

- DEPARTURE OF W. T. "TED" VAN VELZEN -

The West Coast banders scored a real "coup" last September when they convinced Ted Van Velzen to leave the Banding Laboratory and accept the position of Staff Biologist at the Point Reyes Bird Observatory in California.

Ted's enthusiasm, ornithological and banding "know-how" and familiarity with Banding Laboratory problems and procedures guarantee that the Point Reyes Banding program will soon become one of the outstanding programs of its type in the country.

Here's wishing Ted and the Point Reyes Bird Observatory the best of luck.

Ted's current address is:

W. T. Van Velzen
Point Reyes Bird Observatory
Star Route
Inverness, California 94937

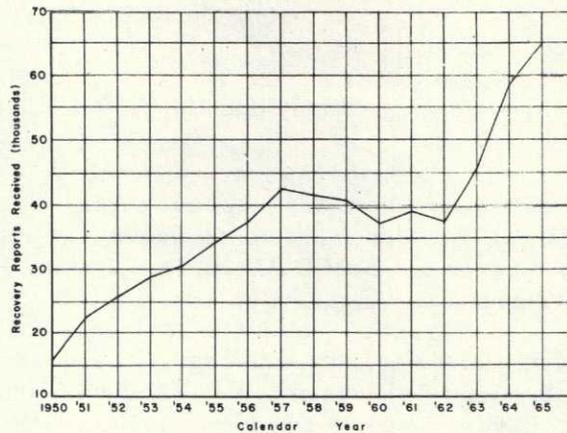
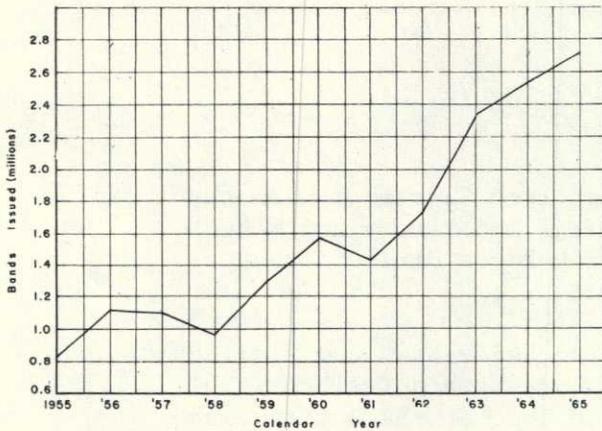
- "COMMENTS ON BIRD BANDING PURPOSES, POLICIES AND PROCEDURES" -

I am sure that many of you are aware that, during the past year, there have been some changes in the operations and philosophies within the Banding Laboratory.

Many of you also know that Al Duvall, who was the Chief of the Bird Banding Laboratory for several years, has gone on to bigger and better things. In the fall of 1964 Al accepted the position of Staff Ornithologist with the Pesticide Review Board and is no longer affiliated with the Bird Banding Laboratory. Shortly after Al's departure I came to work in the Bird Banding Laboratory. Until recently Ted Van Velzen, whom many of you know, and I collaborated in attempting to fill the void created by Al's departure.

Another subject, with which you as banders may be familiar, is the fact that the Bird Banding Laboratory has been experiencing difficulties in coping with the volume of banding data produced each year.

This can be explained in part by the rather dramatic increases in banding activity during recent years, as shown by numbers of bands issued and numbers of recovery reports received.



If we were to plot a third line on these graphs - one showing our personnel level - you would find that this line would not show a similar increase.

There are three approaches we can take in coping with the volume of data being produced and at the same time insuring adequate handling of these data:

1. We can increase our staff and facilities.
2. We can reduce our program.
3. We can increase our efficiency and eliminate many of our problems.

The Administration's present effort to economize on public expenditures discourages pursuing the first alternative. We are, in a limited way, working on the second alternative - that of reducing our program.

At the present time we have a "limited moratorium" on the issuance of new banding permits. It is, for the present, no longer sufficient for a prospective bander to be "ready, willing and able" - he must also have a definite need for a permit. We are also actively purging our rolls of inactive, uncooperative, or incompetent banders. As these permits are retired, we will issue permits to new banders to replace them.

Our major emphasis will be on the third alternative - that of increasing efficiency and eliminating problems. We have already taken some significant steps in this direction:

In October 1964, the Bird Banding Laboratory and Automatic Data Processing Section moved into a new building. Simply being able to get some elbow room, to stretch out and to get organized, has been a terrific help.

We have also increased our capabilities as far as the machines are concerned. Recently we acquired magnetic tape drives for our Univac 1004. This will enable us to extract banding data from tape much more rapidly and accurately than was possible with cards.

Last summer we completely overhauled the filing systems within the Bird Banding Laboratory. We are now able to file, locate, and extract banding records more rapidly.

Most of the forms used are presently being revised with an eye toward improving their effectiveness and clarity. We have recently adopted and are presently using a new form 3-1807, "Bird Band Recovery Report." We feel that this form is less ambiguous than its predecessor and therefore permits the user to tell us more easily and precisely what was involved in his recovery of the band and likewise enables us to rapidly and accurately convert his information to machine data.

You now receive a self-addressed postal card with your bands. We have noted on the card what we think we are sending you. You are requested to check your order, and to acknowledge the fact that you are aware of your responsibility for the use of the bands, the submission of records covering their usage, and that they are not to be transferred to another bander without prior approval from the Bird Banding Laboratory. When you realize that we are issuing over 2.7 million bands per year, you can imagine the problems involved in keeping track of who has which bands if John Doe and Mary Smith randomly swap bands in the field without letting us in on it until John's records reporting Mary's bands and Mary's records reporting bands issued to John start to trickle in!

Also we are now using a "Banding Schedule Evaluation Sheet" - a "Grade Card" of sorts whereby we can notify you of what discrepancies we note in your records or if we do not detect discrepancies in them. I'll touch on this in a little more detail later on.

The form with which you are most familiar - the Banding Schedule - is also due for a "face lifting." We have looked at many, many schedules submitted by banders. We have tried to select the areas where consistent errors or omissions occur and to design a form which eliminates these ambiguities.

I, personally, feel that one of our major problems in the past has been the lack of an effective means of communication between the Bird Banding Laboratory and the banders. We hope that the revival of "Bird Banding Notes" will help remedy that problem. Most or all of you have now received the first two copies of the new series which Ted worked up and distributed.

We had intended to include a section on the policies and philosophies of the Banding Program in the second issue. We found, after we started trying to put it on paper, that these were rather difficult to nail down.

We have, after some "cussing and discussing," come up with a draft of what we feel these should be.

THOUGHTS ON BIRD BANDING ITS PURPOSES, POLICIES, AND PROCEDURES

Bird Banding in North America, and the maintenance of the records produced, has grown into a large and complex operation. The variety of the uses to which these data can and are being put has also increased dramatically in recent years. These two factors, among others, have prompted us to rather critically review our purposes, policies, and procedures.

At the present time, the only justifiable purpose for placing a U.S. Fish and Wildlife Service band on a bird is the generation of scientifically usable data which accrues from that banding and/or the subsequent recovery of that band.

There are, we realize, other valuable benefits derived from bird banding. Perhaps the most important of these secondary benefits are the "Public Relation/Educational" aspects of some banding programs. Bird banding, under the proper circumstances, can be a very effective means of creating and expanding public interest in wildlife and conservation in general. If improperly conducted, it can have the opposite effect!

A by-product of banding is the recreation derived by the individual from participating in his chosen avocation of capturing and banding birds. Unfortunately, many individuals have allowed the recreational aspect of their banding activities to overshadow the other, more important, considerations.

We have reached a point where we must now stop and seriously consider where we are to go with banding. There are, in our estimation, serious doubts as to whether the continued random accumulation of banding records without specific goals is justifiable. For example:

With records of over 559,000 bandings and nearly 8,000 returns and recoveries of White-throated Sparrows in our files, how much additional, significant knowledge will be gained by the continued random accumulation of records for this species, unless such bandings are accomplished in conjunction with a specific research project? The same could be said for Slate-colored Juncos or several other species.

The cost, to that oft forgotten soul, the taxpayer, of processing banding records in such a manner that they are readily available to qualified investigators, is high. The time and costs involved in processing records such as those just mentioned are just as great as those involved in handling the records of well-planned research projects. Unfortunately, neither our budget nor our personnel ceilings have kept pace with the recent increases in banding activity.

With essentially the same staff and only slight budgetary increases, we are presently handling more than twice the volume of data we handled only a few years ago. This has been made possible only by the use of Automatic Data Processing methods. The use of machines demands much more precisely recorded data than previously, when these records were handled manually. This requires considerable editing and coding of your records prior to their conversion to machine data. With limited funds, facilities, and personnel, it is possible to process only so many records per day.

This is where you, the banders, come in. In order to insure that the basic purpose of bird banding -- that is, the compilation in an accessible form of complete, accurate data for research and management purposes -- is met, we must receive your cooperation in two respects.

First, we feel that a person who wishes to continue banding must be capable of, and prepared to submit legible, accurate and complete records when requested. You should always assume that you may be the last ornithologist to critically review your records before they are converted to data cards or tape. Your records should say precisely what you mean and you should mean precisely what they say! The clerks who scan and punch these records are simply that -- clerks. In most cases they don't know a Titmouse from a Tinamou, and could care less. They are neither qualified nor expected to interpret or complete a bander's records for him.

We can process literally hundreds of good "clean" records in the same time it takes us to decipher or unscramble one garbled record. In the past we have gritted our teeth, guessed what the bander meant, and completed his records for him, only to see similar errors or omissions on subsequent records.

In an attempt to alleviate this we have recently initiated a "Banding Schedule Evaluation Sheet" whereby we can notify the bander of the discrepancies -- or the lack thereof -- when we edit his records. We also point out, on this form, the page in the Banding Manual which prescribes the correct procedure. The bander will receive one copy of this form, one will be placed in his files for our future reference and, in the case of Federal banders, one copy will be provided their Regional Supervisors. The Canadian Banding Office receives two copies of each Canadian bander's evaluation sheet.

The manner in which banders respond to these notices and other requests from the Banding Laboratory will be prime considerations when Banding Permits are renewed.

The second area in which we must seek your cooperation can best be described as a request for quality versus quantity banding.

At the present time, we have no desire to prescribe either quotas or the species which should be banded, or not banded. We do request that you give this serious thought. Before you place a band on a bird, ask yourself "Why am I banding this bird?". If the bird in question happens to be a White-throated Sparrow, a Slate-colored junco, or a few other species, and if you are unable to accurately determine the age or sex of that bird, I suspect it would be rather difficult to come up with a satisfactory answer.

There is, of course, a great need for banding birds which are accurately aged and sexed. I place special emphasis on the word "accurately". Never, under any circumstances, enter "guesses" on the records you submit to the Banding Laboratory. Data of that sort are worse than no data at all.

We also encourage banders to "band with a purpose," that is, to formulate projects alone or in cooperation with other banders. You should always consider such a project uncompleted until you have summarized and published the results you obtain. We would appreciate receiving a copy of any such published works. We cannot, nor do we wish to, request, review, or assign individual banding projects. We feel, however, that any bander should be fully prepared to justify his program if justification is requested.

You can be sure that banders who are obviously "listing," "road running," or playing other forms of "Bird Golf" will be asked for such justifications.

We wish, with certain justifiable exceptions, to limit the use of U.S. Fish and Wildlife Service bands to those species noted in the AOU Checklist. Taking your bands with you on vacations to foreign countries and banding a few birds of several species is not only beyond the authority granted in your banding permit but accomplishes nothing more than creating an interesting subject for conversation. Our entire system in the Banding Laboratory is being geared more and more to automatic data processing techniques. The only item in our data cards to designate the species is the AOU Number. If you report the banding of species such as White-bellied Martins, Spine-tailed Swifts or Oilbirds we are unable to process these records. The adding of a few exotic species to a bander's list is not, in our estimation, sufficient justification for the expenditure of taxpayer's dollars.

In summary, there are many things you, the banders, can do to help our banding program accomplish the purposes for which it is intended.

By the same token, those of us in the Banding Laboratory will do all we can to cooperate and facilitate your projects. We hope, in the future, to make ourselves more available at various banding association and ornithological meetings where we can discuss our mutual problems with banders and other ornithologists. Our offices at the Banding Laboratory are always open to those of you who wish to examine our facilities first hand. We have found, that in practically all cases where a bander has had an opportunity to visit the Laboratory and see what is involved in the processing of banding records, he is much more aware and sympathetic toward our mutual problems.

Although we are presently up to our ears in correspondence, we are always open to any serious suggestions or constructive criticisms.

(A talk presented by Earl B. Baysinger at the Annual Meetings of the Eastern, Western, Northeastern, and Inland Bird Banding Associations.)

- NEW PERSONNEL -

Many of you have probably noticed a new signature on correspondence received from the Bird Banding Laboratory.

In October, William C. Russell assumed the duties of Biological Technician in the Banding Laboratory.

Will is a graduate of the University of Pennsylvania and is well known among East Coast birders. Among other duties, Will has been assigned the task of reviewing the biological accuracy of incoming records.

- OVERHAUL OF FILING SYSTEMS WITHIN THE BIRD BANDING LABORATORY -

During the past summer the entire staff of the Bird Banding Laboratory concentrated on breaking down, inventorying, and refiling all banding schedules received since 1961. Most of this task was completed in early August.

In the past, banding schedules have been filed by permit number. That is, all of John Doe's schedules were filed together. This made the task of correcting errors in John's records relatively simple. However, the task of extracting data with which to process reports of band recoveries was rather cumbersome. Each time we received a band recovery we had to first check the issue files to determine to whom the band was issued and then go to the schedule files (banding data used to process recoveries are extracted from your original schedules, not from machine cards) to locate the schedule.

