

The Changing Seasons

*presenting evidence of "change in
summer birdwatching habits
. . .it's no longer the forgotten season."*

by William B. Robertson, Jr.

WRITERS OF *The Changing Seasons* are in much the same predicament as a person with a huge basket of laundry and no clothesline. There's never a shortage of material: the problem, rarely solved, is finding an adequate thread of logic to hang it on. Awash to the gunwales in a flood of detail, the search for unifying principles is usually lost in concern for survival. Either we sift the records for those of greatest shock value (Gee whiz, a Racket-tailed Motmot in Central Park!) or we adopt what Davis Finch termed the "starkly enumerative" approach, plodding through the checklist with long columns of bird names about as stimulating to read (and to write) as your basic telephone directory. This effort, alas, probably errs in both directions, but it also struggles here and there to say a few things in general about breeding range extension.

One of this season's most notable aspects was the mounting evidence of change in summer birdwatching habits. Recording shifts in breeding distribution and success is much of what *American Birds* is all about. Yet, historically, the nesting season has been the annual low point of observational effort, the dull spell between migrations when active birders got reacquainted with their families. A few editors still complain about poor summer coverage but the lament is lost among the reports of intensive activity. Schemes to verify

and accurately map distribution of breeding birds are afoot in at least a dozen states. Projects directed to specific groups (endangered species, colonial water birds, diurnal raptors, owls, bluebirds) are even more numerous. Add the Fish and Wildlife Service's network of cooperative Breeding Bird Survey routes and it's clear that summer is no longer the forgotten season. Perhaps the Breeding Bird Surveys, by giving observers a reason to go afield in June, were substantially responsible for the turn-around. Last year Bob Newman commented on the recent sharp increase in observations that represent first state breeding records. It doesn't seem likely that the birds have stepped up their pace. What has changed is that a lot more people are out there looking and the lag time between actual and recorded range extension has probably been much reduced.

Old business

THE EPHEMERAL NEWS value of new bird records poses some difficulty for anyone who tries to chart breeding range extensions from the information in *American Birds*. Early occurrences get detailed treatment. But, then, unless the species is especially noteworthy or its rate of advance unusual, the event tends to lose out to more newsworthy items. At times one is left wondering whether the early records were

followed by actual colonization of a new area. It's comforting to find in the present reports comments indicating that many species are consolidating their hold on new ranges, as well as *second* breeding records for some of last year's novelties, such as Gadwall in Maine, Forster's Tern in Ontario and American Redstart in Arizona. Altitudinal distribution is one aspect of the fine structure of range extension that received notice. Conspicuous extensions of altitudinal range, both uphill and down, were reported for about 15 species. Brown Creeper, Red-breasted Nuthatch, Winter Wren, and Dark-eyed Junco exemplify species nesting at lower elevations in the East and the American Robin, typically a montane bird in the Southwest, nested in Tucson and on both banks of the lower Colorado River.

BREEDING RANGE EXTENSIONS

New Records

CONFIRMED BREEDING RECORDS said (or, in one or two cases, assumed by me) to be the first for various major geographical entities totalled 28, marginally fewer than last year. Those of particular note are italicized below. Included in parentheses are several others that seem to be first modern breeding occurrences and perusal of range statements in the A.O.U. *Check-List* (1957) suggests that a few of the claimed first records (starred below) may also belong in this second category. The tally, with several Regions reporting only partially or not at all, was: *Laysan Albatross, Kauai*; *Manx Shearwater, Newfoundland*; Cattle Egret, Colorado; *Louisiana Heron, Maine*; *White Ibis, Virginia*; Hooded Merganser, Texas; *Black-necked Stilt, Alberta*; Ring-billed Gull, Northern Pacific Coast Region; *Black-headed Gull, Newfoundland*; Franklin's Gull, Wyoming; white *Sterna*, probably Common Tern, Washington coast; Horned Puffin, British Columbia; Black-billed Cuckoo, South Texas Region; Barn Owl, Vermont; Flammulated Owl, Washington; *Great Gray Owl, Ontario; *Chuck-will's-widow, Ontario*; *Sulphur-bellied Flycatcher, Texas*; (Acadian Flycatcher, Massachusetts); *Western Wood Pewee, Minnesota*; *Tree Swallow, Kansas; *Bank Swallow, North Carolina; Mockingbird, Saskatchewan; (Gray Catbird, Florida); *Wood Thrush, Oklahoma; (Bell's Vireo, Colorado); *Northern Parula, New Mexico* and

(*California*); Cerulean Warbler, Vermont; *Rufous-capped Warbler, Arizona*; *Pyrrhuloxia, California*; and Botteri's Sparrow, New Mexico.

