# **Northern Wheatear Recovery**

### David J. T. Hussell

Ontario Ministry of Natural Resources Wildlife Research and Development Section 2140 East Bank Drive Peterborough, ON K9J 7B8 email:david.hussell@ontario.ca

Current address: 111 Decou Road Simcoe, ON N3Y 4K2

### ABSTRACT

A Northern Wheatear (Oenanthe oenanthe) banded on Baffin Island in July 2007 was found dead in Iceland in May 2009. This is the first recovery of a North American-banded Northern Wheatear anywhere and the only North American-banded passerine encountered in Iceland.

## **INTRODUCTION**

The Northern Wheatear *(Oenanthe oenanthe)* is the only member of an Old World family comprising about 20 species (Panov 2005) that extends its breeding range into North America. Moreover, it is the only regularly breeding North American passerine that normally winters in Africa.

The nominate race (*O. o. oenanthe*) breeds in open country throughout Europe, in n. Africa and Asia, east to Alaska, Yukon and into extreme western parts of the Northwest Territories (Kren and Zoerb 1997, Godfrey 1986, Koes 1995). The "Greenland" race (*O. o. leucorhoa*) breeds in Iceland, Greenland, and the eastern Canadian Arctic, including Ellesmere Island, Baffin Island, northern Quebec, and the coastal regions of Labrador (Kren and Zoerb 1997, Godfrey 1986, Koes 1995).

All populations winter in sub-Saharan Africa. Western arctic breeders migrate west to southwest to spend the winter in east Africa, while the "Greenland" race migrates southeast, crossing the Atlantic Ocean, to winter in West Africa from Senegal and Sierra Leone east to Mali (Cramp 1988).

From 1955 to 2006, only 68 Northern Wheatears were banded in North America, of which 32 were banded in Alaska, 32 on Baffin Island, Nunavut, and one each in Connecticut, Michigan, Ohio, and Ontario (Louise Laurin, Canadian Bird Banding Office, pers. comm.). Additional Northern Wheatears were banded prior to 1955 (e.g. Sutton and Parmelee 1954), but are not in the Bird Banding Lab's electronic database. There were no reported encounters before 2009 (Louise Laurin, Canadian Bird Banding Office, pers. comm.).

Here I report bandings of "Greenland" Northern Wheatears in the vicinity of Iqaluit, Baffin Island, NU, in 2007 and 2008, and the first recovery anywhere of a Northern Wheatear banded in North 'America.

# METHODS

I studied Northern Wheatears at Iqaluit, NU (63° 45' N, 68° 32' W), 6 to14 Jul and 24 Aug to 3 Sep 2007, 25 Jun to 27 Jul and 20 Aug to 3 Sep 2008. I trapped most of the adult breeding wheatears with bow-nets (approximately 25 x 38 cm) baited with meal worms and placed near wheatear nest sites. Recently fledged young and transient hatch-year (HY) wheatears were trapped with the same bow-nets in places where the birds tended to congregate. Breeding adults were uniquely color-banded (in addition to receiving a numbered metal band). Nestlings and locally raised young were given a single color band, unique to the year. HY birds trapped in August and September were banded only with a standard metal band.

# RESULTS

I banded 29 breeding adults, 23 nestlings (or recently fledged young) during June and July and 31 transient hatch year (HY) birds in August and September, 2007 and 2008.

An after-hatch-year (AHY) female that I banded when it was attending six nestlings on 9 Jul 2007 was found recently dead (2-3 days) at Garðabær, a town about six km south of Reykjavik, Iceland (64° 05' N, 21° 55' W) on 14 May 2009. The specimen is in the collection of the Icelandic Institute of Natural History in Reykjavik (Ævar Petersen, Icelandic Bird Ringing Scheme, pers. comm.).

When I trapped this wheatear in 2007 its wing chord measured 96 mm, it had a trace of fat, and it weighed 28.4 g. I did not see this bird at Iqaluit in 2008. This wheatear also holds the longevity record for a North American-banded Northern Wheatear: at least 2 years and 11 months, assuming that it hatched no later than June 2006.

#### DISCUSSION

This is the first encounter (recovery) anywhere of a Northern Wheatear banded in North America (Louise Laurin, Canadian Bird Banding Office,

pers. comm.). It is also the first recovery of a North American-banded passerine on land in Iceland. However, there is a recovery of a Snow Bunting (Plectrophenax nivalis) banded near Washington Hollow, New York (41° 45' N, 73° 45' W) on 20 Jan 1941 and reported on a ship at sea about 5 km off the southeast coast of Iceland on 18 Apr 1941.

This wheatear was presumably on its spring migration when found in Iceland in May 2009. Assuming that it was hatched in the Canadian Arctic or Greenland, wintered in Africa each year, and returned each summer to breed in Baffin Island, it would have been making at least its sixth crossing of the Atlantic Ocean when it died. To return to Igaluit from Iceland, it would have to travel almost due west over the Greenland ice cap.

There are 14 recoveries in western Europe from 4,284 Northern Wheatears banded in Greenland, but none in Iceland (Lyngs 2003). Interestingly, the seven fall recoveries are in southwestern France



Second Year Male, - July 2007.

(4), Spain (2), and Portugal (1), while the spring recoveries are in northern France (1), Channelnel Islands (1), Belgium (1), and the British Isles (4), suggesting the possibility of different spring and fall migration routes.