Schedules are now filed in band-number sequence. We can now by-pass the issue records and process recoveries more rapidly. It is, however, no longer a simple task to locate all of John Doe's records since they are now distributed (by band number) among some 46 file cabinets filled with banding schedules. For this reason, among others, we must become much more particular as to what constitutes "acceptable records." Schedules received here with data omitted or entered in a manner which leaves the data open to interpretation must be returned to the bander for his clarification. We feel very strongly that the only person who is fully qualified to say what disposition was made of any band is the person who placed the band on the bird's leg!

We believe that this procedure will help guarantee that discrepancies are accurately reconciled prior to the time these data are summarized onto cards or entered into the permanent files.

We will appreciate your cooperation in promptly checking out, clarifying, and returning any such records which have been returned to you for clarification.

- CHANGE IN PROCEDURES OF ISSUING AND RENEWING BANDING PERMITS -

Banding permits are now authorized and issued at the Bird Banding Laboratory. This is a recent change from the former procedure. In the past, permits were forwarded to the Regional Office of the Bureau of Sport Fisheries and Wildlife Region which had jurisdiction over the area within which the bander lived. The permits were signed in that office and forwarded to the bander. We hope that the new procedure

will not only reduce the amount of paper work by the Bureau, but will also enable us to more rapidly act on your requests for permit action.

In order to more evenly distribute the workload of Permit Renewals and to avoid any "backlogs," we have (since December 1, 1965) changed the manner of determining when permits expire.

With a few exceptions, permits are issued for a period not to exceed 2 years. The month in which the permit expires is determined by the first letter in the Bander's last name as follows:

<u>Names beginning with:</u>	<u>Expire on:</u>
A, B	January 31
C, D	February 28
E, F	March 31
G, H	April 30
I, J	May 31
K, L	June 30
M, N	July 31
O, P, Q	August 31
R, S	September 30
T, U	October 31
V, W	November 30
X, Y, Z	December 31

In order to insure the receipt of your renewed permit in sufficient time to obtain State permits, etc., you should request renewal at least 30 days prior to the expiration date.

A notation will be entered on your permit above the permit number to indicate what action was taken. These notations are interpreted as follows:

<u>Notation</u>	<u>Definition</u>
Issue	Initial issue of a new permit.
Renewal	Renewal of a permit which was in "good standing." No changes were made on the new permit.
Revision	Renewal of a permit which was in "good standing." New permit differs from old permit (special provisos added or deleted, etc.)
Reactivation	Reactivation of a permit which was voluntarily placed on "inactive status" due to permittees inability to participate in banding for an extended period.

Notation

Definition

Reinstatement	Reinstatement of banding privileges which have been suspended due to permittee's failure to submit usable records or for other reasons. Also used to indicate reinstatement of permit which bander has allowed to expire. Requests for reinstatement should be accompanied by a detailed outline of your project which requires the use of the banding technique.
Replacement	Permit issued to replace a lost or destroyed permit.

- BAND ACCOUNTABILITY -

Bands should never be "swapped" or "borrowed" in the field. The numbers reported on each schedule received at the Banding Laboratory are now routinely checked against the numbers on bands which have been issued to the bander submitting the schedule. If these numbers do not agree we have no way of knowing whether:

1. The person submitting the schedule has erred in entering the numbers on his schedule, thus creating numbers which were actually on bands issued to another bander, or,
2. The numbers on the schedule are correct and he is reporting bands he has "borrowed" from another bander, or
3. Our issue records are in error and we have charged the wrong bander with the bands in question, or,
4. A duplicated series of bands is involved.

Each discrepancy of this sort must be reconciled through correspondence before the records can be processed and filed.

Bands should always be reported on schedules noting the permit number and name of the Master Permittee to whom they were issued. Bands issued to a State Conservation Agency, National Wildlife Refuge, or other organization to which a permit has been issued should note the name of the organization in the "Bander" box.

Changing the Band Issue Records in the Bird Banding Laboratory requires the careful alteration of three separate sets of records. Rather than risk the errors involved in such alterations we now routinely alter the schedule to reflect the permit number and name of the person to whom the

bands were issued as the bander. Any bander whose records are so altered will be notified. In the case of Federal banders we will also notify the Regional Office so that their records can be altered accordingly.

Bands issued to U.S. Game Management Agents are considered personal, not Station property. If you transfer you should take any bands issued to you with you to your new duty station. If you will be doing no banding at your new station, the bands should be returned to the Bird Banding Laboratory.

If you are a U.S. Game Management Agent cooperating with other U.S. Agents or State personnel using their bands, and wish credit in the Regional Office for your participation, please enter your name in the "Remarks" section of the Banding Schedule.

All bands used in Canada should be obtained from the Canadian Banding Office in Ottawa. Instructions for the return or transfer of unused Canadian bands should be requested from the Canadian Office.

- IF YOU CHANGE YOUR ADDRESS -

Please notify the Banding Laboratory immediately of any change of address. Please include both your new phone number and Zip Code.

We frequently receive reports of the recovery of bands before the bander submits his schedules. In these cases we must write the bander to obtain the necessary data (See BBN Vol 5 No. 2, Pg. 2) before we can reply to the person who cooperated by reporting his recovery of the band.

Delays of several months have frequently resulted before "lost" banders could be tracked down.

In cases where mail is returned marked "Moved - left no forwarding address," etc., we have no choice other than to remove the bander's name from our list of "Active Banders."

- BANDING CORRESPONDENCE -

Each week the Banding Laboratory receives many letters which have spent considerable time bouncing through various offices and messenger mail systems before they reach their destination.

Banding correspondence, requests for bands, schedules, etc., are also frequently uncovered among the "Operation Recovery" reports forwarded to Mr. Robbins. Likewise, "OR" forms frequently spend several days in the Bird Banding Laboratory before they are detected and forwarded to Mr. Robbins.

Some banders also still persist in addressing Banding Correspondence to the Director, Patuxent Wildlife Research Center, or to Washington, D.C.

Delays, extra handling and possible loss of mail can be avoided if all banding schedules, recovery reports, requests for bands or banding data, permit renewals and other correspondence pertaining to banding policies and procedures are addressed to:

Bird Banding Laboratory
Migratory Bird Populations Station
Laurel, Maryland 20810

All forms, reports, and other correspondence pertaining to "Operation Recovery" should be addressed to:

Migratory Non-Game Bird Section
Migratory Bird Populations Station
Laurel, Maryland 20810

These two activities are located in separate buildings approximately $\frac{1}{2}$ mile apart. Your cooperation will assist us in responding more rapidly to your requests.

All correspondence from Canadians pertaining to banding, etc., should be forwarded thru:

Canadian Wildlife Service
400 Laurier Avenue, West
Ottawa 4, Ontario
Canada

This does not mean that you should discard any of the self-addressed envelopes addressed to Patuxent Wildlife Research Center, Attn. Bird Banding. These envelopes will get to the Banding Laboratory. Please add our "Zip Code" (20810) to any such envelopes you have.

- LIMITATIONS ON THE HANDLING OF PREVIOUSLY BANDED BIRDS -

One of the major assumptions a person analyzing banding data must make is that the data provided him from our files accurately describe both the banded bird and the treatment it received prior to its release.

This information is provided the analyst in the form of the "Status and Additional Information" codes.

Banders also have a right to expect that data produced by their banding programs will not be biased by activities of other banders who subsequently catch their banded birds.

For these, and many other reasons, we must take the stand that once a bird has been banded, released into the wild and the records of that banding submitted to the Banding Laboratory, that bird must be considered "untouchable" by persons who subsequently capture it.

If you capture a bird banded by someone else or a bird banded by yourself, the records of which have already been submitted to the Banding Laboratory, the ONLY actions you are authorized to take are as follows:

1. Capture the bird.
2. Record the band number, take any necessary weights or measurements, leave the band on the bird and release the bird in the same geographic location where you captured it. The band number should be reported to the Bird Banding Laboratory as a "return" or "recovery" as the case may be.
3. If the band is so worn that one or more digits are illegible or if it is apparent that the band will soon be lost, you should remove the old band and reband the bird. **THIS PROCEDURE WILL REQUIRE SPECIAL NOTATIONS IN YOUR RECORDS.** (See P. 25 "Questions from the Banders," Number 4).

Any additional manipulations or treatments (color marking, transporting, taking of blood samples, etc.) would be expected to alter the behavioral patterns, the survival potential, or the likelihood of hunters or others to shoot or attempt to capture these birds. The likelihood of hunters or other persons to report or not report their subsequent recoveries of these birds would also be altered.

You should consider that additional activities such as those noted above may not only seriously jeopardize the project of the person who originally

banded the bird, but also that data pertaining to these birds has, or will be, provided other investigators for their studies.

** IN CASES WHERE BANDERS PERSIST IN MISHANDLING PREVIOUSLY BANDED BIRDS, THEY OR THEIR PROJECTS MAY BE REQUESTED TO BEAR THE COST OF RECONCILING THESE RECORDS. THESE ACTIVITIES WILL ALSO BE CONSIDERED JUSTIFIABLE GROUNDS FOR THE REVOCATION OF BANDING PRIVILEGES. **

Three examples of the problems created by mishandling previously banded birds are set forth below:

Example 1. A researcher traps, bands, and releases large numbers of Snow Geese. He is only interested in studying movements and mortality of normal birds so he handles the birds as little as possible prior to their release. His records are submitted to the Banding Laboratory noting that these are "Normal, wild, birds (Status & Add. Inf. Code 3.00). These data are then entered into our permanent records.

Another investigator subsequently captures some of these birds and applies colored neck bands.

If you were a hunter and five Snow Geese flew over your blind, four normal, unmarked birds and the fifth wearing a bright red neckband, it would be likely that you would either select for or against shooting the marked bird.

In either case, the "survival potential" of the marked bird would be considerably different than that of the unmarked birds. Likewise, a hunter who bags a dyed or otherwise marked bird would be expected to have his curiosity stimulated much more than a hunter who bags a banded bird which has no other markings, collars, etc. As a result of this added stimulus, he would be much more likely to report the band, thus introducing biases into the "reporting rate" (The rate at which persons, left to their own devices, tend to report bands. This is an important statistic in the analysis of banding data.).

The actions of the person who applied the neck markers has therefore not only adversely affected the research project of the original bander but has also introduced serious biases into the data the Banding Laboratory will provide other investigators who request and analyze data produced by these birds.

Example 2. John Doe bands a bird and reports the "Banding location" as "Fulton, Missouri." Bill Jones, who is studying homing instinct in this species, subsequently catches John's bird and transports it to Sacramento, California, where he releases it.

Mrs. Philby's cat happens on the bird in Sacramento and Mrs. Philby dutifully reports this unhappy occurrence to the Bird Banding Laboratory.

We now have records from John Doe saying he put this band on a "normal, wild bird" at Fulton, Missouri, and a letter from Mrs. Philby with a band and the information that her cat caught the bird in Sacramento, California.

From the records, it would appear that a "normal, wild bird" (Code 3.00) traveled, of its own accord, from Fulton, Missouri, to Sacramento, California! Try analyzing data like that.

Example 3. Bonnie Bander is dutifully cooperating with researchers studying blood parasites in wild birds. Bonnie is aware that birds which have been subjected to the additional handling and stress of having a blood sample taken are not as likely to survive as birds which are simply captured, banded, and released. She, therefore, correctly notes "Status and Additional Information" Codes "6-18" (experimental due to taking of blood sample) on her schedules reporting each newly banded bird from which she takes a sample.

These codes will, at their discretion, permit persons analyzing banding data to either include or exclude these records.

Occasionally, however, Bonnie captures birds banded by other persons or birds she had banded in earlier years and which had not been bled.

Bonnie also extracts a blood sample from these birds as well as the unbanded birds she catches.

Again, a serious bias has been introduced into the data in the Bird Banding Laboratory files. From the records we would provide an investigator, he would assume that these birds were still "normal, wild birds" as originally reported, and that they would be expected to have the same survival potential as other "normal, wild birds." He would conduct his analysis accordingly and would be analyzing seriously biased data.

The process of correcting biased records which have been processed by the Bird Banding Laboratory is very time-consuming, expensive, and error prone. The reconciliation of any biased records requires the following procedures:

1. We must learn the band numbers of all birds whose records have been altered and determine what codes should be substituted to accurately describe the treatment the birds received. This usually requires several exchanges of correspondence before the details are worked out.
2. We must then locate the schedule reporting the original banding of each bird. These records are filed numerically, by band number, among the records of some 19 million other birds.
3. Once the original records are located and pulled from the files, machine cards must be punched and verified for all affected birds. These "locator" cards must be sorted down, summarized and matched against our Master Banding Summary Card files in order to locate the summary cards prepared from the original banding data. Once these original summary cards are located, they must be pulled from the files and destroyed.
4. The "locator" cards must also be matched against our magnetic tapes to locate any records which have been converted to tape. Once the original records are located on the tape, they must be erased. Since we maintain two sets of tapes (one "work" tape and another as "insurance" in case anything happens to the "work" tape), this procedure must be duplicated. At this point, we have removed from our machine files the original banding data which has been adulterated.

5. The clerks must now go back to the original schedules, cross out the original "Status & Additional Information Codes," and enter the new codes. This step is necessary since "recoveries" are processed from the original schedules. If these erroneous codes were not corrected on the original schedules, all recoveries processed from these records would carry the erroneous "Status & Additional Information" Codes.
6. Another set of cards containing the corrected "Status & Additional Information" codes must now be punched, verified, and summarized. These corrected cards must be sorted down and added to the magnetic tapes (both of them). Since the tapes are "updated" only once per year, these cards must be held aside until the time of "update." This means we have to go to two sources to locate all pertinent data each time we extract data from our machine files. This not only increases the time and work involved in honoring data requests but also greatly increases the chances of human or machine error.
7. After these cards are added to the tapes, the cards must be merged into the permanent card files.

At this point, all we have accomplished is the removal of biased banding data and the substitution of corrected data. We have yet to resolve the data pertaining to any recoveries which have been processed from these records.

