

changing seasons

The Winter Season, 1999–2000:

Warm Weather And Cross-Continental Wonders

Michael A. Patten

Department of Biology, University of California,
Riverside, California 92521
San Diego Natural History Museum,
P.O. Box 121390, San Diego, California 92112

As the ravages of La Niña and global warming draped North America, we were treated to one of the mildest winters on record. Unseasonably warm weather was the norm from coast to coast, from the snowbelt to the sunbelt. As a startling example, consider a 27 December temperature of 68°F (20°C)...in Calgary! Much of the north and east experienced slightly more normal weather in January, before a milder February continued the earlier trend. The balmy temperatures of the early winter lured many birds into a false sense of security, and they attempted to winter much farther north than usual, sometimes with tragic results. Dozens of American Woodcocks, for example, perished during a cold snap in mid-January in southern New Jersey; most were underfed and emaciated.

Even so, a host of less-hardy species was present this winter, some in Regions far outside their normal range. Perhaps in no group was this pattern better exemplified than in the hummingbirds. Because eastern North America generally hosts but one species, hummingbirds are met with careful scrutiny in that half of the continent, particularly after September, when most Ruby-throateds have departed. This mildest of winters produced a plethora of hummer oddities sprinkled across the East, from multiple Broad-taileds in Louisiana to confirmed Black-chinneds in North Carolina and Tennessee, a Broad-billed in Louisiana, and an Allen's in Texas to the more amazing (and well-documented) find of a Calliope in South Carolina. If global warming is real and will occur as quickly as some fatalists predict, the hummingbird show this winter will look tame ten years from now.

GLOBAL WARMING?

A counterintuitive trend in this warm winter was the continued presence of numerous redpolls and other winter finches in the northern states, particularly in the Northeast. Furthermore, the East saw its biggest influx of Rough-legged Hawks in decades, with some 30 reaching Connecticut, various others south to North Carolina, and three reaching Florida, the first of the species documented in that state (Fig. 1). Not to be outdone it would seem, a Snowy Owl pushed southward to Florida (see the Pictorial Highlights), also furnishing a first record for the Sunshine State.

A more ambiguous pattern was the presence of many western wood-warblers in the East, including Audubon's in Massachusetts and Maryland, a Black-throated Gray in Québec, Townsend's in Virginia and Florida, and MacGillivray's in Massachusetts and New

York. Whether the warmth had anything to do with the occurrence of these species is debatable and seemingly unlikely, but the warmth probably did allow many warblers to tarry in the unexpectedly favorable climate, increasing the probability for their discovery by birders.

In short, if global warming is occurring or the apparent increased frequency of El Niño events are contributing to changes in species distributions, what exactly can we predict? A simple prediction could be that warm-water seabirds would appear farther north (see Patten 1998). Also, we might safely hypothesize that landbirds that normally winter in the subtropics would extend their wintering range to the north, as might be happening with the hummingbirds mentioned above or with the marked increase of Rufous-capped Warblers (see the cover), Rufous-backed Robins (see the Pictorial Highlights), Streak-backed Orioles, and other "Mexican" species.

But what if a species is showing the opposite pattern? Is it a fluke or does it call into question our very ideas about global warming? A fine example of such an exception is provided by the Yellow-billed Loon. This bird of the high Arctic seemingly expanded its wintering range southward along the Pacific Coast beginning in the mid-1960s (Remsen and Binford 1975). Until the early 1970s, there were but two records away from the Pacific slope, a 1930 partial specimen recovered in New York and a 1944 specimen from Colorado (Phillips 1990). Since the early 1970s, there have been ±150 records for the interior of North America, ranging from inland records from British Columbia and the Pacific states to dozens from the Prairie Provinces, Ontario, and New York south to the Southwest (e.g., Arizona, Texas)

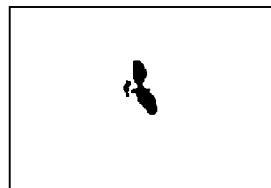


Figure 1. Rough-legged Hawks staged one of their largest incursions into the Northeast in decades. Birds reached far to the south of their normal range in the East, with a few providing the first documented records for Florida, such as this light-morph bird near Zellwood, Orange County, 17 February 2000. Photographed by Kurt A. Radamaker.

