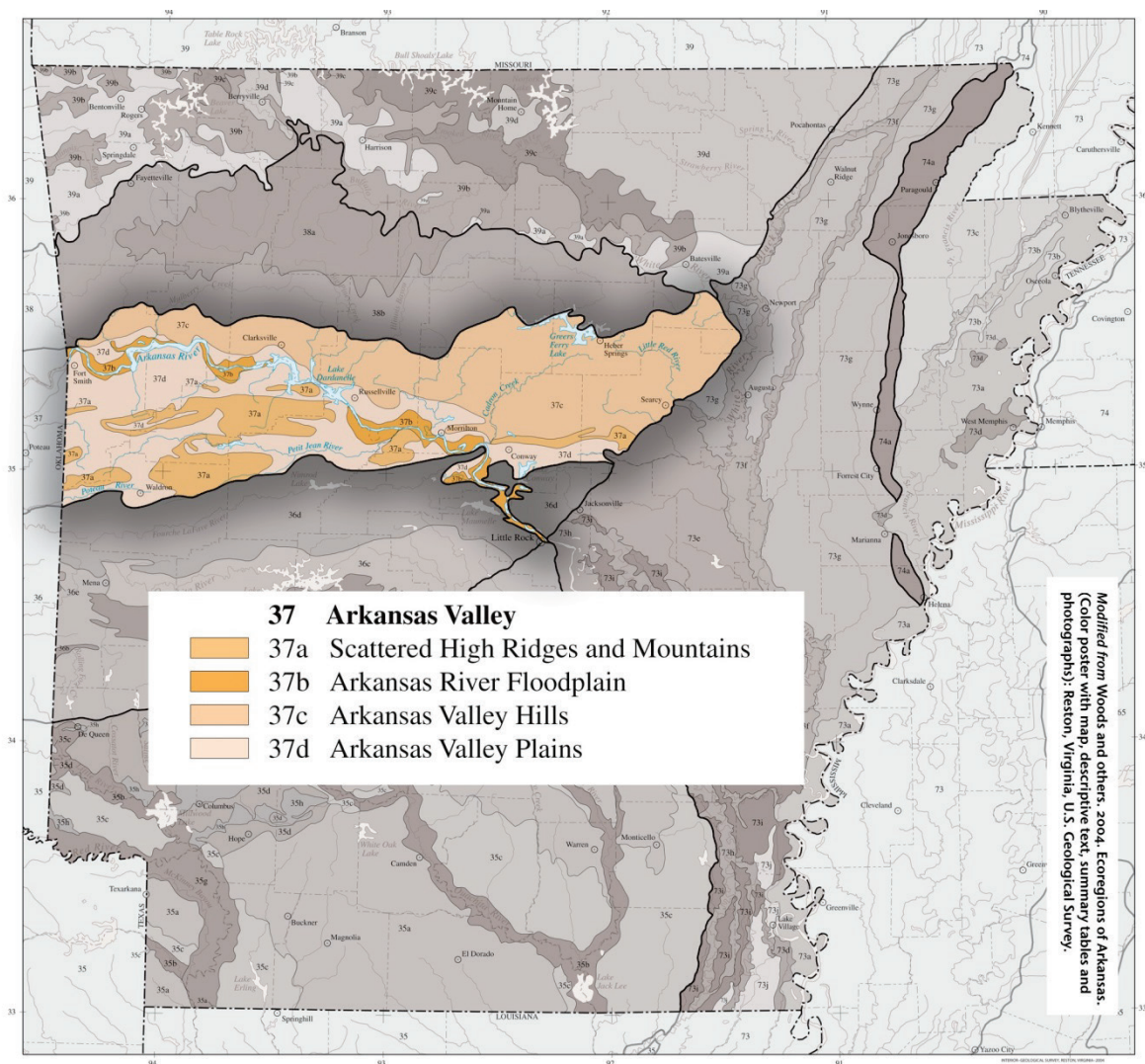


Arkansas Valley (Ecoregion 37)

Ecoregion 37 is a synclinal and alluvial valley lying between the Ozark Highlands (39) and the Ouachita Mountains (36). The Arkansas Valley (37) is, characteristically, diverse and transitional. It generally coincides with the Arkoma Basin, an oil and gas province, that developed as sand and mud were deposited in a depression north of the rising Ouachita Mountains during the Mississippian and Pennsylvanian eras.

The Arkansas Valley (37) contains plains, hills, floodplains, terraces and scattered mountains. It is largely underlain by interbedded Pennsylvanian sandstone, shale and siltstone.

Figure 3.10. Arkansas Valley Ecoregion





Prior to the 19th century, uplands were dominated by a mix of forest, woodland, savanna and prairie whereas floodplains and lower terraces were covered by bottomland deciduous forest. Today, less rugged upland areas have been cleared for pastureland or hayland. Poultry and livestock farming are important land uses.

Water quality is generally good and influenced more by land use activities than by soils or geology; average stream gradients and dissolved oxygen levels are lower in the Arkansas Valley (37) than in the Ouachita Mountains (36) or Ozark Highlands (39), whereas turbidity, total suspended solids, total organic carbon, total phosphorus and biochemical oxygen demand values are typically higher. The Arkansas River is continuously turbid. Summer flow in smaller streams is typically limited or non-existent.

