THE CHANGING SEASONS

Paul Lehman

HROUGHOUT MOST OF THE UNITED STATES AND CANADA, the spring migration in 1987 was one of the poorest in many years for the number of individuals recorded by observers. The following comments are representative of the majority of regional reports, especially from the eastern two-thirds of the continent: "overall poor to average;" "unexciting;" "rather slow;" "ripped off again;" "abysmal migration in terms of numbers of birds, particularly warblers and thrushes;" "the spring of 1987 will be quickly forgotten by most birders in this region;" and "all through May one had the impression that there were still many more birds to come and suddenly it was June and they had not appeared." Why was this the case? The poor showing of many migrant species can certainly be explained, at least in part, by weather factors. Overall, the spring of 1987 was mild to warm in most sections of the United States and southern Canada. Many regions reported near record warmth during a significant part of the period with relatively few major frontal systems occurring during the latter one-half of the season. Adverse weather events were not totally absent; for example, spring blizzards hit the Great Plains and Great Lakes areas between late March and mid-April, a surprise snowstorm and cold temperatures reached far into the Central Southern and Appalachian regions at the beginning of April, and heavy snow fell locally in New England late that month. Conditions were dry along most of the Pacific Coast south of Alaska and from central Alaska to central Canada, it was cool and wet in the Northeastern Maritimes, and temperatures in the eastern arctic were colder than normal.

The warm conditions in early spring resulted in a relatively rapid icemelt in more northern regions and thus fewer waterfowl concentrations were noted in many areas, with only several notable exceptions. Mild winter weather overall in 1986–1987 also may have contributed to the below average numbers observed as more individuals than normal probably remained farther north.

Throughout much of the interior of North America a number of typically coastal waterbirds (e.g., loons, Brant, and scoters), as well as many species of shorebirds, are grounded, and thus noted in numbers by observers, only during inclement weather. (Such concentrations of these migrants may remain in an area only a few hours.) For example, such coastal species regularly migrate overland in spring out of the Gulf of California, where some become "trapped" as they move north, and are noted at the Salton Sea and at other large inland bodies of water in southeastern California only when grounded by unfavorable conditions. Such storms did not occur this year and these species were noted there in below average numbers. Record-early arrival dates for some waterfowl and shorebirds were noted in many regions during the relatively mild March and early April. It should be stated, however, that northbound movements in many waterfowl species are especially variable, with a broad range of arrival dates. Many individuals may be "ready to go" during much of the winter, and will do so once weather conditions are favorable. Sizable northward migrations have been noted already by early or mid-winter during unseasonably warm weather, only to be followed by subsequent reverse, southbound migrations when more seasonable cold weather returns.

Warm weather during the latter two-thirds of spring had a significant impact on landbird migration. The lack of widespread and recurring "bad" weather in many areas meant fewer fallouts, defined waves, or local build-ups in numbers of transients. With such favorable conditions for migrants, most birds trickled through or apparently overflew regions. East winds were common along the Atlantic Coast in several states and provinces and dampened passerine migration there. Local breeders often appear well before migrants of the same species which are moving farther north. For example, locally breeding Yellow Warblers in California and Maryland appear two to three weeks before the transients. This phenomenon was even more apparent this season owing to migrants overflying many regions. The warm spring also resulted in an early leaf-out of vegetation in many areas, making observation more difficult. Interestingly, despite the weather, most regions commented that the late April and May transients were either on time or even somewhat late. An observation from Louisiana that "it seemed that the neotropical migrants were late, and local winterers lingered longer than usual" was shared by many. This could be due either to the poor showing at the migration lookouts where observers congregate and/or to weather conditions in the tropics which might have delayed migration by up to a week; in the latter case, local weather in the United States and Canada would certainly have little or no effect. The Regional Editor from the Northern Great Plains, Gordon Berkey, has some interesting thoughts and observations on this spring's poor migration and the low number of early passerine arrivals which probably hold true for many regions in North America. He writes:

