

# **Biodiversity and a changing climate**

Looking at swifts and how we can help  
them

# Biodiversity, Climate and Us

Relating a changing climate to our biodiversity

- Global perspective
- Weather impacts
- Synchronisation & range
- Our mitigation and adaptation

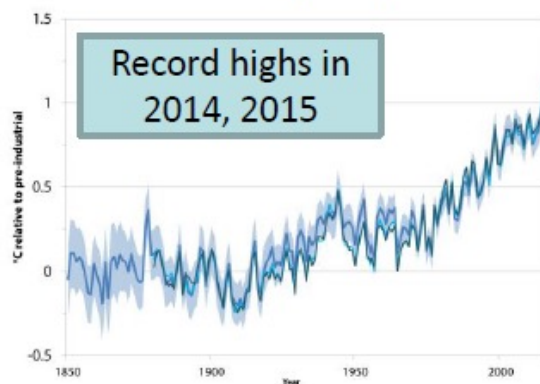
Swifts in the county and how they can be helped

- Identification
- Life story
- Threats
- Actions we can take

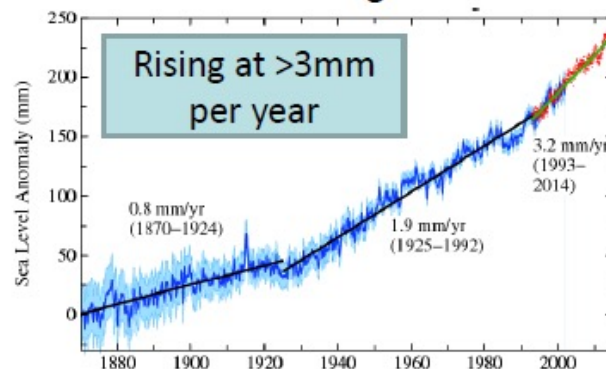
# Indicators of climate change



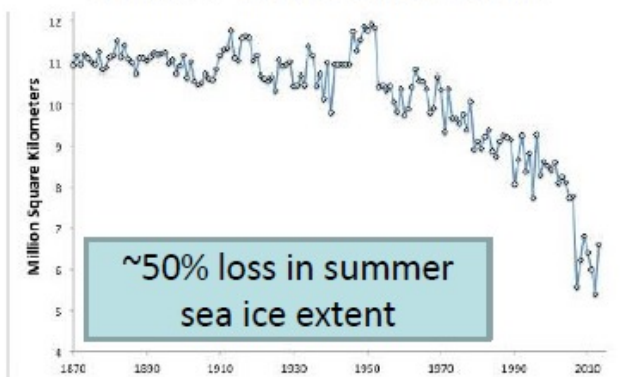
### Global average temperature



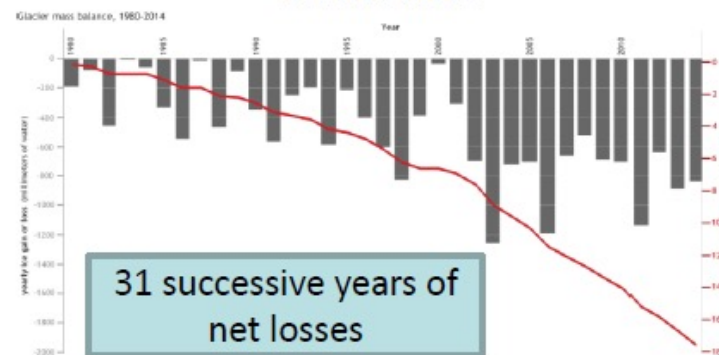
### Global average sea level



### Summer arctic sea ice extent



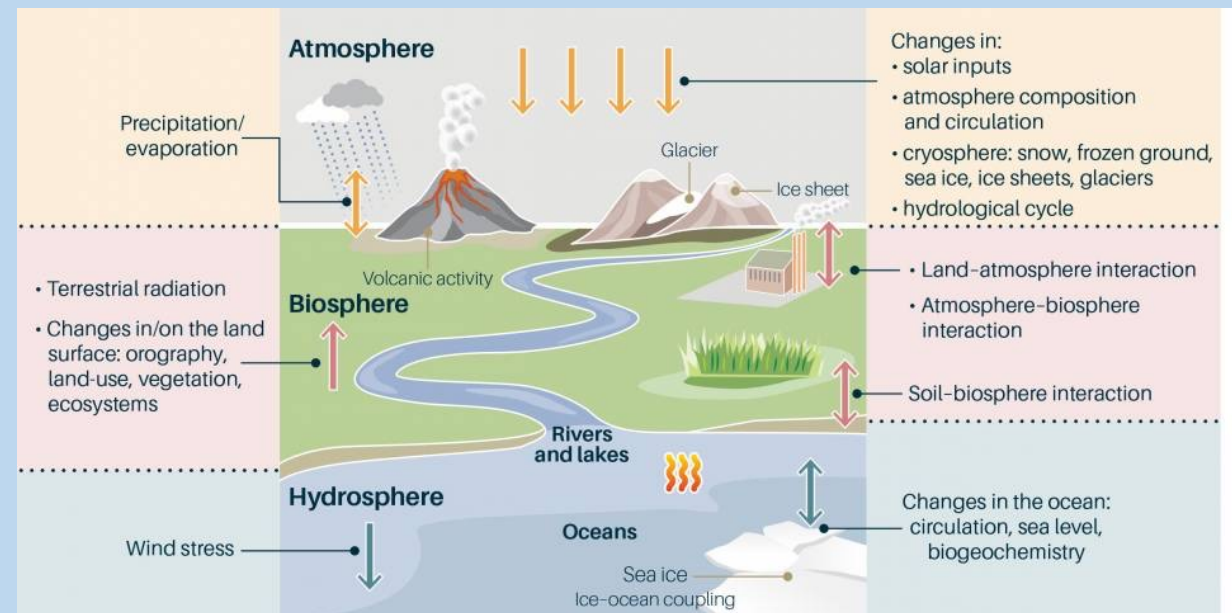
### Glacier mass



Source: NASA, NOAA Climate.gov, Met Office Hadley Centre

# Whole planet perspective – global species

- Migrating species and /or wide range
- Conditions right in all locations for migrants
- Coping with full range of changing weather – heat, water, stormy

