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Endangered, Threatened, and Rare Animals and Plants of Kentucky

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ABSTRACT

The Endangered Species Committee of the Kentucky Academy of Science and the Kentucky Nature Preserves Commission cooperated in the development of a rare animal and plant list. The list includes 263 animal species (83 species of invertebrates, 180 species of vertebrates) and 309 vascular plant species identified as Endangered, Threatened, Special Concern, or of Undetermined status at the state or federal level. Categories for both state and federal designations are defined. Several population descriptors (endemic, disjunct, peripheral, nesting) are also used where appropriate. Each bird species listed is also given a monitoring strategy to indicate the type of records necessary for evaluation of its current status.

INTRODUCTION

The increased concern for our total environment has led to a new awareness of endangered, threatened, and rare species of plants and animals. Since passage of the Federal Endangered Species Act of 1973, national interest in the conservation and preservation of these species has increased dramatically. Public awareness and concern have stimulated cooperation

between a variety of organizations and agencies in many states, resulting in the formation of numerous programs designed to identify species in need of protection.

Compiling this list is a fundamental step necessary to effectuate the recovery and preservation of our rich natural diversity. It is anticipated that publication of this list will encourage individuals, private organizations, and government agencies to become involved in research, preservation, management, and educational programs on behalf of these species.

The list should also serve as an important tool for developers and decision-makers. The best decisions concerning the most effective use of Kentucky's nat-

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ural resources can be made only after the most vulnerable elements of our natural diversity have been identified. Informed planning can then avoid unnecessary destruction of our rare fauna and flora.

The development of this list of endangered, threatened, and rare animals and plants of Kentucky is a result of a cooperative effort between the Endangered Species Committee of the Kentucky Academy of Science and the Kentucky Nature Preserves Commission. Development of the bird list was accomplished with the cooperation of the Academy and the Kentucky Ornithological Society.

The list includes species currently being monitored in Kentucky by the Commission, and should be considered a dynamic working document reflecting the best available information. A list of those species which have been delisted from earlier versions is maintained at the Commission.

The Commission maintains a computerized and manual data base as part of the Kentucky Natural Heritage Program. This information has been summarized and presented as the Kentucky Natural Areas Plan (Harker et al. 1980).

We invite input from all knowledgeable persons on species they feel should be added or deleted from the list. Comments on the nomenclature, occurrences of these species, or any other relevant information will also be appreciated.

ACKNOWLEDGMENTS

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Southern Illinois University, for contributions to the development of this list.

SPECIAL STATUS CODES

The intent in assigning a status to listed species in Kentucky is to (1) indicate the degree of rarity of the species, (2) indicate the degree of threat to continued survival of the species, and aid in establishing priorities for conservation and/or preservation efforts. Designations were established as a tool to monitor the survival potential of listed species. Only those species which, to the best of our knowledge, currently exist in Kentucky are assigned a status.

STATUS CATEGORIES

Four major status categories have been developed (Endangered, Threatened, Special Concern, and Undetermined) and are coded in capital letters and defined as follows:

Endangered (E). A species which is in danger of extirpation and/or extinction throughout all or a significant portion of its range in Kentucky, including those species proposed or recognized as federally endangered that occur in Kentucky.

Threatened (T). A species which is likely to become endangered within the foreseeable future throughout all or a significant portion of its range in Kentucky, including those species proposed or recognized as federally threatened that occur in Kentucky.

Special Concern (S). A species which should be continually monitored because (a) it exists in a limited geographic area, (b) it may become threatened or endangered due to modification or destruction of habitat, (c) certain characteristics or requirements make it especially vulnerable to specific pressures, or (d) experienced researchers have identified other factors.

Undetermined (U). A species that has been suggested as threatened, endangered, or extirpated, but insufficient information exists for assignment to Special Concern, Threatened, or Endangered status categories.

ENDANGERED PLANTS

DESCRIPTIVE CATEGORIES

Descriptive categories were developed, which may be used in conjunction with the major status categories to indicate certain aspects of the geographic distribution, population dynamics, and other characteristics of a species in Kentucky. These classifications are shown in lower case letters and enclosed in parentheses as follows: *Geographic (g)*. A species whose range in Kentucky represents the entire natural range.

Endemic (e). A species confined to a significant portion of its range in Kentucky.

Disjunct (d). A species whose range in Kentucky represents a fragment from the primary contiguous range or a discontinuous distribution.

Seasonal (s). A bird species which breeds in Kentucky but may be absent at times, especially during winter. Kentucky status, therefore, is based on the nesting dynamics of the species and not the population dynamics of nesting sites of these species. Nesting sites of these species may be of rare or unique habitat and require special preservation.

FEDERAL DESIGNATIONS

The federal designations are shown in brackets after the appropriate status category and are defined as follows:

Endangered (E). Those species which are in danger of extinction throughout all or a significant portion of their range. Those species which are endangered are designated as such.

Threatened (T). Those species which are likely to become endangered within the foreseeable future throughout all or a significant portion of their range. Those species which are threatened are designated as such.

Candidate for Listing (CL). This category includes those species which are currently under review for federal listing (Federal Register 1980a).

BIRD MONITORING STRATEGIES

In an attempt to reflect the information required to make an accurate as-

ern Illinois University, for contributions to the development of this list.

SPECIAL STATUS CODES

The intent in assigning a status to a species in Kentucky is to (1) indicate the degree of rarity of the species, (2) indicate the degree of threat to the continued survival of the species, and (3) establishing priorities for conservation and/or preservation efforts. Designations were established as a tool for the survival potential of species. Only those species which, to the best of our knowledge, currently exist in Kentucky are assigned a status.

STATUS CATEGORIES

Four major status categories have been developed (Endangered, Threatened, of Concern, and Undetermined) and are coded in capital letters and defined as follows:

Endangered (E). A species which is in danger of extirpation and/or extinction throughout all or a significant portion of its range in Kentucky, including those species proposed or recognized as threatened or endangered that occur in Kentucky.

Threatened (T). A species which is likely to become endangered within a reasonable future throughout all or a significant portion of its range in Kentucky, including those species proposed or recognized as federally threatened that occur in Kentucky.

of Concern (S). A species that requires continual monitoring because it exists in a limited geographic area, may become threatened or endangered due to modification or destruction of its habitat, (c) certain characteristics or trends make it especially vulnerable to environmental pressures, or (d) experienced other factors that have not been identified.