Accompanying the warm weather were strong prevailing southerly winds. Three effects on migration might be anticipated under these conditions. First, migration ought to be earlier, so there should be more 'earliest' dates. Second, more overshoots of southern species might be expected. Third, total numbers of birds seen might be expected to be small as birds overfly during favorable migration conditions. The observations are mixed on the first point, but seem consistent with the last two. There was a total of 44 new state earliest dates in the Dakotas, compared to over 60 under less favorable conditions last year. The timing is also peculiar, as 23 [of these records] occurred by March 22. Thus the remainder of the period did not have more earliest arrivals than normal, even though the warm weather and southerly flow continued throughout. In fact, arrivals during the latter part of the period were not even ahead of normal. In order to understand this phenomenon, I looked at the wintering range of 205 species which winter seldom enough in the region that arrival dates get reported. Thirty-six of the 44 earliest dates were set by 144 species that have established wintering ranges in the United States, and only 8 were set by 51 species that winter almost strictly south of the border. May we conclude that shorter distance migrants took advantage of good migrating conditions to move northward earlier, while birds that winter in Central and South America may have arrived on the continent later than normal?

The shorebird migration was also below average this spring in a majority of regions (lack of migrant-grounding

fronts?), although a few areas reported mixed or average results and a few good concentrations were noted locally (e.g., one-day total of 530 Hudsonian Godwits and a *one-field* count of 1800 Buff-breasted Sandpipers in the South Texas Region).

It should be pointed out that not all areas were quite so unanimous in their dismay at the low numbers of migrant landbirds, particularly thrushes and warblers. For example, it was good overall, especially in the deserts, in southern California: it was excellent in northeast Texas; and along sections of the Texas coast, the season started out disappointingly but turned out "super." When fronts and unsettled weather did occur they often resulted in waves of transients being noted. In southern Ontario, an intense winter storm in late March grounded migrants and prompted some notable reverse migrations (e.g., 20,000+ birds at one locality March 31). The early April snowstorm in the Central Southern and Appalachian regions resulted in the grounding of good numbers of pipits and sparrows and caused significant mortality in Purple Martins, Eastern Bluebirds, and several species of migrant sparrows. In south Florida, where temperatures were actually somewhat "cool," "clear flying weather in April and May suppressed hopes of observers for fruitful fallouts, [but] a cold front in early April produced a very good fallout with excellent numbers of early migrants." Good numbers of transients were noted in the Mountain West Region during brief May cold spells which not only grounded and delayed migrants but probably also forced some summer residents downslope from the surrounding mountains. On the Texas coast a slow-moving front with light to moderate rain in early May resulted in an excellent migrant fallout, peaking May 7 as "the most significant grounding (for both numbers of species and individuals) of the decade;" that day two observers along 30 miles of coast counted approximately 7000 grounded transients, including 225 Acadian Flycatchers, 905 Veeries, 113 Philadelphia Vireos, 654 Red-eyed Vireos, 465 Magnolia Warblers, and 626 Bay-breasted Warblers

In all, observers are urged to use extreme caution when using migration data to assess short- or long-term population changes in birds. While long-term banding studies provide valuable data, many censuses and impressions of the numbers of transients, especially nocturnal migrants, are subject to a number of possible errors. Such errors could include the failure to fully appreciate the potential weekend bias in coverage and that good flying weather may result in the overflight of an area by many individuals so that despite a heavy nocturnal migration many fewer transients are seen the following day.

A few trends

Black-necked Stilts are occurring in larger numbers in many areas at the northern and eastern periphery of their western range. Several were also found farther afield in coastal and interior British Columbia, northern Idaho, western Montana, in the Northern Great Plains Region, and in Nebraska; a pair made it to southern Saskatchewan, and one was as far east as Wisconsin.

