



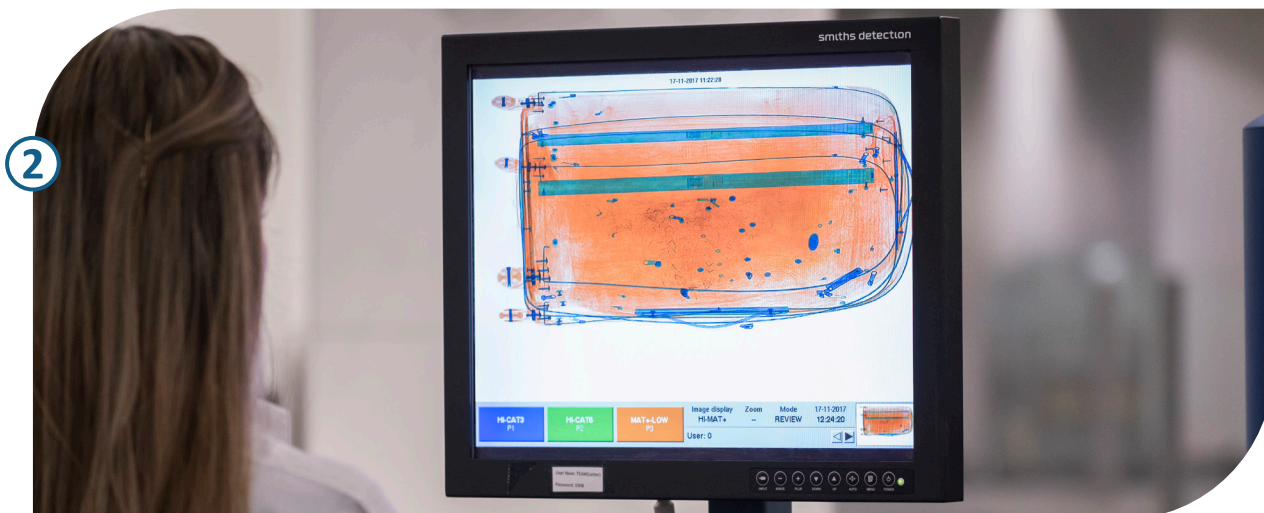
Australian Government
**Department of Agriculture,
Fisheries and Forestry**

Biosecurity champions

Student activities – Year 3



① Activity 1: worksheet 1a – stimulus images
At the airport



Images: © Department of Agriculture, Fisheries and Forestry

🕒 Activity 1: worksheet 1b – fact sheet
Pests, diseases and biosecurity

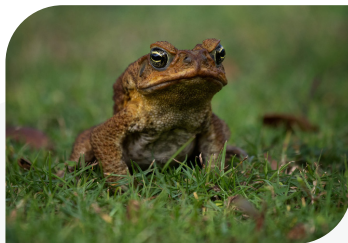
Did you know?

Australia's biosecurity officers use detector dogs trained to detect biosecurity risk items in luggage and mail.



What is a pest?

A pest is an unwanted living thing that can damage plants, animals or people and spread diseases. Cane toads, red imported fire ants and brown marmorated stink bugs are pests.



Cane toad



Red imported fire ant



Brown marmorated stink bug

Image: © Department of Agriculture, Fisheries and Forestry

What is a disease?

A disease causes a living thing to become unwell. Diseases are caused by bacteria, fungi or viruses, which we call pathogens.

Lumpy skin disease, *Xylella fastidiosa* (pronounced zy-LEL-lah fas-tid-ee-OH-sah) and citrus canker are diseases.



Citrus canker



Xylella fastidiosa infected leaves

Image: © John Hartman, University of Kentucky, bugwood.org

How can we protect Australia?

Australia does not have many of the world's most damaging plant and animal pests and diseases.

We are trying to keep out pests and diseases that are not native to Australia. If they come into our country, they could quickly become a big problem, damaging our environment, harming our native plants and animals and destroying the plants we use to produce food and fibre. Some pests and diseases can also affect humans and make them sick.

Australia's biosecurity system helps protect us from unwanted pests and diseases.

Biosecurity involves careful inspection of:

- luggage
- mail
- cargo
- imported goods

checking for any high-risk or prohibited items such as seeds, plants, wood, meat, fruit and vegetables that might contain pests and diseases that Australia is trying to keep out.

Biosecurity detector dogs and technology such as X-ray machines are used to detect many items that may contain pests and diseases. Biosecurity officers can then inspect these items.



Images: © Department of Agriculture, Fisheries and Forestry

There are rules about what can be brought into Australia. You must declare (tell someone about) food, plant and animal products as you enter Australia from overseas and on mail parcels.

At airports and cruise terminals, special bins are provided to dispose of food and other biosecurity risk items.

There are penalties for those who do the wrong thing and don't follow the rules when travelling or ordering goods online.

