

**12<sup>th</sup> MEETING OF THE STANDING COMMITTEE***31 January – 01 February 2017, Paris, France***AEWA TECHNICAL COMMITTEE RECOMMENDATIONS FOR THE  
DELINEATION OF SELECTED AEWA POPULATIONS  
ON TABLE 1 OF THE ACTION PLAN****Introduction**

As part of the AEWA Technical Committee work plan for the inter-sessional period 2016-2018, which was approved by the 6th Session of the Meeting of the Parties in November 2015 (Resolution 6.17), the Committee was tasked with considering evidence supporting the delineation of current population boundaries for the following species and at TC13 to make any recommendations, as appropriate, to the 12<sup>th</sup> Meeting of the AEWA Standing Committee for interim approval such that any changes can be included within work to develop proposals for MOP7 (CSR 7 and proposed changes to Table 1 of AEWA's Action Plan). The extended list as included in the TC work plan at its 13<sup>th</sup> Meeting covers the following species:

- Lesser White-fronted Goose *Anser erythropus* – status of birds in Fennoscandia;
- Little Crake *Porzana parva*;
- Sociable Lapwing *Vanellus gregarius*;
- White-tailed Lapwing *Vanellus leucurus*;
- Whimbrel *Numenius phaeopus rogachevae*;
- Black-legged Kittiwake *Rissa tridactyla*;
- Roseate Tern *Sterna dougallii*;
- Little Tern *Sterna albifrons*;
- Swift Tern *Thalasseus bergii*;
- Antarctic Tern *Sterna vittata*;
- Common Murre *Uria a. aalge* & *U. aalge albionis*;
- Atlantic Puffin *Fratercula arctica*.

As part of this task, the AEWA Technical Committee also identified the need to further elaborate the existing 'Guidance on the Definition of Biogeographical Populations of Waterbirds' adopted at the 3rd Session of the Meeting of the AEWA Parties in 2005 (Doc. MOP3.12). This additional guidance is captured in Doc. AEWA/StC 12.11 'General Guidance on the Definition of Species Populations under AEWA', which was developed and adopted at the 13<sup>th</sup> Meeting of the Technical Committee on the 14-17 March 2016 and which has also been submitted to this meeting for approval.

In addition, the Technical Committee developed and adopted a proforma for the assessment of species/population delineations under AEWA, which was applied for species assessed after the 13<sup>th</sup> Meeting of the Technical Committee. The assessments for the Lesser White-fronted Goose and the Sociable Lapwing were concluded and approved by the Committee already at the TC Meeting and therefore follow a different format. The points of consideration were, however, the same as in the proforma template.

It should further be noted, that after reviewing the delineation of populations of the Black-legged Kittiwake (*Rissa tridactyla*) and the Atlantic Puffin (*Fratercula arctica*), the Technical Committee recommends keeping the current treatment in Table 1 as adopted by MOP6. The Technical Committee will, however, continue to monitor for new data and information on possible exchanges between the populations of the Atlantic Puffin that may warrant a recommendation for lumping them.

The attached document includes recommendations adopted by the Technical Committee for all further species listed above, with the exception of the Terns (Roseate Tern, Little Tern, Swift Tern, Antarctic Tern), where further consultations with BirdLife International and other stakeholders are still needed before a recommendation can be issued.

### Action Requested from the Standing Committee

The Standing Committee is requested to review the delineations of selected AEWA populations in the table below as recommended by the Technical Committee and to approve them for further use.

In addition, the Standing Committee is requested to take a decision to review the recommended treatment of the Tern species listed above inter-sessionally via correspondence, when provided by the Technical Committee.

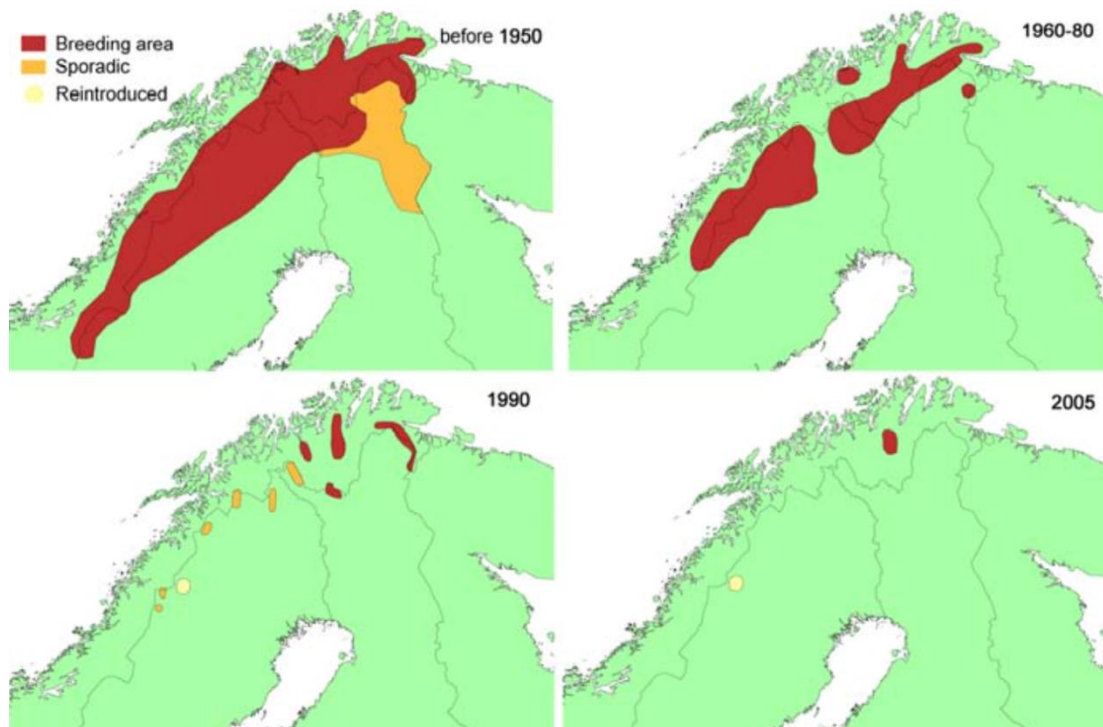
Species	Proposed action
<b>Lesser White-fronted Goose</b> ( <i>Anser erythropus</i> ) – status of birds in Fennoscandia	Based on their current dispersion patterns - with the Lesser White-fronted Geese breeding in Sweden wintering in the Netherlands and the birds breeding in Norway wintering in Greece - the AEWA Technical Committee considers that the current AEWA International Single Species Action Plan for the conservation of the species adopted in 2008, treats the two populations correctly as separate biogeographic populations.
<b>Little Crake</b> ( <i>Porzana parva</i> )	Merge the two populations recognised in Waterbird Population Estimate and change the name of the population to Western Eurasia/Africa, SW & S Asia.
<b>Sociable Lapwing</b> ( <i>Vanellus gregarius</i> )	As observations suggest that the species is panmictic, there is no reason to continue the assumption that the Sociable Lapwings using the western flyway are a distinct population from those using the eastern route.
<b>White-tailed Lapwing</b> ( <i>Vanellus leucurus</i> )	In the absence of any evidence of demographically distinct units, it is suggested to treat the species having one single population until further evidence indicating the contrary emerges.
<b>Whimbrel</b> ( <i>Numenius phaeopus rogachevae</i> )	Based on the fact that the known breeding area of the subspecies is within the Agreement Area and applying the precautionary principle concerning the staging and wintering areas, it is recommended to add this subspecies to Table 1 of the AEWA Action Plan.
<b>Black-legged Kittiwake</b> ( <i>Rissa tridactyla</i> )	No change recommended

