



Species By County Report

The following report contains Species that are known to or are believed to occur in this county. Species with range unrefined past the state level are now excluded from this report. If you are looking for the Section 7 range (for Section 7 Consultations), please visit the [IPaC](#) application.

County: Lincoln, Kentucky

[Download CSV](#)

Need to contact a FWS field office about a species? Follow [this link](#) to find your local FWS Office.

Group	Name	Population	Status	Lead Office	Recovery Plan	Recovery Plan Action Status	Recovery Plan Stage
Mammals	Indiana bat (<i>Myotis sodalis</i>)	Wherever found	Endangered	Bloomington Ecological Services Field Office	Indiana Bat (Myotis sodalis) Draft Recovery Plan: First Revision	Implementation Progress	Draft Revision 1
Mammals	Gray bat (<i>Myotis grisescens</i>)	Wherever found	Endangered	Columbia Ecological Services Field Office	Gray Bat	Implementation Progress	Final
Mammals	Northern Long-Eared Bat (<i>Myotis septentrionalis</i>)	Wherever found	Threatened	Twin Cities Ecological Services Field Office			



Species Information

State Threatened, Endangered, and Special Concern Species observations for selected counties

Linked life history provided courtesy of NatureServe Explorer .

Records may include both recent and historical observations.

[US Status Definitions](#) [Kentucky Status Definitions](#)

List State Threatened, Endangered, and Special Concern Species observations in 1 selected county.

Selected county is: Lincoln.

Scientific Name and Life History	Common Name and Pictures	Class	County	US Status	KY Status	WAP	Reference
<i>Accipiter striatus</i>	Sharp-shinned Hawk	Aves	Lincoln	N	S	Yes	Reference
<i>Ammodramus henslowii</i>	Henslow's Sparrow	Aves	Lincoln	N	S	Yes	Reference
<i>Anas clypeata</i>	Northern Shoveler	Aves	Lincoln	N	E		Reference
<i>Anas discors</i>	Blue-winged Teal	Aves	Lincoln	N	T		Reference
<i>Circus cyaneus</i>	Northern Harrier	Aves	Lincoln	N	T	Yes	Reference
<i>Fulica americana</i>	American Coot	Aves	Lincoln	N	E		Reference
<i>Haliaeetus leucocephalus</i>	Bald Eagle	Aves	Lincoln	N	T	Yes	Reference
<i>Junco hyemalis</i>	Dark-eyed Junco	Aves	Lincoln	N	S		Reference
<i>Lampsilis ovata</i>	Pocketbook	Bivalvia	Lincoln	N	E	Yes	Reference
<i>Pandion haliaetus</i>	Osprey	Aves	Lincoln	N	S	Yes	Reference
<i>Passerculus sandwichensis</i>	Savannah Sparrow	Aves	Lincoln	N	S	Yes	Reference
<i>Phalacrocorax auritus</i>	Double-crested Cormorant	Aves	Lincoln	N	T		Reference
<i>Simpsonia ambigua</i>	Salamander Mussel	Bivalvia	Lincoln	N	T	Yes	Reference
<i>Toxolasma lividum</i>	Purple Lilliput	Bivalvia	Lincoln	N	E	Yes	Reference
<i>Tyto alba</i>	Barn Owl	Aves	Lincoln	N	S	Yes	Reference
<i>Villosa lienosa</i>	Little Spectaclecase	Bivalvia	Lincoln	N	S	Yes	Reference
<i>Villosa trabalis</i>	Cumberland Bean	Bivalvia	Lincoln	E	E	Yes	Reference

17 species are listed

**Report of
Endangered, Threatened, and Special Concern
Plants, Animals, and Natural Communities
for Lincoln County, Kentucky**

**Kentucky State Nature Preserves
Commission
801 Schenkel Lane
Frankfort, KY 40601
(502) 573-2886 (phone)
(502) 573-2355 (fax)**

www.naturepreserves.ky.gov

Kentucky State Nature Preserves Commission

Key for County List Report

Within a county, elements are arranged first by taxonomic complexity (plants first, natural communities last), and second by scientific name. A key to status, ranks, and count data fields follows.

