Plan 2004. Strategic Guidance: Strengthening the Biological Foundation. Canadian Wildlife Service, U.S. Fish and Wildlife Service, Secretaria de Medio Ambiente y Recursos Naturales, 22 pp. Available: <http://www.fws.gov/birdhabitat/NAWMP/images/NAWMP2004.pdf>

Palmer-Ball, Jr. B. 2003. Annotated Checklist of the Birds of Kentucky. The Kentucky Ornithological Society. Gateway Press, Inc. Louisville, KY.

Palmer-Ball, Jr. B. 1996. The Kentucky Breeding Bird Atlas. The University Press of Kentucky. Lexington, KY.

Palmer-Ball, Jr. B. and E. Ciuzio. 2004 Survey of Kentucky Heronries. Kentucky Warbler. 80:87-96.

Palmer-Ball, Jr. B. and L. McNeely. 2003. Summer Season 2003. Kentucky Warbler 79:79-86.

Parker, J. W. and J. C. Ogden. 1979. The recent history and status of the Mississippi kite. American Birds 33(2):119-28

Ray, E. 2004. Osprey Nesting Survey: Lake Barkley - Kentucky. Submitted to the Kentucky Department of Fish and Wildlife Resources.

Rich, R.D., R. Altman, J. Bart, C.J. Beardmore, H. Berlanga, P.J. Blancher, G.S. Butcher, D. Demarest, R. Dettmers, E.H. Dunn, W.C. Hunter, E. Inigo-Elias, A.O. Panjabi, D.M. Pashley, C.J. Ralph, K.V. Rosenberg, C. Rustay, J. Ruth, and T. Will. January 2005 (draft). High priority needs for rangewide monitoring of North American Landbirds. Partners in Flight Science Committee.

Rich, T.D., C.J. Beardmore, H. Berlanga, P.J. Blancher, M.S.W. Bradstreet, G. Butcher, D.W. Demarest, E.H. Dunn, W.C. Hunter, E.E. Inigo-Elias, J.A. Kennedy, A.M. Martell, A.O. Panjabi, D.N. Pashley, K.V. Rosenberg, C.M. Rustay, J.S. Wendt, and T.C. Will. January 2004. Partners in Flight North American Landbird Conservation Plan. Cornell Lab of Ornithology.

Ritchison, G. and M. E. Hodge. 2003. Bewick's Wrens in Kentucky and Tennessee: distribution, breeding success, habitat use, and interactions with House Wrens. A report submitted to the Kentucky Department of Fish and Wildlife Resources and U.S. Fish and Wildlife Service.

Ritchison, G. and N. Ranalli. 2004. Shorebird migration in western Kentucky: phenology, habitat use, and possible effects of prey availability. Interim report submitted to KDFWR.

Robbins, C. S., J. W. Fitzpatrick, and P. B. Hamel. 1992. A warbler in trouble: *Dendroica cerulea*. Pages 549-562 IN J. M. Hagan III, and D. W. Johnston, editors. 1992. Ecology and conservation of neotropical migrant landbirds. Smithsonian Institution Press, Washington, D.C. xiii + 609 pp.

Rosenberg, K. V. May 2004. Partners in flight continental priorities and objectives defined at the state and bird conservation region levels: Kentucky. Cornell Lab of Ornithology. Ithaca, NY.

Sauer, J. R., J. E. Hines, and J. Fallon. 2004. The North American Breeding Bird Survey, Results and Analysis 1966 - 2003. Version 2004.1. USGS Patuxent Wildlife Research Center, Laurel, MD.

Sauer, J.R., and S. Droege. 1992. Geographical patterns in population trends of Neotropical migrants in North America. Pages 26-42 in J.M. Hagan, III, and D.W. Johnston, editors. Ecology and conservation of Neotropical migrant landbirds. Smithsonian Institution Press, Washington, DC.

Smallwood, J. A., M. F. Causey, D. H. Mossop, J. R. Klucsarits, B. Robertson, S. Robertson, J. Mason, M. J. Maurer, R. J. Melvin, R. D. Dawson, G. R. Bortolotti, J. W. Parrish, Jr., T. F. Breen, and K. Boyd. 2009. Why are American kestrels (*Falco sparverius*) populations declining in North America? Evidence from nest-box programs. *Journal of Raptor Research* 43:274-282.

Stehn, T. 2004. Whooping Crane recovery activities March 2004-September 2004. Available <http://www.bringbackthecranes.org/crane-info/recv2004a.htm>. (Accessed December 9, 2004).

Tacha, T.C., S.A. Nesbitt, and P.A. Vohs. 2004. Sandhill crane. Pages 77-94 in Tacha, T.C and C.E. Braun. Eds. Migratory Shore and Upland Game Bird Management in North America. Allen Press, Lawrence KS.

Whitaker, D.M. 2003. Ruffed grouse (*Bonasa umbellus*) habitat ecology in the central and southern Appalachians. PhD Dissertation. Virginia Tech., Blacksburg, Virginia, USA. December 2003.

Wilkins, K. A. and M. C. Otto. Trends in duck breeding populations, 1955-2004. U.S. Fish and Wildlife Service Division of Migratory Bird Management, 11500 American Holly Drive, Laurel, MD 20708-4016. Administrative Report – July 8, 2004

TVA (Tennessee Valley Authority). 2004. Reservoir Operations Study - Final Programmatic Environmental Impact Statement.

U.S. Fish and Wildlife Service Division of Endangered Species. Federal Register for Wednesday July 12, 1995 (Volume 60, Number 133, pp 36000-36010].

U.S. Fish and Wildlife Service. 2003. Recovery plan for the red-cockaded woodpecker (*Picoides borealis*): second revision. U.S. Fish and Wildlife Service, Atlanta, GA. 296 pp.

U.S. Fish and Wildlife Service. 2009. Waterfowl population status, 2009. U.S. Department of the Interior, Washington, D.C. USA

Vorisek, S. 2003. 2003 Bald Eagle nesting activity in Kentucky. Annual Report. KY Department of Fish and Wildlife Resources.

Vorisek, S. and K. Carter. 2004. Peregrine Falcon Monitoring. Unpublished Interim Report submitted to the U.S. Department of the Interior Fish and Wildlife Service to fulfill Agreement Number 401814G017. 11pp.

Vukovich, M. 2000. Use of reclaimed surface mine grasslands by Northern Harriers, Short-eared Owls, and other raptors: abundance, behavior, and nesting success. Master's Thesis. Eastern Kentucky University.

Whitt, A.L. 1969. Distribution of the Dickcissel in Madison County. Kentucky Warbler 45:29-30.