

The Status of
Northern Wheatear
(Oenanthe oenanthe leucorhoa)
in Newfoundland and Labrador



Juvenile Northern Wheatear, Cape Pine, August 9, 2001
Photo by Ken Knowles

prepared for
THE SPECIES STATUS ADVISORY COMMITTEE

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STATUS REPORT

***Oenanthe oenanthe* (Gmelin 1789)**

Common Name:

Northern Wheatear

Other Common Names:

French – Traquet motteux

Inuit – Erkogolik or Okalajok (Austin 1932)

Subspecies: *O. o. leucorhoa* – Iceland, Greenland, northeastern North America

Family: Turdidae (Thrushes, chats, Old-world flycatchers)

Life Form: Bird (Aves)

Distribution

Global: Breeding range includes northern Europe and Asia, south to Middle East and north Africa (Conder 1989). Also includes Iceland, Greenland, northeastern Canada, and Alaska. Disjunct populations of two subspecies in North America: *O. o. oenanthe* in Alaska and northwest Canada, and *O. o. leucorhoa* in Iceland, Greenland and northeast Canada (Kren and Zoerb 1997). Winters in sub-Saharan Africa.

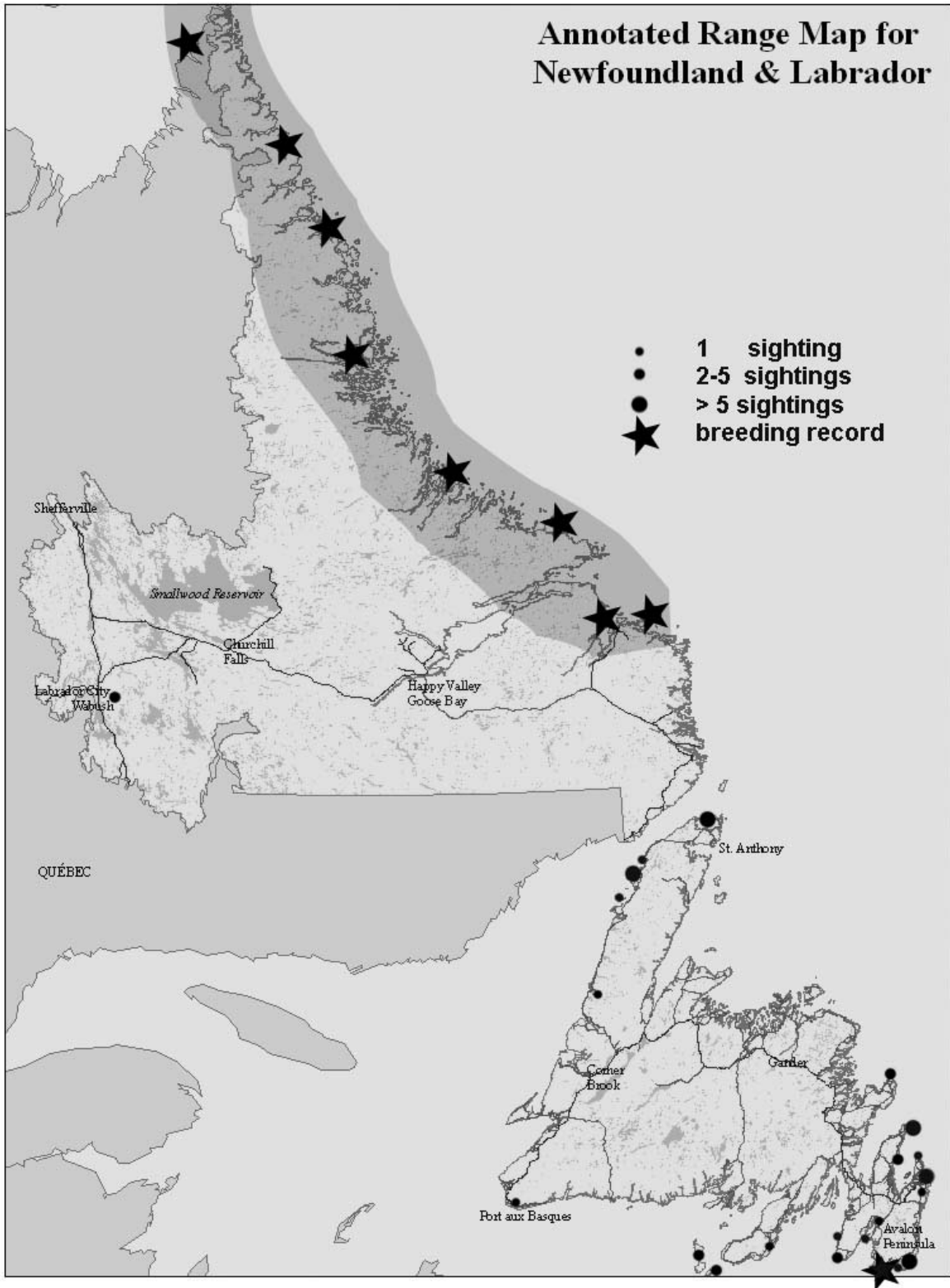
National: In North America, *O. o. oenanthe* breeds in Alaska and northwestern Canada, migrating through Asia and the Middle East. *O. o. leucorhoa*, a trans-Atlantic migrant, breeds in Newfoundland and Labrador, Greenland, and Arctic archipelago including Baffin, Ellesmere, and Axel Heiberg Islands (Sutton and Parmelee 1954, Boothroyd 1984).