The British migration atlas mentions that all foreign-banded wheatears recovered in Britain, including two banded in Iceland and four in Greenland, were banded in autumn and recovered in spring (Shaw 2002) [although two of the Greenland-banded wheatears were actually banded as chicks in southwest Greenland (Lyngs 2003), indicating natal origins rather than autumn stopover locations that are implied by Shaw (2002)]. These recoveries appear to indicate that the normal spring migration route of Nearctic breeders is via northwestern Europe and Iceland. My recovery in Iceland provides another link in this spring migration route and is the first to connect Iceland with the Canadian eastern Arctic breeding population.

The lack of fall recoveries of Greenland-banded wheatears in northwestern Europe and the occurrence of seven recoveries in southwestern Europe at that season, suggest that Greenland breeders often follow a more southerly route to cross the Atlantic Ocean in fall than they do in spring. Snow (1953) reached the same conclusion based on sightings of wheatears from ships in the Atlantic. Nevertheless, wheatears of the "Greenland" race do occur in the British Isles in fall, sometimes in large numbers (Shaw 2002). These records may indicate that some individuals, perhaps including wheatears from the breeding populations in Iceland and the northern parts of the Canadian and Greenland breeding range, follow a more northerly route via northwestern Europe during their fall migrations. Alternatively or additionally, wheatears attempting a crossing at lower latitudes may have encountered cyclonic weather conditions over the ocean, drifting them northeastward to a landfall in northwestern Europe (Williamson 1961).

There are no recoveries of Greenland-banded Northern Wheatears in Africa, despite the fact that Page 104 North American the entire population winters there. Observations on an island in the Atlantic Ocean 350 km off the southern coast of Morocco led Thorup et al. (2006) to propose that Nearctic breeders may make a direct trans-oceanic flight of over 4000 km from southern Greenland or Newfoundland to northwest Africa. Fall recoveries of Greenland-banded wheatears in southwestern Europe and numerous fall observations in the British Isles and elsewhere in northwestern Europe (Cramp 1988) indicate that many wheatears do not follow that route; nevertheless others may do so.

As a longevity record, this recovery is not very impressive at only 2 years and 11 months. I have one other recapture at a minimum age of two years. The lack of banding and long-term studies of this species in North America accounts for the dearth of recaptures and recoveries. Longevities of 7 years (Kren and Zoerb 1997) and 8 years, 3 days (Coiffait et al. 2008) have been reported elsewhere for the nominate race. The oldest "Greenland" Wheatear known to me is an AHY banded in Greenland in September 1966 and recovered in May 1969 in Wales (Lyngs 2003). It was at least 3 years and 11 months old.

# ACKNOWLEDGMENTS

Thanks to Erica Dunn, Oliver Love, Rick Ludkin. Spencer Sealy, and Helen Ych for assistance and companionship in the field. Mark Mallory. Canadian Wildlife Service (CWS), Environment Canada, Iqaluit, provided essential logistical support and advice; as also did Mary Ellen Thomas and Rick Armstrong, Nunavut Research Institute, Iqaluit. Ævar Petersen, Icelandic Bird Ringing Scheme, provided details of the recovery. Louise Laurin (CWS Bird Banding Office) answered several of my questions, and Lesley-Ann Howes (CWS Bird Banding Office) and Bruce Peterjohn (US Bird Banding Laboratory) expedited the reporting of this recovery. Bird Studies Canada sponsored this project in 2008. Thanks to James Baird for the gift of a reprint of Williamson (1961).

#### LITERATURE CITED

- Coiffait, L., J.A. Clark, R.A. Robinson, J.A. Blackburn, B.M. Griffin, K. Risely, M.J. Grantham, J.H. Marchant, T. Girling and L. Barber. 2008. Bird ringing in Britain and Ireland in 2006. *Ringing* and Migration 24:15-79.
- Cramp, S. (ed.). 1988. The birds of the western Palearctic. Vol. 5. Oxford Univ. Press, Oxford.
- Godfrey, W.E. 1986. The birds of Canada. Rev. ed. Natl. Mus Nat. Sci., Ottawa.
- Koes, R.F. 1995. The Northern Wheatear in Canada. Birders Journal 4:21-28.
- Kren, J. and A.C. Zoerb. 1997. Northern Wheatear (*Oenanthe oenanthe*). *In* The birds of North America, No. 316 (A. Poole and F. Gill, eds.). The Academy of Natural Sciences, Philadelphia, PA, and The American Ornithologists' Union, Washington, DC.
- Lyngs, P. 2003. Migration and winter ranges of birds in Greenland. Dansk Ornitologisk Forenings Tidsskift 97:1-167.

- Panov, E. N. 2005. Wheatears of Palearctic. Pensoft Publishers, Sofia, Bulgaria. 439pp.
- Shaw, D.N. 2002. Northern Wheatear (Wheatear) *Oenanthe oenanthe*. Pp 515-517 *In* The migration atlas: movements of the birds of Britain and Ireland (C. Wernham, M.Toms, J. Marchant, J. Clark, G.Siriwardena, and S. Baillie, eds.). T & A.D. Poyser, London.
- Snow, D.W. 1953. The migration of the Greenland Wheatear. *Ibis* 95:376-378.
- Sutton, G.M. and D.F. Parmelee. 1954. Nesting of the Greenland Wheatear on Baffin Island. *Condor* 56:295-306.
- Thorup, K., T.E. Ortvad, and J. Rabøl. 2006. Do Nearctic Northern Wheatears (*Oenanthe oenanthe leucorhoa*) migrate non-stop to Africa? *Condor* 108:446-451.
- Williamson, K. 1961. The concept of 'cyclonic approach'. *Bird Migration* 1:235-240.



Female approaching nest with food, July 2009. Photo by David Hussell. North American Bird Bander