# COUNTY REPORT
# OF
# ENDANGERED, THREATENED, AND SPECIAL CONCERN
# PLANTS, ANIMALS, AND NATURAL COMMUNITIES
# OF
# KENTUCKY

**KENTUCKY STATE NATURE PRESERVES COMMISSION**
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Data Current as of June 2002

# Kentucky State Nature Preserves Commission
## Key for County List Report

The attached report lists endangered, threatened, special concern, and historic plants, animals, and natural communities (elements) reported from each county in Kentucky. Within a county, elements are arranged first by taxonomic complexity (plants first, natural communities last), and second by scientific name. A key to status, ranks, and count data fields follows.

**STATUS**

KSNPC: Kentucky State Nature Preserves Commission status:
N or blank = none  E = endangered  T = threatened  S = special concern  H = historic  X = extirpated

USESA: U.S. Fish and Wildlife Service status:
N or blank = none  C = candidate  LT = listed as threatened
LE = listed as endangered

LTNL = Listed Threatened in part of its range, but is not listed in Kentucky (Copperbelly water snake has a special conservation agreement in 14 Kentucky counties as an alternative to Federal Listing.)

**RANKS**

GRANK: Estimate of element abundance on a global scale:
G1 = extremely rare  G2 = rare  G3 = uncommon  G4 = common  G5 = very common
GU = uncertain  GH = historically known and expected to be rediscovered  GX = extinct

Subspecies and variety abundances are coded with a 'T' suffix; the 'G? portion of the rank then refers to the entire species.

SRANK: Estimate of element abundance in Kentucky:
S1 = extremely rare  S2 = rare  S3 = uncommon
S4 = many occurrences  S5 = very common  SA = accidental
SRF = reported falsely in literature  SU = uncertain  SX = extirpated
SE = exotic  ? = unknown  SH = historically known in state
SZ = not of significant conservation concern  SR = reported but without persuasive documentation
S#B - breeding rank for non-resident species  S#N - non-breeding rank for non-resident species

**COUNT DATA FIELDS**

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

E - currently reported from the county
H - reported from the county but not seen since 1980 (at least 20 years)
F - reported from county & cannot be relocated but for which further inventory is needed (previously reported as "O")
X - known to have extirpated from the county
U - reported from a county but cannot be mapped to a quadrangle or exact location.

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

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

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

KY State Nature Preserves Commission
801 Schenkel Lane
Frankfort, KY 40601
phone: (502) 573-2886
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| County | Taxonomic Group | Scientific name | Common name | Statuses | Ranks | # of Occurrences E H F X U |
|---|---|---|---|---|---|---|
| HABITAT | | | | | | |
| McCracken | PLANTS | ***AESCULUS PAVIA*** | RED BUCKEYE | T | G5/S2S3 | 0 1 0 0 0 |
| WOODS AND THICKETS. | | | | | | |