<b>Common Murre</b> ( <i>Uria a. aalge</i> & <i>U. aalge albionis</i> )	Redefine the spatial extent of the AEWA Table 1 listed population as follows:  <i>Uria aalge</i> - <del>E North America, Greenland</del> , Iceland, Faeroes, Scotland, S Norway, Baltic
<b>Atlantic Puffin</b> ( <i>Fratercula arctica</i> )	No change recommended

# AEWA TECHNICAL COMMITTEE RECOMMENDATION REGARDING THE DELINEATION OF BIOGEOGRAPHIC POPULATIONS OF LESSER WHITE- FRONTED GEESE (*Anser erythropus*) UNDER AEWA

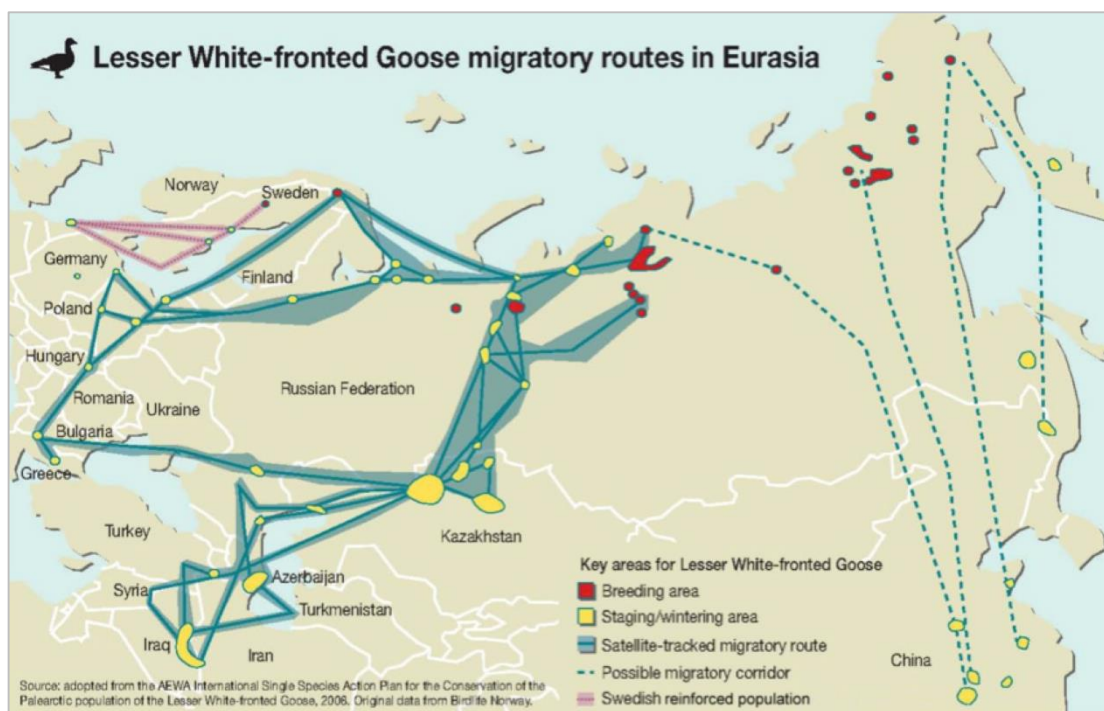
(Drafted and approved by the AEWA Technical Committee at its 13<sup>th</sup> Meeting – 14.-17. March 2016)

**Application of the principles of delineation of species populations under AEWA to the Lesser White-fronted Geese breeding in the Nordic countries**



**Figure 1.** Historical and recent breeding distribution of the Lesser White-fronted Goose in Fennoscandia (Source: AEWA Single Species Action Plan for the Lesser White-fronted Goose, 2008).

