

GENERAL NOTES

The motivation of sun-bathing in birds.—A report of observations on sun-bathing in birds (Hauser, 1957. *Wilson Bull.*, 69:78-90) considers the relative importance of "heat" and "light" in initiating this behavior pattern in direct sunlight. Mrs. Hauser suggests that "heat, alone, is not the motivating factor." Observations that I have made of sun-bathing by hand-raised birds, though involving artificial conditions, may be of some value in this consideration.

A hand-raised Western Meadowlark (*Sturnella neglecta*) was observed to sun-bathe on a number of occasions, but particularly when the rays of morning sun were permitted to shine directly into the cage. When given the "freedom" of my house trailer, especially during the winter months and early morning hours, this bird would regularly "sun-bathe" in the path of the hot air being forced from the base of a space heater. The posturing in this situation did not differ from that exhibited as a response to direct sunlight. The observation that this reacton to forced hot air seemed independent of light intensity in the trailer prompted me to solicit this same behavior during the evening, under solely artificial light. I then discovered that, once a posture characteristic of sun-bathing had been assumed, I could turn off all lights in the trailer without disturbing or interfering with this behavior. After an interval of one minute of complete darkness, the lights could be turned on and the bird would still be in its characteristic position. Similar behavior was observed in a hand-raised Starling (*Sturnus vulgaris*).

These observations of sun-bathing in captive birds, in response to forced hot air, may be of importance in interpreting and evaluating the stimuli responsible for such behavior in direct sunlight. Sun-bathing has been reported to be particularly conspicuous when the sunlight is bright during periods of relatively low ambient temperature and also in the sunlight that breaks a period of rain or cloudy weather. There is a reference in the article cited above to sun-bathing in dry sand which, though not so stated, may have become warmed by the "full sun." On another occasion, several species were observed sun-bathing on a "compost heap, primarily composed of decaying elm leaves." A thermometer, laid on the leaf bed in full sun, registered 140°F. I am inclined to regard a sudden warming of the bird's immediate environment as being extremely important in the motivation of sun-bathing behavior.—WESLEY E. LANYON, *American Museum of Natural History, New York, January 1, 1958.*

Baiting of fish by a Green Heron.—On Lake Eola at Orlando, Florida, many visitors feed the water birds during the winter with the result the birds become very tame. When Howard Hardaway and the writer visited the lake on April 16, 1957, a Green Heron (*Butorides virescens*) was fishing from a low retaining wall on the edge of the lake. When we threw him a piece of bread, he picked it up and placed it in the water. At first we thought he was softening it before eating, but instead he allowed the piece of bread to float slowly away. When it was almost out of reach, he picked it up and placed it close to the wall again. Suddenly the heron speared a fish which came up to nibble on the bread. We threw him another piece about one inch square some distance back from the wall. The heron picked it up and ran back to the edge of the lake and again started fishing with the bread as bait. Several times when some American Coots (*Fulica americana*) swam in after the floating bread, the heron retrieved it and drove away the intruders with threatening strokes of his long bill. As soon as the coots were dispersed, he again placed the bread in the water near the wall and resumed his fishing.