

Presented with a sizable grasshopper, she seized it by the head, pinched and shook it vigorously until the body was shaken loose. She ate the head, then picked up the insect by a hind leg and shook until the body fell off. She discarded that leg and got rid of the second in the same manner, sometimes she would also get rid of the small legs. She then took hold of the wings and shook them loose and, finally, with an effort, swallowed the body. With smaller grasshoppers she often ate the body with the wings and some of the legs.

On Sept. 27 and 28 we measured and counted all the food items. In one day she ate 11 grasshoppers measuring from 0.6 to 1.0 inches, 1 meal beetle, and 21 mealworms, averaging an inch. Only once during this day did she seem fed to repletion and cease her tireless hopping back and forth in her cage. (She was not trying to get out, for she much preferred her cage with its many perches to any other place on the porch.) In 5 hours she deposited 50 droppings. Twice during the other test day she was thoroughly filled; at 10:45 A.M. after 13 grasshoppers she preened herself and ignored food for a time. After 16 more she even napped a bit at 5:20 P.M. Her total was 32 grasshoppers, averaging 0.9 inches (23 mm.); each day she had eaten over 2 feet of insects.

On Oct. 17 we gave the Meadowlark only grasshoppers, although he was able to find some scattered puppy meal in his cage; he ate 32, ranging from 0.5 to 1.2 inches, averaging 0.9 inches, and he ate the legs in every case. The Meadowlark weighed 105 grams, nearly 10 times the probable weight of the Black and White Warbler. (Dr. J. Van Tyne gave me 4 weights of fall females of this species; they ranged from 10.5 to 11.5 grams, averaging 11.0.) Three feeding tests in early November showed that he ate about 18% of his weight (of dog food, puppy meal, and insects), whereas the Warbler probably ate about 80% of her weight each day—some 9 grams of grasshoppers. As a rule, the smaller the bird, the more proportionally it eats. Moreover, the Warbler was very active, the Meadowlark inactive. When we consider the small size of most of the insects taken in nature by Warblers, it is no wonder that these little birds must be ever on the move seeking nourishment.—MARGARET AND CONSTANCE NICE, 5725 Harper Avenue, Chicago 37, Illinois.

ON THE NAMING OF BIRDS

Recently we have read a good deal about the common or English names of birds. Some writers emphasize the need of giving each species an English name invented—where necessary—according to certain “simple and logical guiding principles” (Eisenmann and Poor, 1946, *Wilson Bull.*, 58: 210–215). Others contend that English names are of minor importance; that those already existing, even where manifestly unsatisfactory, are good enough for the slight purposes they serve; and that we can do no better than to agree to conserve those already in use (Griscom, 1947, *Wilson Bull.*, 59: 131–138).

First, why must we have English names? Are not the Latinized binomials or trinomials all we need in studying birds? There seems to be a widespread belief that vernacular names are easier to remember than Latinized names, that their use makes bird study simpler and more attractive to amateurs. My own experience is that in some instances the English name, in others the Latin binomial, sticks the more tenaciously in my mind. Although Blackburnian Warbler is admittedly a not particularly appropriate name, I still find it easier to remember than *Dendroica fusca*—doubtless because a bird so glowing as the adult male can not properly be called ‘fuscous’, whereas the 2 words that compose the proper name ‘Blackburn’ are suggestive of the warbler’s vivid plumage. But I find that *Terenotriccus erythurus* comes more readily to mind than the book-name Fulvous-throated Flycatcher, because the ruddy tail which gives its specific name to this little bird of tropical America is far more prominent than its fulvous throat. Each man’s memory forms its own associations, and no two of us remember in precisely the same way. But if the Latin names were not changed with such disconcerting frequency that they are far less stable than the English names, I should say that the latter

were not so much easier to remember that we should be justified in taking great pains to invent them. After all, their existence merely increases the burden on our memory, for every earnest student of birds learns the Latin as well as the English nomenclature of his local avifauna.