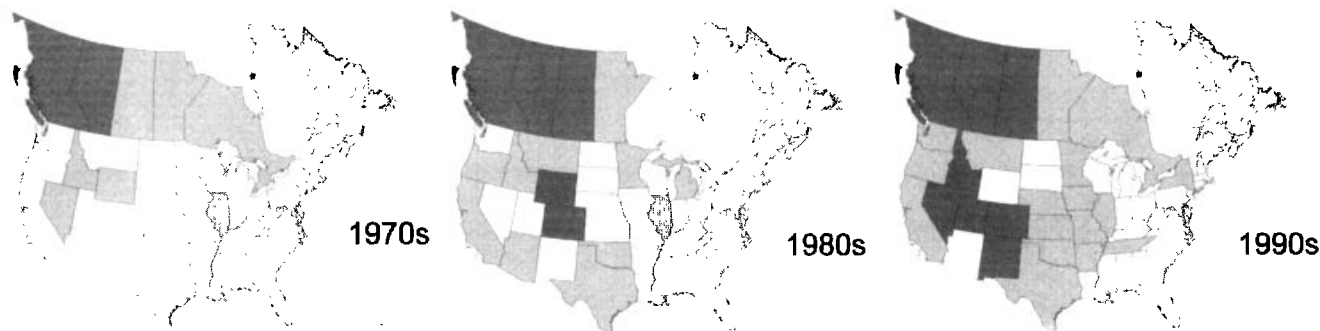


Figure 2. Records of the Yellow-billed Loon inland in North America (i.e., away from Pacific Coast). Dark gray signifies >3 records, light gray signifies 1-3 records, and white signifies no records. Note the sharp increase in both the 1980s and 1990s, especially to the south and east.

and Southeast (e.g., Tennessee, Arkansas).

Interestingly, there has been no trend for states and provinces to record their first (or first for the interior) since 1970—additions have not become more frequent in recent years (runs test; $t_s = -0.74$, $P > 0.10$). Instead, firsts were recorded rather randomly in the past 30 years. Although there are alternative interpretations, I see this random pattern as an indication that increased observer effort has had little effect on the apparent increase in Yellow-billed Loons (cf. Remsen and Binford, Phillips 1990). Even so, the number of individuals recorded away from the Pacific Coast has increased significantly in the past two decades (Fig. 2; $\chi^2 = 22.6$, $P < 0.001$). It would thus seem that the range of this Arctic species is slowly drifting southward, contradicting our notions about global warming.

Perhaps the Yellow-billed Loon is an anomaly, yet as noted, the warm winter of 1999–2000 brought many northern birds far to the south, whether the Snowy Owl in Florida or the redpoll invasion. Long-term population increases, decreases, expansions, and contractions are real in many species, but by their very nature detection of them takes time. We need to resist the temptation to proffer pat answers to complex questions, based on short-term weather events.

PREDICTING PATTERNS

Despite the cautions raised above, one of the great benefits to publishing records and analyses of avian distribution is that it allows us to make predictions about what should occur. We have all seen the multitude of "The Next Bird for X" type articles (e.g., Brinkley 2000), yet there are more fundamental predictions we can make and, I daresay, more important questions we can ask. A stellar example of the beauty of method comes from the Southern Pacific Coast Region during winter 1999–2000. Within the past decade, it was learned that the Gray Vireo winters exclusively in "forests" of Elephant Trees (*Bursera microphylla*) in Sonora and Baja California, where it subsists almost entirely on the fruits of this plant (Bates 1992).

Armed with this information, Philip Unitt and a team from the San Diego Natural History Museum searched the only Elephant Tree forest in the United States, for Unitt had reasoned that the Gray Vireo may well winter there. On 4–5 December, they discovered at least five Gray Vireos in a remote portion of Anza-Borrego Desert State Park, the first of this species known to winter in California. Full details of this remarkable discovery will appear in a forthcoming issue of *Western Birds*.

How many other discoveries await the intrepid and thoughtful field ornithologist? There are doubtless many, whether extending known breeding or wintering ranges, elucidating novel migratory pathways, or uncovering heretofore unknown distributional patterns. Regarding the latter, just consider that we do not know the

winter range of the Timberline Sparrow (*Spizella breweri taverneri*), a subspecies recently discovered breeding south to central Montana by Brett Walker and one which may warrant species status (Klicka et al. 1999). We might reasonably predict that it lies to the south of the winter range of the nominate Brewer's Sparrow, given standard leapfrog patterns of distribution (e.g., Remsen 1984), but does its winter range reach northward into the southern United States? And just where do Kirtland's Warblers spend the winter? We know it is not on the main islands of the Bahamas, contrary to dogma, but it is assuredly somewhere in the West Indies. As the Glossy Ibis continues its westward march and the White-faced Ibis its eastward march, are there now sites where both species breed? If so, is there any hybridization? I predict that the answer is "yes" to these last two questions...

