

Section 4. Terrestrial Habitats

Components of Terrestrial Habitat Reports

Definition

The terrestrial habitat team described the terrestrial habitats of Arkansas in 38 types in Table 4.1. Thirty of 37 terrestrial habitat types in Arkansas were adapted from definitions provided by NatureServe (2005). The remaining seven habitat types (marked with an asterisk) were created for this project by the terrestrial habitat team.

Ranking

The Habitat Score (Table 4.1) of each terrestrial habitat is a sum of all Species Priority Scores associated with species for which this habitat is associated. A higher score implies a higher quantity of Species of Greatest Conservation Need (SGCN) and/or more greatly imperiled species occurred in the habitats listed below.

Table 4.1. Terrestrial Habitat Scores.

Habitat Name	Sum of Species Priority Scores
Caves, Mines, Sinkholes and other Karst Features	6925
Ozark-Ouachita Prairie and Woodland	3952
Ozark-Ouachita Riparian	3778
Ozark-Ouachita Mesic Hardwood Forest	2586
Ozark-Ouachita Dry Oak and Pine Woodland	2226
West Gulf Coastal Plain Calcareous Prairie and Woodland	1733
Pasture Land	1716
Ozark-Ouachita Pine-Oak Forest/Woodland	1650
Ozark-Ouachita Large Floodplain	1551
Lower Mississippi Alluvial Plain Grand Prairie	1515
Ozark-Ouachita Cliff and Talus	1503
West Gulf Coastal Plain Large River Floodplain Forest	1213
Lower Mississippi River High Bottomland Forest	1177
West Gulf Coastal Plain Small Stream/River Forest	1170
Lower Mississippi River Riparian Forest	1138
Ponds, Lakes, and Water Holes	1093
Ozark-Ouachita Dry-Mesic Oak Forest/Woodland	1070
Ozark-Ouachita Forested Seep	1055
Lower Mississippi Flatwoods Woodland and Forest	1053
Lower Mississippi River Low Bottomland Forest	1034
West Gulf Coastal Plain Red River Floodplain Forest	926

Interior Highlands Dry Acidic Glade and Barrens	905
Crop Land	876
Ozark-Ouachita Pine-Bluestem Woodland	872
Mud Flats	769
Herbaceous Wetland	738
Interior Highlands Calcareous Glade and Barrens	735
West Gulf Coastal Plain Pine-Hardwood Flatwoods	702
West Gulf Coastal Plain Seepage Swamp and Baygall	646
Ouachita Montane Oak Forest	625
Crowley's Ridge Loess Slope Forest	605
West Gulf Coastal Plain Pine-Hardwood Forest/Woodland	581
Lower Mississippi River Bottomland Depression	564
West Gulf Coastal Plain Wet Hardwood Flatwoods	450
West Gulf Coastal Plain Sandhill Oak and Shortleaf Pine	421
Urban/Suburban	403
Cultivated Forest	262
Lower Mississippi River Dune Woodland, Pond, and Forest	229

Key Factors

Each terrestrial habitat type is assigned “Key Factors” which describe those conditions most critical for maintaining the ecological function and viability of associated species. Key Factors (table 4.2) are ecological attributes deemed critical to the long-term integrity of a given habitat. The terrestrial habitat team determined the importance (weight) of the Key Factor to the overall habitat integrity.

Table 4.2. Key Factors.

Fire Regime
No-Activity Protection Zone
Canopy Closure
Composition
Percent Total Herbaceous Ground Coverage
Cave/Mine Accessibility
Disturbance Policy
Spatial Ecology
Remoteness
Recharge Area

Indicators of Terrestrial Habitat Condition

One or more measurable “Indicators” (Table 4.3) are identified for each Key Factor. The Indicator scoring criteria requires that habitat and/or population parameters of all species of conservation concern be expressed in terms that can be quantified, measured, monitored and influenced. This step also requires that each assumption, assertion and decision be supported by the best science available, including all known literature and expert opinion.

Table 4.3. Indicators of Terrestrial Habitat Condition.

Road density
Spatial extent of buffer
Canopy closure
Percent total herbaceous ground coverage
Exotic forbs and grasses
Exotic shrubs and woody vines
Broomsedge imbalance
Loblolly pine presence
Exotic forbs and grasses
Exotic forbs and grasses
Oak dominance
Red oak/Overcup oak ratio Cottonwood decline
Sugarberry increase
Oak component
Loblolly encroachment
Percent herbaceous groundcover w/minimal woody plants
Shortleaf pine decline
Percent total herbaceous ground coverage
Patch size
Patch proximity
Average block size
Number of blocks
Fire seasonality/intensity
Fire frequency
Road proximity
Percent urban/impervious
Percent forested
Percent pastureland
Point source pollution
Unpaved road density

Ratings for Indicators

For each Indicator, the terrestrial habitat team determined and weighted a range of measurements to assess the relative health of associated Key Factors, which in turn reflect the integrity of the associated habitat:

Poor Level: Rapid declines and/or extirpations imminent.

Fair Level: Gradual, long-term declines and/or extirpations possible.

Good Level: Populations are expected to remain stable indefinitely.

Very Good Level: Populations robust; increases in abundance possible.

Conservation Actions

Conservation actions propose to manage and conserve the identified habitats as determined by the Indicator thresholds. The threshold for viability of the species is defined for each habitat at the 'Good' level. Conservation actions were formulated for each habitat that call for bringing each Indicator's current status up to or above the 'Good' threshold. Using this methodology, 383 measurable conservation actions were formulated for the 38 habitat types using specific, quantified objectives for each Indicator.

Current Status and Monitoring

In addition to species-specific monitoring strategies presented in Section 2, Arkansas' habitat monitoring strategy consists of measuring indicators in the field. In developing the AWAP, we determined one area of weakness is that information on current status, trends and effort to attain goals is lacking. Developing a cost-effective methodology for monitoring status, coordinated with adjacent states and in-state partners, public and stakeholders will be a priority for the near future of AWAP efforts.

Habitat Name Caves, Mines, Sinkholes and other Karst Features



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Ecoregions where the habitat occurs:

- | | | | | |
|-------------------------------------|-------------------------------------|----------------------------|--------------------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley | Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |

Description

Karst is a landscape underlain by limestone that has been eroded by dissolution, producing ridges, towers, fissures, sinkholes, and other characteristic landforms. Caves refer to naturally occurring underground cavities, chambers, or series of chambers, especially ones with an opening in the side of a hill or mountain. Mines refer to man-made underground cavities, chambers, or series of chambers, especially ones with an opening in the side of a hill or mountain.

Species associated with this habitat type (and the weight or importance of the habitat to each species)

Caves, Mines, Sinkholes and other Karst Features

include:

Hubricht's Long-tailed Amphipod (*Allocrangonyx hubrichti*) Weight: Obligate
Foushee Cavesnail (*Amnicola cora*) Weight: Obligate
Cave Obligate Pseudoscorpion (*Apochthonius diabolus*) Weight: Obligate
Cave Obligate Pseudoscorpion (*Apochthonius titanicus*) Weight: Obligate
Amphipod (*Bactrurus pseudomucronatus*) Weight: Obligate
Isopod (*Caecidotea ancyla*) Weight: Obligate
Isopod (*Caecidotea dimorpha*) Weight: Obligate
Bat Cave Isopod (*Caecidotea macropropoda*) Weight: Obligate
Isopod (*Caecidotea oculata*) Weight: Obligate
Isopod (*Caecidotea salemensis*) Weight: Obligate
Cave Obligate Isopod (*Caecidotea simulator*) Weight: Obligate
Isopod (*Caecidotea steevesi*) Weight: Obligate
Isopod (*Caecidotea stiladactyla*) Weight: Obligate
Benton County Cave Crayfish (*Cambarus aculabrum*) Weight: Obligate
Bristly Cave Crayfish (*Cambarus setosus*) Weight: Obligate
Hell Creek Cave Crayfish (*Cambarus zophonastes*) Weight: Obligate
Cave Obligate Harvestman (*Crosbyella distincta*) Weight: Obligate
Cave Obligate Harvestman (*Crosbyella roeweri*) Weight: Obligate
Grotto Salamander "eastern clade" (*Eurycea spelaea eastern*) Weight: Obligate
Grotto Salamander "northern clade" (*Eurycea spelaea northern*) Weight: Obligate
Grotto Salamander "western clade" (*Eurycea spelaea western*) Weight: Obligate
Pseudoscorpion (*Hesperochernes occidentalis*) Weight: Obligate
Isopod (*Lirceus bidentatus*) Weight: Obligate
Springtail (*Pseudosinella dubia*) Weight: Obligate
Shelled Cave Springtail (*Pseudosinella testa*) Weight: Obligate
Springtail (*Pygmarrhopalites clarus*) Weight: Obligate
Cave Obligate Springtail (*Schaefferia alabamensis*) Weight: Obligate
Ozark Cave Amphipod (*Stygobromus ozarkensis*) Weight: Obligate
Cave Obligate Millipede (*Trigenotyla parca*) Weight: Obligate
Ozark Cavefish (*Troglichthys rosae*) Weight: Obligate
Southern Cavefish (*Typhlichthys subterraneus*) Weight: Obligate
Ringed Salamander (*Ambystoma annulatum*) Weight: Optimal
Eastern Tiger Salamander (*Ambystoma tigrinum*) Weight: Optimal
Ozark Big-eared Bat (*Corynorhinus townsendii ingens*) Weight: Optimal
Cave Obligate Planarian (*Dendrocoelopsis americana*) Weight: Optimal
Four-toed Salamander (*Hemidactylium scutatum*) Weight: Optimal
Isopod (*Lirceus bicuspidatus*) Weight: Optimal
Wood Frog (*Lithobates sylvaticus*) Weight: Optimal
Gray Bat (*Myotis grisescens*) Weight: Optimal
Little Brown Bat (*Myotis lucifugus*) Weight: Optimal
Northern Long-eared Bat (*Myotis septentrionalis*) Weight: Optimal
Indiana Bat (*Myotis sodalis*) Weight: Optimal
Ground Beetle (*Rhadine ozarkensis*) Weight: Optimal
Caddo Mountain Salamander (*Plethodon caddoensis*) Weight: Suitable
Southeastern Shrew (*Sorex longirostris*) Weight: Marginal

Habitat Team

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Habitat Priority Score: 6925

Caves, Mines, Sinkholes and other Karst Features

Key Factor Name Cave/Mine Accessibility

Key Factor Description: Percent of caves/mines housing species of greatest conservation need that are closed to disturbance.

Key Factor Weight: Medium

Indicator Name: Road Proximity

Indicator Description: Distance to nearest public road from cave entrance.

Poor Level: <.25 mile

Fair Level: .25-.5 mile

Good Level: 0.5-1 mile

Very Good Level: >1 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the distance from the nearest public road to cave entrance to .5 more or more.

Monitoring Strategy: Monitor distance to nearest public road from cave entrance.

Indicator Name: Percent gated or fenced caves/mines

Indicator Description: The percent of known caves and mines that have been successfully gated.

Poor Level: <20

Fair Level: 20-40

Good Level: 40-60

Very Good Level: >60

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Build or maintain gates in 40 percent or more of the caves and mines known to have ecologically sensitive biota.

Monitoring Strategy: Monitor percent of known caves and mines that have been successfully gated.

Key Factor Name Recharge area

Key Factor Description: The surface and sub-surface hydrologic area contributing water and the compounds (nutrients/sediments/pollutants) water carries to the cave system.

Key Factor Weight: High

Indicator Name: Point source pollution

Indicator Description: Number of Point Source Pollution permits per square mile in the recharge area.

Poor Level: 0.465-0.297

Fair Level: 0.296-0.184

Good Level: 0.183-0.036

Very Good Level: <0.036

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or reduce the number of Point Source Pollution permits to .183 or fewer per square mile in the recharge area.

Monitoring Strategy: Monitor number of Point Source Pollution permits per square mile in the recharge area.

Indicator Name: Percent Forested

Indicator Description: Percent total land cover in the recharge area that is forested.

Poor Level: <25

Fair Level: 25-50

Good Level: 50-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the total land cover in the recharge area that is forested to 50 percent or more.

Monitoring Strategy: Monitor percent total land cover in the recharge area that is forested.

Key Factor Name Recharge area

Indicator Name:	Unpaved road density
Indicator Description:	Miles of unpaved road per square mile of recharge area.
Poor Level:	>2 miles
Fair Level:	1-2 miles
Good Level:	0.5-1 mile
Very Good Level:	<0.5 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the miles of unpaved road per square mile of recharge area to one or less.
Monitoring Strategy:	Monitor miles of unpaved road per square mile of recharge area.
Indicator Name:	Percent Urban/impervious
Indicator Description:	The percent of total land cover in the recharge area that is urban/impervious.
Poor Level:	>25
Fair Level:	15-25
Good Level:	5-15
Very Good Level:	<5
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the total land cover in the recharge area that is urban/impervious to 15 percent or less.
Monitoring Strategy:	Monitor percent total land cover in the recharge area that is urban/impervious.

Key Factor Name Recharge area

Indicator Name:	Percent pasture land
Indicator Description:	Percent total land cover in the recharge area that is pasture land.
Poor Level:	>75
Fair Level:	50-75
Good Level:	25-50
Very Good Level:	<25
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the total land cover in the recharge area that is pasture land to 50 percent or less.
Monitoring Strategy:	Monitor percent total land cover in the recharge area that is pasture land.

Habitat Name Crop Land



Ecoregions where the habitat occurs:

- Ozark Highlands
- Boston Mountains
- Mississippi Valley
- Loess Plains
- Arkansas Valley
- Ouachita Mountains
- South Central Plains
- Mississippi Alluvial Plain

Description

This type includes cultivated fields or aquaculture ponds, often many acres in size, managed specifically for a single crop. Occasional edges around the perimeter provide some habitat diversity.

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

- American Black Duck (*Anas rubripes*) Weight: Suitable
- Trumpeter Swan (*Cygnus buccinator*) Weight: Suitable
- Migrant Loggerhead Shrike (*Lanius ludovicianus*) Weight: Suitable
- Short-billed Dowitcher (*Limnodromus griseus*) Weight: Suitable
- American Golden-Plover (*Pluvialis dominica*) Weight: Suitable

Crop Land

American Badger (*Taxidea taxus*) Weight: Suitable
Grasshopper Sparrow (*Ammodramus savannarum*) Weight: Marginal
Sprague's Pipit (*Anthus spragueii*) Weight: Marginal
Ruddy Turnstone (*Arenaria interpres*) Weight: Marginal
Smith's Longspur (*Calcarius pictus*) Weight: Marginal
Sanderling (*Calidris alba*) Weight: Marginal
Dunlin (*Calidris alpina*) Weight: Marginal
Stilt Sandpiper (*Calidris himantopus*) Weight: Marginal
Buff-breasted Sandpiper (*Calidris subruficollis*) Weight: Marginal
Piping Plover (*Charadrius melodus*) Weight: Marginal
Common Nighthawk (*Chordeiles minor*) Weight: Marginal
Northern Bobwhite (*Colinus virginianus*) Weight: Marginal
Rusty Blackbird (*Euphagus carolinus*) Weight: Marginal
Ozark Pocket Gopher (*Geomys bursarius ozarkensis*) Weight: Marginal
Least Bittern (*Ixobrychus exilis*) Weight: Marginal
Black-tailed Jackrabbit (*Lepus californicus*) Weight: Marginal
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Marginal
Black-bellied Plover (*Pluvialis squatarola*) Weight: Marginal
Purple Gallinule (*Porphyrio martinicus*) Weight: Marginal
Illinois Chorus Frog (*Pseudacris illinoensis*) Weight: Marginal
Strecker's Chorus Frog (*Pseudacris streckeri*) Weight: Marginal
King Rail (*Rallus elegans*) Weight: Marginal
Western Harvest Mouse (*Reithrodontomys megalotis*) Weight: Marginal
Eastern Spadefoot (*Scaphiopus holbrookii*) Weight: Marginal
Hurter's Spadefoot (*Scaphiopus hurterii*) Weight: Marginal
American Woodcock (*Scolopax minor*) Weight: Marginal
Eastern Spotted Skunk (*Spilogale putorius*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

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Habitat Priority Score: 876

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Habitat Name Crowley's Ridge Loess Slope Forest



Ecoregions where the habitat occurs:

- Ozark Highlands Boston Mountains Mississippi Valley Loess Plains Arkansas Valley
Ouachita Mountains South Central Plains Mississippi Alluvial Plain

Description

This system of upland forests is confined to a series of narrow ridges on Crowley's Ridge. This vegetation is very distinctive from that of the adjacent alluvial plain, and may represent the only forested terrain in a largely agricultural landscape. The ridges themselves also contrast sharply with the adjacent alluvial plain. It is a remnant loess-capped features rising from 100-200 feet above the alluvial plain surface. These are generally mesic and dry-mesic forests that occupy narrow, "finger" ridges and slopes in a highly dissected landscape. In many cases, these slopes and ravines provide habitat for plant species that are rare or absent from other parts of the alluvial plain (e.g., *Liriodendron tulipifera*). In the ravines and slopes, canopies are dominated by *Fagus grandifolia*, *Quercus alba*, and *Liriodendron tulipifera*, with many associates. Forests on the ridgetops are dominated by *Quercus alba*, *Quercus rubra*, *Quercus falcata*, *Quercus stellata*, *Carya texana*, *Pinus echinata* and *Quercus velutina*.

Crowley's Ridge Loess Slope Forest

(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Common Wormsnake (*Carphophis amoenus*) Weight: Obligate
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Optimal
Spotted Dusky Salamander (*Desmognathus conanti*) Weight: Optimal
Mole Salamander (*Ambystoma talpoideum*) Weight: Suitable
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Monarch (*Danaus plexippus*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Wood Thrush (*Hylocichla mustelina*) Weight: Suitable
Swainson's Warbler (*Limnothlypis swainsonii*) Weight: Suitable
Bronze Copper (*Lycaena hyllus*) Weight: Suitable
Eastern Spadefoot (*Scaphiopus holbrookii*) Weight: Suitable
American Woodcock (*Scolopax minor*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Marginal
Cerulean Warbler (*Setophaga cerulea*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

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Habitat Priority Score: 605

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Frequency

Indicator Description: Average percent of all known occurrences burned per 3-7 year interval.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-7 years.

Monitoring Strategy: Monitor average percent of all known occurrences burned per 3-7 year interval.

Key Factor Name Fire Regime

Indicator Name:	Fire Seasonality/Intensity
Indicator Description:	The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.
Monitoring Strategy:	Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: 0-1

Fair Level: 2

Good Level: 3

Very Good Level: >3

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >4 miles

Fair Level: 2-4 miles

Good Level: 1-2 miles

Very Good Level: <1 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<250 acres
Fair Level:	250-500 acres
Good Level:	501-1,000 acres
Very Good Level:	>1,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 501 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).
Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<2,500 acres
Fair Level:	2,500-5,000 acres
Good Level:	5,001-10,000 acres
Very Good Level:	>10000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 5,001 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.

Habitat Name Cultivated Forest



Ecoregions where the habitat occurs:

- | | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |

Description

This type includes plantations primarily composed of pine with regularly spaced trees planted for commercial production and subject to periodic silvicultural maintenance. This habitat type is extensive in Arkansas and is used by many species of conservation concern. Key factors and Indicators have often been derived in relationship to species of concern that use this habitat. In some cases, this habitat replaces native terrestrial habitats and may be of conservation concern from that standpoint.

