expression of opinion. We invite relevant discussion.—J. G.

IS EGG-COLLECTING JUSTIFIABLE?

In the May-June *Bird-Lore*, 1906, pages 95 to 98, appears an article, entitled "The Amount of Science in Oology", which deserves careful attention from every egg-collector and oologist. The writer, Professor Thomas H. Montgomery of the University of Texas, arraigns oology *as a science* in a very convincing manner. He handles his subject admirably and we heartily agree with him in a good deal of what he says, tho we as heartily dissent from his repeated implication that the bulk of egg-collecting is useless and should be stopped.

A reply by Mr. Robert P. Sharples, as printed in the September-October issue of *Bird-Lore*, pages 169-170, altho it contains some excellent points, still leaves Professor Montgomery with the best of the argument. Several more points have occurred to us, however, which we hereby submit in defense of the collector and student of bird's eggs and nests.

Even in his contention as to the *quantity* of *science* in oology Professor Montgomery is not quite fair. He admits that there is a little, but dwells on the technicality that the term excludes everything but what relates solely to the colors, shapes, sizes and numbers of eggs. This is misleading, for we all now-a-days use the term oology as including everything pertaining to the eggs, nests, nesting places, and nesting habits of our birds.

Then Professor Montgomery proceeds to belittle the value of whatever facts we can accumulate in this field, partly on the grounds that the field is relatively small, and partly because the published results of the study of oology are in the nature of a bare record of numbers, sizes, descriptions of nest structure, etc.; he says this is not science, but merely a possible preparation. For science begins only when laws are established.

What a juggler of words! He seems to have forgotten for the moment that the vast bulk of the work of embryologists, morphologists, and systematists is a "mere cataloging" of the structures of animals and plants. The work of His in embryology is referred to in comparison with the published descriptions and figures of egg-shells and nests; but we must declare that the distinction appears to us only one of subject matter: both are records of structure.

In belittling the importance of the accumulation of hoards of facts, Professor Montgomery makes a grave error. The majority of present-day scientists (tho perhaps we use the term wrongly!), many of them of eminence, content themselves with a simple accumulation of facts; they have constant reason to deplore the premature deduction of laws (tho *that* is where science begins, according to our learned informant!). The cataloging of a vast array of facts is often necessary to the safe establishment of even a single law in nature. As to the different laws determined, who is as yet in a position to judge anything of their relative values?

We will admit that the field of oology appears to be *small* as compared to the field of say, embryology. But it seems hardly needful to say that this in no way militates against the value of each fact recorded in the smaller field. The only difference resulting is in the relative sizes of the two masses of facts. Some of us can accomplish more, by nature of our capacity for work, in a small field than we can in a large one: we can gain a more adequate comprehension of the smaller subject. Should we, whose ability happens to be limited, be debarred from any participation in the contribution to science, simply because we cannot enter the largest field? The field of oology, in its broader sense, will be found extensive enough to occupy the average investigator for some time. And in spite of Professor Montgomery's over-emphasis of the barrenness of oology, it without any violence to meaning involves the accumulation of data on habits, life history and general ecology, as well as on the mere egg-shell.

After all, we cannot bring ourselves to believe that the quantity of science in oology is the only deciding point as to whether or not egg-collecting is justifiable. We do not maintain that all collectors pursue the subject with the sole purpose of obtaining knowledge. But we do say that the majority, more or less incidentally perhaps, do obtain a considerable amount of information which becomes sooner or later available to Science.

Besides the scientific aspect of collecting, no matter what its valuation, there is the educational feature so prominent in the development of many individuals. Many an advanced investigator along more important and practical lines received his early training in accuracy and method thru securing and arranging his collection of eggs. We can name at least a dozen eminent men of science who have declared to us that they got their first interest in things of Nature thru collecting birds' eggs. We wonder if Professor Montgomery himself did not get his start in this way, too!

The boy may find far worse play-time employment than in hunting the fields for a new bird, especially when he puts in his spare time at home studying his finds. Which is of most worth, a few bird skins and eggs, or A MAN? The educational value of egg-collecting is to our minds preeminent.

Then there is the recreative phase which is not to be disparaged; and the pleasure to be derived from this pursuit. We must confess that we have gotten more complete satisfaction, in other words *happiness*, out of one vacation trip into the mountains after rare birds and eggs than out of our two years of University work in embryology! The tired business man who takes a week's vacation in the spring, finds in oology a most restful pursuit. The mind-worn school-teacher, and we know several such, forgets all his troubles in a June jaunt into avian haunts. Both take in a few specimens, and about these cluster woodsy memories which serve to refresh an evening hour now and then during the long work-a-day season. There is an esthetic tinge which only one who has "been there" can appreciate.

