

Mississippi Alluvial Valley Conservation Opportunity Area



The corridor along the Mississippi River is recognized as one of the most significant migratory bird corridors in the world (the Mississippi Flyway). Annually, up to 50 million ducks, geese, shorebirds, wading birds, neotropical birds, and raptors migrate through this area. The MAV is an extensive area along the Mississippi River that lies mostly within the Mississippi Alluvial Plain Ecoregion, which encompasses about 2% of the total land area in Tennessee.

The landscape consists mostly of forested wetland habitats interspersed with agricultural lands and uplands. An estimated 80% of the original bottomland hardwood forest has been removed, along with the large river cane (a type of native bamboo) corridors that once existed. TWRA personnel are reforesting areas on state-owned lands to restore bottomland hardwood habitat. As of 2015, TWRA has restored over 7,500 acres of former agricultural lands to forest. The agency is also experimenting with native habitat restoration on agricultural lands by planting river cane along the Mississippi.

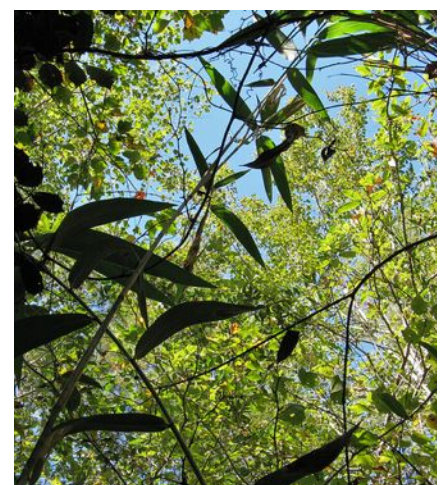
Its diverse habitats, species richness, proximity to Memphis, and location along the Great River Road leading to Reelfoot make the MAV an attractive destination for hunters, anglers, and wildlife viewers. TWRA will consider future land acquisitions in this COA for watershed protection, critical habitat protection, habitat restoration, streambank stabilization, planting of bottomland hardwoods, and planting of buffer strips along the river. TWRA will also seek partnerships with other agencies and landowners to implement many of the management strategies on private lands within the COA.

Public Lands within the COA

Bogota Wildlife Management Area (WMA), Chickasaw National Wildlife Refuge (NWR), Eagle Lake Refuge, Fort Pillow State Park (SP), Hatchie River State Scenic River, John Tully WMA, Lake Isom NWR, Lower Hatchie NWR, Meeman-Shelby Forest SP/State Natural Area (SNA)/WMA, Moss Island WMA, Sunk Lake SNA, Thorny Cypress WMA, Tumbleweed WMA, White Lake Refuge



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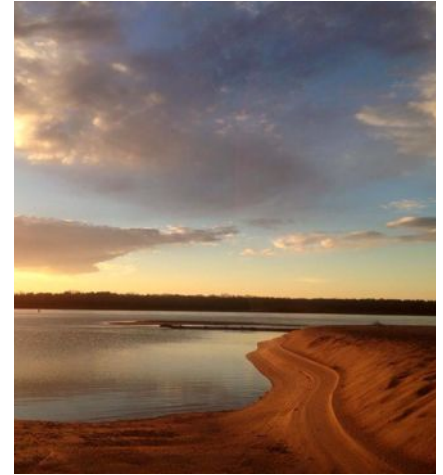


Top to bottom: Western Sandpiper Juvenile - Chris Sloan; River cane - Travis/next page: Banks of the Mississippi River - John Henry Photography

