

Rare and Extirpated Biota and Natural Communities of Kentucky

May 2012

Abstract

The Kentucky State Nature Preserves Commission has updated and revised the lists of rare and extinct or extirpated biota. This is the most current list of statuses available and represents an updated version of the formal list last published in the Journal of the Kentucky Academy of Science in 2010. The list is based on a standard methodology now utilized by NatureServe. Natural communities have been included in this update. The newly revised lists include one lichen, 387 vascular plant and lesser taxa, 347 animal taxa, and 36 natural communities considered rare (Table 1). Twenty-one plant and 46 animal taxa are considered extirpated or extinct from Kentucky (Table 2).

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Table 1. Kentucky's endangered, threatened, special concern, and historical biota and natural communities, 2012.

	Status			Status	
	KSNPC	US		KSNPC	US
Lichens			<i>Adiantum capillus-veneris</i> Southern Maidenhair-fern	T	--
			<i>Adlumia fungosa</i> Allegheny-vine	H	--
<i>Phaeophyscia leana</i> Lea's Bog Lichen	E	--	<i>Aesculus pavia</i> Red Buckeye	T	--
Plants			<i>Agalinis auriculata</i> Earleaf False Foxglove	E	--
Liverworts			<i>Agalinis obtusifolia</i> Ten-lobed False Foxglove	E	--
<i>Plagiochila caduciloba</i> Gorge Leafy Liverwort	E	--	<i>Agalinis skinneriana</i> Pale False Foxglove	H	--
Mosses ¹			<i>Ageratina luciae-brauniae</i> Lucy Braun's White Snakeroot	S	--
<i>Abietinella abietina</i> Wire Fern Moss	T	--	<i>Agrimonia gryposepala</i> Tall Hairy Groovebur	T	--
<i>Anomodon rugelii</i>	T	--	<i>Amianthium muscivomicum</i> Fly Poison	E	--
<i>Brachythecium populeum</i> Matted Feather Moss	E	--	<i>Angelica atropurpurea</i> Great Angelica	E	--
<i>Bryum cyclophyllum</i>	E	--	<i>Angelica triquinata</i> Filmy Angelica	E	--
<i>Bryum miniatum</i>	E	--	<i>Apios priceana</i> Price's Potato-bean	E	LT
<i>Cirriphyllum piliferum</i>	T	--	<i>Arabis hirsuta</i> Western Hairy Rockcress	H	--
<i>Dicranodontium asperulum</i>	E	--	<i>Arabis missouriensis</i> Missouri Rockcress	H	--
<i>Entodon brevisetus</i>	E	--	<i>Arabis perstellata</i> Braun's Rockcress	T	LE
<i>Herzogiella turfacea</i>	E	--	<i>Aralia nudicaulis</i> Wild Sarsaparilla	E	--
<i>Neckera pennata</i>	T	--	<i>Aristida ramosissima</i> Branched Three-awn Grass	H	--
<i>Oncophorus raii</i>	E	--	<i>Armoracia lacustris</i> Lakecress	T	--
<i>Orthotrichum diaphanum</i>	E	--	<i>Aureolaria patula</i> Spreading False Foxglove	S	--
<i>Polytrichum pallidisetum</i> A Hair Cap Moss	T	--	<i>Baptisia australis</i> var. <i>minor</i> Blue Wild Indigo	S	--
<i>Polytrichum piliferum</i>	E	--	<i>Baptisia bracteata</i> var. <i>glabrescens</i> Cream Wild Indigo	S	--
<i>Polytrichum strictum</i>	E	--	<i>Baptisia tinctoria</i> Yellow Wild Indigo	T	--
<i>Sphagnum quinquefarium</i> Five-ranked Bogmoss	E	--	<i>Bartonia virginica</i> Yellow Screwstem	T	--
<i>Tortula norvegica</i> Tortula	E	--	<i>Berberis canadensis</i> American Barberry	E	--
Vascular Plants			<i>Berchemia scandens</i> Supple-jack	T	--
<i>Acer spicatum</i> Mountain Maple	E	--	<i>Bolboschoenus fluviatilis</i> River Bulrush	E	--
<i>Aconitum uncinatum</i> Blue Monkshood	T	--	<i>Botrychium matricariifolium</i> Matricary Grape-fern	E	--

Table 1. Continued.

	Status			Status	
	KSNPC	US		KSNPC	US
<i>Botrychium oneidense</i> Blunt-lobe Grape-fern	H	--	<i>Carex reniformis</i> Reniform Sedge	E	--
<i>Bouteloua curtipendula</i> Side-oats Grama	S	--	<i>Carex roanensis</i> Roan Mountain Sedge	E	--
<i>Boykinia aconitifolia</i> Brook Saxifrage	E	--	<i>Carex seorsa</i> Weak Stellate Sedge	T	--
<i>Cabomba caroliniana</i> Carolina Fanwort	T	--	<i>Carex stipata</i> var. <i>maxima</i> Stalkgrain Sedge	H	--
<i>Calamagrostis canadensis</i> var. <i>macouniana</i> Blue-joint Reedgrass	H	--	<i>Carex straminea</i> Straw Sedge	T	--
<i>Calamagrostis porteri</i> ssp. <i>insperata</i> Bent Reedgrass	E	--	<i>Carex tetanica</i> Rigid Sedge	E	--
<i>Calamagrostis porteri</i> ssp. <i>porteri</i> Porter's Reedgrass	T	--	<i>Carex tonsa</i> var. <i>rugosperma</i> Umbel-like Sedge	T	--
<i>Calamovilfa arcuata</i> Cumberland sandgrass	E	--	<i>Carya aquatica</i> Water Hickory	T	--
<i>Calopogon tuberosus</i> Grass Pink	E	--	<i>Castanea dentata</i> American Chestnut	E	--
<i>Calycanthus floridus</i> var. <i>glaucus</i> Eastern Sweetshrub	T	--	<i>Castanea pumila</i> Allegheny Chinkapin	T	--
<i>Calylophus serrulatus</i> Yellow Evening Primrose	H	--	<i>Castilleja coccinea</i> Scarlet Indian Paintbrush	E	--
<i>Carex aestivalis</i> Summer Sedge	E	--	<i>Cayaponia quinqueloba</i> Five-lobe Cucumber	E	--
<i>Carex alata</i> Broadwing Sedge	T	--	<i>Ceanothus herbaceus</i> Prairie Redroot	T	--
<i>Carex appalachica</i> Appalachian Sedge	T	--	<i>Cheilanthes alabamensis</i> Alabama Lipfern	H	--
<i>Carex atlantica</i> ssp. <i>capillacea</i> Prickly Bog Sedge	E	--	<i>Cheilanthes feei</i> Fee's Lipfern	E	--
<i>Carex austrocaroliniana</i> Tarheel Sedge	S	--	<i>Chelone obliqua</i> var. <i>obliqua</i> Red Turtlehead	E	--
<i>Carex buxbaumii</i> Brown Bog Sedge	E	--	<i>Chelone obliqua</i> var. <i>speciosa</i> Rose Turtlehead	S	--
<i>Carex comosa</i> Bristly Sedge	H	--	<i>Chrysogonum virginianum</i> Green-and-gold	E	--
<i>Carex crawei</i> Crawe's Sedge	S	--	<i>Chrysosplenium americanum</i> American Golden-saxifrage	T	--
<i>Carex crebriflora</i> Coastal Plain Sedge	E	--	<i>Cimicifuga rubifolia</i> Appalachian Bugbane	T	--
<i>Carex decomposita</i> Epiphytic Sedge	T	--	<i>Circaea alpina</i> Small Enchanter's Nightshade	S	--
<i>Carex gigantea</i> Large Sedge	E	--	<i>Clematis catesbyana</i> Satin-curly	H	--
<i>Carex hystericina</i> Porcupine Sedge	H	--	<i>Clematis crispa</i> Blue Jasmine Leather-flower	T	--
<i>Carex jooirii</i> Cypress-swamp Sedge	E	--	<i>Collinsonia verticillata</i> Whorled Horse-balm	E	--
<i>Carex juniperorum</i> Juniper Sedge	E	--	<i>Comptonia peregrina</i> Sweet-fern	E	--
<i>Carex leptonevia</i> Finely-nerved Sedge	E	--	<i>Conradina verticillata</i> Cumberland Rosemary	E	LT
<i>Carex pellita</i> Woolly Sedge	H	--	<i>Convallaria montana</i> American Lily-of-the-valley	E	--

Table 1. Continued.