As Figure 1. shows, over the last century the distribution of Lesser White-fronted Geese in Fennoscandia became increasingly fragmented resulting in two separate breeding areas.



**Figure 1.** Global distribution of the Lesser White-fronted Goose populations. Dashed lines show the linkages between breeding and wintering areas for the Eastern main population, but the precise migration routes followed are unknown. (Source: draft revised AEWA Single Species Action Plan for the Lesser White-fronted Goose, version 2015)

As the result of a human-induced flyway modification, birds breeding in Sweden now winter in the Netherlands - thus birds breeding in Sweden and Norway also have separate wintering grounds.

## Conclusion

Based on their current dispersion patterns - with the Lesser White-fronted Geese breeding in Sweden wintering in the Netherlands and the birds breeding in Norway wintering in Greece - the AEWA Technical Committee considers that the current AEWA International Single Species Action Plan for the conservation of the species adopted in 2008, treats the two populations correctly as separate biogeographic populations.



## PROFORMA ON PROPOSAL TO CHANGE POPULATION DELINEATIONS

**Name of population:**

*Zapornia parva* (Little Crake) - Western Eurasia/Africa

**Current status on AEWA Table 1:**

Category 2c on Column B

**What is the issue?**

AEWA recognises only one population: Western Eurasia/Africa, while the CSN Tool shows two populations in agreement with WPE (Figure 2).

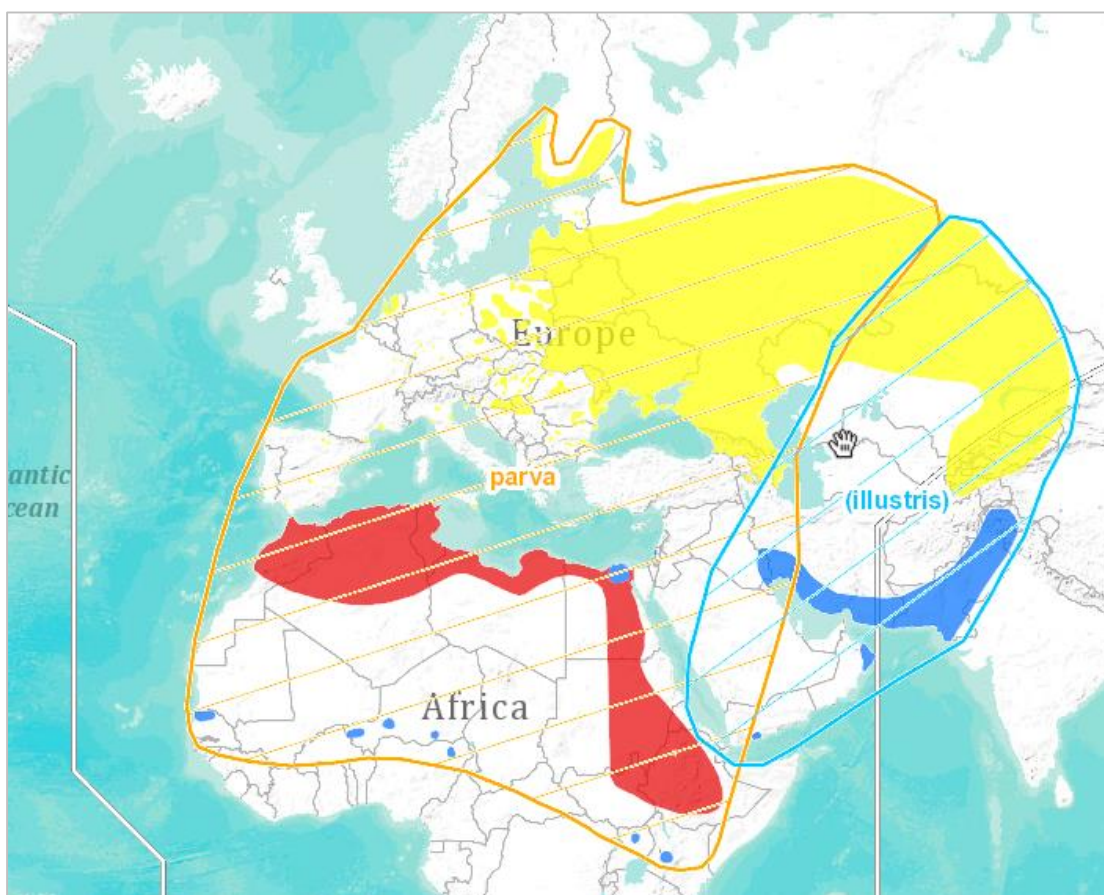


Figure 2. Population delineations for Little Crake on the CSN Tool based on the Waterbird Population Estimates. White line shows the limit of the AEWA Agreement Area.

**Proposal:** Merge the two populations recognised in WPE and change the name of the population to Western Eurasia/Africa, SW & S Asia.

**What is the evidence supporting the proposal?**

According to the WPE the breeding range of the subspecies *parva* includes S, C and E Europe, while the non-breeding range is poorly known. Supposedly, it includes the Mediterranean basin, W&E Africa and (somewhat surprisingly) Arabia. The breeding range of subspecies *illustris* include Central Asia to W

Xingjiang (Turkestan) and the non-breeding range W Pakistan and W Asia. (Actually, the range map shows that the range extends beyond W Pakistan to the east).

Scott (2002) states: "Only one population is recognised in the Agreement Area, the entire population of Europe and Western Asia migrating to Africa. Birds breeding in Central Asia ('*illustris*') are believed to winter mainly in Pakistan and north-western India, and are therefore extralimital" although a significant part of both the breeding and the wintering range seems to be in the Agreement Area as shown on Figure 1.

*Illustris* is recognised under the CMS Central Asian Flyway Action Plan based on its separate status in WPE.