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

- Sharp-shinned Hawk (*Accipiter striatus*) Weight: Suitable
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Suitable

Cultivated Forest

Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Cobweb Skipper (*Hesperia metea*) Weight: Suitable
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Marginal
Northern Bobwhite (*Colinus virginianus*) Weight: Marginal
Wood Thrush (*Hylocichla mustelina*) Weight: Marginal
Swainson's Warbler (*Limnothlypis swainsonii*) Weight: Marginal
Bachman's Sparrow (*Peucaea aestivalis*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

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Habitat Priority Score: 262

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Bedding or Hipping

Indicator Description: The percent area where raised beds are created for tree planting

Poor Level: >20

Fair Level: 10-19

Good Level: 5-9

Very Good Level: <5

Current_Status:

Indicator Weight: High

Conservation Action: Maintain or, where necessary restore, the percentage of bedded or hipped areas to nine percent or less.

Monitoring Strategy: Monitor percent of area where raised beds are created for tree planting.

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Key Factor Name Composition

Indicator Name:	Exotic Forbs and Grasses
Indicator Description:	The percent of ground cover in non-native herbaceous species
Poor Level:	>20
Fair Level:	10-20
Good Level:	5-9
Very Good Level:	<5
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.
Monitoring Strategy:	Monitor the percent of ground cover in non-native herbaceous species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences burned per 3-5 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-5 years.
Monitoring Strategy:	Monitor average percent of all known occurrences burned per 3-5 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >4 miles

Fair Level: 2-4 miles

Good Level: 1-2 miles

Very Good Level: <1 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Indicator Name: Patch Size

Indicator Description: Average patch size across all known occurrences (acres)

Poor Level: <250 acres

Fair Level: 250-500 acres

Good Level: 501-1,000 acres

Very Good Level: >1,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average patch size of this habitat type to 501 acres or more across all known occurrences.

Monitoring Strategy: Monitor average patch size across all known occurrences (acres).

Key Factor Name Spatial Ecology

Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.
Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<2,499 acres
Fair Level:	2,500-5,000 acres
Good Level:	5,001-10,000 acres
Very Good Level:	>10,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 5,001 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.

Habitat Name Herbaceous Wetland



Ecoregions where the habitat occurs:

- Ozark Highlands
- Boston Mountains
- Mississippi Valley Loess Plains
- Arkansas Valley
- Ouachita Mountains
- South Central Plains
- Mississippi Alluvial Plain

Description

This system represents semipermanently flooded to saturated depressional areas. They are typically created by changes in channels of meandering streams or other depressions, or by anthropogenic activity. These may occur both within and outside the frequently flooded bottoms where the river flows. Vegetation typically includes *Typha latifolia*, *Juncus* spp and *Scirpus* spp. This broad habitat type includes wetlands across Arkansas in both the Interior Highlands and the Coastal Plain/Mississippi River Alluvial Plain that have a substantial cover of emergent herbaceous vegetation (>25%), with limited cover of woody shrubs (<25% of vegetated cover) and no or only scattered trees. Natural types occur in depressions within prairies, in active or abandoned beaver ponds, on the margins of oxbow lakes, in sinkhole and upland depression ponds, and where forested wetlands have been deforested by catastrophic fire, winds or other natural processes. Semi-Natural and Ruderal types occur within or on

Herbaceous Wetland

the margins of constructed reservoirs or in areas where drainage has been blocked or forest cover has been removed by anthropogenic activity. Vegetation zones often exist, typically related to water depth, characterized by such species (from deepest to shallowest) as cattail, spike rush, prairie cordgrass, gammagrass and switchgrass. Southern wild rice is common or abundant in some areas. Mudflats occur when water levels drop, and "moist soil" species such as smartweed may become abundant.

Alligatorweed may become abundant to the south, and a variety of sedges, along with water primrose, arrowhead and needle-rush are common.

These habitats are important to reptiles, amphibians and of special concern, secretive marsh birds such as rails, gallinules and bitterns, along with herons and egrets. During wet months the habitats host dabbling ducks.

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

American Bittern (*Botaurus lentiginosus*) Weight: Optimal
Sedge Wren (*Cistothorus platensis*) Weight: Optimal
Trumpeter Swan (*Cygnus buccinator*) Weight: Optimal
Dion Skipper (*Euphyes dion*) Weight: Optimal
Dukes' Skipper (*Euphyes dukesi*) Weight: Optimal
Common Gallinule (*Gallinula galeata*) Weight: Optimal
Least Bittern (*Ixobrychus exilis*) Weight: Optimal
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Optimal
Purple Gallinule (*Porphyrio martinicus*) Weight: Optimal
King Rail (*Rallus elegans*) Weight: Optimal
Tricolored Heron (*Egretta tricolor*) Weight: Suitable
Bronze Copper (*Lycaena hyllus*) Weight: Suitable
Swamp Metalmark (*Calephelis muticum*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 738

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: High

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy:

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species.

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/
Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept., or from leaf-expansion to leaf-fall, depending on project-level goals. In some, but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn, it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire frequency
Indicator Description:	Average percent of all known occurrences plus 100 meter buffer burned per 5-100 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent plus 100 meter buffer of all known occurrences of this habitat type every 2-5 years.
Monitoring Strategy:	Monitor the average percent of all known occurrences plus 100 meter buffer burned per 2-10 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: > 2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Average Block Size

Indicator Description: Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.

Poor Level: <1,000 acres

Fair Level: 1,000-2,000 acres

Good Level: 2,000-4,000 acres

Very Good Level: >4,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore average block size to 2,000 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor block size.

Key Factor Name Spatial Ecology

Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.
Indicator Name:	Patch Size
Indicator Description:	Width of buffer (meters)
Poor Level:	<100 meters of buffer
Fair Level:	100-250 meters of buffer
Good Level:	251-400 meters of buffer
Very Good Level:	>400 meters of buffer
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain, or where necessary, buffer known occurrences of this habitat type with a minimum of 251 meters of adjacent but dissimilar habitats.
Monitoring Strategy:	Monitor width of buffer (meters).

Key Factor Name Spatial Ecology

Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>3200 meters
Fair Level:	1601-3200 meters
Good Level:	800-1600 meters
Very Good Level:	<800 meters
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average distance between patches to 1,600 meters or less.
Monitoring Strategy:	Monitor median nearest distance between patches.
Indicator Name:	Patch Size
Indicator Description:	Area of patch
Poor Level:	<0.5 ha
Fair Level:	0.5 ha
Good Level:	1.0 ha
Very Good Level:	>2.0 ha
Current_Status:	
Indicator Weight:	Medium
Conservation Action:	Maintain, or where possible, enlarge known occurrences of this habitat to 0.1 ha.
Monitoring Strategy:	Monitor width of buffers (meters).

Habitat Name Interior Highlands Calcareous Glade and Barrens



Ecoregions where the habitat occurs:

- | | | | |
|-------------------------------------|-------------------------------------|---------------------------------|--------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Description

This system is found along moderate to steep slopes and steep valleys on primarily southerly to westerly facing slopes. Limestone, dolomite or shale bedrock typify this system with shallow, moderately to well-drained soils interspersed with rocks. These soils often dry out during the summer and autumn, and then become saturated during the winter and spring. *Schizachyrium scoparium* dominates this system and is commonly associated with *Andropogon gerardii*, *Bouteloua curtipendula*, and calcium-loving plant species. Stunted woodlands primarily dominated by *Quercus muehlenbergii* interspersed with *Juniperus virginiana* occur on variable-depth-to-bedrock soils. Fire is the primary natural dynamic, and prescribed fires help manage this system by restricting woody growth and maintaining the more open glade structure. These systems are usually small, isolated, and/or disjunct and are often embedded in a larger habitat matrix. These systems rely heavily on surrounding and/or adjacent habitats for landscape scale

Interior Highlands Calcareous Glade and Barrens

functions and processes such as fire. (adapted from Natureserve 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Eastern Collared Lizard (*Crotaphytus collaris*) Weight: Obligate
Western Groundsnake (*Sonora semiannulata*) Weight: Obligate
Northern Metalmark (*Calephelis borealis*) Weight: Optimal
Scrubland Tiger Beetle (*Cicindela obsoleta*) Weight: Optimal
Baltimore Checkerspot (*Euphydryas phaeton ozarkae*) Weight: Optimal
Common Nighthawk (*Chordeiles minor*) Weight: Suitable
Outis Skipper (*Cogia outis*) Weight: Suitable
Monarch (*Danaus plexippus*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Cobweb Skipper (*Hesperia metea*) Weight: Suitable
Crawford's Gray Shrew (*Notiosorex crawfordi*) Weight: Suitable
Slender Glass Lizard (*Ophisaurus attenuatus*) Weight: Suitable
Diana (*Speyeria diana*) Weight: Suitable
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap
Bewick's Wren (*Thryomanes bewickii*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 735

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Low

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: High

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences plus 100 meter buffer burned per 3-5 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent plus 100 meter buffer of all known occurrences of this habitat type every 3-5 years.
Monitoring Strategy:	Monitor average percent of all known occurrences plus 100 meter buffer burned per 3-5 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Average Block Size

Indicator Description: Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.

Poor Level: <500 acres

Fair Level: 500-1,000 acres

Good Level: 1,001-2,000 acres

Very Good Level: >2,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore average block size to 1,001 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor block size.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>2.5 miles
Fair Level:	1-2.5 miles
Good Level:	0.5-1 mile
Very Good Level:	<0.5 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to one mile or less.
Monitoring Strategy:	Monitor median nearest distance between patches.
Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<10 acres
Fair Level:	10-30 acres
Good Level:	31-100 acres
Very Good Level:	>100 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 31 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).

Habitat Name Interior Highlands Dry Acidic Glade and Barrens



Ecoregions where the habitat occurs:

- Ozark Highlands Boston Mountains Mississippi Valley Loess Plains Arkansas Valley
Ouachita Mountains South Central Plains Mississippi Alluvial Plain

Description

This system occurs along moderate to steep slopes or valley walls of rivers along most aspects. Parent material includes chert, shale and/or sandstone bedrock with well- to excessively well-drained, shallow soils interspersed with rock and boulders. These soils are typically dry during the summer and autumn, becoming saturated during the spring and winter. Grasses such as *Schizachyrium scoparium* and *Sorghastrum nutans* dominate this system with stunted oak species *Quercus stellata*, *Quercus marilandica* and shrub species such as *Vaccinium* spp. Occurring on variable depth soils. This system is influenced by drought and infrequent to occasional fires. Prescribed fires help manage this system by maintaining an open glade structure.

EMBEDDED: These systems are usually small, isolated, and/or disjunct and are often "embedded" in a larger habitat matrix. These systems rely heavily on surrounding and/or adjacent habitats for landscape

Interior Highlands Dry Acidic Glade and Barrens

scale functions and processes such as fire. (adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Eastern Collared Lizard (*Crotaphytus collaris*) Weight: Obligate
Western Groundsnake (*Sonora semiannulata*) Weight: Obligate
Northern Metalmark (*Calephelis borealis*) Weight: Optimal
Western Diamond-backed Rattlesnake (*Crotalus atrox*) Weight: Optimal
Baltimore Checkerspot (*Euphydryas phaeton ozarkae*) Weight: Optimal
Great Plains Skink (*Plestiodon obsoletus*) Weight: Optimal
Rufous-crowned Sparrow (*Aimophila ruficeps*) Weight: Suitable
Common Nighthawk (*Chordeiles minor*) Weight: Suitable
Outis Skipper (*Cogia outis*) Weight: Suitable
Northern Bobwhite (*Colinus virginianus*) Weight: Suitable
Monarch (*Danaus plexippus*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Cobweb Skipper (*Hesperia metea*) Weight: Suitable
Crawford's Gray Shrew (*Notiosorex crawfordi*) Weight: Suitable
Slender Glass Lizard (*Ophisaurus attenuatus*) Weight: Suitable
Diana (*Speyeria diana*) Weight: Suitable
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Marginal
Bewick's Wren (*Thryomanes bewickii*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 905

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Low

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: High

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: High

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences plus 100 meter buffer burned per 3-5 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent plus 100 meter buffer of all known occurrences of this habitat type every 3-5 years.
Monitoring Strategy:	Monitor average percent of all known occurrences plus 100 meter buffer burned per 3-5 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape. The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Average Block Size

Indicator Description: Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.

Poor Level: <250 acres

Fair Level: 250-500 acres

Good Level: 501-1,000 acres

Very Good Level: >1,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore average block size to 501 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor block size.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>2.5 miles
Fair Level:	1-2.5 miles
Good Level:	0.5-1 mile
Very Good Level:	<0.5 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to one mile or less.
Monitoring Strategy:	Monitor median nearest distance between patches.
Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<5 acres
Fair Level:	5-10 acres
Good Level:	10-30 acres
Very Good Level:	>30 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 10 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).

Key Factor Name Spatial Ecology

Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.

Habitat Name Lower Mississippi Alluvial Plain Grand Prairie



Ecoregions where the habitat occurs:

- | | | | |
|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |

Description

This system of prairies and woodlands occurs on the oldest substantial land surfaces in the Mississippi River Alluvial Valley and the highest land surface in the river-deposited portions of the Mississippi Alluvial Plain ecoregion. It occupies a very flat region up to 20 miles wide and 60 miles long bounded by present day rivers, especially the Arkansas and White, which are much lower in elevation than the Grand Prairie terrace. This terrace is covered with thin soils underlain by deep layers of impervious clay. The surface soils have been considered to be loess by some sources but are more likely silts and silty clays (T. Foti pers. comm.). Although productive, these soils are droughty due to the impervious clay subsoils. The combination of droughty soils, very flat topography, and the lack of major stream corridors in the region create conditions suitable to the ignition and spread of fires. Almost annual fires would have been necessary to maintain these prairies, and anthropogenic influences have been critical for probably

Lower Mississippi Alluvial Plain Grand Prairie

5,000 years. The vegetation includes both wet and dry prairies as well as "slashes" dominated by *Fraxinus pennsylvanica* and *Crataegus* spp. (adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Prairie Mole Cricket (*Gryllotalpa major*) Weight: Obligate
Le Conte's Sparrow (*Ammodramus leconteii*) Weight: Optimal
Common Nighthawk (*Chordeiles minor*) Weight: Optimal
Sedge Wren (*Cistothorus platensis*) Weight: Optimal
Northern Bobwhite (*Colinus virginianus*) Weight: Optimal
Monarch (*Danaus plexippus*) Weight: Optimal
Migrant Loggerhead Shrike (*Lanius ludovicianus*) Weight: Optimal
Slender Glass Lizard (*Ophisaurus attenuatus*) Weight: Optimal
King Rail (*Rallus elegans*) Weight: Optimal
Ornate Box Turtle (*Terrapene ornata*) Weight: Optimal
Red Milkweed Beetle (*Tetraopes quinque maculatus*) Weight: Optimal
Henslow's Sparrow (*Ammodramus henslowii*) Weight: Suitable
Grasshopper Sparrow (*Ammodramus savannarum*) Weight: Suitable
American Black Duck (*Anas rubripes*) Weight: Suitable
Chicken Turtle (*Deirochelys reticularia*) Weight: Suitable
Tricolored Heron (*Egretta tricolor*) Weight: Suitable
Willow Flycatcher (*Empidonax traillii*) Weight: Suitable
American Kestrel (*Falco sparverius*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Suitable
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Suitable
American Golden-Plover (*Pluvialis dominica*) Weight: Suitable
Graham's Crayfish Snake (*Regina grahamii*) Weight: Suitable
Eastern Spadefoot (*Scaphiopus holbrookii*) Weight: Suitable
American Woodcock (*Scolopax minor*) Weight: Suitable
Bell's Vireo (*Vireo bellii*) Weight: Suitable
Sprague's Pipit (*Anthus spragueii*) Weight: Marginal
American Bittern (*Botaurus lentiginosus*) Weight: Marginal
Smith's Longspur (*Calcarius pictus*) Weight: Marginal
Buff-breasted Sandpiper (*Calidris subruficollis*) Weight: Marginal
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 1515

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: High

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Key Factor Name Composition

Indicator Name:	Broomsedge imbalance
Indicator Description:	The percent broomsedge coverage among ground vegetation
Poor Level:	>20
Fair Level:	10-20
Good Level:	5-9
Very Good Level:	<5
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the percent broomsedge coverage among ground vegetation to nine percent or less.
Monitoring Strategy:	Monitor percent of broomsedge coverage among ground vegetation.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences plus 100 meter buffer burned per 2-4 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent plus 100 meter buffer of all known occurrences of this habitat type every 2-4 years.
Monitoring Strategy:	Monitor average percent of all known occurrences plus 100 meter buffer burned per 2-4 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Average Block Size

Indicator Description: Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.

Poor Level: <1,000 acres

Fair Level: 1,000-2,499 acres

Good Level: 2,500-5,000 acres

Very Good Level: >5,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore average block size to 2,500 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor block size.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>2.5 miles
Fair Level:	1-2.5 miles
Good Level:	0.5-1 mile
Very Good Level:	<0.5 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to one mile or less.
Monitoring Strategy:	Monitor median nearest distance between patches.
Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<100 acres
Fair Level:	100-249 acres
Good Level:	250-500 acres
Very Good Level:	>500 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 250 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).

Key Factor Name Spatial Ecology

Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.

Habitat Name Lower Mississippi Flatwoods Woodland and Forest



Ecoregions where the habitat occurs:

- | | | | |
|--------------------------|--------------------------|-------------------------------------|--------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | |

Description

This system is composed of forests, prairies and woodlands on Pleistocene terraces in the Mississippi Alluvial Plain ecoregion. It occurs primarily west of Crowley's Ridge on Pleistocene glacial outwash deposits in Arkansas and Missouri, and on Macon Ridge in Louisiana and Arkansas. The sites are above modern floodplains, but have poor internal drainage and are flat with poor runoff, leading to very wet conditions in winter and spring. They also often have a claypan that restricts both internal drainage and, later in the year, water availability. Therefore they are very wet in the winter/spring and very dry in the summer, a moisture regime termed hydroxeric. Because of this moisture regime, the communities are variable, ranging from willow oak flats to post oak flats to prairies. In the 1940s, the Arkansas Game and Fish Commission produced a wildlife habitat map of Arkansas in which these sites were classified as "terrace hardwood forests". These communities have a large variety of upland and lowland tree

species, ranging from post oak to overcup oak in a small area. Such species diversity may be explained by regeneration of species with dramatically different moisture tolerances on the same site in dry and wet years on these hydroxeric sites. Because the sites are above current floodplains and susceptible to being drained, they have been cleared at an even greater rate than nearby floodplain forests. (adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Optimal
Southeastern Bat (*Myotis austroriparius*) Weight: Optimal
American Black Duck (*Anas rubripes*) Weight: Suitable
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Suitable
Common Wormsnake (*Carphophis amoenus*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Monarch (*Danaus plexippus*) Weight: Suitable
Chicken Turtle (*Deirochelys reticularia*) Weight: Suitable
Swallow-tailed Kite (*Elanoides forficatus*) Weight: Suitable
Rusty Blackbird (*Euphagus carolinus*) Weight: Suitable
Dukes' Skipper (*Euphyes dukesi*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Meske's Skipper (*Hesperia meskei*) Weight: Suitable
Bronze Copper (*Lycaena hyllus*) Weight: Suitable
Gray Comma (*Polygonia progne*) Weight: Suitable
Eastern Spadefoot (*Scaphiopus holbrookii*) Weight: Suitable
American Woodcock (*Scolopax minor*) Weight: Suitable
Diana (*Speyeria diana*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Marginal
Northern Bobwhite (*Colinus virginianus*) Weight: Marginal
Tricolored Heron (*Egretta tricolor*) Weight: Marginal
Wood Thrush (*Hylocichla mustelina*) Weight: Marginal
Swainson's Warbler (*Limnothlypis swainsonii*) Weight: Marginal
Southeastern Bat (*Myotis austroriparius*) Weight: Marginal
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Marginal
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Marginal
Cerulean Warbler (*Setophaga cerulea*) Weight: Marginal
Southern Bog Lemming (*Synaptomys cooperi*) Weight: Marginal
Bewick's Wren (*Thryomanes bewickii*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap
Illinois Chorus Frog (*Pseudacris illinoensis*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 1053

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Indicator Name: Loblolly pine presence

Indicator Description: The percent of loblolly crown cover among dominant canopy trees

Poor Level: >20

Fair Level: 10-20%

Good Level: 5-9%

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: High

Conservation Action: Maintain or, where necessary, restore the total percentage of loblolly crown cover among dominant canopy trees to nine percent or less.

