



Fairfield's Migrating Birds



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Why Migrate?

Bird migration is a regular seasonal movement between breeding and wintering grounds, undertaken by many species of birds.

Migration, which carries high costs in predation and mortality, is driven primarily by availability of food.





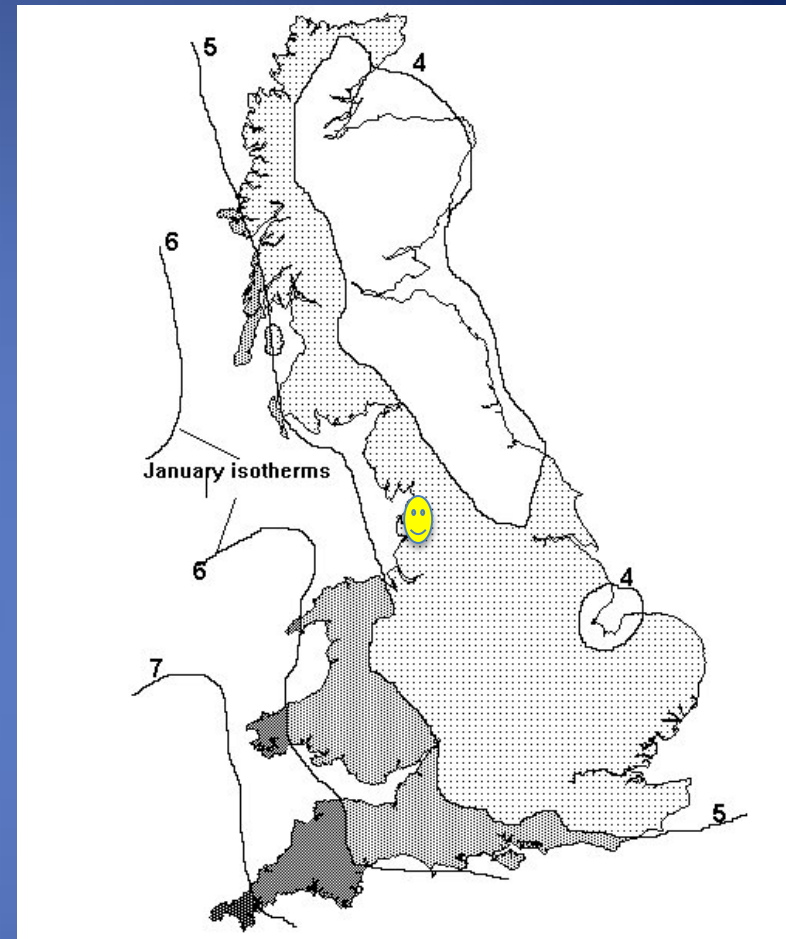
Why Fairfield?

- Warmer western location
- Coastal
- Lowland

Habitats include:-

- Wetland
- Arable
- Woodland/Hedgerows

Our Management for Wildlife



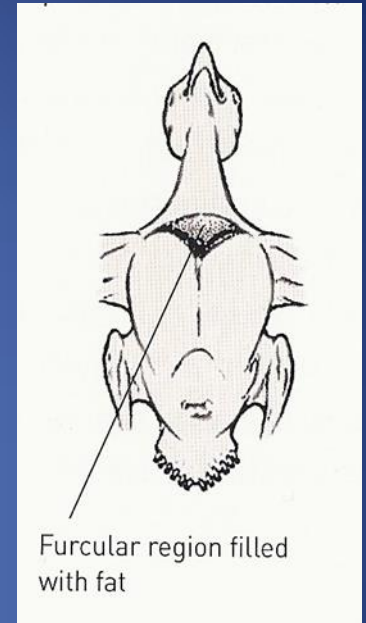
January Isotherm

Fat the Fuel for Migration

Fats are 9 times more efficient fuels than carbohydrates and produce 9 kcal per gram.

Each gram of fat also produces one gram of water for the bird.

Finally, small birds may double or triple their weight, but a large bird like a swan may only add 12% to their weight.