"NEW" SPECIES

It is a sad, troubling fact among most birders that taxa are ignored unless they can be counted on some list. Somewhere along the way, birders (and, to be fair, many conservation biologists and wildlife managers; see Rojas 1992) lost track of what data are important. We tend to attach a great deal more importance to a species than to a subspecies (or morph), yet the birds themselves make no such judgment—nor do the bulldozers that further destroy their habitat, regardless of how we treat the taxonomy.

When a study is published wherein various taxa are merged into a single species, those taxa invariably receive far less attention. In California, for example, the Atlantic Brant (*Branta bernicla hrota*) was formerly a rare but nearly annual winter visitor to the coast among large flocks of Black Brant (*B. b. nigricans*). I say "formerly" with no small amount of chagrin, for since the two were lumped and became merely Brant, there have been virtually no reports of *B. b. hrota* in the state (Patton and Campbell 1992). Frankly, even though habitat loss has pushed the Brant's wintering range to the south, I doubt that *B. b. hrota* stopped occurring in California; rather, there is simply no interest now that a "Brant is a Brant." In a similar vein, how many birders look at juncoes now? Most seem happy to call them all Dark-eyed, although rumblings of potential splits have renewed some interest in the group (the same thing is happening with Fox Sparrows).

This insidious problem works in the other direction as well. With the split of the Rufous-sided Towhee into the Eastern Towhee (*Pipilo erythrophthalmus*) and Spotted Towhee (*P. maculatus*), we are now learning that Spotted Towhees are annual in eastern North America. This winter saw reports from as far east as Pennsylvania, Massachusetts, and Newfoundland. I doubt that there has been a true increase in records—we are merely seeing an increase in per-

ceived importance. Conversely, along with a few Eastern Towhees in eastern Colorado, an area with several prior records, a rambunctious male reached southeastern Arizona. I suspect that only now will observers in the West seriously consider the Eastern Towhee as a potential vagrant and state-list addition, and thus worthy of field identification.

Similarly, reporting wayward Cassin's, Plumbeous, and Blue-headed Vireos has become all the rage. Yet field identification of these birds remains mired in difficulty, with many overlapping characters and many birds with ambiguous features. Birders who ignore subspecies are ill-prepared to identify these same taxa after a taxonomic split. In some cases we are fortunate to have in-hand a paper about field identification of the subspecies (e.g., Heindel 1996), even if tentative. But in other cases we are left to learn an identification from scratch, making the expected mistakes along the way. How many birders are aware of the black-backed subspecies of the Spotted Towhee from the Pacific Northwest, *P. m. oregonus*? Some individuals of this taxon can essentially lack dorsal spotting, or at least appear to lack it when viewed in the field. This subspecies moves southward in winter, with specimen records to southern California. How does one ensure that an apparently unspotted towhee is an Eastern? Had we always paid attention to subspecies, this question would be moot. Instead, I ask it in earnest, so that we are not besieged with erroneous records of Eastern Towhees.

WHOOPEER SWANS AND OTHER PROBLEM SPECIES

It is perhaps too late for me to avoid the title of curmudgeon, but if I have thus far, my ruminations here may seal my fate. I was both fascinated and disheartened to read an S.A. in the Middlewestern Prairie report as Ken Brock lucidly told a tale of multiple Whooper Swans in the Region, with individuals appearing in Iowa, Ohio, and Indiana. He further noted an adult captured in North Dakota this same winter. Lest anyone get too excited about this latest slew of Eurasian vagrants, Brock quickly noted that the natural occurrence of each of these individuals was doubtful at best. He cited the known escaped birds from a breeder on Long Island, New York, that eventually surfaced at the Ipswich and Plum Island area of Massachusetts (Nikula 1995), where they subsequently bred (Ellison and Martin 1999). He did not cite a similar instance from Maryland (Johnson and Sladen 1983), which only adds fuel to the fire. In any event, this group from Long Island and its offspring were later fingered as the likely source for records from Labrador, Québec (see David et al. 1999), New England, and Pennsylvania.