There are other and deeper reasons why our birds should have names in the living language we speak and write. Ornithology consists of far more than classification and the making of faunal lists—for this the technical terminology would be adequate. Our experiences with birds are manifold and complex, factual and emotional. We are impelled to speak and write of them in our mother tongue; to do so with ease, grace and grammatical correctness, it is indispensable that we have names for them in our own language. English and Latin differ so profoundly in word order and mode of pluralization that we can hardly write a sentence containing a Latin binomial without either making a clumsy circumlocution or committing a grammatical error. "I saw two Summer Tanagers" is a sentence at once simple, natural and correct. How would we state this fact if we lacked an English name for the bird? "I saw two *Pirangae rubrae*" would be decried as pedantry; but "I saw two *Piranga rubras*" is an intolerable solecism. "I saw two individuals of *Piranga rubra*" is formally correct but clumsily long. Most of us would probably evade the issue by saying "I saw two *Piranga rubra*"; but this is doubtfully admissible. The Latin name of a species should probably be considered either as a collective noun or an abstract noun, designating not a particular individual but a concept, a 'universal'. I believe that it is as incorrect to say that "I saw a *Piranga rubra*" as to say "I saw a mankind" when referring to a particular man, or "I saw a vegetation" when designating an individual plant. At all events, the grammar of both the English and the Latin languages forbids us, except in rare instances, to use nouns in both singular and plural without change of termination.

Another grave difficulty in the use of scientific names is that we are not sure how to pronounce them. Theoretically they should be pronounced as Romans of the classic period would have spoken them; but although there are systems for the pronunciation of Latin words, these are at variance, and without actual phonographic records we can only surmise the values which a people long extinct gave to the words and syllables preserved for us in written documents. Having lived long in Spanish-speaking countries, I tend to accent the scientific names of birds according to the rules for pronouncing Spanish, which is perhaps as close to classic Latin as any living tongue. But when occasionally I meet my colleagues, they do not always understand my pronunciation of Latin binomials; and I often have difficulty in following them when they use names perfectly familiar to me in print.

Admitting the desirability of having names for the birds in our mother tongue, there still remains the question of how we should go about selecting or creating them. Should they be, as some have suggested, made to order, standardized by committees, and established by fiat, as the Latin names are? So far as we know, no living language nor any important part of any language has been created in this fashion. If our names for birds are to become a true and vital part of our mother tongue, they must be subject to the same laws of genesis, survival and decay as the other words which make up the language.

Inexactness and lack of logicity does not trouble us in names once they have become so thoroughly familiar that we have forgotten the misconception in which they originated. We do not today hesitate to use 'turkey', 'Muscovy' duck, 'Irish' potato, or 'guinea pig' because these organisms of New World origin have, like so many others, been wrongly attributed to the Old World. Often a name appropriate to one member of a group of birds is no longer descriptive when applied to related species. Although the original redstart is a thrush and not a wood warbler, I do not believe that anyone would wish to change the designation of our American Redstart, which like the European bird of that name bears a color approaching red on its tail: the word is etymologically if not taxonomically appropriate. Yet when *Setophaga picta*, by virtue of its relationship to *Setophaga ruticilla* is likewise called a redstart,

the name ceases to be descriptive of its black and white tail; and when extended to members of the related Neotropical genus *Myioborus*, it is still wider of the mark. We should rebel against giving the name 'red-tail' to warblers with black and white tails, but since the meaning of the equivalent 'redstart' is not so obvious to us, we apply it with no feeling of impropriety. Likewise 'nightingale-thrush', very aptly applied to the brownish, semi-terrestrial *Catharus melpomene*, is far less appropriate for the blackish, spotted-breasted members of this genus. Again I would let the nomenclature stand as it is. I have never known any man called Smith or Tanner to change his surname because he no longer follows the ancestral occupation. When a name becomes just a name—a sound of forgotten primary meaning associated with an object or an idea—it has reached the ultimate stage in the formation of language.