Provincial:

Labrador: Breeds along coast from Cape Chidley to Black Tickle (Mactavish and Linegar 2002). Ground surveys of the interior (where suitable breeding habitat likely exists) may result in an expansion of the currently-accepted breeding range.

Insular Newfoundland: One nest record from Cape Pine on the southern Avalon Peninsula (Mactavish and Linger 2002). Regular but uncommon passage migrant, primarily during fall (late August-late October) but also during spring (May-early June). Southern coastal region potentially provides important migratory habitat, but records are limited due to inaccessibility of this area.

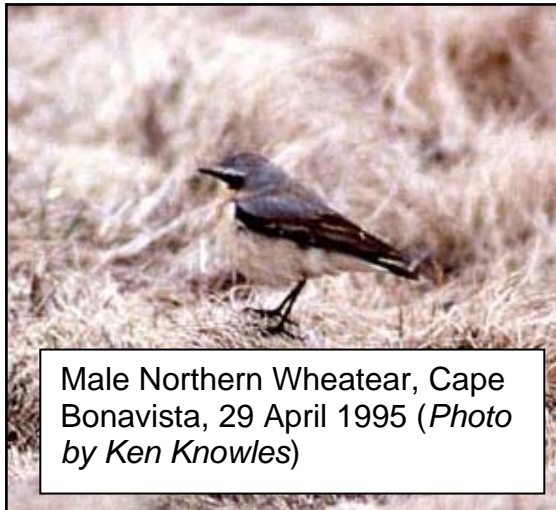
Annotated range map



Note: Breeding range taken from Godfrey (1986)

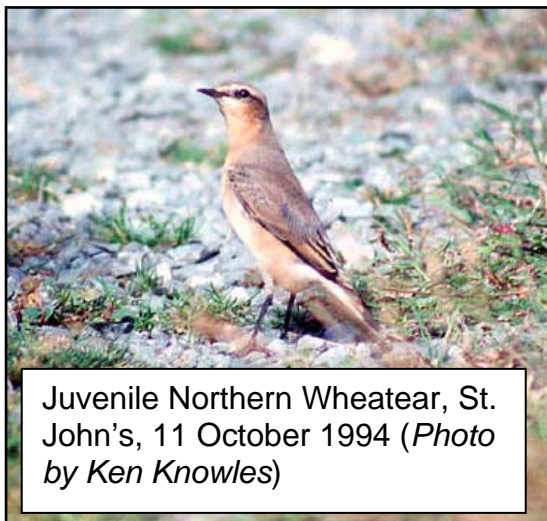
Description and habitat

Note: For a thorough recent account of the biology of northern wheatear in North America see Kren and Zoerb (1997). Unless otherwise noted, summary information presented here is taken from this source.



