



Adult male Blue Grosbeak in western Will County, Illinois, June 4, 1989. At least five birds were present in this northern peripheral area. The Blue Grosbeak is one of several "southern" passerines that seem to be expanding its breeding range northward. Photograph/Joe B Milosevich.

The Changing Seasons

Summer 1989

Kenn Kaufman

CONSIDER THIS IDEA: MAN-MADE CHANGES in the environment are not bad for birds.

Before you brand me as a traitor, I should re-phrase that. To say that our changes are "not bad for birds" is true only in one superficial way. Various bird species are so different in the niches they fill, and in their requirements, that almost any change in the scene is likely to benefit *some* species. Chopping up a forest into fragments will help the parasitic cowbirds get to their hosts. Overgrazing of a prairie will help the Horned Larks. Even the disastrous increase in human population has been a boon to House Sparrows and Rock Doves. There is hardly anything we could do, short of bringing on a nuclear holocaust, that would not be good for *some* kind of bird.

With every change, however, there are losers as well as winners. Each example above has its down side: advances by cowbirds are bad for many other passerines; turning prairie into the bare earth favored by Horned Larks will have negative impacts on many animals and plants; prime House Sparrow habitat is not very good for most other birds. At first glance, an outsider might say that there's no net loss—that we're simply trading some birds for others. But a sinister common thread runs through many of the man-made changes.

Winners, losers, and biodiversity

Although there are exceptions, most man-made changes in birdlife run in

one direction: the most adaptable forms are favored, while specialized and localized forms are squeezed out. And while trends of that sort might be inevitable in the business world, it's not good to see them occurring on a large scale in nature. These trends lead to reductions in biodiversity.

Biodiversity—a shortened form of biological diversity—is one of the buzzwords among environmentalists today. As much as I dislike most buzzwords, this is one I'll use. Boiled down to basics, the argument in favor of biodiversity is one that birders should relate to instantly: "The more species, the better." A balanced ecosystem, a healthy environment, will have many different species interacting in complex ways. As species are removed, the system will become less stable, less

healthy. Scientists favoring biodiversity will say that every species is worth preserving for its own sake. Trading 100 specialized and uncommon species for 20 adaptable and common ones, therefore, is not a good deal.

Bob Pyle gives us an example this season. Wildlife agencies have worked hard to bring back the endangered Hawaiian Duck, or Koloa, on the island of O'ahu. Early indications of success now seem to have been stymied by—of all things—Mallards. Despite the fact that there are plenty of damned Mallards elsewhere, people had to bring them to Hawaii as well: tough, adaptable, mongrel Mallards, the kind of generic ducks that could take over every pond on the islands. The kind of generic ducks that could forcibly interbreed with the Koloa. All the Koloa on O'ahu now are apparently swamped with Mallard genes, and the purebred Hawaiian Duck is more endangered than ever.

We run the risk of creating a world overflowing with Mallards and House Sparrows, and little else—the biological equivalent of a world with nowhere to eat but McDonald's, nothing to read but *USA Today*.

The less adaptable species are probably under stress already because of extremes in weather patterns, possibly brought about by mankind's effects on the atmosphere. Here is this past summer's weather report.

Patterns of exceptional rainfall and drought dominated summer 1989 over much of North America

Much of eastern Canada and New England saw relatively "normal" precipitation. The rest of the continent seemed to be off balance, too wet or too dry, continuing the uneven pattern established in the spring.

Rainfall was excessively heavy from New York south at least to Virginia and west through the Appalachians to parts of Ohio, Indiana, and Kentucky. Conditions were also wetter than usual in parts of the Central Southern Region. In eastern Texas, it was very wet even before Tropical Storm *Allison* made landfall in late June, bringing up to 20 inches of rainfall in some areas.

On the coastlines of both Texas and the Middle Atlantic states, heavy rains

were known to have hurt the nesting efforts of terns, skimmers, plovers, and others. High water from the rains also apparently was harmful to Black Terns nesting in upstate New York, where the population has already been declining for some time. Effects on nesting passerines were less obvious. Some songbirds reportedly had very good food supplies because of the rain, but ground-nesting species may have had a soggy time of it; many Louisiana Waterthrush nests along streams were apparently flooded out in Pennsylvania.

