"Many species that normally bathe in standing water will sometimes make incomplete, often clumsy, attempts at bathing in rain, in wet vegetation or even, sometimes, in snow" (Simmons *in* Thomson, *A new dictionary of birds*. Nelson, London. 1964: 279). Verbeek (*Auk*, **79:** 719, 1962) described 28 birds of seven species dew bathing at the same time and locality during an August drought in British Columbia. Mayfield (*The Kirtland's Warbler*. Cranbrook Inst. Sci., 1960) described dew bathing by the Kirtland's Warbler (*Dendroica kirtlandii*) and cited examples of similar behavior by three other species. Nicolai (*J. Orn.*, **103:** 125-139, 1962) suggested that lying on dew-dampened grass by the dove *Geopelia cuneata* was a rudiment of true bathing, absent in this species. Ficken (*Wils. Bull.*, **74:** 153-165, 1962) noted leaf-bathing by a Bay-breasted Warbler (*Dendroica castanea*), and on 27 December 1964 I observed a Yellow-throated Warbler (*Dendroica dominica*) bathing on a dew-covered palm frond at Flamingo, Florida.

It is notable that I did not observe dew bathing by cardinals before 9 June although I had been observing them in the field daily since 13 April. The average maximum daily temperature at Dresden, Tennessee, in June 1966 was 87.8° F, and a total of 1.24 inches of rain was recorded. In much of western Tennessee, 1966 had the driest June in 13 years, and in some locations, the driest in 30 to 35 years (U. S. Dep. Commerce, *Climatological data: Tennessee*, **71:** 59-70, 1966). In the three days preceding my first observation, 0.56 inches of rain were recorded, but no rain had fallen for 11 days prior to this and later in June rain was recorded on only one day. There was no standing water in the home-ranges of any of the birds involved.

Dew bathing may have been more readily stimulated during this period of drought, but bathing in standing water was never seen in Tennessee. Twice I have observed females bathing in shallow streams in southern Ontario, but in over 100 hours of observing male cardinals in Tennessee and Ontario, I have never observed one bathing. Caged male cardinals, however, bathe readily and frequently.

As the Cardinal frequently associates with rivers and streams, its sporadic bathing is apparently not due to lack of opportunity. Most accounts of the Cardinal omit bathing behavior. In 1599, Aldrovandus (*in* Christy, *Cardinal*, **5:** 173-186, 1942) reported that the Cardinal "often plunges itself into water." Christy retorted: "A bit of fable. Of all the dooryard birds the cardinal is remarkable in that it is seldom seen at the bird bath." However, it seems likely that Aldrovandus' report was based on captive birds. Laskey (*Wils. Bull.*, **56:** 27-44, 1944) noted only a few instances of cardinals bathing, while Nice (*Bird-Banding*, **13:** 187, 1942) reported that female cardinals bathed fairly often, but that she knew of only one record for a male.

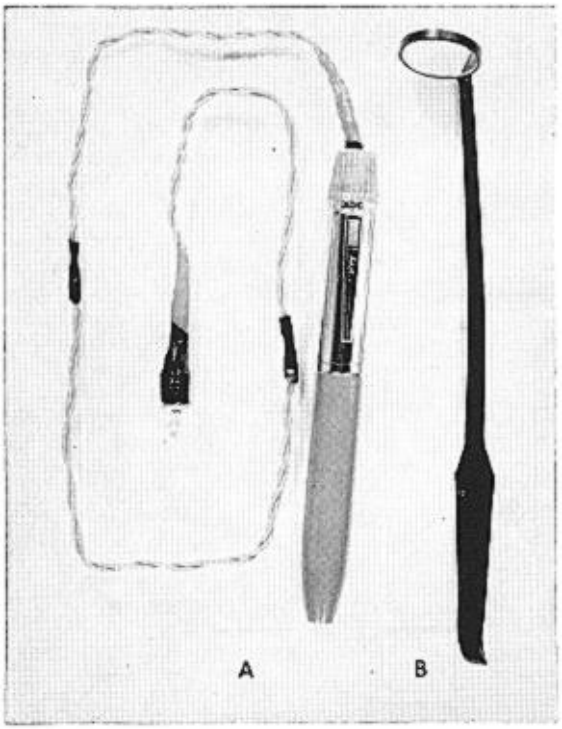
I have observed rain bathing by a cardinal once in southern Ontario. A male, singing from a 15 m high branch of a dead elm (*Ulmus americana*) during a light rain shower at 0717 EST on 23 June 1965, began bathing movements when the intensity of the rain suddenly increased; he bathed for four minutes, then two minutes later for a further five. Rain bathing by passerines may be more common than realized since observation is usually curtailed under such conditions.

I can suggest no reason why bathing should be indulged in less by the Cardinal than by many other passerines, if this is, in fact, the case. It appears that incidental stimulation, contact with rain or wet leaves, may act as a releaser of bathing behavior. Considering the barren environment of the cage, the proclivity for bathing shown by captive cardinals might be consistent with this suggestion.