The BirdLife/HBW checklist treats the species being monotypic. The subspecies *illustris* was recognised by Ripley et al. (1977) but not by Cramp et al. (1977-1994), Taylor (2010) nor by Taylor (2016) who all consider the species to be monotypic in line with all other major taxonomic references.

Practical considerations: most likely the species can be only monitored, using special night surveys, on the breeding grounds. There is no hard evidence separating neither the breeding nor the wintering grounds of the two populations.

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

No changes in status on Table 1 will be caused by this change. However, in the absence of any recent evidence for significant long-term decline (BirdLife International 2015), it is likely that the population will be proposed to be classified in Category 1 of Column C at the next MOP.

#### **References**

BirdLife International (2015). *Zapornia parva* (Little Crane) European Red List of Birds Supplementary Material. URL: [http://datazone.birdlife.org/userfiles/file/Species/erlob/supplementarypdfs/22692663\\_zapornia\\_parva.pdf](http://datazone.birdlife.org/userfiles/file/Species/erlob/supplementarypdfs/22692663_zapornia_parva.pdf)

Ripley, S. D., Lansdowne, J. F., & Olson, S. L. (1977). *Rails of the world: a monograph of the family Rallidae*. David R. Godine Publisher.

Scott, D. (2002) *Report on the Conservation Status of Migratory Waterbirds in the Agreement Area*. AEWA Secretariat, 2000.

Taylor, B. (2010). *Rails: a guide to rails, crakes, gallinules and coots of the world*. Bloomsbury Publishing.

Taylor, B. (2016). Little Crane (*Zapornia parva*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. & de Juana, E. (eds.). *Handbook of the Birds of the World Alive*. Lynx Edicions, Barcelona. (retrieved from <http://www.hbw.com/node/53657> on 24 May 2016).

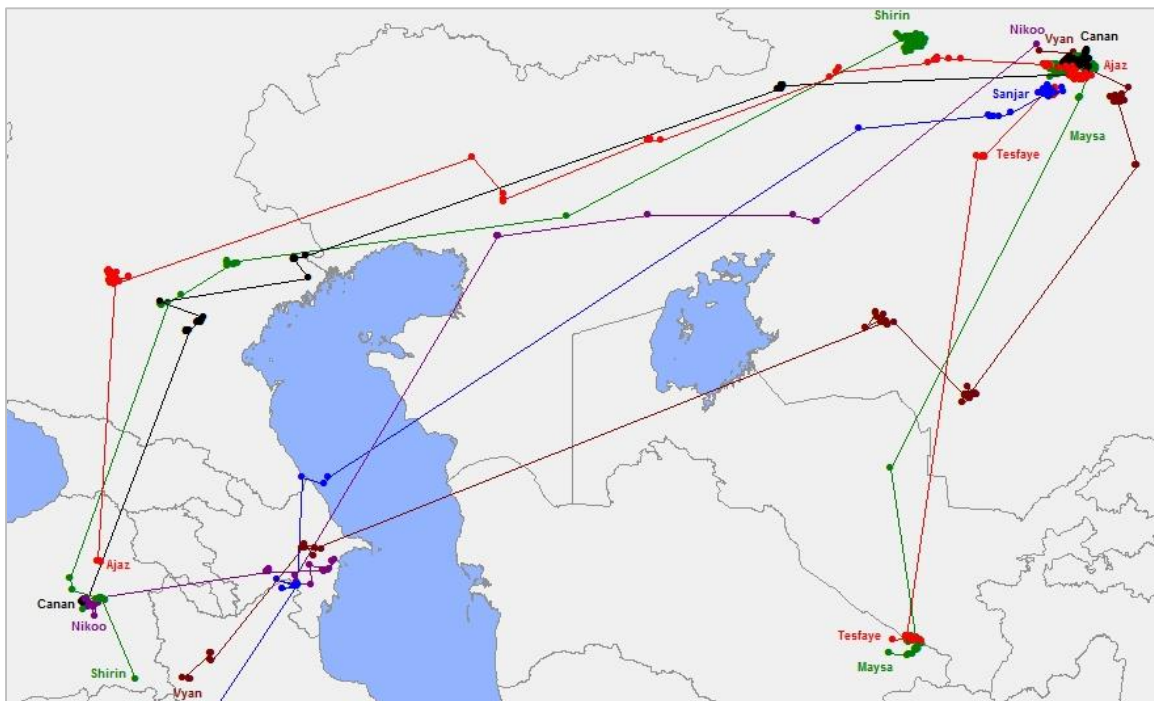
## DELINEATION OF BIOGEOGRAPHIC POPULATIONS OF THE SOCIABLE LAPWING (*Vanellus gregarius*)

*Prepared by Ian Fisher (Coordinator of the AEWA Sociable Lapwing International Working Group) and Paul Donald (Royal Society for the Protection of Birds UK, Principal Research Scientist)*

The 2012 *International Single Species Action Plan for the Conservation of the Sociable Lapwing* describes the species as monotypic, with no scientific evidence for distinct sub-populations. It notes, however, that there are two distinct wintering areas, and that birds wintering in north-east Africa and on the Indian subcontinent have been assumed to originate from different populations in the west and east of the breeding range respectively, assuming that a migratory divide exists.

The RSPB and ACBK (BirdLife Partners in the UK and Kazakhstan respectively) have been fitting small numbers of satellite tags to birds since 2007, and to date there has been no correlation between the breeding area and which route an individual bird takes on its migration. As the Sociable Lapwing is not faithful to its breeding grounds, choosing an area opportunistically dependent on habitat quality, it is unlikely that the breeding populations are distinct.

As an example, the tagged birds from 2015 can be seen in *Image 1*, with no clear origin evident for a particular migration path. This year's data have also shown that the migration strategies may be more variable than previously thought, given the unexpected direct route across the Caspian Sea taken by three of the birds (usually only seen on autumn migration), and the unexplained change of direction of the bird called Vyan (seeming to start on the eastern route, but then going north-west and finally across to Azerbaijan).