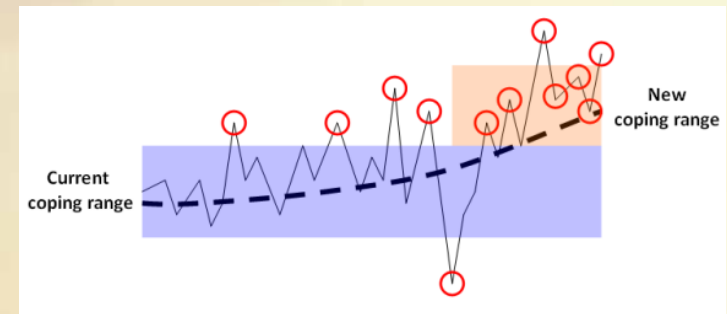


# Weather impacts

- East Anglian
  - Hotter, drier summers
  - Warmer, wetter winters
  - More extreme weather
  - More intense weather

## Understanding adaptation:

How does adaptation happen?



# Tidal surge

December 2013



5 December saw the most serious tidal surge in over 60 years, here's a look at some of the facts surrounding the event:



"Our thoughts remain with those people who have been affected by flooding"  
- Paul Leinster, Chief Executive, Environment Agency

# Synchronisation & range options

- Actions triggered by temperature?
- Actions triggered by 'rains'?
- Actions altered by storms? (migration)
  
- Leaves, insects, predators
- Predators and parasites
  
- How quickly can you move to better conditions?
- When do you run out of space?

# Mitigation and adaptation

- Changing what and where we do things
  - Wind turbines and birds/bats
  - House improvements
  - Biofuels
  - Tree planting
  - Land use change
- Here and elsewhere.....





