

# Movements of Finnish red-throated divers during breeding and post- breeding periods



Kalevi Eklöf & Markus Ahola

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# Background

- Breeding time movements of RTD's are poorly known
- Possible over-estimates to breeding population size



# This presentation

- A preview of the results about the trial to satellite-track Finnish RTD's
- Six individuals harnessed with backpack satellite transmitter



# A remotely controlled spring-trap


The trap was sprung by calling to an attached mobile phone



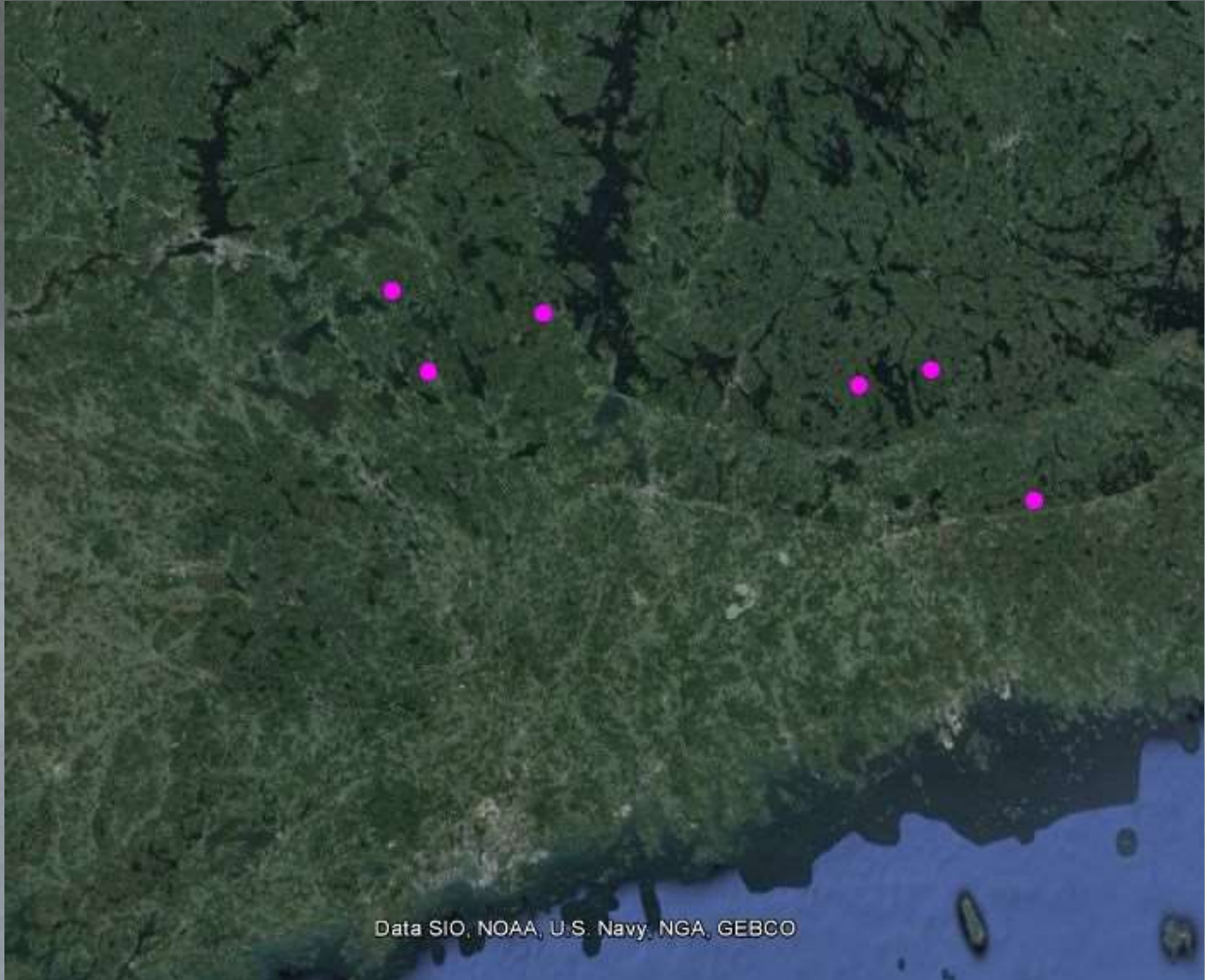
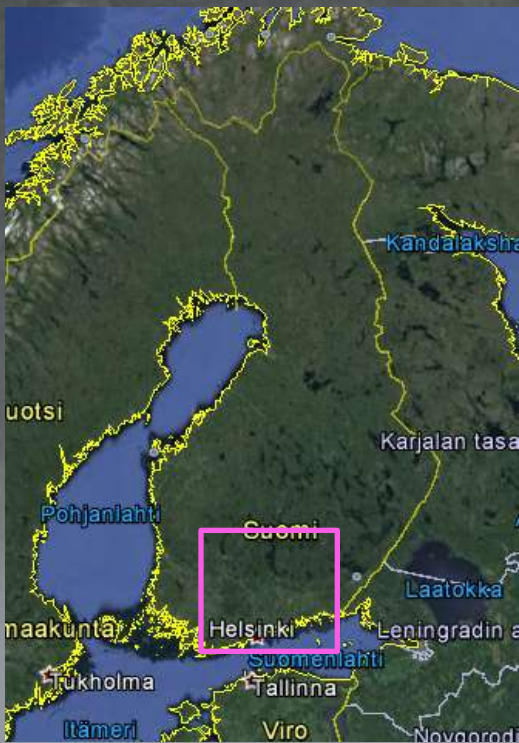
Transmitters were  
attached with  
harness



