

**APPENDIX F:
Federally- and State-Listed Species**

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06/01/2010

Indiana County Endangered, Threatened and Rare Species List

County: Bartholomew

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Cyprogenia stegaria	Eastern Fanshell Pearlymussel	LE	SE	G1Q	S1
Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	G2T2	SX
Epioblasma triquetra	Snuffbox		SE	G3	S1
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Obovaria subrotunda	Round Hickorynut		SSC	G4	S1
Pleurobema clava	Clubshell	LE	SE	G2	S1
Pleurobema rubrum	Pyramid Pigtoe		SE	G2G3	SX
Ptychobranchus fasciolaris	Kidneyshell		SSC	G4G5	S2
Quadrula cylindrica cylindrica	Rabbitsfoot	C	SE	G3G4T3	S1
Toxolasma lividus	Purple Lilliput		SSC	G3	S2
Villosa fabalis	Rayed Bean	C	SSC	G2	S1
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
Reptile					
Clonophis kirtlandii	Kirtland's Snake		SE	G2	S2
Bird					
Ammodramus henslowii	Henslow's Sparrow		SE	G4	S3B
Buteo lineatus	Red-shouldered Hawk		SSC	G5	S3
Cistothorus platensis	Sedge Wren		SE	G5	S3B
Falco peregrinus	Peregrine Falcon	No Status	SE	G4	S2B
Haliaeetus leucocephalus	Bald Eagle	LT,PDL	SE	G5	S2
Helmitheros vermivorus	Worm-eating Warbler		SSC	G5	S3B
Mniotilta varia	Black-and-white Warbler		SSC	G5	S1S2B
Nycticorax nycticorax	Black-crowned Night-heron		SE	G5	S1B
Tyto alba	Barn Owl		SE	G5	S2
Wilsonia citrina	Hooded Warbler		SSC	G5	S3B
Mammal					
Lasiurus borealis	Eastern Red Bat		SSC	G5	S4
Lasiurus cinereus	Hoary Bat	No Status	SSC	G5	S4
Lynx rufus	Bobcat	No Status	SSC	G5	S1
Myotis lucifugus	Little Brown Bat		SSC	G5	S4
Myotis septentrionalis	Northern Myotis		SSC	G4	S3
Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	G2	S1
Nycticeius humeralis	Evening Bat		SE	G5	S1
Pipistrellus subflavus	Eastern Pipistrelle		SSC	G5	S4
Taxidea taxus	American Badger		SSC	G5	S2
Vascular Plant					
Arabis patens	Spreading Rockcress		SE	G3	S1
Carex straminea	Straw Sedge		ST	G5	S2
Crataegus prona	Illinois Hawthorn		SE	G4G5	S1

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Indiana County Endangered, Threatened and Rare Species List

County: Bartholomew

Species Name	Common Name	FED	STATE	GRANK	SRANK
Juglans cinerea	Butternut		WL	G4	S3
Liatris pycnostachya	Cattail Gay-feather		ST	G5	S2
Oenothera perennis	Small Sundrops		SR	G5	S2
Panax quinquefolius	American Ginseng		WL	G3G4	S3
Panicum bicknellii	A Panic-grass		SE	G4?Q	S1
Penstemon canescens	Gray Beardtongue		SE	G4	S2
Scirpus smithii	Smith's Bulrush		SE	G5?	S1
Sparganium androcladum	Branching Bur-reed		ST	G4G5	S2
Spiranthes ochroleuca	Yellow Nodding Ladies'-tresses		ST	G4	S2
High Quality Natural Community					
Forest - flatwoods bluegrass till plain	Bluegrass Till Plain Flatwoods		SG	G3	S2
Forest - upland dry	Dry Upland Forest		SG	G4	S4
Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	G4	S4
Forest - upland mesic	Mesic Upland Forest		SG	G3?	S3
Other					
Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

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Indiana County Endangered, Threatened and Rare Species List**County: Clark**

Species Name	Common Name	FED	STATE	GRANK	SRANK
Platyhelminthes (Flatworms)					
Sphalloplana weingartneri	Weingartner's Cave Flatworm		WL	G4	S4
Diplopoda					
Pseudotremia nefanda	Clark Cave Millepede		SE	G3G4	S2
Dipluran					
Campodea plusiochaeta	A Dipluran		SE	GNR	S1
Crustacean: Malacostraca					
Crangonyx packardi	Packard's Cave Amphipod		WL	G4	S4
Gammarus bousfieldi	Bousfield's spring amphipod		SE	G1	S1
Stygobromus mackini	Mackin's cave amphipod		SE	G5	S1
Synurella dentata	Dentate amphipod		WL	GNR	S4
Mollusk: Bivalvia (Mussels)					
Fusconaia subrotunda	Longsolid		SE	G3	SX
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Potamilus capax	Fat Pocketbook	LE	SE	G1G2	S1
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
Mollusk: Gastropoda					
Fontigens cryptica	Hidden Springs Snail		SE	G1	S1
Ellipluran: Collembola					
Pseudosinella fonsa	Fountain Cave Springtail		ST	G3G4	S2
Sinella alata	Springtail		WL	G5	S4
Sinella cavernarum	A Springtail		WL	G5	S4
Insect: Coleoptera (Beetles)					
Aleochara lucifuga	Rove beetle		WL	GNR	S4
Atheta annexa	Rove beetle		WL	G4	S4
Batrisodes krekeleri	Krekeler's cave ant beetle		SE	G1	S1
Dryobius sexnotatus	Six-banded Longhorn Beetle		ST	GNR	SNR
Pseudanophthalmus barri	Cave Beetle		SE	G1G2	S1
Insect: Lepidoptera (Butterflies & Moths)					
Artogeia virginiensis	West Virginia White		SR	G3G4	S3
Celastrina nigra	Sooty Azure		ST	G4	S2
Arachnida					
Dolomedes scriptus	Lined Nursery Web Spider			GNR	S1?
Dolomedes vittatus	Nursery Web Spider			GNR	S1
Fish					
Acipenser fulvescens	Lake Sturgeon		SE	G3G4	S1
Etheostoma variatum	Variagate Darter		SE	G5	S1
Amphibian					
Acris crepitans blanchardi	Northern Cricket Frog		SSC	G5	S4

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Indiana County Endangered, Threatened and Rare Species List

