

VEGETATION USED FOR NESTING BY THE RED-WINGED BLACKBIRD IN FLORIDA

JACOB F. STOWERS, DONALD T. HARKE, AND
ALLEN R. STICKLEY, JR.

THE versatility and adaptability of the Red-winged Blackbird (*Agelaius phoeniceus*) in nesting in diverse habitats and different species of vegetation has been noted by several ornithologists (Beer and Tibbitts, 1950; Campbell, 1948; Case and Hewitt, 1963; Meanley and Webb, 1963). Some of these authorities (Campbell, 1948; Meanley and Webb, 1963) have listed the plant species used by Redwings to support nests in certain study areas. However, other than a few species mentioned by Bent (1958) and Sprunt (1954), the multiformity of habitat types and species of vegetation in which the Redwing nests in Florida has not been documented.

The diversity of Redwing nesting sites impressed the authors while collecting Florida Redwings for a U.S. Bureau of Sport Fisheries and Wildlife taxonomic study. During May and June 1966, a list of the various habitat types and species of vegetation used by Redwings for nesting was compiled from breeding areas scattered throughout the state (Fig. 1). These areas included the major habitats in Florida and afford a good indication of the diversity of Redwing nesting in the state.

A total of 30 genera of plants was found to contain Redwing nests in marsh and upland habitats. In Table 1 the vegetation is categorized into eight subdivisions under three main habitat headings: inland freshwater areas, coastal saline areas, and upland field areas. These three general habitats are the primary ecological types that are important Redwing nesting sites in the state. The vegetative types under the habitat subdivisions are listed in descending order of frequency in which they were found to contain Redwing nests.

Common and scientific names in Table 1 are taken from Hotchkiss (1950) and Small (1933). We wish to acknowledge the assistance of Dr. E. S. Ford, Department of Botany, University of Florida, in identifying some of the plants.

RESULTS

Predominant nesting sites used by Redwings are small shrubs or grasses in marshy areas or upland fields. The plant found to be used most frequently by nesting Redwings was buttonbush (*Cephalanthus occidentalis*), a very common shrub indigenous to both shallow and deep freshwater marshes in Florida. Of the 177 nests found, 50 (28 per cent) were in buttonbush, and it

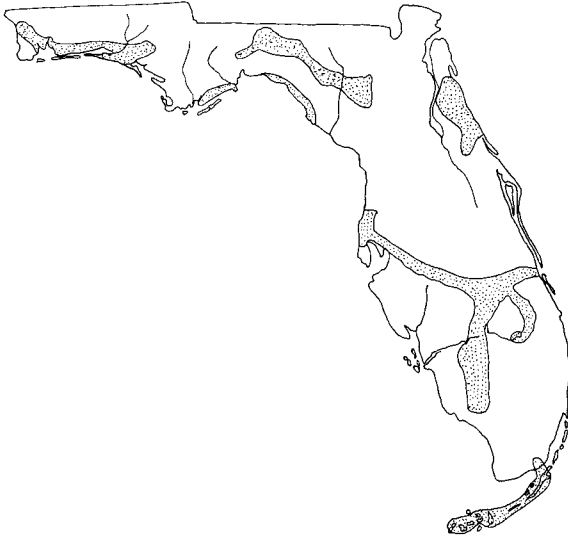


FIG. 1. Areas in Florida where nesting vegetation data were collected during May and June, 1966.

was a major nesting site in three of eight habitat subdivisions listed in Table 1.

Other plants in which Redwings were found to nest were *Baccharis halimifolia* and *Salix* sp.; 25 (14 per cent) of the 177 nests were found in *Baccharis*, while 14 (8 per cent) were in *Salix*. *Baccharis* is commonly found in wet areas along roadsides and in uncultivated fields, and *Salix* is often found in marshy areas, especially in roadside ditches

Redwing nests were found in experimental sweet corn plots in May at the University of Florida Experimental Station at Belle Glade. They occasionally have been found in abandoned cornfields in south Florida, but only after the corn was harvested, and spraying and cultivation had ceased. One three-fourths-acre-plot contained two nests, while 14 (of which nine were active) were found in another. These plots had not been cultivated for at least two weeks before the nests were found. Nests in corn were either supported by two adjacent cornstalks (Fig. 2), or were placed on a single stalk in the angle between the top ear and the stalk.

In south Florida Redwing nests also were found in another cultivated crop, sugarcane. Nesting density did not appear to be high; but because of the large acreage, the crop should be considered as a major nesting site in the Belle Glade area.

