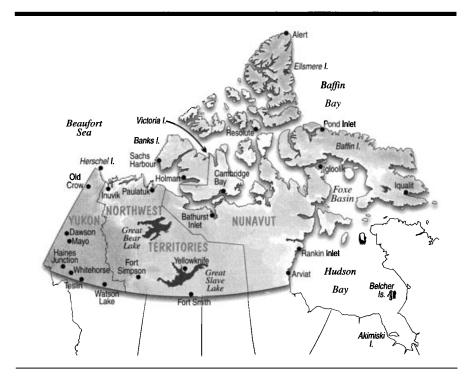
Northern Canada



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orthern Canada experienced the best and the worst of this year's dramatically variable summer weather. These conditions had a pronounced impact, both positive and negative, on breeding productivity. In the western part of the Region, the Yukon enjoyed one of the warmest and driest seasons on record, with early nesting, good productivity, and tremendous forest fires. A late spring in the Northwest Territories resulted in a late nesting cycle for many species, while early summer (June) was very dry, with parts of the Deh Cho in the southwestern Northwest Territories receiving only about oneeighth of average monthly rainfall. By contrast, the eastern parts of the Region suffered a cold and wet summer, which had a dramatic negative impact on the breeding success of a wide range of Arctic species from swans and geese through shorebirds, gulls, and songbirds. Small mammal populations influenced productivity of local bird populations. For example, an absence of lemmings at Cambridge Bay, Nunavut was associated with low numbers of jaegers and

raptors. It is not clear what the driving force was behind the amazing number of species seen well beyond the nw. extent of their ranges in the Yukon and Northwest Territories. As always, observer coverage is sparse in the North, and there really is no "beaten path." Surveys of forests and wetlands along the Beaver River and La Biche River in the extreme southeastern Yukon continued to expand our knowledge of this very remote and productive region of the boreal forest. Observers at Cambridge Bay and the distant reaches of the eastern Arctic provided our first reports for Nunavut.

Abbreviations: Albert Cr. (Albert Creek Banding Station, se. Yukon), NWT (Northwest Territories), Whse. (Whitehorse, Yukon).

LOONS THROUGH SHOREBIRDS

An ad. Yellow-billed Loon in alternate plumage lingered 2–12 Jun on the Yukon R. in Whse. (BS, m.ob.). An estimated 2900 Northern Fulmars were seen 30 Jul during a trip from Killiniq I., Nunavut, through the Button Is., n. Gray Strait, and Hudson Strait (MJI). Two American White Pelicans on or about 1 Jul at Wool Bay, sw. of Yellowknife, NWT (GR) were unusual that far n. of their breeding areas on the Slave R. Tundra Swans, Canada Geese, Brant, and King and Common Eiders were all in low numbers at Cambridge Bay, Nunavut 28 Jun–13 Jul, with little or no signs of nesting (JR); harsh

weather appeared to be the primary cause. An imm. Bald Eagle seen at Port Burwell, Nunavut 30 Jul was cautiously identified (ph. GA, MFa, PSR). An ad. Broad-winged Hawk seen perched at km 431 Mackenzie Hwy., NWT 21 Jun (THe) was well n. of its nearest known nesting area near Ft. Liard. After two good years, Peregrine Falcon nesting productivity took a downturn this year for the Yukon R. population; the driving factor is still unknown (fide DM).

A calling Yellow Rail was tape-recorded 17 Jun at km 250 on the Liard Hwy. (THe, GK)—a new location for this rare species in Northwest Territories. A Sora nest with five eggs and a chick at the lower La Biche R. 30 Jun (BB, LC, CE) provided one of the few breeding records for the Yukon. Despite a somewhat late start to the nesting season, Whooping Cranes in Wood Buffalo N.P., NWT/AB produced a record number of 54 nests and 41 fledged chicks (MBra). Low numbers for all shorebird species and a complete absence of White-rumped and Buff-breasted Sandpipers were recorded 28 Jun-13 Jul at Cambridge Bay, Nunavut (JR). A total of 21 calling Whimbrel were recorded 22 Jun at two nesting sites in Vuntut N. P., as part of a newly established monitoring program for the species (fide DH). A late but noteworthy report was of a Long-billed Curlew at the Ft. Smith airport, NWT in May (ph LM). Also rare was a Marbled Godwit seen 2 Jun in Yellowknife, NWT (MBro). Short-billed Dowitcher is a very rare breeder in s. Yukon, and new nesting sites are always noteworthy; four pairs and one nest (four eggs) were discovered 18 Jun at a wetland near Crag L., s. of Whse. (CE); on 24 Jun, the nest contained 3 tiny young and one egg (HG, SH, PS). Two pairs of Short-billed Dowitchers were noted 16 & 21 Jun at a suspected nesting site at Judas Cr., s. of Whse. (CE).

