



# EFSA's activities on HPAI

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Standing Group of Experts on  
High Pathogenicity Avian Influenza in Europe



What  
EFSA  
does



Provides independent scientific advice and support for EU risk managers and policy makers on food and feed safety



Provides independent, timely risk communication



Promotes scientific cooperation



What  
EFSA  
does  
NOT  
do



Develop food safety policies & legislation



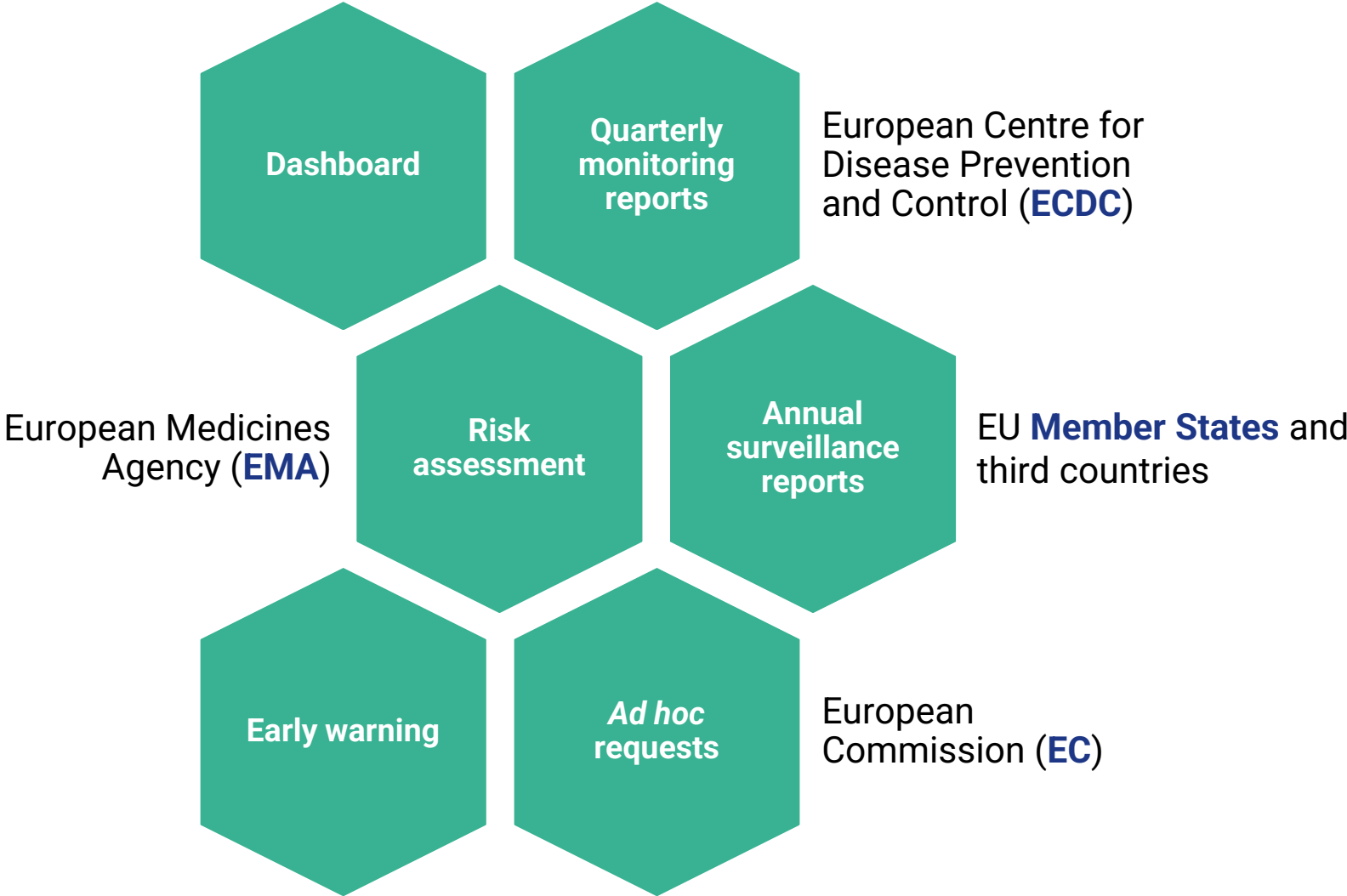
Adopt regulations, authorise marketing of new products