Bird Forum



Mark Ranner



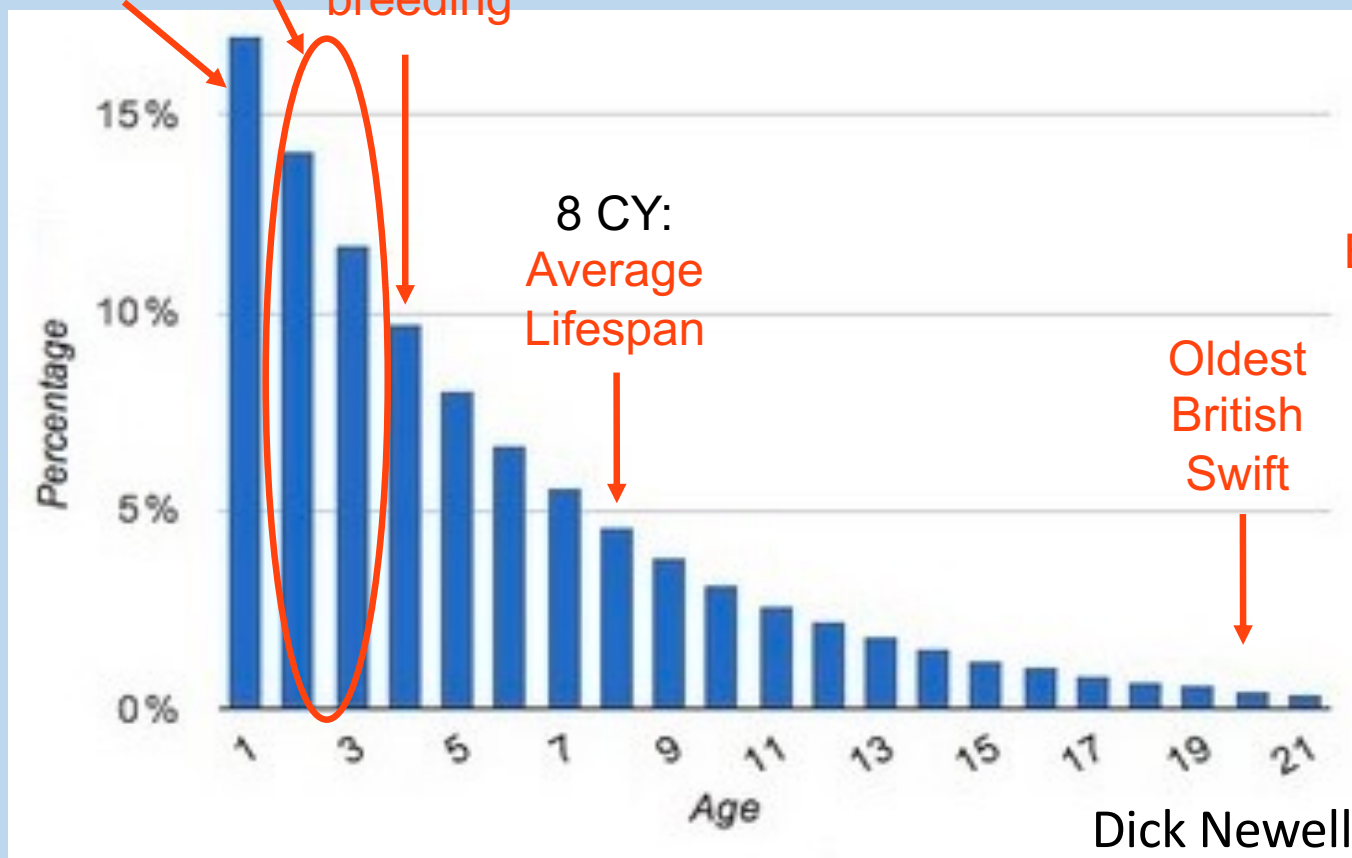
RSPB Images



Simon Hooton

2 CY & 3 CY:  
Non-breeding  
1 CY: Juveniles  
4 CY: First breeding

CY = Calendar Year



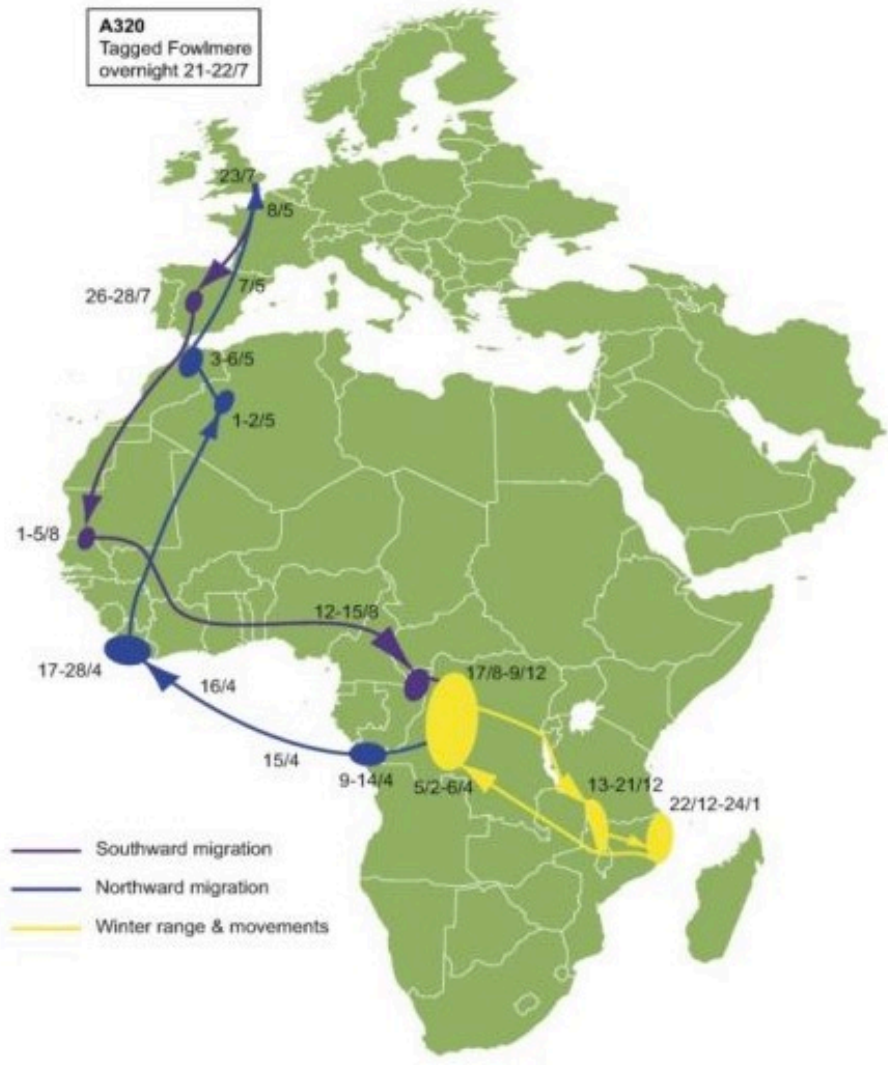
Oldest European Swift

Oldest British Swift

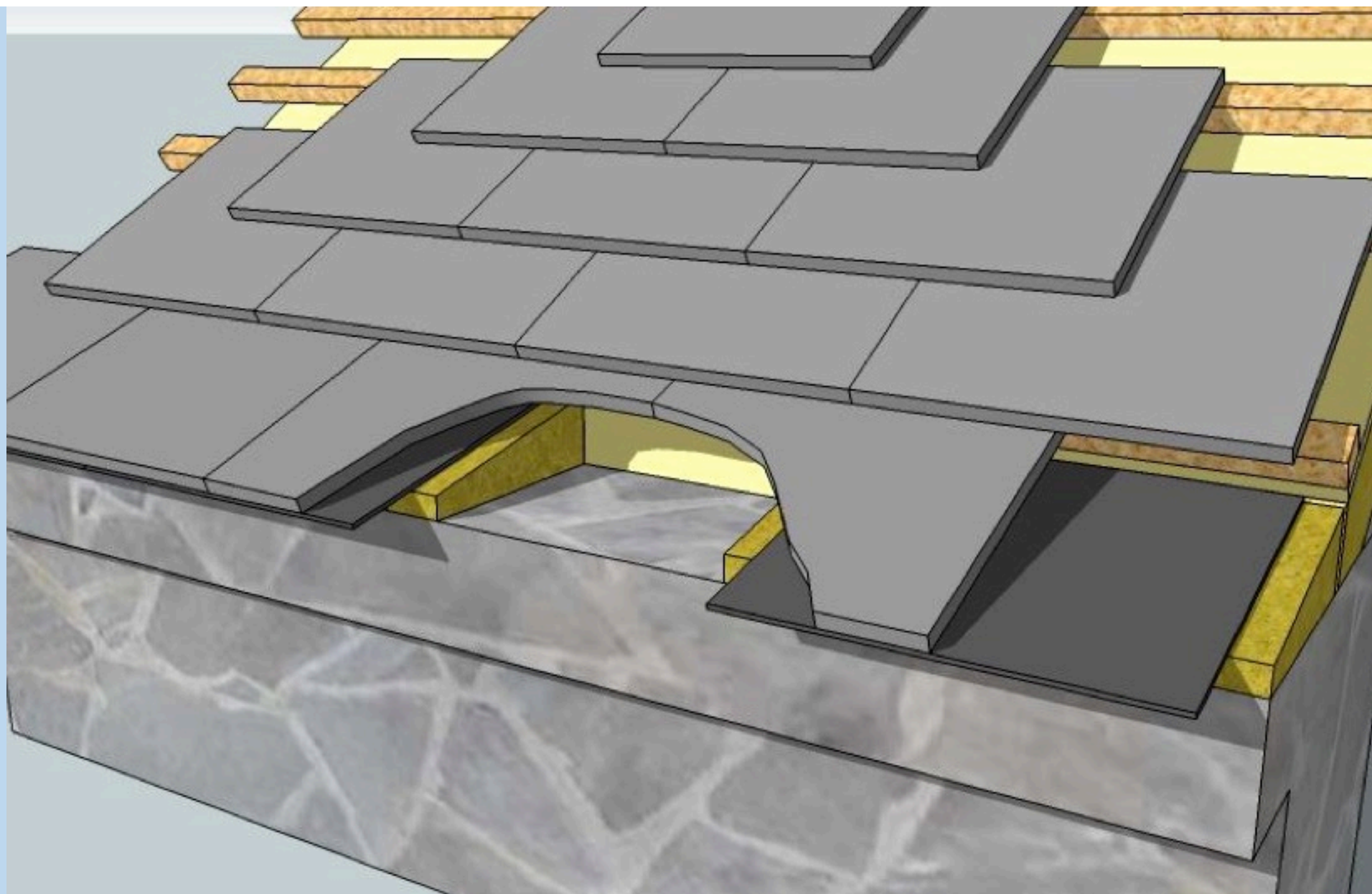
.....30



**A320**  
Tagged Fowlmire  
overnight 21-22/7











Graham Catley

**SOS**  
SWIFTS