STATUS

KSNPC: Kentucky State Nature Preserves Commission status:

N or blank = none E = endangered T = threatened S = special concern H = historic X = extirpated

USESA: U.S. Fish and Wildlife Service status:

blank = none C = candidate LT = listed as threatened LE = listed as endangered
PT = proposed threatened PE = proposed endangered
SOMC = Species of Management Concern

RANKS

GRANK: Estimate of element abundance on a global scale:

G1 = Critically imperiled	GU = Unrankable
G2 = Imperiled	G#? = Inexact rank (e.g. G2?)
G3 = Vulnerable	G#Q = Questionable taxonomy
G4 = Apparently secure	G#T# = Intraspecific taxa (Subspecies and variety abundances are coded with a 'T' suffix; the 'G' portion of the rank then refers to the entire species)
G5 = Secure	
GH = Historic, possibly extinct	GNR = Unranked
GX = Presumed extinct	GNA = Not applicable

SRANK: Estimate of element abundance in Kentucky:

S1 = Critically imperiled	SU = Unrankable	Migratory species may have separate ranks for different population segments (e.g. S1B, S2N, S4M): S#B = Rank of breeding population S#N = Rank of non-breeding population S#M = Rank of transient population
S2 = Imperiled	S#? = Inexact rank (e.g. G2?)	
S3 = Vulnerable	S#Q = Questionable taxonomy	
S4 = Apparently secure	S#T# = Intraspecific taxa	
S5 = Secure	SNR = Unranked	
SH = Historic, possibly extirpated	SNA = Not applicable	
SX = Presumed extirpated		

COUNT DATA FIELDS

OF OCCURRENCES: Number of occurrences of a particular element from a county. Column headings are as follows:

E - currently reported from the county
H - reported from the county but not seen for at least 20 years
F - reported from county & cannot be relocated but for which further inventory is needed
X - known to have extirpated from the county
U - reported from a county but cannot be mapped to a quadrangle or exact location.

The data from which the county report is generated is continually updated. The date on which the report was created is in the report footer. Contact KSNPC for a current copy of the report.

Please note that the quantity and quality of data collected by the Kentucky Natural Heritage Program are dependent on the research and observations of many individuals and organizations. In most cases, this information is not the result of comprehensive or site-specific field surveys; many natural areas in Kentucky have never been thoroughly surveyed, and new species of plants and animals are still being discovered. For these reasons, the Kentucky Natural Heritage Program cannot provide a definitive statement on the presence, absence, or condition of biological elements in any part of Kentucky. Heritage reports summarize the existing information known to the Kentucky Natural Heritage Program at the time of the request regarding the biological elements or locations in question. They should never be regarded as final statements on the elements or areas being considered, nor should they be substituted for on-site surveys required for environmental assessments.

KSNPC appreciates the submission of any endangered species data for Kentucky from field observations. For information on data reporting or other data services provided by KSNPC, please contact the Data Manager at:

Kentucky State Nature Preserves Commission
801 Schenkel Lane
Frankfort, KY 40601
(502) 573-2886 (phone)
(502) 573-2355 (fax)
email: naturepreserves@ky.gov
internet: www.naturepreserves.ky.gov

County Report of Endangered, Threatened, and Special Concern Plants, Animals, and Natural Communities of Kentucky
Kentucky State Nature Preserves Commission