These observations were made during a study of habitat utilization by the Cardinal supported through grants from the National Research Council of Canada to D. M. Scott of the University of Western Ontario.—Douglas D. Dow, Department of Zoology, University of Western Ontario, London, Canada.

A Device for Examining Nesting Cavities.—In studying birds nesting in natural cavities, we have frequently encountered deep narrow cavities that defy examination using a conventional flashlight or penlight. A device designed by the authors, which is essentially a modified penlight, has facilitated the observation of eggs or nestlings in obscure, hard-to-get-at cavities. In addition to making observations on bird nests in natural cavities, we have found this technique useful in examining gourd-like mud nests and nests in nest boxes.

Fig. 1. A. — Modified penlight; B. — Dental mirror.

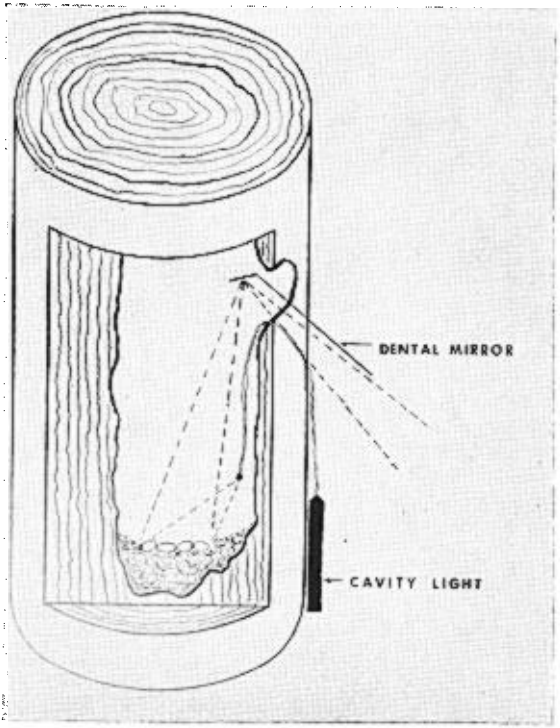


Two 18-inch strands of stiff bell wire are twisted together. The bulb and socket are removed from the body of a two-cell penlight. The ends of the two strands are soldered to the two terminals in the bulb socket. If the penlight does not have a removable socket, an adequate adapter can be fashioned from Plexiglas or some other suitable material, but construction is simplified when a penlight with a removable bulb socket is used. After the wires are attached to the bulb socket, they are threaded through the bulb opening in the penlight head. The other ends of these wires are soldered to the two terminals on the bulb base, which is then covered with plastic electrician's tape. With prolonged use, connections loosen and wires break, but this can be reduced if a thin layer of Dow Corning Selastic aquarium sealant is applied to the wire-bulb opening and wire-bulb base junctures before electrician's tape is applied. We have also found that the aggravation of dead batteries resulting from the penlight being accidentally turned on can be eliminated if the penlight switch is taped in the off position when not is use. The completed "cavity light" arrangement is illustrated in Fig. 1A.

To investigate a cavity the bulb attached to the end of the wire is positioned near the cavity bottom. Thus illuminated, cavity contents can be observed with a "dental" mirror (a small mirror set at a 70° angle on the end of a handle—Fig. 1). Stiff wire such as bell wire can be bent over the cavity entrance, thus freeing the investigator's hands (Fig. 2).

Total costs of materials for the "cavity light" are about $2.00. An adequate "dental" mirror can be purchased from an *electrical* supply firm for about 50 cents.

Fig. 2. Position of dental mirror and cavity light for examining nesting cavities.



We thank Dr. R. S. Hoffmann for reviewing the manuscript, and James Seidensticker for preparing Fig. 2. John C. Seidensticker IV, Department of Zoology, University of Montana, Missoula; Lawrence Kilham, M.D., Department of Microbiology, Dartmouth Medical School, Hanover, New Hampshire.

Swainson's Warbler Banded at Linwood, N. J.—On May 23, 1968, at our Linwood, N. J. banding station, a Swainson's Warbler (*Limnothlypis swainsonii*) was netted, banded, weighed, photographed and the wing chord measured. Our identification was confirmed by Dr. Ernest A. Choate, of Cape May Point, New Jersey, who is Region No. 5 Editor of "New Jersey Nature News" published by the New Jersey Audubon Society.

From literature at our disposal, and from correspondence with David A. Cutler, Regional Editor for Audubon Field Notes, and Donald E. Kunkle, former Recorder for the Urner Ornithological Club, we have been unable to find any record of previous sightings or bandings of this species in New Jersey and believe it to be the first for the state.

Our station is situated on five acres equally divided between a fresh tidal cattail marsh and upland habitat. The marsh and upland areas are divided by a strip of native shrubs and trees about twenty feet in width, which provides cover for migrants using the edge of the marsh. The HT type tethered Japanese mist net in which the bird was taken was placed in a path cut through this strip. The bird weighed 13.7 grams, had a wing chord of 69 millimeters and bears Fish & Wildlife band number 60-56172.—Mr. & Mrs. William E. Savell, 554 Barr Avenue, Route 1, Box 364, Linwood, N. J. 08221.