

CONTINENTAL BIRDLIFE

A JOURNAL OF NORTH AMERICAN FIELD ORNITHOLOGY

VOLUME 1, NUMBER 4 AUGUST 1979

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Snap Judgment 4

Captured at a coastal station, this small bird was photographed in the hand before being banded and released. To what species does it belong?

The answer, a discussion of the characteristics supporting the identification, and the name of the photographer will appear in the October 1979 issue of *Continental Birdlife*.

CONTINENTAL BIRDLIFE

A Bimonthly Journal of North American Field Ornithology

Editor / KENN KAUFMAN

Associate Editor / JANET WITZEMAN

Assistant Editor / ELAINE COOK

Photographic Consultant / ROBERT A. WITZEMAN

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Address all communications to:

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Cover Photograph: An immature Magnificent Frigatebird *Fregata magnificens* perched in a dead Cottonwood above Painted Rock Dam, Maricopa County, central Arizona; photographed 22 July 1979 by Janet Witzeman. Frigatebirds staged an invasion of unprecedented magnitude into Arizona and southern California during July and August. For other late-summer events, see the *Latest Rumors* on page 108 of this issue.

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Can you look these birds in the face-pattern and tell them they all belong to the same species?

The Double Identity of the Western Grebe

For the past few years, several of us in Arizona have made a habit of looking closely at Western Grebes *Aechmophorus occidentalis* and identifying them to color phase. We had all read (and been intrigued by) Robert W. Storer's account of the situation in *The Living Bird* for 1965. Storer discussed two morphs, a "light phase" and a "dark phase," occurring in western North America. Throughout most of the grebes' range in Canada and the U.S. the light phase birds made up a small minority in the breeding population; yet there was a remarkable tendency for these light phase birds to mate with each other, rather than with the more abundant dark phase birds around them.

Our casual observations seemed to bear out this idea of preferential mating. Even on Lake Havasu, on the Arizona-California border, where light phase birds appeared to be in the majority, we almost never saw mixed pairs: dark phase birds mated with other dark birds, light phase with light. Every so often we would ask ourselves, rhetorically: If they don't interbreed, why aren't these "color phases" considered separate species?

That same question has now been put forth, in a more formal and authoritative way, in a paper by John T. Ratti published in the July 1979 issue of *The Auk*. This researcher spent parts of three years (1975-1977) studying several populations of Western Grebes, and piled up some impressive statistics. Mixed pairs (i.e., dark phase grebes paired with light phase) accounted for less than two per cent of Ratti's observations in Utah and less than one per cent of those in Oregon and California indicating that these two forms were hardly interbreeding at all. In addition, Ratti documented significant differences between the two forms in the development of color pattern of their young, with the offspring of dark birds developing blackish backs and



Face-patterns of the two forms of Western Grebes; "light phase" on left, "dark phase" on right. In both cases the upper figure represents the "typical" pattern, while the lower figure illustrates what is evidently individual variation on these patterns rather than any indication of hybridization. Aside from these differences in black-and-white pattern, bill color differs: orange-yellow in the light birds, greenish-yellow in the dark form.

crowns rather promptly while the young of light parents remained mostly whitish until more than a month and a half old. He also noted differences in timing of the onset of their breeding activities, and a tendency for birds to associate with others of their own color phase even during the non-breeding season. However, from a taxonomic viewpoint the near lack of interbreeding between the two forms was the most important point.

The significance of this information for field ornithologists should be selfevident. Although the question may not be closed yet*, the evidence strongly suggests that the old familiar "Western Grebe" is in fact a genus containing two closely related but separate species. If that is the case, then North American field observers are

*Our only reason for hedging on this is that there is a possibility (albeit a remote one) that the leading avian systematists may review the evidence and conclude that this is a unique situation involving two mere color phases. Preferential or assortative mating is known to occur, to a limited extent, in some polymorphic species. For example, the "Blue Goose" and "Snow Goose" are now held to be only color phases of a singlespecies *Chen caerulescens*, yet there is a tendency for both blue phase and white phase birds to mate with others of their own color type (Cooch and Beardmore 1959). Even in the Parasitic Jaeger *Stercorarius parasiticus*, which varies from "light" to "dark" in plumage, there is a slight tendency for individuals to pair with others resembling their own color type (O'Donald 1959); and we have heard rumors of a similar phenomenon in Swainson's Hawks *Buteo swainsoni* and some other birds. However, in Western Grebes there is so very little interbreeding between birds of the two color types that it seems likely to be regarded as a situation involving two full species.

WESTERN GREBE FORMS



Above: An adult "light phase" Western Grebe Aechmophorus [occidentalis] "clarkii" with downy young on Lake Havasu, Arizona/California border. Below: Adult "dark phase" Western Grebe A. occidentalis with downy young at Bear River Migratory Bird Refuge, Utah. Note that the downy young dark phase bird already appears to be developing a dark-capped appearance. Both photos by Kenneth V. Rosenberg.

presented with an opportunity unique in this era: here we have two species which are widespread, conspicuous, rather easily identified — yet their comparative distributions are not known in any detail at all. Rather than waiting to see if these grebes are to be formally "split" by the A.O.U.'s Committee on Classification and Nomenclature, the perceptive observer will want to start now to clarify the ranges of the two forms by identifying them carefully, photographing any extralimital birds, and making separate entries for the two in daily field notes.

In the comments on identification below we continue to refer to these two forms simply as dark phase and light phase birds, since no "official" English names for the two have been proposed. Oddly enough, Latin names are already available: G.N. Lawrence (in Baird 1858) originally described the Western Grebe to science as two species, calling the dark birds *occidentalis* and the light birds *clarkii*, and if the two are formally re-split these are the names that will probably be used.

Both of the forms, obviously, are black-and-white in pattern, and can be called "dark" or "light" only in a comparative sense. The face-pattern is the most diagnostic point of difference: in dark phase birds the black of the crown extends down to below the eye and lores, while the light birds have white extending up onto the lores and to above the eye. This difference is accentuated by the bill color, dull greenish yellow in the dark birds and rather bright yellow-orange in the light ones. Both forms are deep black on the crown and on the stripe down the nape, but light birds have narrower nape stripes (thus appearing more extensively white on the sides of the neck) and tend to be paler (i.e., grayer, less blackish) on the back and more extensively white on the flanks. According to Ratti's study the light birds also average slightly smaller, but the differences were not statistically significant for most measurements so they would hardly be noticeable in the field.

A small minority of the population shows yet another pattern, with an appearance typical of the dark phase except that the lores are whitish. Ratti (op. cit.) came to the tentative conclusion that this was merely a matter of individual or seasonal variation, and that these individuals should be classified with the dark phase. Another potential source of confusion is that some light phase birds have only very narrow white margins above the eye, so that when the feathers are relaxed the black of the crown may appear to extend down to (but not below) the eye; these birds might at first be taken for intermediate or hybrid individuals.

Observers should keep in mind, of course, that a small part of the population (perhaps one per cent) is in fact composed of hybrids, so that not all individuals will be identifiable to one of the two categories.

The scanty information currently available indicates that the great majority of the Western Grebes breeding as far north as Canada are of the dark form, while light phase birds are evidently in the majority in the Mexican population; but the changeover between these two extremes apparently is not accomplished smoothly and gradually, so local situations will have to be figured out one by one. Because the dark form has the more northerly distribution of the two, we might guess that dark birds would be more likely to figure in the vagrant records in the East, especially in the Northeast. However, in the case of recent sightings where no detailed notes were taken, it may be impossible to assign some records to one form or the other (and if the two are officially designated as separate species, this may cause some consternation among state- and province-listers!). Many questions remain unanswered. Elucidating the comparative distributions, migrations, and vagrancy patterns of the two forms should be an exciting project for the 1980's. -K.K.

