

# Lesson Plan

## Victorian Curriculum: Level 3/4

Science understanding – Biological sciences (VCSSU057/58)

Science Inquiry Skills – Communicating (VCSIS072)

<b>Topic: Ecosystems</b>	<b>Learning outcomes</b>  Students will be able to: <ul style="list-style-type: none"><li>• Understand the concept of ecosystems and the features that keep them in balance.</li><li>• Form contextual understanding of sustainability in recreational fishing using the Victorian rules and regulations.</li></ul>
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**Time required:** 60 minutes

**Classroom set up:** Students can complete online or in classroom setting. Students to work individually or in pairs to read through and complete materials attached.

**Extension:** Students can choose an aquatic animal of their choice and draw the environment it lives in.

**Tasks:**

- Ecosystems
- Backyard food web
- Sustainability

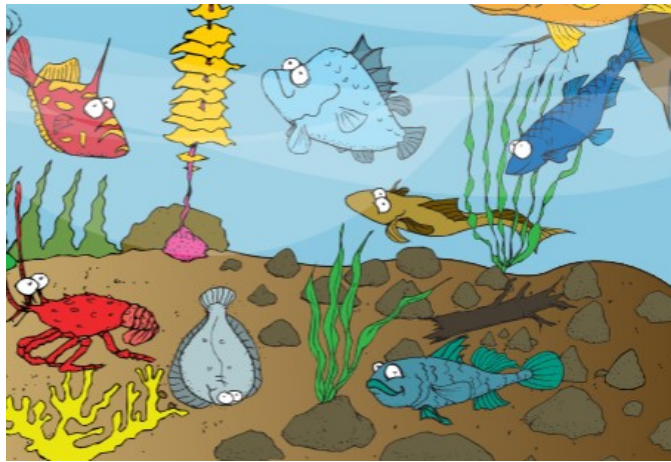


# Ecosystems

Your backyard is an ecosystem with lots of different types of creatures living together!

Fish and other creatures like crabs, snails, worms and squid are found living together in an ecosystem too.

Some ecosystems are saltwater like the sea.



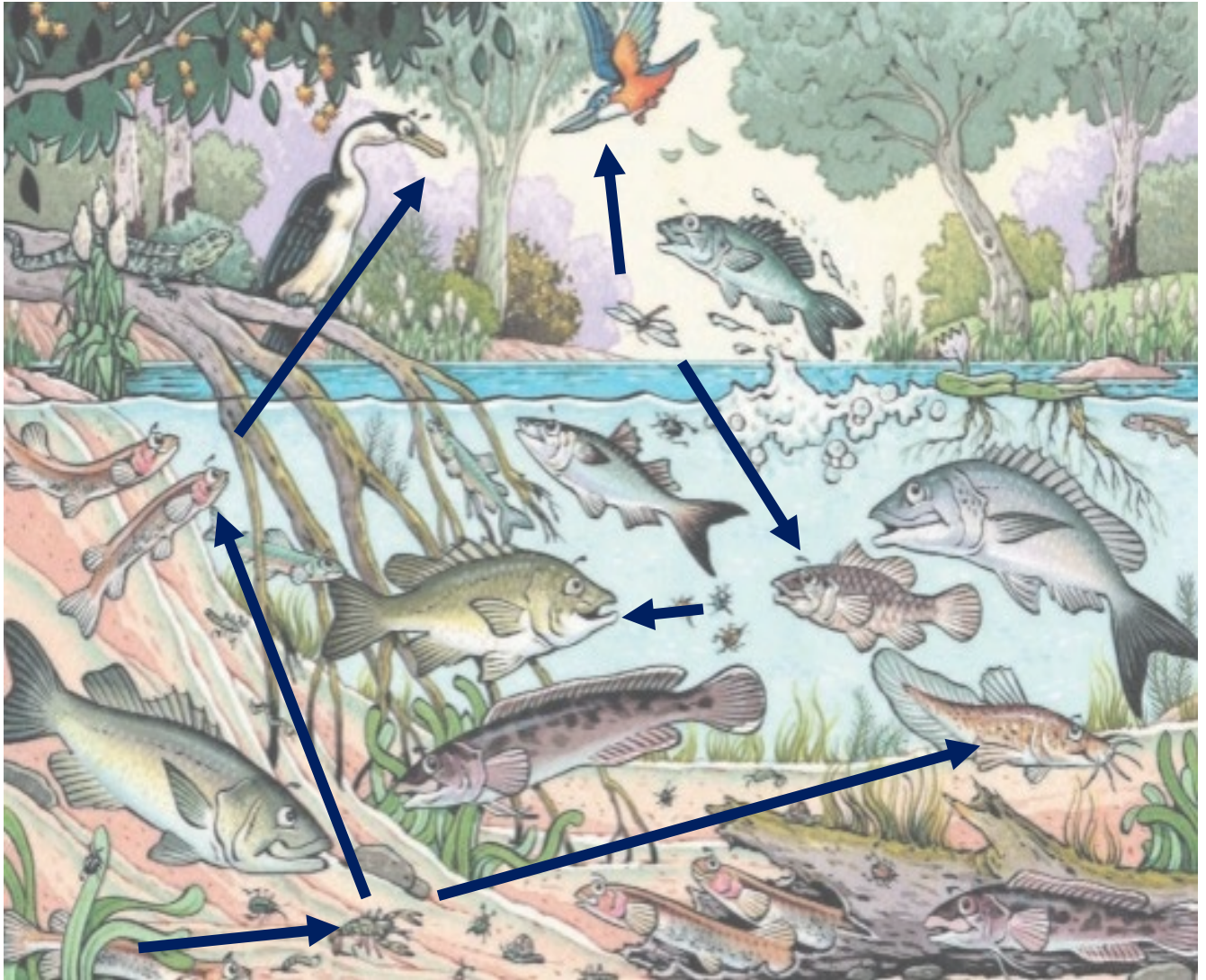
Other ecosystems are freshwater like rivers, lakes and dams.



