



USAID
FROM THE AMERICAN PEOPLE

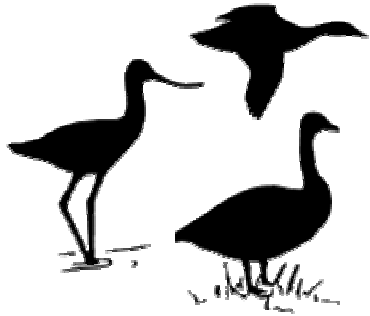


Global Avian Influenza Network for Surveillance (GAINS) for Wild Birds



Percy FitzPatrick
Institute of African Ornithology
University of Cape Town





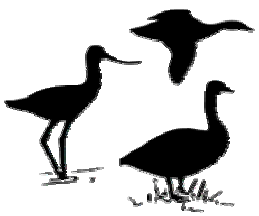
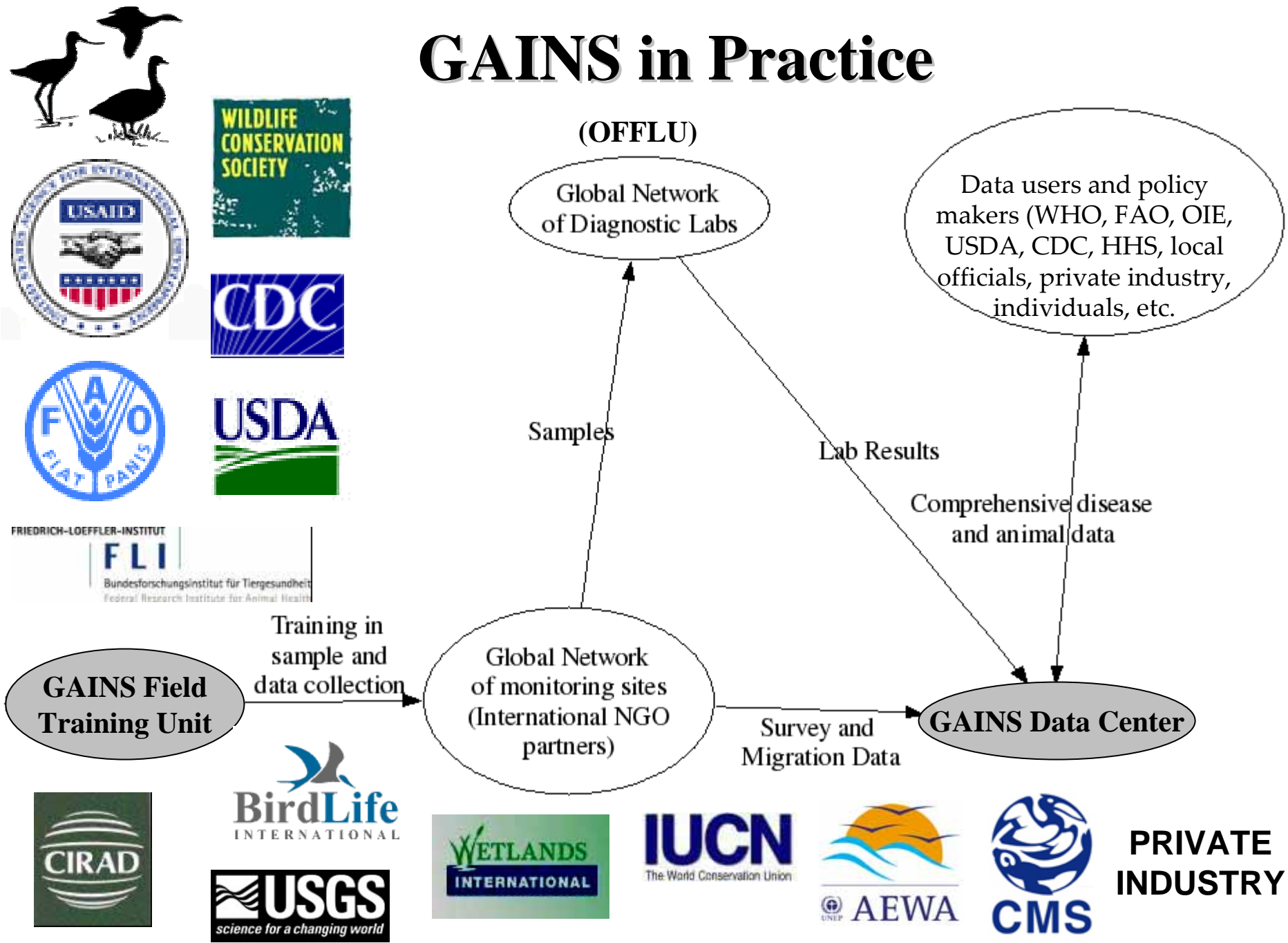
Global Avian Influenza Network for Surveillance (GAINS)

Goals

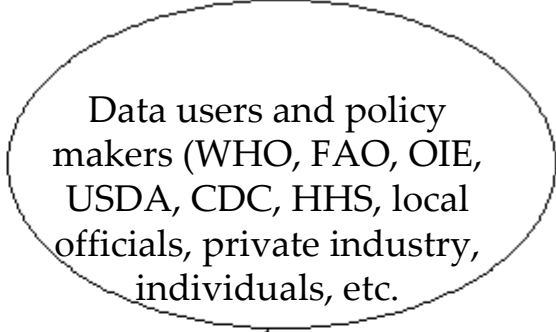
- **Monitor disease distribution**
- **Monitor bird movement**
- **Assess impact on wildlife**
- **Isolate new virus strains to contribute to analysis and vaccine production**
- **Provide quality information to:**
 - **Guide preparedness**
 - **Provide early warning**