Discovery in Newfoundland of a substantial colony of Manx Shearwaters and a few pairs of Black-headed Gulls with dependent young at last justified the long-standing belief of field observers that these species must be breeding somewhere on the New World side of the North Atlantic. The nesting records and other summer occurrences suggested the Northern Parula may become the first Eastern warbler to achieve definitive colonization of the West.

Nesting attempts by pioneering individuals may be especially prone to variously abortive results and, in consequence, some of the first breeding records above may be sufficiently vexed to promote development of a new field of ornithological law. Thus the Hooded Merganser laid one egg in a proper nest in a tree cavity, but what happened after that is evidently not known. The Rufous-capped Warbler produced a nest and four eggs, but only one bird was seen and it didn't sing. Observers speculated that it may have been an unmated female. In the case of the Pyrrhuloxia, a pair and a nest were seen, but no eggs. Intent is a vital consideration in law, however, and in all instances there seems to be no question on that score.

Next year's range extensions

SUMMER RECORDS THAT SUGGESTED possible (or impending) range extension were far too numerous to detail. Besides those confirmed as breeding in new areas, at least 60 species occurred beyond known ranges often in circumstances that strongly indicated nesting. Wilson's Phalarope, apparently pressing against its entire perimeter, had the prize for most near misses with nesting suspected, but not proved, in Québec, New York, northern Illinois, Vancouver Island, and the southern Yukon. Wood Thrush, another species with several active range edges, also achieved outpost occurrences at Boulder, Colorado (singing), and Point Reyes. Perhaps the White-winged Crossbill doesn't have a breeding range *per se*, but merely nests whenever and wherever it finds good cone crops. This summer the species was mobile along much of its southern perimeter with singing males at two

places in Vermont, flocks of hundreds on both sides of Lake Superior, and western reports that included birds in breeding condition banded at Logan, Utah.

Other notables from a long list were: Little Blue Heron at Salton Sea and Royal Tern in New Jersey and Long Island (similar in that first nesting is expected momentarily in both cases); Tufted Puffin possibly colonizing the California mainland coast; Hawk Owls in Maine and Nova Scotia; Common Raven on the Lake Ontario shore near Rochester; three singing Winter Wrens in Rocky Mountain Nat'l Park; Ruby-crowned Kinglets in Pennsylvania and western New York and nesting at a new southern limit in Ontario; Prothonotary Warbler, first Québec sighting; Virginia's Warbler banded in eastern Oregon; Northern Waterthrush, probably nesting on the east slope of the Cascades in Oregon; Red-faced Warbler in extreme northwestern Arizona; singing Kentucky and Hooded Warblers in southern Wisconsin, the former also in southern Minnesota; Yellow Grosbeaks (*Pheucticus chrysopheplus*) at three localities in Arizona, the records accompanied by convincing arguments that these are not escaped cagebirds; and singing Five-striped Sparrows at a number of new spots around Nogales.

AS THE EASTERN WARBLERS in California become increasingly difficult to dismiss as vagrants, it becomes reasonable to suspect that some species have taken up new nesting ranges in the West. Records this June of Tennessee, Northern Parula, Magnolia, Black-throated Blue, Cape May, Hooded—many of these singing or “acting as if they were nesting”—suggested that the Rockies of northern Colorado would be a good place to look. Add to the above, summer records of Bay-breasted in southwestern Wyoming, Northern Parula and Cape May in Nevada and Black-and-white, Worm-eating, Ovenbird, and Hooded in Arizona. Tennessee and Cape May, two species whose populations may wax and wane with outbreaks of spruce budworm, also occurred widely out-of-range in the East and Midwest.

