

The peninsula is almost 180 by 60 miles (300 by 100 km), and is bordered by the Chesapeake Bay on the west, and the Delaware River, Delaware Bay, and Atlantic Ocean on the east.

The total land area south of the Chesapeake and Delaware Canal is 5,454.482 sq mi (14,127.044 km²).

A major influence on the climate is the Gulf Stream. Coursing northward off the Atlantic Coast, 35 miles or more out to sea, it brings the peninsula a moist climate that is far more moderate than geography permits on the adjacent mainland. Snow and ice seldom last more than a day or two and prolonged droughts are a rarity.

Delmarva fox squirrels were once found throughout the Delmarva Peninsula, southeastern Pennsylvania and southern New Jersey. They are now found only on the Delmarva Peninsula. To find out more about Delmarva fox squirrels and possibly even see one, visit one of the following: Prime Hook National Wildlife Refuge in Sussex County, Delaware; Eastern Neck National Wildlife Refuge in Kent County, Maryland; Blackwater National Wildlife Refuge in Dorchester County, Maryland; and Chincoteague National Wildlife Refuge in Accomac County, Virginia.

The northern isthmus of the peninsula is transected by the Chesapeake and Delaware Canal. The canals turned the peninsula technically into an island. A canal across the peninsula between the Delaware River and the Chesapeake Bay was first proposed by Augustine Herman in the mid-1600s. In 1802 the Chesapeake and Delaware Canal Company was incorporated. Construction began in 1814, but due to lack of funds the project was halted in 1816. Work began again in April 1824. It was open for business in 1829 at a cost of near 2.5 million dollars.