

The Changing Seasons

*Spring Migration, 1980—a perceptive, critical,
and hortatory review of the season's effort*

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INTRODUCTION

AS IS THE CASE with many ornithologists, we frequently turn to *American Birds'* seasonal report data as a mine of information with which to help prepare summaries, reports and papers. The information is widely used for the obvious reason that it is the most current and geographically comprehensive source available in the literature. Our theme for this "Changing Seasons" article is thus to urge the further refining and improvement of the data so as to reflect as quickly and accurately as possible the underlying trends in the bird populations of the Americas.

At this point we should declare our common bias. Our work at Manomet Bird Observatory lies in the field of population biology, even though several of the staff are "birders" in a traditionally rabid sense in their private lives, life lists and all. However, it is from the former standpoint that we wish to appeal to all contributors and editors to provide more relevant population data. To put it another way, in this election year we wish to espouse the cause of the common bird!

Our professional interests lie in four separate areas: diurnal raptors, marine birds, shorebirds and landbirds. Therefore, in preparing this article we have sliced the taxonomic cake into four sections which most closely correspond with our research interests, while pursuing the common theme outlined above.

The authors of the spring 1979 "Changing Seasons," Charles R. Smith and Donald A. McCrimmon, Jr., accurately and eloquently summarized the problems facing new authors of this article. The detail in the twenty-five regional reports is overwhelming and we also agree that some regional bias is almost

unavoidable. Recent migration issues of *American Birds* provide excellent coverage of unusually large concentrations of birds, range expansions, extralimital occurrences and first state, regional or national records. Common species (*i.e.*, common within the reporting region), are largely ignored, except for unusually early or late arrivals. Population increases tend to be more frequently reported than decreases; total absence often goes totally unremarked. Many of the above deficiencies are natural enough given the essential optimism of human nature. It is obviously more exciting to report a dramatic annual increase of Great Gray Owls in the northeastern United States than a continuing slight decrease in Peregrines, but consider which would have been the more significant observation thirty years ago.

OBSERVERS IN STANDARD locations from year to year have the opportunity to detect and document long term trends in migrant populations because of the continuity of their records. Such observers, however, would not pretend to be in any way unique in this sense. Even as they detect a local, inexplicable trend, a week-end ornithologist at another distant breeding or wintering area, or on another part of the migration route, may know exactly what is causing the increase or decrease in species numbers. This may be local information which is totally undetectable except by this individual, yet all is lost if it goes unreported. In many (perhaps nearly all) cases the local impact of such an event may not affect the larger population of this species, but why not report it? Leave the editing to the editors, who can only reduce data, not increase them.

Consistency of reporting format is the second major area where improvement

would be welcomed by those using migration data. This appeal should perhaps be addressed equally to both contributors and regional editors. Bird records sometimes suffer from inexact locations, dates or counts. Examples of tantalizing records from past issues vary from the extreme generality of "Great Plains" to using very local names which are not to be found on any atlas or road map. "Present," "common," "abundant," "good numbers" and "flight" defy comparative analysis, as does the classic "25 birds every few yards" with no mention of how many yards were censused. A final plea would be for as much consistency as possible from year to year by individual contributors. It is better to cover one site regularly than to submit widely scattered records.

We acknowledge the diverse sources of *American Birds* data. They are, at once, a strength and a weakness of the journal. Clearly only so much standardization is possible. However, we take the opportunity this forum presents to appeal for more counts of common species at regular sites, less emphasis on rarity and more relation of records to environmental factors, even if the relationship is only tentative. The regional editors can then test this local trend in their wider geographic bailiwicks, and pass the records on for a national perspective if they feel it is warranted. Unless the individual birdwatcher reports such trends initially, they may well escape the editor who is not in such close contact with the field observations, and the significant changes will be lost until they are much farther advanced. On closer examination, the migration routes and population fluctuations of the common species may well turn out to provide more sustained satisfaction than watching for rarities only. Perhaps the problem lies in

the word "common"—we should remember that it is an adjective of geographical limitations, not one of social status.

