

# Waterbirds and Managing Health Risks

*Agricultural Wetlands and Migratory Birds Living in Harmony*  
*Society for the Conservation of Philippine Wetlands, Inc.*  
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**Rizza Araceli F. Salinas, DVM**  
Wildlife Resources Division  
Biodiversity Management Bureau





The Philippines is an archipelago with thousands of islands and a very long coastline estimated to be as long as 36,000 kilometers. The Philippines can therefore be considered as one big wetland with a very long coastal zone and with many fresh water bodies.



# Waterbirds

- known natural reservoir of the bird flu virus;
- the bird flu virus normally carried by these birds have been identified as benign or classified as LPAI (lowly pathogenic avian influenza) virus
- however, they have been tagged as potential carriers of the Highly Pathogenic Avian Influenza virus
- H5N1 strain has been found in at least 75 species of WILD birds





# Risks of interaction with waterbirds

- Waterbirds favor wetlands, such as *freshwater, brackish and coastal wetlands*, as well as *grasslands, forests and agricultural habitats*
- Increased interaction with domestic poultry
- Increased chances of transmission of diseases, parasites, etc



# *Common Diseases*

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- Infectious Bursal Disease
- Infectious bronchitis
- Avian tuberculosis
- Fowl Cholera
- Infectious laryngotracheitis
- **Newcastle Disease**
- **Avian Influenza / Bird flu**

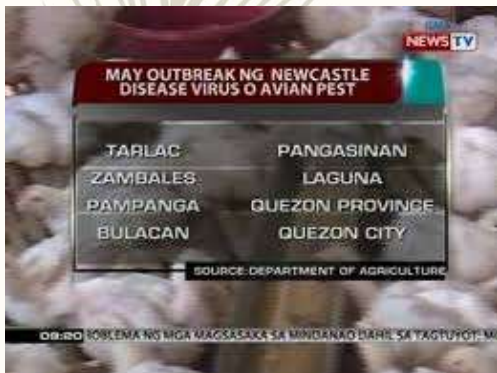


*Pisik, Halak, Peste*





# Reported Disease Outbreaks



## Newcastle Disease

- January 2015 after Typhoon Nona in December
- Tarlac, Pampanga, Nueva Ecija, Laguna
- Affected: poultry



## Avian Influenza (H5N6)

- August 2017
- Pampanga, Nueva Ecija
- Affected: poultry, quails

# Measures to minimize interaction

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*Kill or chase away the birds?*

*Disinfect the lands?*



# Measures to minimize interaction

- Strictly implement Good Animal Husbandry Practices (as recommended by the ASEAN Working Group on Livestock)
- Improve farm biosecurity





# How to battle bird flu?

SAVING WILD BIRDS, POULTRY AND HUMANS

## EAAF

The East Asian-Australasian Flyway (EAAF) stretches across 22 countries, and is used by 50 million waterbirds of over 155 species.



Every year, millions of wild birds undertake impressively long journeys. They travel thousands of kilometres each way between their arctic breeding areas and non-breeding grounds in the south. They need to migrate in order to survive.

During the long migration, birds face many challenges – habitat loss, hunting and diseases, such as the **AVIAN INFLUENZA** also called bird flu.



## migratory birds are more the **VICTIM** than the culprit of bird flu

Migratory waterbirds such as ducks, geese, swans and shorebirds can carry the harmless, low pathogenic form of the avian influenza virus. This virus can spread from one bird to another without making the bird sick. If the virus turns up in a poultry farm where many chickens and ducks live in crowded and unhygienic conditions, the virus can turn into a harmful, high pathogenic form. This harmful virus can spread rapidly among poultry, and most of the infected birds die shortly afterwards. Finally, the evolved harmful virus can get back into wild waterbirds, spread among them and kill them too.

## the solution is **NOT** chasing away or killing wild birds



### PROBLEM

We often hear in the media that migratory birds bring in or spread bird flu. Thus people mistakenly believe that wild birds introduce the harmful form of the virus into their farms, which can then kill their poultry, and make people sick. This fear sometimes leads them to chase or even kill wild birds. Chasing wild birds away is counterproductive - if they are already sick they can spread the infection. Spraying disinfectant into natural wetlands to kill the virus causes a lot of damage to the ecosystem and is an ineffective way to combat the virus. These actions are useless against high pathogenic avian influenza outbreaks!

## the solution is **NOT** poisoning natural wetlands



### SOLUTION

The solution is to improve biosecurity. Biosecurity means protecting poultry and people by preventing diseases like avian influenza virus from entering and leaving farms. It also means protecting other poultry farms and wild birds in the surrounding wetlands, by stopping the disease from leaving infected farms. Biosecurity helps to sustain a healthy environment for poultry, wildlife and humans.