Undetermined (U). A species that has been suggested as threatened, endangered, or extirpated, but insufficient information exists for assignment to Species of Concern, Threatened, or Endangered categories.

DESCRIPTIVE CATEGORIES

Four descriptive categories were developed, which may be used in conjunction with the major status categories, to describe certain aspects of the geographical distribution, population dynamics, or behavioral characteristics of a species within Kentucky. These classifications (coded in lower case letters and enclosed in parentheses) are defined as follows:

Peripheral (p). A species whose occurrence in Kentucky represents the edge of its natural range.

Endemic (e). A species confined to or with a significant portion of its range in Kentucky.

Disjunct (d). A species whose occurrence in Kentucky represents a separation from the primary contiguous population or a discontinuous distribution.

Nesting (n). A bird species which rarely nests in Kentucky but may be common at other times, especially during migration. The Kentucky status, therefore, is based on the nesting dynamics of the species and not the population dynamics. The nesting sites of these species may be indicative of rare or unique habitat worthy of preservation.

FEDERAL DESIGNATION

The federal designations are enclosed in brackets after the appropriate species and are defined as follows:

Endangered (E). Those species in danger of extinction throughout all or a significant portion of their range. Those proposed endangered are designated as PE.

Threatened (T). Those species that are likely to become endangered within the foreseeable future throughout all or a significant portion of their range. Those proposed threatened are designated as PT.

Candidate for Listing (CL) This designation includes those species that are currently under review for federal listing (Federal Register 1980a).

BIRD MONITORING STRATEGIES

In an attempt to reflect the information required to make an accurate assessment

of the rare Kentucky avifauna, four monitoring strategies have been designed. These strategies will yield the maximum amount of useful data concerning occurrences, population dynamics, and seasonal fluctuations in response to the behavioral characteristics of individual species. These data will help identify and ultimately protect valuable habitat necessary for the continued existence of each species.

Monitoring Strategy I. Record and map all past and present occurrences. This includes nest records and valid sightings at any time of the year. This strategy is appropriate for our rarest birds for which any information is important.

Monitoring Strategy II. Record information concerning current population dynamics including but not limited to: Christmas counts, U.S. Fish and Wildlife breeding bird counts, National Wildlife Federation bird counts, or any species specific counts yielding information on distribution and abundance. These counts will be used to identify local, regional, and/or national trends of the desired species. Occurrence information is not mapped.

Monitoring Strategy III. Record and map all past and present summer sightings and summer nest sites observed from June 1 through July 31. The occurrence of a singing male on territory during the months of June and July should be regarded as a legitimate record. This strategy also pertains to those species whose occurrence in Kentucky represents the peripheral margin of the breeding range (p) and to those species that have so declined in their breeding population levels (b) that monitoring is now necessary.

Monitoring Strategy IV. Record and map all past and present nesting sites. This strategy is appropriate for those species that are colonial (c) and for which few breeding sites exist in the state and for those species that utilize an important ecological habitat (h) for breeding.

INTRODUCTION TO THE ANIMAL LIST

The animal list represents a synthesis of information gathered from a variety of local, regional, state, and federal sources. The list reflects an extensive literature review and an examination of museum specimens. Several species are included which have not been taxonomically described. The sources most commonly consulted for common and scientific names are: Pelecypods, Stansbery (1980); gastropods, Pilsbry (1939), Branson (1970); crustaceans, Federal Register (1980b), Hobbs (1976), Holsinger (1976), Pennak (1978); fishes, Bailey et al. (1970), Robins et al. (1976); amphibians and reptiles, Collins et al. (1978); birds, American Ornithologists' Union (1957, and supplements); mammals, Hall (1981). Common and scientific names of species recently described reflect the available literature.

ANIMAL LIST

PELECYPODS	STATUS		STATUS
<i>Alasmidonta atropurpurea</i>	E	<i>Villosa fabalis</i>	E
<i>Cumberlandia monodonta</i>	E	<i>Villosa lienosa</i>	U
<i>Cyprogenia stegaria</i>	T	<i>Villosa ortmanni</i>	E
<i>Dromus dromas</i>	E [E]	<i>Villosa trabalis</i>	E [E]
<i>Epioblasma arcaeformis</i>	E	<i>Villosa vanuxemi</i>	T
<i>Epioblasma biemarginata</i>	E		
<i>Epioblasma brevidens</i>	E	GASTROPODS	
<i>Epioblasma capsaeformis</i>	E	<i>Anculosa praerosa</i>	T [CL]
<i>Epioblasma cincinnatiensis</i>	E	<i>Antroselates spiralis</i>	S
<i>Epioblasma flexuosa</i>	E	<i>Helicodiscus fimbriatus</i>	S
<i>Epioblasma florentina</i>	E [E]	<i>Helicodiscus notius specus</i>	S
<i>Epioblasma haysiana</i>	E	<i>Helicodiscus punctatellus</i>	S
<i>Epioblasma lewisi</i>	E [E]	<i>Lithasia armigera</i>	E [CL]
<i>Epioblasma obliquata</i>	E	<i>Lithasia geniculata</i>	E [CL]
<i>Epioblasma personata</i>	E	<i>Lithasia obovata</i>	S
<i>Epioblasma propinqua</i>	E	<i>Lithasia salebrosa</i>	T [CL]
<i>Epioblasma rangiana</i>	E	<i>Lithasia verrucosa</i>	E [CL]
<i>Epioblasma sampsoni</i>	E	<i>Nitocris trilineata</i>	T
<i>Epioblasma stewardsoni</i>	E	<i>Pleurocera acuta</i>	S
<i>Epioblasma torulosa torulosa</i>	E [E]	<i>Pleurocera alveare</i>	S
<i>Epioblasma triquetra</i>	S	<i>Pleurocera curta</i>	S
<i>Epioblasma walkeri</i>	E [E]	<i>Rhodacmea elaitor</i>	T
<i>Fusconaia maculata</i>	E	<i>Vitrinizonites latissimus</i>	S
<i>Hemistena lata</i>	E		
<i>Lampsilis orbiculata</i>	E [E]	CRUSTACEANS	
<i>Lasmigona compressa</i>	S(p)	<i>Cambarellus shufeldtii</i>	U
<i>Lasmigona subviridis</i>	U	<i>Cambarus batchi</i>	T(e)
<i>Leptodea leptodon</i>	E	<i>Cambarus bouchardi</i>	E [CL]
<i>Obovaria retusa</i>	E	<i>Cambarus cornutus</i>	S
<i>Pegias fabula</i>	E	<i>Cambarus ornatus</i>	S
<i>Plethobasus cicatricosus</i>	E [E]	<i>Cambarus parvoculus</i>	S
<i>Plethobasus cooperianus</i>	E [E]	<i>Eubbranchipus neglectus</i>	U
<i>Plethobasus cyphyus</i>	T	<i>Gammarus housfieldi</i>	E(e)
<i>Pleurobema clava</i>	E	<i>Orconectes australis</i>	S
<i>Pleurobema oviforme</i>	T	<i>Orconectes bisectus</i>	T(e)
<i>Pleurobema plenum</i>	E [E]	<i>Orconectes inermis</i>	S
<i>Pleurobema rubrum</i>	E	<i>Orconectes jeffersoni</i>	E(e) [CL]
<i>Potamilus capax</i>	E [E]	<i>Orconectes kentuckiensis</i>	St(e)
<i>Ptychobranchnus subtentum</i>	T	<i>Orconectes lancifer</i>	S
<i>Quadrula cylindrica</i>	E	<i>Orconectes pellucidus</i>	S
<i>Quadrula fragosa</i>	U	<i>Orconectes rafinesquei</i>	St(e)
<i>Quadrula sparsa</i>	E [E]	<i>Orconectes tricuspis</i>	S
<i>Simpsonaias ambigua</i>	E	<i>Palaemonias ganteri</i>	E(e) [PE]
<i>Toxolasma lividas</i>	S		

