

Changing Seasons, Fall 2000

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I am quite honored to introduce two new regional reports: Baja California Peninsula and Central America. I urge each of you to read these initial reports and keep in the back of your mind that they exist, for now there is an outlet for all those goodies that you will discover in these regions, either due to travel or, for the lucky birders who live in these regions, every-day birding. If we can just get the rest of Mexico up and running! Additionally, the Mountain West Region has been separated into two: Wyoming and Colorado retain together the "Mountain West" moniker and the "Great Basin" region comprises Utah and Nevada. This action has already produced the desired effect of greatly increasing the reporting rate from Utah and Nevada. I heartily welcome the new Regional Editors!

Now that I have gotten the introductory comments out of the way, please indulge me while I conduct some philosophizing. While thinking about this season, a fact broke into my consciousness that I hadn't considered before and one that I find quite amazing: All of the text included in the various regional reports is based mostly on an incredible number of individual answers to the question, "Where should I go birding today?" Individual answers are often seemingly "wrong"—the individual didn't find anything of particular note or interest. Maybe she or he might have found a first local (or county or province or national or whatever) record of Bird X if only she or he would have gone to the sewage-treatment plant rather than the passerine hotspot that day. But, more likely, there just wasn't anything out-of-the-ordinary around that day. And, as we all know, there are many, many more days like that than there are days marked by important firsts. Again, as we all know but don't like to admit, these "negative-data" days are just as important as the opposite. They offer reinforcement to our idea of what normal is and provide good opportunities to *really* study that common species that one has been ignoring. Maybe these days are a bit less exciting, but they are still very important to our knowledge of bird distribution, proximal effects of weather on migration, and a host of other aspects of bird behavior and ecology.

The Future of Migration Studies

The advance of technology has created new ways to study an aspect of birds that is, arguably, the most fascinating—migration. For most of the past century or so, all of our knowledge about bird migration has come from those very, very rare conjunctions in space and time of a previously banded bird and human eyes. Recently, radio telemetry (and particularly very recently, satellite telemetry) has enabled us, at fairly great expense and/or with much effort, to track individual banded birds on sections of their migrations. The expense of this technique has meant that the species studied are usually those for which we have great concern (e.g., Endangered species). In addition, the technology, at least the readily available technology, also has limits that cause us to be able to study only fairly large species.

Ornithology sits at the threshold of new science—stable-isotope analysis. This method enables scientists to pluck one or a few feathers

from any individual bird and determine from analysis of the ratios of various isotopes (or variations) of a particular chemical element, where, on a gross scale, that feather was grown (Chamberlain et al. 1997, Hobson and Wassenaar 1997, Kelly and Finch 1998, Hobson 1999). Thus, depending upon the molt strategy of the individual or the species, we can determine where the bird summered or wintered. Each feather is produced from the resources that the individual bird obtains from the environment at the time the feather is grown. This feather then contains the approximate ratios of various isotopes found in the local environment, which vary due to a few factors, such as rainfall patterns.

These types of studies are beginning to be published (Wassenaar and Hobson 1998, Wassenaar and Hobson 2000, Meehan et al. 2001) and the technique of stable-isotope analysis promises to revolutionize bird-migration research. This method will enable us to obtain information relating to migration (and other facets of ecology) from *every* individual bird handled. No longer will we be reliant on that 1-in-100 or 1-in-1000 chance (or worse) that a banded bird will repay our effort with a recovery elsewhere.

This method also creates another way for all birders to contribute directly to migration research. Though there are hurdles to be leaped (e.g., organization, permitting, funding), every road-, window-, or tower-killed bird offers the opportunity to learn about individual choices on migration routes and breeding and wintering areas.

For those that don't have access to folks studying stable-isotope patterns, there is another way to advance ornithology. It involves a very low-tech methodology called counting. Some birders identify thrushes in active migration by the call notes given sporadically as the birds fly overhead at night. I have been aware that counts of migrant thrushes on the ground are always considerably lower than capture totals at banding stations. Somewhat recently, it has also become fairly common knowledge that counts of migrant thrushes on the ground have, in many respects, no bearing to the number of thrushes that migrated over those locations the previous night.

Fortunately, there is an expanding cadre of intrepid birders conducting at least sporadic counts of calling, migrating thrushes (and, presumably, other species). In fall 2000, such counts were reported from five states and two provinces (Table 1). These few data, of course, provide a far-from-complete picture of the shape and extent of thrush migration. However, just imagine a network of hundreds of observers counting and reporting such data. Of course, there will still be the very difficult problem of separating Gray-cheeked and Bicknell's Thrushes by their flight calls. However, if separation were widely possible, it would certainly help in determining the latter species' migration range. Hopefully, the long-awaited and imminent release by Bill Evans and Michael O'Brien (M. O'Brien pers. comm.) of a commercial CD of flight calls of nocturnal migrant species (replacing the long-existing, but nearly invisible, thrush tape) will surely stimulate many others to embark on this exciting endeavor.

