



## BANDERS' SHOFTALK

Banders' Shoftalk is an informal discussion among banders who wish to share their knowledge with others. Most of the time, it will consist of ideas, loosely put together, about equipment, identification, age, sex and general field methods. Each issue can consist of one long article, several shorter articles, or, even a few lines. The main purpose is to get banders to participate. You might call it a workshop session on paper. Articles need not be typed and they will be printed pretty much as they are received. Won't you help?

THE BIRD IN THE CAGE, IN THE NET  
AND IN THE HAND.

By: Hans Bub and Frederick S. Schaeffer.....

It is often amazing how little attention we pay to questions which always surround us in our work. A lot is obvious, much seems totally unimportant to us, some facets elude us completely. We should set out to examine all topics presented below. Our banding programs today cover a much greater scope than in the past, not only in favor of safer capturing techniques, but also in greater numbers banded.

On these grounds, we would like to examine the various topics here, so that we may reach more meaningful conclusions in the coming years. In conducting a meaningful study, taking notes is of the utmost importance. We suggest that the topics presented here be copied in the same order, simply in a small notebook or on index cards. One side should always be kept blank.

Many questions can be answered in statistical form but to do this, we have to acquire experience. When we become accomplished statisticians, they will be more easily adopted and understood.

### I. The banding of non-flying (locals) birds

The banding of nestlings, particularly those which are still unable to fly, has been greatly neglected since the Japanese mistnet became popular.

Despite this, nestling banding is of great importance, for migration studies as well as the avifaunal and other aspects of ornithology. Research in population ecology cannot progress without the banding of nestlings.

The following questions are of particular interest to us:

1. At what age can young of given species be safely banded?
2. Is a particular time of day desirable? We may not necessarily like to band in the early morning or late evening hours. One usually attempts to capture locals of plovers (e.g. Lapwings, shorebirds) in the evening hours, when the adults are engaged in incubation.
3. How do adults behave before and after their young are banded, particularly if those young are still in the nest?
4. How should we remove the young from the nest: singularly, or altogether? How do we return them to the nest and what amount of care do we have to take to accomplish this? It is said to happen that Barn Swallows and Black Redstarts eject their young from the nest when they were banded. If this indeed occurred, it is possible that those nestlings were extremely young when banded. We should therefore return the young to the nest in such a way that the band is not visible to the adult birds. Additional data is desired on this aspect. We direct your attention to Loehrl, H. (1950) "Zum Verhalten einiger Singvoegel vor und nach dem Flueggewerden" (The behavior of several songbirds before and after taking flight from the nest) Vogelwarte 15, p. 213-219. Also see further references listed at the end of this paper.

Some of the questions which appear in this paper may seem very basic to you. Admittedly, in American Ornithology, the answers to some of these questions are known, but definitely not for all species. We implore you to take copious notes in any case for we are confident that, eventually, you will come upon something which is still unknown and has not been written up in literature. Countless examples of this exist, one has but to read through the short notes in Bird-Banding, Wilson Bulletin, etc. The purpose of this paper is to increase your overall awareness of often overlooked facets in the study of birds.

### II. Use of Decoys

Many banders have some experience in the use of live decoys, more often, the beginner does not. We should therefore delve into this subject more deeply and discuss our experiences so that this knowledge may be more widely distributed.

The decoy will undoubtedly play a greater role in the future because it makes capture of greater numbers possible. We would first like to discuss objective methods of caging and holding birds as decoys. The following points, within the scope of this topic, interest us in particular: Size of the cage used; nourishment of birds used as decoys; their



behavior toward other birds in small and large cages; conditions needed to maintain their safety when caged, etc. We should consider, not only songbirds, but also other species often used as decoys.