| McCracken | PLANTS | ***ASTER DRUMMONDII VAR TEXANUS*** | TEXAS ASTER | T | G5T?/S2 | 0 0 0 0 1 |
| BOTTOMLANDS AND OPEN WOODS. | | | | | | |
| McCracken | PLANTS | ***BAPTISIA BRACTEATA VAR LEUCOPHAEA*** | CREAM WILD INDIGO | S | G4G5T4T5/S3 | 2 0 0 0 0 |
| PRAIRIES AND OPEN WOODS ON SANDY SOIL. | | | | | | |
| McCracken | PLANTS | ***CAREX HYSTERICINA*** | PORCUPINE SEDGE | H | G5/SH | 0 1 0 0 0 |
| SWAMPS, WET MEADOWS, SHORELINES. | | | | | | |
| McCracken | PLANTS | ***CARYA AQUATICA*** | WATER HICKORY | T | G5/S2S3 | 1 0 0 0 0 |
| BOTTOMLANDS AND FLOODPLAIN SWAMPS. | | | | | | |
| McCracken | PLANTS | ***HALESIA TETRAPTERA*** | MOUNTAIN SILVER-BELL | E | G5/S1S2 | 2 0 0 0 1 |
| RICH WOODS AND EDGES OF SLOUGHS AND OXBOW LAKES. | | | | | | |
| McCracken | PLANTS | ***HETEROTHECA SUBAXILLARIS VAR LATIFOLIA*** | BROAD-LEAF GOLDEN-ASTER | T | G5T5/S2 | 1 0 0 0 0 |
| DRY, OFTEN SANDY PLACES, PARTICULARLY DISTURBED SITES. | | | | | | |
| McCracken | PLANTS | ***HYDROLEA UNIFLORA*** | ONE-FLOWER FIDDLELEAF | S | G5/S3? | 0 1 0 0 0 |
| SWAMPY WOODLANDS, POND AND SLOUGH MARGINS, WET DITCHES. | | | | | | |
| McCracken | PLANTS | ***HYPERICUM ADPRESSUM*** | CREEPING ST. JOHN'S-WORT | H | G2G3/SH | 0 0 0 0 1 |
| MARSHES, SHORES, WET MEADOWS, SWALES AND DITCHES. | | | | | | |
| McCracken | PLANTS | ***LATHYRUS PALUSTRIS*** | VETCHLING PEAVINE | T | G5/S2 | 0 0 0 0 1 |
| WET MEADOWS, SWAMPS, WET WOODS, AND IN KY BOULDER COBBLE BARS ALONG CREEKS AND RIVERS, AND KNOWN FROM A ROADSIDE NEAR A RAILROAD. (MEDLEY). | | | | | | |
| McCracken | PLANTS | ***LESPEDEZA STUEVEI*** | TALL BUSH-CLOVER | S | G4?/S3? | 0 1 0 0 0 |
| DRY HILLSIDE, WOODLAND. | | | | | | |
| McCracken | PLANTS | ***LILIUM SUPERBUM*** | TURK'S CAP LILY | T | G5/S1S2 | 0 0 0 0 1 |
| MOIST MEADOWS, MOIST/WET WOODS INLCUDING FLOODPLAINS, AND COVES | | | | | | |
| McCracken | PLANTS | ***MALUS ANGUSTIFOLIA*** | SOUTHERN CRABAPPLE | S | G5?/S3 | 0 1 0 0 0 |
| OPEN DRY - MESIC WOODS AND THICKETS. | | | | | | |
| McCracken | PLANTS | ***MELANTHERA NIVEA*** | SNOW MELANTHERA | S | G5/S3? | 1 0 0 0 0 |
| FLOODPLAINS AND SANDY WOODS INCLUDING DISTURBED OPENINGS. | | | | | | |
| McCracken | PLANTS | ***MUHLENBERGIA GLABRIFLORIS*** | HAIR GRASS | S | G4?/S2S3 | 0 1 0 0 0 |
| DRY, DESSICCATED OR BAKED SOILS, PRAIRIES, GRAVELS, OR ROCKY SLOPES AND MEDLEY REPORTS WET WOODS, MARSH EDGES AND FIELDS. | | | | | | |
| McCracken | PLANTS | ***PRENANTHES ASPERA*** | ROUGH RATTLESNAKE-ROOT | E | G4?/S1 | 1 1 0 0 0 |
| DRY PRAIRIES AND BARRENS, LIMESTONE GLADES, DRY, OPEN ROCKY WOODS. USUALLY IN ACID SOILS. | | | | | | |
| McCracken | PLANTS | ***RUDBECKIA SUBTOMENTOSA*** | SWEET CONEFLOWER | E | G5/S1 | 1 0 1 0 0 |
| PRAIRIES AND LOW GROUNDS SUCH AS OPEN STREAM TERRACE WOODLANDS. | | | | | | |
| McCracken | PLANTS | ***SILPHIUM LACINIATUM VAR ROBINSONII*** | COMPASS PLANT | T | G5T?/S2 | 5 0 0 0 0 |
| PRAIRIES INCL. REMNANTS OF THIS FLORA ON ROADSIDES AND FIELDS. | | | | | | |
| McCracken | PLANTS | ***SOLIDAGO BUCKLEYI*** | BUCKLEY'S GOLDENROD | S | G4/S2S3 | 0 1 0 0 0 |
| WOODS AND BLUFFS. | | | | | | |

