

## FURTHER RECORDS OF WHITE-THROATED SWIFTS UTILIZING MAN-MADE STRUCTURES

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The White-throated Swift, *Aeronautes saxatalis*, occurs widely in western North America utilizing narrow crevices in rock cliffs, from sea level to 13,000 feet, for both nesting and roosting sites (Bent 1940:311). These swifts have on several occasions been noted using man-made structures for these activities (Bailey 1907, Skinner 1933, Pitelka 1944, Yocom 1966, DeSante and Perrone 1968). We present here additional observations of these swifts utilizing man-made structures in southern California.

For several years White-throated Swifts have been observed flying around many of the older buildings in the downtown section of Riverside, Riverside Co., California (P. Romero pers. comm.). On 1 October 1978 Collins saw approximately 125 swifts going to roost in the deserted First Baptist Church on the corner of 9th and Lemon streets. Between 11 October 1978 and 6 July 1979 he made an additional 20 trips to observe the evening roosting or morning arousal of these swifts. The principal entrances to the roosting sites were the topmost louver in the church tower and the louvered window near the roof peak (Figure 1). The tower was utilized by 10-25 birds with the rest entering through the window. When examined from the inside in April, the louvered window was found to be screened on the inside; the birds were going up through a crack in the upper part of the window frame into the space between the inner and outer walls of the church. A few swifts also roosted in small openings behind the metal flashing at the top of the church tower.

During April 1979 swifts were seen briefly entering openings in other buildings in the downtown area; the brevity of these trips suggested they were prospecting for nest sites. Aerial copulations were observed on 8 April and young swifts were being fed in the church tower on 4 July 1979. The swifts were observed roosting in the same localities when the site was revisited in November 1981. From these observations it seems clear that White-throated Swifts were using the church throughout the year for both roosting and nesting.

In late May 1979 D. Thompson (pers. comm.) noted a flock of perhaps 15-20 White-throated Swifts frequenting the end of the Port San Luis Harbor District Pier, San Luis Obispo Co., California. The swifts were observed in late evening entering cracks between the rafters of the roofed end of the pier. Subsequently Johnson checked the site periodically between July 1979 and October 1981 in all seasons. Adult activity and the begging calls of nestlings suggested that the site was being utilized both as a winter roost and nesting area. At least six individuals were present in the winter months and three ac-

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tive nests were noted. The success rate of these nests could not be determined.

The pier is approximately 400 yards long and unroofed for most of its length. The ocean end has a restaurant, cocktail lounge, fish market, and parking area all covered by a high wooden roof (Figure 2a). The flooring of the pier is approximately 15 feet above water level and the nest sites in the rafters are about 25 feet above the pier floor. The sites are formed by the junction of the two 2 × 8 inch rafters which run parallel at the angle between the flat roof and its pitched sides (Figure 2b). By our estimates, there are 7-10 usable situations where the rafters meet at the ends but are bowed at the middle allowing the birds to enter and travel to either end. The active swift nests were located only at those sites where much grass and string was noted hanging through the crack between the rafters. We surmise that the swifts were using old House Finch, *Carpodacus mexicanus*, nests as bases for their own; four to six pairs of House Finches were using other sites in the rafters not occupied by the swifts.

These nest sites do not appear to be particularly safe since the wings of two dead swifts and at least three eggs could be seen protruding from the cracks between the rafters. The House Finch nests seemed to be composed largely of string, and probably fish line, in which the dead swifts apparently had become entangled. The eggs had fallen over the edge of the nests, possibly due to the struggles of the entrapped swifts. Similar entanglements have been reported for House Swifts, *Apus affinis*, in southeast Asia (Dickinson 1966, Kapoor 1965).



Figure 1. First Baptist Church, Riverside, California, which was utilized by nesting and roosting White-throated Swifts.

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Although not widely reported, it now seems clear that at least some White-throated Swifts are as opportunistic in their choice of nesting and roosting sites as the several other species of swifts that regularly utilize man-made structures (Lack 1956). Human activity around both sites was high but did not seem to disturb the swifts. The Riverside site is in a busy part of town and adjacent to an active construction site for a new nine-story building. The Port San Luis Pier is used daily by fishermen, and there is frequent truck and automobile traffic immediately below the nest sites; a live rock band plays in the cocktail lounge four evenings a week. In the cases documented here, as well as those observed by Yocom (1966), the swifts were using structures at substantial distances from suitable natural nesting or roosting sites. The choice of such nest/roost sites presumably has allowed them to utilize foraging ranges and food resources otherwise unavailable to White-throated Swifts despite their great mobility.

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Figure 2. Port San Luis Harbor District Pier: a-roofed end of pier; b-White-throated Swift nest site between pier roof rafters.

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*Note added in press:* The First Baptist Church of Riverside was destroyed by fire on 19 September 1982. — CTC



White-throated Swifts

Sketch by Narca Moore