Fish communities characteristically contain a substantial proportion of sensitive species; a sunfish and minnow-dominated community exists along with substantial proportions of darters and catfishes (particularly madtoms).

Scattered High Ridges and Mountains

37a. The Scattered High Ridges and Mountains ecoregion is more rugged and wooded than Ecoregions 37b, 37c, or 37d. Ecoregion 37a is characteristically covered by savannas, open woodlands, or forests dominated or codominated by upland oaks, hickory and shortleaf pine; loblolly pine occurs but is not native. It is underlain by Pennsylvanian sandstone and shale; calcareous rocks such as those that dominate the Ozark Highlands (39) are absent.

Nutrient and mineral values (including turbidity and hardness) in streams are slightly higher than

in other parts of the Arkansas Valley (37). Magazine Mountain, the highest point in Arkansas at 2,753 feet, is distinguished by diverse habitats. Its flat top is covered with xeric, stunted woodlands. Mesic sites also occur and may contain beech–maple forests.

Arkansas River Floodplain

37b. The Arkansas River Floodplain is characteristically veneered with Holocene alluvium and includes natural levees, meander scars, oxbow lakes, point bars, swales and backswamps. It is lithologically and physiographically distinct from the surrounding uplands of the Arkansas Valley (37). Mollisols, Entisols, Alfisols and Inceptisols are common; the soil mosaic sharply contrasts with nearby, higher elevation ecoregions where Ultisols developed under upland oaks, hickory and pine.

Potential natural vegetation is southern floodplain forest. Bottomland oaks including bur oak, American sycamore, sweetgum, willows, eastern cottonwood, green ash, pecan, hackberry and elm were once extensive. They have been widely cleared for pastureland, hayland and cropland. However, some forest remains in frequently flooded or poorly-drained areas. In Arkansas, bur oak is most dominant in Ecoregion 37b.

Arkansas Valley Hills

37c. The Arkansas Valley Hills are underlain by Pennsylvanian sandstone and shale and are lithologically distinct from Ecoregions 37b and 39. Ecoregion 37c is more hilly than the Arkansas Valley Plains (37d) and less rugged than Ecoregions 36, 37a and 38. Ultisols are common and support a potential natural vegetation of oak–hickory forest or oak–hickory–pine forest; both soils and natural vegetation contrast with those of Ecoregion 37b.

Today, pastureland is extensive, but rugged areas are wooded; overall, trees are much less extensive than in neighboring Ecoregions 36d, 37a and 38 but more widespread than in Ecoregions 37b and 37d. Poultry operations, livestock farming and logging are important land uses.

Arkansas Valley Plains

37d. The Arkansas Valley Plains are in the rainshadow of the Fourche Mountains and were once covered by a distinctive mosaic of prairie, savanna and woodland. Ecoregion 37d is mostly undulating but a few hills and ridges occur.

Westward, Ecoregion 37d becomes flatter, drier, more open and has fewer topographic fire barriers. Prior to the 19th century, frequently burned western areas had extensive prairie on droughty soils; scattered pine–oak savanna also occurred. Elsewhere, potential natural vegetation is primarily oak–hickory forest or oak–hickory–pine forest.

Today, pastureland and hayland are extensive but remnants of prairie, particularly the Cherokee Prairie near Fort Smith and woodland occur. Poultry and livestock farming are primary land uses. Cropland agriculture in the Arkansas Valley Plains (37d) is less important than in Ecoregion 37b and wooded areas are not as extensive as in more rugged Ecoregions 36, 37a, 37c and 38. Stream turbidity generally remains low except during storm events (adapted from Woods and others 2004).

Arkansas Valley Ecoregion:

Species of Greatest Conservation Need (SGCN)

Species of greatest conservation need (SGCN) in the Arkansas Valley are presented by taxa association (Table 3.11). A higher priority score indicates a greater need for actions to conserve the species. Calculation of the priority score is discussed in Section 2, pages 8-8. A ranked list of all SGCN associated with the ecoregion is presented in Table 3.12.

Table 3.11. SGCN by taxa association in the Arkansas Valley ecoregion.

Taxa Association	Common Name	Scientific Name	Priority Score
Amphibian	Crawfish Frog	<i>Lithobates areolatus</i>	23
	Plains Spadefoot	<i>Spea bombifrons</i>	23
	Ringed Salamander	<i>Ambystoma annulatum</i>	19
	Great Plains Narrowmouth Toad	<i>Gastrophryne olivacea</i>	19
	Strecker's Chorus Frog	<i>Pseudacris streckeri</i>	19
	Hurter's Spadefoot	<i>Scaphiopus hurterii</i>	19
	Bird-voiced Treefrog	<i>Hyla avivoca</i>	15
	Bird	Piping Plover	<i>Charadrius melodus</i>
Henslow's Sparrow		<i>Ammodramus henslowii</i>	33
Sprague's Pipit		<i>Anthus spragueii</i>	33
Bachman's Sparrow		<i>Peucaea aestivalis</i>	33
King Rail		<i>Rallus elegans</i>	33
Interior Least Tern		<i>Sterna antillarum athalassos</i>	31
Buff-breasted Sandpiper		<i>Calidris subruficollis</i>	29
Rusty Blackbird		<i>Euphagus carolinus</i>	29
Bewick's Wren		<i>Thryomanes bewickii</i>	29
Ruddy Turnstone		<i>Arenaria interpres</i>	24
Smith's Longspur		<i>Calcarius pictus</i>	24
Common Nighthawk		<i>Chordeiles minor</i>	24
Migrant Loggerhead Shrike		<i>Lanius ludovicianus migrans</i>	24
Yellow-crowned Night-Heron		<i>Nyctanassa violacea</i>	24
American Woodcock		<i>Scolopax minor</i>	24