County	Taxonomic Group	Scientific name	Common name	Statuses	Ranks	# of Occurrences				
						E	H	F	X	U
Lincoln	Vascular Plants	<i>Bouteloua curtipendula</i>	Side-oats Grama	S /	G5 / S3?	3	0	0	0	0
Lincoln	Vascular Plants	<i>Calopogon tuberosus</i>	Grass Pink	E /	G5 / S1	0	1	0	0	0
Lincoln	Vascular Plants	<i>Carex crawei</i>	Crawe's Sedge	S /	G5 / S2S3	1	0	0	0	0
Lincoln	Vascular Plants	<i>Carex tetanica</i>	Rigid Sedge	E /	G4G5 / S1?	1	0	0	0	0
Lincoln	Vascular Plants	<i>Hydrophyllum virginianum</i>	Eastern Waterleaf	T /	G5 / S2?	1	0	0	0	0
Lincoln	Vascular Plants	<i>Hypericum crux-andreae</i>	St. Peter's-wort	T /	G5 / S2S3	1	0	0	0	0
Lincoln	Vascular Plants	<i>Lespedeza capitata</i>	Round-head Bush-clover	S /	G5 / S3	2	0	0	0	0
Lincoln	Vascular Plants	<i>Lonicera reticulata</i>	Grape Honeysuckle	T /	G5 / S2	1	0	0	0	0
Lincoln	Vascular Plants	<i>Ludwigia hirtella</i>	Rafinesque's seedbox	E /	G5 / S1	1	0	0	0	0
Lincoln	Vascular Plants	<i>Onosmodium hispidissimum</i>	Hairy False Gromwell	E /	G4G5T4 / S1	1	0	0	0	0
Lincoln	Vascular Plants	<i>Polygala cruciata</i>	Crossleaf Milkwort	E /	G5 / S1	1	0	0	0	0
Lincoln	Vascular Plants	<i>Spiranthes magnicamporum</i>	Great Plains Ladies'-tresses	T /	G4 / S2	1	0	0	0	0
Lincoln	Vascular Plants	<i>Viola septemloba</i> var. <i>egglestonii</i>	Eggleston's Violet	S /	G4 / S3	2	0	0	0	0
Lincoln	Freshwater Mussels	<i>Pleurobema clava</i>	Clubshell	E / LE	G1G2 / S1	0	0	0	1	0
Lincoln	Freshwater Mussels	<i>Simpsonia</i> <i>ambigua</i>	Salamander Mussel	T / SOMC	G3 / S2S3	0	0	2	0	0
Lincoln	Freshwater Mussels	<i>Toxolasma lividus</i>	Purple Lilliput	E / SOMC	G3Q / S1	0	0	1	0	0
Lincoln	Freshwater Mussels	<i>Villosa lienosa</i>	Little Spectaclecase	S /	G5 / S3S4	0	0	6	2	0
Lincoln	Freshwater Mussels	<i>Villosa trabalis</i>	Cumberland Bean	E / LE	G1 / S1	0	0	1	0	0
Lincoln	Insects	<i>Hystriophora loricana</i>	An Olethreutine Moth	T /	G2G4 / S1S2	1	0	0	0	0
Lincoln	Fishes	<i>Noturus stigmosus</i>	Northern Madtom	S / SOMC	G3 / S2S3	0	1	0	0	0
Lincoln	Breeding Birds	<i>Passerculus sandwichensis</i>	Savannah Sparrow	S /	G5 / S2S3B,S2S3 N	1	0	0	0	0
Lincoln	Mammals	<i>Myotis septentrionalis</i>	Northern Long-Eared Bat	E / LT	G2G3 / S3	0	1	0	0	0
Lincoln	Communities	<i>Limestone/dolomite prairie</i>		E /	GNR / S1	1	0	0	0	0
Lincoln	Communities	<i>Shale barrens (open woodland)</i>		N /	GNR / S2S3	1	0	0	0	0
Lincoln	Communities	<i>Wet meadow</i>		E /	GNR / S1	2	0	0	0	0
Lincoln	Communities	<i>Xeric red cedar - oak forest/woodland</i>		N /	GNR / S5	1	0	0	0	0
Lincoln County Total:						23	3	10	3	0