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Identifying "Myrtle" and "Audubon's" warblers out of Breeding Plumage

KENN KAUFMAN

These two subspecies groups still deserve recognition; here's how to do it

Within the last couple of decades it has been proven (see Hubbard 1969) that the two birds formerly known as the Myrtle Warbler *Dendroica coronata* and Audubon's Warbler *D. auduboni* interbreed freely where their ranges come in contact. Because of this, they have been officially (A.O.U. 1973) "lumped" into one species under the name of Yellow-rumped Warbler *D. coronata*. However, their hybrid zone is relatively small, so the vast majority of all the Yellow-rumped Warblers on the continent can be clearly referred to either the Myrtle or Audubon's group, and can be identified as such in the field. For this reason, most observers continue to be aware of the two as distinct taxonomic entities (which they are), and, for convenience, to refer to the two subspecies groups by their former specific names.

The differences between breeding-plumaged adult male Myrtle and Audubon's warblers are obvious, and are pictured and described adequately in all the standard bird guides. There are also a number of characters helpful in separating dull-plumaged birds (females, immatures, winter-plumaged males) of the two forms; the bird guides generally fail to discuss these. In my conversations with bird watchers from around the





FIGURE 1. Face-patterns of winter Yellow-rumped Warblers.

continent, I have found that the field marks for the duller Yellow-rumpeds are wellknown in areas where both forms occur regularly, but poorly known elsewhere: these field characters are evidently being learned only through direct experience or by wordof-mouth. Hopefully, then, this brief article will be helpful to birders in areas where only one of the Yellow-rumped forms occurs regularly (but where the other might be looked for as an occasional stray).

COMPARISON OF CHARACTERS FOR "MYRTLE" AND "AUDUBON'S" FORMS

In the comments below, hybrids are temporarily ignored. Thus, to all of these statements, one should add the mental reservation that hybrids could be intermediate between the conditions described.

Throat color: Dependence upon throat color as a means of separating Myrtles and Audubon's can lead to confusion and misidentifications. Although a bright yellow throat is a good sign of an Audubon's and a snowy-white throat usually indicates a Myrtle, many dull-plumaged birds will not fit into either of these extremes. Some Audubon's (especially immature females) may have throats that are quite whitish more so than the dingy throats of some young Myrtles. Thus, other characters frequently must be checked.

Face pattern: Given a decent look at the bird, the face pattern quickly separates most Myrtles and Audubon's; each has a distinctive appearance made up of several features. The Myrtle has the stronger pattern of the two. Its auriculars (or "cheek-patches") are almost always conspicuously darker than the rest of the face, and the contrast is enhanced by the fact that the whitish area of the throat usually extends right up to the lower edge of the auriculars (and often up behind the rear edge of them). Completing the picture of contrast with the dark auriculars is a pale spot before the eye and a pale line behind it.

The Audubon's has a much plainer facial appearance, with the auriculars never conspicuously darker and normally not contrasting even slightly with the rest of the

Kaufman / YELLOW-RUMPED WARBLERS

face. Its pale throat area is generally smaller than the Myrtle's, not extending up to the lower edge of the auriculars and seeming to narrow posteriorly rather than spreading out toward the sides of the neck. Audubon's often has some faint indication of a pale spot before the eye, but usually lacks the pale postocular line. Both Myrtle and Audubon's warblers show a fairly conspicuous (usually broken) eye-ring. I have sketched out the differences in their typical face patterns in Figure 1.

Chest pattern: There is a general tendency in winter birds for the Myrtle to have a whitish chest with well-defined darker streaks, while the Audubon's chest is darker, washed with brownish-gray, with only a blurry streaked effect at most. However, there is enough individual variation in this that I have found it useful only in a minor way, to reinforce the identification suggested by other characters.

Tail spots: As a rule, the Audubon's shows more white in the tail than does the Myrtle. Usually two or three outer rectrices on each side have white spots in Myrtles, while the white reaches four or five pairs of rectrices in Audubon's. This character is variable; within each form males have somewhat more white in the tail than females (and adult males have more than immature males); in addition, Myrtles from the northwesternmost breeding populations have, on the average, slightly more tail white than those breeding farther east (Hubbard 1970). However, taking this variability into account, the difference between the two forms is still worth noting. See Figure 2 for examples of typical patterns.

This difference in tail patterns can be helpful in "elimination birding," when one is scanning large numbers of birds looking for out-of-place individuals. In Arizona and California I have often picked out Myrtles among flocks of Audubon's (when many birds were moving about, spreading their tails in flight) by noting the odd individual with restricted white areas near the outside edge of the tail. In a similar fashion, when wading through hordes of wintering Myrtles on the southern Atlantic coast I have sought Audubon's by watching the birds as they flushed ahead, looking for one with unusually broad white patches in the tail corners.

Call-notes: Describing in words the chip-notes of warblers is a perilous task, but it is worth pointing out that typical chips of Myrtle and Audubon's warblers differ

FIGURE 2. Tail-patterns of Yellow-rumped Warblers (as viewed from above). These are done from specimens of immature males; see text for a discussion of age and sex differences in the amount of tail white.



Myrtle



Audubon's

noticeably in tone quality. The Myrtle's characteristic note is a loud, hard *check*, with a penetrating quality unusual in warbler calls. Audubon's typically delivers a softer *chep*. A Myrtle chipping among Audubon's is usually noticeable, but to pick out an Audubon's among Myrtles is more difficult; and there is much individual variation in the calls of both. To separate them on voice alone with 100% accuracy would require a keen ear indeed (and a considerable amount of practice).

A NOTE OF CAUTION: IDENTIFYING HYBRIDS

The observer should always keep in mind the possibility of hybrids when attempting to distinguish the subspecies groups of this complex. If a bird does not display all the characters of either the Myrtle or the Audubon's form, it may in fact be something intermediate between the two.

On the other hand, it is probably not safe to field-identify the birds as hybrids when they are in dull plumage. In the field I often comment to myself that a wintering Yellow-rumped at which I'm looking might be a hybrid, but in my daily notes such individuals are entered merely as "Yellow-rumped Warbler (ssp.)," indicating that they were not identified to either the Myrtle or Audubon's group. It must be remembered that hybrids can range in appearance from near-Myrtles with just one or two Audubon's characters to near-Audubon's with just a trace of visible Myrtle ancestry. Picking out a member of this motley crew in winter plumage probably cannot be done with complete certainty in the field. However, in spring it is worth watching for hybrids in adult male plumage, as some of these birds can display truly interesting plumage patterns.

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Letters

It is our hope that *Continental Birdlife* will develop an active and critical readership. Almost any article of the sorts that we publish has the potential to become a springboard to further discussion; so if you feel inclined to comment on anything in these pages, please do so. While we don't have time to answer all letters personally, we will print any that bring up meaningful points related to articles published previously. For that matter, we welcome letters that are relevant to any current topic in North American field ornithology.