Enforce food safety legislation



# OVERVIEW OF ACTIVITIES ON HPAI



# QUARTERLY MONITORING REPORTS

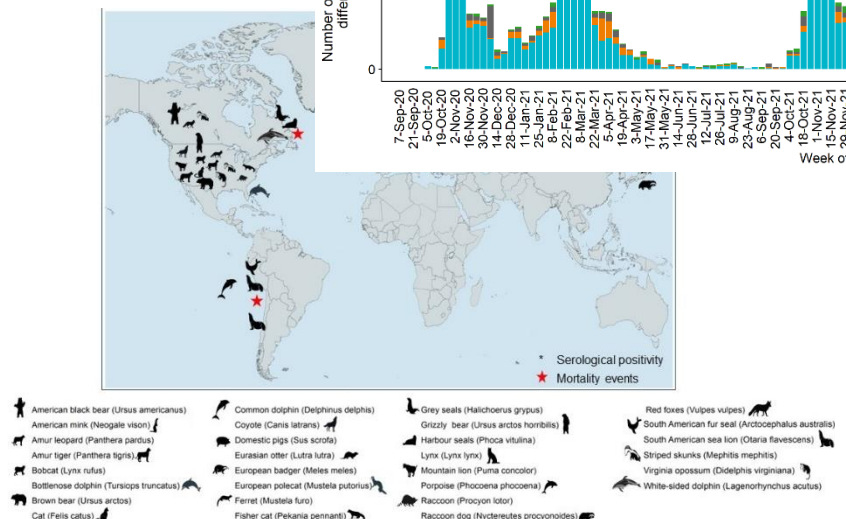
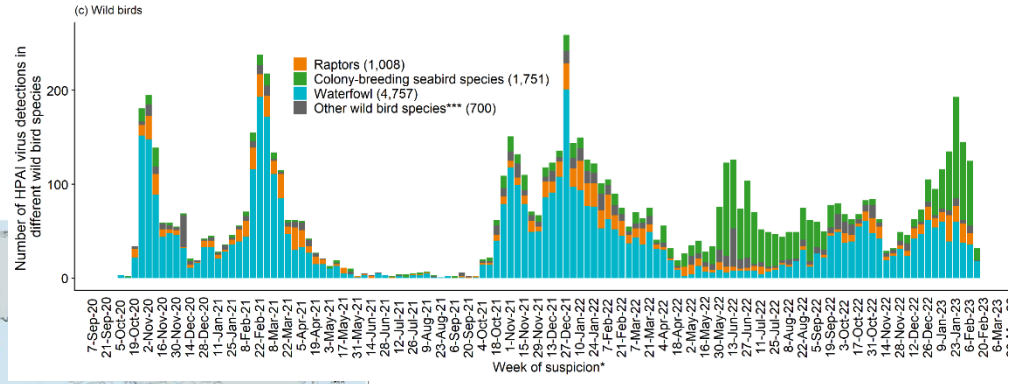
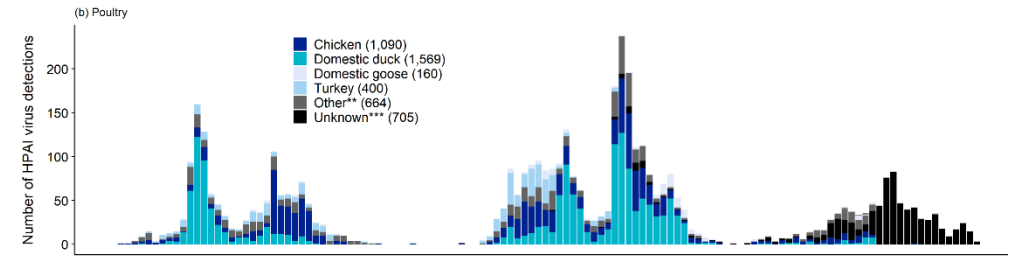
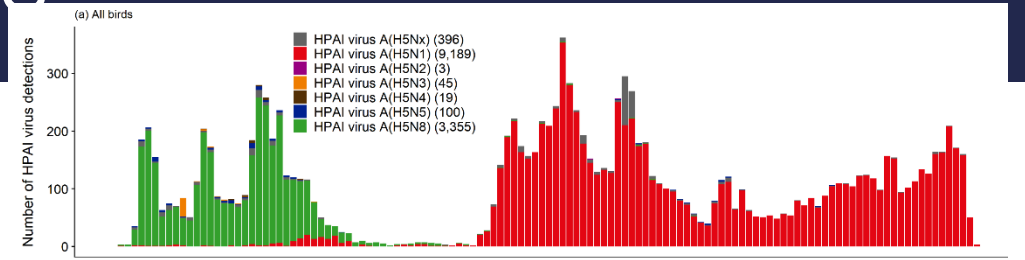
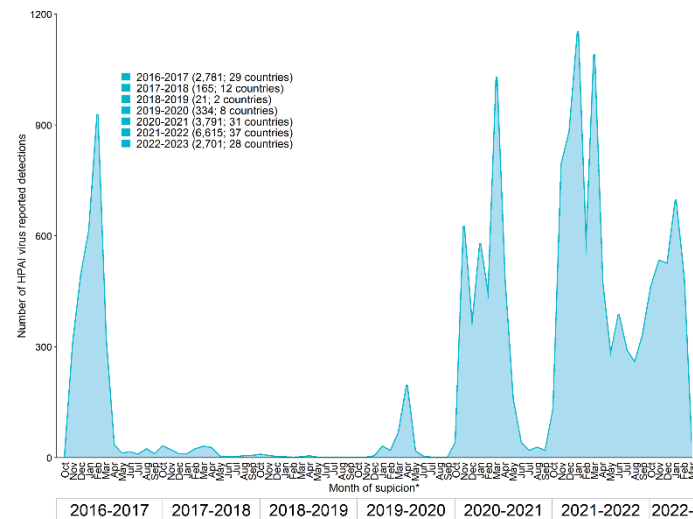
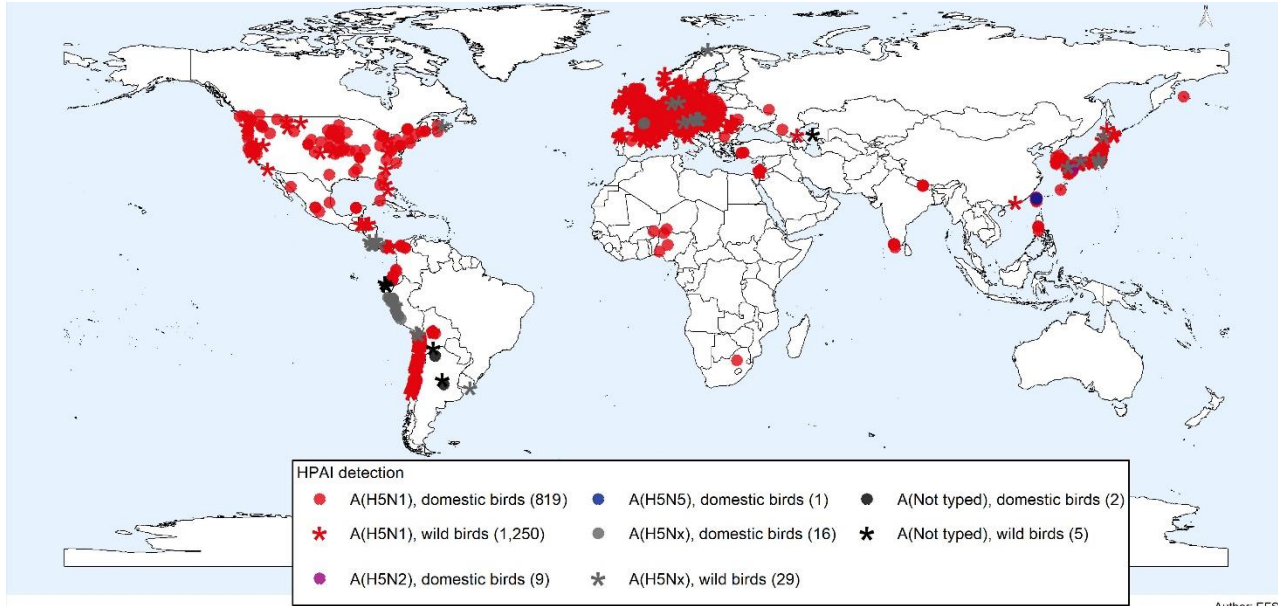
- Update of the avian influenza situation in **poultry, captive** and **wild birds** in Europe and beyond
  - Spatio-temporal distribution
  - Evolution of the epidemic
  - Characteristics of the poultry production systems affected