This involves a hand search of the files to determine which birds of those involved have been recovered. We then must determine which of the birds were recovered before the data were altered and which were recovered after the data were altered. Records of birds recovered after the data were altered must be removed from both the card and tape files. We must then punch and verify replacement Recovery Statistical Cards containing the corrected data.

These cards are held until the magnetic tapes are "updated." At this time they are added to the tapes to replace the erroneous data. After the data in these cards are added to the tapes, the cards must be merged into the permanent recovery card files.

At this stage in history, all we have accomplished is the correction of the files in the Banding Laboratory and the Automatic Data Processing Section. We still must provide the original bander corrected Recovery

data cards to replace those which were processed from his schedules before we discovered his data had been altered. If the birds are game species, our Regional Offices, as well as the State Conservation Agencies of the State where the bird was banded and the State where the bird was recovered, must be notified so they can correct their files. The Canadian Office files must also be corrected if the bird was banded or recovered in Canada.

As far as the researcher who has received data containing these biased data is concerned, the whole procedure outlined above has as much effect as "closing the barn door after the horse is out." He will already have conducted his analysis and drawn his conclusions based on the biased data he received!

We realize that under certain exceptional circumstances, it is necessary to alter the "Status" of a banded bird. In these instances, we request that you submit your proposal to the Banding Laboratory. If your proposal is justifiable, we can, if we are notified in advance, make allowances and handle these problems as outlined below. This procedure will result in the loss of some data for the affected birds and will be authorized only in well justified instances.

1. Remove the original band from the bird whose "Status" is to be changed.
2. Submit the band on a Form 3-1807 as a "Recovery." You should indicate in the "Remarks" section precisely what treatment the bird received prior to its release. This bird will then be considered as having been "recovered" and the person who originally banded it will be notified that you have "captured" his bird, removed his band and changed the "Status" of this bird for scientific purposes. This is the last the original bander will ever hear from this bird.
3. You should then place one of your bands on the bird and report it as a new banding on your schedule reporting that band. You should enter the appropriate "Status & Additional Information" codes on your schedule.

**** THIS PROCEDURE IS NOT AUTHORIZED UNLESS YOU HAVE RECEIVED WRITTEN CLEARANCE FROM THE BIRD BANDING LABORATORY.****

Before you request permission, you should consider your reaction if another investigator were to request permission to handle your birds in this manner!

- ANOTHER RECORD BREAKING YEAR IN THE -
BIRD BANDING LABORATORY

The year 1965 proved to be another record-breaking year for the Migratory Bird Populations Station's Bird Banding Laboratory. During 1965, most activities of the Banding Program exceeded those recorded in 1964. Banding activities, as indicated by the number of bands issued and subsequent number of band recoveries received, continued the steady climb noted in recent years. During 1965, a record 2,715,143 bands were issued. During this same period, approximately 65,000 band recoveries were reported to the Banding Laboratory, an increase of more than 15 percent over the number reported in 1964.

During 1965, the Banding Laboratory received the records of 1,739,809 birds banded. Of this total, 465,744 were game species and the remaining 1,274,065 were non-game species.

A random-input/rapid-retrieval system of microfilming letters containing data pertaining to the recovery of bands was designed and initiated during 1965.

Most of the increases in efficiency gained through the revised procedures and techniques (see "Overhaul of Filing Systems within Bird Banding Laboratory" elsewhere in this issue) were offset by chronic personnel shortages during 1965.

Major changes in the procedures and policies of issuing and renewing banding permits were implemented last year. Higher standards were set for persons requesting the issuance or renewal of a Federal banding permit. During 1965, approximately 222 banding permits were terminated. The majority of these terminations were voluntary. During the same period, 55 new permits were issued (compared to 253 permits issued in 1964).

The Banding Laboratory received and acknowledged 77 requests for data from our files from investigators not affiliated with the Migratory Bird Populations Station.

In addition to handling the bird banding records for North America, the Banding Laboratory continued its cooperation with the U.S. Antarctic Research Project's banding program, the Smithsonian Institution's Pacific Project, and investigators in several other foreign countries.

- CHECK YOUR RECOVERY DATA -

Each time we extract recovery data from our files for an investigator we find that there are invariably many discrepancies which must be reconciled before he can analyze these data.

Many of these discrepancies involve data which is fairly old. In all cases the bander had been provided a recovery card or "flimsy" containing the banding and recovery data for these birds.

We request that you check out any recovery cards or flimsies we provide you. Frequently hunters or other persons transpose digits in the numbers they report to the Banding Laboratory. By reporting Band Number 1234 instead of 1324 the reporter creates a valid but erroneous band number. We check these records as closely as possible but since we are now mailing nearly 2,500 such reports per week, it is very difficult to catch any but the most obvious errors.

You are our final "quality control" check. If you note dubious or obviously erroneous data in cards or flimsies please bring it to our attention. We can then locate the error and correct it before these data are entered into the permanent files or provided an investigator.

- SECOND REMINDER -

1. BANDING PERMIT RENEWAL - In the December 1964 issue of "Banding Notes" Mr. Van Velzen pointed out that: "It is the responsibility of each bander to check the expiration date on his permit and initiate a request for renewal approximately 30 days before the permit expires. A statement should be included concerning any special authorizations given on the last permit."

We have received several anguished letters from banders who have either allowed their permits to expire or who have requested their renewal but did not request the retention of special provisos (authority to use mist nets, color mark, additional States, etc.).

Banders who allow their permits to expire may be requested to provide an outline of their research project prior to the reissuance of their permit.

Special provisos are routinely omitted from a bander's renewed permit unless he specifically requests their retention.

2. REPORTING MORE THAN 100 BANDS PER SCHEDULE - We now note on the original schedule the fact that a bird has been recovered. This enables us to detect and reconcile multiple reports of the recovery of the same band. For this reason we must request that no more than 100 birds be reported on each of the schedules now in use.
3. USE OF LIGHT BLUE INK, PENCIL OR CARBONS - The Bird Banding Laboratory has recently acquired a Xerox 914 Copier. IBM cards are punched from copies of your schedules. This machine will not satisfactorily copy either very light blue ink or carbon copies. For these reasons please submit only original copies of your schedules prepared with black or dark blue ink, or typewriter ribbons.
4. REPORTING BANDS IN NUMERIC SEQUENCE - Your schedules are filed in band number sequence. If you report bands out of sequence (Example: You report bands #703-56101 thru 56125 and 703-56195 thru 56200 on the same schedule) it is very difficult to file and retrieve subsequent schedules reporting the "in between" bands (703-56126 thru 56194). In the past this has occasionally resulted in "lost" or misfiled schedules. For these reasons please report bands only in numerical sequence.
5. DISPOSITION OF BANDS PREVIOUSLY REPORTED AS "LOST" OR "DESTROYED" - If you find bands which you have previously reported as "Lost" or "Destroyed" please do not use them. These bands should be destroyed. Please make sure they are disposed of in such a manner that they will not later be found and used or reported.
6. BAND ISSUE CARDS - On October 1, 1965, we initiated the use of Band Issue Cards. These small, self-addressed postal cards are now enclosed with each shipment of bands you receive. Please check the numbers we have noted on the card against the numbers on the bands you receive. If they agree return the card immediately so we can complete our records on this band shipment. If the numbers do not agree notify us immediately so we can reconcile the discrepancy.

- QUESTIONS FROM THE BANDERS -

Each day the Banding Laboratory receives several letters from banders posing various questions about banding policies and procedures. In many cases, the same question is asked many times by different banders.

From scanning hundreds of records and pieces of correspondence from dozens of banders each day, it is apparent that there are many other areas where questions and misconceptions exist.

In order to disseminate this information as uniformly as possible, thus enabling you (by correctly preparing and submitting your data) to assist us in providing you better services, we will periodically compile a list of these "typical" questions and answers and include them in Bird Banding Notes.

I request that you take time to scan through these items and make a mental note of their content for future reference.

1. Use of U.S. Fish and Wildlife Service bands on captive birds.

Q. I have a research project which requires my holding wild, migratory birds in captivity. Since, for my project, I need to be able to identify the various individuals, will it be permissible for me to capture these birds, place Fish and Wildlife Service bands on them and hold them in captivity? Few, if any, of these birds will be released into the wild at the termination of my experiment.

A. We request that birds which are to be held in captivity not be banded with Fish and Wildlife Service bands. The Banding Laboratory will, upon request, provide addresses of several suppliers who can provide plain, numbered bands for marking these captive birds.

If upon the termination of your experiment, you wish to release these birds into the wild and study their survival or dispersal, it would be permissible to place U.S. Fish and Wildlife Service bands on them at the time of release. Your records reporting such bandings should be properly coded in the "Status and Additional Information" (S) columns on your schedule.

Such birds should not be released into the wild wearing private bands.

If you have any further questions, please drop a letter to the Banding Laboratory and we will be happy to consider your individual problems.

2. Transporting birds prior to release.

Q. I have an experiment in which I wish to transport birds several miles from the point of capture before releasing them. Does my banding permit grant me authority to do this? How should these birds be entered on my records submitted to the Banding Laboratory?

- A. Unless you have special authorization noted on your banding permit, or unless you have received "letters of authorization" from the Fish and Wildlife Service, your permit authorizes you to capture and hold wild, migratory birds only as long as is necessary to apply a standard U.S. Fish and Wildlife Service band, take weights or measurements, etc. In order to be fully legal, it is necessary to request and obtain special permission for holding or transporting birds.

By removing a bird from its normal surroundings, transporting it several miles and releasing it into alien surroundings, you have changed the chances of survival of this bird. In order to eliminate any unnecessary biases in the data the Banding Laboratory provides researchers, it is necessary to indicate on the banding schedules that these are "experimental" (Not normal) birds. For any bird thus manipulated, you should enter the codes "6-11" (experimental due to being transported and released) in the "Status and Additional Information" (S) column on your banding schedule reporting this bird.

You should note the release site and date in the blocks on the banding schedule provided for "Banding Location" and "Date."

Unless you have received prior written approval from the Banding Laboratory, do not in any way manipulate a previously banded bird banded by someone other than yourself or one of your birds the records of which have been submitted to the Banding Laboratory! Changing the status of birds whose records have already been processed and converted to machine data is an extremely time-consuming and expensive process. (See P. 13 for further comments re changing "Status").

3. Obtaining banding data from Bird Banding Laboratory files.

- Q. I wish to do a comprehensive study of a species. What procedures are necessary to secure the data from your files pertaining to that species?
- A. The banding and recovery data contained in the files in the Bird Banding Laboratory are available to any qualified researcher. (See P. 29).

These data can be provided in the form of either machine-printed listings or as IBM cards with the information "punched" into the card and printed out on the card. The only data provided in these listings or cards are the numeric codes pertaining to the banding and recovery data. These codes can be deciphered by the use of the keys provided in your Banding Manual. If you wish to request such data, it is necessary that you state precisely what you need. We must convert your request into a machine program and, therefore, it is necessary that we know precisely what you want and how you want it. We maintain two separate files in the Automatic Data Processing Section. One consists of summaries of birds banded and the second consists of birds recovered. The banding summaries simply list data pertaining to the total birds banded of each species regardless of whether or not they have been recovered. These data are further broken down by Age, Sex, Date, Coordinates, etc.

In the recovery files, one card is maintained for each recovery. This card contains both the banding information and the recovery information pertaining to that bird.

Both files are maintained in year banded, within State banded, within species order.

It is a fairly simple task to extract "All banding and Recovery data pertaining to Mourning Doves Banded in North Dakota and Recovered anywhere." We would simply have to search the file containing Mourning Dove data until we came to North Dakota and extract the data.

It is a much more complicated task to extract data pertaining to records of "All Mourning Doves Recovered in North Dakota." This would require searching the "Mourning Dove" records of each State or Province where these birds have been banded, on the chance that one or more may have been recovered in North Dakota.

The complexity of the request increases in proportion to the number of species involved.

In some instances, it may be necessary to have the data extracted by a commercial firm. In these cases, the person requesting the data may be requested to sustain part or all of the cost of extracting these data.

The number of requests for these data is so great that there is usually a 3- to 4-month backlog. Therefore, I request that you be sure that you need the data before you request it.

All requests for data from Canadian sources should be forwarded through the Canadian Banding Office in Ottawa.

4. Reporting badly worn, or illegible bands.

Q. Yesterday, I caught a bird wearing a very old, badly-worn band on which the numbers were nearly illegible. How should I handle this?

A. If one or more digits on the old band are illegible or nearly so or if the band is so badly worn that loss is imminent the old band should be removed.

Place a new band on the bird, record the data, and release the bird.

The worn band should be Scotch-taped to the "Remarks" section of the schedule reporting your new band. You should note in the "Remarks" section that "the attached, worn band was replaced by Band Number X."

If the band is so worn that digits are missing we will chemically etch the band to determine the missing digits. When the number has been obtained we will provide you a report as to where, when, and by whom the bird was banded.

We will also cross-reference our records so we will be able to continue the longevity records for this bird.

DO NOT reband a bird carrying a legible band unless the band is so worn that loss is imminent. If this is the case REMOVE THE OLD BAND before you apply your new band.

DO NOT remove bands unless they are either illegible or so worn that loss is imminent.

Some investigators are now using monel instead of aluminum bands. The digits are not stamped as deeply on monel bands as they are on the aluminum bands. The monel bands are also thinner than aluminum bands. DO NOT REMOVE MONEL BANDS UNDER THE MISTAKEN ASSUMPTION THAT THEY ARE WORN ALUMINUM BANDS.

5. Banding of pet, sick, or injured birds.

Q. The little boy down the street has a pet crow on which he wishes me to place a band. What is your policy on bandings such as this?

A. Banding of pet, injured, or sick birds is strongly discouraged. Bandings such as these contribute little data of value in studying wild, migratory birds and simply add volume to our files.