County: Clark

Species Name	Common Name	FED	STATE	GRANK	SRANK
<i>Cryptobranchus alleganiensis alleganiensis</i>	Eastern Hellbender		SE	G3G4T3T4	S1
Reptile					
<i>Clonophis kirtlandii</i>	Kirtland's Snake		SE	G2	S2
<i>Crotalus horridus</i>	Timber Rattlesnake		SE	G4	S2
<i>Opheodrys aestivus</i>	Rough Green Snake		SSC	G5	S3
<i>Tantilla coronata</i>	Southeastern Crowned Snake		SE	G5	S1
<i>Terrapene carolina carolina</i>	Eastern Box Turtle		SSC	G5T5	S3
Bird					
<i>Ammodramus henslowii</i>	Henslow's Sparrow		SE	G4	S3B
<i>Dendroica cerulea</i>	Cerulean Warbler		SE	G4	S3B
<i>Helmitheros vermivorus</i>	Worm-eating Warbler		SSC	G5	S3B
<i>Lanius ludovicianus</i>	Loggerhead Shrike	No Status	SE	G4	S3B
<i>Nycticorax nycticorax</i>	Black-crowned Night-heron		SE	G5	S1B
<i>Tyto alba</i>	Barn Owl		SE	G5	S2
Mammal					
<i>Lynx rufus</i>	Bobcat	No Status	SSC	G5	S1
<i>Mustela nivalis</i>	Least Weasel		SSC	G5	S2?
<i>Myotis grisescens</i>	Gray Bat	LE	SE	G3	S1
<i>Myotis sodalis</i>	Indiana Bat or Social Myotis	LE	SE	G2	S1
<i>Taxidea taxus</i>	American Badger		SSC	G5	S2
Vascular Plant					
<i>Acalypha deamii</i>	Mercury		SR	G4?	S2
<i>Asclepias viridis</i>	Green Milkweed		SE	G4G5	S1
<i>Asplenium resiliens</i>	Black-stem Spleenwort		SE	G5	S1
<i>Asplenium ruta-muraria</i>	Wallrue Spleenwort		SR	G5	S2
<i>Aster schreberi</i>	Schreber Aster		SE	G4	S1
<i>Azolla caroliniana</i>	Carolina Mosquito-fern		ST	G5	S2
<i>Calamagrostis porteri</i> ssp. <i>insperata</i>	Reed Bent Grass		ST	G4T3	S1
<i>Carex eburnea</i>	Ebony Sedge		SR	G5	S2
<i>Carex straminea</i>	Straw Sedge		ST	G5	S2
<i>Chaerophyllum procumbens</i> var. <i>shortii</i>	Wild Chervil		ST	G5T3T4Q	S1
<i>Cirsium carolinianum</i>	Carolina Thistle		SR	G5	S2
<i>Cuscuta indecora</i>	Pretty Dodder		SE	G5	S1
<i>Eleocharis bifida</i>			SE	G3G4	S1
<i>Euphorbia obtusata</i>	Bluntleaf Spurge		SE	G5	S1
<i>Gonolobus obliquus</i>	Angle Pod		SR	G4?	S2
<i>Heliotropium tenellum</i>	Slender Heliotrope		ST	G5	S2
<i>Hexalectris spicata</i>	Crested Coralroot		SR	G5	S2
<i>Hottonia inflata</i>	Featherfoil		ST	G4	S2
<i>Iresine rhizomatosa</i>	Eastern Bloodleaf		SR	G5	S2

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County: Clark

Species Name	Common Name	FED	STATE	GRANK	SRANK
<i>Isoetes engelmannii</i>	Appalachian Quillwort		SE	G4	S1
<i>Lathyrus venosus</i>	Smooth Veiny Pea		ST	G5	S2
<i>Leavenworthia uniflora</i>	Michaux Leavenworthia		SE	G4	S1
<i>Lechea racemulosa</i>	Illinois Pinweed		SE	G5	S1
<i>Linum sulcatum</i>	Grooved Yellow Flax		SR	G5	S2
<i>Ludwigia decurrens</i>	Primrose Willow		WL	G5	S2
<i>Magnolia acuminata</i>	Cucumber Magnolia		SE	G5	S1
<i>Melica nitens</i>	Three-flower Melic Grass		ST	G5	S2
<i>Melothria pendula</i>	Creeping Cucumber		SE	G5?	S1
<i>Ophioglossum engelmannii</i>	Limestone Adder's-tongue		SR	G5	S2
<i>Oxalis illinoensis</i>	Illinois Woodsorrel		WL	G4Q	S2
<i>Panicum bicknellii</i>	A Panic-grass		SE	G4?Q	S1
<i>Passiflora incarnata</i>	Purple Passion-flower		SR	G5	S2
<i>Penstemon deamii</i>	Deam Beardtongue		SR	G1	S1
<i>Phlox amplifolia</i>	Large-leaved Phlox		SR	G3G5	S2
<i>Polypodium polypodioides</i>	Resurrection Fern		SR	G5	S2
<i>Rhexia mariana</i> var. <i>mariana</i>	Maryland Meadow Beauty		ST	G5T5	S1
<i>Rubus centralis</i>	Illinois Blackberry		SE	G2?Q	S1
<i>Satureja glabella</i> var. <i>angustifolia</i>	Calamint		SE	G5	S1
<i>Scutellaria parvula</i> var. <i>australis</i>	Southern Skullcap		WL	G4T4?	S2
<i>Sedum telephioides</i>	Allegheny Stonecrop		SR	G4	S2
<i>Solidago squarrosa</i>	Stout-ragged Goldenrod		SE	G4?	S1
<i>Spiranthes magnicamporum</i>	Great Plains Ladies'-tresses		SE	G4	S1
<i>Stachys clingmanii</i>	Clingman Hedge-nettle		SE	G2	S1
<i>Strophostyles leiosperma</i>	Slick-seed Wild-bean		ST	G5	S2
<i>Sullivantia sullivantii</i>	Sullivantia		ST	G4	S2
<i>Thalictrum pubescens</i>	Tall Meadowrue		ST	G5	S2
<i>Tragia cordata</i>	Heart-leaved Noseburn		WL	G4	S2
<i>Trifolium reflexum</i> var. <i>glabrum</i>	Buffalo Clover		SE	G5T2T4Q	S1
<i>Trifolium stoloniferum</i>	Running Buffalo Clover	LE	SE	G3	S1
<i>Viburnum molle</i>	Softleaf Arrow-wood		SR	G5	S2
<i>Viola hirsutula</i>	Southern Wood Violet		SX	G4	SX
<i>Wisteria macrostachya</i>	Kentucky Wisteria		SR	G5	S2
High Quality Natural Community					
Barrens - bedrock limestone	Limestone Glade		SG	G4	S2S3
Barrens - bedrock siltstone	Siltstone Glade		SG	G2	S2
Forest - upland dry	Dry Upland Forest		SG	G4	S4
Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	G4	S4
Forest - upland mesic	Mesic Upland Forest		SG	G3?	S3

Other

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County: Clark

Species Name	Common Name	FED	STATE	GRANK	SRANK
Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

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Indiana County Endangered, Threatened and Rare Species List

County: Jackson

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
<i>Cyrogenia stegaria</i>	Eastern Fanshell Pearlymussel	LE	SE	G1Q	S1
<i>Epioblasma torulosa torulosa</i>	Tubercled Blossom	LE	SE	G2TX	SX
<i>Lampsilis fasciola</i>	Wavyrayed Lampmussel		SSC	G5	S3
<i>Obovaria subrotunda</i>	Round Hickorynut		SSC	G4	S1
<i>Pleurobema clava</i>	Clubshell	LE	SE	G2	S1
<i>Pleurobema cordatum</i>	Ohio Pigtoe		SSC	G4	S2
<i>Pleurobema plenum</i>	Rough Pigtoe	LE	SE	G1	S1
<i>Pleurobema rubrum</i>	Pyramid Pigtoe		SE	G2G3	SX
<i>Ptychobranthus fasciolaris</i>	Kidneyshell		SSC	G4G5	S2
<i>Quadrula cylindrica cylindrica</i>	Rabbitsfoot	C	SE	G3G4T3	S1
<i>Villosa lienosa</i>	Little Spectaclecase		SSC	G5	S3
Insect: Odonata (Dragonflies & Damselflies)					
<i>Epitheca canis</i>	Beaverpond Baskettail		SE	G5	S1
Amphibian					
<i>Hemidactylium scutatum</i>	Four-toed Salamander		SE	G5	S2
<i>Rana pipiens</i>	Northern Leopard Frog		SSC	G5	S2
Reptile					
<i>Clonophis kirtlandii</i>	Kirtland's Snake		SE	G2	S2
<i>Crotalus horridus</i>	Timber Rattlesnake		SE	G4	S2
<i>Kinosternon subrubrum subrubrum</i>	Eastern Mud Turtle		SE	G5T5	S2
<i>Nerodia erythrogaster neglecta</i>	Copperbelly Water Snake	PS:LT	SE	G5T3	S2
<i>Opheodrys aestivus</i>	Rough Green Snake		SSC	G5	S3
Bird					
<i>Accipiter striatus</i>	Sharp-shinned Hawk	No Status	SSC	G5	S2B
<i>Ammodramus henslowii</i>	Henslow's Sparrow		SE	G4	S3B
<i>Ardea alba</i>	Great Egret		SSC	G5	S1B
<i>Bartramia longicauda</i>	Upland Sandpiper		SE	G5	S3B
<i>Buteo lineatus</i>	Red-shouldered Hawk		SSC	G5	S3
<i>Buteo platypterus</i>	Broad-winged Hawk	No Status	SSC	G5	S3B
<i>Cistothorus palustris</i>	Marsh Wren		SE	G5	S3B
<i>Cistothorus platensis</i>	Sedge Wren		SE	G5	S3B
<i>Dendroica cerulea</i>	Cerulean Warbler		SE	G4	S3B
<i>Haliaeetus leucocephalus</i>	Bald Eagle	LT,PDL	SE	G5	S2
<i>Helmitheros vermivorus</i>	Worm-eating Warbler		SSC	G5	S3B
<i>Ixobrychus exilis</i>	Least Bittern		SE	G5	S3B
<i>Lanius ludovicianus</i>	Loggerhead Shrike	No Status	SE	G4	S3B
<i>Mniotilta varia</i>	Black-and-white Warbler		SSC	G5	S1S2B
<i>Nyctanassa violacea</i>	Yellow-crowned Night-heron		SE	G5	S2B
<i>Pandion haliaetus</i>	Osprey		SE	G5	S1B