*Image 1: tagged birds to mid-October 2015*



Since 2010, several Sociable Lapwings fitted with satellite transmitters have staged at an area known as Tallymerjen (or Talimarzhan), which straddles the border between south-eastern Turkmenistan and south-western Uzbekistan (the southern location of Tesfaye and Maysa in *Image 1*). The birds tracked along this migration route stopped here for prolonged periods, suggesting that it might be an important staging site for birds *en route* to wintering grounds in India and Pakistan.

In September and October 2015, there were coordinated counts on either side of the border to assess for the first time the number of birds using the site, their habitat use and diet and the threats they may face. Maximum counts of 4,225 in Uzbekistan and 3,675 in Turkmenistan represent the highest numbers of the species recorded anywhere since the nineteenth century. Movements of birds between the two countries were hard to quantify because of the restricted border zone, but the total number of birds using the area was probably between 6,000 and 8,000. This may be all of the birds on this flyway, and perhaps a third of its global population.

There appear to be no taxonomic differences between birds using the western and eastern flyways, and no evidence yet to determine whether the choice of route/wintering area is coincidental or genetic.

**As observations suggest that the species is panmictic, there is no reason to continue the assumption that the Sociable Lapwings using the western flyway are a distinct population from those using the eastern route.**

## PROFORMA ON PROPOSAL TO CHANGE POPULATION DELINEATIONS

### Name of population:

*Vanellus leucurus* (White-tailed Lapwing)

- SW Asia/SW Asia & North-east Africa

- Central Asian Republics/South Asia

### Current status on AEWA Table 1:

SW Asia/SW Asia & North-east Africa: Category 2 of Column A

Central Asian Republics/South Asia: Category 1 of Column B

### What is the issue?

So far, all five editions of the Waterbird Population Estimates and the Wader Atlas have recognised two populations of White-tailed Lapwing on the basis of separate wintering areas following Perennou et al. 1994 (Figure 3):

1. a population wintering commonly in southern Iraq and southern Iran, in smaller numbers in North-east Africa, and sparingly in the Arabian Peninsula;
2. a population wintering mainly in Pakistan and north-western India