WEATHER SUMMARY

MANY REGIONAL EDITORS reported colder-than-normal temperatures continent-wide this spring. For example, Herbert Kale in Florida quotes a U.S. Weather Station report of light snow on March 2 and an afternoon maximum temperature of only 30°F at Tallahassee, the lowest afternoon maximum since 1971! The only warmer weather reported was a zone from the Northern Great Plains, running east through the Western Great Lakes to the Niagara-Champlain Region.

Wetter weather than normal was reported in the west from the Southwest and Southern Pacific Coast Regions north through the mountains and along the coast to the Canadian border. It was also wetter than normal from the Central Southern Region east and north to include Florida (but dry in the south), the Atlantic Coastal and the Hudson-Delaware Regions. Contrasting with the wetter coastal regions, the whole center of the continent from the South Texas Region north at least to the Canadian Border, east of the Rocky Mountains and west of the Appalachian Region, had a drier-than-normal spring. This was just the precursor of the summer droughts to follow.

The biological effect of these weather patterns, plus local events, was reported variously from the different regions. General trends included comments that staging and flocking were less well pronounced this spring than in previous years. The dry regions reported reduced waterfowl and shorebird migration due to loss of aquatic habitat, but some major concentrations were seen at the remaining water. Many regions reported a tardy migration due to the widespread cooler weather, "a week to ten days late" in the Southern Great Plains according to Frances Williams. (N.B. see the Northern Rocky Mountain-Intermountain and Northern Pacific Coast Regions for the effects of the Mt. St. Helens eruptions.)

DIURNAL RAPTORS

FOLLOWING UP THE THEME outlined in our introduction, a quick review

of the regional raptors for diurnal birds of prey will indicate both the great value of many of the data as presented, and the *added* value which might be obtained from greater uniformity of reporting.

A conspicuous value first: every region on the eastern and northern fringes of Turkey Vulture range, from Hudson-Delaware around through Northeastern Maritime and Québec to Middlewestern Prairie, records increased numbers for the spring of 1980; and of the ten regions on the eastern and northern edges of expanding Mississippi Kite range, six provide additional documentation. These, and similar data for other species, may well be very useful over the long term.

Now let us turn to the opposite case of the Broad-winged Hawk, numerically one of the two or three most important hawks in North America, physiologically interesting because it performs long migrations with possibly as little expenditure of energy as any bird in the world, and withal, a species which may be threatened over the years by the increasing deforestation of its winter range in Central and South America.

In spring, Broad-winged Hawks arrive in South Texas by the tens of thousands, having been concentrated on their long trip up the Gulf coast of Mexico by riding the continuous line of thermals which results from the warming of the cool northeast tradewinds over the hot coastal plain. Once around the bend of the Texas coast at Corpus Christi, however, they no longer have the steady lift of the tradewind thermals, and for the rest of their journey must depend on the more scattered land thermals of the Mississippi drainage. They progressively disperse, not to be again concentrated until they reach the barriers presented by the Great Lakes and the waters of the Atlantic Ocean on the New Jersey coast.

And what do the regional reports for spring, 1980, have to say about this migration? In South Texas the Broad-wingeds checked through on schedule: 30,000 north of Kingsville on March 20, 10,000 at Beeville, northwest of Corpus, on March 30, a middling late 2765 at Santa Ana on March 31 and 2000 more on April 5, a wind-up 1000 at Beeville April 7—in all, a total of 46,000 reported. In the Southern Great Plains Region, with the flight lanes beginning to spread out: 1108 on April 1 at Nacadoches, east Texas, on a course for Lake Erie, and 300 on April 16 at Ingram, Texas, on a course for Manitoba. Still

farther from Texas 400 on April 25 in east Tennessee, Appalachian Region, headed for New England, and 600 on April 26 in Iowa, Middlewestern Prairie Region, on a course to clear the west end of Lake Superior. *With these few exceptions, after leaving South Texas there is not another report of significant numbers (10 or more) south of the Great Lakes and west of New Jersey.*