	Cerulean Warbler	<i>Setophaga cerulea</i>	24
	Rufous-crowned Sparrow	<i>Aimophila ruficeps</i>	23
	American Bittern	<i>Botaurus lentiginosus</i>	23
	Willow Flycatcher	<i>Empidonax traillii</i>	23
	Purple Gallinule	<i>Porphyrio martinicus</i>	23
	Le Conte's Sparrow	<i>Ammodramus leconteii</i>	21
	Sedge Wren	<i>Cistothorus platensis</i>	21
	Sharp-shinned Hawk	<i>Accipiter striatus</i>	19
	Grasshopper Sparrow	<i>Ammodramus savannarum</i>	19
	American Black Duck	<i>Anas rubripes</i>	19
	Anhinga	<i>Anhinga anhinga</i>	19
	Eastern Whip-poor-will	<i>Antrastomus vociferus</i>	19
	Sanderling	<i>Calidris alba</i>	19
	Dunlin	<i>Calidris alpina</i>	19
	Stilt Sandpiper	<i>Calidris himantopus</i>	19
	Chimney Swift	<i>Chaetura pelagica</i>	19
	Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	19
	Northern Bobwhite	<i>Colinus virginianus</i>	19
	Tricolored Heron	<i>Egretta tricolor</i>	19
	Common Gallinule	<i>Gallinula chloropus</i>	19
	Purple Finch	<i>Haemorhous purpureus</i>	19
	Wood Thrush	<i>Hylocichla mustelina</i>	19
	Least Bittern	<i>Ixobrychus exilis</i>	19
	Short-billed Dowitcher	<i>Limnodromus griseus</i>	19
	Swainson's Warbler	<i>Limnothlypis swainsonii</i>	19
	Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	19
	Black-bellied Plover	<i>Pluvialis squatarola</i>	19
	Bell's Vireo	<i>Vireo bellii</i>	19
	Trumpeter Swan	<i>Cygnus buccinator</i>	17
	American Kestrel	<i>Falco sparverius</i>	15
	American Golden-Plover	<i>Pluvialis dominica</i>	15
Crayfish	Boston Mountains Crayfish	<i>Cambarus causeyi</i>	62
	Bismark Burrowing Crayfish	<i>Procambarus parasimulans</i>	19
Fish	Alabama Shad	<i>Alosa alabamae</i>	52
	Arkansas River Shiner	<i>Notropis girardi</i>	50
	Alligator Gar	<i>Atractosteus spatula</i>	27
	Plains Minnow	<i>Hybognathus placitus</i>	27
	Longnose Darter	<i>Percina nasuta</i>	27
	American Eel	<i>Anguilla rostrata</i>	24
	Paddlefish	<i>Polyodon spathula</i>	24
	Blue Sucker	<i>Cycleptus elongatus</i>	23
	Bluntnose Shiner	<i>Cyprinella camura</i>	23