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|---|---|---|---|---|---|---|
| | HABITAT | | | | | |
| McCracken | GASTROPODS | ***LEPTOXIS PRAEROSA*** | ONYX ROCKSNAIL | S | G5/S3S4 | 0 1 0 0 0 |
| | CALL (1895) INDICATED THAT IN THE OHIO RIVER AT THE FALLS IT OCCURRED IN THE GREATEST PROFUSION WHERE THE BOTTOM IS CLEAN ROCK OR ROCK WITH ABUNDANT CONFERVOID" VEGETATION." | | | | | |
| McCracken | GASTROPODS | ***LITHASIA ARMIGERA*** | ARMORED ROCKSNAIL | S | G3G4/S3S4 | 0 0 0 0 1 |
| | BARS AND POOLS WITH SAND, GRAVEL, AND ROCK SUBSTRATES (KNPC), SLOPING ROCK OUTCROPS WITH POCKETS OF SAND, GRAVEL AND MUD, PARTIALLY BURIED LOGS, AND ROCK RIPRAP (SICKEL 1988). | | | | | |
| McCracken | GASTROPODS | ***LITHASIA GENICULATA*** | ORNATE ROCKSNAIL | S | G3G4/S1 | 0 3 0 0 0 |
| McCracken | GASTROPODS | ***LITHASIA VERRUCOSA*** | VARICOSE ROCKSNAIL | S | G3G4/S3S4 | 0 2 0 0 1 |
| | OBSERVATIONS ON THE HABITAT INCLUDE SPECIMENS TAKEN FROM RECENTLY EXPOSED BARS AND POOLS WITH SAND, GRAVEL, AND ROCK SUBSTRATES (HAAG AND PALMER-BALL, PERS COMM). | | | | | |
| McCracken | BIVALVES | ***FUSCONAIA SUBROTUNDA SUBROTUNDA*** | LONGSOLID | S | G3T3/S3 | 0 1 0 0 0 |
| | GRAVEL BARS AND DEEP POOLS IN LARGE RIVERS AND LARGE TO MEDIUM-SIZED STREAMS (AHLSTEDT 1984, GOODRICH AND VAN DER SCHALIE 1944, NEEL AND ALLEN 1964, PARMALEE 1967). | | | | | |
| McCracken | BIVALVES | ***LAMPSILIS ABRUPTA*** | PINK MUCKET | E/LE | G2/S1 | 2 3 1 0 0 |
| | LARGE RIVERS IN HABITATS RANGING FROM SILT TO BOULDERS, BUT APPARENTLY MORE COMMONLY FROM GRAVEL AND COBBLE. COLLECTED FROM SHALLOW AND DEEP WATER WITH CURRENT VELOCITY RANGING FROM ZERO TO SWIFT (AHLSTEDT 1983, BOGAN AND PARMALEE 1983, BUCHANAN 1980), B | | | | | |
| McCracken | BIVALVES | ***LAMPSILIS OVATA*** | POCKETBOOK | E | G5/S1 | 0 3 0 0 0 |
| | CONSIDERED A LARGE RIVER SPECIES (CLENCH AND VAN DER SCHALIE 1944, PARMALEE 1967, STANSBERY 1976), BUT OCCURS IN MEDIUM-SIZED STREAMS IN GRAVEL, SAND, OR EVEN MUD (PARMALEE 1967, JOHNSON 1970, GORDON AND LAYZER 1989). IN THE LOWER WABASH AND OHIO RIVERS | | | | | |
| McCracken | BIVALVES | ***OBOVARIA RETUSA*** | RING PINK | E/LE | G1/S1 | 0 1 0 1 0 |
| | LARGE RIVER SPECIES THAT INHABITS GRAVEL AND SAND BARS (BOGAN AND PARMALEE 1983, GOODRICH AND VAN DER SCHALIE 1944, NEEL AND ALLEN 1964, STANSBERY 1976). | | | | | |
| McCracken | BIVALVES | ***PLETHOBASUS COOPERIANUS*** | ORANGEFOOT PIMPLEBACK | E/LE | G1/S1 | 4 2 2 0 0 |
| | USUALLY FOUND IN LARGE RIVERS IN SAND AND GRAVEL SUBSTRATES (AHLSTEDT 1983, BOGAN AND PARMALEE 1983, MILLER, A.C. ET AL. 1986). | | | | | |
| McCracken | BIVALVES | ***PLETHOBASUS CYPHYUS*** | SHEEPNOSE | S | G3/S3 | 3 5 1 0 0 |
| | USUALLY FOUND IN LARGE RIVERS IN CURRENT ON MUD, SAND, OR GRAVEL BOTTOMS AT DEPTH OF 1-2 METERS OR MORE (BAKER 1928, PARMALEE 1967, GORDON AND LAYZER 1989). | | | | | |
| McCracken | BIVALVES | ***PLEUROBEMA RUBRUM*** | PYRAMID PIGTOE | E | G2/S1 | 0 1 0 0 0 |
| | INHABITS MEDIUM TO LARGE RIVERS AND USUALLY OCCURS IN SAND OR GRAVEL BOTTOMS IN DEEP WATERS (AHLSTEDT 1984, MURRAY AND LEONARD 1962, PARMALEE ET AT. 1982). | | | | | |
| McCracken | BIVALVES | ***POTAMILUS CAPAX*** | FAT POCKETBOOK | E/LE | G1/S1 | 1 1 1 1 0 |
| | OCCURS IN MEDIUM TO LARGE-SIZED RIVERS OFTEN AROUND ISLAND AND BACK CHANNELS, AND SOMETIMES IN DITCHES, IN MUD (OOZE); MIXED SAND, MUD, AND CLAY; OR FINE SILT AND MUD IN FLOWING WATER AT DEPTHS OF A FEW INCHES UP TO EIGHT FEET (PARMALEE 1967, AHLSTEDT AN | | | | | |
| McCracken | BIVALVES | ***POTAMILUS PURPURATUS*** | BLEUFER | E | G5/S1 | 1 0 0 0 0 |
| | DEEP STREAMS WITH DEEP MUD AND FAIRLY QUIET POOLS (MURRAY AND LEONARD 1962). IN MISSOURI BOOTHEEL STREAMS, IT IS FOUND IN SMALL TO MEDIUM GRAVEL WITH MUD OCCASIONALLY INTERSPERSED (OESCH 1984). IN THE ST. FRANCIS RIVER OF ARKANSAS AND MISSOURI, INDIVIDUA | | | | | |
| McCracken | BIVALVES | ***QUADRULA CYLINDRICA CYLINDRICA*** | RABBITSFOOT | T | G3T3/S2 | 1 2 1 0 0 |
| | SMALL TO LARGE RIVERS WITH SAND, GRAVEL, AND COBBLE AND MODERATE TO SWIFT CURRENT, SOMETIMES IN DEEP WATER (PARMALEE 1967, BOGAN AND PARMALEE 1983). | | | | | |
| McCracken | CRUSTACEANS | ***CAMBARELLUS PUER*** | A DWARF CRAYFISH | E | G4G5/S1 | 0 0 1 0 0 |
| | CYPRESS SWAMPS, STREAMS, AND LOWLANDS (DRAINED WETLANDS) ON THE MISSISSIPP ALLUVIAL PLAIN, USUALLY AMONG LIVING OR DEAD VEGETATION (PAGE 1985). | | | | | |
| McCracken | CRUSTACEANS | ***ORCONECTES LANCIFER*** | A CRAYFISH | E | G5/S1 | 0 1 0 0 0 |
| | OXBOW LAKES AND STREAMS ON THE GULF COASTAL PLAIN (PAGE 1985), WHERE IT LIVES AMONG ORGANIC DEBRIS, USUALLY NEAR BALD CYPRESS (BURR AND HOBBS 1984). | | | | | |

