

Boston Mountains (Ecoregion 38)

Ecoregion 38 is mountainous, forested and underlain by Pennsylvanian sandstone, shale and siltstone. It is one of the Ozark Plateaus; some folding and faulting has occurred but, in general, strata are much less deformed than in the Ouachita Mountains (36). Maximum elevations are higher, soils have a warmer temperature regime and carbonate rocks are much less extensive than in the Ozark Highlands (39). Physiography is distinct from the Arkansas Valley (37).

Upland soils are mostly Ultisols that developed under oak–hickory and oak–hickory– pine forests. Today, forests are still widespread; northern red oak, southern red oak, white oak and hickories usually dominate the uplands, but shortleaf pine grows on drier, south- and west-facing slopes underlain by sandstone.

Figure 3.7. Boston Mountains ecoregion.

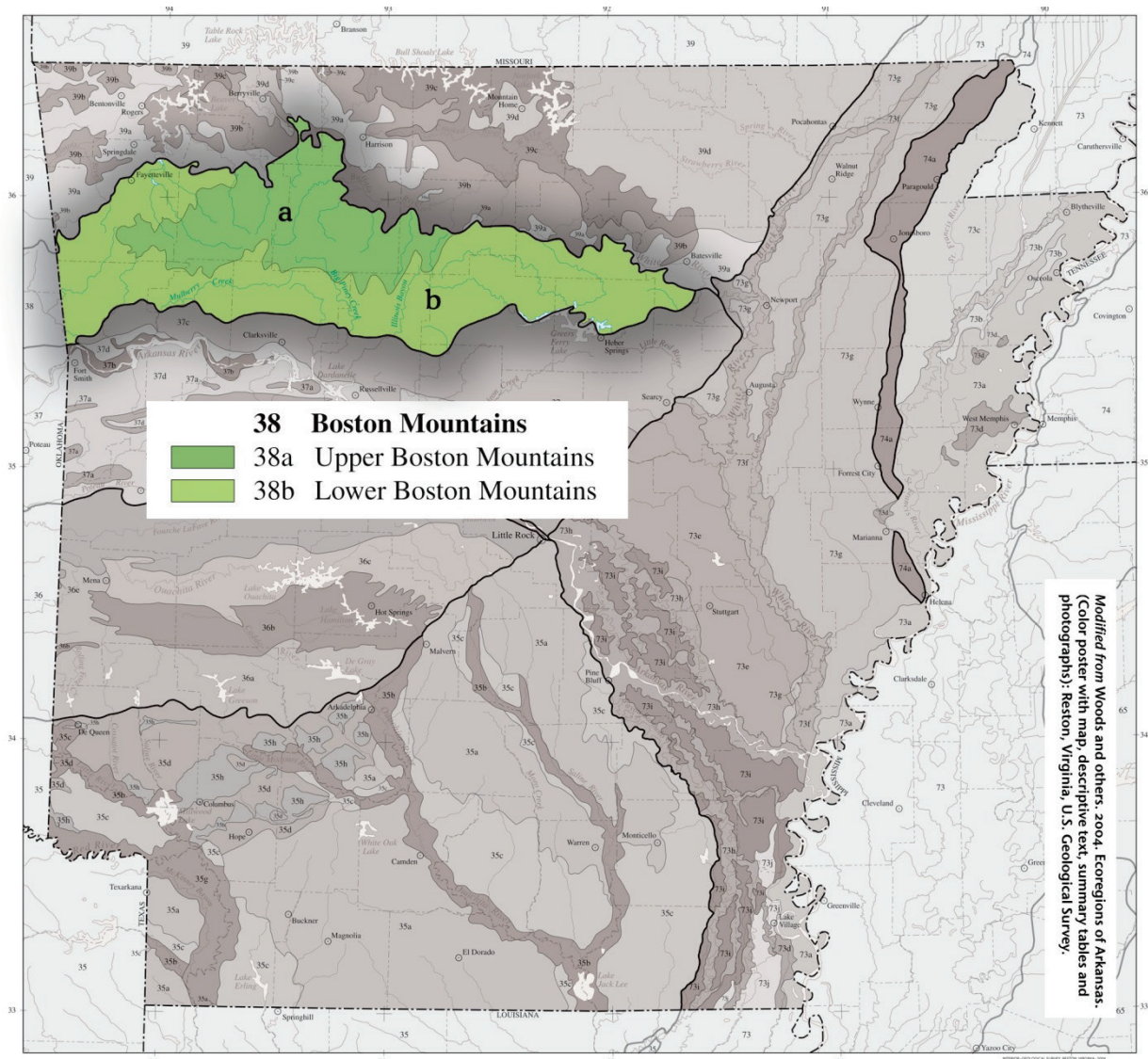




Photo by Tom Foti, AHNC

Upper Boston Mountains

Pastureland or hayland occur on nearly level ridgetops, benches and valley floors. Population density is low; recreation, logging and livestock farming are the primary land uses.

Water quality in streams is generally exceptional; biochemical, nutrient and mineral water quality parameter concentrations all tend to be very low. Fish communities are mostly composed of sensitive species; a diverse, often darter-dominated community occurs along with nearly equal proportions of minnows and sunfishes. During low flows, streams in both Ecoregions 38 and 36 usually run clear but, during high flow conditions, turbidity in Ecoregion 38 tends to be greater than in Ecoregion 36. Summer flow in many small streams is limited or nonexistent but isolated, enduring pools may occur.

Upper Boston Mountains

38a. The Upper Boston Mountains ecoregion is generally higher and more moist than the Lower Boston Mountains (38b); elevations vary from 1,900 to 2,800 feet. Potential natural vegetation is oak–hickory forest. Characteristically, the forests of the Upper Boston Mountains (38a) are more closed and contain far less pine than those of the Lower Boston Mountains (38b). North-facing slopes support mesic forests. Ecoregion 38a is underlain by Pennsylvanian sandstone, shale and siltstone that contrasts with the limestone and dolomite that dominates Ozark Highlands (39).