I was disheartened by my own musings on this scene. Brock noted that there is a dearth of published records from farther west, although he cited persistent reports from Minnesota over the past decade, a sighting from Missouri that was largely dismissed, and a captive pair that fledged one cygnet in Illinois. Add to these reports a recent adult in Saskatchewan (Koes and Taylor 1999) and multiple records from southeastern Oregon (St. Louis 1995) and northern California (Howell and Pyle 1997). Because the Whooper Swan is semi-regular in western Alaska (mainly on the outer Aleutian Islands) as a stray from Asia, records from the Pacific States have generally been considered to be of naturally occurring vagrants. However, I grow concerned when I review this species' spread in the East—from apparently feral stock—especially when I note that the much of the East is geographically closer to the Pacific States than is western Alaska. As Brock noted, "Some biologists have suggested that Whoopers may duplicate the invasion pattern of Mute Swans; consequently, the population warrants monitoring." We now have Eurasian Collared-Doves reaching the West from their burgeoning non-native populations in the East (Romagosa and McEaney 1999). And need I remind anyone that European Starlings and House Sparrows reached the West from escaped/introduced populations in the East? Am I suggesting that the Whooper Swan has not

reached the West Coast as a natural vagrant? In truth, I feel that the balance of evidence could be reasonably argued either way. However, it would not surprise me to learn that all birds from the coterminous United States had captive origins.

Ornithology, like all fields of science, is a human endeavor. It is thus fraught with decidedly human problems, not the least of which is emotional attachment to our own views or biases. We will never learn the truth about avian distributions if we allow ourselves to succumb to the "birds have wings" or "it looked wild" type of arguments. Conversely, we will learn nothing if we dub all oddities as "obvious escapes." Instead, we should be dispassionate, weighing carefully all data so that we may draw a reasoned conclusion—and we remember that reasonable people can reach different conclusions with the same data. It is not enough to note the absence of bands or cage wear, although we should look hard and objectively for both. A bird escaped for even a short amount of time may have molted into fine feather, negating that criterion. Further, escaped birds will find the local habitat most suitable for them. If I put a duck in a cage for a year and then let it go, it will not have forgotten how to swim or how to find a pond with adequate food. But we must bear in mind that many genuine vagrants have appeared vast distances from their known range. Just witness the Black-headed Gull, banded in Finland that returned to winter in north-central Texas!

We therefore should always consider if a particular species has a reasonable chance of reaching a particular region. Is it migratory? Is its range geographically close? We need to examine whether there are intermediate records or a pattern of occurrence and whether the species is commonly kept in captivity. There will always be a first record, sometimes far afield, and it may fall under suspicion accordingly. But when we remember the greater good we are trying to serve, it is a small price to pay, particularly when we recall the simple fact that any record can be reevaluated if a pattern of occurrence develops (e.g., the Ruddy Ground-Dove in the Southwest). To that end, we should always report and document all such potential strays, even if their natural occurrence seems unlikely to us at first blush (e.g. the recent Black-backed Oriole in southwestern California). We should consider labeling such birds, at least initially, as "natural occurrence uncertain" rather than tagging them with the negatively loaded label of "exotics," although some birds clearly will be exotics, like those Chilean Flamingos I saw at the Salton Sea a few weeks ago. Gathering additional data and scrutinizing it with an objective eye will yield the best results, and provide us all with a noble goal.

I extend my heartfelt thanks to P. A. Buckley, Richard A. Erickson, and Matthew T. Heindel for offering excellent comments on a draft of the manuscript and to Greg W. Lasley for some timely information.

LITERATURE CITED

- Bates, J. M. 1992. Frugivory on *Bursera microphylla* (Burseraceae) by wintering Gray Vireos (*Vireo vicinior*, Vireonidae) in the coastal deserts of Sonora, Mexico. *Southwestern Naturalist* 37:252–258.
- Brinkley, E. S. 2000. The next new ABA-area birds: Atlantic pelagic—The Gulf Stream. *Birding* 32:136–145.
- David, N., Y. Aubry, and P. Bannon. 1999. Québec Region. *North American Birds* 53:361–362.
- Ellison, W. G., and N. L. Martin. 1999. New England Region. *North American Birds* 53:30–34.
- Heindel, M. T. 1996. Field identification of the Solitary Vireo complex. *Birding* 28:458–471.
- Howell, S. N. G., and P. Pyle. 1997. Twentieth report of the California Bird Records Committee: 1994 records. *Western Birds* 28:117–141.
- Johnson, J. C., and W. J. L. Sladen. 1983. Whooper Swans released in Maryland. *Maryland Birdlife* 39:3–4.
- Klicka, J., R. M. Zink, J. C. Barlow, B. W. McGillivray, and T. J. Doyle

1999. Evidence supporting the recent origin and species status of the Timberline Sparrow. *Condor* 101:577-588.

Koes, R. E., and P. Taylor. 1999. Prairie Provinces Region. *North American Birds* 53:292-293.