***Every animal has a special place in an ecosystem which keeps it balanced and healthy***

## Who eats who?

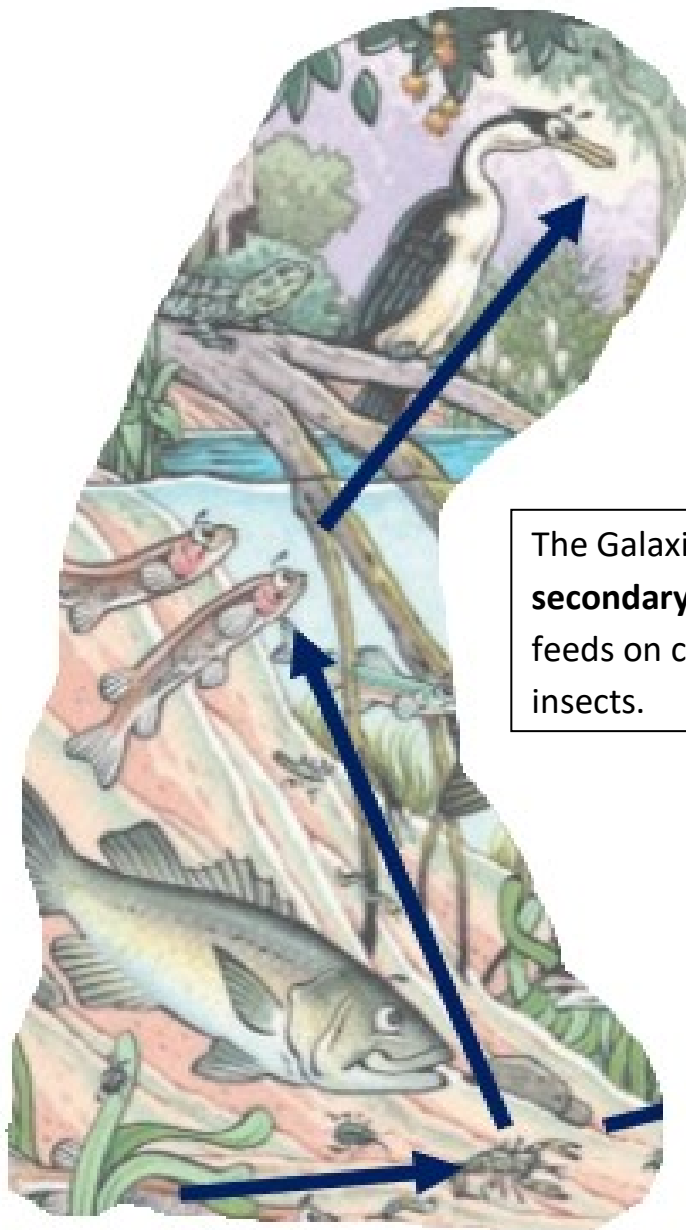
Every animal in an ecosystem makes up part of a food chain which can be shown using arrows which shows the flow of energy.