	STATUS		STATUS
<i>Agosia flavescens</i>	T	<i>Hybopsis insignis</i>	S
Lake sturgeon		Blotched chub	
<i>Agosia alabamae</i>	U	<i>Hybopsis meeki</i>	U
Alabama shad		Sticklefin chub	
<i>Hybopsis spelaea</i>	S	<i>Hybopsis x-punctata</i>	U
Northern cavefish		Gravel chub	
<i>Desmoceripta asprella</i>	E	<i>Ichthyomyzon castaneus</i>	S
Crystal darter		Chestnut lamprey	
<i>Desmoceripta clara</i>	E	<i>Ichthyomyzon fossor</i>	T(p)
Western sand darter		Northern brook lamprey	
<i>Desmoceripta pellucida</i>	T	<i>Ichthyomyzon gagei</i>	U
Eastern sand darter		Southern brook lamprey	
<i>Desmoceripta vivax</i>	E(p)	<i>Ichthyomyzon greeleyi</i>	U
White sand darter		mountain brook lamprey	
<i>Desmoceripta agassizi</i>	S	<i>Ichthyomyzon unicuspis</i>	S(p)
Spring cavefish		Silver lamprey	
<i>Desmoceripta elongatus</i>	U(p)	<i>Ictiobus niger</i>	U
White dace		Black buffalo	
<i>Desmoceripta funduloides</i>	S	<i>Lampetra appendix</i>	S
Blackside dace		American brook lamprey	
<i>Desmoceripta elongatus</i>	T	<i>Lepisosteus oculatus</i>	T
White sucker		Spotted gar	
<i>Desmoceripta zonatum</i>	S(p)	<i>Lepisosteus spatula</i>	T(p)
Spotted pygmy sunfish		Alligator gar	
<i>Desmoceripta sucetta</i>	U	<i>Lepomis marginatus</i>	T
White chubsucker		Dollar sunfish	
<i>Desmoceripta nasquinongy ohioensis</i>	S	<i>Lepomis punctatus</i>	S
White muskellunge		Spotted sunfish	
<i>Desmoceripta niger</i>	T(p)	<i>Lepomis symmetricus</i>	S(p)
White pickerel		Bantam sunfish	
<i>Desmoceripta cinereum</i>	E	<i>Lota lota</i>	U(p)
Black darter		Burbot	
<i>Desmoceripta fusiforme</i>	S(p)	<i>Moxostoma atripinne</i>	T(e)
Blacktop darter		Blackfin sucker	
<i>Desmoceripta histrio</i>	T(p)	<i>Nocomis biguttatus</i>	U
Blackquin darter		Hornyhead chub	
<i>Desmoceripta microlepidum</i>	U	<i>Notropis amnis</i>	U
White scale darter		Pallid shiner	
<i>Desmoceripta microperca</i>	E(p)	<i>Notropis ariommus</i>	U
Black darter		Popeye shiner	
<i>Desmoceripta nigrum susanae</i>	T(e)	<i>Notropis camurus</i>	U(p)
Black darter		Bluntface shiner	
<i>Desmoceripta parvipinne</i>	E(p)	<i>Notropis maculatus</i>	T(p)
Black stripe darter		Taillight shiner	
<i>Desmoceripta sagitta</i>	T(e)	<i>Notropis shumardi</i>	U
Black darter		Silverband shiner	
<i>Desmoceripta swaini</i>	S(p)	<i>Notropis sp.</i>	E(e)
Black darter		Palezone shiner (undescribed)	
<i>Desmoceripta tippecanoe</i>	E	<i>Notropis sp.</i>	T(p)
Tippecanoe darter		Sawfin shiner (undescribed)	
<i>Desmoceripta chrysotus</i>	S(p)	<i>Notropis venustus</i>	S(p)
Blacktop minnow		Blacktail shiner	
<i>Desmoceripta notti</i>	S	<i>Noturus hildebrandi</i>	S(p)
Blackhead minnow		Least madtom	
<i>Desmoceripta flammea</i>	U	<i>Noturus phaeus</i>	S(p)
Flame chub		Brown madtom	
<i>Desmoceripta haji</i>	T(p)	<i>Noturus stigmaticus</i>	T
Cypress minnow		Northern madtom	
<i>Desmoceripta placitus</i>	U(p)	<i>Perca flavescens</i>	U
Flame minnow		Yellow perch	
<i>Desmoceripta gelida</i>	U(p)	<i>Percina burtoni</i>	E
Blotched chub		Blotchside logperch	
<i>Desmoceripta gracilis</i>	U(p)	<i>Percina copelandi</i>	S
Blotched chub		Channel darter	