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| | HABITAT | | | | | |
| McCracken | INSECTS | ***EUPHYES DUKESI*** | DUKES' SKIPPER | S | G3/S1 | 3 0 0 1 0 |
| | SHADED TUPELO SWAMPS IN SOUTH, PARTIALLY SHADED MARSHES AND DITCHES IN MIDWEST (OPLER AND MALIKUL 1992). FEEDS ON SEDGES (CAREX LACUSTRIS AND C. HYALINOLEPIS) (L.D. GIBSON PERS COMM). ON THE ATLANTIC COAST IT ALSO FEEDS ON CAREX WALTERIANA (L.D. GIBSON P | | | | | |
| McCracken | INSECTS | ***SATYRIUM FAVONIUS ONTARIO*** | NORTHERN HAIRSTREAK | S | G4T4/S1 | 0 1 0 0 0 |
| | S. FAVONIUS IS FOUND IN WOODS OR EDGES WITH EVERGREEN OR DECIDUOUS OAKS (OPLER AND MALIKUL 1992). MAIN HABITAT REQUIREMENTS ARE BLACK JACK OAK (QUERCUS MARILANDICA) AND A NECTAR SOURCE SUCH AS FARKLEBERRY (VACCINIUM ARBORETUM) OR DOGBANE (APOCYNUM CANNAB | | | | | |
| McCracken | FISHES | ***ACIPENSER FULVESCENS*** | LAKE STURGEON | E | G3/S1 | 0 1 0 0 0 |
| | LAKES AND LARGE RIVERS WITH A FIRM SAND/GRAVEL BOTTOM (BURR AND WARREN 1986, ETNIER AND STARNES 1993). | | | | | |
| McCracken | FISHES | ***ATRACTOSTEUS SPATULA*** | ALLIGATOR GAR | E | G3G4/S1 | 0 1 0 0 0 |
| | SLUGGISH POOLS AND BACKWATERS OF LARGE RIVERS, BACKWATERS, AND OXBOW LAKES (BURR AND WARREN 1986, PAGE AND BURR 1991, ETNIER AND STARNES 1993). | | | | | |
| McCracken | FISHES | ***CYPRINELLA VENUSTA*** | BLACKTAIL SHINER | S | G5/S3 | 1 0 0 0 0 |
| | OCCURS IN CREEKS AND SMALL STREAMS OF THE COASTAL PLAIN OVER FIRM SAND AND GRAVEL OF RIFFLES AND RACEWAYS, AND ALONG UNDERCUT BANKS OR AMONG SUBMERGED STUMPS AND LOGS (BURR AND WARREN 1986). ALSO, OVER FIRM SAND OR GRAVEL IN THE MISSISSIPPI AND LOWER OHI | | | | | |
| McCracken | FISHES | ***ERIMYZON SUCETTA*** | LAKE CHUBSUCKER | T | G5/S2 | 0 1 0 0 0 |
| | LOWLAND LENTIC HABITATS (WETLANDS AND FLOODPLAIN LAKES) WITH SUBMERGENT AND FLOATING VEGETATION (BURR AND WARREN 1986, ETNIER AND STARNES 1993). | | | | | |
| McCracken | FISHES | ***ESOX NIGER*** | CHAIN PICKEREL | S | G5/S3 | 1 0 0 0 0 |
| | COASTAL PLAIN WETLANDS, STREAMS, AND VEGETATED OXBOW LAKE SHORELINES, AND IT ALSO TOLERATES RESERVOIR CONDITIONS (BURR AND WARREN 1986, ETNIER AND STARNES 1993). | | | | | |
| McCracken | FISHES | ***ETHEOSTOMA PROELIARE*** | CYPRESS DARTER | T | G5/S2 | 1 0 0 0 0 |
| | SMALL TO MEDIUM-SIZE SLUGGISH STREAMS, OXBOWS, AND WETLANDS WHERE THE BOTTOM IS SOFT AND AQUATIC VEGETATION ABOUNDS (BURR AND MAYDEN 1979, KUEHNE AND BARBOUR 1983, PAGE 1983, BURR AND WARREN 1986). | | | | | |
| McCracken | FISHES | ***HYBOGNATHUS HAYI*** | CYPRESS MINNOW | E | G5/S1 | 1 2 0 0 0 |
| | OXBOW LAKES AND QUIET WATER OF LOW GRADIENT STREAMS ON THE COASTAL PLAIN AND SHAWNEE HILLS. USUALLY OVER MUD OR SAND BOTTOMS, BUT OCCASIONALLY ASSOCIATED WITH SUBMERGED AQUATIC VEGETATION OR OTHER COVER (BURR AND WARREN 1986, PFLIEGER 1975, SMITH 1979, G | | | | | |
| McCracken | FISHES | ***ICHTHYOMYZON CASTANEUS*** | CHESTNUT LAMPREY | S | G4/S2 | 1 2 0 0 0 |
| | MODERATE-SIZE CREEKS, LARGE RIVERS, AND RESERVOIRS. SUBSTRATE CONSISTS OF GRAVEL AND RUBBLE WITH AREAS OF SAND AND SILT. LARVAE REQUIRE CLEAR STREAMS WITH STABLE BARS OF SILT, SAND AND ORGANIC DETRITIS (BECKER 1983, PFLIEGER 1975, ROHDE AND LANTEIGNE-COU | | | | | |
| McCracken | FISHES | ***ICTIOBUS NIGER*** | BLACK BUFFALO | S | G5/S3 | 4 0 0 0 0 |
| | RESERVOIRS AND MEDIUM TO LARGE RIVERS WITH MODERATE TO LOW GRADIENT AND SOMETIME SWIFT CURRENT (BECKER 1983, PFLIEGER 1975, SMITH 1979, TRAUTMAN 1981, AND BURR AND WARREN 1986). | | | | | |
| McCracken | FISHES | ***LEPOMIS MINIATUS*** | REDSPOTTED SUNFISH | T | G5/S2 | 4 0 0 0 0 |
| | OCCURS IN WELL-VEGETATED SWAMPS, SLOUGHS, BOTTOMLAND LAKES, AND LOW GRADIENT STREAMS (BURR AND MAYDEN 1979, PFLIEGER 1975, SMITH 1979, BURR AND WARREN 1986, ETNIER AND STARNES 1993). | | | | | |
| McCracken | FISHES | ***LOTA LOTA*** | BURBOT | S | G5/SU | 1 0 0 0 0 |
| | KENTUCKY SPECIMENS GENERALLY COME FROM MEDIUM TO LARGE-SIZE RIVERS. IN THE NORTH, THEY INHABIT COOL, LARGE, AND DEEP RIVERS AND LAKES (BECKER 1983, PFLIEGER 1975, SCOTT AND CROSSMAN 1973, SMITH 1979, TRAUTMAN 1981). | | | | | |
| McCracken | FISHES | ***MENIDIA BERYLLINA*** | INLAND SILVERSIDE | T | G5/S2 | 4 0 0 0 0 |
| | SCHOOLING SURFACE FISH THAT OCCURS IN THE MISSISSIPPI RIVER AND FLOODPLAIN LAKES (BURR AND WARREN 1986, ETNIER AND STARNES 1993). | | | | | |
| McCracken | FISHES | ***NOTROPIS MACULATUS*** | TAILLIGHT SHINER | T | G5/S2S3 | 1 1 0 0 0 |
| | LOW GRADIENT STREAMS, OXBOW LAKES, AND SLOUGHS IN AND AROUND CYPRESS KNEES, MARGINAL VEGETATION, AND ACCUMULATIONS OF STICKS AND DETRITUS (BURR AND PAGE 1975, BURR AND WARREN 1986, ETNIER AND STARNES 1993). | | | | | |