The Australian Government works with other countries to manage pests and diseases before they arrive in Australia.



Images: © Department of Agriculture, Fisheries and Forestry

Who is in charge of biosecurity?

The Department of Agriculture, Fisheries and Forestry (DAFF) is the Australian Government department that manages biosecurity in Australia.

Many others, including Indigenous rangers, play a crucial role in protecting and taking care of Country. They help to take care of Country by managing feral animals, weeds, and fire and keeping a Top Watch! across northern Australia for pests and signs of diseases.

In fact, we all have a role to play in Australia's biosecurity, including you!



Images: © Department of Agriculture, Fisheries and Forestry

🕒 Activity 1: worksheet 1c – sentences

Pests, diseases and biosecurity



Read the sentences and fill in the blank spaces using the words below.

- diseases** **pests** **Indigenous** **dogs** **luggage** **Government**
penalty **Country** **biosecurity** **stink** **living thing**

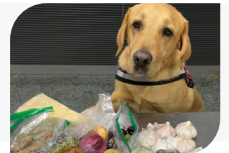
1. A pest is an unwanted _____ that can damage plants, animals or people, and spread diseases.



2. This pest is a brown marmorated _____ bug. It is a pest that Australia is trying to keep out.



3. Australia's _____ system helps protect us from unwanted pests and diseases.



4. Biosecurity involves careful inspection of _____, mail, cargo and imported goods.



5. Biosecurity officers check for any high-risk or prohibited items such as seeds, plants, wood, meat, fruit and vegetables that might contain _____ and _____ that Australia is trying to keep out.



6. The Australian _____ makes the rules about biosecurity and what is and is not allowed into Australia.



7. _____ rangers help to take care of _____. They help protect Australia from biosecurity threats.



8. If people do the wrong thing and don't follow Australia's biosecurity rules they may have to pay a _____.



9. X-ray machines and detector _____ are used to detect items that may contain pests and diseases. Biosecurity officers can then inspect these items.



④ Activity 2: worksheet 2a – stimulus

How is this technology used to protect Australia?
Who do you think is using this technology?

①





🕒 Activity 2: worksheet 2b – role-play

How do people protect Australia?

Role-play activity



Instructions

- You are going to act out a role-play that shows students how different people can keep Australia safe from biosecurity threats.
- Pick a role to play and highlight (colour in) the parts in the script that you are going to say.
- Dress up or wear a badge to show who you are.
- Perform the role-play.
- Talk about the questions below with your class.

Setting

A primary school classroom decorated with plants, animals and Australian landscape posters. A small stage or chairs are set up where the stakeholders (people involved in the area of biosecurity) will speak to a group of Year 3 students.

Characters and outfit suggestions

- **Chairperson** – wearing a polo shirt and trousers, with a badge that reads 'Chairperson.'
- **Government official** – dressed in a business shirt and trousers with a name tag.
- **Scientist** – wearing a white lab coat, glasses and carrying a clipboard.
- **Biosecurity officer** – wearing a polo shirt with a badge.
- **Biosecurity detector dog handler** – dressed in a comfortable jacket and jeans, with a trained dog (toy dog) by their side.
- **Member of the general public** – casual dress, with a 'Community member' badge.



Role-play script

Chairperson: ‘Good morning class! Today, special guests who help keep Australia safe in very special ways are here to tell us about their important roles. Let’s listen and learn!’

Government official: ‘Hello, everyone! I work for the Government. My job is to manage biosecurity risks to Australia to keep our farms, animals, parks and pets safe from things that can make them sick. I make rules to help keep out exotic pests and diseases. Can you think of some examples of these rules?’
(waits for responses).

Scientist: ‘Hi, young scientists! I work in a lab studying plants, animals and microorganisms. I use my microscope to look very closely at tiny things we can’t see with just our eyes. What tiny living things do you think I might look at?’
(waits for responses).

Biosecurity officer: ‘Hi kids! I work in many places, including airports, seaports, international mail centres and the Post Entry Quarantine facility. Did you know that Australia is very lucky to have Indigenous rangers who help to take care of the Country by managing feral animals, weeds and fire? They are the Traditional Custodians of the lands and waters and play a very important role in Australia’s biosecurity. I work closely with Indigenous rangers to manage biosecurity threats to Australia.’

Biosecurity detector dog handler: ‘Hey there! I work with my dog here, who has a super nose. He sniffs out anything unusual that shouldn’t be there. This helps us keep plants and animals safe. You might have seen one of these special dogs if you have been in an airport before. Hands up if you have a pet dog at home? Hands up if you have seen a detector dog in real life?’

Member of the general public: ‘Hello! I live in your community, just like you. Before I buy things online, I make sure that the items I want to buy are allowed into Australia. I also think really carefully when I travel and when I am packing my bags to come back to Australia. I always make sure I declare any food, plant or animal products that I am bringing back into Australia.’