Because any one person fails to derive pleasure from a certain pursuit, it is not incumbent upon him to decry that pursuit as followed by anyone else, *unless* it involves an infringement of the rights of others. Let us be tolerant of one another's peculiarities.

We know of some very despicable cases of egg-hoggishness. *Some* egg-collecting is absolutely useless from any standpoint, and that sort we condemn. No *reasonable* collector will pursue any of our native animals to the verge of extermination. We believe that moderate collecting will not work diminution in the numbers of any of our birds. We believe in the *temperate* collecting of anything which results in added happiness to the individual, just so no one else is directly inconvenienced thereby. Such an occupation becomes all the more commendable when it results in the addition of reliable information to our sum total of scientific knowledge.—J. G.

RECORD CRITERIA

In Mr. William Brewster's admirable work just published on "The Birds of the Cambridge Region of Massachusetts," we find in the preface a statement of principles which deserve the widest possible recognition by serious bird students. We have ourselves intended to express similar views in these columns. But now that we have them from so eminent an authority, and so distinctly stated, we take the liberty of quoting them verbatim. These sentiments should be taken to heart by the author of every proposed local list or record. Publication of any sort of information intended to be of scientific value is a serious step, and is not to be taken lightly. It is very easy to foist upon the science of ornithology undesirable, not to say erroneous, literature.

Mr. Brewster says:—"My early training and experience have led me to believe that—with certain exceptions about to be specified—the occurrence of birds in localities or regions lying outside their known habitats should not be regarded as definitely established until actual specimens have been taken and afterwards determined by competent authorities. No doubt it is becoming more and more difficult to live up to this rule because of the ever increasing and, in the main, wholesome, popular feeling against the killing of birds for whatever purpose. Nevertheless I cannot admit that mere observation of living birds met with in localities where they do not properly belong, or where they have not been ascertained to occasionally appear, should often be considered as establishing anything more than possible or probable instances of occurrence—according to the weight and character of the evidence.

"Exceptions to the rule may and indeed *should* be made in the cases of species which, like the Turkey Vulture, the Swallow-tailed Kite, and the Cardinal, are easily recognized at a distance and which are reported by persons known to have had previous familiarity with the birds in life. Sight identifications of species somewhat less distinctly characterized than those just mentioned, if made under favorable conditions by observers of long field experience and tried reliability, may also sometimes be accepted with entire confidence. But on no authority, however good, should a mere field observation of any bird that is really difficult to identify, be taken as establishing an important primal record.

"These principles, which, in my opinion, should govern the *makers* as well as compilers of all local records, were formerly endorsed, and also followed in the main, by most ornithologists. Of late they have been frequently disregarded, especially by the younger generations of bird lovers and students. I have endeavored to apply them consistently and firmly—yet at the same time tolerantly—in dealing with the records considered in the present paper. If some of my rulings appear arbitrary, it must be remembered that it is not always possible to explain the reasons which cause one to look askance at the testimony of certain observers while accepting that of others with entire confidence. It goes without saying that personal considerations—whether of friendship or the reverse—should never be allowed to influence the judgment of any writer on scientific subjects, but his personal knowledge of men and their methods not only does but *should* exert such influence. Moreover there is often internal evidence in printed testimony—perhaps no more tangible than that to be gained by what is called 'reading between the lines'—that leads one irresistibly, and, as a rule, quite safely, to adopt conclusions which cannot always be logically justified or consistently explained."—J. G.

WHY SHOULD IT HAVE BEEN PRINTED?

In number 56 of *The Wilson Bulletin* (September, 1906) occurs an article entitled "Common Birds of Whittier, California," which excites our severe criticism. In this article appears a half page of introductory matter in which the author states the list following to have been derived from notes taken between November 7, 1905, and May 7, 1906—a period of seven months. And yet the list is divided into "Residents," "Winter Visitants," "Summer Residents," and "Transients"! The author, by the way, is very evidently an "easterner" visiting southern California for the winter. As far as we know, not a specimen was secured to verify the determinations. The list is the main part of the paper, occupying nearly four pages, and embracing no less than ninety-two species. Only one of these, "Numenius sp?", is queried, and we are led to believe that there can be absolutely no doubt as to the identity of each of the other ninety-one species enumerated. What galls us most is that the list is couched in full scientific form, containing both scientific and common names and hence each species must be quoted in our synonymy. These will tax our printer's supply of question marks!.

We have quoted elsewhere Mr. Brewster's remarks regarding records, and these are extremely apropos in the present instance.

The article in question is poorly edited in several particulars; for one thing there are altogether too many typographical errors. We would em-