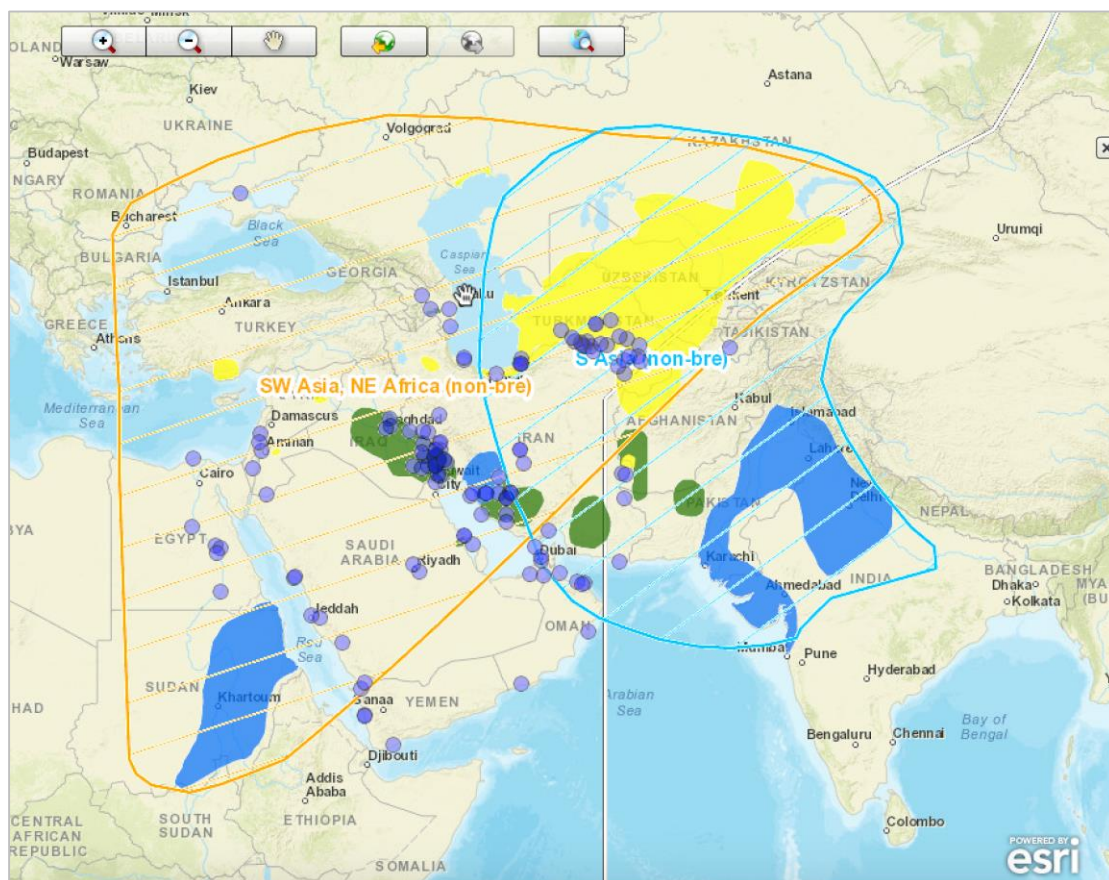


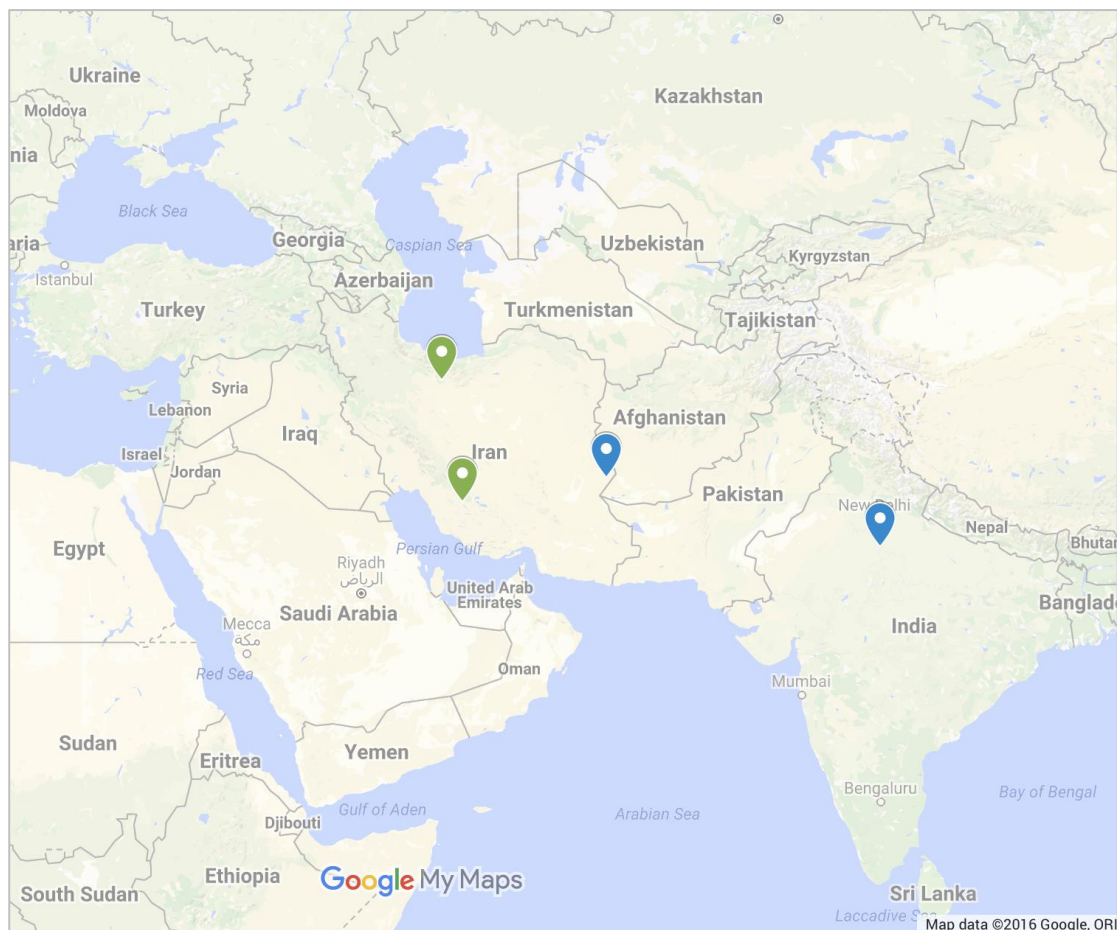
Figure 3. Range, population boundaries and occurrence of White-tailed Lapwing in the IWC. Yellow indicates breeding, blue wintering and green resident ranges, the blue dots represent sites where the species was observed during the mid-winter counts (Source: CSN Tool)

However, this delineation is problematic in the light of the distribution range and the observations of wintering birds. This species has a practically continuous wintering range, but the current population delineation (1) leaves out the small but increasing ‘population’ in Arabia, (2) divides this ‘population’ arbitrarily from other ones in Iran and (3) divides arbitrarily the populations both in north and south Iran. Furthermore, the current delineation does not provide any guidance how to allocate the Central Asian breeding population. The latter renders breeding bird estimates unusable to estimate population size although population estimates based on breeding surveys would probably produce more useable estimates than winter counts for a species that is rather dispersed in both seasons.

**Proposal:** Considering that practically there is no evidence for the existence of separate wintering populations, the arbitrary allocation of resident ‘populations’ to different biogeographic units and the impossibility to produce population estimates for this dispersed species based on winter counts, it is proposed to define the population based on the breeding ground. In the absence of any evidence of demographically distinct units, it is suggested to treat the species having one single population until further evidence to contrary emerges.

### What is the evidence supporting the proposal?

Efforts were made to locate ring recovery data. The Russian Ringing Centre has confirmed that they have no recovery data for this species. The Ornithology Unit of the Department of Environment of Iran has kindly shared three recovery data (see Figure 4).



*Figure 4. Known ring recoveries. Blue markers represent two birds ringed on 17/12/1970 and 19/12/1971 in Bharatpur, India, and recovered on 10/09/1971 and 16/02/1978 at Hamoun Lake (Seistan Basin), Iran, respectively. The green markers represent the recovery of a bird marked near to Tehran, Iran on 23/07/1977 (i.e. post-breeding season) and recovered near to Shiraz, Iran on 04/04/1980. (Source: Ornithology Unit of the Department of Environment of Iran)*

The proposal was posted for comments both to the AEWA Technical Committee and to the Wader Study Group. No comments were received.

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

Currently both populations have best guess population estimates:

- South-west Asia & North-east Africa (non-breeding): B (10,000-25,000), 1%: 250
- South Asia (non-breeding): B/C (10,000-100,000), 1%: 1,000.

Until better estimates are obtained, a provisional estimate for the size of the combined population could be 25,000-100,000 individuals. This would result in using a 1% threshold of 1,000 individuals for the whole population and the merged population shall be listed in Category 1 of Column B of Table 1.