Chairperson: ‘Isn’t it amazing how everyone works together? Each of you can be a biosecurity helper too, by keeping a look out for biosecurity threats!’



Government official: ‘Exactly! And remember, if you ever see a strange plant or animal, tell an adult. That way, we can take care of it fast. How do you think a plant might look if it has a pest or disease?’ (*waits for responses*).

Scientist: ‘Don’t forget, science is not just in the lab. You can be a scientist in your backyard by watching and noting what happens around you. What things do you think that you could look for?’ (*waits for responses*).

Biosecurity officer: ‘Right, and always be curious! Ask questions about the nature around you and learn how everything lives together. Don’t forget to follow the rules when you travel back to Australia and teach your families how to do this if they are unsure. What is one rule you know about that helps to protect Australia?’ (*waits for responses*).

Biosecurity detector dog handler: ‘My dog and I are always on the lookout. You can be too! Keep your playgrounds clean and listen to the nature around you—it has a lot to say!’

Member of the general public: ‘Yes, and talk to your families about what you learned today. Sharing knowledge is a great way to help protect our community.’

Chairperson: ‘Thank you, everyone, for coming to our careers day! Let’s give our guests a big round of applause for sharing their important work with us. Remember, you can be heroes for our environment too!’

Role-play activity

Turn and talk questions

1



Do you think that one of these jobs protects Australia the most?
Which one and why?

2



What job would you like to be in real life?
Why would you select this role?

Class questions

3



Think about a question you would like to ask each of the people who work in these jobs?

4



What do you think would happen if all these people did not work as a team?

5



Do you think that it is getting easier or harder to keep threats out of Australia? How could you find out the answer to this question?



6



Why do you think that Australia is free of many pests and diseases that are in other countries?

Activity 3: worksheet 3a

Biosecurity challenge

Calling all biosecurity champions across Australia!

Prepare yourselves for the Biosecurity challenge, a quest in which you will play detectives, scientists and guardians of our nation.



Join forces on a mission to defend Australia from unseen threats by completing biosecurity events. These threats are particularly concerning during international gatherings (like the Olympic Games and World Cup events), which can accidentally introduce harmful stowaways that can threaten our plants, animals and ecosystems.

Each event you complete earns your group a coloured paw stamp from Frankie the biosecurity detector dog. Complete all five events to become biosecurity champions.

Let the biosecurity challenge begin!



Event 1 Rapid response multiple choice quiz



Event 2 Teamwork trek



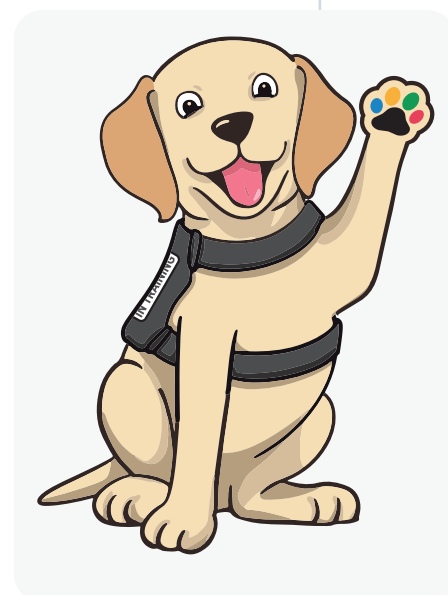
Event 3 True or false trivia

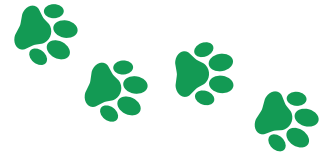


Event 4 Problem-solving puzzle



Event 5 Research raid





Event 1: Rapid response quiz

In your groups, answer the questions. Tick the circles as you complete each one.

Question 1: How does Australia keep out plants and animals that shouldn't be here?

- a) Checking everything and everyone very carefully.
- b) Inspecting luggage, mail and cargo that come from other countries.
- c) Not allowing any travel or packages from other countries.
- d) Closing borders during certain times of the year.

Question 2: How are biosecurity detector dogs used at airports in Australia?

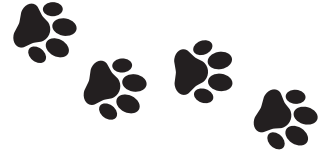
- a) They help control the robots at the airport.
- b) They sniff out pests and things that shouldn't come into Australia.
- c) They check if visitors have been where they shouldn't have been.
- d) They look in people's luggage for forbidden items.

Question 3: What is a pest?

- a) Something we don't want because it can damage plants, animals, or people.
- b) A bacteria we don't want that causes trouble for other germs.
- c) A plant that is used to make medicine and food healthier.
- d) Something we don't want because it troubles native trees.



Don't forget to stamp your green paw print and keep competing until your group has all five!