Water quality in streams reflects geology, soils and land use and is typically exceptional; mineral, nutrient and solid concentrations as well as turbidity all tend to be very low. During the summer, many streams do not flow.

Lower Boston Mountains

38b. The Lower Boston Mountains ecoregion is a mosaic of woodland, forest and savanna that contrasts with the denser, more moist and closed forests of the Upper Boston Mountains (38a). Potential natural vegetation is oak–hickory– pine and oak–hickory forests; pine is much more common than in Ecoregions 38a or 39. Shortleaf pine is especially widespread on drier, south- and west-facing slopes underlain by sandstone. Both precipitation and forest density decrease toward the west, where oak–pine woodland or savanna become common.

Ecoregion 38b is underlain by Pennsylvanian sandstone, shale and siltstone; it is lithologically distinct from the limestone- and dolomite-dominated Ozark Highlands (39).

Overall, water quality is quite similar to Ecoregion 38a, which, although generally higher, has similar lithology and land uses (adapted from Woods and others 2004).

Boston Mountain Ecoregion:

Species of Greatest Conservation Need (SGCN)

Species of greatest conservation need (SGCN) in the Boston Mountains are presented by taxa association (Table 3.7). 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 7-15. A ranked list of all SGCN associated with the ecoregion is presented in Table 3.8.

Table 3.7. SGCN by taxa association in the Boston Mountains.

Taxa Association	Common Name	Scientific Name	Priority Score
Amphibian	Crawfish Frog	<i>Lithobates areolatus</i>	23
	Ringed Salamander	<i>Ambystoma annulatum</i>	19
	Four-toed Salamander	<i>Hemidactylium scutatum</i>	19
	Hurter's Spadefoot	<i>Scaphiopus hurterii</i>	19
	Wood Frog	<i>Lithobates sylvaticus</i>	15
Bird	Piping Plover	<i>Charadrius melodus</i>	43
	Henslow's Sparrow	<i>Ammodramus henslowii</i>	33
	Bachman's Sparrow	<i>Peucaea aestivalis</i>	33
	Rusty Blackbird	<i>Euphagus carolinus</i>	29
	Bewick's Wren	<i>Thryomanes bewickii</i>	29
	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