Monitoring Trends in Bird Populations

British birds are assigned to:-

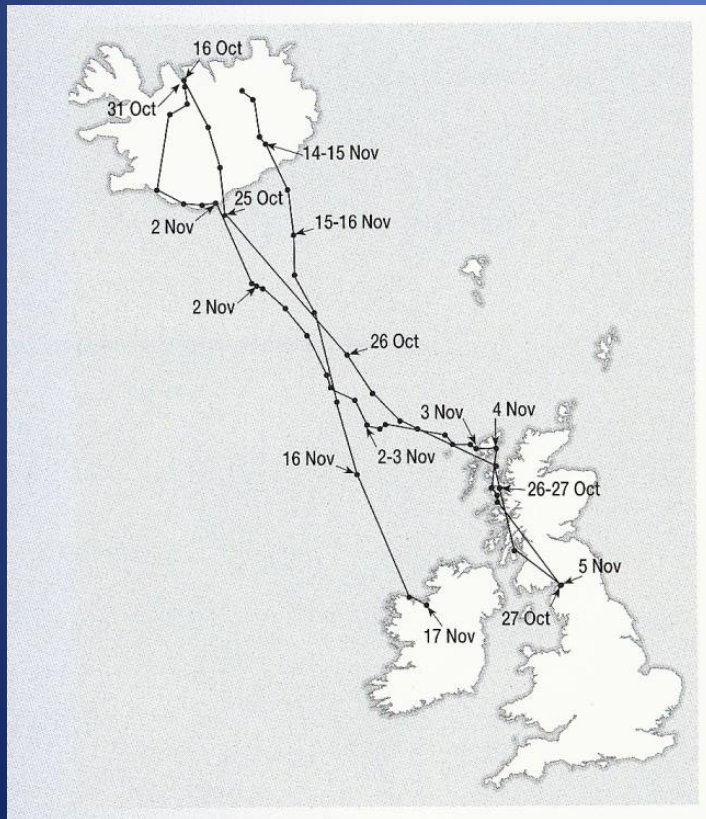
Red, **Amber** or **Green** lists

A criterion used in assigning birds to the **red** list is severe (at least 50%) decline in breeding population or contraction of breeding range over last 25 years.

WINTER MIGRANTS

Whooper Swans

These swans migrate 900-1200 km from Iceland.

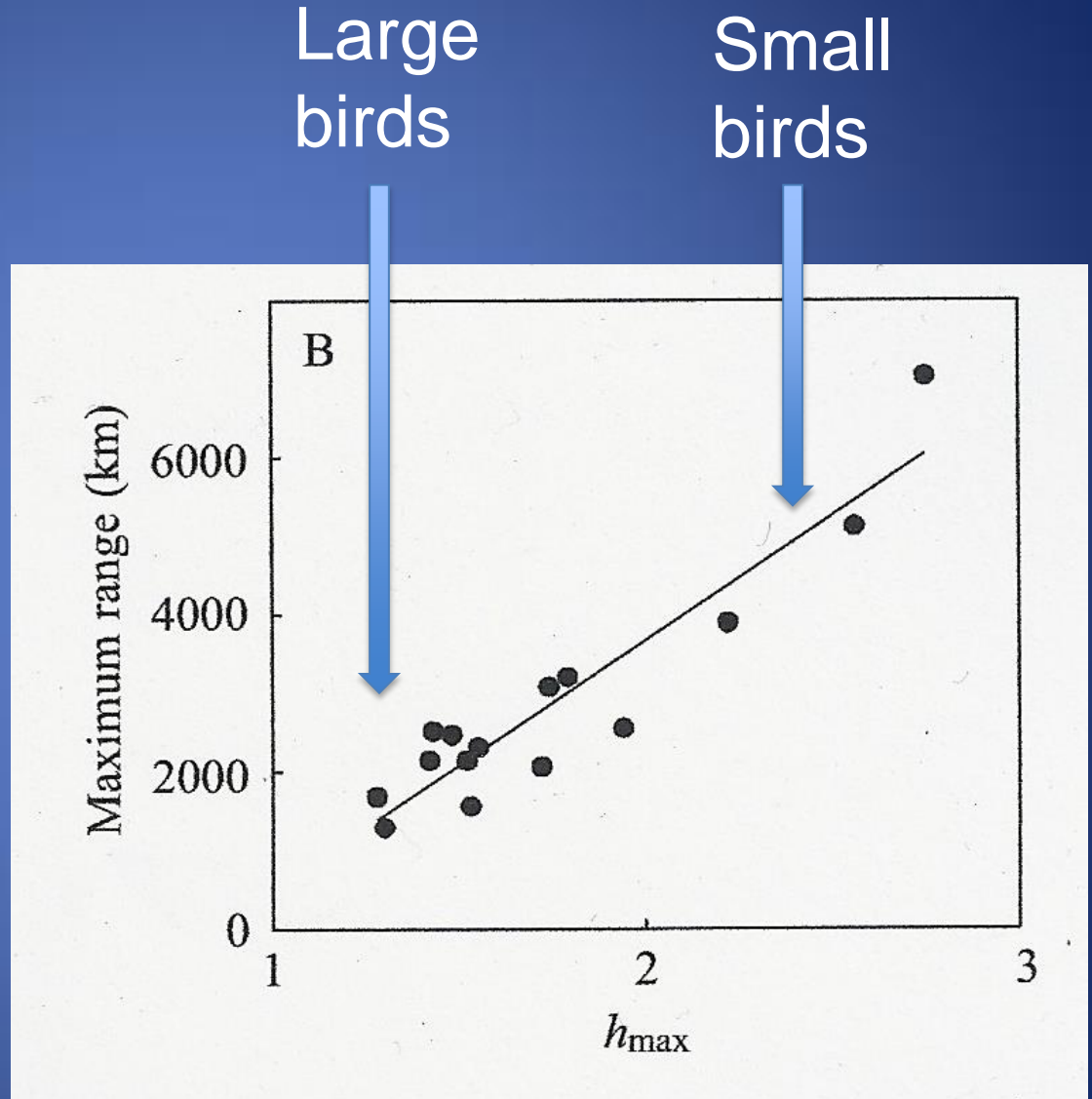


They are our largest migrant (11 kg) and this journey is near the limit of their range. They may be seen on Aldcliffe marsh in winter.

Flight Range

Here we see flight range as a function of how much a bird can bulk up.

This is just like a plane taking on fuel!