	Status			Status	
	KSNPC	US		KSNPC	US
<i>Corallorhiza maculata</i> Spotted Coralroot	E	--	<i>Erythronium rostratum</i> Yellow Troutlily	S	--
<i>Coreopsis pubescens</i> Star Tickseed	S	--	<i>Eupatorium maculatum</i> Spotted Joe-pye-weed	H	--
<i>Corydalis sempervirens</i> Rock Harlequin	S	--	<i>Eupatorium semiserratum</i> Small-flower Thoroughwort	E	--
<i>Cymophyllus fraserianus</i> Fraser's Sedge	E	--	<i>Eupatorium steelei</i> Steele's Joe-pye-weed	T	--
<i>Cyperus plukenetii</i> Plukenet's Cyperus	H	--	<i>Euphorbia mercurialina</i> Mercury Spurge	T	--
<i>Cypripedium candidum</i> Small White Lady's-slipper	E	--	<i>Eurybia hemispherica</i> Tennessee Aster	E	--
<i>Cypripedium kentuckiense</i> Kentucky Lady's-slipper	E	--	<i>Eurybia radula</i> Rough-leaved Aster	E	--
<i>Cypripedium parviflorum</i> Small Yellow Lady's-slipper	T	--	<i>Eurybia saxicastellii</i> Rockcastle Aster	T	--
<i>Dalea purpurea</i> Purple Prairie-clover	S	--	<i>Fimbristylis perpusilla</i> Harper's fimbry	S	--
<i>Delphinium carolinianum</i> Carolina Larkspur	T	--	<i>Fimbristylis puberula</i> Chestnut Sedge	T	--
<i>Deschampsia cespitosa</i> Tufted Hairgrass	E	--	<i>Forestiera ligustrina</i> Upland Privet	T	--
<i>Deschampsia flexuosa</i> Crinkled Hairgrass	T	--	<i>Gaylussacia ursina</i> Bear huckleberry	T	--
<i>Dichanthelium boreale</i> Northern Witchgrass	S	--	<i>Gentiana decora</i> Showy Gentian	S	--
<i>Didiplis diandra</i> Water-purslane	E	--	<i>Gentiana flavida</i> Yellow Gentian	E	--
<i>Dodecatheon frenchii</i> French's Shooting Star	S	--	<i>Gentiana puberulenta</i> Prairie Gentian	E	--
<i>Draba cuneifolia</i> Wedge-leaf Whitlow-grass	E	--	<i>Gleditsia aquatica</i> Water Locust	S	--
<i>Drosera brevifolia</i> Dwarf Sundew	E	--	<i>Glyceria acutiflora</i> Sharp-scaled Manna-grass	E	--
<i>Drosera intermedia</i> Spoon-leaved Sundew	E	--	<i>Goodyera repens</i> Lesser rattlesnake-plantain	E	--
<i>Dryopteris carthusiana</i> Spinulose Wood Fern	S	--	<i>Gratiola pilosa</i> Shaggy Hedgehyssop	T	--
<i>Echinodorus berteroi</i> Burhead	T	--	<i>Gratiola quartermaniae</i> Quarterman's Hedge-hyssop	H	--
<i>Echinodorus tenellus</i> var. <i>parvulus</i> Dwarf Burhead	E	--	<i>Gratiola viscidula</i> Short's Hedgehyssop	S	--
<i>Eleocharis flavescens</i> Bright Green Spikerush	S	--	<i>Gymnopogon ambiguus</i> Bearded Skeleton-grass	S	--
<i>Elodea nuttallii</i> Western Waterweed	T	--	<i>Gymnopogon brevifolius</i> Shortleaf Skeleton-grass	E	--
<i>Elymus svensonii</i> Svenson's Wildrye	T	--	<i>Halesia carolina</i> Common Silverbell	E	--
<i>Eriophorum virginicum</i> Tawny Cotton-grass	E	--	<i>Hedeoma hispidum</i> Rough Pennyroyal	T	--
<i>Eryngium integrifolium</i> Blue-flower Coyote-thistle	E	--	<i>Helianthemum bicknellii</i> Plains Frostweed	E	--
<i>Erysimum capitatum</i> var. <i>capitatum</i> Western Wallflower	E	--	<i>Helianthemum canadense</i> Canada Frostweed	E	--

Table 1. Continued.

	Status			Status	
	KSNPC	US		KSNPC	US
<i>Helianthus eggertii</i> Eggert's Sunflower	T	--	<i>Lathyrus palustris</i> Vetchling Peavine	T	--
<i>Helianthus silphiooides</i> Silphium Sunflower	E	--	<i>Lathyrus venosus</i> Smooth Veiny Peavine	S	--
<i>Heraclium lanatum</i> Cow-parsnip	H	--	<i>Leavenworthia exigua</i> var. <i>laciniata</i> Kentucky Gladecress	E	C
<i>Heteranthera dubia</i> Grassleaf Mud-plantain	S	--	<i>Leavenworthia torulosa</i> Necklace Gladecress	T	--
<i>Heteranthera limosa</i> Blue Mud-plantain	S	--	<i>Lespedeza capitata</i> Round-head Bush-clover	S	--
<i>Heterotheca subaxillaris</i> var. <i>latifolia</i> Broad-leaf Golden-aster	T	--	<i>Lespedeza stuevei</i> Tall Bush-clover	T	--
<i>Hexastylis contracta</i> Southern Heartleaf	E	--	<i>Lesquerella globosa</i> Globe Bladderpod	E	C
<i>Hieracium longipilum</i> Hairy Hawkweed	T	--	<i>Lesquerella lescurii</i> Lescur's Bladderpod	H	--
<i>Houstonia serpyllifolia</i> Michaux's Bluets	E	--	<i>Leucothoe recurva</i> Red-twig Doghobble	E	--
<i>Hydrocotyle ranunculoides</i> Floating Pennywort	E	--	<i>Liatris cylindracea</i> Slender Blazingstar	T	--
<i>Hydrolea ovata</i> Ovate Fiddleleaf	E	--	<i>Lilium philadelphicum</i> Wood Lily	T	--
<i>Hydrolea uniflora</i> One-flower Fiddleleaf	E	--	<i>Lilium superbum</i> Turk's Cap Lily	T	--
<i>Hydrophyllum virginianum</i> Eastern Waterleaf	T	--	<i>Limnobiium spongia</i> American Frog's-bit	T	--
<i>Hypericum adpressum</i> Creeping St. John's-wort	H	--	<i>Liparis loeselii</i> Loesel's Twayblade	T	--
<i>Hypericum crux-andreae</i> St. Peter's-wort	T	--	<i>Listera australis</i> Southern Twayblade	H	--
<i>Hypericum pseudomaculatum</i> Large Spotted St. John's-wort	H	--	<i>Listera smallii</i> Kidney-leaf Twayblade	T	--
<i>Iris brevicaulis</i> Zigzag Iris	T	--	<i>Lobelia gattingeri</i> Gattinger's Lobelia	E	--
<i>Iris fulva</i> Copper Iris	E	--	<i>Lobelia nuttallii</i> Nuttall's Lobelia	T	--
<i>Isoetes butleri</i> Butler's Quillwort	E	--	<i>Lonicera dioica</i> var. <i>orientalis</i> Wild Honeysuckle	E	--
<i>Isoetes melanopoda</i> Blackfoot Quillwort	E	--	<i>Lonicera reticulata</i> Grape Honeysuckle	T	--
<i>Juglans cinerea</i> White Walnut	T	--	<i>Ludwigia hirtella</i> Hairy Ludwigia	E	--
<i>Juncus articulatus</i> Jointed Rush	S	--	<i>Lycopodiella appressa</i> Southern Bog Clubmoss	E	--
<i>Juncus elliottii</i> Bog Rush	H	--	<i>Lycopodiella inundata</i> Northern Bog Clubmoss	E	--
<i>Juncus filipendulus</i> Ringseed Rush	T	--	<i>Lycopodium clavatum</i> Running Pine	E	--
<i>Juniperus communis</i> var. <i>depressa</i> Ground Juniper	T	--	<i>Lysimachia terrestris</i> Swamp Candles	E	--
<i>Koeleria macrantha</i> Prairie Junegrass	E	--	<i>Magnolia pyramidata</i> Pyramid Magnolia	H	--
<i>Krigia occidentalis</i> Western Dwarf Dandelion	E	--	<i>Maianthemum canadense</i> Wild Lily-of-the-valley	T	--

Table 1. Continued.

	Status			Status	
	KSNPC	US		KSNPC	US
<i>Maianthemum stellatum</i> Starflower False Solomon's-seal	E	--	<i>Onosmodium hispidissimum</i> Hairy False Gromwell	E	--
<i>Malus ioensis</i> Iowa Crabapple	S	--	<i>Onosmodium molle</i> Soft-hairy False-gromwell	H	--
<i>Malvastrum hispidum</i> Hispid Falsemallow	T	--	<i>Onosmodium occidentale</i> Western False Gromwell	E	--
<i>Marshallia grandiflora</i> Barbara's Buttons	E	--	<i>Orobanche ludoviciana</i> Louisiana Broomrape	H	--
<i>Matelea carolinensis</i> Carolina Anglepod	E	--	<i>Orontium aquaticum</i> Golden Club	T	--
<i>Melampyrum lineare</i> var. <i>latifolium</i> American Cowwheat	T	--	<i>Oxalis macrantha</i> Price's Yellow Wood Sorrel	H	--
<i>Melampyrum lineare</i> var. <i>pectinatum</i> American Cow-wheat	H	--	<i>Parnassia asarifolia</i> Kidneyleaf Grass-of-parnassus	E	--
<i>Melanthera nivea</i> Snow Squarestem	S	--	<i>Parnassia grandifolia</i> Large-leaved Grass-of-parnassus	E	--
<i>Melanthium virginicum</i> Virginia Bunchflower	E	--	<i>Paronychia argyrocoma</i> Silverling	E	--
<i>Minuartia cumberlandensis</i> Cumberland Sandwort	E	LE	<i>Paspalum boscianum</i> Bull Paspalum	S	--
<i>Minuartia glabra</i> Appalachian Sandwort	T	--	<i>Paxistima canbyi</i> Canby's Mountain-lover	T	--
<i>Mirabilis albida</i> Pale Umbrella-wort	H	--	<i>Perideridia americana</i> Eastern Yampah	T	--
<i>Monotropsis odorata</i> Sweet Pinesap	T	--	<i>Phacelia ranunculacea</i> Blue Scorpion-weed	S	--
<i>Muhlenbergia bushii</i> Bush's Muhly	E	--	<i>Philadelphus inodorus</i> Mock Orange	T	--
<i>Muhlenbergia cuspidata</i> Plains Muhly	T	--	<i>Philadelphus pubescens</i> Hoary Mock Orange	E	--
<i>Muhlenbergia glabrifloris</i> Hair Grass	S	--	<i>Phlox bifida</i> ssp. <i>bifida</i> Cleft Phlox	T	--
<i>Myriophyllum heterophyllum</i> Broadleaf Water-milfoil	S	--	<i>Phlox bifida</i> ssp. <i>stellaria</i> Starry-cleft Phlox	E	--
<i>Myriophyllum pinnatum</i> Cutleaf Water-milfoil	H	--	<i>Platanthera cristata</i> Yellow-crested Orchid	T	--
<i>Najas gracillima</i> Thread-like Naiad	S	--	<i>Platanthera integrilabia</i> White Fringeless Orchid	E	C
<i>Nemophila aphylla</i> Small-flower Baby-blue-eyes	T	--	<i>Platanthera psycodes</i> Small Purple-fringed Orchid	E	--
<i>Nestronia umbellula</i> Conjurer's-nut	E	--	<i>Poa saltuensis</i> Drooping Bluegrass	E	--
<i>Oclemena acuminata</i> Whorled Aster	T	--	<i>Podostemum ceratophyllum</i> Threadfoot	S	--
<i>Oenothera linifolia</i> Thread-leaf Sundrops	E	--	<i>Pogonia ophioglossoides</i> Rose Pogonia	E	--
<i>Oenothera oakesiana</i> Evening Primrose	H	--	<i>Polygala cruciata</i> Crossleaf Milkwort	E	--
<i>Oenothera perennis</i> Small Sundrops	E	--	<i>Polygala nuttallii</i> Nuttall's Milkwort	H	--
<i>Oenothera triloba</i> Stemless Evening-primrose	T	--	<i>Polygala paucifolia</i> Gaywings	E	--
<i>Oldenlandia uniflora</i> Clustered Bluets	E	--	<i>Polygala polygama</i> Racemed Milkwort	T	--

Table 1. Continued.

