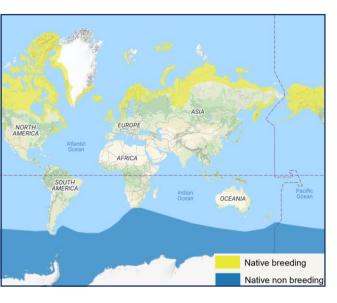
# Arctic tern (Sterna paradisaea)

#### Anatomy

Male and female arctic terns have a white head, pale grey underparts, and blue-grey wings. A black cap covers the top of the head, the nape and the neck. The bill and legs are bright red. The wings slender and very long, with a similar tail the common swallow. This leads to the arctic tern being called "sea swallow" in some languages



# Distribution



The arctic tern breeds all over the arctic coast, on all coasts of Greenland except the north coast, northern Europe and Siberia, Svalbard, Iceland, Jan Mayen, and across northern America including the Canadian Arctic islands.

# Why this species?

- Furthest migrating species on Earth, some migrating from northern Greenland to the southern ocean on a route that can reach 71,000 km
- Almost everywhere in the arctic
- Emblematic species, easy to observe

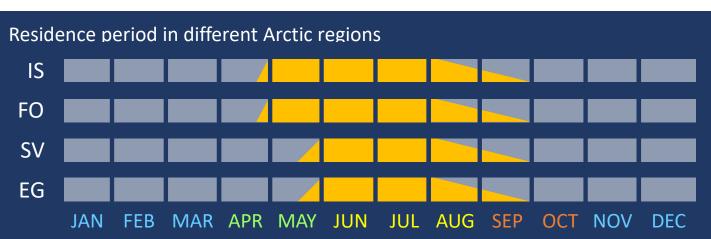
## Fun facts

A 2010 study estimated that some arctic terns travel around 2,4 million kilometers in their 30-year lifespan. This is approximately the same length as three round-trips to the moon. Arctic terns that breed in Greenland zigzag along their route, from Antarctica, to Africa, to South America, and finally to the Arctic.

Arctic terns are highly protective of their nest and might chase other animals and people away by screaming, diving at them and hitting them with their sharp beaks, or even defecating on them. This may be beneficial for other birds nesting nearby. Estimated 3 million adults (2017) but trend unknown



Population



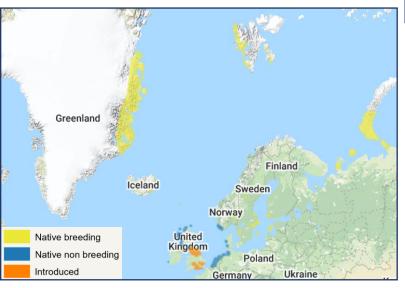


## **Barnacle goose** (Branta leucopsis)

#### Anatomy

The barnacle goose is medium sized with distinct white underparts, grey wings, black neck and white face. Its bill and legs are black.

It has a call that is similar to a dog barking in the distance.



#### Why this species?

- Representative for the Arctic, where it is very migratory
- Breeding in Iceland, Greenland, Norway, and Svalbard
- Beautiful and friendly bird, easy to identify
- This species is doing very well compared to other goose species. Why is that?



#### Distribution

The barnacle goose is originally a high arctic breeder, breeding in northeast Greenland, Svalbard and Siberia.

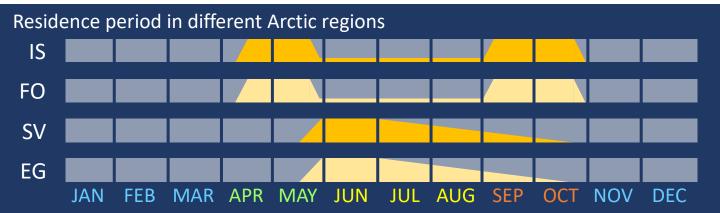
Since the 1980's, new breeding colonies have been established in Baltic sea (Sweden, Denmark, Finland, Estonia) and in the North sea (Netherlands, Belgium, Germany). Since 1998, this goose has also been breeding in the south of Iceland. High arctic breeding pairs winter in the UK, the Baltic sea, and the North sea.



