



Department of
Primary Industries and
Regional Development

*We're working for
Western Australia.*

Biosecurity Blitz 30-Day Challenge

30 Days - 30 Activities



Reporter



Authors

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30-Day Challenge

Explore and survey what's living nearby

We developed a set of 30 surveillance activities following the five themes below to illustrate our relationship with pests and the environment. This should lead to a better understanding that by protecting plants we all support agricultural production, the environment and help boost our own economic development. Everyone who takes on these challenge will appreciate protecting plants from pests and diseases is a more cost-effective strategy to dealing with plant health emergencies, so you and your community can enjoy the great Australian lifestyle each day.

- Take a walk in the wild
- Meet the urban dwellers!
- Peek-a-boo, I see you!
- When the sun goes down
- Follow green highways

Take the activities with you on your journey and read them at your leisure. Keep track of your reports with the Biosecurity Blitz passport and make reports using the MyPestGuide™ Reporter app.

Try to make 10 reports to reach the beginner level or complete all 30 activities to achieve boffin status and win a prize.

What is a boffin?

- a modern-day wizard.
- a scientist, engineer or other person engaged in technical or scientific research and development.
- a person with knowledge or a skill considered to be complex or arcane.

What is the prize?

IF you reach 'Boffin' status you will win:

- An invitation to attend the virtual National surveillance workshop (9 to 10 December 2020).
- A lifetime membership to the new Pest Surveillance Network Australasia Pacific (PSNAP), including:
 - A subscription to the SNAP newsletter to keep you informed of surveillance activities across Australasia.
 - Access to a news board to get the insider's scoop on upcoming professional development opportunities.

Calendar of activities

- Here's a quick overview of what's coming up for the month-long Blitz.
- Start blitzing on 19 October and get your final reports in by 16 November, 5pm.
- View the [30-Day Calendar](#) anytime or print it and take it with you.

Sun	Mon	Tue	Wed	Thu	Fri	Sat
Oct 11 Invitation to participate	12	13	14	15	16	17
18 Take a walk in the wild Activity 1	19 Biosecurity Blitz starts Activity 2	20 Activity 3	21 Activity 4	22 Activity 5	23 Activity 6	24 Activity 7
25 Meet the urban dwellers! Activity 8	26 Activity 9	27 Activity 10	28 Activity 11	29 Activity 12	30 Activity 13	31 Activity 14
Nov 1 Peek-a-boo, I see you! Activity 15	2 Activity 16	3 Activity 17	4 Activity 18	5 Activity 19	6 Activity 20	7 Activity 21
8 When the sun goes down Activity 22	9 Activity 23	10 Activity 24	11 Activity 25	12 Activity 26	13 Activity 27	14 Follow green highways Activity 28
15 Activity 29	16 Biosecurity Blitz ends Activity 30	17	18	19	20	21 Results
22 Survey	23	24	25	26	27	28

Biosecurity Blitz Passport

1. Be sure to print your passport before you travel.
2. View the [30-Day Calendar](#) anytime or print it and take it with you.
3. Download the MyPestGuide™ Reporter app.
4. Complete as many activities as you signed up for or more!
5. Keep track of reported activities in your passport.
6. Email your completed passport to us by 16 November, 5pm to: <mailto:mypestguide@dpird.wa.gov.au>
7. Late passports will not be considered for a prize.



Biosecurity Blitz Passport

Six easy steps in rising to the 30-Day Challenge!

1. View the 30 Day Challenge calendar of activities
2. Download the MyPestGuide™ Reporter app.
3. Complete 10 or more activities in any order.
4. Keep track of the reported activities in this passport.
5. SAVE to your computer and PRINT the form to keep track of your reports.
6. Email completed forms to: mypestguide@dpird.wa.gov.au

SAVE

PRINT

Tell us which Challenge you selected when you signed up for the Blitz

Beginner (10+ reports)

Boffin (30+ reports)

Your email

For more information: mypestguide.agric.wa.gov.au/biosecurityblitz

Try to complete at least one of the activities for each week and fill in the remainder with your choice of activities listed in the calendar

18-24 Oct	25-31 Oct	1-7 Nov	8-14 Nov	15-16 Nov
Take a walk in the wild	Meet the urban dwellers!	Peek-a-boo, I see you!	When the sun goes down	Follow the green highway



Be one step ahead of pests
Use MyPestGuide™ Reporter



Take a walk in the wild

Action : Go outdoors and explore local parks and regional nature reserves.