## PROFORMA ON PROPOSAL TO CHANGE POPULATION DELINEATIONS

**Name of population:**

*Numenius phaeopus rogachevae* (Whimbrel)

**Current status on AEWA Table 1:**

Not listed

**What is the issue?**

This new subspecies of Whimbrel was described by Tomkovich (2008) from eastern Evenkia, Central Siberia and it is recognised by AEWA's taxonomic reference (Van Gills et al. 2016).

**Proposal:** Based on the fact that the known breeding area of the subspecies is within the Agreement Area and applying the precautionary principle concerning the staging and wintering areas, it is recommended to add this subspecies to Table 1 of the AEWA Action Plan.

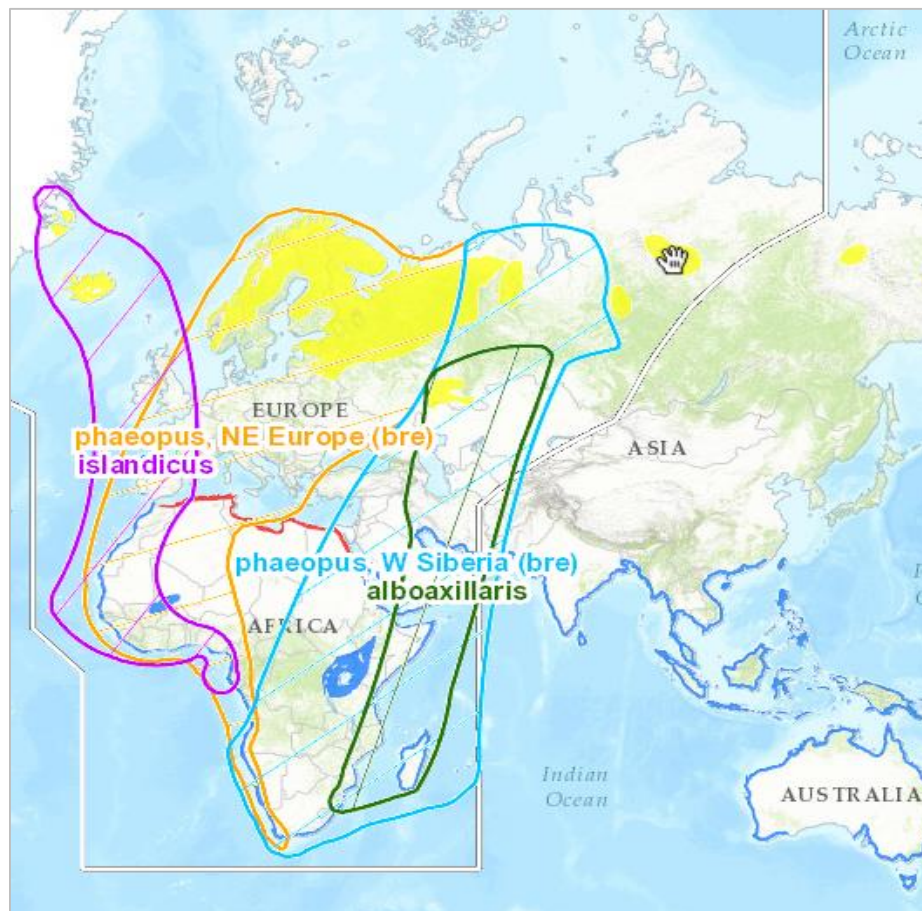


Figure 5. Breeding area of *Numenius phaeopus rogachevae* (indicated by the hand) is clearly located within the Agreement Area.

**What is the evidence supporting the proposal?**

The holotype (N° R-94691, Fig. 3) was collected in July 23, 1966 by B.N. Andreyev near the source of the Vilyui River, a tributary of the Lena River (65°45'N, 105°00'E, see Figure 1).

Although the migration routes and wintering grounds of the new subspecies are not known, its breeding area is clearly within the Agreement Area and there are some not yet published observations that indicate that some of its wintering grounds might be also in the Agreement Area.

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

None. Considering that both population size and trend are unknown, the proposed provisional status is Category 1 of Column C.

**References**

- Tomkovich, P. S. (2008). A new subspecies of the Whimbrel (*Numenius phaeopus*) from central Siberia. *ZOOLOGICHESKY ZHURNAL*, 87(9), 1092-1099.
- Van Gils, J., Wiersma, P. & Kirwan, G.M. (2016). Whimbrel (*Numenius phaeopus*). In: del Hoyo, J., Elliott, A., Sargatal, J., Christie, D.A. & de Juana, E. (eds.). *Handbook of the Birds of the World Alive*. Lynx Edicions, Barcelona. (retrieved from <http://www.hbw.com/node/53894> on 24 May 2016).



## PROFORMA ON PROPOSAL TO CHANGE POPULATION DELINEATIONS

<b>Name of species and population(s):</b>
---

Common Murre <i>Uria aalge</i> and <i>U. a. albionis</i>
--

### Current categorisation on AEWA Table 1:

*Uria aalge* = Column B2c

*U. aalge albionis* = Column C1

*U. aalge hyperborea* = Column C1

### What is the issue?

1. The population of *U. a. aalge* is currently considered as a single population across the whole of the northern Atlantic. However, it should comprise separate NE & NW Atlantic populations as there is no evidence of any trans-Atlantic interchanges.
2. The correct limits to the range of the sub-species *aalge* and *albionis*.

**Proposal:** Redefine the spatial extent of the AEWA Table 1 listed populations as follows:

#### *Uria aalge*

~~E North America, Greenland,~~ Iceland, Faeroes, Scotland, S Norway, Baltic

*Uria aalge albionis* - no change

### What is the evidence related to the proposal?

Two races of Common Murres occur in the NE Atlantic: *Uria aalge* and *U. aalge albionis*, with *U. a. hyperborea* occurring in eastern arctic waters.