In most other areas, the story was drought. Southern Florida, which had enjoyed fairly good rainfall in 1988, reverted this year to the very dry conditions that have characterized the 1980s. Wading birds there fared worse than ever. I was astonished to hear from Rich Paul that the whole Everglades system south of the Tamiami Trail revealed an all-time low dry-season tally of only 4200 wading birds this past May. That number is shockingly low considering the vastness of the 'Glades. To put it into perspective, a *single* heronry in *Missouri* (the one at Caruthersville) apparently had substantially more birds than that this summer! Other species also reacted noticeably to the dry conditions. Nesting of Snail Kites was down, and they did not nest at all in their usual stronghold of the Conservation Areas. Even Cape Sable Seaside Sparrows began singing late this year, apparently because of the drought.

Dry conditions also prevailed over much of the western two-thirds of the United States, from Iowa and Missouri to southern California. And these conditions were part of an ongoing pattern, as the dry summer compounded the effects of earlier drought. In southern California, for example, summer normally brings little rainfall anyway, but last winter and spring had been so dry that many bird habitats were left in bad shape. On the Great Plains, in both the northern and the southern sections, this season brought more rainfall than the summer of 1988 (in fact, brief heavy rains wiped out young Snowy Plovers and others in Oklahoma); but both Berkey and Grzybowski noted that long-term effects of drought were still evident in their regions.

Across the interior, the Northern Rocky Mountain region was "abnor-

mally hot and dry," the Mountain West had a "drought-dominated summer," and "drought conditions prevailed" in Arizona. Regional Editors felt that many nesting birds suffered from the drought, from Black-necked Stilts in Nevada and Nebraska to Elegant Trogons in Arizona. But the most obvious responses were those of several grassland birds.

A thin layer of life: The vulnerability of grasslands and their birdlife

Life in the grasslands seems more vulnerable to climatic variations than life in other habitats. This might be just an illusion, caused by the high visibility of life there—but it could be a fact. After all, forests have several different layers that act as their own built-in buffers against weather changes, but prairies are exposed to everything that happens in the atmosphere. Almost all life on the grasslands shares the same thin layer within a few inches of the surface of the ground.

The rainfall in prairie regions may vary substantially from one year to another, and the local denizens must deal with this somehow. Some plants may lie dormant in the soil, in the form of seeds, if a season is too dry. Birds do not have the luxury of that option. Years that are excessively wet or dry may have major impacts on their populations.

Prairie cycles and prairie nomads

In Colorado this summer, Hugh Kingery contemplated the big annual variations in numbers of many grassland birds recorded on the standardized Breeding Bird Survey routes. A dry statistical analysis of the BBS results will show all kinds of trends for grassland birds—up, down, and unchanged—but if regionwide results are broken down by individual routes, the trends break down as well. The separate BBS tallies for Lark Buntings in Colorado and Wyoming in 1989 showed dramatic rises, dramatic drops, and steady numbers, even on adjacent routes. Kingery suggested two possibilities for many of these prairie birds: either they undergo pop-

ulation cycles, or they are nomadic in their breeding.

Looking at the picture from a number of regions over the years, I think the latter is more likely. Most prairie birds, at least the songbirds, probably do not go through regular boom-and-bust cycles in the manner of some northern grouse. Instead, many seem to have built-in nomadic tendencies—they can go where the conditions are good in any given season.

Two that are already fairly well-known as nomads are the Dickcissel and Lark Bunting. Last summer, when the Great Plains drought was more severe, these two made news by appearing in several unusual areas. Dickcissels were especially notable in their relocations in 1988: extraordinary numbers appeared and even nested in the states along the Atlantic seaboard. These areas are hundreds of miles directly *east* of where most of the birds would have been in a normal season, which suggests some interesting re-routing by birds after arrival on their drought-stricken prairies. Lark Buntings were not so inventive in their response, but they did nest in large numbers well north of usual limits, with many in the southern Prairie Provinces.