You should tactfully explain to these persons that the reason we are banding birds is to learn more about the movements and survival of wild, migratory birds. Since these birds have been raised in captivity (or sick, injured, etc.), they would not be expected to behave in the same way that a wild bird would and, therefore, we prefer not to place our bands on them.

6. Reporting pigeon, parakeet, etc., bands.

Q. Someone gave me a band he had taken from a dead pigeon. Should we report these bands to you?

A. No, since pigeons are not wild, migratory birds, the U.S. Fish and Wildlife Service does not have jurisdiction over the banding of that species and we do not maintain records of bands used on pigeons, parakeets, canaries, etc.

7. "Acceptable" records.

Q. You recently sent all of my 1965 banding schedules back for me to complete because I had left out the "AOU" numbers. Why are you so fussy?

A. You are only one of several banders who have had their records returned for clarification or completion. We feel very strongly that the only person qualified to say precisely what use was made of any given band is

the person who puts the band on the bird. We are, therefore, very reluctant to sit down and attempt to redo or complete any bander's records for him (even if we had the time). You must bear in mind that the clerks who handle these records are not in any sense trained ornithologists and cannot be expected to complete or interpret your records for you.

In your case, the problem was with the AOU numbers. In our statistical records, the AOU number is the only thing we punch into the card to designate the species. Also, on your records, many of the names of the species were only partially entered and the clerks, even if they had the time, could not accurately determine what AOU numbers should be entered on your schedules. For example, on your schedules reporting your bandings of titmice, you entered only the word "titmouse" in the species column. You know and I know that only the Tufted Titmouse occurs in your State. My clerks, however, do not know this. Had they completed your schedules for you, they would have no way of knowing whether you meant Tufted Titmice, Plain Titmice, Bridled Titmice, or what-have-you.

Always double-check your records to make sure they say precisely what you intend them to say. You should always assume that you may be the last ornithologist to critically review your data before it is converted to machine cards.

In any instance, where records are returned to you for clarification, we request your cooperation in rapidly providing that clarification and returning the schedules.

8. Banding hummingbirds.

- Q. I have an opportunity to band an occasional hummingbird. Please send me some Size X (hummingbird) bands or advise me as to whether or not I should attempt to cut down the standard Size O band for use on hummingbirds.
- A. At the present time, we are discouraging the banding of hummingbirds unless it is a part of a specific, documented project.

The very tiny size of the Size X band limits the number of digits we can use in the band number. This, in turn, limits the total number of bands of this size that we

can distribute without having to duplicate band numbers. In addition, these bands are issued in a flat sheet and must be individually cut and rolled prior to being used. This is difficult to do without leaving sharp edges on the band which would be injurious to the very small leg of a hummingbird.

The practice of cutting down a Size O band for use on hummingbirds is, for several reasons, especially discouraged. This, again, is very difficult to accomplish without leaving the edge of the band in such a condition that injury to the bird is likely. In addition, cutting down these bands and removing one or more digits from the band number makes it very unlikely that any subsequent recoveries could be processed without the possibility of an error.

The general rule with reference to hummingbirds is "don't band them unless you have a documented research project dealing with hummingbirds." If this is the case, band them only with the special Size X hummingbird bands which can be obtained from the Banding Laboratory.

9. Banding in additional States.

Q. I plan to spend my vacation this summer touring several States in the West. Please amend my banding permit to authorize my banding in the States of California, Nevada, and Arizona.

A. At the present time, we are discouraging the addition of States to a bander's permit unless such additions are necessary due to a research project, the acquisition of a summer home, or other justifiable reason.

If you plan to vacation in a State other than those authorized on your banding permit or to attend a "banding bee," etc., we request that you contact a bander residing in that State. It will be possible for you to band birds with him, utilizing his bands. By so doing, you will not only save the Banding Laboratory much unnecessary work, but you will also have the pleasure and experience of handling new birds in different localities,

of making the acquaintance of persons with similar interests, and of contributing to their banding projects.

Names and addresses of banders in the various States can be obtained from any of the banding associations or, upon request, from the Banding Laboratory.

- RELEASE OF BANDING AND RECOVERY DATA FROM -
THE BIRD BANDING LABORATORY FILES

Each week the Bird Banding Laboratory receives several requests from persons wishing banding and recovery data from our files. These requests are received from non-banders as well as banders. Several banders and other persons have also asked about our present policies concerning the release of these data.

Over the years a "working policy" has been established. We propose to document and incorporate this "working policy" into the revision of the Bird Banding Manual which is presently being assembled. The proposed policy toward the release of banding data from the Bird Banding Laboratory files is outlined below. We invite any comments or constructive criticisms from any interested parties.

1. The only justifiable purpose for placing an official band on a bird is the generation of scientifically usable data which accrues from that banding and/or the subsequent recovery of that band. Such data are of limited value until such time as they have been summarized, analyzed, and published. We, therefore, welcome requests from scientists, students, banders, wildlife technicians, or other qualified persons who wish to request and analyze data from our files.
2. The responsibility for the conservation and management of migratory game species is vested in the Federal Governments of Canada, Mexico, and the United States. In order to insure that these responsibilities are met, we reserve the right of access to data necessary for the conservation and management of migratory game species by Federal and cooperating State and Provincial Conservation Agencies.
3. Except as noted in 2 above, we recognize that the person who first bands a bird has prior publication rights to any data resulting from that banding and/or the subsequent recovery of that band. We honor this priority to the extent that persons receiving data from the Bird Banding Laboratory are notified in writing that:
"You are reminded that the person who originally bands a bird has prior publication rights to data produced by

that banding. You should resolve all conflicts-of-interest with any bander whose recent (past 5 years) bandings or recoveries comprise a significant portion of your data prior to your publication of these data."

- LIMITATIONS ON THE USE OF U. S. FISH AND WILDLIFE SERVICE BANDS -

Unless you have received special permission, we request that official U.S. Fish and Wildlife Service bands NOT be used:

1. On any species other than those noted in the AOU Section of your Banding Manual.
2. On birds which are to be held in captivity. If there is a valid reason, these birds can be banded at the time of release. Birds which have been held in captivity will require special "Status and Additional Information" codes on the schedules. Please contact the Banding Laboratory prior to submitting your records if you have any questions.
3. As parts of displays or in photographs, etc., unless one or more digits are obliterated or obscured. Sad experience has shown that when bands are placed in the public view in such a manner that the number can be read, many of these band numbers will be reported to the Banding Laboratory as "Recoveries."
4. On pet, injured, or sick birds. (See "Questions from the Banders," Number 5).
5. On non-migratory game species (quail, pheasants, grouse, etc.). The primary purpose of U.S. Fish and Wildlife Service bands is to assist in the study of migration routes, distribution, mortality, and longevity in migratory species.

Since the species noted above are not migratory little, if any, significant data would be expected to accrue from banding them with U.S. Fish ~~and~~ Wildlife Service bands.

The various State Conservation Agencies are responsible for the conservation and management of non-migratory species. Many such agencies have banding programs (utilizing State bands) under-way. If you have the opportunity to band numbers of these species, you should contact your State Conservation Agency and offer to assist in their banding program utilizing their bands.

6. On "unidentified" species. We still receive many records of "unidentified empidonax" or unidentified gull" bandings each year. The knowledge that an "unidentified gull" was banded at point "A" and recovered at point "B" is of very limited value. The general rule is: "If you can't identify the species release the bird unbanded."

- DO YOU BELONG? -

During the past year or so, I have had the pleasure of attending and speaking at the Annual Meetings of the Eastern, Northeastern, Inland, and Western Bird Banding Associations. It is quite apparent that banders gain a great amount of information by attending these meetings. Banders find, in discussing their particular problems with other banders, that solutions frequently become apparent. Traps, baits, and techniques worked out by one bander may suit another's problem to a "tee."

The various papers presented at these meetings give attending banders the opportunity to learn what other investigators are doing with the data they accumulate and to ask questions or discuss points of interest. These presentations and discussions frequently plant the germ of an idea or raise a question that can be developed into a significant banding project by some member of the audience.

In addition to the pleasures and benefits gained from attendance at the meetings, the members also receive periodic publications and newsletters. This again helps keep one abreast of who is doing what to which and where he is doing it. This knowledge may keep you and your project from dashing off down the same blind alleys that others before you have already explored.

Membership in the Northeastern Association brings a subscription to "Bird Banding." This journal is recognized as the most authoritative publication dealing with banding published in North America. Since some of the more significant studies dealing with banding and banding data analyses are published in "Bird Banding," any serious bander should either subscribe to this journal or have access to it.

Those of you who are relatively new banders should make a special effort to not only join the Associations but to attend the meetings. You will find that you can pick up more information in a few minutes at one of EBBA's Workshop Sessions than you could absorb in months at your own traps. Even the "Old Pros" seldom return from a meeting without one or two new bits of information.

The amateur bander can gain much information and direction from the professionals he meets at these meetings or through the pages of the publications, and the professional is sometimes able to locate a source of highly qualified, relatively inexpensive assistance from the same sources.

In the Banding Laboratory we find that, in general, the records submitted by banders who belong to Associations are more complete and accurate than records submitted by "independent" banders.

At the present time, we are not making membership in one or more of these cooperating Associations a prerequisite for the issuance or renewal of banding permits. We feel, however, that serious banders either do, or should, belong to at least one banding association.

The addresses of the four U.S. Associations are:

The Eastern Bird Banding Association
Mrs. Charles Neel, Secretary
Star Route, Box 187
Sheffield, Pennsylvania

Inland Bird Banding Association
Mrs. John Lueshen, Secretary
Wisner, Nebraska

The Northeastern Bird-Banding Association
Mrs. Daniel P. Johnson, Secretary
28 Wing Road
Lynnfield Center, Massachusetts

Western Bird Banding Association
Mrs. Eleanor L. Radke
P.O. Box 94
Cave Creek, Arizona 85331

- "BULLETIN BOARD" -

We frequently receive laments from researchers who wish that "Banders would devote more time and attention to" this or that, and several banders have commented that "I am intensely interested in banding but I simply do not have the time to formulate and follow through on a specific research project. How can I be of more service?"

In an attempt to bring these two together, we will devote a portion of each issue of "Bird Banding Notes" to such requests. Please limit your requests to one or two short paragraphs. We will have little time to edit them so they should be in "polished" form upon receipt. Sorry, we cannot handle advertisements or "For Sale" items.

These items will be handled on a "first come, first served" basis. If there is insufficient space in a given edition, any "left over" notices will be included in the next issue. Each issue of "Bird Banding Notes" is distributed to each "active bander" in our current files.

BLACK-CROWNED NIGHT HERON STUDY

Sightings of Black-crowned Night Herons marked with a standard U.S. Fish and Wildlife Service band plus colored leg streamers and, in some cases, a colored leg band and/or "back saddle" should be reported to Mr. Robert Paulson, Jr., 2504 College Street, Cedar Falls, Iowa 50613.

Mr. Paulson needs data pertaining to:

1. Exact location with respect to nearest town, etc.
2. Type habitat
3. Behavior
4. Exact time of observation (hour and date)
5. Number, type, colors and, if possible, identifying letters on markers
6. Age of bird
7. How many other herons (marked and unmarked) were in the vicinity of the marked bird when observed.
8. Observer's name and address.

ATTENTION: RED-WINGED BLACKBIRD NESTLING BANDERS

I would like to correspond with anyone actively engaged in Red-winged blackbird nestling banding, particularly in the Southeastern United States. I am specifically interested in weights and measurements as well as any ecological or distributional notes. Dan C. Holliman, Biology Department, Birmingham-Southern College, Birmingham, Alabama 35204.

- CORRIGENDA -

Vol. 5, No. 2, April, 1965

Page 16: Red-eyed Vireo, column 1962 should be 3,537.
Total column should be 15,681.

Page 20: Total Individuals, column 1962 should be 763,035.
Total column should be 4,506,133.

Page 26: Red-eyed Vireo, Grand Total should be 18,332.

- IS YOUR HOUSE IN ORDER? -

Before reading farther, take out your Banding Permit and look it over. Now conjure up a mental picture of your banding activities.

Do they fall within the authority granted you by your permit? If not, any such activities are technically in violation of the Migratory Bird Treaty Act.

Occasionally the Banding Laboratory receives letters from banders, bird lovers, Federal, State or local law enforcement personnel, newspaper editors, or "just plain citizens" registering or forwarding complaints about banders' activities.

In instances where these complaints appear to be legitimate, we request the cooperation of our Division of Management and Enforcement in having their Federal Game Management Agents check out the complaint. These gentlemen are well known for the thoroughness of their investigations. These officers would have no recourse other than to note any violations they detect.

Your permit states "...It may be revoked... if the permittee violates any of the provisions of the Migratory Bird Treaty Act or the Regulations thereunder... ."

By far the simplest way to solve unhappy situations is to avoid them.

Banding is a privilege granted only to highly qualified individuals and specifically denied others. Along with this privilege goes a responsibility to conduct your activities in such a manner that they will not be subject to criticism.

Irresponsible activities by a few banders can create enough public ill will to give the entire banding program a "black eye."

Some minimal rules to follow are:

1. Make sure that your Federal permit is valid and that it or attached "Letters of Authorization" cover all aspects of your activities.
2. Your Federal permit is invalid unless you also have in your possession any State permits required by the State in which you are banding.
3. Secure permission (preferably in writing) from the owner or caretaker, etc., of any land upon which you conduct your activities.
4. Have all traps or nets plainly labeled with your name and address or have the trapping area clearly marked with a Poster (Form 3-1155) which bears your name and address and explains the presence of your nets or traps. This not only reduces the chance of theft or vandalism and establishes your legal ownership of these items, but indicates to any law enforcement officer that these are probably legal devices.
5. Make yourself and your activities known to the local game warden and law enforcement personnel. Your local game warden will be much more understanding in handling complaints or queries from citizens about "somebody down in the Park catching birds" if he knows a little about bird banding and that there is a bander in his area.
6. Never leave mist nets untended.

The pros and cons of mist netting have been debated in detail in the past and there is no need to "rake old coals."