**14 – 21 days to hatching**





**SOS**  
SWIFTS





Graham Catley

**SOS**  
**SWIFTS**

**35 – 50 days to fledging**





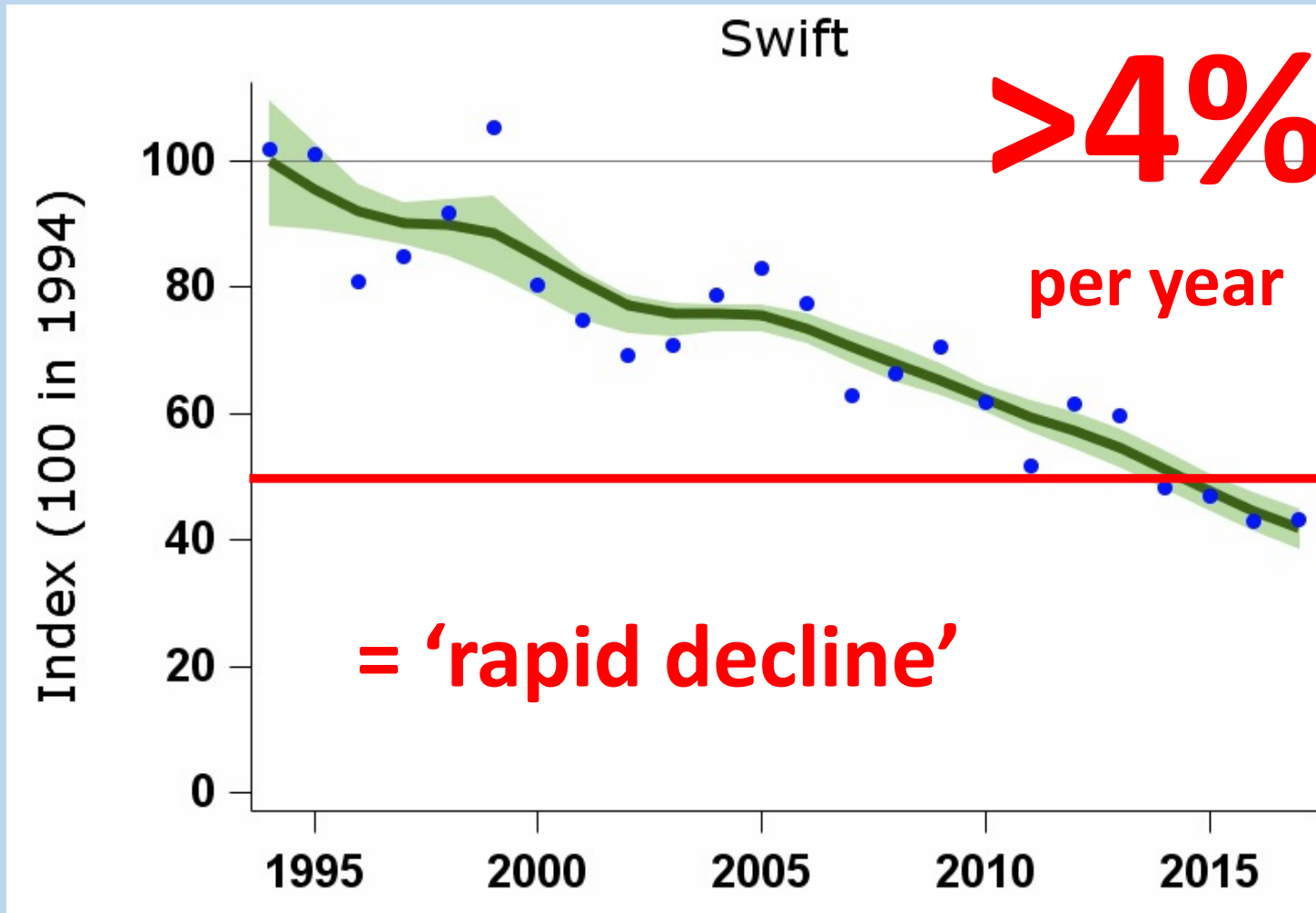


Simon Richardson





# Breeding Bird Survey Index: 1994-2018







## Insect declines and why they matter

Professor Dave Goulson, FRES



Commissioned by the South West Wildlife Trusts

The unnoticed apocalypse

23

BEE AND FLOWER-VISITING  
WASP SPECIES HAVE GONE  
**EXTINCT**  
IN THE UK SINCE 1850