GAINS in Practice



Training in sample and data collection



Samples

Lab Results

Comprehensive disease and animal data

Survey and Migration Data



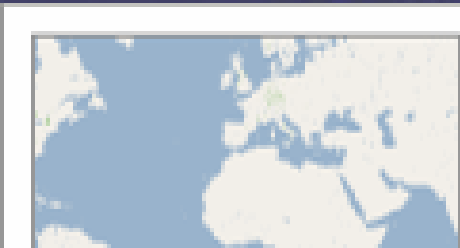
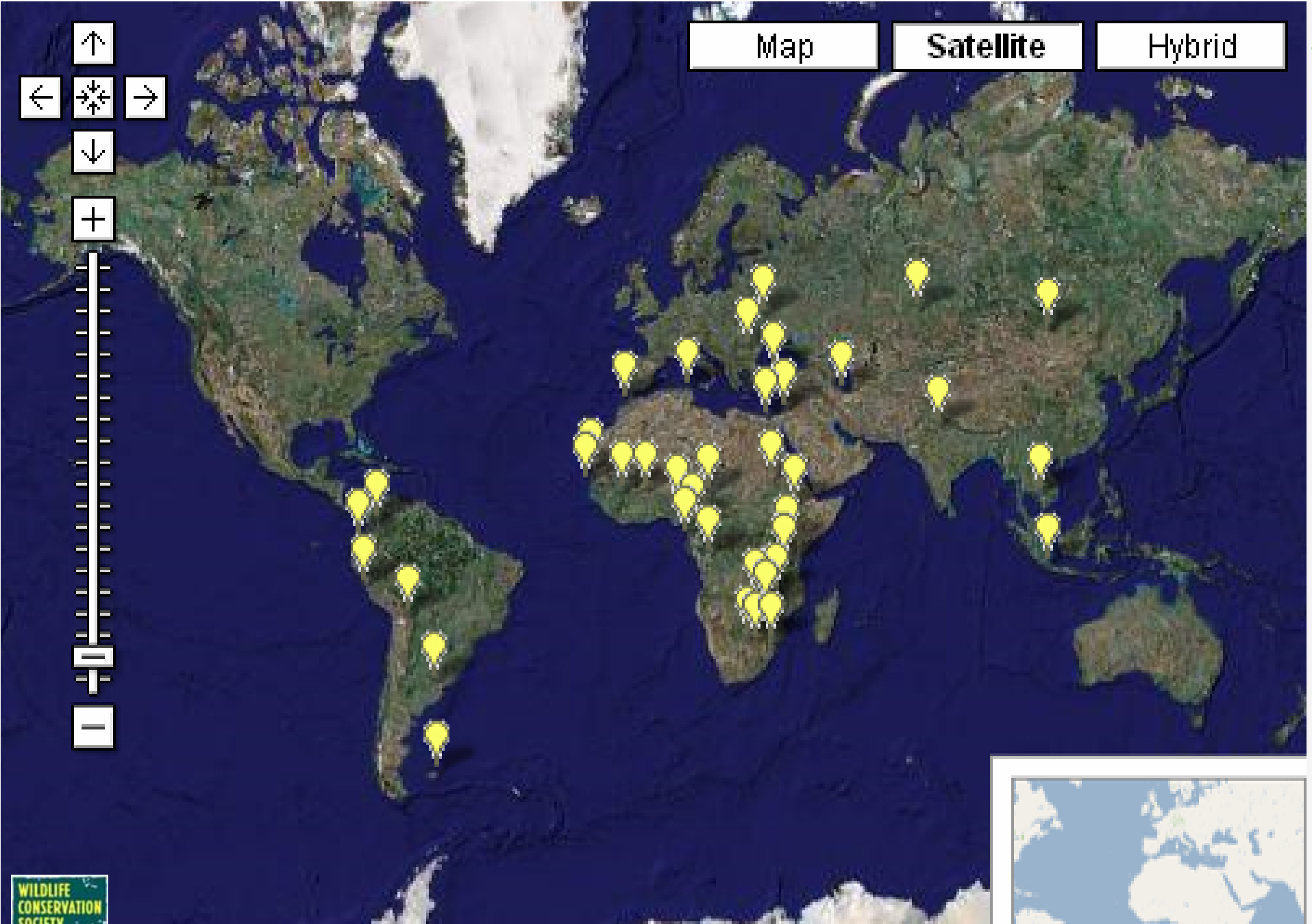
PRIVATE INDUSTRY

Map

Satellite

Hybrid

Map navigation controls including directional arrows (up, down, left, right), a compass rose, a zoom-in (+) button, a zoom slider, and a zoom-out (-) button.



Global Avian Influenza Network for Surveillance

A program of the Global Animal Information Network for Surveillance

Map Tools > Where We Work > Asia > Mongolia

Register | Login

Search

Go

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Contributors

Data Tools

Map Tools

Resources

About GAINS

During the early stages of GAINS, field activities will be focused where existing relationships with organizations and government agencies allow for implementation. Additional organizations and agencies are welcome to share information on current or previous activities and results related to the monitoring of wild birds. Please [register with this site by clicking here](#) if you are interested in contributing to the GAINS initiative.



Lon: 126.5625

Lat: 47.15984001304432

The GAINS team is excited to release prototype maps like the one above using Google technology. We are in the process of developing more advanced mapping components that will be released at the start of 2007. If you have any feedback or suggestions about how you would like to be able to explore GAINS data, please [register](#) with the site and then visit our [suggestions](#) page.









W. B. Karesh / WCS

[Home](#) > [News](#) > World News

Posted on 04 Nov 2005 # ANI

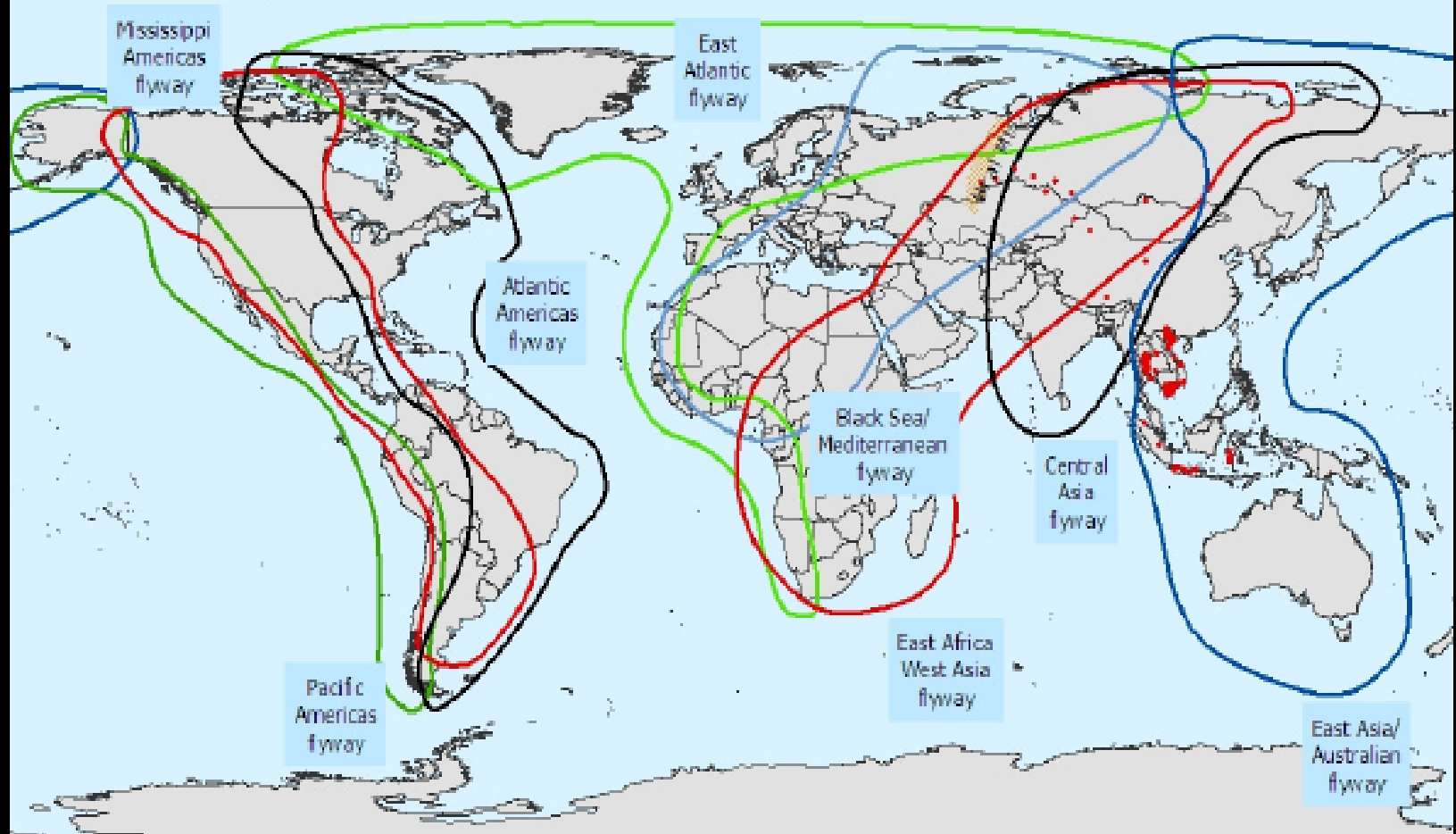
Wild whooper swan virus HP H5N1 selected for human pandemic influenza vaccine