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| | HABITAT | | | | | |
| McCracken | FISHES | ***NOTURUS STIGMOSUS*** | NORTHERN MADTOM | S | G3/S2S3 | 2 1 0 0 0 |
| | LARGE STREAMS AND RIVERS IN MODERATE TO SWIFT CURRENT OVER GRAVEL AND SAND, AND SOMETIMES DEBRIS OR PONDWEED FOR COVER (BURR AND WARREN 1986, ETNIER AND STARNES 1993). | | | | | |
| McCracken | FISHES | ***UMBRA LIMI*** | CENTRAL MUDMINNOW | T | G5/S2S3 | 1 0 0 0 0 |
| | RESTRICTED TO DENSE BEDS OF SUBMERGENT AQUATIC VEGETATION OR ORGANIC DEBRIS PILES IN SPRING-FED WETLANDS, DITCHES, AND THE MARGINS OF LOWLAND LAKES OF THE COASTAL PLAIN (BURR AND WARREN 1986). | | | | | |
| McCracken | AMPHIBIANS | ***AMPHIUMA TRIDACTYLUM*** | THREE-TOED AMPHIUMA | E | G5/S1 | 0 0 0 0 1 |
| | THE AMPHIUMA IS FOUND IN LAKES, OPEN SPRING STREAMS OF RUNNING WATER, AND STREAMS FLOWING OVER CALCAREOUS ROCKS. ALSO RECORDED FROM DRAINAGE DITCHES, BAYOUS, AND WOODED ALLUVIAL SWAMPS (BISHOP 1974). PROBABLY ONLY THE LATTER IN KENTUCKY. | | | | | |
| McCracken | AMPHIBIANS | ***HYLA CINEREA*** | GREEN TREEFROG | S | G5/S3 | 2 0 0 0 0 |
| | FLOODPLAIN WETLANDS, PARTICULARLY THOSE DOMINATED BY BUTTONBUSH AND HERBACEOUS EMERGENT VEGETATION. | | | | | |
| McCracken | AMPHIBIANS | ***RANA AREOLATA CIRCULOSA*** | NORTHERN CRAWFISH FROG | S | G4T4/S3 | 17 1 6 0 |
| | BREEDS IN PONDS IN FARMLAND AND EDGE. REMAINS UNDERGROUND THROUGHOUT MOST OF THE YEAR, USING CRAYFISH BURROWS IN MOIST GRASSLANDS AND MEADOWS. | | | | | |
| McCracken | REPTILES | ***APALONE MUTICA MUTICA*** | MIDLAND SMOOTH SOFTSHELL | S | G5T5/S3 | 1 0 0 0 0 |
| | OPEN WATER HABITATS; MOST NUMEROUS IN OPEN RIVER SITUATIONS WITH GRAVEL OR SAND SUBSTRATES, BUT ALSO PRESENT IN SLOWER RIVERS AND IMPOUNDMENTS. | | | | | |
| McCracken | REPTILES | ***MACROCLEMYS TEMMINCKII*** | ALLIGATOR SNAPPING TURTLE | T | G3G4/S2 | 0 1 0 0 0 |
| | FLOODPLAIN SLOUGHS, BACKWATER AREAS OF LARGER RIVERS, IMPOUNDMENTS. SEEMS TO PREFER MUDDY SUBSTRATE WITH DARK RETREATS INCLUDING MUSKAT AND BEAVER DENS, LOGS, OR SHELTERING VEGETATION. | | | | | |
| McCracken | REPTILES | ***THAMNOPHIS SAURITUS SAURITUS*** | EASTERN RIBBON SNAKE | S | G5T5/S3 | 1 0 0 0 0 |
| | VARIETY OF SEMI-OPEN HABITATS, GENERALLY IN WEEDY OR BRUSHY GROWTH ALONG THE MARGINS OF SLOUGHS, MARSHES AND OTHER AQUATIC HABITATS. | | | | | |
| McCracken | BIRDS | ***ACCIPITER STRIATUS*** | SHARP-SHINNED HAWK | S | G5/S3B,S4N | 1 0 0 0 0 |
| | FOREST AND OPEN WOODLAND, CONIFEROUS, MIXED, OR DECIDUOUS, PRIMARILY IN CONIF. IN MORE NORTHERN AND MOUNTAINOUS PORTION OF RANGE (B83COM01NA). MIGRATES THROUGH VARIOUS HABITATS, MAINLY ALONG RIDGES, LAKESHORES, & COASTLINES (B83NAT01NA). | | | | | |
| McCracken | BIRDS | ***AIMOPHILA AESTIVALIS*** | BACHMAN'S SPARROW | E | G3/SX?B | 0 0 0 1 0 |
| | OPEN PINE WOODS WITH SCATTERED BUSHES OR UNDERSTORY, BRUSHY OR OVERGROWN HILLSIDES, OVERGROWN FIELDS WITH THICKETS AND BRAMBLES, GRASSY ORCHARDS. | | | | | |
| McCracken | BIRDS | ***ARDEA HERODIAS*** | GREAT BLUE HERON | S | G5/S3B,S4N | 0 0 1 0 0 |
| | FRESHWATER AND BRACKISH MARSHES, ALONG LAKES, RIVERS, BAYS, LAGOONS, OCEAN BEACHES, MANGROVES, FIELDS, AND MEADOWS. | | | | | |
| McCracken | BIRDS | ***CORVUS OSSIFRAGUS*** | FISH CROW | S | G5/S3B | 2 1 0 0 0 |
| | BEACHES, BAYS, LAGOONS, INLETS, SWAMPS, NEAR MARSHES, AND, LESS FREQUENTLY, DECIDUOUS OR CONIFEROUS WOODLAND, IN INLAND SITUATIONS PRIMARILY IN BALDCYPRESS SWAMPS AND ALONG MAJOR WATERCOURSES. ALSO GARBAGE DUMPS. | | | | | |
| McCracken | BIRDS | ***ICTINIA MISSISSIPPIENSIS*** | MISSISSIPPI KITE | S | G5/S2B | 1 0 0 0 0 |
| | TALL FOREST, OPEN WOODLAND, PRAIRIE, SEMIARID RANGELAND, SHELTERBELTS, WOODED AREAS BORDERING LAKES AND STREAMS IN MORE OPEN REGIONS, SCRUBBY OAKS AND MESQUITE. | | | | | |
| McCracken | BIRDS | ***LOPHODYTES CUCULLATUS*** | HOODED MERGANSER | T | G5/S1S2B,S3S4N | 0 1 0 0 0 |
| | STREAMS, LAKES, SWAMPS, MARSHES, AND ESTUARIES; WINTERS MOSTLY IN FRESHWATER BUT ALSO REGULARLY IN ESTUARIES AND SHELTERED BAYS (B83COM01NA). | | | | | |
| McCracken | BIRDS | ***RIPARIA RIPARIA*** | BANK SWALLOW | S | G5/S3B | 0 0 1 0 0 |
| | OPEN AND PARTLY OPEN SITUATIONS, FREQUENTLY NEAR FLOWING WATER (B83COM01NA). | | | | | |
| McCracken | BIRDS | ***TYTO ALBA*** | BARN OWL | S | G5/S3 | 2 0 0 0 0 |
| | OPEN AND PARTLY OPEN COUNTRY IN A WIDE VARIETY OF SITUATIONS, OFTEN AROUND HUMAN HABITATION (B83COM01NA). IN NORTHERN WINTER OFTEN ROOSTS IN DENSE CONIFERS; ALSO ROOSTS IN NEST BOXES IF AVAILABLE (A85MAR01NA). | | | | | |