	American Bittern	<i>Botaurus lentiginosus</i>	23
	Willow Flycatcher	<i>Empidonax traillii</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
	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
	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
	Williams' Crayfish	<i>Orconectes williamsi</i>	34
	Midget Crayfish	<i>Orconectes nana</i>	30
	Hubbs' Crayfish	<i>Cambarus hubbsi</i>	27
Fish	Yellowcheek Darter	<i>Etheostoma moorei</i>	100
	Ozark Shiner	<i>Notropis ozarcanus</i>	33
	Longnose Darter	<i>Percina nasuta</i>	27
	American Eel	<i>Anguilla rostrata</i>	24
	Paddlefish	<i>Polyodon spathula</i>	24
	Bluntnose Shiner	<i>Cyprinella camura</i>	23
	Autumn Darter	<i>Etheostoma autumnale</i>	19
	Sunburst Darter	<i>Etheostoma mihileze</i>	19
	American Brook Lamprey	<i>Lethenteron appendix</i>	19
	Gilt Darter	<i>Percina evides</i>	19
	Highland Darter	<i>Etheostoma teddyroosevelt</i>	15
Insect	Bowed Snowfly	<i>Allocaupnia oribata</i>	80
	Nearctic paduniellan caddisfly	<i>Paduniella nearctica</i>	80
	ground beetle	<i>Rhadine ozarkensis</i>	80

	beetle	<i>Rimulincola divalis</i>	80
	winter stonefly	<i>Allocapnia jeanae</i>	50
	winter stonefly	<i>Allocapnia ozarkana</i>	50
	Linda's Roadside-Skipper	<i>Amblyscirtes linda</i>	38
	Swamp Metalmark	<i>Calephelis muticum</i>	34
	Ozark Emerald	<i>Somatochlora ozarkensis</i>	34
	mayfly	<i>Dannella provonshai</i>	30
	Ozark Swallowtail	<i>Papilio joanae</i>	30
	Mottled Duskywing	<i>Erynnis martialis</i>	29
	Lace-winged Roadside-Skipper	<i>Amblyscirtes aesculapius</i>	27
	Carolina Roadside-Skipper	<i>Amblyscirtes carolina</i>	27
	Appalachian Azure	<i>Celastrina neglectamajor</i>	27
	Baltimore Checkerspot	<i>Euphydryas phaeton ozarkae</i>	27
	Ozark Clubtail Dragonfly	<i>Gomphus ozarkensis</i>	27
	Giant Stag Beetle	<i>Lucanus elephus</i>	25
	Diana	<i>Speyeria diana</i>	25
	Northern Metalmark	<i>Calephelis borealis</i>	23
	Woodland Tiger Beetle	<i>Cicindela unipunctata</i>	23
	Outis Skipper	<i>Cogia outis</i>	23
	Yehl Skipper	<i>Poanes yehl</i>	23
	Byssus Skipper	<i>Problema byssus</i>	23
	Ozark Pseudactium	<i>Pseudactium ursum</i>	23
	ground beetle	<i>Scaphinotus inflectus</i>	23
	Bell's Roadside-Skipper	<i>Amblyscirtes belli</i>	21
	Golden-banded Skipper	<i>Autochton cellus</i>	21
	tiger beetle	<i>Cicindela lepida</i>	21
	Leonard's Skipper	<i>Hesperia leonardus</i>	19
	Cobweb Skipper	<i>Hesperia metea</i>	19
	predaceous diving beetle	<i>Heterosternuta phoebeae</i>	19
	Ouachita Diving Beetle	<i>Hydroporus ouachitus</i>	19
	Gray Comma	<i>Polygonia progne</i>	19
	Oak Hairstreak	<i>Satyrrium favonius ontario</i>	19
	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	cave obligate pseudoscorpion	<i>Apochthonius diabolus</i>	65
	cave obligate harvestman	<i>Crosbyella distincta</i>	65
	cave obligate harvestman	<i>Crosbyella roeweri</i>	65
	cave obligate springtail	<i>Schaefferia alabamensis</i>	65
	cave obligate millipede	<i>Trigenotyla parca</i>	65
	bat cave isopod	<i>Caecidotea macropropoda</i>	57
	springtail	<i>Pseudosinella dubia</i>	50