Table 1. Nocturnal counts reported of migrating *Catharus* thrushes in Fall 2000.

| Species | Date | Number | Location |
|---------------------|-----------|--------|-------------------|
| Veery | 2 Sep | 250 | Westwood, MA |
| Swainson's Thrush | 9–10 Sep | 1,420 | Chicoutimi, PQ |
| | 12–13 Sep | 36,000 | Kingston, ON |
| | 15 Sep | 80 | Northampton, MA |
| | 25 Sep | 350 | Berks Co., PA |
| | 27 Sep | 300 | Berks Co., PA |
| | 4 Oct | 790 | Kennesaw Mtn., GA |
| Gray-cheeked Thrush | 6 Oct | 50 | Portsmouth, NH |
| | 12–13 Sep | 300 | Kingston, ON |
| | 17–18 Sep | 300 | Kingston, ON |
| | 18 Sep | 50 | Berks Co., PA |
| | 21–22 Sep | 185 | Chicoutimi, PQ |
| | 4 Oct | 61 | Kennesaw Mtn., GA |

Multi-region Phenomena

One of the most important uses of these regional reports lies in the synthesis of the reports from multiple regions. While an event may be interesting even when occurring in only one place or province or region, landscape-scale phenomena are truly exciting and probably result from events happening on populational or even species-wide scales. These pages can offer the first inkling of awareness of changes in the population, distribution, and migration of various species. Thus, it behooves us to read more than just our home regional report. Here are a few multi-regional events that caught my eye and that might point to large-scale events:

- Northern Fulmar numbers were apparently high in the Pacific, but low in the Atlantic.
- Out-of-range Great White Herons were reported on the Atlantic Coast as far north as Cape May, NJ, with mentions from at least five states. This is especially interesting, given the recent suggestive evidence published that we may be in for a re-split of this form, currently considered a subspecies or morph of Great Blue Heron.
- Great Egrets were reported in high numbers in quite a few northern regions.
- Individuals of small forms of Canada Geese were mentioned in a number of regions where they are rare.
- High numbers of both eagle species were reported from numerous hawkwatches across the continent.
- Buff-breasted Sandpipers were reported in higher numbers than of late in many regions.
- Wilson's Phalarope were reported in low numbers in virtually all Atlantic Coast regions and in Hawaii.
- Note how much space is devoted to hummingbirds in virtually all eastern regions, and also note the timing of the various birds' arrivals.
- Lark Sparrow numbers seemed high in a number of Atlantic Coast regions.
- With five of the nine Painted Bunting records in the Middle Pacific Coast region being birds found in mist nets, how many more went undetected? Note also that California birders found three on the Baja in three days in early September.
- Yellow-headed Blackbird numbers were reported as low in both the Atlantic Provinces and New England regions, a continuation of a recent trend on the Atlantic seaboard.

Words of Caution: Juvenile vs. Immature...

These pages are used by a fair few birders and ornithologists researching the occurrence of species, either locally or on a larger scale. Though there are many that have opined that records of rarities are meaningless to species and to ornithology, recent literature is, in my opinion, more enlightened (e.g., Veit 2000). With increasing attention being paid by scientists to out-of-range occurrences, these pages may be subject to more intensive mining for information. We, as contributors, should endeavor to make this information as useful as possible by reporting to our regional or sub-regional editors all possible information, particularly age and/or sex of individual rare birds. It is then incumbent upon those editors to faithfully forward that information to the readers of these pages.

In that vein, I wish to implore reporters and editors to use the terms "juvenile" and "immature" consistently. As example, a Thayer's Gull reported south of Canada in early August as an immature is at least possible. However, if one intermingles "immature" and "juvenile" in other references to gull ages, the reader may be led to believe that the early-August Thayer's was a juvenile. Since it is patently unlikely that a juvenile (young-of-the-year) Thayer's (or Pomarine Jaeger or Black-legged Kittiwake among many other Arctic-breeding species) could get to the Lower 48 in early August (or even early September for certain species), some could interpret that this bird was, at best, incorrectly aged, but, more likely, misidentified (since correct ageing is often critical to correct identification of many taxa).

Young-of-the-year jaegers, Thayer's and Sabine's Gulls, and Black-legged Kittiwakes that we find off Manitoulin Island, or on American Falls Reservoir, or at the Altamaha River mouth in fall are juveniles. Many individuals may retain juvenal plumage longer than this, sometimes, much longer (Howell et al. 1999). "Immature" should be used in two situations only: for those individuals that have conducted at least one pre-basic molt and are obviously not adults, and for those individuals that are not adults but which are not seen well enough to age more precisely. Correct usage of these terms is particularly critical for larids and other slow-maturing species that often summer south of normal breeding grounds and, thus, could be found in southern areas much earlier in the fall than could juveniles of the same species.

...and identifiable forms...

There is a fairly strong movement afoot to identify forms/races/subspecies, one which I applaud most vigorously. Though we humans require sharp lines of distinction in order to wrap our minds around "species," evolution is nowhere near that particular. We identify birds during a snapshot in evolution's long life, a snapshot that catches many forms in the process of changing, even becoming "new" species. These forms are geographic sub-units of existing species and many have their own migration routes and timetables, molting patterns, and wintering areas. These various features of difference can and do isolate these sub-units and are some of the building blocks of speciation.

