

## Georgia Wildlife Web Site

### Regions of Georgia

The State of Georgia extends from the Atlantic Ocean into the Blue Ridge Mountains. The State is divided into five regions based upon physical geography. These regions are called Physiographic Provinces. The five physiographic provinces of Georgia are the Coastal Plain (subdivided into upper and lower regions on the map at left), the Piedmont Region, the Blue Ridge Region, the Ridge and Valley Region, and the Appalachian Plateau. Vegetation varies among these provinces and within them, depending on soil type, elevation, moisture and disturbances.

#### Coastal Plain Province

The Georgia coast is associated with the Coastal Plain Province, a low, flat region of well-drained, gently rolling hills and poorly drained flatwoods. The Coastal Plain extends east and south of the Fall Line Hills, the old Mesozoic shoreline still marked by a line of sand hills. In Georgia, the Atlantic Ocean forms the eastern border of the Coastal Plain. The southern border of this province is formed by the Gulf of Mexico, in the State of Florida. The entire eastern Coastal Plain stretches from southeastern Virginia to eastern Texas, excluding the southern tip of Florida. Its soils, sands, and sandy clays are of marine origin and are usually acidic. They possess a low native fertility due to excessive leaching. Georgia's Coastal Plain is as much as 300 km wide (200 mi). Its elevation ranges from sea level to 225 m (750 ft). The Coastal Plain is subdivided into the Fall Line Hills, five distinct upland districts, the Okefenokee Basin, and the Barrier Island Sequence. The Coastal Plain also is sometimes divided into upper and lower sections, the upper section being near the Fall Line and the lower section being the mainland along the Atlantic coast.

An important district of the Lower Coastal Plain is the Okefenokee Basin, an area of low relief and swamps. It probably formed when a bay of the Atlantic Ocean was cut off from the ocean by a barrier island. Much of the basin is now a national wildlife refuge and wilderness area.

Another important Lower Coastal Plain district is the series of marsh and sea islands forming the Barrier Island Sequence. While a chain of these islands stretches from New Jersey to Texas, the islands between roughly Cape Romain, South Carolina, and Amelia Island, Florida, share similar recent histories and physiographic characteristics. Sea islands are between 5-40 km (3-25 mi) long and 1-5 km (1-3 mi) across. Island elevations are usually less than 6 m (20 ft) above mean sea level, although individual dunes may be higher.

On well-drained soils of the Coastal Plain, the dominant plant species are Long-leaf Pine, Loblolly Pine, and several species of oak. On poorly drained soils, the dominant species are Long-leaf Pine and Slash Pine with a dense ground cover of Saw Palmetto, Gallberry, and Wire-grass. These plants are adapted to a humid subtropical climate of mild winters, hot summers, high rainfall, and frequent ground fires. Where the soil is poorly drained, Pond Pines are dominant. The Southern Mixed Hardwood community includes oaks, Sweet Gum, magnolias, Red Bay, and Pignut Hickory. Such hardwood communities are found bordering freshwater streams and floodplain swamps and in low, fertile areas near the coast. Wooded swamps composed of Cypress, Tupelo, and Red Maple trees are found adjacent to swamps, ponds, and lakes as well as along

sluggish, meandering streams. The major plant communities on the Barrier Islands are maritime oak forests and pine forests.

### **Piedmont Province**

The Piedmont Province contains a series of rolling hills and occasional isolated mountains. Rivers and ravines are found throughout this province. This is an area of oak-hickory-pine forests and mixed deciduous forests. Oak-hickory-pine forests are the most widespread type of forest in the southeastern United States and cover the entire Piedmont from Virginia south to Alabama and west to Texas. The dominant trees include oaks, hickories, Short-leaf Pine, and Loblolly Pine. Pines occur in the less favorable or disturbed areas of the Piedmont. In river valleys, mixed deciduous forests of hardwood trees such as Sweet Gum, Beech, Red Maple, elms, and birches are found.

### **Blue Ridge Province**

The Blue Ridge Province occupies the northeastern portion of Georgia. It consists of an irregular sequence of mountains, ridges, and basins. Elevations reach 480 - 1,410 m (1,600 - 4,700 ft). The Blue Ridge Mountains and Cohutta Mountains form most of this province, with the McCaysville Basin separating them. Portions of the Piedmont Province extend into this province as well. Distinctly different elevations result in considerable variety in vegetation.

### **Ridge and Valley Province**

The Ridge and Valley Province occupies most of northwestern portion of Georgia. It includes the Chickamauga Valley, Armuchee Ridges, and the Great Valley. These form a series of parallel valleys separated by ridges in the northwest corner of the state. Lowland areas are about 210 - 240 m (700 - 800 ft) above sea level, but the higher ridges may be above 480 m (1,600 ft). Plant species vary from area to area, based on local soil type, elevation, moisture, and disturbances.

### **Appalachian Plateau**

Referred to as the Appalachian Plateau Province, this mountainous province is found in extreme northwestern Georgia. Its most prominent features are Lookout and Sand Mountains. A variety of vegetation types occur in this area, depending on elevation, but Appalachian Oak Forests cover most of the Province. For example, forests on north-facing ravines between 800 and 1,200 m (2,640 - 3,960 ft). include Basswood, Sugar Maple, Tulip Poplar, Beech, Birch, and Hemlock trees. More northern species of evergreens and shrubs appear in the forests above 1,200 m (3,960 ft). The understory may include rhododendrons, native azaleas, and Mountain Laurel.

### **Reference**

Hodler, T.W. and H.A. Schretter. 1986. The Atlas of Georgia. University of Georgia Press, Athens.

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