TO COMPLETE THIS rough analysis of the spring Broad-winged migration as shown in the regional reports, let us check quickly through the data from the string of observation points which runs in a semicircle from the Atlantic coast through Québec and New York to the western Great Lakes. In the Middle Atlantic Coast Region, 113 on April 20 near Annapolis, Maryland, is a predictable number for that location. Cape May, New Jersey, lists two late flights of 240 on May 15, on a *northwest wind*, and 125 on June 5—these would be mostly or wholly non-breeding subadults of the previous year. At Sandy Hook, New Jersey, *no report on Broad-wingeds*, although this station was manned daily, saw 3654 Sharp-shinned Hawks, and *must* have seen Broad-wingeds. At Upper Montclair, New Jersey, apparently manned most of the time, peak day for Broad-wingeds was 584 on May 2—late but not unexpectedly so. For the whole Northeastern Maritime Region, *no report of Broad-wingeds*. At Valleyfield, extreme southwestern Québec, and interesting because it extends the flight lane passing Derby Hill by 150 miles to the northeast, approximately 1000 Broad-wingeds on April 26-27. From Derby Hill, at the southeastern corner of Lake Ontario, *not a word about Broad-wingeds* although the all-species total of 54,690 is given, and most of the rarer species and unusual totals are mentioned; the lack of Broad-winged data forecloses any linkage with the equally steady counting at Valleyfield. Of the important spring crossing into southwestern Ontario from eastern Michigan south of Port Huron, *no report*, although this area was formerly well reported. From Whitefish Point Bird Observatory, a very important crossing, *no report of Broad-wingeds*, although grebes and loons are so thoroughly covered, and enough other hawks mentioned, as to suggest Broad-winged data were available. Last-

ly, from the western end of Lake Superior there are *no hawk reports* at all

Without further detail, we think our point is clear. We are considering here one of the truly spectacular bird migrations of North America. The data supplied by the regional reports for the spring of 1980 are useful. They would be far more useful if the gaps were filled in when the information is available, as it must have been in many cases, if the cited localities were always identifiable, the dates of peak movements always supplied, seasonal and peak-day counts or estimates always included.

And what about the whole vast Mississippi drainage with almost no reports at all? If there are Broad-winged by the tens of thousands in South Texas, and again at all the crossings along the line of the Great Lakes, it is obvious that the birds have traversed the intervening states. Our fieldwork has shown that systematic observation reveals their presence—dispersed, it is true, but steadily drifting by overhead in mid-day, plunging down in late afternoon to roost in groves of trees, circling up lazily in the morning as the air is warmed by the sun. Most of the spring movement is on south and southwest winds, with a cold front approaching from the west. For bird-watchers along any course laid out from the bend of the Texas coast to one of the Great Lakes concentration points, it may prove both interesting and rewarding to keep a constant eye aloft.—J.A.H.

MARINE BIRDS

MARINE BIRDS ARE probably the most difficult group of all to observe during their migrations. Most species occur beyond telescope range of the coast, and the thousands of square kilometers of continental shelf waters adjacent to most coastal reporting regions can hardly be covered in a weekend birding trip. In this section we examine the adequacy of the regional reports as a mechanism to monitor spring migration of three common-to-abundant coastal and marine bird species: Common Loon, Gannet, and Red Phalarope. It is important to monitor loons and phalaropes because of their vulnerability to oil spills, and Gannets because of the possible population decline (Nettleship, 1977, pp 96-109 *In* T. Mosquin and C.

Suchal, Eds., *Canada's Threatened Species and Habitats*, Canadian Nature Federation, Ottawa).

Common Loons are found throughout North America, but migrations occur principally along the Atlantic and Pacific seaboard (Palmer, 1962, *Handbook of North American Birds*, I). Although mention is made in the regional reports of inland movements of Common Loons east of the Mississippi River (Middle Atlantic Coast, Hudson-Delaware, Ontario, Niagara-Champlain, and Appalachian Regions), no records are indicated for spring passage along the Atlantic Coast itself. Reports from the Pacific coast present temporal and spatial abundance data for a significant part of the western North American Common Loon spring movement. From the Middle and Northern Pacific Coast reports, spring passage occurred from mid-April to early-May. Quantitative abundance data provided from several localities within these regions, indicates the important migration pathways and peaks in abundance for each locality. Unfortunately, loon migration went unremarked in the Alaska Region, where these Pacific coastal movements culminate.

In North America, Gannets are found only on the East Coast, where their seasonal movements should be detectable from Florida to the Canadian Maritime Provinces (Palmer 1962, *op.cit.*). We would expect spring migration to be noticeable particularly from New Jersey to southern New England. However, except for a late concentration in the South Atlantic Coast Region (*i.e.* Atlantic Beach, N.C.), the Atlantic coast reports are devoid of Gannet records. Therefore, the spring passage of this common marine species went unnoticed, or at least unreported.