Learning : Observe how plant pests and diseases alter natural ecosystems.

Begin your blitzing adventure

This week's focus is how to look for and observe plant pests and diseases in the natural environment. Get outdoors and explore your local parks and gardens, or head further afield to your favourite nature reserve. Observe how plant pests and diseases or other factors might alter the natural ecosystems which support plant life.

Australia is home to more than one million species, many of which are 'endemic' – found nowhere else in the world. Our native species are threatened by invasive organisms, including pests and pathogens that can weaken or kill plants. Changes in plant composition due to pests and pathogens can have serious consequences to Australia's native biodiversity. Plants killed by pests can create an opening for invasive species, making it easy for them to dominate the landscape, altering habitats and food web relationships that our native plants and animals depend on.

Keeping ecosystems healthy and protecting them from pests and diseases is important to the long-term productivity and sustainability of our forest, grassland, desert and marine ecosystems.

Activities 1-7

Activity 1 - Invite a friend to blitz with you

1. Forward the email invitation to a friend this week (any day) and invite others to take part in the Biosecurity Blitz month-long event and celebrate the 2020 International Year of Plant Health.
2. Sign up today to receive the weekly newsletters.
3. View the 30-day calendar of activities and register to be a Biosecurity Blitz 'Beginner' or a 'Boffin' and get the new surveillance passport to fill in.
4. Start making reports to collect evidence you really are a BBB.

Activity 2 - Nature's best drilling team

Australian native woody plants are prone to attack by various bark and wood boring insects, usually beetles or moths that lay their eggs on or inside the tree. Healthy plants usually tolerate borer attacks, with new growth outgrowing the weakened branches and exudation of gum restricting borer activity. However, continuous attack may weaken the plant resulting in branches breaking off and reducing the plant lifespan. Borers are not boring, are they?

1. Visit a natural park, forest or urban reserve.
2. Look for beetles or moths sitting on trunks or branches and try to find boreholes. Take a photo of the plant and another up close of the insect and/or bore-hole. Can you stick a pencil or pen in the hole to show the size of the hole? Read the activity '[European house borers are not boring](#)' to learn how exotic borers can impact your home.
3. Make a report, fill in your passport.

Activity 3 - Mandibles at work

Leaf-chewing invertebrates have well developed chewing mouthparts. Their damage may occur to plant parts above-ground, or even below-ground on the roots, and includes damage such as missing portions of leaf edges, holes on leaves, chewed stems and removal of entire leaves or whole seedlings and young plants. Remember, whatever invertebrates chew plants in the wild, they will also be affecting native plants in your garden!

1. Visit a natural park, forest or urban reserve.
2. Look for insects on leaves, stems of plants leaves, stems or flowers. Can you see them using their mouthparts to chew the plant? Take photograph of the insects you find.
3. Make a report, fill in your passport.

Activity 4 - Getting a bit rusty?

Fungal diseases can cause the death of native plants by affecting their health and reducing their ability to reproduce or survive. Fungal spores survive in soil, spread by wind or water, and can be transported on clothing, equipment and tools. Make sure that you are not moving them into, within or out of a natural area! Remember to use clean-down stations and boot cleaning stations!

1. Visit a natural park, forest or urban reserve.
2. Be on the lookout for *Phytophthora* (dieback) or Myrtle rust (found only in Eastern Australia) on or under leaves of gum trees / wax flowers / tea tree / bottlebrush / native peppermint trees and lilly pilly.
3. Follow the instructions in the activity 'Are you a bit rusty, Myrtle?' and do not touch the plants!
4. Look for, photograph and report any damage to host plants so we can be sure the disease has not spread to Western Australia. Make an absence report (we hope) and fill in your passport.

Activity 5 - A plant's best friend

This is the time of the year to enjoy Australian wildflowers. They attract not only nectar-loving birds, but also insect predators like hoverflies and small parasitic wasps that act as natural pest control agents! Let's see if you can spot some while taking a walk in the wild side!