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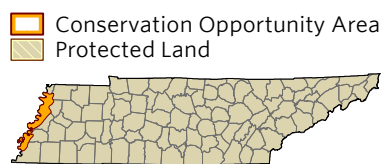
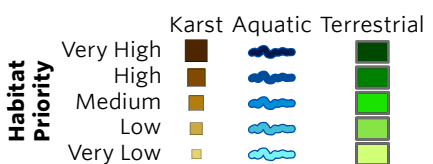
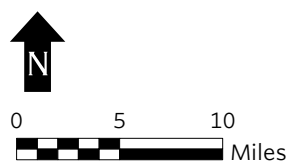
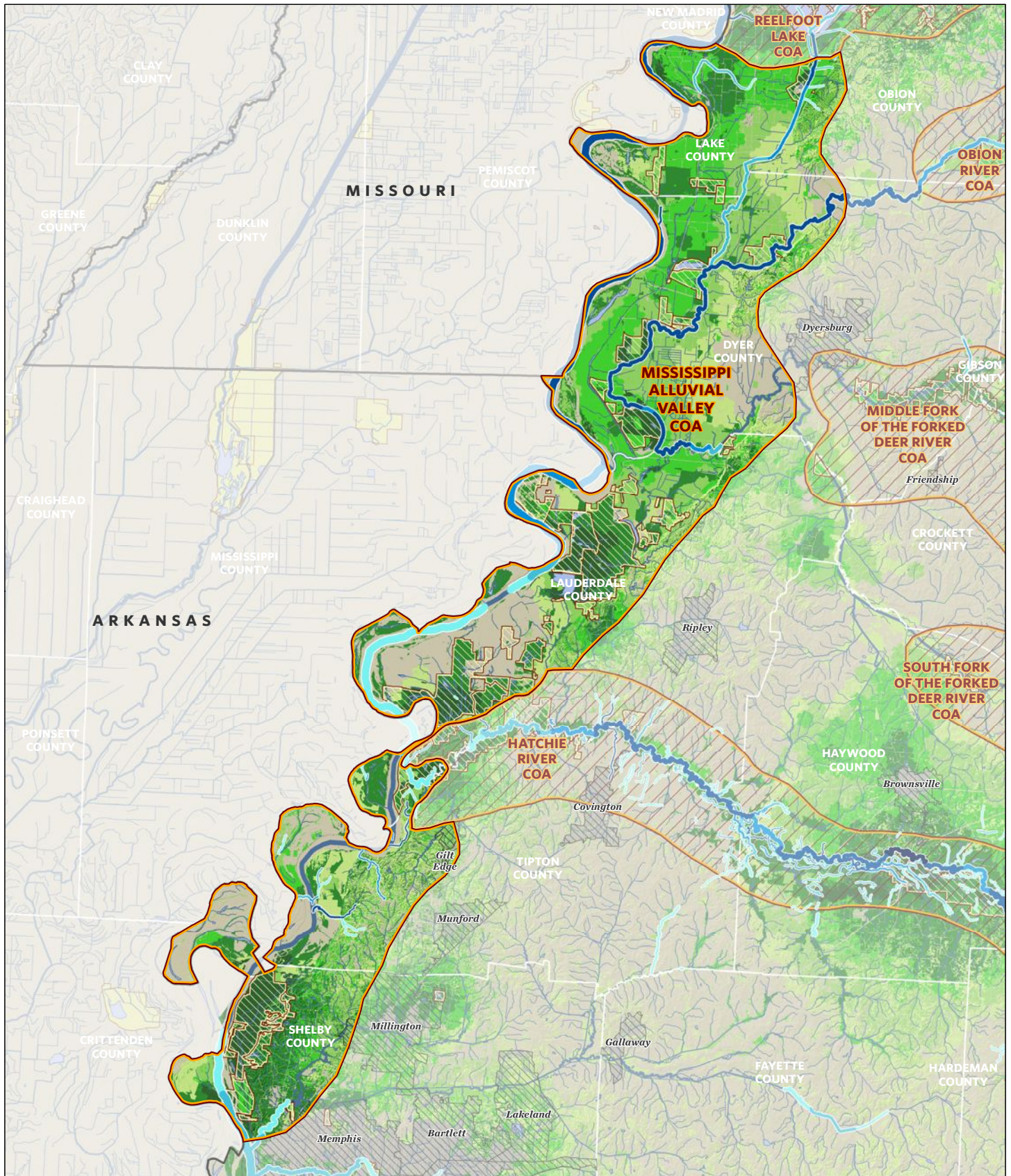
Partnerships

TWRA will develop and foster partnerships with the US Fish and Wildlife Service, Tennessee Department of Environment and Conservation, Army Corps of Engineers, The Nature Conservancy, Tennessee Ornithological Society, Tennessee Wildlife Resources Foundation, National Wild Turkey Federation, Natural Resources Conservation Service, Farm Bureau, Tennessee Department of Forestry, Ducks Unlimited, Cooperative Extensions, University of Memphis, UT Martin, and various other universities, institutions, and local governments.