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

| County | Taxonomic Group | Scientific name | Common name | Statuses | Ranks | # of Occurrences E H F X U |
|---|---|---|---|---|---|---|
| | HABITAT | | | | | |
| McCracken | BIRDS | ***VIREO BELLII*** | BELL'S VIREO | S | G5/S2S3B | 1 1 0 0 0 |
| | DENSE BRUSH, MESQUITE, STREAMSIDE THICKETS, AND SCRUB OAK, IN ARID REGIONS BUT OFTEN NEAR WATER (B83COM01NA); MOIST WOODLAND, BOTTONLANDS, WOODLAND EDGE, SCATTERED COVER AND HEDGEROWS IN CULTIVATED AREAS. OPEN WOODLAND, BRUSH IN WINT. | | | | | |
| McCracken | MAMMALS | ***MYOTIS AUSTRORIPARIUS*** | SOUTHEASTERN MYOTIS | E | G3G4/S1S2 | 1 0 0 0 0 |
| | THE SOUTHEASTERN MYOTIS USES PRIMARILY CAVES FOR HIBERNACULA AND SUMMER MATERNITY AND ROOSTING SITES. | | | | | |
| McCracken | MAMMALS | ***MYOTIS SODALIS*** | INDIANA BAT | E/LE | G2/S1S2 | 1 0 0 0 0 |
| | INDIANA BATS USE PRIMARILY CAVES FOR HIBERNACULA, ALTHOUGH THEY ARE OCCASIONALLY FOUND IN OLD MINE PORTALS. | | | | | |
| McCracken | MAMMALS | ***NYCTICEIUS HUMERALIS*** | EVENING BAT | T | G5/S2S3 | 3 0 0 0 0 |
| | THE EVENING BAT IS A COLONIAL SPECIES THAT ROOSTS IN TREES AND HOUSES. IT APPARENTLY MIGRATES SOUTHWARD IN WINTER. | | | | | |
| McCracken | COMMUNITIES | ***FLOODPLAIN RIDGE/TERRACE FOREST*** | | N | S1 | 1 0 0 0 0 |
| McCracken | COMMUNITIES | ***WET PRAIRIE*** | | N | S1 | 1 0 0 0 0 |

