



15th MEETING OF THE TECHNICAL COMMITTEE
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**DELENIATION OF BIOGEOGRAPHIC POPULATIONS OF THE THICK-BILLED MURRE
(*URIA LOMVIA*)**

PROPOSAL TO CHANGE POPULATION DELINEATIONS

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Name of population(s):

Uria lomvia lomvia (Thick-billed Murre), E North America, Greenland, E to Severnaya Zemlya¹

Current status on AEWA Table 1:

Category 2c of Column B

What is the issue?

The entire range of the *U. l. lomvia* subspecies in the Agreement is treated as a single population, but there are two migratory pathways identified in the Atlantic associated with the Labrador and the Greenland Currents. Birds from Arctic Canada and W Greenland move south to E Newfoundland (shelf and Grand Banks) and Nova Scotia; those from the European Arctic move SW towards W Greenland, these include Spitsbergen birds that reach both SW Greenland and Newfoundland waters (**HBW**). Therefore, it is proposed to define [1] a W Atlantic and [2] an E Atlantic biogeographic population (Figure 1). Both the breeding and the wintering grounds of the W Atlantic population are situated partly outside of the Agreement area.

AEWA's taxonomic reference also recognises *U. l. eleonora* and defines its breeding distribution area from E Taymyr Peninsula E to New Siberian Island but does not clarify its wintering area. This subspecies was not considered in document AEWA/MOP 3.16 although its breeding range falls partly within the agreement area. According to Gavrilov (pers. com. 2019), only one breeding colony of this subspecies is within the Agreement area. Therefore, no listing on AEWA Table 1 is justified.

What is the evidence supporting the proposal?

This is basically consistent with McFarlane-Tranquilla et al. (2014) and with the SEATRACK data (Figure 2). Frederiksen et al. (2016) provides an overview of the estimated wintering numbers by origin of breeding areas.

Lyngs (2003) note that the few eastern "birds recovered in May-Sep either have dubious recovery dates or may be of wounded birds; perhaps a few imm. birds remain to summer", which suggest that overlap between the western (N

¹ Maria Gavrilov noted that no *U. lomvia* is breeding on Severnaya Zemlya. Therefore, the current AEWA name of the population is incorrect.

America - W Greenland) and eastern (Iceland, Svalbard, Russia to Severnaya Zemlya) populations occur only in the winter, but no indication of exchange during the breeding season.

There is also no ringing (EURING) or geolocator (see above) evidence that birds breeding in the W Atlantic would reach the E Atlantic.

It is estimated that less than 75% of the entire range of the W Atlantic population would be situated within the Agreement area. However, birds from the Canadian Arctic winter mainly off of E Newfoundland and Labrador along with birds from Iceland and Svalbard and smaller numbers winter off W Greenland, Gulf of St Lawrence, Bay of Fundy and further south (BNA, Frederiksen et al. 2016). Gaston et al. (2012) estimated the breeding population of *U. lomvia* at 1,540,000 pairs. From this, c. 590,000 pairs would be in the Agreement area. There are also 342,000 pairs estimated for Greenland, including only 1% of this in the east (Merkel et al. 2014). This means that nearly 50% of the proposed W Atlantic biogeographic population breeds within the Agreement area. High natal and breeding site fidelity (BNA) as well as colony specific core wintering areas (McFarlane et al. 2013, SEATRACK) suggest that both proposed populations could be even further divided. E.g. Figure 3 indicates that colony specific core wintering areas may also exist in case of the E Atlantic. However, this requires further analysis. Nevertheless, these considerations may justify listing the W Atlantic population also on Table 1 of AEWA.

What are the implications of the proposal including any changes in status on AEWA Table 1?

[1] *U. lomvia lomvia*, W Atlantic: The populations size exceeds 100,000 individuals. The larger Canadian population is increasing by 1% per year (Gaston pers. com. to Hentati-Sundberg 2011), but it has declined by 20-40% from the mid-1950s to the late 1970s. W Greenland 35-50% decline 1930-1990 and continuing (HBW, BirdLife International 2015, Merkel et al. 2014). Therefore, it is proposed to list the population in Category 2c in Column B. This represents no change compared to the current listing of the *U. l. lomvia* subspecies.