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Rallus elegans	King Rail		SE	G4	S1B
Tyto alba	Barn Owl		SE	G5	S2
Wilsonia citrina	Hooded Warbler		SSC	G5	S3B
Mammal					
Lutra canadensis	Northern River Otter		SSC	G5	S2
Lynx rufus	Bobcat	No Status	SSC	G5	S1
Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	G2	S1
Nycticeius humeralis	Evening Bat		SE	G5	S1
Taxidea taxus	American Badger		SSC	G5	S2
Vascular Plant					
Acalypha deamii	Mercury		SR	G4?	S2
Cabomba caroliniana	Carolina Fanwort		SX	G3G5	SX
Carex atlantica ssp. atlantica	Atlantic Sedge		ST	G5T4	S2
Carex seorsa	Weak Stellate Sedge		SR	G4	S2
Epilobium ciliatum	Hairy Willow-herb		SX	G5	SX
Hydrastis canadensis	Golden Seal		WL	G4	S3
Juglans cinerea	Butternut		WL	G4	S3
Magnolia acuminata	Cucumber Magnolia		SE	G5	S1
Mikania scandens	Climbing Hempweed		SE	G5	S1
Najas gracillima	Thread-like Naiad		ST	G5?	S1
Panax quinquefolius	American Ginseng		WL	G3G4	S3
Panicum bicknellii	A Panic-grass		SE	G4?Q	S1
Platanthera flava var. flava	Southern Rein Orchid		SE	G4?T4?Q	S1
Poa paludigena	Bog Bluegrass		WL	G3	S3
Rubus alumnus	A Bramble		SX	G5	SX
Rubus centralis	Illinois Blackberry		SE	G2?Q	S1
Rubus odoratus	Purple Flowering Raspberry		ST	G5	S2
High Quality Natural Community					
Barrens - bedrock siltstone	Siltstone Glade		SG	G2	S2
Forest - floodplain mesic	Mesic Floodplain Forest		SG	G3?	S1
Forest - floodplain wet	Wet Floodplain Forest		SG	G3?	S3
Forest - floodplain wet-mesic	Wet-mesic Floodplain Forest		SG	G3?	S3
Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	G4	S4
Forest - upland mesic	Mesic Upland Forest		SG	G3?	S3
Wetland - seep acid	Acid Seep		SG	GU	S1
Other					
Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

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Indiana County Endangered, Threatened and Rare Species List**County: Johnson**

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	G2T2	SX
Epioblasma triquetra	Snuffbox		SE	G3	S1
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Obovaria subrotunda	Round Hickorynut		SSC	G4	S1
Pleurobema clava	Clubshell	LE	SE	G2	S1
Ptychobranchus fasciolaris	Kidneyshell		SSC	G4G5	S2
Quadrula cylindrica cylindrica	Rabbitsfoot	C	SE	G3G4T3	S1
Simpsonaias ambigua	Salamander Mussel		SSC	G3	S2
Villosa fabalis	Rayed Bean	C	SSC	G2	S1
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
Insect: Odonata (Dragonflies & Damselflies)					
Cordulegaster bilineata	Brown Spiketail		SE	G5	S1
Enallagma divagans	Turquoise Bluet		SR	G5	S3
Sympetrum semicinctum	Band-winged Meadowhawk		SR	G5	S2S3
Reptile					
Clonophis kirtlandii	Kirtland's Snake		SE	G2	S2
Bird					
Ammodramus henslowii	Henslow's Sparrow		SE	G4	S3B
Bartramia longicauda	Upland Sandpiper		SE	G5	S3B
Circus cyaneus	Northern Harrier		SE	G5	S2
Cistothorus platensis	Sedge Wren		SE	G5	S3B
Dendroica cerulea	Cerulean Warbler		SE	G4	S3B
Haliaeetus leucocephalus	Bald Eagle	LT,PDL	SE	G5	S2
Ixobrychus exilis	Least Bittern		SE	G5	S3B
Nycticorax nycticorax	Black-crowned Night-heron		SE	G5	S1B
Rallus elegans	King Rail		SE	G4	S1B
Rallus limicola	Virginia Rail		SE	G5	S3B
Tyto alba	Barn Owl		SE	G5	S2
Mammal					
Lasiurus borealis	Eastern Red Bat		SSC	G5	S4
Lynx rufus	Bobcat	No Status	SSC	G5	S1
Mustela nivalis	Least Weasel		SSC	G5	S2?
Myotis lucifugus	Little Brown Bat		SSC	G5	S4
Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	G2	S1
Nycticeius humeralis	Evening Bat		SE	G5	S1
Pipistrellus subflavus	Eastern Pipistrelle		SSC	G5	S4
Taxidea taxus	American Badger		SSC	G5	S2
Vascular Plant					
Azolla caroliniana	Carolina Mosquito-fern		ST	G5	S2

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Indiana County Endangered, Threatened and Rare Species List

County: Johnson

Species Name	Common Name	FED	STATE	GRANK	SRANK
Chelone obliqua var. speciosa	Rose Turtlehead		WL	G4T3	S3
Juglans cinerea	Butternut		WL	G4	S3
Zannichellia palustris	Horned Pondweed		SR	G5	S2
High Quality Natural Community					
Forest - floodplain wet-mesic	Wet-mesic Floodplain Forest		SG	G3?	S3
Wetland - seep circumneutral	Circumneutral Seep		SG	GU	S1

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Indiana County Endangered, Threatened and Rare Species List