MORE ON FLICKERS

A n interesting dichotomy developed in the responsest o our flicker-identification article (C. B. 1 (1): 4-15, February 1979). Many readers, we were glad to hear, appreciated this in-depth approach to a rather obscure field problem. However, there were others who told us frankly that they would prefer material on identification at the species level. All the comments of both kinds are appreciated here. We have identification articles in preparation dealing with a variety of field problems, and hopefully these will, among them, be able to please both camps.

Two specific comments were received which we found interesting:

Had I seen your scholarly paper on flickers before its publication, I'd have asked you to include some discussion (and possibly some explanation) of a hybrid pattern that I have yet to see, namely, a *male* bird with black moustachial streaks and *no* red nape patch. Does such a hybrid ever occur? If you know of specimens, do tell me of them, for I have looked for them in vain and I must have examined several hundred specimens, all told.

> George Miksch Sutton Norman, Oklahoma

To fill in a bit of background for the reader: male flickers of the eastern or "Yellow-shafted" form have red nape patches and black moustachial (malar) streaks, while the western "Red-shafted" flicker males lack the red nape patch and have red malar streaks. Where the two forms meet and hybridize, birds with various combinations of characters are found. As Dr. Sutton pointed out in his *Oklahoma Birds* (1967: University of Oklahoma Press, Norman), and as I should have mentioned in my article, hybrids having both red malar streaks and red nape patches occur frequently; but birds showing the opposite combination of characters — black malar streaks and no nape patch — are seemingly impossible to find.

My own modest researches into the subject have undoubtedly been less thorough than Dr. Sutton's, but for what it is worth, I too have sought and failed to find hybrids displaying this pattern. And I can suggest no explanation for this paradox. However, it is interesting to note that the red nape patch is (to put it unscientifically) a "strong" character, cropping up in *some* individuals of *all* races of the Common Flicker, and doing so more often in males than in females. Furthermore, a surprisingly high percentage of the male Yellow-shafted X Red-shafted hybrids I have encountered have shown at least a trace of the red nape patch; those that did not usually had color patterns heavily dominated by Red-shafted characters. Perhaps a hybrid must have a lot of Red-shafted ancestry to be able to "override" the red nape patch. These considerations could be relevant if the hybrid pattern that Dr. Sutton describes is merely a rare one. If in fact this pattern *never* occurs, then the explanation probably lies in the field of genetic linkages and beyond the scope of this journal.

At any rate, our readers are hereby advised that we would like to hear about (and, particularly, to see photographs of) any hybrid flickers with pure black malar streaks and no trace of the red nape patch. -K.K.

I was interested in your article on the flicker forms. You did not mention Paul Julian's article on "A Proposal for Reporting Flickers in Colorado" (Colorado Field Ornithologist 14: 16, Dec. 1972). He lives in the hybrid zone along the east slope of the Rockies, and had read Short's article. He was stimulated by the fact that Colorado birders reported flickers as Red-shafted or Yellow-shafted even though they were in the hybrid zone. So he proposed a grading system based on six scores as a measure of the mixing. He dealt, of course, with only the two forms and I am not sure his approach would help here [Arizona] but it was an interesting suggestion.

> William A. Davis Tucson, Arizona

That is an interesting thought. It is doubtful that such a system could be applied on a continent-wide basis, but observers who live in hybrid zones and who are sufficiently interested might try developing their own "field-expedient hybrid index" as a rapid way of describing individual hybrids in their daily notes. -K.K.

MORE ON HARLEQUIN DUCKS

David Stemple wrote to point out that we should have at least mentioned the subspecies question in Harlequin Ducks *H. histrionicus* — otherwise some readers might wonder why no attempt was made to guess the race of the Harlequin in Sonora (C.B. 1 (1): 16-17, February 1979).

The population of Harlequins in northwestern North America and northeastern Asia has been called by some *H. h. pacificus*, a subspecies distinct from the birds of northeastern North America, Greenland, and Iceland. In his original description of *pacificus*, Brooks (1915 — Bull. Mus. Comp. Zool. Harvard 59(5): 393) characterized it as being larger than the Atlantic area birds, with a larger bill, and with the chestnut in the stripes on either side of the crown less developed. Subsequent authors have pointed out that the amount of chestnut and white in the head pattern varies individually and with the plumage sequence, leaving measurements as the only criterion for recognition of this race. Published data indicate that the Pacific birds do average larger-billed (and slightly larger overall); but there is much overlap in the measurements, and the subspecies are not recognized by most current authorities (e.g., A.O.U. Check-list of North American birds, fifth edition, 1957; R.S. Palmer 1976, Handbook of North American Birds, Volume 3).

In studying museum specimens recently (and looking critically at bill size) I found noticeable differences between the extreme individuals of the two populations (i.e., small-billed Atlantic and large-billed Pacific birds); but putting these aside, I was generally unable to guess the origins of the majority of specimens without consulting the labels. The upshot of this is that it might well have been impossible to determine the origin of the Sonoran Harlequin even in the hand. So we would prefer not to hazard an opinion on the basis of photographs... but if any qualified researchers would like to try, we will be glad to share our file of photos of the Sonoran bird. — K.K.



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Answer to Snap Judgment 3

KENN KAUFMAN

This photograph of a bird of prey (on typical modern-American perch) was published on the rear cover of the June C.B. with no clues, other than that it was taken somewhere north of Mexico. Can you identify the bird?



Many of us learn to separate the raptors first by their appearance in the air. When seen overhead, most in North America can be quickly assigned to one of the major groupings (accipiters, buteos, falcons — or to one of the minor groups such as harriers or ospreys) on the basis of shape, and then run down to species by reference to plumage characters and minor details of silhouette. When perched, however, some quite unrelated raptors can look surprisingly similar: most of the useful flight characters disappear, and even a familiar species can momentarily pose an unfamiliar challenge. It can cause us to focus on characters we normally do not notice on flying hawks.

On first glance at this photo, no doubt, some readers will have wavered on the choice between large falcon or slim buteo. The elongated look (with long pointed wings) and some aspects of the face pattern do indeed appear falconine. However, a longer study should indicate that the body of this bird is too bulky, not streamlined enough for a falcon. For a more concrete distinguishing character, we may look to the *scapular feathers:* they are broad, oval-ended and quite large, unlike those of any North American falcon.

Our mystery bird, then, is of the buteo group. The area we can see of the flanks is marked with arrowhead-shaped or spade-shaped spots, suggesting that the bird may be an immature but providing little help in determining the species. We know that some buteos are quite variable in plumage; what particular characters will lead us to a specific identification?

The face pattern on the pictured bird is likely to draw attention. Our bird has a whitish forehead set off from a dark crown, a narrow but sharply defined light

SNAP JUDGMENT ANSWER

superciliary line separated from the palish cheeks by a dark postocularline, and a very dark malar area just above the clear whitish throat. Although some of these features appear in the face patterns of other *Buteo* species, the clear-cut pattern shown here points to an immature of one of three North American possibilities: Swainson's Hawk *B. swainsoni*, Broad-winged Hawk *B. platypterus*, or Gray Hawk *B. nitidus*.

A second plumage character worth noting on the pictured hawk is the appearance of the *wing coverts:* they are very dark, appearing almost blackish in this shot, with sharply demarcated pale tips creating a scaled or scalloped effect on the folded wing (a pattern repeated, to an extent, on the scapulars). While this might seem a simple pattern, it is displayed by the immatures of only two North American *Buteo* species: Broad-winged and Swainson's hawks.

