

## Kids make great pest detectives

By officers of the Pest and Disease Information Service, South Perth



You've probably seen adults stamp their big feet in frustration when they realise bugs have munched through the vegie patch and mould has spoiled their flowers.

Adults are often too busy to notice garden pests before the damage is done. Kids can help by becoming pest detectives who spot signs of trouble early.

You have advantages over adults. You're nearer to the ground and you may have sharper eyesight, so you can spy really weeny insects or the little signs which tell you a plant disease is starting to grow.

Some insects damage plants. Others hurt people and pets. Some insects are a nuisance when you're playing. Disease can spoil a yummy strawberry or tomato, and some weeds even make your garden uncomfortable.

Of course, dealing with pests isn't your job. If anything needs to be chopped off with sharp tools or squirted with spray, ask your adults to do their own dirty work! Your role is to investigate and discover.

The Pest and Disease Information Service (PaDIS) has lots of online *Gardennotes* to help you identify many things you find. On the back page we tell you how to contact PaDIS.

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For more information visit our website [www.agric.wa.gov.au](http://www.agric.wa.gov.au)



### Friends which fight for you

As a pest detective you need to know your garden's enemies but it's just as important to know your garden's friends, which are creatures that remove the pests. They do this in different ways.

The larvae (young) of ladybirds, lacewings and hoverflies devour little sap-sucking pests such as aphids. Mantises eat larger pest insects. Spiders catch hundreds of mozzies in their webs. A tiny wasp injects an egg into an aphid and when the wasp larva hatches, the aphid dies but its skin protects the wasp larva.

Frogs, lizards and insectivorous (insect eating) birds do a great job, too. Of course, they eat some good insects as well, but we can forgive them because they are so clever at fighting pests.

You can attract more birds by growing lots of different plants and putting water in a birdbath, somewhere that a cat can't reach. Frogs will visit a safe garden with plenty of plant cover, even if you don't have a pond.

If your adults use pesticide (insect killing) sprays, tell them to make sure it's a spray which kills only the pests, not one which kills every insect including the garden's friends.

### Lunch for loopers

Loopers love leaves! These caterpillars get their name from the way they curve their body into a loop as they move along. Being green, loopers are hard to see until they grow big. The first time your adults spot one will probably be when they notice a plant has been stripped nearly bare. Herbs seem to be a favourite snack.

Check the plants closely every day so you can spot the loopers while they're young and haven't yet developed an enormous appetite. Then tell your adults so they can remove them. By the way, many caterpillars which don't loop are just as destructive!

### Ants in your pants

There are many different ant species. Some are no problem but others, especially if there are zillions of them, are pests.

They may dig away so much soil that they expose roots, which makes the plant sick. They carry sap-sucking insects to new parts of the garden. Ants also annoy us by crawling up our legs outdoors or invading the kitchen.





If ants in the house or garden are a problem, your adults may decide to get rid of them by buying a product which is advertised for killing ants.

Educate your adults before they buy the wrong thing! Tell them that different species like different foods. Some have a sweet tooth while others want meatier meals. If the ants are offered the wrong kind of bait, they won't take it back to the nest.

It's impossible to identify ants just with our eyes because many species look alike. Ask your adults to squirt fly spray on the ants, then you can take over as pest detective. Collect about 20 dead ants with sticky tape, stick it to white paper, write your name and address and post it to PaDIS.

Entomologists (insect experts) will identify the ants through a microscope, and someone from PaDIS will send you the ants' name and recommend the right bait.

### **Prickles in your paws**

Being a pest detective mostly means using your eyes, but there's one occasion when another body part tells you something unwanted is in the garden.

That's the day you run barefoot across the lawn and get a foot full of prickles. The tiny weed to blame is bindii which is hard to see when it grows in grass. After it has flowered it develops burrs (seeds with spikes).

As it has deep roots bindii isn't easy to pull out, so it must be sprayed with herbicide (weedkiller). Most adults don't even think about bindii until they see you hopping on one leg. By then it's too late to spray. Teach your adults to spray the lawn in July next time, even though the bindii can't be seen in winter.

### **Spotting the spots**

However good a pest detective you are, identifying plant diseases isn't your responsibility but you can make your adults aware of any warning signs you notice.

These could be speckles or powdery stuff, twisted leaves, shrivelled branches, scabs or brown mushy spots. If you are quick to alert your adults they may save the plant by spraying it or by cutting off the bad bits.

Collect the parts that are pruned, seal them in plastic and put them in the bin. Never put them in the compost heap because the fungus spores, which cause the disease, will get back into the garden when your adults spread the compost.

### **Sting in the tail**

Although paper wasps sting, they won't attack if you leave them alone. If you notice lots of paper wasps flying into a bush or an outdoor building, stay away. Your adults can remove the nest themselves or ring a pest controller.

There's another species that's much more dangerous. European wasps are already living in the eastern States but they aren't established in Western Australia, which means they haven't become permanent residents here.

European wasps arrive every summer by hitching a lift across the Nullarbor, hiding in trucks, packing crates or big machinery.

The only reason European wasps haven't managed to establish here is that people report them to PaDIS, and people from the Department of Agriculture and Food remove the nests.

As a pest detective you should know what a European wasp looks like. It's striped black and yellow like a paper wasp, but a keen-eyed kid will be able to notice the difference in flight.





Paper wasps fly lazily, with their legs dangling. European wasps tuck their legs up, hidden under their bodies, and dart swiftly or hover around barbecues, pet food bowls and soft drinks cans.

Imagine drinking cola and getting stung in the mouth! A pest detective who can recognise a European wasp and warn other people will be the hero of the day.

### Unwelcome stranger

As you get smarter at identifying the good and the bad insects you'll also develop the skill to recognise anything which looks strange or different from everything else you've seen.

This stranger could be a pest which lives in the eastern States but isn't known to be in Western Australia. It might be something which could damage the crops which our farmers grow, as well as harming your garden plants.

If you report your find to PaDIS, an expert will investigate. If it is a new pest, we will arrange for it to be removed. Then you can promote yourself to super pest detective and proudly claim that you have saved Western Australia from danger.

PaDIS will send a magnifying glass and specimen vial to any pest detective under 12 years of age who reports something which is a new threat to Western Australia.

### Eye for identification

If you use a magnifying glass to view tiny insects, choose an unbreakable plastic one in case it drops on to the ground.

You'll need photographs and written descriptions to identify most things. Visit [www.agric.wa.gov.au](http://www.agric.wa.gov.au) and follow the link to the Pest and Disease Information Service where you can download the *Gardennotes* or visit [www.padil.gov.au](http://www.padil.gov.au) which has lots of photographs you can enlarge on screen.

An especially useful *Gardennote* is titled *How to send in specimens for identification*. However, sending specimens by mail isn't your only choice. If you would like to meet a PaDIS person and show them your specimen, ask your adults whether they would like to drive you to our South Perth headquarters.

Do get in touch. We love hearing from our pest detectives!



Say hello to the Pest and Disease Information Service

Telephone 1800 084 881. This is a Freecall number but always ask your adults for permission before you ring.

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