



BIRD FLU

Educational Resource Prompt Questions

A South Australian Educational Resource

Written by Bruce Baker

A collaboration between:





SAFETY

DO NOT TOUCH A SICK OR DEAD BIRD



IF YOU FIND A SICK OR DEAD BIRD (other than those killed obviously by cars)



AVOID

Avoid any contact with sick or dead birds. Remain distant.



RECORD

Photograph or video what you see. Make any additional notes.



REPORT

Report your observation to the National Hotline
1800 675 888

IMPORTANT NOTE TO EDUCATORS

- Reinforce student (and public) safety and the Importance of hygiene.
- Please be mindful of using age-appropriate materials.
- Some images and video footage can be distressing. Consider audience sensitivity.
- Avoid alarmist language while conveying the true seriousness of the issue.
- Dispel conspiracy theories.

01 BIRDS, ECOLOGY AND THE ENVIRONMENT

Classification

- What makes a bird a bird?
- Choose a species of bird that you know and give its full scientific classification from Kingdom to Species using the hierarchy of classification (K, P, C, O, F, G, S. Advanced students may include super and sub taxa). What is the full classification for the Greater Crested Tern?
- Why are scientific names of birds (and other living things) important?

Bird Migration

- Which birds in your area migrate?
- Where do they come from and go to? When? Why?
- What is a 'flyway'? How many are there? Where are they?
- Why might they be significant in relation to bird flu?

Scavengers

- What are scavengers? Why might they be important in bird flu?

Predators

- What are predators? Why might they be important in bird flu?

Social Species

- Some birds are very social and gather in large flocks. Why could this be a major issue?
- Some birds nest in colonies. Can you find any examples? Why might they do this? What are the advantages and disadvantages of this behaviour? Why might it be significant with bird flu?

Ecological Impacts

- Birds provide a number of 'ecosystem services'. What are these? Why are they important?



02 THE SCIENCE OF BIRD FLU

Disease

- What is a 'disease'?
- What is a 'pathogen'? What types of pathogens are there?
- What is a 'virus'? How big is a virus particle? How do they reproduce?
- How are viruses classified?

Origin

- Is 'bird flu' a new issue? Has Australia experienced bird flu before?
- When and where is this current virus thought to have originated?
- What role(s) may intensive agriculture play?

Transmission

- What is transmission? How is bird flu transmitted?
- What is a 'vector'? What is a 'host'?
- What are 'modes of transmission'? Describe these for different diseases as examples.

Signs and Symptoms

- What is the difference between the 'signs' and the 'symptoms' of a disease?
- What are the signs of bird flu?

Species Boundaries

- Which species of birds are being affected? Are there particular groups?
- Are other animals being affected (such as mammals)? Which species are being affected?
- How can bird flu infect mammals? How is it transmitted? What must happen to the virus to enable it to infect mammals? (This can get complicated)
- Which mammals are being affected? How does this compare with other continents?

Human Infections

- What is a 'zoonotic disease'?
- What are the risks to humans?
- Have people died from bird flu?
- Who is likely to be exposed to bird flu?
- What can be done to minimise risks?
- What symptoms may humans develop?
- What type of treatments may be offered to infected humans?

03 BIRD FLU IN AUSTRALIA AND AROUND THE WORLD

Bird Flu in Australia

- Is there only one type of 'bird flu'?
- When did bird flu reach Australia? (This can be restricted to the current strain, or widened)
- When was bird flu detected in other parts of the world? (This is complicated)
- Why was Australia the last continent to be impacted by the current H5N1 strain?
- How did it get here?
- Can we get rid of it? How will it end?

Global Impact

- Research the impacts of bird flu in other parts of the world. Which countries or regions are most affected?

Timeline / Infographic

- Construct an annotated timeline (infographic) showing the history of bird flu. (You may want to restrict this to a particular strain).



04 MONITORING, RESEARCH AND RESPONSE

Monitoring

- What methods are being used to monitor the spread of bird flu? (Think of some of the technologies used)

Testing

- How are samples collected? What protocols need to be followed?
- What techniques are used to determine whether a sick or dead animal has bird flu?