It behooves us to note, where possible, the occurrences of these different forms, as they help us understand the patterns of vagrancy in birds. At least two East Coast regions noted the occurrence of individuals of Gambel's White-crowned Sparrows, the pale-lored subspecies that breeds in central Canada (and which geographically separates the black-lored forms in the northeast, *leucophrys*, and the Rockies and Cascades/Sierras form, *oriantha*); Gambel's winters in the central and western parts of the Lower 48. This form is readily identified given reasonable views, though intergradation can be a problem requiring consideration. However, I also urge caution in identifying subspecies, particularly out-of-range subspecies.

...and "Western" Flycatchers...

The split of the former "Western" Flycatcher into two species, Pacific-slope and Cordilleran, has caused no little consternation in birding circles, particularly in the Sierras and Cascades, where the respective ranges of the two species abut and/or overlap. Apparently, individuals of one species can speak the other's language in the overlap zone. This has produced the admirable trait in numerous Pacific-slope birders of conservatism in identification of individuals of the species complex, particularly away from known breeding areas.

Though I applaud attempting to identify *Empidonax*, I am concerned that many birders in the Rockies, where Cordilleran is the only breeder of the Western Flycatcher complex, routinely identify silent and/or female, yellowy *Empidonax* as Cordilleran; many do not consider Pacific-slope Flycatcher. While a large percentage of these identifications is undoubtedly correct, particularly in the spring, we have absolutely no idea which. However, most migrant species and subspecies that are restricted as breeders to the same habitats and/or range as Pacific-slope Flycatcher (e.g., Cassin's Vireo and Townsend's Warbler) are uncommon to common migrants through the Rockies and out onto the Great Plains, so why not Pacific-slope Flycatcher?

The editors of the Great Basin region report that, "In Nevada, a heavy passage of Western Flycatchers was noted through the valleys and in the mountains 10 Aug–18 Oct (v.o.); banding data indicated that most were Pacific-slope Flycatchers..." These data suggest that Utah and Colorado birders should be on the lookout for Pacific-slope Flycatcher, a sentiment with which I strongly agree. However, Pyle (1997) states, "The separation of Pacific-slope from Cordilleran Flycatchers by in-hand criteria alone should be performed with extreme caution and the realization that many individuals cannot be identified." He goes on to write that the formula used to separate the two species allows "separation of about 60% of individuals" and further states that the "formula is based on specimens and the values may differ somewhat on live birds..."

...and late records of early-fall migrants

Many Neotropical migrant bird species depart North America early in fall. For some of these, there is ample physical evidence that individuals of some species can and do linger late in North America. However, for a minority of these, there is very little proof that any individuals are present on the continent within their breeding ranges after mid-autumn. One example of the latter category is Purple Martin. Cape May, NJ, has a long history of late-season records for a large number of early-migrating species, e.g., November records for Common Nighthawk, Chimney Swift, and Bank Swallow, to name a few. However, to my knowledge, there has never been a Purple Martin correctly identified there after September. Thus, I wholeheartedly agree with Bruce Mactavish in hoping that the observer of a 24 October Purple Martin in the Atlantic Provinces region considered other species of *Progne* in his identification. Other species in the genus may be more likely in late fall in North America, with a couple of strong contenders, including Southern Martin, providing particularly horrible identification headaches.

Jaegers and Other Arctic-breeding Larids

Birders across the continent enjoyed the fruits of what must have been either a terrific breeding season for various Arctic-breeding larids or an abnormal distribution of these migrants. Jaegers, Sabine's Gulls, Black-legged Kittiwakes, and Arctic Terns are pelagic migrants that normally are seen in large numbers only on the ocean. However, all of these species are well-known for their annual occurrence in inland areas of the continent, but on a very sporadic basis in both time and space. Fall 2000 saw a plethora of reports of these species away from the coasts and in most

regions, highlighted by large numbers of Long-tailed Jaegers (at least 69 by my count) and Sabine's Gulls (75 in Colorado alone).

The Hudson-Delaware editors asked, "Are Long-tailed Jaeger numbers increasing or are we looking more closely?" I would agree with Margaret Bain, who writes in regard to large numbers of Long-tails in southern Ontario, "...birders' improving identification skills are more accurately estimating the relative abundance of the three jaeger species with Long-tailed almost certainly under-estimated until recently."

Historically, most inland jaegers (and particularly juveniles) were identified as Parasitics because the then-current dogma was that Parasitic was the default species away from the ocean. Many of us believe that the dogma is wrong (Lee 1989, P. Lehman pers. comm.) I do not write this to disrespect my elders; they simply had little chance to get it right. There was little in the way of accurate identification information available, and inland birders didn't have the luxury of seeing multiple jaegers in a season, much less in a day. And, of course, Parasitic was the default jaeger!

