

ecolinc Biodiversity of the Western Volcanic Plains

Grassland Food Webs: Student Worksheet



Activity 1

Food webs & energy transfer in a grassland ecosystem

(Level 7)





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Food webs & energy transfer in a grassland ecosystem (Level 7)

Food chains in a grassland ecosystem

- 1. What is a food chain?
- 2. Are plants always at the base of a food chain?
- 3. How do plants gain their energy?
- 4. How do animals gain their energy?
- 5. What is a food web?

BWVP Grassland Food Webs Learning Object

Complete the Very Easy Food Chain and Easy Food Webs using the BWVP Grassland Food Webs learning object.

6. Draw the food chain in the space below.



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7.	Draw t	the food	web i	n the	space	below.
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Food web - no Feral Cat

Food web - with Feral Cat

8. Complete the following table. Tick whether the organism is a producer or consumer, herbivore or carnivore.

Carriivore.				
Organism	Producer	Consumer	Herbivore	Carnivore
Kangaroo Grass				
Smoky Buzzer Cicada				
Southern Brown Bandicoot				
Striped Legless Lizard				
Brown Falcon				
Feral Cat				

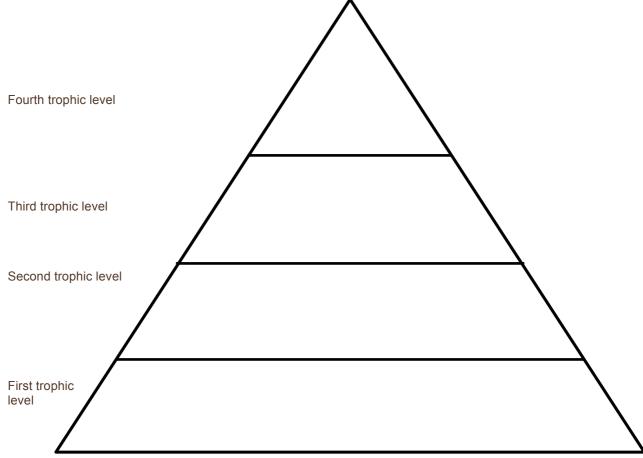


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Energy flow through trophic levels

9. Complete the trophic pyramid with the organisms used in the food web.



- 10. Which organism is greatest in abundance?
- 11. What happens to the amount of energy as you move up the pyramid?
- 12. Why is a food chain limited to three or four organisms?
- 13. What is important about decomposers, like fungi?



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14. Is a food web never ending?
Introduced species
Explore the impact of introduced species on ecosystems. Open the BWVP Flora and Fauna Field Guide and look up Animal > Mammal > Placental.
15. There are several introduced placental animals. List these.
16. How do these animals pose threats to native plants and animals?
17. Look up the Feral Cat. What is the diet of the Feral Cat?
18. When are cats active?
19. Refer to your food webs. What is the impact of the Feral Cat on this ecosystem?
Conclusion
20. You now know that plants are producers and animals are consumers. What is the difference between these two roles?
21. Observe the following food chain. Tussock Grass Golden Sun Moth Striped Legless Lizard Eastern Brown Snak
The Golden Sun Moth is an endangered species. How can this affect the food chain?
22. Explain the energy flow in a food chain.



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23. In an ecosystem can there be more carnivores than herbivores?
24. What trophic level do humans occupy?
25. How can humans cause an imbalance in a food web?