	Status			Status	
	KSNPC	US		KSNPC	US
<i>Polymnia laevigata</i>	E	--	<i>Rubus canadensis</i>	E	--
Tennessee Leafcup			Smooth Blackberry		
<i>Pontederia cordata</i>	T	--	<i>Rudbeckia subtomentosa</i>	E	--
Pickereel-weed			Sweet Coneflower		
<i>Potamogeton amplifolius</i>	E	--	<i>Sabatia campanulata</i>	E	--
Large-leaf Pondweed			Slender Marsh Pink		
<i>Potamogeton illinoensis</i>	S	--	<i>Sagina fontinalis</i>	E	--
Illinois Pondweed			Water Stitchwort		
<i>Potamogeton pulcher</i>	T	--	<i>Sagittaria graminea</i>	T	--
Spotted Pondweed			Grassleaf Arrowhead		
<i>Prenanthes alba</i>	E	--	<i>Sagittaria platyphylla</i>	E	--
White Rattlesnake-root			Delta Arrowhead		
<i>Prenanthes aspera</i>	E	--	<i>Sagittaria rigida</i>	E	--
Rough Rattlesnake-root			Sessile-fruited Arrowhead		
<i>Prenanthes barbata</i>	E	--	<i>Salix amygdaloides</i>	H	--
Barbed Rattlesnake-root			Peach-leaved Willow		
<i>Prenanthes crepidinea</i>	S	--	<i>Salix discolor</i>	H	--
Nodding Rattlesnake-root			Pussy Willow		
<i>Prenanthes racemosa</i>	S	--	<i>Salvia urticifolia</i>	E	--
Glaucous Rattlesnake-root			Nettle-leaf Sage		
<i>Prosartes maculata</i>	S	--	<i>Sambucus racemosa</i> ssp. <i>pubens</i>	E	--
Nodding Mandarin			Red Elderberry		
<i>Pseudognaphalium helleri</i> ssp. <i>micradenium</i>	H	--	<i>Sanguisorba canadensis</i>	E	--
Small Rabbit-tobacco			Canada Burnet		
<i>Psoralidium tenuiflorum</i>	H	--	<i>Saxifraga michauxii</i>	T	--
Few-flowered Scurf-pea			Michaux's Saxifrage		
<i>Ptilimnium capillaceum</i>	T	--	<i>Saxifraga micranthidifolia</i>	E	--
Mock Bishop's-weed			Lettuce-leaf Saxifrage		
<i>Ptilimnium costatum</i>	E	--	<i>Schisandra glabra</i>	E	--
Eastern Mock Bishop's-weed			Bay Starvine		
<i>Ptilimnium nuttallii</i>	E	--	<i>Schizachne purpurascens</i>	T	--
Nuttall's Mock Bishop's-weed			Purple Oat		
<i>Pycnanthemum albescens</i>	H	--	<i>Schoenoplectus hallii</i>	E	--
Whiteleaf Mountainmint			Hall's Bulrush		
<i>Pycnanthemum muticum</i>	E	--	<i>Schoenoplectus heterochaetus</i>	H	--
Blunt Mountainmint			Slender Bulrush		
<i>Quercus ilicifolia</i>	H	--	<i>Schwalbea americana</i>	H	LE
Scrub oak			Chaffseed		
<i>Quercus nigra</i>	T	--	<i>Scirpus expansus</i>	E	--
Water Oak			Woodland Beakrush		
<i>Quercus texana</i>	T	--	<i>Scutellaria arguta</i>	E	--
Nuttall's Oak			Hairy Skullcap		
<i>Ranunculus ambigens</i>	S	--	<i>Scutellaria saxatilis</i>	T	--
Waterplantain Spearwort			Rock Skullcap		
<i>Rhododendron canescens</i>	E	--	<i>Sedum telephioides</i>	T	--
Hoary Azalea			Allegheny Stonecrop		
<i>Rhynchosia tomentosa</i>	E	--	<i>Sida hermaphrodita</i>	T	--
Hairy Snoutbean			Virginia Mallow		
<i>Rhynchospora macrostachya</i>	E	--	<i>Silene ovata</i>	E	--
Tall Beaked-rush			Ovate Catchfly		
<i>Rhynchospora recognita</i>	S	--	<i>Silene regia</i>	E	--
Globe Beaked-rush			Royal Catchfly		
<i>Ribes americanum</i>	T	--	<i>Silphium laciniatum</i>	T	--
Eastern Black Currant			Compassplant		

Table 1. Continued.

	Status			Status	
	KSNPC	US		KSNPC	US
<i>Silphium pinnatifidum</i> Tansy Rosinweed	S	--	<i>Symphyotrichum concolor</i> Eastern Silvery Aster	T	--
<i>Silphium wasiotense</i> Appalachian Rosinweed	S	--	<i>Symphyotrichum drummondii</i> var. <i>texanum</i> Hairy Heart-leaved Aster	H	--
<i>Solidago albopilosa</i> White-haired Goldenrod	T	LT	<i>Symphyotrichum pratense</i> Barrens Silky Aster	S	--
<i>Solidago buckleyi</i> Buckley's Goldenrod	S	--	<i>Symphyotrichum priceae</i> White Heath Aster	E	--
<i>Solidago curtisii</i> Curtis' Goldenrod	S	--	<i>Talinum calcaricum</i> Limestone Fameflower	E	--
<i>Solidago gracillima</i> Southern Bog Goldenrod	S	--	<i>Talinum teretifolium</i> Roundleaf Fameflower	E	--
<i>Solidago puberula</i> Downy Goldenrod	S	--	<i>Taxus canadensis</i> Canadian Yew	T	--
<i>Solidago roanensis</i> Roan Mountain Goldenrod	T	--	<i>Tephrosia spicata</i> Spiked Hoary-pea	E	--
<i>Solidago shortii</i> Short's Goldenrod	E	LE	<i>Thaspium pinnatifidum</i> Cutleaf Meadow-parsnip	T	--
<i>Solidago simplex</i> ssp. <i>randii</i> var. <i>racemosa</i> Rand's Goldenrod	S	--	<i>Thermopsis mollis</i> Soft-haired Thermopsis	E	--
<i>Solidago squarrosa</i> Squarrose Goldenrod	H	--	<i>Thuja occidentalis</i> Northern White Cedar	T	--
<i>Sparganium eurycarpum</i> Large Bur-reed	E	--	<i>Torreyochloa pallida</i> Pale Manna Grass	H	--
<i>Sphenopholis pennsylvanica</i> Swamp Wedgescale	S	--	<i>Toxicodendron vernix</i> Poison Sumac	E	--
<i>Spiraea alba</i> Narrow-leaved Meadow-sweet	H	--	<i>Tragia urticifolia</i> Nettle-leaf Noseburn	E	--
<i>Spiraea virginiana</i> Virginia Spiraea	T	LT	<i>Trepocarpus aethusae</i> Trepocarpus	S	--
<i>Spiranthes lucida</i> Shining Ladies'-tresses	T	--	<i>Trichophorum planifolium</i> Bashful Bulrush	E	--
<i>Spiranthes magnicamporum</i> Great Plains Ladies'-tresses	T	--	<i>Trichostema setaceum</i> Narrowleaved Bluecurls	E	--
<i>Spiranthes ochroleuca</i> Yellow Nodding Ladies'-tresses	T	--	<i>Trientalis borealis</i> Northern Starflower	E	--
<i>Spiranthes odorata</i> Sweetscent Ladies'-tresses	E	--	<i>Trifolium reflexum</i> Buffalo Clover	E	--
<i>Sporobolus clandestinus</i> Rough Dropseed	T	--	<i>Trifolium stoloniferum</i> Running Buffalo Clover	T	LE
<i>Sporobolus heterolepis</i> Northern Dropseed	E	--	<i>Trillium nivale</i> Snow Trillium	E	--
<i>Stachys eplingii</i> Epling's Hedgenettle	H	--	<i>Trillium pusillum</i> Least Trillium	E	--
<i>Stellaria longifolia</i> Longleaf Stitchwort	S	--	<i>Trillium undulatum</i> Painted Trillium	T	--
<i>Stenanthium gramineum</i> Eastern Featherbells	T	--	<i>Ulmus serotina</i> September Elm	S	--
<i>Streptopus lanceolatus</i> Rosy Twisted-stalk	E	--	<i>Utricularia macrorhiza</i> Greater Bladderwort	E	--
<i>Styrax grandifolius</i> Bigleaf Snowbell	E	--	<i>Vaccinium erythrocarpum</i> Southern Mountain Cranberry	E	--
<i>Symphoricarpos albus</i> Snowberry	E	--	<i>Vallisneria americana</i> Eelgrass	S	--

Table 1. Continued.

