OBSERVATIONS ON THE NEST BEHAVIOR OF THE CALIFORNIA SCRUB JAY

To our knowledge no one has reported sustained observations of the nest behavior of the California Scrub Jay (*Aphelocoma coerulescens*). Incomplete observations of one nest were reported by Michener and Michener (1945). On 28 March 1972 we found a completed nest on a steep ravine about five feet from the ground in a Toyon (*Heteromeles arbutifolia*) on the Point Reyes National Seashore in Marin Co., California. We watched the nest from a blind 30 feet away for 61 hours and 53 minutes on the 2nd, 5th, 6th, 7th, 8th, 10th, 11th, and 17th days after the first egg hatched and once during the incubation period. Since the parents had been color banded previously we knew that the female was 4 years old and the male at least 3.

The female laid 5 eggs and incubation lasted 18 days. Bent (1946) reported that incubation was 14 to 16 days. The male was not observed incubating. During the only sustained observation of adults during the incubation period, the female sat on the eggs for 3 hours and 7 minutes before leaving the nest. During the 51 minutes she was off the nest she ranged over most of the defended territory. The young hatched one at a time during a two-day period. The night after the last young hatched it rained and the next morning at 0600 the female was observed taking a dead nestling from the nest. The last nestling to hatch was noticeably smaller than the earlier ones; we assume, therefore, that because of the rain and because the youngest nestling was probably the weakest, that this nestling died.

When the eggs hatched the male began to bring food to the female and the nestlings. Upon arriving at the nest he would poke his beak as far as he could into the female's mouth transferring some of his food to her. Then usually both parents fed the nestlings. The number of trips made by the male was relatively constant until day 10 but increased after that (Figure 1). The female began bringing food to the nest for the young on day 7. The increase in feeding trips to the nest by the female on day 11 coincided with her cessation of brooding the young (Figures 1 and 2). At this time the male stopped feeding the female at the nest.

Some time between day 14 and 16 another nestling died. When we color banded the nestlings on day 10 this nestling had the least developed plumage so we assume the nestling that died was the youngest in the nest at that time.

The first young jay left the nest during the afternoon of day 24. Bent (1946) reported that young are able to leave the nest in 18 days. His behavior during the previous 2 days suggested that he was ready to leave. He would jump back and forth across the nest when the parents came to feed, occasionally hopping out when the parents left, but returning each time to snuggle into the nest with the other young. When he finally left the nest for food, one of the other nestlings stood in the nest looking in his direction and making crying sounds. This behavior continued for some time. The second remaining nestling, on the other hand, just sat in the nest with no apparent concern. The next day these two nestlings also left (day 25), but a small pile of young jay feathers found later about 15 feet from the undisturbed nest suggested that one young was killed by a predator after leaving. It appears, therefore, that two of the original five young survived.

Throughout the nesting period the parent birds vigorously defended their territory against all other Scrub Jays and they were the only adults we observed

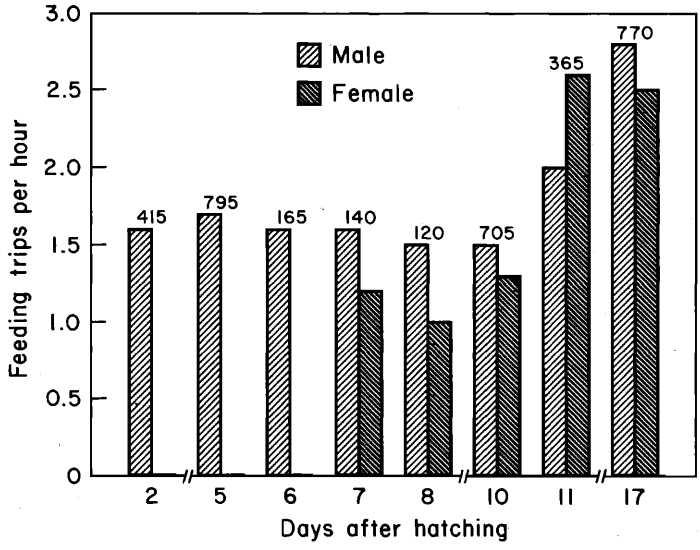

Figure 1. Average number of feeding trips to nest by Scrub Jay pair. Numbers above the bars represent minutes of observation.

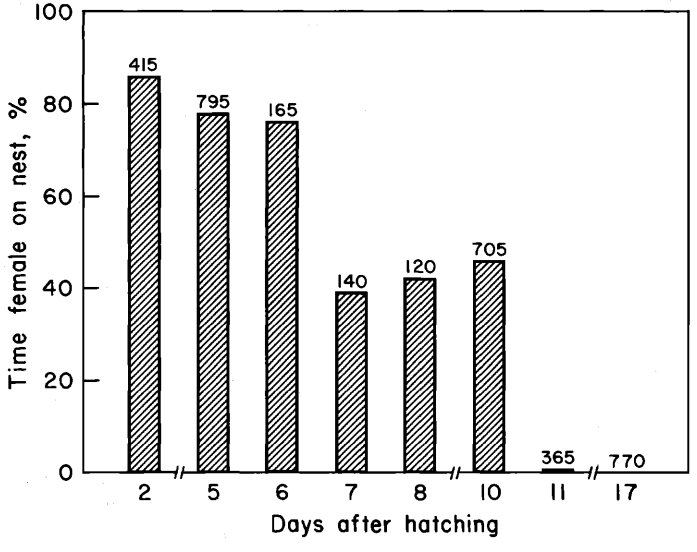

Figure 2. Percent of time female Scrub Jay brooded young. Numbers above the bars represent minutes of observation.

feeding the nestlings.

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Robert M. Stewart, Stephen M. Long and Meryl Stewart, Point Reyes Bird Observatory, P.O. Box 321, Bolinas, California 94924.

Sketch by Tim Manolis

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