The vocabulary of ornithology, like that of other sections of our language, should be free to grow and change. Who are the people to be responsible for this growth? The people who pay attention to birds—professional and amateur ornithologists, bird-lovers of all degrees—have made and are making the language of ornithology; they must be free to modify and improve it by the natural processes involved in the development and change of language. The English names of our birds are almost universally admitted to be unsatisfactory in many instances. To those most intimately associated with any bird, a new designation will now and then be more or less spontaneously suggested, whether by voice, or habits, or some feature of coloration or structure. The originator of such a name should by all means use it, in the beginning perhaps in conversation with friends of kindred interests, later in published writings, where first it must march timidly, shielded by quotation marks, although soon it may be strong enough to stand boldly among its compeers without apologies. The editors of ornithological publications must use their judgment in admitting a new name to their pages, just as the editors of literary magazines must employ discretion in allowing the use of words not yet included in the standard dictionaries. If the bird's new name is better than the one already in general use—if it is easier to remember, more 'natural', more descriptive—it will almost surely in the ordinary course of events supplant the older term; just as 'bobolink' has replaced 'ortolan' as the common name of *Dolichonyx oryzivorus*. Perhaps a new name based upon behavior or habitat will not be strictly applicable to the species in all portions of an extended range, but I do not believe that it should for this reason be rejected if otherwise good. A bird's English name consists of at most three or four words, and we must not expect so small a number of adjectives and substantives to tell the whole story of its appearance, habits and range!

If we accept the contention that the 'common' names of birds should be as far as possible of spontaneous origin and free, untrammelled growth, like the other departments of a living language, what should be the function of a 'committee on nomenclature' in regard to them? I believe that such a committee should treat the English names of birds as the makers of dictionaries deal with the language as a whole. The dictionary-maker does not attempt to create the language; his job is to discover and record the generally accepted usage in writing and speech. Yet it is inevitable that the judgments passed by the editors of a widely used dictionary strongly influence subsequent usage. So the 'committee on nomenclature' should list the most generally used name of each of the birds within the area it treats. If several names are in common use, I see no reason why it should not record them all, perhaps indicating preference for that most generally employed or otherwise most suitable, but not neglecting to include others which hold a place in the common speech of ornithologists, and may at last outlive the one currently preferred. If no English name is available for a certain bird, the space for it may well be left blank, as a challenge to some alert ornithologist to become so thoroughly familiar with the bird that a name spontaneously springs up in his mind. By such procedures the names of birds would be treated as living, plastic language, rather than an aggregation of book names fixed by fiat. In countries like England and most of the United States where men have long taken a pointed interest in birds, their names even if free to

change would probably do so slowly, at about the same rate as the English language as a whole changes. But if English-speaking ornithologists should turn their attention in numbers to a region like Amazonia or the high Andes, we should expect a host of new names to appear, just as happens in any science or art which is rapidly expanding or changing.

To expect a 'committee on nomenclature' to do more than list the English names currently available and express an opinion as to the best usage, is to ask too much. The most conspicuous result of past attempts to manufacture names in large quantities is a score of clumsy and inept designations. Robert Ridgway, who in preparing his great work on 'The Birds of North and Middle America' tried to invent English names for every species and subspecies not already so-named—that is, for a large part of the vast avifauna of México, Central America and the Antilles—complained of the difficulty of the task and the virtual impossibility of devising satisfactory appellations for a long array of slightly differing objects. Many of his names, especially those derived from distinguishing features of coloration or form, are felicitous and will probably endure; but perhaps the majority are forced creations which await only some more apt combination of words or letters to supersede them. A very large proportion of the 'English' names originated by Ridgway contain the names of persons or political divisions, or are merely the sesquipedalian generic term preceded by an English adjective.

If faced with the problem of inventing a name for a bird, the substantive part of which must be, let us say, 'toucan' or 'swallow', it is most helpful to have before one specimens or pictures of all the known toucans or swallows, and to try to pick a character in which the species to be named differs from all the others which bear the same substantive. If only one species of swallow has a pink throat, let us by all means call it 'Pink-throated Swallow'. Unfortunately, in many groups of birds designated by the same substantive, it is impossible to find a unique character in which a given species differs from all related forms. More often related species are distinguished by different combinations of characters.