County: Marion

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	G2T2	SX
Epioblasma triquetra	Snuffbox		SE	G3	S1
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Obovaria subrotunda	Round Hickorynut		SSC	G4	S1
Plethobasus cyphus	Sheepnose	C	SE	G3	S1
Pleurobema clava	Clubshell	LE	SE	G2	S1
Pleurobema plenum	Rough Pigtoe	LE	SE	G1	S1
Ptychobranchus fasciolaris	Kidneyshell		SSC	G4G5	S2
Quadrula cylindrica cylindrica	Rabbitsfoot	C	SE	G3G4T3	S1
Toxolasma lividus	Purple Lilliput		SSC	G3	S2
Venustaconcha ellipsiformis	Ellipse		SSC	G4	S2
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
Insect: Lepidoptera (Butterflies & Moths)					
Hyperaeschra georgica	A Prominent Moth			G5	S2
Insect: Neuroptera					
Sisyra sp. 1	Indiana Spongilla Fly		ST	GNR	S2
Fish					
Percina evides	Gilt Darter		SE	G4	S1
Amphibian					
Rana pipiens	Northern Leopard Frog		SSC	G5	S2
Reptile					
Clemmys guttata	Spotted Turtle		SE	G5	S2
Clonophis kirtlandii	Kirtland's Snake		SE	G2	S2
Emydoidea blandingii	Blanding's Turtle		SE	G4	S2
Thamnophis butleri	Butler's Garter Snake		SE	G4	S1
Bird					
Ardea alba	Great Egret		SSC	G5	S1B
Bartramia longicauda	Upland Sandpiper		SE	G5	S3B
Botaurus lentiginosus	American Bittern		SE	G4	S2B
Buteo lineatus	Red-shouldered Hawk		SSC	G5	S3
Buteo platypterus	Broad-winged Hawk	No Status	SSC	G5	S3B
Dendroica cerulea	Cerulean Warbler		SE	G4	S3B
Falco peregrinus	Peregrine Falcon	No Status	SE	G4	S2B
Haliaeetus leucocephalus	Bald Eagle	LT,PDL	SE	G5	S2
Helmitheros vermivorus	Worm-eating Warbler		SSC	G5	S3B
Ixobrychus exilis	Least Bittern		SE	G5	S3B
Lanius ludovicianus	Loggerhead Shrike	No Status	SE	G4	S3B
Mniotilta varia	Black-and-white Warbler		SSC	G5	S1S2B

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Indiana County Endangered, Threatened and Rare Species List**County: Marion**

Species Name	Common Name	FED	STATE	GRANK	SRANK
<i>Nycticorax nycticorax</i>	Black-crowned Night-heron		SE	G5	S1B
<i>Pandion haliaetus</i>	Osprey		SE	G5	S1B
<i>Rallus elegans</i>	King Rail		SE	G4	S1B
<i>Wilsonia citrina</i>	Hooded Warbler		SSC	G5	S3B
Mammal					
<i>Lutra canadensis</i>	Northern River Otter		SSC	G5	S2
<i>Lynx rufus</i>	Bobcat	No Status	SSC	G5	S1
<i>Myotis sodalis</i>	Indiana Bat or Social Myotis	LE	SE	G2	S1
<i>Taxidea taxus</i>	American Badger		SSC	G5	S2
Vascular Plant					
<i>Chelone obliqua</i> var. <i>speciosa</i>	Rose Turtlehead		WL	G4T3	S3
<i>Deschampsia cespitosa</i>	Tufted Hairgrass		SR	G5	S2
<i>Hydrastis canadensis</i>	Golden Seal		WL	G4	S3
<i>Juglans cinerea</i>	Butternut		WL	G4	S3
<i>Melanthium virginicum</i>	Virginia Bunchflower		SE	G5	S1
<i>Panax quinquefolius</i>	American Ginseng		WL	G3G4	S3
<i>Poa wolfii</i>	Wolf Bluegrass		SR	G4	S2
<i>Rubus odoratus</i>	Purple Flowering Raspberry		ST	G5	S2
<i>Trifolium stoloniferum</i>	Running Buffalo Clover	LE	SE	G3	S1
High Quality Natural Community					
Forest - flatwoods central till plain	Central Till Plain Flatwoods		SG	G3	S2
Forest - floodplain mesic	Mesic Floodplain Forest		SG	G3?	S1
Forest - floodplain wet	Wet Floodplain Forest		SG	G3?	S3
Forest - floodplain wet-mesic	Wet-mesic Floodplain Forest		SG	G3?	S3
Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	G4	S4
Forest - upland mesic	Mesic Upland Forest		SG	G3?	S3
Wetland - fen	Fen		SG	G3	S3

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Indiana County Endangered, Threatened and Rare Species List

County: Scott

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
Insect: Lepidoptera (Butterflies & Moths)					
Artogeia virginienis	West Virginia White		SR	G3G4	S3
Reptile					
Nerodia erythrogaster neglecta	Copperbelly Water Snake	PS:LT	SE	G5T3	S2
Opheodrys aestivus	Rough Green Snake		SSC	G5	S3
Bird					
Ammodramus henslowii	Henslow's Sparrow		SE	G4	S3B
Buteo lineatus	Red-shouldered Hawk		SSC	G5	S3
Haliaeetus leucocephalus	Bald Eagle	LT,PDL	SE	G5	S2
Helmitheros vermivorus	Worm-eating Warbler		SSC	G5	S3B
Mammal					
Myotis sodalis	Indiana Bat or Social Myotis	LE	SE	G2	S1
Vascular Plant					
Calamagrostis porteri ssp. insperata	Reed Bent Grass		ST	G4T3	S1
Carex straminea	Straw Sedge		ST	G5	S2
Dentaria multifida	Divided Toothwort		SE	G4?	S1
Euphorbia obtusata	Bluntleaf Spurge		SE	G5	S1
Hottonia inflata	Featherfoil		ST	G4	S2
Najas gracillima	Thread-like Naiad		ST	G5?	S1
Penstemon deamii	Deam Beardtongue		SR	G1	S1
Platanthera flava var. flava	Southern Rein Orchid		SE	G4?T4?Q	S1
Scirpus purshianus	Weakstalk Bulrush		SR	G4G5	S1
Solidago squarrosa	Stout-ragged Goldenrod		SE	G4?	S1
Spiranthes vernalis	Grassleaf Ladies'-tresses		WL	G5	S2
High Quality Natural Community					
Forest - upland dry	Dry Upland Forest		SG	G4	S4
Forest - upland dry-mesic	Dry-mesic Upland Forest		SG	G4	S4
Forest - upland mesic	Mesic Upland Forest		SG	G3?	S3

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Indiana County Endangered, Threatened and Rare Species List

County: Shelby

Species Name	Common Name	FED	STATE	GRANK	SRANK
Mollusk: Bivalvia (Mussels)					
Epioblasma torulosa rangiana	Northern Riffleshell	LE	SE	G2T2	SX
Epioblasma triquetra	Snuffbox		SE	G3	S1
Lampsilis fasciola	Wavyrayed Lampmussel		SSC	G5	S3
Pleurobema clava	Clubshell	LE	SE	G2	S1
Ptychobranhus fasciolaris	Kidneyshell		SSC	G4G5	S2
Quadrula cylindrica cylindrica	Rabbitsfoot	C	SE	G3G4T3	S1
Simpsonaias ambigua	Salamander Mussel		SSC	G3	S2
Toxolasma lividus	Purple Lilliput		SSC	G3	S2
Villosa fabalis	Rayed Bean	C	SSC	G2	S1
Villosa lienosa	Little Spectaclecase		SSC	G5	S3
Insect: Odonata (Dragonflies & Damselflies)					
Enallagma divagans	Turquoise Bluet		SR	G5	S3
Bird					
Haliaeetus leucocephalus	Bald Eagle	LT,PDL	SE	G5	S2
Mammal					
Lutra canadensis	Northern River Otter		SSC	G5	S2
Taxidea taxus	American Badger		SSC	G5	S2
High Quality Natural Community					
Forest - flatwoods central till plain	Central Till Plain Flatwoods		SG	G3	S2
Other					
Geomorphic - Nonglacial Erosional Feature - Water Fall and Cascade	Water Fall and Cascade			GNR	SNR