- Joint **SCIENTIFIC REPORT**    **JOURNAL**

- Currently published on a bimonthly basis



# QUARTERLY MONITORING REPORTS



# DASHBOARD

<http://hpaiefsa.aus.vet/>

## Highly pathogenic avian influenza virus detection in Europe



### Settings

**Main bird categories:**  
 All birds  Poultry  Wild birds

**Subtypes:**  
 A(H5Nx)  A(H5N3)  A(H5N6)  
 A(H5N1)  A(H5N4)  A(H5N8)  
 A(H5N2)  A(H5N5)

**Poultry Sub-categories:**  
 Chicken  Domestic duck  Domestic goose  
 Turkey  Other  Unknown

**Choose minimum date:**  
 2016-10-01 2022-10-01

**Choose maximum date:**  
 2022-10-01 2023-03-31

*Press play above to animate the graphics (adding 7 days to the maximum date)*

### Summary per country

Show  entries

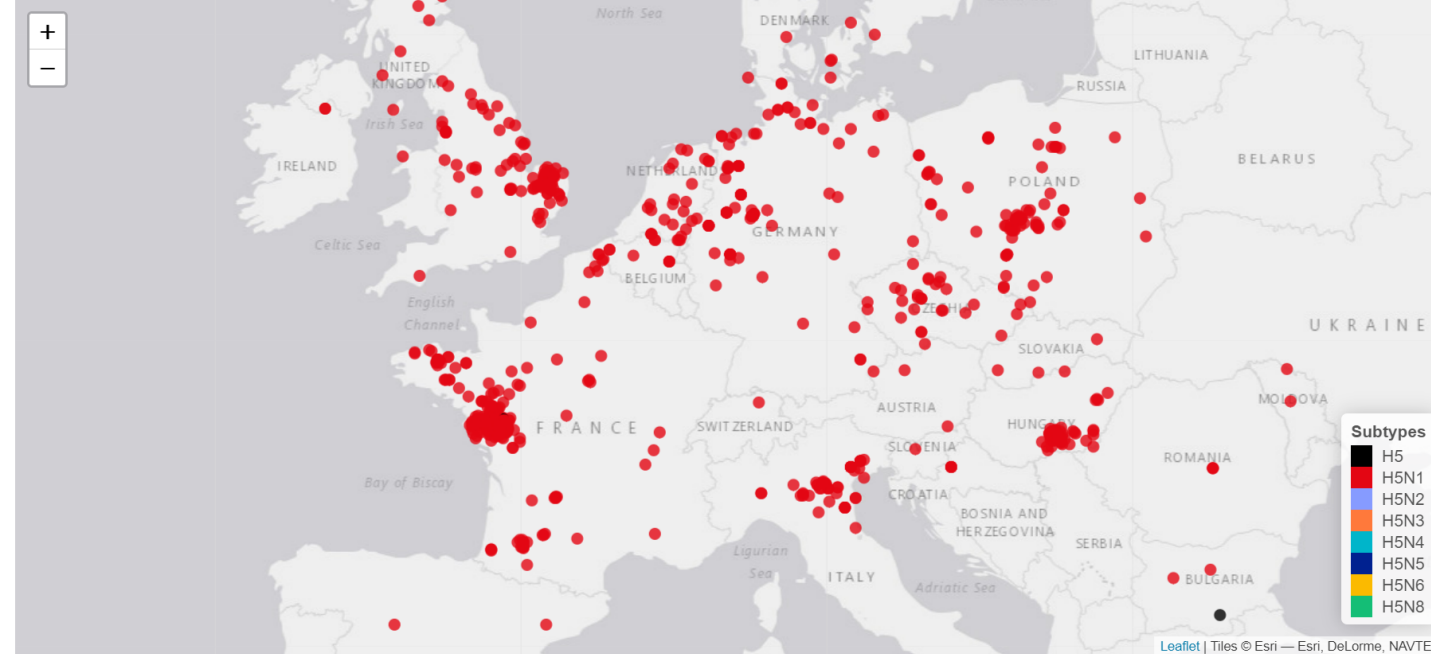
Search:

Country	Number of detection
Austria	3
Belgium	11
Bulgaria	3
Croatia	1

Showing 1 to 4 of 25 entries

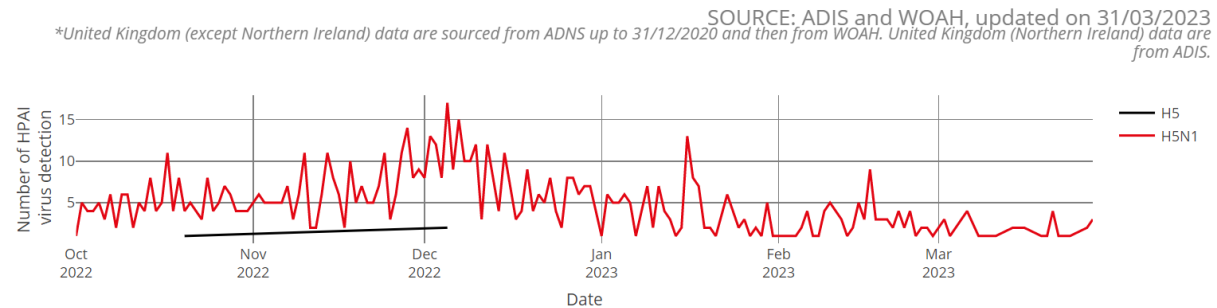
Previous  2 3 4 5 6 7 Next

### Map - Subtypes



### Time series

**Timeseries type:**  
 Bird categories  
 Subtypes



# ANNUAL SURVEILLANCE REPORTS

- Collection, validation and analysis of data on **surveillance activities** submitted to EFSA by EU Member States and third countries
  - Active surveillance in poultry (**mandatory**)
  - Passive surveillance in dead and moribund wild birds (**mandatory**)
  - Active surveillance in wild birds, industry sampling and other **voluntary** activities



Scientific Report |  Open Access | 

**Annual report on surveillance for avian influenza in poultry and wild birds in Member States of the European Union in 2021**

