

ecosystems

maritime forest habitat

Maritime Forest Habitat

Maritime Forests develop in the zone that is the least disturbed. Trees look like they are trimmed short. The salt spray of the ocean carried by the winds kill their tops. Many different kinds of animals use these trees by eating their fruit and finding shelter in their holes and decaying remains. Storm waves sometimes wash over the dunes and flood the maritime forest, leaving sand and stones at the foot of the trees. Such washovers can lead to the creation of a new inlet. Oftentimes insects make homes in the Maritime Forest Trees. The Black Cherry Tree is commonly found in this habitat. Insects like the Black Cherry Aphid frequently cause serious injury to these trees.

Two types of injury occur on the tree. Curling and twisting of the leaves are caused by the aphids' feeding on the leaves. Huge numbers may kill young trees and reduce the quantity and quality of the cherry crop on mature trees. Saliva secreted by the aphid spot foliage (leaves) and fruits. Later, a fungus grows in the saliva, causing it to turn black and leaving fruit and foliage black. The relationship between the tree and aphid is called Parasitism. Parasitism is when two organisms enter into a relationship which benefits one at the expense of another.

Eastern screech owls which can sometimes be found near a Maritime Forest habitat bring live blind snakes to their babies to feed on. Some of the snakes are eaten but most falls under the babies and live amongst nest debris, where they eat soft-bodied insect larvae. Eating of larvae may reduce insect parasitism on owl babies. This is an example of commensalism in which the screech owl is helped by the snakes and the live-in blind snake is not affected.

Cottonmouth snakes and fish-eating birds such as pelicans and herons live on islands off the northwestern coast of Florida. The birds are skilled hunters but sloppy eaters that transform their habitat into giant sushi buffets. Though cottonmouth snakes elsewhere tend to eat anything they can swallow—including small birds, eggs and chicks—snakes on these islands rely almost entirely on the shorebirds' seafood delivery service. "The snakes feed rarely, if ever, on colonial-nesting birds or their eggs," says University of Florida zoologist Harvey Lillywhite, who discovered the event. Thanks to the loads of easy food, snake populations on the islands have boomed, which, in turn, benefits the birds. The snakes deter other nest predators such as raccoons, arboreal snakes and rats. The snakes and bird have a mutualistic relationship because they both benefit from the connection.

Standards LE 8.2a, 7.1c,d

Maritime Forest Vocabulary

Define:

Parasitism -

Commensalism -

Mutualistic -

pick one of these words and give an example that is not from the reading.

What do these relationships have in common with each other? / What makes them different?

Our goal is to learn about harmful and beneficial relationships among organisms