It was thought by some (myself included!) that Clark's Grebes had a more limited, more southwestern, overall range than Western Grebe. However, it is apparent that this recently split species occurs virtually throughout the entire range of the Western Grebe, although is certainly scarcer in the north, with one individual occurring farther east in the Duluth/Superior area, thus establishing both Minnesota's third and Wisconsin's first records From Colorado there comes the report of a number of sightings of probable mixed pairs and hybrid Western x Clark's Grebes.

The known range of Boreal Owls in the Rockies and adjacent mountain ranges was extended still farther this spring with the discovery of birds in extreme southern Colorado and just across the border into northern New Mexico, the latter state's first records.

Carolina Wrens are doing well just about everywhere in the East.

The breeding range of Cave Swallows appears to be expanding on two fronts. Not only has the species (of the race pallida) doubled its range in Texas since 1983, but the Cuban and West Indian subspecies, *fulva*, was found breeding this year in south Florida. Other unusual sightings this spring were of single individuals at the Dry Tortugas and farther north along the west coast of Florida, and four separate birds were in coastal Alabama (one found dead and identified as *fulva*). Previous records of Cave Swallows from the Gulf states also exist for northwest Florida and coastal Mississippi. Known *fulva* has also occurred in the past far to the north in Nova Scotia.

While the expansion of the cyclic Black-shouldered Kite appears to have slowed, stopped, or even reversed (?) in some regions, it continues to do fairly well in others. Recent range expansions into several Gulf Coast states may be somewhat difficult to monitor since the species regularly frequents widespread backwoods clearcuts that are difficult to fully census. Two extralimital individuals were recorded this season far to the north in Illinois and Wisconsin.

Is the overall breeding range of the Golden-winged Warbler shifting northward? Continued declines were noted in the Appalachian Region while, at the same time, the species' range is likely expanding in parts of the north (e.g., in Quebec).

On a negative note, serious declines are being noted in the numbers of Black Terns and Burrowing Owls in many regions, and the reports on the rarer Hawaiian endemics are generally depressing. Increases in the range and population of the Brown-headed Cowbird in Florida are having or probably will have soon a significant negative impact on nesting Black-whiskered Vireos and Prairie Warblers there. And while most of the news about Short-eared Owls recently has been bad, it was good to hear that 100 nestlings were banded at one wildlife area in northern California.

Rarities

A list of some of the better rarities seen this season not mentioned elsewhere in this Changing Seasons report includes: three Great Knots, Oriental Cuckoo, and Redflanked Bluetail in Alaska; Short-tailed Albatross off northern California; Violet-crowned Hummingbird in southern California; Piping Plover in New Mexico; Northern Cardinal in Alberta; Bewick's Wren in North Dakota; Garganey and Golden-crowned Sparrow in Minnesota: Yellow-billed Loon in Michigan; Cassin's Sparrow in Missouri and Ontario; Hooded Oriole in Louisiana; Snowy Plover in Ontario; Brambling in Ohio; Smith's Longspur in West Virginia; returning White-winged Tern in Quebec; Anhinga in Massachusetts; Spotted Redshank in North Carolina; Bar-tailed Godwit in the West Indies; and Blacktailed Godwit, Key West Quail Dove, and Bahama Mockingbird in Florida.

First state/provincial breeding records were established this season for Common Grackle in Nevada, Snowy Egret in North Dakota, Hooded Merganser in Texas (first successful), and the Cave Swallows in Florida. An interesting collection of ducks, shorebirds, and gulls was found in Hawaii Also there was an American Coot of the North American race, showing that even this ungainly species can go far(!), as well as mention of a Least Tern accompanied by helpful hints on separating this species from Little Tern. Two sightings of Least Terns in Massachusetts in March were exceptionally early. *Twelve* Longtailed Jaegers and two South Polar Skuas were seen from shore at Cape Hatteras, North Carolina on one day in late May. The continued spread of Great-tailed Grackles resulted in Washington recording its first. Eight Blackcrowned Night-Herons in southeast Alaska probably represent the first record of the North American race for that state.