Monitoring Strategy: Monitor percent of loblolly crown cover among dominant canopy trees.

Key Factor Name Composition

Indicator Name:	Exotic Forbs and Grasses
Indicator Description:	The percent of ground cover in non-native herbaceous species
Poor Level:	>20
Fair Level:	10-20
Good Level:	5-9
Very Good Level:	<5
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.
Monitoring Strategy:	Monitor the percent of ground cover in non-native herbaceous species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Frequency

Indicator Description: Average percent of all known occurrences burned per 3-7 year interval.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-7 years.

Monitoring Strategy: Monitor average percent of all known occurrences burned per 3-7 year interval.

Key Factor Name Fire Regime

Indicator Name:	Fire Seasonality/Intensity
Indicator Description:	The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.
Monitoring Strategy:	Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: 0-1

Fair Level: 2

Good Level: 3

Very Good Level: >3

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >4 miles

Fair Level: 2-4 miles

Good Level: 1-2 miles

Very Good Level: <1 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<250 acres
Fair Level:	250-500 acres
Good Level:	501-1,000 acres
Very Good Level:	>1,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 501 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).
Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<2,499 acres
Fair Level:	2,500-5,000 acres
Good Level:	5,001-10000 acres
Very Good Level:	>10000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 5,001 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.

Habitat Name Lower Mississippi River Bottomland Depression



Ecoregions where the habitat occurs:

- Ozark Highlands Boston Mountains Mississippi Valley Loess Plains Arkansas Valley
Ouachita Mountains South Central Plains Mississippi Alluvial Plain

Description

This system represents semipermanently flooded to saturated depressional areas. They are typically created by changes in channels of meandering streams and depending on time since abandonment by the river, character may vary from large oxbow swamps to small saturated swales. These may occur both within and outside the frequently flooded bottoms where the river flows. Vegetation ranges from cypress-tupelo swamp to *Quercus lyrata* forest.

(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Lower Mississippi River Bottomland Depression

Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) Weight: Optimal
Southeastern Bat (*Myotis austroriparius*) Weight: Optimal
American Black Duck (*Anas rubripes*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Chicken Turtle (*Deirochelys reticularia*) Weight: Suitable
Tricolored Heron (*Egretta tricolor*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Glossy Swampsnake (*Liodytes rigida*) Weight: Suitable
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Suitable
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Suitable
Southern Bog Lemming (*Synaptomys cooperi*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Marginal
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Marginal
American Woodcock (*Scolopax minor*) Weight: Marginal
Lincoln Underwing (*Catocala lincolnana*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 564

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: High

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences plus 100 meter buffer burned per 5-100 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent plus 100 meter buffer of all known occurrences of this habitat type every 5-100 years.
Monitoring Strategy:	Monitor average percent of all known occurrences plus 100 meter buffer burned per 5-100 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Size

Indicator Description: Width of buffer (meters)

Poor Level: <100 meters of buffer

Fair Level: 100-250 meters of buffer

Good Level: 251-400 meters of buffer

Very Good Level: >400 meters of buffer

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or ,where necessary, buffer known occurrences of this habitat type with a minimum of 251 meters of adjacent but dissimilar habitats.

Monitoring Strategy: Monitor width of buffer (meters).

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: 0-1

Fair Level: 2

Good Level: 3

Very Good Level: >3

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<1,000 acres
Fair Level:	1,000-2,000 acres
Good Level:	2,000-4,000 acres
Very Good Level:	>4,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 2,000 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>3200 meters
Fair Level:	1601-3200 meters
Good Level:	800-1600 meters
Very Good Level:	<800 meters
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average distance between patches to 1,600 meters or less.
Monitoring Strategy:	Monitor median nearest distance between patches.

Habitat Name Lower Mississippi River Dune Woodland, Pond, and Forest



Photo courtesy of ANHC

Ecoregions where the habitat occurs:

- | | | | | |
|--------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley | Loess Plains | Arkansas Valley |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | | |

Description

This system represents the vegetation of sand dunes and related eolian features. These Pleistocene dunes were overlooked or unrecognized until the late 1970s (Saucier 1978). This fact coupled with long periods of weathering and human disturbance, as well as proximity to a terrace mapped as "prairie" in General Land Office records, has led to considerable confusion regarding this type (T. Foti pers. comm.). These dunes are near Crowley's Ridge and the Black and White rivers, above the normal flood level of the Mississippi. Examples in Missouri occur amidst a series of low-lying, anastomosing channels that have helped to protect them from extensive alteration more typical in Arkansas where the uplands have been largely cleared. The uppermost portions of the dunes support a xeric community similar to sandhills of the South Central Plains, but are outside the natural range of some species in that

ecoregion. Instead the dunes support very open *Quercus stellata* woodlands with *Schizachyrium scoparium* and abundant lichen cover (presumably *Cladonia* spp.), along with *Opuntia* sp. Less edaphically extreme slopes support more closed-canopied forests in which *Quercus stellata* is still important, along with *Quercus falcata* and possibly other species. In many instances, distinctive wetlands are also present. Called "sand ponds" in Arkansas, these depressions have silty bottoms and perched water tables. The margin of these ponds are rimmed by *Quercus phellos* and have *Quercus lyrata*.

(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Marginal
Common Nighthawk (*Chordeiles minor*) Weight: Marginal
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Marginal
Northern Bobwhite (*Colinus virginianus*) Weight: Marginal
Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) Weight: Marginal
Eastern Harvest Mouse (*Reithrodontomys humulis*) Weight: Marginal
American Woodcock (*Scolopax minor*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

ANHC Mr. Tom Foti, TNC Mr. Doug Zollner, AGFC Ms. Elizabeth Murray, Audubon Arkansas Mr. Ken Smith, Conservation Southeast Mr. Jeff Holmes, AGFC Mr. Jeff Johnston, AGFC Ms. Jane Anderson, FTN Associates Mr. Don Catenzaro

Habitat Priority Score: 229

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: High

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences burned per 3-5 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-5 years.
Monitoring Strategy:	Monitor average percent of all known occurrences burned per 3-5 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: 0-1

Fair Level: 2

Good Level: 3

Very Good Level: >3

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Indicator Name: Patch Size

Indicator Description: Average patch size across all known occurrences (acres)

Poor Level: <10 acres

Fair Level: 10-30 acres

Good Level: 31-100 acres

Very Good Level: >100 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average patch size of this habitat type to 31 acres or more across all known occurrences.

Monitoring Strategy: Monitor average patch size across all known occurrences (acres).

Key Factor Name Spatial Ecology

- Indicator Name:** Patch Proximity
- Indicator Description:** Median nearest distance between patches.
- Poor Level:** >2.5 miles
- Fair Level:** 1-2.5 miles
- Good Level:** 0.5-1 mile
- Very Good Level:** <0.5 mile
- Current_Status:** Data Gap
- Indicator Weight:** Medium
- Conservation Action:** Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to one mile or less.
- Monitoring Strategy:** Monitor median nearest distance between patches.
- Indicator Name:** Average Block Size
- Indicator Description:** Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
- Poor Level:** <500 acres
- Fair Level:** 500-1,000 acres
- Good Level:** 1,001-2,000 acres
- Very Good Level:** >2,000 acres
- Current_Status:** Data Gap
- Indicator Weight:** Medium
- Conservation Action:** Maintain or, where necessary, restore average block size to 1,001 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
- Monitoring Strategy:** Monitor block size.

Habitat Name Lower Mississippi River High Bottomland Forest



Ecoregions where the habitat occurs:

- Ozark Highlands Boston Mountains Mississippi Valley Loess Plains Arkansas Valley
Ouachita Mountains South Central Plains Mississippi Alluvial Plain

Description

High Bottomlands are often temporarily flooded on older Holocene point bars and natural levees, with flooding less frequent than every 5 years. Wetland functions are primarily driven by precipitation, are classed as hardwood flats in a hydrogeomorphic classification (Klimas and others 2004). They are flooded less frequently than adjacent riparian floodplains or low floodplains. These floodplains are of particular conservation interest because they have been cleared to a greater extent than riparian or low floodplains because of the reduced flooding of these sites. Also, flood control levees protect many of these sites and with protection from levees almost all sites are cleared. Thus most wetlands remaining in large bottomland areas are riparian or low bottomlands, and the species, communities and other characteristics of high bottomlands have been essentially lost. Forests are often dominated by species such as *Quercus pagoda* and *Quercus michauxii*. Wildlife agency partners generally would like to see

Lower Mississippi River High Bottomland Forest

this distinction recognized. Because many of these sites are adjacent to uplands or non-flooded hydro-eric flatwoods, both of which have a relatively high fire frequency, and high floodplains are relatively dry, they have a higher typical fire frequency than lower bottomlands.

(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Optimal
Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) Weight: Optimal
Wood Thrush (*Hylocichla mustelina*) Weight: Optimal
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Suitable
Lace-winged Roadside-Skipper (*Amblyscirtes aesculapius*) Weight: Suitable
Mole Salamander (*Ambystoma talpoideum*) Weight: Suitable
American Black Duck (*Anas rubripes*) Weight: Suitable
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Woodland Tiger Beetle (*Cicindela unipunctata*) Weight: Suitable
Chicken Turtle (*Deirochelys reticularia*) Weight: Suitable
Six-banded Longhorn Beetle (*Dryobius sexnotatus*) Weight: Suitable
Swallow-tailed Kite (*Elanoides forficatus*) Weight: Suitable
Rusty Blackbird (*Euphagus carolinus*) Weight: Suitable
Dukes' Skipper (*Euphyes dukesi*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Swainson's Warbler (*Limnothlypis swainsonii*) Weight: Suitable
Giant Stag Beetle (*Lucanus elaphus*) Weight: Suitable
Bronze Copper (*Lycaena hylus*) Weight: Suitable
Southeastern Bat (*Myotis austroriparius*) Weight: Suitable
Gray Comma (*Polygonia progne*) Weight: Suitable
Oak Hairstreak (*Satyrrium favonius ontario*) Weight: Suitable
American Woodcock (*Scolopax minor*) Weight: Suitable
Tricolored Heron (*Egretta tricolor*) Weight: Marginal
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Marginal
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Marginal
Eastern Harvest Mouse (*Reithrodontomys humulis*) Weight: Marginal
Cerulean Warbler (*Setophaga cerulea*) Weight: Marginal
Southern Bog Lemming (*Synaptomys cooperi*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

ANHC Mr. Tom Foti, TNC Mr. Doug Zollner, AGFC Ms. Elizabeth Murray, Audubon Arkansas Mr. Ken Smith, Conservation Southeast Mr. Jeff Holmes, AGFC Mr. Jeff Johnston, AGFC Ms. Jane Anderson, FTN Associates Mr. Don Catenzaro

Habitat Priority Score: 1177

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Oak Dominance

Indicator Description: The percent of oak stems among dominant canopy trees

Poor Level: <12 or >72

Fair Level: 13-24 or 61-72

Good Level: 25-36 or 49-60

Very Good Level: 37-48

Current_Status: Data Gap

Indicator Weight: High

Conservation Action: Maintain or, where necessary, restore the percent of oak stems among dominant canopy trees to 25-60 percent.

Monitoring Strategy: Monitor percent oak stems among dominant canopy trees.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Frequency

Indicator Description: Average percent of all known occurrences burned per 3-7 year interval.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-7 years.

Monitoring Strategy: Monitor average percent of all known occurrences burned per 3-7 year interval.

Key Factor Name Fire Regime

Indicator Name:	Fire Seasonality/Intensity
Indicator Description:	The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.
Monitoring Strategy:	Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >4 miles

Fair Level: 2-4 miles

Good Level: 1-2 miles

Very Good Level: <1 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: 0-1

Fair Level: 2

Good Level: 3

Very Good Level: >3

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<2,499 acres
Fair Level:	2,500-5,000 acres
Good Level:	5,001-10,000 acres
Very Good Level:	>10,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 5,001 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<250 acres
Fair Level:	250-500 acres
Good Level:	501-1,000 acres
Very Good Level:	>1,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 501 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).

Habitat Name Lower Mississippi River Low Bottomland Forest



Ecoregions where the habitat occurs:

- Ozark Highlands Boston Mountains Mississippi Valley Loess Plains Arkansas Valley
Ouachita Mountains South Central Plains Mississippi Alluvial Plain

Description

Low Bottomlands are usually seasonally flooded in backswamps, with flooding more frequent than every 5 years, usually more frequently than every two years, generally by still water that may be impounded behind natural levees, and are classed as Low Gradient Riverine Backwater wetlands in hydrogeomorphic classifications (Klimas and others 2004). Low bottomlands occur along the Mississippi River and its tributaries in the Mississippi Alluvial Plain Ecoregion. Prolonged flooding dominates this system, and its duration is greater than in the adjacent Mississippi River Riparian Forest. *Quercus lyrata* is the characteristic dominant species. Soils are clayey with poor internal drainage. Changes in soils and vegetation of this system are much slower than in the adjacent Mississippi River Riparian forest. Historically, regeneration was through small treefall gaps or large tornado tracks. (adapted from NatureServe 2005)

Lower Mississippi River Low Bottomland Forest

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Eastern Whip-poor-will (*Antrastomus vociferus*) Weight: Optimal
Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) Weight: Optimal
Bird-voiced Treefrog (*Hyla avivoca*) Weight: Optimal
Squirrel Treefrog (*Hyla squirella*) Weight: Optimal
Southeastern Bat (*Myotis austroriparius*) Weight: Optimal
Mole Salamander (*Ambystoma talpoideum*) Weight: Suitable
American Black Duck (*Anas rubripes*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Suitable
Chicken Turtle (*Deirochelys reticularia*) Weight: Suitable
Tricolored Heron (*Egretta tricolor*) Weight: Suitable
Swallow-tailed Kite (*Elanoides forficatus*) Weight: Suitable
Rusty Blackbird (*Euphagus carolinus*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Wood Thrush (*Hylocichla mustelina*) Weight: Suitable
Glossy Swampsnake (*Liodytes rigida*) Weight: Suitable
Giant Stag Beetle (*Lucanus elaphus*) Weight: Suitable
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Suitable
Graham's Crayfish Snake (*Regina grahamii*) Weight: Suitable
American Woodcock (*Scolopax minor*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Marginal
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Marginal
Cerulean Warbler (*Setophaga cerulea*) Weight: Marginal
Southern Bog Lemming (*Synaptomys cooperi*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

ANHC Mr. Tom Foti, TNC Mr. Doug Zollner, AGFC Ms. Elizabeth Murray, Audubon Arkansas Mr. Ken Smith, Conservation Southeast Mr. Jeff Holmes, AGFC Mr. Jeff Johnston, AGFC Ms. Jane Anderson, FTN Associates Mr. Don Catenzaro

Habitat Priority Score: 1034

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Oak Dominance

Indicator Description: The percent of oak stems among dominant canopy trees

Poor Level: <12 or >72

Fair Level: 13-24 or 61-72

Good Level: 25-36 or 49-60

Very Good Level: 37-48

Current_Status: Data Gap

Indicator Weight: High

Conservation Action: Maintain or, where necessary, restore the percent of oak stems among dominant canopy trees to 25-60 percent.

Monitoring Strategy: Monitor percent oak stems among dominant canopy trees.

Indicator Name: Red Oak/Overcup Oak Ratio

Indicator Description: Relative amount of Red Oak to Overcup Oak in terms of basal area

Poor Level: 1:2

Fair Level: 1:1.5

Good Level: 1:1

Very Good Level: 1.5:1

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the relative amount of Red Oak to Overcup Oak (measured in basal area) to a ratio of 1.1 or higher.

Monitoring Strategy: Monitor relative amount of Red Oak to Overcup Oak in terms of basal area.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences burned per 15-30 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 15-30 years.
Monitoring Strategy:	Monitor average percent of all known occurrences burned per 15-30 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Size

Indicator Description: Average patch size across all known occurrences (acres)

Poor Level: <500 acres

Fair Level: 500-1,000 acres

Good Level: 1,001-2,000 acres

Very Good Level: >2,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average patch size of this habitat type to 1,001 acres or more across all known occurrences.

Monitoring Strategy: Monitor average patch size across all known occurrences (acres).

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: 0-1

Fair Level: 2

Good Level: 3

Very Good Level: >3

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<5,000 acres
Fair Level:	5,000-10,000 acres
Good Level:	10,000-20,000 acres
Very Good Level:	>20,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 10,000 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>4 miles
Fair Level:	2-4 miles
Good Level:	1-2 miles
Very Good Level:	<1 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.
Monitoring Strategy:	Monitor median nearest distance between patches.

Habitat Name Lower Mississippi River Riparian Forest



Ecoregions where the habitat occurs:

- Ozark Highlands Boston Mountains Mississippi Valley Loess Plains Arkansas Valley
Ouachita Mountains South Central Plains Mississippi Alluvial Plain

Description

This system is composed of riverfront associations, generally temporarily (but rarely seasonally) flooded on point bars and natural levees adjacent to the river that formed them, with flooding more frequent than every 5 years, by flowing water directly from the stream. They occur along the lower Mississippi River and its tributaries. They are classed as Low Gradient Riverine Overbank wetlands in a hydrogeomorphic classification (Klimas and others 2004). Flooding is of lower duration than on adjacent backswamps, where water is impounded behind riverfront natural levees. Flooding is of longer duration than on high bottomlands that are typically temporarily flooded. Soils are typically sandier than those of low bottomlands. Giant cane (*Arundinaria gigantea*) is a common understory in these forests on natural levees and higher point bars, and may become dominant after thinning or removal of overstory. Willow and cottonwood sandbars may have an open-canopy (woodland-type) structure.

Lower Mississippi River Riparian Forest

Often on sites with rapid soil deposition and therefore with rapid development of vegetation from low diversity willow and cottonwood dominated communities to more diverse communities dominated by *Platanus occidentalis*, *Carya illinoensis*, *Celtis laevigata*, *Fraxinus pennsylvanica* or *Quercus texana*. Historically, regeneration was through small treefall gaps and influenced by river dynamics. (adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Optimal
Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) Weight: Optimal
Swainson's Warbler (*Limnothlypis swainsonii*) Weight: Optimal
Winter Stonefly (*Allocaenia malverna*) Weight: Suitable
Lace-winged Roadside-Skipper (*Amblyscirtes aesculapius*) Weight: Suitable
Mole Salamander (*Ambystoma talpoideum*) Weight: Suitable
American Black Duck (*Anas rubripes*) Weight: Suitable
Anhinga (*Anhinga anhinga*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Suitable
Swallow-tailed Kite (*Elanoides forficatus*) Weight: Suitable
Rusty Blackbird (*Euphagus carolinus*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Wood Thrush (*Hylocichla mustelina*) Weight: Suitable
Glossy Swampsnake (*Liodytes rigida*) Weight: Suitable
Bronze Copper (*Lycaena hylus*) Weight: Suitable
Southeastern Bat (*Myotis austroriparius*) Weight: Suitable
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Suitable
Broad-winged Skipper (*Poanes viator*) Weight: Suitable
American Woodcock (*Scolopax minor*) Weight: Suitable
Southern Bog Lemming (*Synaptomys cooperi*) Weight: Suitable
Southern Bog Lemming (*Synaptomys cooperi*) Weight: Suitable
Tricolored Heron (*Egretta tricolor*) Weight: Marginal
Willow Flycatcher (*Empidonax traillii*) Weight: Marginal
Northern Long-eared Bat (*Myotis septentrionalis*) Weight: Marginal
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Marginal
Cerulean Warbler (*Setophaga cerulea*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 1138

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Cottonwood Decline

Indicator Description: The percent of cottonwood basal area lost within a 30 year period.