#### Fun facts

In Icelandic folklore, it was said that the barnacle goose survived the winter as a barnacle because of the shape of its beak, reminiscent of the mollusk

Barnacle geese nest on high cliffs to escape arctic fox predation. However, there is no food on the cliffs. Thus, as soon as the gooselings are born, they must risk death and jump from the cliffs, gliding all the way down, to find food in the valley with their parents



# **Brent goose** (Branta bernicla)

#### Anatomy

Small goose with a black head and breast, black neck with a white streak. Bill and legs are black. The under-tail is white with dark brown wings. Pale flanks streaked with brown. The body can be darker or paler depending on the form (pale-bellied, darkbellied or black).



#### Distribution



# Why this species?

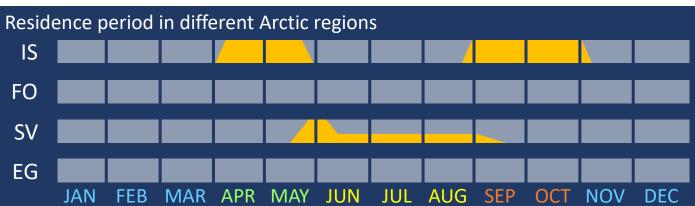
- The brent goose is the most northernly breeder out of all geese.
- Beautiful and easy to observe
- Distinctive and pleasant "snoring" call

## Fun facts

It is the smallest goose to reproduce in Greenland, Siberia, Iceland or Svalbard. It has the smallest tail of any geese.

In the brent goose's skull, there is a gland that takes salt out of their blood and secretes it through their nostrils. This allows them to eat salty marsh plants and seaweed.

The migration of the Canadian brent is the longest of any north Atlantic goose.



There are three different populations of the brent goose, all high-arctic breeders, which can be identified by slightly different colorings. The pale-bellied brent breeds in Greenland, NE Canada, Svalbard and Franz Josef Land. It winters in the North sea and the US east coast,

passing through Iceland. The dark-bellied brent breeds central and W Siberia, and winters in NW Europe.

The black brent breeds in NW Canada, Alaska and E Siberia and winters on the US west coast and in Japan.



# **Dunlin** (Calidris alpina)

#### Anatomy

Small but beautiful wader, yellow-orange to brown speckled with black back and crown. Underparts are much lighter, beige to white with some black speckles on the breast. The long bill and legs are black. In summer, the belly is black. In winter, the belly is white, and the back and crown become a duller grey-brown.



# Native resident Native breeding Native non breeding Passage Resident Native non breeding Resident Resi

## Why this species?

- Beautiful and colorful wader
- Circumpolar
- Population decreasing
- The black belly is unique and makes it easy to identify in summer

#### The dunlin breeds on the western and southern coast of Greenland, Iceland, Svalbard, Scandinavia, the UK, some parts of northern Europe, Siberia, western and northern Alaska, and northern mainland Canada. In the winter, the different populations move south to different locations depending on their breeding areas.

#### Population

Distribution

Estimated 853,000-1,120,000 mature individuals (2015) but decreasing



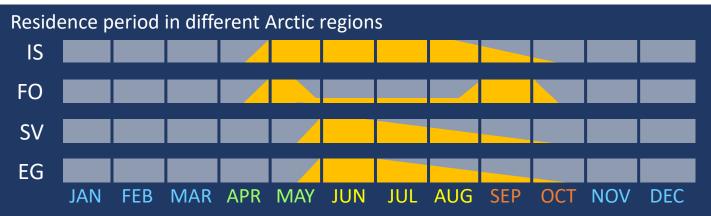
# Fun facts

Female dunlins are usually larger than males and have proportionally longer bills than them.

Usually, it is the male dunlin that takes care of the juveniles. The female leaves the breeding area, letting him take care of the chicks.

The dunlin is one of the most sociable sandpipers. Groups of dunlins can reach hundreds of thousands of birds at wintering areas.

It is likely that the dunlin sometimes successfully reproduces with the purple sandpiper, as apparent hybrids have been spotted.



# Common eider (Somateria mollissima)

#### Anatomy

Big duck with greyish legs. The male is distinctive with a white upper body and black lower body, a white cap, greenish head patches, yellow bill, and a white spot on the tail.

The female is brown with streaks and a grey bill.