We now know much more about jaeger identification and, equally important, jaeger migration timing. We now know that if you are looking at a juvenile jaeger well south of the breeding grounds and your calendar tells you that it is late August or early September, then you are looking at a Long-tail (Table 2). A few more developing jaeger "rules," the first being somewhat of an antithesis to the previous dogma 1) Pomarine may be the most common jaeger species in the interior of the continent away from very large bodies of water (P. Lehman, J. Dunn pers. comm., pers. obs.); it is certainly this writer's experience in Colorado (which does not have any very large water bodies); 2) if you're watching a juvenile jaeger walking around catching grasshoppers in the weedy fringe of a lake that holds hundreds or thousands of gulls, you are looking at a Long-tail; it is certainly this writer's experience in Colorado. So my sample size on this "rule" is only one; I still think it significant.

From the Fall 2000 regional reports I extracted all inland jaeger records (that is, away from the ocean and outer coast) and all occurrences of Long-tails off the Atlantic Coast, where the species is rare (Table 2). Among the Long-tail records, note the preponderance of August and early September dates (28 of 41 specific records). Of interest in the Parasitic records is the preponderance of records from west of the Rocky Mountains (11 of 15 specific records). Are Parasitics truly more common there than east of the Rockies (and away from very large bodies of water), as suggested by Michael Patten (pers. comm.)? This fact certainly suggests an interesting avenue of research. Finally, I would like to commend the Southern Pacific Coast editors for supplying the age of each jaeger reported. Age data, supplied for all inland jaeger records, would provide another interesting avenue of research.

Lesser Black-backed Gulls

To stay with the Larid theme a bit longer, Lesser Black-backed Gull, as all but the most isolated birder knows, is rapidly becoming a ho-hum species across the breadth of the continent. Counts of more than 100 at and near the Tullytown landfill in southeastern Pennsylvania do not even raise eyebrows any more. The species is so regular in Colorado that it is shortly to be removed from the review list. This population expansion has greatly increased speculation that the species "must" be breeding in the New World. How else can it be explained that the species is annual in numbers in California; that juveniles show up in Ontario in August/September; that it has even made it to both coasts of Mexico? It "must" be breeding in Herring Gull colonies on this side of the Pond! However, there is another, conservative camp that supports the notion that all Lessers in the New World are products of the Old. I still don't know which theory is correct and, as with most things biological, the

Table 2. Reports of Long-tailed Jaegers and all other jaegers away from the ocean, Fall 2000.

| Species | First date | Dates (if a span), number (if not 1), age (if reported), and location | Species | First date | Dates (if a span), number (if not 1), age (if reported), and location | |
|--------------|------------|---|------------------------|---|---|---------------------------|
| unidentified | | undated—4-5 in MN in season | Long-tailed (cont.) | 13 Sep | 13-24 Sep—Pt. No Point, WA | |
| | | undated—34 at Whitefish Pt., MI | | 19 Sep | juv, Pt Pelee, ON | |
| | | undated—4 in MI away from Whitefish Pt. | | 21 Sep | juv., Irvine, CA | |
| | | undated—12, Van Wagner's Beach, ON | | 21 Sep | Woodlawn Beach SP, NY | |
| | | undated—3, CO | | 22 Sep | 3 ads., Van Wagner's Beach, ON | |
| | | 27 Aug-8 Oct—16, L. Champlain | | 23 Sep | Mono Co., CA | |
| | 26 Sep | 26 Sep—1 "possible Long-tailed" nr Morris, MB | | 23 Sep | off Montauk, NY | |
| | | | | 25 Sep | Calhoun Co., TX, oil platform | |
| Long-tailed | 15 Aug | Whitehorse, YT | | 30 Sep | Long Pt, ON | |
| | 15 Aug | 15-18 Aug—ad., Maxwell, NM | | 02 Oct | Calhoun Co., TX, oil platform | |
| | 26 Aug | Placer Co., CA | | 11 Oct | Derby Hill, NY | |
| | 27 Aug | dark juv., Van Wagner's Beach, ON | | 14 Oct | Kingston, WA | |
| | 27 Aug | juv., Amherst I., ON | | 03 Nov | Kenedy Co., TX, oil platform | |
| | 27 Aug | Lake Co., TN | | 17 Nov | New Buffalo, MI | |
| | 27 Aug | 2 juvs., Grimsby STP, ON | | | 4 reports in Sep off Grand Manan I., NB | |
| | 27 Aug | 6, Atlantis & Block Canyons, off New England | | Parasitic | 29 Aug | Salt Lake, UT |
| | 28 Aug | juv., Van Wagner's Beach, ON | | | 30 Aug | Alvord Basin, OR |
| | 28 Aug | juv. off Savannah, GA (1st for GA) | 05 Sep | | "believed to be a juv. Parasitic," China Lake, CA | |
| | 28 Aug | Pt. Townsend, WA | 07 Sep | | Lesser Slave Lake, AB | |
| | 28 Aug | Sutter Co., CA | 10 Sep | | 10-15 Sep—3, Pyramid L., NV | |
| | 31 Aug | 31 Aug-1 Sep—2, El Paso Co., TX | 11 Sep | | Fern Ridge Res., OR | |
| | 01 Sep | 1-9 Sep—Deer Flat, ID | 13 Sep | | 13-17 Sep—ad., SE Salton Sea, CA | |
| | 01 Sep | Bonner Co., ID | 15 Sep | | 15-20 Sep—Sprague, WA | |
| | 02 Sep | juv., Van Wagner's Beach, ON | Pomarine | | 03 Aug | imm., Pinery PP, ON |
| | 02 Sep | 2-5 Sep darkish juv., Jackson Lake, CO | | | 26 Aug | light ad., Summit Co., UT |
| | 03 Sep | MD waters | | 23 Sep | juv., Duluth, MN | |
| | 03 Sep | off DE (1st for DE) | | 08 Oct | juv., Wisconsin Pt., WI | |
| | 04 Sep | 3 out of Oregon Inlet, NC | | 13 Oct | Thatcher Pass, WA | |
| | 05 Sep | Hamlin Beach, NY | | 18 Oct | Porter, NY | |
| | 09 Sep | Moisie, PQ | | 11 Nov | Sandpoint, ID | |
| | 09 Sep | Kings Co., CA | | 11 Nov | Pt. Edward, ON | |
| | 09 Sep | 9-10 Sep—2, Lake Enid, MS (1st for MS) | | 15 Nov | 15-16 Nov—Polson, MT | |
| | 09 Sep | 9-25 Sep—4+, Pyramid L., NV | | | undated—Hamlin Beach SP, NY | |
| | 10 Sep | juv., NE Salton Sea | | | 30 Sep-7 Nov—6 during period in CO | |
| | 11 Sep | L. Tawakoni, TX | | 9-28 Sep—3 during period off Pt. No Point, WA | | |
| | 11 Sep | juv., Owens L., CA | | | | |