GULLS THROUGH FINCHES

A crash in the lemming cycle at Cambridge Bay, Nunavut was associated with low numbers and an absence of nests for Parasitic Jaegers as well as low numbers of Longtailed Jaegers, although two nests of the latter species were found 28 Jun-13 Jul (JR). An imm. Thayer's Gull at treeline in Asi Kevi 23 Jul (ph IM) provided a rare summer record, also the first record for sw. Yukon. Two Sabine's Gull nests (fewer than normal) were found at Cambridge Bay, Nunavut 28 Jun-13 Jul (JR). Dovekies were abundant and Thick-billed Murres were seen regularly in Davis Strait from the mouth of Cumberland Inlet n. to cen. Baffin I. 31 Jul-1 Aug (MJI). An estimated 600 Black Guillemots were seen 31 Jul at Monumental 1., Nunavut (MJI). A record low of eight nest boxes were occupied at the Black Guillemot breeding colony on Herschel I., Yukon this summer; the colony peaked at 36 occupied boxes in 1992–1994 but has been declining steadily since 1999 (fide DC).

A single Mourning Dove, a rare but regular wanderer to the Region, was seen in Ft. Simpson, NWT 20–22 Jun (EC, HP). Surveys of owl nests in the Yellowknife area, NWT indicated low productivity this year, and although too few nests were monitored to suggest widespread patterns or trends, small-mammal trapping indicated low populations of prey species (THi). Observation of at least 2 Long-eared Owl fledglings in Ft. Simpson, NWT 26–31 Jul (DT) established the area's first confirmed breeding record.

Yellow-bellied Flycatchers were found at two new Yukon locations this year: one was singing along the North Klondike Hwy., 32 km n. of McQuesten 9 Jun (PS, LC), and one

was singing at the lower La Biche R. 24 Jun and 2 Jul (CE, LC). The known range of Dusky Flycatcher in the Yukon was extended about 150 km northward, with observations of 3 singing birds along the North Klondike Hwy. between Mc-Gregor and McCabe Creeks 4 Jun (PS). Three male Pacific-slope Flycatchers, the first for the Yukon Territory, were recorded singing on territories at the Beaver R. Hotsprings 25-27 Jun (ph., v.r. CE, LC). Philadelphia Vireo is rare anywhere in the Region; 2 were singing along the lower La Biche R., Yukon 24 Jun (LC, CE), and a single was seen 29 Jun in Ft. Simpson, NWT (DT,

AL). Red-eyed Vireos were recorded well w. of the species' normal range in the Yukon, with 2 at Albert Cr. 10–11 Jun (TMK, RiB), one singing at the Watson Lake airport 23 Jun (LC, CE), and one singing 11 Jul in Whse. (WN). A Clark's Nutcracker, the first seen in the Yukon in over a decade, was at Printers Pass in the Ruby Range 11 Jun (†KM); this sighting was followed by 2 more at different Yukon locations in the fall season. A female Barn Swallow at Cambridge Bay, Nunavut 5 Jul (JR) was well beyond its normal range.

A singing Winter Wren, very rare in the Whse. area, was at Porter Cr. 17 Jul (WN). Marsh Wren is very local in Northwest Territories; one was heard singing briefly 19 Jun at km 200 Liard Hwy. (THe, GK), and another was heard singing 21 Jun at the e. end of Ekali L. (THe, GK), a new location for the species. A Northern Mockingbird, the 2nd for Northwest Territories, was seen frequenting a residential area beside the Mackenzie R. in Ft. Simpson 21–29 Jun (vt.

DT, HP, GW). Cedar Waxwings, an irregular species in s. Yukon, were common during late Jun-Jul in the Watson L. area (SC, CE; TMK) and along the lower La Biche R. (CE, LC). Tennessee Warblers were noted in higher-than-normal numbers in the Yukon from Watson L. to Whse.: 40 were banded at Albert Cr. 30 May-13 Jun (TMK), and 3 were at Judas Cr., near Whse., 21 Jun (CE). Cape May Warblers were noted far w. and n. of the species' normal range, with one singing at Albert Cr. 8 Jun (TMK), one singing along the Lubbock R., s. of Whse., 20 Jun (LC, JS), and one singing at Inuvik, NWT 20 Jun (PS). Intensive breeding bird surveys in s. and cen. Yukon partially filled the hole in the Townsend's Warbler's Yukon range: a total of 14 was recorded on seven of



The Yukon Territory's third record record of Lark Sparrow was found 4 July 2004 near the lower La Biche River in the southeastern part of the territory. Photograph by Cameron D. Eckert.