In the summer of 1989, with the drought apparently much less serious in many Midwestern areas, Dickcissels staged a mild “echo” invasion in some places. Among the areas that reported fewer than last year, but more than average, were locales in New Jersey, Maryland, Virginia, eastern Tennessee, and possibly Arkansas. Numbers in North Dakota dropped back to normal levels. Minnesota reported high numbers again, but only in the southern part of the state, and Ontario saw no repeat performance. The birds in the Atlantic states prompted observers to hope that the Dickcissel might re-establish itself more solidly in that region, where it was a fairly common breeder many decades ago.

Within their more limited sphere, Lark Buntings moved around again this summer. Toward the north, they were even more numerous than last year in the Dakotas and Montana, and they summered much farther north than usual in the Prairie Provinces. These were obviously birds that had shifted from farther south: Lark

Buntings were sparse in New Mexico, variably reduced in Colorado, and down to one-sixth of normal numbers in western Nebraska.

Another nomad, Cassin’s Sparrow, seemed to gain with the dry conditions. Small colonies appeared this summer unusually far east in Nebraska and Oklahoma, and numbers appeared to be higher than usual in western Texas. Arid Arizona may have been too much for them, however, as numbers were low there.

Of course, winners and losers are created by unusually dry conditions. Le Conte’s Sparrows, which favor damp meadows, were absent from most marginal areas on the northern Great Plains (this is a species that bears close monitoring). Bobolinks were also reduced in that region. However, an interesting footnote on Bobolinks came from the Appalachians. Areas of Pennsylvania, Virginia, and West Virginia that had had unusually heavy rainfall during the spring and early summer hosted unusual numbers of Bobolinks this season. Perhaps this species is another type of prairie nomad.

Winners and losers: gulls and terns

As J.P. Myers pointed out in his “Aggravations” column last summer, gulls and terns provide a good example of the way human influence has tipped the balance of nature. In the man-made world, many gull species have increased and many tern species have declined, and the two trends are connected. Modern gulls are open-minded enough to vary their natural diet of garbage by dining on the chicks

Unforeseen hazards: Ring-billed Gulls on the Great Plains do not normally have to worry about being eaten alive by skuas. Dakota birders do not normally have to worry about the field marks for telling the various skua species apart. But the bird world sometimes delivers the unexpected—as demonstrated by this skua on Lake Oahe, North Dakota, on July 13, 1989. See the Northern Great Plains Region report for more details. Photograph/Chris Grondahl.



of terns and other birds in summer. This season in New Jersey, Laughing Gulls were seen to eat 44 Black Skimmer chicks at one colony in just three days. In upstate New York, the Oneida Lake colony of Common Terns now has man-made protection in the form of a monofilament grid put up to discourage the local Ring-billed Gulls. Similar defenses might be tried elsewhere.

Decline of Roseate Terns has been a cause of concern for some time, so it was encouraging to read that 60 pairs were now nesting on a roof in the Florida Keys. Roof-nesting has been a successful strategy for Least Terns for several years, since it removes the terns from some potential hazards of nesting on the ground.

While some terns have faced threats or declines, Caspian Tern seems to be prospering. It has added Alaska to its territory within the last decade or so. The sighting of a big flock inland in Newfoundland hinted at presence of a new colony there, a large new colony was found in Saskatchewan, and the species nested for the first time in southern Alberta. The lone colony in upstate New York increased, many nonbreeders lingered in the Appalachian Region and in Colorado, suggestive pairs were seen at two sites in South Dakota (where the species is not known to nest), and new colonies were noted in northern California. The Caspian Tern does not seem very susceptible to the problems facing other tern species. For example, it is large enough that it can probably defend its eggs and young more effectively against gull predation. However, its size was no defense against Tropical Storm Allison, which came ashore in Texas in June—all the nesting terns there, including Caspians, suffered heavy losses in the storm.

One good tern. .