Although rarely emphasized (or even illustrated correctly) in field guides, the pattern of the individual coverts and scapulars is a worthwhile point to check in identifying perched hawks. For example, the mottled whitish back patches that seem so characteristic of Red-tailed Hawks *B. jamaicensis* perched at a distance are formed by the individual feather patterns on the scapulars and inner coverts: these have large white or pale buffy spots or scallopings along the edges, as shown in Figure 1. As the feathers become worn, of course, the light areas near the tips may wear away, but this process exposes the pale spots on the underlapping feathers so that the mottled white look is never lost. By contrast, on juvenile Swainson's Hawks these feathers have pale areas only at the tips (and narrowly on the edges on some scapulars); once these have worn away, the wings and back appear a rather uniform chocolate-black.



FIGURE 1. Samples of median upper wing coverts on juvenile Swainson's and Red-tailed hawks.

This digression has nothing to do with the identity of the bird in the photograph. But by now — armed with the information that it must be either Broad-winged or Swainson's — most readers will have arrived at the correct answer. The stretched-out look, the long pointed wings and longish tail, all rule against the compact little Broadwing.

This juvenile Swainson's Hawk was photographed in Sublette County, Wyoming, in August 1979 by Kenneth V. Rosenberg.

Reviews

Edited by ELAINE COOK



The Birds of South Dakota — Members of the Check List Committee of the South Dakota Ornithologists' Union. 1978. Published by the Union with the cooperation of the W.H. Over Museum. 311 pp., range maps, 52 line drawings, frontispiece. \$10.00.

Publisher's address: South Dakota Ornithologists' Union c/o W.H. Over Museum University of South Dakota Vermillion, South Dakota 57069

Subtitled An Annotated Check List, this volume brings together accumulated knowledge of the status of birds in South Dakota. This is no mean feat, as it meant the close cooperation of the seven members of the Check List Committee; anyone who has dealt with a multi-author work of this scope knows the difficulties inherent in accomplishing such an undertaking. The authors are Nathaniel J. Whitney, Jr., chairman of the Committee; Byron E. Harrell, editor of the completed manuscript and general factotum of seeing it into and through the printing process; Bruce K. Harris; Nelda Holden; James W. Johnson; B.J. Rose; and Paul F. Springer. Authors were assigned specific groups of birds for which to prepare species accounts, and each checked the work of the others.

The format for each species includes a status statement, a one- or two-line habitat description, separate spring and fall migration accounts (normal period of occurrence, earliest and latest dates), and, when applicable, nesting and winter occurrences and status. Food habits, general behavior, disease, predation, etc. are not within the scope of the work.

BOOK REVIEWS

Small distribution maps are provided for every species, 377 of them; these maps also locate extralimital records by season, and are almost always on the same page as the applicable species account.

The species accounts are well done, providing a clear and concise statement of status, carefully documented by referenced records obtained through the years. One might be properly suspicious of some of the sight records authenticated by the authors, but in the main the matter of whether or not to accept records is handled judiciously. Some readers might wish that the current locations of specimens cited were stated, and the same applies to photographs cited that have not appeared in the literature. A cutoff time for records is not given, but it appears to be mid-1975 for at least some species; no records (save one) are more recent and few species accounts contain records after 1973.

An Introduction describes the physiography, climate, and plant life of South Dakota; the distribution of the avifauna in general; how human settlement has changed the environment; a brief ornithological history of the state; an interpretation of the species accounts (check list); and a tabular summary of the birds of South Dakota. A 16-page signature of photographs illustrates bird habitats; unfortunately, either some of these were poor initially, or they suffered in the printing process. Excellently prepared sections appear at the end: a list of hypotheticals, a bibliography, and indices of persons, locations (including a state map), and birds. The total of about 550 entries in the index of persons indicates the thoroughness of the entire book.

The Birds of South Dakota measures 7 x 10 inches. The cover is quite "soft," too much so to permit much use, and its illustration, a Badlands scene in color, is badly blurred. The frontispiece, showing a Lark Bunting singing on a yucca stalk and painted by Wayne Trimm, is disappointingly small.

The Birds of South Dakota is so well organized, so well researched, and so indispensable to anyone expecting to bird in South Dakota, that it is well nigh a *tour de force*. Even if you have never been in the state, nor ever expect to be, obtain a copy as an example of how to "do" a state list. But you had better hurry — as of this writing, only 200 copies remain of an initial printing of 1100. — Gale Monson

As co-author of the Annotated Checklist of the Birds of Arizona and of the classic The Birds of Arizona. Gale Monson is well acquainted with the factors involved in producing a multi-authored distributional work; he also has an extensive background of field experience with the birds of the Dakotas. - Eds.



Birds of Northern California: an Annotated Field List (Second Edition) — Guy McCaskie, Paul De Benedictis, Richard Erickson, and Joseph Morlan. Designed and edited by Nick Story. 1979. Berkeley, California: Golden Gate Audubon Society. 84+ iv pp., map, bar graphs. \$5.00.

Available from publisher at \$5.80 (includes 80¢ postage & tax): Golden Gate Audubon Society, Inc. 2718 Telegraph Avenue, Suite 206 Berkeley, CA 94705

In the twelve years since the first edition (by McCaskie and De Benedictis) of this checklist was published, a remarkable amount of new information on bird distribution in northern California has been amassed. Because the two original authors no longer live in this region, this extensively revised edition was largely undertaken by Erickson and Morlan, who are well-known as leaders in northern California's current corps of active field observers. This work thus preserves its high standards of distinguished authorship.

The area covered is approximately the northern two-thirds of the state, minus Inyo County and part of Mono County (pre-empted by the southern Californians and covered in a similar field list by Pyle and Small). To facilitate capsulizing each species' range within this rather large area, the introduction describes and maps five "distributional districts" which conform to the broad outlines of bird distribution here, and adds definitions of ten basic habitat types.

The format of the main body of the list is one which is now reasonably standard: each two-page spread begins with a bar graph treating several species and follows with a section of text giving additional comments on those species. The bar graphs convey degrees of relative abundance by month, and letter codes indicate in which distributional districts each species occurs, what are its preferred habitats, and whether it nests in northern California. Text comments are added for most species, but not all: only those for which the authors wished to add significant information not communicable in bar graphs. These comments may deal with peculiarities in distribution, details of the occurrence of outstanding rarities, or helpful pointers on identification. The latter are particularly noteworthy: rather than mere rehashes of well-known information (such as are included in some regional checklists), these supply points additional to (or in correction of) the standard field-guide treatment. This work is thus doubly useful as a supplement to one's field guides.

In summary, this well-designed, authoritative field list will be indispensable to anyone doing a substantial amount of birding in or near northern California, and a useful reference for observers elsewhere in the West. -E.C., K.K.

Birds of Pennsylvania — Merrill Wood. 1979. University Park, Pennsylvania: College of Agriculture, Pennsylvania State University. 133 pp., illus., map. \$2.00 paperback.

Publisher's address: College of Agriculture Pennsylvania State University Box 6000 University Park, Pennsylvania 16802

This attractive and very modestly priced little book is basically a briefly-annotated list of Pennsylvania's bird species. It appears that it was primarily designed for, and will be of most use to, casual or beginning birdwatchers who want a general idea of what occurs in the state.

Each regularly occurring species receives a short paragraph outlining its geographic and seasonal occurrence in Pennsylvania, often with brief habitat notes or other comments; a second short paragraph capsulizes the total range of the species. For rarer species there is an indication of the counties and seasons in which they have occurred, and for accidentals all records are listed individually.