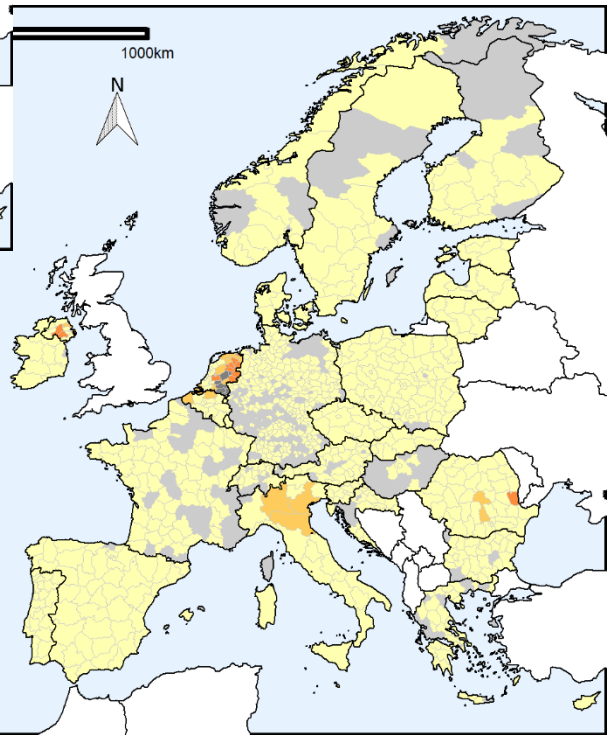
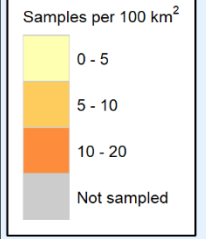
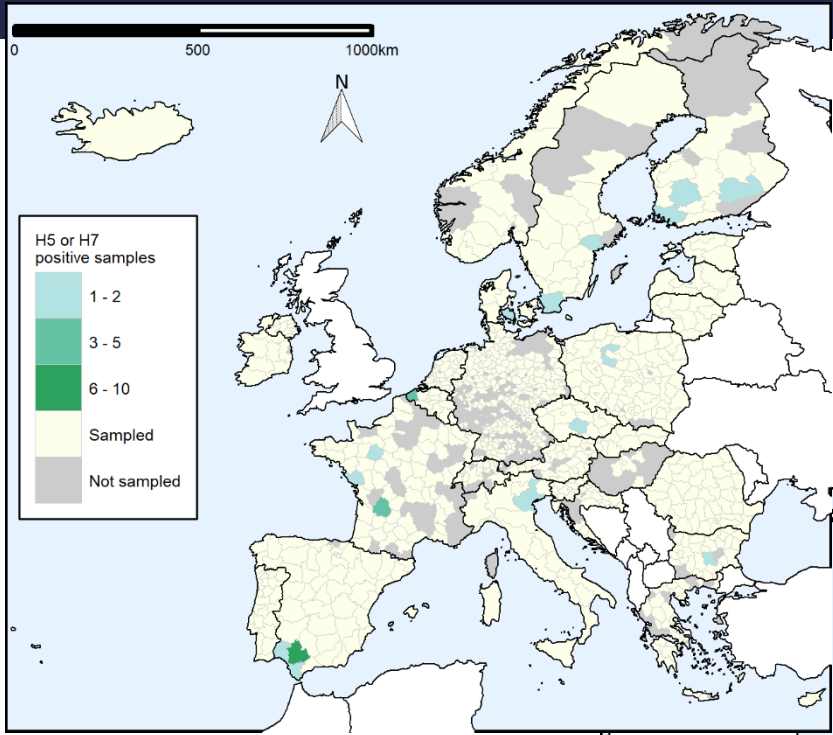
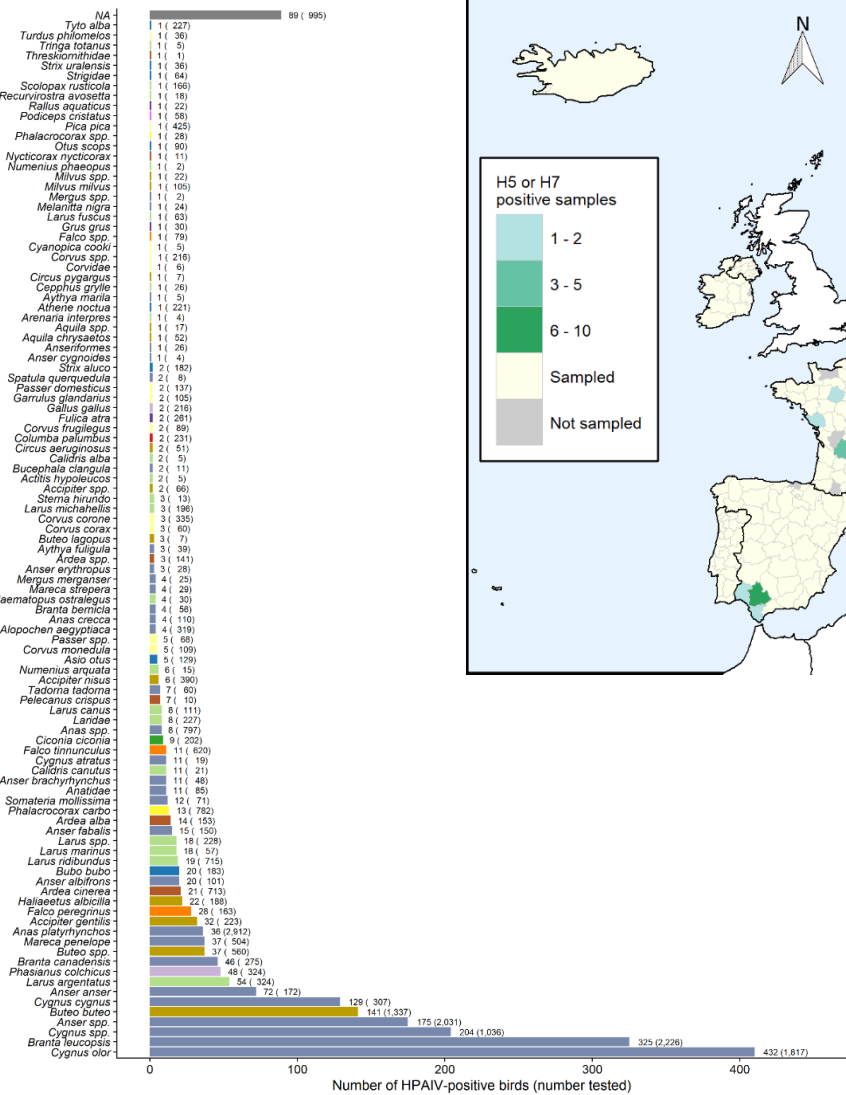
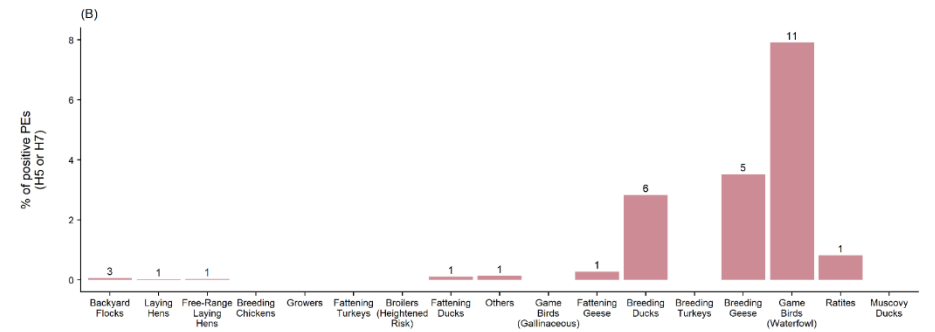
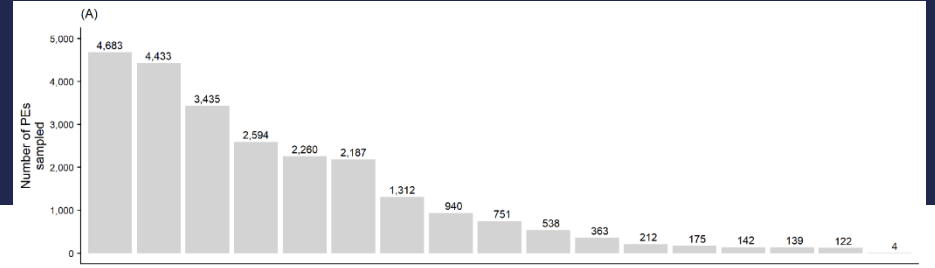
European Food Safety Authority (EFSA) , Inma Aznar, Francesca Baldinelli, Anca Stoicescu, Lisa Kohnle