answer is probably some combination of the two competing theories.

Since I have spent some time pondering this issue, I will lay out what I think are the relevant points in the past discussions I have had with many:

- 1) Lesser Black-backed Gull is mostly a highly colonial, temperate-zone breeder (Cramp and Simmons 1983);
- 2) many, if not most, of the temperate-zone North American Herring Gull colonies (Great Lakes, northeast U.S., Canadian Maritimes) are probably monitored at least somewhat regularly;
- 3) juveniles of large, Arctic-breeding gulls do not show up in the Lower 48 or on the Great Lakes in August/September;
- 4) the dispersed, one-pair-per-nutrient-poor-lake breeding population of Herring Gulls in northern New York and the Canadian

Shield is unlikely to hide the large number of Lessers being found in the New World;

- 5) Lesser is a fairly-regular winter inhabitant of the pelagic zone (Cramp and Simmons 1983);
- 6) Lesser is rarer in the Great Lakes than it is in any of the three northernmost Atlantic Coast regions.

Now, consider a few points gleaned from the fall 2000 reports:

- 1) Bruce Mactavish, in the Atlantic Provinces, reported that "Lesser Black-backed Gull numbers continue to surge..." with 12 in Nova Scotia and 25 in St. Johns, NF, of which, counts of "9 in farm fields 16 Oct and 10 at the landfill 17 Nov" are possibly duplicative;
- 2) The New England editors stated that their region "has generally lagged behind the rest of the East Coast in the numbers of Lesser

Black-backed Gulls reported, but the region is catching up. Up to 80 frequented S. Beach and N. Monomoy I. in early Aug. . . .”

- 3) Lesser is so common and regular in the Hudson-Delaware region that those editors didn't even mention the species, but this is the region that hosts the largest number of Lesser Black-backed Gulls in the New World (the aforementioned counts of 100-plus in southeast Pennsylvania).

In the above, note the trend of increasing numbers, both totals and one-time, one-place counts, as one travels from the Atlantic Provinces south through New England to the Hudson-Delaware region. Note also the differing dates of the high counts in the northern two regions. These points do not suggest that a large percentage of Lessers is coming across the Atlantic from northern European colonies and trickling south along our shores from the Maritimes. They, instead, suggest that at least some sizable proportion are resident in North America or are finding routes other than through the Canadian Maritimes.

Now, I am going to throw in another monkey wrench, just in case you were starting to believe that the species breeds in numbers in North America. If Lesser Black-backed Gull were to breed in interior or Arctic Canada, one would expect birds to be at least as common in either the Atlantic Provinces (as for Iceland Gull) or the Great Lakes (as for Glaucous Gull) as it is in southeast Pennsylvania. That is because the birds would surely traverse one of those areas to get to Tullytown. But, the species is considerably less common in those areas than in Tullytown. However, there are many fewer birders in the Atlantic Provinces than further south along the coast, thus perhaps creating an artificial disparity in abundance.

Here is more grist for the mill: Perhaps the birds are crossing the Atlantic, but on a more southerly track, such that they make landfall farther south—New England through New York and New Jersey. Perhaps key gull colonies in the St. Lawrence region hide a large number of breeding Lessers, which then split the gap between the Atlantic Provinces and the Great Lakes on their way south (witness the recent discovery that a major breeding ground for Barrow's Goldeneye has been hiding in Québec). Perhaps the vast majority of the August New England birds and the wintering Pennsylvania birds are immatures and/or non-breeders. Perhaps someone will catch a few of these birds and pluck some feathers for stable-isotope analysis. I am hoping that this discussion will generate some interest in answering the question once and for all. Comments, anyone?