Red Phalaropes are exclusively pelagic migrants along both the Atlantic and Pacific coasts. Since their migration is predominately offshore, we expect this species to be extremely difficult to monitor. There was substantial documentation of the Pacific migration, but regional records along the Atlantic coast were sparse. Several sighting records of Red Phalaropes were reported from the Hudson-Delaware Region and one extralimital record from the Northeastern Maritime Region. Based primarily on one large concentration (*ca.* 17,000) seen at the edge of the continental shelf (east of Atlantic City, N.J.), we could guess

that an offshore passage of possibly large magnitude occurred in mid- to late-April along the Atlantic seaboard. The Atlantic Coast migration of Red Phalaropes in spring appears to occur well offshore and could understandably pass detection.

A coastal and offshore Red Phalarope migration was documented in the Southern, Middle, and Northern Pacific Coast reports. From these, we could determine that tens of thousands migrated in late May along the coast from Southern California to British Columbia. In addition, since peak numbers of *c.* 20,000 were noted from a coastal site in the Middle Pacific region on May 20 and some 30,000 were observed offshore further south in the Southern Pacific Region one week later, we can sense both the magnitude (> 50,000) and timing of this spring migration along the Pacific Coast of North America, as far north as British Columbia. No Red Phalarope records were reported for the Alaska Region.—K.D.P.

SHOREBIRDS

FIFTY-SEVEN SPECIES of shorebirds were reported this spring in the regional accounts; 46 were from the Canadian provinces and the "lower 48" states; Alaska had 9 species to itself including two stints, a godwit, Greenshank, and a bird this writer has only dreamed of seeing, a Terek Sandpiper. But putting birders' superlatives aside, and viewing the record as biologists wanting to monitor population pulses, the record is wanting. Only nine species are adequately reported (number and date) as many as 15 times, a total hardly adequate for even suggesting population changes. Three species (American Golden Plover, Whimbrel and Wilson's Phalarope) were mentioned more than 20 times. The most glaring illustrations of scarce reporting are Sanderling (four reports, only one of which is from the coast), Greater and Lesser Yellowlegs (two reports each), Least Sandpiper (one report . . . in the Mountain West Region), and Purple Sandpiper (no reports).

The infrequent reporting of common species prevents attempts to verify how the 1980 migration compared with other years. However, a few comments from regional editors are suggestive. Vernon Kleen commented on this being a very

dry spring in the Middlewestern Prairie Region, a boon to birders who lived near the few remaining wet spots still attractive to shorebirds. In the Niagara-Champlain Region, a storm apparently caused a large-scale grounding of Short-billed Dowitchers in mid-May. Shorebirds were late and in lower-than-normal numbers in the Mountain West, whereas unsettled and often stormy weather in the South Atlantic Coast Region made for good numbers in mid-April. A May 8-11 storm caused a good fall-out of migrants in the Middle Pacific Coast Region (Great Basin), while in the Southern Great Plains, drought caused poor shorebirding. As usual, the story is mixed from place to place, making a logical synthesis impossible.

Some other interesting regional comments include George Hall's observation that the advent of ponds for power plant cooling and for sewage treatment has produced good shorebirding. It is unfortunate that so many of these areas are fenced and inaccessible to observers. Robert Paxton *et al.* mentioned that shorebird concentrations were poor on the mid-Atlantic coast, but that the Delaware Valley Region was a major staging area this year for up-country migration. The concentrations of shorebirds here were remarkable, highlighting the fact that this zone is very important to shorebirds as a point of departure for non-stop flights to James Bay and other areas in northern Canada. These flights are fueled by the fat accumulated at the staging areas.

The regional reports also include suggestive information. In Hawaii C.J. Ralph observed an exodus of American Golden Plovers in the last week of April, the same week that first arrivals were seen in Alaska. Northern Phalaropes (including 40,000 off New Brunswick!) were reported from a large number of places throughout North America in the ten days between May 17 and 26, the most highly synchronized series of reports among all the shorebirds. In contrast, Wilson's Phalarope reports from Alaska to Florida were from a scattering of dates between April 1 and May 30.