10 B.B.S. routes 5–22 Jun (PS, SH); additionally, 4 were singing at Moose Cr. Campground, km 559 North Klondike Hwy. 10 Jun (CE, PS). A female Bay-breasted Warbler banded at Albert Cr. 7 Jul (TMK), a first for the Watson L. area, was about 150 km w. of the species' usual range. A MacGillivray's Warbler, rare in the Watson L. area, was banded at Albert Cr. 9 Jun (TMK). The Yukon's first Canada Warbler nest was an exciting find at the lower La Biche R. 4 Jul (ph. CE, BB, LC).

Western Tanagers were unusually common in both the Yellowknife (RoB, MFo, m.ob.) and Ft. Simpson, NWT (DT) areas this summer. In the Yukon, Western Tanagers were noted well beyond the species' normal range: one seen singing near Little Atlin L., s. Yukon 2 Jun (HG) was 300 km w. of typical range, and one singing along the North Klondike Hwy., 10 km n. of McQuesten 9 Jun (LC, PS) was an amazing 600 km nw. of usual range. Four Brewer's Sparrows seen 22–25 Jul in Asi Keyi, sw.

Yukon (LC) were near the far nw. edge of the species' range. A Lark Sparrow, the Yukon's 3rd, was seen 4 Jul at the lower La Biche R. (ph CE, LC). A ten-year old burn s. of Norman Wells, NWT hosted an abundance of sparrows this season, with Chipping, Clay-colored, Savannah, Lincoln's, and White-crowned all found to be common (CS et al.). A Le Conte's Sparrow singing in a sedge meadow near the site (CS) could represent a significant range extension if breeding is confirmed there. A total of 8 Le Conte's Sparrows was counted at the lower La Biche R., Yukon 23 Jun-4 Jul (CE, LC, BB); this number is consistent with counts at that location 10 years ago. Single singing Nelson's Sharp-tailed Sparrows, rare in Northwest Territories, were

found at km 250 Liard Hwy. 19-20 Jun (GK, THe) and at km 383 Mackenzie Hwy. 21 Jun (GK, THe). A White-throated Sparrow seen singing 4 Jun at McCabe Cr., s. of Pelly Crossing (PS, LC), was well beyond its range. A pair of Smith's Longspurs was seen below the Natazhat Glacier in Asi Keyi, sw. Yukon 22 Jul (LC). Rosebreasted Grosbeaks, uncommon in Northwest Territories, were encountered more than usual this season in both Yellowknife (RoB) and Ft. Simpson (DT, HP). Rock Island L. may well support the Yukon's largest breeding concentration of Red-winged Blackbirds; a count of 51 was made there 4 Jun (LC, CE, SH), while a postbreeding flock of about 100 was

seen in a field at Upper Liard, Yukon 20 Jul (CE). A male Rusty Blackbird at Herschel I. on the Yukon's North Coast 13 Jun through at least 23 Jul (DC; BD) provided the 2nd record of the species for the island.

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State of the Region

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Northern Canada offers both fantastic opportunities and enormous challenges for bird conservation. In an increasingly urbanized world—whose citizens may consider woodlots and inner-city parks to be "wilderness"—the North stands out as remarkably different. Northern Canada features true wilderness landscapes with diverse and productive ecosystems, naturally regulating predator—prey relationships, vast areas of intact boreal forest, and a wide range of species that live nowhere else on Earth. The scale of landscape-level disturbances is unlike anything known in the south. In the Yukon, the awesome forest fires of 2004 covered 180,000 km² (70,000 mi²)—an area almost as large as the state of Utah. The

connection between northern people and the land is direct, and often intimate. Despite our remoteness, the Region of Northern Canada shares with the southern provinces multiple deep concerns about the changing state of the environment and the health of wildlife.

Climate change has serious and farreaching implications for the North. It is a point of discussion and alarm in virtually every northern community, and especially among First Nations. The North is seen as the "first and worst" with respect to the global impacts of climate change. This concern is not without cause. People on the land are seeing rapid and dramatic changes. Scientists are making the connection between climate change (e.g., changing precipitation and winter temperatures) and landscape-level ecosystem processes (e.g. ice-pack melt, spruce beetle populations, forest fires). Researchers at Cambridge Bay, Nunavut have found drastic population declines in Ivory Gull and Glaucous Gull, and in the eastern Canadian Arctic, reduced productivity

among Thick-billed Murres. Similarly, the Pacific Common Eider population has declined by 50% in just 20 years. While scientists struggle to determine the cause for such changes, investigating hypotheses that involve everything from contaminants to shifts in ice patterns, the long-term prognosis for Arctic species like Ivory Gull is dire.