We found ourselves wondering about some of the latter, since the author does not state whether he personally re-evaluated any of the numerous records quoted from *Audubon Field Notes/American Birds* — some of which, invariably, inevitably, will be open to question. Another oddity is that Lesser White-fronted Goose *Anser erythropus* is included as a fully accepted species while Tufted Duck *Aythya fuligula* is relegated to the "escape list," seemingly a reversal of the actual probabilities. And some may be pained to see that the Kermadec Petrel *Pterodroma neglecta* [a petrel, perhaps this species, was once photographed over Hawk Mountain] is here taken out of its proper family, the shearwater/petrel assemblage, and dumped unceremoniously among the storm-petrels.

But casual observers (who are unlikely to encounter any of these accidentals anyway) should not be disturbed by such matters; and they are likely to appreciate such points as the attractive drawings of common species in the margins, or the introduction, with its calendar of expected avian events by month. In conclusion, then, this book may have little to offer the advanced or serious student of Pennsylvania's birdlife, but it should make a fine gift for beginners. — K.K., E.C.



Recent Literature in Field Ornithology

IDENTIFICATION AND RELATED TOPICS

- Dwyer, Thomas J., and John V. Dobell. 1979. External determination of age of Common Snipe. J. Wiidl. Manage. 43(3): 754-756.
- Giesen, Kenneth M., and Clait E. Braun. 1979. A technique for age determination of juvenile White-tailed Ptarmigan. J. Wildl. Manage. 43(2): 508-511.
- Grant, P.J. 1979. Plumage of juvenile Water Rail. Br. Birds 72(5): 230.
- Jensen, Jørn Vestergaard. 1979. Marsh Sandpiper with yellowish legs. Br. Birds 72(5): 230-231.

— Abnormal *Tringa stagnatilis* might have been confused with Lesser Yellowlegs *T. flavipes*.

- Krapu, Gary L., Douglas H. Johnson, and Charles W. Dane. 1979. Age determination of Mallards. J. Wildl. Manage. 43(2): 384-393.
- Lewis, James C. 1979. Field identification of juvenile Sandhill Cranes. J. Wildl. Manage. 43(1): 211-214.

- i.e., distinguishing juveniles from adults.

Mueller, Helmut C., Daniel D. Berger, and George Allez. 1979. The identification of North American Accipiters. Ann. Birds 33(3): 236-240.

- Quite negative in tone and not very thorough.

Preston, K. 1979. Robin with appearance of Red-flanked Bluetail. Br. Birds 72(5): 231-233.

- Aberrantly patterned European Robin *Erithacus rubecula* could have been misiden-

tified as *Tarsiger cyanurus*. With two photos. Vinicombe, Keith. 1979. Dark wing-bar of Alpine

Accentor. Br. Birds 72(5): 231. Wallace, D.I.M. 1979. Review of the British records of Semipalmated Sandpipers and claimed Red-necked Stints. Br. Birds 72(6): 264-274.

- With much discussion of identification, several photographs.

TAXONOMY AND NEW FORMS

Clancey, P.A. 1978. On the validity of Alcedo cristata robertsi Peters, 1945. Bull. B.O.C. 98(3): 87-90.

— A race of the Malachite Kingfisher, of Africa.

- Davison, G.W.H. 1978. Further noteson Lophophorus sclateri. Bull. B.O.C. 98(4): 116-118.
 Taxonomic notes on Sclater's Monal (a pheasant); discusses characteristics of L.s. orientalis.
- Erard, C. 1978. A new race of Parisoma lugens from the highlands of Bale, Ethiopia. Bull. B.O.C. 98(2): 43-49.
- Field, G.D. 1979. The genus Criniger (Pycnonotidae) in Africa. Bull. B.O.C. 99(2): 57-59. — Comments on taxonomy and behavior.
- Fitzpatrick, John W., and John P. O'Neill. 1979. A new tody-tyrant from northern Peru.

Auk 96(3): 443-447. — The Cinnamon-breasted Tody-Tyrant, Hemitriccus cinnamomeipectus.

Fitzpatrick, John W., David E. Willard, and John W. Terborgh. 1979. A new species of

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hummingbird from Peru. Wilson Bull. 91(2): 177-186.

- The Royal Sunangel, *Heliangelus regalis*. Holyoak, D.T., and J.-C.Thibault. 1978. Undes-

- cribed Acrocephalus warblers from Pacific Ocean islands. Bull. B.O.C. 98(4): 122-128. — Acrocephalus caffer garretti and A. luscinia astrolabii, both new subspecies.
- Ingels, J. 1979. Remarks on specimens, holotype, description and subspecies of *Chlorophonia flavirostris* (sic) Slater (sic). *Bull. B.O.C.* 99(2): 77-80.

- Argues against recognition of any subspecies.

King, Ben. 1978. A new race of *Pitta oatesi* from peninsular Malaysia. Bull. B.O.C. 98(3): 109-113.

- Pitta oatesi deborah, a new race of the Rusty-naped Pitta.

Mann, C.F., P.J.K. Burton, and I. Lennerstedt. 1978. A re-appraisal of the systematic position of *Trichastoma poliothorax* (Timaliinae, Muscicapidae). Bull B.O.C. 98(4): 131-140.

 New genus Kakamega erected for this species of babbler for which the authors give the English name "Grey-chested Illadopsis."

- Parkes, Kenneth C. 1979. A new northern subspecies of the Tropical Gnatcatcher Polioptila plumbea. Bull. B.O.C. 99(2): 72-75. — P.p. brodkorbi, occurring from Mexico to Nicaragua.
- Ratti, John T. 1979. Reproductive separation and isolating mechanisms between sympatric dark- and light-phase Western Grebes. Auk 96(3): 573-586.
- Traylor, Melvin A., Jr. 1979. Two sibling species of *Tyrannus* (Tyrannidae). Auk 96(2): 221-233.

- Discussing the twospecies in the "Tropical Kingbird" complex.

RARA AVES

- Ash, J.S. 1978. The undescribed female of Harwood's Francolin Francolinus harwoodi and other observations on the species. Bull. B.O.C. 98(2): 50-55.
- Brooke, M. de L. 1978. Inland observations of Barau's Petrel Pterodroma baraui on Reunion. Bull. B.O.C. 98(3): 90-95.
- McEwan, Linda C., and David H. Hirth. 1979. Southern Bald Eagle productivity and nest site selection. J. Wildl. Manage. 43(3): 585-594.
- O'Neill, John P., and Thomas S. Schulenberg. 1979. Notes on the Masked Saltator, Saltator cinctus, in Peru. Auk 96(3): 610-613.

Ryel, L.A. 1979. On the population dynamics of

Kirtland's Warbler. Jack-Pine Warbler 57(2): 76-83.

Stokes, Tony. 1979. On the possible existence of the New Caledonian Wood Rail Tricholimnas lafresnayanus. Bull. B.O.C. 99(2): 47-54.

- No documented records since 1890, but a remnant population may still exist.

- Storer, Robert W. 1979. Misidentified "Eskimo Curlews". Wilson Bull. 91(2): 331.
 - Five of six specimens reported for Labrador prove to be Whimbrels.
- Wilbur, Sanford R., Paul D. Jorgensen, Barbara W. Massey, and Venita A. Basham. 1979. The Light-footed Clapper Rail: an update. Am. Birds 33(3): 251.
- Wood, Brian, S.C. Madge, and C.S. Waller. 1978. Description, moult and measurements of Montifringilla theresae. Bull. B.O.C. 98(2): 55-59.