1. Visit a natural park, forest or urban reserve.
2. Look for native wildflowers and photograph all the insects that you find visiting the flowers.
3. Make a report, fill in your passport.

Activity 6 - Life beyond the Thunderdome

The Australian outback contains unique plant communities and ecosystems. However, the remoteness of some areas represent an opportunity for invasive pests such as fire ants to remain unchecked, multiply and spread. Vertebrates such as camels, pigs, goats or rabbits can uproot plants, chew tree bark, and eat entire plant communities. Weeds displace native plants and invasive grasses can increase fire intensity. Take your own Mad Max adventure!

1. Visit a remote area, pretend you are in the land of Thunderdome. HINT: old movie.
2. Look for and photograph vertebrates, invertebrates, plants and the presence or absence of pests and diseases in the outback.
3. Make multiple reports, fill in your passport with each report made.

Activity 7 – I'm off on an adventure

Some pests can be expert hitchhikers, carried in everyday items, and their first port of call could be your humble garden patch or one of our protected natural parks. Pests can jump from the neighbour's garden, the street verge, the orchard, fields and farms, and into our native forests and bushlands by hitching a ride in your vehicle or on your clothing. Do you have a hidden passenger?

1. Check your garden equipment, camping gear, clothing, cars and tyres for pests which may have hitched a ride from faraway places.
2. Find out what plant health regulations have been put in place to protect agriculture, forestry and the environment. Be careful about bringing plants and plant products (e.g. seeds, vegetables, cut flowers) into natural areas or when you cross borders, even when you order from online sources.
3. Make a report of what you find (or don't find) after your journey or examine any packaged goods bought from a store, supermarket or local food stall which travelled afar and fill in your passport.

Meet the urban dwellers

Action : Explore your home garden, street verges and urban green areas.

Learning : Why are first detections of pests often in the urban garden?

Blitzing urban hubs

A surprising diversity of plants and animals are found in urban greenspaces. Parks, cemeteries, vacant lots, streams and lakes, gardens, yards, school playgrounds, golf courses, bridges and landfills, all contribute to the distribution and richness of plant and animal diversity found in urban areas.

In our urban environment, we decide what plants are planted where and with whom for a range of reasons – a mix of native, exotic, ornamental or utilitarian plants - all providing organisms with the opportunity to colonise new plants and habitats they would not normally find in the wild.

Often, the first detection of a new invasive species, or incursion of a new pest or disease comes from urban plant health recorders. Help limit the spread of emerging invasions by undertaking surveillance in your local area.

Activities 8-14

Activity 8 – Is anybody there?

Fruit trees and vegetables are common planted in most Australian backyards. They grow beautifully in pots on balconies and verandas. At a glance, they look healthy, but let's take a closer look to see if they're free of pests and diseases!

1. Find a fruit tree - in your home, or at a neighbour's or friend's house (pests on fruit trees)
2. Look for vertebrates, insects, cocoons, or growths and galls on the stems, branches or leaves; blemishes, holes and damage to fruit and leaves and photograph what you find.
3. Make a report, fill in your passport.

Activity 9 – Play four in a line!

Four In A Line (also known as Connect 4 and Four in a Row) is a classic travel game. Did you know many of the ornamental plants found in the home garden, parks and street verges were originally introduced by the Australian Acclimatisation Society which played a fascinating, yet devastating, role in Australia's ecological history? Travelling plants brought with them a variety of exotic organisms, including fungi. Symptoms of fungal infection in plants include changes in the colour and shape of leaves, stems and fruit, and the presence of coloured lesions. Can you connect four and see the spots?

1. Find introduced plants in home gardens, parks, street verges, garden centres.
2. Look for spots or coloured markings on leaves, stems or flowers and photograph affected and unaffected parts of the same plant.
3. Make a report, fill in your passport.

Activity 10 – From the garden, with love?

Potted plants are well suited to small spaces and low maintenance gardens, such as growing fruit species in reduced spaces. However, they too can be subject to the same diseases that affect horticultural crops. Yes, the same diseases can spread to your plants!

