The Changing Seasons

Autumn 1989

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Strong onshore winds following the inland passage of the remains of Hurricane Hugo *may have brought this juvenile Long-tailed Jaeger to Jones Beach State Park, Long Island, New York, September 23, 1989. Photograph/Anthony Tierno.*

DURING AUTUMN 1989, EVEN FOR a hard-core birder like me, avian events were definitely upstaged by human events around the world. From the rebirth of Prague to the fall of the Berlin Wall, it was a season of wonder.

Afterwards, as I read the accounts from the *AB* Regional Editors, it became obvious that this had also been a remarkable season for North American birds. I was tempted to speculate that some cosmic force had made this a time of upheaval both for bird populations and for human nations. But I was tempted only for a moment. Unfortunately, the questions are too complex for such a simple *deus ex machina* in either topic, human relations or bird movements. We have to look for more realistic sequences of cause and effect.

For the avian events of late 1989, the causes were diverse, seemingly contradictory, and often unknown. The bizarre nature of the season was reflected in the fact that the Maritimes hosted both a Corn Crake (which should have been in Europe or Africa) and a Hermit Warbler (which should have been in Mexico). A Red-flanked Bluetail, accidental even in Alaska, made it all the way to California, while the first Indigo Bunting ever for Alaska appeared on the far northwest coast, as far from its normal range as possible. There were apparently unusual numbers both of western birds in the East and eastern birds in the West. In many respects, the season defied summary. The following account touches on only a few events that affected many different regions.

A first glance at hurricane *HUGO*

Early reports differed as to whether *Hugo* qualified as a category five hurricane, the most powerful level on the Saffir-Simpson Scale, or only a category four. But with winds of up to 150 to 160 miles per hour, it was clearly a very violent storm. Forming far out in the Atlantic, *Hugo* grew to hurricane status well before it reached the northeastern corner of the Caribbean, pounding the islands from Guadeloupe to Puerto Rico in mid-September. Angling toward the northwest, the storm raged ashore in South Carolina around midnight on September 21st. From there the center of the gradually weakening storm moved northwest by north into the Appalachians, north across West Virginia, and then back toward the north-northeast across western Pennsylvania and New York, finally raining itself out over southern Quebec and the Maritimes around September 23rd.

Initial estimates put damage to human property somewhere near ten *billion* dollars. But in wildlife habitats, which are given no dollar values, the damage must have been equally intense. *Hugo* may have dealt a severe blow to Puerto Rican Parrot, Yellow-shouldered Blackbird, and other endangered species of the Caribbean, as Rob Norton reports. In South Carolina, damage to Red-cockaded Woodpecker nesting habitat was extreme. It

may take years to assess the full impact on these populations.

Many seabirds were carried inland by the storm. Most notable were the Black-capped Petrels found dead or dying hundreds of miles inland, as far along the storm track as upstate New York. At least seven were *found*, picked up, and turned in to those who could identify them, from western Virginia to New York; the total killed must have been many times that number.

Other probable hurricane waifs along the storm track included various jaegers, Laughing Gulls, and Sooty and Royal terns, plus a Greater Shearwater in New York and a storm-petrel in Tennessee. But beyond these, tracing cause and effect becomes more risky. Not all pelagics in the interior right after Hugo were necessarily brought there by that storm. A Sabine's Gull on the Susquehanna, as pointed out by Bob Paxton *et al.*, may have been knocked down on a regular overland route. And an anomalous Leach's Storm-Petrel was found well inland on Lake Champlain on September 21, two days *before* the storm's effect would be felt there.

In terms of effects on birdlife, *Hugo* may have been one of the most destructive hurricanes of this century, and as such it merits closer scrutiny. An upcoming issue of *American Birds* will feature a full report on this massive storm.

Concerted waves of migrants

The period September 23 to 25, just after the remnants of *Hugo* had passed through, was exceptionally good for birding in many areas of eastern North America—but not as a direct result of the hurricane.