	isopod	<i>Caecidotea dimorpha</i>	42
	isopod	<i>Caecidotea oculata</i>	42
	cave obligate isopod	<i>Caecidotea simulator</i>	42
	cave obligate planarian	<i>Dendrocoelopsis americana</i>	42
	Shelled Cave Springtail	<i>Pseudosinella testa</i>	42
	isopod	<i>Caecidotea ancyla</i>	30
	isopod	<i>Caecidotea stiladactyla</i>	30
	isopod	<i>Lirceus bicuspidatus</i>	27
	Ozark Cave Amphipod	<i>Stygobromus ozarkensis</i>	27
	springtail	<i>Arrhopalites clarus</i>	25
	pseudoscorpion	<i>Microcreagris ozarkensis</i>	23
	pseudoscorpion	<i>Pseudozaona occidentalis</i>	23
Mammal	Ozark Big-eared Bat	<i>Corynorhinus townsendii ingens</i>	80
	Northern Long-eared Bat	<i>Myotis septentrionalis</i>	63
	Indiana Bat	<i>Myotis sodalis</i>	62
	Eastern Small-Footed Bat	<i>Myotis leibii</i>	34
	Little Brown Bat	<i>Myotis lucifugus</i>	33
	Plains Harvest Mouse	<i>Reithrodontomys montanus</i>	23
	Eastern Spotted Skunk	<i>Spilogale putorius</i>	21
	Crawford's Gray Shrew	<i>Notiosorex crawfordi</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	White Hickorynut	<i>Obovaria sp. Cf arkansasensis</i>	80
	Speckled Pocketbook	<i>Lampsilis streckeri</i>	76
	Neosho Mucket	<i>Lampsilis rafinesqueana</i>	57
	"Ozark" Fanshell	<i>Cyprogenia aberti</i>	52
	Purple Lilliput	<i>Toxolasma lividum</i>	52
	Spectaclecase	<i>Cumberlandia monodonta</i>	48
	Salamander Mussel	<i>Simpsonaias ambigua</i>	34
	Rabbitsfoot	<i>Quadrula cylindrica</i>	33
	Ellipse	<i>Venustaconcha ellipsiformis</i>	27
	"Elongate" Pigtoe	<i>Fusconaia sp. Cf. sampsoniana</i>	24
	Ouachita Kidneyshell	<i>Ptychobranthus occidentalis</i>	23
	Pondhorn	<i>Unio merus tetralasmus</i>	23
	Bleedingtooth Mussel	<i>Venustaconcha pleasii</i>	23
	Elktoe	<i>Alasmidonta marginata</i>	19
	Gulf mapleleaf	<i>Quadrula nobilis</i>	19
	Lilliput	<i>Toxolasma parvum</i>	19
	Round Pigtoe	<i>Pleurobema sintoxia</i>	17
	Rainbow	<i>Villosa iris</i>	17
	Little Spectaclecase group	<i>Villosa sp. Cf lienosa</i>	17
	Fatmucket	<i>Lampsilis siliquoidea</i>	15

Reptile	Queen Snake	<i>Regina septemvittata</i>	29
	Great Plains Skink	<i>Plestiodon obsoletus</i>	23
	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
	Slender Glass Lizard	<i>Ophisaurus attenuatus</i>	15

Table 3.8. Species of greatest conservation need (SGCN) in the Boston Mountains ranked by priority score. A higher priority score indicates a greater need for actions to conserve the species. Of the 377 SGCN, 154 occur in this ecoregion.