First published: 15 September 2022 | <https://doi.org/10.2903/j.efsa.2022.7554>





# ANNUAL SURVEILLANCE REPORTS



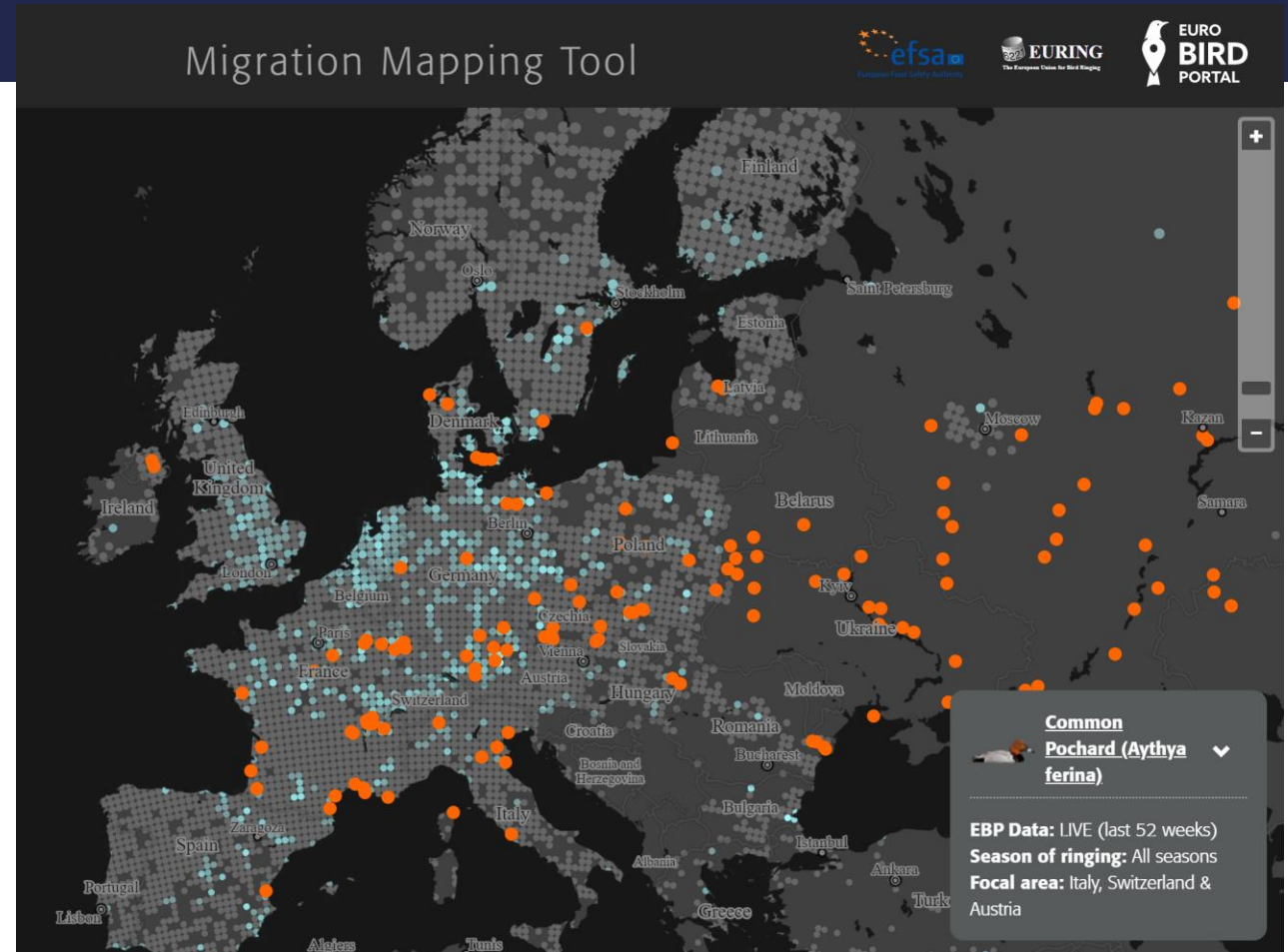
# RISK ASSESSMENT AND REGULATORY SCIENCE

- Ongoing **systematic literature reviews** <https://animal-diseases.efsa.europa.eu/HPAI>
- **Control measures**
  - Clinical and laboratory sampling procedures, monitoring period, minimum radius of protection and surveillance zones, minimum length of time for which risk-mitigating measures should be applied in the different zones
- **Vaccination** against HPAI in poultry
  - Available vaccines (*July 2023*)
  - Possible vaccination strategies as complementary prevention and control measures (*July 2023*)
  - Surveillance, restriction and risk-mitigating measures in vaccinated areas (*March 2024*)
- Listing and categorisation within the framework of Regulation (EU) 2016/429 ('**Animal Health Law**')

# EARLY WARNING

## Migration Mapping Tool

- Displays spatio-temporal patterns of wild bird distributions (**abundance** and **connectivity**)
  - Seasonality
  - Migration
- **Week-by-week** at a resolution of **30x30 km**
- Includes the **50 target species** recommended by EFSA for passive surveillance of HPAI in wild birds