# Tagged RTD's in this project

- 6 Backpack satellite transmitters
    - 2 in 2010 (1 Doppler, 1 GPS PTT, both 22 g)
    - 3 in 2011 (1 Doppler, 2 GPS PTT, all 22 g)
    - 1 in 2012 (GPS PTT, 16 g)
  - 2 Males, 4 females
- 
- Moderate amount of data only from the Doppler PTT's (poor from GPS ones)
  - and only from one outside of the breeding range

# Tagging sites



Data SIO, NOAA, U.S. Navy, NGA, GEBCO

# Filtering of the locations

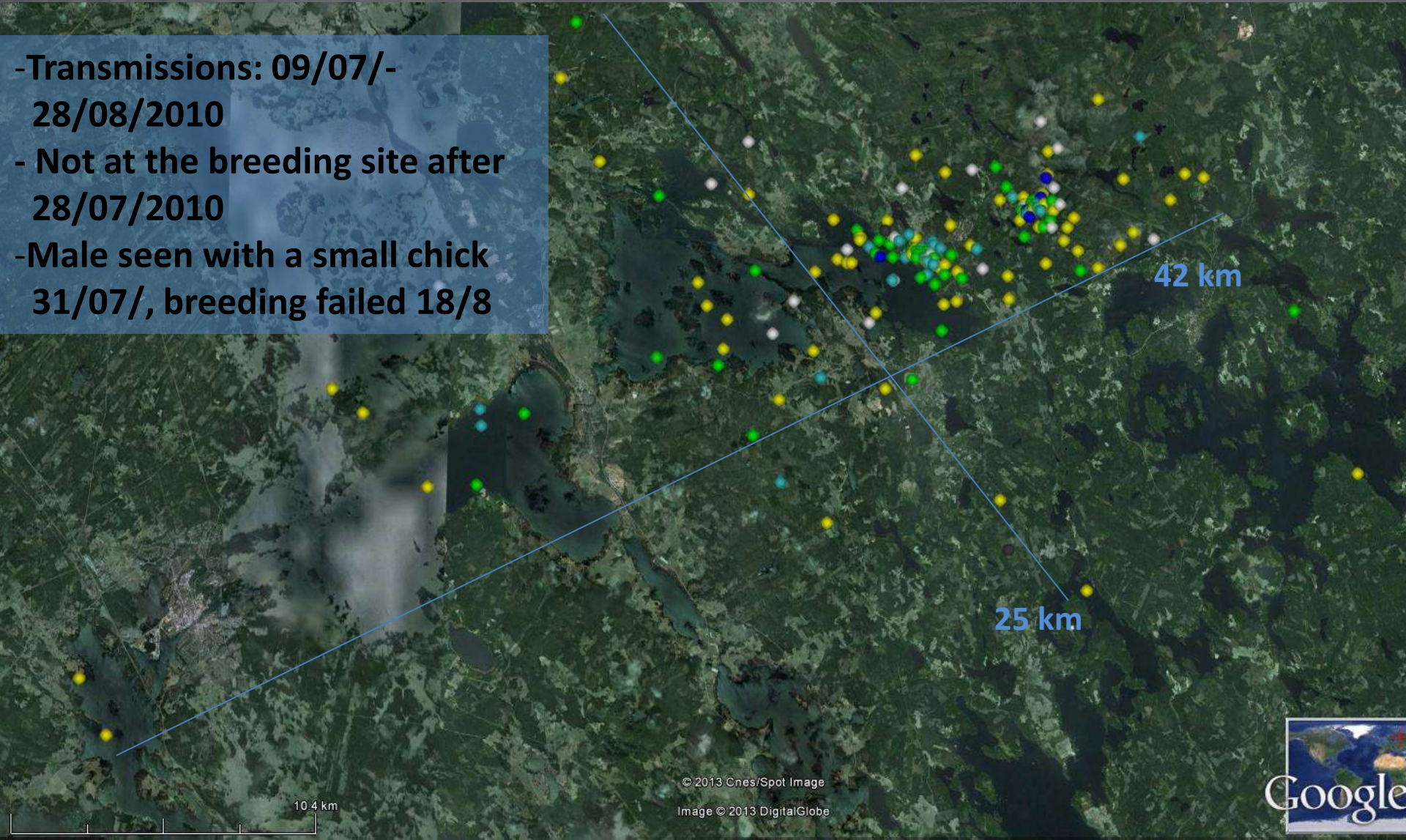
- In the following maps, the poorest accuracy class of the locations was removed for most individuals