Poor Level: >50

Fair Level: 30-50

Good Level: 15-29

Very Good Level: <15

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of cottonwood basal area lost within a 30 year period to 29 percent or less.

Monitoring Strategy: Monitor percent of cottonwood basal area lost within a 30 year period.

Indicator Name: Sugarberry increase

Indicator Description: Percent increase in sugarberry basal area over a 30 year period in a defined area.

Poor Level: >50

Fair Level: 30-50

Good Level: 15-29

Very Good Level: <15

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent increase in sugarberry basal area over a 30 year period in a defined area to 29 percent or less.

Monitoring Strategy: Monitor percent increase in sugarberry basal area over a 30 year period in a defined area.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Frequency

Indicator Description: Average percent of all known occurrences burned per 5-7 year interval.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 5-7 years.

Monitoring Strategy: Monitor average percent of all known occurrences burned per 5-7 year interval.

Key Factor Name Fire Regime

Indicator Name:	Fire Seasonality/Intensity
Indicator Description:	The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.
Monitoring Strategy:	Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Size

Indicator Description: Average patch size across all known occurrences (acres)

Poor Level: <500 acres

Fair Level: 500-1,000 acres

Good Level: 1,001-2,000 acres

Very Good Level: >2,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average patch size of this habitat type to 1,001 acres or more across all known occurrences.

Monitoring Strategy: Monitor average patch size across all known occurrences (acres).

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >4 miles

Fair Level: 2-4 miles

Good Level: 1-2 miles

Very Good Level: <1 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Key Factor Name Spatial Ecology

Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.
Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<5,000 acres
Fair Level:	5,000-10,000 acres
Good Level:	10,000-20,000 acres
Very Good Level:	>20,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 10,000 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.

Habitat Name Ouachita Montane Oak Forest



Ecoregions where the habitat occurs:

- | | | | |
|-------------------------------------|--------------------------|---------------------------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Description

This system represents hardwood forests of the highest elevations of the Ouachita Mountains, including Mount Magazine. Vegetation consists of either forests or open woodlands dominated by *Quercus alba* or *Quercus stellata*. Canopy trees are often stunted due to the effects of ice, wind and cold conditions, in combination with fog, shallow soils over rock, and periodic severe drought. Some stands form almost impenetrable thickets.

EMBEDDED: These systems are usually small, isolated, and/or disjunct and are often "embedded" in a larger habitat matrix. These systems rely heavily on surrounding and/or adjacent habitats for landscape scale functions and processes such as fire.
(adapted from NatureServe 2005)

Ouachita Montane Oak Forest

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Optimal
Fourche Mountain Salamander (*Plethodon fourchensis*) Weight: Optimal
Kiamichi Slimy Salamander (*Plethodon kiamichi*) Weight: Optimal
Rich Mountain Salamander (*Plethodon ouachitae*) Weight: Optimal
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Suitable
Western Diamond-backed Rattlesnake (*Crotalus atrox*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Southeastern Shrew (*Sorex longirostris*) Weight: Suitable
Wood Thrush (*Hylocichla mustelina*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 625

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences burned per 3-7 year interval
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-7 years.
Monitoring Strategy:	Monitor average percent of all known occurrences burned per 3-7 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Habitat Name Ozark-Ouachita Cliff and Talus



Ecoregions where the habitat occurs:

- | | | | | |
|-------------------------------------|-------------------------------------|----------------------------|--------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley | Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |

Description

This system is found primarily in the Interior Highlands and is characterized by rock outcrops and talus ranging from moist to dry and is typically sparsely vegetated. However, on moister sites with more soil development several fern species and sedges (*Carex* spp.) can establish. Woodland species can establish, often as stunted individuals. Wind and water erosion are the major dynamics influencing this system. These communities are usually small, isolated, and/or disjunct and are embedded in a larger habitat matrix. These systems rely heavily on surrounding and/or adjacent habitats for landscape scale functions and processes such as fire. (adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Ozark-Ouachita Cliff and Talus

Eastern Collared Lizard (*Crotaphytus collaris*) Weight: Obligate
Western Groundsnake (*Sonora semiannulata*) Weight: Obligate
Rich Mountain Slitmouth (*Stenotrema pilsbryi*) Weight: Obligate
Ozark Big-eared Bat (*Corynorhinus townsendii ingens*) Weight: Optimal
Western Diamond-backed Rattlesnake (*Crotalus atrox*) Weight: Optimal
Land Snail (*Gastrocopta rogersensis*) Weight: Optimal
Magazine Mountain Shagreen (*Inflectarius magazinensis*) Weight: Optimal
Eastern Small-Footed Bat (*Myotis leibii*) Weight: Optimal
Striate Supercoil (*Paravitrea aulacogyra*) Weight: Optimal
Migrant Loggerhead Shrike (*Lanius ludovicianus*) Weight: Suitable
Crawford's Gray Shrew (*Notiosorex crawfordi*) Weight: Suitable
Little Brown Bat (*Myotis lucifugus*) Weight: Marginal
Indiana Bat (*Myotis sodalis*) Weight: Marginal
Eastern Spotted Skunk (*Spilogale putorius*) Weight: Marginal

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Habitat Priority Score: 1503

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species.

Key Factor Weight: Medium

Indicator Name: Fire Frequency

Indicator Description: Average percent of all known occurrences plus 100 meter buffer burned per 3-7 year interval.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Burn at least 51 percent of the spatial extent plus 100 meter buffer of all known occurrences of this habitat type every 3-7 years.

Monitoring Strategy: Monitor average percent of all known occurrences plus 100 meter buffer burned per 3-7 year interval.

Key Factor Name Fire Regime

Indicator Name:	Fire Seasonality/Intensity
Indicator Description:	The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.
Monitoring Strategy:	Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Size

Indicator Description: Average patch size across all known occurrences (acres)

Poor Level: <100 acres

Fair Level: 100-200 acres

Good Level: 201-400 acres

Very Good Level: >400 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average patch size of this habitat type to 201 acres or more across all known occurrences.

Monitoring Strategy: Monitor average patch size across all known occurrences (acres).

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<1,000 acres
Fair Level:	1,000-5,000
Good Level:	5,001-10,000 acres
Very Good Level:	>10,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 5,001 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>2 miles
Fair Level:	1-2 miles
Good Level:	0.5-1 mile
Very Good Level:	<0.5 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to one mile or less.
Monitoring Strategy:	Monitor median nearest distance between patches.

Habitat Name Ozark-Ouachita Dry Oak and Pine Woodland



Ecoregions where the habitat occurs:

- | | | | |
|-------------------------------------|-------------------------------------|---------------------------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Description

This system occurs along gentle to steep slopes and over bluff escarpments with southerly to westerly aspects. Parent material can range from calcareous to acidic with very shallow, well- to excessively well-drained soils. This system was historically woodland in structure, composition, and process but now includes areas of more closed canopy. Oak species such as *Quercus stellata*, *Quercus marilandica*, and *Quercus muehlenbergii* dominate this system with an understory of grassland species such as *Schizachyrium scoparium* and shrub species such as *Vaccinium arboreum*. Drought stress and fire are the processes influencing and maintaining this system. (adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species)

Ozark-Ouachita Dry Oak and Pine Woodland

include:

Bell's Roadside-Skipper (*Amblyscirtes belli*) Weight: Optimal
Linda's Roadside-Skipper (*Amblyscirtes linda*) Weight: Optimal
Eastern Whip-poor-will (*Antrastomus vociferus*) Weight: Optimal
Golden-banded Skipper (*Autochton cellus*) Weight: Optimal
Northern Metalmark (*Calephelis borealis*) Weight: Optimal
Northern Bobwhite (*Colinus virginianus*) Weight: Optimal
Baltimore Checkerspot (*Euphydryas phaeton ozarkae*) Weight: Optimal
Indiana Bat (*Myotis sodalis*) Weight: Optimal
American Burying Beetle (*Nicrophorus americanus*) Weight: Optimal
Kiamichi Slimy Salamander (*Plethodon kiamichi*) Weight: Optimal
Bewick's Wren (*Thryomanes bewickii*) Weight: Optimal
Texas Frosted Elfin (*Callophrys irus hadros*) Weight: Suitable
Outis Skipper (*Cogia outis*) Weight: Suitable
Ozark Big-eared Bat (*Corynorhinus townsendii ingens*) Weight: Suitable
Western Diamond-backed Rattlesnake (*Crotalus atrox*) Weight: Suitable
Monarch (*Danaus plexippus*) Weight: Suitable
Beetle (*Derops divalis*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Leonard's Skipper (*Hesperia leonardus*) Weight: Suitable
Meske's Skipper (*Hesperia meskei*) Weight: Suitable
Cobweb Skipper (*Hesperia metea*) Weight: Suitable
Eastern Small-Footed Bat (*Myotis leibii*) Weight: Suitable
Rattlesnake-Master Borer Moth (*Papaipema eryngii*) Weight: Suitable
Fourche Mountain Salamander (*Plethodon fourchensis*) Weight: Suitable
Rich Mountain Salamander (*Plethodon ouachitae*) Weight: Suitable
Oak Hairstreak (*Satyrium favonius ontario*) Weight: Suitable
Indiana Phlox Moth (*Schinia indiana*) Weight: Suitable
Eastern Spotted Skunk (*Spilogale putorius*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Marginal
Common Nighthawk (*Chordeiles minor*) Weight: Marginal
Bachman's Sparrow (*Peucaea aestivalis*) Weight: Marginal
Plains Harvest Mouse (*Reithrodontomys montanus*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 2226

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Percent total herbaceous ground coverage

Indicator Description: Average percent total native herbaceous ground cover across all known potential occurrences. Density must be sufficient to carry growing season fire at least once every five years. Composition should include only native species.

Poor Level: <25

Fair Level: 25-40

Good Level: 41-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average percent total native herbaceous groundcover across all known potential occurrences to 41 percent or more.

Monitoring Strategy: Monitor average percent total native herbaceous ground cover across all known potential occurrences.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences burned per 3-5 year interval
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-5 years.
Monitoring Strategy:	Monitor average percent of all known occurrences burned per 3-5 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >4 miles

Fair Level: 2-4 miles

Good Level: 1-2 miles

Very Good Level: <1 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<5,000 acres
Fair Level:	50,00-10,000 acres
Good Level:	10,000-20,000 acres
Very Good Level:	>20,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 10,000 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<500 acres
Fair Level:	500-1,000 acres
Good Level:	1,001-2,000 acres
Very Good Level:	>2,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 1,001 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).

Habitat Name Ozark-Ouachita Dry-Mesic Oak Forest/Woodland



Ecoregions where the habitat occurs:

- | | | | |
|-------------------------------------|-------------------------------------|---------------------------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Description

This system is the matrix system of these regions and occurs on dry-mesic to mesic gentle to moderately steep slopes. Soils are typically moderately to well-drained and more fertile than those associated with dry-oak forest/woodlands. An open to closed canopy of oak species (*Quercus rubra* and *Quercus alba*) often associated with hickory species (*Carya* spp.) typify this system. Wind, drought, and fires influence this system.

(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Bell's Roadside-Skipper (*Amblyscirtes belli*) Weight: Optimal

Ozark-Ouachita Dry-Mesic Oak Forest/Woodland

Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Optimal
Northern Metalmark (*Calephelis borealis*) Weight: Optimal
American Burying Beetle (*Nicrophorus americanus*) Weight: Optimal
Mole Salamander (*Ambystoma talpoideum*) Weight: Suitable
Appalachian Azure (*Celastrina neglectamajor*) Weight: Suitable
Dusky Azure (*Celastrina nigra*) Weight: Suitable
Monarch (*Danaus plexippus*) Weight: Suitable
Mottled Duskywing (*Erynnis martialis*) Weight: Suitable
Indiana Bat (*Myotis sodalis*) Weight: Suitable
Caddo Mountain Salamander (*Plethodon caddoensis*) Weight: Suitable
Kiamichi Slimy Salamander (*Plethodon kiamichi*) Weight: Suitable
Rich Mountain Salamander (*Plethodon ouachitae*) Weight: Suitable
Gray Comma (*Polygonia progne*) Weight: Suitable
Diana (*Speyeria diana*) Weight: Suitable
Eastern Spotted Skunk (*Spilogale putorius*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Marginal

Habitat Team

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Habitat Priority Score: 1070

Key Factor Name Canopy closure

Key Factor Description: Combination of stem density, basal area and extent of canopy cover, with intermitent closure as ideal (Surrogate for Horizontal Structure).

Key Factor Weight: Medium

Indicator Name: Canopy Closure

Indicator Description: The percent of the spatial extent of all known occurrences with a percent canopy closure between 30 and 70 percent.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of the spatial extent of all known occurrences with a canopy closure between 30 and 70 percent to 51 percent or more.

Monitoring Strategy: Monitor percent of the spatial extent of all known occurrences with a percent canopy closure between 30 and 70 percent.

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Oak component

Indicator Description: The percent of oak basal area among dominant canopy trees

Poor Level: <30 or >80

Fair Level: 30-39 or 71-80

Good Level: 40-49 or 61-70

Very Good Level: 50-60

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of oak stems among dominant canopy trees to 40-70 percent.

Monitoring Strategy: Monitor percent of oak basal area among dominant canopy trees.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences burned per 3-7 year interval
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-7 years.
Monitoring Strategy:	Monitor average percent of all known occurrences burned per 3-7 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: 0-1

Fair Level: 2

Good Level: 3

Very Good Level: >3

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >4 miles

Fair Level: 2-4 miles

Good Level: 1-2 miles

Very Good Level: <1 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<500 acres
Fair Level:	500-1,000 acres
Good Level:	1,001-2,000 acres
Very Good Level:	>2,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 1,001 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).
Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<5,000 acres
Fair Level:	5,000-10,000 acres
Good Level:	10,000-20,000 acres
Very Good Level:	>20,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 10,000 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.

Habitat Name Ozark-Ouachita Forested Seep



Ecoregions where the habitat occurs:

- | | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Description

This system of seeps may be found along the bottom slopes of smaller valleys where rock fractures or sandy soils allow water to seep out of the mountainsides. The soil remains saturated to very moist throughout the year. The vegetation is typically forested with highly variable canopy composition. In acid seeps, vegetation is characterized by *Acer rubrum* var. *trilobum*, *Nyssa sylvatica*, *Liquidambar styraciflua*, and *Quercus alba*. Other canopy species may include *Fagus grandifolia* and *Magnolia tripetala*. Canopy coverage can be moderately dense to quite open. The subcanopy is often well-developed and characteristically includes *Ilex opaca* var. *opaca*, *Magnolia tripetala*, *Carpinus caroliniana*, and *Ostrya virginiana*. Calcareous seeps or fens, typically in the Ozarks, may be dominated by shrubs or herbs such as *Parnassia grandifolia* and *Carex* spp. Many are less than one hectare in area, but riparian seeps are often much larger. These systems are usually small, isolated, and/or

Ozark-Ouachita Forested Seep

disjunct and are embedded in a larger habitat matrix. These systems rely heavily on surrounding and/or adjacent habitats for landscape scale functions and processes such as fire.

(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Four-toed Salamander (*Hemidactylium scutatum*) Weight: Obligate
Swamp Metalmark (*Calephelis muticum*) Weight: Optimal
Ouachita Spiketail (*Cordulegaster talaria*) Weight: Optimal
Daisy Burrowing Crayfish (*Fallicambarus jeanae*) Weight: Optimal
Ringed Salamander (*Ambystoma annulatum*) Weight: Suitable
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Suitable
Ouachita Burrowing Crayfish (*Fallicambarus harpi*) Weight: Suitable
Saline Burrowing Crayfish (*Fallicambarus strawni*) Weight: Suitable
Irons Fork Burrowing Crayfish (*Procambarus reimeri*) Weight: Suitable
Ozark Emerald (*Somatochlora ozarkensis*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Marginal
Ouachita Mountain Crayfish (*Procambarus tenuis*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 1055

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Frequency

Indicator Description: Average percent of all known occurrences plus appropriate buffer burned per 5-7 year interval.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Burn at least 51 percent of the spatial extent plus appropriate buffer of all known occurrences of this habitat type every 5-7 years.

Monitoring Strategy: Monitor average percent of all known occurrences plus appropriate buffer burned per 5-7 year interval.

Key Factor Name Fire Regime

Indicator Name:	Fire Seasonality/Intensity
Indicator Description:	The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.
Monitoring Strategy:	Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name No-Activity Protection Zone

Key Factor Description: 100 foot zone of no-activity by ALRMP

Key Factor Weight: Medium

Indicator Name: Spatial extent of buffer

Indicator Description: Spatial extent of the buffer from edge.

Poor Level: <50 feet

Fair Level: 50-99 feet

Good Level: >100 feet

Very Good Level: >100 feet

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the spatial extent of the buffer in feet from edge to 100 feet or more.

Monitoring Strategy: Monitor spatial extent of the buffer in feet from edge.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >1200 meters

Fair Level: 801-1200 meters

Good Level: 500-800 meters

Very Good Level: <500 meters

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average distance between patches to 800 meters or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Indicator Name: Average Block Size

Indicator Description: Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.

Poor Level: <300 acres

Fair Level: 300-600 acres

Good Level: 601-1,000 acres

Very Good Level: >1,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore average block size to 601 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor block size.

Key Factor Name Spatial Ecology

Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.
Indicator Name:	Patch Size
Indicator Description:	Width of buffer (meters)
Poor Level:	<100 meters of buffer
Fair Level:	100-250 meters of buffer
Good Level:	251-400 meters of buffer
Very Good Level:	>400 meters of buffer
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, buffer known occurrences of the habitat type with a minimum of 251 meters of adjacent but dissimilar habitats.
Monitoring Strategy:	Monitor width of buffer (meters).

Habitat Name Ozark-Ouachita Large Floodplain



Ecoregions where the habitat occurs:

- | | | | |
|-------------------------------------|-------------------------------------|---------------------------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Description

This floodplain system occurs along larger upland rivers where topography and alluvial processes have resulted in a recognizable floodplain. Many examples of this system will contain well-drained levees, terraces and stabilized bars, and some will include herbaceous sloughs and shrub wetlands resulting, in part, from beaver activity. A variety of soil types may be found within the floodplain from very well-drained gravelly substrates to very dense clays. This variety of substrates in combination with different flooding regimes creates a mix of vegetation. Most areas are inundated at some point each spring; microtopography determines how long the various habitats are inundated. Although vegetation is quite variable in this broadly defined system, examples may include *Acer saccharinum*, *Platanus occidentalis*, *Liquidambar styraciflua*, *Betula nigra*, and *Quercus* spp. Understory species include shrubs, such as *Cephalanthus occidentalis* and *Arundinaria gigantea*, and sedges (*Carex* spp.). This system likely

Ozark-Ouachita Large Floodplain

floods at least annually and can be altered by occasional severe floods. Impoundments and conversion to agriculture can also impact this system. An example of this habitat is the floodplain along the Buffalo River.