## the solution is **BIO-SECURITY**

### SIMPLE STEPS TO IMPROVE BIOSECURITY



People should disinfect or change shoes and clothes when entering a farm.



The farm should be kept free of droppings that could spread the virus.



Dead poultry should be removed and incinerated or buried deep in the ground to avoid the transmission of the virus to healthy birds.



Farm clothes, tools and transport equipment should be regularly disinfected to avoid the transmission of the virus to other poultry farms.



The water and air entering and leaving the poultry farm should be filtered.



Farmers have to make sure that wildlife and poultry are strictly separated. Wild birds or other animals should not have access to poultry water and food.

### INFECTIONS SHOULD BE REPORTED TO AUTHORITIES IMMEDIATELY

Design: Marta Ferenczi, JotaEslava.es

# Avian Influenza Protection Program



The DA AIPP MOP seeks to provide guidance in the government action in preventing the entry of Avian Influenza in the Philippines (Stage 1) as well as disease response in the event of an incursion (Stage 2). The Department of Health, through the Philippine Preparedness and Response Plan for Pandemic and Avian Influenza, provides guidance in the event of Avian Influenza transmission to human beings.

## Disease Control Measures

- Precautions at the borders
- Monitoring
- Screening
- Targeted Surveillance
- Movement Control Inside the Country

*If there will be HPAI,*

- *Stamping Out*
- *Zoning*
- *Vaccination Prohibited*



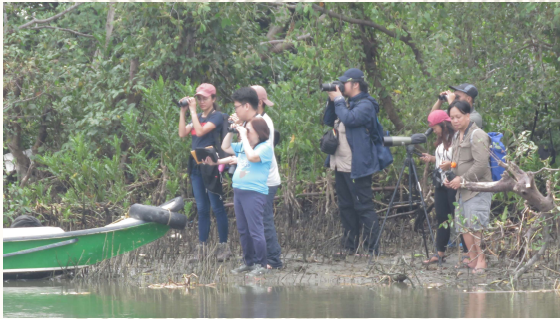


# DENR Role in the AIPP

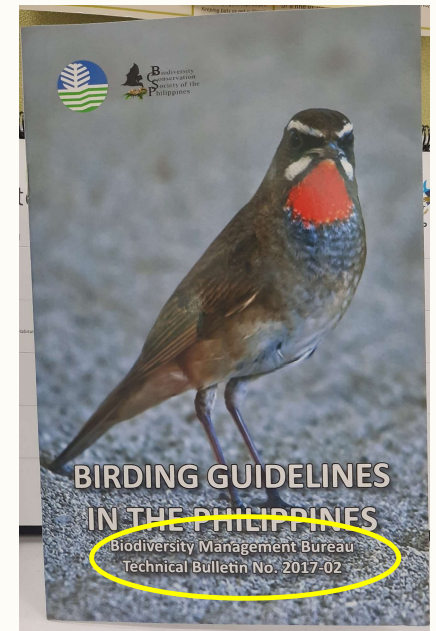
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- Intensify monitoring of waterbird habitats during bird migration season and AI outbreak
- Conduct surveillance in identified high-risk areas to regularly monitor wild bird population
  - early detection
  - enhance knowledge on avian influenza viruses associated with wild birds in the Philippines
- Release public advisory on precautionary measures
- Suspend/disapprove permits, as appropriate
- Continuously monitor the population of migratory birds
  - provide data on waterbirds and their habitats as reference for surveillance work, mapping of AI high risk areas, land use planning

# Responsible Birding (ecotourism)



- Maintain and observe safe distance between the birds and the observers
  - Can use hides, blinds, etc.
- Avoid causing stress
  - On the birds and fellow birders
- Follow the guidelines







**BY THE PRESIDENT OF THE PHILIPPINES**

**Administrative Order No. 10**

**Creating the Philippine Inter-Agency  
Committee on Zoonoses (PhilCZ),  
Defining Its Powers, Functions,  
Responsibilities, Other Related  
Matters and Providing Funds Thereof**

# Joint Department Administrative Order

## GUIDELINES TO OPERATIONALIZE THE PHILIPPINE INTER-AGENCY COMMITTEE ON ZONOSSES (PhiICZ)

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Guidelines for the effective operation of the Philippine Inter-Agency Committee on Zoonoses (PhiICZ) as **the functional and sustainable “One Health” mechanism to strengthen the coordination** between the animal-human health and environment sectors to **prevent and control zoonotic diseases** at the national and local levels.”







