



SWALLOW-TAILED KITE CONSERVATION



HOW YOU CAN MAKE A DIFFERENCE



SWALLOW-TAILED KITES

IN
MISSISSIPPI

CONSERVATION



“The flight of this elegant species of hawk is singularly beautiful and protracted. It moves through the air with such ease and grace, that it is impossible for any individual ... not to be delighted by the sight of it whilst on wing.”

- JOHN JAMES AUDUBON



The Swallow-tailed Kite's appeal is positively charismatic. Perhaps this is why birders, wildlife photographers, and nature enthusiasts travel to Mississippi from around the world to glimpse this rare bird of prey during the spring and summer before it migrates to southern Brazil for the winter.

The U.S. population of the Swallow-tailed Kite was once found in up to 21 states. After dramatic declines due to persecution and habitat loss from the late 1800s to early 1900s, it's now regularly found in only the Gulf Coast states, Georgia, and South Carolina. While not federally threatened or endangered, the species is protected by the Migratory Bird Treaty Act, and Mississippi considers the Swallow-tailed Kite a Species of Greatest Conservation Need.

Surveys have found Swallow-tailed Kites nesting in the lower Pearl and Pascagoula river basins, along with a small, recently discovered population in central Mississippi. Much of the land where these birds are found, especially along the Pearl River and in central Mississippi, is privately owned. If we are to conserve this beautiful bird in our state, we must rely on our greatest resource - our people. Private citizens, landowners, foresters, farmers, land managers, hunters and anglers can all take an active role in helping these birds while they spend the nesting season in our state.

Swallow-tailed Kites are social birds, often hunting and roosting together. They usually nest within relative proximity of each other, in what are called "nesting neighborhoods." Typical neighborhoods consist of 2-7 pairs nesting within 0.4-1 square mile. During July and August, while gearing up for southbound migration, communal night roosts can swell to over 75 individuals. When feeding on insect swarms, over 30 kites may gather to feed over one field.

Swallow-tailed Kites feed primarily on flying insects, and may specialize in eating paper wasp larvae. When a kite



spies a wasp nest, it grasps and snaps off the supporting twig before flying away as swiftly as possible to avoid the adult guards. During nesting, parents also hunt small vertebrates from the treetops, including tree frogs, anoles, rough green snakes, tree-roosting bats, and small nestling birds.

Kite habitat is made up of a variety of land uses, often a patchwork of bottomland hardwoods, pine plantations, clear cuts, pastures and croplands. This diversity of land uses in close proximity provides an abundance of prey and excellent hunting conditions within close range of the nest. In Mississippi, nests are usually found in mature bottomland hardwood forests, often in a tree on or near a clearing or edge (e.g., lake, river, stream, field, pine plantation, block cut). Sweetgum and various oaks are more commonly used. The crown of the nest tree typically has an opening on at least one side that provides a view and allows sufficient room for the parents, with their 4-ft. wingspans, to fly into and out of the nest. Kites place their nests in the upper 10-15% of a tall tree, anchored at a fork on the main trunk or of a substan-

tial limb. The nest is relatively small, roughly 1.5-2 ft. in diameter. The pair adorns the stick platform with lichen-covered twigs, curtains of Spanish moss and light green old man's beard lichens.

We need your help! Some things you can do to help the Swallow-tailed Kite include:

Report all sightings of Swallow-tailed Kites to the Mississippi Department of Wildlife, Fisheries, and Parks' Mississippi Museum of Natural Science -
call: 601-576-6000
OR email:
nick.winstead@mmns.ms.gov

Anyone enjoying the outdoors should keep their eyes peeled. Turkey hunters are in the woods during kite courtship and nest-building. Anglers and boaters should be on the lookout for kite roosts as they ply our waterways since most roosts occur along streams, rivers and oxbows.

Avoid disturbing nesting and roosting Swallow-tailed Kites.

Kites are most sensitive to disturbance during courtship, nest building, and early incubation. Some may be easily disturbed throughout the nesting period until young disperse beyond the nest. Do not stand under an active nest or within plain view of a nesting kite. It is best to maintain a distance of 300 ft. from an active nest. Other types of activities that could cause injury to kites or nest abandonment include flying drones over nests, flying helicopters or other aircraft within 800 ft. of a nest, or operating heavy machinery near a nest. In any case, if kites are continuously calling, or fly over you and call, you could be dis-

turbing a nest and should leave the area. Roosting kites are sensitive to the same types of disturbance as nesting kites. Since roosts are often along waterways, boat traffic and jet skis are additional potential sources of disturbance. Give the birds space, about 300 ft. if possible, and move through the area as steadily and as quietly as you can.

Habitat management.

Private landowners have a unique opportunity to help protect Swallow-tailed Kites in Mississippi. Voluntary enhancements and management techniques can encourage and protect Swallow-tailed Kites on your property, furthering their recovery within our state.

Though kites use a variety of habitats, they depend on forests for nesting - usually bottomland forests.