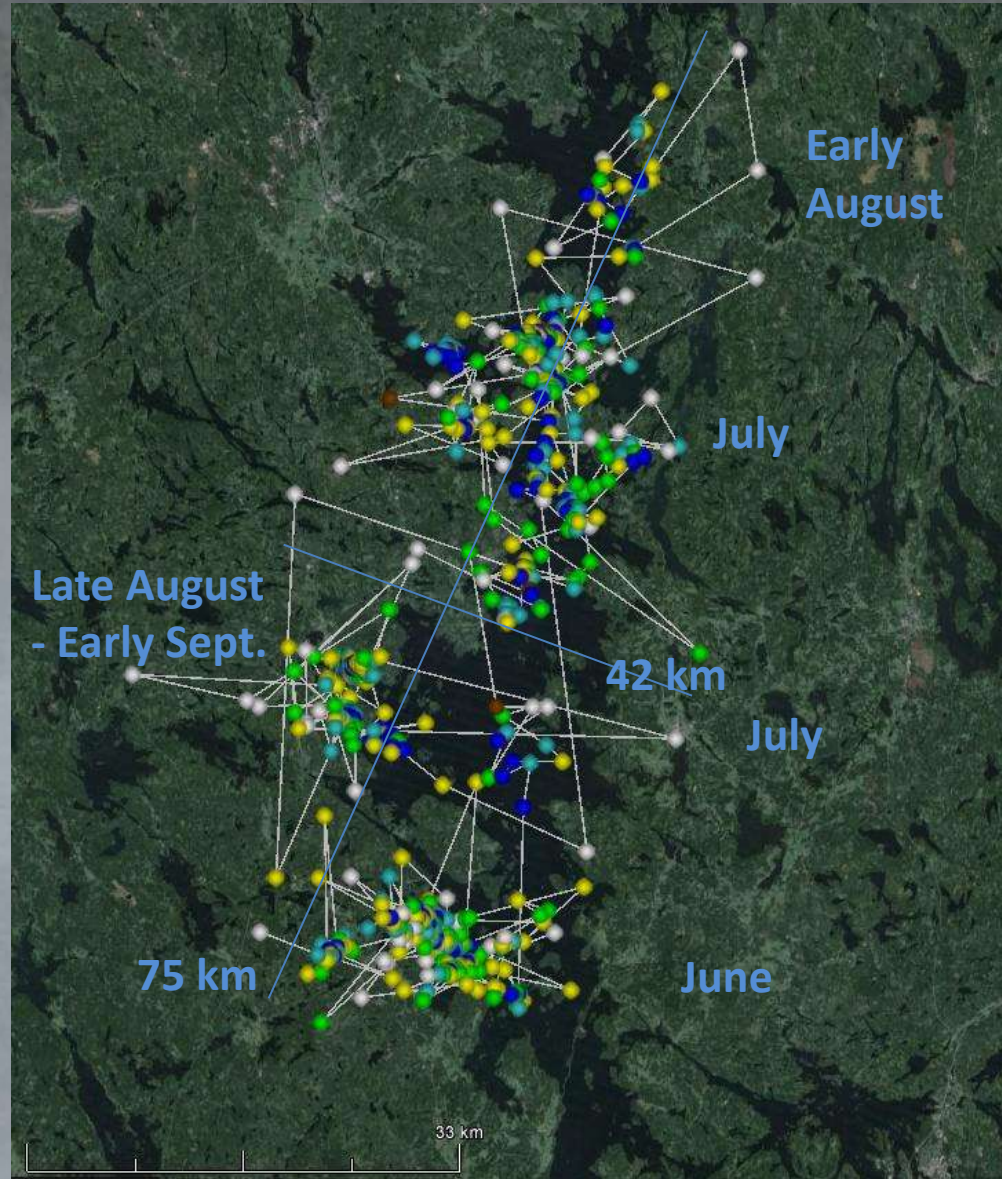
# 54382 FEMALE, 22g Doppler PTT

- Transmissions: 09/07/-  
28/08/2010
- Not at the breeding site after  
28/07/2010
- Male seen with a small chick  
31/07/, breeding failed 18/8