Northern Forest Owls

After last fall's major flight of Northern Saw-whet Owls through the northeast and the Middle Atlantic region, Fall 2000 saw a return to something resembling, in the manufactured word of President Kennedy, "normalcy" in many locations. However, the Freeport, ME, banding station captured 367, and a new station (in the growing list of banding stations targeting this species) at Delta, MB, recorded 237 captures this fall. An interesting tidbit about the species can be found in the Ontario report. Though the Thunder Cape Bird Observatory (TCBO) banded 318 "Swets", Boreal Owl upstaged its smaller congener. TCBO had banded an "unprecedented" 16 Boreals by 10 October. Banders at Tadoussac, PQ, caught 113 Boreals in their season, and banders at Whitefish Point Bird Observatory in Michigan banded an "incredible" 176 Boreals. This flight sent Boreals to such far-flung locations as Boston, MA, and Napanee, ON.

Despite the flowery verbiage expended on Boreal Owl, the superlatives really dripped off the pens (er, word processors) of some of these same editors when writing about the Northern Hawk Owl flight. In Ontario, "October also brought an unprecedented movement of Northern Hawk Owls ..." Québec "experienced its most spectacular invasion of Northern Hawk Owl ever." In Minnesota, 34 were found by the end of November. Whether or not connected to the mid-continent flight, Washington

recorded three Hawk Owls this fall; the state only has about 11 previous records.

Okay, now let's move on to the coolest bird in the world. In Ontario, "at least 15 Great Gray Owls were reported in *Rainy River* during Nov, very high numbers for the District. . . ." In Québec, "*only* [italics mine] about 15 had been recorded by the end of the period. . . ." In the Prairie Provinces, "Great Gray Owls were also prominent, with 18 at Buffalo Point, MB, 29 Sep. . . , 7 banded in Saskatchewan. . . , and numerous other sightings" Minnesota birders had counted 75 by the end of the period. Though there may have been larger numbers of Great Grays noted in previous years in some places, the species usually doesn't show up in great numbers until after the fall reporting period. Thus, the large numbers reported in fall 2000 presaged a very sizable flight (about which, check out the winter season report in the next issue of *North American Birds*).

Fires and Bird Movements

Summer and early fall 2000 saw one of the "worst" (depending on your point of view) fire seasons in the western U.S. in recent memory. In addition, fall 2000 saw two fairly widespread migratory phenomena in the West. The first, which was evident as early as July, was a very large movement of various western mountain species out of the mountains. Virtually all western U.S. regions reported on irruptions into lowland areas of, variously, Lewis's Woodpecker, Steller's, Western Scrub-, and Pinyon Jays, Mountain Chickadee, all three nuthatches, Golden-crowned Kinglet, and Red Crossbill. The Southern Great Plains region would also have mentioned this phenomenon had we received it, as many of these species made it east at least to western Kansas (S. Seltman in litt.).

The second phenomenon was the appearance in the Rockies and western Great Plains of greater-than-usual (Cassin's Vireo) or nearly unprecedented (Townsend's Warbler) numbers of migratory breeding species from wetter forest types to the north and west (see the Great Basin, Mountain West, and Northern Great Plains regional reports). In addition to large numbers, arrival in Colorado also seemed quite a bit early, at least for Townsend's Warbler. At the Barr Lake, CO, banding station, Rocky Mountain Bird Observatory personnel banded 67 Townsend's Warblers, as compared to a previous six-year average of 6.5 and previous record seasonal total of 9 (with roughly similar effort).

The juxtaposition of these various events (fire season, mountain-bird exodus, and tremendous numbers of normally uncommon migrant species) spawned the inevitable attempts at linkage among them. Perhaps, so the theory goes, the fires caused locally breeding or resident birds to flee, thus pushing them further to the south and east than they would normally travel. Generating theories to explain natural phenomena is a very fruitful pastime and is standard operating procedure in science. However, though a relatively large area of the western montane landscape burned in summer 2000, that area is still an infinitesimal percentage of the landscape I just cannot see it driving such huge movements of birds. The current "accepted" theory holds that these movements of montane birds are related to food shortage in source areas. Now, the food shortage may be a result of dry conditions that also spawn fires, but it does not mean that fires produce montane-bird irruptions.