Jun 06 – sent to Sanofi - Pasteur



H5N1 outbreaks in 2005 and major flyways of migratory birds

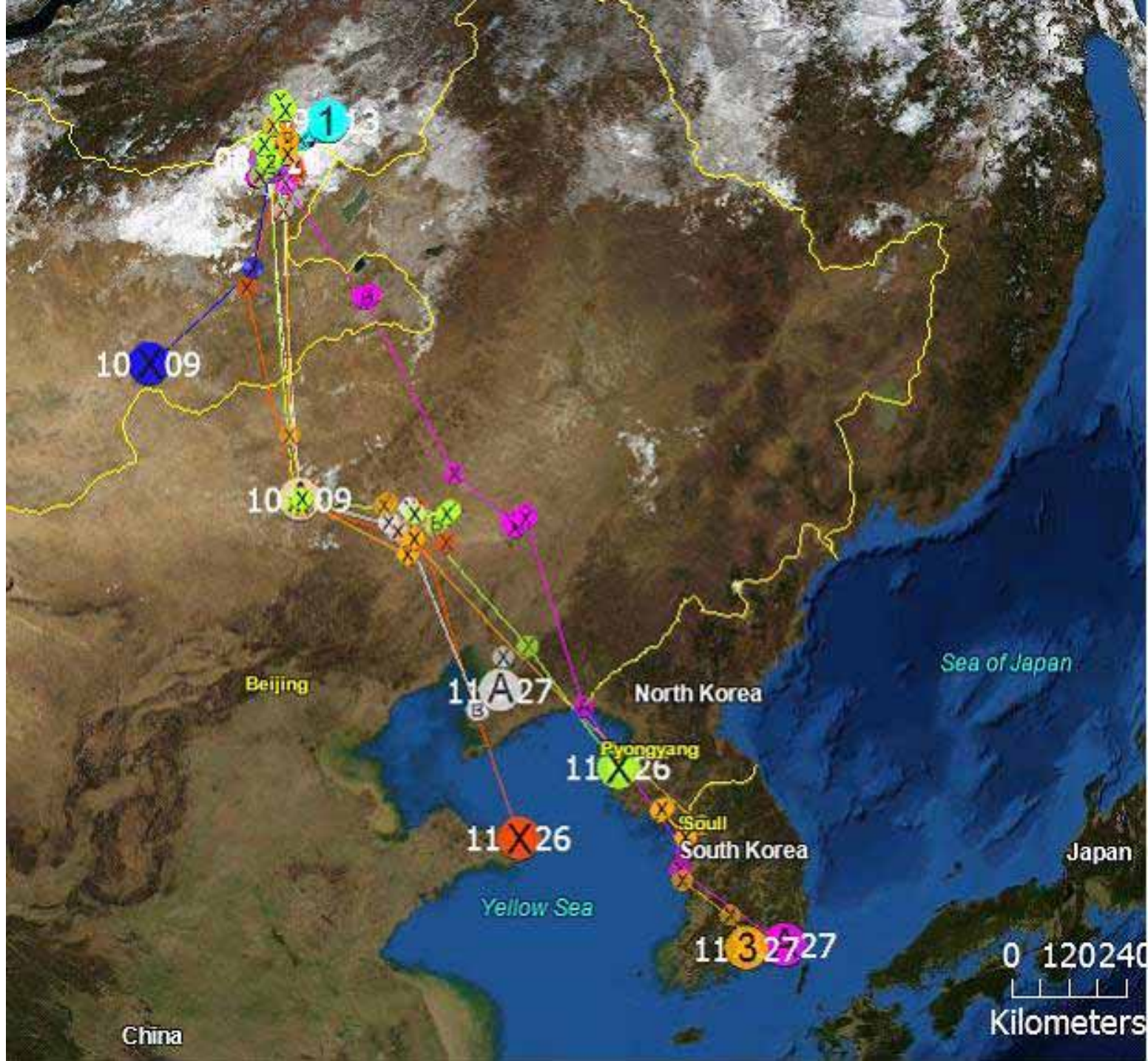
Situation on 30 August 2005



● Districts with H5N1 Outbreaks since January 2005

© United Nations Food and Agriculture Organization 2005.
All rights reserved. Compiled by FAO AGAH, EMPRES Programme.
Data sources: AI outbreaks: OIE, FAO and Government sources.
Flyways: Wetlands International







Swan Locations

Swan s579 Purple 11/7/2006 - 11/28/2006
Swan s694 Orange 11/21/2006 - 11/28/2006

11/7/06:1

11/21/06:9

11/22/06:11

11/27/06:3

11/23/06:5

11/8/2006 -
11/29/2006

11/9/06:3

(Pusan)

Chungchongbuk-Do
Cheongju

South Korea

Chungchongnam-Do

Taejon

Daejeon

Kyongsangbuk-Do

Sapsi-do

Eochong-do

Daegu Taegu

Iksan

Kyongsangnam-Do

Wl-do

Anma-do

Kwangju

© 2006 ZENRIN
© 2006 Europa Technologies
Image © 2006 TerraMetrics

Google

49 mi

Pointer 35°56'45.83" N 127°21'26.19" E elev 609 ft

Streaming 100%

Eye alt 165.70 mi





WILDLIFE
CONSERVATION
SOCIETY

R. A. Cook/WCS







Mduduzi learning to ring birds on an Egyptian goose





Global Avian Influenza Network for Surveillance

A program of the Global Animal Information Network for Surveillance

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About GAINS

Featured Contributor

FLI

The Friedrich-Loeffler-Institut is both an important production site for FMD vaccines and a research institution for animal diseases.

[Read More](#)

For a full list of our contributors, see our [Contributors Page](#)

Special Reports



The aim of the Wild Bird Global Avian Influenza Network for Surveillance (GAINS) program is to expand operational field capabilities, improve the understanding of viral strains and transmission of influenza viruses in wild birds, and to disseminate information to all levels of governments, international organizations, the private sector and the general public.