	Status			Status	
	KSNPC	US		KSNPC	US
<i>Epioblasma florentina walkeri</i> Tan Riffleshell	E	LE	<i>Barbicambarus cornutus</i> Bottlebrush Crayfish	S	--
<i>Epioblasma obliquata obliquata</i> Catspaw	E	LE	<i>Bryocamptus morrisoni elegans</i> A Copepod	T	--
<i>Epioblasma torulosa rangiana</i> Northern Riffleshell	E	LE	<i>Caecidotea barri</i> Clifton Cave Isopod	E	--
<i>Epioblasma triquetra</i> Snuffbox	E	LE	<i>Cambarellus puer</i> Swamp Dwarf Crayfish	E	--
<i>Lampsilis abrupta</i> Pink Mucket	E	LE	<i>Cambarellus shufeldtii</i> Cajun Dwarf Crayfish	S	--
<i>Lampsilis ovata</i> Pocketbook	E	--	<i>Cambarus bouchardi</i> Big South Fork Crayfish	E	--
<i>Lasmigona compressa</i> Creek Heelsplitter	E	--	<i>Cambarus buntingi</i> Longclaw Crayfish	S	--
<i>Obovaria retusa</i> Ring Pink	E	LE	<i>Cambarus friaufi</i> Hairy Crayfish	S	--
<i>Pegias fabula</i> Littlewing Pearlymussel	E	LE	<i>Cambarus parvoculus</i> Mountain Midget Crayfish	T	--
<i>Plethobasus cooperianus</i> Orangefoot Pimpleback	E	LE	<i>Cambarus veteranus</i> Big Sandy Crayfish	S	--
<i>Plethobasus cyphus</i> Sheepnose	E	LE	<i>Crangonyx caecus</i> An Amphipod	T	--
<i>Pleurobema clava</i> Clubshell	E	LE	<i>Crangonyx castellanum</i> An Amphipod	E	--
<i>Pleurobema oviforme</i> Tennessee Clubshell	E	--	<i>Crangonyx lewisi</i> Lewis Cave Amphipod	T	--
<i>Pleurobema plenum</i> Rough Pigtoe	E	LE	<i>Crangonyx longidactylus</i> An Amphipod	T	--
<i>Pleurobema rubrum</i> Pyramid Pigtoe	E	--	<i>Crangonyx specus</i> An Amphipod	E	--
<i>Potamilus capax</i> Fat Pocketbook	E	LE	<i>Gammarus bousfieldi</i> Bousfield's Amphipod	E	--
<i>Potamilus purpuratus</i> Bleufer	E	--	<i>Macrobrachium ohione</i> Ohio Shrimp	E	--
<i>Ptychobranchnus subtentum</i> Fluted Kidneyshell	E	C	<i>Orconectes barri</i> Cumberland Plateau Cave Crayfish	T	--
<i>Quadrula cylindrica cylindrica</i> Rabbitsfoot	T	C	<i>Orconectes bisectus</i> Crittenden Crayfish	T	--
<i>Simpsonaias ambigua</i> Salamander Mussel	T	--	<i>Orconectes burri</i> Burr Crayfish	T	--
<i>Toxolasma lividus</i> Purple Lilliput	E	--	<i>Orconectes inermis inermis</i> Ghost Crayfish	S	--
<i>Toxolasma texasiensis</i> Texas Lilliput	E	--	<i>Orconectes jeffersoni</i> Louisville Crayfish	E	--
<i>Villosa lienosa</i> Little Spectaclecase	S	--	<i>Orconectes lancifer</i> Shrimp Crayfish	E	--
<i>Villosa ortmanni</i> Kentucky Creekshell	T	--	<i>Orconectes margorectus</i> Livingston Crayfish	T	--
<i>Villosa trabalis</i> Cumberland Bean	E	LE	<i>Orconectes packardi</i> Appalachian Cave Crayfish	T	--
<i>Villosa vanuxemensis vanuxemensis</i> Mountain Creekshell	T	--	<i>Orconectes palmeri palmeri</i> Gray-Speckled Crayfish	E	--
			<i>Orconectes pellucidus</i> Mammoth Cave Crayfish	S	--

Crustaceans

Table 1. Continued.

	Status			Status	
	KSNPC	US		KSNPC	US
<i>Orconectes ronaldi</i>	T	--	<i>Gomphus hybridus</i>	E	--
Mud River Crayfish			Cocoa Clubtail		
<i>Palaemonias ganteri</i>	E	LE	<i>Habrophlebiodes celeteria</i>	H	--
Mammoth Cave Shrimp			A Leptophlebiid Mayfly		
<i>Procambarus viaeviridis</i>	T	--	<i>Hansonoperla hokolesqua</i>	S	--
Vernal Crayfish			Splendid Stone		
<i>Pseudocandona jeanneli</i>	E	--	<i>Litobrancha recurvata</i>	S	--
Jeannel's Cave Ostracod			A Burrowing Mayfly		
<i>Sagittocythere stygia</i>	T	--	<i>Lordithon niger</i>	H	--
An Ectocommensal Ostracod			Black Lordithon Rove Beetle		
<i>Stygobromus vitreus</i>	S	--	<i>Lytrosis permagnaria</i>	E	--
An Amphipod			A Geometrid Moth		
Insects			<i>Maccaffertium bednariki</i>	S	--
			A Heptageniid Mayfly		
<i>Acroneuria hitchcocki</i>	T	--	<i>Manophylax butleri</i>	S	--
Kentucky Stone			A Limnephilid Caddisfly		
<i>Acroneuria kosztarabi</i>	S	--	<i>Mesamia stramineus</i>	E	--
Virginia Stone			Helianthus Leafhopper		
<i>Allocapnia cunninghami</i>	T	--	<i>Nannothemis bella</i>	E	--
Karst Snowfly			Elfin Skimmer		
<i>Amphiagrion saucium</i>	E	--	<i>Nehalennia irene</i>	E	--
Eastern Red Damsel			Sedge Sprite		
<i>Arigomphus maxwelli</i>	T	--	<i>Nixe flowersi</i>	H	--
Bayou Clubtail			A Heptageniid Mayfly		
<i>Arrhopalites altus</i>	T	--	<i>Ophiogomphus aspersus</i>	H	--
A Cave Obligate Springtail			Brook Snaketail		
<i>Arrhopalites bimus</i>	T	--	<i>Ophiogomphus howei</i>	T	--
A Cave Obligate Springtail			Pygmy Snaketail		
<i>Batriasymmodes quisnamus</i>	T	--	<i>Ophiogomphus mainensis</i>	E	--
A Cave Obligate Beetle			Maine Snaketail		
<i>Batrisodes henroti</i>	T	--	<i>Papaipema beeriana</i>	E	--
A Cave Obligate Beetle			Blazing Star Stem Borer		
<i>Batrisodes hubrichti</i>	T	--	<i>Papaipema eryngii</i>	E	--
A Cave Obligate Beetle			Rattlesnake-master Borer Moth		
<i>Calephelis borealis</i>	T	--	<i>Papaipema silphii</i>	E	--
Northern Metalmark			Silphium Borer Moth		
<i>Calephelis muticum</i>	E	--	<i>Papaipema</i> sp. 5	T	--
Swamp Metalmark			Rare Cane Borer Moth		
<i>Callophrys irus</i>	E	--	<i>Papaipema speciosissima</i>	E	--
Frosted Elfin			Osmunda Borer Moth		
<i>Calopteryx dimidiata</i>	E	--	<i>Phyciodes batesii</i>	H	--
Sparkling Jewelwing			Tawny Crescent		
<i>Celithemis verna</i>	H	--	<i>Poanes viator</i>	T	--
Double-ringed Pennant			Broad-winged Skipper		
<i>Cheumatopsyche helma</i>	H	--	<i>Polygonia faunus</i>	H	--
Helma's Net-spinning Caddisfly			Green Comma		
<i>Dannella provonshai</i>	H	--	<i>Polygonia progne</i>	H	--
An Ephemerellid Mayfly			Gray Comma		
<i>Dryobius sexnotatus</i>	T	--	<i>Prairiana kansana</i>	E	--
Six-banded Longhorn Beetle			A Cicadellid Leafhopper		
<i>Erora laeta</i>	T	--	<i>Pseudanophthalmus abditus</i>	T	--
Early Hairstreak			Concealed Cave Beetle		
<i>Euphyes dukesi</i>	S	--	<i>Pseudanophthalmus audax</i>	T	--
Dukes' Skipper			Bold Cave Beetle		

Table 1. Continued.

