

not nest on the Alaskan mainland north of the Yukon at least." My experience refutes this, of course, but the fact that this species has a breeding station on this westernmost point, without connecting links between there and the Yukon, is strange. Mr. Outram Bangs (in letter) says of our series of Aleutian Sandpipers: "All of your series are *couesi*, typical except number 8962, which bears a very close resemblance to *A. m. quarta* (Hartert) of Bering Island. This form, however, is said to be non-migratory. Judged by color alone it would pass for *quarta* and it may be a stray wanderer of that well marked form."

I saw other brightly colored individuals at Wales, similar to this example. My attention was first called to them when I shot this specimen and a darker bird, which I took to be a female. On dissection, both proved to be males. It was my intention to make a large series to show the extreme differences in color, but walrus hunting kept me offshore until the nesting season was well advanced. Cape Prince of Wales will prove an interesting field to ornithologists, for many years' work can be done at this place without exhausting the possibilities, and among other things, the variability of these sandpipers should be worth studying. As I understand it, *A. m. quarta* is supposed to be a resident form, but it would seem far more strange for a bird so closely related to the Aleutian Sandpiper to be strictly non-migratory, than for it to wander northward along the Alaskan coast.

SHARP-TAILED SANDPIPER. *Pisobia acuminata*.

Hendee took one specimen of this rare straggler to the Alaskan coast on September 27 on Unalaska Island. It was a young of the year.

Denver, Colorado, June 23, 1925.

WITH THE BIRD BANDERS

Pith and Pathos.—There is always someone to take the joy out of living. Michener's splendid article and graphs analysing a banding season with the Purple Finches were in my hands when Sprot's "Dangers in Bird Banding" came from the editor for my perusal. Since the latter is listed for publication, it seems proper to apply to its inferred conclusions certain tests for soundness.

Unfortunately, in Sprot's article, not a single empiric fact is offered in support. So far as Rowan's article is concerned, I suspect that it came into the mind of every bander to write an indignant reply. On second thought, they probably came to the same conclusion that I did, namely, that his article were best ignored since it merely represented crude mechanics and cruder natural history, which was self condemnatory. The marvel was not that several of Rowan's juncos succumbed, but that any survived when confined in a day-lighted compartment for a continued period after capture.

Unfortunately, too, Sprot's isolation deprives him of personal contact with any group of banders or with any of the "leaders", else he might not consider his own such a unique case of humane understanding. His efforts to provide against distress for the birds is the history of nearly every bander who has any ingenuity whatever, and those who have not have proven themselves quick to adopt any improvements offered.

The number of commendable traps that have been evolved by banders in the last three or four years is spectacular, and no small proportion of them were developed for the birds' comfort. The rest were mainly adaptations for species not theretofore catchable. How these traps escaped the attention of Sprot is not clear.

Bird netting for banding purposes presents insurmountable legal difficulties at the present time, aside from the fact that it involves expense beyond the means of the average bander. I see no reason for believing that it causes less distress to the bird than many traps now in use.

Certain points Sprot makes are emphatically sound:

1. The government sparrow trap is one of the worst, from the birds' standpoint, that has been offered for banding purposes.
2. Trapping for banding purposes should have the undivided attention of the operator in order that birds may be removed as soon as possible after capture.
3. The smaller the trap the better for the bird.
4. Improvement is still possible in trapping methods.
5. His own inventions have been good (but they have been only a few of the many good ones).

But Sprot is entirely wrong when he concludes that we banders "imagine that our methods are all that can be desired" or that we "blindly rush on encouraging others," etc. Many problems have confronted those who have undertaken to promote the banding work. Some, at least, feared, at the beginning, just what Sprot has suddenly discovered (?), that inhumane banders might be numerous and would be hard to suppress.

The desire to see banding activities follow lines that would be *safe for the birds* and *safe for science*, was, frankly, the motive and the only motive I had in volunteering to promote the work in the West. To my great and continuing relief I have found that the recruits to banding come from the ultra humane bird students, those whose instincts abhor cruelties, and whose desire for intimate contact with and study of birds finds a natural outlet through this channel. Conspicuously few experimental or systematic zoologists have actively identified themselves with the work.

In holding banders responsible for the birds that do not return to the traps, Sprot overlooks the incontrovertible fact that Nature foredooms to annual slaughter, through natural causes, the major portion of the current population. When four young reared is the average per pair, 67% of the total population at the end of the breeding season must die within the year, if the population is to remain normal. Obviously the large percentage of "returns" that we are getting come from the remaining 33% destined for survival, and, as obviously, no small proportion of those banded, which do not return, succumb en route in Nature's own destructive program. Nor does it seem strange that, after a round trip involving 4000 miles of travel, a few of the other surviving banded birds should fail to re-register at a spot one foot square.