| Desired Change | Units |
|---|-------------|
| + Increase the application of Best Management Practices to benefit GCN species and habitats on private lands using government funded incentive programs | number |
| + Restore acres and stream miles of bottomland hardwood forest by converting former agriculture lands. | acres/miles |
| + Restore river cane corridors. | acres |
| + Create or improve buffers around tributaries to reduce sediment transfer and runoff of contaminants. | acres |
| + Increase mudflat and moist soil habitat on wildlife refuges through enhanced water management to provide habitat for migrating birds and Mississippi kites | acres |
| - Decrease the negative effects of development on GCN species and habitats by encouraging municipal and county governments to limit or regulate development within critical units of aquatic, subterranean, and terrestrial habitats. | plans |
| ✓ Protect existing riparian zones and bottomland hardwood forests. | acres |

To learn more about the Mississippi Alluvial Valley Conservation Opportunity Area, please contact: Rob Colvin, Wildlife Diversity Coordinator, Region 1 (731) 423-5725



The Nature Conservancy
Protecting nature. Preserving life.

| MISSISSIPPI ALLUVIAL VALLEY COA GCN SPECIES (TN) | |
|--|--|
| Taxa group | Scientific & Common names |
| Bat | <i>Corynorhinus rafinesquii</i> (Rafinesque's Big-eared Bat) |
| Bat | <i>Myotis austroriparius</i> (Southeastern Bat) |
| Bat | <i>Perimyotis subflavus</i> (Tri-colored Bat) |
| Bird | <i>Accipiter striatus</i> (Sharp-shinned Hawk) |
| Bird | <i>Ammodramus leconteii</i> (LeConte's Sparrow) |
| Bird | <i>Ammodramus savannarum</i> (Grasshopper Sparrow) |
| Bird | <i>Anas rubripes</i> (American Black Duck) |
| Bird | <i>Ardea alba</i> (Great Egret) |
| Bird | <i>Asio flammeus</i> (Short-eared Owl) |
| Bird | <i>Bartramia longicauda</i> (Upland Sandpiper) |
| Bird | <i>Botaurus lentiginosus</i> (American Bittern) |
| Bird | <i>Calidris canutus</i> (Red Knot) |
| Bird | <i>Calidris himantopus</i> (Stilt Sandpiper) |
| Bird | <i>Calidris mauri</i> (Western Sandpiper) |
| Bird | <i>Calidris pusilla</i> (Semipalmated Sandpiper) |
| Bird | <i>Caprimulgus carolinensis</i> (Chuck-will's-widow) |
| Bird | <i>Chaetura pelagica</i> (Chimney Swift) |
| Bird | <i>Charadrius melodus melodus</i> (Piping Plover) |
| Bird | <i>Chordeiles minor</i> (Common Nighthawk) |
| Bird | <i>Circus cyaneus</i> (Northern Harrier) |
| Bird | <i>Cistothorus platensis</i> (Sedge Wren) |
| Bird | <i>Colinus virginianus</i> (Northern Bobwhite) |
| Bird | <i>Egretta caerulea</i> (Little Blue Heron) |
| Bird | <i>Empidonax minimus</i> (Least Flycatcher) |
| Bird | <i>Empidonax traillii</i> (Willow Flycatcher) |
| Bird | <i>Euphagus carolinus</i> (Rusty Blackbird) |
| Bird | <i>Falco peregrinus</i> (Peregrine Falcon) |
| Bird | <i>Geothlypis Formosa</i> (Kentucky Warbler) |
| Bird | <i>Haliaeetus leucocephalus</i> (Bald Eagle) |
| Bird | <i>Helmitheros vermivorum</i> (Worm-eating Warbler) |
| Bird | <i>Hylocichla mustelina</i> (Wood Thrush) |
| Bird | <i>Icteria virens</i> (Yellow-breasted Chat) |
| Bird | <i>Icterus spurius</i> (Orchard Oriole) |
| Bird | <i>Ictinia mississippiensis</i> (Mississippi Kite) |
| Bird | <i>Ixobrychus exilis</i> (Least Bittern) |
| Bird | <i>Lanius ludovicianus</i> (Loggerhead Shrike) |
| Bird | <i>Limnothlypis swainsonii</i> (Swainson's Warbler) |
| Bird | <i>Limosa fedoa</i> (Marbled Godwit) |
| Bird | <i>Limosa haemastica</i> (Hudsonian Godwit) |
| Bird | <i>Melanerpes erythrocephalus</i> (Red-headed Woodpecker) |
| Bird | <i>Numenius phaeopus</i> (Whimbrel) |
| Bird | <i>Nycticorax nycticorax</i> (Black-crowned Night-heron) |
| Bird | <i>Parkesia motacilla</i> (Louisiana Waterthrush) |
| Bird | <i>Passerina ciris</i> (Painted Bunting) |
| Bird | <i>Pluvialis dominica</i> (American Golden Plover) |
| Bird | <i>Protonotaria citrea</i> (Prothonotary Warbler) |
| Bird | <i>Riparia riparia</i> (Bank Swallow) |
| Bird | <i>Scolopax minor</i> (American Woodcock) |
| Bird | <i>Setophaga cerulea</i> (Cerulean Warbler) |
| Bird | <i>Setophaga discolor</i> (Prairie Warbler) |
| Bird | <i>Sternula antillarum athalassos</i> (Interior Least Tern) |