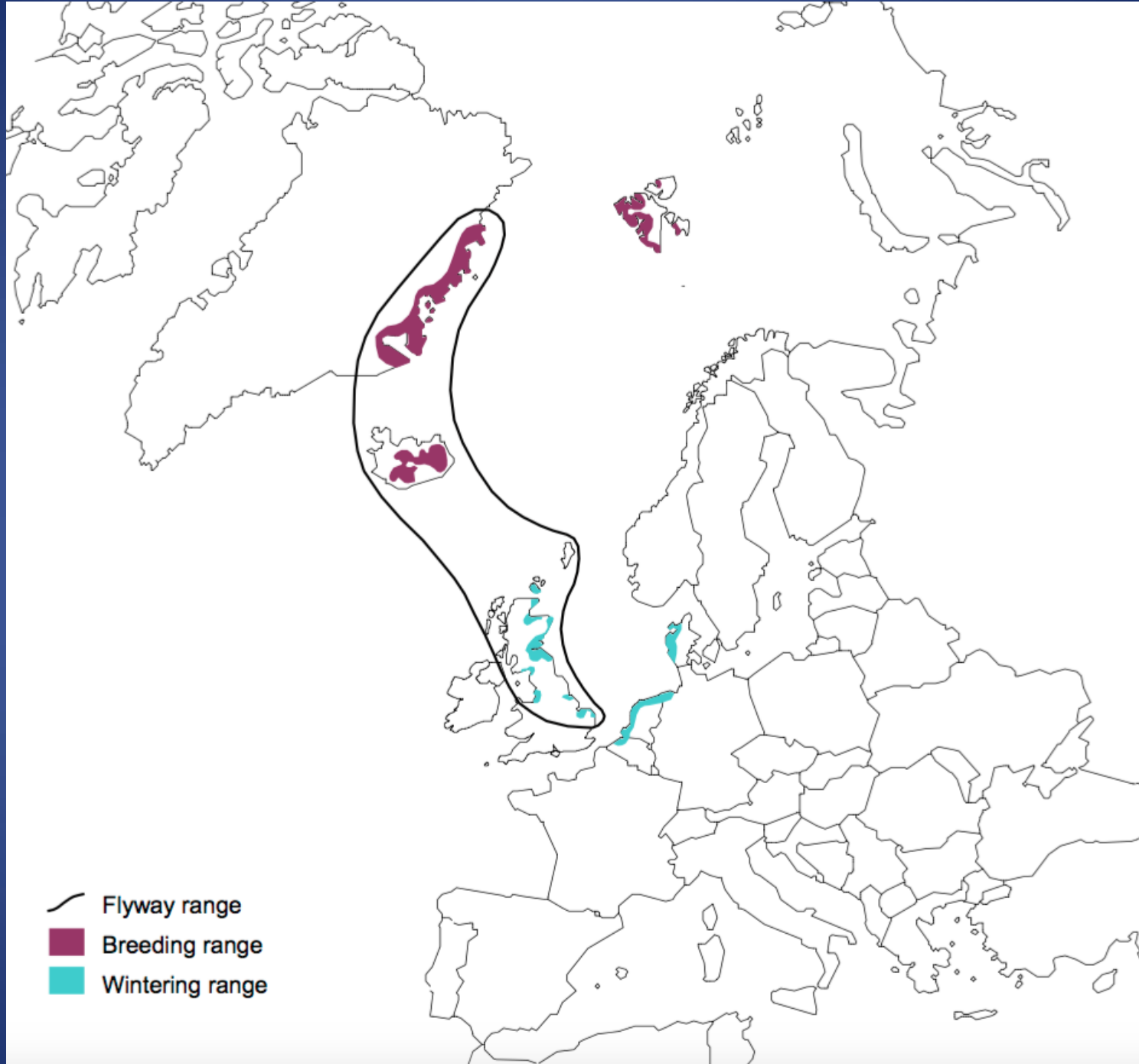





Pink-footed Goose

The pink-footed goose is medium-sized and migrates here from Iceland and Greenland. ~360,000 birds winter in Britain.