TABLE I
SUPPORTING PLANTS AND HEIGHTS OF 177 NESTS OF THE RED-WINGED BLACKBIRD,
LISTED BY HABITAT TYPE¹

Supporting plant	Number of nests	Height of nests (feet)	
		Average	Range
<i>Inland freshwater areas</i>			
Shallow or deep freshwater marshes			
Buttonbush (<i>Cephalanthus occidentalis</i>)	14	3.1	2-5
Silverling (<i>Baccharis halimifolia</i>)	5	3.4	1-6
Panicum (<i>Panicum</i> sp.)	4	3.0	2-6
Pigweed (<i>Amaranthus</i> sp.)	3	2.6	2-3
Willow (<i>Salix</i> sp.)	1	3.0	—
Sweet bay (<i>Magnolia virginiana</i>)	1	15.0	—
Bitter-weed (<i>Ambrosia elatior</i>)	1	3.0	—
Dock (<i>Rumex</i> sp.)	1	2.0	—
Deer's tongue (<i>Trilisa odoratissima</i>)	1	2.0	—
Open freshwater (edge)			
Buttonbush (<i>Cephalanthus occidentalis</i>)	26	2.0	1-3
St. Johnswort (<i>Hypericum</i> sp.)	1	2.0	—
Gum (<i>Nyssa</i> sp.)	1	6.0	—
Pine, (dead) (<i>Pinus</i> sp.)	1	2.0	—
Seasonally flooded basins (roadside ditch)			
Willow (<i>Salix</i> sp.)	13	2.5	1-4
Silverling (<i>Baccharis halimifolia</i>)	12	4.1	2-8
Buttonbush (<i>Cephalanthus occidentalis</i>)	10	2.6	1-3
Napier grass (<i>Pennisetum purpureum</i>)	5	1.8	1-2
Ironweed (<i>Vernonia altissima</i>)	3	2.3	1-3
Thorny-amaranth (<i>Amaranthus spinosus</i>)	2	2.0	—
Waxmyrtle (<i>Myrica cerifera</i>)	2	3.0	—
Panicum (<i>Panicum</i> sp.)	2	4.0	—
Shining-sumac (<i>Rhus copallinum</i>)	1	2.0	—
Black-titi (<i>Cyrilla racemiflora</i>)	1	5.0	—
Red maple (<i>Acer rubrum</i>)	1	20.0	—
Goldenrod (<i>Solidago</i> sp.)	1	2.0	—
<i>Coastal saline areas</i>			
Irregularly flooded salt marshes			
Hightide bush (<i>Iva frutescens</i>)	11	3.0	2-4
Silverling (<i>Baccharis halimifolia</i>)	1	4.0	—
False willow (<i>Baccharis angustifolia</i>)	1	3.0	—
Mangrove swamps			
Black-mangrove (<i>Avicennia nitida</i>)	6	6.0	3-8
Red-mangrove (<i>Rhizophora mangle</i>)	2	4.0	3-5
Buttonwood (<i>Conocarpus erecta</i>)	2	12.0	9-15
Darling-plum (<i>Reynosa septentrionalis</i>)	1	4.0	—
Buttonwood and saffron-plum (<i>Conocarpus erecta</i> and <i>Bumelia angustifolia</i>)	1	6.0	—

¹Habitat types from Shaw and Fredine, 1956.²Corn not cultivated at least 2 weeks before nests were found.

TABLE 1 (cont.)

Supporting plant	Number of nests	Height of nests (feet)	
		Average	Range
<i>Upland field areas</i>			
Cornfields ²			
Corn (<i>Zea mays</i>)	16	4.0	3-5
Waterhemp (<i>Acnida cuspidata</i>)	1	5.0	—
Sugarcane fields			
Sugarcane (<i>Saccharum</i> sp.)	4	1.0	1
Fireweed (<i>Erechtites hieracifolia</i>)	2	1.5	1-2
Dog-fennel (<i>Eupatorium</i> sp.)	1	2.0	—
Thorny-amaranth (<i>Amaranthus spinosa</i>)	1	3.0	—
Uncultivated fields			
Silverling (<i>Baccharis halimifolia</i>)	6	4.6	2-6
Thorny-amaranth (<i>Amaranthus spinosa</i>)	4	1.5	1-3
Saltmarsh fleabane (<i>Pluchea camphorata</i>)	2	2.0	2
Shining-sumac (<i>Rhus copallinum</i>)	1	4.0	—
Ragweed (<i>Ambrosia rugelii</i>)	1	4.0	—



FIG. 2. Redwing nest in sweet corn. Nest is supported by two adjacent stalks. (Photo by Allen R. Stickley, Jr.)

With the multiformity in nesting vegetation there was also a diversity in the height of nests which ranged from one to 20 feet (Table 1). The nest at the 20-foot height was in a red maple (*Acer rubrum*); another nest was 15 feet from ground level in a sweet bay (*Magnolia virginiana*). Both of these nests were located in areas of dense breeding populations. Two other high nests were also found in buttonwood (*Conocarpus erecta*).

SUMMARY

During the breeding season of 1966, as an adjunct to a taxonomic study of Red-winged Blackbirds in Florida, 177 Redwing nests were found. The general habitat types were noted, and the plant species harboring nests were listed.

Redwing nests were found in 30 genera of plants. Buttonbush was the primary choice; it was used to support 50 of the 177 nests. Silverling and willow were the next most often used plants. Nests also were found in other shrubs and trees, in assorted herbs and grasses, and in fields of sweet corn and sugarcane. The great degree of nesting adaptability of the Red-winged Blackbird is attested by the diversity of nesting site selections in several habitats.

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