Post-breeding dispersal into new areas, particularly by immatures, is a fairly regular precursor (and perhaps the mechanism) of breeding range extension in many water birds. Notable this summer were a major northward

and inland movement of young White Ibis in the East and a smaller flight of young Roseate Spoonbills to southern Nevada, southwestern Arizona, Salton Sea, and the southern California coast. By the end of summer, Salton Sea had also accumulated 650 Wood Storks, 600 Laughing Gulls (mostly adults) and 200 (Yellow-legged) Western Gulls, all presumably dispersing from colonies in western Mexico and the Gulf of California. Such concentrations at least raise the possibility that other Mexican water birds may follow the path of the Black Skimmer, now solidly established as a breeder at Salton Sea.

Surveying the possibilities spread above, it appears that the bullish market in breeding range extensions can be expected to hold for the next few years.

Some general comments

IT IS ABUNDANTLY EVIDENT to anyone who compares breeding ranges given in the A.O.U. *Check-List* with those indicated in recent issues of *American Birds* that many species now breed in areas considerably different from those they occupied 20 years ago. Perhaps there's some value in looking briefly at a few general aspects of the patterns of change in breeding bird distribution.

As an initial point, range expansion gets the headlines, but, to the extent that range changes reflect pervasive environmental changes, one might expect range shrinkage to occur about as frequently. Indeed, that seems to be the case at the far breeding range extremities of some species (American Kestrel, Hairy Woodpecker, Eastern Kingbird, Eastern Bluebird, Summer Tanager) in southern Florida. It may be worth looking for elsewhere.

Two groups seem distinguishable among the suite of expanding species; those whose main thrust is directional from one range edge and those that seem to be pressing in all directions. Examples of the former from present reports are Goshawk (south), Cerulean Warbler (north), Clay-colored Sparrow (east), and Common Grackle (west). Species showing explosive expansion include Cattle Egret, Louisiana Heron, Yellow-crowned Night Heron, Mississippi Kite, Willow Flycatcher, Cliff Swallow, Blue-winged Warbler, Brown-headed Cowbird, Rose-breasted Grosbeak, Indigo Bunting, and House Finch. This group appears also to be characterized by large numbers of wandering or overshooting individuals in advance of the expanding range

edges, as witness about 100 reports of Rose-breasted Grosbeaks from California and the Southwest. Birds exhibiting multidirectional range extension on a lesser scale were Black Skimmer, Black-billed Cuckoo, Barn Owl, Chimney Swift, Gray Catbird, Bronzed Cowbird, and possibly Purple Finch. Are the apparent differences between uni- and multidirectional expansion merely temporal and quantitative or is there some basic difference in the populations concerned? Some species, such as Cattle Egret and House Finch, are evidently responding to rich, unexploited ecological opportunities, but environmental explanations for other rapid expansions aren't as clear. And the Cattle Egret, incidentally, seems likely to far surpass its latitudinal limits in the Old World. Why?

CONSIDERING THE DIRECTION of range expansion, one is impressed that many of the southward advances and the spread west across the Great Plains have obviously been assisted by man's habitat modifications. Planted trees in towns guided the westward spread of Mississippi Kites, Blue Jays and Common Grackles, just as spruce plantations helped Golden-crowned Kinglets move south in the East and eucalyptus plantings helped Dark-eyed Juncos south down the California coast. So simple a thing as use of square-cut rather than curved culverts has promoted spread of the mudnest-building swallows, and the Tree Swallow has utilized the birdboxes of numerous "operations bluebird" in its spread south. Lumbering clear-cuts and cleared lanes along power lines have been important in the spread of many open country and forest-edge species into forested areas. Man's role is at least less plain in the northward spread of many birds. Do these, perhaps, show the influence of some larger change, such as a trend of climatic warming?