You should realize, however, that to the uninitiated bird lover, the sight of a bird tangled in a net is a traumatic experience. This is further amplified if there is no one in attendance to explain the purposes of netting and to safely remove the bird and show that it is not harmed.

The first reaction of a person stumbling upon a bird in an untended net is to try to release the bird. If you can recall your first attempts to extract a badly tangled chickadee or titmouse, you can appreciate the frame of mind this individual would be in by the time he got the bird (or parts thereof) out of the net!

It is doubtful that any explanation that could be offered would convince this individual of the value of your banding project.

7. Nets and traps should not be operated in areas where they are in view of casual passers-by. You should realize that the vast majority of the public is not even aware of birds, much less activities such as bird banding. You will find, if you operate your nets and traps in heavily traveled areas, that you will spend most of your time explaining what you are doing rather than doing it.

Regardless of the completeness and thoroughness of your explanations, there will always be a few individuals who "just aren't convinced." It inevitably happens that, while dealing with these individuals, a bird either injures or kills itself and what was a neutral individual is transformed into a staunch opponent of banders in general and you in particular.

Young boys have a remarkable knack of being able to copy, construct and put into use their own traps after having seen one in operation.

Last, but not least, leaving your traps or nets in view is very tempting to the vandal or thief.

8. Use common sense in selecting netting locations. There is no excuse for the complaint we received concerning some midwest banders "trampling across graves" to remove birds from nets strung through a cemetery!

- A REQUEST FOR DATA PERTAINING TO AGE OR SEX DETERMINATION TECHNIQUES -

One of the first problems a person analyzing banding data encounters is the lack of records containing accurate age and sex data.

We still receive many schedules containing "age and sex unknown" which are reporting species for which reliable methods of age and sex determination have been developed. We also receive an equal number of schedules on which the bander is indicating the age or sex of species for which no reliable age or sex determination techniques have been developed.

We are aware that many of these techniques are described in obscure journals or in very expensive books which the average bander would not be expected to have in his library.

We plan, in cooperation with the appropriate committee of the North American Council of Bird Banding Associations, to gather together as many of these techniques as are available, summarize them, and incorporate them into the revised Bird Banding Manual which is presently being assembled.

Our ultimate goal is to provide banders reliable age and sex criteria for as many species of North American birds as possible.

To accomplish this we will need cooperation from you. The amount of time we can devote to developing techniques or searching the literature will be very limited. We would like to request your assistance in this task. If you or your colleagues have developed reliable techniques for any species which is not presently noted in your Banding Manual, please summarize your findings and submit them to the Bird Banding Laboratory. These will be reviewed by other banders or ornithologists and, if they stand up, will be incorporated into the Manual. The dissemination of this information will assist greatly in increasing the value of the data entered into our files.

We need all kinds of data.

Eye color, for example, has been found to be useful in recognizing young birds but for most species we do not know how long this character remains valid. Does, for instance, the immature Red-eyed Vireo's eye remain brown until October, December, or later? Is this character as reliable for Red-eyes banded in British Columbia as it is for birds banded in Maryland?

How about skull ossification? This has been found to be a reliable method of recognizing immature birds of many species. There are other species, however, for which it is not reliable. We need much more information as to how long this technique holds up. A white-throat banded in December and whose skull has not completely ossified can be safely identified as an immature but how about the bird banded in December whose skull is ossified? Is this truly an adult or is it an early hatched bird of the year whose skull has ossified? What about the rate of ossification? Do the skulls of birds hatched and reared in areas having soils rich in calcium ossify at the same rate as birds hatched and reared in areas where the soil is lacking calcium?

These are questions that only persons who have the opportunity to handle the same bird on several occasions can answer.

We plan to include all the readily available data pertaining to age and sex techniques in an early issue of Banding Notes. These data will be summarized and, in most cases, presented in the following format:

Yellow-shafted Flicker Colaptes auratus Band Size 3 AOU 412

Ad. Male - Eye red-brown when examined in good light. "Moustache" marks present.

Ad. Female - Eye same as above. "Moustache" marks absent.

Imm. Male - Eye brown (probably thru Oct.) when examined in good light. "Moustache" marks present.

Imm. Female - Eye same as Imm. Male. "Moustache" marks absent after post-juvinal molt.

Note - Immature Yellow-shafted Flickers of both sexes have "moustache" marks in the juvinal plumage. Females lose theirs during the post-juvinal molt. Yellow-shafted Flickers with pale brown eyes, which lack or are in the process of losing their "moustache" marks can be safely called Immature Females. The sex of immature Yellow-shafted Flickers cannot be safely determined prior to the post-juvinal molt.

We prefer not to include weights or measurements, unless such data are of value in determining the age, sex, or species of the birds. These data are of value but they should be published somewhere other than the Banding Manual.

We plan to publish the next issue of Banding Notes sometime during late Spring and would like to include as much information as possible.

We are, therefore, soliciting any such data you may be able to provide.

- TEMPORARY LOCATIONS FOR "PRINT-OUTS" OF NEW CODES -
ON RECOVERY CARDS AND LISTING

In order to more completely convey all the pertinent information surrounding the recovery of bird bands, the Bird Banding Laboratory has recently adopted two additional codes. These new codes have been punched into all recovery cards processed since September 1, 1965.

Definitions of these and other new or revised codes are noted elsewhere in this issue.

Our present stock of pre-printed IBM cards and the Recovery Listing Forms do not provide marked spaces for printing these codes. Until such time as we exhaust our present supplies and receive new ones we have selected temporary locations for the "print-out" of these codes.

On cards or listings you receive from the Bird Banding Laboratory you will find these codes printed out in the following locations:

Bird Band Recovery Card Report to Bander:

1. A two digit "Present condition of Bird and Band" code is printed out in the space to the right of the box marked "Who Rept" and under the box marked "Prev Rep.". These codes are punched into columns 77 and 78.
2. A single digit "Why Reported" code is printed out at the right edge of the card directly below the box marked "How Obt.". This code is punched into Column 79.

Recovery Listing Forms

1. The two digit "Present Condition of Bird and Band" code is printed out in the "Band No." column. These two digits are printed directly to the right of the vertical line separating the "Permit No. and Band No." columns.
2. The single digit "Why Reported" code is printed out at the extreme right edge of the sheet in the "Day Cd." column. In instances where both a "Day Code" and a "Why Reported" code appear in this column the "Why Reported" code will be nearest the right edge of the sheet.

- REVISIONS AND ADDITIONS TO THE BANDING MANUAL -

During recent years several new codes in addition to those in your Banding Manual have been adopted.

The following pages should be added to or used to replace similar pages now existing in your Bird Banding Manual. Your present Manual and/or these pages should now contain keys to all codes presently being used in the Banding Laboratory.

These "updated" code sheets are provided for your use until such time as the Banding Manual can be revised and distributed.

- Revision of Form 3-1807 "Bird Band Recovery Report" -

A revised version of the Form 3-1807 has been in use since September 1, 1965. These forms are now available from the Banding Laboratory and if you have not yet received a supply, please request the new forms in your next supply order. Please request only as many as you will actually need.

Each year we receive approximately 60,000 reports of recoveries. Approximately 10-15% (6,000 - 9,000) of these recoveries are reported via 3-1807's.

Since September 1, we have issued over 90,000 of these forms. I have a sneaking suspicion that someone somewhere has a very large barn, the inside of which he has papered with the new pink 3-1807!

You will note that the new form contains spaces to indicate whether or not the band was removed and also to indicate the "present condition" of the bird. This information is converted to code and transmitted to persons whose birds are recovered, or to persons analyzing banding data, via the "Present Condition of Bird and Band" codes listed elsewhere in this issue of "Bird Banding Notes."

The information requested in item 13 is apparently confusing to some users of this form. This question is intended to indicate whose initiative caused the band to be reported, the person filling out the form (Game Warden, USGMA, Refuge Personnel, banders, etc.) or the person who actually shot or found the banded bird.

If the person who found the band, OF HIS OWN VOLITION, contacted you to report the band, only box 13a should be checked. For example: A hunter bumps into a game warden in the barbershop and, knowing the warden is a conservation agency employee, gives him a band from a bird he shot. In this case the hunter is reporting the band OF HIS OWN VOLITION. Recoveries of this type would receive the same weight as if the hunter had reported the band to the U.S. Fish and Wildlife Service via a letter.

If, on the other hand, the Game Warden had contacted the hunter in the field or at a check station and either asked for banded birds or noticed the band during the bag check then the band number would have been reported due to the initiative of the Warden rather than the hunter. This fact and the action the Warden took should be indicated by checking the appropriate box under 13b.

It's really not nearly as complicated as it sounds. What we want to know is who caused the band to be reported - the person who recovered the band

or the person filling out the form. If it was the person who fills out the form then we wish to know what action he took after he obtained the band number and recovery data (Question 13, b 1, 2, or 3).

On the old 3-1807 there was a box to check if the person who recovered the band wished the band returned. This box has been omitted on the revised form. When possible we prefer to retain the band with the recovery report to verify records or reconcile possible discrepancies.

If the hunter specifically requests the return of the band, please note this in the "Remarks" section of the form and we will verify the number and return the band.

We have also omitted the box to be checked for requesting an extra copy of the recovery report.

In the "good old days" when recoveries were processed via "flimsies" the flimsies were printed in sets. There were 2 extra copies in each set and these copies could easily be forwarded to other interested parties.

Recovery Reports are now produced by machine. The machine produces simultaneously "Report to the Hunter" cards, "Report to the Bander" cards and a permanent Statistical Card which is retained in our files. If we send "Report to the Hunter" cards to more than one person the data cards have to be passed through the machines once for each extra "Report to the Hunter" card produced. Each time the cards are passed an extra "Report to the Bander" card and "Statistical" card are also produced. We must then sort these down and discard the extra "Report to Bander" and "Statistical" cards. This greatly increases the amount of work and time required to process a recovery. These recoveries are handled in batches of 2,000 to 4,000. Occasionally these duplicated cards are missed thus resulting in duplicate recovery reports being forwarded to banders or being entered into our files.

If there is a need for additional reports for any recovery, please request the additional report in the "Remarks" section and we will forward a second card. Unless it is specifically requested only the person whose name is entered in Box No. 6 will receive a "Hunter Card." The person who banded the bird will, of course, receive a "Bander Report Card" on the bird and periodically (approximately each month) the Banding Laboratory provides each State a listing of all game birds recovered in their State regardless of where banded and another listing of all recoveries of game birds banded in their State regardless of where the birds were recovered.



- SAMPLE -

BIRD BAND RECOVERY REPORT

INSTRUCTIONS: Prepare a separate form for each banded bird. In the case of a bird wearing more than one band, report both band numbers on one form. Submit one copy to: Bird Banding Laboratory, Migratory Bird Populations Station, Bureau of Sport Fisheries and Wildlife, Laurel, Maryland 20810.

1. Band number(s) 607-00000 657-00000	ATTACH BAND(s) HERE (Flatten down and attach with scotch tape)
2. Date recovered (month, day, year) Nov. 20, 1965	

3. Kind of bird Black Duck	4. Age ?	5. Sex ?
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6. Recovered by (name) John Doe	7. Permanent mailing address 100 Main St., Anytown, Md. 20810
------------------------------------	--

8. Where recovered (Indicate as follows: 1-local area; 2-nearest town; 3-County; 4-State or Province)
On Little Patuxent River, 2 miles north of Simpsonville, Howard Co., Md.

9. How did hunter or finder obtain bird?
Shot Trapped Other explain Duck was caught in muskrat trap

10. Was band removed? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	11. Present condition of bird Dead <input type="checkbox"/> Alive-released <input checked="" type="checkbox"/> Alive-in captivity <input type="checkbox"/>
--	---

COMPLETE ITEMS 12 and 13 ONLY IF SOMEONE ELSE FOUND OR KILLED BIRD	
12. I saw band and verified number. Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
13. I obtained number and data noted above under the following circumstances: (Please check one)	
a. Hunter or finder contacted me to report band.	<input checked="" type="checkbox"/>
b. I contacted the hunter or finder and:	
(1) I obtained number and data noted above and am submitting this report without his knowledge.	<input type="checkbox"/>
(2) I recorded number and data and advised him to report number and data to address on band.	<input type="checkbox"/>
(3) I am, <u>at his request</u> , reporting number and data for him.	<input type="checkbox"/>
c. Other (explain)	

14. Remarks
Bird had two bands..

Submitted by (name and title) Bill Smith, District Game Warden	Address Room 5, County Court House Anytown, Md., 20810
---	--

GENERAL INSTRUCTIONS

- A. Purpose. We know that only a fraction of the banded birds recovered by individuals are reported to the Banding Laboratory. Studies have shown that, when left to their own devices, hunters report approximately 50% of the banded Mallards they take. Purposeful collecting of bands by Conservation Agency Personnel materially increases this reporting rate. This is especially true of areas such as Public Shooting Area Check Stations where the reporting rate may approach 100%. These activities result in a "spotty" reporting rate pattern with a very high proportion of recovered bands reported from some areas and a low proportion from others. Undetected variances in reporting rates destroy much of the value of banding data for research and management purposes. For example: If equal numbers of banded birds were taken in each of two areas and 100% of the bands were reported from the first area but only 50% from the second, then recoveries received at the Banding Laboratory would not reflect the true distribution of bands between the two areas.

Analyses of banding data have clearly demonstrated that "band collecting" activities have sharply reduced the value of banding data for most research and management purposes. Such activities must be discouraged. The solution to this problem is to either allow persons who recover a band to report it under their own volition or to properly identify reports which result from "band collecting" activities. The Bird Band Recovery Report is designed to accomplish this.

- B. Accuracy. The information reported must be thorough and accurate. This information is a vital element to the Bureau of Sport Fisheries and Wildlife's study on the effects of various hunting regulations and natural mortality upon the continental migratory bird populations.