GAINS is a global surveillance network of wild birds for avian influenza. Our strategies are: improving the collection, coordination, and laboratory evaluation of samples from wild birds in order to identify locations of avian influenza viral strains; identifying genetic changes in virus isolates; enhancing links with wild bird distribution and migration information, and providing an early warning system for global spread of highly pathogenic avian influenza (HPAI) that threatens domestic poultry and human health as well as biodiversity (particularly avian).

[Special Report - Training Afghan Technical Experts to Monitor Wild Birds \(PDF\)](#)

[Special Report - GAINS 5th Quarterly Report - 2007 \(PDF\)](#)

Map Explorer



Use the Map Explorer to map the results of wild bird avian influenza sampling done by GAINS contributors.

[Launch the Map](#)

[Explorer](#)

Data Explorer



Use the Data Explorer to access the GAINS avian influenza database.

[Launch the](#)

Where We Work

Select country

Featured countries where GAINS and its partners are conducting mortality surveillance, avian influenza sampling, and wild bird censuses.



GAINS Avian Influenza News

[China bans poultry imports from Canada after avian influenza alert \(People's Daily\)](#)

[China Bans Poultry Imports From Canada After Avian Influenza Alert \(Bernama\)](#)

[Avian Influenza Detected In Saskatchewan Statement From The Honourable Gerry Ritz, Minister Of Agriculture And Agri ... \(Medical News Today\)](#)

[Avian Influenza Detected In Saskatchewan, Canada \(Medical News Today\)](#)

[New biosensor detects avian influenza in just minutes \(News-Medical-Net\)](#)



Address <http://www.gains.org/tabid/547/Default.aspx>

Go Links

Haemagglutinin (H): All Neuraminidase (N): All Pathogenicity: All

Update Map Report



Layers Refresh Map

- Sites with positive diagnosis
- Sites without positive diagnosis
- Sites with counts
- Cities
- Rivers
- Lakes
- Countries with samples
- All Countries
- latlong

Identify Results



lon: 111.283 lat: -12.567



Address <http://www.gains.org/tabid/547/Default.aspx> Go Links

Influenza subtype

Haemagglutinin

Update Map Report

Select the external data source:

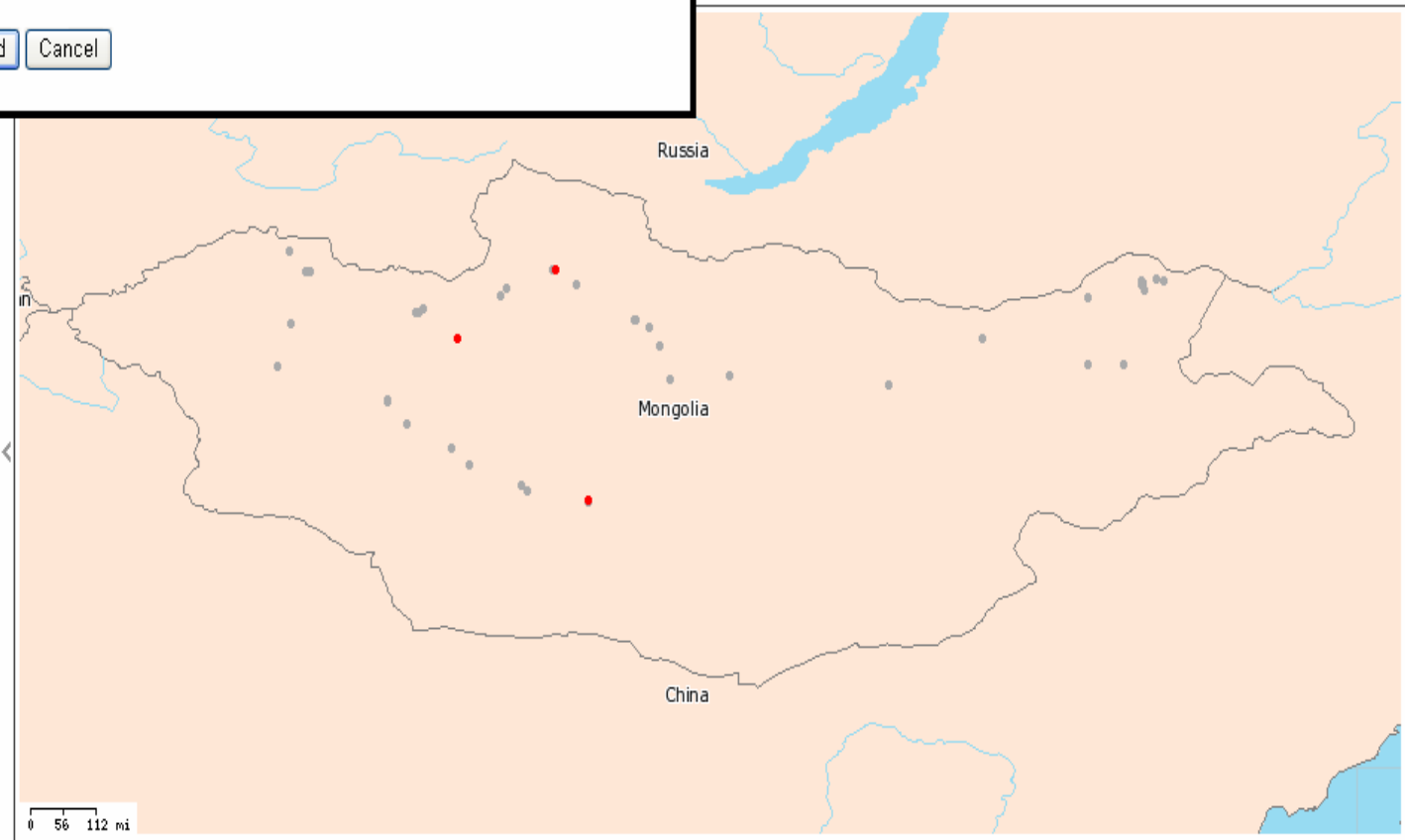
XML File:

 Browse...