Another point well worth attention is the impact of expanding species upon the established avifauna of an area. In the case of concern about expanding ranges of brood parasites and aggressive competitors such as the Starling, experience elsewhere suggests that the populations impacted will adjust and persist. What, however, of the species expanding into the ranges of closely related forms? To take cases clearly foreshadowed in the present reports, is there room in any ecosystem for populations of Barred *and* Spotted Owls, Eastern *and* Western Wood Pewees, Indigo

and Lazuli Buntings? The competitive and perhaps genetic (the ultimate competition) outcome of coexistence in these and a number of other cases offers fascinating opportunities for observers.

SPECIAL TOPICS

Winter kill

HOW BADLY DID the East's epochally bitter winter of 1976-77 affect breeding populations of resident and wintering birds? The bottom line (see also *AB* 31:968) seems to read, "Not as much as was feared." More exact reckoning must await analysis of Breeding Bird Survey data. Reports indicated greatly reduced numbers of about 35 species at one place or another, but the impact was local, a mosaic pattern of varying severity, rather than monolithic. As Clive Goodwin put it for the Ontario Region, "The picture that emerged was typically fuzzy." Viewed across Regions, the fuzziness was even more evident. More species were hit harder in the central and northern Appalachians than elsewhere, but even there a few survived in most areas. Carolina and Winter Wrens seem to have taken severe losses across the board. No sweeping consensus existed as to other principal victims, but Eastern Phoebe, House Wren, Mockingbird, Hermit Thrush, Eastern Bluebird, and both kinglets got frequent mention.

Notably, the crushing winter kill did not appear to fall more heavily upon outpost populations. Several of the species hardest hit still occurred at or near their previous limits and apparently no species lost major areas of its range. This characteristic along with the favorable weather of summer 1977 should mean that reproduction will soon obscure the effects of the winter. Enhanced fecundity of survivors seems typically to follow natural disasters. For example, see George Hall's note about the two pairs of Carolina Wrens in southwestern Pennsylvania that raised at least 14 young. Recurring events that decimate local populations but leave a few survivors set up virtual textbook conditions for adaptive natural selections. Thus, the winter of record discontent may pave the way for more secure range expansion by a new and improved Carolina Wren.

Summer weather and nesting birds

IT WAS AN EXCEPTIONALLY hot summer all across the continent and, with a few exceptions, it was also very dry. Scores of long-standing records for extreme high temperatures and duration of heat waves were eclipsed and sea ice at Barrow, Alaska, broke up in late June, one of the earliest dates ever. The big drought from the Rockies to the Pacific persisted with little relief. The middle-sized drought in the northern plains and upper Midwest eased in some areas but effects lingered. And, a new little drought along the Atlantic coast from Virginia to northern Florida began to attract attention. Damaging storms and other perturbations that might have reduced nesting success seem to have been unusually few and local.

The warm, dry, settled weather promoted productive nesting by most land birds in nearly all Regions. For species tied to inland aquatic habitats, the view was less encouraging and it darkened rapidly as one moved west. Many inland water bird colonies in the West did not form and results often were poor in those where nesting was attempted, commonly because low water made nesting sites more accessible to predators. Grave concern is felt for the future of heronries in the Midwest, but perhaps in that case drought is merely one of a cluster of problems. Waterfowl production was down by 50 per cent or more in some renowned duck factories in the Great Basin. Grebes, White Pelicans, ducks, and coots thought to have skipped the breeding season concentrated on deep water reservoirs unsuitable for nesting. The many and various records of displaced water birds are perhaps best epitomized in Guy McCaskie's report that all three scoter species summered at Salton Sea. Many editors mentioned lower populations of rails, Black Terns and the passerines that breed in inland marshes. Hugh Kingery reported rosy finches absent from some alpine areas, apparently because deficient snowfall eliminated their preferred feeding niche along the edges of melting snowbanks.