	STATUS		STATUS
<i>Percina evides</i>	S	<i>Elaphe guttata</i>	STATE
Gilt darter		Corn Snake	S(d)
<i>Percina macrocephala</i>	T	<i>Eumeces anthracinus</i>	T
Longhead darter		Coal Skink	
<i>Percina (Odontopholis) sp.</i>	S(e)	<i>Graptemys kohni</i>	U
Blackfin darter (undescribed)		Mississippi Map Turtle	
<i>Percina ouachitae</i>	U	<i>Graptemys pseudogeographica</i>	U
Saddleback darter		False Map Turtle	
<i>Percina oxyrhyncha</i>	U	<i>Lampropeltis triangulum</i>	S
Sharpnose darter		<i>elapsoides</i>	
<i>Percina phoxocephala</i>	S	Scarlet Kingsnake	
Slenderhead darter		<i>Lampropeltis triangulum sypila</i>	St(p)
<i>Percina shumardi</i>	T	Red Milk Snake	
River darter		<i>Macroclmys temmincki</i>	U
<i>Percina squamata</i>	E	Alligator Snapping Turtle	
Olive darter		<i>Masticophis flagellum</i>	E
<i>Percopsis omiscomaycus</i>	S(p)	Coachwhip	
Trout-perch		<i>Nerodia cyclopion</i>	U
<i>Phenacobius uranops</i>	S	Green Water Snake	
Stargazing minnow		<i>Nerodia fasciata</i>	U
<i>Phoxinus cumberlandensis</i>	T(e)	Southern Water Snake	
Blackside dace		<i>Ophisaurus attenuatus</i>	U
<i>Polyodon spathula</i>	S	Slender Glass Lizard	
Paddlefish		<i>Pituophis melanoleucus</i>	U
<i>Scaphirhynchus platyrhynchus</i>	T	Pine Snake	
Shovelnose sturgeon		<i>Sistrurus miliarius</i>	Eip
<i>Typhlichthys subterraneus</i>	T	Pigmy Rattlesnake	
Southern cavefish		<i>Thamnophis proximus</i>	U
<i>Umbra limi</i>	T(p)	Western Ribbon Snake	
Central mudminnow			
AMPHIBIANS		BIRDS	
<i>Ambystoma talpoideum</i>	S	<i>Accipiter cooperi</i>	STRATEGY
Mole Salamander		Cooper's Hawk	II
<i>Amphiuma tridactylum</i>	U	<i>Accipter striatus</i>	II
Three-toed Amphiuma		Sharp-shinned Hawk	
<i>Cryptobranchus alleganiensis</i>	T	<i>Aimophila aestivalis</i>	III(b)
Hellbender		Backman's Sparrow	
<i>Hemidactylium scutatum</i>	T	<i>Ammodramus henslowii</i>	III(p)
Four-toed Salamander		Henslow's Sparrow	
<i>Hyla avivoca</i>	S	<i>Ammodramus savannarum</i>	II(b)
Bird-voiced Treefrog		Grasshopper Sparrow	
<i>Hyla cinerea</i>	T	<i>Aquila chrysaetos</i>	I
Green Treefrog		Golden Eagle	
<i>Hyla gratiosa</i>	E	<i>Archilochus colubris</i>	II
Barking Treefrog		Ruby-throated Hummingbird	
<i>Plethodon cinereus</i>	S(p)	<i>Ardea herodias</i>	IV(c)
Redback Salamander		Great Blue Heron	
<i>Rana areolata</i>	U	<i>Bartramia longicauda</i>	III(p)
Crawfish Frog		Upland Sandpiper	
<i>Siren intermedia</i>	U	<i>Botaurus lentiginosus</i>	IV(b)
Lesser Siren		American Bittern	
REPTILES		<i>Buteo lineatus</i>	II
<i>Cemophora coccinea</i>	U	Red-shouldered Hawk	
Scarlet Snake		<i>Casmerodius albus</i>	IV
<i>Chrysemys concinna</i>	U	Great Egret	
River Cooter		<i>Catharus fuscescens</i>	III(p)
<i>Chrysemys floridana</i>	U	Veery	
Cooter		<i>Chondestes grammacus</i>	III(b)
<i>Clonophis kirtlandi</i>	E	Lark Sparrow	
Kirtland's Water Snake		<i>Circus cyaneus</i>	II
		Marsh Hawk	
		<i>Cistothorus platensis</i>	III(p)
		Short-billed Marsh Wren	

STATE	STRATEGY	STATUS	STRATEGY	STATUS
SoB	III(p)	U	III(p)	E(n)
T	III(p)	U	III(p)	E(n)
U	III(p)	E(n)		
U	I	E [E]		
S	III(p)	U(n)		
Sp	I	E [E]		
T	IV(h)	E(n)		
E	I	E [E]		
T	III(p)	S		
T	IV(c)	S(n)		
T	IV(h)	E(n)		
E	III(p)	E(n)		
E(p)	IV(h)	T(n)		
T	IV(c)	S		
GA	IV(c)	S		
T	III(p)	E(n)		
T	II	S		
T	IV(c)	S		
T	III(p)	E(n)		
T	I	E [E]		
S	IV(h)	T(n)		
S	III(p)	T(n)		
T	IV(h)	E(n)		
T	IV(c)	S(n)		
E	IV(c)	T		
U	III(b)	T		
E	II	U		
S	I	E [E]		
T	III(p)	U(n)		
U	III(p)	E(n)		
T				

Wilsonia canadensis
Canada Warbler

MAMMALS

Clethrionomys gapperi
Gapper's Red-backed Vole
Felis concolor cougar
Eastern Cougar
Lastonycteris noctivagans
Silver-haired Bat
Lasiurus cinereus
Hoary Bat
Lontra canadensis
River Otter
Lynx rufus
Bobcat
Microsorex hoyi
Thompson's Pygmy Shrew
Mustela rixosa
Least Weasel
Myotis austroriparius
Southeastern Myotis
Myotis grisescens
Gray Bat
Myotis keenii
Keen's Bat
Myotis leibii
Small-footed Myotis
Myotis sodalis
Indiana Bat
Napaeozapus insignis
Woodland Jumping Mouse
Nycticeius humeralis
Evening Bat
Peromyscus maniculatus nubiterrae
Cloudland Deermouse
Plecotus rafinesquii
Rafinesque's Big-eared Bat
Plecotus townsendii virginianus
Townsend's Big-eared Bat
Sorex cinereus
Masked Shrew
Sorex dispar
Long-tailed Shrew
Sorex longirostris
Southeastern Shrew
Spilogale putorius
Eastern Spotted Skunk
Sylvilagus aquaticus
Swamp Rabbit
Sylvilagus transitionalis
New England Cottontail
Ursus americanus
Black Bear
Zapus hudsonius
Meadow Jumping Mouse

VASCULAR PLANT ELEMENTS

The plant element list is composed primarily of native taxa which are known to occur in three or fewer counties. A few taxa, however, are retained on the list although they are known from more than three counties because they are of local concern or are known to be rare in Kentucky. Some taxa, recorded to date from only a few counties, have not been listed when the best available botanical specimens suggest that these species are more common than records indicate.