The Mississippi Department of Wildlife, Fisheries, & Parks seeks to:

- document important nesting, roosting and feeding areas in the state
- work with landowners to conserve these centers of kite activity, especially nest sites
- increase the number of Swallow-tailed Kite breeding pairs and expand their breeding range northward beyond central Mississippi



Kites tend to use older, taller trees for nesting and roosting, but will feed over all types of forest, including young and old pine plantations. Forests managed for timber can provide vital habitat for Swallow-tailed Kites. However, one of the biggest threats is the possibility that a nest site or an entire nesting neighborhood might be logged during the breeding season, causing loss of eggs and/or nestlings. At a minimum, please consider avoiding harvesting nest trees along with a wooded buffer, at least until nesting has completed. Suggested buffers around known nests or the outer margins of nesting neighborhoods are 750 ft. from March 15 through May 31, shrinking to a 300 ft. buffer from June 1 through August 15, or until young birds are capable of sustained flight.

Additional voluntary measures are available for landowners wishing to keep Swallow-tailed Kites on their property. Kites will often nest in a prior year's nest tree or an adjacent tree. Former nest sites could be monitored for 5 years following the last nesting attempt before harvesting is conducted within 300 ft. of a nest tree. Consider the surrounding area when planning timber harvests - given the social nature of the species, it is important to ensure sufficient area of mature forest in any one year that could support a nesting neighborhood of 2-7 pairs (approximately 0.4-1 square mile). Identify suitable nesting and roosting habitat in streamside zones, and along transition zones between wet lowlands and drier uplands within a one-mile radius of active nests. If timber harvests are planned for these areas, consider management

techniques that allow for future kite habitat. Leave some emergent to super-emergent trees that are taller than the residual canopy, or retain clumps of canopy trees if performing a stand-replacement harvest. Ideally, these clumps would be adjacent to unharvested forest to minimize risks from wind and lightning. Leaving a 300 ft. buffer of trees along both sides of a stream will maintain suitable habitat. If this isn't possible, leaving a smaller buffer of even 2-3 trees in depth along both sides of a waterway may still benefit kites. Kites sometimes nest and roost in older pine plantations. These stands can be improved for kites by thinning once canopy closure occurs. Most nests in pine plantations are located along one of the take rows because this affords them enough room to fly in and out of the nest easily. It is important to regenerate

forests after timber operations, especially near streams, rivers and lakes.

Crop disking and haying during spring and summer make flying insects readily available to kites. Telemetry data have revealed that kites may travel many miles to feed over such areas. Allowing fields to stand fallow (e.g., wheat, soybean, and other harvested crops) over the spring and summer can also provide great sources of flying insects. Fields of unharvested watermelons can produce huge numbers of beetles as the melons rot. If

possible, avoid the use of neurotoxic insecticides that are known to harm birds (neonicotinoids, and organophosphates) such as Imidacloprid and Chlorpyrifos.

There are many other voluntary actions landowners can take to help Swallow-tailed Kites. Spring and summer controlled burns of forests and fields stir up flying insects, which attract kites from many miles away. Known nest sites should be left unburned from March 15 through August 15 to avoid harming nesting kites. Also, exhaustive burns that leave little understory or



midstory near nests attract Great Horned Owls, a main kite predator. Kites are attracted to ponds and lakes as sites to hunt dragonflies and other insects and to drink and bathe. Providing a 1.5-2 acre body of water could be inviting to kites. Planting a catalpa tree could be beneficial since the caterpillars that depend on them are well-known kite prey. Kites roost in live trees, dead limbs and snags. They'll sometimes roost in a live tree because it provides shelter from rain, then fly to a nearby dead tree in the morning to face the sun and dry off. Retain dead trees along waterways and forest edges for roosting.

If dead limbs and snags are lacking, roost trees can be created by girdling a few canopy trees.

Working together, we can help Swallow-tailed Kites make a comeback in Mississippi! If you believe you have Swallow-tailed Kites on your property, or would like to discuss in further detail ways you can help these birds, please contact MDWFP's Mississippi Museum of Natural Science. We would be happy to perform a site visit and discuss voluntary measures you can take to help Mississippi recover the Swallow-tailed Kite.

Identification:

The common Mississippi Kite is sometimes mistaken for the rare Swallow-tailed Kite.

Swallow-tailed Kite

- white head, breast
- wings and tail are black with a bluish cast; leading edge of underwing is white
- larger size and wingspan (48 inches)
- long, deeply forked tail



Mississippi Kite

- light gray head, breast
- charcoal black wings, tail
- smaller with shorter wingspan (31 inches)
- short, squared off tail



This document was produced with the support of the Mississippi Department of Wildlife, Fisheries, and Parks' Mississippi Museum of Natural Science and the United States Fish and Wildlife Service's Wildlife and Sport Fish Restoration Program (State Wildlife Grants), and in partnership with Orleans Audubon Society and Avian Research and Conservation Institute.

*Design & Layout: Dan Milner / www.DanMilnerDesigns.com
 We wish to thank the following contributing photographers for the use of their images:
 Robert Stalnaker, Katie Houvener, Steve Byland and Jennifer Coulson.*