THE GLOOM, HOWEVER, was not altogether unrelieved. Most water birds contrived to nest with at least moderate success at places in their usual Western range and dispersal triggered by drought resulted in nesting records

from new areas. Some probable examples were: Western Grebe in southern New Mexico; a small White Pelican colony in Idaho, first nesting in the state in 20 years; White-faced Ibis and American Avocets at Salton Sea; and Killdeer near Fairbanks, Alaska. Black-necked Stilts, on the move last spring (*AB* 31:1026), topped the list by nesting at Beaverhill Lake, Alberta, east of Edmonton at 53°N. Ducks, particularly dabblers, invaded the far Arctic and the coastal Northwest in unusual numbers. Blue-winged Teal and Canvasback reportedly nested in the central Yukon and Ring-necked Duck may have nested in southern Alaska. The production achieved by birds forced into unfamiliar territory may be insignificant and the new range of convenience may not be retained, but, nevertheless, the flexibility of water birds in the face of historic drought is heartening.

A few water birds prospered with drought. Several editors thus explain increased numbers of Upland Sandpipers and John Ogden suggests that dry weather in central and northern Florida, disruptive to heron nesting, contributed to the outstanding success of Wood Storks by concentrating food organisms. And, as usual, low water and expanded habitat made for better shorebird watching. For most notable example, Lake Tahoe, standing four feet below its normal level, unveiled mudflats that may have been in preparation for centuries and which attracted large number of shorebirds rarely or never seen before in the Sierra Nevada.

Migration and migrants

A BAD JOKE ONCE current among bird-watchers in Florida had it that any migrant seen up to June 10 was a spring migrant, after July 10 it was a certifiable fall migrant, and in the month between one judged which it was according to the direction it was facing or flying. The fact that northbound shorebirds often seem to meet others of the same kind coming south has long been a vexation to those who care deeply about early and late dates. This year, perhaps due to more field work in June, the clearance between spring and fall migration for passerines as well was reduced perilously near the vanishing point. Records from the banking station at Prince Edward Point, Ontario, revealed that steady passage of *Empidonax*, thrushes and warblers

continued past mid-June and presumed southward migration began the first week of July. Comments and records tending toward the same conclusion came from about ten other Regions.

Among unusual shorebird migrants, a truly Wandering Tattler in Ontario and Arizona's first White-rumped Sandpiper were on spring migration by the above criterion; Maine's first Rufous-necked Sandpiper was a fall migrant; and, in the absence of directional data, it isn't clear to which migration the *July 8* Bar-tailed Godwit at Mono Lake, California, should be assigned. Alaska listed seven species of Palearctic shorebirds, the most notable a Terek Sandpiper near Anchorage.

THE "SKUA QUESTION", apparently settled for now in the West (*Auk* 94:417 ff.), became still more deliciously complicated in the East with a well-photographed bird at Hudson Canyon judged to resemble a second species of the Southern Ocean (Brown Skua, *Catharacta lonnbergi*. See Watson. 1975. Birds of the Antarctic and Sub-Antarctic, p. 206 ff.). Peter Vickery, noting that all seen at George's Bank, Massachusetts, were called South Polar Skuas and all seen from ferries in the Gulf of Maine were called Great Skuas, seemed justified in concluding that confusion reigns. How did we spend our time up until about five years ago before we had the skuas to kick

around? Unusually numerous reports of Long-tailed Jaegers included records near Montreal and on Lake Champlain. An observation of 15-20 on June 29 underlined the fact that Bridled Tern is often the predominant summer pelagic off the Carolina Capes. Identification of two noddies off Oregon Inlet, North Carolina, to genus only, showed commendable, but perhaps excessive, caution.

A bit of dogma about migration that I picked up somewhere held that "waves" of migrants were infrequent in the West because weather patterns were seldom favorable. Increasing use of the term in Regional reports, however, suggests that California's newfound Eastern parulids are making waves in more ways than one. This year had the largest spring flight yet, about 200 records of at least 15 species ("awesome numbers" of Bay-breasted) mainly on the Farallons and the central coast. As last year (*AB* 30:1000), the principal waves occurred in mid-June.

Palearctic land birds found along Alaska's western (*i.e.*, Far Eastern) periphery included three additional novelties—Jungle Night-jar (*Caprimulgus indicus*), Brown Shrike (*Lanius cristatus*) and Dusky Warbler (*Phylloscopus fuscatus*)—all strongly migratory species that winter in tropical Asia. Even at the present rate of addition it promised to be a good while before this pool of possible overshooting Old World migrants is exhausted.



skua, sp., almost certainly not North America Great Skua, Hudson Canyon, May 28, 1977. Photo by Alan Brady. See p. 1117.