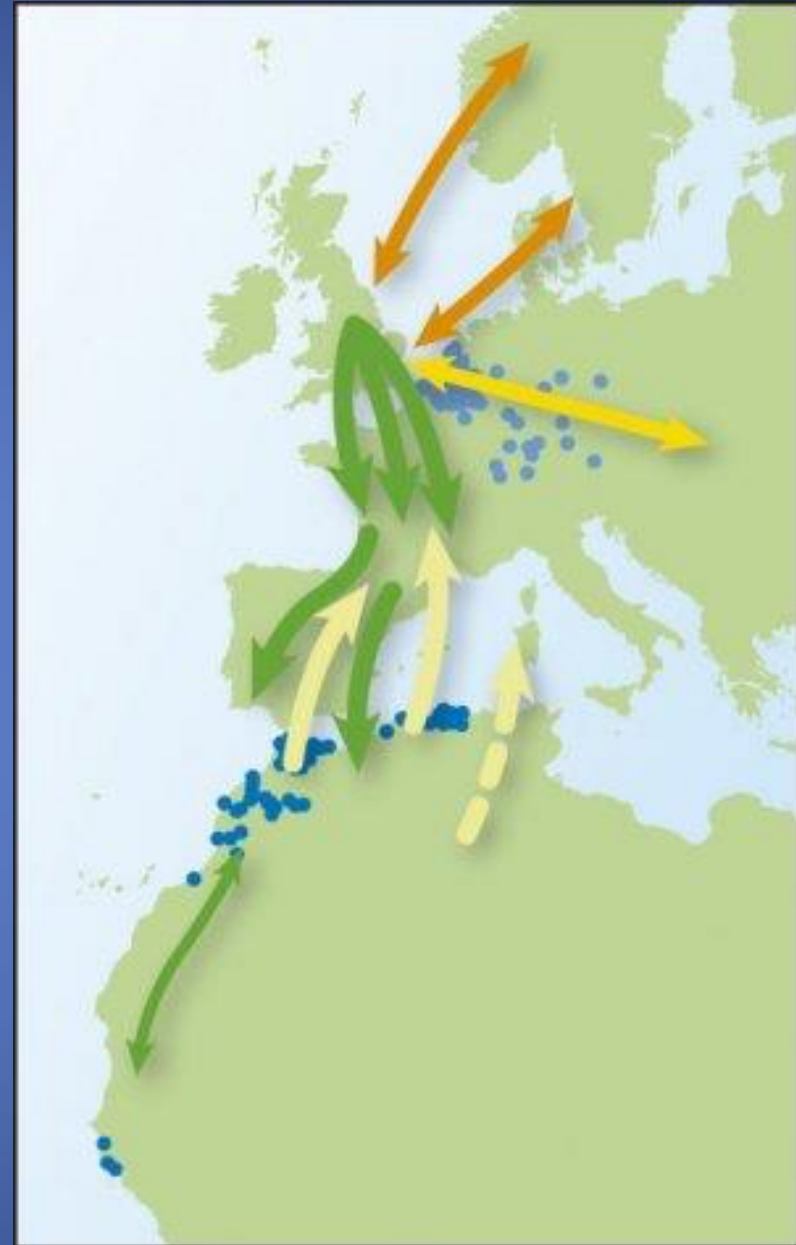
-  Flyway range
-  Breeding range
-  Wintering range

Blackcaps



We generally think of blackcaps as spring visitors, with > 2 million birds arriving in March or April. They are handsome warblers with a beautiful song.

But, let us look at the cohort of winter migrants (yellow arrow).



Blackcaps



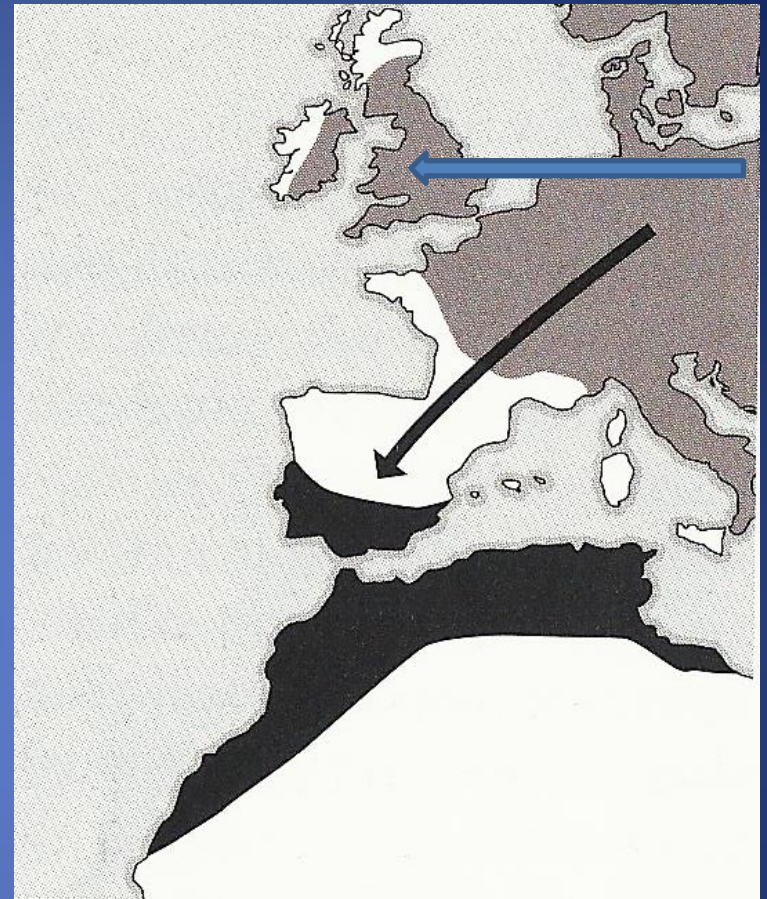
Normally insectivorous, blackcaps switch to a diet of berries prior to migration and gorge themselves, increasing their weight from 20 to 31g.

Blackcaps

In the past, all German blackcaps have migrated SW wards in September towards Spain.

Since the 1960s, some German blackcaps have been migrating to Britain.

These birds depend on our garden feeders, and are now reproductively isolated from those following the traditional route.



Snipe

Breeding - 160,000 birds.

Wintering – 1.1 million birds.

