

ON SKULLING WITH A HANDLENS

By Frederick S. Schaeffer

It has come to my attention through recent correspondence with several banders, that many banders are "skulling" birds without the use of a handlens or loupe. Despite what some may think, this cannot be done; in fact, even with a magnifying glass it is extremely difficult.

It seems that some banders look at the skin, rather than attempt to look through the skin as is required to determine the extent to which the skull is or is not ossified. A review of ossification as a means to determine age is therefore in order, and I would refer readers to the following publications:-

Miller, Alden H., 1946. A Method of Determining the Age of Live Passerine Birds. Bird Banding 37: 33-35.

Baird, James, 1964. Aging Birds by Skull Ossification. EBBA News: 27(4): 162-163. Also reprinted in EBBA Workshop Manual Vol. III and attached to MTAB 9.

Mr. Baysinger writes on page 4 of MTAB 9: "A general rule-of-thumb is that it should never be attempted without a handlens."

To explore further the motives for these authors to advocate the use of a handlens, I did a study in September 1969 on 25 birds, using two methods. In column "A" below you will find my findings, using the Baird method but without the use of a handlens. In column "B" you will find the correct age for each bird by using the Miller method, consisting of making an incision in the skin of the bird's head. Many ornithologists are using the latter method (but see remarks on this at the close of this article).

Band	Species	"A" (General aspect of skin)	"B"
-065	Catbird	very pinkish, unable to age	HY
-066	"	almost whitish - AHY	HY
-067	"	very red - HY	HY
-068	Towhee	very pink (also gape mark)HY	HY
-070	Catbird	very light, many follicles, unable	HY
-071	"	ditto	HY
-072	Rose-br. Grosbeak	unable to age	HY
-073	Catbird	very pinkish - unable	HY
-074	"	reddish - HY	AHY
-075	Towhee	pinkish (& gape) HY	HY
-076	"	pinkish - HY	HY
-077	Catbird	pinkish - unable	HY
-078	"	unable to determine	HY
-079	Towhee	unable to determine	HY

<u>Band</u>	<u>Species</u>	<u>"A" (General aspect of skin)</u>	<u>"B"</u>
-080	Towhee	unable to determine	HY
-082	Catbird	very pink - HY	HY
-083	"	unable to determine	HY
-085	Towhee	unable to determine	AHY
-086	"	reddish (some gape) - HY	AHY
-087	"	pinkish - HY	AHY

Conclusions:

(a) Out of 11 Catbirds, only two were "skulled" correctly without a handlens. Seven could not be "skulled" without a handlens because I could not look through the skin. Two were actually "skulled" wrong.

(b) Out of eight Towhees, only three were "skulled" correctly without a handlens. Three could not be "skulled", and two were "skulled" wrong.

(c) The Rose-breasted Grosbeak could not be "skulled".

Please note that in none of these cases did I pay much attention to morphological characteristics and this was done on purpose. It should also be noted that the determination of aging via "skulling" is deemed unlikely by Merrill Wood in his new book, in these species.

My results in reference to the Catbirds are particularly interesting because I have actually observed banders trying to age this species by "skulling" without the use of a handlens.

In view of these findings and of works cited above, I strongly urge all banders to use a handlens. I do not advocate the use of Miller's method on a widespread basis, particularly during Operation Recovery with its often less-than-ideal laboratory conditions - besides this, it is quite possible that special permission may be needed to do this because it would in all probability render the bird "experimental" (status-code 6).

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