In previous similar irruptions of montane residents, out-of-range individuals have been collected in eastern Colorado and Kansas that were referable to extra-regional subspecies (e.g., Steller's Jay). That is, the birds were not simply local birds moving onto the Plains, they were birds moving long distances from the Northwest. In fact, in discussing the irruptions of various montane breeders in the Pacific Northwest this fall, the Oregon-Washington regional editors wrote that "given the number of corvids on the move, these birds may not have come from the nearby Coast Range populations." Such was the case in winter 2000-2001, when Alan Versaw, a

Colorado Springs, CO, birder, noted a number of odd-looking Steller's Jays that he determined looked like Steller's Jays from the Pacific Northwest, and not like the locals. So, could it be that the sources of at least some of these irrupting corvids and parids and sittids were some of the same places as the sources of the Cassin's Vireos and Townsend's Warblers? What would cause such a widespread, both geographically and taxonomically, phenomenon? Are all these species' movements related, or is each responding to different factors that happened to coincide in the Summer and Fall of 2000?

Since all these species eat different foods that they capture in different ways in different strata of local habitats, I would think it unlikely that all these movements could be tied to only one factor. Sure, drought is probably a factor (probably even a strong one), but I doubt that it's the only one. In fact, some seed-producing trees respond to stress by producing seed sets that are larger than normal, not smaller (possibly to ensure survival of its genes if not itself).

There is one more small piece of the puzzle that I wish to supply. At Barr Lake, CO, 62 of the 67 Townsend's Warblers RMBO banded were immatures—young-of-the-year. That is a very high percentage (>92.5%), even for a species of which the preponderance of birds RMBO captures are immatures.

While poor food supplies could easily be the ultimate cause of the montane-bird irruption, I would be very interested to know what effect, if any, the seemingly successful breeding season in the Pacific Northwest had on this phenomenon. It is too bad that these regional reports are biased toward the unusual. With isotopic analysis and better and more widespread eyeballing of and reporting on bird populations of the regular species in all regions, particularly on subspecific forms (see discussion, above), we may stand a chance of getting a handle on the next such event.

Dove Perambulations (or, "Blimey! Another White-winged Dove!")

Are we getting tired of Eurasian Collared-Doves yet? The species continued its near-light-speed colonization of the continent, with numerous records at new localities (e.g., Moose Jaw, SK), while consolidating recent range expansions (e.g., in New Mexico), and beginning a takeover of at least one new state (Arizona). I repeat the urging of Romagosa and McEaney (1999) to continue to monitor this species' colonization of the continent.

Now, "wassup" with White-winged Dove? For decades, this species has caused hearts to flutter by sporadically and rarely, with the emphasis on "rarely," showing up at extralimital locations for annoyingly brief periods of time. While the number of extralimital occurrences has been increasing with regularity for the past few years, fall 2000 seemed to be some sort of break-out season. I found this species mentioned as occurring out-of-range in no fewer than 12 regions!

Inca Dove seems poised to be the next Columbidae to become somewhat ho-hum. While this species has been expanding its range northward out of Mexico slowly for over a century, there is some indication that it, like its larger cousins, is also undergoing a rapid change in status in some places. The two or three birds first found in February 2000 in Rocky Ford, CO, mushroomed to six in the summer and fall (via local breeding) and were present deep into the winter of 2000-2001, despite it being the coldest winter (by far) of my seven in Colorado. The species has also recently become established in the Mexicali Valley (in Baja) and Kentucky recorded its first record for the species in Fall 2000.

Finally, Common Ground-Doves put in appearances in a number of extralimital regions, despite much concern about rapidly declining breeding populations in the species' stronghold in the southeast. Though I realize that this may seem like a stretch, I hope birders are considering the pos-

sibility of Ruddy Ground-Dove when viewing an out-of-range *Columbina*. That species, like most other southwest dove species, is becoming more and more common and regular in the U.S., and females and immatures of the two species of ground-dove provide a real identification challenge

The Sources of Vagrants

The Middle Pacific Coast editors provide an interesting commentary on the source of California records of eastern breeding birds; I suggest reading the introduction to that report. However, in brief, numbers of taiga and eastern broadleaf-forest breeding migrants were down considerably in northern California this fall. Some support for the notion that this was not just a phenomenon preventing the delivery of most vagrant species to California was provided by their observation that southern vagrants appeared in above-average numbers.

So, I went to the best source on fall migration numbers of eastern birds. This source is the Appalachian region, which supports two long-term banding stations that catch and band large numbers of migrant warblers, among many other species. For only two species did both the Middle Pacific and Appalachian reports provide comparisons of fall 2000 with a previous average: Cape May and Blackpoll Warblers. For these two species, the Allegheny Front Migration Observatory, WV, reported capture totals 79% and 76% below the previous averages, respectively. At the Powdermill Nature Reserve, PA, both species were captured in below-average numbers. In northern California, quite interestingly, Blackpoll numbers were down 16% and Cape May Warblers went unreported! These bits of data echo the theory, but in reverse, put forth by Veit (2000) that records of western birds in the east are tied to positive trends in breeding populations of those species, with those breeding populations usually not in close proximity to the locations of the records.