The preparation of this list is the result of an extensive literature review and examination of herbaria specimens. For consistency, the scientific nomenclature utilized in this study is standardized to Kartesz and Kartesz (1980). One taxon is included which has not been validly published.

PLANT LIST

PTERIDOPHYTES

- Adiantum capillus-veneris*
Venus Hair Fern
- Botrychium matricariifolium*
Matricary Grape Fern
- Botrychium oneidense*
Blunt-lobed Grape Fern
- Cheilanthes alabamensis*
Smooth Lip Fern
- Cheilanthes feei*
Slender Lip Fern
- Cystopteris fragilis* var. *Mackayi*
Mackay's Bladder Fern
- Dryopteris ludoviciana*
Southern Wood Fern
- Dryopteris spinulosa*
Spinulose Wood Fern
- Isoetes butleri*
Butler's Quillwort
- Isoetes melanopoda*
Midland Quillwort
- Lycopodium appressum*
Southern Bog Clubmoss
- Trichomanes boschianum*
Filmy Fern
- Woodsia scopulina*
Mountain Cliff Fern

GYMNOSPERMS

- Taxus canadensis*
American Yew
- Thuja occidentalis*
Northern White Cedar

MONOCOTYLEDONS

- Allium burdickii*
Narrow-leaved Wild Leek
- Amianthium muscaetoxicum*
Fly Poison
- Bouteloua curtipendula*
Side-oats Grama
- Calamagrostis canadensis*
Blue Joint Grass
- Calamagrostis cinnoides*
Cinna-like Reed Grass

STATUS

- E *Calamagrostis porteri*
Porter's Reed Grass
- E(p) *Calopogon tuberosus*
Grass Pink
- E(p) *Carex buxbaumii*
Sedge
- E *Carex crawei*
Sedge
- E(d) *Carex hystericina*
Sedge
- U *Carex jooirii*
Sedge
- E(d) *Carex lanuginosa*
Sedge
- S(p) *Carex leptalea*
Sedge
- E *Carex leptonevria*
Sedge
- E *Carex picta*
Sedge
- E *Carex socialis*
Sedge
- S *Carex stricta*
Sedge
- E *Carex tenera*
Sedge
- T *Cymophyllus fraseri*
Fraser's Sedge
- T(d) *Cyperus diandrus*
Umbrella Sedge
- S(d) *Cyperus retrorsus*
Umbrella Sedge
- E(d) *Cypripedium candidum*
White Lady'slipper
- E *Cypripedium* sp.
Lady's slipper (undescribed)
- T *Dichanthelium acuminatum*
var. *villosum*
Panic Grass
- S *Dichanthelium boreale*
Panic Grass
- U *Dichanthelium sabulorum*
Panic Grass
- U *Echinodorus rostratus*
Burhead

STATUS

- ... puber*
- ... auraria*
- ... hirt*
- ... dubi*
- ... lino*
- ... odorat*
- ... abatus*
- ... tattu*
- ... stylis*
- ... cristata*
- ... philadelph*
- ... perbum*
- ... cap laly*
- ... sponz*
- ... Bit*
- ... australis*
- ... Eway!*
- ... nullii*
- ... Ewaybl.*
- ... num cas*
- ... lily of the*
- ... num virgi*
- ... Flower*
- ... bergia bu*
- ... Satin Gr*
- ... bergia cus*
- ... Satin Gr*
- ... bergia tor*
- ... lly*
- ... num aquati*
- ... Club*
- ... sis racemo*
- ... seed-ed R*
- ... num boscial.*
- ... Grass*
- ... palum distich*
- ... sis Grass*
- ... palum setaceu*
- ... a psammoy*
- ... sis Grass*
- Platanthera criste*
Crested Fringe-
- Platanthera integ*
White Fringele
- Platanthera psyc*
Purple Fringed
- Ps. longida*
Weak Bluegrass
- ... ophioglo*
Rose Pogonia