	Status			Status	
	KSNPC	US		KSNPC	US
<i>Pseudanophthalmus caecus</i> Clifton Cave Beetle	T	C	<i>Satyrium favonius ontario</i> Northern Oak Hairstreak	S	--
<i>Pseudanophthalmus calcareus</i> Limestone Cave Beetle	T	--	<i>Soyedina calcarea</i> A Stonefly	E	--
<i>Pseudanophthalmus catoryctos</i> Lesser Adams Cave Beetle	E	--	<i>Speyeria idalia</i> Regal Fritillary	H	--
<i>Pseudanophthalmus cnephosus</i> A Cave Obligate Beetle	T	--	<i>Stylurus notatus</i> Elusive Clubtail	E	--
<i>Pseudanophthalmus conditus</i> Hidden Cave Beetle	T	--	<i>Stylurus scudderi</i> Zebra Clubtail	E	--
<i>Pseudanophthalmus elongatus</i> A Cave Obligate Beetle	S	--	<i>Tomocerus missus</i> A Cave Obligate Springtail	T	--
<i>Pseudanophthalmus exoticus</i> Exotic Cave Beetle	H	--	<i>Traverella lewisi</i> A Leptophlebiid Mayfly	H	--
<i>Pseudanophthalmus frigidus</i> Icebox Cave Beetle	T	C	<i>Tychobythinus hubrichti</i> A Cave Obligate Beetle	T	--
<i>Pseudanophthalmus globiceps</i> Round-headed Cave Beetle	T	--			
			Other Invertebrates		
<i>Pseudanophthalmus horni</i> Garman's Cave Beetle	S	--	<i>Belba bulbipedata</i> A Cave Obligate Mite	T	--
<i>Pseudanophthalmus hypolithos</i> Ashcamp Cave Beetle	T	--	<i>Galumna alata</i> A Cave Obligate Mite	T	--
<i>Pseudanophthalmus inexpectatus</i> Surprising Cave Beetle	T	--	<i>Geocentrophora cavernicola</i> A Cave Obligate Planarian	T	--
<i>Pseudanophthalmus major</i> Beaver Cave Beetle	T	--	<i>Hesperonemastoma inops</i> A Cave Obligate Harvestman	S	--
<i>Pseudanophthalmus parvus</i> Tatum Cave Beetle	T	C	<i>Kleptochthonius attenuatus</i> A Cave Obligate Pseudoscorpion	T	--
<i>Pseudanophthalmus pholeter</i> Greater Adams Cave Beetle	E	--	<i>Kleptochthonius cerberus</i> A Cave Obligate Pseudoscorpion	S	--
<i>Pseudanophthalmus pubescens intrepidus</i> A Cave Obligate Beetle	T	--	<i>Kleptochthonius erebicus</i> A Cave Obligate Pseudoscorpion	T	--
<i>Pseudanophthalmus puteanus</i> Old Well Cave Beetle	T	--	<i>Kleptochthonius hageni</i> A Cave Obligate Pseudoscorpion	S	--
<i>Pseudanophthalmus rogersae</i> Rogers' Cave Beetle	T	--	<i>Kleptochthonius hubrichti</i> A Cave Obligate Pseudoscorpion	T	--
<i>Pseudanophthalmus scholasticus</i> Scholarly Cave Beetle	T	--	<i>Kleptochthonius microphthalmus</i> A Cave Obligate Pseudoscorpion	T	--
<i>Pseudanophthalmus simulans</i> Cub Run Cave Beetle	T	--	<i>Macrocheles stygius</i> A Cave Obligate Mite	T	--
<i>Pseudanophthalmus solivagus</i> A Cave Obligate Beetle	S	--	<i>Macrocheles troglodytes</i> A Cave Obligate Mite	T	--
<i>Pseudanophthalmus tenebrosus</i> Stevens Creek Cave Beetle	T	--	<i>Pseudotremia amphiorax</i> A Cave Obligate Milliped	T	--
<i>Pseudanophthalmus transfluvialis</i> A Cave Obligate Beetle	S	--	<i>Pseudotremia carterensis</i> A Cave Obligate Milliped	S	--
<i>Pseudanophthalmus troglodytes</i> Louisville Cave Beetle	T	C	<i>Pseudotremia merops</i> A Cave Obligate Milliped	T	--
<i>Pseudosinella espanita</i> A Cave Obligate Springtail	S	--	<i>Pseudotremia spira</i> A Cave Obligate Milliped	T	--
<i>Raptoheptagenia cruentata</i> A Heptageniid Mayfly	H	--	<i>Pseudotremia unca</i> A Cave Obligate Milliped	T	--
<i>Rasvena terna</i> Vermont Sallfly	S	--	<i>Sphalloplana buchanani</i> A Cave Obligate Planarian	T	--

Table 1. Continued.

	Status			Status	
	KSNPC	US		KSNPC	US
<i>Tyrannochthonius hypogeus</i>	S	--	<i>Etheostoma tecumsehi</i>	S	--
A Cave Obligate Pseudoscorpion			Shawnee Darter		
Fishes			<i>Fundulus chrysotus</i>	E	--
<i>Acipenser fulvescens</i>	E	--	Golden Topminnow		
Lake Sturgeon			<i>Fundulus dispar</i>	E	--
<i>Alosa alabamae</i>	E	--	Starhead Topminnow		
Alabama Shad			<i>Hemitremia flammea</i>	E	--
<i>Amblyopsis spelaea</i>	S	--	Flame Chub		
Northern Cavefish			<i>Hybognathus hayi</i>	E	--
<i>Ammocrypta clara</i>	E	--	Cypress Minnow		
Western Sand Darter			<i>Hybognathus placitus</i>	S	--
<i>Atractosteus spatula</i>	E	--	Plains Minnow		
Alligator Gar			<i>Hybopsis amnis</i>	E	--
<i>Chrosomus cumberlandensis</i>	T	LT	Pallid Shiner		
Blackside Dace			<i>Ichthyomyzon castaneus</i>	S	--
<i>Cyprinella camura</i>	E	--	Chestnut Lamprey		
Bluntnose Shiner			<i>Ichthyomyzon fossor</i>	T	--
<i>Cyprinella venusta</i>	S	--	Northern Brook Lamprey		
Blacktail Shiner			<i>Ichthyomyzon greeleyi</i>	T	--
<i>Erimystax insignis</i>	E	--	Mountain Brook Lamprey		
Blotched Chub			<i>Ictiobus niger</i>	S	--
<i>Erimyzon sucetta</i>	T	--	Black Buffalo		
Lake Chubsucker			<i>Lampetra appendix</i>	T	--
<i>Esox niger</i>	S	--	American Brook Lamprey		
Chain Pickerel			<i>Lampetra</i> sp. 1	E	--
<i>Etheostoma chienense</i>	E	LE	Undescribed Terrapin Creek brook lamprey		
Relict Darter			<i>Lepomis marginatus</i>	E	--
<i>Etheostoma cinereum</i>	S	--	Dollar Sunfish		
Ashy Darter			<i>Lepomis miniatus</i>	T	--
<i>Etheostoma fusiforme</i>	E	--	Redspotted Sunfish		
Swamp Darter			<i>Lota lota</i>	S	--
<i>Etheostoma lemniscatum</i>	E	LE	Burbot		
Tuxedo Darter			<i>Macrhybopsis gelida</i>	E	--
<i>Etheostoma lynceum</i>	E	--	Sturgeon Chub		
Brighteye Darter			<i>Macrhybopsis meeki</i>	E	--
<i>Etheostoma maculatum</i>	T	--	Sicklefin Chub		
Spotted Darter			<i>Menidia beryllina</i>	T	--
<i>Etheostoma microlepidum</i>	E	--	Inland Silverside		
Smallscale Darter			<i>Moxostoma poecilurum</i>	E	--
<i>Etheostoma parvipinne</i>	E	--	Blacktail Redhorse		
Goldstripe Darter			<i>Nocomis biguttatus</i>	S	--
<i>Etheostoma proeliare</i>	T	--	Hornyhead Chub		
Cypress Darter			<i>Notropis albizonatus</i>	E	LE
<i>Etheostoma pyrrhogaster</i>	E	--	Palezone Shiner		
Firebelly Darter			<i>Notropis hudsonius</i>	S	--
<i>Etheostoma sagitta sagitta</i>	S	--	Spottail Shiner		
Cumberland Arrow Darter			<i>Notropis maculatus</i>	T	--
<i>Etheostoma sagitta spilotum</i>	T	C	Taillight Shiner		
Kentucky Arrow Darter			<i>Notropis</i> sp. 4	E	--
<i>Etheostoma susanae</i>	E	LE	Sawfin Shiner		
Cumberland Darter			<i>Noturus exilis</i>	E	--
<i>Etheostoma swaini</i>	E	--	Slender Madtom		
Gulf Darter			<i>Noturus hildebrandi</i>	E	--
			Least Madtom		

Table 1. Continued.

	Status			Status	
	KSNPC	US		KSNPC	US
<i>Noturus phaeus</i> Brown Madtom	E	--	<i>Eumeces anthracinus</i> Coal Skink	T	--
<i>Noturus stigmosus</i> Northern Madtom	S	--	<i>Eumeces inexpectatus</i> Southeastern Five-lined Skink	S	--
<i>Percina macrocephala</i> Longhead Darter	E	--	<i>Farancia abacura reinwardtii</i> Western Mud Snake	S	--
<i>Percina squamata</i> Olive Darter	E	--	<i>Lampropeltis triangulum elapsoides</i> Scarlet Kingsnake	S	--
<i>Percopsis omiscomaycus</i> Trout-perch	S	--	<i>Macrochelys temminckii</i> Alligator Snapping Turtle	T	--
<i>Phenacobius uranops</i> Stargazing Minnow	S	--	<i>Nerodia cyclopion</i> Green Water Snake	E	--
<i>Platygobio gracilis</i> Flathead Chub	S	--	<i>Nerodia erythrogaster neglecta</i> Copperbelly Water Snake	S	--
<i>Scaphirhynchus albus</i> Pallid Sturgeon	E	LE	<i>Nerodia fasciata confluens</i> Broad-banded Water Snake	E	--
<i>Thoburnia atripinnis</i> Blackfin Sucker	S	--	<i>Ophisaurus attenuatus longicaudus</i> Eastern Slender Glass Lizard	T	--
<i>Typhlichthys subterraneus</i> Southern Cavefish	S	--	<i>Pituophis melanoleucus melanoleucus</i> Northern Pine Snake	E	--
<i>Umbra limi</i> Central Mudminnow	T	--	<i>Sistrurus miliarius streckeri</i> Western Pygmy Rattlesnake	T	--
Amphibians			<i>Thamnophis proximus proximus</i> Western Ribbon Snake	T	--
<i>Amphiuma tridactylum</i> Three-toed Amphiuma	E	--	<i>Thamnophis sauritus sauritus</i> Eastern Ribbon Snake	S	--
<i>Cryptobranchus alleganiensis alleganiensis</i> Eastern Hellbender	E	--	Breeding Birds		
<i>Eurycea guttolineata</i> Three-lined Salamander	T	--	<i>Accipiter striatus</i> Sharp-shinned Hawk	S	--
<i>Hyla avivoca</i> Bird-voiced Treefrog	S	--	<i>Actitis macularius</i> Spotted Sandpiper	E	--
<i>Hyla gratiosa</i> Barking Treefrog	S	--	<i>Aimophila aestivalis</i> Bachman's Sparrow	E	--
<i>Hyla versicolor</i> Gray Treefrog	S	--	<i>Ammodramus henslowii</i> Henslow's Sparrow	S	--
<i>Plethodon cinereus</i> Redback Salamander	S	--	<i>Anas clypeata</i> Northern Shoveler	E	--
<i>Plethodon wehrlei</i> Wehrle's Salamander	E	--	<i>Anas discors</i> Blue-winged Teal	T	--
<i>Rana areolata circulosa</i> Northern Crawfish Frog	S	--	<i>Ardea alba</i> Great Egret	T	--
<i>Rana pipiens</i> Northern Leopard Frog	S	--	<i>Asio flammeus</i> Short-eared Owl	E	--
Reptiles			<i>Asio otus</i> Long-eared Owl	E	--
<i>Apalone mutica mutica</i> Midland Smooth Softshell	S	--	<i>Bartramia longicauda</i> Upland Sandpiper	H	--
<i>Chrysemys dorsalis</i> Southern Painted Turtle	T	--	<i>Botaurus lentiginosus</i> American Bittern	H	--
<i>Clonophis kirtlandii</i> Kirtland's Snake	T	--	<i>Bubulcus ibis</i> Cattle Egret	S	--
<i>Elaphe guttata</i> Corn Snake	S	--	<i>Certhia americana</i> Brown Creeper	E	--