	Suckermouth Minnow	<i>Phenacobius mirabilis</i>	23
	Brown Bullhead	<i>Ameiurus nebulosus</i>	19
	Sunburst Darter	<i>Etheostoma mihileze</i>	19
	Goldeye	<i>Hiodon alosoides</i>	19
	Mooneye	<i>Hiodon tergisus</i>	19
	Pealip Redhorse	<i>Moxostoma pisolabrum</i>	19
	Striped Mullet	<i>Mugil cephalus</i>	19
	Slenderhead Darter	<i>Percina phoxocephala</i>	19
	Highfin carpsucker	<i>Carpionodes velifer</i>	17
	Lake Chubsucker	<i>Erimyzon sucetta</i>	15
	Highland Darter	<i>Etheostoma teddyroosevelt</i>	15
	Shoal Chub	<i>Macrhybopsis hyostoma</i>	15
	Saddleback Darter	<i>Percina vigil</i>	15
Insect	Magazine Mountain mold beetle	<i>Arianops sandersoni</i>	80
	Magazine stripetail	<i>Isoperla szczytkoi</i>	80
	Nearctic paduniellan caddisfly	<i>Paduniella nearctica</i>	80
	beetle	<i>Rimulicola divalis</i>	80
	mayfly	<i>Paraleptophlebia calcarica</i>	65
	Texas Frosted Elfin	<i>Callophrys irus hadros</i>	42
	American Burying Beetle	<i>Nicrophorus americanus</i>	42
	Dukes' Skipper	<i>Euphyes dukesi</i>	32
	Prairie Mole Cricket	<i>Gryllotalpa major</i>	32
	Mottled Duskywing	<i>Erynnis martialis</i>	29
	Meske's Skipper	<i>Hesperia meskei</i>	29
	Lace-winged Roadside-Skipper	<i>Amblyscirtes aesculapius</i>	27
	Giant Stag Beetle	<i>Lucanus elephus</i>	25
	Diana	<i>Speyeria diana</i>	25
	lace bug	<i>Acalypta susanae</i>	23
	Northern Metalmark	<i>Calephelis borealis</i>	23
	Woodland Tiger Beetle	<i>Cicindela unipunctata</i>	23
	Outis Skipper	<i>Cogia outis</i>	23
	microcaddisfly	<i>Paucicalcaria ozarkensis</i>	23
	Yehl Skipper	<i>Poanes yehl</i>	23
	Byssus Skipper	<i>Problema byssus</i>	23
	Ouachita Pseudactium	<i>Pseudactium magazinensis</i>	23
	King's Hairstreak	<i>Satyrium kingi</i>	23
	ground beetle	<i>Scaphinotus parisiana</i>	23
	Bell's Roadside-Skipper	<i>Amblyscirtes belli</i>	21
	tiger beetle	<i>Cicindela lepida</i>	21
	red milkweed beetle	<i>Tetraopes quinque maculatus</i>	21
	Texas milkweed beetle	<i>Tetraopes texanus</i>	21
	lace bug	<i>Acalypta lillianus</i>	19
	Arogos Skipper	<i>Atrytone arogos iowa</i>	19

	Dion Skipper	<i>Euphyes dion</i>	19
	Leonard's Skipper	<i>Hesperia leonardus</i>	19
	Cobweb Skipper	<i>Hesperia metea</i>	19
	Small-eyed Mold Beetle	<i>Ouachitychus parvoculus</i>	19
	Gray Comma	<i>Polygonia progne</i>	19
	Oak Hairstreak	<i>Satyrium favonius ontario</i>	19
	Ant-like Tiger Beetle	<i>Cicindela cursitans</i>	17
	Big Sand tiger beetle	<i>Cicindela formosa pigmentosignata</i>	17
	Beach-dune Tiger Beetle	<i>Cicindela hirticollis</i>	17
	Sandy Stream Tiger Beetle	<i>Cicindela macra</i>	17
	Gorgone Checkerspot	<i>Chlosyne gorgone</i>	15
	Monarch	<i>Danaus plexippus</i>	15
	Twelve-spotted Tiger Beetle	<i>Cicindela duodecimguttata</i>	13
Invertebrate - other	Magazine Mountain Shagreen	<i>Inflectarius magazinensis</i>	80
	Striate Supercoil	<i>Paravitrea aulacogyra</i>	80
	Calico Rock Oval	<i>Patera clenchi</i>	65
	Elevated Spring Amphipod	<i>Stygobromus elatus</i>	50
	Hubricht's Long-tailed Amphipod	<i>Allocrangonyx hubrichti</i>	42
	isopod	<i>Caecidotea dimorpha</i>	42
	isopod	<i>Lirceus bicuspidatus</i>	27
Mammal	Northern Long-eared Bat	<i>Myotis septentrionalis</i>	63
	Eastern Small-Footed Bat	<i>Myotis leibii</i>	34
	Little Brown Bat	<i>Myotis lucifugus</i>	33
	Rafinesque's Big-Eared Bat	<i>Corynorhinus rafinesquii</i>	29
	Southeastern Bat	<i>Myotis austroriparius</i>	24
	Black-tailed Jackrabbit	<i>Lepus californicus</i>	21
	Eastern Spotted Skunk	<i>Spilogale putorius</i>	21
	Crawford's Gray Shrew	<i>Notiosorex crawfordi</i>	19
	Eastern Harvest Mouse	<i>Reithrodontomys humulis</i>	19
	Southeastern Shrew	<i>Sorex longirostris</i>	19
	Gray Bat	<i>Myotis grisescens</i>	16
	American Badger	<i>Taxidea taxus</i>	16
	Long-tailed Weasel	<i>Mustela frenata</i>	15
Mussel	Purple Lilliput	<i>Toxolasma lividum</i>	52
	Bleedingtooth Mussel	<i>Venustaconcha pleasii</i>	23
	Elktoe	<i>Alasmidonta marginata</i>	19
	Lilliput	<i>Toxolasma parvum</i>	19
	Round Pigtoe	<i>Pleurobema sintoxia</i>	17
	Little Spectaclecase group	<i>Villosa sp. Cf lienosa</i>	17
	Fatmucket	<i>Lampsilis siliquoidea</i>	15
	"Arkoma" Fatmucket	<i>Lampsilis sp. A</i>	15
	Fawnsfoot	<i>Truncilla donaciformis</i>	15
Reptile	Queen Snake	<i>Regina septemvittata</i>	29

	Collared Lizard	<i>Crotaphytus collaris</i>	24
	Great Plains Skink	<i>Plestiodon obsoletus</i>	23
	Western Chicken Turtle	<i>Deirochelys reticularia miaria</i>	19
	Southern Prairie Skink	<i>Plestiodon obtusirostris</i>	19
	Graham's Crayfish Snake	<i>Regina grahamii</i>	19
	Ornate Box Turtle	<i>Terrapene ornata ornata</i>	19
	Western Diamondback Rattlesnake	<i>Crotalus atrox</i>	17
	Gulf Swampsnake	<i>Liodytes rigida</i>	15
	Slender Glass Lizard	<i>Ophisaurus attenuatus</i>	15

Table 3.12. Species of greatest conservation need (SGCN) in the Arkansas Valley ranked by priority score. A higher priority score indicates a greater need for actions to conserve the species. Of the 377 SGCN, 159 occur in this ecoregion.

