observations is now in preparation.—John T. Emlen, Jr., Division of Zoology, University of California, Davis, and Ben Glading, San Joaquin Experimental Range (U.S. Forest Service), O'Neals, California, October 5, 1937.

An Early Spring Migration Record for Calliope Hummingbird.—Prior to this year the migrating Calliope Hummingbirds (Stellula calliope) have not been observed to arrive in the San Gabriel Valley (Los Angeles County, California) until some time in April, my earliest record being April 8, 1926. Willett states (Pacific Coast Avifauna no. 21, 1933, p. 99) that an adult male was taken by L. H. Miller at Riverside in late March, 1892. This was probably the only published occurrence earlier than April in the United States, as the Arizona and New Mexico records almost entirely pertain to the southward migration.

At mid-afternoon on March 6, 1937, only a minute or two after noting the first Rufous Hummingbird (Selasphorus rufus) of the season, I saw in the same flowering quince bush a male Calliope Hummingbird. The Calliope was tame and unhurried, and alternately fed and rested in the quince for the remainder of the afternoon, but it did not reappear on the following day or thereafter. The maximum temperatures on March 6 and the several preceding days were slightly above 80 degrees.

—ROBERT S. WOODS, Azusa, California, October 26, 1937.

Calliope Hummingbird at Zion National Park.—At the request of Mr. Clifford C. Presnall, Park Naturalist, Zion National Park, Utah, I am recording the observation of a Calliope Humming-bird (Stellula calliope) made by Mr. Stephens and myself, April 22, 1937. A bird of this species was seen several times on the mountain slope just back of the Museum. We noted its small size, greenish back, the white tips of the tail, and the bill black above and yellowish below. Mr. Presnall states that it migrates through that part of the country, since it has been seen at Bryce; but this is a new observation for Zion.—Laura A. Stephens (Mrs. Albert B.), San Francisco, California, October 6, 1037

A Black Phoebe's Nest with Eggs of Three Species.—One and one-half miles north of Manka, Solano County, California, I stopped my car at a concrete bridge, on June 26, 1937, a very hot day, and looked underneath for a nesting Black Phoebe. A nest of phoebe construction, plastered into the angle formed by a concrete pillar and the under-surface of the bridge, was about twelve feet over the small stream. The first egg I withdrew from this nest was a Dwarf Cowbird's (Molothrus ater obscurus), then three of the Western Flycatcher (Empidonax difficulis), and finally, under a scanty lining of fine hairs, three eggs of the Black Phoebe (Sayornis nigricans).

A Western Flycatcher, intermittently perching on a fence post near-by and flying back and forth beneath the bridge, with its beak open because of the heat, was the present caretaker of this domicile. The flycatcher had added to the lining of grasses and weed stems installed by the phoebe, a few hairs, bark strips, weed stems, grasses, a feather, and cobwebs matted about the rim, these additions reducing somewhat the size of the nesting cup.

Subsequent preparation of the eggs showed that the phoebe's eggs had not started to incubate and were very slightly "caked." Incubation in the cowbird's and flycatcher's eggs were at about the same stage, some three or four days. There was nothing to indicate whether the phoebes had met with an accident, or had been driven away by the flycatchers.—Emerson A. Stoner, Benicia, California, September 23, 1937.

Safe Packing of Dry Study-skins of Birds for Shipment.—Packing dry study-skins of birds is a matter of considerable importance on account of the hazards to which specimens are subjected during transit. Care and time expended upon details will save valuable specimens from damage. Individual skins should be placed in containers in such a way that neither bills, tails, nor feet shall be in contact with sides or ends of the packing box, and so that they will not be crowded against one another or subjected to excessive pressure. Therefore, containers must be large enough to allow for sufficient padding on all sides, top and bottom, and each skin must receive special attention as to wrapping and placing within the well-padded box. Cotton, of a cheap grade, is the best packing material for all bird-skins, with the exception of very large specimens such as geese and eagles. For large birds, shredded tissue paper, newspaper, or excelsior is satisfactory for padding. Containers must be firm; light-weight wood is preferable to cartons; ordinary cardboard boxes are entirely unsuitable unless reinforced with corrugated cardboard.