A point that should be noted by linguists and comedians, as well as birders: every possible pun on the word “tern” has already been invented, and most have been repeated *ad nauseum*. It’s time to outlaw any further tern puns. But the birds themselves continue to surprise us. This summer produced more than one tern of events worthy of further comment.

Sandwich Terns made news in the Northeast, with up to four individuals (depending on duplication) in eastern

Canada (including firsts for two provinces), and probably another in Maine for a second record there. There's no connection, I assume, but one Florida colony grew to 200 pairs of Sandwich Terns, an astounding total for the area.

The White-winged Tern has been recorded more than two dozen times in North America by now. Two more hit the Hudson-Delaware Region this summer, but one of them was a first—it was a one-year-old bird, an age class never identified on this continent before. Paxton and company discuss the intriguing question: where was this bird hatched?

The Black Noddy has been known to North American birders mostly as a bird to be sought and missed at the Dry Tortugas. This season there were record numbers in the southern Caribbean and a couple of strays in the Virgin Islands and Puerto Rico. If the Black Noddy is really undergoing an expansion there, it might become easier to find in Florida in the future.

The season saw continuing comebacks or expansions by Peregrine Falcon and several fish-eating birds: Osprey, Bald Eagle, Brown Pelican, and Double-crested Cormorant

The post-DDT success stories of the five species listed here are by now so familiar that their continuing advances hardly seem newsworthy any more. It's worth pointing out, though, that the Peregrine's return has not been accomplished without a lot of human effort. Flipping through the reports for this season alone I noted references to restocking programs in six states and two provinces, and I know that is only the tip of a substantial iceberg. Despite the strong signs of success (such as the 26 young Peregrines fledged in New England this season), there is still room for concern. Read about the drawbacks of bridge nest sites in the Hudson-Delaware Region.

There have also been efforts on behalf of Ospreys and Bald Eagles. The numbers of Ospreys nesting on artificial platforms erected for them in the Northeast are remarkable. Good news for Bald Eagles this summer came from many areas, including Florida, where 439 active pairs set a new record, and Massachusetts, where the successful nesting of a pair was one of

the highlights of the season. Both the Bald Eagle and Osprey were set back somewhat by this year's weather on the Middle Atlantic Coast, but the general trend there has been upward. And both species are also mostly doing well farther west.

This summer's northward flight of Brown Pelicans on the Atlantic Coast was not as pronounced as in the last few years. Not to worry, though: they continued nesting at their new northern limits in Maryland and Virginia, and Florida recorded a new all-time high with over 12,000 nesting pairs.

Five years ago in this column I discussed the remarkable continent-wide increase in Double-crested Cormorants. This season I could do it again. They are still increasing. Virtually every mention of Double-crested Cormorant in these reports was a mention of higher numbers or new colonies. An interesting sidelight came from Ontario, where Ron Weir noted that the cormorants move into nesting colonies of Black-crowned Night-Herons and take over the best sites, eventually crowding out the night-herons—another case of winners and losers. Fortunately, it appears that the night-herons are able to establish new colonies nearby.

Birds on the march: the continuing adventures of Black-necked Stilt and Shiny Cowbird

Observations this summer, added to those of spring, clearly indicate that something has been going on with Black-necked Stilts. As I mentioned last season, drought could have been involved in driving stilts out of some traditional areas: for example, they failed to fledge any young at Nevada's Stillwater Refuge, at Casper, Wyoming, or in western Nebraska. Drought conditions at the heart of the range probably contributed to the appearance of stilts in a number of outlying areas where they are quite rare: Alberta, Saskatchewan, Ontario, North Dakota, Minnesota, Wisconsin, and Illinois (plus Ohio and Indiana in late spring). The Saskatchewan birds posted the first successful nesting for the province, right on the heels of the second successful nesting for Alberta.

Farther east, probably outside the influence of the drought, big counts were made on the Gulf of Mexico, and up to 14 young were raised at the

sewage ponds at Ensley, Tennessee. The population on the Atlantic seaboard advanced up the Delaware coast, and two pairs nested at the Philadelphia sewage ponds for the first Pennsylvania breeding. Stilts the world over seem to be very adaptable birds (with the exception of the ill-fated Black Stilt of New Zealand), and I suspect that the Black-necked Stilt will prosper in spite of man's activities.