### III. Capturing with Decoys

The results of our bird-trapping methods depend largely on the use of decoys, if used advantageously and if we are aware of the behavior of other birds which are still free, toward these decoys. Few techniques are more specialized and a great many questions concerning this topic still warrant answering:

#### a) Treatment and use of live decoys.

1. Treatment of decoys before capture. When we wish to capture birds for example, on the weekend, should we remove the decoys from their holding cages the evening before our banding session, or not? (In Europe, birds used as decoys are kept in captivity as long as they are needed for this purpose).
2. What care is needed, for the decoy, during the trapping period?
3. How many decoys should be used under various conditions?
4. Are there differences between decoys in their use, of different sex, or only so in spring or autumn? This is a facet where additional data are needed to determine how strongly a free bird reacts toward decoys of different sex in different seasons. Are there species with which the decoy's sex makes no difference?
5. How are decoys of various species used to our greatest advantage, to cause the strongest possible attraction? Should they be used on the ground, conspicuously, or well camouflaged?
6. At which time is it best to use bait, either solid or fluid?
7. When should bird-calls (recorded, etc.) be used?
8. Which species are more suitable as decoys for capturing birds of prey? For instance, birds used in Bal-Chatrri traps must have the quality to remain lively even in the moment of mortal danger. Bramblings have this qualification.

New questions occur to us about the use of decoys within the gathering cages:

1. Do they attract the other birds?
2. Do they warn off other birds in the same cage?
3. Do they create no noticeable reaction on the part of other birds at all?

#### b) Behavior of free birds toward decoys.

1. Do species react only to decoys of their own kind, or also toward decoys of other species and genera?
2. How do free birds react toward one or more or many decoys?
3. Which species necessitate the use of vegetation on or around their perch?
4. Do free birds react differently at different times of the day or season toward bait, water, similar species, different sexes or other genera?

5. Is there a minimum altitude at which the free bird will interrupt its flight, to allow itself to be attracted to decoys below?
6. What role does the weather play in this aspect?
7. Does the decoy effect free birds in a "visible" or an "acoustical" way, or both?

### IV. Behavior of free birds to be captured in traps or nets.

This chapter is most interesting and important. A sound knowledge of this aspect is still lacking for many species; how to capture them, in such a way that a minimum disturbance is caused them. Not only could we catch birds in a manner most praised by conservationists, if we knew all the answers, but we could also satisfy our own aspirations as banders. While we are studying these factors, we will also be able to contribute toward ornithological and ethological knowledge and will become more familiar with the psychology of birds.

#### a) Behavior during capture.

1. Are the birds afraid of the traps?
2. Are we able to employ methods which will heighten or lessen fear?
3. Are there factors which increase or decrease fear?
4. How well should the traps be camouflaged?

Here another short note is needed. A great many banders have trapped birds in the same manner for years and will undoubtedly claim that their method is the best. Let us pose the question-- when you take a bird from your traps or nets, is it calm, or is it in shock? Can you tell the difference between these two conditions? These symptoms are amazingly similar, you know...

5. Can birds be captured safely on the breeding grounds?

Besides notes on the types of traps used, date and time, we should also examine the following: Age and Sex; Number of birds involved; Ecological setting; Weather, i.e. Temperature, Wind and Cloud cover; Precipitation.

#### b) Behavior in the traps.

Dr. Sunkel (Jrnl. for Ornith., 1956) offered some very pertinent questions about this topic:

1. What are the characteristics of behavior of birds caught in various traps we use?
2. Do captured birds call, or not?
3. Do they struggle, squirm or try to escape? Are they quiet? What parts of the body do they employ to gain exit from the cage? How are these used? Do they "hammer" away at the mesh, in the manner of a Woodpecker, or, do they tug and tear like a Chickadee (Tit) at the mesh or net? Is the bill used to peck at an imaginary enemy? Do they cause themselves to become even more entangled by their continuous struggle for freedom like the short tailed Kinglets or Dipper do, or is their long tail an impediment as with Barn Swallows, Long-tailed Tits or White Wagtails?
4. Do they feign shock?



## 5. Do sudden molts occur, caused by fear, and which feathers are lost?

The following considerations are also of importance to note, besides type of trap, date, time and weather: biotope, number of birds (Is this form of behavior equally noticeable with one or with many birds?), Age, Sex and weather conditions.