	STATUS		STATUS
<i>Allypeltis puberula</i>	E(p)	<i>Pontederia cordata</i>	S
Slip		Pickereel Weed	
<i>Allypeltis melicaria</i>	U	<i>Potamogeton praelongus</i>	U
Manna Grass		Pond Weed	
<i>Allypeltis brevifolius</i>	E(d)	<i>Potamogeton spirillus</i>	U
Head Grass		Pond Weed	
<i>Allypeltis dubia</i>	E	<i>Rhynchospora globularis</i>	E
White Star Grass		Grass Beak Rush	
<i>Allypeltis limosa</i>	T	<i>Sagittaria brevicrostra</i>	U
Blue Plantain		Arrowhead	
<i>Allypeltis odorata</i>	E(p)	<i>Sagittaria graminea</i>	E
Scout Grass		Grass-leaved Arrowhead	
<i>Allypeltis</i>	E	<i>Scleria ciliata</i>	E
Upper Iris		Nut Rush	
<i>Allypeltis articulatus</i>	U	<i>Scirpus expansus</i>	U
Sh		Bulrush	
<i>Allypeltis scottii</i>	U	<i>Scirpus fluviatilis</i>	U
Sh		Bulrush	
<i>Allypeltis longistylis</i>	U	<i>Scirpus heterochaetus</i>	U
Sh		Bulrush	
<i>Allypeltis cristata</i>	E(p)	<i>Scirpus purshianus</i>	U
Sh		Bulrush	
<i>Allypeltis philadelphicum</i>	S(p)	<i>Smilacina stellata</i>	E
Sh		Starry-flowered False	
<i>Allypeltis superbum</i>	T	Solomon's Seal	
Sh		<i>Sparganium eurycarpum</i>	U
<i>Allypeltis spongia</i>	T(p)	Common Burr Reed	
Sh		<i>Sphenopholis pensylvanica</i>	E
<i>Allypeltis australis</i>	E(p)	Swamp Oats	
Sh		<i>Spiranthes lucida</i>	T
<i>Allypeltis smallii</i>	T	Shining Ladies' Tresses	
Sh		<i>Spiranthes magnicamporum</i>	T(p)
<i>Allypeltis themum canadense</i>	T(p)	Ladies' Tresses	
Sh		<i>Spiranthes odorata</i>	U
<i>Allypeltis virginicum</i>	E	Sweet Ladies' Tresses	
Sh		<i>Sporobolus clandestinus</i>	U
<i>Allypeltis bushii</i>	U	Rough Rush Grass	
Sh		<i>Sporobolus heterolepis</i>	E
<i>Allypeltis cuspidata</i>	E(d)	Prairie Dropseed	
Sh		<i>Streptopus roseus</i>	E(p)
<i>Allypeltis torreyana</i>	E	Twisted Stalk	
Sh		<i>Torreyochloa pallida</i>	U
<i>Allypeltis aquaticum</i>	T	Pale Manna Grass	
Sh		<i>Trillium nivale</i>	E(d)
<i>Allypeltis racemosa</i>	T(d)	Snow Trillium	
Sh		<i>Trillium pusillum</i> var. <i>ozarkanum</i>	T [CL]
<i>Allypeltis racemosa</i>	U	Ozark Wake Robin	
Sh		<i>Trillium undulatum</i>	S(p)
<i>Allypeltis distichum</i>	U	Painted Trillium	
Sh		<i>Vallisneria americana</i>	U
<i>Allypeltis setaceum</i>	E(d)	Tape Grass	
Sh		<i>Veratrum parviflorum</i>	T
<i>Allypeltis psammophilum</i>	E(p)	False Hellebore	
Sh		<i>Veratrum viride</i>	E(p)
<i>Allypeltis cristata</i>	E(p) [CL]	False Hellebore	
Sh		<i>Veratrum woodii</i>	U
<i>Allypeltis integrilabia</i>	E	Wood's False Hellebore	
Sh		<i>Wolffia braziliensis</i>	U
<i>Allypeltis psycodes</i>	E(p)	Water Meal	
Sh		<i>Xerophyllum asphodeloides</i>	E
<i>Allypeltis languida</i>	E(p)	Turkey Beard	
Sh		<i>Zizania aquatica</i>	E
<i>Allypeltis weakii</i>	E(p)	Wild Rice	
Sh			

	STATUS		STATUS
<i>Zizaniopsis miliacea</i>	T	<i>Castanea pumila</i>	E
Southern Wild Rice		Chinquapin	E
DICOTYLEDONS		<i>Castilleja coccinea</i>	E
<i>Acer spicatum</i>	T(d)	Indian Paintbrush	E
Mountain Maple		<i>Cayaponia grandifolia</i>	U
<i>Aconitum uncinatum</i>	T	Cayaponia	U
Monkshood		<i>Ceanothus herbaceus</i>	E(d)
<i>Adlumia fungosa</i>	E	Redroot	E(d)
Allegheny Vine		<i>Chelone obliqua</i> var. <i>obliqua</i>	E
<i>Agalinis decemloba</i>	E	Pink Turtlehead	E
Purple False Foxglove		<i>Chelone obliqua</i> var. <i>speciosa</i>	T[CL]
<i>Agalinis fasciculata</i>	U	Pink Turtlehead	T[CL]
Purple False Foxglove		<i>Chrysogonum virginianum</i>	E
<i>Agalinis obtusifolia</i>	E	Green and Gold	E
Purple False Foxglove		<i>Chrysosplenium americanum</i>	E(p)
<i>Agalinis skinneriana</i>	E	Golden Saxifrage	E(p)
Purple False Foxglove		<i>Cicuta bulbifera</i>	E(p)
<i>Agrimonia gryposepala</i>	E(p)	Bulblet-bearing Water Hemlock	E(p)
Agrimony		<i>Cimicifuga rubifolia</i>	T[CL]
<i>Ampelopsis arborea</i>	U	Bugbane	T[CL]
Pepper Vine		<i>Circaea alpina</i>	U
<i>Angelica triquinata</i>	E	Small Enchanter's Nightshade	U
Filmy Angelica		<i>Cladrastis kentukea</i>	T
<i>Apios priceana</i>	E[CL]	Yellow-wood	T
Sadie Price's Potato Bean		<i>Clematis crispa</i>	U
<i>Arabis glabra</i>	U	Leather Flower	U
Tower Mustard		<i>Clematis glaucophylla</i>	U
<i>Arabis missouriensis</i>	E	Leather Flower	U
Missouri Rock Cress		<i>Comptonia peregrina</i>	T
<i>Arabis perstellata</i> var. <i>perstellata</i>	E(e)[CL]	Sweet Fern	T
Rock Cress		<i>Conradina verticillata</i>	E(e)[CL]
<i>Arenaria fontinalis</i>	T[CL]	Cumberland Rosemary	E(e)[CL]
Water Stitchwort		<i>Coreopsis pubescens</i>	U
<i>Armoracia aquatica</i>	U	Downy Coreopsis	U
Lake Cress		<i>Corydalis sempervirens</i>	S(p)
<i>Aster concolor</i>	E	Pale Corydalis	S(p)
Aster		<i>Cotinus obovatus</i>	E(d)
<i>Aster sericeus</i>	E	Smoke Tree	E(d)
Silky Aster		<i>Crotonopsis linearis</i>	E
<i>Aster texanus</i>	U	Linear Rushfoil	E
Texas Aster		<i>Decodon verticillatus</i>	S
<i>Aureolaria patula</i>	E[CL]	Swamp Loosestrife	S
False Foxglove		<i>Delphinium carolinianum</i>	T(p)
<i>Baptisia leucophaea</i>	U	Carolina Larkspur	T(p)
Creme Wild Indigo		<i>Delphinium exaltatum</i>	E(p)
<i>Baptisia tinctoria</i>	U	Tall Larkspur	E(p)
Yellow Wild Indigo		<i>Dentaria multifida</i>	U
<i>Bartonia virginica</i>	E	Much-divided Toothwort	U
Screwstem		<i>Dicliptera brachiata</i>	U
<i>Berchemia scandens</i>	U	Dicliptera	U
Rattan Vine		<i>Didiplis diandra</i>	T
<i>Boykinia aconitifolia</i>	T	Water Purslane	T
Brook Saxifrage		<i>Dioclea multiflora</i>	U
<i>Cabomba caroliniana</i>	U	Dioclea	U
Fanwort		<i>Dodecatheon frenchii</i>	T[CL]
<i>Calycanthus floridus</i>	T(p)	French's Shooting Star	T[CL]
Sweet Shrub		<i>Drosera brevifolia</i>	E(d)
<i>Calylophus serrulatus</i>	U	Sundew	E(d)
Evening Primrose		<i>Drosera intermedia</i>	E
<i>Carya ovata</i> var. <i>australis</i>	E	Sundew	E
Hickory		<i>Erigeron pulchellus</i> var. <i>brauniae</i>	U
		Lucy Braun's Robin Plantain	U