IPaC Information for Planning and Consultation U.S. Fish & Wildlife Service

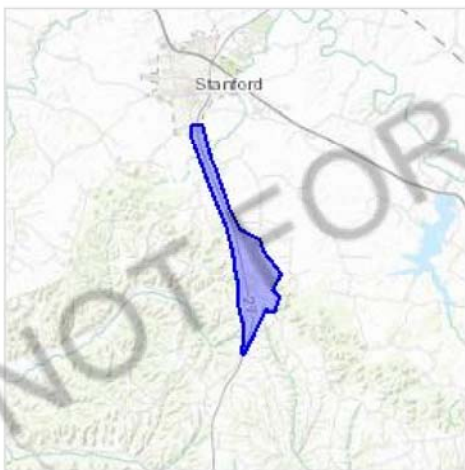
IPaC resource list

This report is an automatically generated list of species and other resources such as critical habitat (collectively referred to as *trust resources*) under the U.S. Fish and Wildlife Service's (USFWS) jurisdiction that are known or expected to be on or near the project area referenced below. The list may also include trust resources that occur outside of the project area, but that could potentially be directly or indirectly affected by activities in the project area. However, determining the likelihood and extent of effects a project may have on trust resources typically requires gathering additional site-specific (e.g., vegetation/species surveys) and project-specific (e.g., magnitude and timing of proposed activities) information.

Below is a summary of the project information you provided and contact information for the USFWS office(s) with jurisdiction in the defined project area. Please read the introduction to each section that follows (Endangered Species, Migratory Birds, USFWS Facilities, and NWI Wetlands) for additional information applicable to the trust resources addressed in that section.

Location

Lincoln County, Kentucky



Local office

Kentucky Ecological Services Field Office

☎ (502) 695-0468

📠 (502) 695-1024

J C Watts Federal Building, Room 265
330 West Broadway
Frankfort, KY 40601-8670

<http://www.fws.gov/frankfort/>

NOT FOR CONSULTATION

Endangered species

This resource list is for informational purposes only and does not constitute an analysis of project level impacts.

The primary information used to generate this list is the known or expected range of each species. Additional areas of influence (AOI) for species are also considered. An AOI includes areas outside of the species range if the species could be indirectly affected by activities in that area (e.g., placing a dam upstream of a fish population, even if that fish does not occur at the dam site, may indirectly impact the species by reducing or eliminating water flow downstream). Because species can move, and site conditions can change, the species on this list are not guaranteed to be found on or near the project area. To fully determine any potential effects to species, additional site-specific and project-specific information is often required.

Section 7 of the Endangered Species Act **requires** Federal agencies to "request of the Secretary information whether any species which is listed or proposed to be listed may be present in the area of such proposed action" for any project that is conducted, permitted, funded, or licensed by any Federal agency. A letter from the local office and a species list which fulfills this requirement can only be obtained by requesting an official species list from either the Regulatory Review section in IPaC (see directions below) or from the local field office directly.

For project evaluations that require USFWS concurrence/review, please return to the IPaC website and request an official species list by doing the following:

1. Draw the project location and click CONTINUE.
2. Click DEFINE PROJECT.
3. Log in (if directed to do so).
4. Provide a name and description for your project.
5. Click REQUEST SPECIES LIST.

Listed species

¹ are managed by the [Ecological Services Program](#) of the U.S. Fish and Wildlife Service.

1. Species listed under the [Endangered Species Act](#) are threatened or endangered; IPaC also shows species that are candidates, or proposed, for listing. See the [listing status page](#) for more information.

The following species are potentially affected by activities in this location:

Mammals

NAME	STATUS
Gray Bat <i>Myotis grisescens</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6329	Endangered

Indiana Bat *Myotis sodalis*

Endangered

This species only needs to be considered if the following condition applies:

- All activities in this location should consider possible effects to this species. The project area includes "potential" habitat.

There is **final** critical habitat for this species. Your location is outside the critical habitat.

<https://ecos.fws.gov/ecp/species/5949>

Northern Long-eared Bat *Myotis septentrionalis*

Threatened

This species only needs to be considered if the following condition applies:

- The specified area includes areas in which incidental take would not be prohibited under the 4(d) rule. For reporting purposes, please use the "streamlined consultation form," linked to in the "general project design guidelines" for the species.