V. Behavior of a captured bird, in the hand.

This chapter is of special interest, for it is in the hand that a bird's reactions are most noticeable. We (at Vogelwarte Helgoland) have already noted the different behavioral characteristics of various species held in the hand. Some are, for example, noticeably resigned to their fate while others defend themselves by squirming about, pecking or an unceasing "bawling" (e.g. Flickers). In ornithological literature we can find a number of considerations on this topic. The following questions occur to us:

1. Is the bird outwardly excited?
2. Does it vocalize?
3. Does it try to escape (and how?), or, does it resign itself to remain in that position?
4. Does the captured bird display particular behavioral characteristics, as Wrynecks and Kingfishers do?
5. Does a bird go into shock and how is this apparent? How long does this condition last?
6. Does the bird become partially or completely paralyzed and how is this noticeable? How long does this condition last?
7. Do they suddenly molt, as caused by fear? (Schreckmauser)

We should also consider the following questions:

How should we hold a given species? How does the bird react toward the various methods of holding? (Fowl, for instance are held by the legs) How does the bird react to being held in a holding bag or a gathering cage?

(Again, all observations should include the date, time, age and sex, if possible, and all other details based on the questions.)

VI. Behavior of Birds after Release.

This topic has been discussed in detail in "Vogelfang und Vogelberingung" (see references), Vol. III, pp. 106-7. The following questions come to mind:

1. Does the bird vocalize, and in what way? How long after release does it begin to call?
2. How far does the bird fly after it is released? (If you are in a very open area, the answer may be more significant than in a planted area).
3. Does the bird occupy himself with the band, attempting to remove it? Does he let the banded leg "trail" behind?
4. What is the behavior of free birds toward those just released?
5. Does a bird, after being released, shake himself? Does he bathe? Does he preen, and how thoroughly?

6. Does he return to the trapping area again and how often? Is he recaptured? Here we can also note the behavior differences which occur in the breeding season, versus behavior in other seasons of the year.
7. Does the bird avoid the trapping area?

Recommended experiments:

How do birds behave, when one, two, three or more are released at the same time? How do they behave when they are released in such a way that they have full view of the trapping area and what happens when they reach an area completely void of traps? Again, all notes should include date, time, age and sex, weather, etc.

VII. Broodpatch and Cloacal Condition

This chapter has been discussed in Volume IV of "Vogelfang und Vogelberingung".

## a) Incubation patch

Research was begun some years ago to gather facts for this chapter but proved only partially successful because most field observers had different ideas just what a broodpatch was. Figure 101 in the above mentioned publication clearly shows the broodpatch of a Wheatear; breast and belly are completely bare, the skin is somewhat reddish and slightly wrinkled. This condition pertains to most songbirds which are of interest to us here; females, are known to have well developed broodspots. Naturally, further research is desirable. A complete incubation patch is quite obvious and cannot be mistaken by the field worker. It should be very interesting if we could determine how many days it takes for a broodpatch to develop. Special research is required here. Also the study of re-growth of the feathers should be interesting. Notes about this should include how many feathers are in pin, quill or full growth stage.

With any research on this subject, we should not overlook that the underparts of the young birds usually are only partially or lightly feathered. To obtain as complete a record as possible of all genera in this aspect, copious notes should be taken about each species we encounter with dates, band numbers, etc., to facilitate comparisons in subsequent seasons.

## b) Cloacal condition

Facts about this condition are most important. To reach an objective conclusion, more thoroughly researched data is needed. See Vogelfang und Vogelberingung, Vol. IV pp. 178-179 for further details.

References

BUB, Hans. 1967/69. Vogelfang und Vogelberingung (In German). A. Ziemsen Verlag (Publisher) Wittemberg Lutherstadt, German Democratic Repub.

(To date this is the best "bander's textbook" I have yet encountered. An English edition is presently in preparation and should be available in a couple of years. F.S.S.)

The german edition is presently available for export from:

Boekhandelaar Koens  
Bankastraat 10  
The Hague (Netherlands)

Nesting behavior...

- BURTT, H. E. 1967. The Psychology of Birds. MacMillan Co. pp. 80-81.  
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- BAILEY, R. E. 1952. The incubation Patch of Passerine Birds. Condor, 54: 121-136.  
MARSHALL, A.J., Ed., 1961. Biology and Comparative Physiology of Birds, Academic Press, Vol. II. Chapter XVII: WITSCHI, E., Sex and Secondary Sexual Characteristics, pp. 115-168 (recommended especially to the serious student).

Cloacal Condition...

- PETTINGILL, O. S., Jr., 1970. Ornithology in Laboratory and Field, 4th Ed., App. A., pp. 442-446 (Determining the Sex and Age of Live Birds). See also further references listed at the end of that chapter.

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