An extended oceanographic cruise during the first onehalf of May well off (i.e., 100–400 miles) the southern California coast visited waters barely explored by ornithologists. It produced reports of eight Murphy's Petrels, 70 Cook's Petrels, and seven Wedge-rumped Storm-Petrels Off northern California in mid-April, 100 dark Pterodroma petrels, all believed to be Solander's, were seen on a cruise by another observer. We still have much to learn about the seasonal distribution and field identification of dark Pterodromas off the Pacific Coast of North America.

Some thoughts

In the last several years a number of observers in the East have commented that most of the "southern" warblers and thrushes (i.e., Wood Thrush and Veery) seem to be occurring in average or increasing numbers, while a number of the more "northern" species appear to be in reduced numbers. This impression was echoed this spring by the Appalachian Region's George A. Hall, who writes that "the majority opinion seemed to be that while the locally nesting species were in normal numbers and on time, the northnesting species were late and in low numbers." While I do not think such an overall change in abundance has been conclusively proven, there are possible explanations for such an impression. First, for the birds, the ideal weather this spring would result in "northern" thrushes and warblers overflying many regions, while the more "southern" species include more local breeders which will be in evidence under virtually any conditions. Second, many observers may be more accustomed to the elevated numbers of such northern warblers as Tennessee, Cape May, Baybreasted, and, possibly, Blackpoll of the 1970s that resulted (at least in part) from the major spruce budworm outbreaks that occurred at that time; lower numbers of these warblers in many regions in the 1980s may, in fact, be more "normal." And third, a number of breeding bird atlassers and other observers have found that recent gypsy moth defoliation of canopy vegetation in blocks of eastern forests has resulted in the subsequent growth of a lusher and more extensive understory followed by at least a partial recovery of the canopy layer; this habitat modification, in turn, favors such species as Veery, Wood Thrush, Kentucky and Hooded warblers, the latter two having increased in numbers markedly in a number of areas (Rick Blom, pers. comm)

What are the combined impacts of such local changes in habitat and food supply on the breeding grounds in North America with the changes resulting from the continued loss of deep, interior and montane forests in Central and South America where some of these same species winter? What will be the effects on such species as Tennessee and Magnolia warblers that winter commonly in tropical scrub and open forest habitats in comparison to several thrushes and Kentucky, Hooded, and, especially, Worm-eating and Swainson's warblers that winter predominantly in the deeper forests? Also, how restricted to a specific habitat type in winter is a particular species?

Lastly, gauging such population changes back in North America based on the number of vagrant records outside the species' normal range is tenuous at best; however, it should be noted, for example, that such species as Cape May Warbler have declined notably as a vagrant in California in the past 5–8 years, while Kentucky and Hooded warblers have increased during the same period there (11 Kentuckys this spring alone in southern California!) and elsewhere.

In reading this season's regional reports one once again comes across a plea, from the Arizona regional editors ("hopefully it will be the last"), emphasizing "the desperate need for documentation of rarities" by observers. The list of rarities reported from that and other states/provinces this spring unaccompanied by details is frustrating. This continues to be a problem in a good number of regions. In contrast, in the Southern Pacific Coast Region, Guy Mc-Caskie will not publish records of casual or accidental species unaccompanied by details, an appropriate procedure. Another regularly-occurring problem in areas especially frequented by out-of-town birders (e.g., Alaska, southeastern Arizona, south Texas, Pt. Pelee, and Florida) is that only a handful of observers report their notable sightings to local birders and regional editors. Please, if you are visiting another region: 1) report rarities you see or find promptly, and 2) send in the highlights of your visit to the appropriate AB regional editor(s) with proper documentation for the rarities. If in doubt, please send everything in, and never assume "someone else will do it."

