

site as an example of a large "tree house" (a peat-formed island), estimated the size of the area to be about 1000 m in diameter. Canopy trees in the site range between 30 and over 90 cm in diameter at breast height and over 30 m in height, suggesting the area was most certainly spared from logging in the early part of the century. Several of these canopy trees are 400-500 years old or older (Duever, 1979). Fire scars on the larger trees and several of the younger understory trees indicate that the area has been burned, though not severely, during recent fires. Numerous completely burned trunks exist on the outermost perimeter of the forest facing Grand Prairie indicating the forest may have covered a greater area than it presently does.

#### METHODS

A detailed census of woody plants was conducted on two separate occasions during the summers of 1978 and 1979. The 1978 census was part of an intensive site-specific study on this unique stand, whereas the 1979 census was part of a comprehensive survey of major woody communities in Okefenokee Swamp. During both surveys, large quadrats with smaller nested quadrats were used to survey the larger and smaller classes of individuals. Vascular plant nomenclature follows Radford et al. (1968).

During the 1978 census all woody plants greater than 1 m in height were measured by tree, sapling, or seedling classes. The tree size class (individuals with a 10 cm or greater diameter at breast height [dbh]) was sampled in nine 10-m x 20-m plots. The sapling size class (2-10 cm dbh) was measured in four 5-m x 10-m plots nested within the first four tree quadrats. Seedlings (woody plants  $\geq 1$  m in height but  $< 2$  cm dbh) were sampled in four 2-m x 4-m plots also nested within the larger 10 quadrats. Species and breast height diameter were recorded for all individuals greater than 1.3 m (standardized "breast height" for this study). Species and height were recorded for plants between 1 and 1.3 m in height.

The 1979 census was part of a more comprehensive survey of all major woody plant communities throughout the swamp. Two quadrat sizes were used for all size classes. Individuals with a dbh of less than 5 cm were sampled in eight 2-m x 4-m plots located randomly within a larger bounded 20-m x 40-m quadrat randomly placed well within the stand to minimize forest edge effect. Woody plants larger than 5 cm dbh were sampled in four 10-m x 20-m plots also located within the larger bounded quadrat. Species, breast height diameter, and whether or not the trees were live or dead were recorded for all individuals. Data in this report are based only on live individuals.

Importance values were calculated for woody plants by summing data on relative frequency, density and dominance (basal area), and converting to a basis of 100%. Importance values were calculated for trees (which included all individuals with the potential to attain upper canopy stature) and shrubs as separate size classes, and for all woody plants as a whole. Species diversity ( $\bar{H}$ ) for the tree size class was calculated as follows:

$$\bar{H} = \sum p_i \log_2 p_i \quad (1)$$