Priority Score	Common Name	Scientific Name	Taxa Association
80	Magazine Mountain mold beetle	<i>Arianops sandersoni</i>	Insect
80	Magazine Mountain Shagreen	<i>Inflectarius maaazinensis</i>	Invertebrate - other
80	Magazine stripetail	<i>Isoperla szczytkoi</i>	Insect
80	Nearctic paduniellan caddisfly	<i>Paduniella nearctica</i>	Insect
80	Striate Supercoil	<i>Paravitrea aulacoavra</i>	Invertebrate - other
80	beetle	<i>Rimulincola divalis</i>	Insect
65	mavfly	<i>Paraleptophlebia calcarica</i>	Insect
65	Calico Rock Oval	<i>Patera clenchi</i>	Invertebrate - other
63	Northern Long-eared Bat	<i>Mvotis septentrionalis</i>	Mammal
62	Boston Mountains Crayfish	<i>Cambarus causevi</i>	Crayfish
52	Alabama Shad	<i>Alosa alabamae</i>	Fish
52	Purple Lilliput	<i>Toxolasma lividum</i>	Mussel
50	Arkansas River Shiner	<i>Notropis airardi</i>	Fish
50	Elevated Spring Amphipod	<i>Stvaobromus elatus</i>	Invertebrate - other
43	Piping Plover	<i>Charadrius melodus</i>	Bird
42	Hubricht's Long-tailed Amphipod	<i>Allocranaonyx hubrichti</i>	Invertebrate - other
42	isopod	<i>Caecidotea dimorpha</i>	Invertebrate - other
42	Texas Frosted Elfin	<i>Callophrys irus hadros</i>	Insect
42	American Burving Beetle	<i>Nicrophorus americanus</i>	Insect
34	Eastern Small-Footed Bat	<i>Mvotis leibii</i>	Mammal
33	Henslow's Sparrow	<i>Ammodramus henslowii</i>	Bird
33	Sprague's Pipit	<i>Anthus spragueii</i>	Bird
33	Little Brown Bat	<i>Mvotis lucifuqus</i>	Mammal
33	Bachman's Sparrow	<i>Peucaea aestivalis</i>	Bird
33	King Rail	<i>Rallus elegans</i>	Bird
32	Dukes' Skipper	<i>Euphves dukesi</i>	Insect
32	Prairie Mole Cricket	<i>Gryllotalpa major</i>	Insect
31	Interior Least Tern	<i>Sterna antillarum athalassos</i>	Bird
29	Buff-breasted Sandpiper	<i>Calidris subruficollis</i>	Bird
29	Rafinesque's Big-Eared Bat	<i>Corvynorhinus rafinesquii</i>	Mammal
29	Mottled Duskywing	<i>Erynnis martialis</i>	Insect
29	Rustv Blackbird	<i>Euphagus carolinus</i>	Bird
29	Meske's Skipper	<i>Hesperia meskei</i>	Insect
29	Queen Snake	<i>Reaina septemvittata</i>	Reptile
29	Bewick's Wren	<i>Thryomanes bewickii</i>	Bird
27	Lace-winged Roadside-Skipper	<i>Amblyscirtes aesculapius</i>	Insect
27	Alligator Gar	<i>Atractosteus spatula</i>	Fish
27	Plains Minnow	<i>Hvboanathus placitus</i>	Fish
27	isopod	<i>Lirceus bicuspidatus</i>	Invertebrate - other
27	Longnose Darter	<i>Percina nasuta</i>	Fish
25	Giant Stag Beetle	<i>Lucanus elephus</i>	Insect
25	Diana	<i>Speveria diana</i>	Insect
24	American Eel	<i>Anaquilla rostrata</i>	Fish
24	Ruddy Turnstone	<i>Arenaria interpres</i>	Bird