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	<p>U.S. Fish & Wildlife Service Kentucky Ecological Services Field Office</p>	<p>U.S. Fish & Wildlife Service 330 West Broadway, Rm 265 Frankfort, KY 40601 Phone: 502-695-0468 Fax: 502-695-1024</p>
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Endangered, Threatened, & Candidate Species in _____JEFFERSON_____ County, KY					
Group	Species	Common name	Legal* Status	Known** Potential	Special Comments
Mammals	<i>Myotis grisescens</i>	gray bat	E	K	
	<i>Myotis sodalis</i>	Indiana bat	E	K	
Mussels	<i>Pleurobema clava</i>	clubshell	E	K	
	<i>Cyprogenia stegaria</i>	fanshell	E	K	
	<i>Potamilus capax</i>	fat pocketbook	E	K	
	<i>Plethobasus cooperianus</i>	orangefoot pimpleback	E	K	
	<i>Obovaria retusa</i>	ring pink	E	K	
	<i>Lampsilis abrupta</i>	pink mucket	E	K	
	<i>Plethobasus cyphyus</i>	sheepnose	C	P	
	<i>Pleurobema plenum</i>	rough pigtoe	E	P	
Plants	<i>Trifolium stoloniferum</i>	running buffalo clover	E	K	
Birds	<i>Sterna antillarum</i>	interior least tern	E	K	

Insects	<i>Nicrophorus americanus</i>	American burying beetle	E	historic	considered extirpated
	<i>Pseudanopthalmus troglodytes</i>	Louisville cave beetle	C	K	

NOTES:

* Key to notations: E = Endangered, T = Threatened, C = Candidate, CH = Critical Habitat

**Key to notations: K = Known occurrence record within the county, P = Potential for the species to occur within the county based upon historic range, proximity to known occurrence records, biological, and physiographic characteristics.

Table F-2. State-listed Threatened and Endangered Species that Could Potentially Occur in the Study Area		
Common and Scientific Names	State Status	Preferred Habitat
Indiana		
Mammals		
Franklin's ground squirrel <i>Spermophilus franklinii</i>	E	Tall grasslands and is often found along forest-prairie borders and marsh edges
Birds		
American bittern <i>Botaurus lentiginosus</i>	E	Bogs, wet meadows, and hayfields
Barn Owl <i>Tyto alba</i>	E	Generally found at low elevations in open habitats, such as grasslands, deserts, marshes and agricultural fields and require cavities for nesting
Black rail <i>Laterallus jamaicensis</i>	E	Usually frequent wet areas where dense but not necessarily tall growths of rushes, sedges or grasses are present
Black tern <i>Chlidonias niger</i>	E	Wetlands with dense emergent vegetation with open water for breeding
Black-crowned night heron <i>Nycticorax nycticorax</i>	E	Marshes, swamps, ponds, lakes, lagoons, occasionally grasslands.
Common moorhen <i>Gallinula chloropus</i>	E	Freshwater cattail-bulrush marshes with patches of Phragmites, Carex, and Sparganium
Henslow's sparrow <i>Ammodramus henslowii</i>	E	Uncultivated grasslands, wet meadows, and overgrown fields, somewhat weedy or shrubby
King rail <i>Rallus elegans</i>	E	Shallow, freshwater marshes; small potholes.
Least bittern <i>Ixobrychus exilis</i>	E	Emergent vegetation in wetlands
Loggerhead Shrike <i>Lanius ludovicianus</i>	E	Prefers a field bordered with trees or replete with brush / thickets to almost any other
Marsh wren <i>Cistothorus palustris</i>	E	Breed in fresh and brackish water marshes with abundant reeds
Peregrine Falcon <i>Falco peregrines</i>	E	Prefer open habitats, such as grasslands, tundra, and meadows

Table F-2. State-listed Threatened and Endangered Species that Could Potentially Occur in the Study Area		
Common and Scientific Names	State Status	Preferred Habitat
Piping plover <i>Charadrius melodus</i>	E	Open sandy beaches or rocky shores, often in high, dry sections away from water
Sedge Wren <i>Cistothorus platensis</i>	E	Dry transitional edges of freshwater marshes, bogs and wet meadows.
Upland sandpiper <i>Bartramia longicauda</i>	E	Grasslands
Virginia rail <i>Rallus limicola</i>	E	Freshwater marshes
Yellow-headed blackbird <i>Xanthocephalus xanthocephalus</i>	E	Requires freshwater marshes for breeding. Nest over water in emergent vegetation
Insects		
A Cicadellid moth <i>Cicadula straminea</i>	T	A grass and sedge feeder found in marshes
A Cicadellid moth <i>Dorydiella kansana</i>	T	Found on its host plant, nut-rush (<i>Scleria sp.</i>) and may occur in a wide variety of habitats that support nut-rush.
A Cicadellid moth <i>Limotettix divaricatus</i>	T	Bogs, alvars and sandy areas
A Cicadellid moth <i>Paraphlepsius lobatus</i>	T	Found on host plant, <i>Andropogon scoparius</i>
A Noctuid moth <i>Apamea burgessi</i>	T	Sparsely vegetated sand and gravel and sandplain and other warm season grasslands
A Noctuid moth <i>Eucoptocnemis fimbriaris</i>	T	Sand prairies
A Noctuid moth <i>Agrotis stigmata</i>	T	Larvae are found on yarrow (<i>Achillea millifolium</i>)
A Noctuid moth <i>Archanara laeta</i>	T	The larvae are known to feed on bur-reed.
A Noctuid moth <i>DichagyrisLoxogratis acclivis</i>	T	The larvae feed on seeds of <i>Panicum virgatum</i>

Table F-2. State-listed Threatened and Endangered Species that Could Potentially Occur in the Study Area		
Common and Scientific Names	State Status	Preferred Habitat
A Noctuid moth (unnamed) <i>Capis curvata</i>	T	Prairie
A Noctuid moth (unnamed) <i>Oligia obtusa</i>	E	Found on host plants, sedges
A Tortricid moth <i>Aethes patricia</i>	E	Feeds on apple, feeding on fruit, buds, leaves and shoots
American Burying Beetle <i>Nicrophorus americanus</i>	E	Habitat generalists, occurring in both forested and grassland areas, but require soils suitable for digging
Aureolaria seed borer <i>Rhodoecia aurantiago</i>	T	Larva feed on seedpods of gerardia (<i>Agalinis sp.</i>). Moth appears in August.
Barrens Metarranthis moth <i>Metarranthis apiciaria</i>	E	Larvae found on host plants in various vegetated habitats
Beer's blazing star borer moth <i>Papaipema beeriana</i>	T	Mesic tall grass prairie
Big broad-winged skipper <i>Poanes viator viator</i>	T	Bog/fen, herbaceous wetland, riparian, scrub shrub wetland habitats
Bunchgrass skipper <i>Problema byssus</i>	T	Grassland/herbaceous, savanna, woodland - conifer, woodland – hardwood
Columbine borer <i>Papaipema leucostigma</i>	T	Grassland, prairie, and savanna habitats, though not exclusive to these. Larvae feed on <i>Columbine sp.</i>
Culver's root borer <i>Papaipema sciata</i>	T	The Culver's root borer occurs with its larval host plant, Culver's root (<i>Veronicastrum virginicum</i>).
Dune locust <i>Trimerotropis maritime</i>	T	Beach sand along the Atlantic Coast and the Great Lakes
Dune Oncocnemis moth	T	Prairie dunes