--- The little-known Theresa's Snow Finch.

BIRD DISTRIBUTION - NORTH AMERICA

- Adams, Raymond J., Jr. 1979. Seasonal distribution and abundance of birds in the Kalamazoo, Michigan, area. Jack-Pine Warbler 57(2): 91-105.
- Bailey, Edgar P. 1978. Breeding seabird distribution and abundance in the Shumagin Islands, Alaska. Murrelet 59(3): 82-91.
- Barrentine, Carl D., and Roland S. Shook. 1978. A December Barn Swallow observation for central Washington. Murrelet 59(3): 108.
- Bell, Gary P., Frank J.S. Phelan, and Ron C. P. Wypkema. 1979. The owl invasion of Amherst Island, Ontario, January-April 1979. Am. Birds 33(3): 245-246.
- Boswall, Jeffery. 1978. The birds of Alacran Reef, Gulf of Mexico. Bull. B.O.C. 98(3): 99-109.
- Cannings, Richard J., Stephen R. Cannings, Jean M. Cannings, and George P. Sirk. 1978. Successful breeding of the Flammulated Owl in British Columbia. Murrelet 59(2): 74-75.
- Climpson, Jeffrey T., Joseph G. Francik, and Robyn K. Nolen. 1978. A Chestnut-sided Warbler in southeastern Washington. Murrelet 59(3): 102.
- Connelly, John W., Jr. 1978. Trends in Bluewinged and Cinnamon teal populations of eastern Washington. Murrelet 59(1): 2-6.
- Grayson, Donald K., and Chris Maser. 1978. First record for the Long-tailed Jaeger in eastern Oregon. Murrelet 59(2): 75-77.
- Green, Gregory A. 1978. Summer birds of the Alvord Basin, Oregon. Murrelet 59(2): 59-69.
- Henny, Charles J., James A. Collins, and William J. Deibert. 1978. Osprey distribution, abundance, and status in western North America;

II, the Oregon population. *Murrelet* 59(1): 14-25.

- Hodges, John I., James G. King, and Fred C. Robards. 1979. Resurvey of the Bald Eagle breeding population in southeast Alaska. J. Wildl. Manage. 43(1): 219-221.
- Ketterson, Ellen D., and Val Nolan Jr. 1979. Seasonal, annual, and geographic variation in sex ratio of wintering populations of Darkeyed Juncos (Junco hyemalis). Auk 96(3): 532-536.

 Areas with colder winter temperatures have lower percentages of females in the wintering populations.

- Leighton, Frederick A., Jon M. Gerrard, Peter Gerrard, Douglas W.A. Whitfield, and William J. Maher. 1979. An aerial census of Bald Eagles in Saskatchewan. J. Wildl. Manage. 43(1): 61-69.
- Manuwal, David A. 1978. Avian diversity and habitat selection in the Noatak Valley, Brooks Range, Alaska. Murrelet 59(2): 42-58.
- McNicholl, Martin K. 1978. Sight records of Veery and Swamp Sparrow on Vancouver Island, British Columbia. Murrelet 59(3): 102-104.
- Post, Peter W. 1979. An irruption of Tufted Titmice in the Northeast. Am. Birds 33(3): 249-250.
- Ritchie, Robert J. 1978. Probable Common Flicker nest on the north slope of the Brooks Range, Alaska. Murrelet 59(1): 31-33.
- Schultz, Gary A. 1978. Barrow's Goldeneyes nesting in central Idaho. Murrelet 59(3): 107-108.
- Sealy, Spencer G. 1979. Extralimital nesting of Bay-breasted Warblers: response to forest tent caterpillars? Auk 96(3): 600-603. — Near Delta, Manitoba, in 1976.
- Van Horn, Dennis. 1978. First breeding record of a Blue Jay in Oregon. Murrelet 59(2): 70.
- Vickery, Peter D., and Robert P. Yunick. 1979. The 1978-1979 Great Gray Owl incursion across northeastern North America. Am. Birds 33(3): 242-244.
- Weber, John W. 1978. First Idaho records of the Arctic Loon and its history east of the Cascades in Oregon and Washington. Murrelet 59(3): 109-110.
- Wilbur, Sanford R. 1979. The Bell's Vireo in California: a preliminary report. Am. Birds 33(3): 252.
- Wykoff, Jack N. 1979. First record of Goldencrowned Sparrow in Michigan. Jack-Pine Warbler 57(2): 109.

— This bird has been identified as a probable hybrid, Golden-crowned Sparrow Zonotrichia atricapilla x White-throated Sparrow Z. albicollis, by R.B. Payne (Auk 96: 595-599).

BIRD DISTRIBUTION - OTHER AREAS

- Alomia, Merling K. 1979. First occurrence of the Fork-tailed Flycatcher at Lake Titicaca, Peru. Am. Birds 33(3): 254.
- Ash, J.S. 1978. Inland and coastal occurrences of Broad-billed Sandpipers Limicola falcinellus in Ethiopia and Djibouti. Bull. B.O.C. 98(1): 24-26.

- Includes notes on identification.

- Barlow, Jon C. 1978. Records of migrants from Grand Cayman Island. Bull. B.O.C. 98(4): 144-146.
- Brooke, R.K. 1979. Two overlooked vagrants from the Tristan da Cunha group. Bull. B.O.C. 99(2): 81-82.

- Ringed Plover Charadrius hiaticula and Dark-billed Cuckoo Coccyzus melacoryphus.

- Bruce, Murray D. 1978. Records of birds from Timor: some additions and corrections. Bull. B.O.C. 98(4): 127-128.
- Cudworth, John. 1979. Rufous-sided Towhee in North Humberside. Br. Birds 72(6): 291-293. — Bird of a western race, perhaps Pipilo erythrophthalmus arcticus, considered to be almost certainly an escape from captivity.
- Davison, G.W.H. 1979. Alleged occurrence of *Rheinartia ocellata* in Sumatra. Bull. B.O.C. 99(2): 80-81.
 - One sight record of Crested Argus Pheasant evidently misidentified Great Argus Argusianus argus.
- Feare, C.J. 1979. *Apus pacificus* in the Seychelles. *Bull. B.O.C.* 99(2): 75-77.

- Sight and photographic records.

- Fisher, David J. 1978. First record of Blackheaded Gull Larus ridibundus and third record of Herring Gull Larus argentatus for South America. Bull. B.O.C. 98(3): 113. — Sight records in Trinidad. The Blackheaded was an adult; the Herring, "firstyear."
- Grimes, L.G. 1978. Occurrence of Javan Little Tern Sterna albifrons sinensis in West Africa. Bull. B.O.C. 98(3): 114.
- Hanmer, D.B. 1979. The Grey Sunbird Nectarinia veroxii in southern Malawi. Bull. B.O.C. 99(2): 71-72.
 - One record, 9 November 1978; netted and released.
- Jaeger, M.M., W.A. Erickson, and M.E. Jaeger. 1979. Sexual segregation of Red-billed Queleas (Quelea quelea) in the Awash River Basin of Ethiopia. Auk 96(3): 516-524.

Jarvinen, Olli, and Risto A. Vaisanen. 1978. Eco-

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logical zoogeography of North European waders, or Why do so many waders breed in the North? *Oikos* 30(3): 496-507.