# Distribution



The Eider duck breeds all around the arctic: in W and E Greenland, N Canada, Alaska, E Siberia and Wrangel Island, the New Siberia Islands, Novaya Zemlya, Franz Josef Land, Svalbard, the Kola peninsula, Norway, Sweden, the UK, the Faroe Islands, and Iceland. In winter, they partially migrate south, away from the sea ice.

## Why this species?

- Economically important for its down feathers, used to make pillows or blankets.
- It is the most northerly breeding waterfowl with the pintail duck.
- It is big, beautiful, and easy to identify

#### Population

Estimated 3,300,000– 4,000,000 (2020) but population trend unknown



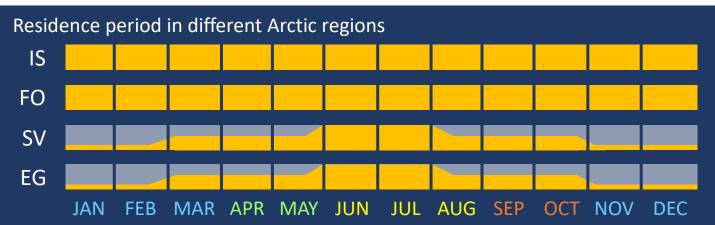
#### Fun facts

Eiders are the most maritime waterfowl, living entirely at sea except for breeding birds.

The common eider feeds mostly on mollusks. It eats mussels whole, while it removes the legs and claws of crabs before swallowing body and shell.

Common eiders were the subjects of the first bird protection laws, written in England by Saint Cuthbert in 676.

The scientific name of the eider duck comes from both Greek and Latin, translating to "softest body down"

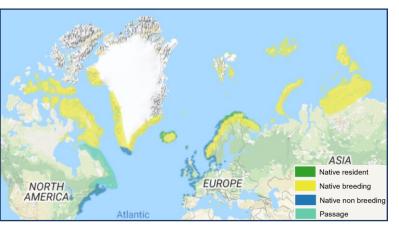




# **Purple sandpiper** (Calidris maritima)

#### Anatomy

Stocky wader, with relatively small legs and bill compared to other sandpipers. The legs are orange, the bill is yellow with a black tip. It is grey-brown on the upperparts and white speckled with brown on the underparts, the speckles getting less and less dense from breast to rump. In winter, it is greyer. Male and female are similar.



## Why this species?

- Largely migratory over a huge range
- Population decreasing
- Interesting feeding behavior, where it waits for a wave to retreat to look for invertebrates and mollusks in the seaweed and sand. Good at dodging incoming waves.
- Very tame and easy to approach



#### Distribution

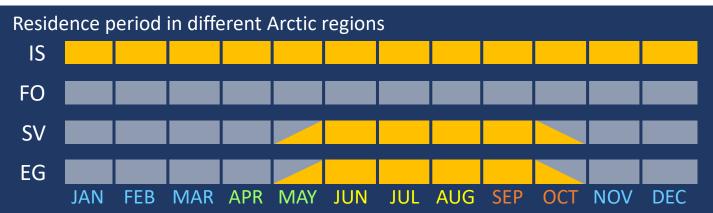
The purple sandpiper breeds in N central Canada, on the W and SE coasts of Greenland, Svalbard, Iceland, Franz Josef Land, Iceland, Norway, the Kola peninsula, Novaya Zemlya, and N central Siberia. It is mostly migratory although some Icelandic and Norwegian birds are resident. Canadian birds winter in E US, Greenland and Svalbard birds in Iceland and Great Britain, and Russian birds in NW Europe.



# Fun facts

The purple sandpiper is an adept of a predator distraction technique called the "rodent-run", which is also used by some other waders. When a predator comes close to the nest, the male, which usually takes care of the chicks, makes itself look like a mouse and runs away from the nest to distract the predator. He does this by extending his wings to look like front legs, fluffing his feathers to look like fur, and scurrying away squeaking in a mouse-like way.

The purple sandpiper has the most northernly winter range of any water bird.