No critical habitat has been designated for this species.

<https://ecos.fws.gov/ecp/species/9045>

Clams

NAME	STATUS
Clubshell <i>Pleurobema clava</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/3789	Endangered
Cumberland Bean (pearly mussel) <i>Villosa trabalis</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6061	Endangered
Cumberland Elktoe <i>Alasmodonta atropurpurea</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/1248	Endangered
Cumberlandian Combshell <i>Epioblasma brevidens</i> There is final critical habitat for this species. Your location is outside the critical habitat. https://ecos.fws.gov/ecp/species/3119	Endangered

Fanshell <i>Cyprogenia stegaria</i>	Endangered
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/4822	
Fluted Kidneyshell <i>Ptychobranhus subtentum</i>	Endangered
There is final critical habitat for this species. Your location is outside the critical habitat.	
https://ecos.fws.gov/ecp/species/1397	
Littlewing Pearlymussel <i>Pegias fabula</i>	Endangered
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/2572	
Northern Riffleshell <i>Epioblasma torulosa rangiana</i>	Endangered
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/527	
Orangefoot Pimpleback (pearlymussel) <i>Plethobasus cooperianus</i>	Endangered
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/1132	
Pink Mucket (pearlymussel) <i>Lampsilis abrupta</i>	Endangered
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/7829	
Purple Cat's Paw (=purple Cat's Paw Pearlymussel) <i>Epioblasma obliquata obliquata</i>	Endangered
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/5602	
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i>	Threatened
There is final critical habitat for this species. Your location is outside the critical habitat.	
https://ecos.fws.gov/ecp/species/5165	
Ring Pink (mussel) <i>Obovaria retusa</i>	Endangered
No critical habitat has been designated for this species.	
https://ecos.fws.gov/ecp/species/4128	

Rough Pigtoe <i>Pleurobema plenum</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6894	Endangered
Sheepnose Mussel <i>Plethobasus cyphus</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/6903	Endangered
Snuffbox Mussel <i>Epioblasma triquetra</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/4135	Endangered
Spectaclecase (mussel) <i>Cumberlandia monodonta</i> No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/7867	Endangered
Tan Riffleshell <i>Epioblasma florentina walkeri</i> (=E. walkeri) No critical habitat has been designated for this species. https://ecos.fws.gov/ecp/species/1247	Endangered

Critical habitats

Potential effects to critical habitat(s) in this location must be analyzed along with the endangered species themselves.

THERE ARE NO CRITICAL HABITATS AT THIS LOCATION.

Migratory birds

Certain birds are protected under the Migratory Bird Treaty Act

¹ and the Bald and Golden Eagle Protection Act².

Any activity that results in the take (to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct) of migratory birds or eagles is prohibited unless authorized by the U.S. Fish and Wildlife Service

³. There are no provisions for allowing the take of migratory birds that are unintentionally killed or injured. Any person or organization who plans or conducts activities that may result in the take of migratory birds is responsible for complying with the appropriate regulations and implementing appropriate conservation measures, as described [below](#).

1. The [Migratory Birds Treaty Act](#) of 1918.
2. The [Bald and Golden Eagle Protection Act](#) of 1940.
3. 50 C.F.R. Sec. 10.12 and 16 U.S.C. Sec. 668(a)

Additional information can be found using the following links:

- Birds of Conservation Concern <http://www.fws.gov/birds/management/managed-species/birds-of-conservation-concern.php>
- Measures for avoiding and minimizing impacts to birds <http://www.fws.gov/birds/management/project-assessment-tools-and-guidance/conservation-measures.php>
- Nationwide conservation measures for birds <http://www.fws.gov/migratorybirds/pdf/management/nationwidestandardconservationmeasures.pdf>

The birds listed below are [USFWS Birds of Conservation Concern](#) that might be affected by activities in this location. The list does not contain every bird you may find in this location, nor is it guaranteed that all of the birds on the list will be found on or near this location. To get a better idea of the specific locations where certain species have been reported and their level of occurrence, please refer to resources such as the [E-bird data mapping tool](#) (year-round bird sightings by birders and the general public) and [Breeding Bird Survey](#) (relative abundance maps for breeding birds). Although it is important to try to avoid and minimize impacts to all birds, special attention should be given to the birds on the list below. To get a list of all birds potentially present in your project area, visit the [E-bird Explore Data Tool](#).