Table 1. Continued.

	Status			Status	
	KSNPC	US		KSNPC	US
<i>Chondestes grammacus</i> Lark Sparrow	T	--	<i>Riparia riparia</i> Bank Swallow	S	--
<i>Circus cyaneus</i> Northern Harrier	T	--	<i>Sitta canadensis</i> Red-breasted Nuthatch	E	--
<i>Cistothorus platensis</i> Sedge Wren	S	--	<i>Sternula antillarum athalassos</i> Interior Least Tern	T	LE
<i>Corvus corax</i> Common Raven	T	--	<i>Thryomanes bewickii</i> Bewick's Wren	S	--
<i>Corvus ossifragus</i> Fish Crow	S	--	<i>Tyto alba</i> Barn Owl	S	--
<i>Dendroica fusca</i> Blackburnian Warbler	T	--	<i>Vermivora chrysoptera</i> Golden-winged Warbler	T	--
<i>Dolichonyx oryzivorus</i> Bobolink	S	--	<i>Vireo bellii</i> Bell's Vireo	S	--
<i>Egretta caerulea</i> Little Blue Heron	E	--	<i>Wilsonia canadensis</i> Canada Warbler	S	--
<i>Egretta thula</i> Snowy Egret	E	--			
			Mammals		
<i>Empidonax minimus</i> Least Flycatcher	E	--	<i>Clethrionomys gapperi maurus</i> Kentucky Red-backed Vole	S	--
<i>Falco peregrinus</i> Peregrine Falcon	E	--	<i>Corynorhinus rafinesquii</i> Rafinesque's Big-eared Bat	S	--
<i>Fulica americana</i> American Coot	E	--	<i>Corynorhinus townsendii virginianus</i> Virginia Big-eared Bat	E	LE
<i>Gallinula chloropus</i> Common Moorhen	T	--	<i>Mustela nivalis</i> Least Weasel	S	--
<i>Haliaeetus leucocephalus</i> Bald Eagle	T	--	<i>Myotis austroriparius</i> Southeastern Myotis	E	--
<i>Ictinia mississippiensis</i> Mississippi Kite	S	--	<i>Myotis grisescens</i> Gray Myotis	T	LE
<i>Ixobrychus exilis</i> Least Bittern	T	--	<i>Myotis leibii</i> Eastern Small-footed Myotis	T	--
<i>Junco hyemalis</i> Dark-eyed Junco	S	--	<i>Myotis sodalis</i> Indiana Bat	E	LE
<i>Lophodytes cucullatus</i> Hooded Merganser	T	--	<i>Nycticeius humeralis</i> Evening Bat	S	--
<i>Nyctanassa violacea</i> Yellow-crowned Night-heron	T	--	<i>Peromyscus gossypinus</i> Cotton Mouse	T	--
<i>Nycticorax nycticorax</i> Black-crowned Night-heron	T	--	<i>Sorex cinereus</i> Cinereus Shrew	S	--
<i>Pandion haliaetus</i> Osprey	S	--	<i>Sorex dispar blitchi</i> Long-tailed Shrew	E	--
<i>Passerculus sandwichensis</i> Savannah Sparrow	S	--	<i>Spilogale putorius</i> Eastern Spotted Skunk	S	--
<i>Phalacrocorax auritus</i> Double-crested Cormorant	T	--	<i>Ursus americanus</i> American Black Bear	S	--
<i>Pheucticus ludovicianus</i> Rose-breasted Grosbeak	S	--			
<i>Podilymbus podiceps</i> Pied-billed Grebe	E	--			
<i>Poocetes gramineus</i> Vesper Sparrow	E	--			
<i>Rallus elegans</i> King Rail	E	--			

¹Species without English (common) names have not been assigned official names.

Table 1. Continued.

	Status		Status	
	KSNPC	US	KSNPC	US
Natural communities				
Acid seep/bog	S	--		
Appalachian seep/bog	T	--		
Bluegrass mesophytic cane forest	E	--		
Bluegrass woodland	E	--		
Bottomland hardwood forest	S	--		
Bottomland lake	S	--		
Bottomland marsh	T	--		
Bottomland ridge/terrace forest	E	--		
Bottomland slough	T	--		
Calcareous seep/bog	E	--		
Coastal Plain forested acid seep	E	--		
Coastal Plain mesophytic cane forest	T	--		
Coastal Plain slough	T	--		
Cumberland highlands forest	E	--		
Cumberland Mountains pitch pine woodland	E	--		
Cumberland Plateau gravel/cobble bar	E	--		
Cumberland Plateau sandstone glade	E	--		
Cypress (tupelo) swamp	E	--		
Dolomite glade	E	--		
Limestone barrens (open woodland)	T	--		
Limestone flat rock glade	E	--		
Limestone slope glade	S	--		
Limestone/dolomite prairie	E	--		
Sand bar	S	--		
Sandstone barrens (open woodland)	E	--		
Sandstone prairie	E	--		
Shawnee Hills sandstone glade	T	--		
Shrub swamp	T	--		
Sinkhole/depression marsh	E	--		
Sinkhole/depression pond	T	--		
Tallgrass prairie	E	--		
Wet bottomland hardwood forest	T	--		
Wet depression/sinkhole forest	T	--		
Wet meadow	E	--		
Wet prairie	E	--		
Xerohydric flatwoods	E	--		

Table 2. Plants and animals presumed extinct or extirpated from Kentucky.

	US Status ¹		US Status ¹
Plants		<i>Epioblasma biemarginata</i>	--
		Angled Riffleshell	
		<i>Epioblasma cincinnatiensis</i>	--
		Cincinnati Riffleshell	
Vascular Plants		<i>Epioblasma flexuosa</i>	--
<i>Anemone canadensis</i>	--	Leafshell	
Canada Anemone		<i>Epioblasma florentina florentina</i>	LE
<i>Argyrochosma dealbata</i>	--	Yellow Blossom	
Powdery Cloakfern		<i>Epioblasma haysiana</i>	--
<i>Callirhoe alcaeoides</i>	--	Acornshell	
Clustered Poppy-mallow		<i>Epioblasma lewisii</i>	--
<i>Caltha palustris</i> var. <i>palustris</i>	--	Forkshell	
Marsh Marigold		<i>Epioblasma obliquata perobliqua</i>	LE
<i>Coeloglossum viride</i>	--	White Catspaw	
Long-bract Green Orchis		<i>Epioblasma personata</i>	--
<i>Coeloglossum viride</i> var. <i>virescens</i>	--	Round Combshell	
Long-bract Green Orchis		<i>Epioblasma propinqua</i>	--
<i>Cypripedium reginae</i>	--	Tennessee Riffleshell	
Showy Lady's-slipper		<i>Epioblasma sampsonii</i>	--
<i>Dryopteris ludoviciana</i>	--	Wabash Riffleshell	
Southern Shield Wood Fern		<i>Epioblasma stewardsonii</i>	--
<i>Hydrocotyle americana</i>	--	Cumberland Leafshell	
American Water-pennywort		<i>Epioblasma torulosa torulosa</i>	LE
<i>Lysimachia fraseri</i>	--	Tubercled Blossom	
Fraser's Loosestrife		<i>Hemistena lata</i>	LE
<i>Lysimachia radicans</i>	--	Cracking Pearlymussel	
Trailing Loosestrife		<i>Leptodea leptodon</i>	LE
<i>Monarda punctata</i>	--	Scaleshell	
Spotted Bee-balm		<i>Lexingtonia dolabelloides</i>	C
<i>Orbexilum stipulatum</i>	--	Slabside Pearlymussel	
Stipuled Scurf-pea		<i>Plethobasus cicatricosus</i>	LE
<i>Pedicularis lanceolata</i>	--	White Wartyback	
Swamp Lousewort		<i>Quadrula fragosa</i>	LE
<i>Physostegia intermedia</i>	--	Winged Mapleleaf	
Slender Dragon-head		<i>Quadrula tuberosa</i>	--
<i>Plantago cordata</i>	--	Rough Rockshell	
Heart-leaved Plantain		<i>Villosa fabalis</i>	LE
<i>Polytaenia nuttallii</i>	--	Rayed Bean	
Prairie Parsley		Insects	
<i>Pyrola americana</i>	--	<i>Nicrophorus americanus</i>	LE
American Wintergreen		American Burying Beetle	
<i>Saxifraga pensylvanica</i>	--	<i>Pentagenia robusta</i>	--
Swamp Saxifrage		Robust Pentagenian Burrowing Mayfly	
<i>Scirpus microcarpus</i>	--	Fishes	
Small-fruit Bulrush		<i>Ammocrypta vivax</i>	--
<i>Xerophyllum asphodeloides</i>	--	Scaly Sand Darter	
Eastern Turkeybeard		<i>Crystallaria cincotta</i>	C
		Diamond Darter	
Animals		<i>Erimystax x-punctatus</i>	--
		Gravel Chub	
Freshwater Mussels		<i>Etheostoma microperca</i>	--
<i>Epioblasma arcaeiformis</i>	--	Least Darter	
Sugarspoon		<i>Ichthyomyzon gagei</i>	--
		Southern Brook Lamprey	

Table 2. Plants and animals presumed extinct or extirpated from Kentucky.