# Department Roles

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The DOH shall serve as the lead agency on the prevention and control of zoonotic diseases in humans.

The DA shall serve as the lead agency on the prevention and control of zoonotic diseases in livestock, poultry and other domestic animals.

The DENR shall serve as the lead agency on zoonotic diseases in wild fauna.



# Department Responsibilities

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*All agencies shall:*

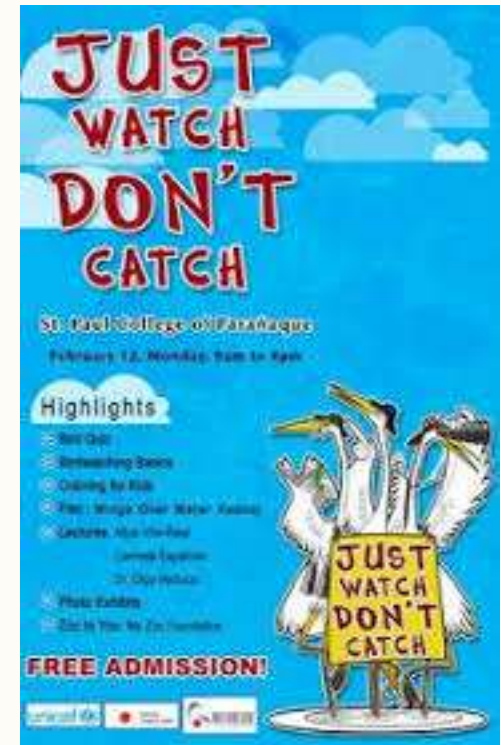
- Develop and disseminate policies, guidelines, and issuances on zoonotic diseases;
- Provide epidemiologic data on zoonotic diseases as basis for policy formulation and decision-making;
- Provide accurate and timely information to specific target audiences;
- Undertake research priorities and ensure dissemination and use of research findings;
- Serve as chairperson, vice-chairperson and secretariat of the Committee.



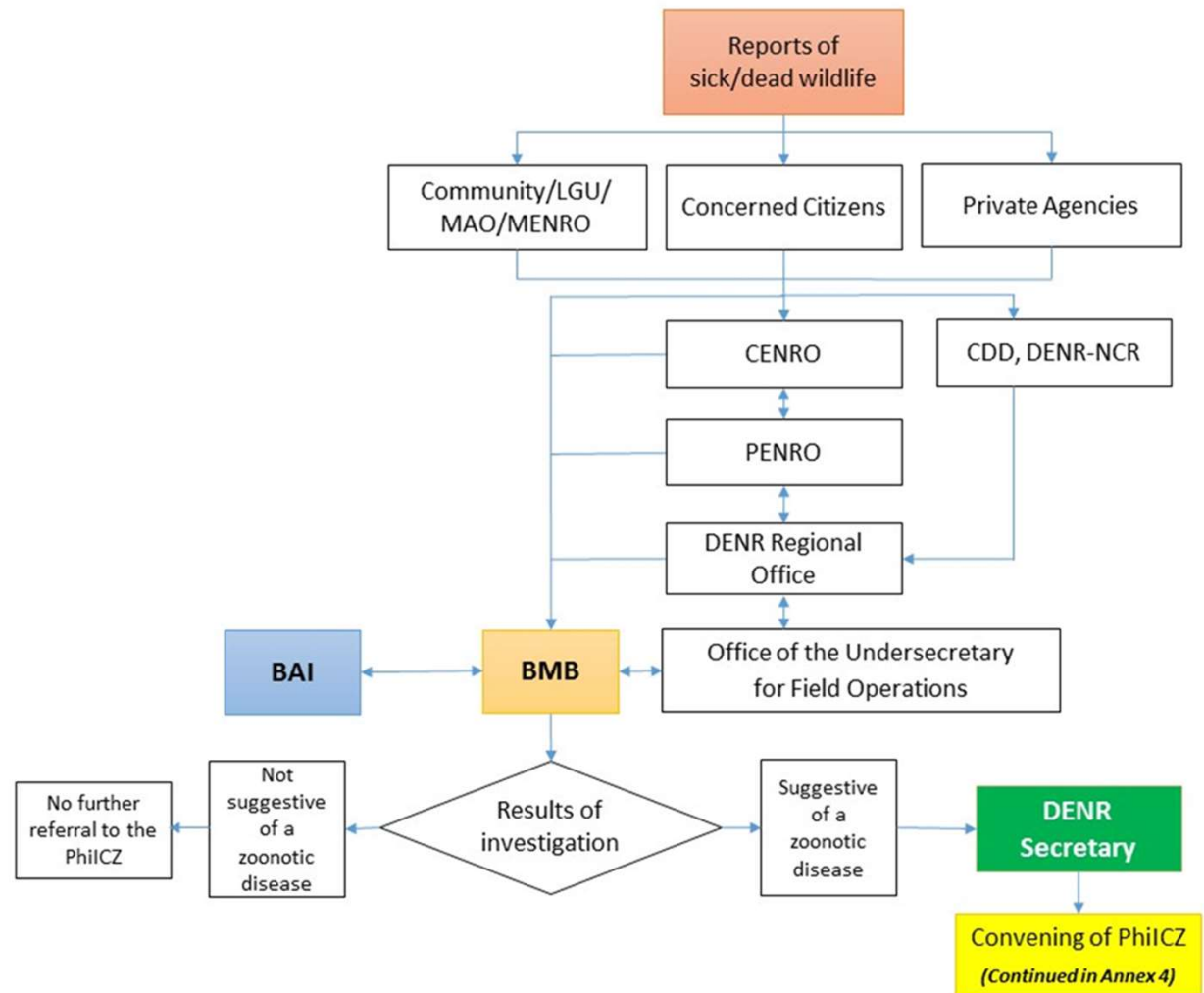
# What to do when there is a dead migratory/waterbird