NAME	BREEDING SEASON
Blue-winged Warbler <i>Vermivora pinus</i>	Breeds May 1 to Jun 30
Eastern Whip-poor-will <i>Antrostomus vociferus</i>	Breeds May 1 to Aug 20
Kentucky Warbler <i>Oporornis formosus</i>	Breeds Apr 20 to Aug 20
Prairie Warbler <i>Dendroica discolor</i>	Breeds May 1 to Jul 31
Red-headed Woodpecker <i>Melanerpes erythrocephalus</i>	Breeds May 10 to Sep 10
Rusty Blackbird <i>Euphagus carolinus</i>	Breeds elsewhere
Wood Thrush <i>Hylocichla mustelina</i>	Breeds May 10 to Aug 31

Probability of Presence Summary

The graphs below provide our best understanding of when birds of concern are most likely to be present in your project area. This information can be used to tailor and schedule your project activities to avoid or minimize impacts to birds.

Probability of Presence (■)

Each green bar represents the bird's relative probability of presence in your project's counties during a particular week of the year. (A year is represented as 12 4-week months.) A taller bar indicates a higher probability of species presence. The survey effort (see below) can be used to establish a level of confidence in the presence score. One can have higher confidence in the presence score if the corresponding survey effort is also high.

How is the probability of presence score calculated? The calculation is done in three steps:

1. The probability of presence for each week is calculated as the number of survey events in the week where the species was detected divided by the total number of survey events for that week. For example, if in week 12 there were 20 survey events and the Spotted Towhee was found in 5 of them, the probability of presence of the Spotted Towhee in week 12 is 0.25.
2. To properly present the pattern of presence across the year, the relative probability of presence is calculated. This is the probability of presence divided by the maximum probability of presence across all weeks. For example, imagine the probability of presence in week 20 for the Spotted Towhee is 0.05, and that the probability of presence at week 12 (0.25) is the maximum of any week of the year. The relative probability of presence on week 12 is $0.25/0.25 = 1$; at week 20 it is $0.05/0.25 = 0.2$.
3. The relative probability of presence calculated in the previous step undergoes a statistical conversion so that all possible values fall between 0 and 10, inclusive. This is the probability of presence score.

To see a bar's probability of presence score, simply hover your mouse cursor over the bar.

Breeding Season (■)

Yellow bars denote when the bird breeds in the Bird Conservation Region(s) in which your project lies. If there are no yellow bars shown for a bird, it does not breed in your project area.

Survey Effort (|)

Vertical black lines superimposed on probability of presence bars indicate the number of surveys performed for that species in the counties of your project area. The number of surveys is expressed as a range, for example, 33 to 64 surveys.

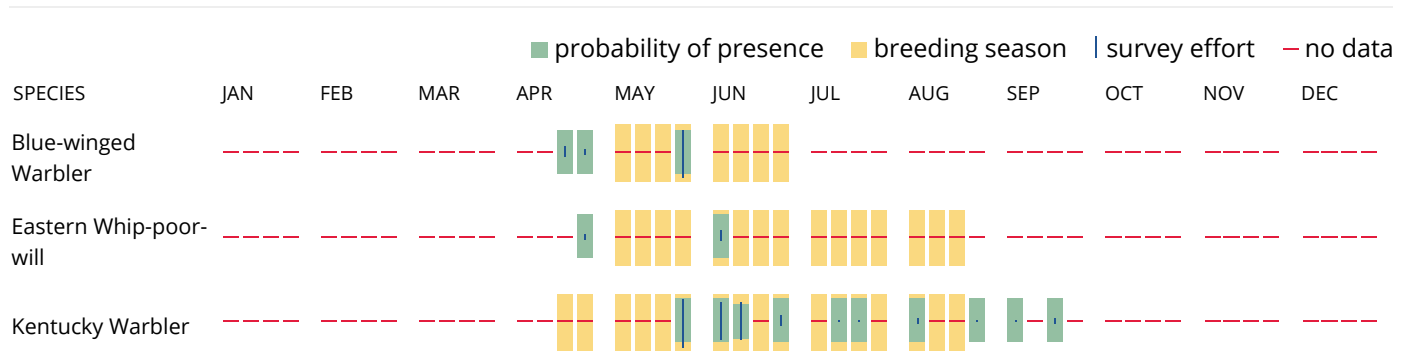
To see a bar's survey effort range, simply hover your mouse cursor over the bar.