Priority Score	Common Name	Scientific Name	Taxa Association
100	Yellowcheek Darter	<i>Etheostoma moorei</i>	Fish
80	Bowed Snowfly	<i>Allocapnia oribata</i>	Insect
80	Ozark Big-eared Bat	<i>Corynorhinus townsendii ingens</i>	Mammal
80	White Hickorynut	<i>Obovaria sp. Cf arkansasensis</i>	Mussel
80	Nearctic paduniellan caddisfly	<i>Paduniella nearctica</i>	Insect
80	ground beetle	<i>Rhadine ozarkensis</i>	Insect
80	beetle	<i>Rimulincola divalis</i>	Insect
76	Speckled Pocketbook	<i>Lampsilis streckeri</i>	Mussel
65	cave obligate pseudoscorpion	<i>Apochthonius diabolus</i>	Invertebrate - other
65	cave obligate harvestman	<i>Crosbivella distincta</i>	Invertebrate - other
65	cave obligate harvestman	<i>Crosbivella roeweri</i>	Invertebrate - other
65	cave obligate springtail	<i>Schaefferia alabamensis</i>	Invertebrate - other
65	cave obligate millipede	<i>Triaenotyla parca</i>	Invertebrate - other
63	Northern Long-eared Bat	<i>Myotis septentrionalis</i>	Mammal
62	Boston Mountains Crayfish	<i>Cambarus causevi</i>	Crayfish
62	Indiana Bat	<i>Myotis sodalis</i>	Mammal
57	bat cave isopod	<i>Caecidotea macropropoda</i>	Invertebrate - other
57	Neosho Mucket	<i>Lampsilis rafinesqueana</i>	Mussel
52	"Ozark" Fanshell	<i>Cyproaenia aberti</i>	Mussel
52	Purple Lilliput	<i>Toxolasma lividum</i>	Mussel
50	winter stonefly	<i>Allocapnia jeanae</i>	Insect
50	winter stonefly	<i>Allocapnia ozarkana</i>	Insect
50	springtail	<i>Pseudosinella dubia</i>	Invertebrate - other
48	Spectaclecase	<i>Cumberlandia monodonta</i>	Mussel
43	Piping Plover	<i>Charadrius melodus</i>	Bird
42	isopod	<i>Caecidotea dimorpha</i>	Invertebrate - other
42	isopod	<i>Caecidotea oculata</i>	Invertebrate - other
42	cave obligate isopod	<i>Caecidotea simulator</i>	Invertebrate - other
42	cave obligate planarian	<i>Dendrocoelopsis americana</i>	Invertebrate - other
42	Shelled Cave Springtail	<i>Pseudosinella testa</i>	Invertebrate - other
38	Linda's Roadside-Skipper	<i>Amblyscirtes linda</i>	Insect
34	Swamp Metalmark	<i>Calephelis muticum</i>	Insect
34	Eastern Small-Footed Bat	<i>Myotis leibii</i>	Mammal
34	Williams' Crayfish	<i>Orconectes williamsi</i>	Crayfish
34	Salamander Mussel	<i>Simpsonaias ambiaua</i>	Mussel
34	Ozark Emerald	<i>Somatochlora ozarkensis</i>	Insect
33	Henslow's Sparrow	<i>Ammodramus henslowii</i>	Bird
33	Little Brown Bat	<i>Myotis lucifugus</i>	Mammal
33	Ozark Shiner	<i>Notropis ozarcanus</i>	Fish
33	Bachman's Sparrow	<i>Peucaea aestivalis</i>	Bird
33	Rabbitsfoot	<i>Quadrula cylindrica</i>	Mussel
30	isopod	<i>Caecidotea ancyla</i>	Invertebrate - other
30	isopod	<i>Caecidotea stiladactyla</i>	Invertebrate - other
30	mavfly	<i>Dannella provonshai</i>	Insect
30	Midget Crayfish	<i>Orconectes nana</i>	Crayfish
30	Ozark Swallowtail	<i>Papilio ioanae</i>	Insect
29	Mottled Duskywing	<i>Erynnis martialis</i>	Insect
29	Rusty Blackbird	<i>Euphagus carolinus</i>	Bird

