

STOP
FRUIT FLY
IT'S UP TO ALL OF US!



Queensland Fruit Fly



CHILDREN'S

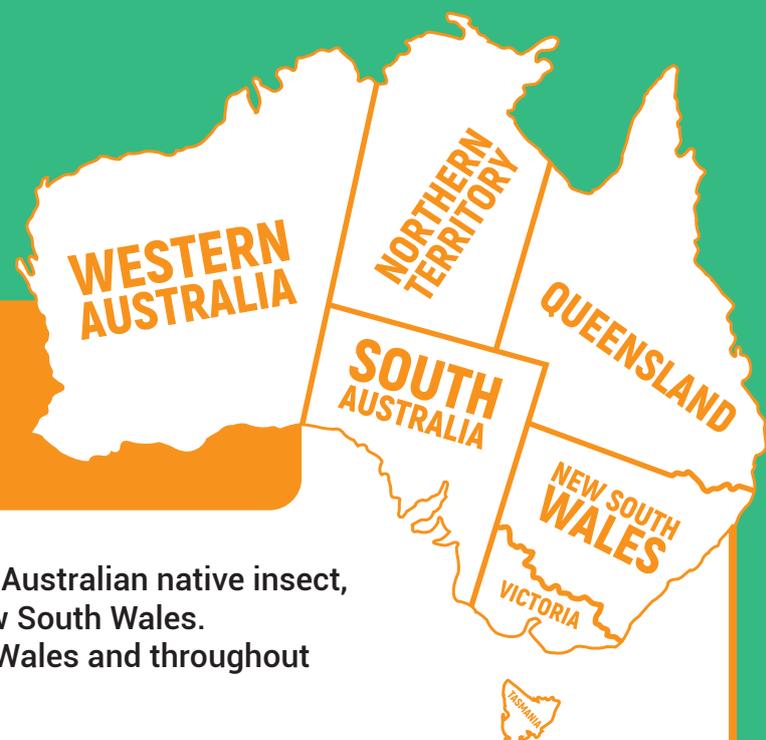
ACTIVITY BOOK

NAME:



pestfreearea.com.au

INTRODUCTION



What is Queensland fruit fly?

Queensland fruit fly (*Bactrocera tryoni*) is an Australian native insect, originally from Queensland and northern New South Wales. However, it is now found in all of New South Wales and throughout the Northern Territory and Victoria.

What is a pest and why is Queensland fruit fly a pest?

Animals, insects and plants are generally called pests when they cause damage to agriculture or wild ecosystems. They are known to damage crops, spread weeds and disease, prey on livestock or compete for food, hurt our native wildlife, and cause soil erosion and habitat destruction. Many pests were brought to Australia from other countries and include rabbits, cane toads, blackberries, feral cats and foxes.

Queensland fruit fly is considered a pest in many areas of Australia as it causes damage to fruit and vegetable crops. It was introduced to Victoria from Queensland and northern New South Wales in infested fruit.

Why is it important to control Queensland fruit fly in Sunraysia?