The excessive use of the modifiers "probable" and "possible" for too many records found in the regional reports results, in part, from the lack of details received by many of the regional editors. Submission of such details would help "take much of the unnecessary guesswork" out of writing the reports. The real concern is how researchers or others will interpret these sightings. While I do believe some such records are valuable, their numbers could be reduced by more observers including better documentation in their reports and a willingness to let briefly and poorly seen birds go unsubmitted. Chalk them up to birds which simply "got away." Since the final responsibility for determining which records are published resides with the regional editors, let's make their job easier.

In many regions an interesting question commonly asked 15: Where are all the northbound Golden Eagles in spring compared to the numbers seen passing south in fall? Wellworked spring hawk lookouts (i.e., Derby Hill and Braddock Bay in upstate New York where superb raptor counts were tallied this Spring), that concentrate northbound birds along the south shores of the wider Great Lakes, record a regular but small movement of this species. Good numbers this spring included a record count for Whitefish Point, Michıgan, of 25 birds in March, and a very impressive two-day March count in Alberta of 395 individuals! Perhaps the differences between fall and spring counts result from a northward migration along a much broader front as well as fewer hawkwatchers in the field at this season, especially in late February and March when the majority of Golden Eagles likely move north. In the same vein, what happens to all the Northern Goshawks seen at eastern hawkwatches in the fall? Far fewer are seen in spring, and the species is particularly difficult to find during the winter in many regions at or just south of the locations where the good fall counts are made.

I am continually struck by the regularity with which some observers and regional editors comment that separate sightings of a given vagrant species likely involve the same individual, even when the sightings are separated by up to hundreds of miles and numbers of days. Vagrancy is a regularly-occurring phenomenon in many species of birds, there are lots of vagrants flying around out there! And while an individual, out-of-range American White Pelican, for example, might be expected to follow a particular coastline, and be recorded at a number of different localities along the way, the majority of species, especially landbirds, are not so restricted to a particular route and will not be recorded repeatedly. While it is usually impossible to absolutely prove whether similarly-plumaged individual rarities separated by significant distances or time spans involve the same or different birds, I think the same individual involved in such situations is certainly the exception rather than the rule. Even on a more local scale this will sometimes be the case. As a hypothetical example, if an individual passerine vagrant appears at High Island, Texas, remaining 3 days at "Boy Scout Woods," and on the fourth day it is gone but a similarly-plumaged individual of the same species appears at "Smith Woods" one mile away I would believe this bird to almost certainly be a different individual. The same individual moving about on such a local scale is more likely in areas where the bird's movements are not so restricted by habitat. Now that I have said this, I have just heard that apparently the same Berylline Hummingbird banded at Ramsey Canyon in the Huachuca Mountains appeared soon thereafter at Madera Canyon in the Santa Rita Mountains, approximately 50 air-miles away . as I implied above, there are exceptions!

An oft-repeated "birding maxim" is that vagrants should NOT be assumed to originate from the populations closest to the site of observation. Another is that using more caution and looking more closely at individuals out-of-range should be extended to those that are unseasonal; they should NOT be assumed to be of the "normally"-occurring species. In previous Changing Seasons reports (e.g., AB 37(2):150–154; 38(3):287–292), I discussed some of my thoughts and prejudices related to the reporting of such out-of-range and unseasonal species. A number of such hard-to-identity or, perhaps, "over-reported" species for the early spring season deserve comment here:

Sabine's Gull: This high arctic nesting species does not typically first appear along the North American Pacific Coast in spring until the end of April or early May; I know of no documented records of transients earlier than mid-April. It has been recorded only casually or accidentally inland in the United States and southern Canada in spring, most such records have occurred during the latter one-half of May and June. There are reports from the interior as early as April 17 (see Ryff, Alan. 1986. The Spring Mystery of Sabine's Gull. Birding 18(2):83-90), but these are truly exceptional. A report this year of two Sabine's Gulls from New Mexico, April 13, would constitute the earliest report for the North American interior. Even though they involve such a distinctive species, Sabine's Gull sightings before the end of April need to be carefully documented, and the possibility of such early individuals being immature kittiwakes or some other species should be considered.