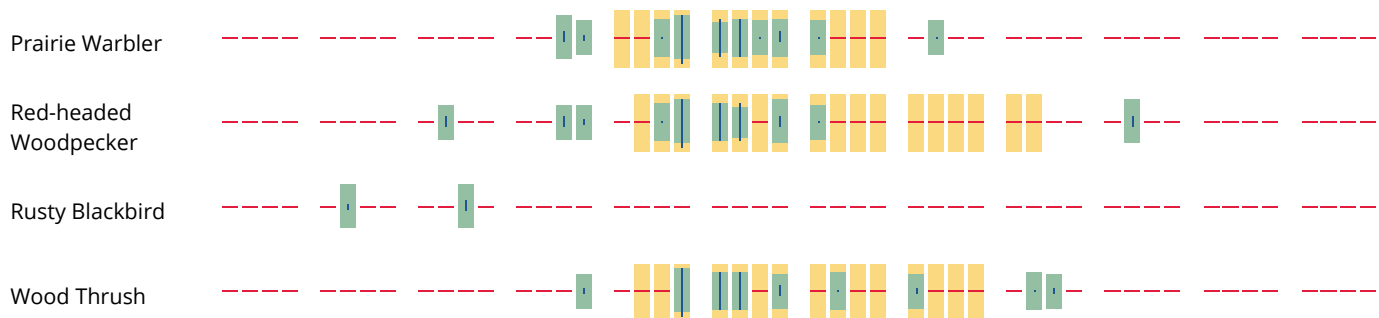
No Data (—)

A week is marked as having no data if there were no survey events for that week.

Survey Timeframe

Surveys from only the last 10 years are used in order to ensure delivery of currently relevant information.





Tell me more about conservation measures I can implement to avoid or minimize impacts to migratory birds.

[Nationwide Conservation Measures](#) describes measures that can help avoid and minimize impacts to all birds at any location year round. Such measures are particularly important when birds are most likely to occur in the project area. To see when birds are most likely to occur in your project area, view the Probability of Presence Summary. Special attention should be made to look for nests and avoid nest destruction during the breeding season. The best information about when birds are breeding can be found in [Birds of North America \(BNA\) Online](#) under the "Breeding Phenology" section of each species profile. Note that accessing this information may require a [subscription](#). [Additional measures](#) and/or [permits](#) may be advisable depending on the type of activity you are conducting and the type of infrastructure or bird species present on your project site.

What does IPaC use to generate the migratory birds potentially occurring in my specified location?

The Migratory Bird Resource List is comprised of USFWS [Birds of Conservation Concern \(BCC\)](#) that might be affected by activities in your project location. These birds are of priority concern because it has been determined that without additional conservation actions, they are likely to become candidates for listing under the [Endangered Species Act \(ESA\)](#).

The migratory bird list generated for your project is derived from data provided by the [Avian Knowledge Network \(AKN\)](#). The AKN data is based on a growing collection of [survey, banding, and citizen science datasets](#). The AKN list represents all birds reported to be occurring at some level throughout the year in the counties in which your project lies. That list is then narrowed to only the Birds of Conservation Concern for your project area.