(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Lace-winged Roadside-Skipper (*Amblyscirtes aesculapius*) Weight: Optimal
Carolina Roadside-Skipper (*Amblyscirtes carolina*) Weight: Optimal
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Optimal
Sandy Stream Tiger Beetle (*Cicindela macra*) Weight: Optimal
Ouachita Spiketail (*Cordulegaster talaria*) Weight: Optimal
Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) Weight: Optimal
Bird-voiced Treefrog (*Hyla avivoca*) Weight: Optimal
Squirrel Treefrog (*Hyla squirella*) Weight: Optimal
Bell's Roadside-Skipper (*Amblyscirtes belli*) Weight: Suitable
Anhinga (*Anhinga anhinga*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Ant-like Tiger Beetle (*Cicindela cursitans*) Weight: Suitable
Twelve-spotted Tiger Beetle (*Cicindela duodecimguttata*) Weight: Suitable
Big Sand Tiger Beetle (*Cicindela formosa pigmentosignata*) Weight: Suitable
Beach-dune Tiger Beetle (*Cicindela hirticollis*) Weight: Suitable
Tiger Beetle (*Cicindela lepida*) Weight: Suitable
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Suitable
Rusty Blackbird (*Euphagus carolinus*) Weight: Suitable
Dukes' Skipper (*Euphyes dukesi*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Wood Thrush (*Hylocichla mustelina*) Weight: Suitable
Glossy Swampsnake (*Liodytes rigida*) Weight: Suitable
Gray Bat (*Myotis grisescens*) Weight: Suitable
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Suitable
Yehl Skipper (*Poanes yehl*) Weight: Suitable
Gray Comma (*Polygonia progne*) Weight: Suitable
Byssus Skipper (*Problema byssus*) Weight: Suitable
American Woodcock (*Scolopax minor*) Weight: Suitable
Tricolored Heron (*Egretta tricolor*) Weight: Marginal
Willow Flycatcher (*Empidonax traillii*) Weight: Marginal
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Marginal
Ozark Clubtail Dragonfly (*Gomphus ozarkensis*) Weight: Data Gap
Swainson's Warbler (*Limnothlypis swainsonii*) Weight: Data Gap
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap
Ozark Snaketail Dragonfly (*Ophiogomphus westfalli*) Weight: Data Gap
Ozark Emerald (*Somatochlora ozarkensis*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 1551

Key Factor Name Canopy Closure

Key Factor Description: Combination of stem density, basal area and extent of canopy cover, with intermittent closure as ideal.

Key Factor Weight: Medium

Indicator Name: Canopy Closure

Indicator Description: The percent of the spatial extent of all known occurrences with a percent canopy closure of greater than 80%.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of the spatial extent of all known occurrences with a canopy closure of greater than 80 percent to 51 percent or more.

Monitoring Strategy: Monitor percent of the spatial extent of all known occurrences with a percent canopy closure of greater than 80%.

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences burned per 5-7 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 5-7 years.
Monitoring Strategy:	Monitor average percent of all known occurrences burned per 5-7 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Average Block Size

Indicator Description: Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.

Poor Level: <500 acres

Fair Level: 500-1,000 acres

Good Level: 1,000-2,500 acres

Very Good Level: >2,500 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore average block size to 1,000 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor block size.

Key Factor Name Spatial Ecology

Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	<4
Fair Level:	4-7
Good Level:	7-10
Very Good Level:	>10
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to seven or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.
Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>.5 mile
Fair Level:	.25-.5 miles
Good Level:	.1-.25 miles
Very Good Level:	<.1 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to .25 mile or less.
Monitoring Strategy:	Monitor median nearest distance between patches.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<50 acres
Fair Level:	50-100 acres
Good Level:	100-250 acres
Very Good Level:	>250 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 100 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).

Habitat Name Ozark-Ouachita Mesic Hardwood Forest



Ecoregions where the habitat occurs:

- | | | | |
|-------------------------------------|-------------------------------------|---------------------------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Description

This system is found on toeslopes, valley bottoms and north slopes. *Quercus rubra* increases in abundance compared to dry-mesic habitats, and *Acer saccharum* is sometimes a leading dominant. On more alkaline moist soils, *Quercus muehlenbergii*, *Tilia americana*, and *Cercis canadensis* may be common. In the Boston Mountains, mesic forests may also be common on protected slopes and terraces next to streams. Here *Fagus grandifolia* may be the leading dominant, with codominants of *Acer saccharum*, *Liquidambar styraciflua*, *Tilia americana*, *Magnolia acuminata*, and others. Similar habitats occur in the western Ouachita Mountains. (adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species)

Ozark-Ouachita Mesic Hardwood Forest

include:

Ouachita Slitmouth (*Stenotrema unciferum*) Weight: Obligate
Lace Bug (*Acalypta susanae*) Weight: Optimal
Ringed Salamander (*Ambystoma annulatum*) Weight: Optimal
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Optimal
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Optimal
Wood Thrush (*Hylocichla mustelina*) Weight: Optimal
Wood Frog (*Lithobates sylvaticus*) Weight: Optimal
American Burying Beetle (*Nicrophorus americanus*) Weight: Optimal
Caddo Mountain Salamander (*Plethodon caddoensis*) Weight: Optimal
Fourche Mountain Salamander (*Plethodon fourchensis*) Weight: Optimal
Kiamichi Slimy Salamander (*Plethodon kiamichi*) Weight: Optimal
Rich Mountain Salamander (*Plethodon ouachitae*) Weight: Optimal
Ground Beetle (*Scaphinotus inflectus*) Weight: Optimal
Ground Beetle (*Scaphinotus parisianna*) Weight: Optimal
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Suitable
Mole Salamander (*Ambystoma talpoideum*) Weight: Suitable
Eastern Tiger Salamander (*Ambystoma tigrinum*) Weight: Suitable
Copeland's Mold Beetle (*Arianops copelandi*) Weight: Suitable
Magazine Mountain Mold Beetle (*Arianops sandersoni*) Weight: Suitable
Appalachian Azure (*Celastrina neglectamajor*) Weight: Suitable
Dusky Azure (*Celastrina nigra*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Woodland Tiger Beetle (*Cicindela unipunctata*) Weight: Suitable
Beetle (*Derops divalis*) Weight: Suitable
Earthworm (*Diplocardia meansi*) Weight: Suitable
Six-banded Longhorn Beetle (*Dryobius sexnotatus*) Weight: Suitable
Oklahoma Salamander (*Eurycea tynnerensis*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Giant Stag Beetle (*Lucanus elaphus*) Weight: Suitable
Eastern Small-Footed Bat (*Myotis leibii*) Weight: Suitable
Indiana Bat (*Myotis sodalis*) Weight: Suitable
Small-eyed Mold Beetle (*Ouachitychus parvocolus*) Weight: Suitable
Gray Comma (*Polygonia progne*) Weight: Suitable
Ouachita Pseudactium (*Pseudactium magazinensis*) Weight: Suitable
Ozark Pseudactium (*Pseudactium ursum*) Weight: Suitable
Cerulean Warbler (*Setophaga cerulea*) Weight: Suitable
Southeastern Shrew (*Sorex longirostris*) Weight: Suitable
Diana (*Speyeria diana*) Weight: Suitable
Pseudoscorpion (*Tartarocreagrion ozarkensis*) Weight: Suitable
American Woodcock (*Scolopax minor*) Weight: Marginal
Eastern Spotted Skunk (*Spilogale putorius*) Weight: Marginal
White Liptooth (*Daedalochila peregrina*) Weight: Data Gap
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 2586

Key Factor Name Canopy closure

Key Factor Description: Combination of stem density, basal area and extent of canopy cover, with intermitent closure as ideal (Surrogate for Horizontal Structure).

Key Factor Weight: Medium

Indicator Name: Canopy Closure

Indicator Description: The percent of the spatial extent of all known occurrences with a percent canopy closure of greater than 80% (BA 70 or greater).

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of the spatial extent of all known occurrences with a canopy closure of greater than 80 percent (BA 70 or greater) to 51 percent or more.

Monitoring Strategy: Monitor percent of the spatial extent of all known occurrences with a percent canopy closure of greater than 80% (BA 70 or greater).

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences burned per 5-7 year interval
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 5-7 years.
Monitoring Strategy:	Monitor average percent of all known occurrences burned per 5-7 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >4 miles

Fair Level: 2-4 miles

Good Level: 1-2 miles

Very Good Level: <1 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<2,500 acres
Fair Level:	2,500-5,000 acres
Good Level:	5,001-10,000 acres
Very Good Level:	>10,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 5,001 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<250 acres
Fair Level:	250-500 acres
Good Level:	501-1,000 acres
Very Good Level:	>1,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 501 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).

Habitat Name Ozark-Ouachita Pine-Bluestem Woodland



Ecoregions where the habitat occurs:

- | | | | | |
|-------------------------------------|-------------------------------------|----------------------------|--------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley | Loess Plains | Arkansas Valley |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |

Description

This system is composed of *Pinus echinata* dominated woodlands with open canopy and abundant herbaceous groundcover with few hardwoods among dominant canopy trees. Fire is important to maintaining these communities. Because this system occurs in large, undissected blocks, fire is more common than in most woodland communities and the canopy is more open and the herbaceous groundcover more dense. (Foti et al. 2015)
(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Red-cockaded Woodpecker (*Picoides borealis*) Weight: Obligate

Ozark-Ouachita Pine-Bluestem Woodland

Bell's Roadside-Skipper (*Amblyscirtes belli*) Weight: Optimal
Monarch (*Danaus plexippus*) Weight: Optimal
Diana (*Speyeria diana*) Weight: Optimal
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Suitable
Northern Metalmark (*Calephelis borealis*) Weight: Suitable
Texas Frosted Elfin (*Callophrys irus hadros*) Weight: Suitable
Oklahoma Salamander (*Eurycea tynnerensis*) Weight: Suitable
Leonard's Skipper (*Hesperia leonardus*) Weight: Suitable
Meske's Skipper (*Hesperia meskei*) Weight: Suitable
Cobweb Skipper (*Hesperia metea*) Weight: Suitable
Broad-winged Skipper (*Poanes viator*) Weight: Suitable
Byssus Skipper (*Problema byssus*) Weight: Suitable
Oak Hairstreak (*Satyrium favonius ontario*) Weight: Suitable
Bell's Vireo (*Vireo bellii*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Marginal
Gorgone Checkerspot (*Chlosyne gorgone*) Weight: Data Gap

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Habitat Priority Score: 872

Key Factor Name Canopy closure

Key Factor Description: Combination of stem density, basal area and extent of canopy cover, with intermitent closure as ideal (Surrogate for Horizontal Structure).

Key Factor Weight: Medium

Indicator Name: Canopy Closure

Indicator Description: The percent of the spatial extent of all known occurrences with a percent canopy closure ranging between 40-60%.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of the spatial extent of all known occurrences with a canopy closure of ranging between 40 to 60 percent to 51 percent or more.

Monitoring Strategy: Monitor percent of the spatial extent of all known occurrences with a percent canopy closure ranging between 40-60%.

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Frequency

Indicator Description: Average percent of all known occurrences burned per 3-5 year interval.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-5 years.

Monitoring Strategy: Monitor average percent of all known occurrences burned per 3-5 year interval.

Key Factor Name Fire Regime

Indicator Name:	Fire Seasonality/Intensity
Indicator Description:	The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.
Monitoring Strategy:	Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Percent total herbaceous ground coverage

Key Factor Description: Average percent total native herbaceous ground cover across all known potential occurrences. Density must be sufficient to carry growing season fire at least once every five years. Composition should include only native species.

Key Factor Weight: Medium

Indicator Name: Percent total herbaceous ground coverage

Indicator Description: Average percent total native herbaceous ground cover across all known potential occurrences. Density must be sufficient to carry growing season fire at least once every five years. Composition should include only native species.

Poor Level: <25

Fair Level: 25-40

Good Level: 41-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average percent total native herbaceous groundcover across all known potential occurrences to 41 percent or more.

Monitoring Strategy: Monitor average percent total native herbaceous ground cover across all known potential occurrences.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Size

Indicator Description: Average patch size across all known occurrences (acres)

Poor Level: <500 acres

Fair Level: 500-1,000 acres

Good Level: 1,001-2,000 acres

Very Good Level: >2,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average patch size of this habitat type to 1,001 acres or more across all known occurrences.

Monitoring Strategy: Monitor average patch size across all known occurrences (acres).

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<5,000 acres
Fair Level:	5,000-10,000 acres
Good Level:	10,000-20,000 acres
Very Good Level:	>20,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 10,000 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>4 miles
Fair Level:	2-4 miles
Good Level:	1-2 miles
Very Good Level:	<1 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.
Monitoring Strategy:	Monitor median nearest distance between patches.

Habitat Name Ozark-Ouachita Pine-Oak Forest/Woodland



Ecoregions where the habitat occurs:

- | | | | |
|-------------------------------------|-------------------------------------|---------------------------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Description

This system represents forests and woodlands in which *Pinus echinata* is an important or dominant component. Although examples of this system occur throughout this region, there is local variation in the extent to which they were present. For example, this system was historically prominent only in the southeastern part of the Ozark Highlands where sandstone derived soils were common (USFS 1999); being limited from other areas by inadequate winter precipitation, and non-conductive soils. In contrast, pine was "virtually ubiquitous in the historical forests of the Ouachitas" (USFS 1999). In nearly all cases (at least in the Ouachitas), *Pinus echinata* occurs with a variable mixture of hardwood species. The exact composition of the hardwoods is much more closely related to aspect and topographic factors than is the pine component (Dale and Ware 1999). In some examples of this system, the aggregate importance of hardwoods may be greater than pine, especially on subxeric and mesic sites (Dale and

Ozark-Ouachita Pine-Oak Forest/Woodland

Ware 1999).
(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Red-cockaded Woodpecker (*Picoides borealis*) Weight: Obligate
Bell's Roadside-Skipper (*Amblyscirtes belli*) Weight: Optimal
Monarch (*Danaus plexippus*) Weight: Optimal
Diana (*Speyeria diana*) Weight: Optimal
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Suitable
Northern Metalmark (*Calephelis borealis*) Weight: Suitable
Texas Frosted Elfin (*Callophrys irus hadros*) Weight: Suitable
Oklahoma Salamander (*Eurycea tynnerensis*) Weight: Suitable
Leonard's Skipper (*Hesperia leonardus*) Weight: Suitable
Meske's Skipper (*Hesperia meskei*) Weight: Suitable
Cobweb Skipper (*Hesperia metea*) Weight: Suitable
Broad-winged Skipper (*Poanes viator*) Weight: Suitable
Byssus Skipper (*Problema byssus*) Weight: Suitable
Oak Hairstreak (*Satyrium favonius ontario*) Weight: Suitable
Bell's Vireo (*Vireo bellii*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Marginal
Gorgone Checkerspot (*Chlosyne gorgone*) Weight: Data Gap
Little Brown Bat (*Myotis lucifugus*) Weight: Suitable
Northern Long-eared Bat (*Myotis septentrionalis*) Weight: Suitable
Caddo Mountain Salamander (*Plethodon caddoensis*) Weight: Suitable
Fourche Mountain Salamander (*Plethodon fourchensis*) Weight: Suitable
Kiamichi Slimy Salamander (*Plethodon kiamichi*) Weight: Suitable
Rich Mountain Salamander (*Plethodon ouachitae*) Weight: Suitable
Gray Comma (*Polygonia progne*) Weight: Suitable
Byssus Skipper (*Problema byssus*) Weight: Suitable
Oak Hairstreak (*Satyrium favonius ontario*) Weight: Suitable
Bewick's Wren (*Thryomanes bewickii*) Weight: Suitable
Red-cockaded Woodpecker (*Picoides borealis*) Weight: Marginal
Southeastern Shrew (*Sorex longirostris*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

ANHC Mr. Tom Foti, TNC Mr. Doug Zollner, AGFC Ms. Elizabeth Murray, Audubon Arkansas Mr. Ken Smith, Conservation Southeast Mr. Jeff Holmes, AGFC Mr. Jeff Johnston, AGFC Ms. Jane Anderson, FTN Associates Mr. Don Catenzaro

Habitat Priority Score: 1650

Key Factor Name Canopy Closure

Key Factor Description: Combination of stem density, basal area and extent of canopy cover, with intermitent closure as ideal (Surrogate for Horizontal Structure).

Key Factor Weight: Medium

Indicator Name: Canopy Closure

Indicator Description: The percent of the spatial extent of all known occurrences with a percent canopy closure of greater than 70%.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of the spatial extent of all known occurrences with a canopy closure of greater than 70 percent to 51 percent or more.

Monitoring Strategy: Monitor percent of the spatial extent of all known occurrences with a percent canopy closure of greater than 70%.

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Loblolly encroachment

Indicator Description: The percent basal area in loblolly

Poor Level: >15%

Fair Level: 10-14%

Good Level: 5-9%

Very Good Level: <5%

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the total percentage of land area in loblolly to nine percent or less.

Monitoring Strategy: Monitor percent basal area in loblolly.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Frequency

Indicator Description: Average percent of all known occurrences burned per 3-5 year interval.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-5 years.

Monitoring Strategy: Monitor average percent of all known occurrences burned per 3-5 year interval.

Key Factor Name Fire Regime

Indicator Name:	Fire Seasonality/Intensity
Indicator Description:	The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.
Monitoring Strategy:	Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Average Block Size

Indicator Description: Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.

Poor Level: <5,000 acres

Fair Level: 5,000-10,000 acres

Good Level: 10,000-20,000 acres

Very Good Level: >20,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore average block size to 10,000 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor block size.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<500 acres
Fair Level:	500-1,000 acres
Good Level:	1,001-2,000 acres
Very Good Level:	>2,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 1,001 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).
Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>4 miles
Fair Level:	2-4 miles
Good Level:	1-2 miles
Very Good Level:	<1 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.
Monitoring Strategy:	Monitor median nearest distance between patches.

Habitat Name Ozark-Ouachita Prairie and Woodland



Ecoregions where the habitat occurs:

- | | | | |
|-------------------------------------|--------------------------|---------------------------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |

Description

This system of prairies and associated woodlands is found in the Arkansas Valley and Ozarks. The Arkansas Valley is characterized by broad, level to gently rolling uplands derived from shales and is much less rugged and more heavily impacted by Arkansas River erosional processes than the adjacent mountainous regions. In addition, the valley receives annual precipitation total of 2-6 inches less than the surrounding regions due to a rainshadow produced by a combination of prevailing western winds and mountain orographic effects. The shale-derived soils associated with the Arkansas Valley prairies are thin and droughty. The prairies of the Ozark Highlands occur on level to gently rolling areas underlain by limestone and chert, and soils are also thin and droughty. The combined effect of droughty soils, reduced precipitation, and prevailing level topography create conditions highly conducive to the ignition and spread of fires. Prairies are typically dominated by *Andropogon gerardii*, *Sorghastrum nutans*,

Ozark-Ouachita Prairie and Woodland

Panicum virgatum, and Schizachyrium scoparium and a high diversity of grasses and forbs and relatively few woody plants. Woodlands occur on gentle to steep slopes and are typically dominated by Quercus stellata and Quercus marilandica, often fairly widespread with a typical prairie herbaceous groundlayer between the trees.
(adapted from NatureServe 2005).