But after all is said and done, a clear national overview of the 1980 shorebird migration was not possible. The most reported species, American Golden Plover, was mentioned only 33 times, hardly a sound basis for summarizing a migration which takes place over a quarter of the globe!—B.A.H.

LANDBIRDS

AS A PRELIMINARY exercise in testing the landbird section of the spring migration reports for common bird data, we chose ten species of landbirds. The first group, Common Flicker, Yellow Warbler, Common Yellowthroat and Wilson's Warbler, were chosen for their extensive geographic ranges within continental North America. All migrate through at least 23 of the 24 regions each spring. They are common in most parts of their extensive winter and summer ranges.

Common Flicker By taxonomic accident this species heads the list, and was also the only one studied with absolutely no records of any sort this spring. We can only assume that, being so widespread, the species is never rare enough to note, and the recent name changes in 1973 have slackened interest in "hybrids." Perhaps we overlooked a record or two?

Yellow Warbler South Texas migrants were down in numbers, while the species is colonizing new brushy habitat over 4000 feet elevation in the Middle Pacific Coast Region. No reports from the 23 other regions available.

Common Yellowthroat 2500 in Jefferson County on April 13 was a high count for the South Texas Region, but no other records were submitted from North America.

Wilson's Warbler In three widely spaced regions, Middlewestern Prairie, South Texas and the Appalachians, observers noted that numbers were lower than usual this spring. Three other regions reported early migrants or late wintering birds.

Our second group of birds contains three "attractive" species, Golden-winged Warbler, Blue-winged Warbler and Grasshopper Sparrow. None are nearly as abundant as birds of the first group. The warblers are only found in eastern North America; the sparrow is a widespread migrant in the United States, breeding as far north as southern Canada.

Blue-winged and Golden-winged warblers This dynamic pair of species is "attractive" owing to its relative scarcity in most areas, and particularly for the dominant and recessive hybrids with backcrosses and variable songs. For a taxonomic treatment see Short 1963, *Proc. Intern. Ornith. Congr.* 13:147-160. These species were excellently

covered with a mention in 14 out of 15 likely regions, four status summaries and mention of hybrids in ten regions

Grasshopper Sparrow Ten out of 16 likely regions reported this species with four status summaries all indicating increases in recent years. The Hudson-Delaware report suggests possible reasons for this. It seems likely that this seldom-abundant species is widely recognized as an indicator of change in weedy and grassland habitats.

The final three species are those whose status we suspect to be changing in our own New England area, and which we tested against the spring migration reports to see if the trend was continental or local. Ruby-crowned Kinglet, Bay-breasted Warbler and White-throated Sparrow are all widespread migrants

Ruby-crowned Kinglet In our area the three snowy, cold winters prior to 1979/80 coincided with a decline in both spring and fall migrant kinglets of both species. Our spring banding records this year showed an increase in Ruby-crowneds following a winter of well-below-average snowfall. Northeastern Maritime Region reported this; the Middlewestern Prairie Region found them almost back to normal in Ohio, and the Niagara-Champlain Region summarized both species of kinglets as recovering from their decline. It is a pity that no other data were reported from the other 20+ regions. Was there no change, or was it not documented?

Bay-breasted Warbler This warbler has an eastern range which has overlapped extensively with the spruce budworm outbreak of recent years. Numbers of Bay-breasted Warblers have been known to increase during outbreaks for many years, (see MacArthur 1958, *Ecology* 39: 599-619). Our records show at least a five-fold increase in fall banding records compared with pre-1974 levels. Of the four status changes noted, all (Florida, Southern Atlantic Coast, Appalachian and South Texas Regions) reported increases above "normal," although they were reportedly scarce on the Middle Atlantic Coast.

White-throated Sparrow Another species that has been sparse on spring and fall migrations, Christmas Bird Counts, etc., for several years in the Northeast, but perhaps is more common this spring. We would hesitate to suggest this emphatically, or provide convincing reasons, but it seemed worth investigating. Again nothing conclusive was writ-

ten on the status of this rather abundant migrant sparrow. Two regions reported above-normal numbers; eight regions had rare, early or late records; nine regions east of the Rocky Mountains did not report the species.—T. L-E.