The arrival of a cold front on the Atlantic Coast in fall usually triggers heavy bird activity. First, many migrants are stopped in their tracks by the rains that are often associated with the leading edge of the front. As soon as the front has passed, the sky usually clears rapidly, accompanied by cooler temperatures and winds out of the north or northwest—ideal conditions for migrating.

Such were the conditions on the fourth weekend of September. A major cold front, which had been lingering around mid-continent for much of the week, arrived on the Atlantic Coast and the Gulf Coast on Saturday, September 23. National Weather Service maps for early morning on the 23rd show the leading edge of this front stretched from eastern Texas northeast to Pennsylvania and north into Quebec (right behind the retreating and diminishing center of *Hugo*). During the day and night of the 23rd, as the system advanced, the front crossed the Atlantic Coastline as far south as the Carolinas and moved eastward along the Gulf Coast from Texas to northwest Florida.

The result was an unusually widespread agreement that September 23 and 24 were good migration days. Hawk Mountain, Pennsylvania, had its biggest Osprey day ever on the 23rd. Farther east (where the front arrived a little later), the best Osprey passage was on the 24th in Westchester County, New York, and at sites in Connecticut and Rhode Island. The 24th was also an excellent day for warblers in New Jersey; farther south (where, again, the front might have passed a little later) the 25th saw top counts of warblers and other passerines at some sites in Maryland and Virginia. Inland as far as Presque Isle, in far western Pennsylvania, a huge concentration of migrant gulls and terns was present on the 23rd and had disappeared by the 24th—but in that area, as George Hall points out, it was difficult to separate the effects of the cold front from those of the hurricane.

Along the Gulf of Mexico, on the heels of this same frontal system, the biggest hawk flights of the season occurred September 22–25 in Louisiana and September 23–24 at newly discovered sites on the coast of Texas. At the same time, a major migration of Anhingas was noted in southwestern Louisiana. The only warbler fallout of the season on the Gulf was noted September 24 in northwest Florida.

October produced migrant concentrations in some areas that were even more notable, although less widespread: October 7 to 10 in the Maritimes, and October 18 to 23 in the Hudson-Delaware region. If you are at all interested in migration, you must read what Bruce Mactavish has to say about displaced vireos and others in Newfoundland October 7, and the account by R. O. Paxton *et al.* on "the greatest migration landfall ever" near New York City on October 23.

With weather maps in hand and reports from observers in the field, it is not hard to trace cause and effect for many of the most conspicuous events of fall migration. One aspect of fall 1989 deserves mention: by coincidence, the arrivals of major fronts on the East Coast were spaced so that most of the fallouts and diurnal flights occurred on, or just after, weekends. As a result, observers in general were far more aware of the birds than they would have been if these events had come and gone during mid-week.

Headlines in the west: the montane invasion

Across the southwestern quadrant of the continent, the season's biggest event was a massive exodus of montane birds. From western Kansas to western Texas, across New Mexico and Arizona, across southern Wyoming, Colorado, Utah, and Nevada, and into eastern California, the valleys and plains were invaded by normally-resident birds from the mountains.

Jays were the most prominent invaders. Scrub Jays were the first to arrive in many areas, as they often are during these infrequent flights; but in 1989 they came exceptionally early. In southern Arizona, Scrub Jays were widespread by early September and some had even appeared in August. Steller's Jays were right behind them, reaching the desert before mid-September, a month ahead of "normal." Pinyon Jays and Clark's Nutcrackers also hit the lowlands in many areas, although they did not spread southward as much as they do in some years.

A number of other montane birds took part in the flight, but the extent of their movements varied by region Mountain Chickadees spread eastward across the plains of Wyoming and Colorado and into western Kansas, Oklahoma, and Texas; others were at low elevations in New Mexico and Arizona. In southern California the jay flight was noted only in limited areas of the eastern deserts, and chickadees drew no comment, but woodpeckers were conspicuous: both Lewis' Woodpecker and Acorn Woodpecker showed up early in un-

Two "Problem Birds" for observers and editors: Great White Heron and Eastern Fox Sparrow

Until the 1970s, the biggest white heron in Florida was regarded as a full species: *Ardea occidentalis*, Great White Heron. When this form was "lumped" with Great Blue Heron, the problem of what to call the white birds became a source of confusion that has persisted to this day.