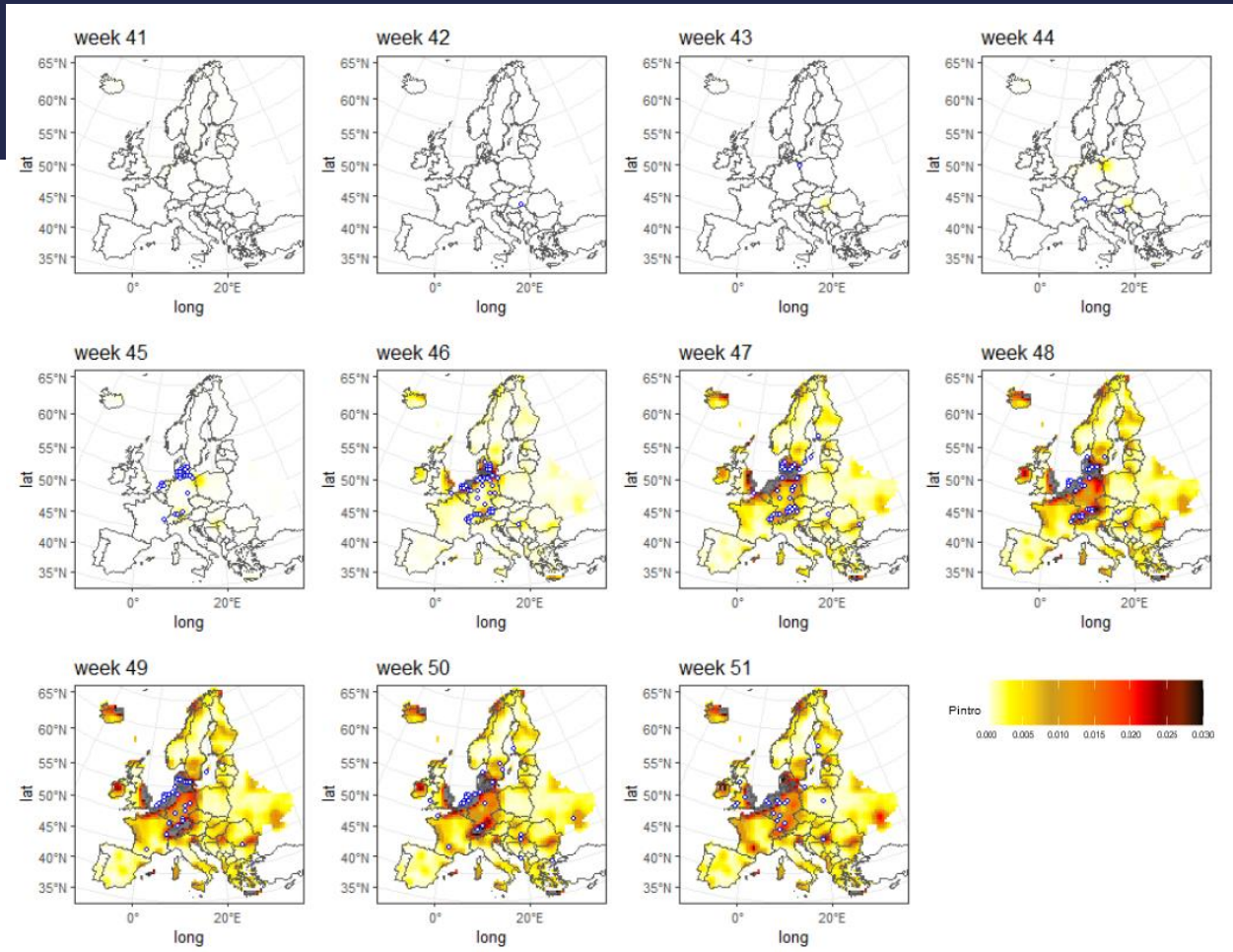
<https://eurring.org/research/migration-mapping>



# EARLY WARNING

## Bird Flu Radar

- Estimates the probability of HPAI virus introduction into wild birds
- **Week-by-week** at a resolution of **50x50 km**
- Offers an alert messaging system



<http://15.236.78.66:3838/hpai/>

Early warning of highly pathogenic avian influenza (HPAI) in the EU weekly summary report

Probability of introduction of HPAI A(H5/N1) in wild birds in Germany from 2023-04-24 to 2023-05-01

Please note that if  $P_{intro} < 0.20$ , grid cells are displayed in grey

The overall median probability of introduction for Germany from 2023-04-24 to 2023-05-01 is 0.031 [95%CI: 0.006-0.12], while the maximum is 1. That of 188 cells for Germany, 112 have a probability of HPAI introduction in wild birds higher than 0.04, which represents 59% of the country. Please note that 0.04 is the optimal cut-point value at which model sensitivity and specificity are maximized (see EFSA's External Scientific Report). Model results should be interpreted with caution due to the model limitations, delay in outbreak reporting in wild birds and delay in data transmission, which leads to an underestimation of the probability of introduction. For more information on how to interpret these data you may have a look at this video.

For the previous week, the total number of HPAI outbreaks reported in wild birds in Germany was 6 according to the Food and Agriculture Organization of the United Nations (FAO). Estimated probabilities of introduction in wild birds for the previous weeks and for other EU countries are available through the Migration Mapping Tool.