Table F-2. State-listed Threatened and Endangered Species that Could Potentially Occur in the Study Area		
Common and Scientific Names	State Status	Preferred Habitat
<i>Oncocnemis riparia</i>		
Dusted skipper <i>Atrytonopsis hianna</i>	T	Open dry fields, open woodlands, barrens, mid grass and tall grass prairies, foothills and prairie gulches, and outcrops and glades.
Ernestine's moth <i>Phytometra ernestinana</i>	E	Native grasslands, prairie, and savanna.
Giant Sunflower Borer moth <i>Papaipema maritime</i>	T	The species is restricted to mesic and wet-mesic prairies and prairie fens. The larvae bore into the stalks of <i>Helianthus giganteus</i> .
Golden Borer moth <i>Papaipema cerina</i>	T	Associated with dry-mesic forests and hydric grasslands. This species is also associated with large contiguous natural landscapes.
Grasshopper (unnamed) <i>Paroxya atlantica</i>	T	Grasslands
Great copper <i>Lycaena xanthoides</i>	E	Prairie swamps, marshes, weedy fields, and meadows
Grote's black-tipped quaker <i>Dichagyris grotei</i>	T	Xeric prairie
Included cordgrass borer <i>Spartiniphaga includens</i>	T	Wet meadows and edges of wetlands; adults are nocturnal and come to light
Indiangrass flexamia <i>Flexamia reflexus</i>	T	Hay pastures, ROW, and savannas. Host plant Indian grass
Kansas Prairie Leafhopper <i>Prairiana kansana</i>	E	Sand prairies and grasslands
Karner blue butterfly <i>Lycaeides melissa samuelis</i>	E	Occurs in association with larval host plant wild blue lupine (<i>Lupinus perennis</i>). Sandy barrens and oak savanna with periodic fire

**Table F-2. State-listed Threatened and Endangered Species that
Could Potentially Occur in the Study Area**

Common and Scientific Names	State Status	Preferred Habitat
Large-headed grasshopper <i>Phoetaliotes nebrascensis</i>	T	Occurs in a wide variety of habitats and on a variety of soil types. Feeds on a diverse mix of grasses and forbs.
Louisiana macrochilo moth <i>Macrochilo louisiana</i>	T	Wet meadows, fens, wetland edges
Many-lined Cordgrass moth <i>Chortodes enervate</i>	T	Feeds on <i>Spartina pectinata</i>
Marked Noctuid moth <i>Tricholita notata</i>	T	Mesic prairie
Marsh Fern moth <i>Fagitana littera</i>	T	Bogs, acidic shrub swamps, wet pine barrens, wetlands
Mottled Duskywing <i>Erynnis martialis</i>	T	Open woodland, barrens, prairie hills, open brushy fields, chaparral
Multicolored Huckleberry moth <i>Pangrapta decoralis</i>	T	Presumably woodlands, shrubby areas near hostplant (blueberries)
Newman's brocade <i>Meropleon ambifuscum</i>	T	Prairie species that tolerates a variety of open and wooded areas.
Olympa Marble <i>Euchloe Olympia</i>	T	Various open areas including prairies, foothills, lakeshore dunes, shale barrens, meadows, and open woodlands
Ottoe skipper <i>Hesperia ottoe</i>	E	Well-drained native grasslands, dunes, sandy barrens, limestone, bluff prairie and shortgrass prairie
Pearly Indigo Borer <i>Sitochroa dasconalis</i>	T	Fields and other places where food plant grows
Peppered Paraphlepsius <i>Paraphlepsius maculosus</i>	T	Dry prairie, oak savanna, barrens
Persius Dusky Wing <i>Erynnis persius persius</i>	E	Pine barrens and oak savannas
Pink streak moth <i>Faronta rubripennis</i>	T	Sandy grassy situations such as prairies and dunes

Table F-2. State-listed Threatened and Endangered Species that Could Potentially Occur in the Study Area		
Common and Scientific Names	State Status	Preferred Habitat
Plox moth <i>Schinia Indiana</i>	E	Sandy dry to dry-mesic savannas (black/Hill's oak or jack pine barrens) and small dry-mesic prairie openings with an abundance of <i>Phlox pilosa</i>
Prairie Panic Grass Leafhopper <i>Polyamia herbida</i>	T	Occurs in a variety of grassland types, including glaciated, dry sand prairie-barrens, and unglaciated barrens and hill prairie
Prairie Sedge moth <i>Crambus murellus</i>	T	Xeric prairie
Rare Sand Quaker <i>Platyperigea meralis</i>	T	Sandy grassland areas
Regal fritillary <i>Speyeria idalia</i>	E	Grassland areas with prairie remnants or lightly grazed pasture, where topography often includes hills and valleys
Royal fern borer moth <i>Papaipema speciosissima</i>	T	Grassland, Prairie and Savanna habitats, though not exclusive to these. Larvae feed on <i>Osmunda regalis</i> and <i>Osmunda cinnamomea</i>
Silphium Borer moth <i>Papaipema silphii</i>	T	Occurs in a variety of prairie habitats including mesic prairie, prairie fen, and lakeplain mesic prairie
Silver-bordered fritillary <i>Boloria selene myrina</i>	T	Marshy or boggy areas with violets
Silvery blue <i>Glaucopsyche lygdamus couperi</i>	E	Open woodland, flowery meadows, and roadsides, sometimes in small waste areas in cities.
Spittle bug <i>Paraphilaenus parallelus</i>	T	Bogs in mixed sugar maple-oak-hemlock forests of Ontario and Wisconsin. Adults feed on <i>Carex spp.</i>
Starry Champion Moth <i>Hadena ectypa</i>	T	Forest understory near host plant <i>Silene stellata</i>
Sweet Fern Underwing <i>Catocala antinympha</i>	E	Pine-shrubby oak-heath barrens or other xeric open pine woodland
Tufted Sedge Moth <i>Chortodes inquinata</i>	T	Areas near hostplant <i>Carex comosa</i>
Two-lined cosmoteitix <i>Cosmotettix bilineatus</i>	T	Wet prairie

Table F-2. State-listed Threatened and Endangered Species that Could Potentially Occur in the Study Area		
Common and Scientific Names	State Status	Preferred Habitat
Two-spotted Skipper <i>Euphyes bimacula</i>	T	Bogs, sedge meadows, sedge marshes along streams, and sometimes openings in swamps
Reptiles		
Blanding's Turtle <i>Emydoidea blaningii</i>	E	Wetland habitats with permanent shallow water and emergent vegetation. Extensive use of terrestrial habitats for nesting and travel
Eastern Massasauga <i>Sistrurus catenatus catenatus</i>	E	Strongly associated with floodplain habitats along medium to large rivers
Kirtland's Snake <i>Clonophis kirtlandi</i>	E	Inhabits prairie fens, wet meadows, lakeplain wet prairies and associated open and wooded wetlands, seasonal marshes, open swamps
Ornate Box Turtle <i>Terrapene ornate ornate</i>	E	Inhabit prairie grassland, pasture, fields, sandhills, and open woodland
Smooth Green Snake <i>Liochlorophis vernalis</i>	E	Meadows, grassy marshes, moist grassy fields at forest edges, mountain shrublands, stream borders, bogs, open moist woodland, abandoned farmland, and vacant lots
Spotted Turtle <i>Clemmys guttata</i>	E	Mostly unpolluted, shallow bodies of water with a soft bottom and aquatic vegetation; in some areas they occur in brackish tidal streams
Kentucky		
Mammals		
Gray Myotis <i>Myotis grisescens</i>	T	A cave-roosting species. Closely associated with water, where it drinks and forages for night-flying insects. In winter, hibernates primarily in deep vertical caves
Indiana Bat <i>Myotis sodalis</i>	E	For hibernation, prefer limestone caves with stable temperatures of 39 to 46 F. Although floodplain and riparian forests are important habitats for both foraging and roosting, other habitats are used. Indiana bats typically roost under loose bark during the summer.
Birds		
American Coot <i>Fulica americana</i>	E	Inhabits a wide variety of freshwater wetlands from prairie potholes to swamps and marshes to suburban park and

