

DISPLAY TENDENCIES OF GOLDEN-CROWNED KINGLETS

By Mabel Warburton

While engaged in bird-banding activities during Operation Recovery at Island Beach, New Jersey, observations were made to determine the display tendencies of Golden-crowned Kinglets (*Regulus satrapa*) while in the hand.

The period of observation ran for ten days 17 October through 26 October, 1968, and was conducted in one net-lane only and in conjunction with routine netting and banding. All observations were made after the bird was removed from the net, but while being removed from the collecting case, while being held in the hand for examination, and while the band was being attached.

Display is defined here as separating the crown feathers so that the partly-concealed and brightly-colored feathers of the more centrally located crown patch spring into fuller view. Forbush and May (1925) noted that Golden-crowns displayed the crown patch in the wild, but display of a hand-held bird was brought to my attention by Blake (*AUK*, 85:506) wherein the display of a female only was noted. During my observation, both males and females took part in this behavior.

In 1968 a wave of Golden-crown migration occurred in early October (6th, 8th and 9th) and again in middle October (12th, 13th, 14th and 15th) and a third peak was reached 17, 20, and 22 October when this observation was being made.

The accompanying table shows the number of Golden-crowns captured, the number of males and females, and the number of each which displayed. Since no Golden-crowns were captured on 19 October, this date is not included in the chart.

Golden-crowns captured during the observation period totalled 201, of which 121 were males (slightly over 60%) and 80 (over 39%) were females. Of the displaying birds, 71% were male, and 29% were female. Of the captured males, 22.3% displayed and of the captured females 13.7% displayed.

Questions to be answered by further study might be: does the male always tend to be the dominant displayer, or at another season might the female excel, *i.e.* in spring, might the female show more animation than in the fall? Kinglets in the hand show much activity, chattering, singing, and fluttering. Is this lively behavior peculiar to male rather than to female, and might this erection of crown feathers be connected with the general all-over animation behavior of the bird rather than be a separate action? Courtship behavior of the male often

entails a showing of colorful plumage, this would tend to point out that the male would display in spring only, but this is not borne out in the observations made. Does, then, the showing of colorful crown feathers have another function than to attract the opposite sex?

| OCTOBER | 17 | 18 | 20 | 21 | 22 | 23 | 24 | 25 | 26 | Total |
|-----------------|----|----|----|----|----|----|----|----|----|-------|
| Number Captured | 27 | 2 | 61 | 6 | 68 | 10 | 17 | 7 | 3 | 201 |
| Males | 14 | 2 | 35 | 3 | 46 | 3 | 11 | 4 | 3 | 121 |
| Females | 13 | 0 | 26 | 3 | 22 | 7 | 6 | 3 | 0 | 80 |
| Displayed | 1 | 0 | 18 | 2 | 8 | 2 | 5 | 1 | 1 | 38 |
| Males | 0 | 0 | 11 | 1 | 8 | 1 | 4 | 1 | 1 | 27 |
| Females | 1 | 0 | 7 | 1 | 0 | 1 | 1 | 0 | 0 | 11 |

CHART: Number of Golden-crowned Kinglets captured and displaying in observation period.

Acknowledgment: I am indebted to Charles H. Blake for helpful criticism of this paper.

--44 Hilltop Road, Yardley, Pa. 19067

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WARBLER RECOVERIES OF ISLAND BEACH BANDED BIRDS

- 63-66450 Canada Warbler, banded 08-31-61
Recovered 05-18-65, Springfield, Mass. (Tr. & Rel.)
- 106-63145 Magnolia Warbler, banded 09-18-63
Recovered 06-11-64, St. John, N.B. (Caught by cat)
- 72-85431 Myrtle Warbler, banded 10-14-65
Recovered 06-17-66, St. Johnsbury, Vt. (Found Dead in Building)
- 112-44727 American Redstart, banded 09-03-66
Recovered 05-00-67, Jamaica B.W.I. (Condition Unknown)
- 114-95393 Nashville Warbler, banded 10-20-67
Recovered 10-21-67 Mantoloking, N.J. (Found dead due to striking stationary object).

The above recoveries have been verified.

Contributed by Mabel Warburton (*Editor's Note: Watch future issues for more Recoveries from Island Beach, N.J.*)