Also prospering is the recently-arrived Shiny Cowbird. According to Bruce Neville, the records in south Florida are already "too numerous to track." Three were seen north of Tampa Bay in late June. After the spring reports of two in Louisiana, it was no surprise to learn that Georgia also had sightings at that season.

Something that we urgently need now is a method for distinguishing Shiny and Brown-headed cowbirds at the fledgling stage, while they are still being fed by their foster parents. Both of these species are now increasing in Florida; to have some idea of their population dynamics, we must know which cowbird is parasitizing which host species. It's no longer safe anywhere in the southeast to assume that a fledgling cowbird is a Brown-headed.

More birds on the march: southern songbirds and others are gradually conquering the North

On a broad front across North America, many southern passerines and other land birds are slowly extending their ranges toward the north. Most of the expansions that have been smooth and gradual over the years have been in the eastern states and provinces. In the mountainous West, things are more complicated: local climate and habitat there are likely to be affected more strongly by elevation than by latitude, a spread uphill may be more significant than a spread to the north, and expansions more often take place in brief spurts. Still, they do occur. Western birds making northward advances this season included Northern Beardless-Tyrannulet and Varied Bunting in Arizona, Lesser Goldfinch in Idaho, Black-throated Sparrow in Washington, and Great-tailed Grackle in Utah and California.

For the last few years there have been numbers of northerly summer

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records of Costa's Hummingbirds in California, suggesting a range expansion in progress. Several have reached Oregon, and a handful have hit extreme southern British Columbia—but the male Costa's in *Anchorage, Alaska*, this summer was an outlandish extension of the pattern, one of the most out-of-range hummingbirds ever recorded anywhere.

In eastern North America, some well-known northward expansions have been going on for decades—Northern Mockingbird and Northern

Cardinal, for example, trying to live up to their names. These two, along with Carolina Wren and some other non-migratory species, have been helped along substantially by recent mild winters. But quite a few others that are only summer residents are also pushing northward.

The Blue-winged Warbler made new advances in southwestern Ontario this season. The Golden-winged Warbler continued its decline in New York and Pennsylvania, and many hybrids were noted in New England—

these are all manifestations of the same thing, a winners-and-losers situation, as the Blue-winged Warbler edges out the Golden-winged *via* sheer reproductive force.

Hooded Warblers are apparently increasing in the upper Midwest and have established themselves as nesters in all the western Great Lakes states, and this summer they continued their northward advance in Ontario. The Kentucky Warbler, another songster of forest understory, is spreading northward in eastern Pennsylvania. In western Pennsylvania, a Swainson's Warbler spent part of the summer well north of usual limits.

Another southern songbird with expansionist tendencies, the Blue Grosbeak, was considered up in numbers in the Middlewestern Prairie region and in southwest Minnesota. After the normal period for spring overshoots, unusual summer stray Blue Grosbeaks were noted north to Maine, Wisconsin, northern Utah, and northern California. Many other southern passerines, such as Summer Tanagers, Acadian Flycatchers, and Yellow-throated Warblers, continued to display minor northward moves.

Not a passerine, but beautiful enough to be one, is the American Swallow-tailed Kite. This is one more species that may be spreading north. Following this spring's birds in New Jersey and Massachusetts, one wandered north to Maine and another to Ohio, and two spent most of June in Connecticut. Twenty years ago it would have been absurd to dream that this "Florida specialty" might ever come close to nesting in New England. But situations do change. We don't call this column "The Changing Seasons" for nothing.

There are winners and losers with every climatic change, and we can't always predict which birds will fall in which category. It's still quite possible that global warming will be disastrous for many birds—but not for all. In a few decades, birders in New England may be sitting on their rooftops while feral Mallards swim in and out the ground-floor windows. . . but if those birders can look up and watch Swallow-tailed Kites, they may conclude that the Greenhouse Effect was not all bad.

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