29	Queen Snake	<i>Regina septemvittata</i>	Reptile
29	Bewick's Wren	<i>Thryomanes bewickii</i>	Bird
27	Lace-winged Roadside-Skipper	<i>Amblyscirtes aesculapius</i>	Insect
27	Carolina Roadside-Skipper	<i>Amblyscirtes carolina</i>	Insect
27	Hubbs' Crayfish	<i>Cambarus hubbsi</i>	Crayfish
27	Appalachian Azure	<i>Celastrina neglectamajor</i>	Insect
27	Baltimore Checkerspot	<i>Euphydryas phaeton ozarkae</i>	Insect
27	Ozark Clubtail Dragonfly	<i>Gomphus ozarkensis</i>	Insect
27	isopod	<i>Lirceus bicuspidatus</i>	Invertebrate - other
27	Longnose Darter	<i>Percina nasuta</i>	Fish
27	Ozark Cave Amphipod	<i>Stygobromus ozarkensis</i>	Invertebrate - other
27	Ellipse	<i>Venustaconcha ellipsiformis</i>	Mussel
25	springtail	<i>Arrhopalites clarus</i>	Invertebrate - other
25	Giant Stag Beetle	<i>Lucanus elephus</i>	Insect
25	Diana	<i>Speyeria diana</i>	Insect
24	American Eel	<i>Anquilla rostrata</i>	Fish
24	Common Nighthawk	<i>Chordeiles minor</i>	Bird
24	"Elongate" Pigtoe	<i>Fusconaia sp. Cf. sampsoniana</i>	Mussel
24	Migrant Loggerhead Shrike	<i>Lanius ludovicianus migrans</i>	Bird
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	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	Bluntnose Shiner	<i>Cyprinella camura</i>	Fish
23	Willow Flycatcher	<i>Empidonax traillii</i>	Bird
23	Crawfish Frog	<i>Lithobates areolatus</i>	Amphibian
23	pseudoscorpion	<i>Microcreagrais ozarkensis</i>	Invertebrate - other
23	Great Plains Skink	<i>Plestiodon obsoletus</i>	Reptile
23	Yehl Skipper	<i>Poanes yehl</i>	Insect
23	Byssus Skipper	<i>Problema byssus</i>	Insect
23	Ozark Pseudactium	<i>Pseudactium ursum</i>	Insect
23	pseudoscorpion	<i>Pseudozaona occidentalis</i>	Invertebrate - other
23	Ouachita Kidneyshell	<i>Ptychobranthus occidentalis</i>	Mussel
23	Plains Harvest Mouse	<i>Reithrodontomys montanus</i>	Mammal
23	ground beetle	<i>Scaphinotus inflectus</i>	Insect
23	Pondhorn	<i>Unio merus tetralasmus</i>	Mussel
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	Golden-banded Skipper	<i>Autochthon cellus</i>	Insect
21	tiger beetle	<i>Cicindela lepida</i>	Insect
21	Sedge Wren	<i>Cistothorus platensis</i>	Bird
21	Eastern Spotted Skunk	<i>Spilogale putorius</i>	Mammal
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	Grasshopper Sparrow	<i>Ammodramus savannarum</i>	Bird