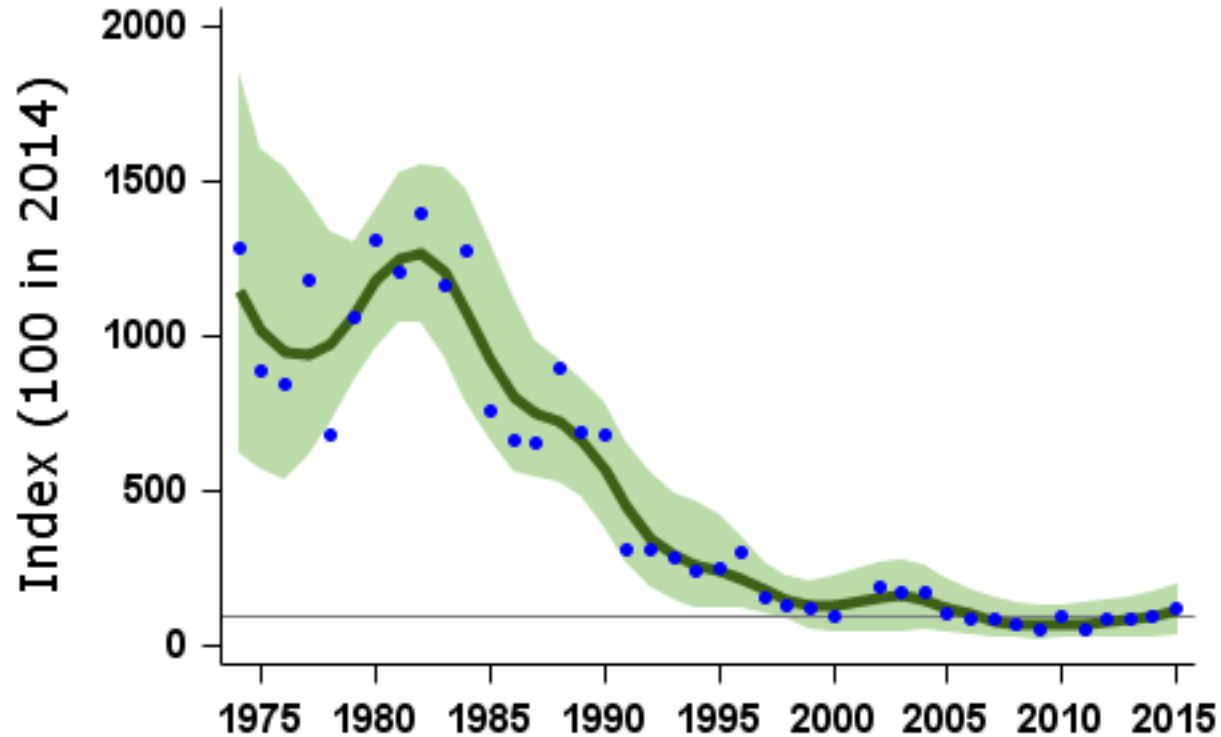
Snipe are medium sized (100g), wading birds with long straight bills.

They have the longest bill relative to body size of any bird in Britain.

They feed on small invertebrates, including worms and insect larvae.

