

March-April  
 A Bird Bander's  
 Diary  
 by  
 Ralph K. Bell

March 8, 1971... Seventeen degrees above zero early this morning. There were heavy snow squalls accompanied by strong winds most of the day and the temperature was 25 degrees when I arrived home at dusk. My wife told me about seeing at least eight Bluebirds in our yard late in the afternoon and observed one going into the "log" box that is located about 30 yards north of our yard fence. I had cut this log from a dead elm tree about 20 years ago, chiseled out the center of it, then drilled a  $1\frac{1}{2}$  inch diameter hole through the side, capped it and the result was a very natural looking nest cavity for Bluebirds.

Nesting records for this "log" box have been kept since 1954 and it has produced 60 young from 15 nestings. The number of young fledged has been lower than would be expected from a nesting site in a very favorable location and this has been due to alternate nestings in a near-by conventional box.

March 9... Since it is not unusual for several Bluebirds to roost together on cold stormy nights, I arose before dawn to check the "log" box. As I went outside at 6:05 a.m. it was just starting to get light. The temp was 16 degrees with a clear sky. A Junco flew in front of me and I heard some Crows in the distance. As I neared the "log" box, I could dimly see something sticking out of the entrance hole and my first thought was that I was too late and some of the Bluebirds must have already left the box. But this was not the case. It was the whole tail of a bluebird that was protruding and it appeared that the box was full of birds. I lifted the "log" box off the post and carried it into my heated banding building and then immediately checked the nearby conventional Bluebird box but it was empty. Upon noting a single Bluebird in a nearby tree, I checked the swallow nests under the eaves of the barn where 5 had roosted all winter from found 4 more. This indicated that those Bluebirds that were in the "log" box were probably new arrivals from their wintering grounds in the south.

Then came the big surprise as I started shaking the Bluebirds out of that "log" box into a big gathering cage - there were a total of 12 packed into it. The bottom of the log was only slightly over  $5\frac{1}{2}$  inches below the entrance hole and the round nest cavity was not over 4 inches wide at its widest part. It was no wonder that the last Bluebird could not get all the way in.

Eight of the 12 were males and 3 of those carried bands. There were no bands on any of the 4 females. Of the banded males, one had been originally netted here in the yard on March 11, 1967 (almost exactly four years ago). One had been banded as a nestling in a box a little over a mile away on June 14, 1969. The other one was a nestling in a box about 8 miles away (banded May 17, 1970).

Since 3 carried bands (25%), this could be a pretty good representation of the number of banded Bluebirds in the area. No doubt less than 25% of the Bluebirds nest in the approx. 250 boxes put out for them, but the ratio is somewhat evened up by the greater mortality of eggs and young in natural nesting cavities (because of snakes, raccoons, starlings, etc).

This communal roosting by Bluebirds is really not unusual here, but it is the first time I have been able to observe this at migration time. Almost every year we have several Bluebirds (usually 4 to 7) that roost here all winter under the eaves of our barn and this will roost together in one of the boxes during extremely cold weather when the temp drops below zero. The box usually selected is of the old conventional size, 5" x 5" and is painted white. I always leave some dead grass in the bottom of this box each fall for added warmth and comfort. Why the migrant Bluebirds selected the much smaller "log" box is a big question. Perhaps they had roosted in something similar on their wintering grounds in the south during severe cold stormy weather.

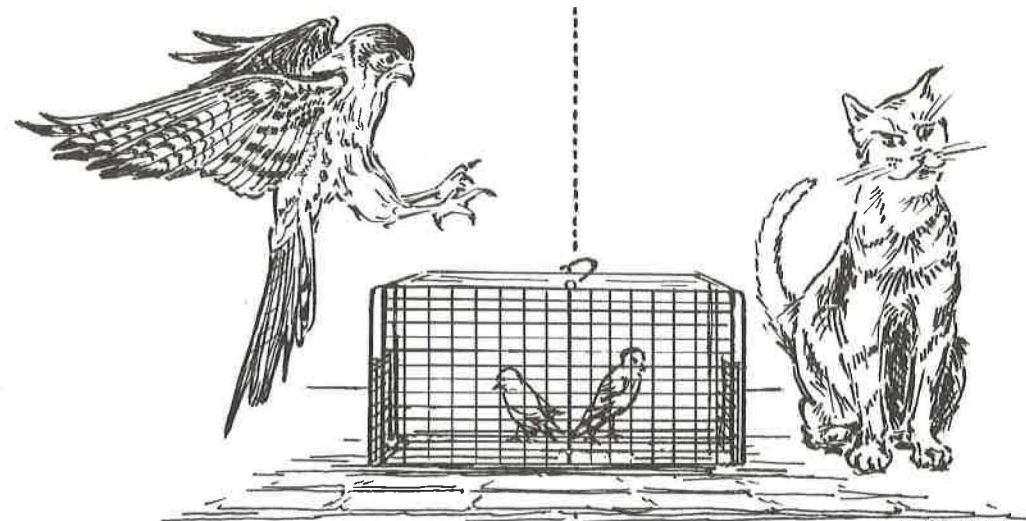
There is an excellent article on this subject in the October 1959 issue of BIRD-BANDING, page 219-26, entitled "Communal Roosting By the Eastern Bluebird in Winter" by Anita Frazier and Val Nolan, Jr. Their summary of this phenomenon is as follows: "From 5 to 14 Eastern Bluebirds roosted in a bird house near Bloomington, Indiana, during cold clear weather on five nights in February, 1958. The birds slept heads together and bodies pointed downward, forming an inverted cone. Retirement was earlier on colder nights; arising was later on colder mornings, over an hour after sunrise. The long duration of roosting and the very evident sluggishness of the birds lead to the suggestion that Eastern Bluebirds may respond physiologically to intense cold by reducing body temperature during sleep to a degree not previously known for that species".

I now wish I had observed the position of the Bluebird bodies more closely in the "log" box but due to the small size of the nest

cavity, it seems improbable that the bluebirds could have been positioned as they were in the box near Bloomington, Indiana.

I do know that our wintering bluebirds stay in the roosting box for at least a half hour after sunrise before venturing out into the cold on those below zero mornings. When the weather moderates they go back to roosting in the swallow nests under the eaves of the barn. Perhaps in the future I will study this strange behavior more closely. I haven't bothered them much in the past as I did not want to disturb them.

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TUESDAY  
OR: "ONE PICTURE IS WORTH 1000 WORDS" . . .  
THURSDAY