Compounding the problem is confusion over the terms "phase" and "morph." Ideally, these two should not be used interchangeably: "phase" implies an element of time, "morph" is a permanent condition. Thus, Little Blue Heron has a "calico phase" when it is in a patchy stage of molt from immature white to dark adult plumage. But there is no "blue phase Snow Goose," because the bird is not just going through a phase—it is blue for life. "Blue *morph*" would be correct.

It is clearly not accurate to refer to the Great White Heron as a "white phase," because the bird is white permanently. But it could also be misleading to call it a "white morph Great Blue Heron."

In lumping the Great Blue and Great White herons, the A.O.U. Check-list Committee noted that the latter was different enough (*e.g.*, in some measurements) to merit being considered a subspecies, not just a color morph. In North America the Great White breeds only in a limited area of south Florida and the Keys. Apparently it rarely interbreeds with the Great Blue. Some scientists believe there is still a case for considering it a full species.

By comparison, no one would suggest that the white morph of Reddish Egret is a separate species or even a subspecies. That color morph occurs as a variable percentage of the Reddish Egret population throughout most of its range. Much the same could be said for the dark morphs of Pomarine Jaeger or Ferruginous Hawk, or any of several other dimorphic species. To refer to the Great White Heron as a "white morph Great Blue Heron" implies that it is a similar case—which it is not.

The chances are very high that any all-white Great Blue seen in the southeastern United States is actually a stray "Great White Heron" from Florida. I'd recommend using that name—with or without quotation marks—rather than "white morph Great Blue Heron," at least until we know more about the taxonomy of this form.

Minor flaws in an otherwise excellent book can trap the unwary. In the National Geographic Society's *Field Guide to the Birds of North America*, a deservedly popular reference among active birders, one such trap is in the labelling of various races of Fox Sparrow.

The National Geographic guide depicts and names six different races of Fox Sparrow. The purpose of showing various races was, no doubt, to alert observers to the great variability of this species. Unfortunately, many birders have leaped to the conclusion that if a Fox Sparrow looks similar to one of the pictures, it must belong to the subspecies named. This is not necessarily true. Fox Sparrow has something like *eighteen* different races, or even more according to some authorities, and none of them can be identified from a picture in a book.

Every fall since 1983, birders using the National Geographic guide have reported "Eastern" Fox Sparrows, race *iliaca*, from western North America. These reports are almost certainly wrong. True *iliaca* inhabits the far eastern end of the range of Fox Sparrow. Most foxy-red Fox Sparrows (looking like the National Geographic picture of *iliaca*) that show up west of the Mississippi probably belong to the race *zaboria*. Because *zaboria* breeds as far west as Alaska, its appearance anywhere in the western United States is not too surprising.

I'm not recommending that western birders should start calling all these reddish birds *zaboria* instead. Naming the races of Fox Sparrows in the field is tricky, even for specialists with lots of museum experience. A better approach would be to separate Fox Sparrows by general type: "reddish," "sooty-brown," "gray-headed and large-billed," *et cetera*. This will give a general idea of the origins of the birds without pinning inaccurate subspecific names on them.

usual numbers in the lowlands. Farther east, a scattered few of these two species were found in the lowlands of the Southwest and the southwestern Great Plains. White-breasted Nuthatches, which could have originated either in the mountains or elsewhere, appeared in southern California and western Texas in bigger numbers than usual.

We can make a plausible guess as to the cause of the montane invasion. Following a series of dry seasons in the mountains of the West and Southwest, many kinds of wild food crops were apparently in poor supply; shortages of food may have driven many birds to the unfamiliar surroundings of the lowlands.