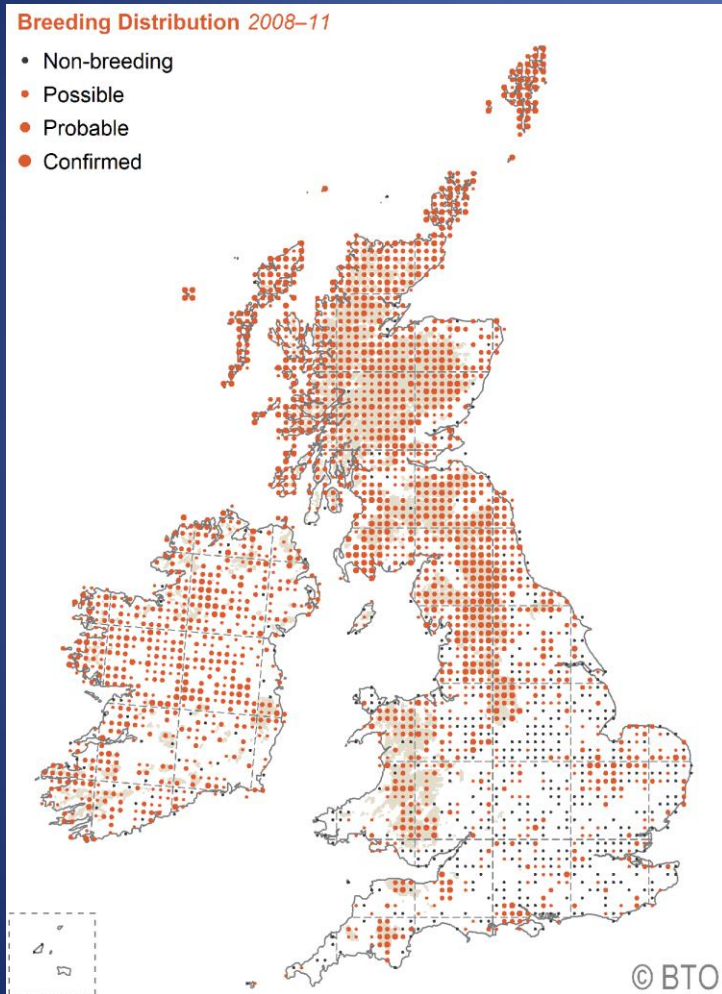


WBS/WBBS 1974-2015 Snipe

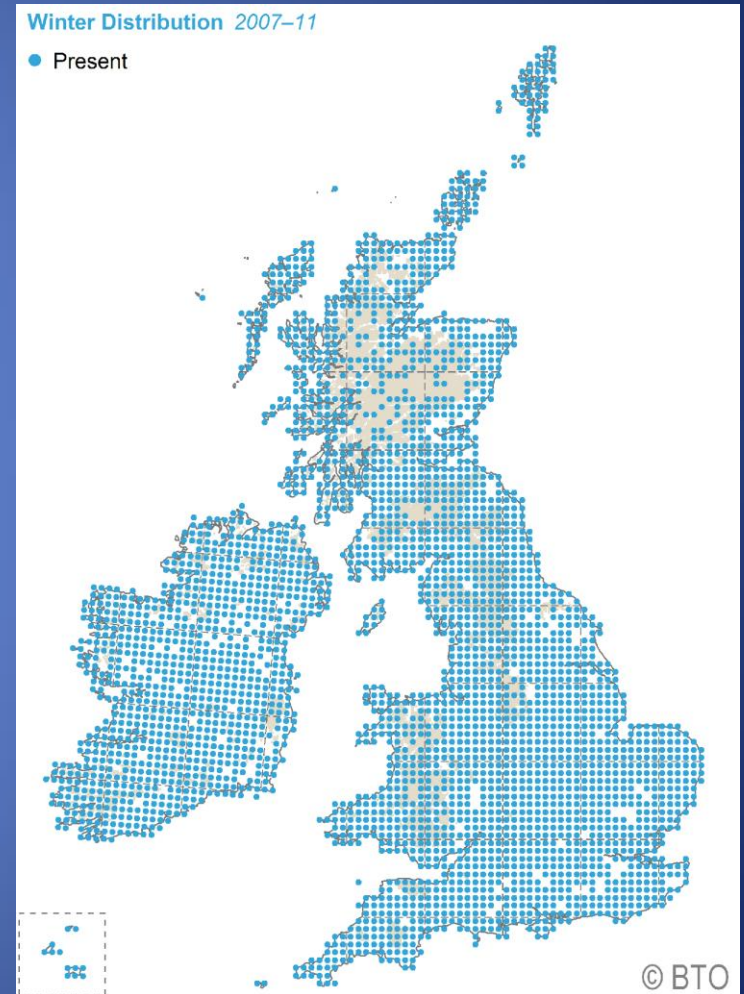


Snipe numbers are a classic example of the impact of land drainage upon farmland since the 1970's.

Snipe Distribution



Breeding

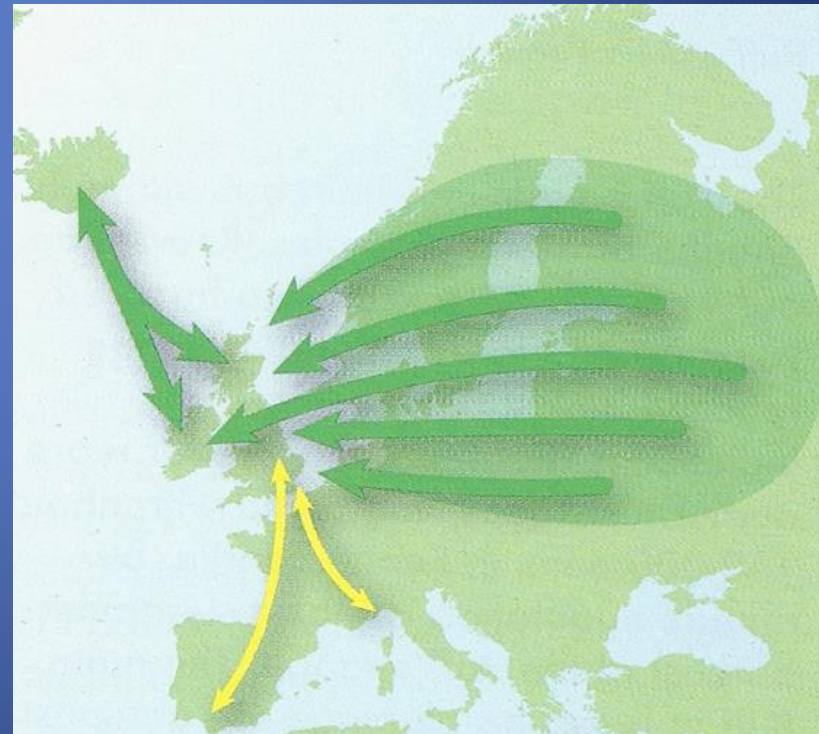


Winter

Migration

British breeding Snipe are short- to medium-haul migrants. Autumn migration begins in August.

In winter, our birds are fivefold outnumbered by migrants from Iceland and Fennoscandia, which start to arrive in September.