C. Reporting.

1. This form should be used to report all bands taken by you (shot, found dead, found injured, foreign traps, etc.).

2. If you encounter another individual who has obtained a bird band please proceed as follows:

a. If the individual seeks you out to report the band, thus indicating his interest, you should obtain the necessary data and submit the report.

b. If, through your official activities (check stations, law enforcement, bag checks, etc.), you encounter a banded bird we prefer that you record and report the band number and recovery data without the hunters knowledge. We can later check our records to see if he also reported the band. This will provide valuable data concerning the proportion of bands taken but not reported.

c. If the above is not possible, then explain that you will record the band number and recovery data "for your own reports" but that if he wishes data concerning the history of the bird he should report the number and data to the address on the band. You should then submit your report of the recovery.

d. Do not offer to report the band for him. If, however, he requests, or through prior experience expects you to report the band for him, do not refuse.

- D. Remarks. Use this space for any additional information. Also, please note in this section if the hunter or finder indicates he is reporting the band as the result of publicity dealing with conservation, such as: talks given by Conservation Agency personnel, magazine or newspaper articles, TV or radio programs.

"Additional Information" Codes

These codes are used in conjunction with and as an amplification of the "Status" codes. They should be entered in the "Status" ("S") column of the Banding Schedule (Form 3-860) immediately following the "Status" code. (Example: 6-11 which would be interpreted as a bird which is "experimental" because it has been "transported and released".)

Some of these codes have, during the period 1959 through 1964, been partially duplicated. In all such cases, the duplicated "Additional Information" codes have been used in conjunction with the "Status" code "7". These duplicated numbers are:

<u>Status</u>		<u>Additional Information</u>	<u>Interpretation</u>
7	-	05	Geese banded, wing-clipped, held
7	-	06	Held, wing-clipped, transported, and released
7	-	07	Held, transported, primaries pulled, banded with oversize, color-anodized band and released
7	-	08	Transported, banded with oversize, color-anodized band and released
7	-	09	Bird recovered from Botulism, transported and released

These codes, as interpreted above, were discontinued in 1965. However, the records for birds assigned these codes during the period 1959 through 1964 are still in the files. Investigators wishing records of birds meeting the conditions noted above and which were banded during the period 1959 through 1964 should specifically request these codes when requesting these data. Investigators analyzing banding data in which these codes appear should also be aware of this situation.

Codes for Additional Information (continued)

- 00 - Normal
- 01 - Color leg band
- 02 - Neck band
- 03 - Reward band
- 04 - Control band - also (lead free)
- 05 - Lead fed
- 06 - State band only
- 07 - Different size bands or same size band on each leg
- 08 - Painted or dyed
- 09 - Wing clipped or pulled
- 10 - Pinioned
- 11 - Transported and released
- 12 - Transported and neck banded
- 13 - Transported and color leg band
- 14 - Botulism (recovery)
- 15 - Injured
- 16 - Fluoroscoped
- 17 - Treated with Testosterone
- 18 - Blood sample taken
- 19 - Color leg band and painted or dyed, etc.
- 20 - Color neck band and painted or dyed, etc.
- 21 - Sick (or exhausted - released upon recovery)
- 22 - Transported and wing clipped or pulled
- 23 - Color neck band and color leg band
- 24 - Transported and painted or dyed
- 25 - Transported and painted or dyed and wing feathers pulled
or clipped
- 26 - Transported, neck banded, and wing feathers pulled or
clipped
- 27 - Transported, color neck banded, and painted or dyed
- 28 - Transported and pinioned
- 29 - Miscellaneous bands and painted or dyed
- 30 - Transported and different height band on each leg
- 31 - Transported and double leg banded with same size Service
bands (one band dipped in paint)
- 32 - State Reward band and bird held for several weeks
- 33 - Bird held for several weeks before released
- 34 - Experimental unknown
- 35 - Pinioned, neck banded and transported
- 36 - Bird held in captivity
- 37 - Transported and blood sample taken
- 38 - Recovered cripple
- 39 - Head or wing tag
- 40 - Oil soaked, cleaned and released
- 41 - Different height bands on each leg and painted or dyed
- 42 - Adhesive tape used to hold band on young bird
- 43 - Different height band on each leg to test band retention

(continued to next page)

Codes for Additional Information (continued)

- 44 - Held for observation or photography and released
- 45 - Throat culture taken
- 46 - Injured bird color neck banded
- 47 - Plastic saddle
- 48 - High band on one leg, no band on other leg
- 49 - Miscellaneous band with Service band, plus neck band
- 50 - Recovered cripple, transported and released
- 51 - Bill marker attached
- 52 - Blood sample taken and color leg band
- 53 - Transported and held in captivity
- 54 - Lock-on band
- 55 - Lock-on band and transported and released
- 56 - Sick or injured, treated, transported and released
- 57 - Injured by weather conditions
- 58 - Double leg banded, lock-on band, plus regular band
- 59 - Web tagged
- 60 - Sick or injured, held, treated and released
- 61 - Lock-on band and neck band
- 62 - Pinioned and State band
- 63 - Wing clipped, color bill marker and released
- 64 - Transported and released, photographed
- 65 - Temperature taken for temperature control
- 66 - Sick bird when banded, not treated
- 67 - Saddle banded and color band
- 68 - Transported - painted or dyed and color leg band
- 69 - Plastic streamer on leg or flipper
- 70 - Spotlighting
- 71 - Transported - painted or dyed and color leg band, plus
lock-on band
- 72 - Dye injected into egg before hatching
- 73 - Neck banded and wing clipped
- 74 - Different height band on each leg. Held for observation
and saddle banded
- 75 - Held in captivity - transported and released
- 76 - Transported, neck banded, primaries pulled or wing-clipped,
plus lock-on band
- 77 - Regular Service band plus State lock-on band
- 78 - Exposed to increased artificial light during Dec. & Jan. and
transported and released
- 79 - Transported and released with bill marker attached
- 80 - Pinioned, transported and released with miscellaneous bands
- 81 - Color leg band and lock-on band
- 82 - Lock-on band, nasal disc and wing-clipped
- 83 - Control band, nasal disc and wing-clipped
- 84 - Held, transported and released with bill marker
- 85 - Miscellaneous
- 86 - Test reporting rate
- 87 - Monel butt-end bands

- | Code | <u>"Who Reported" Codes</u> |
|------|--|
| 01 | From hunter, his family, or his hunting companion and reported by means other than 3-1807 (when bird found dead etc. - not result of hunting, the reporter will be considered as the hunter, etc., if he reported the band). |
| 02 | From State or Provincial conservation agency or employees in U.S., or Canada and reported by either 3-1807 or other means. |
| 03 | From Federal conservation agency or employees in Canada, U.S., and Alaska and reported by either 3-1807 or other means. This includes all F.W.S. employees, C.W.S. employees and R.C.M. Police. |
| 04 | From hunting club caretakers or officers, hunting guides or boat "captains" and reported by either 3-1807 or other means. |
| 05 | From a source which cannot be determined as including any of the other categories. |
| 06 | From hunting and fishing editors, etc. and reported by either 3-1807 or other means. |
| 07 | From poultry houses, pluckers, plucking stations, cold storage lockers, etc., and reported by either 3-1807 or other means. |
| 08 | From individuals using form 3-1807 not included in other categories and bird banders other than State or Federal. |
| 09 | From an intermediate person, outside the U.S., such as Hudson Bay Co. employees, missionary, and Latin American intermediary and reported by either 3-1807 or other means. |
| 10 | Ducks Unlimited (officials and employees). |
| 11 | Reported as a result of Duck Club contest. |
| 12 | Reported by hunter on 3-1807. |
| 13 | Delta Waterfowl Research Station. |
| 14 | Parts Collection Survey (Duck Wing, Goose Tail, etc.). Each year the U.S. Fish & Wildlife Service requests a sample of hunters to furnish parts of the birds they bagged. The hunters are asked to note any bands they have recovered. This code designates bands thus reported. |
| 15 | Mail Questionnaire Survey - Each year the U.S. Fish & Wildlife Service conducts a survey of hunters via a mail questionnaire. The hunters are asked to note any bands they have recovered. This code designates bands thus reported. |

Co-ordinates

Section B 32 notes that banding and recovery co-ordinates are reduced downward to the nearest 10 minutes and that in North and Central America the co-ordinates of the southeast corner of the 10-minute block within which the precise co-ordinates of banding or recovery fall are used. For bandings and recoveries in other sections of the world, however, the southeast corner of the 10-minute block is not used. The following table is provided to clarify the designation of 10-minute block of banding and recovery.

Banding or recoveries occurring in:

Corner of 10-minute block used.

Western Hemisphere:

North of equator
South of equator

Southeast corner
Northeast corner

Eastern Hemisphere:

North of equator
South of equator

Southwest corner
Northwest corner

Inexact Co-ordinates

In some instances, particularly with recoveries, it is not possible to obtain sufficient information to narrow the banding or recovery location to a single 10-minute block. In these instances, the following codes have been adopted to indicate this situation:

Code Number

Interpretation

7

The county in which the bird was banded or recovered is the most finite location obtainable. In these instances, the geographic center of the county is used. In all cases where this procedure is used, the last digit of the longitude shall be a "7". For example, if the co-ordinates of the center of a given county are 435-0972, the "2" would be replaced by a "7" and the approximated co-ordinates would read 435-0977.

(Continued)

Code
Number

(continued)

Interpretation

8

In some instances, it is not possible to narrow the location to a 10-minute block, a county or a single 1^o block. For example, the hunter merely states that he killed the bird on "Chesapeake Bay, Maryland" and fails to respond to subsequent requests for additional information. In these cases, the intersection of the latitude and longitude lines nearest the southeast corner of "Chesapeake Bay" would be determined. If, for example, these co-ordinates were 370-0760, the last digits of both latitude and longitude would be replaced by the numeral "8". In this instance, the approximated co-ordinates would read 378-0768.

9

In some instances it is possible to determine that the location is contained within a single 1^o block. For example, a hunter may indicate only that he shot a bird on Nezpique Bayou, Louisiana. This bayou extends into several 10-minute blocks and several parishes but is contained within a single 1^o block. The co-ordinates of the southeast corner of the degree block which contains Nezpique Bayou are 300-0920. In this instance, the last digit of both latitude and longitude would be replaced with the numeral "9" and the approximated co-ordinates would read 309-0929.

Codes Used in Columns 72-73 "Hunting Season" of Recovery Cards

Column 72 represents a period within the year in which the bird was banded. The periods are as follows:

	<u>Code</u>
January 16 - February	1
March - April	2
May	3
June - July	4
August	5
September	6
October, November, December, and January 1 - 15	7

Column 73 represents the number of "recovery years" in which the bird lived. The recovery year is August 1 thru July 31. This number also is based on whether the bird was banded during the period August 1 thru January 15 (when shot recoveries are occurring). The following table illustrates how "recovery years survived" is calculated. The resulting number is determined by subtracting the calendar year of banding from the calendar year of recovery to get the difference "D", then adding the appropriate value as indicated in the table.

Date Recovered	Date Banded	
	Jan. 1 - 15	Jan. 16 thru Dec. 31
Months Jan. 1-15 Jan. 16-31 February March April May June July	D + 1	Difference between year banded and recovered
August September October November December	D + 2	D + 1

"HOW OBTAINED" CODES - Listed Numerically
(Alphabetical Listing Follows)

These codes (noted in Col. 61 & 62 of the Recovery Statistical Card) are intended to describe the circumstances surrounding the recovery of the bird or band. These codes should be used in conjunction with the "Present Condition" Codes (Col. 63 & 64 of the Recovery Statistical Card).

As requirements change, new codes are added or existing codes are discontinued or modified. Since September 1, 1965 the date of all such additions, deletions or modifications has been noted. Since data with the "old" codes are still in the files, analysts should be aware of these dates and definitions.

*On September 1, 1965 the wording "Caught", "Caught by" or "Caught by or due to" were added to or replaced the word "killed".

