THE TERRITORIAL CONCEPT IN THE HORNED OWL

WITH ONE ILLUSTRATION

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Most field workers in ornithology come soon to recognize that individual birds commonly lay claim to definite feeding areas which they try to defend against intruders of their own kind or against those of kindred interests. I have often noted this phenomenon among the various owls (especially with Horned, Spotted and Pigmy owls). From some point within his baronial estate the owl may boom forth his proclamation to the strigine world and consciously or unconsciously warn away all intruders. Only as one invades this particular territory with an imitation of the owl's note does he get an active response from the claimant.

During the present summer, in Holcomb Valley of the San Bernardino Mountains, I observed an interesting and entertaining manifestation of this proprietary

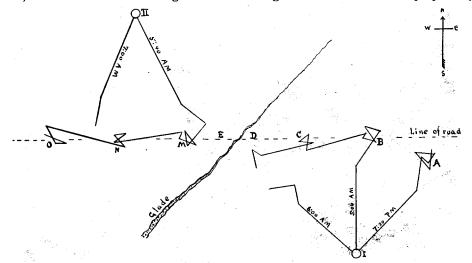


Fig. 110. DIAGRAM OF MOVEMENTS OF TWO HORNED OWLS (1 and 2) WITHIN THEIR RESPECTIVE AREAS. NUMBER 1 REACTED AT SUNSET, 7:30 P. M., AND AT 5 A. M. AND 8 A. M., NEXT MORNING, EACH TIME APPROACHING FROM ITS STA-TION AT I. NUMBER 2 RESPONDED AT 5:30 A. M. AND 7:30 A. M., COMING FROM ITS STATION AT II. THE DIAGRAM IS NOT QUITE ACCURATE IN SCALE. THE RADIUS OF EACH AREA WAS ABOUT ONE-FOURTH OF A MILE.

instinct. The species concerned was *Bubo virginianus pacificus* and the dates June 26 and 27. We made camp at Saragosa Spring at 7600 feet (station A, fig. 110), and immediately after sunset I began giving the four-note "hoot" of the Great Horned Owl. Within a few minutes a male bird answered from the southwest about a quarter of a mile away (station I). Calling continued, and this bird answered from a nearer point and then approached to within seventy-five feet and moved from perch to perch about our campfire out in the open. Each time it hooted the call was answered from where I sat by the fire. It was not yet dark, and the bird was plainly visible. Each time I hooted it turned quickly and looked in the direction of the sound. We played with him until we tired of it and slid into our sleeping bags under a juniper tree. The owl remained about until after I went to sleep.

I was awakened after the first hour or two by my restless companion who was disturbed by the noisy owl. I then heard the high pitched note and a cat-like "squawk" from the female bird. They were both about. I raised up with the

Nov., 1930 TERRITORIAL CONCEPT IN THE HORNED OWL

spot light and answered the birds and they both approached, the male within fifteen feet of me, on the lateral branch of a juniper scrub. The light drove them away temporarily, but not till the pinkish eye shine was noted. The birds retreated but a short distance and returned, seemingly searching for the invading owl. I drove them away again and went back to sleep. After one repetition of the performance I slept till daylight at 4:30 when, with a companion, I started for a walk down cañon at sunrise, walking almost due west along the mountain road. Two repetitions of the owl call brought the male bird's response again at station I.

We had moved along the roadway perhaps two hundred yards and the owl approached us. We stopped at B and the bird occupied several stations within fifty to one hundred feet of us, each time looking for the answering hoot. We moved to C and repeated the performance. The bird followed us toward D but would not quite come to us. We walked on to E but he would not come any farther than a point east of D. As we called repeatedly from E a second owl of slightly deeper voice answered from the northwest (station II). At M we stopped and number 2 approached, occupying several stations about us, once perching on a dead stub within thirty feet in bright sunshine.

We repeated the performance at N and at O and then continued our walk down cañon. Bird number 1 had meanwhile retired to station I and was silent. We left number 2 at O and were gone about forty minutes. As we returned toward O hooting was resumed and number 2 at once responded from his original station at II. He approached at once, flying through the open scrubby timber, and we noticed that the small birds were not particularly disturbed by his presence or actions. (The Pigmy Owl's note a short time previously had attracted eight species of birds.) We repeated the previous performances at approximately stations N and M in reverse order until we arrived at E where number 1 answered from station I.

I was taken with a strong desire to call the two birds together and see what would happen, so I moved to a point directly between them. Owl number 1 approached to within seventy-five yards, but would come no nearer. Number 2 came in from the west to about the same distance on his side, but I hooted till my throat was tired and the two owls remained each on his own side.

I finally saw number 2 fly back to the west, and we ourselves decided to go to breakfast. The sun had been up nearly three hours.

There was a poorly defined glade running obliquely through the sparsely forested country, crossing the road between D and E. This seemed to be the dividing line between the lands of these two robber barons, and neither carried his quarrel quite up to the boundary line.

CONCLUSIONS

Bubo hoots from a point within his chosen territory.

Within that territory he generally responds quickly to the note of a supposed invader.

Calls from without his estates do not bring him to the spot though they may rouse him to send out his own challenge.

The male bird is the more aggressive and is recognized by the deeper voice and more regular cadence. This point has been tested out by dissection.

When reacting to the invader, the owl is not disturbed by people. I once brought a bird to a desert camp where there were seventy-five people laughing and talking, about their several cook fires, or pointing at the owl and exclaiming at its erect horns and cat-like face.

There is honor (or fear) among thieves, for each bird seems to respect the other's territory.

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