1. Visit your local garden centre, a friend's or neighbour's garden to examine potted plants and fruit trees.
2. Look for stink bugs and yellow spots and dust on leaves, stems, fruit or flowers and photograph affected and unaffected parts of the same plant.
3. Make a report, fill in your passport.

Activity 11 – Our house, in the middle of the street

In Australia, urban bushland reserves and many street verges are pockets of local native plants. Did you know that they not only protect native biodiversity but also contribute to reducing the urban 'heat island effect' in summer? At the same time, they can also harbour unwanted invasive plants, and pests and diseases that could damage or kill native plants.

1. Visit your local urban reserve, street trees, or local wetland
2. Can you spot any invasive plants that shouldn't be there? Look for invertebrates (and vertebrates!) in among the leaves, bark and flowers of both native and non-native plants and photograph what you can find.
3. Make a report, fill in your passport.

Activity 12 – It's raining feathers!

Bird species, including native birds, can be pests in some situations. They may cause severe damage to grain crops and horticulture. They can damage garden produce such as peaches, grapes, apples, and cherries, spread plant diseases or damage trees through excessive feeding (did you know some of our parrots have characteristic nibble patterns on nuts?). And if that isn't enough, non-native birds can be aggressive and occupy breeding hollows needed by our local natives, as well as spread disease. Have a look around for our feathered friends and add a feather to your cap!

1. Visit a nature reserve, your local urban reserve, local wetland, farm, orchard or even a port or marina.
2. Look for birds, check out dropped honkey nuts and prunings dropped on the ground, photograph what you see.
3. Make a report for each different type of bird, fill in your passport.

Activity 13 – Best flight deals

Aphids, mites and many other crop pests travel on the wind, easily crossing farm boundaries. Bacteria and fungal spores can also become airborne and remain suspended for long periods, drifting long distances then landing on plants in agricultural and natural areas. These pests and pathogens can survive from one season to the next on unmanaged weeds and volunteer crop plants. And when the wind blows, they can travel again...even as far as South Africa to Australia and then on to New Zealand!

Look for volunteer plants or other weeds along verges and vacant land (under development). Do they contain spots on the leaves or on a really hot, humid day can you spot aphids or termites swarming? To look for pollen you might need a white sticky trap placed high up on a pole or in a tree. Look out for caterpillars (soon to be moths) on weeds where heaps of eggs were previously laid.

1. Take advantage of modern digital technology, mobile apps and software to access information about how to prevent and manage plant pests and diseases and to report outbreaks. Do you need tech to determine how far an ant flies?
2. Make reports on flying insects or spot bacteria or fungal spores and don't forget to record the host plant, then fill in your passport.
3. Spread the word about #PlantHealth on social media by sharing your reports with friends via the app.

Activity 14 – Look, no legs!

Weeds are plants that have remarkable ways of dispersing and invading disturbed habitats. The seed of a weed is designed to be picked up by wind currents, or become attached through prickly burrs to the fur or wool of animals which can disperse it great distances. Take a closer look at weeds travelling to new places during COVID19!

1. If you are a farmer or work in agribusiness, you can have a direct influence on plants, and the management of natural resources. Prevent the spread of pests by using only certified pest-free seeds and seedlings. Check your seed packets are certified and if any seeds have volunteered outside the areas you've planted.
2. Regularly monitor and report the occurrence of pests (including weeds) by taking advantage of modern digital technologies to help you conduct surveillance.
3. Make reports of any weeds found beyond where they were planted. Do these weeds correlate back to any seeds from your seed packets?

Peek-a-boo, I see you!

Action : Explore different habitats to locate pest shelters and hiding places.

Learning : Why shelter selection is so important to an organism's survival.

Survival of the fittest

In nature, shelter and hiding places are important for protection from the weather and to provide a safe place to raise a family. Many invertebrates, like butterflies, will lay their eggs on the undersides of leaves to hide them, and as late-stage larvae they pupate as a cocoon hidden in a rolled leaf. A keen eye is needed to find all the places that insects hide and shelter!

Many important plant pests are only active at specific times of the day or night, and at other times are hidden deep in bark crevices, under stones, or in soil and leaf-litter. Knowing where to look for plant pests is crucial!

