BAT BANDING NEWS



Original Issue Compiled by Dr. Wayne H. Davis, Editor, of Bat Banding News

The title *Bat Banding News* was published between 1960–1963 (Volumes 1 through 4). Beginning with Volume 5 in 1964, the title was changed to *Bat Research News*.

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Bat Research News is ISSN # 0005-6227.

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VOLUME 1: NUMBER 1

FALL 1960

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VOL. I No. I

(Reprinted, Feb., 1962)

Fall, 1960

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EDITOR'S COLUMN

It seems as if a Bat Banders' Newsletter has never yet appeared on this planet. Imagine! How could the world have gotten along for so long without some form of a Bat Banders' News? From the enthusiasm elicited by my questionaire it appears as if the bat banders agree with me. Your self-appointed editor, who has had absolutely no experience in anything of this sort, has decided to wade right in and see what happens. The philosophy is that if we once get started then we will have opportunity to work on improvement.

Plans for the News now call for it to include such things as tips on equipment, catching bats, handling bats, locating colonies, etc., articles on current problems of general interest such as rabies, banding tree bats, the use of nets, a better bat band, the disappearance of Myotis sodalis in summer, etc., notes on individual banders and their studies; and a frequent listing of names and addresses of active banders.

It is thought that the News might best appear quarterly. The problem of finances has yet to be faced.

Since many banders are members of the American Society of Mammalogists, it may be that we can arrange an annual meeting of bat banders in conjunction with the meetings of that society.

Many thanks for the responses to the questionaires. A wealth of in-

formation is there. I eventually plan to use everything.

Bat Banding is growing rather rapidly in numbers banded but rather slowly in numbers of banders. Although banders come and go, there are now only about 38 active ones in North America as compared to 33 listed by Mohr in 1952 (Bull. 14 Natl. Speleolog. Soc., p. 3). Of banders active then only D. G. Constantine, J. B. Cope, W. H. Davis, B. P. Glass, H. H. Goehring, D. R. Griffin, H. B. Hitchcock, R. E. Mumford, R. T. Orr, Sister M. Talitha, E. W. Smith, and H. Trapido are active today.

Better travel, more efficient techniques, financial assistance, and the moderate increase in number of banders have resulted in a great expansion of banding activities in recent years. Numbers banded are now regularly running over 50,000 annually. The greatest numbers of bats carrying bands today are in the states of Texas, Okla., Mo., Ky., and Ind. Bryan Glass has banded over 50,000 bats, Richard Myers 45,000, James B. Cope over 20,000. Your editor has banded 27,000 and Harold B. Hitchcock a similar number.

In rather striking contrast to our limited operations are those of the bird banders. The Fish & Wildlife Service says that there are now over 2,000 bird banders in N. America and that last year over a million bands were issued for this purpose.

BAND INJURIES

Perhaps the greatest problem facing bat banders is that of band injuries and how to get a harmless band available to us. The problem has been discussed recently in the literature (Herreid, C. F., et al., 1960, J. Mamm. 41:398; and Hitchcock, H. B., 1957, J. Mamm. 38:402). Banders

who have not read these papers should do so. Dr. Hitchcock is presently carrying out studies to determine the extent of injuries caused by the bands we now use on Myotis lucifugus, and he is running comparative studies using lipped bands of the type used in Europe. dicates that preliminary results are showing that the lipped bands cause fewer injuries but that there is still need to find a band which is harmless to all individuals. There is no way of telling how many, if any, are actually killed by the band and could not return. Your editor found that some of the Plecotus townsendii which he banded in caves in W. Va. were actually killed by the band. Incidentally, perhaps the best bat for using our present type and size of band on is the eastern pipistrel. With many thousands of these banded and examined yearly it was found that injury and chewing were almost non-existent in this little bat.

Tth invention of a good band is only part of our problem, however. Bands which are now in use are manufactured for bird banding and are supplied to the Fish & Wildlife Service's Mammal distribution Section by the bird banding office. As long as this arrangement is in effect there seems to be little chance of changing our type of band. problem becomes here a matter of finance. If funds are available a new kind of band can be produced. If bat banding were separated from bird banding funds for bands would not be available. Considering the great amount of time and money going into important bat banding research, some of which is supported by generous grants from federal and state health departments, it is no less than tragic that we do not have available a better bat band.

All banders should be on the lookout for ways to cut banding injuries and chewing. Dr. Hitchcock is trying a larger band (No. 1B). These can be obtained for the asking. There is no question but what they are better for Eptesicus fuscus. This species is very hard on the standard bands. Most likely 1B bands would be superior for other larger species as well, such as <u>Plecotus</u> (<u>Corynorhinus</u>), <u>Lasiurus</u>, <u>Myotis grisescens</u>, etc., and all banders should have this size on hand. In fact, Dr. Hitchcock has raised the possibility that they may even be best for Myotis lucifugus, and tests of this are now in progress in Vermont and Ontario. We shall keep you informed of the progress of these tests. One difficulty is that 1B bands are stiffer and one's fingers tire after closing about 100 of them. Perhaps pliers will be needed when handling numbers of bats. The band when closed is large enough that it can slip back over the elbow onto the humerus. Whether this will actually happen, and whether it will cause trouble if it does, is yet to be determined.