We have
up to 150
snipe in
winter



The Secretive Waders



Common Snipe
100g



Woodcock >300g



Jack Snipe 50g

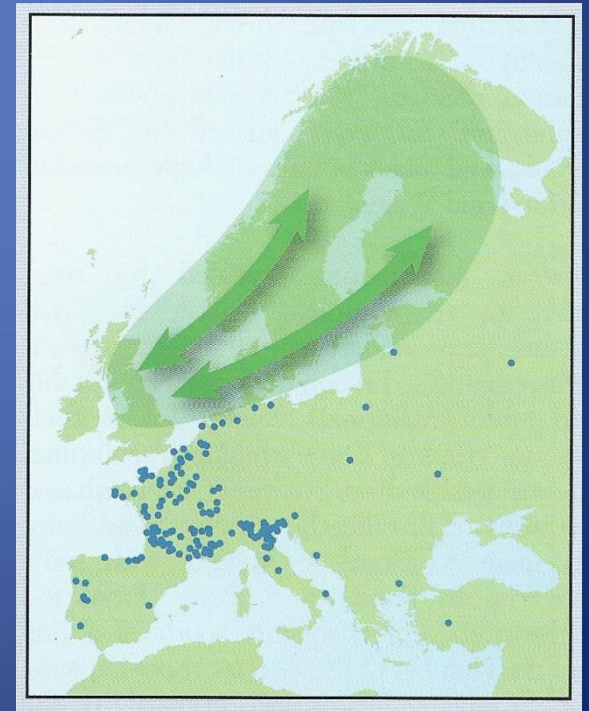
Scandinavian Thrushes

- **Fieldfare**

These are thrushes of Scandinavian and Russian origin.

They are social birds, spending the winter in flocks of, from a dozen or two, to several hundred strong.

They are often seen in winter in west field.



Scandinavian Thrushes

- Redwing

These thrushes eat berries and fruit as well as worms.

They are often seen in mixed groups with fieldfare.

When winter weather is severe they conflict with mistle thrush residents, defending a well-berried tree.





Linnet

Linnets are small, slim finches with a characteristic undulating (bouncy) flight.

They tend to be an upland bird but can be seen in large flocks in winter in Fairfield (along the Pads path and on the oak and hawthorn trees).



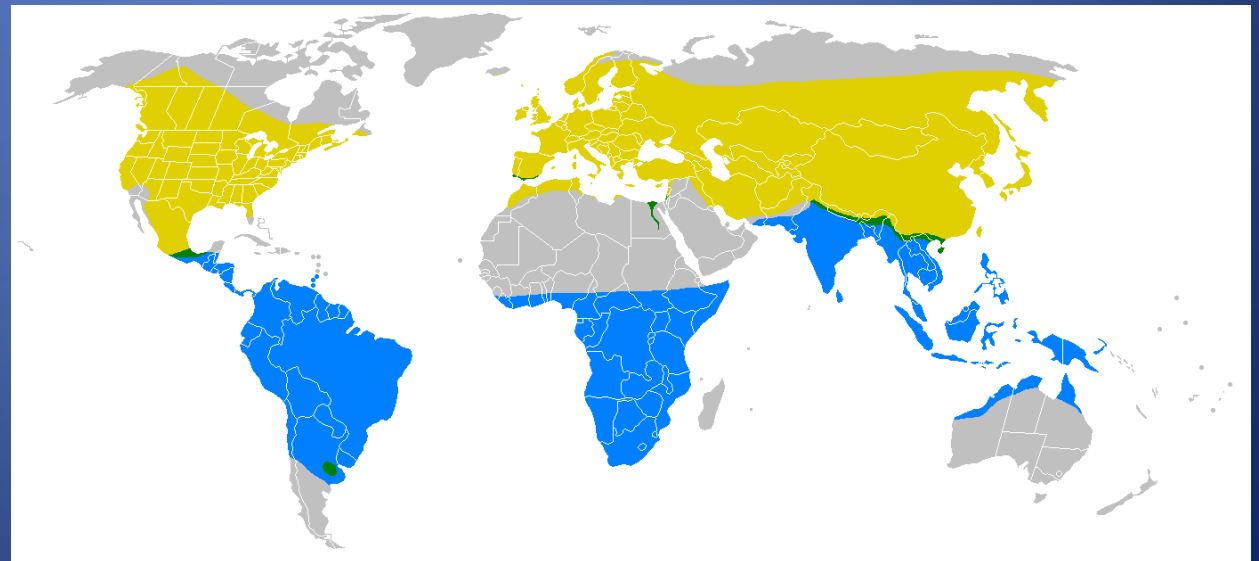




SUMMER MIGRANTS

Swallow

Migration of swallows between Britain and South Africa was first established in 1912 when a bird that had been ringed at a nest in Staffordshire, was found in Natal.



Swallow Migration

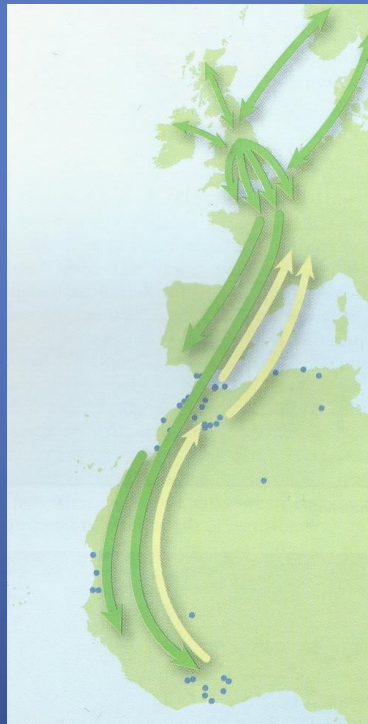
Migrating swallows cover 200 miles a day, mainly during daylight, at speeds of ~20 miles per hour. The maximum flight speed is 35 mph.

- 50% of adults don't return
- 80% of juveniles don't return

Distance travelled ~5500 miles
~9000 km.