WMS URL:

Upload Cancel

- Layers
Refresh Map
- Sites with positive dia
 - Sites without positive dia
 - ◇ Sites with counts
 - Cities
 - Rivers
 - Lakes
 - Countries with samples
 - All Countries
 - latlong



Identify Results

lon: 102.118 lat: 54.781



Address <http://www.gains.org/tabid/547/Default.aspx>

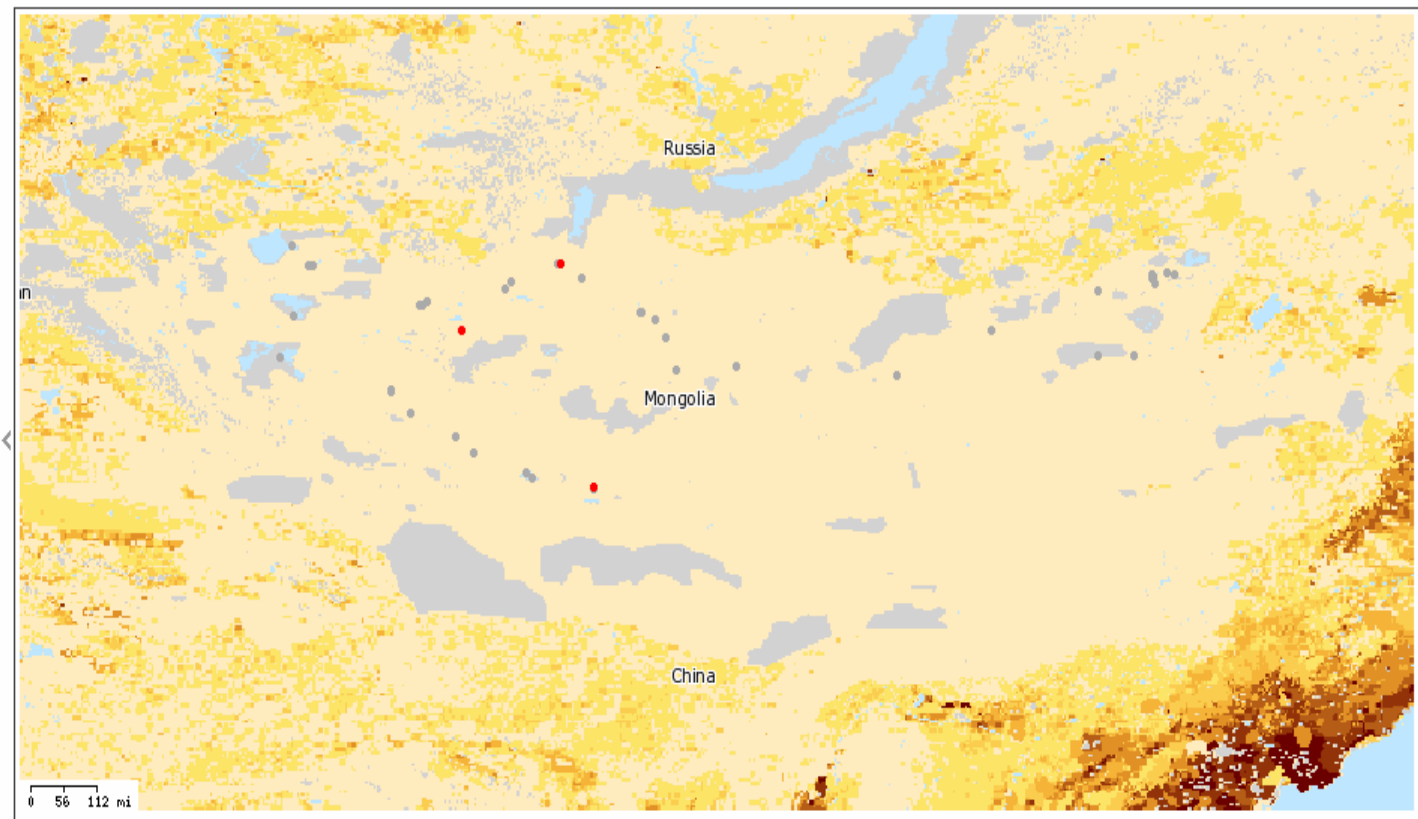
Influenza subtype

Haemagglutinin (H): All Neuraminidase (N): All Pathogenicity: All

Update Map Report



- Layers
- Refresh Map
- Sites with positive diagnosis
 - Sites without positive diagnosis
 - FAO GeoNetwork OGC Web Map
 - Sites with counts
 - Cities
 - Rivers
 - Lakes
 - Countries with samples
 - All Countries
 - latlong



Identify Results

lon: 117.356 lat: 54.446



Address <http://www.gains.org/tabid/547/Default.aspx>

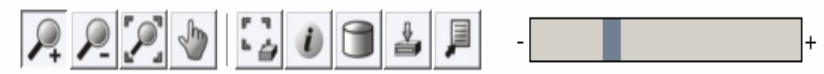
Go Links

Influenza subtype

Haemagglutinin (H): 5 Neuraminidase (N): All Pathogenicity: All

Update Map Report

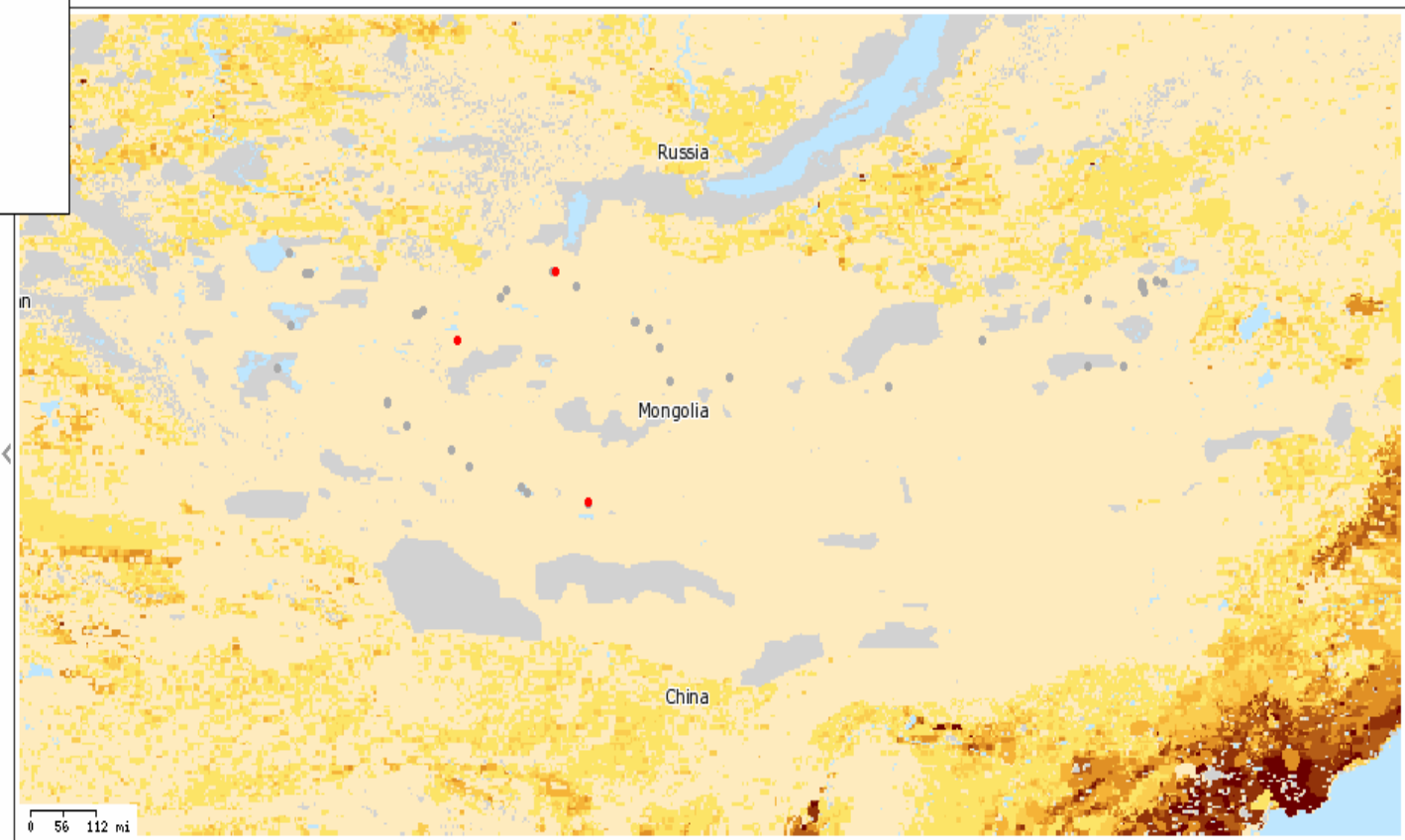
- All
- Undefined
- 1
- 2
- 3
- 4
- 5**
- 6
- 7
- 8
- 9
- 10
- 11
- 12
- 13
- 14
- 15
- 16