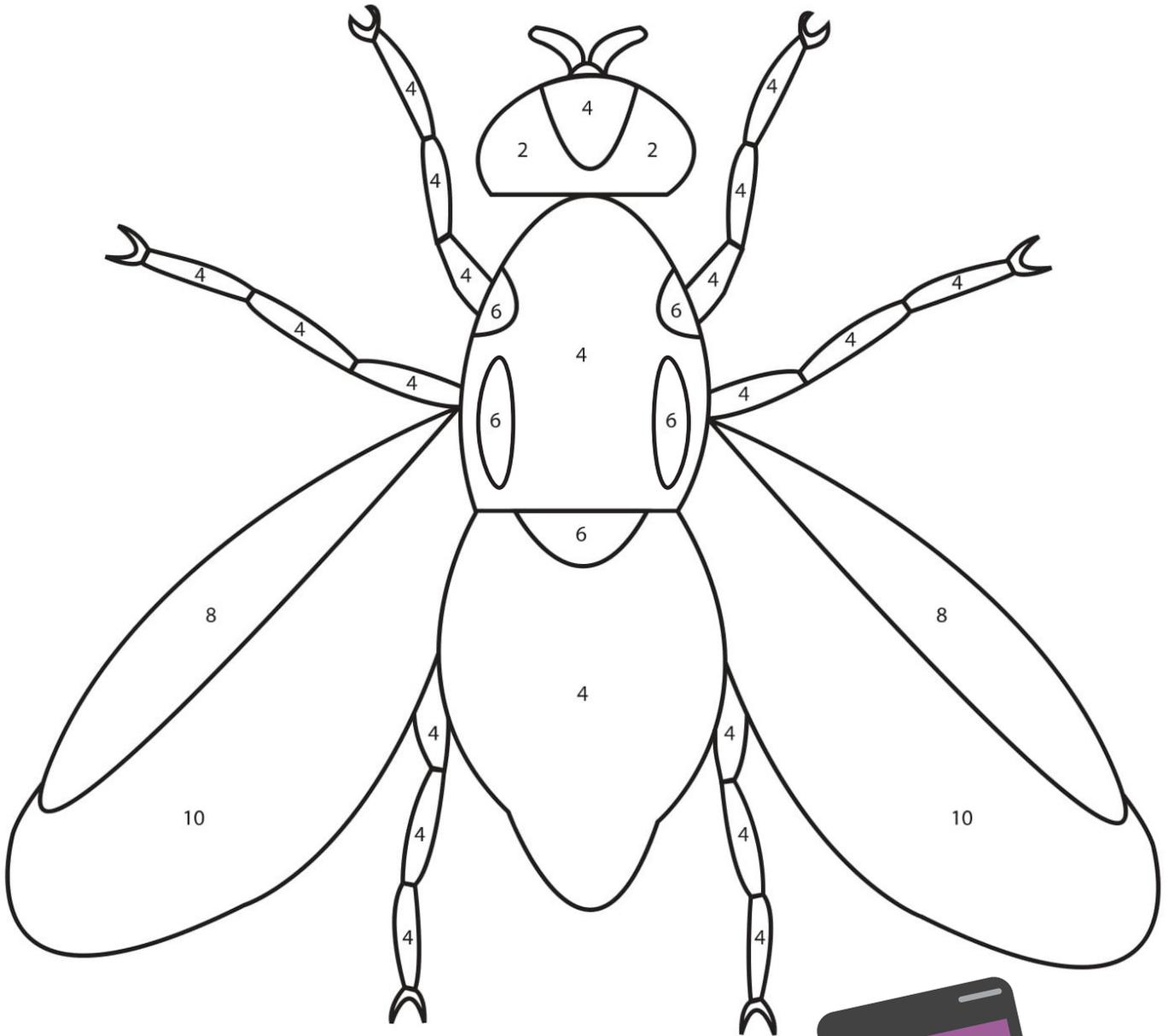
Queensland fruit fly is a pest insect in the greater Sunraysia region. It lays eggs in fruit, making it rotten and no good to eat. Other countries and Australian states, like South Australia and Tasmania, do not want the pest brought in as it could destroy their fruit industries.

To help stop this, they put quarantine rules in place. This means that farmers from Sunraysia can't sell their fruit to these places, or they have to treat the fruit before they send it.

COLOUR BY NUMBERS!

Colour in the Queensland fruit fly by following the colour key

RED.....	2
BROWN.....	4
YELLOW.....	6
BLACK.....	8
GREY.....	10



Send us a photo of your picture and we will share it on our Facebook page! Email us at:

gspfa@mildura.vic.gov.au



QLD FRUIT FLY FACTS!



Queensland fruit flies can lay eggs in more than **117 different types of fruit**, including oranges, apples, pears, peaches, grapes, cherries, and fruiting vegetables like capsicums and tomatoes.



Tiny creamy-white larvae (maggots) hatch from eggs **after 2–3 days** and burrow into the fruit as they feed. Fruit with maggots will become mushy and brown on the inside. Maggots feed on the fruit for **6–16 days**, then the fruit falls to the ground and the maggots burrow into the ground to pupate.



In the soil, they change into oval shaped, hard pupae. Inside the pupal case, which is like the cocoon formed by butterflies, the adult fly develops and comes out of the ground in about **10 days**.

WORD SEARCH!

**CAN YOU FIND ALL
THE WORDS BELOW?**



I S S V F S I M Q L Z A
U U J Q L K Q L U A C P
P N P V I E I T E R P P
Q R Z A E G R O E V B L
F A L P S G P M N A J E
M Y U R W S E A S E G N
A S O I T C S T L N U E
G I Q C R I T O A O H T
G A V O A A K R N B Z S
O Y E T P S O I D R L X
T B P Y S N T P U P A E
S P F R U I T F L Y S F

QUEENSLAND

FRUIT FLY

ORANGE

APPLE

TOMATO

SUNRAYSIA

APRICOT

MAGGOTS

EGGS

FLIES

LARVAE

NETS

TRAPS

PEST

PUPAE

VEGETABLE

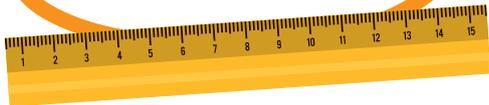


QLD FRUIT FLY FACTS!

