Alight: A Story of Fire and Nature

AUTHOR

SAM LLOYD

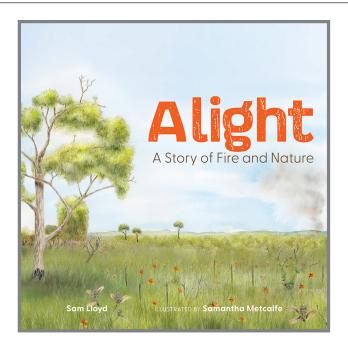
ILLUSTRATOR

SAMANTHA METCALFE

SCIS: TBC

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RECOMMENDED FOR: Lower to Mid Primary



SYNOPSIS

Alight shares the story of Australian native plants and animals during a planned fire. Discover how the fire helps Christmas Bells grow new flowers and Wallum Banksia to open its woody seed capsules. Follow Antechinus and a tiny Wallum Sedge Frog as they face the danger of the fire—and the challenges that come after. See how the bush recovers and flourishes after the fire, all under the watch of Old Eucalypt.

ABOUT THE AUTHOR

Dr Sam Lloyd is a scientist, fire ecologist and writer with a passion for the Australian bush and children's literature. Through storytelling, art and a love of books, Sam strives to engage children in the world of science and nature. Sam lives in Brisbane with her husband, children, dog and some chooks.

ABOUT THE ILLUSTRATOR

Samantha Metcalfe is a Natural History Illustrator who finds inspiration in the unique biodiversity of the Australian bush. Working primarily in colour pencil, her realistic and detailed illustrations often focus on capturing Australia's native flora and fauna. Samantha has illustrated several children's picture books including *The Voyage of Whale and Calf*, and she was also shortlisted for the 2019 Children's Book Council of Australia Award for New Illustrator.

THEMES

- Fire
- Ecosystems
- Adaptation

STUDY NOTES

- Ecosystems are the plants, animals and microorganisms that live in a particular area and the environment they interact with (such as soil and weather). Show the students examples of both a food chain and a simple food web, showing the interactions between food (both plants and animals) and consumers (animals) in an ecosystem.
 - Visit or prompt the students to think about different ecosystems (such as a local park or wetland) and their characteristics. Observe or brainstorm what plants and animals live in the area and what the environment is like.
 Compare and discuss the results for different ecosystems.
- First Nations peoples in Australia have practiced cultural burning to nurture the Australian landscape and culture

for tens of thousands of years. Non-indigenous land managers also manage the land with fire, using planned fires to reduce the risk of dangerous bushfires and improve the health of ecosystems. Typically, planned fires, whether cultural or not, are smaller than unplanned wildfire and the land is burned in patches, leaving some areas unburnt. Also, the fires are not super hot, so many plants and animals survive them. This type of burning is quite different to unplanned wildfire that can't be controlled and burns thousands of hectares of land unintentionally. Discuss the different characteristics of cultural burning, planned fire and bushfires.

SCIENCE

- Alight describes many different habitats within the ecosystem. What are those different habitats, and what animals or plants live in each?
- Discuss how plants in the book have adapted to survive fire, or even need fire to reproduce. What would happen to the habitat if it remained unburned for many years? What would happen if the area burned too often?
- Alight mentions lots of different organisms. Create a table using the below headings and list the different organisms from the book under the following categories:
 - plants
 - mammals
 - birds,
 - amphibians
 - reptiles
 - invertebrates
 - fungi.
- Ask students to examine a banksia seed capsule specimens, then ask them to draw an example of what they see. As a class, discuss why the banksia seeds aren't simply burnt in a fire.
- Draw a line to link the below food items to the below animal (consumer) that eats it. Refer back to the story if you are not sure.

FOOD	CONSUMER
mosquito	antechinus
Christmas bells	bandicoot
eucalypt leaves	barn owl
fungi	honeyeater
insects	koala
antechinus	microbat

- Discuss why antechinus occurs in both columns.
 - Create a food chain that shows antechinus as both consumer and food.
- Read the book again to see what other food and consumer relationships you can find. For example, Christmas bells also provide food (in the form of nectar) to ants and bees. These nectar-feeding insects will also feed from flowers of the wallum banksia.

ENGLISH

- Some of the words in the text are in bold type. These are defined in the glossary at the back of the book. Looking at the definitions of the words, discuss how adaptation, germinate and seed bank relate to fire in an ecosystem.
- The five main characters in the book are plants or animals. Who are these main characters? For each character, what words are used to describe how they feel about the fire as it is coming closer? Do they need to take any action as it approaches?
- The beginning of the book shows two land managers who are lighting a planned burn in the grassy woodland and wallum heath. As described in the 'Fire in the Australian bush' section at the back of the book, all fire is potentially dangerous so planned burns require detailed planning, permission and safety measures to be in place. Imagine you are one of the land managers in the book. Write a journal entry that describes your activities on the day and what you observed in the bush as the fire went through.



ABORIGINAL AND TORRES STRAIT ISLANDER HISTORIES AND CULTURES

• What have non-Indigenous land managers learnt about fire management from First Nations peoples? How does following traditional Indigenous practices help care for the bush?