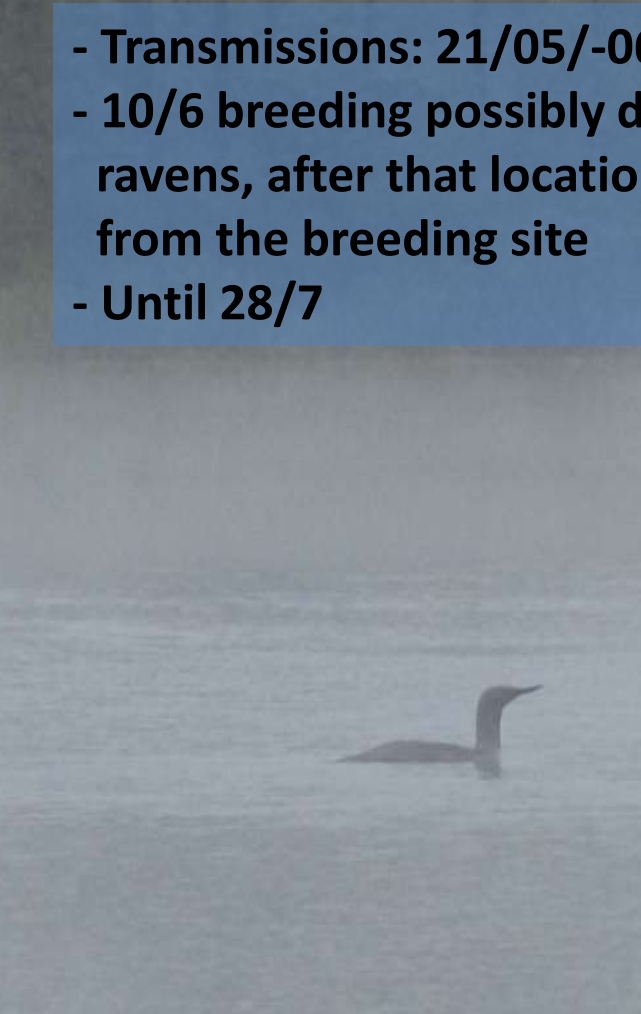
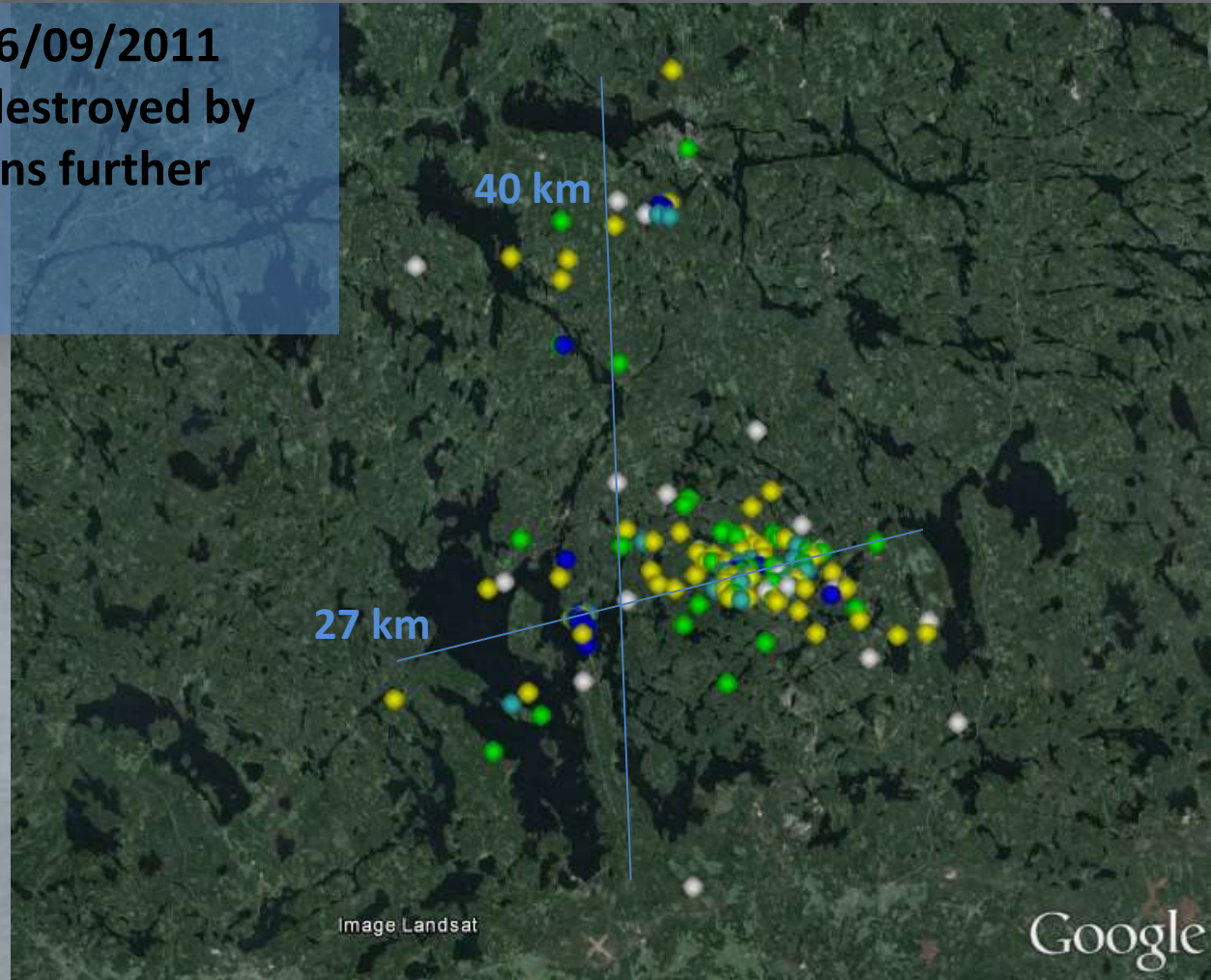
# 54499 FEMALE, 16g Doppler PTT

- Transmissions: 04/06-13/09/2012
- Breeding failure in mid June
- In early July visited breeding sites of other pairs
- The bird was seen 28/8
- Early September transmissions mostly from one bay



