

When in use the lower edges of the trap and maze rest upon the ground.

To attract the birds into the trap, a grain bait is scattered about on the ground in the trap, in the maze passage, and a little outside the entrance. The operation of this trap is continuous, making it possible to catch a considerable number of birds at one time.

Bureau of Entomology and Plant Quarantine, United States Department of Agriculture.



SOME INTERESTING RECORDS FROM BIRDS BANDED
AT AVERY ISLAND, RETAKEN DURING THE WINTER
OF 1940-1941

By E. A. McILHENNY

WHEN one has handled yearly as many birds as I have and affixed an identifying metal band to each one over a thirty-year period, the differences in construction of each year's bands (and there are differences prior to 1938) are quite noticeable. I am now referring to No. 6 bands. Each series of bands issued by the Biological Survey, now the Fish and Wildlife Service, has stamped on each band besides the serial number a prefix letter or number, indicating the year of issue.

Prior to 1939, there was a marked yearly difference in the No. 6 Band, or in the metal contained in this particular size, or in its numbering, as put out by the Biological Survey, now the Fish and Wildlife Service. Knowing these differences, it is easy for one to identify No. 6 bands of the different series by their peculiarities.

Bands bearing an identifying prefix are not necessarily all used in the year they were issued. "A" band was issued in 1930, and again in 1934. "B" band was issued in 1931 and 1932; "C" in 1934; "34" in 1934 and 1935, and "38" in 1937 and 1938.

As before stated, these references are all to No. 6 bands, which is the size used on all medium sized wildfowl, such as Coots, Pintails, etc.

"A" band is easily distinguishable by the fact that it is not only much shorter than "B", but is a harder alloy, and susceptible of high polish.

"B" is one of the softest bands yet issued. They were a long, slender band, much longer than "A", and were affixed at my station to migratory wild fowl in 1931 and 1932. I recover more illegible "B" bands than of any other type.

The "C" band again was different. This band is much longer than either "A" or "B", and is also narrower. "C" has worn a little better than "B".

"34" is the shortest and broadest No. 6 band issued up to the year 1934. The numbering on this band is also considerably larger than on any other previously issued band. This band seems to be softer than bands previously issued, as the numbers wear off more rapidly.

"36" and "38" are both the same length as "34", but are somewhat narrower, and are of very much lighter metal, and the numbers are very much smaller. Neither of these bands wore well.

Knowing the differences both in size and material in the different types of bands, I have no difficulty in determining the year the bands were affixed to birds at my station, and by keeping a record of birds from which the illegible bands were removed, it is easy to know, for instance, that a "B" band taken from a male Scaup was put on the bird in 1931 or 1932, but when the band is illegible, it is quite impossible to make a definite statement as to which Scaup, of the many hundreds banded during the time, this particular band was used on. Therefore, it is easy to identify the year the bird was banded, but when the number of the band is illegible, the identical bird cannot be determined.

It is unfortunate that a material cannot be furnished by the Fish and Wildlife Service that would stand up better under the hard wear given the bands by swimming birds.

During the past year, a number of birds were re-trapped bearing old copper bands, on which the numbers and letters were completely obliterated by wear. As none of these bands have been used since 1930, it is evident that we are losing many valuable records by not being able to decipher the numbers on these bands.

I had made a few hundred bands, size No. 6, from stainless steel, and, during 1937 and 1938, attached them to one of the legs of

ducks, on the other leg of which I placed an aluminum band of the then Biological Survey. On re-trapping ducks bearing the two types of bands, I have found that the stainless steel band showed much less wear than the aluminum band, and the lettering, although not so deeply stamped, was entirely legible, while the lettering on the aluminum band was badly worn.

My wild fowl banding station at Avery Island has been in continuous operation for just thirty years, and my banding records go back to January, 1912, or eight years before the Biological Survey took over the supervision of bird banding, which had been begun by the American Bird Banding Society, of which I was an early member.

During the thirty years I have been actively engaged in banding migratory birds, I have trapped and affixed numbered and recorded metal bands on the legs of 286,743 individuals.

Through long experience, I have developed quite an elaborate system of traps for capturing the different species of birds wintering in southern Louisiana. These traps are permanent wire-covered enclosures, some on land and some in water. The traps are baited daily, and the birds removed and banded twice daily. I have working for me a crew of four men who have been trained in this work, and who, through long association with the work, have become very efficient.