<u>Code</u>	<u>Present Definition</u>	<u>Date Added (New Codes)</u>	<u>Former Definition</u>	<u>Date of Change</u>
00	Found dead. See also codes 21, 30, 45, 50			
01	Shot. See also codes 16, 91			
02	Caught due to: Starvation*			
03	Caught due to: Injury*			
04	Caught by or due to: Traps or snares other than devices used to catch birds for banding. (Muskrat traps, etc.) See also Code 26.		Caught in trap (not banding)	09-01-65
05	Code discontinued. See code 31		Killed by carnivore (not cat)	09-01-65
06	Caught by or due to: Rodent*			
07	Caught by or due to: Miscellaneous birds*			
08	Caught by or due to: Shrike*			
09	Caught by or due to: Hawks, Owls or other raptors. Also includes bands found in raptor pellets. See also code 51.		Killed by hawks and owls	09-01-65

"HOW OBTAINED" CODES (Continued)

<u>Code</u>	<u>Present Definition</u>	<u>Date Added (New Codes)</u>	<u>Former Definition</u>	<u>Date of Change</u>
10	Banding Mortality: Birds accidentally killed during banding operations. Includes birds killed in, by or due to traps, holding devices or handling. Does not include birds killed by weather or predators. See code 51.		Killed by accidents, traps, etc.	09-01-65
11	Caught by or due to: Dog*			
12	Caught by or due to: Cat*			
13	Caught due to striking: <u>Stationary</u> object other than wires or towers. See also Code 54		Killed by flying into object	09-01-65
14	Caught due to striking or being struck by: Motor vehicle. See also Code 45.		Killed by automobile	09-01-65
15	Caught due to: Weather conditions.* See also code 51.			
16	Collected as Scientific Specimen.			
17	Drowned.			
18	Caught due to disease: Botulism*			
19	Caught by or due to: Reptile*			
20	Caught due to disease: Unknown type		Sick bird when captured	09-01-65
21	Bird caught or found dead in building or enclosure		Found in building	09-01-65
22	Code discontinued		Died from "Fright"	09-01-65
23	Caught due to: Oil soaked plumage		Killed from oil in plumage	09-01-65
24	Caught or killed due to fall from nest.		Fell from nest & was killed	09-01-65
25	Caught or killed due to poisoning. Does not include lead poisoning, avicides or pesticides. See codes 40, 44 and 55		Poisoned	09-01-65

"HOW OBTAINED" CODES (Continued)

<u>Code</u>	<u>Present Definition</u>	<u>Date Added (New Codes)</u>	<u>Former Definition</u>	<u>Date of Change</u>
26	Caught by or due to: Entanglement in fishing gear (line, hooks, nets, etc.)		Entangled in string, nets, fish hooks, etc.	09-01-65
27	Caught due to striking or being struck by: Moving train*			
28	Caught by hand.			
29	Sight record: Identified by color band, marked plumage or marker other than standard, numbered metal band.		Identified by colored band-- sight record (in same 10- minute block where banded).	09-01-65
30	Died in nest. See also Codes 33 & 49			
31	Caught by or due to: Unknown animal* See also Codes 49, 51			
32	Caught due to: Parasite infestation.		Killed by parasites	09-01-65
33	Caught or observed at or in nest. See also codes 30 & 49.		Found nesting (in same 10- minute block where banded)	09-01-65
34	Caught by or due to: Fish (Includes bands reported found inside fish)		Eaten by fish	09-01-65
35	Caught by or due to: Clam*			
36	Caught due to: Exhaustion*			
37	Caught due to: Electric Shock*			
38	Caught due to: Fire*			
39	Caught due to striking or being struck by: Moving aircraft.		Killed by airplane	09-01-65
40	Caught due to: Lead Poisoning*			

"HOW OBTAINED" CODES (Continued)

<u>Code</u>	<u>Present Definition</u>	<u>Date Added (New Codes)</u>	<u>Former Definition</u>	<u>Date of Change</u>
41	Code discontinued. See "Present Condition" codes 09, 10, 11.		Held for propagating	09-01-65
42	Caught due to striking or being struck by: Moving farm machinery.		Run over by farm machinery	09-01-65
43	Caught due to disease: Trichomoniasis		Died from Trichomoniasis	09-01-65
44	Caught due to: Control Operations (roost bombing, gassing, avicides, etc.)			
45	Found dead on highway. No information as to whether killed by motor vehicle or not. See also code 14			
46	Caught due to: Joined flock of domestic or captive birds or fowl.		Joined flock of domestic ducks	09-01-65
47	Discontinued code. See code 98 or "Present Condition" codes		Band removed (no more information)	09-01-65
48	Discontinued code. See "Present Condition" Codes		Held in captivity	09-01-65
49	Caught at, on or in nest by predator. See also codes 24, 30 & 33.		Killed in nest by predator	09-01-65
50	Found dead: Band with skeleton or bone only.			
51	Banding Mortality: Bird killed by predators, weather, etc. while in trapping or holding devices. See also code 10	09-01-65		
52	Sight record: Band read by telescope or other means while bird was free.	09-01-65		
53	Recovered for Scientific Purposes (not collected). Bird captured, band removed & "Status" changed (dyed, neck-banded, bled, etc.) for Scientific purposes. Bird re-banded & released.	09-01-65		

"HOW OBTAINED" CODES (Continued)

<u>Code</u>	<u>Present definition</u>	<u>Date Added New Codes</u>	<u>Former Definition</u>	<u>Date of Change</u>
54	Caught due to striking: Radio, TV, High tension, etc. wires or towers. See also code 37.	09-01-65		
55	Caught due to: Pesticides. Birds reported killed or captured as a result of spray programs. Does not include avicides. See Code 44.	09-01-65		
56	Obtained - Letter simply states in effect "I obtained this band". No further information available.	09-01-65		
87	Discontinued code. See codes 29 or 52		Sight record in a different 10-minute block from one where banded.	09-01-65
88	Discontinued code. See code 33		Found nesting in a different 10-minute block from one where banded.	09-01-65
89	Previously banded bird trapped and released during banding operations in <u>different 10-minute block than where originally banded.</u> See also code 99.			
91	Illegally taken.		Shot out of hunting season	09-01-65
96	Discontinued code. See code 98		Band only	09-01-65
97	Miscellaneous. Method of recovery not covered by other codes.			
98	Band or band number only obtained. No further information available.			
99	Previously banded bird trapped and released during banding operations in <u>same 10-minute block where originally banded.</u> See also code 89			

"HOW OBTAINED" Codes - Listed Alphabetically

<u>CODE</u>	<u>DEFINITION</u>
98	Band or Band Number Only obtained. No further information available.
10	Banding Mortality: Birds accidentally killed during banding operations. Includes birds killed in, by or due to traps, holding devices or handling. Does not include birds killed during trapping operations, by weather or predators. See code 51.
51	Banding Mortality, Predation & Weather: Birds killed by predators, weather, etc. while in trapping or holding devices. See also code 10.
21	Bird caught or found dead in building or enclosure.
49	Caught at, on or in nest by predator. See also codes 24, 30, 33.
28	Caught by hand.
12	Caught by or due to: Cat
35	" " " " ": Clam
44	" " " " ": Control Operations (Roost Bombing, Gassing, Avicides, etc.)
18	" " " " ": Disease, Botulism
43	" " " " ": Disease, Trichomoniasis
20	" " " " ": Disease, Unknown type
11	" " " " ": Dog
37	" " " " ": Electric Shock
26	" " " " ": Entanglement in Fishing Gear (Line, hooks, nets, etc.).
36	" " " " ": Exhaustion
24	" " " " ": Fall from nest.
38	" " " " ": Fire
34	" " " " ": Fish (Includes bands found inside fish).
09	" " " " ": Hawks, Owls or other Raptors. Also includes bands found in raptor pellets. See also Code 51.
03	" " " " ": Injury
46	" " " " ": Joined flock of domestic or captive birds or fowl.

"HOW OBTAINED" Codes - Listed Alphabetically (continued)

<u>CODE</u>	<u>DEFINITION</u>
40	Caught by or due to: Lead Poisoning
07	" " " " ": Miscellaneous birds
23	" " " " ": Oil soaked plumage
32	" " " " ": Parasite Infestation
55	" " " " ": Pesticides. Birds reported killed, captured or found dead as a result of a spray program. Does not include Avicides. See code 44.
25	" " " " ": Poisoning. Does not include lead poisoning Avicides or pesticides. See code 40, 44 & 55.
19	" " " " ": Reptile
06	" " " " ": Rodent
08	" " " " ": Shrike
02	" " " " ": Starvation
13	" " " " ": Striking stationary object other than wires or towers. See code 54.
54	" " " " ": Striking Radio, TV, High-tension, etc. wires or towers. See also code 37.
39	" " " " ": Striking or being struck by moving aircraft.
42	" " " " ": Striking or being struck by moving farm machinery.
14	" " " " ": Striking or being struck by moving motor vehicle. See also code 45.
27	" " " " ": Striking or being struck by moving train.
04	" " " " ": Traps or snares other than devices used to catch birds for banding. (Muskrat traps, etc.). See also code 26.
31	" " " " ": Unknown animal. See also codes 49 & 51.
15	" " " " ": Weather conditions. See also code 51.
33	Caught or observed at or in nest. See also code 30 & 49.
16	Collected as scientific specimen.

"HOW OBTAINED" Codes - Listed Alphabetically (continued)

<u>CODE</u>	<u>DEFINITION</u>
30	Died in nest. See also code 33 & 49.
17	Drowned
00	Found dead. See also codes 21, 30, 45, 50
50	Found dead, band with skeleton or bone only.
45	Found dead on highway. No information as to whether or not killed by motor vehicle. See also code 14.
91	Illegally taken.
97	Miscellaneous. Method of recovery not covered by other codes.
56	Obtained - Letter simply states in effect "I obtained this band" No further information available.
53	Recovered for scientific purposes (not collected). Bird captured, band removed & "Status" changed (dyed, neck-banded, bled, etc.) for scientific purposes. Bird re-banded and released.
52	Sight Record - Band number read by telescope or other means while bird was free.
29	Sight Record - Bird identified by color band, marked plumage or marker other than standard metal leg band. See also codes 33 and 52.
01	Shot. Does not include birds collected for scientific purposes. See codes 16 & 91.
89	Trapped and Released: Banded birds trapped and released during banding operations in <u>different</u> 10-minute block from where originally banded. See also code 99.
99	Trapped and Released: Banded birds trapped and released during banding operations in <u>same</u> 10-minute block where banded. See also code <u>89</u> .

"WHY REPORTED" Codes

We are aware that all bands recovered are not reported to the Bird Banding Laboratory. We are also aware that active "band collecting" activities by Conservation Agency personnel, bird banders, etc. or local publicity campaigns can greatly increase the percentage of bands reported from a given area. These "local" activities, if not recognized, can introduce serious biases into banding data.

These codes (noted in Col. 75 of the "Recovery Statistical Card") are intended to identify the stimulus prompting the reporting of bands. Such identifications will provide the banding data analyst additional information upon which to base his conclusions.

In these definitions the word "hunter" refers to the person who actually found the band. The word "reporter" refers to the person who submitted the Report of Recovery of the band. In many instances they will be one and the same person.

These codes were first utilized on Sept. 1, 1965.

<u>CODE</u>	<u>DEFINITION</u>
0	Unknown
1	Hunter reported band of his own volition.
2	Band number was obtained and reported without hunter's knowledge.
3	Band number was solicited from hunter or otherwise obtained as the result of reporter's rather than hunter's initiative. Hunter was advised to report number and data to address on band.
4	Band number was secured as the result of reporter's initiative. Hunter either was not advised to report band or requested reporter to submit report for him.
5	Hunter indicated that publicity dealing with conservation, such as talks given by Conservation Agency personnel, magazine or newspaper articles, TV or radio programs, etc., prompted him to report band.

"PRESENT CONDITION OF BIRD AND BAND" Codes

These codes (noted in Col. 63 and 64 of the Recovery Statistical Card) are intended to provide the banding data analyst as much information as is available concerning the condition and disposition of the bird and band at the time of "Recovery".

These codes are an amplification of and should be used in conjunction with the "How Obtained" (Col. 61 and 62) codes.

Use of these codes was initiated with recoveries processed in the Bird Banding Laboratory on Sept. 1, 1965.

<u>CODE</u>	<u>CONDITION OF BIRD</u>	<u>STATUS OF BAND</u>
00	Unknown	Unknown
01	"	Left on Bird
02	"	Removed
03	Dead	Unknown
04	"	Left on Bird
05	"	Removed
06	Alive-Released	Unknown
07	" "	Left on Bird
08	" "	Removed
09	Alive-In Captivity	Unknown
10	" "	Left on Bird
11	" "	Removed
12	Alive - Unknown whether released or in captivity.	Unknown
13	" "	Left on Bird
14	" "	Removed

Mourning DoveZenaidura macouraBand Size - 3A

AGE DETERMINATION FROM WING PLUMAGE:

The dove wings pictured in these sketches are in a molt condition typically seen during late summer & early fall. The molt of the primary wing feathers (numbered I - X) begins with number I & proceeds outward, one feather at a time, in sequence. The darker, blue-gray color of the new feathers easily distinguishes the newly replaced feathers from the older, lighter, faded, unmolted primaries.

The primary coverts (small feathers overlying the base of the primaries, see sketch) molt in the same sequence as the primaries. The molt of the coverts usually precede the molt of the primaries by one feather. Thus, the covert overlying primary number VI will usually have dropped by the time primary number V drops.

Immature doves can be distinguished from adults until such time as the molt of the primary coverts has been completed. The tips of the UNMOLTED coverts in IMMATURE birds are characteristically white or buff colored.

The UNMOLTED primary coverts of adult birds are a uniform slate-gray color. A very faint, light edging can sometimes be detected on the tips of the coverts on adult birds. This light edging is due to feather wear & is easily distinguished from the light or buffy tipping on immature coverts.

These age criteria are accurate until the birds begin molting primaries No. VIII & IX. At that time the ninth & tenth primary coverts are usually gone. A careful inspection may reveal the last white or buff-tipped covert hidden under other feathers.

NOTE: During the fall, if doves have completed the molt of all the wing feathers, no age determinations can be made by methods other than internal examinations. Unless such examinations have been made these birds must be noted as "age unknown" (U) on your banding schedules. Most doves banded after January 1 & before young begin hatching will be considered adults. In a very few instances birds with immature plumage characters will be noted during this period. These birds should be recorded as SUB-ADULTS (SA) on your banding schedules.

SEX DETERMINATION FROM PLUMAGE CHARACTERISTICS:

ADULTS: The sex of adult mourning doves can be determined by a combination of two plumage characteristics; the color of the crown and nape and the color of the throat & breast. In adult MALES the crown & nape are BLUE OR BLUE-GRAY and the throat and breast area are washed with a PINKISH OR ROSY hue. In adult FEMALES the crown & nape are BROWN OR GRAYISH BROWN and the throat & breast are TAN.

Normally these characters are quite distinctive. Occasionally birds are encountered which fall into an "in between" category. These birds should be recorded as "sex unknown" (U) on your banding schedules.

IMMATURES: The sex of immature doves cannot be accurately determined from plumage characteristics until the birds are well along in their post-juvinal molt. Immature birds should be recorded as "sex unknown" (U) except in those cases where the bander has had considerable experience in handling doves and the plumage characters leave no doubt as to the sex of the bird.

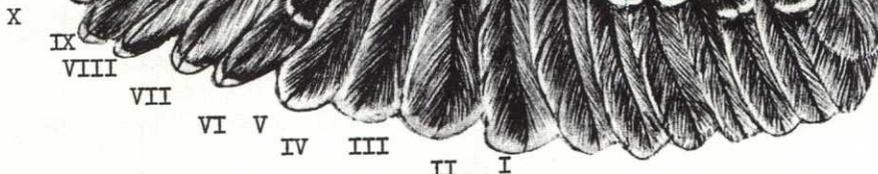
Dec 1, 1965

(over)

AGE DETERMINATIONIMMATURE

Primary Coverts

NOTE: Coverts overlying unmolted primaries are white- or buffy-tipped.