Male Northern Wheatear, Cape Bonavista, 29 April 1995 (Photo by Ken Knowles)

Medium to small ground-dwelling passerine. Length 14.5-15.5 cm, wingspan 26-32 cm, body mass 18-33 g. Breeding male is pale blue-grey above, buffy to pale white below. Black face mask and wings, white rump. Distal portion of tail black, proximal portion of tail white laterally, black centrally, black forming an inverted T-shape. Breeding female similar to male but duller, lacks black mask and is buffier overall. Non-breeding males lack bold colours, grey-brown rather than black. Primary feathers tipped buffy to buffy-white, obvious wing bar across greater coverts. Both sexes have distinctive black inverted T-shape pattern on tail during both breeding and non-breeding. Immatures similar to adult females.



Juvenile Northern Wheatear, St. John's, 11 October 1994 (Photo by Ken Knowles)

Preferred habitat is open terrain, especially dry, stony, shrubby tundra having low vegetation. Most often observed in coastal barrens on islands and headlands in both Labrador and on insular Newfoundland (Mactavish and Linegar 2002). Also found on barren mountain tops, rocky slopes, and alpine meadows above timberline. Rarely found in areas having trees. Nests on ground in rock crevices and holes (Koes 1995).

Overview of Biology

Northern wheatear is exceptional in being the only regularly breeding passerine in eastern North America that winters in sub-Saharan Africa, and makes one of the longest trans-ocean migrations of any passerine. *O. o. leucorhoa* is primarily a nocturnal migrant. Two different migration routes may be used to reach the wintering ground. Extreme northern populations migrate across Greenland to northern Europe and then south to sub-Saharan Africa. Koes (1995) suggests that individuals breeding on the Labrador Peninsula migrate down the coast of Hudson and James Bays, south along the Ottawa, Saguenay and St. Lawrence Rivers to eastern Newfoundland, and from

there across the Atlantic to the Azores and on to Africa. Spring migration appears to follow a more northerly route through Iceland and Greenland (Snow 1953). *O. o. leucorhoa* leaves wintering grounds later than *O. o. oenanthe*, passing through western Europe mid April (Cramp 1988) and arrives on breeding grounds from May to June (Meltofte 1976). Fall migration initiated from August to September, continuing through late October (Cramp 1988). There have been no band returns for individuals banded in North America (Bird Banding Office, Canadian Wildlife Service, unpublished data).

Little or no data available on demography, annual lifetime reproductive success, annual survival, population trends and numbers of individuals in North America (Kren and Zoerb 1997); most of the information presented here was generated from studies on subspecies other than *O. o. leucorhoa*. Northern wheatears have strong fidelity to breeding sites, which usually consist of barren rocky, open areas. Generally a solitary species, territories are defended both on the wintering and breeding grounds, and loosely during migration. Territory size inversely related to population density (Cramp 1988, Conder 1989). The longest documented lifespan is seven years (Staav 1992), and no data are available on annual survival. Diet consists mainly of terrestrial insects, small mollusks, spiders and other invertebrates. Berries are a common food in Arctic regions (Cramp 1988).

Northern wheatears nest on the ground in rocky holes or crevices (Koes, 1997). Average clutch size is 5-8 eggs, eggs are laid 24 hours apart, and incubation lasts 12-14 days. Because incubation is initiated before the clutch is complete, larger clutches tend to hatch asynchronously, while small clutches typically hatch synchronously (Cramp 1988). Young fledge at 15-17 days, and fledglings are dependent on parents until 28 days post-hatch (Conder 1989). In Great Britain 50% of successful pairs attempt a second nest (Conder 1989); double brooding not documented in North America.