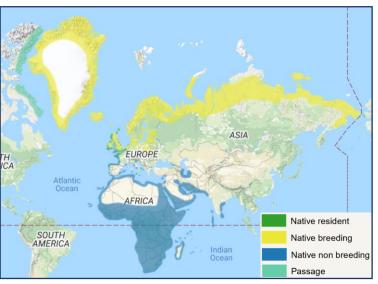




## **Common ringed plover** (*Charadrius hiaticula*)

#### Anatomy

Compact bird with long legs relative to its size. The legs are orange, the bill is short, orange with a black tip. The belly and undertail are white, the wings brown, darker at the tip. The crown and upper nape are brown. A black collar, wider at the chest, circles the lower neck, with a white collar above it circling the throat and nape. A black collar circles the eye and head down to the bill, with a white spot above the bill and a white crescent above the black ear cover.



# Fun facts

Males and females incubate the eggs, with males incubating more often at night and females during the day. If a predator threatens its nest, the ringed plover. realistically feigns a broken wings to distract the intruder and lead it far from the nest.

To stir-up its prey, the ringed plover sometimes uses the "foot trembling" technique. He stomps his foot very rapidly on the sand, a behavior which sometimes looks like a strange dance step.



# Distribution

The ringed plover breeds almost all-around Greenland, in Iceland, Scandinavia, the UK, Siberia, and NE Canada. In the winter, ringed plovers from Greenland, Scandinavia and Iceland migrate to SW Europe and Africa, while those from Siberia migrate to the Middle east or India.

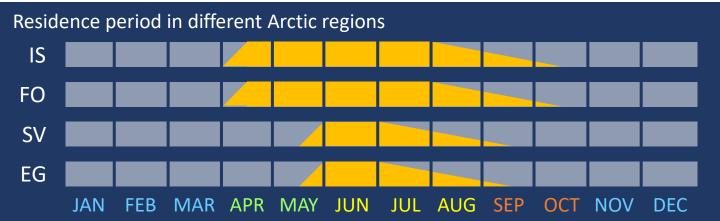
# Why this species?

- Interesting, lesser known bird
- Beautiful face and body patterns
- Easy to identify feeding behavior, looking out and running for its prey of larvae or mollusks on the beach
- Its population is decreasing

# Population

Estimated 415,000-1,400,000 (2015) but decreasing







#### **Ruddy turnstone** (Arenaria interpres)

#### Anatomy

Small, sturdy wader. The breeding male has a whitishbeige head with black streaks, and a black curved line on the eye that is connected to a black collar. This black pattern is connected to a black breast and black flank patch. The wings are chestnut brown with black scale patterns. The underparts are white. The bill is short and black, the legs orange. Breeding females and nonbreeding birds are similar with duller or less defined patterns.



#### Distribution



The ruddy turnstone has a circumpolar breeding distribution, breeding on the entire northern Eurasian coast, the Baltic, southern Siberian islands, western and northern Alaska, northern Canada, Greenland, and Svalbard. Eurasian ruddy turnstones migrate in the winter to western Europe, Africa, the middle East, southern Asia, and Australasia. American ruddy turnstones winter in the US, central America, and northern South America.



## Why this species?

- Beautifully patterned wader, easy to identify
- Interesting wintering range, huge from very northern to very southern.
- On every continent except the Antarctic

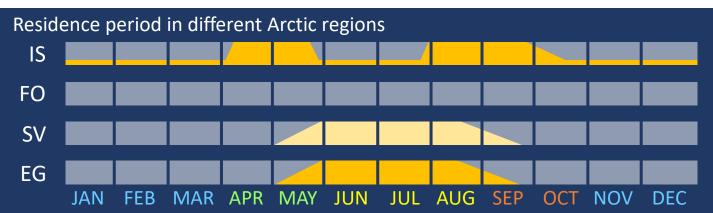
Estimated 300,000-500,000 mature individuals but decreasing



The ruddy turnstone is named for its behavior: it is often seen turning stones over, looking for crustaceans, mollusks, and insects. It can also use its bill like a shovel, digging holes in the sand.

Ruddy turnstones are monogamous, and usually stay with the same mate for multiple breeding seasons. They are also very territorial during this period and may even attack their mate at the beginning of the breeding season.

During their migration, ruddy turnstone may travel more than 700 kilometers in one day.