Activities 15-21

Activity 15 – A place to call home

Depending on the species, insects seek shelter from the weather or from predators in a variety of places – in crevices in bark, inside holes in trees, inside flowers, fruits or seeds, under rocks and other objects on the ground, and in burrows in the soil – anywhere that provides food and protection from winds, storms and rain. Tiny insects only require a tiny place to call home – so look carefully!

1. Look in a home garden or urban reserve close to home.
2. Look for rough bark or under rocks on the ground, or find a plant that looks like there is no obvious insect activity, and then carefully search deeper (e.g. under the bark or on the soil) to see what tiny insects lie beneath.
3. Feel free to link this activity with one of the later nocturnal activities too, and go to the same spot at night and see if the same critters are active?
4. Make a report for each different critter you find, fill in your passport.

Activity 16 – Bunker builders and earthmovers

Animals, big and small can find shelter in the soil. Their digging can help turn soil over, help water penetrate deep into the soil, and disperse seeds and fungal spores. Some prefer to dig just under the surface or make a shallow scrape under a bush, while others can dig a meter or more, making long tunnels. Some animals leave characteristic mounds while others are much more secretive. Can you find the local earthmovers?

1. Visit a natural park, bush or urban reserve.
2. Look for small mounds of freshly turned earth and tracks leading, holes in the ground with critters near the entrance and photograph what you find.
3. Follow the instructions in the activity Dunkin donuts
4. Make a report for each different critter you find, fill in your passport.

Activity 17 – Galls galore!

Some plants respond to the feeding and breeding habits of certain wasps, flies, mites, nematodes (or infections by fungi, bacteria and viruses) by producing abnormal growths, known as plant galls. Galls can be found on leaves, stems, twigs and flower buds, stealing nutrients from the plant to feed the gall-maker, and affecting plant health. An example is citrus gall wasp. Now get out and check those citrus trees!

1. Visit your local citrus fruit trees, or check out the citrus trees at your local garden centre.
2. Follow the instructions set out in the activity "Citrus galls having a ball".
3. Photograph what you find. Plants with no swellings or bulges are great to photograph too as these are an absence report (we hope) of citrus gall wasp, fill in your passport.

Activity 18 – Litter society

Soil and leaf litter organisms help decompose organic material, spreading it around and releasing nutrients for new plant growth. Many invertebrates inhabit the soil and leaf litter layers, including worms, mites, millipedes, slaters, spiders, springtails, and a wide range of insects, all feeding on and helping to recycle leaf material, fungus and other organic material. Time to check outdoors for some litter socialites!

1. Visit a natural park, bush or urban reserve, or even your own garden if there is a lot of leaf litter on the ground.
2. Look for piles of leaf litter under trees, and dark brown organic rich earth. Grab a sturdy stick or a garden trowel and turn over the leaf litter, scrabble about disturbing it and watch the invertebrates show themselves! Take photos of what has been hiding.
3. Make a report, fill in your passport.

Activity 19 – The landlord dilemma

Insect pests are always looking for safe shelter and a dependable food source. Many insects find what they are looking for inside our homes, especially our pantries, among our winter woollens, and in books and papers on the shelf. These are all quiet dark places with a constant temperature and humidity – all essential for raising their offspring. How many unwanted tenants can you find?

1. Check in your pantry and check your spices, dried staples and herbs, pet food, pet bedding; rustle about in your woollens and drawers, check those old books, photo albums and documents in the home office, check along the wooden furniture you never move.
2. Look for stored product pests, carpet beetles and borers, silverfish, ants, roaches and termites, or spiders.
3. Make a separate report for each kind of critter that you find, fill in your passport.

Activity 20 – Looking for volunteers

Summer rainfall in cropping areas can promote the growth and build-up of volunteer plants and weeds close to cropping paddocks, alongside fence lines, headlands, roadsides and non-crop land. Volunteer plants are plants which germinate on their own accord. Such vegetation provides 'between seasons' hosts for insects and pests of grain crops to survive. Can you spot which pests are joining the volunteer program?

1. Visit your local cropping area or back paddock and take a walk along a road or fence-line.
2. Observe any new plants or strange colouration on the crop?
3. Record and photograph your findings using MyPestGuide™ Reporter or PestFax Reporter apps.

Activity 21 – Liver fluking fun

Read the activity '[Liver fluking fun](#)' and follow the instructions.