STATUS	PLANT NAME	STATUS	PLANT NAME	STATUS
E	<i>Alisma aquaticum</i>	U	<i>Leavenworthia uniflora</i>	S
E	Water Eryngo	E(e) [CL]	Glade Cress	U(p)
E	<i>Astragalus luciae-brauniae</i>	E(p)	<i>Leiophyllum buxifolium</i>	T [CL]
U	Braun's White Snake Root	E(d)	Sand Myrtle	E(p)
E(d)	<i>Astragalus maculatum</i>	S	<i>Lesquerella globosa</i>	E(p)
E	Pine Weed	T(p)	Bladder-pod	E(p)
T [CL]	<i>Azoreum rugosum</i> var. <i>roanensis</i>	S	<i>Leucothoe recurva</i>	E(p)
E	Roan Mountain White Snakeroot	T	Fetterbush	U
E	<i>Barbarea mercurialina</i>	S	<i>Liatris pycnostachya</i>	T(p)
T [CL]	Orange	E	Prairie Blazing Star	E
E	<i>Cardamine proserpinacoides</i>	T	<i>Linum sulcatum</i>	U
E	False Mermaid	S	Grooved Yellow Flax	T(p)
E(p)	<i>Cassia ligustrina</i>	E	<i>Lobelia nuttallii</i>	E
E(p)	Plant Privet	T	Nuttall's Lobelia	E
T [CL]	<i>Cassia brachycera</i>	T	<i>Ludwigia hirtella</i>	E
E	Black Huckleberry	E	False Loosestrife	E
E	<i>Cyanus alba</i>	T	<i>Lysimachia fraseri</i>	E(p)
T [CL]	Bluish Gentian	T	Fringed Loosestrife	T
U	<i>Cyanus decora</i>	T	<i>Lysimachia radicans</i>	U
U	Blue Gentian	E	Creeping Fringed Loosestrife	U
T	<i>Cyanus puberulenta</i>	E	<i>Lysimachia terrestris</i>	E
U	Blue Gentian	T	Swamp Candles	E
U	<i>Cyanus pilosa</i>	E	<i>Malus angustifolia</i>	U
U	Blue Hyssop	E	Crab Apple	U
U	<i>Cyanus viscidula</i>	E	<i>Malus ioensis</i>	E
U	Blue Hyssop	U	Crab Apple	E
U	<i>Cyanus carolina</i>	U	<i>Marshallia grandiflora</i>	E
T	Small Tree	U	Barbara's Buttons	E
T	<i>Cyanus hispidum</i>	U	<i>Matelea carolinensis</i>	E
E	Blue Pennyroyal	U	Carolina Anglepod	T
E	<i>Cyanus uniflora</i>	E	<i>Mecardonia acuminata</i>	U
U	Blue Landia	E	Mecardonia	E
U	<i>Cyanus atrorubens</i>	E [CL]	<i>Melampyrum lineare</i>	U
S(p)	Blackflower	U	Cow Wheat	E
E(d)	<i>Cyanus eggertii</i>	E(p)	<i>Minuartia glabra</i>	E
E	Black Sunflower	U	Sandwort	E
E	<i>Cyanus silphoides</i>	U	<i>Monarda punctata</i>	U
S	Black-like Sunflower	E	Dotted Monarda	T
U	<i>Cyanus lanatum</i>	E	<i>Monarda russeliana</i>	U
U	Black Parsnip	U	Russel's Horsemint	T
T(p)	<i>Cyanus latifolia</i>	E	<i>Monotropsis odorata</i>	U
E(p)	Black Aster	E	Sweet Pinesap	U
U	<i>Cyanus longipilum</i>	S	<i>Myriophyllum heterophyllum</i>	U
U	Black-haired Hawkweed	E(p)	Water Milfoil	U
U	<i>Cyanus shuttleworthii</i>	E	<i>Najas gracillima</i>	U
U	Blackworth's Wild Ginger	S	Slender Naiad	U
U	<i>Cyanus canadensis</i>	E(p)	<i>Najas guadalupensis</i>	S
U	Black Seal	U	Southern Naiad	S
T	<i>Cyanus ovata</i>	T	<i>Nemophila aphylla</i>	E
U	Black	E	Nemophila	T
U	<i>Cyanus quadrivalvis</i>	T	<i>Oenothera linifolia</i>	E
T [CL]	Black	E	Sundrops	T
E(d)	<i>Cyanus virginianum</i>	T	<i>Oenothera perennis</i>	T
E	Black Waterleaf	E	Sundrops	T
U	<i>Cyanus adpressum</i>	T	<i>Oenothera triloba</i>	T
U	Blackwort	E	Sundrops	T
U	<i>Cyanus palustris</i>	E	<i>Onosmodium hispidissimum</i>	T
U	Black Pea	E(e) [CL]	Hairy False Gromwell	E [CL]
U	<i>Onosmodium exigua</i> var. <i>laciniata</i>	E [CL]	<i>Onosmodium molle</i> ssp. <i>molle</i>	E(p)
U	Black Cress	E [CL]	Soft False Gromwell	E(p)
U	<i>Onosmodium torulosa</i>	E [CL]	<i>Onosmodium molle</i> ssp. <i>occidentale</i>	E(p)
U	Black Cress		Western False Gromwell	