# **Snow bunting** (Pletrophenax nivalis)

#### Anatomy

Passerine bird with a black bill and grey legs. The breeding male is white with black and white wings. The breeding female is white, with brown and white wings and a speckled brown head. Outside of breeding season, males and females are identical, with the black or brown on their wings turning brownish-grey, and dark yellow speckling on the head and breast. The bill becomes brown.



distribution, breeding along the whole arctic coast in Greenland, Svalbard, Norway, Iceland, Siberia, Canada and Alaska. The Icelandic, Aleutians and coastal Norwegian populations

winter, with the Scandinavian and Greenland

Europe and S Russia, and the N American birds

moving to S Canada and N United States.

#### Distribution



# Why this species?

- Perfect distribution, can be observed and studied all over the North hemisphere.
- Interesting but sometimes overlooked
- Rather tame bird that can be fed in winter ad observed in towns and gardens

## Population

Estimated 40,000,000 (2004) but decreasing

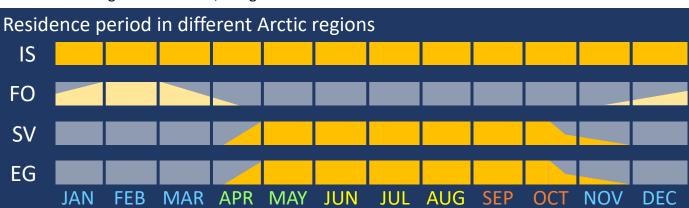


# Fun facts

The snow bunting is the most northernly breeding passerine in the world. It has even been spotted on the North Pole.

It does not need to drink water, getting enough moisture from other sources. This is one of the reasons it can survive extremely low temperatures and harsh winters.

The snow bunting bathes in snow, using it to rub its feathers clean.

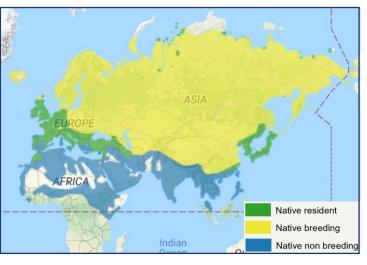




# White wagtail (Motacilla alba)

#### Anatomy

The male white wagtail has grey wings, flanks and back, with a white belly. The tail is black in the middle and white on the edges. The crown, nape, and throat are black. The female looks like the male, with greyer and less distinguishable patterns. Outside of breeding season, females and males are pale grey with a white throat and black spots on the breast and side of the throat.



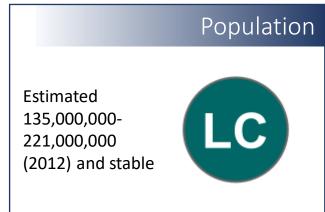
# Why this species?

- Tame bird that can be easily observed and monitored as it is often present in towns and gardens
- Very adaptable bird: it lives in an extreme variety of environments, as it is the most widespread bird in Europe



## Distribution

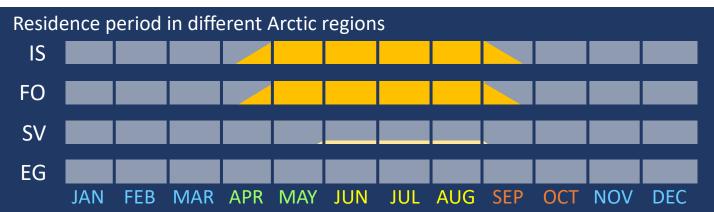
The white wagtail breeds throughout most of Asia and Europe. In the arctic, it is primarily migratory and breeds in Iceland, Scandinavia, Finland, Siberia, and Alaska. Arctic white wagtails migrate to N Africa, the middle east, and Southern Asia for winter.



#### Fun facts

As its name suggests, the white wagtail and other wagtails often "pump" their tail up and down. There are many theories as to why the wagtail wags its tail, such as to communicate with other wagtails or to flush prey out, but nobody knows definitively if any of these theories s right.

The wagtail has different patterns in different areas of the world. Here, we described the wagtail most commonly found in the arctic and western Europe.