APPROXIMATELY

**3/4** OF THE CROP  
TYPES GROWN  
BY HUMANS  
**REQUIRE**  
POLLINATION  
BY INSECTS

NUMBER OF PESTICIDE  
APPLICATIONS HAS  
APPROXIMATELY  
DOUBLED OVER  
THE LAST **25**  
YEARS

UK POPULATIONS OF THE  
SPOTTED FLYCATCHER  
FELL BY **93%**  
BETWEEN 1967 AND 2016

Other once-common insectivorous birds  
have suffered similarly, including

THE GREY PARTRIDGE **-92%**  
NIGHTINGALE **-93%**  
AND CUCKOO **-77%**



UK "WIDER COUNTRYSIDE" BUTTERFLIES

**DECLINED** **46%** AND HABITAT  
SPECIALISTS BY **77%**  
between 1976 and 2017

A SURVEY OF HONEY SAMPLES  
FROM AROUND THE WORLD  
REVEALS THAT **75%**

**75%** CONTAIN  
NEONICOTINOID INSECTICIDES

THE RED-BACKED SHRIKE,  
A SPECIALIST PREDATOR OF  
LARGE INSECTS, WENT  
**EXTINCT**  
IN THE UK IN THE 1990S



# SOS

# SWIFTS

## Save Our Suffolk Swifts

A Suffolk Wildlife Trust and  
Suffolk Bird Group  