Layers

[Refresh Map](#)

- Sites with positive diagnosis
- Sites without positive diagnosis
- FAO GeoNetwork OGC Web
- Sites with counts
- Cities
- Rivers
- Lakes
- Countries with samples
- All Countries
- latlong



0 56 112 mi

lon: 94.870 lat: 53.108

Identify Results

Influenza subtype

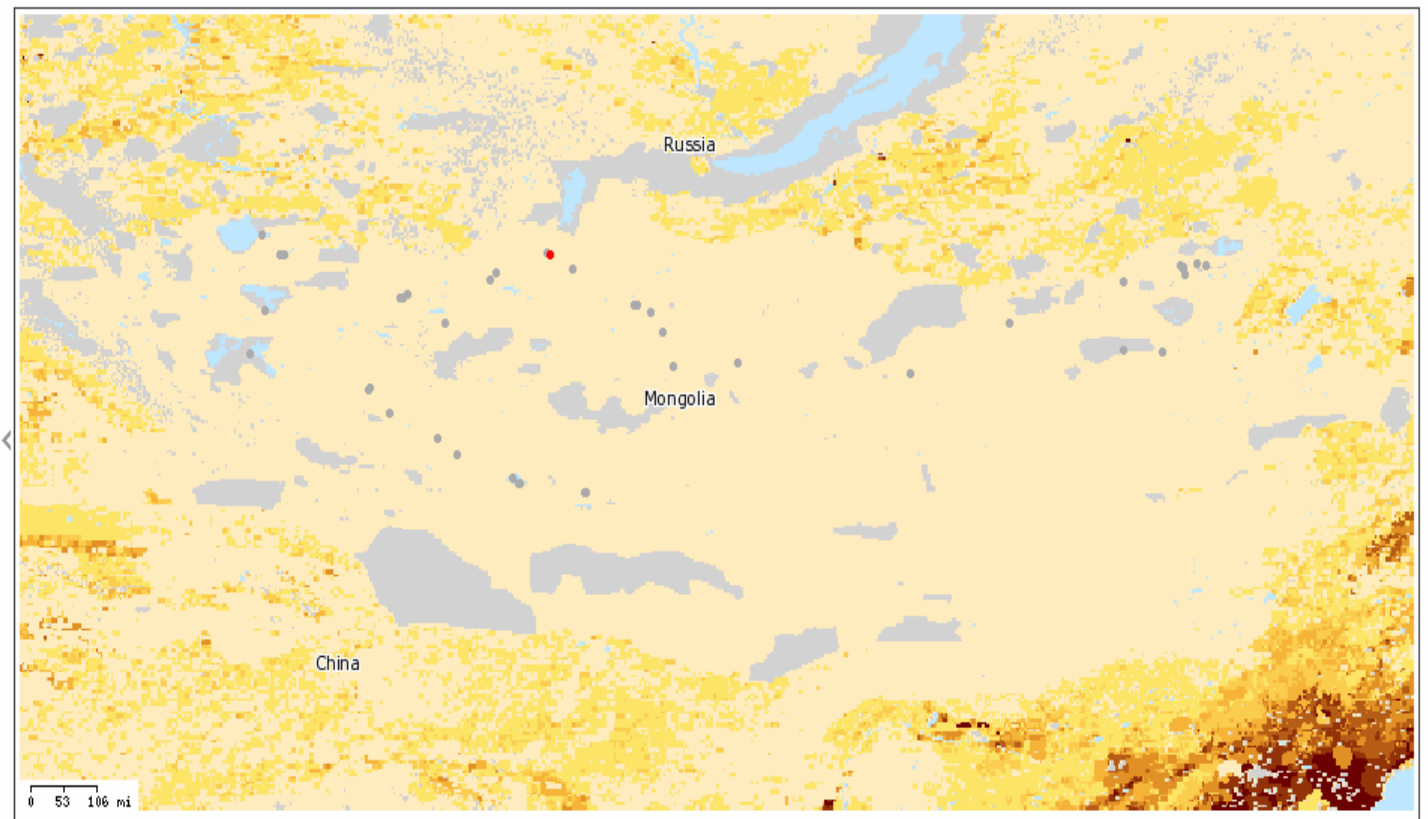
Haemagglutinin (H): 5 Neuraminidase (N): 1 Pathogenicity: High

Update Map Report



- Layers
Refresh Map
- Sites with positive diagnosis
 - Sites without positive diagnosis
 - WMS:FAO GeoNetwork OGC Web Map
 - Sites with counts
 - Cities
 - Rivers
 - Lakes
 - Countries with samples
 - All Countries
 - latlong

- Identify Results
- Anser indicus
 - Cygnus cygnus
 - Show Flyway
 - Export Flyway
 - Sampling Events
 - 8/9/2005
 - H12N3Low: 1
 - H5N1High: 1
 - Larus argentatus
 - Tadorna ferruginea
 - Erhel Nuur