Scientific Research

- What role(s) does scientific research play in bird flu? (HINT: Think of the various stages and impacts).
- Which branches of science would be most involved? Briefly describe how each would contribute?

Citizen Science

- What role(s) do citizen scientists play in monitoring bird flu?
- Why is this important?

Agencies and Departments

- Which government agencies or departments are involved in responding to bird flu?

Prevention

- Given that bird flu is now in Australia, how can we prevent (or at least reduce) it spreading?
- What is a 'vaccine'? Is there a vaccine for bird flu?
- What are the difficulties of vaccinating birds? Consider pets, poultry industry animals and wild birds.

Treatment

- Many illnesses have a treatment. Is there a treatment for bird flu?



05 IMPACTS ON PEOPLE AND COMMUNITIES

Economic Impacts

- Which industries are affected by bird flu? (Think broadly)
- What will be the economic costs to industries? Why will these occur?

Social Impacts (on humans)

- How does (will) the arrival of bird flu in Australia impact humans?

(HINTS: Food, shopping, pets, recreation, hobbies, industries, employment)

Public Forums

- What is a local community forum?
- What function(s) do they serve?
- Why are they so important in relation to bird flu?

Education

- Why is it important that students learn about bird flu?



06 WHAT CAN WE DO TO SUPPORT BIRDS AND LOCAL WILDLIFE?

Actions at Home and School (to reduce the spread of bird flu)

- Clean bird baths. Why should bird baths be cleaned regularly?
- Stop feeding birds. Bird feeding is popular with many, but it creates a number of issues. List as many as you can think of and explain each briefly.
- Provide pet protection. Why should cats be kept indoors?
- Monitor birds. Many people enjoy watching birds in their gardens, schools and parks. What should you do if you observe a sick or dead bird? (Remember the 3 key steps.)

Conservation Measures

- Why is habitat protection and restoration so important in relation to bird flu?
- Why is it important to ban driving on beaches? (You may think of several reasons – explain each).
- Why is it important for people walking dogs on beaches to observe any local restrictions (e.g. on lead areas, restricted areas (seasonally) and monitor their dog closely? (Several reasons).
- Why is it more important than ever that cat control measures are taken (e.g. kept indoors)?
- Why is it more important than ever for important conservation areas to be protected? (Habitat)
- What is the purpose of making every effort to control or eradicate feral predators of birds?
- Why is it important to ban duck and quail hunting? (Think of as many reasons as you can)

Community and Government Action

- How would increasing funding into bird flu and conservation measures help?
- How can we encourage governments to spend more on bird flu and conservation?
- How would stronger nature laws help combat the impacts of bird flu?



RESOURCES



Australian Centre for Disease Control

Bird flu (avian influenza)

<https://www.cdc.gov.au/diseases/bird-flu-avian-influenza>

Department of Agriculture, Fisheries and Forestry (DAFF)

Resources for bird flu

<https://www.agriculture.gov.au/biosecurity-trade/pests-diseases-weeds/animal/avian-influenza/resources>

Department of Agriculture, Fisheries and Forestry (DAFF)

Biosecurity in the classroom: new resources for teachers

<https://www.agriculture.gov.au/about/news/biosecurity-teacher-resources>

Wildlife Health Australia

H5 bird flu

<https://wildlifehealthaustralia.com.au/Resource-Centre/H5-bird-flu>

Australian Veterinary Association

AVA HPAI Resources

<https://www.ava.com.au/resources-hub/emergency-and-disaster-response/ava-hpai-resources>

Department of Climate Change, Energy, the Environment and Water

H5 avian influenza (bird flu)

<https://www.dcceew.gov.au/environment/invasive-species/diseases-fungi-and-parasites/birdflu>

RESOURCES CONT.

Australian Government (Birdflu.gov.au)

Bird flu (avian influenza)

<https://www.agriculture.gov.au/campaigns/birdflu>

Note: Event Data - this site has statistical data and an interactive map

South Australian Science Teachers Association (SASTA)

<https://www.sasta.asn.au/>

Australian Association for Environmental Education SA Chapter (AAEESA)

<https://www.aaeesa.org.au/>

Birds SA

<https://www.birdssa.au/>

Written by Bruce Baker

Developed for SASTA, AAEESA and Birds SA, 2026