Population size

Global population size is not threatened and has previously been estimated to be 125 million individuals (Moreau 1972). No information on population size in northeastern North America (Kren and Zoerb 1997). From 2000-2003 Chaulk et. al. (2004) conducted breeding bird surveys on 174 small islands (<30 ha) along the Labrador coast from Rigolet to Nain, but did not observe any wheatears (K. Chaulk, Labrador Inuit Association, pers. comm.). However other authors report that the species is locally common along the Labrador coast, and the greatest abundance may occur in the southern portion of this range (Koes 1995, Mactavish and Linegar 2002). For example, 47 individuals, including four family groups, were observed between Cartwright and Black Tickle during August 1994 (Mactavish and Linegar 2002). The degree to which this apparent higher abundance of individuals is an artifact of greater search intensity in southern portions of the species' range is unknown.

Traditional and local ecological knowledge

Inuit elders along central Labrador coast reported having no traditional or ecological

knowledge relating to northern wheatears (K. Chaulk, Labrador Inuit Association, pers. comm.). Mr. R.J. Nuna of the Innu Nation Environment Office was contacted, but did not provide any information relating to northern wheatear.

Trends

Historical records indicate that in Labrador during the early 1900s the species was considered scarce or local on the coast south of Okak (Todd 1963). Recent anecdotal evidence suggests that population size is increasing in Labrador, its breeding range is extending southward, and the species is locally common in these southern areas (Koes 1995, Mactavish and Linegar 2002). These authors also report that numbers of sightings in southeastern Canada have increased in recent years.

Threats and limiting factors

Due to the remoteness and limited economic importance of breeding habitat (see *Annotated range map* and *Description and habitat*) there is little current or anticipated threat due to human disturbance. However, observations in Europe have shown that disturbance during the nesting period will cause abandonment (Conder 1989). Frequent disturbance such as regular low-level training flights by military aircraft may be a cause for concern. Localized habitat loss may result from mining or other forms of natural resource exploitation along the Labrador coast.

Existing protection

Protected since 1916 under the Migratory Birds Convention (Department of Justice of Canada 1994)

Special significance

Only eastern North American breeding passerine that winters on African continent, and only passerine undertaking transatlantic migration (Kren and Zoerb 1997).

Ranks or Status

Ranking System	Rank or Status
G-rank/IUCN	G5
N-rank/National General Status/COSEWIC	N5B
General Status – provincial	S3ZB / Secure
Newfoundland – S-rank/General Status	SZB / Vagrant
Labrador – S-rank/General Status	S3B / Secure

Sources of information and list of references

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Sutton, G.M. and D.F. Parmelee 1954. Nesting of the Greenland wheatear on Baffin Island. Condor 56: 295-306.

Todd, W.E.C. 1963. Birds of the Labrador Peninsula and adjacent areas. Carnegie Museum and University of Toronto Press, Toronto, ON.

Collections examined

The Robie Tuffs Museum. Biology Dept., Acadia University, Wolfville, NS. 2 Specimens examined, both males collected on Baffin Island (1975, 1977) by C. Coldwell.