Plants get their energy from the sun via a process called photosynthesis.

Animals get their energy from consuming what is around them.

Plants are **producers** and animals are **consumers** and are defined as primary, secondary, tertiary or apex depending what they eat in the food web.



The Cormorant is a **tertiary consumer** and feeds on fish like the

The Galaxiid fish is a **secondary consumer** and feeds on crustaceans and insects.

The Yabby is a **primary consumer** and feeds on aquatic plants.

This aquatic plant is a **producer**. It converts the sunlight into energy via

# Your turn!

How many animals can you find in your backyard ecosystem?

Draw a food chain using arrows and label the food chain with the words below:

**Producer      Primary consumer      Secondary consumer      Tertiary consumer**





## Sustainability

Food webs exist within a delicate balance.

Every link in a food web is connected to at least two others and if threatened the ecosystem can collapse.



**When people go fishing, they must follow rules and regulations that help keep the food webs in balance and protect our aquatic ecosystems.**

# The Victorian Recreational Fishing Guide

This is a guide to fishing rules and regulations and must be used by anyone going fishing.

Inside, fish species, crustaceans and molluscs which are fished for recreationally, in sport and collected to eat have their own rules which help protect the species.

Each year the Victoria Fisheries Authority (VFA) releases a new guide to help create a responsible and sustainable fishing future.

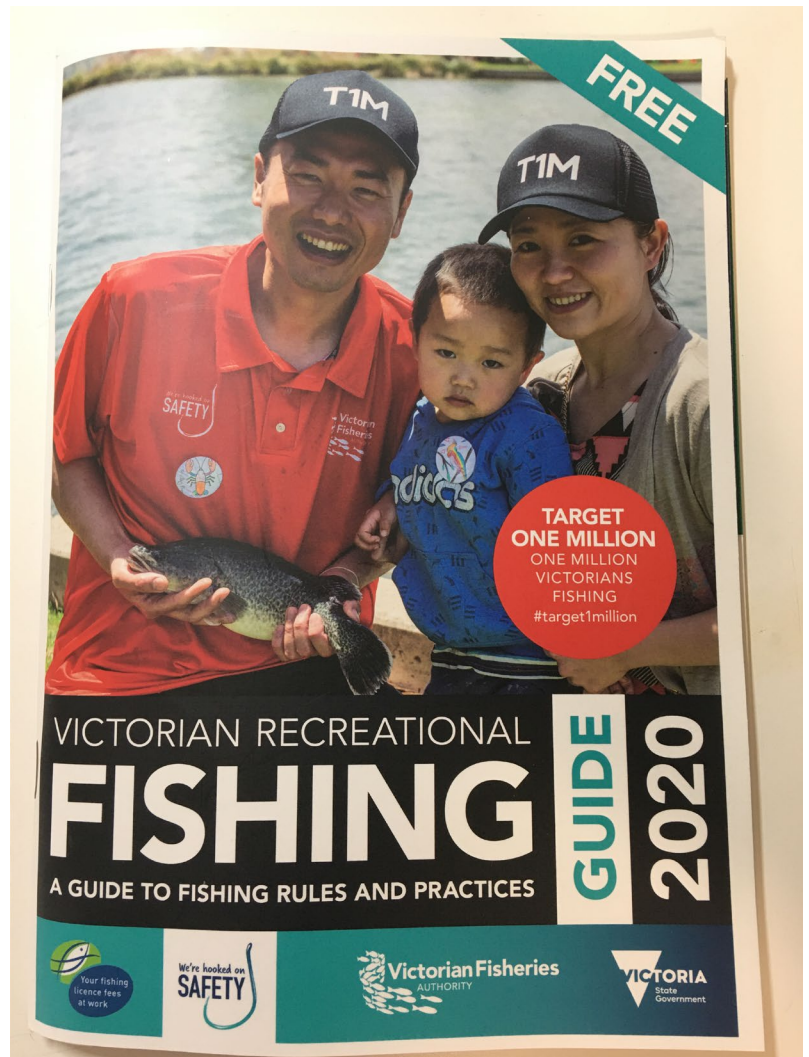
## Minimum legal size:

The minimum legal length the fish can be taken from the water.

**Bag limit:** The maximum number of species you can take in one day.

## Let's try!

Visit: [What's that fish?](#) and complete the work sheets in conjunction with [Victorian Fisheries Authority Recreational Fishing Guide](#).



## Extension

Draw an aquatic species of your choice below