	US Status ¹	US Status ¹
<i>Moxostoma lacerum</i>	--	
Harelip Sucker		
<i>Moxostoma valenciennesi</i>	--	
Greater Redhorse		
<i>Percina burtoni</i>	--	
Blotchside Logperch		
Reptiles		
<i>Masticophis flagellum flagellum</i>	--	
Coachwhip		
Breeding Birds		
<i>Anhinga anhinga</i>	--	
Anhinga		
<i>Campephilus principalis</i>	LE	
Ivory-billed Woodpecker		
<i>Chlidonias niger</i>	--	
Black Tern		
<i>Conuropsis carolinensis</i>	--	
Carolina Parakeet		
<i>Ectopistes migratorius</i>	--	
Passenger Pigeon		
<i>Elanoides forficatus</i>	--	
Swallow-tailed Kite		
<i>Picoides borealis</i>	LE	
Red-cockaded Woodpecker		
<i>Tympanuchus cupido</i>	--	
Greater Prairie-chicken		
<i>Vermivora bachmanii</i>	LE	
Bachman's Warbler		
Non-Breeding Birds		
<i>Cygnus buccinator</i>	--	
Trumpeter Swan		
<i>Grus americana</i>	LE	
Whooping Crane		
Mammals		
<i>Bos bison</i>	--	
American Bison		
<i>Canis lupus</i>	--	
Gray Wolf		
<i>Canis rufus</i>	LE	
Red Wolf		
<i>Puma concolor cougar</i>	LE	
Eastern Cougar		

¹ The US Status provided here refers to the current status of the taxon under the U.S. Endangered Species Act (USES) as interpreted for its range within the state of Kentucky.

Status Designations

(KSNPC) Kentucky State Nature Preserves Commission

Endangered (E). A taxon or natural community in danger of extirpation and/or extinction throughout all or a significant part of its range in Kentucky.

Threatened (T). A taxon or natural community likely to become endangered within the foreseeable future throughout all or a significant part of its range in Kentucky.

Special Concern (S). A taxon or natural community that should be monitored because (1) it exists in a limited geographic area in Kentucky, (2) it may become threatened or endangered due to modification or destruction of habitat, (3) certain characteristics or requirements make it especially vulnerable to specific pressures, (4) experienced researchers have identified other factors that may jeopardize it, or (5) it is thought to be rare or declining in Kentucky but insufficient information exists for assignment to the threatened or endangered status categories.

Historical (H). A taxon or natural community that has not been reliably reported in Kentucky since 1990 but is not considered extinct or extirpated---see next designation.

Extinct/Extirpated. A taxon for which habitat loss has been pervasive and/or concerted efforts by knowledgeable biologists to collect or observe specimens within appropriate habitat have failed. Extinct species are those that have been eliminated throughout their entire range and extirpated species are those that have been eliminated from a jurisdiction (i.e., nation or state/province).

(US) Endangered Species Act of 1973

Federal statuses are defined below. Non-breeding birds with a federal status occurring as a migrant or visitor in Kentucky (e.g., *Charadrius melodus*, *Mycteria americana*) are not included within this list.

Endangered (LE). ". . . a species in danger of extinction throughout all or a significant portion of its range .." (USFWS 2010a).

Threatened (LT). ". . . a species likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." (USFWS 2010a).

Candidate (C). Taxa for which the USFWS has ". . . sufficient information on biological status and threats to propose them as endangered or threatened" (USFWS 2010b).

Proposed Endangered (PE). "Species proposed for official listing as endangered." (USFWS 2010a)

Proposed Threatened (PT). "Species proposed for official listing as threatened." (USFWS 2010a)

(Note: no natural communities have been assigned a federal status).

Nomenclature Sources

Sources consulted for the plant and lichen names are: Anderson (1990); Jones (2005); and Esslinger (2009). Sources consulted for the common and scientific names of animals are as follows: gastropods - Hubricht (1985); Turgeon et al. (1998) and Minton and Lydeard (2003); freshwater mussels - Gordon (1995) and Turgeon et al. (1998); crustaceans - Barr (1968); Holsinger (1972); Hobbs (1989); Zhang and Holsinger (2003); Taylor and Schuster (2004); McLaughlin et al. (2005); Taylor et al. (2007); and Buhay and Crandall (2008); insects – Hodges (1983); Barr (1996; 2004); McCafferty (1996); Stark et al. (1998); Needham et al. (2000); Westfall and May (2006); Pelham (2008); NatureServe (2010a); and Morse (2010); fishes - Page and Burr (1991); Nelson et al. (2004), Blanton and Jenkins (2008); Welsh and Wood (2008); Strange and Mayden (2009); and USFWS (2010a); amphibians and reptiles - King and Burke (1989); Collins and Taggart (2002); and Crother (2008); breeding birds - AOU (1998); mammals - Hall (1981), Jones et al. (1992), and Wilson and Reeder (1993).

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Literature Cited

- Anderson, L. E., H. A. Crum, and W. R. Buck. 1990. List of the mosses of North America north of Mexico. *The Bryologist* 93:448-499.
- [AOU] American Ornithologists' Union. 1998. Check-list of North American birds. 7th edition. American Ornithologists' Union, Washington, DC.
- Barr, T. C., Jr. 1968. Ecological studies in the Mammoth Cave system of Kentucky I - the biota. *International Journal of Speleology* 3:147-204.
- Barr, T. C., Jr. 1996. Cave beetle status survey and prelisting recovery project. Report prepared for the United States Fish and Wildlife Service and the Kentucky Department of Fish and Wildlife Resources, Frankfort, KY.
- Blanton, R. E. and R. E. Jenkins. 2008. Three new darter species of the *Etheostoma percnurum* species complex (Percidae, subgenus *Catonotus*) from the Tennessee and Cumberland river drainages. *Zootaxa* 1963:1-24.
- Branson, B. A., D. F. Harker, J. M. Baskin, M. E. Medley, D. L. Batch, M. L. Warren, W. H. Davis, W. C. Houtcooper, B. Monroe, L. R. Phillippe, and P. Cupp. 1981. Endangered, threatened, and rare animals and plants of Kentucky. *Transactions of the Kentucky Academy of Science* 42:77-89.
- Braun, E. L. 1935. The vegetation of Pine Mountain, Kentucky: an analysis of the influence of soils and slope exposure as determined by geological structure. *American Midland Naturalist* 16:517-565.
- Braun, E. L. 1950. *Deciduous forests of eastern North America*. Blakiston Publishers, Philadelphia, PA.
- Buhay, J. E., and K. A. Crandall. 2008. Taxonomic revision of cave crayfishes in the genus *Orconectes*, Subgenus *Orconectes* (Decapoda: Cambaridae) along the Cumberland Plateau, including a description of a new species, *Orconectes barri*. *Journal of Crustacean Biology* 28:57-67.
- Collins, J. T., and T. W. Taggart. 2002. Standard common and current scientific names for North American amphibians, turtles, reptiles, and crocodylians. 5th edition. The Center for North American Herpetology, Lawrence, KS.
- Cowardin, L. M., V. Carter, F. C. Golet, and E. T. LaRoe. 1979. Classification of wetlands and deepwater habitats of the United States. U.S. Department of the Interior, Fish and Wildlife Service, Washington, D.C., Northern Prairie Wildlife Research Center, Jamestown, ND.
- Crother, B. I., 2008. Scientific and standard English names of amphibians and reptiles of North America north of Mexico, with comments regarding confidence in our understanding. Sixth edition. Society for the Study of Amphibians and Reptiles, *Herpetological Circulars* 37:1-94.
- Esslinger, T. L. 2009. A cumulative checklist for the lichen-forming, lichenicolous and allied fungi of the continental United States and Canada. North Dakota State University: www.ndsu.nodak.edu/instruct/esslinge/chcklst/chcklst7.htm. Accessed March 31, 2010.
- Fleming, G. P., P. P. Coulling, K. D. Patterson, and K. Taverna. 2006. The natural communities of Virginia: classification of ecological community groups. Second approximation. Version 2.2. Virginia Department of Conservation and Recreation, Division of Natural Heritage, Richmond, VA. www.dcr.virginia.gov/natural_heritage/ncintro.shtml. Accessed March 31, 2010.
- Gordon, M. E. 1995. *Anodontoides denigratus* (Lea) (Bivalvia: Unionoida) from the upper Cumberland River system. Report submitted to the U.S. Fish and Wildlife Service, Asheville, NC.
- Grossman D. H., D. Faber-Langendoen, A. S. Weakley, M. Anderson, P. Bourgeron, R. Crawford, K. Goodin, S. Landaal, K. Metzler, K. D. Patterson, M. Pyne, M. Reid, and L. Sneddon. 1998. International classification of ecological communities: terrestrial vegetation of the United States. Volume I, *The National Vegetation Classification System: development, status, and applications*. The Nature Conservancy, Arlington, VA.
- Hall, E.R. 1981. *The mammals of North America*. 2nd edition. John Wiley and Sons, New York, NY.
- Hodges, R. W., T. Dominick, D. R. Davis, D. C. Ferguson, J. G. Franclemont, E. G. Munroe, J. A. Powell (eds). 1983. Check list of the Lepidoptera of America North of Mexico. E.W. Classey Ltd. and The Wedge Entomological Research Foundation, London.
- Hobbs, H. H. Jr. 1989. An illustrated checklist of the American crayfishes (Decapoda: Astacidae, Cambaridae & Parastacidae). *Smithsonian Contributions to Zoology* 480:1-236.
- Holsinger, J.R. 1972. The freshwater amphipod crustaceans (Gammaridae) of North America. *Water Pollution Control Research Series* 18050 ELD04/72. U.S. Environmental Protection Agency, Cincinnati, OH.
- Hooper, D. U., F. S. Chapin, J. J. Ewel, A. Hector, P. Inchausti, S. Lavorel, J. H. Lawton, D. M. Lodge, M. Loreau, S. Naeem, B. Schmid, H. Setälä, A. J. Symstad, J., Vandermeer, and D. A. Wardle. 2005. Effect of biodiversity on ecosystem functioning: a consensus of current knowledge. *Ecological Monographs* 75:3-35.
- Hubricht, L. 1985. The distributions of the native land mollusks of the eastern United States. *Fieldiana* 24:1-191.
- Jones, J. K., Jr., R. S. Hoffmann, D. W. Rice, C. Jones, R. J. Baker, and M. D. Engstrom. 1992. Revised checklist of North American mammals north of Mexico, 1991. *Occasional Papers of the Museum of Texas Tech University* 146.
- Jones, R. L. 2005. *Plant life of Kentucky*. The University Press of Kentucky, Lexington, KY.
- King, W. F., and R. L. Burke (eds). 1989. *Crocodylian, tuatara, and turtle species of the world: a taxonomic and geographic reference*. Association of Systematics Collections, Washington, DC.
- [KSNPC] Kentucky State Nature Preserves Commission. 1991. *Kentucky Ecological Communities*. Frankfort, KY.
- [KSNPC] Kentucky State Nature Preserves Commission. 1996. Rare and extirpated plants and animals of Kentucky. *Transactions of the Kentucky Academy of Science* 57:69-91.