Arctic Tern: This species is also not usually recorded anywhere in North America until early May, with a few late April sightings along the southern United States coasts (e.g., four this season were off Florida April 20). These earlier sightings may involve the more southerly breeders headed for such nesting areas as south coastal Alaska or New England, the average arrival date for Massachusetts is May 7-10 (Blair Nikula, pers. comm.). Spring sightings in the interior, where the species is predominantly very rare to casual, likely involve individuals heading for the arctic and thus occur later, during late May and June. Like the Sabine's Gull, an Arctic Tern would certainly not fare well if it arrived on a still-frozen tundra! At the southern limit of its central tundra range at James Bay, Ontario, the species has arrived in numbers by the fourth week of May (Alan Wormington, pers. comm.), but not until June farther north.

Common Nighthawk: This species usually first appears along the Gulf Coast in mid-April; probably not until the second week of May in the Northeast, with peak numbers in the northern states and southern provinces not occurring until later in the month. This season exceptionally early nighthawks, identified as Commons, were reported April 7 in southern Ontario (two) and from April 14-21 in western Pennsylvania, probably a result of the warm weather and south winds; one seen in southern Mississippi in early March is an exceptional record of a presumably locally wintering individual. All such reports of early spring, as well as late fall and winter, Common Nighthawks in North America need to be fully documented and observers should consider the possibility of the birds being Lesser Nighthawks (which arrive in Arizona in early March), or even some other caprimulgid species. Some early spring records of heard-only Common Nighthawks probably, or definitely, pertain to American Woodcocks or, possibly, Common Goldeneyes.

Philadelphia Vireo: This rather late spring migrant typically arrives on the Gulf Coast during the third week of April and in the northern states and southern provinces beginning in early or mid-May. Records at these more northern latitudes before May should be looked at with a certain degree of skepticism; Warbling Vireo is much more likely in April (female Tennessee Warbler should also be considered). Single reports 2 consecutive years from northeast Washington, where the species would be accidental, in late April, therefore need further documentation.

While on the subject of early spring dates, it is interesting to compare significantly different arrival dates which exist between eastern and western populations of the same species in ways that do not seemingly make sense. One might assume a species would typically arrive in southern California and Arizona at the same time or earlier than in most southcentral and southeastern states, and certainly earlier than in the Northeast, due to the generally milder early spring conditions and rich food supply. However, this is not always the case. The Yellow-billed Cuckoo usually arrives along the Gulf Coast by mid-April, in Kansas by early May, and in the Northeast by mid-May; however, in Arizona and most of California this species does not first appear until the very end of May or early June. The Common Nighthawk, whose spring migration in the East was discussed earlier, is a very late arrival in the far West, not typically seen until late May or early June, even at southern latitudes. The regional editors in northern California write that "it cannot be overstated that observers should be cautious in reporting this species before the last few days in May," earlier nighthawk sightings there between mid-April and mid-May were "almost certainly Lesser Nighthawks by date." An extremely early individual was reported this season from southwestern British Columbia May 10. Eastern Kingbirds first appear along the Gulf Coast in late March or early April, in New York State at the beginning of May, but not typically in the West until late May or early June.

Purple Martins don't arrive in Arizona until late April or early May, while the species may appear in parts of the South already by late January or early February and in Maryland by late March or early April. Does anyone have any possible explanations?

Potpourri

An Emperor Goose, that wintered in Seattle, "had become tame enough to eat bread from the hand, and many observers doubted its wild origin." While a good number of such waterfowl records do pertain to escapees, it should be noted that wild individuals are regularly noted taking up residence with domestic ducks and geese, slowly becoming more and more "corrupted" as winter and spring progress.