Many of us have tried different ways of applying the band to minimize injuries. So far as I know it is now generally thought that it is best to close the band only to the point where it will slide freely. If it is too loose, it will slide back up along the forearm, become imbedded in the muscle, and cause serious trouble. If too tight it will nearly always become overgrown. I have tried a few bands clenching the open ends one inside the other so as to cut through the membrane. Although the only return of this small group was well healed and the band could rotate freely about the forearm, I doubt if this method will prove satisfactory. We would appreciate hearing from anyone who has been doing any experimenting with band injuries or has any

ideas on the subject.

TIPS ON TECHNIQUES

This past summer's banding activity in Vermont brought on several innovations and refinements of techniques for catching bats in buildings and in flight. However, since the summer season is now gone, and we are faced with the hibernation season and cave banding, I shall put that material aside for the present.

There are few banders who do not find it necessary to use a stick or pole to obtain hibernating bats in caves or mines where they are out of reach, and the end of a stick is most inefficient for dislodging a bat. In working with Pipistrellus subflavus in the cvaes of W. Va., it was found that considerable time was required just to get the bats down, for this species hangs singly and is scattered throughout a cave. A very simple invention improved the situation tremendously. A piece of coat hanger is bent in the form of a ring about 4 inches in diameter and taped firmly to the end of a pole with the ring extending beyond the pole. The ring is brought along the under side of the bat and against his feet as he clings to the wall or ceiling. The bat can then be either dropped or lifted gently down. I have a series of 4 bamboo poles which will fit together to form one. Each is tipped with a ring. Workers each use one pole, and when a bat is out of reach, two or more poles are put together. In this way bats can be gathered almost as rapidly as if they were in reach. I also find that a ring is just as useful in gathering bats which cluster. Indeed a ringed pole is a real essential for anyone banding any numbers of hibernating bats if they are out of reach.

What is the most efficient way of opening and handling bands, and what is the best type of container to carry into a cave for handling large numbers of bats? Over the past years I have developed my own techniques and learned from others, and shall present them here in hopes that if they are not superior to your own you will write and let us know in time for the next News to include your ideas.

In handling bands I pull about 33 off the wire and let them rest in the crevice of the cover of a book. One at a time I push them over a smooth tapering crochet hook (hook ground off) which has been ground down very slightly to allow the bands to move freely once opened. When the needle fills with open bands I replace them on the book. I then string bands on straight pieces of coat hanger tapered at one end for easy gathering of opened bands. Using this technique I open and string loo bands in 10 to 12 minutes.

We have recently come up with a band stringer which in some ways is better than a wire. A piece of window blind cord impregnated with paraffin is stiff enough for stringing bands quickly, yet can be rolled up so that the bands can be carried in the pocket.

I find cloth bags quite convenient for handling bats whenever much cave crawling is required. A bag half the size of a feed sack will accommodate 125 to 200 bats without suffocation.

Wire cages of the type described by Griffin in his paper on "Migrations of New England cave bats" (Bull. Mus. Comp. Zool., 1940) are useful in small caves and buildings. One drawback is that occasionally a bat will escape.

I was on a trip with a bander once (was it John Hall or Dick Myers?) who had a collapsible cage which was very convenient. Could we have a description of this cage from its inventor?

HERE AND THEKE

Merlin D. Tuttle, Little Creek School, Concord, Tenn., is a new bat bander and an enthusiastic one. He plans to do an extensive survey of Myotis grisescens. Richard F. Myers, Biology Dept., Central Missouri State College, Warrensburg, is working on this species in Missouri.

John Hall, who banded extensively in Kentucky in recent years, would like to have observers on the lookout for his bats in Tennessee and Alabama. He has recently finished his graduate work at the University of Illinois and is now teaching biology at Albright College in Reading, Pennsylvania. Perhaps he will be able to find the winter home of the Myotis lucifugus which have been banded over the past 10 years in Sullivan County, N. Y., by Sister M. Talitha, Queen of the Rosary Academy, Amityville, N. Y.

Considerable interest is now being shown in the tree bats, especially Lasiurus borealis. Bryan P. Glass, of Okla. State Univ., Still-water, has banded 50 red bats, Myers 75, and R. E. Mumford, Forestry Dept., Purdue Univ., Lafayette, Ind., has banded 15. In the spring issue I would like to have a review of the problems and techniques of catching these bats. Myers, no doubt, believes the best way is to pick them up in caves (see Myers, R. F., 1960, J. Mamm., 41:114). I would appreciate hearing anyone's ideas, their success or lack of it with such things as the stretched wire method, bat nets, fly casting, etc.

H. H. Goehring, State College, St. Cloud, Minn., has been banding bats for many years in the storm sewers of St. Cloud. He is particularly interested in Eptesicus and is pushing one individual for an age record. We would be interested in hearing what he has learned about the problems of band injury and chewing in the course of his study.

BE CAREFUL !!

No one should handle bats without gloves. The rabies problem is real. Although most prevalent in the Southwest (particularly among <u>Tadarida</u>) rabies in bats has been reported from Montana to Minnesota and Connecticut.

Rubber gloves are satisfactory for handling small bats. A glove can be placed on one hand with the other free for handling the band. Rubber gloves are rather fragile and don't last very long, particularly in cave banding. A tight-fitting leather glove may be useful.