Flies can grow, mate and start laying eggs as quickly as **2 weeks** after they come out of the ground.

Female flies can lay **500–2000 EGGS** in their lifetime.

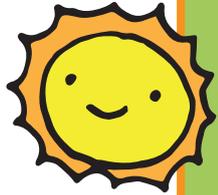
Adult flies are about **5–8mm** in length.



A QLD FRUIT FLY LAYING EGGS INTO A TOMATO



Mature larvae can “jump” by curling into a U shape then rapidly straightening.



Fruit fly numbers usually start to increase in spring when the weather warms up and there are suitable host plants available. The highest numbers will be found in summer.

Adult flies don't die over winter. They hide around buildings and in the bark of trees to protect themselves from frost and winds.

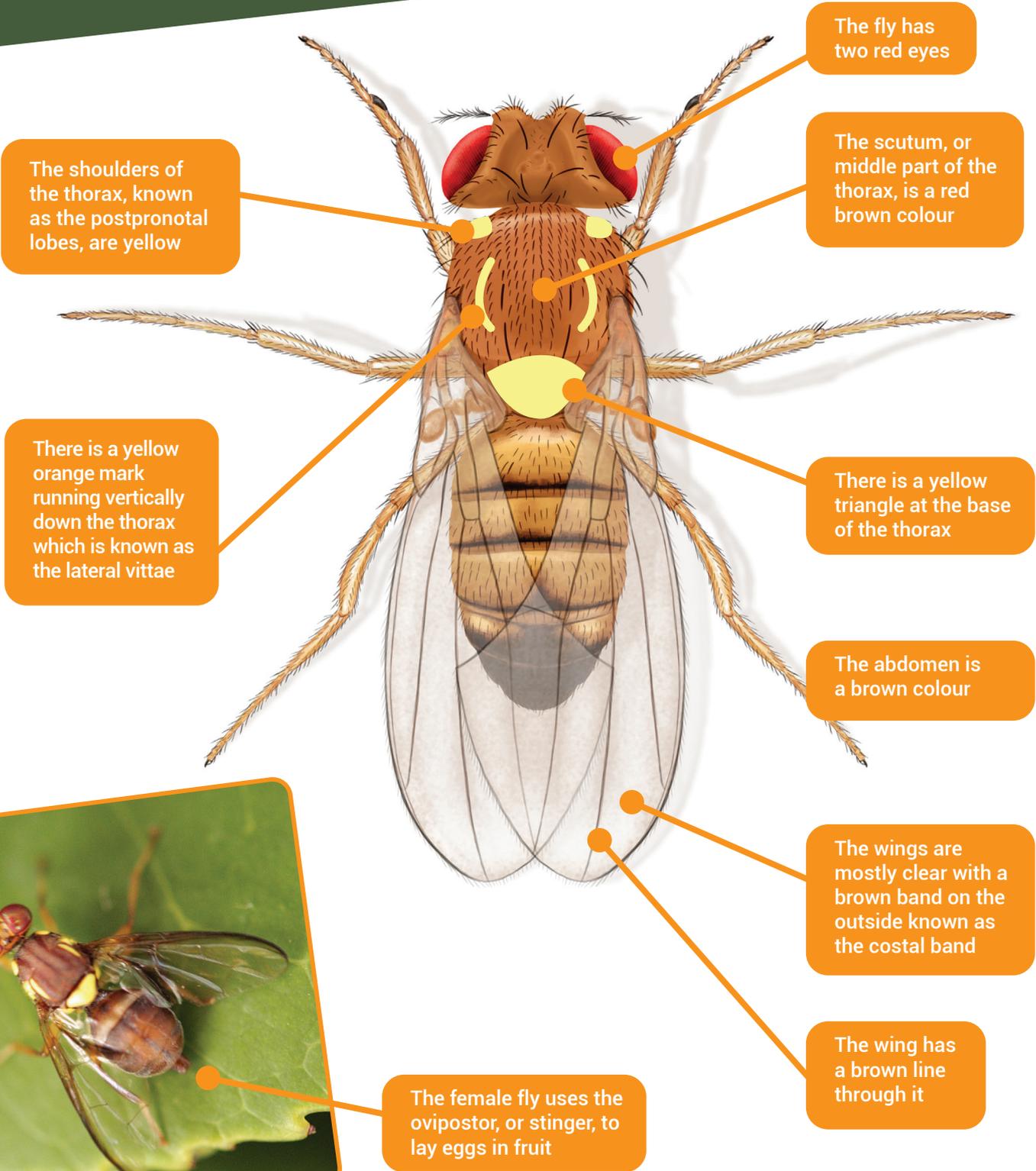
Flies that survive winter can mate and lay eggs once the temperature at sunset reaches **16°C**.