In the southwestern Yukon, a spruce beetle population that began to expand in 1994 has resulted in the death of mature White Spruce forests over an area exceeding 2,500 km² (965 mi²). The potential effects on forest bird populations have not been fully explored. Winter woodpecker surveys in southwestern Yukon have turned up exceptional densities of American Three-toed Woodpeckers. Researchers in adjacent areas of Alaska have found that highly elastic foragers such as Yellow-rumped Warbler do well in beetle-killed forests, although there is concern for habitat specialists such as Townsend's Warbler. There remains a poor understanding of the relationship between beetle-kill and forest bird populations. Yet forest managers clutching at straws for a solution have come up with the ineffective scheme of simply cutting more trees—thereby ensuring a negative outcome in the form of habitat loss and forest fragmentation.

Conservation of boreal forests and wetlands is a priority across the North (see <www.borealbirds.org>). Creeping habitat loss and fragmentation driven primarily by logging, mining, and petroleum development are major threats to northern birds. Too often it seems that resource managers ignore the mistakes of the south in favor of boom-and-bust economies—to the detriment of both people and the environment. In the Northwest Territories, a rapidly growing web of seismic lines, roads, and cutblocks now dominates areas that were considered pristine just a decade ago. Similarly, many of the

Yukon's watersheds are experiencing increasing development related to forestry and petroleum industries, with only token recognition of the needs of the Region's wild species. Researchers have established that habitat specialists such as American Three-toed Woodpecker, Boreal Chickadee, and Townsend's Warbler require mature White Spruce forests. Continent-wide monitoring programs have detected declines in boreal songbirds such as Olive-sided Flycatcher, Blackpoll Warbler, Bay-breasted Warbler, and Rusty Blackbird. Yet it is an intense and often unsuccessful struggle to implement long-term conservation planning and true ecosystem-based management. The concept of permanently setaside forest reserves is just not part of the management agenda. Following the belief that all potential industrial impacts can be mitigated, the suggestion that operational "no go" zones be applied to the Region's critical wetlands has been consistently rejected by development planners. Recently, the establishment of protected areas in the Yukon has occurred only through First Nation land claims.

The scale of northern landscapes and the complexities of environmental change and

population dynamics are inherent conservation and research challenges. Basic questions about species' ranges and habitat associations are still unanswered. Assumptions about species' life histories and habitat associations cannot be borrowed from the south. In the North, we know Upland Sandpiper as a tundra breeder, and Dusky Flycatchers inhabit subalpine shrubs. The breeding grounds of declining shorebirds such as Red Knot and Buff-breasted Sandpiper are thinly distributed and extremely remote. A search for a Surfbird or Wandering Tattler nest requires a well-provisioned trek by an experienced hiker. There is no army of volunteers to call, no network of roads that can be utilized to answer these questions, and in some cases, monitoring populations of far-northern species seems nearly impossible. Pieces of the puzzle fall into place slowly, through decades of work.

The interaction of environmental detriments over time, and the scientific apprehension of their cumulative effects,

pose profoundly complex conservation challenges for the present and the future. Rigorous research is required to establish even a basic understanding of the impacts of climate change, habitat loss, and contaminants, especially those that reach the North through long-range transport. Their combined effects are predicted to have dramatic and unpredictable consequences for species and ecosystems. Given the prevalence of toxic elements associated with resource extraction and other forms of economic "development," it is difficult to imagine positive scenarios for our bird life at present.

The intact nature of some northern ecosystems represents enormous potential for success; however, every conservation achievement requires extraordinary and persistent dedication by Northerners. Environmental organizations such as the Yukon Conservation Society, Canadian Arctic Resources Committee, Yukon Bird Club, Ecology North, Canadian Parks and Wilderness Society, and Southeast Yukon Proper Land-Use Society have worked tirelessly, both directly and indirectly, towards the conservation of northern birds and their habitats. For example, Yukon organizations have advanced the La Biche River Forest Ecosystem Network to protect the range of habitats for forest birds and other biodiversity in that exceptionally rich watershed. Yet despite the very modest size of the network, the governments involved have shown a stark lack of responsibility and foresight in their reluctance to implement this basic conservation measure. The North has so much to offer in terms of conservation and at such a negligible cost—indeed a benefit—to the economy. The protection of a major boreal forest watershed, such as the Beaver River in southeast Yukon, would be a gift to the planet. The ability to make profound contributions toward biodiversity conservation is still easily within our reach but is slipping away quickly.



In the southeastern corner of the Yukon Territory, the Beaver River is a wilderness area that contains diverse boreal-forest and wetland ecosystems, all with exceptionally productive breeding bird communities. Canada's boreal forest is the heartland for 290 nesting bird species, among them many declining species such as Lesser Scaup, Solitary Sandpiper, Olive-sided Flycatcher, Bay-breasted Warbler, Le Conte's Sparrow, and Rusty Blackbird. The forest is rapidly losing extent and quality to many forms of resource extraction, but coalitions such as the Canadian Boreal Initiative and Boreal Songbird Initiative are addressing conservation concerns in this habitat. Photograph by Cameron D. Eckert.