Northern Gannets in the Gulf of Mexico usually frequent clearer waters. Along the western Gulf Coast gannets may be diverted away from shore by the cloudy Mississippi River effluent. Therefore, offshore winds from the west or northwest resulting in clearer nearshore waters off Texas and western Louisiana may actually assist in the sighting of this species from shore there. These same westerly winds dominated this spring and may have been responsible for few or no sightings locally of Cape May, Black-throated Blue, and Blackpoll warblers, species which originate farther east.

The Digby, Nova Scotia, Lesser Black-backed Gull completed its 17th consecutive winter at that location.

A male Rufous Hummingbird with a solid green back was found dead in western Washington in late April.

Interesting information on subspecies of Common Redpoll can be found in the Quebec regional report.

Over the past several years Harris' Hawks have been released along the lower Colorado River in hopes that the species will recolonize this area. A sighting this spring from southern Nevada is likely associated with this program.

Questions concerning the status of Manx vs Audubon's shearwaters off the Carolinas in winter and early spring are raised in the Southern Atlantic Coast regional report

In many localities in the West numbers of Ross' Geese tend to head north slightly later than most of the Snow Geese. Therefore chances of finding the former species outof-range may be somewhat higher toward the tail end of the spring migration period of Snow Geese. This year a group of four Ross' were reported in Delaware in late March.

An aerial census of 40,000 American White Pelicans at the Salton Sea in southern California in early March was staggering, and must constitute a large percentage of the North American population of this species. A count of 56 White-tailed Hawks hunting rodents at a controlled burn in south Texas was also impressive, as must have been 60,000 Snow Buntings at one locality in Quebec. Significant waterbird concentrations in Newfoundland included 5000+ Northern Fulmars and 25,000 Black-legged Kittiwakes at Cape Spear, and 850 Glaucous Gulls at St. John's.

Regular spring census work at Whitefish Point Bird Observatory on Michigan's Upper Peninsula continues to not only produce good numbers of migrant hawks and owls but also an interesting assortment of waterbirds for an inland location, including loons, scoters, jaegers, and gulls, as well as other rarities.

The migratory status of the two races (species?) of Lesser Golden-Plover, *dominica* and *fulva*, in the West is a subject needing further study. Based on a nationwide examination of Pacific Northwest specimens, an individual dominica photographed in coastal Washington in May is the first documented adult of this subspecies for that region in spring.

Starving Cattle Egrets regularly lurk at the Dry Tortugas water fountain attempting to catch migrant warblers, thrushes, etc.; this year they were even noted taking a Yellow-billed Cuckoo and a Sooty Tern chick. The rather small, for a buteo, Hawaiian Hawk was watched eating a Wild Turkey. In Fort Worth, Texas, an Osprey was seen with a Northern Cardinal in its talons; and at the Dry Tortugas more strange behavior was noted as a Magnificent Frigatebird "harrassed, made contact, and drove a lowflying immature Broad-winged Hawk into the ocean." Lastly, in the Mountain West Region's corrigenda section it is duly noted that "unbrushed teeth did not do in the Boulder County prairie dogs; the culprit was plague, not plaque."

ACKNOWLEDGMENTS: I would like to thank Rick Blom, Jon Dunn, Ted Eubanks, Jr., Shawneen Finnegan, Kenn Kaufman, Curtis Marantz, and Alan Wormington for assistance provided in the preparation of this Changing Seasons report.

> ——P.O. Box 1061 Goleta, CA 93116

Anyone who wishes to contribute their bird observations to the Regional Reports must have their information and/or photographs to the Regional Editor as soon after the season ends as possible.

Regional Editors are on tight deadlines and unless material is submitted to them in a timely fashion, it will not be included in the Regional Reports.

Winter Season:December 1-February 28Spring Season:March 1-May 31Summer Season:June 1-July 31Fall Season:August 1-November 30

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, *fide:* 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, \pm : approximately, or estimated number, δ male, \mathcal{Q} : female, \emptyset : imm. or female, *: specimen, ph.: photographed, \pm : 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.