**EASTERN SHAWNEE TRIBE**
**OF OKLAHOMA**
**P.O. Box 350 • Seneca, MO 64865 • (918) 666-2435 • FAX (918) 666-3325**

July 23, 2002

Department of Energy
Gary S. Hartman, EIS Document Manager
Oak Ridge Operations Office
PO Box 2001
Oak Ridge, Tennessee 37831

**Re: Paducah Gaseous Diffusion Plant,**
**McCracken County, Kentucky**
**Portsmouth Gaseous Diffusion Plant.**
**Pike County, Ohio**

Dear Mr. Hartman:

Thank you for notice of the referenced project. The Eastern Shawnee Tribe of Oklahoma is currently unaware of any documentation directly linking Indian Religious Sites to the proposed construction. In the event any items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered during construction, the Eastern Shawnee Tribe request notification and further consultation.

The Eastern Shawnee Tribe has no objection to the proposed construction. However, if any human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction, the construction should stop immediately, and the appropriate persons, including state and tribal NAGPRA representatives contacted.

Sincerely,

Charles Enyart

Charles Enyart, Chief
Eastern Shawnee Tribe of Oklahoma

**PEORIA TRIBE OF INDIANS OF OKLAHOMA**
118 S. Eight Tribes Trail (918) 540-2535 FAX (918) 540-2538
P.O. Box 1527
MIAMI, OKLAHOMA 74355

CHIEF
John P. Froman

SECOND CHIEF
Joe Goforth

July 26, 2002

Gary S. Hartman
Department of Energy
Oak Ridge Operations Office
P. O. Box 2001
Oak Ridge, Tennessee 37831

RE: DUF conversion facilities

Thank you for notice of the referenced project. The Peoria Tribe of Indians of Oklahoma is currently unaware of any documentation directly linking Indian Religious Sites to the proposed construction. In the event any items falling under the Native American Graves Protection and Repatriation Act (NAGPRA) are discovered during construction, the Peoria Tribe request notification and further consultation.

The Peoria Tribe has no objection to the proposed construction. However, if any human skeletal remains and/or any objects falling under NAGPRA are uncovered during construction, the construction should stop immediately, and the appropriate persons, including state and tribal NAGPRA representatives contacted.

John P. Froman
Chief

xc: Bud Ellis, Repatriation/NAGPRA Committee Chairman

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Log No. 71278
Date Received AUG 2 2002
File Code

TREASURER LeAnne Reeves | SECRETARY Hank Downum | FIRST COUNCILMAN Claude Landers | SECOND COUNCILMAN Jenny Rampey | THIRD COUNCILMAN Jason Dollarhide

**July 26, 2002**

**TENNESSEE HISTORICAL COMMISSION**
DEPARTMENT OF ENVIRONMENT AND CONSERVATION
2941 LEBANON ROAD
NASHVILLE, TN 37243-0442
(615) 532-1550

**Mr. Gary S. Hartman**
**Oak Ridge Operations/DP-80**
**Post Office Box 2001**
**Oak Ridge, Tennessee, 37831**

**RE: DOE, DUF MANAGEMENT/ETTP, OAK RIDGE, ANDERSON COUNTY**

**Dear Mr. Hartman:**

**In response to your request, received on Wednesday, July 24, 2002, we have reviewed the documents you submitted regarding your proposed undertaking. Our review of and comment on your proposed undertaking are among the requirements of Section 106 of the National Historic Preservation Act. This Act requires federal agencies or applicant for federal assistance to consult with the appropriate State Historic Preservation Office before they carry out their proposed undertakings. The Advisory Council on Historic Preservation has codified procedures for carrying out Section 106 review in 36 CFR 800. You may wish to familiarize yourself with these procedures (Federal Register, December 12, 2000, pages 77698-77739) if you are unsure about the Section 106 process.**

**Considering available information, we find that the project as currently proposed MAY AFFECT PROPERTIES THAT ARE ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER OF HISTORIC PLACES. You should continue consultation with our office, designated consulting parties and invite them to participate in consultation, and provide us with appropriate survey documentation for review and comment. Please direct questions and comments to Joe Garrison (615) 532-1559. We appreciate your cooperation.**

**Sincerely,**

Herbert L. Harper

**Herbert L. Harper**
**Executive Director and**
**Deputy State Historic**
**Preservation Officer**

**HLH/jyg**

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# United States Department of the Interior

FISH AND WILDLIFE SERVICE

Ecological Services
6950 Americana Parkway, Suite H
Reynoldsburg, Ohio 43068-4127

(614) 469-6923/FAX (614) 469-6919

March 16, 2004

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AMESQ
Log No. 151493
Date Received MAR 25 2004
File Code

Dr. James L. Elmore
Oak Ridge Operations Office
Department of Energy
P.O. Box 2001
Oak Ridge, TN 37831

Dear Dr. Elmore:

This is in response to your January 9, 2004 letter (which we received on February 10, 2004) and attached Biological Assessment of the Effects of Construction and Operation of a Depleted Uranium Hexafluoride Conversion Facility at the Portsmouth Site, January 2004, regarding informal consultation under section 7 of the Endangered Species Act for the proposed depleted uranium hexafluoride conversion facility at the Portsmouth Gaseous Diffusion Plant located in Pike County, Ohio.