IF YOU WOULD LIKE TO FIND OUT MORE FUN FACTS ABOUT THE QUEENSLAND FRUIT FLY VISIT OUR WEBSITE

WHAT DOES A QUEENSLAND FRUIT FLY LOOK LIKE?

There are more than 4000 types of fruit fly around the world, and about 300 occur in Australia.

The two species of most economic concern are Queensland fruit fly and Mediterranean fruit fly. The description below will help you identify the Queensland fruit fly.



HOW CAN I HELP?

✓ Pick all fruit as it ripens – don't leave it on the tree for fruit fly to attack.

✓ If you have too much fruit to eat, make sure you still pick it all. Ask an adult to help you cook the extra fruit – you can make jam, or cooked fruit can be frozen to eat later.

✓ Do not leave any fallen fruit under trees.

✓ Plant vegetables that don't attract fruit fly, such as spinach, corn, beans, peas, herbs, pumpkin and broccoli.

✓ Help your elderly neighbours by picking up their fruit.

✓ Make traps (**instructions on page 11**) to hang in your garden and catch fruit flies.



✓ When you pick up fallen fruit, put it in a plastic bag and leave it in the sun for 10 days to make sure all the larvae are destroyed before you put the bag in the bin.

QUIZ TIME

The answers to all the questions are in this booklet and also available on the Greater Sunraysia Pest Free Area website: pestfreearea.com.au/schools

IF YOU CAN'T FIND THEM, GET AN ADULT TO HELP YOU LOOK!

1. Circle all the host fruits in the list below:

- ORANGES
- APPLES
- TOMATOES
- POTATOES
- APRICOTS
- LETTUCE
- PEARS
- CHERRIES
- STRAWBERRIES
- ONIONS
- PEACHES
- CAPSICUMS
- AVOCADOS
- MANDARINS

2. Name as many pest animals in Australia that you can think of:

3. How big is a Queensland fruit fly?

- A Similar size as a bee (15mm)
- B Similar size as a mosquito (3-6mm)
- C Similar size as a dragon fly (25-100mm)

4. Which part of a fruit fly's body is used to push the eggs into fruit?

- A Mouth
- B Antennae
- C Legs
- D Stinger - ovipositor

5. Where do Queensland fruit flies lay their eggs?

- A On the bark of a tree
- B In the soil
- C Inside the fruit

7. How many types of fruit fly are there in Australia?

A More than 4500

B More than 25

C More than 300

D Less than 5

8. How many eggs can a female Queensland fruit fly lay in a lifetime?

A 10-20

B 1000-2000

C 500-2000

D 300-400

9. What are some of the signs that your fruit has been infested with Queensland fruit fly?

10. When you pick up fallen fruit, what should you do with it?

12. Queensland fruit flies have distinctive markings running vertically down the thorax, known as the lateral vittae. What colour are these markings?

A Black

B Orange/Yellow

C Red/Brown

D Green

13. How often should you replace the liquid in your homemade trap?

A Every 6 months

B Every 1-2 weeks

C Every day

D Once a year



MAKE A FRUIT FLY TRAP!

This homemade trap recipe takes only a few minutes to make with items you probably already have at home. **Ask an adult to help you with this activity.**

✓ Start with a plastic bottle (soft drink or similar) with a lid.

✓ Have an adult cut 2–3 holes in the bottle about the size of a 5-cent piece, 10cm from the top. The holes need to be big enough for fruit flies to get in.

✓ Mix UP

1 teaspoon Vegemite

1 cup water

1 tablespoon sugar

2 drops unscented or lemon dish-washing liquid

✓ Add mixture to the bottle and screw on the lid. Tie twine around the bottle's neck and hang from your trees.



The liquid in homemade traps attracts flies into the trap, and when the fly can't escape it drops into the liquid and drowns.

The liquid will need replacing every 1–2 weeks, especially in hot weather, so it doesn't go off and attract ants.

Put at least one trap in each tree. Ask an adult to help check the traps, taking care to check for bees and wasps.



MORE RESOURCES?

More resources are available
on the Greater Sunraysia
Pest Free Area website:
pestfreearea.com.au/schools

WANT A GUEST SPEAKER?

If you would like someone to
come and talk to your school,
Scouts or Girl Guides group, or
any other community group,
please contact us on
(03) 5022 0327

This work was funded by the Victorian
Government's Managing Fruit Fly in
Victoria Regional Grants program.
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Swan Hill Rural City Council.



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