

Grassland Food Webs: Student Worksheet



Alan Henderson ©

Activity 1

**Food webs & trophic levels
in a grassland ecosystem
(Level 6)**

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?

Scavengers

A food web consists of producers, herbivores, carnivores and omnivores however there is another group called scavengers. Scavengers consume decaying matter also known as carrion.

6. Is a scavenger a carnivore or herbivore?

7. How is the diet of carnivores and scavengers different?

8. Which animals are scavengers?

Open the BWVP Flora and Fauna Field Guide. Look up the Group – Raptors.

9. Click on each of the birds and explore their diets. One of these birds is a carnivore and scavenger. Which one?

10. What is the diet of this bird?

11. What trophic level would the bird occupy?

BWVP Grassland Food Webs Learning Object

Complete the Very Easy Food Chain and the Easy Food Webs (with and without the Feral Cat) using the BWVP Grassland Food Webs learning object.

12. Draw the food chain in the space below.

13. Draw the food webs in the spaces below.

Food web – no Feral Cat

Food web – with Feral Cat

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

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

Energy flow through trophic levels

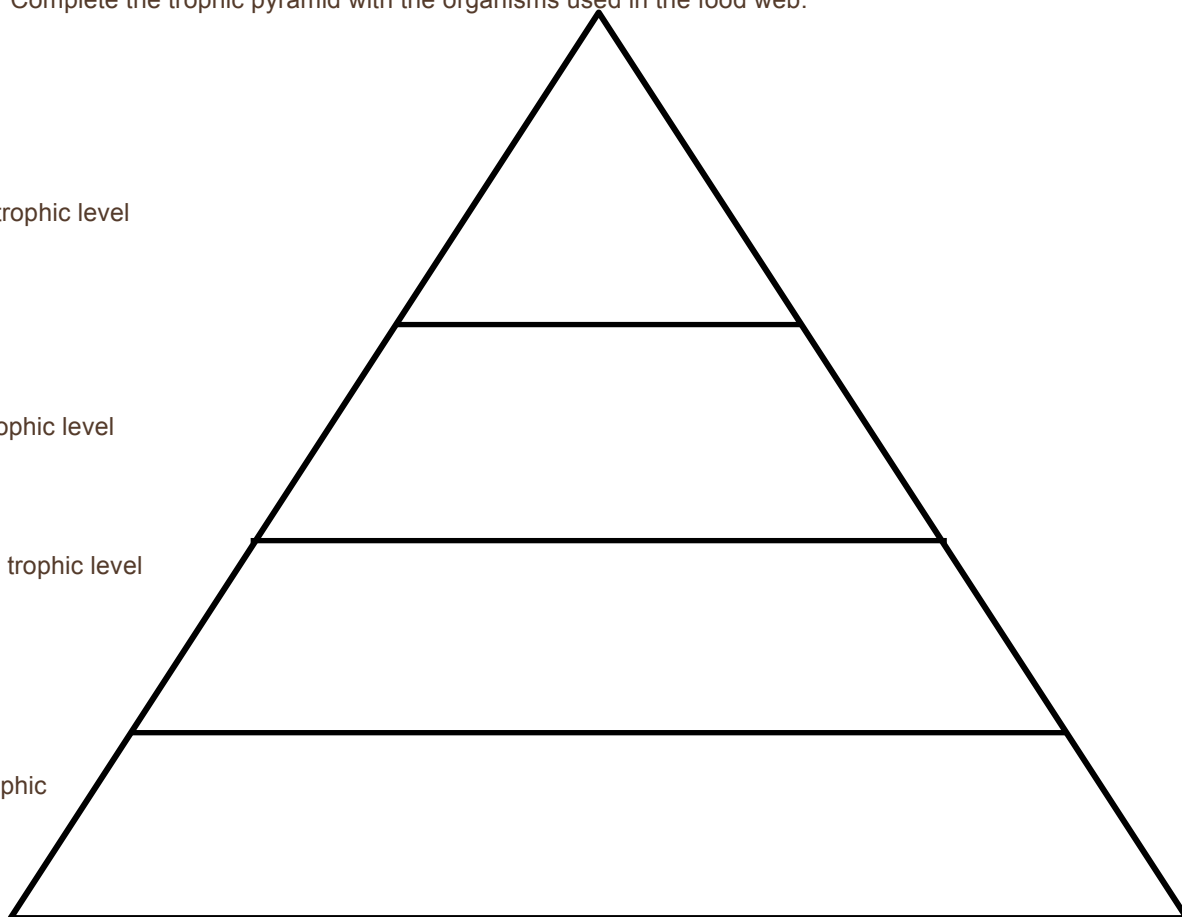
15. Complete the trophic pyramid with the organisms used in the food web.

Fourth trophic level

Third trophic level

Second trophic level

First trophic level



16. Which organism is greatest in abundance?

Introduced species

Explore the impact of introduced species on ecosystems. Open the BWVP Flora and Fauna Field Guide and look up Animal > Mammal > Placental.

17. There are several introduced placental animals. List these.

18. How do these animals pose threats to native plants and animals?

19. Look up the Feral Cat. What is the diet of the Feral Cat?

20. When are cats active?

21. Refer to your food webs. What is the impact of the Feral Cat on this ecosystem?

Conclusion

22. Observe the following food chain.

Eucalypt Tree → Gumleaf Grasshopper → Tiger Snake → Brown Falcon

23. What would happen if the Brown Falcon became extinct?

24. What would happen if all of the grasshoppers were removed from the grassland?

25. In a trophic pyramid, what organisms are always at the base?

26. How important are scavengers in an ecosystem?

27. Are domestic cats a threat in an urban ecosystem?

28. If you are a cat owner, what can you do to protect native animals?