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Arogos Skipper (*Atrytone arogos iowa*) Weight: Obligate
Prairie Mole Cricket (*Gryllotalpa major*) Weight: Obligate
American Burying Beetle (*Nicrophorus americanus*) Weight: Obligate
Lace Bug (*Acalypta lillianus*) Weight: Optimal
Bell's Roadside-Skipper (*Amblyscirtes belli*) Weight: Optimal
Eastern Tiger Salamander (*Ambystoma tigrinum*) Weight: Optimal
Henslow's Sparrow (*Ammodramus henslowii*) Weight: Optimal
Le Conte's Sparrow (*Ammodramus leconteii*) Weight: Optimal
Grasshopper Sparrow (*Ammodramus savannarum*) Weight: Optimal
Common Nighthawk (*Chordeiles minor*) Weight: Optimal
Northern Bobwhite (*Colinus virginianus*) Weight: Optimal
Monarch (*Danaus plexippus*) Weight: Optimal
Dion Skipper (*Euphyes dion*) Weight: Optimal
Great Plains Narrowmouth Toad (*Gastrophryne olivacea*) Weight: Optimal
Migrant Loggerhead Shrike (*Lanius ludovicianus*) Weight: Optimal
Crawfish Frog (*Lithobates areolatus*) Weight: Optimal
Giant Prairie Robberfly (*Microstylum morosum*) Weight: Optimal
Slender Glass Lizard (*Ophisaurus attenuatus*) Weight: Optimal
Great Plains Skink (*Plestiodon obsoletus*) Weight: Optimal
Prairie Skink (*Plestiodon septentrionalis*) Weight: Optimal
Byssus Skipper (*Problema byssus*) Weight: Optimal
Boreal Chorus Frog (*Pseudacris maculata*) Weight: Optimal
Strecker's Chorus Frog (*Pseudacris streckeri*) Weight: Optimal
Graham's Crayfish Snake (*Regina grahamii*) Weight: Optimal
Hurter's Spadefoot (*Scaphiopus hurterii*) Weight: Optimal
Plains Spadefoot (*Spea bombifrons*) Weight: Optimal
Diana (*Speyeria diana*) Weight: Optimal
Ornate Box Turtle (*Terrapene ornata*) Weight: Optimal
Anthophorid Bee (*Tetraloniella albata*) Weight: Optimal
Red Milkweed Beetle (*Tetraopes quinquemaculatus*) Weight: Optimal
Texas Milkweed Beetle (*Tetraopes texanus*) Weight: Optimal
Lined Snake (*Tropidoclonion lineatum*) Weight: Optimal
Bell's Vireo (*Vireo bellii*) Weight: Optimal
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Suitable
Texas Frosted Elf (*Callophrys irus hadros*) Weight: Suitable
Sedge Wren (*Cistothorus platensis*) Weight: Suitable
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Suitable
Willow Flycatcher (*Empidonax traillii*) Weight: Suitable
Rusty Blackbird (*Euphagus carolinus*) Weight: Suitable
Oklahoma Salamander (*Eurycea tynesensis*) Weight: Suitable
American Kestrel (*Falco sparverius*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable

Ozark-Ouachita Prairie and Woodland

Leonard's Skipper (*Hesperia leonardus*) Weight: Suitable
Meske's Skipper (*Hesperia meskei*) Weight: Suitable
Magazine Stripetail (*Isoperla szczytkoi*) Weight: Suitable
Black-tailed Jackrabbit (*Lepus californicus*) Weight: Suitable
Crawford's Gray Shrew (*Notiosorex crawfordi*) Weight: Suitable
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Suitable
Rattlesnake-Master Borer Moth (*Papaipema eryngii*) Weight: Suitable
Mayfly (*Paraleptophlebia calcarica*) Weight: Suitable
Microcaddisfly (*Paucicalcaria ozarkensis*) Weight: Suitable
Eastern Harvest Mouse (*Reithrodontomys humulis*) Weight: Suitable
American Woodcock (*Scolopax minor*) Weight: Suitable
Southeastern Shrew (*Sorex longirostris*) Weight: Suitable
Bewick's Wren (*Thryomanes bewickii*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Marginal
Sprague's Pipit (*Anthus spragueii*) Weight: Marginal
American Bittern (*Botaurus lentiginosus*) Weight: Marginal
Smith's Longspur (*Calcarius pictus*) Weight: Marginal
Buff-breasted Sandpiper (*Calidris subruficollis*) Weight: Marginal
Bachman's Sparrow (*Peucaea aestivalis*) Weight: Marginal
Gorgone Checkerspot (*Chlosyne gorgone*) Weight: Data Gap
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Data Gap
Ozark Swallowtail (*Papilio joanae*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 3952

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Low

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Indicator Name: Broomsedge imbalance

Indicator Description: The percent of broomsedge coverage among ground vegetation

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent broomsedge coverage among ground vegetation to nine percent or less.

Monitoring Strategy: Monitor percent of broomsedge coverage among ground vegetation.

Key Factor Name Composition

Indicator Name:	Exotic Forbs and Grasses
Indicator Description:	The percent of ground cover in non-native herbaceous species
Poor Level:	>20
Fair Level:	10-20
Good Level:	5-9
Very Good Level:	<5
Current_Status:	Data Gap
Indicator Weight:	High
Conservation Action:	Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.
Monitoring Strategy:	Monitor the percent of ground cover in non-native herbaceous species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences plus 100 meter buffer burned per 2-4 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent plus 100 meter buffer of all known occurrences of this habitat type every 2-4 years.
Monitoring Strategy:	Monitor average percent of all known occurrences plus 100 meter buffer burned per 2-4 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >2.5 miles

Fair Level: 1-2.5 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to one mile or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: 0-1

Fair Level: 2

Good Level: 3

Very Good Level: >3

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<1,000 acres
Fair Level:	1,000-2,499 acres
Good Level:	2,500-5,000 acres
Very Good Level:	>5,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 2,500 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<75 acres
Fair Level:	75-149 acres
Good Level:	150-375 acres
Very Good Level:	>375 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 150 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).

Habitat Name Ozark-Ouachita Riparian



Ecoregions where the habitat occurs:

- | | | | | |
|-------------------------------------|-------------------------------------|----------------------------|--------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley | Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | | |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | |

Description

This system is found along streams and small rivers. In contrast to larger floodplain systems, this system has little to no floodplain development and often contains cobble bars and steep banks. It is traditionally higher gradient than larger floodplains and experiences periodic, strong flooding. Canopy cover can vary within examples of this system, but typical tree species include *Liquidambar styraciflua*, *Platanus occidentalis*, *Acer* spp., and *Quercus* spp. The richness of the herbaceous layer can vary significantly, ranging from species-rich to species-poor. Likewise, the shrub layer can vary considerably, but typical species may include *Lindera benzoin*, *Alnus serrulata* and *Hamamelis vernalis*. Small seeps and fens can often be found within this system, especially at the headwaters of streams. These areas are typically dominated by species of sedges (*Carex* spp.), ferns (*Osmunda* spp.), and other herbaceous species such as *Impatiens capensis*. Flooding and scouring strongly influence this system and prevent

Ozark-Ouachita Riparian

the floodplain development found on larger rivers.
(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Ozark Pocket Gopher (*Geomys bursarius ozarkensis*) Weight: Obligate
Ozark Snaketail Dragonfly (*Ophiogomphus westfalli*) Weight: Obligate
Lace-winged Roadside-Skipper (*Amblyscirtes aesculapius*) Weight: Optimal
Carolina Roadside-Skipper (*Amblyscirtes carolina*) Weight: Optimal
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Optimal
Ozark Clubtail Dragonfly (*Gomphus ozarkensis*) Weight: Optimal
Ouachita Diving Beetle (*Heterosternuta ouachita*) Weight: Optimal
Predaceous Diving Beetle (*Heterosternuta phoebeae*) Weight: Optimal
Sulphur Springs Diving Beetle (*Heterosternuta sulphuria*) Weight: Optimal
Wood Thrush (*Hylocichla mustelina*) Weight: Optimal
Queensnake (*Regina septemvittata*) Weight: Optimal
Ozark Emerald (*Somatochlora ozarkensis*) Weight: Optimal
Diana (*Speyeria diana*) Weight: Optimal
Arkansas Agapetus Caddisfly (*Agapetus medicus*) Weight: Suitable
Winter Stonefly (*Allocaonia jeanae*) Weight: Suitable
Bowed Snowfly (*Allocaonia oribata*) Weight: Suitable
Winter Stonefly (*Allocaonia ozarkana*) Weight: Suitable
Winter Stonefly (*Allocaonia warreni*) Weight: Suitable
Bell's Roadside-Skipper (*Amblyscirtes belli*) Weight: Suitable
Ringed Salamander (*Ambystoma annulatum*) Weight: Suitable
Mole Salamander (*Ambystoma talpoideum*) Weight: Suitable
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Ouachita Spiketail (*Cordulegaster talaria*) Weight: Suitable
Ozark Big-eared Bat (*Corynorhinus townsendii ingens*) Weight: Suitable
Mayfly (*Dannella provonshai*) Weight: Suitable
Mottled Duskywing (*Erynnis martialis*) Weight: Suitable
Dion Skipper (*Euphyes dion*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Gray Bat (*Myotis grisescens*) Weight: Suitable
Eastern Small-Footed Bat (*Myotis leibii*) Weight: Suitable
Indiana Bat (*Myotis sodalis*) Weight: Suitable
Contorted Ochrotrichian Microcaddisfly (*Ochrotrichia contorta*) Weight: Suitable
Microcaddisfly (*Ochrotrichia robisoni*) Weight: Suitable
Nearctic Paduniellan Caddisfly (*Paduniella nearctica*) Weight: Suitable
Caddo Mountain Salamander (*Plethodon caddoensis*) Weight: Suitable
Yehl Skipper (*Poanes yehl*) Weight: Suitable
Gray Comma (*Polygonia progne*) Weight: Suitable
Byssus Skipper (*Problema byssus*) Weight: Suitable
American Woodcock (*Scolopax minor*) Weight: Suitable
Southeastern Shrew (*Sorex longirostris*) Weight: Suitable
American Badger (*Taxidea taxus*) Weight: Suitable
Boston Mountains Crayfish (*Cambarus causeyi*) Weight: Marginal
Swainson's Warbler (*Limnothlypis swainsonii*) Weight: Marginal
Northern Long-eared Bat (*Myotis septentrionalis*) Weight: Marginal
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Marginal
Cerulean Warbler (*Setophaga cerulea*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Ozark-Ouachita Riparian

Irons Fork Burrowing Crayfish (*Procambarus reimeri*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 3778

Key Factor Name Canopy Closure

Key Factor Description: Combination of stem density, basal area and extent of canopy cover, with intermitent closure as ideal.

Key Factor Weight: Medium

Indicator Name: Canopy Closure

Indicator Description: The percent of the spatial extent of all known occurrences with a percent canopy closure of greater than 80% (BA 60 or greater).

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of the spatial extent of all known occurrences with a canopy closure of greater than 80 percent to 51 percent or more.

Monitoring Strategy: Monitor percent of the spatial extent of all known occurrences with a percent canopy closure of greater than 80% (BA 60 or greater).

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences burned per 5-7 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 5-7 years.
Monitoring Strategy:	Monitor average percent of all known occurrences burned per 5-7 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >.5 miles

Fair Level: .25-.5 miles

Good Level: .1-.25 miles

Very Good Level: <.1 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to .25 mile or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Indicator Name: Patch Size

Indicator Description: Average patch size across all known occurrences (acres)

Poor Level: <50 acres

Fair Level: 50-100 acres

Good Level: 100-250 acres

Very Good Level: >250 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average patch size of this habitat type to 100 acres or more across all known occurrences.

Monitoring Strategy: Monitor average patch size across all known occurrences (acres).

Key Factor Name Spatial Ecology

Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	<4
Fair Level:	4-7
Good Level:	7-10
Very Good Level:	>10
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to seven or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.
Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<500 acres
Fair Level:	500-1,000 acres
Good Level:	1,000-2,500 acres
Very Good Level:	>2,500 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 1,000 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.

Habitat Name Pasture Land



Ecoregions where the habitat occurs:

- Ozark Highlands
- Boston Mountains
- Mississippi Valley Loess Plains
- Arkansas Valley
- Ouachita Mountains
- South Central Plains
- Mississippi Alluvial Plain

Description

This type includes land with mixed grasses or monocultures of non-native grasses managed to support grazing domestic mammals. The type often has waterholes in association with the grassland. This type reduces the availability of more suitable habitats on the landscape for species of conservation concern.

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

- Ozark Pocket Gopher (*Geomys bursarius ozarkensis*) Weight: Obligate
- American Badger (*Taxidea taxus*) Weight: Optimal
- Eastern Tiger Salamander (*Ambystoma tigrinum*) Weight: Suitable

Pasture Land

Henslow's Sparrow (*Ammodramus henslowii*) Weight: Suitable
 Grasshopper Sparrow (*Ammodramus savannarum*) Weight: Suitable
 Buff-breasted Sandpiper (*Calidris subruficollis*) Weight: Suitable
 American Kestrel (*Falco sparverius*) Weight: Suitable
 Ouachita Burrowing Crayfish (*Fallicambarus harpi*) Weight: Suitable
 Great Plains Narrowmouth Toad (*Gastrophryne olivacea*) Weight: Suitable
 Migrant Loggerhead Shrike (*Lanius ludovicianus*) Weight: Suitable
 Black-tailed Jackrabbit (*Lepus californicus*) Weight: Suitable
 Crawfish Frog (*Lithobates areolatus*) Weight: Suitable
 Ozark Swallowtail (*Papilio joanae*) Weight: Suitable
 Prairie Skink (*Plestiodon septentrionalis*) Weight: Suitable
 American Golden-Plover (*Pluvialis dominica*) Weight: Suitable
 Broad-winged Skipper (*Poanes viator*) Weight: Suitable
 Yehl Skipper (*Poanes yehl*) Weight: Suitable
 Illinois Chorus Frog (*Pseudacris illinoensis*) Weight: Suitable
 Boreal Chorus Frog (*Pseudacris maculata*) Weight: Suitable
 Strecker's Chorus Frog (*Pseudacris streckeri*) Weight: Suitable
 Western Harvest Mouse (*Reithrodontomys megalotis*) Weight: Suitable
 Plains Harvest Mouse (*Reithrodontomys montanus*) Weight: Suitable
 Eastern Spadefoot (*Scaphiopus holbrookii*) Weight: Suitable
 Hurter's Spadefoot (*Scaphiopus hurterii*) Weight: Suitable
 Plains Spadefoot (*Spea bombifrons*) Weight: Suitable
 Southern Bog Lemming (*Synaptomys cooperi*) Weight: Suitable
 Bewick's Wren (*Thryomanes bewickii*) Weight: Suitable
 Lined Snake (*Tropidoclonion lineatum*) Weight: Suitable
 Le Conte's Sparrow (*Ammodramus leconteii*) Weight: Marginal
 Sprague's Pipit (*Anthus spragueii*) Weight: Marginal
 Smith's Longspur (*Calcarius pictus*) Weight: Marginal
 Common Nighthawk (*Chordeiles minor*) Weight: Marginal
 Northern Bobwhite (*Colinus virginianus*) Weight: Marginal
 Monarch (*Danaus plexippus*) Weight: Marginal
 Rusty Blackbird (*Euphagus carolinus*) Weight: Marginal
 Purple Finch (*Haemorhous purpureus*) Weight: Marginal
 Bronze Copper (*Lycaena hylus*) Weight: Marginal
 American Woodcock (*Scolopax minor*) Weight: Marginal
 Bell's Vireo (*Vireo bellii*) Weight: Marginal
 Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 1716

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Frequency

Indicator Description: Average percent of all known occurrences burned per 2-4 year interval.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 2-4 years.

Monitoring Strategy: Monitor average percent of all known occurrences burned per 2-4 year interval.

Key Factor Name Fire Regime

Indicator Name:	Fire Seasonality/Intensity
Indicator Description:	The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.
Monitoring Strategy:	Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Habitat Name Ponds, Lakes, and Water Holes



Ecoregions where the habitat occurs:

- | | | | | |
|-------------------------------------|-------------------------------------|-------------------------------------|--------------|-------------------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley | Loess Plains | Arkansas Valley |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | <input checked="" type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | | |
| <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | | |

Description

This type includes a variety of non-flowing aquatic habitats that may be a fraction of an acre to thousands of acres in size. The larger examples occur in the mountains as Corps of Engineers impoundments. Smaller waterholes are often built for wildlife or livestock watering functions. Most of these are built by humans.
(Foti and others 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

- Anhinga (*Anhinga anhinga*) Weight: Obligate
Trumpeter Swan (*Cygnus buccinator*) Weight: Obligate

Ponds, Lakes, and Water Holes

Chicken Turtle (*Deirochelys reticularia*) Weight: Obligate
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Optimal
American Black Duck (*Anas rubripes*) Weight: Suitable
American Bittern (*Botaurus lentiginosus*) Weight: Suitable
Tricolored Heron (*Egretta tricolor*) Weight: Suitable
Common Gallinule (*Gallinula galeata*) Weight: Suitable
Northern Long-eared Bat (*Myotis septentrionalis*) Weight: Suitable
Indiana Bat (*Myotis sodalis*) Weight: Suitable
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Suitable
American Golden-Plover (*Pluvialis dominica*) Weight: Suitable
Purple Gallinule (*Porphyrio martinicus*) Weight: Suitable
Interior Least Tern (*Sternula antillarum athalassos*) Weight: Suitable
Ruddy Turnstone (*Arenaria interpres*) Weight: Marginal
Sanderling (*Calidris alba*) Weight: Marginal
Dunlin (*Calidris alpina*) Weight: Marginal
Stilt Sandpiper (*Calidris himantopus*) Weight: Marginal
Piping Plover (*Charadrius melodus*) Weight: Marginal
Least Bittern (*Ixobrychus exilis*) Weight: Marginal
Short-billed Dowitcher (*Limnodromus griseus*) Weight: Marginal
Black-bellied Plover (*Pluvialis squatarola*) Weight: Marginal
King Rail (*Rallus elegans*) Weight: Marginal

Habitat Team

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Habitat Priority Score: 1093

Key Factor Name Spatial Ecology

Key Factor Description:

Key Factor Weight: Medium

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: 0-1

Fair Level: 2

Good Level: 3

Very Good Level: >3

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Indicator Name: Patch Size

Indicator Description: Width of buffer (meters)

Poor Level: <100 meters of buffer

Fair Level: 100-250 meters of buffer

Good Level: 251-400 meters of buffer

Very Good Level: >400 meters of buffer

Current_Status: Data Gap

Indicator Weight: Medium

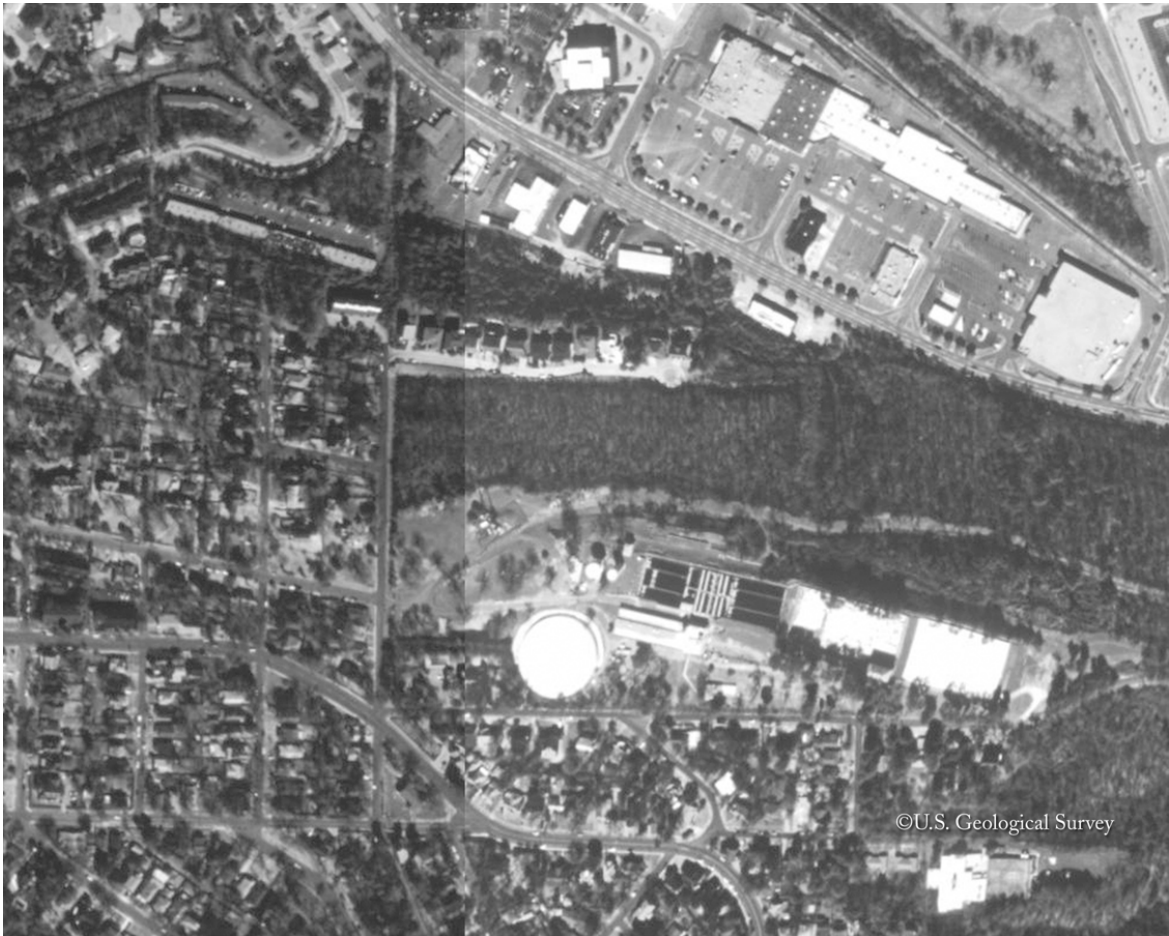
Conservation Action: Maintain, or where necessary, buffer known occurrences of this habitat type with a minimum of 251 meters of adjacent but dissimilar habitats.