TECHNICAL SUMMARY

Distribution and Population Information	Criteria Assessment
<ul style="list-style-type: none"> • <i>extent of occurrence (EO)(km²)</i> • <i>area of occupancy (AO) (km²)</i> • <i>number of extant locations</i> • <i>specify trend in # locations, EO, AO (decline, stable, increasing, unknown)</i> • <i>habitat trend: specify declining, stable, increasing or unknown trend in area, extent or quality of habitat</i> • <i>generation time (average age of parents in the population) (indicate years, months, days, etc.)</i> • <i>number of mature individuals (capable of reproduction) in the Provincial population (or, specify a range of plausible values)</i> • <i>total population trend: specify declining, stable, increasing or unknown trend in number of mature individuals or number of populations</i> • <i>are there extreme fluctuations (>1 order of magnitude) in number of mature individuals, number of locations, AO and/or EO?</i> • <i>is the total population severely fragmented (most individuals found within small and isolated populations between which there is little exchange, i.e., ≤ 1 successful migrant / year)?</i> 	<p>Unknown</p> <p>Unknown</p> <p>NA*</p> <p>Stable or increasing</p> <p>Stable</p> <p>Unknown; < 7 years</p> <p>Insufficient data</p> <p>Stable or increasing</p> <p>No</p> <p>No</p>
Rescue Effect (immigration from an outside source)	
<ul style="list-style-type: none"> • <i>does species exist elsewhere?</i> <ul style="list-style-type: none"> • <i>status of the outside population(s)?</i> • <i>is immigration known or possible?</i> • <i>would immigrants be adapted to survive here?</i> • <i>is there sufficient habitat for immigrants here?</i> 	<p>Yes</p> <p>Stable</p> <p>Yes</p> <p>Yes</p> <p>Yes</p>

*Found in suitable habitat throughout breeding range.

Appendix A. Population Information

Table 1. Reported (verified) sightings of northern wheatear (*O. o. leucorhoa*) in Newfoundland and Labrador during the past 25 years.

Date		Location	Count	Observer	Notes
Year	Day				
1980	13, 29 May	L'Anse-aux-Meadows	2	B. Mactavish	Osprey 11(4)
1980	27 Aug	Cape St. Mary's	1	J. Wells	
1981	13-14 Oct	L'Anse-aux-Meadows	2	B. Mactavish	
1981	26-28 Oct	L'Anse-aux-Meadows	1	B. Mactavish	Male
1982	2-3 Oct	St. John's	1	D. Barton	
1983	13-14 May	St. John's	1	J. Pratt, B. Mactavish, D. Milley	Male
1985	26-27 Aug	Pt. Amour (Lab)	1	C. Brown, J. Selno	Immature
1986	20 May	Gray Islands	1	I. Goudie	
1986	13 Oct	Cape Spear	1	R. Burrows	
1987	2 Oct	Cuslett	1	R. Elliot	
1987	4 Oct	St. Pierre	1	F. Urtizbera	
1989	15 Sep	Miquelon	1	C. Moullec	
1989	2, 19 Oct	St. Pierre	2	F. Urtizbera, R. Etcheberry	
1989	23 Oct, 8 Nov	St. Pauls	2	H. Deichmann	Immatures
1990	8 Nov	Pt. La Haye	1	J. Chardine	
1993	27 28 Aug	L'Anse-aux-Meadows	2	P. Linegar, B. Mactavish	
1993	6 Sep	St. Pierre	1	B. Letournel	
1993	12 Sep	NE Trapassey R.	1	J. Casey, G. Crutcher	
1993	16 Oct	Miquelon	1	J. & C. Hebert	
1994	6 June	Grand Bay	1	K. Knowles, J. Pratt	
1994	6 June	L'Anse-aux-Meadows	1	B. Bradbury	Female
1994	Aug	Grady Isl., Black Isl., Hopedale	15	P. Ryan	Including 5-6 juv
1994	19 Aug	Releigh	1	K. Knowles	
1994	4 Sep	Cape Race	1	H. Regehr, M. Rodway	Immature
1994	Sep	Cape Race	2	M. Rodway	
1994	28 Sep	Cape St. Francis	1	D. Phelen	
1994	29,30 Sep	Cape Race	1	H. Regehr, M. Rodway	
1994	01 Oct	Ferryland	1	W. Montevicchi	
1994	10,12 Oct	St. John's	1	B. Mactavish	
1994	10 Oct	Signal Hill	1	J. Selno	