Penry, E.H. 1979. Sight records of the Sooty Falcon Falco concolor in Zambia. Bull. B.O.C. 99(2): 62-65.

- With photo, some discussion of field identification.

- Powers, Kevin D., and Joseph A. Van Os. 1979. A concentration of Greater Shearwaters in the western North Atlantic. Am. Birds 33(3); 253.
- Pratt, H. Douglas, Phillip L. Bruner, and Delwyn G. Berrett. 1979. America's unknown avifauna: the birds of the Mariana Islands. Am. Birds 33(3): 227-235.
- Roe, Nicholas A., and William E. Rees. 1979. Notes on the puna avifauna of Azangaro Province, Department of Puno, southern Peru. Auk 96(3): 475-482.
- Schuchmann, Karl-L. 1978. Notes on the Rufouscapped Thornbill *Chalcostigma ruficeps*, a new hummingbird species for Colombia. *Bull. B.O.C.* 98(4): 115-116.
- Snow, D.W. 1979. Atlas of speciation in African non-passerine birds — Addenda and Corrigenda. Bull. B.O.C. 99(2): 66-68.
- Sutherland, William J., and Duncan J. Brooks. 1979. Nest of Black-browed Albatross in Shetland. Br. Birds 72(6): 286-288.
 - The lone individual summering 1974-1978 at Hermaness, Shetland, went through the motions of nest-building.
- Tyler, Stephanie J. 1978. Some observations of birds in Fah, northeast Eritrea. Bull. B.O.C. 98(3): 80-87.

- Observations made during seven months that the author was being held by liberation-front guerillas in Ethiopia. "Observations at Fah were necessarily limited; in particular the confiscation of my binoculars made identification of distant birds difficult . . ." This paper bears quiet testimony to its author's courage and presence of mnd under dangerous conditions.

- Wells, D.R. 1979. Black Kites *Milvus migrans* in Sumatra. *Bull. B.O.C.* 99(2): 56-57.
- Wiley, James W., and Beth Nethery Wiley. 1979. Status of the American Flamingo in the Dominican Republic and eastern Haiti. Auk 96(3): 615-619.
- Wiley, James W. 1979. The White-crowned Pigeon in Puerto Rico: Status, distribution, and movements. J. Wildl. Manage. 43(2): 402-413.

TECHNIQUES

Franks, Edwin C. 1979. Ant, bee, and wasp con-

trol at hummingbird feeders. Jack-Pine Warbler 57(2): 70-75.

Kushlan, James A. 1979. Effects of helicopter censuses on wading bird colonies. J. Wikll. Manage. 43(3): 756-760.

HYBRIDS AND HYBRIDIZATION

Alerstam, Thomas, Bo Ebenman, Magnus Sylven, Staffan Tamm, and Staffan Ulfstrand. 1978. Hybridization as an agent of competition between two bird allospecies: *Ficedula albicollis* and *F. hypoleuca* on the island of Gotland in the Baltic. Oikos 31(3): 326-331.

- Collared and Pied flycatchers.

Dowsett, R.J. 1978. A hybrid Hirundo rustica x Delichon urbica in Zambia. Bull. B.O.C. 98(3): 113-114.

- Barn Swallow x House Martin.

Payne, Robert B. 1979. Two apparent hybrid Zonotrichia sparrows. Auk 96(3): 595-599.
Apparent Golden-crowned x Whitethroated sparrow (Z. atricapilla x Z. albicollis) from Michigan, and Harris' x Whitecrowned sparrow (Z. querula x Z. leucophrvs) from Ontario; with photographs.

PLUMAGE AND MOLT

- Ferns, P.N. 1978. The onset of prebasic body moult during the breeding season in some high-Arctic waders. Bull. B.O.C. 98(4): 118-122.
- Haas, George H., and Spencer R. Amend. 1979. Primary feather molt of adult Mourning Doves in North and South Carolina. J. Wildl. Manage. 43(1): 202-207.

VOCALIZATIONS

- Bitterbaum, Erik, and Luis F. Baptista. 1979. Geographical variation in songs of California House Finches (Carpodacus mexicanus). Auk 96(3): 462-474.
- Dowsett-Lemaire, Francoise, and R.J. Dowsett. 1978. Vocal mimicry in the lark *Mirafra hypermetra* as a possible species-isolating mechanism. *Bull. B.O.C.* 98(4): 140-144.
- Hardy, John William. 1979. Vocal repertoire and its possible evolution in the black and blue jays (Cissilopha). Wilson Bull. 91(2): 187-201.

— With descriptions of all known vocalizations. This group includes the Mexican species Purplish-backed Jay C. beecheii, San Blas Jay C. sanblasiana, and Yucatan Jay C. yucatanica, plus the Bushy-crested Jay C. melanocyanea of Central America.

- Kettle, Ron. 1979. Recommended bird-recordings. Br. Birds 72(5): 199-207.
 - Aimed at British audience; might be useful for North Americans traveling to Europe.
- Kroodsma, Donald E. 1979. Vocal dueling among male Marsh Wrens: evidence for ritualized expressions of dominance/subordinance. Auk 96(3): 506-515.

ECOLOGY AND BEHAVIOR

- Beaman, Mark. 1979. Hen Harriers hunting over the sea. Br. Birds 72(6): 288.
 - This species is *Circus cyaneus*, usually called Marsh Hawk or Northern Harrier in North America.
- Berry, Rob. 1979. Nightjar habitats and breeding in East Anglia. Br. Birds 72(5): 207-218.
 Interesting study of Caprimulgus europaeus in Britain.
- Bramley, Alan. 1979. White Storks migrating at night by utilizing oil flares. Br. Birds 72(5): 229.
- Bull, Evelyn L., and Ralph G. Anderson. 1978.
 Notes on Flammulated Owls in northeastern Oregon. Murrelet 59(1): 26-28.
 With notes on nesting sites.
- Bull, Evelyn L. 1978. Roosting activities of a male Pileated Woodpecker. *Murrelet* 59(1): 35-36.
- Carpenter, Thomas W. 1979. Observations of Buteos eating fish. Jack-Pine Warbler 57(2): 109-110.
- Chang, W.F., and S.R. Severinghaus. 1979. Notes on the Yellow Tit *Parus holsti* of Taiwan with discovery of its nest. *Bull. B.O.C.* 99(2): 54-56.
- Divoky, George J., Karen L. Oakley, and Harriet R. Huber. 1979. Pomarine Jaeger preys on adult Black-legged Kittiwake. Wilson Bull. 91(2): 329.
- Erickson, David B. 1978. Robin feeding upon snake. Murrelet 59(1): 26.
- Eshbaugh, Barbara K., and W. Hardy Eshbaugh. 1979. Removal of fur from a live raccoon by Tufted Titmice, *Wilson Bull.* 91(2): 328.
- Fraga, Rosendo M. 1979. Helpers at the nest in passerines from Buenos Aires Province, Argentina. Auk 96(3): 606-608.
- Franklin, Alan B., Deborah A. Clark, and David B. Clark. 1979. Ecology and behavior of the Galapagos Rail. Wilson Bull. 91(2): 202-221.
- Gochfeld, Michael. 1979. Nest description and plumage variation of the Sepia-brown Wren *Cinnycerthia peruana. Bull. B.O.C.* 99(2): 45-47.
- Hilden, Olavi. 1978. Population dynamics in Temminck's Stint Calidris temminckii. Oikos 30(1): 17-28.