Priority Score	Common Name	Scientific Name	Taxa Association
19	Anhinga	<i>Anhinga anhinga</i>	Bird
19	Eastern Whip-poor-will	<i>Antrostomus vociferus</i>	Bird
19	Sanderling	<i>Calidris alba</i>	Bird
19	Dunlin	<i>Calidris alpina</i>	Bird
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	Tricolored Heron	<i>Eretta tricolor</i>	Bird
19	Autumn Darter	<i>Etheostoma autumnale</i>	Fish
19	Sunburst Darter	<i>Etheostoma mihileze</i>	Fish
19	Purple Finch	<i>Haemorhous purpureus</i>	Bird
19	Four-toed Salamander	<i>Hemidactylium scutatum</i>	Amphibian
19	Leonard's Skipper	<i>Hesperia leonardus</i>	Insect
19	Cobweb Skipper	<i>Hesperia metea</i>	Insect
19	predaceous diving beetle	<i>Heterosternuta phoebeae</i>	Insect
19	Ouachita Diving Beetle	<i>Hydroporus ouachitus</i>	Insect
19	Wood Thrush	<i>Hylocichla mustelina</i>	Bird
19	Least Bittern	<i>Ixobrychus exilis</i>	Bird
19	American Brook Lamprey	<i>Lethenteron appendix</i>	Fish
19	Short-billed Dowitcher	<i>Limnodromus ariseus</i>	Bird
19	Swainson's Warbler	<i>Limnothlypis swainsonii</i>	Bird
19	Crawford's Gray Shrew	<i>Notiosorex crawfordi</i>	Mammal
19	Black-crowned Night-Heron	<i>Nycticorax nycticorax</i>	Bird
19	Gilt Darter	<i>Percina evides</i>	Fish
19	Southern Prairie Skink	<i>Plestiodon obtusirostris</i>	Reptile
19	Black-bellied Plover	<i>Pluvialis squatarola</i>	Bird
19	Gray Comma	<i>Polyaonia proane</i>	Insect
19	Gulf mapleleaf	<i>Quadrula nobilis</i>	Mussel
19	Graham's Crayfish Snake	<i>Reaina arahamii</i>	Reptile
19	Oak Hairstreak	<i>Satvrium 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	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	Rainbow	<i>Villosa iris</i>	Mussel
17	Little Spectaclecase group	<i>Villosa sp. Cf lienosa</i>	Mussel
16	Gray Bat	<i>Myotis arisescens</i>	Mammal
16	American Badger	<i>Taxidea taxus</i>	Mammal
15	Gorgone Checkerspot	<i>Chlosyne gorgone</i>	Insect
15	Monarch	<i>Danaus plexippus</i>	Insect
15	Highland Darter	<i>Etheostoma teddyroosevelt</i>	Fish
15	American Kestrel	<i>Falco sparverius</i>	Bird
15	Fatmucket	<i>Lampsilis siliquoidea</i>	Mussel
15	Wood Frog	<i>Lithobates sylvaticus</i>	Amphibian
15	Long-tailed Weasel	<i>Mustela frenata</i>	Mammal
15	Slender Glass Lizard	<i>Ophisaurus attenuatus</i>	Reptile
15	American Golden-Plover	<i>Pluvialis dominica</i>	Bird

13	Twelve-spotted Tiger Beetle	<i>Cicindela duodecimquttata</i>	Insect
19	Southeastern Shrew	<i>Sorex longirostris</i>	Mammal

Habitats that occur in the Boston Mountains

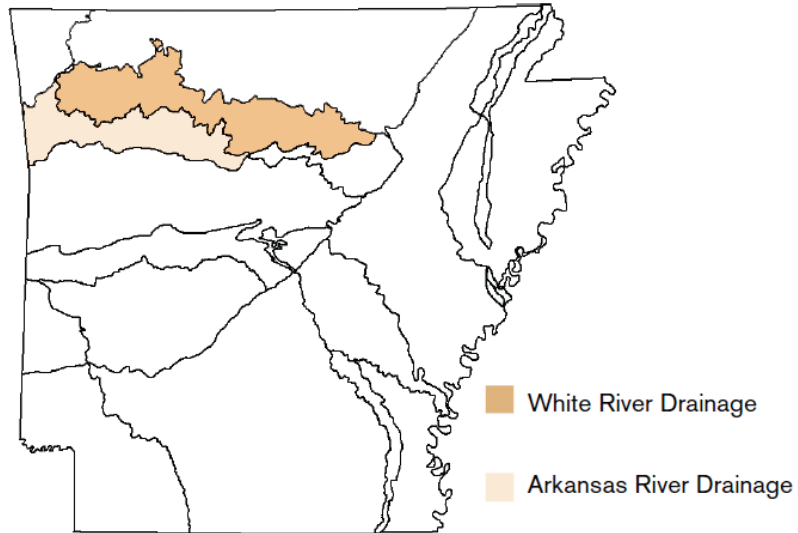
Of the 37 terrestrial habitats in Arkansas, 19 occur in the Boston Mountains ecoregion (Table 3.9). Of 18 ecoregions in Arkansas, two occur in the Boston Mountains (Figure 3.8). These associations are described in the Section 4. Terrestrial Habitats, pages 1188-1575 and Section 5. Aquatic Habitats, pages 1576-1612.

Table 3.9. Terrestrial Habitats in the Boston Mountains

Habitat Name

Caves, Mines, Sinkholes, and other Karst Habitat
Crop Land
Cultivated Forest
Herbaceous Wetland
Interior Highlands Calcareous Glade and Barrens
Interior Highlands Dry Acidic Glade and Barrens
Mud Flats
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 Pine/Bluestem Woodland
Ozark-Ouachita Pine-Oak Forest/ Woodland
Ozark-Ouachita Riparian
Pasture Land
Ponds, Lakes, and Water Holes
Urban/Suburban

Figure 3.8. Ecobasin distribution in the Boston Mountains.