joint initiative



SOS  
SWIFTS

# ....Swift Community Groups

**ALDEBURGH'S AMAZING SWIFTS**





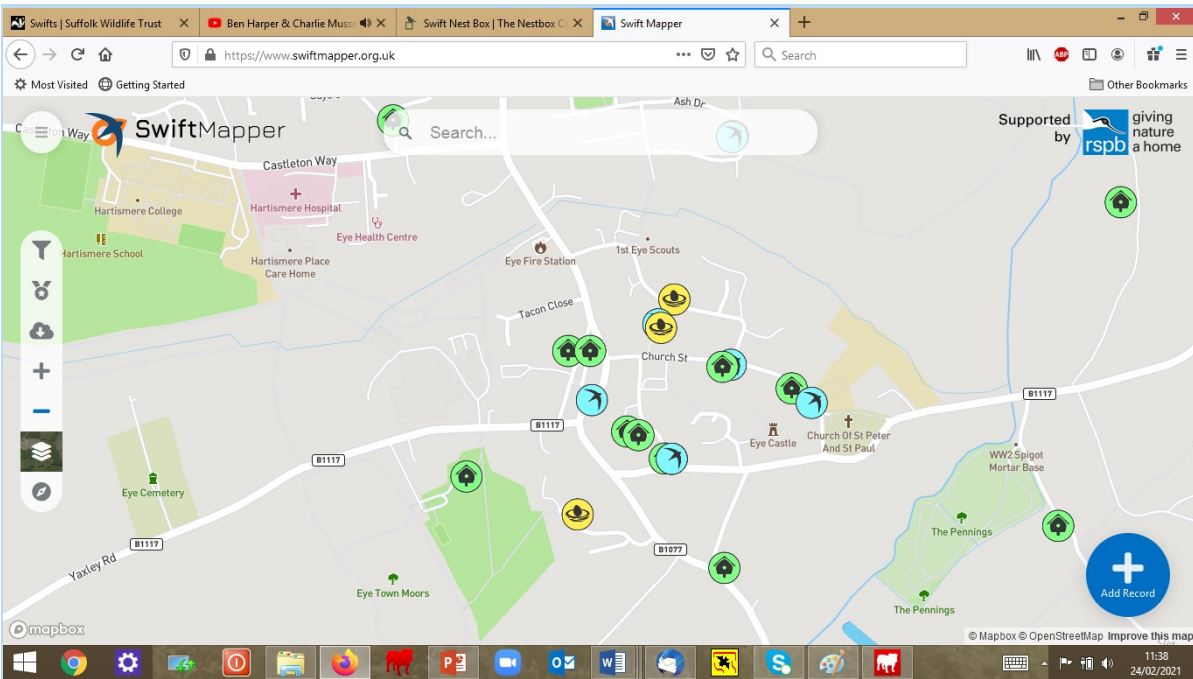
**.....or Swift Street Groups**





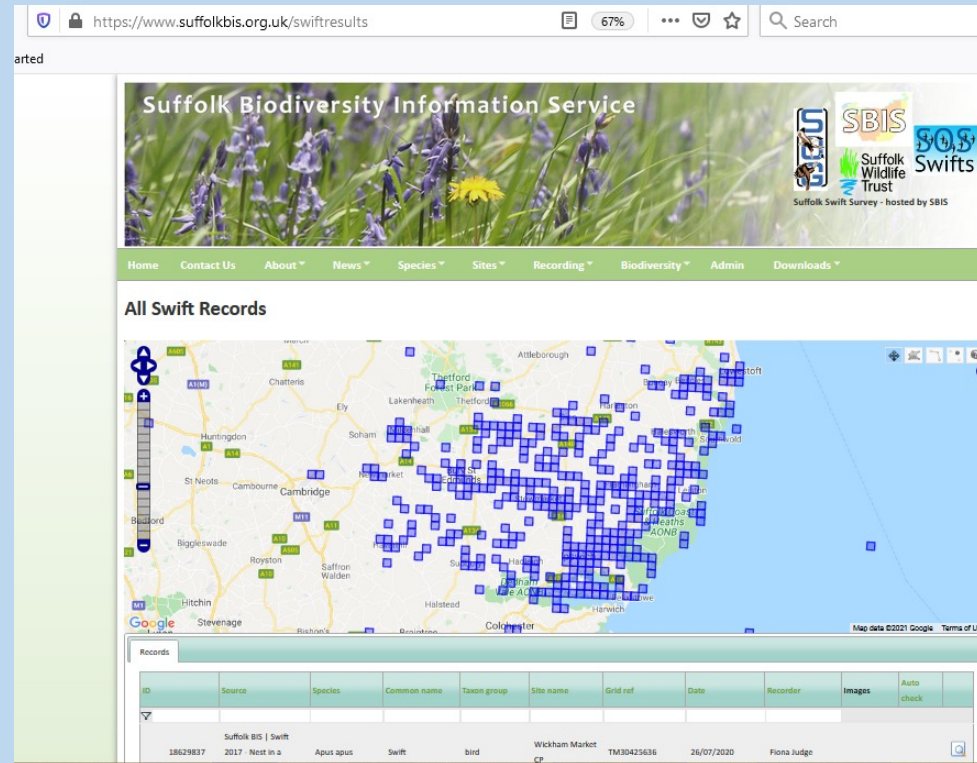
# ....or Swift Buildings





[www.swiftmapper.org.uk](https://www.swiftmapper.org.uk)

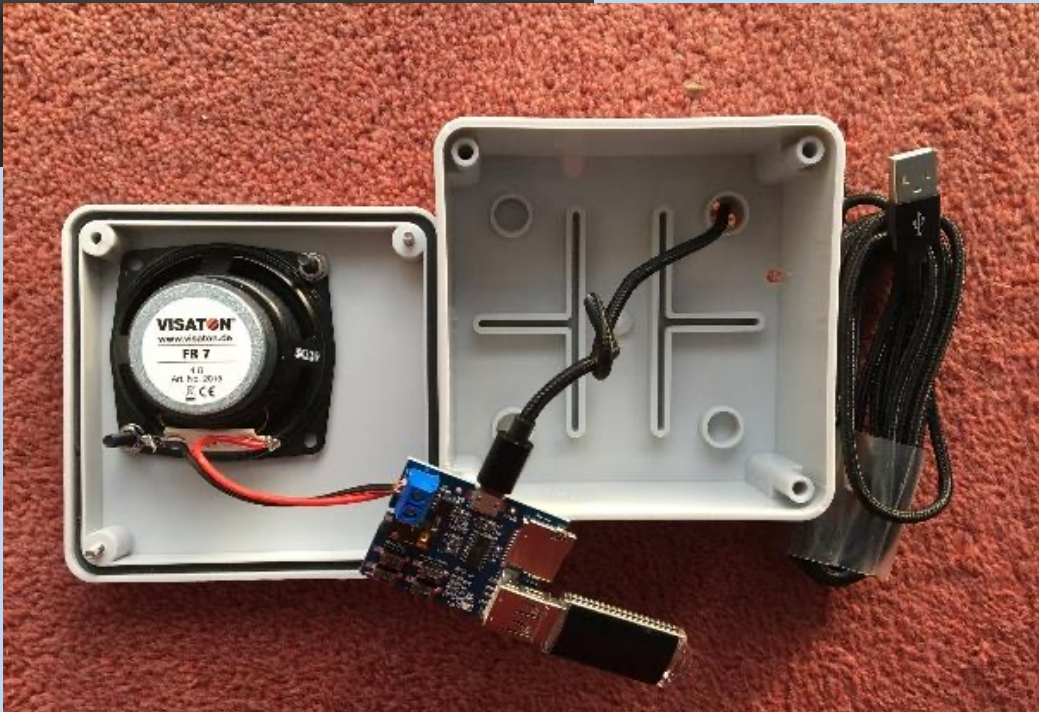
[www.suffolkbis.org.uk/  
swiftrresults](https://www.suffolkbis.org.uk/swiftrresults)