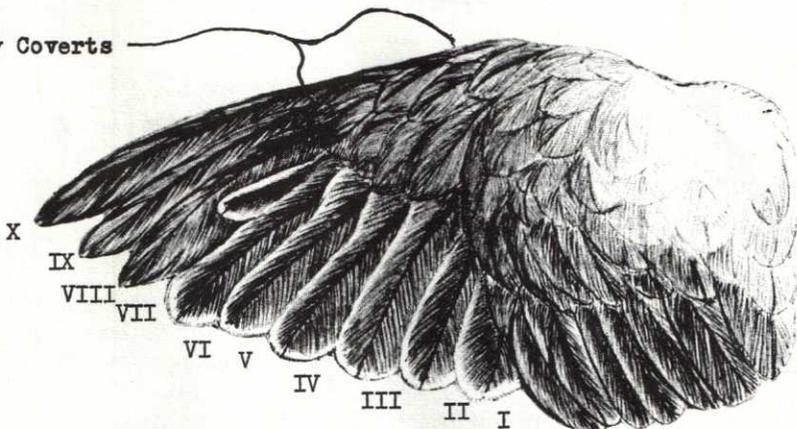


Primaries: I-IV have been molted and replaced. V has been molted and new one is 1/2 grown. VI-X are as yet unmolted; the tips of these feathers are smoother, lighter colored, and less worn than corresponding adult feathers.

ADULT

Primary Coverts

NOTE: Coverts uniform color (not white-tipped)

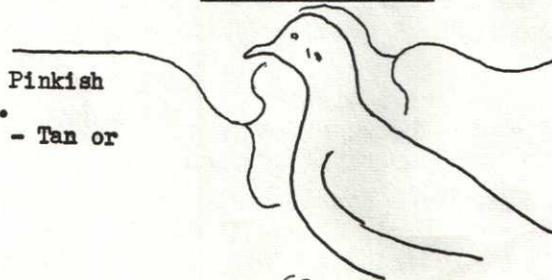


Primaries: I-VI have been molted and replaced. VII has been molted and new feather is 1/2 grown. VIII-X are unmolted and have ragged, worn tips. White border has been worn away.

SEX DETERMINATIONThroat & Breast

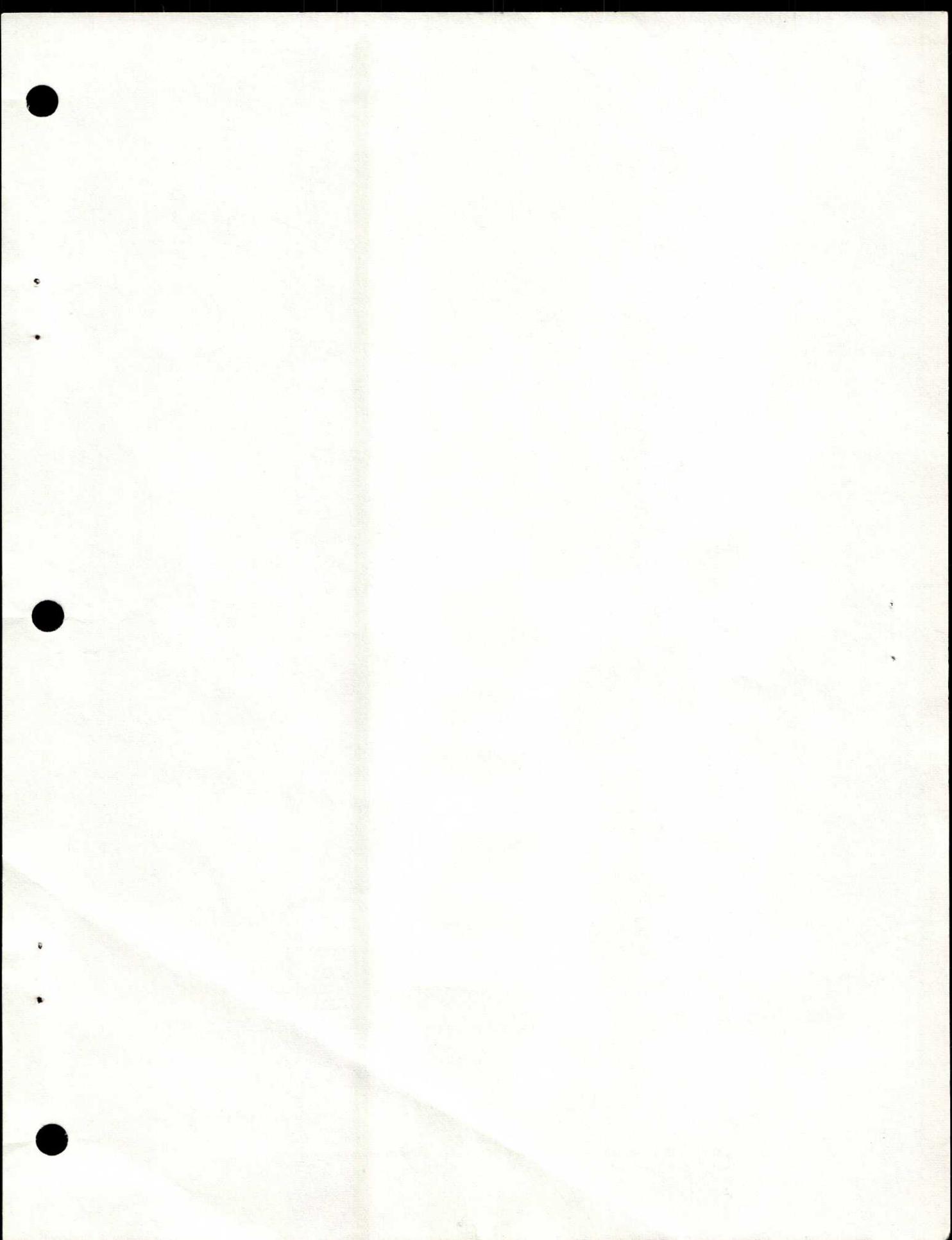
Adult Males - Pinkish or rosy hue.

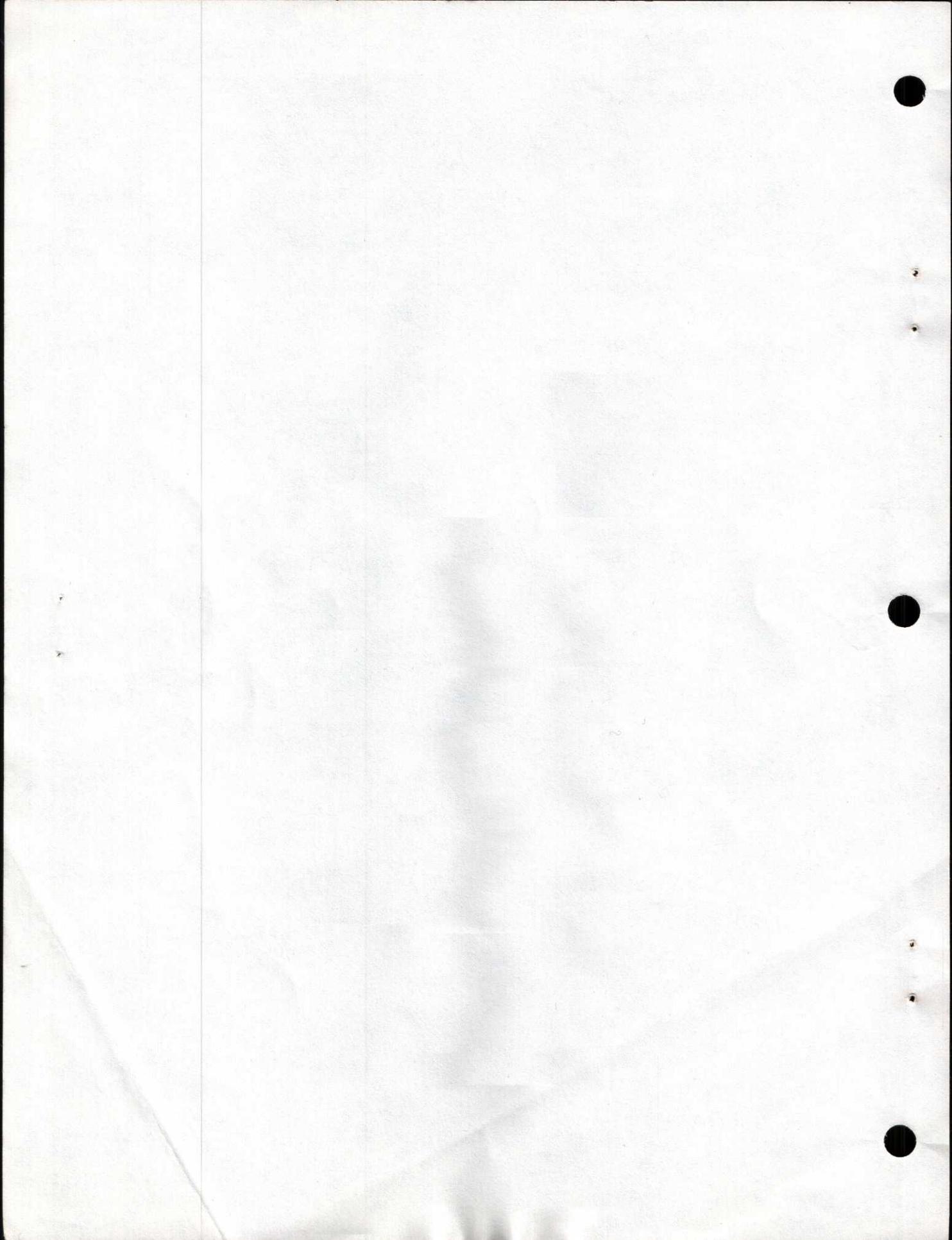
Adult Females - Tan or brown.

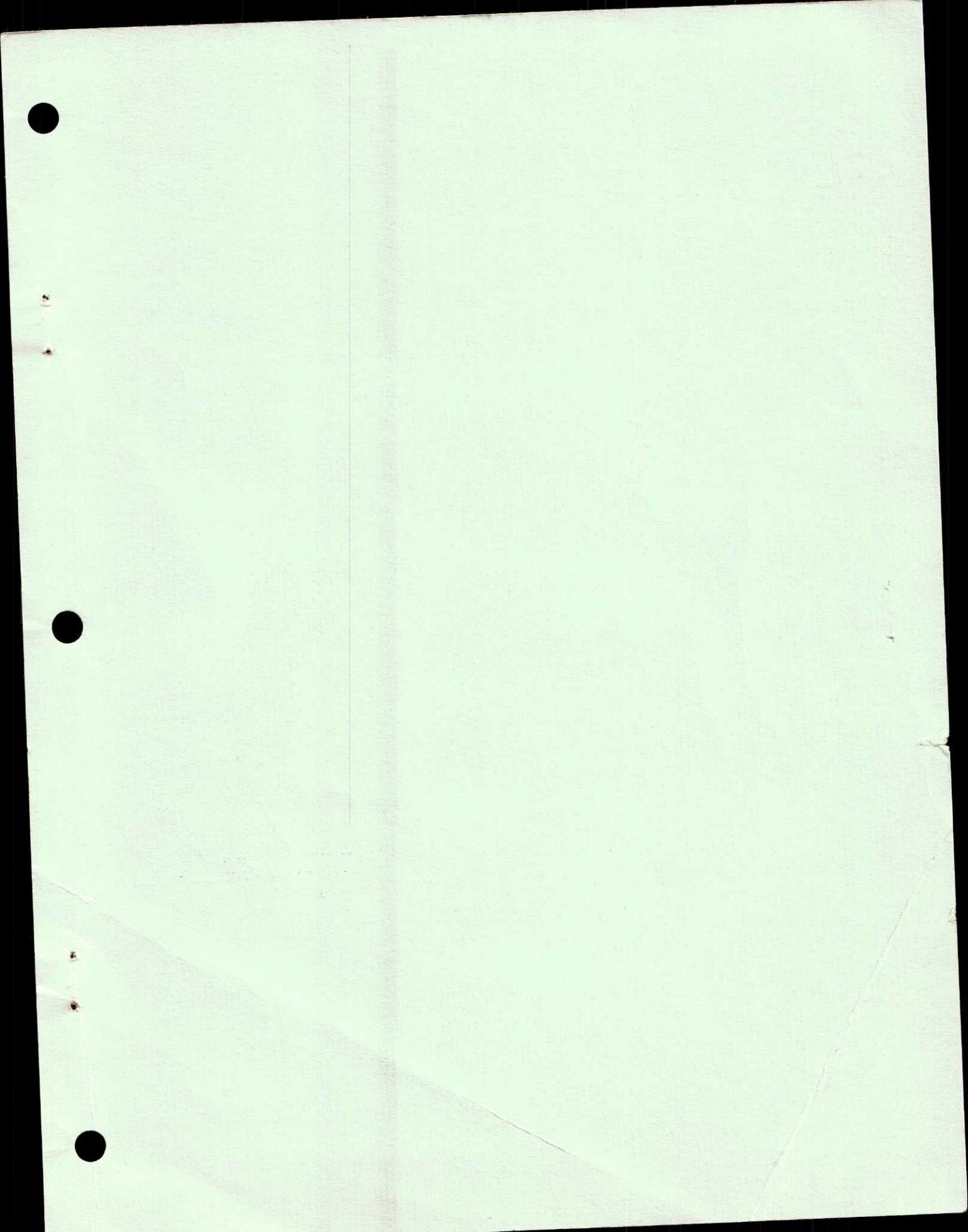
Crown & Nape

Adult Males - Blue or bluish gray.

Adult Females - Brown or brownish gray.







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