

on a limited number of traps, even though the take per trap may be higher for the second station (mostly because of species which don't tend to move in flocks, or at least in such large ones).

Another problem to consider in deciding how many traps should be in use is disturbance. Many stations have room enough around the house to place groups of traps in two or three places, on different sides of the house, so that usually a disturbance (such as the bander making his rounds) will affect only one group at a time. This is valuable in retaining flocks that might otherwise leave the area entirely, and in giving maximum feeding time for species which need a long day in order to get enough food, such as some which winter only as stragglers.

In considering relative efficiency of the two methods, time spent by the bander is one factor. On busy days, banding tends to be a full-time job either way. Relatively inactive days may produce some valuable results, while taking only part of the bander's time. The automatic traps take less time than the pull-string, unless the latter is controlled from the spot where the bander is spending his time anyway (this in turn limits the number of potential pull-string sites further).

Relative efficiency of the two trap types in taking wise, old birds may be hard to compare. At my station, using Potter-type or McCamey automatics kept baited at all times, three recent half-days of mid-winter banding produced 1 chickadee out of 20 banded in 1956, 1 out of 10 from 1958, 2 out of 10 from 1959, and 7 out of 25 from 1960. This seems to me to be a respectable showing, considering the short *average* life of the species. Admittedly I took none out of 42 banded in 1957, but that year's total was weighted with birds taken in early fall, probably largely immatures without a strong attachment to the area. I do not know how many wise, old birds I missed, but rather doubt that the same effort with pull-string traps would have yielded a radically different result.

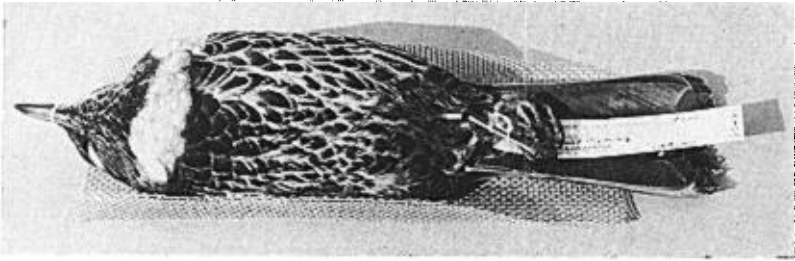
I do not mean to take issue with the central theme of Dr. Kennard's comments, on the great value of a pull-string type of trap for selective trapping, especially where individuals are identified with color markings. Without the color markings, the bander may find it hard to be selective. Certainly we would not suggest passing up birds already banded so as to take only unbanded birds. Apart from the value of the data that can be obtained from repeats, it is often hard to guess at the time of banding from the appearance of the band. My chickadees often surprise me, either by keeping a band shiny for years or getting it dark within a few weeks of banding.

Each bander should consider trap types and placing in the light of his own needs. Intensive study of a resident population, as illustrated by Dr. Kennard's work, is one of the most rewarding approaches, and should be in far wider use than it is now. — E. Alexander Bergstrom, 37 Old Brook Road, West Hartford 17, Conn.

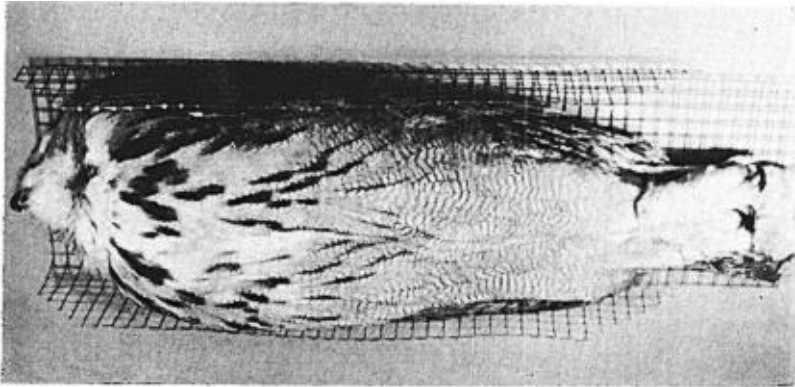
A Bird Skin Drying Form for Field Use.—An improvement on the Hurley drying form for bird study skins has been presented in this journal by Wood (1956, *Bird-Banding* 28: 156-157). Considerable field experience using the Hurley and types of cardboard drying forms in the southern United States and eastern Mediterranean prompts me to present a few cautions and suggestions.

The main drawback to using the Hurley form in the field whether in dry or damp, cool or warm climates is the lack of air circulation and therefore drying on the dorsal surface of the specimen. Often considerable moisture in muscle or fat, especially in the wings, is left in this area when the skin is put together. This moisture forms condensation on the aluminum surface during drying. This is true especially for large specimens and particularly so when heat is applied from below the form. Flies, always a serious field pest on warm days, have a way of finding this damp undersurface for laying eggs and it is often too late when the maggots are discovered. Once maggots have started it is nearly impossible to dry a skin without artificial heat. For this reason, a small amount of Paradichlorobenzene or naphthalene may be placed inside the back of the skin before closing the specimen, the form should be sprinkled with PDB or naphthalene, and birds drying in forms should be kept in insect-tight containers if possible.

A further improvement suggested on the Hurley form is the use of hardware cloth or screening (aluminum is especially good) instead of sheet aluminum. Not only does air circulate better and the dorsal surface of the skin consequently dry faster, but one can see the dorsal plumage and quickly rectify any faulty feather arrangement before the skin dries entirely.



When a large number of study skins are arranged in a museum cabinet drawer, specimens with rounded backs tend to roll in the tray. A further modification suggested is to square up the form slightly so that the bird's back is flatter and so that rolling of the finished skin is prevented.



Drying forms of this sort are a great boon to the travelling field collector. I have used them successfully for drying and transporting such large specimens as *Aquila* spp., *Gypaëus barbatus* and *Bubo bubo*. Field drying forms are equally good on all medium and large birds from Robin size but carrying forms for even smaller specimens is unrewardingly cumbersome (see photographs). The light weight forms may be conveniently stored and transported flat when not in use and bent to shape as needed. They need not necessarily be nailed to a board for pinning the tail flat unless actually travelling when drying. — George E. Watson, Peabody Museum and Department of Zoology, Yale University, New Haven, Connecticut.

A Device for Holding and Spreading Bird Bands.—All bird banders, at one time or another, must have found the opening of bands a time-consuming process, particularly in the field. When bands are opened beforehand and stored in small envelopes or other containers, it is frequently impossible to use the entire lot without getting some bands out of sequence or even losing a few. While banding Starlings and Red-winged Blackbirds as an employee of the Denver Wildlife Research Center, the author constructed a device which overcomes these difficulties. It was designed for use with standard size 2 bird bands, but could easily be modified to work effectively on several other sizes of bands.

The device consists of a smooth cone of brass 3 inches long, tapering from 1/8-inch to 3/16-inch in diameter. First, a hole is drilled through the axis of the cone to accommodate a standard bicycle spoke. An 11-inch spoke will hold 36 size 2 bands, and a 10-inch spoke will hold 30 bands. The knurled head of the spoke is seated against the basal end of the cone. The other end of the spoke, the nipple or fitting, is attached to a short length of metal rod which serves as a handle, or to a ring which can be attached to a belt snap or clip. (Figure 1)