SUMMARY

WAS ALL OF THIS a waste of time? Is *American Birds* the wrong journal for such migration/population data?

We hope not. Despite our comments, this is still the journal we turn to for a wealth of continent-wide information. We may not see the entire picture very often, but we find indicators which spur us to try and fill the gaps. Our exhortations to contributors and regional editors also left us with a feeling of *mea culpa*. It is a pleasure to report one carefully observed rare bird seen during the spring. It is tedious to wade through numerous records of common birds from the same season to detect trends. Next, one should refer back to previous years' data and seek the long term pic-

ture. We can think of several occasions when we, too, neglected to report the common bird. In the last analysis, however, it must logically be more worthwhile to add sound population data to the concentrations, range explosions and extralimital records which this journal reports so well.

We wish to thank all the Manomet Bird Observatory staff who assisted us with this article, particularly Christopher C. Rimmer and Peter W. Stangel.

—*Manomet Bird Observatory, Manomet, MA 02345.*

CONTINENTAL SURVEY

The Spring Migration

March 1-May 31, 1980

Abbreviations frequently used in Regional Reports

ad.: adult, Am.: American, c.: central, C: Celsius, CBC: Christmas Bird Count, Cr.: Creek, Com: Common, CO: County, Cos.: Counties, *et al.*: and others, E.: Eastern (bird name), Eur.: European, Eurasian, F: Fahrenheit, *vide*: reported by, F.&W.S.: Fish & Wildlife Service, Ft.: Fort, imm.: immature, I.: Island, Is.: Islands, Isles, Jct.: Junction, juv.: juvenile, L.: Lake, m.ob.: many observers, Mt.: Mountain, Mts.: Mountains, N.F.: National Forest, N.M.: National Monument, N.P.: National Park, N.W.R.: Nat'l Wildlife Refuge, N.: Northern (bird name), Par.: Parish, Pen.: Peninsula, P.P.: Provincial Park, Pt.: Point, not Port, Ref.:

Refuge, Res.: Reservoir, not Reservation, R.: River, S.P.: State Park, sp.: species, spp.: species plural, ssp.: subspecies, Twp.: Township, W.: Western (bird name), W.M.A.: Wildlife Management Area, v.o.: various observers, N,S,W,E,: direction of motion, n., s., w., e.,: direction of location, >: more than, <: fewer than, ±: approximately, or estimated number, ♂: male, ♀: female, Ø: imm. or female, *: specimen, ph.: photographed, †: documented, ft: feet, mi: miles, m: meters, km: kilometers, date with a + (e.g., Mar. 4+): recorded beyond that date. Editors may also abbreviate often-cited locations or organizations.

NORTHEASTERN MARITIME REGION

/Peter D. Vickery

This spring seemed more or less typical in posing again a set of ornithological questions. It has been long established that Prothonotary Warblers, Summer Tanagers and a host of other "southern" birds regularly overshoot their nesting grounds and find their way into the Region. But surely such knowledge cannot account for the *three* Burrowing Owls that appeared in New England this season. And how, possibly, does one explain a **Mountain Bluebird** some 70 miles east of Nantucket Island? We all know birds wander in unexpected directions, but a Mountain Bluebird out in the Atlantic? Sadly, Maine's Band-tailed Pigeon, coincidental to the bluebird discovery, does not help at all to clarify the situation.

On the other hand, the **Pink-footed Goose** and associated European vagrants in Newfoundland are more easily understood, although it is less certain how the *four* Wheatears in New England fit into this picture.

Several new species appear to be pushing north. In addition to Acadian Flycatchers

and Cerulean Warblers, American Oystercatchers, their numbers having grown in southern New England, are making pioneering inroads into Maine. Similarly Chuck-will's-widows seem to be more numerous in the southern part of the Region. It remains to be seen if this is a trend which will continue.

It is impossible to know what significance to give general comments about the spring migration. Birders in Rhode Island and on Cape Cod felt that numbers of regular spring migrants were well above average. Reports from the Rockland, Maine area were precisely the reverse: few birds and especially no flycatchers and thrushes. Manomet Bird Observatory, without doubt the

most consistent monitoring network in New England, reported a good spring with good flycatcher and thrush totals. Obviously local conditions, time in the field and direction of migration can have profound effects on how