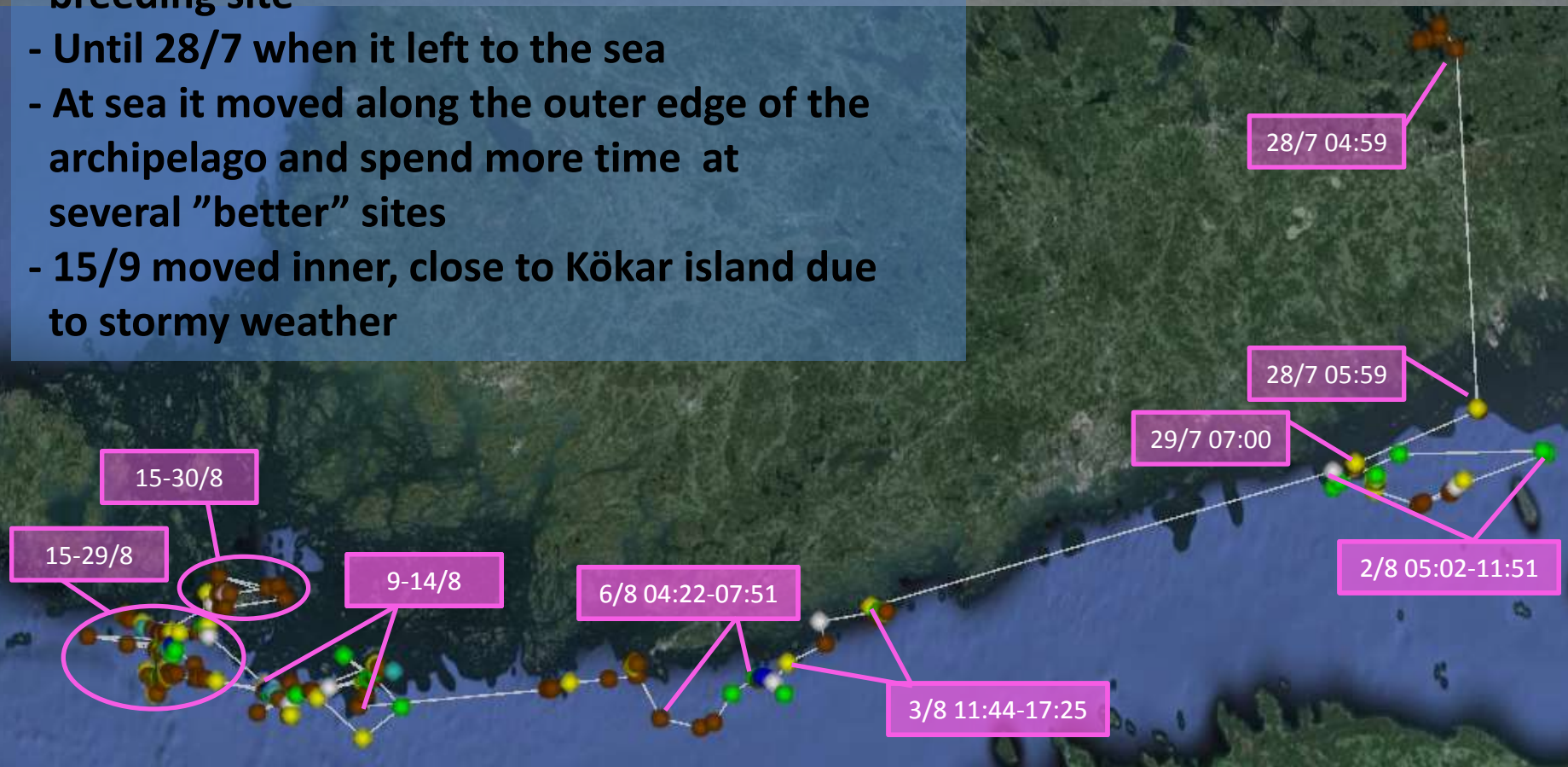
# 54429 MALE, 22g Doppler PTT

- Transmissions: 21/05/-06/09/2011
- 10/6 breeding possibly destroyed by ravens, after that locations further from the breeding site
- Until 28/7



# 54429 MALE, 22g Doppler PTT

- Transmissions: 21/05/-06/09/2011
- 10/6 breeding possibly failed by ravens, after that locations further from the breeding site
- Until 28/7 when it left to the sea
- At sea it moved along the outer edge of the archipelago and spend more time at several "better" sites
- 15/9 moved inner, close to Kökar island due to stormy weather



# Summing up

- The backpack transmitters worked only 2-3 months with RTD's
  - GPS-transmitters only for 1 month
- However, interesting information about breeding range and movements during and after breeding was collected
- More detailed analysis of the data is still needed



# Thank you!

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