

Measurements.—Greatest breadth of distal end, approximately 28.5 mm.; breadth of distal end across anterior edge of trochleae, 23.2; height of metatarsal facet, 40.0; depth of external ridge of middle trochlea, 13.0; depth of internal ridge of middle trochlea, 11.3; breadth of shaft at distal foramen, 18.2.

The species name is chosen in honor of Mr. George Willett, ornithologist of the Los Angeles Museum, whose interest and assistance not only in the matter of the specimen at hand, but in the many problems that beset the comparative osteologist, have been deeply appreciated.

Los Angeles Museum, Los Angeles, California, March 8, 1935.

FROM FIELD AND STUDY

Nesting of the Williamson Sapsucker.—On the bright sunny day of May 15, 1934, I made a trip along the Glacier Point road in Yosemite hoping for a visit with the Williamson Sapsuckers. I told Ray Driver, who was my companion for the day, that the sapsuckers could be seen without getting out of the car. However, Ray was quite willing to get out of the car to see one of these showy woodpeckers and so at an altitude of 7,000 feet where a little mountain meadow was an island of green surrounded and walled in by a stand of lodge-pole pines, we stopped the car and went to investigate one of the ancestral nesting trees.

Again, this year, the birds had decided to build in the old home tree. There were fresh chips on the ground at the base of the tree and a fresh-cut, round hole, but there was no response to our knock. Too early, we thought, for incubating birds. We circled around through the woods and soon found another fresh-cut hole. Here in answer to our knock there came the sound of squeally young voices and a Hairy Woodpecker head appeared at the entrance. We left this family in peace and continued our stroll.

Soon we had located the third fresh nest hole, and as we approached, a dark head was seen to duck down into the dark hole. We moved cautiously up to the base of the tree; nothing happened; then we tapped on the tree trunk; still nothing happened. But pounding more vigorously with a stone brought results. A head was cautiously thrust forth and looking up I could see the gleaming red throat patch of a male Williamson Sapsucker (*Sphyrapicus thyroideus*). We looked at each other for nearly a minute and then the sapsucker slowly squeezed out of the hole. The bird was just about seven feet above my head, and looking up I had a grand view of his very yellow belly as he slowly slid out of the hole. He circled, lifted, and came to perch on a limb of the nest tree. Then he moved to the main trunk and hitched upward. When well up toward the top of the tree, fifty feet above the ground, he shouted his hawk-like scream.

While we put up the camera the sapsucker moved about through the neighboring lodge-pole pines, often coming back to his home tree. In fifty-five minutes he came hitching down the trunk to the nest hole. He cocked his head from side to side and gazed into the hole, but did not enter. In less than a minute he was away again in the tree tops. He sounded his harsh call several times. Seemingly in answer to his call the female appeared. This was the first we had seen of the female. The female examined the nest hole, flew up on a branch and uttered a series of low notes. The male joined her, alighting a foot away and uttering a series of low chuckling notes. While giving these notes he strutted along the limb with wing-tips and tail jerking rapidly. As he approached his mate she crouched low on the limb and the mating act was accomplished. The act lasted several seconds before the birds separated to perch side by side on a limb. After a minute or so the female flew off through the woods and the male went into the nest hole. In about five minutes the female came to the nest hole and again uttered her soft coaxing notes. The male came out of the hole and both birds flew to a limb where again the mating act was consummated. The male returned to the nest. In our two-hour watch the female only went to the nest hole to call the mate out.

On May 31 the Williamson Sapsuckers were evidently incubating, for on this date the only activity about the nest site was when the birds changed places. We saw the male bird come out of the hole and the female go in. There was no sound of young voices.

On June 17 we again visited the home tree of the Williamson Sapsuckers. When we arrived, about ten o'clock, both parent birds were bringing food. We watched the birds for an hour and a half and in this period of time the male made nine trips to the nest hole and the female made seven trips. The young were small, as the parent birds went completely into the nest hole. The birds, male and female, always came onto the tree trunk above the nest hole and hitched jerkily downward until on a level with the hole. They landed anywhere between five and fifteen feet above the hole; the female was likely to land nearest to the hole. If an auto happened to be passing when the sapsucker was hitching down, the bird would quickly dodge around the tree; but the mere passing of an auto never caused either of the birds to leave their tree.

About every other trip excrement was carried from the nest. When the male cleaned nest he carried the feces away and dropped them some distance from the nest. When the female cleaned nest she came to the entrance from within, looked about and then dropped the refuse before leaving the nest hole. Directly under the nest hole there was a litter of droppings and we thought as we examined the droppings that such untidiness under a nest hole might thenceforth indicate to us that the occupants of a site were Williamson Sapsuckers, inasmuch as all other woodpeckers we have known are particular to carry the refuse far from the nest tree.

Occasionally the parent birds would arrive at the nest hole simultaneously, or nearly so, and in such case the male would always hold back and allow the female the right of way. When the sapsuckers met at the nest site they exchanged greetings in a "rubber doll" tone of voice. This nasal quaver of notes was remindful of a call often sounded by the Red-breasted Sapsucker. Another call that was occasionally shouted from the tree-tops was shrill and like that of a Red-tailed Hawk.

On this same day (June 17) we discovered another pair of Williamson Sapsuckers feeding young. The nest hole was about thirty-five feet above the ground in a dead white fir. This was the first time we ever found Williamsons nesting in anything but lodge-pole pines. However, this tree was evidently also an ancestral home tree as there were six old holes. Again the birds of this pair employed the unique habit of hitching down to the nest hole instead of up as most woodpeckers do. Also there was the litter of droppings under the nest.—CHAS. W. MICHAEL, *Yosemite, California, June 19, 1934.*

Observations on a Captive Pygmy Owl.—During a field trip in Monterey County, California, in 1933, one of these small diurnal owls (*Glaucidium gnoma grinnelli*) was captured and, from May 31 to June 8, was kept in captivity. The bird seemed tractable and was never aggressive toward us. His most vigorous reaction to our presence consisted in clicking the mandibles together. At no time did he make any attempt to defend himself either with the rather formidable claws or beak. The owl was always alert and followed every movement near his cage with his sharp, piercing gaze.

We supplied our captive with fresh-killed *Peromyscus* twice daily; usually two at a time were pushed head foremost about half way through the screen of the cage. The bird showed no apparent reaction to food as long as anyone remained within range of his vision; but if one of us returned within a few minutes after feeding time, one of the mice would be found clutched in the feet of the owl and almost hidden from sight by the bird's breast feathers. On one occasion a mouse was pushed directly in front of the owl, whereupon he promptly seized and held it firmly, but made no further move. Before starting to eat, the bird always placed its prey in a natural position, with back uppermost, and tail and body extended in a straight line. The first portion of the mouse to be eaten was always the brain, which was followed by the contents of the abdominal cavity, and then by those of the thoracic cavity, and finally by the remainder of the body. The only parts not swallowed were scattered bits of skin. The mice were not skinned, although skin was torn