**'Zeist'**





## S Brick Installation



S Brick spans the height of a single brick



Eaves S Brick resting on the soffit

- **Swifts and House Sparrows are colonial:**  
RIBA recommends one nest or roost site per dwelling.  
Install 2 or 3 in every 2nd or 3rd house rather than a single S Brick in every dwelling.
- **Install as high as possible**  
Above 4 metres, more than 5 metres is better.
- **Avoid obstructions**  
Such as trees within 15 metres.
- **South facing walls are fine**  
Internal nest boxes do not overheat.

## The S Brick

from *Action for Swifts*

*Action for Swifts*  
web: [actionforswifts.blogspot.com](http://actionforswifts.blogspot.com)  
email: [actionforswifts@gmail.com](mailto:actionforswifts@gmail.com)

## The S Brick Nest Box

The S Brick encourages Swifts and House Sparrows in brick and rendered cavity walls.

Comprising a PVC foambonded nest chamber and a brick-slip front, the S Brick is one of the simplest and lightest nest boxes on the market.

**Benefits of the S Brick:**

- Simple to retrofit in existing cavity walls and spans the height of a single brick.
- Even more simple to install in new-build, including timber-frame construction.
- Minimal or no cutting of bricks.
- Lightweight for easy handling and low shipping costs.
- Can be tailored to different brick sizes, cavity widths and brick facings.
- Minimal visual or structural intrusion.
- Available in left- and right-hand versions.
- Includes a built-in nest form.

The S Brick is simply for Swifts and Sparrows and occupies the height of a single brick.

www.actionforswifts.blogspot.com  
email: [actionforswifts@gmail.com](mailto:actionforswifts@gmail.com)













01728 454585

***Swift rescue  
& conservation***

***07762***

***300050***

***aldeburghsamazingswifts.co.uk***



# Difficult choices



Mark Ranner



AJ



**Top tips to reduce your plastic use** wildlife watch

In the bathroom	In the kitchen	Out and about
<p>Swap your plastic toothbrush for a bamboo one.</p> <p><b>X</b> </p> <p>Get rid of your refreshing shower puffs and bottled shower gel. Use unperfumed bars of soap instead. You can also get solid shampoo and conditioner.</p> <p></p> <p>Check your cleaning products don't contain microbeads - avoid things containing polyethylene and polypropylene.</p> <p></p>	<p>Say no to cling film and use reusable Tupperware or beeswax wraps instead.</p> <p>Kitchen sponges are made of plastic. Switch to a biodegradable option.</p> <p>Make your own biscuits and other snacks usually come in throwaway plastic packaging.</p> <p></p> <p>Did you know clothes release microfibres when washed that go down the drain? Use the less-wash cycles or purchase-made microfibre-catching laundry bags.</p> <p>Many baby-use plastics to seal the bags. Go for brands that are plastic-free or any water-leak.</p> <p></p>	<p>Do a little forward planning. Carry your own coffee cup, shopping bags and refillable water bottle. Go a step further by carrying your own cutlery, straws and soap.</p> <p>Make your own. Biscuits and other snacks usually come in throwaway plastic packaging.</p> <p>Too shopping? Choose loose produce over packaged and only buy what you need. Local greenmarkets, community allotments or farmers' markets are often plastic-free.</p> <p><b>X</b> </p> <p>Having a 'take away' when you're ordering over the phone isn't to skip the cutlery or sauce packets.</p>

[www.wildlifewatch.org.uk](http://www.wildlifewatch.org.uk)

Which of these best describes how you feel about your current lifestyle and the environment?

	%
I'm happy with what I do at the moment	65.4
I'd like to do a bit more to help the environment	29.0
I'd like to do a lot more to help the environment	4.8

Source: UK Household Longitudinal Study (n=39987)





# SOS SWIFTS

