



## Ecosystems of The Bahamas



### BLACKLAND COPPICE

#### INTRODUCTION

By far the most diverse and interesting group of native trees and plants can be found in our Bahamian forest known as **Coppice**. Jack Patterson, author of *Native Trees of the Bahamas*, estimates that there are probably 100 species of trees and shrubs per square mile in our Bahamian forest. There are different types of coppice throughout the Bahamas. On the islands where coppice occurs, each forest is slightly different depending on its location, the amount of rainfall and if people have used the area in the past. This fact sheet will describe generally the Blackland Coppice.

#### DESCRIPTION

The places we see as we walk along the road and drive in our cars that have many trees growing close together and look "thick" and "dark" with heavy shade are special places called coppice. There are basically two types of coppice in The Bahamas – Blackland Coppice and Whiteland Coppice.

The Blackland Coppice is made of the same trees that greeted Columbus: mahogany, horseflesh, mastic and cedar. These original forests with canopies of over 50 feet in height have long vanished and modern day coppice is secondary, or even tertiary growth. Only on Little Inagua might one still find ancient primeval trees.

In the interior of our islands the coppice is tall and once entered, one discovers that the understory is starved of light by the canopy and it is often gloomy and relatively sterile. There is a stillness in the Blackland forest, for the sun heats the canopy like a tin roof and the wind never penetrates the understory except during a storm. Plants of this forest community have adapted to the environmental stresses placed upon them either internally or in conjunction with other plants in the community. Some shrubs of the forest will only exhibit their best growth if shaded by a canopy. An excellent example of adaptation is the Pigeon Plum (*Cocoloba diversifolia*) an adaptable tree which thrives in sunlight or shade, When the tree is young the leaves are large, to gather light in the

shaded forest floor. When it matures and can reach the sunlight, its normal leaves are just a fraction of the size of when the tree was small.

Some of the most common understory vegetation in the coppice are a six species of Stoppers (*Eugenia spp.*) that are used widely in Bahamian Bush Medicine as a constipant. Also abundant in the coppice are Bahamas Strongback (*Bourreria ovata*), a butterfly attracting tree, three species of Wild coffee (*Psychotria spp.*), which have a flavour and caffeine potency similar to the domestic variety coffee and the lovely Satinleaf or Saffron (*Chrysophyllum oliviforme*) which may be the loveliest tree of the understory. When the breeze blows, the Satinleaf shimmers for the underside of the leaves are covered with a rust-colored down with much less reflectancy than the smooth green topside. Often it is only when the large canopy trees have fallen or the forest has been cleared that these smaller understory trees have their moment of glory.

The shade and humidity of the Blackland Coppice provides the ideal habitat for orchids and bromeliads, which cling to the bark of trees with tenacious roots. These epiphytes derive their nourishment from windblown dust and debris. Nine species of orchids are of the genus *Epidendrum* including the endemic *E. inaguensis*, with linear leaves and purple-yellow flowers on Inagua and Little Inagua. The three native species of vanilla are climbing orchids with fleshy leaves found in the northern and central Bahamas. The bromeliads are represented by the pineapple and numerous species of *Tillandsia*, which include Spanish Moss and the so-called wild pines. The wild pines are still common in most forest areas. Most of them resemble pineapples with a rosette of long, green leaves which send out an elaborate stalked inflorescence once a year.

### **IMPORTANCE**

The Coppice forest is an important habitat for Bahamian wildlife. Birdlife abounds in the coppice forest. Smooth Billed Anis forage for insects and lizards. The Great Lizard Cuckoo hides in the low branches of trees looking for lizards and large insects, the White-crowned Pigeon feeds on Pigeon plum, Seagrape, Blolly and Poisonwood, and the shy Key West Quail Dove rustles through the leaf litter on the forest floor. As one journeys through the forest it is also possible to see our Bahamian Boa Constrictor stretched out along the branch of tree in a shaft of sunlight.

The forest has for hundreds of years ensured man's survival on these islands. It provided land to be cultivated for crops, timber for homes and boats, timber to be sold for foreign exchange and fuel to cook his food. Historically the Bahamian forest provided wood for boat building. Most of the boats used in wrecking were Bahamian built. Stem and stern- posts were made of Mahogany although Horseflesh was preferred and deck beams were made of Cedar. Thousands of boats of various descriptions were cut from the Bahamian forest. Lignum Vitae was cut as a commercial enterprise until the present century. An extremely hard wood, it was used for many different mechanical uses.

### **THREATS**

**Fire:** This is an ancient enemy of forests. Slash and burn agriculture practiced in The Bahamas and other tropical countries often leads to out of control fires with many acres of good timber destroyed for no useful purpose.

**Development:** Man's need for cleared land for development is truly a threat to our forests and it is a challenge to all Bahamians to set aside areas of Bahamian forest for wildlife and as a tribute to the historical debt we owe this ecosystem.

Illustration by John Thompson

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