Priority Score	Common Name	Scientific Name	Taxa Association
24	Smith's Longspur	<i>Calcarius pictus</i>	Bird
24	Common Nighthawk	<i>Chordeiles minor</i>	Bird
24	Collared Lizard	<i>Crotaphytus collaris</i>	Reptile
24	Migrant Loggerhead Shrike	<i>Lanius ludovicianus migrans</i>	Bird
24	Southeastern Bat	<i>Myotis austroriparius</i>	Mammal
24	Yellow-crowned Night-Heron	<i>Nyctanassa violacea</i>	Bird
24	Paddlefish	<i>Polyodon spathula</i>	Fish
24	American Woodcock	<i>Scolopax minor</i>	Bird
24	Cerulean Warbler	<i>Setophaga cerulea</i>	Bird
23	lace bug	<i>Acalypta susanae</i>	Insect
23	Rufous-crowned Sparrow	<i>Aimophila ruficeps</i>	Bird
23	American Bittern	<i>Botaurus lentiginosus</i>	Bird
23	Northern Metalmark	<i>Calephelis borealis</i>	Insect
23	Woodland Tiger Beetle	<i>Cicindela unipunctata</i>	Insect
23	Outis Skipper	<i>Coqia outis</i>	Insect
23	Blue Sucker	<i>Cycleptus elonqatus</i>	Fish
23	Bluntnose Shiner	<i>Cyprinella camura</i>	Fish
23	Willow Flycatcher	<i>Empidonax traillii</i>	Bird
23	Crawfish Frog	<i>Lithobates areolatus</i>	Amphibian
23	microcaddisfly	<i>Paucicalcaria ozarkensis</i>	Insect
23	Suckermouth Minnow	<i>Phenacobius mirabilis</i>	Fish
23	Great Plains Skink	<i>Plestiodon obsoletus</i>	Reptile
23	Yehl Skipper	<i>Poanes yehl</i>	Insect
23	Purple Gallinule	<i>Porphyrio martinicus</i>	Bird
23	Byssus Skipper	<i>Problema byssus</i>	Insect
23	Ouachita Pseudactium	<i>Pseudactium maqazinensis</i>	Insect
23	King's Hairstreak	<i>Satyrium kinqi</i>	Insect
23	ground beetle	<i>Scaphinotus parisiana</i>	Insect
23	Plains Spadefoot	<i>Spea bombifrons</i>	Amphibian
23	Bleedingtooth Mussel	<i>Venustaconcha pleasii</i>	Mussel
21	Le Conte's Sparrow	<i>Ammodramus leconteii</i>	Bird
21	Bell's Roadside-Skipper	<i>Amblyscirtes belli</i>	Insect
21	tiger beetle	<i>Cicindela lepida</i>	Insect
21	Sedge Wren	<i>Cistothorus platensis</i>	Bird
21	Black-tailed Jackrabbit	<i>Lepus californicus</i>	Mammal
21	Eastern Spotted Skunk	<i>Spilogale putorius</i>	Mammal
21	red milkweed beetle	<i>Tetraopes quinque maculatus</i>	Insect
21	Texas milkweed beetle	<i>Tetraopes texanus</i>	Insect
19	lace bug	<i>Acalypta lillianus</i>	Insect
19	Sharp-shinned Hawk	<i>Accipiter striatus</i>	Bird
19	Elktoe	<i>Alasmidonta marginata</i>	Mussel
19	Ringed Salamander	<i>Ambystoma annulatum</i>	Amphibian
19	Brown Bullhead	<i>Ameiurus nebulosus</i>	Fish
19	Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Bird
19	American Black Duck	<i>Anas rubripes</i>	Bird
19	Anhinga	<i>Anhinga anhinga</i>	Bird
19	Eastern Whip-poor-will	<i>Antrostomus vociferus</i>	Bird
19	Arogo Skipper	<i>Atrytone aroqos iowa</i>	Insect
19	Sanderling	<i>Calidris alba</i>	Bird
19	Dunlin	<i>Calidris alpina</i>	Bird