The fact is, trapping methods have been so refined that the marvel at most stations where trapping is consistently kept up, is not how few but how many and how regularly birds continue to repeat and return. No doubt the location of a station may have a bearing on the number of repeats and returns. Sprot's station is in a line of migration flight where the bulk of his catch (*Zonotrichiae*) are only passing through. We in the southland have *Zonotrichiae* throughout the winter; and our returns, with by no means constant trapping, are 25% to 35% of the total banded the previous year.

As to how much banded birds suffer from the trapping, my own conclusions, based on dissection and on close observation of released birds, are that they are inconvenienced but little. Occasionally I have made specimens of trapped birds for study purposes and have examined them critically with trap damage in mind. The more obstreperous ones had slight bruises, tiny irritational blotches, which must be inevitable with any collision. But bumped birds do not go off and die. The trap bumps can be no more severe than the bumps of combat, common enough at certain seasons.

Times uncountable I have watched released birds, particularly at first when I wanted to know how much distress they suffered. A bird released usually flies to a near perch, flits its tail excitedly (remember, it has had a new adventure the outcome of which it suspected would be disastrous), picks at its band a few times, then settles down for a rest. In a short time it becomes alert, and a few minutes later it resumes its daily routine, adding an occasional pick at its new band. Repetitions reduce the excitement and the need for a rest. I have had birds back in a trap in three minutes. Some species show almost no excitement. Others (Wren-Tits, Titmouses, Orioles) get thoroughly mad.

After four years of rather intimate contact with this problem, I venture the assertion that no bird released at once after trapping, which flies to a perch and later flies away of its own accord, ever succumbs because of trap injuries it has previously received. Never, in my experience, has more than one failed to make the perch. That one had so gorged itself with food after the trap door had closed, that it foundered when released, flying only a few yards.

Will the results to be obtained by banding warrant a certain amount of inconvenience to the birds, with occasional fatalities, mainly from predatory animals? The science of geographical distribution is based upon quantities of occurrence records, no small proportion of which exacted the death penalty from the recorder. But banding leaves the great bulk of the recordees free to complete their life cycle and to make subsequent records. And by banding alone can the routes and manner of migration be solved. The results already achieved would seem to justify the belief that banding will take a constantly increasing part in bird study activities, no matter what angle the latter may take.

Conclusions based on quantitative banding must depend upon successive years of comprehensive data. Banders are no less impatient than are some of their critics (who, strangely, include some experimental and systematic zoologists whose own studies require long years of patient accumulation of data) for the time when adequate analyses are possible. The splendid talent already apparent within the ranks insures ultimate credit.

Yes, band every bird you can. And induce others to band. Bird banders are bird lovers and they instinctively guarantee fair treatment for the birds.

Western Bird Banding Association.—The charter membership roll in the Association will close with 1925. Those in the Western Province not yet members are urged to join at once. Although the first annual meeting was postponed to 1926 by the Council, in order to coincide with the first annual meeting of the Cooper Club, certain plans of organization have been perfected looking toward definite progress in banding work.

Harold Michener, as business manager (418 Elm St., Pasadena, Calif.), will have charge of the membership campaign. All dues should be sent to him. John McB. Robertson (Buena Park, Calif.) will have charge of the annual reports to be filed by members and will compile, as he did this year, the annual census. He proposes, too, to make a special study of the migration of the *Zonotrichia leucophrys* group, as brought out by banding. Any pertinent data should be sent him. Harlan H. Edwards (2311 N. Allen, Altadena, Calif.) is taking charge of the record of bands issued to western banders, as a means of quickly locating the bander when a strange band turns up.

It is hoped, too, that 1926 finances will warrant frequent circularization of the membership, in order that the stimulative gossip of the traps may be passed around.—J. EUGENE LAW, *Altadena, California*.

FROM FIELD AND STUDY

"Priority", a Prophecy.—In reviewing Tegetmeier's reprint of Boddaert's "Table des Planches Enluminées d' Histoire Naturelle", the late Edward Newman, writing in the "Zoologist" of May, 1875 (pp. 4438-9), referred to the "Law of Priority" in words that were prophetic fifty years ago, are true today, and unless scientific names are given the protection of a definite time limit of use, will be equally true fifty years hence.

Mr. Newman, founder and for thirty-two years editor of the "Zoologist", wrote with insight: "I am quite ready to admit the good intention, enterprise, industry,—aye, even the accuracy,—of Mr. Tegetmeier's labours but I fail to see their utility, for supposing ~~and~~ even two dozen names may be changed in deference to Boddaert's authority, as is very possible, it will be a matter of regret, rather than rejoicing, and will cause infinite labour to future compilers and infinite confusion to future students. The 'Law of Priority', as explained by the British Association and worked out by restless nomenclators, is essentially a law of change. The task of name-altering, once begun, can never be ended; it is a pouring of water into vessels that have no bottom; it is the ascending of a tread-wheel that can revolve only on its own axis; it is the laborious manufacture of 'Dissolving Views'."—J. H. FLEMING, *Toronto, Canada, August 11, 1925*.