1. Look for, photograph and report all snails in their habitats so we can map the distribution of liver fluke host snail (*Pseudosuccinea columella*).
2. Make a report and fill in your passport.

When the sun goes down...

Action : Find organisms that are doing the nightshift. What are they up to?

Learning : Observe how light and temperature affect pest activity.

The rhythm of the night

Light and temperature exert significant control over the daily lives of plants and animals, as well as microorganisms such as fungi and bacteria. Their activity at different times of the day (circadian rhythms) is synchronised primarily to light and temperature appropriate to their environment, but these patterns can vary from one species to another. For example, several plant species bloom at night, possibly because they evolved in arid climates where nocturnal-flowering prevented excessive water loss or protected pollen from heat stress. Some insects are active only at night to take advantage of dining 'undercover' at sundown.

Animals that have made the transition from the day into the night have developed unique adaptations to cope with the challenges of performing nocturnal activities e.g. visual adaptations to function under dim light conditions, guided by moonlight. Also, many species have a very sensitive sense of smell ('olfaction'), such as moths that can smell the scent of flowers, and even detect the increase in humidity in the flower indicating the presence of nectar resources which is what makes them such good pollinators! Other nocturnal insects, such as mosquitoes, can detect small differences in heat and CO₂ emissions that indicate the next blood-meal is nearby!

Activities 22-28

Activity 22 – Moonshining, not moonshine!

Many species increase their nocturnal activity on moonlit nights, hunting or foraging more easily under the light of the moon – although with the risk of themselves being hunted too. Moonlight can affect the 'crepuscular' activity of some insects (at dawn and dusk), such as mosquito swarming. Have you got the repellent ready?

1. Visit a park or nature reserve that has a low level of artificial lighting (warm, humid nights are best!)
2. As it starts to get dark, compare the activity of insects such as mosquitoes and moths between day and night. If you go to the same spot on different nights, you can also see how the phases of the moon affects nocturnal animals!
3. Observe mosquitoes perching on a plant, or squash and examine in-hand, then photograph, noting the time of night these insects are most likely to drink their own style of moonshine, feeding on warm-blooded animals such as yourself.
4. Snap photos pre- or post-swarming and fill in your passport.

Activity 23 – Munching in the dark

Many insects tend to feeding out in the open at night once their normal daylight predators are asleep. Can you find track down any night time plant pests feeding in the garden?

1. Visit a garden full of fresh vegetables or herbs which hasn't been sprayed with pesticide.
2. Grab your torch, place some red cellophane over the light, secure with an elastic band, and search carefully over the plants, checking both sides of the leaves, all the way down to the base of the plant, stopping at each fork of the stems until you reach the mulch. Use your smart phone to take close up photographs of what you find!
3. Make a report for each different organism you find, fill in your passport.

Activity 24 – Operation 'Night Watch'

Many insects only fly at night to socialise, feed and explore, safely away from predators and competitors. These night 'owls' often clock-on and clock-off at these times to fill other niches not occupied by their competitors. Can you operate at night and watch out for nocturnal visitors?

1. Visit a forested or grassland habitat just as the sun is going down.
2. Hang a white pillow case over two sticks or clip it to tree branches using laundry clips. Place your torch on the ground with the rock under the lamp end. Turn on your torch so it's shining up towards the middle of the sheet.
3. Wait a while until it gets really dark (pack some marshmallows and thermos of hot milo to take with you), then look for moths and other night insects flying into your sheet, let them settle on it (they will be mesmerized by the torch).
4. Make a report for each different insect you see, fill in your passport.

Activity 25 – Time for a siesta?

Nocturnal species usually reduce activity during the day and rest, particularly when the temperature heats up. For example, most native Australian animals are nocturnal or crepuscular, being active when it's dark and cool. This behaviour let's animals cope with the extreme heat and aridity of Australia. You may need to take time for a siesta to stay up into the night to do this activity. Can you see any creatures napping e.g. possums?

1. Get up before dawn and visit the backyard compost bin or tree when night falls. Find a safe, comfortable place to sit and be quiet.
2. Look for the nightshift heading home way up in the tree canopy or uncover the compost bin and scoop out 2-3 trowels of dirt and place it into a white bin. Be ready to snap a photo or catch it to find out where they shelter in the day.
3. Take a photo and release.
4. Make a report of each different organism you find and fill in your passport.

