

## THE NEST AND EGGS OF THE MANGROVE (MAYA) VIREO (*VIREO PALLENS SEMIFLAVUS*)

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El nido y los huevos del Vireo Manglero (*Vireo pallens semiflavus*).

**Key words:** Mangrove Vireo, *Vireo pallens semiflavus*, Belize, nest, egg.

We describe the nest and eggs of the Mangrove Vireo (*Vireo pallens*) belonging to the Atlantic slope group *semiflavus*, formally known as the Maya Vireo (Sibley & Monroe 1990, AOU 1998). The geographic distribution of the Atlantic slope group of the Mangrove Vireo includes the Yucatan peninsula, northeastern Guatemala, mainland Belize and coastal Cayes, areas of the Gulf of Honduras and Bay Islands, and Nicaragua (Bond 1936, Monroe 1968). This species inhabits scrub-shrub and shrubland with pine, bajo-broad-leaf forest, forest edge, and mangroves (Stiles & Skutch 1989, AOU 1998, OF unpubl. data). In Honduras, it inhabits swampy thickets within 4 km of the coast (Monroe 1968). Nest and egg description information for this species are listed as undescribed in Howell & Webb (1995). However, Stiles & Skutch (1989) describe a nest of Mangrove Vireo from Belize as cup-shaped and occurring in

mangroves.

The study site was located in central Belize within the Runaway Creek Nature Preserve (RCNP). The RCNP is located within the Belize district (17°18'29"N, 88°27'59"W). A nest in the construction stage was found on 18 May 2000 in a 2.3 m live oak within a shrubland with pine habitat, in a pine-oak forest assemblage (Wright *et. al.* 1959) at 16 m a.s.l. Dominant trees in this habitat included the Caribbean pine (*Pinus caribaea*), live oak (*Quercus oleoides*), schippea palm (*Schippia concolor*) and palmetto (*Acoelorrhape wrightii*). The nest was monitored from a distance of 12 m using 10x25 binoculars. Adults were observed bringing nesting material to the nest site. On 25 May, during routine nest monitoring, an adult was observed sitting on the nest. By 30 May, the nest had three eggs and an adult vireo was incubating. The nest was observed through 9 June when eggshell fragments were observed in the nest and it was therefore considered to have failed due to predation.

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FIG. 1. Sketch of the Mangrove Vireo nest showing placement on the live oak shrub. Sketch prepared by Hernan Ochaeta.

*Nest.* The nest was a deep oval cup, elliptical in shape with thick walls (Fig. 1). The rim of the nest was suspended by webbing in a twig fork that consisted of an upper and lower horizontal twig. A third twig, adjacent to the lower horizontal twig, helped to support the nest. The diameter of the main branch supporting the twig fork was 1.6 cm. The internal cup depth measured from the upper horizontal twig was 50.2 mm and from the lower horizontal twig was 37.1 mm. The external nest-cup depth measured from the upper horizontal twig was 75.6 mm and from the lower horizontal twig was 68.7 mm. The diameter of the oval cup along the longest axis was 50.1 mm and the diameter of the cup perpendicular to this axis at the widest point was 33.1 mm.

Within the live oak substrate, the nest was oriented west-southwest, positioned 1 m above ground level and completely concealed among the foliage. The dbh (diameter at breast height; at 1.4 m) of the live oak's main stem was 6 cm. The perpendicular distance of the nest from the main stem of the substrate was 1.4 m and the distance from the foliage edge was 0.7 m.

The outer layer of the nest consisted of loose, fine bark strips, broad leaf and graminoid fragments, cottony plant fibers, and lichen that were coarsely bound together with spider webbing, plant down and fibers. The outer layer of the nest was camouflaged among the live oak foliage. The inner layer of the nest contained a smooth lining of intertwined pine (*Pinus caribaea*) needles.

*Eggs.* The eggs were sub-elliptical to oval in shape. To minimize disturbance during incubation, a single representative egg was chosen from the clutch (3 eggs) for measurements. Egg length measured 17.6 mm at the longest point and the diameter measured 13.8 mm at the widest circumference. The egg color was white overall with chocolate brown (Ridgway 1912 plate XXVIII) spots concentrated on the larger end. The spotting varied in size and shape with the largest spot measuring approximately 1 mm in diameter and the smallest being barely visible to the naked eye.

## DISCUSSION

This nest and egg description provides information presently unavailable in the ornithological literature on the nest and egg characteristics of the *semiflavus* group of Mangrove Vireo. The length of the incubation and nestling periods could not be determined due to nest predation. The nest was observed for 21 days after discovery and before predation occurred.

The construction of the nest is similar to the cup-like nests of many species in the genus *Vireo* (Baicich & Harrison 1997). The nest construction, nest placement, and eggs are notably comparable to species & super-species within the "White-eyed vireo" (*Vireo griseus*) complex (Baicich & Harrison 1997). Further study of the *semiflavus* group of Mangrove Vireo and future nest discoveries will provide more extensive information on nest and egg variation and nesting biology.

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