

# Aussie STEM Stars: Maddy McAllister

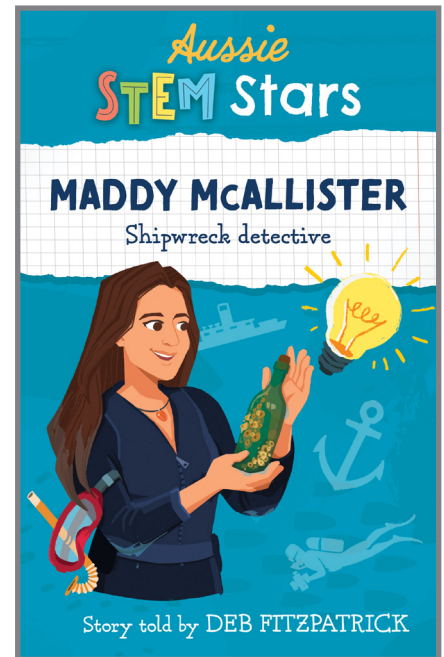
AUTHOR

**DEB FITZPATRICK**

**SCIS:** 5473008

**ISBN:** 9781925893823

**RECOMMENDED FOR:** Mid to Upper Primary



## SYNOPSIS

Each book in the Aussie STEM Stars series is written by an award-winning children’s author and follows the real-life stories of some of Australia’s top scientists and inventors, chosen on the basis of their pioneering work. Themes explored include childhood, school, family, and formative experiences, what inspired them to pursue their chosen path, how they persevered in the face of challenges, and what they have contributed to science in Australia.

Maddy spent her early years in the Northern Territory before her family moved back to Western Australia. Maddy’s love of the sea and everything in it was nurtured by her beloved grandfather who would take her fishing and snorkelling in the ocean off Busselton, south of Perth. On these trips he would regale her with his many stories of shipwrecks around the coast and share his great curiosity in the natural and human-made world.

Still only a 14-year-old teenager and already a certified SCUBA diver, her passion for maritime archaeology in particular, was sparked by a lecture she attended in Busselton where her family had finally settled. A maritime archaeologist from the Museum of Western Australia in Perth told the gathering the story of the shipwreck of a cargo ship *Georgette*, that occurred in 1876, south of Busselton. At great risk to themselves, two courageous young people who lived in the area, Indigenous man Sam Isaacs and 16-year-old Grace Bussell, rode their horses into the boiling surf to rescue survivors.

Dr Maddy McAllister is a Senior Lecturer at James Cook University and the Senior Curator of Maritime Archaeology at Queensland Museum Network and is based in the Queensland Museum Tropics in Townsville. Her PhD research was on the notorious Batavia shipwreck of 1629 in the Houtman Abrolhos Islands of Western Australia.

## ABOUT THE AUTHOR

Deb Fitzpatrick lives in Perth, Western Australia. She writes fiction and creative non-fiction for adults, young adults and children. Her books have been named Notable Books by the Children’s Book Council of Australia, shortlisted in the West Australian Young Readers Book Awards, published in the US, and optioned for film. Deb lived in a shack in Costa Rica for four years where she became accustomed—well, almost—to orange-kneed tarantulas walking through her house, and sloths and spider monkeys in the trees outside. Deb loves using stories from real life in her novels and regularly teaches creative writing to all ages. She has a Master of Arts from the University of Western Australia, and shares her life with a lovely family and their kelpie, who is absolutely not a failed sheep dog, and may or may not star in a novel for kids.

**STUDY NOTES****BEFORE READING**

- What do you know about Maddy McAllister?
- What do you know about shipwrecks?
- What do you know about the study of oceans and weather patterns?
- Read the blurb. What can you gather about this book from the blurb?
- Discuss the image on the back cover. What do you think Maddy is doing?
- Highlight the quote at the beginning of the book:

*Dive deep into your passions,  
let it guide you and be amazed at where it takes you.*

—Maddy McAllister

Write this quote on a poster as a class or small group. Ask students to write ideas around the quote as to what it might mean to them. Add to this poster as the book is studied.