Activity 26 – Ready, set, spore!

Some fungi have an internal clock which controls daily rhythms of spore development and liberation. Mushrooms, shelf fungi, rusts, and smuts often release their reproductive spores during the night and during seasons when moisture is abundant as a mechanism to avoid drying. As a result plant infections occur in the proximity to spore release. Symptoms of fungal diseases are spots and coloured lesions on leaves, stems and flowers. Try to spot the spots!

1. Find a blueberry plant or equivalent surrogate plant from the same plant family
2. Read and follow the instructions set out in the activity 'Blitzing blueberry rust'
3. Look for, photograph and report any damage observed on blueberry leaves (or surrogate plants from the same plant family) so we can check blueberry rust has not spread to Western Australia.

Activity 27 – Armies of worms

Several moth species lay eggs on grasses and pastures which feed their voracious larvae in preparation of their next stage of development as a pupae underground. The moths that emerge from the spring generation migrate to other areas where green pastures or crops will feed a new generation of egg-laying moths. Fall armyworm (*Spodoptera frugiperda*) adults are nocturnal and fare best during warm and humid nights. Can you find these hungry caterpillars or adult moths?

1. Older caterpillars will crawl around at night and may move up and down plants regularly. Look for caterpillars and moths in grass pastures, cereal crops and corn in the garden.
2. Read and follow the instructions set out in the activity 'Curious about caterpillars'
3. Look for, photograph and report any damage observed on plants and record caterpillars and moths so we can check FAW spread within Western Australia.

Activity 28 – Aphids of my eye

When aphids feed on plants they can transfer plant viruses from their saliva causing damage to the plant. If the numbers of aphids on a plant are high enough, they can even kill the plant.

1. Follow the instructions outlined in the activity 'Aphids of my eye'.
2. Check plants and grassy weeds for aphids as well as look out for damage symptoms.
3. Make reports of the aphids observed and learn how the weather changes aphid numbers.

Follow green highways

Action : Explore man-made environments and look for organisms that move between urban and rural areas.

Learning : Human transport networks provide an opportunity for pests to spread.

Listen and look in each landscape

The diversity of living organisms depends on having a wide variety of different types of habitats that can provide the space and resources that specific species need to survive. Human disturbance can disrupt natural ecosystems, reduce habitat suitability for many species, and restrict the movement of organisms across ecosystems and landscapes. We know that 'green corridors' of native vegetation can be very important in providing shelter, food and protection, and connecting isolated populations. But if we are not careful, green corridors could also facilitate the introduction and spread of invasive pests and diseases. For example, human transport networks are highly inter-connected resulting in the movement of pest problems in one place to another place, when people or products are moved.

Activities 29-30

Activity 29 - From plate to paddock

Fruit and vegetables are fun and nutritious to grow at home, but they can also be host to numerous pest and diseases. And these pests don't stay put! Urban areas often overlap with horticultural areas, making it is easier for pests to infest commercial orchards and ruin fruit and vegetable crops, costing us more in the pocket later on to grow.

1. Inform a neighbour that transporting plants and plant products may spread plant pests and diseases into horticultural areas – sometimes with devastating results.
2. Locate a local fruit and vegetable stand or market garden and ask the farmer if you can help monitor their paddock or examine their products for pests.
3. Make a report of the fruit or vegetable pests you find (or don't find) and fill in your passport.

Activity 30 – The grass IS greener

Private sector businesses have a key role in plant health as they can contribute to the development of global plant health standards and help implement them. To make trading and transporting plants and plant products safer businesses are meant to comply with international plant health standards and legislation.

1. Ask a local business if they inform clients that transporting plants and plant products may spread plant pests and diseases – sometimes with devastating results. Are they aware of any examples which might impact their business?
2. Ask a local business if they are undertaking innovative plant-health practices (e.g. R&D) and if they are using any new technologies to facilitate market access in line with international standards? Show them how to use the free reporting tool.
3. Make an absence report based on what pest might be found hiding in the local businesses products. Fill in your passport.