Table F-2. State-listed Threatened and Endangered Species that Could Potentially Occur in the Study Area		
Common and Scientific Names	State Status	Preferred Habitat
		sewage ponds to the edges of large lakes
Bachman's Sparrow <i>Peucaea aestivalis</i>	E	Inhabits dry open pine or oak woods with a scattering of scrub; also frequents overgrown weedy fields and pastures.
Bald Eagle <i>Haliaeetus leucocephalus</i>	T	Breeds in forested areas near large bodies of water. Winters in coastal areas, along large rivers, and large unfrozen lakes.
Black-crowned night heron <i>Nycticorax nycticorax</i>	T	Marshes, swamps, ponds, lakes, lagoons, occasionally grasslands.
Blue-winged Teal <i>Anas discors</i>	T	Migrants use marshes, vegetated wetlands around lakes, and rice fields, and typically stop in freshwater or brackish areas rather than saltwater
Double-crested Cormorant <i>Phalacrocorax auritus</i>	E	Found in diverse aquatic habitats, such as ponds, lakes, rivers, lagoons, estuaries, and open coastline; more widespread in winter.
Great Egret <i>Ardea alba</i>	E	Feeds in variety of wetlands, including marshes, swamps, streams, rivers, ponds, lakes, tide flats, canals, and flooded fields
Hooded Merganser <i>Lophodytes cucullatus</i>	T	Found in wide range of open waters, along coasts, and in shallower waters than other mergansers
Interior Least Tern <i>Sternula antillarum athalassos</i>	E	Seacoasts, beaches, bays, estuaries, lagoons, lakes and rivers, breeding on sandy or gravelly beaches and banks of rivers or lakes, rarely on flat rooftops of buildings
King rail <i>Rallus elegans</i>	E	Shallow, freshwater marshes; small potholes.
Lark Sparrow <i>Chondestes grammacus</i>	T	Park-like woodlands, mesquite grasslands, fallow fields with brushy edges, sagebrush
Least bittern <i>Ixobrychus exilis</i>	T	Emergent vegetation in wetlands
Little Blue Heron <i>Egretta caerulea</i>	E	Prefers freshwater areas such as ponds, lakes, marshes, swamps, and lagoons, sometimes occupy flooded and dry grasslands, or marine coastlines
Northern Shoveler <i>Anas clypeata</i>	E	Breeds in open, shallow wetlands. In winter, inhabits both freshwater and saline marshes.

Table F-2. State-listed Threatened and Endangered Species that Could Potentially Occur in the Study Area		
Common and Scientific Names	State Status	Preferred Habitat
Osprey <i>Pandion haliaetus</i>	T	Forested areas in association with water, primarily near lakes, rivers, and along coastal waters
Peregrine Falcon <i>Falco peregrines</i>	E	Prefer open habitats, such as grasslands, tundra, and meadows
Pied-billed Grebe <i>Podilymbus podiceps</i>	E	Breeds on seasonal or permanent ponds with dense stands of emergent vegetation, bays and sloughs. Uses most types of wetlands in winter
Spotted Sandpiper <i>Actitis macularius</i>	E	Breeds in a variety of habitats, such as shoreline, sagebrush, grassland, forest, lawn, or park
Yellow-crowned Night-Heron <i>Nyctanassa violacea</i>	T	Marshes, swamps, lakes, lagoons, and mangroves; chiefly coastal
Insects		
Louisville Cave Beetle <i>Pseudanophthalmus troglodytes</i>	T	Eleven Jones Cave located by Beargrass Creek in Louisville, Kentucky
Northern Metalmark <i>Calephelis borealis</i>	T	Wooded areas, streams, and openings along roads and forests all associated with limestone or shale barrens (Rlephoto 2011)
Regal fritillary <i>Speyeria idalia</i>	Historic	Grassland areas with prairie remnants or lightly grazed pasture, where topography often includes hills and valleys
Reptiles		
Eastern Slender Glass Lizard <i>Ophisaurus attenuatus longicaudus</i>	T	Most common in flatwoods and around wetlands in sandy habitats. Additionally, very common in coastal dune habitats and are sometimes even found beneath debris at the tide line
Kirtland's Snake <i>Clonophis kirtlandi</i>	T	Inhabits prairie fens, wet meadows, lakeplain wet prairies and associated open and wooded wetlands, seasonal marshes, open swamps
Mussels		
Clubshell <i>Pleurobema clava</i>	E	This species is generally found in clean, coarse sand and gravel in runs, often just downstream of a riffle, and cannot tolerate mud or slackwater conditions (Watters 1994).

Table F-2. State-listed Threatened and Endangered Species that Could Potentially Occur in the Study Area		
Common and Scientific Names	State Status	Preferred Habitat
Elktoe <i>Alasmidonta marginata</i>	T	Preferred habitat to be small streams with good current and sand or gravel bottoms at depths of several inches to 2 feet (Parmalee 1967).
Fanshell <i>Cyprogenia stegaria</i>	E	It has been found in river habitats with gravel substrates and a strong current, in both deep and shallow water (Ortmann 1919; Parmalee 1967).
Fat Pocketbook <i>Potamilus capax</i>	E	This species is found in sand, mud, and fine gravel substrates and flowing water (Dennis 1985b).
Orangefoot Pimpleback <i>Plethobasus cooperianus</i>	E	This species is found in medium to large rivers in sand, gravel, and cobble substrates in riffles and shoals in deep water and steady currents as well as some shallower shoals and riffles (Gordon and Layzer 1989; Bogan and Parmalee 1983; Cummings and Mayer 1992; USFWS 1984).
Pink Mucket <i>Lampsilis abrupta</i>	E	Found in waters with strong currents, rocky or boulder substrates, with depths up to about 1 m, but is also found in deeper waters with slower currents and sand and gravel substrates (Gordon and Layzer 1989; Dennis 1985a).
Pyramid Pigtoe <i>Pleurobema rubrum</i>	E	large rivers but may occur in medium-sized lotic environments, tends to occupy riffles or shoals in relatively shallow water and coarse-particle substrates, along sand bars, or in deep water with stable mud sand bottoms (Watters et al. 2009).
Rabbitsfoot <i>Quadrula cylindrica cylindrica</i>	T	Found in medium to large rivers in sand and gravel (Cummings and Mayer 1992).
Ring Pink <i>Obovaria retusa</i>	E	Dennis (1984) characterized preferred habitat as large rivers, but it has been reported from the Duck River indicating it can tolerate medium rivers (Mirarchi et al. 2004).
Salamander Mussel <i>Simpsonaias ambigua</i>	T	Preferred habitat is in sand or silt under large, flat stones in areas of a swift current (Call 1900; Howard 1915; Buchanan 1980; Clarke 1985; Oesch 1984, 1995; Parmalee and Bogan 1998).
Sheepnose <i>Plethobasus cyphus</i>	E	Associated with riffles and gravel/cobble substrates but usually has been reported from deep water (>2 m) with

Table F-2. State-listed Threatened and Endangered Species that Could Potentially Occur in the Study Area		
Common and Scientific Names	State Status	Preferred Habitat
		slight to swift currents and mud, sand, or gravel bottoms (Gordon and Layzer 1989).
Snuffbox <i>Epioblasma triquetra</i>	E	Found in riffles of medium and large rivers with stony or sandy bottoms, in swift currents, usually deeply buried (Baker 1928).
Spectacle Case <i>Cumberlandia monodonta</i>	E	It occurs in substrates from mud and sand to gravel, cobble, and boulders in relatively shallow riffles and shoals with slow to swift current (Buchanan 1980; Parmalee and Bogan 1998; Baird 2000).
Striped Whitelip <i>Webbhelix multilineata</i>	T	It occurs in lowland forest, sedge meadows, and fen (Nekola 2009).
Fish		
Alligator Gar <i>Atractosteus spatula</i>	E	Generally associated with near surface habitats in slack water and backwater habitats of rivers. Preferred pool, pool-bank snag, pool-channel snag, pool-snag complex, pool-edge, and pool-vegetation habitat groups (Gelwick and Morgan 2000).
Alabama Shad <i>Alosa alabamae</i>	E	anadromous fish; adults live in saltwater and migrate into medium to large coastal rivers to spawn (Mettee et al. 1995)
Lake Sturgeon <i>Acipenser fulvescens</i>	E	Primary habitat is the bottoms of large, clean, freshwater rivers and lakes (Hocutt and Wiley 1986; Becker 1983).