One thing which I do believe we are justified in requesting of a 'committee on nomenclature' is that it designate an English name to be used for each species, in all its races. I think that it would be fair to ask them to do this only in cases where such designation would entail no more than the selection of the most appropriate among names already in use for the subspecies—this should take care of most if not all of the birds of America north of México. To avoid forced inventions, it seems best to use the name of the nominate race as the species name wherever it lends itself to such use. When this name does not adapt itself to combinations in forming the names of subspecies, then the name of a race other than the nominate one might be selected as the species name; and in a few instances preference might be given to the present name of the most widely distributed and familiar subspecies, even if this is not the nominate form. I think it a wise suggestion that only subspecies recognizable in the field with reasonable certainty be given English designations. Witmer Stone (1935, *Auk*, 52: 31-39) advocated that in general forms readily distinguished be given specific rank; this would greatly simplify the matter of English nomenclature, but would hardly be acceptable to modern systematists.

In conclusion, I would emphasize again the fact that the Latinized binomial, or now very commonly trinomial, names of organisms are not language, do not follow the laws of the origin and evolution of language, and can never quite satisfy those who would have genuine names for the things they know, love, talk and write about. I do not imply by this statement that binomials and trinomials are not useful. They are immensely useful as a means of expressing in brief compass our notions of the relationships of organisms, and of referring each species to an original description and, where possible, to a type specimen. But precisely because they are called upon to express relationships of the former kind they are incapacitated for serving to express relationship of another kind—that is, the association of a particular sound with a definite object or idea. For it is obvious that our concepts of biological affinity

may change without altering our association of sound with object. Except that it might be more difficult to remember, a system of serial numbers and letters would be as useful as the current biological nomenclature in indicating these supposed genetic relationships and in referring to published descriptions and the specimens upon which they are based. Because of constantly changing conceptions of relationship, and because of the tyrannous working of the law of priority coupled with shifting interpretations of inadequate descriptions and figures published in the infancy of ornithology, scientific names are changed with a disconcerting suddenness and abruptness which never happens in natural language. Even if the English names of birds are not fixed by fiat but permitted to change and evolve in the way of all living speech, we may expect that they will prove more stable than the scientific names of birds have been. For languages in their natural growth never perpetrate an injustice to the thousands of people who use them, and have only a limited amount of time and mental energy for learning new names, in an effort to do tardy justice to the memory of some savant long since in his grave and, we hope, beyond the petty jealousies involved in priority of publication.

SUMMARY AND RECOMMENDATIONS

It is desirable for many reasons that each species of bird bear a single name, applicable to all its subspecies, in the language which we speak and write. These names of birds should be treated as living language, which combines the fixity necessary for mutual understanding with a degree of flexibility that permits growth and change. It is often exceedingly difficult to make names to order. Most of our English names for New World birds have been so made; many are widely admitted to be unsatisfactory; and to fix these names for all time by fiat would be deplorable. Yet when one enjoys a special intimacy with a bird, a felicitous name will often spring into the mind, suggested by voice, habits, plumage or some other character. These considerations lead to the following recommendations:

1. That students and bird-lovers who have hit upon a bird name which seems to them more apt than the one currently used, feel free to try it out among their friends and colleagues, suggest it in life-history or other papers, and generally make it known to the ornithological public. But so far at least as birds included in the A. O. U. Check-List are concerned, it would seem inadvisable to use such a new name in the title of a paper, or in a formal list, until it had won its way to general acceptance as superior to the officially designated name.

2. That the A. O. U. Committee on Nomenclature take cognizance of these newly suggested names—it might even signify willingness to receive them directly from the originators—and at their discretion use the more inspired of them to supplant existing English names that seem less satisfactory. In this way, also, names could be gradually accumulated for species which now lack them, their several forms being designated by unrelated subspecific names. The alternative of asking a committee to manufacture species names in quantity is to be avoided, as these forced inventions are too often infelicitous.

3. In regard to parts of the Western Hemisphere not covered by the A. O. U. Check-List, it seems premature to undertake a general naming of the birds in English until we are far more intimate with them as living creatures. However, a committee, whether officially representing the A. O. U. or otherwise constituted, might begin to cull the more adequate names from the many scattered sources, and receive suggestions from those who enjoy opportunities to become intimate with particular species. Until this is done, those interested in the birds of tropical America seem doomed to struggle along as best they can with the conflicting and too often unsatisfactory, mass-produced English names to be found in Ridgway, Hellmayr, Chubb and Brabourne and other systematic works.—ALEXANDER F. SKUTCH, Finca 'Los Cusingos', San Isidro del General, Costa Rica.