Monitoring Strategy: Monitor width of buffer (meters).

Key Factor Name Spatial Ecology

Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>1200 meters
Fair Level:	801-1200 meters
Good Level:	500-800 meters
Very Good Level:	<500 meters
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, resotre the average distance between patches to 800 meters or less.
Monitoring Strategy:	Monitor median nearest distance between patches.
Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<300 acres
Fair Level:	300-600 acres
Good Level:	601-1,000 acres
Very Good Level:	>1,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 601 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.

Habitat Name Urban/Suburban



Ecoregions where the habitat occurs:

- Ozark Highlands
- Boston Mountains
- Mississippi Valley
- Loess Plains
- Arkansas Valley
- Ouachita Mountains
- South Central Plains
- Mississippi Alluvial Plain

Description

This type includes roofed structures surrounded by pavement, short grass, shrubs and open-grown trees, interspersed with parkland and commercial areas. High concentrations of exotic flora and fauna are commonly associated with this. (Foti and others 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

- Sharp-shinned Hawk (*Accipiter striatus*) Weight: Suitable
- Chimney Swift (*Chaetura pelagica*) Weight: Suitable
- Common Nighthawk (*Chordeiles minor*) Weight: Suitable

Urban/Suburban

Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Little Brown Bat (*Myotis lucifugus*) Weight: Suitable
American Golden-Plover (*Pluvialis dominica*) Weight: Suitable
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Marginal
Monarch (*Danaus plexippus*) Weight: Marginal
American Kestrel (*Falco sparverius*) Weight: Marginal
Wood Thrush (*Hylocichla mustelina*) Weight: Marginal
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Marginal
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Marginal
Bewick's Wren (*Thryomanes bewickii*) Weight: Marginal

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Habitat Priority Score: 403

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Forested cover

Indicator Description: The percent of tree canopy cover.

Poor Level: <20

Fair Level: 20-40

Good Level: 40-60

Very Good Level: >60

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of tree canopy cover to 40 percent or higher.

Monitoring Strategy: Monitor the percent of tree canopy cover.

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Habitat Name West Gulf Coastal Plain Calcareous Prairie and Woodland



Ecoregions where the habitat occurs:

- Ozark Highlands Boston Mountains Mississippi Valley Loess Plains Arkansas Valley
Ouachita Mountains South Central Plains Mississippi Alluvial Plain

Description

The blackland prairies and woodlands of southwest Arkansas occur over relatively deep calcareous soils. This system is dominated by *Schizachyrium scoparium* and *Sorghastrum nutans* and a rich herbaceous groundlayer. The woodland component is dominated by *Quercus muehlenbergii* and *Carya illinoensis*, also with a rich herbaceous groundlayer. These high-clay content, shrink-swell soils resist invasion by woody species, which combined with fire, maintains the prairie and open woodlands. (adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Le Conte's Sparrow (*Ammodramus leconteii*) Weight: Optimal
Common Nighthawk (*Chordeiles minor*) Weight: Optimal
Northern Bobwhite (*Colinus virginianus*) Weight: Optimal
Monarch (*Danaus plexippus*) Weight: Optimal
Dukes' Skipper (*Euphyes dukesi*) Weight: Optimal
Giant Prairie Robberfly (*Microstylum morosum*) Weight: Optimal
Slender Glass Lizard (*Ophisaurus attenuatus*) Weight: Optimal
Byssus Skipper (*Problema byssus*) Weight: Optimal
Anthophorid Bee (*Tetraloniella albata*) Weight: Optimal
Texas Milkweed Beetle (*Tetraopes texanus*) Weight: Optimal
Bell's Roadside-Skipper (*Amblyscirtes belli*) Weight: Suitable
Henslow's Sparrow (*Ammodramus henslowii*) Weight: Suitable
Grasshopper Sparrow (*Ammodramus savannarum*) Weight: Suitable
Northern Metalmark (*Calephelis borealis*) Weight: Suitable
Texas Frosted Elf (*Callophrys irus hadros*) Weight: Suitable
Dusky Azure (*Celastrina nigra*) Weight: Suitable
Sedge Wren (*Cistothorus platensis*) Weight: Suitable
Outis Skipper (*Cogia outis*) Weight: Suitable
Willow Flycatcher (*Empidonax traillii*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Leonard's Skipper (*Hesperia leonardus*) Weight: Suitable
Meske's Skipper (*Hesperia meskei*) Weight: Suitable
Crawford's Gray Shrew (*Notiosorex crawfordi*) Weight: Suitable
Rattlesnake-Master Borer Moth (*Papaipema eryngii*) Weight: Suitable
Yehl Skipper (*Poanes yehl*) Weight: Suitable
Diana (*Speyeria diana*) Weight: Suitable
Red Milkweed Beetle (*Tetraopes quinquemaculatus*) Weight: Suitable
Bell's Vireo (*Vireo bellii*) Weight: Suitable
Sprague's Pipit (*Anthus spragueii*) Weight: Marginal
Smith's Longspur (*Calcarius pictus*) Weight: Marginal
Buff-breasted Sandpiper (*Calidris subruficollis*) Weight: Marginal
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Marginal
American Woodcock (*Scolopax minor*) Weight: Marginal
Gorgone Checkerspot (*Chlosyne gorgone*) Weight: Data Gap
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

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Habitat Priority Score: 1733

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences plus 100 meter buffer burned per 3-5 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent plus 100 meter buffer of all known occurrences of this habitat type every 3-5 years.
Monitoring Strategy:	Monitor average percent of all known occurrences plus 100 meter buffer burned per 3-5 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Size

Indicator Description: Average patch size across all known occurrences (acres)

Poor Level: <50 acres

Fair Level: 50-125 acres

Good Level: 125-250 acres

Very Good Level: >250 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average patch size of this habitat type to 125 acres or more across all known occurrences.

Monitoring Strategy: Monitor average patch size across all known occurrences (acres).

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<1,000 acres
Fair Level:	1,000-2,499 acres
Good Level:	2,500-5,000 acres
Very Good Level:	>5,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 2,500 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>5 miles
Fair Level:	3-5 miles
Good Level:	1-2 miles
Very Good Level:	<1 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.
Monitoring Strategy:	Monitor median nearest distance between patches.

Habitat Name West Gulf Coastal Plain Large River Floodplain Forest



Ecoregions where the habitat occurs:

- Ozark Highlands Boston Mountains Mississippi Valley Loess Plains Arkansas Valley
Ouachita Mountains South Central Plains Mississippi Alluvial Plain

Description

This system represents broad bottomlands along larger rivers such as the Saline and Ouachita. Several distinct plant communities are recognized within this system that may be related to the array of different geomorphic features present within the floodplain. Some of the major geomorphic features associated with different community types include natural levees, point bars, meander scrolls, oxbows and sloughs. However, in many cases these features too small to be mapped or managed individually, and therefore contribute to an overall matrix of the habitat. Vegetation generally includes forests dominated by bottomland hardwood species and other trees tolerant of flooding and distributed according to these microsite variations.

(adapted from NatureServe 2005)

West Gulf Coastal Plain Large River Floodplain Forest

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Crawfish Frog (*Lithobates areolatus*) Weight: Obligate
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Optimal
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Optimal
Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) Weight: Optimal
Bird-voiced Treefrog (*Hyla avivoca*) Weight: Optimal
Squirrel Treefrog (*Hyla squirella*) Weight: Optimal
Wood Thrush (*Hylocichla mustelina*) Weight: Optimal
Southeastern Bat (*Myotis austroriparius*) Weight: Optimal
American Woodcock (*Scolopax minor*) Weight: Optimal
Lace-winged Roadside-Skipper (*Amblyscirtes aesculapius*) Weight: Suitable
American Black Duck (*Anas rubripes*) Weight: Suitable
Anhinga (*Anhinga anhinga*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Chicken Turtle (*Deirochelys reticularia*) Weight: Suitable
Tricolored Heron (*Egretta tricolor*) Weight: Suitable
Swallow-tailed Kite (*Elanoides forficatus*) Weight: Suitable
Rusty Blackbird (*Euphagus carolinus*) Weight: Suitable
Dukes' Skipper (*Euphyes dukesi*) Weight: Suitable
Dwarf Salamander (*Eurycea quadridigitata*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Glossy Swampsnake (*Liodytes rigida*) Weight: Suitable
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Suitable
Swainson's Warbler (*Limnothlypis swainsonii*) Weight: Marginal
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Marginal
Lincoln Underwing (*Catocala lincolnana*) Weight: Data Gap
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 1213

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Red Oak/Overcup Oak Ratio

Indicator Description: Relative amount of Red Oak to Overcup Oak in terms of basal area

Poor Level: 1:2

Fair Level: 1:1.5

Good Level: 1:1

Very Good Level: 1.5:1

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the relative amount of Red Oak to Overcup Oak (measured in basal area) to a ratio of 1.1 or higher.

Monitoring Strategy: Monitor relative amount of Red Oak to Overcup Oak in terms of basal area.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Frequency

Indicator Description: Average percent of all known occurrences burned per 5-15 year interval.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 5-15 years.

Monitoring Strategy: Monitor average percent of all known occurrences burned per 5-15 year interval.

Key Factor Name Fire Regime

Indicator Name:	Fire Seasonality/Intensity
Indicator Description:	The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.
Monitoring Strategy:	Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Average Block Size

Indicator Description: Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.

Poor Level: <2,500 acres

Fair Level: 2,500-5,000 acres

Good Level: 5,001-10,000 acres

Very Good Level: >10,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore average block size to 5,001 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor block size.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<250 acres
Fair Level:	250-500 acres
Good Level:	501-1,000 acres
Very Good Level:	>1,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 501 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).
Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>4 miles
Fair Level:	2-4 miles
Good Level:	1-2 miles
Very Good Level:	<1 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.
Monitoring Strategy:	Monitor median nearest distance between patches.

Key Factor Name Spatial Ecology

Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.

Habitat Name West Gulf Coastal Plain Pine-Hardwood Flatwoods



Ecoregions where the habitat occurs:

- | | | | |
|--------------------------|-------------------------------------|---------------------------------|--------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley Loess Plains | Arkansas Valley |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | |

Description

This system represents flatwoods found on Pleistocene high terraces, typically outside the floodplain. Soils are fine-textured and hardpans may be present in the subsurface. The limited permeability of these soils contributes to shallowly perched water tables during portions of the year when precipitation is greatest and evapotranspiration is lowest. Soil moisture fluctuates widely throughout the growing season, from saturated to very dry, a condition sometimes referred to as hydroxeric moisture regime. Saturation is primarily influenced by precipitation rather than overbank flooding. *Pinus taeda* is codominant along with *Quercus pagoda* and *Quercus phellos*, with a graminoid-rich groundlayer. Approximately twenty percent of the system is occupied by prairie mounds with *Pinus echinata*, *Vaccinium* spp., and *Symplocos tinctoria*. Extremely dry seasonal conditions make fire an important natural process in the system. As a result, this system was typically a woodland, although recent fire

West Gulf Coastal Plain Pine-Hardwood Flatwoods

suppression and forest management have caused a conversion of most sites to forest. Some swales support pockets of *Fraxinus caroliniana* and *Crataegus* spp. Saline Barrens habitat is present on soils with high saline content, which are generally not conducive to woody plant growth. Thus, the vegetation forms a mosaic primarily consisting of open herbaceous or shrubby plant communities.

(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Red-cockaded Woodpecker (*Picoides borealis*) Weight: Obligate
Henslow's Sparrow (*Ammodramus henslowii*) Weight: Optimal
Prairie Skink (*Plestiodon septentrionalis*) Weight: Optimal
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Suitable
Common Nighthawk (*Chordeiles minor*) Weight: Suitable
Northern Bobwhite (*Colinus virginianus*) Weight: Suitable
Monarch (*Danaus plexippus*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Georgia Satyr (*Neonympha areolatus*) Weight: Suitable
Hurter's Spadefoot (*Scaphiopus hurterii*) Weight: Suitable
Diana (*Speyeria diana*) Weight: Suitable
Le Conte's Sparrow (*Ammodramus leconteii*) Weight: Marginal
Northern Bobwhite (*Colinus virginianus*) Weight: Marginal
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 702

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Percent herbaceous groundcover with minimal woody plants

Indicator Description: The percent of the ground that is primarily herbaceous groundcover.

Poor Level: <60

Fair Level: 60-70

Good Level: 70-80

Very Good Level: >90

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain, or where necessary, restore the percent of the groundcovered by native herbaceous vegetation to 70 percent or more.

Monitoring Strategy: Monitor the percent of the ground that is primarily herbaceous groundcover.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Frequency

Indicator Description: Average percent of all known occurrences burned per 3-7 year interval.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-7 years.

Monitoring Strategy: Monitor average percent of all known occurrences burned per 3-7 year interval.

Key Factor Name Fire Regime

Indicator Name:	Fire Seasonality/Intensity
Indicator Description:	The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.
Monitoring Strategy:	Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Size

Indicator Description: Average patch size across all known occurrences (acres)

Poor Level: <250 acres

Fair Level: 250-500 acres

Good Level: 501-1,000 acres

Very Good Level: >1,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average patch size of this habitat type to 501 acres or more across all known occurrences.

Monitoring Strategy: Monitor average patch size across all known occurrences (acres).

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >4 miles

Fair Level: 2-4 miles

Good Level: 1-2 miles

Very Good Level: <1 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Key Factor Name Spatial Ecology

Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.
Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<2,500 acres
Fair Level:	2,500-5,000 acres
Good Level:	5,001-10,000 acres
Very Good Level:	>10,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 5,001 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.

Habitat Name West Gulf Coastal Plain Pine-Hardwood Forest/Woodland



Ecoregions where the habitat occurs:

- Ozark Highlands Boston Mountains Mississippi Valley Loess Plains Arkansas Valley
Ouachita Mountains South Central Plains Mississippi Alluvial Plain

Description

This ecological system consists of forests and woodlands dominated by *Pinus taeda* and/or *Pinus echinata* in combination with a host of dry to dry-mesic site hardwood species. This type was the historical matrix (dominant vegetation type) within this region. This habitat was historically present on nearly all uplands in the region except on the most edaphically limited sites (droughty sands, calcareous clays, and shallow soil barrens/rock outcrops). Such sites are underlain by loamy to fine-textured soils of variable depths. These are upland sites on ridgetops and adjacent side slopes, with moderate fertility and moisture retention. This system has undergone major transformations since European settlement and has been largely converted to cultivated pine plantations and other human uses. In limited upland areas, especially side slopes and ravines, mesic hardwood forests occur within this matrix. These areas

West Gulf Coastal Plain Pine-Hardwood Forest/Woodland

were somewhat protected topographically from historically fire-prone, pine-dominated uplands. Sites are often found along slopes above perennial or intermittent streams in the region. Vegetation indicators are mesic hardwoods such as *Fagus grandifolia*, *Quercus alba*, and *Ilex opaca*, although scattered, large-diameter pines, often *Pinus taeda*, are also often present. Spring-blooming herbaceous species are typical in the understory of most examples.

(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Red-cockaded Woodpecker (*Picoides borealis*) Weight: Obligate
Bell's Roadside-Skipper (*Amblyscirtes belli*) Weight: Optimal
Sequoyah Slimy Salamander (*Plethodon sequoyah*) Weight: Optimal
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Suitable
Monarch (*Danaus plexippus*) Weight: Suitable
Cobweb Skipper (*Hesperia metea*) Weight: Suitable
Gray Comma (*Polygonia progne*) Weight: Suitable
King's Hairstreak (*Satyrrium kingi*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 581

Key Factor Name Canopy Closure

Key Factor Description: Combination of stem density, basal area and extent of canopy cover, with intermitent closure as ideal (Surrogate for Horizontal Structure). Data from the Ouachita Pine-Oak Forest conservation target were used as comparable, as actual data was unavailable.

Key Factor Weight: Medium

Indicator Name: Canopy Closure

Indicator Description: The percent of the spatial extent of all known occurrences with a percent canopy closure of greater than 70%.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of the spatial extent of all known occurrences with a canopy closure of greater than 70 percent to 51 percent or more.

Monitoring Strategy: Monitor percent of the spatial extent of all known occurrences with a percent canopy closure of greater than 70%.

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Shortleaf pine decline

Indicator Description: Percent loss of shortleaf pine over 30 year period

Poor Level: >50

Fair Level: 31-50

Good Level: 15-30

Very Good Level: <15

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the shortleaf pine loss over a 30 year period to 30 percent or less.

Monitoring Strategy: Monitor percent loss of shortleaf pine over 30 year period.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Frequency

Indicator Description: Average percent of all known occurrences burned per 3-7 year interval.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-7 years.

Monitoring Strategy: Monitor average percent of all known occurrences burned per 3-7 year interval.

Key Factor Name Fire Regime

Indicator Name:	Fire Seasonality/Intensity
Indicator Description:	The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.
Monitoring Strategy:	Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: 0-1

Fair Level: 2

Good Level: 3

Very Good Level: >3

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<5,000 acres
Fair Level:	5,000-10,000 acres
Good Level:	10,000-20,000 acres
Very Good Level:	>20,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 10,000 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<500 acres
Fair Level:	500-1,000 acres
Good Level:	1,001-2,000 acres
Very Good Level:	>2,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 1,001 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).

Key Factor Name Spatial Ecology

Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>4 miles
Fair Level:	2-4 miles
Good Level:	1-2 miles
Very Good Level:	<1 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.
Monitoring Strategy:	Monitor median nearest distance between patches.

Habitat Name West Gulf Coastal Plain Red River Floodplain Forest



Ecoregions where the habitat occurs:

- Ozark Highlands Boston Mountains Mississippi Valley Loess Plains Arkansas Valley
Ouachita Mountains South Central Plains Mississippi Alluvial Plain

Description

This system is restricted to the main stem of the Red River in southwestern Arkansas. Several distinct plant communities can be recognized within this system that may be related to the array of different geomorphic features present within the floodplain. Some of the major geomorphic features associated with different community types within the system include natural levees, point bars, meander scrolls, oxbows, and sloughs. Vegetation generally includes forests dominated by bottomland hardwood species, with sites ranging from relatively dry to cypress-tupelo swamps. This system is generally similar in concept to West Gulf Coastal Plain Large River Floodplain Forest but is distinct from it because of the difference in magnitude between the typical large rivers (Ouachita, Saline) and the Red River bottoms. Native vegetation in the Red River bottoms differs from that of the West Gulf Coastal Plain Large River Floodplain Forest in having a larger area occupied by *Populus deltoides*, *Salix nigra* and other sandy

West Gulf Coastal Plain Red River Floodplain Forest

riverfront forests. Nearly all of this habitat has been converted to row crops.