	STATUS		STATUS
<i>Oxalis priceae</i>	E	<i>Salix amygdaloides</i>	U
Price's Yellow Wood Sorrel		Peachleaf Willow	
<i>Pachistima canbyi</i>	E(d) [CL]	<i>Salvia urticifolia</i>	E
Mountain Lover		Sage	
<i>Panax quinquefolius</i>	T	<i>Sambucus racemosa</i>	T
Ginseng		Red-berried Elder	
<i>Parnassia asarifolia</i>	E	<i>Sanguisorba canadensis</i>	E
Ginger-leaved Grass-of-Parnassus		American Burnet	
<i>Parnassia grandifolia</i>	E(p)	<i>Saxifraga michauxii</i>	T(p)
Grass-of-Parnassus		Michaux's Saxifrage	
<i>Paronychia argyrocoma</i>	E	<i>Saxifraga micranthidifolia</i>	E(p)
Silver Whitlow-wort		Brook Lettuce	
<i>Perideridia americana</i>	T	<i>Schwalbea americana</i>	E(d)
Perideridia		Chaffseed	
<i>Phacelia ranunculacea</i>	U	<i>Scutellaria leonardii</i>	U
Phacelia		Small Scullicap	
<i>Philadelphus hirsutus</i>	U	<i>Sedum telephoides</i>	S
Mock Orange		Live Forever	
<i>Phlox bifida</i> ssp. <i>stellaria</i>	T [CL]	<i>Sida hermaphrodita</i>	E
Cleft Phlox		Virginia Mallow	
<i>Physostegia intermedia</i>	E	<i>Silene ovata</i>	T(p)
False Dragonhead		Catchfly	
<i>Plantago cordata</i>	E	<i>Silene regia</i>	E [CL]
Heart-leaved Plantain		Royal Catchfly	
<i>Podostemon ceratophyllum</i>	S	<i>Silphium laciniatum</i>	U
Riverweed		Compass Plant	
<i>Polemonium reptans</i> var. <i>villosum</i>	S [CL]	<i>Silphium terebinthinaceum</i>	U
Hairy Jacob's Ladder		var. <i>Lucy-brauniae</i>	
<i>Polygala cruciata</i>	T	Lucy Braun's Prairie Dock	
Cross Milkwort		<i>Solidago albopilosa</i>	E (p)
<i>Polygala nuttallii</i>	U	White-haired Goldenrod	
Nuttall's Milkwort		<i>Solidago buckleyi</i>	U
<i>Polygala polygama</i>	E	Buckley's Goldenrod	
Purple Milkwort		<i>Solidago curtisii</i>	T
<i>Polymnia laevigata</i>	E [CL]	Curtis' Goldenrod	
Leaf Cup		<i>Solidago missouriensis</i>	U
<i>Prenanthes alba</i>	E(p)	Missouri Goldenrod	
Lion's Foot		<i>Solidago puberula</i>	T
<i>Prenanthes aspera</i>	U	Puberulent Goldenrod	
Rough White Lettuce		<i>Solidago radula</i>	E
<i>Psoralea stipulata</i>	E(e) [CL]	Rough Goldenrod	
Scurf Pea		<i>Solidago rigida</i> var. <i>glabrata</i>	U
<i>Ptilimnium capillaceum</i>	T	Smooth Stiff Goldenrod	
Hair-like Mock Bishop's-weed		<i>Solidago roanensis</i>	T
<i>Ptilimnium nuttallii</i>	T	Roan Mountain Goldenrod	
Nuttall's Mock Bishop's-weed		<i>Solidago rupestris</i>	E
<i>Pycnanthemum albescens</i>	E	Goldenrod	
Mountain Mint		<i>Solidago shortii</i>	E(p)
<i>Ranunculus allegheniensis</i>	T(p)	Short's Goldenrod	
Allegheny Crowfoot		<i>Solidago spatulata</i>	T
<i>Rhododendron canescens</i>	E	Goldenrod	
Honeysuckle Bush		<i>Solidago squarrosa</i>	E
<i>Rhynchosia tomentosa</i>	E(p)	Squarrose Goldenrod	
Erect Rhynchosia		<i>Spiraea alba</i>	E
<i>Rubus whartoniae</i>	U	Meadow Sweet	
Wharton's Bramble		<i>Sporobolus clandestinus</i>	U
<i>Rudbeckia subtomentosa</i>	E(p)	Rough Rush Grass	
Sweet Coneflower		<i>Stachys eplingii</i>	E
<i>Sabatia campanulata</i>	T	Nuttall's Hedge-nettle	
Rose Pink		<i>Stellaria longifolia</i>	U
<i>Sabatia campestris</i>	E	Stitchwort	
Rose Pink		<i>Styrax grandifolia</i>	U
		Storax	

STATUS		
U	<i>Sullivantia sullivantii</i>	E(p) [CL]
E	<i>Sullivantia hispidula</i>	T [CL]
T	<i>Sullivantia spicata</i>	E
E	<i>Sullivantia Rue</i>	U
Ep	<i>Sullivantia pinnatifidum</i>	U
Ep	Red Meadow Parsnip	E(p)
E	<i>Sullivantia mollis</i>	E
U	<i>Sullivantia aethusae</i>	U
S	<i>Sullivantia scarpus</i>	E
E	<i>Sullivantia setaceum</i>	U
F	<i>Sullivantia umbis</i>	U
F	<i>Sullivantia ovata</i>	S
F	<i>Sullivantia Elms</i>	E
F	<i>Sullivantia gibba</i>	U
F	Red Bladderwort	E
F	<i>Sullivantia vulgaris</i>	U
F	<i>Sullivantia wort</i>	E
F	<i>Sullivantia bisriculata</i>	U
F	Red Ironweed	E
F	<i>Sullivantia choracensis</i>	U
F	York Ironweed	E
F	<i>Sullivantia lentago</i>	U
F	<i>Sullivantia betry</i>	E
F	<i>Sullivantia caudum</i>	T
F	<i>Sullivantia Haw</i>	S
F	<i>Sullivantia Bostonii</i>	T
F	<i>Sullivantia Violet</i>	S
F	<i>Sullivantia carolata</i>	T
F	Leaved Violet	E
F	<i>Sullivantia latifolia</i>	E
F	<i>Sullivantia Violet</i>	E
F	<i>Sullivantia partita</i>	E
F	<i>Sullivantia Violet</i>	E
F	<i>Sullivantia atten</i>	E
F	<i>Sullivantia Violet</i>	E

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