Event 2: Teamwork trek

In your groups, answer the questions. Tick the circles as you complete each one.

Obstacle 1:

Imagine that there are people coming from other countries to visit Australia. They might not know it, but they could have tiny pests and diseases on their shoes or in their bags that can hurt Australia's crops.

What are three ways these pests and diseases could cause problems for our food during a big international event?

Obstacle 2:

Imagine that a disease that makes animals very unwell comes to Australia from another country right before a big international sporting event.

What are three steps we could take to keep Australia safe and stop the disease from spreading?

Obstacle 3:

Imagine lots of people from different countries coming to Australia for an international sporting event.

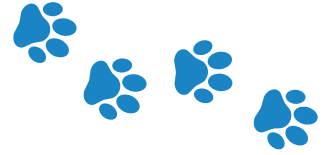
Create a slogan such as:

'Play Safe, Stay Safe: Protect Our Australian Home!'
that encourages crowds to protect Australia's animals, people and environment when visiting.



Don't forget to stamp your black paw print and keep competing until your group has all five!





Event 3: True or false trivia

In your groups, answer the questions. Tick the circles as you complete each one.

Question 1:

A tiny mosquito carrying a virus that could make people very sick was found near a big sports event. Everyone needed to be extra careful to stay healthy.

True or false?

Question 2:

Biosecurity detector dogs can help detect hidden pests and diseases. They are an important biosecurity strategy used in Australia and, therefore, very important during international events.

True or false?

Question 3:

Before they can compete in an international sporting event, all athletes' luggage has to stay in a special place for two weeks to make sure they don't bring any pathogens (germs) that could spread pests and diseases.

True or false?



Don't forget to stamp your blue paw print and keep competing until your group has all five!





Event 4: Problem-solving puzzle

In your groups, answer the questions. Tick the circles as you complete each one.

Problem 1: You're returning to Australia from your first international holiday and are unsure if you can bring back a gift for your friend.

What should you do? Record 'should' or 'should not' on your answer sheet.

1. Check what goods you can bring into Australia on the Australian Department of Agriculture, Fisheries and Forestry website.
2. Declare if you are carrying a certain food, plant material or animal product on your Incoming Passenger Card.
3. Take the item to be assessed by a biosecurity officer when you arrive in Australia.
4. Proceed through border control without declaring the item.
5. Hide the item in your luggage.
6. Attempt to bypass biosecurity checks by using a different exit.

Problem 2: A stadium where athletes are competing has a problem getting rid of waste, leading to unsafe conditions.

Work out how each of these pictures might stop pests and diseases from spreading.



Don't forget to stamp your yellow paw print and keep competing until your group has all five!





Event 5: Research raid

In your groups, answer the questions. Tick the circles as you complete each one.

Task 1:

Australian biosecurity is especially important when hosting large international events, like the Olympic Games. Research the origin of the design of the five Olympic rings.

1. **Who designed them?**
2. **What does the symbol mean?**

Task 2:

This is the brown marmorated stink bug. It is a hitchhiker pest that likes to hide in dark places for the winter. This includes inside things we buy from overseas, like cars and trucks. The bugs feed on lots of different plants, causing the leaves to drop off and unripe fruit to fall to the ground. A camera has zoomed in on this stink bug. In real life, it is 17 mm long (the same as 1.7 cm).



Brown marmorated stink bug

Image: © Department of Agriculture, Fisheries and Forestry

Can everyone in your group cut out a piece of paper 17 mm long in the shape of the bug's body or create a model of it with playdough? Without biosecurity, why would it be easy for this bug to sneak through our borders?



Don't forget to stamp your red paw print and keep competing until your group has all five!



Activity 3: worksheet 3b

Biosecurity challenge answer sheet

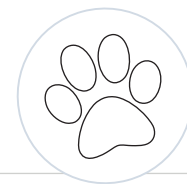


Event 1: Rapid response multiple choice quiz

Question 1: _____

Question 2: _____

Question 3: _____

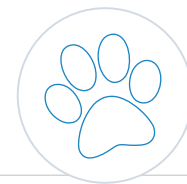


Event 2: Teamwork trek

Obstacle 1: _____

Obstacle 2: _____

Obstacle 3: _____



Event 3: True or false trivia

Question 1: _____

Question 2: _____

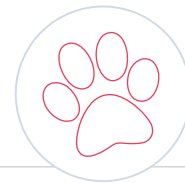
Question 3: _____



Event 4: Problem-solving puzzle

Problem 1:

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____



Event 5: Research raid

Research 1: _____

Research 2: Paste your model or a picture of your model in this space.



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Acknowledgement of Country

We acknowledge the Traditional Custodians of Australia and their continuing connection to land and sea, waters, environment and community. We pay our respects to the Traditional Custodians of the lands we live and work on, their culture, and their Elders past and present.



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