Several satisfactory methods are in current use. By one method specimens are placed directly upon layers of cotton, with cotton pads over and between heads, tails, and feet. This insures safety in transit but is open to the objection that shreds of cotton catch on claws and bills and adhere to feathers, and must be plucked off when specimens are removed from container. Another method

makes use of soft tissue paper for wrapping about each skin. The value of this soft paper lies not only in keeping skins from direct contact with cotton padding, but in using pieces large enough to fold or twist loosely over the tips of bills and to fold over beyond the ends of the tails, thus acting as a buffer against jarring and possible breakage. Wrapped specimens may be slightly staggered by placing alternate specimens head end next to tail end, and placing others in resulting hollows, thereby cutting down the size necessary for the container. A third method gaining in favor is the use of newspaper or magazine paper rolls for wrapping skins. Such wrapping, if properly done, has several points of merit. By properly done is meant that the papers used must be long enough to extend beyond the ends of bills, tails and feet, as well as being wide enough to roll completely or twice around the birds' bodies. A small wad of cotton slipped into each end of the open roll gives extra protection against jarring or slipping of skins during transit. Other points in favor of this method are that the paper containers are firm enough to keep from over-pressure of skin upon skin, and that less cotton padding is required—only about one inch thickness against the box itself being needed.

The Museum of Vertebrate Zoology is at present using a variation of this paper-roll method which seems well adapted to safety of specimens in transit. Unprinted newspaper, obtainable in rolls, is quality of paper used. A piece is cut sufficiently large to completely roll about the bird's body, with a one-half overlap, and with additional length of about one and one-half inches at each end. The

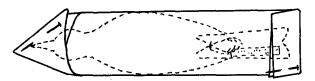


Fig. 18. Illustrating a method of wrapping a bird skin in thin paper for packing.

bird is laid on its back in proper position on the paper; then, holding the edge of the paper firmly over the primaries at the bend of the wing, or at the largest diameter of the body, the paper is rolled around the skin so that its extra width lies across the belly. If the bird is large or much rounded over the breast the paper is fastened here with a pin; otherwise it may be *held* in place until the entire wrapping is completed. The next step is to observe where the tip of the tail lies and to fold over and pin the end of the paper. Finally, observing the position of bill tip, the paper is folded over corner-wise, first from one side, then from the opposite side, starting in the head region; the folds are bowed up and pinned (fig. 18), thus making a pointed pocket of extra thickness of paper in which head and bill are protected from injury. With insertion of bits of cotton to fill gaps and hollows, and with thin sheets of cotton between rows, specimens wrapped in this manner can be closely packed without fear of distortion and injury due to rough handling to which containers may be subjected during shipment.—Margaret W. Wythe, Museum of Vertebrate Zoology, Berkeley, California, November 5, 1937.

Dove Dies of Heart Ailment.—Early in September a Mourning Dove (Zenaidura macroura) was brought to us. It had been found, helpless, in the road and was thought to have a broken wing. Upon examination I could find no break nor evidence of there having been one from which the bird might be recovering. Non-the-less the right wing seemed to be drawing upward and the bird was of under-size for that time of the year. It could raise itself but a few inches off the ground. Otherwise it appeared healthy and normal. We placed it on a screened porch where it could move about at will. It took food and water and was unconcerned over confinement or our presence.

On the fourth day the bird was more active than usual. Then in mid-afternoon it suddenly pitched forward and blood spurted from its mouth. It died instantly. Three hours later I took the body to the doctor in a nearby CCC Camp. He said there were no broken bones nor were any out of joint. He thought there must have been some organic disorder that had caused the "drawing" and partial paralysis. While working the wings, blood poured from the mouth. He then suspected pneumonia. From past experiences with birds so afflicted I was quite sure that malady had not caused the dove's death.

We then performed an autopsy. Surely enough the lungs were healthy; also the liver. But the pericardium was distended with blood; the heart was pulpy. Hence the doctor's diagnosis was: "Death caused by some sort of heart disease."—LILA M. LOFBERG, Road's End, Kern County, California, November 5, 1937.