In response to our September 23, 2002 letter, you prepared and submitted a Biological Assessment (BA). The BA addresses two species, the Indiana bat, a Federally listed endangered species which is listed in all 88 counties of Ohio, and the timber rattlesnake, which has not been assigned a Federal listing status, but the Service has initiated a pre-listing Conservation Action Plan to support State and local conservation efforts.

Your BA provides a thorough assessment of habitat for the above two species. The BA concludes that most of the site was found to have poor summer habitat for the Indiana bat because of the small size, isolation, and insufficient maturity of the few woodlands on the site. Potential summer habitat for the Indiana bat was identified and sampled during surveys conducted in 1994 and 1996. No Indiana bats were collected during those surveys. Nevertheless, the Department agreed that any unavoidable cutting of trees, associated with the proposed facility, with summer roost characteristics would be done between September 15 and April 15. Thus, the proposed action is not likely to adversely affect the Indiana bat. Also, the Department concludes that habitat for the timber rattlesnake is not present on the Portsmouth site; therefore, the propose action would not affect the rattlesnake species.

We concur with the Department of Energy's conclusion regarding the above two species. Regarding the Indiana bat, we recommend your continued efforts to avoid impacting summer bat habitat and/or enhance other areas which could be developed into good summer habitat. The Indiana bat surveys were conducted at least seven years ago; new surveys on the Portsmouth site could result in the capture of this species.

These comments have been prepared under the authority of the Fish and Wildlife Coordination Act (48 Stat. 401, as amended; 16 U.S.C. 661 et seq.), the Endangered Species Act of 1973, as amended, and are consistent with the intent of the National Environmental Policy Act of 1969 and the U. S. Fish and Wildlife Service's Mitigation Policy.

If you have questions, or if we may be of further assistance in this matter, please contact Ken Lammers at extension 15 in this office.

Sincerely,

Mary Knapp

Mary Knapp, Ph.D.
Supervisor

cc: ODNR, Div. of Wildlife, SCEA Unit, Columbus, OH
ODNR, Div. of RELM, Columbus, OH
Ohio EPA, Water Quality Monitoring, Columbus, OH

**United States Department of the Interior**
FISH AND WILDLIFE SERVICE
3761 GEORGETOWN ROAD
FRANKFORT, KY 40601

March 2, 2004

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Date Received MAR 6 2004
File Code

Mr. James L. Elmore, Ph.D.
U.S. Department of Energy
Oak Ridge Operations Office
P.O. Box 2001
Oak Ridge, Tennessee 37831

Subject: FWS #04-0582; Biological Assessment for the Indiana bat, Informal Consultation for the Proposed Depleted Uranium Hexafluoride Conversion Facility, McCracken County, Kentucky

Dear Dr. Elmore:

Thank you for your letter and enclosures transmitting a biological assessment (BA) for the federally endangered Indiana bat in association with the Proposed Depleted Uranium Hexafluoride Conversion Facility in McCracken County, Kentucky. Fish and Wildlife Service (Service) biologists have reviewed the document, and we offer the following comments.

Based on the information provided in the BA, tree clearing will be necessary in one of the three proposed facility construction locations. Of the proposed sites, Location A covers 35 acres, with approximately 10 acres of mature hardwood; Location B covers 59 acres, with the southern half occupied by mature hardwood forest; Location C is 53 acres, with its western half recently disturbed and occupied by young growth (trees and saplings). Once construction begins on the selected location, the facility will occupy approximately 10 acres with up to 45 acres potentially affected by construction activities.

The project area is known to have Indiana bat summer foraging and roosting habitat (of varying quality) in the vicinity. Indiana bats typically roost under exfoliating bark, in cavities of dead and live trees, and in snags (i.e. dead trees or dead portions of live trees). Trees in excess of 16 inches in diameter at breast height (DBH) are considered optimal for maternity colony roosts, but trees in excess of 9 inches DBH appear to provide suitable roosting habitat. Male Indiana bats have been observed roosting in trees as small as 3 inches DBH. The BA states that tree removal would occur between September 15$^{th}$ and April 15$^{th}$. However, to be fully protective of Indiana bat summer roosting and foraging seasons, we recommend that trees only be removed between October 15$^{th}$ and March 31$^{st}$. There are no known or suspected Indiana bat hibernacula within 10 miles of the project area, therefore, hibernacula mitigation measures will not be necessary.

Provided that tree and vegetation clearing occurs during the above-specified interval of October 15 to March 31, the Service concurs that the proposed action is "not likely to adversely affect"

the federally endangered Indiana bat. In view of this, we believe that the requirements of section 7 of the Endangered Species Act have been fulfilled for this project. Your obligations under section 7 must be reconsidered, however, if: (1) new information reveals that the proposed action may affect listed species in a manner or to an extent not previously considered, (2) the proposed action is subsequently modified to include activities which were not considered during this consultation, or (3) new species are listed or critical habitat designated that might be affected by the proposed action.

If you have any questions or if we can be of further assistance, please contact Anthony Velasco at (502)/695-0468 (ext.225).

Sincerely,

Virgil Lee Andrews, Jr.
Field Supervisor