[2] *U. lomvia lomvia*, E Atlantic: The population is estimated around 1,067,000 – 1,367,000 pairs (5). Hence, it exceeds 100,000 individuals and is declining (BirdLife International 2015, Fauchald et al. 2015). Therefore, the population could be listed in Category 2c in Column B. This represents no change compared to the current listing of the *U. l. lomvia* subspecies.

Figure 1. Proposed delineation of the Atlantic populations of *U. lomvia*. (Note: the range map produced by BirdLife International is only to provide a backdrop for the flyway delineation. It will require update at a later stage to incorporate the correction proposed by experts during the consultation process).

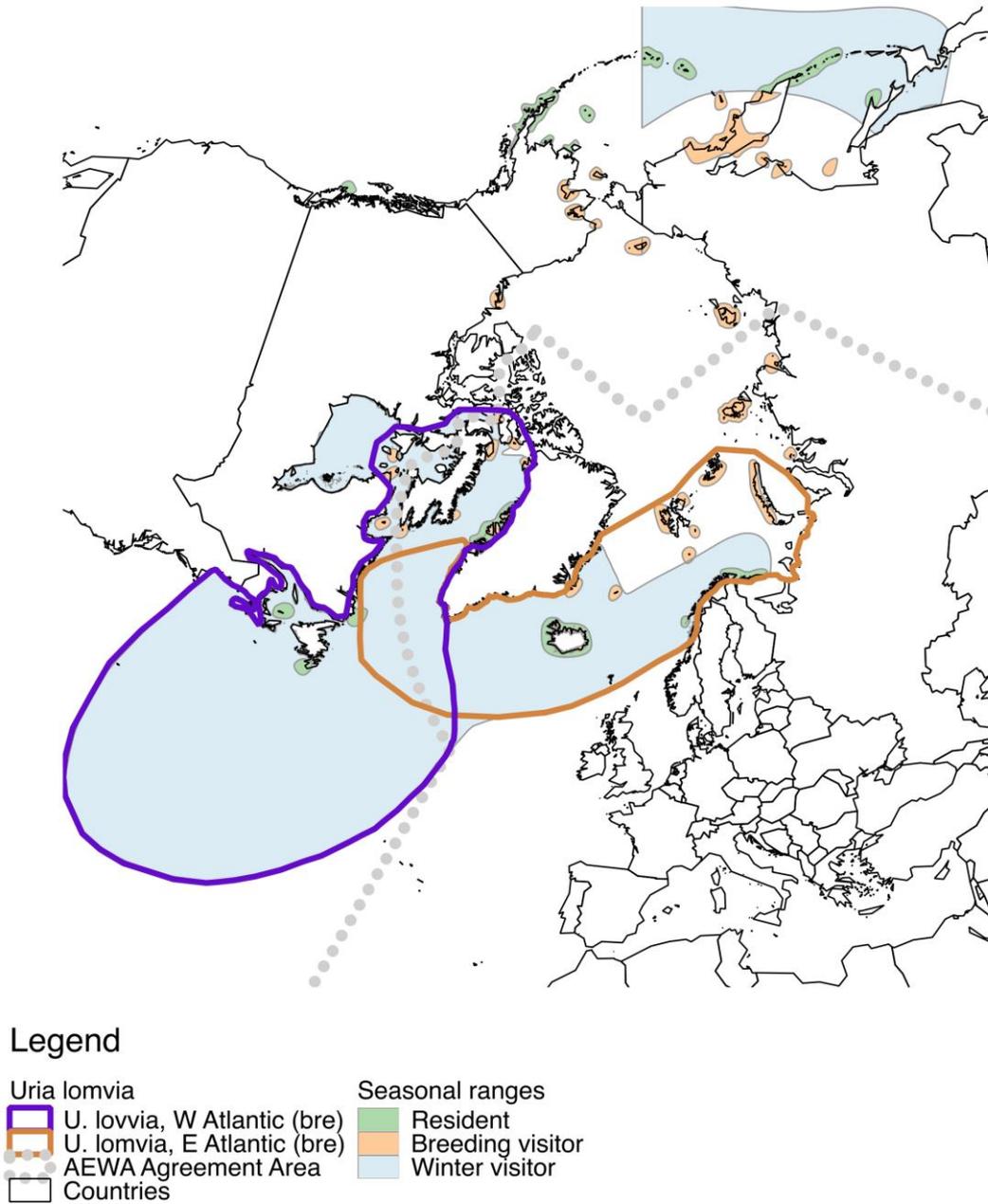


Figure 2. Non-breeding distribution of *U. lomvia* breeding at colonies in the E Atlantic based on geolocator data between 2012 and 2017. Colours indicate different years. Black dots indicate the colonies where birds were captured (Source: [SEATRACK](#)).

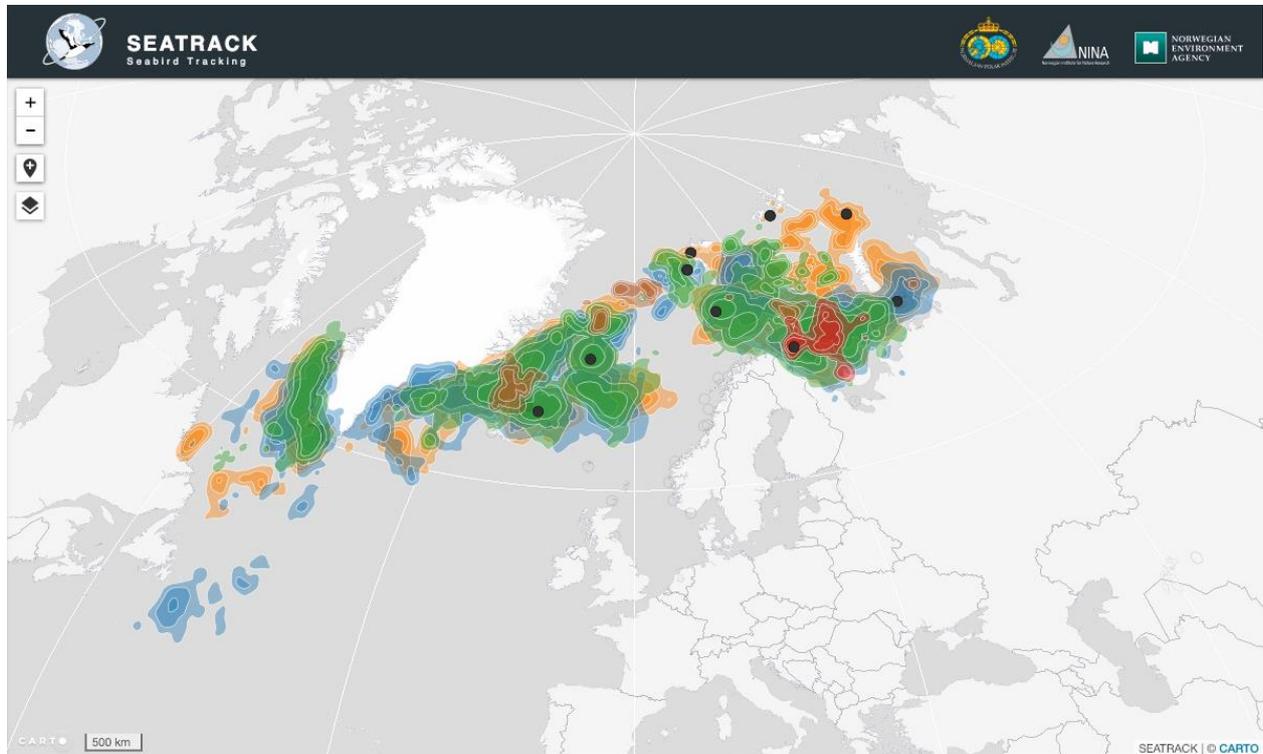


Figure 3. Non-breeding distribution of *U. lomvia* breeding at colonies in the E Atlantic based on geolocator data between 2012 and 2017. Colours indicate different years. Black dots indicate the colonies where birds were captured. Sometimes, it shows only single individuals. (Source: SEATRACK).

