pleasure of the optimistic educator who sees training lay hold upon and glorify the inherent tendency. Altogether, remembering that he claims to be both biologist and educator, he derives much pleasure from the entire experience, which same constitutes a commendable philosophy. Try it, patient reader who may have followed to this point the lengthened but truthful biography of Nip and Tuck.

Los Angeles, California, December 9, 1920.

NOTES ON TWO CHARACTERISTIC BIRDS OF THE SAN GABRIEL WASH

By ROBERT S. WOODS

WITH FOUR PHOTOS

N THE STONY, brush-covered lands along the San Gabriel River at Azusa, Los Angeles County, California, the bird usually most in evidence is the Cactus Wren (*Heleodytes brunneicapillus couesi*), by reason of its active, noisy ways and the abundance of its bulky, flask-shaped nests in various



Fig. 9. ADULT CACTUS WREN PERCHED ON "LEAF" OF PRICKLY PEAR CACTUS; SAN GABRIEL WASH, NEAR AZUSA, CALIFORNIA; MARCH, 1916.

stages of decay. The majority of the nests, which are constructed of dead weeds and grass and lined with feathers, are placed in the taller clumps of prickly pear, probably on account of the small size of most of the cholla cac-

tus. The birds evidently have full confidence in the inaccessibility of their nesting sites, as the nests are located in the most conspicuous positions and the birds do not hesitate to approach them while under observation. The nests, including those of the previous season, are used as sleeping quarters throughout the year. The birds retire early, and if one walks among the cactus after sunset the end of a tail may be seen in the entrance of each habitable nest.

A feature typical of the adult Cactus Wrens in this locality is the large black throat patch, beginning abruptly below the whitish chin and breaking up on the chest into streaks and spots. The young do not acquire this marking for some months after attaining full growth, the throat and chest being lightly and uniformly speckled with black. The young wrens are even more noisy

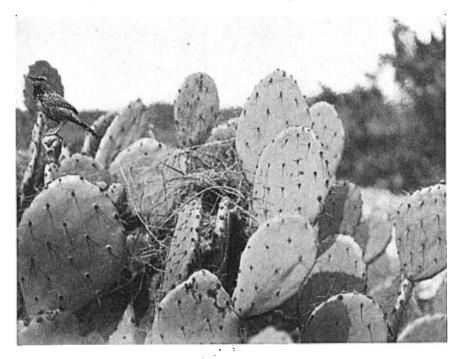


Fig. 10. CACTUS WHEN AND NEST IN PRICKLY PEAR CACTUS; SAN GABRIEL WASH, NEAR AZUSA, CALIFORNIA; MARCH, 1915.

and curious in their disposition than the adults, climbing over any unusual object, such as a camera, and investigating it thoroughly. The Cactus Wren has three rather strident calls which it uses almost constantly except while on the ground; but in this particular locality it seldom if ever sings at any season of the year. The food, which includes ants, is mainly obtained by searching through dead vegetation on the ground, raising leaves and small stones with the beak and peering under.

While the area of brush-land suited to the habits of the Cactus Wrens is not likely to be reduced rapidly, they take kindly to civilization, frequenting the house roofs, and this year a pair even building a nest on a lookout under the gable of a ranch building. They show a marked fondness for sweet corn when the husk has been opened so as to expose the ear, but have not been observed to molest any other vegetable or fruit.

The Costa Hummingbird (Calypte costae) shown herewith, has returned to the same location at Azusa for the last three years at least, arriving the latter part of March and leaving early in June. The presence of the Costa Humming-bird may be recognized by its prolonged shrill whistling note, usually uttered while swooping through the air, but sometimes also while at rest. It has no song such as that of the Anna Hummingbird.

The Costa Hummingbird feeds from both wild and cultivated flowers and from orange blossoms. This occupies little of its time, most of which is spent on certain favorite perches from which a comprehensive view may be obtained.

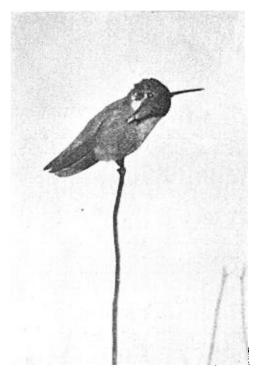


Fig. 11. Adult Male Costa Hummingbird; San Gabriel Wash, Near Azusa, Callfornia; April, 1920.



Fig. 12. Another pose of bird shown in figure 11.

It shows no special hostility to birds of other sorts, though occasionally diving at them from high in the air, to which maneuver, however, the other birds generally pay no particular attention. The female usually stays inside the bushes, where it is often seen hovering among the leaves as if seeking food.

Considerable variation is noticed in the color of the gorget of the same individual male, this sometimes appearing bluish violet and at other times magenta. The nest has not been found, as the movements of the birds I watched gave no clue to its location.

Los Angeles, California, September 28, 1920.