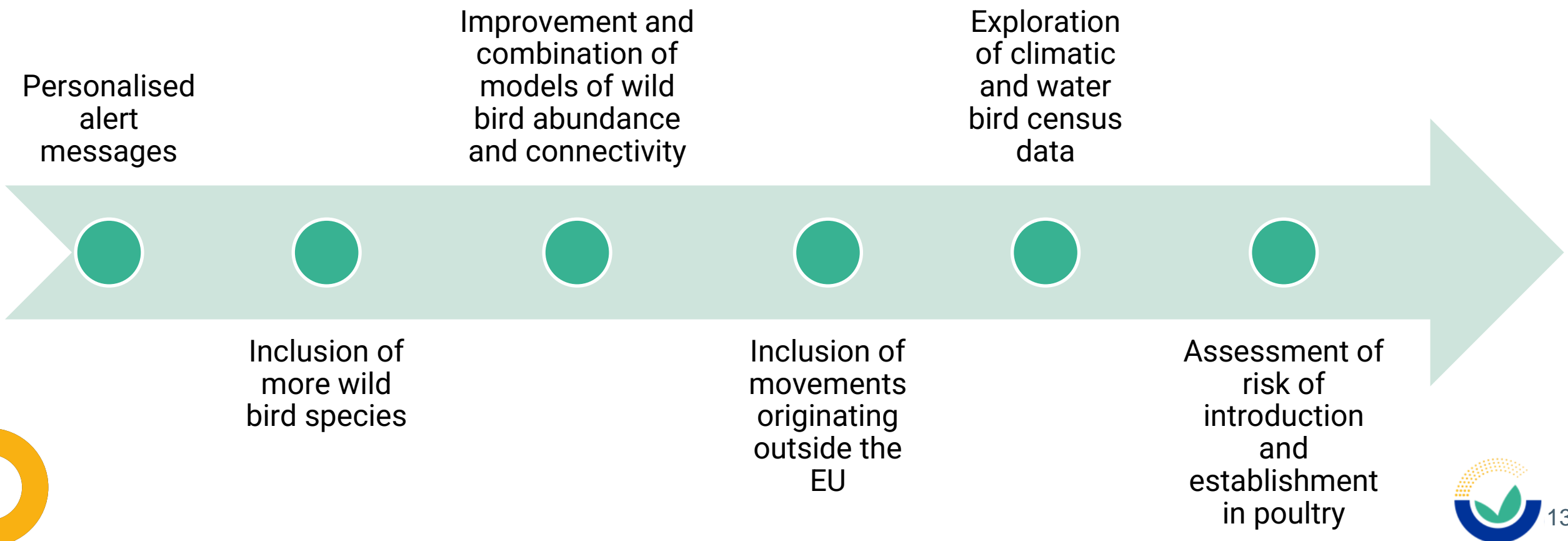
# EARLY WARNING

## Development of a prototype early warning system for avian influenza in the EU based on risk-mapping

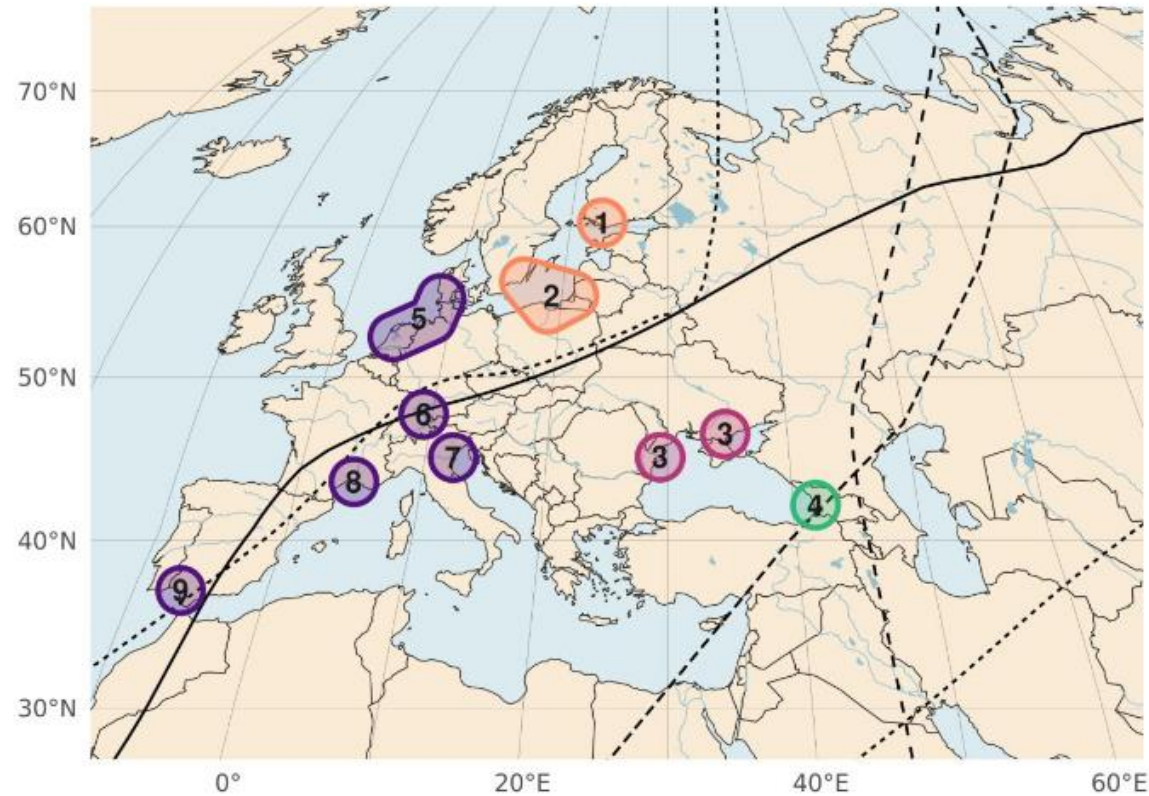
G. Gargallo, J.G. Davies, C. Faverjon, C. Kampichler, S.R. Baillie, A. Cameron, R.A. Robinson, H. Sierdsema

First published: 16 December 2022 | <https://doi.org/10.2903/sp.efsa.2022.EN-7762>

## Bird Flu Radar



# EARLY WARNING



□ East Atlantic Flyway      □ West Asian/East African Flyway  
□ Black Sea/Mediterranean Flyway      □ Central Asian Flyway

■ autumn    ■ autumn/winter    ■ winter    ■ autumn/winter/spring

## Active surveillance in wild birds

- Identification of key **hosts**, key **areas** and key **times** of the year for sampling
- Pilot studies in Georgia and Ukraine
- Combination of **ornithological** and **genomic** data

efsa SUPPORTING PUBLICATIONS

OPEN ACCESS

External scientific report | [Open Access](#)

### Active wild bird surveillance of avian influenza viruses, a report

Jonas> Waldenström ✉ Mariëlle van Toor, Nicola Lewis, Sara Lopes, Zura Javakhishvili, Denys Muzika, Ron A. M. Fouchier, Adam Brouwer

First published: 22 December 2022 | <https://doi.org/10.2903/sp.efsa.2022.EN-7791>



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EUROPEAN MEDICINES AGENCY  
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