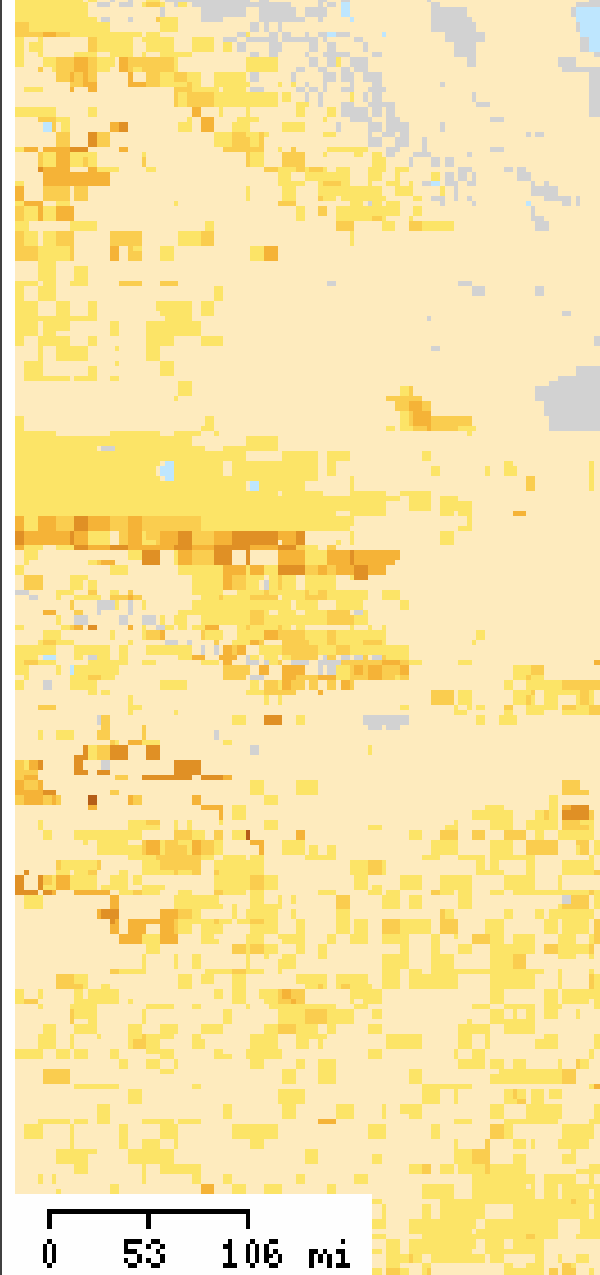
lon: 99.966 lat: 46.481

- All Countries
- latlong

Identify Results

- Anser indicus
- Cygnus cygnus
- [Show Flyway](#)
- [Export Flyway](#)
- Sampling Events
 - 8/9/2005
 - H12N3Low: 1
 - H5N1High: 1
- Larus argentatus
- Tadorna ferruginea

Erhel Nuur



lon: 99.966 lat: 46.4

Influenza subtype

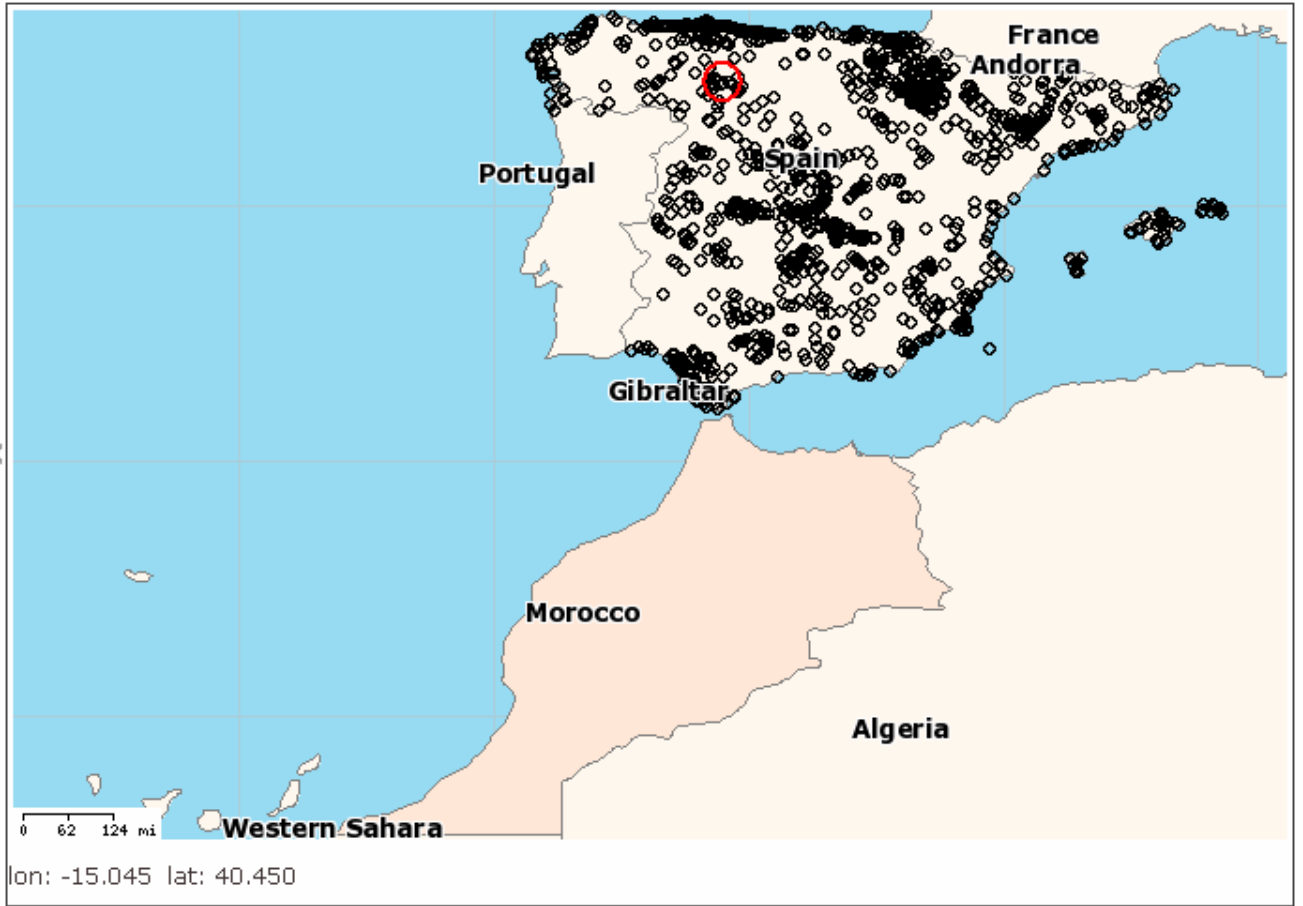
Haemagglutinin (H): All Neuraminidase (N): All Pathogenicity: All

Update Map Report



- Layers Refresh Map
- Sites with positive diagnosis
 - Sites without positive diagnosis
 - Sites with counts
 - Cities
 - Rivers
 - Lakes
 - Countries with samples
 - All Countries
 - Coordinate grid

- Identify Results
- [Confluencia Ríos Esla Y Bernesga \(Le\)](#)
- Report
- Anas platyrhynchos*
 - Ardea cinerea*
 - Charadrius dubius*
 - Ciconia ciconia*
 - Egretta garzetta*
 - Fulica atra*
 - Gallinago gallinago*
 - Gallinula chloropus*
 - Larus ridibundus*





Point Location Item Report

Code: C413007
Name: Confluencia Ríos Esla Y Bernesga (Le)
Longitude: -5.51900005340576
Latitude: 42.4570007324219
Altitude:
Region: Spain
Organization Owner: Wildlife Conservation Society

Species At Point Information

| Species Name | Have Been Counted | AI Positive | No AI Positive Record |
|---------------------|-------------------|-------------|-----------------------|
| Tringa hypoleucos | 1 | 0 | 0 |
| Anas platyrhynchos | 1 | 0 | 0 |
| Ardea cinerea | 1 | 0 | 0 |
| Charadrius dubius | 1 | 0 | 0 |
| Ciconia ciconia | 1 | 0 | 0 |
| Egretta garzetta | 1 | 0 | 0 |
| Fulica atra | 1 | 0 | 0 |
| Gallinula chloropus | 1 | 0 | 0 |
| Gallinago gallinago | 1 | 0 | 0 |