| MISSISSIPPI ALLUVIAL VALLEY COA GCN SPECIES (TN) | |
|--|---|
| Taxa group | Scientific & Common names |
| Bird | <i>Sturnella magna</i> (Eastern Meadowlark) |
| Bird | <i>Thryomanes bewickii</i> (Bewick's Wren) |
| Bird | <i>Tryngites subruficollis</i> (Buff-breasted Sandpiper) |
| Bird | <i>Tyto alba</i> (Barn Owl) |
| Bird | <i>Vermivora chrysoptera</i> (Golden-winged Warbler) |
| Bird | <i>Vermivora cyanoptera</i> (Blue-winged Warbler) |
| Bird | <i>Vireo bellii</i> (Bell's Vireo) |
| Fish | <i>Atractosteus spatula</i> (Alligator Gar) |
| Fish | <i>Cycleptus elongatus</i> (Blue sucker) |
| Fish | <i>Fundulus chrysotus</i> (Golden Topminnow) |
| Fish | <i>Notropis dorsalis</i> (Bigmouth Shiner) |
| Fish | <i>Polyodon spathula</i> (Paddlefish) |
| Fish | <i>Scaphirhynchus albus</i> (Pallid Sturgeon) |
| Gastropod | <i>Webbhelix multilineata</i> (Striped Whitelip) |
| Mammal | <i>Neotoma floridana illinoensis</i> (Eastern Woodrat) |
| Mammal | <i>Ochrotomys nuttalli</i> (Golden Mouse) |
| Mammal | <i>Sorex longirostris</i> (Southeastern Shrew) |
| Plant | <i>Carex hyalina</i> (Tissue Sedge) |
| Plant | <i>Iris fulva</i> (Copper Iris) |
| Plant | <i>Panax quinquefolius</i> (American Ginseng) |
| Plant | <i>Sagittaria platyphylla</i> (Ovate-leaved Arrowhead) |
| Plant | <i>Ulmus crassifolia</i> (Cedar Elm) |
| Plant | <i>Zanthoxylum americanum</i> (Northern Prickly-ash) |
| Reptile | <i>Crotalus horridus</i> (Timber Rattlesnake) |
| Reptile | <i>Macrochelys temminckii</i> (Alligator Snapping Turtle) |
| Reptile | <i>Terrapene carolina</i> (Eastern Box Turtle) |

| MISSISSIPPI ALLUVIAL VALLEY COA HABITATS (TN) | |
|--|--|
| Terrestrial Habitat Type | Total acres of very high, high, and medium ranked habitat |
| Natural habitat | |
| Mississippi River Low Floodplain (Bottomland) Forest | 87810 |
| Mississippi River Riparian Forest | 20521 |
| East Gulf Coastal Plain Northern Loess Bluff Forest | 15274 |
| East Gulf Coastal Plain Small Stream and River Floodplain Forest | 5162 |
| South-Central Interior Small Stream and Riparian | 1826 |
| East Gulf Coastal Plain Large River Floodplain Forest | 1389 |
| East Gulf Coastal Plain Northern Loess Plain Oak-Hickory Upland | 276 |
| East Gulf Coastal Plain Northern Mesic Hardwood Slope Forest | 42 |
| South-Central Interior / Upper Coastal Plain Flatwoods | 22 |
| Semi-natural habitat | |
| Cropland | 90666 |
| Old Field / Successional | 18444 |
| Pasture | 12358 |
| | |
| | |
| | |
| | |
| Aquatic Habitat Type | Total stream miles of very high, high, and medium ranked habitat |
| Headwaters and streams | 18 |
| Small River | 8 |
| Medium River | 46 |
| Large River | 45 |