Chiffchaff & Willow Warbler



These are leaf warblers. Chiffchaffs have a simple call, but willow warblers have a proper song, a descending trill.

Sahara

4800 km/ 3000 m West to East
1800 km/ 1100 m North to South

Our summer migrants face the challenge of this crossing and fly by night and rest up during the day.

Flying north by night at 2 – 4 km high, temperatures are 10 degrees C.



Passage Migrants

Wheatear

Wheatears (Anglo-Saxon – *White-arse*) are insect eating birds that migrate to the UK from the Western Sahel, south of the Sahara.



They arrive in two waves. Birds that breed in Britain arrive in early March, but another group which we see in our arable field arrive in mid- to late-April where they fatten up to migrate further to Greenland and Canada.

Global migration of northern wheatears

Migration routes and wintering grounds of northern wheatears which breed in Nunavut and Alaska.

-  Breeding area
-  Wintering area
-  Autumn migration route
-  Spring migration route
-  estimated route
-  estimated route



This is a 15,000 km journey, with a 3500 km Atlantic crossing.

Africa - 5 months
Canada - 3 months
Travelling – 4 months

Refuelling in Fairfield



From Fairfield blog entries:-

2013 18 April

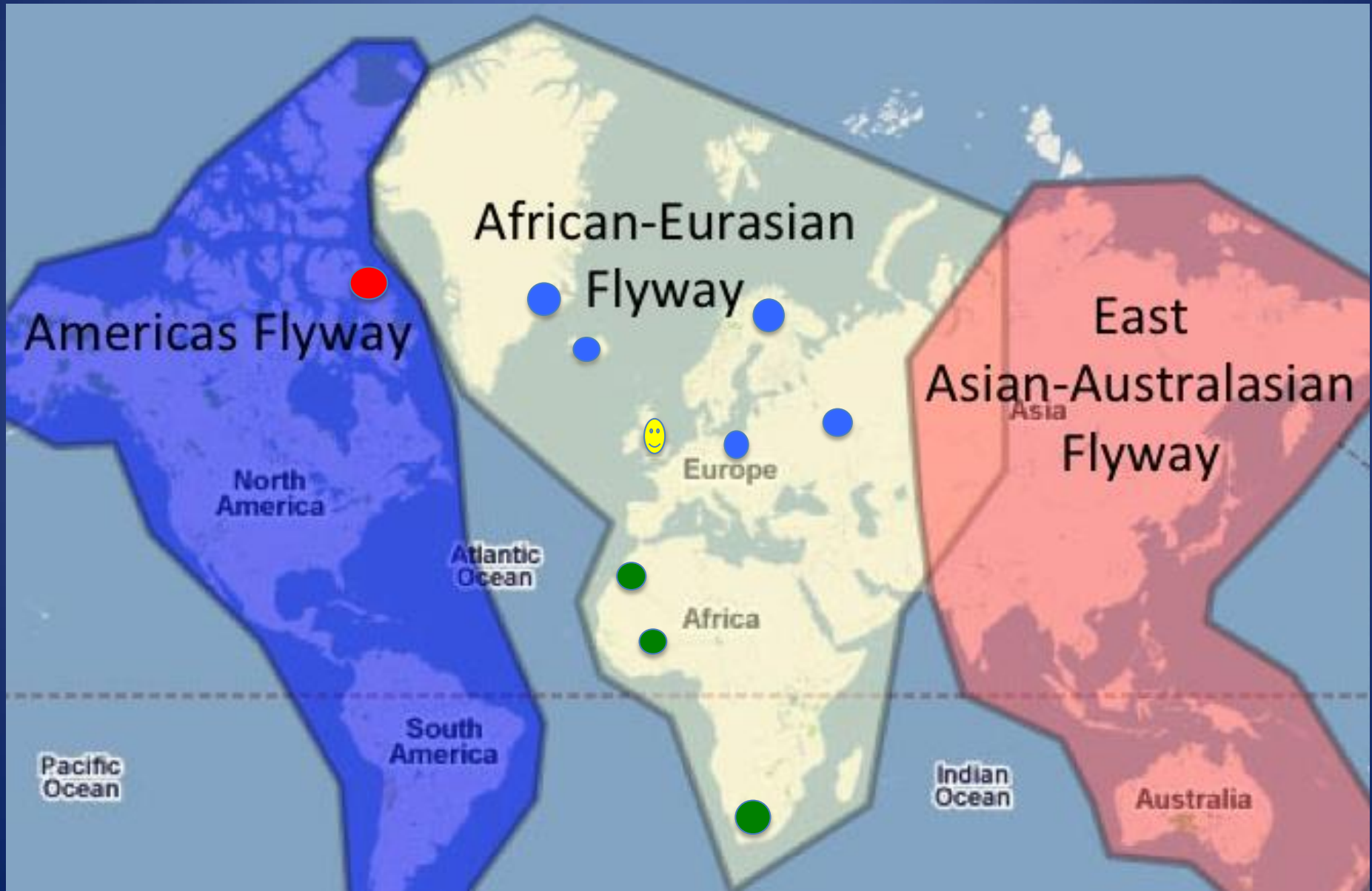
2014 25 April

2015 23 April

2016 6 and 14 April

2017 15 April

Where are “OUR” birds ?



THE END

Proximity to Extinction

An international criterion is proximity to extinction.