Priority Score	Common Name	Scientific Name	Taxa Association
19	Stilt Sandpiper	<i>Calidris himantopus</i>	Bird
19	Chimney Swift	<i>Chaetura pelagica</i>	Bird
19	Yellow-billed Cuckoo	<i>Coccyzus americanus</i>	Bird
19	Northern Bobwhite	<i>Colinus virginianus</i>	Bird
19	Western Chicken Turtle	<i>Deirochelys reticularia miaria</i>	Reptile
19	Tricolored Heron	<i>Egretta tricolor</i>	Bird
19	Sunburst Darter	<i>Etheostoma mihileze</i>	Fish
19	Dion Skipper	<i>Euphyes dion</i>	Insect
19	Common Gallinule	<i>Gallinula chloropus</i>	Bird
19	Great Plains Narrowmouth Toad	<i>Gastrophryne olivacea</i>	Amphibian
19	Purple Finch	<i>Haemorhous purpureus</i>	Bird
19	Leonard's Skipper	<i>Hesperia leonardus</i>	Insect
19	Cobweb Skipper	<i>Hesperia metea</i>	Insect
19	Goldeye	<i>Hiodon alosoides</i>	Fish
19	Mooneye	<i>Hiodon teraisus</i>	Fish
19	Wood Thrush	<i>Hylocichla mustelina</i>	Bird
19	Least Bittern	<i>Ixobrychus exilis</i>	Bird
19	Short-billed Dowitcher	<i>Limnodromus ariseus</i>	Bird
19	Swainson's Warbler	<i>Limnothlypis swainsonii</i>	Bird
19	Pealip Redhorse	<i>Moxostoma pisolabrum</i>	Fish
19	Striped Mullet	<i>Muqil cephalus</i>	Fish
19	Crawford's Gray Shrew	<i>Notiosorex crawfordi</i>	Mammal
19	Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	Bird
19	Small-eyed Mold Beetle	<i>Ouachitychus parvocolus</i>	Insect
19	Slenderhead Darter	<i>Percina phoxocephala</i>	Fish
19	Southern Prairie Skink	<i>Plestiodon obtusirostris</i>	Reptile
19	Black-bellied Plover	<i>Pluvialis squatarola</i>	Bird
19	Gray Comma	<i>Polygona proque</i>	Insect
19	Bismark Burrowing Crayfish	<i>Procambarus parasimulans</i>	Crayfish
19	Strecker's Chorus Frog	<i>Pseudacris streckeri</i>	Amphibian
19	Graham's Crayfish Snake	<i>Regina grahamii</i>	Reptile
19	Eastern Harvest Mouse	<i>Reithrodontomys humulis</i>	Mammal
19	Oak Hairstreak	<i>Satyrrium favonius ontario</i>	Insect
19	Hurter's Spadefoot	<i>Scaphiopus hurterii</i>	Amphibian
19	Southeastern Shrew	<i>Sorex longirostris</i>	Mammal
19	Ornate Box Turtle	<i>Terrapene ornata ornata</i>	Reptile
19	Lilliput	<i>Toxolasma parvum</i>	Mussel
19	Bell's Vireo	<i>Vireo bellii</i>	Bird
17	Highfin carpsucker	<i>Carpiodes velifer</i>	Fish
17	Ant-like Tiger Beetle	<i>Cicindela cursitans</i>	Insect
17	Big Sand tiger beetle	<i>Cicindela formosa pigmentosignata</i>	Insect
17	Beach-dune Tiger Beetle	<i>Cicindela hirticollis</i>	Insect
17	Sandy Stream Tiger Beetle	<i>Cicindela macra</i>	Insect
17	Western Diamondback Rattlesnake	<i>Crotalus atrox</i>	Reptile
17	Trumpeter Swan	<i>Cyanus buccinator</i>	Bird
17	Round Pigtoe	<i>Pleurobema sintoxia</i>	Mussel
17	Little Spectaclecase group	<i>Villosa sp. Cf lienosa</i>	Mussel
16	Gray Bat	<i>Myotis grisescens</i>	Mammal
16	American Badger	<i>Taxidea taxus</i>	Mammal
15	Gorgone Checkerspot	<i>Chlosyne gorgone</i>	Insect

Priority Score	Common Name	Scientific Name	Taxa Association
15	Monarch	<i>Danaus nlexinnus</i>	Insect
15	Lake Chubsucker	<i>Erimyzon sucetta</i>	Fish
15	Highland Darter	<i>Etheostoma teddyroosevelt</i>	Fish
15	American Kestrel	<i>Falco sparverius</i>	Bird
15	Bird-voiced Treefrog	<i>Hyla avivoca</i>	Amphibian
15	Fatmucket	<i>Lampsilis siliquoidea</i>	Mussel
15	"Arkoma" Fatmucket	<i>Lampsilis sp. A</i>	Mussel
15	Gulf Swampsnake	<i>Liodytes rigida</i>	Reptile
15	Shoal Chub	<i>Macrhybopsis hyostoma</i>	Fish
15	Long-tailed Weasel	<i>Mustela frenata</i>	Mammal
15	Slender Glass Lizard	<i>Ophisaurus attenuatus</i>	Reptile
15	Saddleback Darter	<i>Percina viqil</i>	Fish
15	American Golden-Plover	<i>Pluvialis dominica</i>	Bird
15	Fawnsfoot	<i>Truncilla donaciformis</i>	Mussel
13	Twelve-spotted Tiger Beetle	<i>Cicindela duodecimquttata</i>	Insect

Habitats that occur in the Arkansas Valley

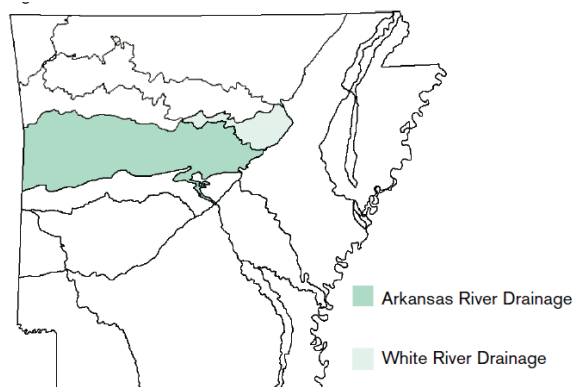
Of the 37 terrestrial habitats in Arkansas, 20 occur in the Arkansas Valley ecoregion (Table 3.14). Of 18 ecobasins in Arkansas, two occur in the Arkansas Valley ecoregion (Figure 3.11). These associations are described in the Section 4. Terrestrial Habitats, pages 1188-1575 and Section 5. Aquatic Habitats, pages 1576-1612.