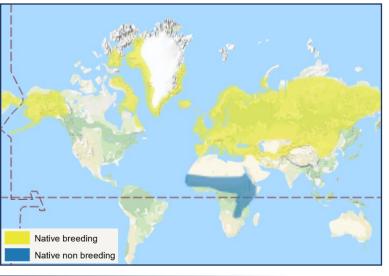
# **Northern wheatear** (<u>Oenanthe oe</u>nanthe)

#### Anatomy

The male has bluish-grey upperparts with black and white wings and paler white to pale orange underparts. Its throat is pale orange with a white forehead and white supercilium. The cheeks are black, and there is a black stripe from the cheek to the beak passing over the eye. The female and non-breeding adults are much plainer and browner but retain a pale orange throat and flanks.



#### Distribution



The northern wheatear has a circumpolar distribution, but it is absent from the central Canadian arctic, Svalbard, the north of Greenland and some parts of northern Siberia. It breeds on both coasts of Greenland, Iceland, Europe, Russia, the north of Asia, Alaska and northeastern Canada. The entire population is migratory and moves to the same area in the winter, in central Africa.

#### Population

# Why this species?

- Entirely migratory and present throughout most of the arctic
- Huge range and large population
- Population decreasing

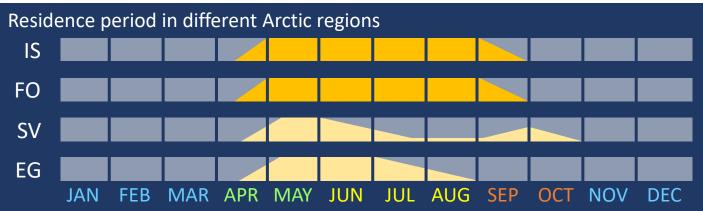
## Fun facts

Estimated 10,000,000-500,000,000 (2010s) but decreasing



The name "Oenanthe oenanthe" comes from the Greek *ainos* "wine" and *anthos* "flower", referring to the fact that wheatears returned to Greece in the spring, as grapes flowered.

In the 18<sup>th</sup> to 19<sup>th</sup> century, wheatears were trapped by shepherds and sold as delicacies in England. Some of the populations of wheatears, in eastern Russia and western Alaska, perform the longest migration of any songbird





#### Anatomy

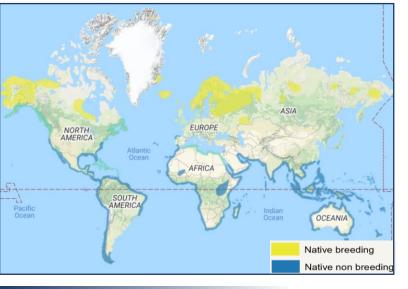
Male and female plumage of breeding and non-breeding adult whimbrels are almost identical. They are fairly large waders, pale grey with heavy brown streaking. The rump is white, as well as the back and upper tail. The legs are grey. Finally, the most recognizable feature of the whimbrel is its dark brown bill, which is long, slender, and curved down.



#### Distribution

Population

The whimbrel breeds in different patches around the arctic: in Iceland, eastern Greenland, Scandinavia, the Faroe Islands, five separate areas in northern Russia, western and northern Alaska, and the eastern US. It is absent from Svalbard, except as a vagrant. The whimbrel is migratory and winter almost all over the coasts of Africa, South America, southern Asia, and Oceania.

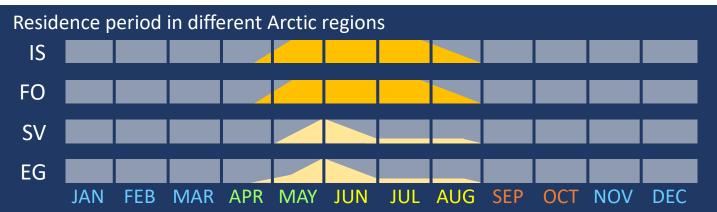


#### Fun facts

The whimbrel has an extremely varied diet. It eats mostly large crabs in the winter, as well as mollusks and small fish. In summer, it eats mostly insects and crowberries.

#### Why this species?

- Beautiful, easy to identify, and large
- Global population decreasing
- Part of the curlew family. Out of nine species of curlews, two are extinct (the eskimo curlew *Numenius tenuirostris* and the slender-billed curlew *Numenius borealis*). Two more are threatened. This shows the importance of monitoring and protecting curlew species.



Between 1,000,000 and 2,300,000 individuals (2015) but decreasing