Hodgson, lan, and Trevor Wyatt. 1979. Hen

Harrier repeatedly stooping at small bird. Br. Birds 72(6): 288-289.

- Kilham, Lawrence. 1979. Courtship and the pairbond of Pileated Woodpeckers. Auk 96(3): 587-594.
- Knight, Richard L., and Albert W. Erickson. 1978. Marmots as a food source of Golden Eagles along the Columbia River. Murrelet 59(1): 28-30.
- Lewis, R.J. 1979. Buzzard utilising air from hotair balloon. Br. Birds 72(5): 230. Bird gaining lift from balloon's artificiallyproduced "thermals".
- Marchant, S. 1978. Nuptial behavior in the genus Coracina (Campephagidae). Bull. B.O.C. 98(4): 129-131.
- Mundahl, John T. 1979. Black-billed Magpie predation of a Killdeer nest. Wilson Bull. 91(2): 330.
- Novelletto, Andrea, 1979; and Petretti, Francesco, 1979. Feeding methods of House Sparrows and Chaffinches with pine seeds. Br. Birds 72(6): 290.
 - Two separate notes: these two species dropped seeds on rocks to crack them open.
- O'Brien, Patricia. 1979. Breeding activities of Waved Woodpeckers in Surinam. Wilson Bull. 91(2): 338-344.
- Pitts, T. David. 1979. Foods of Eastern Bluebirds during exceptionally cold weather in Tennessee. J. Wildl. Manage. 43(3): 752-754.
- Prevett, J. Paul, Ian F. Marshall, and Vernon G. Thomas. 1979. Fall foods of Lesser Snow Geese in the James Bay region. J. Wildl. Manage. 43(3): 736-742.
- Ramakka, James M., and Vicky F. Ramakka. 1979. Eared Dove food habits in southwestern Colombia. J. Wildl. Manage. 43(2): 534-540.
- Raveling, Dennis G. 1979. Traditional use of migration and winter roost sites by Canada Geese. J. Wildl. Manage. 43(1): 229-235.
- Rhodes, R.W. 1979. Hen Harrier apparently attempting to catch fish. Br. Birds 72(6): 289.
- Schuchmann, Karl-L. 1979. Notes on sexual dimorphism and the nest of the Greenish Puffleg Haplophaedia aureliae caucensis. Bull. B.O.C. 99(2): 59-61.

With photo of nest and nestling.

- Thomas, Brian. 1979. Osprey fishing from perch. Br. Birds 72(6): 290.
- Vogt, Richard C. 1979. Cleaning/feeding symbiosis between grackles (Quiscalus: Icteridae) and map turtles (Graptemys: Emydidae). Auk 96(3): 608-609.

MIGRATIO

Oikos, volume 30, number 2, 1978. The entire issue is devoted to the proceedings of a sym-

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posium on current bird migration research at Falsterbo, Sweden, 3-8 October 1977. For the readers' information we are listing the total contents of that issue here; the entries are listed in the order in which they appeared.

- Pennycuick, Colin J. 1978. Fifteen testable predictions about bird flight. Oik os 30(2): 165-176.
- Wiltschko, Wolfgang, and Roswitha Wiltschko. 1978. A theoretical model for migratory orientation and homing in birds. Oikos 30(2): 177-187.
- Wallraff, Hans G. 1978. Proposed principles of magnetic field perception in birds. Oikos 30(2): 188-194.
- Wiltschko, Roswitha, and Wolfgang Wiltschko. 1978. Relative importance of stars and the magnetic field for the accuracy of orientation in night-migrating birds. Oikos 30(2): 195-206.
- Wallraff, Hans G., and O.G. Gelderloos. 1978. Experiments on migratory orientation of birds with simulated stellar sky and geomagnetic field: Method and preliminary results. Oikos 30(2): 207-215.
- Rabø, Jørgen. 1978. One-direction orientation versus goal area navigation in migratory birds. Oikos 30(2): 216-223.
- Richardson, W. John. 1978. Timing and amount of bird migration in relation to weather: a review. Oikos 30(2): 224-272.
- Aler tam, Thomas. 1978. Analysis and a theory of visible bird migration. Qikos 30(2): 273-349.
- Blokpoel, Hans, and W. John Richard on. 1978. Weather and spring migration of Snow Geese across southern Manitoba. Oikos 30(2): 350-363.
- Iwinner, Eberhard, and Dieter Czeschlik. 1978. On the significance of spring migratory restlessness in caged birds. Oikos 30(2): 364-372.
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Latest Rumors

July-August 1979

This is a brief recounting of some of the exciting bird occurrences that have come to our attention recently. We make no claims for the completeness of this summary. Although we believe that all of the records cited here are probably correct, we have not been able to check most of them out personally; readers desiring further information should consult the appropriate regional publications, or the regional reports in *American Birds*.

We received a friendly note from Paul DeBenedictis, the well-known Syracuse ornithologist, in which he suggested that we should keep this column as tentative in tone as possible. Once an incorrect record has been put in print, he said, it may take an extraordinary effort to get it thoroughly retracted. We fully agree (having met this problem in dealing with old distributional records for Arizona and Mexico), so we hasten to emphasize that this is a *rumors* column; any one item mentioned here may prove to be a false alarm. We sincerely hope that we'll never see any "records" quoted from this column. — An example of our fallibility is provided by the supposed Gray-headed Chickadee *Parus cinctus* in Alberta, which we confidently reported in the February "Latest Rumors;" the bird has since been re-identified as an abnormal Black-capped Chickadee *P. atricapillus* (to the enlightenment and/or consternation of those who traveled great distances to see it).

Offshore this summer: Cory's Shearwaters Puffinus diomedea moved north into the Gulf of Maine (between Maine and Nova Scotia) in unprecedented numbers during late summer . . . Farther south at Cox's Ledge ("disputed territory," claimed by pelagic birders from both New York and Rhode Island), a Yellow-nosed Albatross Diomedea chlororhynchos was the center of excitement. But the pelagic prize would have to go to the **Red-tailed Tropicbird** Phaethon rubricauda which reportedly circled about Southeast Farallon Island, California, in July. If accepted this would be the first North American record, although the species breeds in Hawaii and has been reported far off western Mexico. — Onshore in California, a White Wagtail Motacilla alba showed up in early August (a surprisingly early date) and remained through the month near the north end of Monterey Bay, being seen by hundreds of observers. Another early motacillid was an adult **Red-throated Pipit** Anthus cervinus which appeared at summer's end on San Juan Island, providing the first record for Washington state. -On the Mexican border the summer was quiet. The only Berylline Hummingbird Amazilia beryllina found in Arizona was "in the wild," not at feeders — at Penstemon patches at the top of Carr Canyon — and it was seen only one day. An Eared Trogon Euptilotis neoxenus (or perhaps two?) put in a mid-August appearance in the accessible reaches of Cave Creek Canyon, but after two days it (they?) disappeared: probably just moving back to more remote areas of the Chiricahua Mountains. -There was much dispute about a supposed Corn Crake Crex crex in Ohio, but evidently no such doubts tainted the three Curlew Sandpipers Calidris ferruginea that visited the Chicago area in mid-summer. - The New York City area also received Curlew Sandpipers, but perhaps more significant was the belated discovery that there were two, not one, White-faced Ibis Plegadis chihi frequenting the same area on western Long Island; observers speculated on the possibility that the species might nest in the local colony of Glossy Ibis P. falcinellus.

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