John Hubbard pointed out to me that the montane invasion even made the newspaper headlines—but not because of the birds. In New Mexico, black bears came out of the hills to roam the backyards and streets of several towns in the valleys. One confused bear was electrocuted when it tried to climb a power pole in Santa Fe, and its photograph made the papers nationwide. For bears as well as for birds, a general scarcity of food in the mountains was probably the trigger for this lowland hegira.

Major flights from the north and northwest: Red-breasted Nuthatch, Bohemian Waxwing, and Varied Thrush all staged notable invasions

Birders in the Southwest noted more Red-breasted Nuthatches than usual, and wondered if these were part of the montane invasion. Some of them could have been—but they also might have come from the boreal forest, which was undoubtedly the source of a major invasion in the East. The birds moved south in great numbers in eastern Canada and the northeastern states. They were unmentioned from Florida, and only a sprinkling reached the Central Southern region, but the Great Plains had good numbers; in east Texas, according to Ted Eubanks, it was "the season of the Red-breasted Nuthatch." A notable feature of this flight in some areas (although not all) was that it began very early, with some individuals appearing in August.

Also early, and quite extensive, was the arrival of Bohemian Waxwings. They were remarkably early in the Maritimes and Quebec, showing up in September; they were still deemed notably early in October in New England, upstate New York, Ontario, and around the western Great Lakes. Unusually high numbers appeared in some areas of the Northeast. Big flocks also moved into Wyoming,

Colorado, and central british Columbia on more typical dates in November.

Varied Thrush, another invader from the Northwest, is recorded out of range virtually every fall, but this year it appeared in exceptional numbers. As is typical, the flight was more to the east than to the south, but more than usual did reach southern California and Arizona, and one was in western Texas. Farther north and east, Varied Thrushes were reported in high numbers in every region from the Prairie Provinces south to Nebraska and east to the Appalachians. The outlier was a single Varied Thrush on Sable Island, far off the coast of Nova Scotia.

Major non-flights: Snowy Owl and some other northerners were most conspicuous by their absence

A continent-wide pattern was the absence of any flight by Snowy Owls. Ron Weir called it their "poorest flight of the decade" in Ontario, and this kind of scarcity prevailed all the way from the Atlantic Provinces to British Columbia and southern Alaska.

Other northern raptors, while not so conspicuously absent, were nonetheless reported in low numbers. Rough-legged Hawks were scarce all the way from New England to California. Northern Goshawks generally stayed in the North. One found in El Paso for a rare record was probably a wanderer from the mountains of the Southwest, not a migrant from the boreal zones, given the fact that there was no detectable flight in the eastern United States.

Shorebird anomalies with no easy explanations: a good showing of Baird's Sandpipers, a scarcity of Pectoral Sandpipers, a surplus of Stilt Sandpipers, and other unexpected patterns

The last couple of spring seasons have been dry on the Great Plains. Some major stopovers for migrants on the plains dried up completely in spring 1989. It seemed likely that the drought would be hard on those shorebird species that migrate north primarily through the center of the continent: with poor feeding conditions on their northbound route, they would have arrived on the tundra ill-prepared to breed.

If species that are mostly Great Plains spring migrants—like Baird's Sandpiper, White-rumped Sandpiper, Stilt Sandpiper, Buff-breasted Sandpiper, or Hudsonian Godwit—had been universally scarce this fall, we could have guessed that this was a fairly clear case of cause and effect. But as it turned out, some of these were seen in unusually high numbers. No explanation is apparent to me.

Several eastern regions specifically mentioned high numbers of Baird's Sandpipers: the Atlantic Provinces, New England, the Hudson-Delaware Region, Ontario, and the Appalachians. It seems unlikely that these were birds displaced from farther west, since Montana and Colorado also had notable numbers this season, but California did report slightly lowered numbers. Several of the eastern regions that reported lots of Baird's also had good numbers of White-rumped Sandpipers.

Remarkable was the consensus about Stilt Sandpiper: it was in high numbers almost everywhere. Such comments came from areas as diverse as Newfoundland, the Appalachian region, Alabama, Texas, Idaho, Colorado, Arizona, British Columbia, and both northern and southern California.

