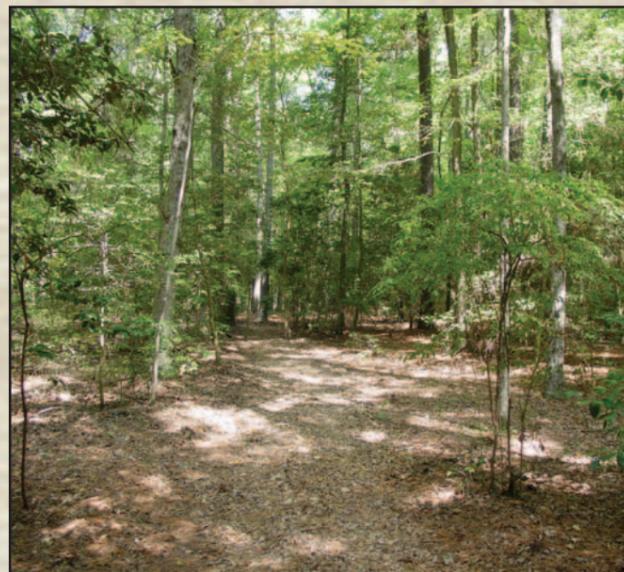


# Living Resources

Despite the low elevations and generally simple topography throughout the Basin, a wide assortment of habitat types harbor a diverse flora and fauna.



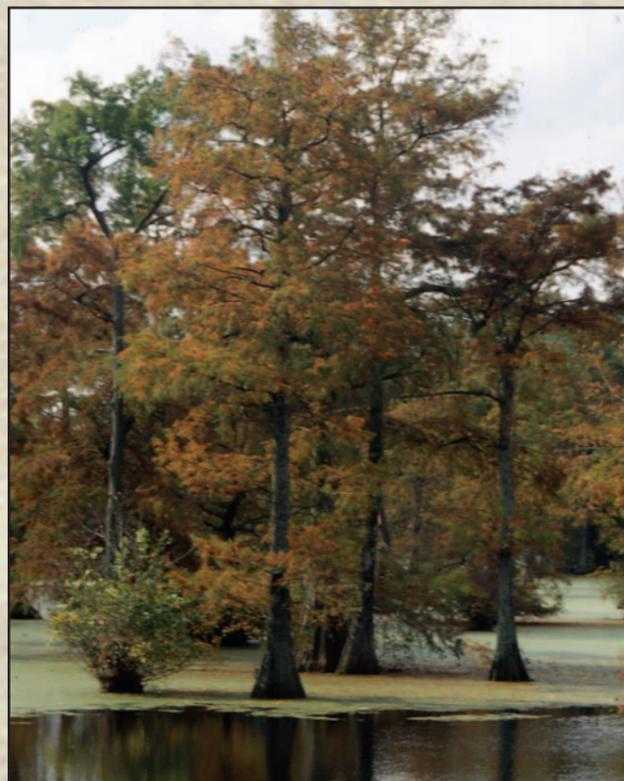
Many acres of pristine woodlands are in the Basin.

## Forest Communities

In general, the northernmost forests in the Chesapeake Basin are comprised of a mixture of hardwoods, dominated primarily by oaks, beech, tulip poplar, and hickories on the drier sites. The predominate tree species in a wide variety of wetland habitats include box elder, sycamore, sweet gum, slippery elm, red maple, tulip poplar, ash, pin oak, and sometimes river birch and black willow. The farther south one travels in the Chesapeake Basin, a transition in forest species begins, but nowhere is this more dramatic than as one enters Sussex County. Here, the deciduous hardwood-dominated forest gives way to an evergreen forest with a distinctive southern feel. This is the Oak-Pine Forest Region.

The oldest trees in the State are found in this Basin, where one forested wetland contains specimens estimated at 500 years old. Although the age of these magnificent trees is unusual in Delaware, and indeed in the entire Chesapeake watershed, many of these trees are just reaching middle age.

The bald cypress is a rare species in the State of Delaware. This tree species has a relatively limited distribution and is found in only four watersheds in the state, two of which are in the Chesapeake Basin (the Broad Creek and Pocomoke). The tree has a low number of natural occurrences within Delaware, where it reaches the northernmost limit of its North American range. The James Branch, which drains into Broad Creek, contains the most extensive and finest examples of bald cypress wetlands in the State.



A stand of Bald Cypress in the Chesapeake Basin.

Atlantic white cedar is a wide ranging but uncommon tree species found in a narrow, interrupted belt scattered along the Atlantic coast from Maine to Florida, then west along the Gulf Coast to Mississippi. Significant populations of Atlantic white cedar are in the Chesapeake Basin, in the Nanticoke watershed and its associated tributaries. Several small populations exist in the Great Cypress Swamp in the Pocomoke drainage. Atlantic white cedar wetlands in Delaware and throughout their range are considered likely places for both state and globally rare species.

## Wildlife

The white-tailed deer is native to the Chesapeake Basin and has adapted and thrived in the human-altered habitat. However, damage to agricultural crops has become a concern in Delaware. Since 1992, the deer harvest within the Basin had increased approximately 53 percent, far exceeding the overall statewide increase of 36 percent, yet the white-tailed deer appears to remain in high num-



Ospreys are opportunistic nesters.

bers in the Basin.

Both the beaver and the wild turkey were exterminated from Delaware in the mid 1800s and reintroduced much later. Both populations are increasing in the Chesapeake Basin. Wild turkeys are very adaptable and will use a variety of habitats from mature forests to open agricultural fields.

The northern bobwhite quail is not faring so well. This species is dependent on grassland habitats which is no longer a prominent feature of agricultural lands, due to the loss of hedgerows and the efficiency of large farm equipment. The decline in Chesapeake Basin quail populations appears to follow the state trend. However, the Chesapeake Basin has great potential for providing quail habitat protection and restoration. Several incentive programs have been initiated to improve conditions for wildlife.

Hopefully these types of efforts will help the northern bobwhite quail return to healthy numbers.



Red-Shouldered Hawk

Bird species such as the Kentucky warbler, Louisiana water thrush, and yellow-throated vireo are migratory neotropical species that breed in the forests of the Choptank watershed, but are rare elsewhere in the State. The cerulean warbler is also dependent on mature deciduous floodplain forests and surrounding upland forests for reproductive success. Formerly present along the Choptank River, this species was not sighted during the last survey. Habitat reduction may have eliminated this species from the Choptank environs. It is now known to be breeding in fewer than six sites throughout Delaware and is faring poorly throughout its global range.

Other bird species such as the barred owl, red-shouldered hawk, and pileated woodpecker are important forest predators that have disappeared from most of Delaware's woodlands. These species require extensive tracts of mature floodplain forests to ensure successful reproduction. The populations of these birds and many others are in decline in Delaware because of fragmentation and elimination of the surrounding upland forests.

The critical factor to the success or failure of a species could be available breeding or nesting habitat, foraging habitat, or direct competition for habitat with exotic or native invasive species. In many cases, these vital habitats have become isolated, small, or degraded in quality. Even the best habitats are vulnerable or threatened.



The Cerulean Warbler's reproductive success depends on mature deciduous floodplain forests.