#### 1. Extent of *Uria aalge*

Lyngs (2003) states “ ... birds of W Palearctic origin winter off Iceland eastwards to the E Atlantic coasts and no others have been recovered in Greenland or Canada despite large numbers being ringed... Canadian populations winter off Newfoundland, Nova Scotia and New England...”

del Hoyo *et al.* (1996) state “ ... no trans-Atlantic migrations known...” On this basis it seems valid to consider *aalge* breeding in the NW & NE Atlantic as two separate populations.

Balmer *et al.* (2013) report on 6,000 recoveries of Guillemots ringed in Britain and Ireland. None were from the western Atlantic, nor were there any recoveries of birds ringed in North American colonies in Britain and Ireland.

However, AEWA’s *Conservation Status Review* 6 presents a single estimate for *U. a. aalge* related to “E North America, Greenland, Iceland, Faeroes, Scotland, S Norway, Baltic” sourced for the period 1997-2014.

The species is not included in *Waterbird Population Estimates* 5.

There seems no basis to treat NW & NE Atlantic *aalge* as comprising as single population as Resolution 4.11 does, given the lack of evidence on any trans-Atlantic movements (especially notable given the large number of ringed birds on both sides of the Atlantic).

## 2. Boundaries between *Uria aalge aalge* and *albionis*

A number of published sources delineate the two races differently especially in respect of the different status of Irish and UK breeding birds. Detailed review for the third review of the UK's SPA network (Stroud *et al.* 2016) suggest that the most robust assessment of population boundaries in Ireland and Britain is that of Harris & Wanless (2007):

- Murres in England (other than Northumberland), Ireland and SW Scotland north to, and including Ailsa Crag, are *U. a. albionis* (Table 1).
- Murres elsewhere in Scotland and in Northumberland are *U. a. aalge*.
- Races are separable but there is a degree of clinal change, so at their interface, the split between races is not absolute.

Table 1. Country allocation of Common Murre races following Harris & Wanless (2007) is as follows:

	<i>aalge</i>	<i>albionis</i>
UK: Scotland (N, W & E)	<i>aalge</i>	
UK: Scotland (S)		<i>albionis</i>
UK: England (Northumbria)	<i>aalge</i>	
UK: England (minus Northumbria)		<i>albionis</i>
UK: Wales		<i>albionis</i>
UK: Northern Ireland		<i>albionis</i>
Ireland		<i>albionis</i>
France	<i>aalge</i>	
Germany	<i>aalge</i>	
Spain	<i>aalge</i>	
Portugal	<i>aalge</i>	
Sweden	<i>aalge</i>	
Denmark	<i>aalge</i>	
Finland	<i>aalge</i>	
Faeroes	<i>aalge</i>	
Iceland	<i>aalge</i>	
Norway	<i>aalge</i>	
Bear Island	<i>aalge</i>	
Jan Mayen	<i>aalge</i>	
Spitzbergen	<i>aalge</i>	
Russia	<i>aalge</i>	

### **What are the implications of the proposal including any changes in categorisation on AEWA Table 1?**

No change to existing populations are proposed, but the removal of western Atlantic breeding-birds (from eastern North America and Greenland) from the population of *U. a. aalge* will reduce the size of the reported population and may increase its status from Column B 2c to a higher categorisation.

This will also have as a consequence, that the western Atlantic breeding-birds will no longer be covered under the Agreement. This treatment is justified as the majority of the western Atlantic breeding-birds (i.e. in New Foundland and Labrador) are outside of the Agreement Area and as the small Greenland population (1000-3000 individuals) is not considered to be migratory.

### **Is the species/population covered by an AEWA Action/Management Plan or other relevant instrument?**

No.

### **TC comments:**

The Technical Committee have approved the basis for the proposed change.

### **References**

- Balmer, D.E., Gillings, S., Caffrey, B.J., Swann, R.L., Downie, I.S. & Fuller, R.J. 2013. *Bird Atlas 2007-11: the breeding and wintering birds of Britain and Ireland*. BTO Books, Thetford. 720 pp.
- del Hoyo, J., Elliot, A. & Sagatal, J. eds. 1996. *Handbook of the Birds of the World*. Vol. 3. Hoatzin to Auks. Lynx Edicions, Barcelona.
- Lyngs, P. 2003. Migration and winter ranges of birds in Greenland. An analysis of ringing recoveries. *Dansk Ornitologisk Forenings Tidsskrift* 97(1): 1-167.
- Harris, M. & Wanless, S. 2007. Common Guillemot *Uria aalge*. Pp. 845-849. In: *The Birds of Scotland*. eds. Forrester, R.W. & Andrews, I.J. Scottish Ornithologists' Club, Aberlady.
- Stroud, D.A., Bainbridge, I.P., Maddock, A., Anthony, S., Baker, H., Buxton, N., Chambers, D., Enlander, I., Hearn, R.D., Jennings, K.R., Mavor, R., Whitehead, S. & Wilson, J.D. - on behalf of the UK SPA & Ramsar Scientific Working Group (eds.) 2016. *The status of UK SPAs in the 2000s: the third network review*. 1,108 pp. JNCC, Peterborough. <http://jncc.defra.gov.uk/page-7309>
- Wetlands International 2015. *Report on the Conservation Status of Migratory Waterbirds in the Agreement Area*. Sixth Edition. Wetlands International. Available at: [http://www.unep-aewa.org/sites/default/files/document/mop6\\_14\\_csr6\\_including%20annexes.pdf](http://www.unep-aewa.org/sites/default/files/document/mop6_14_csr6_including%20annexes.pdf)
- Wetlands International 2014. *Waterbird Population Estimates*. Fifth edition. Available at [wpe.wetlands.org](http://wpe.wetlands.org)