Problems faced by Species of Greatest Conservation Need (SGCN)

Taxa association teams listed problems faced by SGCN individually in the Species Reports, pages 45-1082. A summary of the problems faced by SGCN in the Boston Mountains 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 3.10. Problems faced by SGCN.

Problem faced	Score
Urban development	2094
Forestry activities	1838
Grazing/Browsing	1741
Resource extraction	1682
Dam	1490
Agricultural practices	1482
Road construction	852
Confined animal operations	633
Municipal/Industrial point source	570

Fire suppression	452
Parasites/pathogens	392
Recreation	375
Channel alteration	343
Conversion of riparian forest	333
Water diversion	312
Channel maintenance	302
Commercial/Industrial development	294
Exotic species	241
Non-point source pollution	131
Excessive groundwater withdrawal	121
Predation	97
Management of/for certain species	46
Interspecific competition	29
Excessive non-commercial harvest or collection	27
Commercial harvest	24

Conservation actions needed in the Boston Mountains

Descriptions of conservation actions linked to individual species on the list of SGCN are presented in the Species Reports, pages 45-1082. Below are categories of conservation actions recommended by the taxa association teams (Figure 3.9).

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.

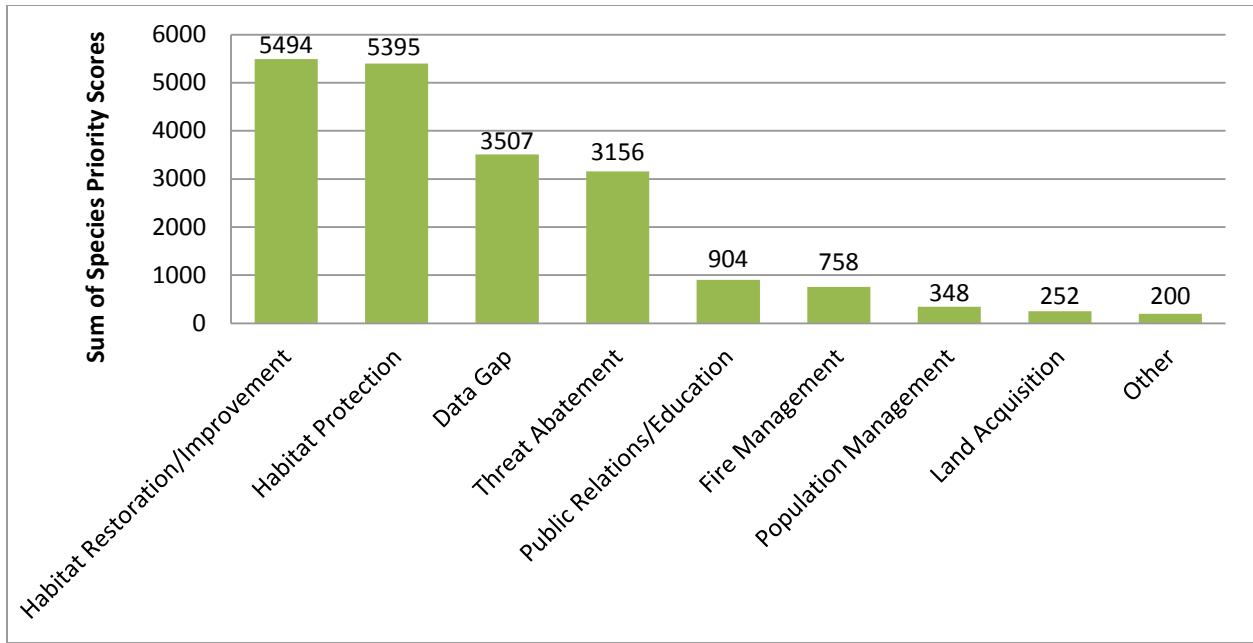


Figure 3.9. Conservation action categories recommended for the Boston Mountains.