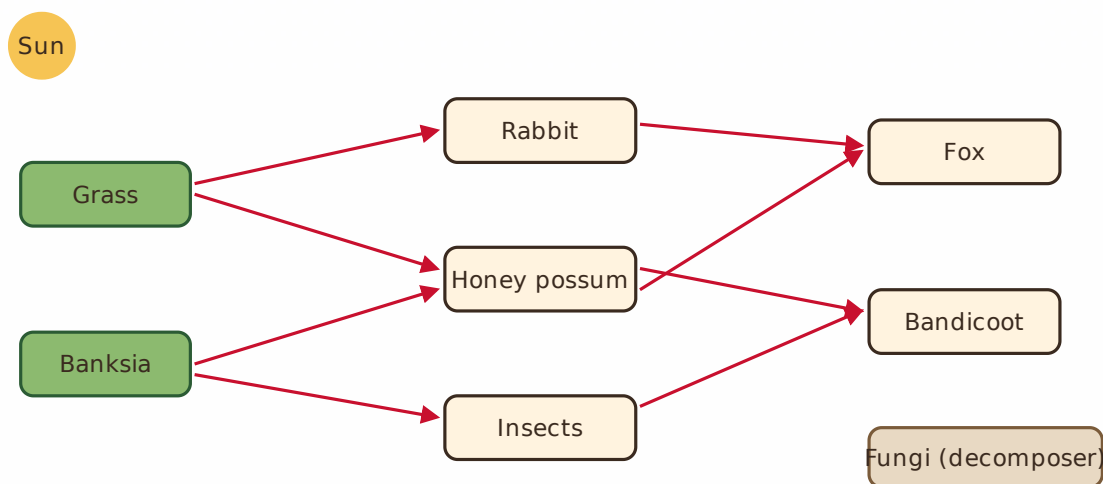


Extension — Ecosystems Under Pressure

Think like an ecologist

Ready for a challenge? These questions ask you to think like an ecologist — reasoning about a whole food web, not just one chain.



A bushland food web. Use it to answer the questions below.

Challenge questions

Q1. Foxes are introduced. Imagine a lot of foxes arrive and the **bandicoot** almost disappears. Trace at least **two** flow-on effects through the web. What might happen to the insects? To the banksia?

Q2. A disease kills most of the **grass**. The honey possum feeds on banksia, but the rabbit feeds mostly on grass. Which animal is in **more** trouble, and why? Use the idea that more food sources make an animal more resilient.

[illegible]

Q3. Explain why a food **web** is a more accurate model of nature than a single food **chain**. Give an example from the diagram.

[illegible]

Q4. Design a fair test. You wonder: "Does adding more producers (plants) help an ecosystem support more consumers?" You cannot test this on real bushland. Describe a model or investigation you *could* do, including what you would change, measure and keep the same.

Q5. Big thinking. Aboriginal peoples have cared for Country for tens of thousands of years, keeping ecosystems in balance. Suggest one thing people today could do to protect a native food web from an introduced species, and explain how it would help.

Great ecologists think in **connections and consequences** — every change ripples through the whole web.