(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Optimal
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Optimal
Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) Weight: Optimal
Wood Thrush (*Hylocichla mustelina*) Weight: Optimal
Anhinga (*Anhinga anhinga*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Tricolored Heron (*Egretta tricolor*) Weight: Suitable
Swallow-tailed Kite (*Elanoides forficatus*) Weight: Suitable
Rusty Blackbird (*Euphagus carolinus*) Weight: Suitable
Dukes' Skipper (*Euphyes dukesi*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Glossy Swampsnake (*Liodytes rigida*) Weight: Suitable
Crawfish Frog (*Lithobates areolatus*) Weight: Suitable
Southeastern Bat (*Myotis austroriparius*) Weight: Suitable
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Suitable
Prairie Skink (*Plestiodon septentrionalis*) Weight: Suitable
American Woodcock (*Scolopax minor*) Weight: Suitable
American Black Duck (*Anas rubripes*) Weight: Marginal
American Bittern (*Botaurus lentiginosus*) Weight: Marginal
Swainson's Warbler (*Limnothlypis swainsonii*) Weight: Marginal
Black-crowned Night-Heron (*Nycticorax nycticorax*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 926

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences burned per 3-15 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-15 years.
Monitoring Strategy:	Monitor average percent of all known occurrences burned per 3-15 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: 0-1

Fair Level: 2

Good Level: 3

Very Good Level: >3

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >4 miles

Fair Level: 2-4 miles

Good Level: 1-2 miles

Very Good Level: <1 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to two miles or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<2,500 acres
Fair Level:	2,500-5,000 acres
Good Level:	5,001-10,000 acres
Very Good Level:	>10,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 5,001 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<250 acres
Fair Level:	250-500 acres
Good Level:	501-1,000 acres
Very Good Level:	>1,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 501 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).

Habitat Name West Gulf Coastal Plain Sandhill Oak and Shortleaf Pine Forest/Woodland



Ecoregions where the habitat occurs:

- | | | | | |
|--------------------------|-------------------------------------|----------------------------|--------------------------|--------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley | Loess Plains | Arkansas Valley |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |

Description

This habitat occurs on uplands underlain by deep, coarse sandy soils. These sites are typified by low fertility and moisture retention, which contribute to open tree canopies with usually <60% canopy closure. Sparse understory vegetation and patches of bare soil are indicative of this system. Vegetation indicators are species tolerant of droughty sites, especially *Quercus incana* and *Quercus arkansana*. *Pinus echinata* is usually present. This habitat may be essentially treeless sand barrens. Fire is a critical natural disturbance process which affects the vegetation structure and likely the species composition of communities in this system.

(adapted from NatureServe 2005)

West Gulf Coastal Plain Sandhill Oak and Shortleaf Pine Forest/Woodland

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Bell's Roadside-Skipper (*Amblyscirtes belli*) Weight: Optimal
Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Suitable
Texas Frosted Elfin (*Callophrys irus hadros*) Weight: Suitable
Mottled Duskywing (*Erynnis martialis*) Weight: Suitable
Meske's Skipper (*Hesperia meskei*) Weight: Suitable
Georgia Satyr (*Neonympha areolatus*) Weight: Suitable
Broad-winged Skipper (*Poanes viator*) Weight: Suitable
Oak Hairstreak (*Satyrium favonius ontario*) Weight: Suitable
Sharp-shinned Hawk (*Accipiter striatus*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 421

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Percent total herbaceous ground coverage

Indicator Description: Average percent total native herbaceous ground cover across all known potential occurrences. Density must be sufficient to carry growing season fire at least once every five years. Composition should include only native species.

Poor Level: <25

Fair Level: 25-40

Good Level: 41-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average percent total native herbaceous groundcover across all known potential occurrences to 41 percent or more.

Monitoring Strategy: Monitor average percent total native herbaceous ground cover across all known potential occurrences.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences plus 100 meter buffer burned per 3-5 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent plus 100 meter buffer of all known occurrences of this habitat type every 3-5 years.
Monitoring Strategy:	Monitor average percent of all known occurrences plus 100 meter buffer burned per 3-5 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >2 miles

Fair Level: 0.76-2.0 miles

Good Level: 0.5-0.75 miles

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to 3/4 mile or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Indicator Name: Patch Size

Indicator Description: Average patch size across all known occurrences (acres)

Poor Level: <2 acres

Fair Level: 2-10 acres

Good Level: 10-40 acres

Very Good Level: >40 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average patch size of this habitat type to 10 acres or more across all known occurrences.

Monitoring Strategy: Monitor average patch size across all known occurrences (acres).

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<50 acres
Fair Level:	50-500 acres
Good Level:	501-1,000 acres
Very Good Level:	>1,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 501 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.

Habitat Name West Gulf Coastal Plain Seepage Swamp and Baygall



Ecoregions where the habitat occurs:

- | | | | | |
|--------------------------|-------------------------------------|----------------------------|--------------------------|--------------------------|
| Ozark Highlands | Boston Mountains | Mississippi Valley | Loess Plains | Arkansas Valley |
| <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ouachita Mountains | South Central Plains | Mississippi Alluvial Plain | | |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | | |

Description

This habitat consists of forested wetlands in acidic seepage zones. These wetlands may occur in poorly developed upland drainages, toe-slopes, and small headwaters stream bottoms. These environments are prone to long duration standing water, and tend to occur on highly acidic, nutrient-poor soils. The vegetation is characterized by *Magnolia virginiana*, *Nyssa sylvatica*, *Nyssa biflora*, and *Acer rubrum*. Understory vegetation consistently supports an abundance of ferns, such as *Osmunda cinnamomea*, *Osmunda regalis* var. *spectabilis*, and *Woodwardia areolata*. In some cases, particularly after severe disturbance, these wetlands may be dominated by herbaceous species. In most cases, these wetlands are embedded in uplands with deep sandy soils. When these communities are associated with streams, they tend to be low gradient, with narrow, often braided channels and diffuse drainage patterns.

West Gulf Coastal Plain Seepage Swamp and Baygall

(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) Weight: Optimal
Chicken Turtle (*Deirochelys reticularia*) Weight: Optimal
Dwarf Salamander (*Eurycea quadridigitata*) Weight: Optimal
Bird-voiced Treefrog (*Hyla avivoca*) Weight: Optimal
Squirrel Treefrog (*Hyla squirella*) Weight: Optimal
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Suitable
Dukes' Skipper (*Euphyes dukesi*) Weight: Suitable
Pine Hills Digger (*Fallicambarus dissitus*) Weight: Suitable
Jefferson County Crayfish (*Fallicambarus gilpini*) Weight: Suitable
Regal Burrowing Crayfish (*Procambarus regalis*) Weight: Suitable
Bayou Bodcau Crayfish (*Bouchardina robisoni*) Weight: Data Gap
Slenderwrist Burrowing Crayfish (*Fallicambarus petilicarpus*) Weight: Data Gap
Blair's Fencing Crayfish (*Faxonella blairi*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 646

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences plus appropriate buffer burned per 3-7 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent plus appropriate buffer of all known occurrences of this habitat type every 3-7 years.
Monitoring Strategy:	Monitor average percent of all known occurrences plus appropriate buffer burned per 3-7 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Proximity

Indicator Description: Median nearest distance between patches.

Poor Level: >1200 meters

Fair Level: 801-1200 meters

Good Level: 500-800 meters

Very Good Level: <500 meters

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average distance between patches to 800 meters or less.

Monitoring Strategy: Monitor median nearest distance between patches.

Indicator Name: Average Block Size

Indicator Description: Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.

Poor Level: <300 acres

Fair Level: 300-600 acres

Good Level: 601-1,000 acres

Very Good Level: >1,000 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore average block size to 601 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor block size.

Key Factor Name Spatial Ecology

Indicator Name:	Patch Size
Indicator Description:	Width of buffer (meters)
Poor Level:	<100 meters of buffer
Fair Level:	100-250 meters of buffer
Good Level:	251-400 meters of buffer
Very Good Level:	>400 meters of buffer
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain, or where necessary, buffer known occurrences of this habitat type with a minimum of 251 meters of adjacent but dissimilar habitats.
Monitoring Strategy:	Monitor width of buffer (meters).
Indicator Name:	Number of Blocks
Indicator Description:	Total number of blocks statewide
Poor Level:	0-1
Fair Level:	2
Good Level:	3
Very Good Level:	>3
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor total number of blocks statewide.

Habitat Name West Gulf Coastal Plain Small Stream/River Forest



Ecoregions where the habitat occurs:

- Ozark Highlands Boston Mountains Mississippi Valley Loess Plains Arkansas Valley
Ouachita Mountains South Central Plains Mississippi Alluvial Plain

Description

This is a forested habitat associated with small rivers and creeks. In contrast to West Gulf Coastal Plain Large River Floodplain Forest, examples of this habitat have fewer major geomorphic floodplain features. Those features that are present tend to be smaller and more closely intermixed with one another, resulting in less obvious vegetational zonation. Bottomland hardwood tree species are typically important and diagnostic, although mesic hardwood species are also present in areas with less inundation and with better drained soils. As a whole, flooding occurs annually, but the water table usually is well below the soil surface throughout most of the growing season. Areas impacted by beaver impoundments are also included in this system. (adapted from NatureServe 2005)

West Gulf Coastal Plain Small Stream/River Forest

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Optimal
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Optimal
Dwarf Salamander (*Eurycea quadridigitata*) Weight: Optimal
Ozark Clubtail Dragonfly (*Gomphus ozarkensis*) Weight: Optimal
Bird-voiced Treefrog (*Hyla avivoca*) Weight: Optimal
Squirrel Treefrog (*Hyla squirella*) Weight: Optimal
Winter Stonefly (*Allocaupnia malverna*) Weight: Suitable
Winter Stonefly (*Allocaupnia ozarkana*) Weight: Suitable
Lace-winged Roadside-Skipper (*Amblyscirtes aesculapius*) Weight: Suitable
Mole Salamander (*Ambystoma talpoideum*) Weight: Suitable
Chimney Swift (*Chaetura pelagica*) Weight: Suitable
Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) Weight: Suitable
Chicken Turtle (*Deirochelys reticularia*) Weight: Suitable
Mottled Duskywing (*Erynnis martialis*) Weight: Suitable
Dion Skipper (*Euphyes dion*) Weight: Suitable
Dukes' Skipper (*Euphyes dukesi*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Wood Thrush (*Hylocichla mustelina*) Weight: Suitable
Swainson's Warbler (*Limnothlypis swainsonii*) Weight: Suitable
Glossy Swampsnake (*Liodytes rigida*) Weight: Suitable
Gray Comma (*Polygonia progne*) Weight: Suitable
Graham's Crayfish Snake (*Regina grahamii*) Weight: Suitable
American Woodcock (*Scolopax minor*) Weight: Suitable
Southeastern Bat (*Myotis austroriparius*) Weight: Marginal
Yellow-crowned Night-Heron (*Nyctanassa violacea*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap
Yehl Skipper (*Poanes yehl*) Weight: Data Gap

Habitat Team

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Habitat Priority Score: 1170

Key Factor Name Canopy Closure

Key Factor Description: Combination of stem density, basal area and extent of canopy cover, with intermitent closure as ideal (Surrogate for Horizontal Structure).

Key Factor Weight: Medium

Indicator Name: Canopy Closure

Indicator Description: The percent of the spatial extent of all known occurrences with a percent canopy closure of greater than 80 percent.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of the spatial extent of all known occurrences with a canopy closure of greater than 80 percent to 51 percent or more.

Monitoring Strategy: Monitor percent of the spatial extent of all known occurrences with a percent canopy closure of greater than 80 percent.

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences burned per 3-7 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-7 years.
Monitoring Strategy:	Monitor average percent of all known occurrences burned per 3-7 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: <4

Fair Level: 4-7

Good Level: 7-10

Very Good Level: >10

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to seven or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<500 acres
Fair Level:	500-1,000 acres
Good Level:	1,000-2,500 acres
Very Good Level:	>2,500 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 1,000 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Patch Size
Indicator Description:	Average patch size across all known occurrences (acres)
Poor Level:	<50 acres
Fair Level:	50-100 acres
Good Level:	100-250 acres
Very Good Level:	>250 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the average patch size of this habitat type to 100 acres or more across all known occurrences.
Monitoring Strategy:	Monitor average patch size across all known occurrences (acres).

Key Factor Name Spatial Ecology

Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>.5 mile
Fair Level:	.25-.5 miles
Good Level:	.1-.25 miles
Very Good Level:	<.1 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to .25 mile or less.
Monitoring Strategy:	Monitor median nearest distance between patches.

Habitat Name West Gulf Coastal Plain Wet Hardwood Flatwoods



Ecoregions where the habitat occurs:

- Ozark Highlands Boston Mountains Mississippi Valley Loess Plains Arkansas Valley
Ouachita Mountains South Central Plains Mississippi Alluvial Plain

Description

These habitats are found on Pleistocene terraces usually outside the floodplains. The local landscape may be a series of ridges and swales. Vegetation composition and structure varies with elevation, soil texture and moisture, and disturbance history. Soils are fine-textured and hardpans may be present in the subsurface. The limited permeability of these soils contributes to shallowly perched water tables during portions of the year when precipitation is greatest and evapotranspiration is lowest. Soil moisture fluctuates widely throughout the growing season, from saturated to very dry, a condition sometimes referred to as hydroxeric moisture regime. Saturation is primarily influenced by precipitation rather than overbank flooding. *Quercus phellos*, *Quercus lyrata*, *Quercus laurifolia*, and *Quercus nigra* occur often with *Sabal minor* and a sparse groundlayer. Prairie mounds with an ore mesophytic vegetation may be present. Dry seasonal conditions make fire a natural process in the system. As a result, this system was

West Gulf Coastal Plain Wet Hardwood Flatwoods

typically a woodland, although recent fire suppression and forest management have caused a conversion of most sites to forest. Some swales support pockets of cypress-tupelo.

(adapted from NatureServe 2005)

Species associated with this habitat type (and the weight or importance of the habitat to each species) include:

Eastern Whip-poor-will (*Antrostomus vociferus*) Weight: Optimal
American Woodcock (*Scolopax minor*) Weight: Optimal
Mole Salamander (*Ambystoma talpoideum*) Weight: Suitable
American Black Duck (*Anas rubripes*) Weight: Suitable
Yellow-billed Cuckoo (*Coccyzus americanus*) Weight: Suitable
Rafinesque's Big-Eared Bat (*Corynorhinus rafinesquii*) Weight: Suitable
Chicken Turtle (*Deirochelys reticularia*) Weight: Suitable
Purple Finch (*Haemorhous purpureus*) Weight: Suitable
Wood Thrush (*Hylocichla mustelina*) Weight: Suitable
Swainson's Warbler (*Limnothlypis swainsonii*) Weight: Marginal
Southeastern Bat (*Myotis austroriparius*) Weight: Marginal
Long-tailed Weasel (*Mustela frenata*) Weight: Data Gap

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Habitat Priority Score: 450

Key Factor Name Composition

Key Factor Description: The diversity, species richness, and relative abundance of vegetative elements in this habitat type.

Key Factor Weight: Medium

Indicator Name: Exotic Forbs and Grasses

Indicator Description: The percent of ground cover in non-native herbaceous species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in non-native herbaceous vegetation to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native herbaceous species.

Indicator Name: Invasive shrubs and woody vines

Indicator Description: The percent of ground cover in non-native woody species

Poor Level: >20

Fair Level: 10-20

Good Level: 5-9

Very Good Level: <5

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the percent of groundcover in invasive woody species to nine percent or less.

Monitoring Strategy: Monitor the percent of ground cover in non-native woody species.

Key Factor Name Fire Regime

Key Factor Description: Fire Return Interval and Seasonality, including landscape-scale fire in surrounding/adjacent habitats to prevent woody encroachment and allow for distribution and dispersal of obligate species

Key Factor Weight: Medium

Indicator Name: Fire Seasonality/Intensity

Indicator Description: The percent of areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Poor Level: <25

Fair Level: 25-50

Good Level: 51-75

Very Good Level: >75

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: When burning, burn during either March/April or August/September, or from leaf-expansion to leaf-fall, depending on project-level goals.

Monitoring Strategy: Monitor percent of burned areas burned during either March/April or Aug/Sept, or from leaf-expansion to leaf-fall, depending on project-level goals. In some but not all cases, seasonality is an accurate surrogate for intensity. Since intensity goals will vary from burn to burn it is difficult to "pre-quantify" ideal intensity objectives at a forest-wide scale. It is presumed that restoration, maintenance, fuel-reduction and other prescribed fire goals will be considered at the project level when planning burn intensity.

Key Factor Name Fire Regime

Indicator Name:	Fire Frequency
Indicator Description:	Average percent of all known occurrences burned per 3-7 year interval.
Poor Level:	<25
Fair Level:	25-50
Good Level:	51-75
Very Good Level:	>75
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Burn at least 51 percent of the spatial extent of all known occurrences of this habitat type every 3-7 years.
Monitoring Strategy:	Monitor average percent of all known occurrences burned per 3-7 year interval.

Key Factor Name Remoteness

Key Factor Description: Mean density of roads (miles per square mile) within this community type at the landscape scale.

Key Factor Weight: Medium

Indicator Name: Road Density

Indicator Description: Average number of road miles per square mile across all known occurrences of this target.

Poor Level: >2 miles

Fair Level: 1-2 miles

Good Level: 0.5-1 mile

Very Good Level: <0.5 mile

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average number of road miles per square mile to one or less across all known occurrences of this target.

Monitoring Strategy: Monitor average number of road miles per square mile across all known occurrences of this target.

Key Factor Name Spatial Ecology

Key Factor Description: The relative spatial abundance, proximity, distribution, and arrangement of this habitat type on the landscape.

Key Factor Weight: Medium

Indicator Name: Patch Size

Indicator Description: Average patch size across all known occurrences (acres)

Poor Level: <10 acres

Fair Level: 10-30 acres

Good Level: 31-100 acres

Very Good Level: >100 acres

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore the average patch size of this habitat type to 31 acres or more across all known occurrences.

Monitoring Strategy: Monitor average patch size across all known occurrences (acres).

Indicator Name: Number of Blocks

Indicator Description: Total number of blocks statewide

Poor Level: 0-1

Fair Level: 2

Good Level: 3

Very Good Level: >3

Current_Status: Data Gap

Indicator Weight: Medium

Conservation Action: Maintain or, where necessary, restore number of blocks to three or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)

Monitoring Strategy: Monitor total number of blocks statewide.

Key Factor Name Spatial Ecology

Indicator Name:	Average Block Size
Indicator Description:	Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.
Poor Level:	<500 acres
Fair Level:	500-1,000 acres
Good Level:	1,001-2,000 acres
Very Good Level:	>2,000 acres
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore average block size to 1,001 acres or more. (Block is defined by the minimum convex polygon bounded by known occurrences of this habitat type in which the median patch size is above the fair level for patch size, and in which each of the patches score fair or better on the patch proximity threshold.)
Monitoring Strategy:	Monitor block size.
Indicator Name:	Patch Proximity
Indicator Description:	Median nearest distance between patches.
Poor Level:	>2.5 miles
Fair Level:	1-2.5 miles
Good Level:	0.5-1 mile
Very Good Level:	<0.5 mile
Current_Status:	Data Gap
Indicator Weight:	Medium
Conservation Action:	Maintain or, where necessary, restore the median nearest distance between patches of this habitat type to one mile or less.
Monitoring Strategy:	Monitor median nearest distance between patches.