Sources: Baird 2000, *Life History of the Spectaclecase, Cumberlandia monodonta* Say, 1829 (*Bivalvia, Unionoidea, Margaritiferidae*), Southwest Missouri State University, Springfield, Missouri, <http://courses.missouristate.edu/ChrisBarnhart/Documents/theses/Baird2000.pdf>;
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http://www.rlephoto.com/metalmarks/metalmark_northern01.htm;
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Notes:

E – Endangered

T – Threatened

Table F-1. Federally-listed Threatened and Endangered Species in the Study Area			
Common and Scientific Names	Federal Status	County	Preferred Habitat
Indiana			
Mammals			
Indiana bat <i>Myotis sodalis</i>	E	Bartholomew, Clark, Jackson, Johnson, Marion, Scott	Hibernation occurs in caves and mines, with swarming in surrounding wooded areas. Summer roosting and foraging habitat occurs in wooded stream corridors and in bottomland and upland forests and woods (USFWS 2011a).
Gray bat <i>Myotis grisescens</i>	E	Clark	A year-round cave obligate -- roosting in caves both during hibernation and summer. Foraging habitat of gray bats is correlated with rivers, streams, lakes or reservoirs and associated shorelines. Forested corridors used to travel between caves and foraging areas (USFWS 2011a).
Mussels			
Sheepnose <i>Plethobasus cyphus</i>	Proposed as Endangered	Clark	Riffles and gravel/cobble substrates but usually has been reported from deep water (>2 m) with slight to swift currents and mud, sand, or gravel bottoms (Gordon and Layzer 1989).
Rayed Bean Mussel <i>Villosa fabalis</i>	Proposed as Endangered	Johnson	Smaller headwater creeks, but records exist in larger rivers. They are usually found in or near shoal or riffle areas, and in the shallow wave-washed areas of glacial lakes, including Lake Erie.
Snuffbox <i>Epioblasma triquetra</i>	Proposed as Endangered	Johnson	Small- to medium-sized creeks and some larger rivers, in areas with a swift current
Kentucky			
Mammals			
Indiana bat <i>Myotis sodalis</i>	E	Jefferson	Hibernation occurs in caves and mines, with swarming in surrounding wooded areas. Summer roosting and foraging habitat occurs in wooded stream corridors and in bottomland and upland forests and woods.

Table F-1. Federally-listed Threatened and Endangered Species in the Study Area			
Common and Scientific Names	Federal Status	County	Preferred Habitat
Gray bat <i>Myotis grisescens</i>	E	Jefferson	A year-round cave obligate -- roosting in caves both during hibernation and summer. Foraging habitat of gray bats is correlated with rivers, streams, lakes or reservoirs and associated shorelines. Forested corridors used to travel between caves and foraging areas.
Birds			
Interior least tern <i>Sterna antillarum</i>	E	Jefferson	Breeds on seacoasts, beaches, bays, estuaries, lagoons, lakes, and rivers (AOU 1983). Rests and loafs on sandy beaches, mudflats, and salt-pond dikes (Stiles and Skutch 1989).
Insects			
American burying beetle <i>Nicrophorus americanus</i>	E - considered extirpated	Jefferson	Species exhibits broad vegetational tolerances, though natural habitat may be mature forests. Species is recorded from grassland, old field shrubland, and hardwood forests. Block Island population occurs on glacial moraine dominated by maritime scrub-shrub community.
Louisville cave beetle <i>Pseudanopthalmus troglodytes</i>	Candidate	Jefferson	The beetles are found in riparian microhabitat on mudbanks, gravel or rocks, usually immediately adjacent to a cave stream.
Mussels			
Sheepnose <i>Plethobasus cyphus</i>	Proposed as Endangered	Jefferson	Riffles and gravel/cobble substrates but usually has been reported from deep water (>2 m) with slight to swift currents and mud, sand, or gravel bottoms (Gordon and Layzer 1989).
Clubshell <i>Pleurobema clava</i>	E	Jefferson	This species is generally found in clean, coarse sand and gravel in runs, often just downstream of a riffle, and cannot tolerate mud or slackwater conditions (USFWS 1997c).

Table F-1. Federally-listed Threatened and Endangered Species in the Study Area			
Common and Scientific Names	Federal Status	County	Preferred Habitat
Fanshell <i>Cyprogenia stegaria</i>	E	Jefferson	Medium to large streams (Dennis 1984). It has been found in river habitats with gravel substrates and a strong current, in both deep and shallow water (Ortmann 1919; Parmalee 1967).
Fat pocketbook <i>Potamilus capax</i>	E	Jefferson	Sand, mud, and fine gravel substrates and flowing water; large rivers in slow-flowing water (often near the bank) in mud or sand (Cummings et al. 1990).
Orangefoot pimpleback <i>Plethobasus cooperianus</i>	E	Jefferson	Medium to large rivers in sand, gravel, and cobble substrates in riffles and shoals in deep water and steady currents as well as some shallower shoals and riffles (Bogan and Parmalee 1983; Cummings and Mayer 1992; Gordon and Layzer 1989).
Ring pink <i>Obovaria retusa</i>	E	Jefferson	Gravel and sand bars are preferred (Neel and Allen 1964; Hickman 1937). Because of reservoir construction on these large rivers, most historic occurrences have been inundated (Bogan and Parmalee 1983).
Pink mucket <i>Lampsilis abrupta</i>	E	Jefferson	Found in waters with strong currents, rocky or boulder substrates, with depths up to about 1 m, but is also found in deeper waters with slower currents and sand and gravel substrates (Gordon and Layzer 1989; Ahlstedt 1985).
Rough pigtoe <i>Pleurobema plenum</i>	E	Jefferson	Medium to large rivers (20 meters wide or greater) in sand, gravel, and cobble substrates in shoals. It is occasionally found on flats and muddy sand (Ahlstedt 1984; Gordon and Layzer 1989).
Plants			
Running buffalo clover <i>Trifolium stoloniferum</i>	E	Jefferson	Mesic woodlands in partial to filtered sunlight, where there is a pattern of moderate periodic disturbance for a prolonged period, such as mowing, trampling, or grazing.

- Sources: Ahlstedt 1984, *Recovery Plan for the Rough Pigtoe Pearly Mussel, Pleurobema plenum* (Lea, 1840), U.S. Fish and Wildlife Service, Region 4, Atlanta, Georgia;
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- USFWS 2011b, *Current List of Kentucky's Threatened, Endangered, and Federal Candidate Species List by County-Jefferson County*, <http://www.fws.gov/frankfort/docs/FWS%202008%20SPP%20LIST.xls>.