Table 3.14. Terrestrial Habitats in the Arkansas Valley

Habitat Name

Caves, Mines, Sinkholes, and other Karst Habitat
Crop Land
Cultivated Forest
Herbaceous Wetland
Interior Highlands Dry Acidic Glade and Barrens
Mud Flats
Ouachita Montane Oak Forest
Ozark-Ouachita Cliff and Talus
Ozark-Ouachita Dry Oak and Pine Woodland
Ozark-Ouachita Dry-Mesic Oak Forest
Ozark-Ouachita Forested Seep
Ozark-Ouachita Large Floodplain
Ozark-Ouachita Mesic Hardwood Forest
Ozark-Ouachita Prairie and Woodland
Ozark-Ouachita Pine/Bluestem Woodland
Ozark-Ouachita Pine-Oak Forest/Woodland
Ozark-Ouachita Riparian
Pasture Land
Ponds, Lakes, and Water Holes
Urban/Suburban

Figure 3.11. Ecobasin Distribution in the Arkansas Valley



Problems faced by Species of Greatest Conservation Need (SGCN)

Taxa association teams listed problems faced by SGCN individually in the Species Reports, pages 44-1113. A summary of the problems faced by SGCN in the Arkansas Valley is presented below. Each problem has a score which is a sum of all Species Priority Scores associated with species for which this problem was assigned. A higher score implies a higher quantity of SGCN and/or more greatly imperiled species associated with problems listed here.

Table 3.15. Problems faced by SGCN in the Arkansas Valley.

Problem faced	Score
Forestry activities	1825
Agricultural practices	1799
Dam	1168
Urban development	989
Grazing/Browsing	741
Resource extraction	726
Fire suppression	623
Recreation	497
Conversion of riparian forest	423
Water diversion	334
Road construction	318
Commercial/industrial development	311
Channel alteration	277
Parasites/pathogens	274
Confined animal operations	244
Exotic species	234
Channel maintenance	229
Predation	170
Municipal/Industrial point source	164
Commercial harvest	150
Excessive groundwater withdrawal	121
Management of/for certain species	103
Non-point source pollution	82

unknown	52
Interspecific competiton	48

Conservation actions needed in the Arkansas Valley

Descriptions of conservation actions linked to individual species on the list of SGCN are presented in the Species Reports, pages 41-1113. Below are categories of conservation actions recommended by the taxa association teams (Figure 3.12). An explanation of the categories follows in Table 3.16.

The score associated with the conservation action category is the sum of all priority scores associated with species for which a conservation action has been assigned, weighted by the importance of the conservation action category to the species. A higher score implies a higher quantity of SGCN and/or more greatly imperiled species would be affected by actions within this conservation action category.

These scores may be used as guides to directing the apportionment of funding toward conservation actions benefiting habitats and species of greatest conservation need.

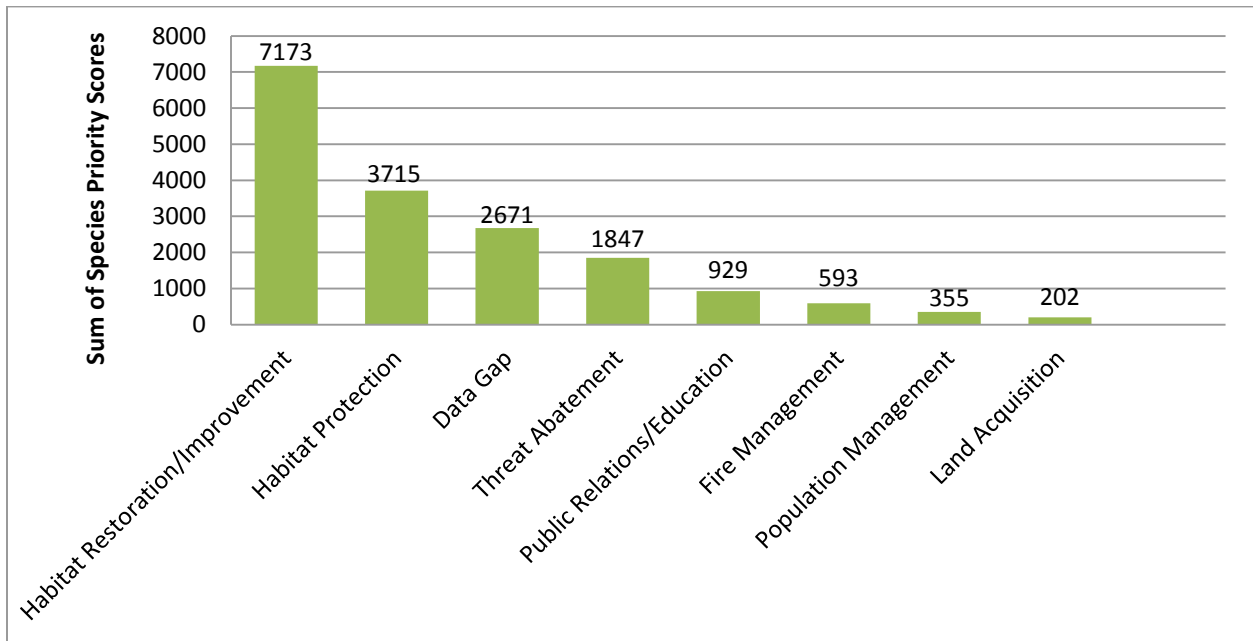


Figure 3.12. Conservation action categories recommended for the Arkansas Valley.