Exciting Rarities, "Mind-boggling" Numbers, and Other Interesting Bits

I encourage all readers to check out every regional report in this issue and find for themselves the records that interest them. However, just to whet your appetite, various *megas* reported by the regional editors included Fea's Petrel in Newfoundland (second Canadian record), Manx Shearwater in Michigan (first Regional record; please see the S.A. in the Western Great Lakes about this exciting record), Audubon's Shearwater in Belize (first and second country records), Aplomado Falcon pair in New Mexico, Sora in Hawaii, Common Crane in Québec (returned with two more hybrid young), Whooping Crane in Tennessee (connect the dots of this Florida-released bird summering in Michigan!), Limpkin in Alabama (first state record); Heermann's Gull in Florida (first state record), Yellow-bellied Flycatcher in Nevada (first state record), Ash-throated Flycatcher on Bermuda, Piratic Flycatcher in Texas, Tropical Kingbird in Massachusetts (first state record), Dusky Thrush in Yukon, MacGillivray's Warbler in Nova Scotia (first Regional record), Rufous-crowned Sparrow in Wisconsin (first Regional record), Brewer's Sparrow in panhandle Florida (first state report; note also the large number in e. Texas); Bronzed Cowbird in Nova Scotia (first substantiated Canadian record), Crested Oropendola in Costa Rica (second country record), and Black Rosy-Finch in Arizona.

I noticed a number of records of large ("mind-boggling" in the words of Bill Pranty) *one-day* numbers of individual species in the various regions: 30,000 Cattle Egrets in Caddo County, LA; 1071 Golden Eagles at Mt. Lorette, AB; 520 Soras in Crittenden County, AR; 48,000 American Avocets at Summer Lake, OR; 29 Sabine's Gulls at Wisconsin Pt., WI; 25,000 Common Terns at South Beach, MA; 30,000 Vaux's Swifts at Portland, OR; 50 Gray Kingbirds at Bayport, FL; 3400 Chihuahuan Ravens near Hobbs, NM; 5000+ Common Ravens near Baker, OR; 250,000 Barn

Swallows near Yamhill, WA; 674 House Wrens at Lake Apopka, FL; 1200 Winter Wrens at Pt. Pelee, ON; and 36,000 Swainson's Thrushes at Kingston, ON.

Check out the incredible Black-footed Albatross report in the Hawaii region. Interesting were records of the dispersal of coastal-breeding pelagic species up the St. Lawrence River and in inland areas of the northeastern U.S. A Black Rail was found in Lubbock, TX—could it have been heading south from the isolated breeding population in Colorado? Note the report of breeding Arctic Terns in southern Alberta, which helps to connect the recently discovered Montana breeders to the rest of that species' breeding range. The Ontario region reported on the adaptability of a late and lost Scissor-tailed Flycatcher.

Well, that's it for this installment. Please read through the fascinating season that was Fall 2000, and keep your dial tuned right here for the next installment of the "Changing Seasons."

Acknowledgments

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Literature Cited

- Chamberlain, C. P., J. D. Blum, R. T. Holmes, X. Feng, T. W. Sherry, and G. R. Graves. 1997. The use of stable isotope tracers for identifying populations of migratory birds. *Oecologia* 109:132–141.
- Cramp, S., and K. E. L. Simmons. 1983. *Handbook of the Birds of Europe, the Middle East and North Africa: the Birds of the Western Palearctic*, vol. 3. Oxford Univ. Press, Oxford.
- Hobson, K. A. 1999. Tracing origins and migration of wildlife using stable isotopes: a review. *Oecologia* 120:314–326.
- Hobson, K. A., and L. I. Wassenaar. 1997. Linking breeding and wintering grounds of Neotropical migrant songbirds using stable hydrogen isotopic analysis of feathers. *Oecologia* 109:142–148.
- Howell, S. N. G., J. R. King, and C. Corben. 1999. First prebasic molt in Herring, Thayer's and Glaucous-winged Gulls. *Journal of Field Ornithology*. 70:543–554.
- Kelly, J. F., and D. M. Finch. 1998. Tracking migrant songbirds with stable isotopes. *Trends in Ecology and Evolution*. 15:48–49.
- Lee, David S. 1989. Jaegers and skuas in the Western North Atlantic: Some historical misconceptions. *American Birds* 43:18–20.
- Meehan, T. D., C. A. Lott, Z. D. Sharp, R. B. Smith, R. N. Rosenfield, A. C. Stewart, and R. K. Murphy. 2001. Using hydrogen isotope geochemistry to estimate the natal latitudes of immature Cooper's Hawks migrating through the Florida Keys. *Condor* 103:11–20.
- Pyle, P. 1997. *Identification Guide to North American Birds, Part I*. Slate Creek Press, Bolinas, CA.
- Romagosa, C. M., and T. McEneaney. Eurasian Collared-Dove in North America and the Caribbean. *North American Birds* 53:348–353.
- Veit, R. R. 2000. Vagrants as the expanding fringe of a growing population. *Auk* 117:242–246.
- Wassenaar, L. I., and K. A. Hobson. 1998. Natal origins of migratory monarch butterflies at wintering colonies in Mexico: new isotopic evidence. *Proceedings of National Academy of Sciences USA* 95:15436–15439.
- Wassenaar, L. I., and K. A. Hobson. 2000. Stable-carbon and hydrogen isotope ratios reveal breeding origins of Red-winged Blackbirds. *Ecological Applications* 10:911–916.



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