Date		Location	Count	Observer	Notes
Year	Day				
1994	11 Oct	St. John's	1	J. Wells	
1994	14 Oct	St. John's	1	F. Woodruff	
1995	29 April	Cape Spear	1	P. Linegar	
1995	29 April	Cape Race	1	H. Regehr, M. Rodway	
1995	29 April	Cape Bonavista	1	J. Joy	
1995	30 April	Maberley	1	J. Joy, J. Pratt	
1995	25 June	Cape Spear	1	T. Boland, K. Knowles	
1995	20 Aug	Cape Bonavista	1	J. Joy	
1995	20 Sep	Harricott	1	D. Phelan	
1996	Summer	Sandy Isl., Voisey Bay (Lab)	1	J. Whitford	
1996	7 Sep	Burin Peninsula	1	J. Wells, P. Linegar, C. Brown	
1996	11 Sep	Cape Spear	1	C. Brown	
1996	22 Sep	Blackhead	1	D. Fifield	
1996	28 Sep	Cape Race	1	P. Linegar, B. Mactavish, C. Brown, J. Pratt	
1996	29 Sep	Blackhead	1	I. Jones	
1996	30 Sep	Cape Spear	1	I. Jones	
1997	ear Sep	Rocky Harbour	1	N. Escott, J. Pratt	
1997	10 Sep	North Harbour	1	F. Shuhood, T. Power	
1997	13 Sep	Signal Hill	1	B. McBride, B. Mactavish	
1998	29 Sep	Drook, Cape Race	1	J. Pratt	
1998	late Sep	Drook, Cape Race	1	T. Boland	
1999	19 Sep	Signal Hill	1	J. Pratt	
2000	May	Reefs Harbour to Plum Pt.	3	J. Gibbons	3 different locations
2001	19 May	Blue Cove	5	J. & I. Gibbons	
2001	20 May	Cape St. Mary's	1	F. Shuhood	Female
2001	22 May	Goulds	1	T. Boland	
2001	26 May	Cape Race	15	B. Mactavish	
2001	15-18 July	Cape Pine	6	B. Mactavish	Nest
2004	late May	Cape Spear	1	J. Clarke, D. Brown	

NOTE: All records are summarized from the files of Dr. W.A. Montevecchi, Memorial University of Newfoundland and Labrador.

Table 2. Historic sightings (prior to 1980) of northern wheatear (*O. o. leucorhoa*) in Newfoundland and Labrador.

Year	Date Day	Location	Count	Observer	Notes
1860	25 Aug	Henley Harbour	3	Coues, E.	1 immature
1874	Summer	Cape Harrison	1	Baird, Brewer, Ridgeway	
1899	29 May, 1 June	Ramah Island	2	Austin	1 male, 1 female
1906	Unknown	Okak	5	Hantzch	breeding
1920's	Unknown	Okak	2	Austin	Set of 2 eggs
1933	Unknown	Red Bay	4	Doane, E.	2 pairs collected
1952	15 July	Grady Island	10-12	Tuck, L.	7-8 ad + juvs
1952	24 Aug	Cape Porcupine	1	Tuck, L.	
1954	18 May	Nain	1	Peacock, F.W.	
1956	24 May	Badger	1	Deichmann, H.	
1967	8 Aug	Funk Island	1	Chistian, M.	
1969	22 April	St. John's	2	Jackson, B.	
1972	4 June	Birchy Cove	1	Ryan, G.	male
1974	2 June	Cow head	1	Lamberton, R.	
1975	1 Jan	St. Anthony	1	Patterson, A.	
1976	early Jan	Happy Valley	1	Hauge, E.	
1976	26 Oct	Norris Point	1	South, R.	immature?
1979	late Sep	L'Anse-aux- Meadows	1	Hedderson, V.	

NOTE: All records are summarized from the files of Dr. W.A. Montevecchi, Memorial University of Newfoundland and Labrador.

Appendix B. Sources and References.

Other sources not referenced

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