

The Proposed Registry for Nesting Data on Neotropical Birds

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Peakall (*E.B.B.A. News* 34:189-190, 1971) mentions seven breeding bird surveys or nest record schemes operating in the United States, and Erskine (*Can. Field Nat.* 85:3-11, 1971) discusses a similar program operating for Canada. In view of the great diversity of the Neotropical avifauna it is disheartening to note that no systematic program for recording data on reproduction has been put into operation. Except for the relatively small proportion of species which have been subjected to special study by ornithologists, notably Alexander Skutch (numerous publications of life histories), and a number of common or conspicuous species, relatively little is known about the breeding biology of these birds. In fact, although more than 2500 species of birds are known from South America and tropical Middle America it is quite safe to say that for about half of these species the nest remains unknown or at least unrecorded in the literature. In North America only the Marbled Murrelet shares that distinction.

Many faunal studies and oological studies have been published on South American birds, but for the most part the data reported therein is of limited value. Schoenwetter's "Handbuch der Oologie" (Akademie-Verlag, Berlin, 1960*et seq.*) gives descriptions of eggs but little information on specific locality, date, or clutch size. Of the thousand or more species for which the nest has been reported, many of the cases represent only one or a few observations and some are no doubt based on misidentifications. For the other species data is inadequate and special information on nest placement, habitat, relation of nesting to rainy season, brood parasitism, etc., is rarely given. One could elaborate other benefits of systematic recording of nesting data but the rationale for such systems is already well documented by the establishment of such record programs in North America and Europe.

I propose that we begin now to record and preserve such data, and since I have collected data on several hundred nests observed by myself and others, and have culled the literature and filed nest information on several groups of neotropical birds. I offer to serve to collect and curate this information.

A nesting data registry for Neotropical Birds differs in several crucial respects from the

schemes which exist in North America, and one of these differences even makes me hesitant to establish such a registry. Most of the data reported at first will likely come from individuals who might be relatively new to neotropical bird study or who might be considered "birding tourists," that is people visiting the Neotropics for the purpose of seeing new and exotic birds. Very few neotropical regions have been extensively studied and there are few useful guides to field identification, and relatively few adequate faunal lists. Familiarity with these birds is gained slowly and the identification of neotropical birds is necessarily a tedious and to some degree uncertain process for any newcomer to the avifauna. For most of us there will be serious identification problems with many of the neotropical groups, particularly those unfamiliar endemic families or those species which are secretive denizens of dense vegetation. Many of the species can only be identified in the hand when a collection of museum specimens of similar species is available, and this is not the way the average person works on a visit to the Neotropics. Of necessity one tends to identify birds on process of elimination and there is a great temptation to identify birds on the basis of supposed range. Many published ranges are generalizations if not actually inaccurate, and major real and apparent range extensions, not to mention new additions to national bird lists are reported frequently. Therefore it is inevitable that misidentifications will be made, thus rendering reports quite misleading to a compiler of biological information. For example I may see a little brown bird which I identify as species A because it is the only bird of that sort recorded in country A. But it would come as no surprise if the extremely similar species B is found to occur in country A and in retrospect I would have no way of determining which species I had observed. In many cases only collecting the parent bird and nest could provide an acceptable record.

This difficulty is very familiar to all amateur and professional bird students who have thrust themselves into an unfamiliar neotropical avifauna. These difficulties also allow the possi-

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bility that a great number of reports based on misidentifications will be incorporated into the registry and that the confusion generated will offset any benefit. For example, the case of the mysterious black eggs collected in various parts of northern South America and attributed apparently in error to a blue honeycreeper (genus, *Cyanerpes*) by a series of authors, is a case in point of how a record based on an initial misidentification can be perpetuated in scientific literature (Eisenmann, *Auk* 70:362-3, 1953). Obviously I feel that even with this major shortcoming a registry will be an asset. If nothing else one can refer to the registry for information on which species have never had their nests reported.

Another shortcoming of nesting reports from the Neotropics will be that of inadequate visits to the nest. The visitor may find a nest, record its contents, but never revisit it. Thus it would not even be possible to say whether the observed clutch-size represented a complete or incomplete clutch, and the record might be of relatively little value. Such information as hatching or fledging success would not be forthcoming. It is, however, much easier to reject such incomplete records when one has abundant information than when one has none, and at present even single-visit reports will provide useful information on nesting season, habitat preference, nest location, etc. Perhaps the knowledge that ones observations, even if not immediately published, will be preserved and incorporated with many other records, will stimulate the bird student to take the time to obtain additional information on the same nest. Similarly the existence of a Neotropical Nesting Registry will provide the observer with a goal that will stimulate the recording of data describing the nest and its situation.

In submitting nest records to the Neotropical Registry it is important that the observer indicate in a paragraph how the species of nesting bird was identified, and whether it was collected, photographed, determined by elimination, or only provisionally identified. A statement of probable identification may eventually prove quite valuable, even if it only allows determination of the bird to the genus level. It would be appropriate to act as if one had observed an unusual bird on a Christmas Bird Count and were writing supporting details to convince the editor of the validity of the sighting. Thus the experience of the observer with the species would be indicated, as well as with other similar species which the observer had considered, and the basis for eliminating these species. Such information would be filed in the registry with the observation, and would allow any future compiler to

evaluate the identification and accept or reject it.