When the birds are taken from the traps, they are sorted as to the species, and sex, placed in assembling boxes, and taken to the banding station, where the affixing of the bands and recording is done by me. The system I have developed enables me to band a large number of birds in a short time, for I frequently handle more than five hundred ducks in one hour.

Many birds, but especially migratory wildfowl, return each winter to that section of the south where they made their home during the first winter of life. This homing instinct has been demonstrated by the thousands of birds retaken in my banding traps. I now annually record more than 2,000 retaken at Avery Island which have made one or more migrations north and south after being banded. Of course, each return retrapped is recorded, but only after one complete round trip migration.

For many years, I have retrapped quite a number of banded birds on which the identifying marks on the bands were either completely worn away or so badly worn as to be illegible.

Failure to identify a particular bird, due to a badly worn band, always disappoints me, as I feel a valuable link in the life span of that individual bird has been lost. From time to time, I have sent numbers of these badly worn bands to the Biological Survey, in the hopes they had some means by which the worn numbers could be brought out. Nothing, however, came from their promises to

decipher the bands, so several years ago I ceased saving the worn bands, and after failure to decipher them here, destroyed them.

At the end of the banding season of the winter 1940-1941, I found I had accumulated 106 illegible bands. Remembering that Mr. Frederick C. Lincoln, of the Bureau of Biological Survey, had written me some years ago that there was an acid formula which, if the worn bands were dipped in, would, through macro-etching, often clear and make legible the worn numbers on the metal, I wrote him on March 17, 1941, asking for the formula.

On March 21, 1941, Mr. Lincoln wrote me in part as follows:

“The American Society for Metals recommends several solutions for the macro-etching of aluminum. The one that we have been using is made up as follows:

Hydrofluoric Acid	15 ml.
Hydrochloric Acid	45 ml.
Nitric Acid	15 ml.
Water	25 ml.

“The bands are first cleaned in absolute alcohol, dried, and then immersed in the etching solution for a few seconds. A wash in running water, a dip into alcohol, and a drying of the band completes the operation.”

I at once contacted several druggists in an attempt to have this formula compounded, as I was anxious to try it. It was quite some time before I could induce anyone to put the formula together, but finally got one of the druggists of New Iberia to agree to compound it. Some weeks passed and the prescription was not received, so I telephoned, and was told that, after making up the formula and putting it into a glass bottle, the combined acids had damaged the glass. I then suggested that a second batch be compounded and put into an earthenware jug. This was done and duly delivered to me.

A few days later, I followed instructions and put the mixture in operation, giving the acid bath to one hundred and six illegible bands accumulated during the winter of 1940-1941. All of these bands were made of aluminum or aluminum alloy. Sixty-four of the one hundred and six bands treated were made legible, and forty-two remained illegible, due to their badly worn condition. On many of the bands, the numbers were brought out nicely, while on others, in order to decipher the numbers, it required the use of a magnifying glass and the turning of the band so that a strong light would strike at it different angles, as the light angles frequently made a number legible which, if looked at flat, was illegible.

Many of the bands treated were so badly worn that no part of the number could be deciphered, while on others two or three of the figures could be read, but not the whole number. The acid bath did not help the old copper bands, which was a disappointment, as birds wearing them had been banded prior to 1930, and a decipher-

ing of the copper band numbers would have added some interesting records.

In handling this acid bath for deciphering worn bands, great care must be exercised. The acid is so strong that severe burns result if it touches flesh. It will burn through any fabric. It will destroy glass or metal. After mixing, store in earthenware.

Of the sixty-four bands, the numbers of which were made legible by the acid bath:

1 was put on in 1930	12 were put on in 1934
2 were put on in 1931	6 were put on in 1935
32 were put on in 1932	1 was put on in 1936
9 were put on in 1933	1 was put on in 1937

A complete list of the bands made legible by the acid bath follows:

SERIAL NUMBER	SPECIES	DATE BANDED	DATE RETAKEN
A-585544	Coot	1/19/34	12/30/40
A-586608	Ring Neck Drake	1/26/34	11/16/40
A-586821	Ring Neck Drake	1/31/34	12/12/40
A-586976	Pintail Hen	1/31/34	12/10/40
(1) A-587514	Louisiana Heron	7/13/34	4/14/40
(2) A-658502	Pintail Drake	2/13/30	11/16/40
B-630247	Pintail Drake	12/ 7/31	11/20/40
B-630208	Lesser Scaup Drake	12/ 7/31	12/14/40
B-631283	Lesser Scaup Drake	1/ 1/32	12/16/40
B-631297	Lesser Scaup Drake	1/ 1/32	11/29/40
B-631296	Lesser Scaup Drake	1/ 1/32	12/20/40
B-631411	Lesser Scaup Drake	1/ 1/32	11/28/40
B-631485	Lesser Scaup Drake	1/ 1/32	11/30/40
B-631554	Lesser Scaup Hen	1/ 1/32	11/30/40
B-631284	Lesser Scaup Drake	1/ 1/32	12/16/40
B-631590	Lesser Scaup Hen	1/ 1/32	12/30/40
B-631907	Pintail Drake	1/ 5/32	12/10/40
B-632159	Lesser Scaup Drake	1/ 8/32	12/30/40
B-632287	Lesser Scaup Drake	1/ 8/32	12/ 1/40
B-632359	Lesser Scaup Hen	1/ 8/32	12/15/40
B-632407	Coot	1/ 8/32	12/29/40
B-632368	Lesser Scaup Hen	1/ 8/32	12/16/40
B-632439	Pintail Drake	1/ 8/32	12/18/40
B-632490	Pintail Hen	1/ 8/32	12/16/40
B-632547	Lesser Scaup Drake	1/ 8/32	12/27/40
B-632565	Lesser Scaup Drake	1/ 8/32	12/18/40
(3) B-632574	Lesser Scaup Drake	1/ 8/32	12/ 2/40
B-632576	Lesser Scaup Drake	1/ 8/32	12/ 6/40
B-632653	Lesser Scaup Drake	1/ 8/32	11/20/40
B-632672	Lesser Scaup Hen	1/ 8/32	12/28/40
B-632787	Lesser Scaup Drake	2/ 3/32	12/13/40
B-632964	Lesser Scaup Drake	2/ 3/32	12/ 6/40
B-632982	Lesser Scaup Drake	2/ 3/32	12/ 6/40
B-656062	Pintail Hen	2/ 3/32	12/ 2/40
B-656155	Pintail Drake	2/16/32	12/11/40
B-656854	Lesser Scaup Drake	2/27/32	11/16/40
B-657386	Coot	11/ 9/32	12/ 3/40

	B-657922	Lesser Scaup Hen	11/14/32	12/19/40
(4)	B-696665	Pintail Hen	12/ 4/32	12/11/40
	B-697695	Coot	12/20/32	12/27/40
	B-698327	Coot	1/19/33	11/21/40
	C-606542	Pintail Hen	1/25/33	11/ 3/40
(5)	C-606877	Pintail Drake	1/25/33	11/23/40
	C-607353	Coot	2/16/33	11/ 4/40
(6)	C-607454	Pintail Drake	3/ 4/33	12/17/40
(7)	C-608549	Coot	11/23/33	12/26/40
(8)	C-607600	Pintail Drake	3/ 4/33	11/26/40
	C-608147	Lesser Scaup Drake	11/11/33	11/16/40
	C-608770	Pintail Hen	11/23/33	11/16/40
	34-550753	Pintail Drake	1/ 9/35	11/28/40
	34-550830	Lesser Scaup Drake	1/ 9/35	11/26/40
	34-552352	Ring Neck Hen	2/16/35	12/10/40
(9)	34-547523	Pintail Drake	11/13/34	12/28/40
(10)	34-552446	Pintail Drake	2/ 4/35	12/ 1/40
	34-552630	Pintail Drake	2/21/35	11/17/40
	34-548236	Pintail Hen	11/20/34	11/29/40
	34-548282	Lesser Scaup Drake	11/20/34	12/18/40
(11)	34-552747	Pintail Drake	2/21/35	11/28/40
	34-549119	Lesser Scaup Drake	12/ 6/34	11/20/40
	34-549378	Pintail Drake	12/12/34	12/12/40
	34-549486	Lesser Scaup Hen	12/12/34	11/27/40
	34-549510	Lesser Scaup Drake	12/12/34	12/ 1/40
(12)	36-690279	Coot	12/31/36	1/11/41
	38-630073	Lesser Scaup Drake	12/25/37	12/20/40

Twelve of these retakes are of special interest, as shown by the numbered notes, and a number of them have been recorded as retakes at Avery Island four or more years.