Buff-breasted Sandpiper has been a source of some concern for the last several years because of a perceived scarcity on the Atlantic Coast in fall. This season, the species was "back up after 3 low years" in New England, was "unusually widespread" inland in the Hudson-Delaware region, had an "outstanding migration" around the western Great Lakes, and received favorable mention in other areas. Comments from Ontario, the Gulf states, and the southern Great Plains were more pessimistic, but at least the news was not all bad.

Pectoral Sandpiper was one species for which the only news, perhaps, was bad news. In a season when many shorebirds were reported in high numbers at many places, Pectorals went mostly unmentioned, possibly a telltale omission. The Middlewestern Prairies called them "plentiful," but the maxima of 3000–5000 there could not compare with local tallies of 11,800 in fall 1988 and 20,000 in fall 1987 in that region. Pectoral Sandpipers were sharply reduced in numbers in both British Columbia and California, and were noted as uncommon in Arizona and even in Hawaii.

To round out the odd shorebird season, a scan of the Regional Reports indicates that Ruffs were unusually widespread, from Alaska to Nova Scotia to Louisiana, with a remarkable sixteen found in northern California

A few odd patterns involving Cattle Egret, Dickcissel, and small doves

At the northern end of the Cattle Egret's breeding range in eastern North America, there has been some evidence recently of a decline in num-

Juvenile Stilt Sandpiper at Eaglet Lake, British Columbia, September 1, 1989. This species was reported in high numbers from many regions last fall, seemingly too many to be explained away as mere coincidence or illusion. But even if this sudden abundance of Stilt Sandpipers was evident, the possible causes for it were not. Photograph/Cathy Antoniazzi.

bers. Considering that the species was unknown on this continent as recently as forty years ago, and considering that it is now superabundant over much of the New World, I find it hard to get too concerned about the fortunes of the Cattle Egret just yet. But I was impressed by the concerted *northward* movement of the species late last fall.

In the Atlantic Provinces, single Cattle Egrets showed up in five places between October 24 and November 14. Singles also appeared at five spots in Quebec between October 30 and November 7. Ontario had a "flurry of late sightings" in early to mid-November, and one showed up very far north at Churchill, Manitoba, in late October. Farther west, late singles were in western Montana and northern Idaho, and eight of the ten reported in British Columbia were late enough to fit in with this pattern. There is no obvious reason why this insectivorous heron should fling itself northward into the cold of late autumn. Possibly this was a movement that originated much farther south—south of the United States—and was undetected at lower latitudes in North America.

Dickcissels were reported in high numbers, even record numbers for the season, along much of the Atlantic Coast. They were also noted in unusual numbers in other areas, such as Ontario and Louisiana. The breeding distribution of the Dickcissel has been reshuffled by the last two summers of drought; maybe they have been particularly successful in their new nesting areas. Then again, with many Dickcissels summering farther north or farther east than usual, it may just require less of a navigational error for a bird to wind up on the Atlantic Coast.

A few years ago, with the first few fall reports of Ruddy Ground-Doves in the Southwest, some observers wondered if the birds might be escapes from captivity. But as the records mount, building a pattern of seasonal occurrence, it becomes more obvious that these reflect a tendency of these birds to stray northward in fall. This season saw another seven Ruddy Ground-Doves in California, and at least two in Arizona.

At the same time, in a related phenomenon, Common Ground-Doves strayed north in Texas: October records there included one in Dallas and one on an oil rig 30 miles offshore. Inca Doves also wandered, with two in Louisiana, one in Kansas, and one as far north as Nebraska. Inca Dove has a long-established pattern of straying north in fall and attempting to stay through the winter, often preceding a colonization of new areas—that was the sequence of its arrival in Arizona some 120 years ago. Following in its footsteps, Ruddy Ground-Dove might well become a breeding bird in our Southwest.

Such predictions are shaky, of course—even more so than many of our theories about cause and effect in bird movements. But it is safe to say that even if Ruddy Ground-Dove does not invade, something else will. We can be certain that bird distribution in North America will continue to change. ■