Such a procedure will provide future bird students with a substantial file of data while requiring them to exercise judgment regarding the validity of each report. This may seem unscientific, but it is in no way different from any other compilation of observational data where the scientists must be well aware of the possible sources of error associated with each observation. This is true even when the observations are made under rigidly controlled experimental situations, but obviously with Neotropical birds the sources of error and consequent uncertainty are much greater. This registry will be a useful repository for records which observers might not take the time to publish, and it will preserve many records which are both valid and valuable but which in the absence of collected specimens would not be accepted for publication.

The above considerations refer mainly to reports of previously unknown nests or nests of rare species or of species out-of-range, but probably a more important aspect of the Nest Registry is compilation of data on common species such as bananaquits, kiskadees, and Blue-gray Tanagers. Unless one is studying a particular species it is unlikely that enough nests would be found for any species to be meaningful. The compilation of reports from many observers scattered over different parts of the breeding season and different parts of the Neotropics may provide much more useful information. On a trip to the Neotropics during the breeding season most observers find a few nests, and a few minutes taken to write down appropriate data would indeed be a worthwhile contribution to avian biology.

Even if all avifaunal students were to report their nest records to the registry the volume of the registry would swell slowly compared to the registries of North American birds. However, it is obvious that such information will have to be tabulated and eventually punched into a computer system, preferably one that is compatible with systems already in existence. Contributions to the registry should follow the pattern established by the North American Nest Record Card Program of Cornell University's Laboratory of Ornithology with respect to the type of data to be included. Because more details are needed regarding the Neotropical observations the use of cards is probably not suitable. Moreover, for colonial birds where one may obtain data on a few hundred nests, use of a single card per nest proves impractical.

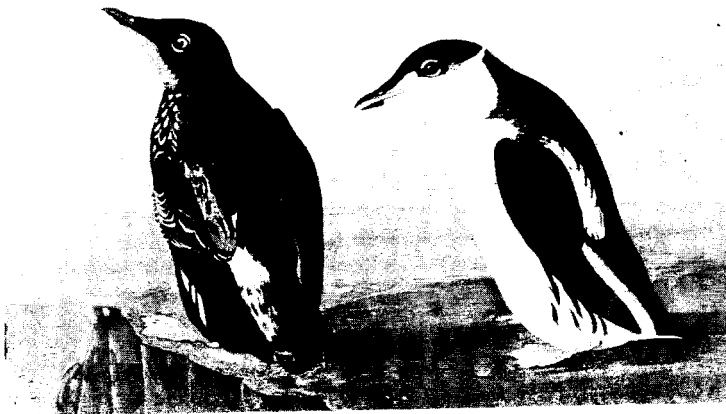
Additional data which would be very valuable to the Neotropical Registry involves climate and certain aspects of habitat. In the Neotropics where meteorological stations are relatively sparse, nest reports preferably should include some climatologic information, such as the timing of the rainy season in a particular year. Mention of the onset of rains is particularly important since for many species nesting is triggered by arrival of the rains. Onset, duration, and amount of precipitation may differ annually and an estimate of these factors would be beneficial. Moreover, even relatively short distances in the Neotropics may be associated with major climatic differences. Thus the rainy season in a choice birding locality may be several months out-of-phase with the rainy season at the meteorologic station in the major city just 100 miles away over a mountain range.

South America is abundantly blessed with San Joses, Santa Marias, Cerro Blancos and Rio Negros, and many of the names are local and are not found in atlases. The province or department of the country should always be included, as well as distance to a nearby major city or other landmark. Time taken to check, verify, and record latitude and longitude will greatly enhance the value of reports. Similarly the crucial factor of altitude, often overlooked by the casual visitor, should be determined or estimated in some way and reported.

A great many terms have been used to describe tropical habitats and vegetation, so a description

or a reference that explains the terms used by the reporter would be essential. The habitat description should be as thorough as time will allow, for even though we take habitats names for granted in North America, too little is known about ecology in the Neotropics. Also such factors as distance of nest from water or its position, not merely in height, but also in relation to the various canopies or strata of tropical forests are important. Care taken in defining habitat more precisely, greatly enhances ones appreciation of avian ecology and also the value of one's records.

I request that anyone who has read this far and would like to contribute records to the Registry organize their material and send it to me at the American Museum of Natural History, Department of Ornithology, New York, New York 10024. I will be pleased to accept, at least initially, records from Central and South America as well as the West Indies, although as the volume swells it may be necessary for other workers to take over certain segments of this vast area. I refrain from suggesting any specific format, but legibility is obviously highly desirable. As far as possible I will acknowledge all reports received, and I will begin to organize the information and make it accessible to bird students. Any suggestions from contributors or users will of course be much appreciated. I greatly appreciate the advice and criticisms this proposal has received from Eugene Eisenmann and Wesley E. Lanyon.



Although numerous letters were received, many from school children who were misled by inaccurate press reports no bona fide claimant to the \$100 award (*AFN* 24: 654) for the first description with pictures of the nest of the Marbled Murrelet was submitted during the year. Color transparencies of purported nestings

proved to be of other species. Reports of adult birds seen and heard inland in the presumed breeding range during nesting season were many, but no one managed to climb that elusive tree and/or cliff to locate a nesting pair. The award still stands; let us hope that it will be claimed during 1972.