Nikula, B. 1995. New England Region. *Field Notes* 49:126-130.

Patten, M.A. 1998. Changing seasons, fall migration, August 1-November 30, 1997: Nora, El Niño, and vagrants from far afield. *Field Notes* 52:14-18.

Patten, M. A., and K. F. Campbell. 1992. California [Christmas Count Summary]. *American Birds* 46:1042-1044.

Phillips, A. R. 1990. Identification and southward limits, in America, of *Gavia adamsii*, the Yellow-billed Loon. *Western Birds* 21:17-24.

Remsen, J. V., Jr. 1984. High incidence of "leapfrog" pattern of geographic variation in Andean birds: implications for the speciation process. *Science* 224:171-173.

Remsen, J. V., Jr., and L. C. Binford. 1975. Status of the Yellow-billed Loon (*Gavia adamsii*) in the western United States and Mexico. *Western Birds* 6:7-20.

Rojas, M. 1992. The species problem and conservation: What are we protecting? *Conservation Biology* 6:170-178.

Romagosa, C. M., and T. McEneaney. 1999. Eurasian Collared-Dove in North America and the Caribbean. *North American Birds* 53:348-353.

St. Louis, M. 1995. Whooper Swan at Summer Lake Wildlife Area, Oregon, and California wintering areas. *Oregon Birds* 21:35-37.



STANDARD ABBREVIATIONS USED IN THE REGIONAL REPORTS

Abbreviations used in place names

In most regions, place names given in *italic* type are counties. Other abbreviations:

| | |
|--------|---|
| A.F.B. | Air Force Base |
| Cr. | Creek |
| Ft. | Fort |
| Hwy | Highway |
| I. | Island or Isle |
| Is. | Islands or Isles |
| Jct. | Junction |
| km | kilometer(s) |
| L. | Lake |
| mi | mile (s) |
| Mt. | Mountain or Mount |
| Mts. | Mountains |
| N.F. | National Forest |
| N.M. | National Monument |
| N.P. | National Park |
| N.W.R. | National Wildlife Refuge |
| P.P. | Provincial Park |
| Pen. | Peninsula |
| Pt. | Point (not Port) |
| R. | River |
| Ref. | Refuge |
| Res. | Reservoir (not Reservation) |
| S.P. | State Park |
| Twp. | Township |
| W.M.A. | Wildlife Management Area |
| W.T.P. | (Waste) Water Treatment Pond(s) or Plant |

Abbreviations used in the names of birds:

| | |
|------|----------|
| Am. | American |
| Com. | Common |
| E. | Eastern |
| Eur. | Eurasian |
| Mt. | Mountain |
| N. | Northern |
| S. | Southern |
| W. | Western |

Other abbreviations and symbols referring to birds:

| | |
|------|---|
| ad. | adult |
| imm. | immature |
| juv. | juvinal or juvenile |
| ph. | photographed |
| sp. | species |
| tape | audio tape-recorded |
| v.t. | video-taped |
| † | written details were submitted for a sighting |
| * | a specimen was collected |
| @ | subject to review by appro- priate records committee |
| BBS | Breeding Bird Survey |
| CBC | Christmas Bird Count |

King Bird Tours

P.O. BOX 196
PLANETARIUM STATION
NEW YORK, NY
10024 U.S.A.
(212) 866-7923

*"the greatest
operator of
ornithological
tours on
earth"*
**Arthur
Frommer**



The Asia Specialists

Write for
itineraries

2001 BIRDING TOURS

THAILAND
North, Central, Peninsular
6-28 January

NW INDIA
Rajasthan, Gujarat
Bharatpur
4-27 January

Forest Owlet Pretour
31 December-5 January

SRI LANKA
26 January-12 February

PHILIPPINES
Luzon, Mindanao,
Cebu, Palawan,
Bohol, Negros
2 February-5 March

VIETNAM
North, South
8 March-1 April

BHUTAN
West to East Traverse
6-29 April

CHINA #1
NW China (Xinjiang)
21 May-6 June

INDONESIA #1
Sulawesi
17 July-5 August

CHINA #2
Tibet Traverse
4 June-4 July

INDONESIA #2
Greater Sundas
Java, Bali
5-26 August

MALAYSIA
Malaya, Borneo (Mt. Kinabalu)
5-27 May