NOTES

- (1) A-587514 This band was so badly worn that it was removed and replaced with 40-644954.
- (2) A-658502 This bird was banded 2/13/30, and shipped on the day banded by express to Moise, Montana, and there liberated.
- (3) B-632574 This bird was retrapped at Avery Island 1/31/35 and killed at Avery Island 12/2/40.
- (4) B-696665 This bird originally wore band A-666073, banded 12/29/30. This band was removed because of its worn condition 12/4/32. This bird was shot in the vicinity of Avery Island 12/11/40.
- (5) C-606877 This bird was banded 1/25/33, and retrapped at Avery Island 12/12/33, 2/21/35, 2/4/39, 12/2/39 and killed in the vicinity of Avery Island 11/23/40.
- (6) C-607454 This bird was originally banded 3/4/33, and shipped on the day banded by express to Cambridge, Maryland, and there liberated. Retrapped at Avery Island on 11/20/34, 12/31/36, 12/25/37, and 12/16/39. Killed in the vicinity of Avery Island 12/17/40.
- (7) C-608549 Banded 11/23/33. Retrapped at Avery Island on 1/25/35, 1/11/36, 4/6/38, and 12/3/38. Killed in the vicinity of Avery Island 12/26/40.

- (8) C-607600 Banded 3/4/33, and shipped on the day banded by express to Voltage, Oregon, and there liberated. Retrapped at Avery Island 12/20/35, 12/5/36, 12/24/38, and killed in the vicinity of Avery Island 11/26/40.
- (9) 34-547523 Banded 11/13/34. Retrapped at Avery Island 11/15/36, 11/13/37, and killed in the vicinity of Avery Island 11/28/40.
- (10) 34-552446 Banded 2/4/35, and shipped the same day banded by express to Berkeley, Calif., and there liberated. Retrapped at Avery Island, La. 2/6/37, 12/16/39, and killed in the vicinity of Avery Island 12/1/40.
- (11) 34-552747 Banded 2/21/35, and shipped same day as banded by express to Cambridge, Maryland, and there liberated. Retrapped at Avery Island 12/23/39. Killed in the vicinity of Avery Island 11/28/40.
- (12) 36-690279 Banded 12/31/36. This bird was retrapped at Avery Island 1/11/41, and band was so badly worn that it was replaced by band 41-616741.

Avery Island, Louisiana.

GENERAL NOTES

A Barn Owl's Record.—Barn Owl B 674404, one of four nestlings banded May 11, 1936 at Chilmark, Marthas Vineyard, Mass., by George D. Eustis, furnishes an interesting bit of life history. This bird, a female, chose Hunt's Point, Bronx, New York City, as a nesting site, and three broods of her young have been banded there by Irving Kassoy. Its mate was banded on May 16, 1938 as 38-644743 and on May 19 the five young were banded. On June 5, 1938, this female was captured and band 38-644737 added. On July 29, 1939 the bird was again caught on its nest and its five young banded. Only about four months later, December 5, 1939, this bird was again caught on its nest and three other young banded. Apparently the male bird was caught only once.

Two broods within six months seems to be quite unusual. I have been able to find only two references to more than one brood a year. Forbush (*Birds of Massachusetts and other New England States*, vol. 2, p. 190) says "One brood yearly, sometimes two, in the south." New York City can hardly be called south. Bendire (*Life Histories of North American Birds*, vol. 1, page 326) gives the following instance: "Mr. F. Stephens informed me that a pair hatched a brood of six young in January, 1885, at St. Isabel, Calif., and that on March 25, the bird was sitting on a second set of eggs." While this was probably the same bird, in the absence of banding it cannot be proved.

Of the thirteen young banded we have as yet heard from only one, 38-644738, of the first-brood, which was found dead on April 29, 1939, at Ambler, Pa., a few miles north of Philadelphia.—MAY THACHER COOKE, U. S. Fish and Wildlife Service, Washington, D. C.

The Age of the Black-capped Chickadee.—In his interesting "Winter Studies of Color-Banded Chickadees" (*Bird-Banding*, vol. XII, pp. 49-67) George J. Wallace concludes that the Chickadee is a "comparatively short-lived species." He seems to base his conclusion on the assumption that the thirteen records of Chickadees known to have lived more than five years, published by me in 1937 (*Bird-Banding*, vol. VIII, pp. 52-65) were all there were in the return files. This series of records represented "only a cursory study of the returns that have been received in the last three years" [1934, 1935, and 1936]. Since the above