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1. Do not touch the bird! Secure the carcass.
2. Inform the authorities.
3. These agencies will properly collect the carcass and submit to the laboratory.
4. Continuously monitor for possible additional mortalities.



## Reporting flow (lifted from the JDAO)







# Current efforts

## Issuance of Public Advisory

- at the onset of bird migration
- during outbreaks, as notified by BAI



Republic of the Philippines  
Department of Environment and Natural Resources  
**BIODIVERSITY MANAGEMENT BUREAU**  
Ninoy Aquino Parks and Wildlife Center  
Quezon Avenue, Diliman, Quezon City  
Tel. Nos.: (632) 924-6031 to 35 Fax: (632) 924-0109, (632) 920-4417  
Website: <http://www.bmb.gov.ph> E-mail: [bmb@bmb.gov.ph](mailto:bmb@bmb.gov.ph)

### PUBLIC ADVISORY

The public is hereby informed of the annual bird migration season in the Philippines whereby influx of migratory birds is expected to commence around September (southward migration) and return to their breeding grounds by March in the following year (northward migration). These birds stop briefly along wetlands – swamps, marshes, intertidal and coastal areas, rivers, ponds, lakes, as well as forests throughout the country, to rest and refuel for their onward journey.


We call on the public to help protect these birds. Hunting of wildlife including birds is illegal, and is punishable under the provisions of Republic Act 9147, or the "Wildlife Resources Conservation and Protection Act". Violator/s may face a maximum imprisonment of Two (2) years and one (1) day to Four (4) years and a fine of Thirty Thousand Pesos (P30,000.00) to Three Hundred Thousand Pesos (P300,000.00).

Certain migratory birds, such as wild ducks, gulls, and shorebirds are susceptible to avian influenza virus (avian flu). The public is therefore further advised not to handle any wild dead bird/s that may be found near wetlands.

If you have knowledge of anyone who killed, inflicted injury, or is engaged in collecting, hunting, transporting or trading of these birds, among other illegal acts as provided for under the Wildlife Act, or encountered any incidences of dead birds, please inform the nearest DENR Field Office, local government unit and/or Police Officer in your area. Information can also be sent to the Biodiversity Management Bureau through Telefax No. (02) 8925-8946 or by email at [wrd@bmb.gov.ph](mailto:wrd@bmb.gov.ph).

Let us keep the Philippines a safe haven for migratory birds and all other wildlife.

Thank you for your cooperation.

  
**RICARDO W. CALDERON, CESO III**  
Assistant Secretary for Climate Change and  
concurrent Director, Biodiversity Management Bureau



# Wildlife Disease Surveillance

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First activity: March 2018, Pampanga

Follow-up activity: November 2018, Pampanga

*Catch and release activity*

*Samples were collected from a total of 120 birds, 25 species*

*Samples were submitted and examined at the BAI-Philippine  
Animal Health Center / Veterinary Disease Diagnostic  
Laboratory*

ALL NEGATIVE.











# Photo credits

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DENR Region IX – PENRO Zamboanga Sibugay

Caves, Wetlands and Other Ecosystems Division, BMB

*Because* all creatures are connected, each must be cherished with love and respect,  
for all of us as living creatures are dependent on one another.

~ Pope Francis





Thank you for your  
kind attention.