Again, the Migratory Bird Resource list only includes species of particular priority concern, and is not representative of all birds that may occur in your project area. Although it is important to try to avoid and minimize impacts to all birds, special attention should be made to avoid and minimize impacts to birds of priority concern. To get a list of all birds potentially present in your project area, please visit the [E-bird Explore Data Tool](#).

What does IPaC use to generate the probability of presence graphs for the migratory birds potentially occurring in my specified location?

The probability of presence graphs associated with your migratory bird list are based on data provided by the [Avian Knowledge Network \(AKN\)](#). This data is derived from a growing collection of [survey, banding, and citizen science datasets](#).

Probability of presence data is continuously being updated as new and better information becomes available.

How do I know if a bird is breeding, wintering, migrating or present year-round in my project area?

To see what part of a particular bird's range your project area falls within (i.e. breeding, wintering, migrating or year-round), you may refer to the following resources: The [The Cornell Lab of Ornithology All About Birds Bird Guide](#), or (if you are unsuccessful in locating the bird of interest there), the [Cornell Lab of Ornithology Neotropical Birds guide](#). If a

bird entry on your migratory bird species list indicates a breeding season, it is probable the bird breeds in your project's counties at some point within the time-frame specified. If "Breeds elsewhere" is indicated, then the bird likely does not breed in your project area.

Facilities

National Wildlife Refuge lands

Any activity proposed on lands managed by the [National Wildlife Refuge](#) system must undergo a 'Compatibility Determination' conducted by the Refuge. Please contact the individual Refuges to discuss any questions or concerns.

THERE ARE NO REFUGE LANDS AT THIS LOCATION.

Fish hatcheries

THERE ARE NO FISH HATCHERIES AT THIS LOCATION.

Wetlands in the National Wetlands Inventory

Impacts to [NWI wetlands](#) and other aquatic habitats may be subject to regulation under Section 404 of the Clean Water Act, or other State/Federal statutes.

For more information please contact the Regulatory Program of the local [U.S. Army Corps of Engineers District](#).

This location overlaps the following wetlands:

FRESHWATER POND

[PUBHh](#)

[PUBHx](#)

[PAB4Hh](#)

[PUBFh](#)

A full description for each wetland code can be found at the National Wetlands Inventory website: <https://ecos.fws.gov/ipac/wetlands/decoder>

Data limitations

The Service's objective of mapping wetlands and deepwater habitats is to produce reconnaissance level information on the location, type and size of these resources. The maps are prepared from the analysis of high altitude imagery. Wetlands are identified based on vegetation, visible hydrology and geography. A margin of error is inherent in the use of imagery; thus, detailed on-the-ground inspection of any particular site may result in revision of the wetland boundaries or classification established through image analysis.

The accuracy of image interpretation depends on the quality of the imagery, the experience of the image analysts, the amount and quality of the collateral data and the amount of ground truth verification work conducted. Metadata should be consulted to determine the date of the source imagery used and any mapping problems.

Wetlands or other mapped features may have changed since the date of the imagery or field work. There may be occasional differences in polygon boundaries or classifications between the information depicted on the map and the actual conditions on site.

Data exclusions

Certain wetland habitats are excluded from the National mapping program because of the limitations of aerial imagery as the primary data source used to detect wetlands. These habitats include seagrasses or submerged aquatic vegetation that are found in the intertidal and subtidal zones of estuaries and nearshore coastal waters. Some deepwater reef communities (coral or tubercid worm reefs) have also been excluded from the inventory. These habitats, because of their depth, go undetected by aerial imagery.

Data precautions

Federal, state, and local regulatory agencies with jurisdiction over wetlands may define and describe wetlands in a different manner than that used in this inventory. There is no attempt, in either the design or products of this inventory, to define the limits of proprietary jurisdiction of any Federal, state, or local government or to establish the geographical scope of the regulatory programs of government agencies. Persons intending to engage in activities involving modifications within or adjacent to wetland areas should seek the advice of appropriate federal, state, or local agencies concerning specified agency regulatory programs and proprietary jurisdictions that may affect such activities.