- [KSNPC] Kentucky State Nature Preserves Commission. 1997. Rare and extirpated plants and animals of Kentucky: 1997 update. Transactions of the Kentucky Academy of Science 58:96-99.
- [KSNPC] Kentucky State Nature Preserves Commission. 1999. Rare and extirpated plants and animals of Kentucky: 1999 update. Transactions of the Kentucky Academy of Science 60:124-126.
- [KSNPC] Kentucky State Nature Preserves Commission. 2000. Rare and extirpated plants and animals of Kentucky: 2000 update. Transactions of the Kentucky Academy of Science 61:115-132.
- [KSNPC] Kentucky State Nature Preserves Commission. 2001. Endangered, threatened, special concern, and historical biota of Kentucky. Available at <http://naturepreserves.ky.gov/pubs/Pages/reports.aspx>.
- [KSNPC] Kentucky State Nature Preserves Commission. 2004. Endangered, threatened, special concern, and historical biota of Kentucky. Available at <http://naturepreserves.ky.gov/pubs/Pages/reports.aspx>.
- [KSNPC] Kentucky State Nature Preserves Commission. 2005. Endangered, threatened, special concern, and historical biota of Kentucky. Available at <http://naturepreserves.ky.gov/pubs/Pages/reports.aspx>.
- [KSNPC] Kentucky State Nature Preserves Commission. 2009. Natural communities of Kentucky. Working draft. Frankfort, KY.
- [KSNPC] Kentucky State Nature Preserves Commission. 2010. Kentucky natural heritage database. Frankfort, KY.
- McCafferty, W.P. 1996. The Ephemeroptera species of North America and index to their complete nomenclature. Transactions of the American Entomological Society 122:1-54.
- McLaughlin, P.A., D. K. Camp, M. V. Angel, E. L. Bousfield, P. Brunel, R. C. Brusca, D. Cadien, A. C. Cohen, K. Conlan, L. G. Eldredge, D. L. Felder, J. W. Goy, T. Haney, B. Hann, R. W. Heard, E. A. Hendrycks, H. H. Hobbs III, J. R. Holsinger, B. Kensley, D. R. Laubitz, S. E. LeCroy, R. Lemaitre, R. F. Maddocks, J. W. Martin, P. Mikkelsen, E. Nelson, W. A. Newman, R. M. Overstreet, W. J. Poly, W. W. Price, J. W. Reid, A. Robertson, D. C. Rogers, A. Ross, M. Schotte, F. Schram, C. Shih, L. Watling, G. D. F. Wilson, and D. D. Turgeon. 2005. Common and scientific names of aquatic invertebrates from the United States and Canada: Crustaceans. American Fisheries Society, Special Publication 31.
- Minton, R. L., and C. Lydeard. 2003. Phylogeny, taxonomy, genetics and global heritage ranks of an imperiled, freshwater snail genus *Lithasia* (Pleuroceridae). Molecular Biology 2003:75-87
- Morse, J. C. (ed). 2010. Trichoptera World Checklist. <http://entweb.clemson.edu/database/trichopt/index.htm>. Accessed 29 March 2010.
- NatureServe. 2010a. Core heritage methodology training manual. NatureServe, Arlington, VA.
- NatureServe. 2010b. NatureServe Explorer Worldwide Web database. www.natureserve.org/explorer. Accessed several times from February to April of 2010.
- Needham, J. G., M. J. Westfall, Jr., and M. L. May. 2000. Dragonflies of North America. Scientific Publishers, Gainesville, FL.
- Nelson, J. S., E. J. Crossman, H. Espinosa-Pérez, L. T. Findley, C. R. Gilbert, R. N. Lea and J. D. Williams. 2004. Common and scientific names of fishes from the United States, Canada, and Mexico. 6th edition. American Fisheries Society, Special Publication 29, Bethesda, MD.
- Nelson, P. W. 2007. The terrestrial natural communities of Missouri. Missouri Natural Areas Committee, Jefferson City, MO.
- Page, L.M., and B.M. Burr. 1991. A field guide to freshwater fishes of North America north of Mexico. Houghton Mifflin, Boston, MA.
- Pelham, J. P. 2008. A catalogue of the butterflies of the United States and Canada with a complete bibliography of the descriptive and systematic literature. Journal of Research on the Lepidoptera, Volume 40.
- Poff, N. L., J. D. Olden, D. M. Merritt, and D. M. Pepin. 2007. Homogenization of regional river dynamics by dams and global biodiversity implications. Proceedings of the National Academy of Sciences 104:5732-5737.
- Stark, B. P., K. W. Stewart, S. W. Szczytko, and R. W. Baumann. 1998. Common names of stoneflies (Plecoptera) from the United States and Canada. Ohio Biological Survey Notes 1:1-18.
- Strange, R. M., and R. L. Mayden. 2009. Phylogenetic relationships and a revised taxonomy for North American cyprinids currently assigned to *Phoxinus*. Copeia 2009:494-501.
- Taylor, C. A., and G. A. Schuster. 2004. The crayfishes of Kentucky. Illinois Natural History Survey Special Publication 28.
- Taylor, C. A., G. A. Schuster, J. E. Cooper, R. L. DiStefano, A. G. Eversole, P. Hamr, H. H. Hobbs III, H. W. Robison, C. E. Skelton, and R. F. Thoma. 2007. A reassessment of the conservation status of crayfishes after 10+ years of increased awareness. Fisheries 32: 372-389.
- Turgeon, D. D., J. F. Quinn, A. E. Bogan, E. V. Coan, F. G. Hochberg, W. G. Lyons, P. M. Mikkelsen, R. J. Neves, C. F. E. Roper, G. Rosenberg, B. Roth, A. Scheltema, F. G. Thompson, M. Vecchione, and J. D. Williams. 1998. Common and Scientific Names of Aquatic Invertebrates from the United States and Canada: Mollusks. 2nd edition. American Fisheries Society Special Publication 26, Bethesda, MD.
- [USFWS] United States Fish and Wildlife Service. 2010a. Endangered and threatened wildlife and plants. Department of the Interior, Washington, DC. www.fws.gov/endangered/about/listing-status-codes.html
- [USFWS] United States Fish and Wildlife Service. 2010b. List of candidate species. Department of the Interior, Washington, DC. http://ecos.fws.gov/tess_public/pub/SpeciesReport.do?listingType=C&mapstatus=1 Accessed Dec 17, 2010.
- Vaughn, C. 2010. Biodiversity losses and ecosystem function in freshwater: emerging conclusions and research directions. Bioscience 60:25-35.

- Warren, M. L., Jr., W. H. Davis, R. R. Hannan, M. Evans, D. L. Batch, B. D. Anderson, B. Palmer-Ball Jr., J. R. MacGregor, R. R. Cicerello, R. Athey, B. A. Branson, G. J. Fallo, B. M. Burr, M. E. Medley, and J. M. Baskin. 1986. Endangered, threatened, and rare plants and animals of Kentucky. Transactions of the Kentucky Academy of Science 47:83-98.
- Welsh, S. A., and R. M. Wood. 2008. *Crystallaria cincotta*, a new species of darter (Teleostei: Percidae) from the Elk River of the Ohio River drainage, West Virginia. Zootaxa 1680:62-68.
- Westfall, M. J., Jr., and M. L. May. 2006. Damselflies of North America. Revised edition. Scientific Publishers, Gainesville, FL.
- Wilson, D. E., and D. M. Reeder (eds). 1993 Mammal species of the world: a taxonomic and geographic reference. 2nd edition. Smithsonian Institution Press, Washington, DC.
- Zhang, J., and J. R. Holsinger. 2003. Systematics of the freshwater amphipod genus *Crangonyx* (Crangonyctidae) in North America. Virginia Museum of Natural History, Memoir Number 6.
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