Red Book, Blue List

UNDERSCORING ONE OF THE important roles of *American Birds*, the current reports include comment on roughly 40 per cent of the 110 relevant species on the Fish and Wildlife Service list of rare and endangered birds and the *AB* Blue List of species thought to be in earlier stages of population decline. Perhaps the best news, a little late for the Bicentennial, was about Bald Eagles. Maine, not long ago a disaster area for the species, had 44 active nests with a productivity rate that suggested a reasonably healthy population. Note of more modest nesting success came from several other areas. These reports added to the increasingly robust evidence that stressed species of fish-eating birds are emerging from the Mordor shadow of hard pesticides. Also most encouraging were high counts of two species of endangered Hawaiian honeycreepers.

Two species on the Blue List made moves that may cost them that dubious distinction. White Ibis nested for the first time in Virginia and juveniles dispersed inland and north to Long Island in numbers that brought confident predictions of further range extension. As for the Cliff Swallow, a reader with only these reports to go by might conclude that it's one of the most aggressive and successful of North American birds. Maybe the most telling datum in a long catalog of increases and range advances is Kingery's note that every I-25 overpass between Cheyenne and Casper now has a Cliff Swallow colony.

HOPEFUL INFORMATION somewhat lower on the scale of optimism was reported for: Manx Shearwater (*P. p. newelli* found again on the island of Hawaii where extirpated as a breeder around 1900); Brown Pelican (34 young from two small Texas colonies with counts of up to 100 summering non-breeders); Reddish Egret (slowly reclaiming its 19th Century turf along the Florida Gulf coast where it nests on spoil islands in a canyon of condominiums); Black-crowned Night Heron; Wood Stork; Fulvous Whistling Duck (southern Florida seems to have become a major population center); Greater Prairie Chicken (*T. c. attwateri*); Black Rail (California); Clapper Rail (southern California); American Oystercatcher (New Jersey,

Chesapeake Bay); Snowy Plover (high counts on desert alkaline lakes in the West); Upland Sandpiper; Yellow-billed Cuckoo (California); Barn Owl; Kirtland's Warbler; Grasshopper Sparrow; and Henslow's Sparrow.

Bell's Vireo (rediscovered nesting in north-eastern Colorado but reportedly near the brink in California) typified the species with some good news and some bad, a group that included Western Grebe, White Pelican, Double-crested Cormorant, White-faced Ibis, most hawks, Least Tern, Red-headed Woodpecker, and Loggerhead Shrike. All the word received was discouraging for Gull-billed Tern (no nesting on Long Island, failed nesting in northern Florida, 50 per cent decline on the Virginia coast) and, with few precincts reporting, for Burrowing and Short-eared Owls. Reportedly stressed populations that look to be prime Blue List candidates included Common Loon (East), Wilson's Plover (New Jersey), Common Tern (Great Lakes), and Yellow-bellied Sapsucker (southern Appalachians).

Accidentals?

IN THIS SPACE A YEAR ago Bob Newman deftly cited a prescient paper by Joseph Grinnell the main point of which was that "accidental" bird occurrences are often no accident but a necessary prelude to range extension. In attempting to sort the summer's salient records into more or less functional categories, however, I'm left with a few that need mention but seem likely to have been isolated incidents without clear portent. Among them are. Anhinga on Long Island; Snail Kite, presumably from eastern Mexico, in southern Texas; California's first Wilson's Plover in 60 years; a pair of Northern Phalaropes all summer on a pond in Wisconsin; Black Skimmer at a reservoir in the heart of Kansas; White-winged Doves at two places in New Brunswick; the Austin, Texas, Green Violet-ear back for the third year in a row; Wheatear in Oregon; White-eyed Vireo at Point Reyes; and a male Chestnut-collared Longspur in breeding plumage photographed for a first Virginia record. If some (or all!) the above prove in fact to have been precocious pioneers, I'll be glad that I was wrong.

—Research Division, Everglades National Park, Homestead, Fla. 33030.