[Frequently Asked Questions](#)

Select All Species Select All Countries

Species: Country:

Start Date: [Calendar](#)

Influenza subtype

- Calidris
- Calidris acuminata
- Calidris alba
- Calidris alpina
- Calidris alpina alpina
- Calidris alpina arctica
- Calidris alpina pacifica
- Calidris alpina schinzii
- Calidris bairdii
- Calidris canutus

Pathogenicity: High



- Layers
- [Refresh Map](#)
- [Sites with positive diagnosis](#)
 - Sites without positive diagnosis
 - [FAO GeoNetwork OGC Web Map](#)
 - Sites with counts
 - Cities
 - Rivers
 - Lakes
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 - All Countries
 - latlong

Identify Results



portunities
at GAINS
net
Test
Explorer
Desk
Explorer

- Layers
- Refresh Map
- Flyways: CALCA
 - Search results
 - species samplings**
 - sites
 - cities
 - rivers
 - lakes
 - countries
 - latlong

Identify Results

SampleDate: 1/1/2001 0:0:0

Anas platyrhynchos

Show Flyway

Export Flyway

Details

WISDOM_SpeciesName: Anas platyrhynchos



GAINS America Latina 2006





Curso-Taller Internacional:

Capacitación en Epidemiología, Vigilancia y Manejo de Aves de Corral y Silvestres para la detección temprana de la Influenza Aviar Altamente Patógena en el Continente Americano

23 - 27 de Octubre de 2006

Lima, Perú

(Países hispano parlantes)

International workshop:

Training in Epidemiology, Surveillance and Management of Poultry and Wild Birds for the Early Detection of Highly Pathogenic Avian Influenza in the Americas.

November 3-7 2006

Kingston, Jamaica

(Países del Caribe)











El Censo Neotropical de Aves Acuáticas 2004

Una herramienta para la conservación

Bernabé López-Lanús y Daniel E. Blanco, editores

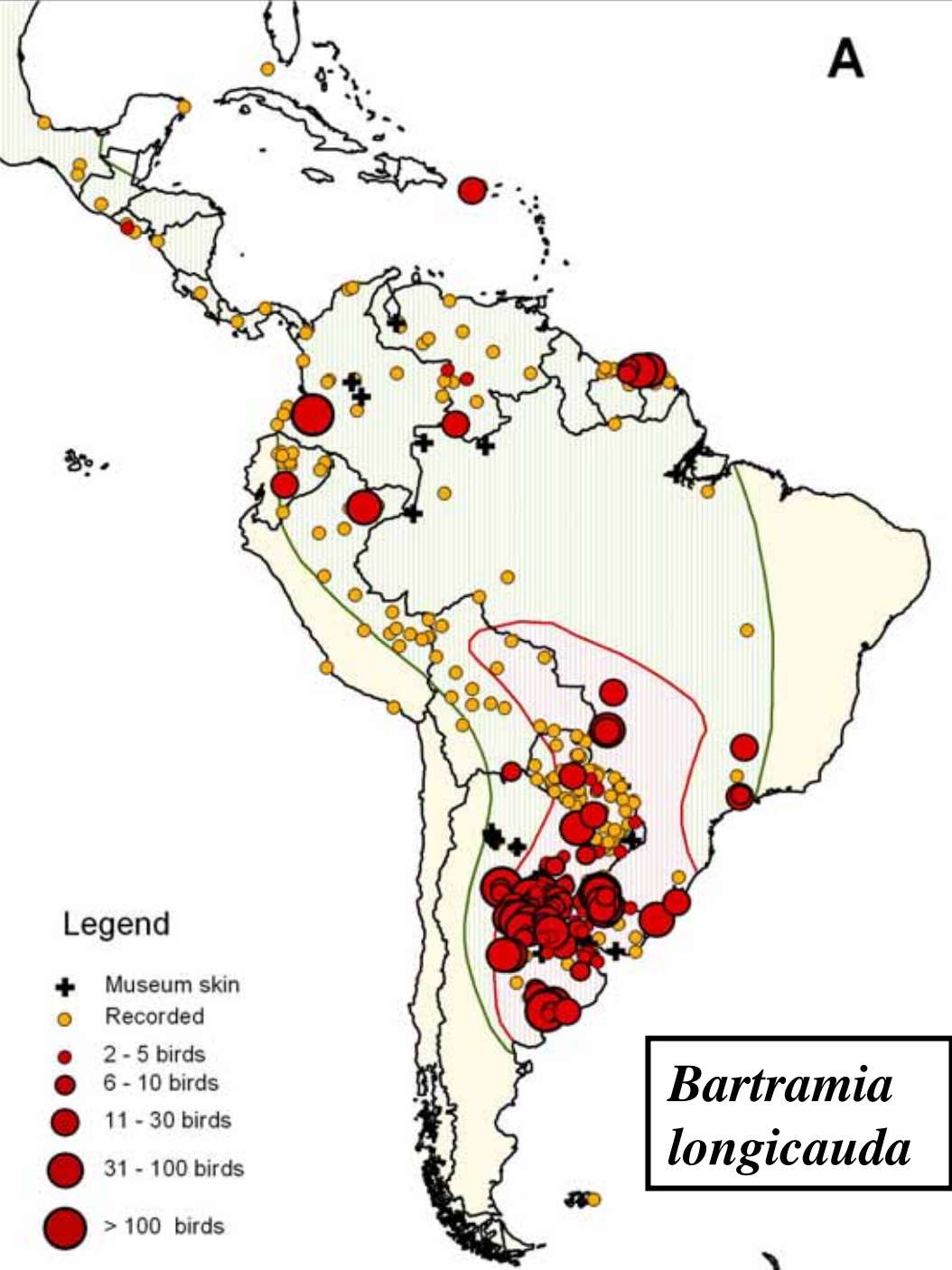


WETLANDS
INTERNATIONAL

Global Series 17

**WILDLIFE
CONSERVATION
SOCIETY**

A





GAINS 2006-2007

- Training & capacity building
- Government awareness & AI preparedness plans
- Wild bird AI surveillance (active and passive)
- Wild bird telemetry & migration flyways
- Wild bird census

GAINS 2006-2007

- Wild bird **active surveillance in 29 countries**
 - Asia, E. Europe & Middle East (12 countries)
 - Africa (10 countries)
 - South America & Caribbean (7 countries)
- Over **12.000 birds sampled**
- Over **800 people in 34 countries** have been **trained**
- Nearly **103 million bird observations** available

GAINS

www.gains.org



Wildlife Conservation Society

www.wcs.org

Field Veterinary Program

www.fieldvet.org

GAINS

www.gains.org

Marcela Uhart, M.V.
Field Veterinary Program
Wildlife Conservation Society
CC 19
(9120) Puerto Madryn
Chubut, Argentina
email: muhart@wcs.org
Ph/fax: 54-2965-452050