- Outline the Glossary at the back and how to use it.
- Who is the author of this book? Explore other books and pieces of writing Deb Fitzpatrick has written and discuss why she may have been asked to write this book.
- What is the difference between a biography and an autobiography? Explore what this book is and why it is a biography and not an autobiography. Discuss the importance of the STEM Stars series.
- What is narrative non-fiction? Could this book fit into that genre as well?

**WHILE READING****Weather**

- Weather plays a huge role in our lives, but how does weather affect the maritime environment?
- Maddy experiences cyclones when she lives in Darwin, but how could these cyclones play a role in the study of shipwrecks?
- Cyclones are called different names in different countries. Write a list of the other terms and where they are used.
- Discover other weather events that can help and hinder maritime archaeology in various ways.

**Mermaids**

- What are mermaids and how did they become part of human culture?
- Investigate the origins of mermaids through fairytales, cultural images and sea stories to gather more of an understanding about how these mythical creatures began, and why they still play a role in society today. You might like to check out: Mermaid tales appear in myths around the world—Arnhem Land included—ABC News <<https://www.abc.net.au/news/2018-06-11/mermaids-across-the-world-arnhem-land/9846210>>

**Shipwrecks**

- Choose a shipwreck that interests you and research it.
- Imagine you are one of the people aboard the ship and write a detailed diary recounting the days leading up to the shipwreck, and the days that follow.

**Archaeology**

- How has the field of Archaeology inspired books and films? Find books and films that have been made out of archaeological finds and consider the following:
  - How accurate are the books/films?
  - Why were these particular finds made into books/films?
  - Why are people interested in these stories?
  - Is the site still significant? Why?
  - How do these films help or harm the study of archaeology and the historical sites?

**AFTER READING**

- After reading each chapter, record your ideas and feelings using the following questions:
  - In one sentence, explain what this chapter was about.

- What did Maddy McAllister or another key person do and say in this chapter? How did they feel?
- What real life events occurred? Link some dates and extra details to this event.
- List new vocabulary you have learnt in this chapter.
- How has the author made you feel? Think of the language used to create tension, happiness, wonder, anxiety.
- Reflect on your answers after you have read the book by answering the following questions:
  - How did your knowledge change throughout the book?
  - How did your feelings change? Why?
  - Did the characters seem to change as you learnt more about them? Which events caused change in their characteristics?
  - What new vocabulary have you learned?

### Chapter 1

- Where is Darwin? Where is Pine Creek? How long would it take for Maddy and her family to drive to Wangi falls from Darwin? From Pine Creek?
- Who are the Koongurrukun, Mak Mak, Marranunggu, Werat and Warray Aboriginal people? Find out where they live and some of the traditional customs they have.
- What are gale-force winds?
- How would you feel if you had to change schools? Describe a timeline of emotions you think you would go through.
- Why was Maddy surprised by the school 'bus'?
- Maddy has a diary. Imagine you are Maddy, and write about the first day at Pine Creek primary, using the information from the story as a guide.
- What are floaties?

### Chapter 2

- Mum uses the idiom 'hold your horses'. Find out what an 'idiom' is and list some other idioms which refer to animals.
- List the events the students are practising. Which of these events do you enjoy, why?
- Why do you think Jasper is groaning?
- What is damper, and how do you make it?
- How are the children feeling as they make damper with the Aunties? Give some examples as to why they are feeling like this.
- What is a bush oven? Draw a labelled diagram of one.
- Maddy and Ally make up their own lyrics to different songs. Create your own set of lyrics, using a theme from the book so far, to a known tune.
- List some verbs that are used throughout this chapter, and discuss with your class how they enhance the story.
- Find Busselton on a map and work out how Maddy and her family could get there by different modes of transport.
- Which country does a Welsh person come from? Is it a separate country from the United Kingdom?
- Which Australian Prime Minister was born in the same country as Grandad and Nanna?

### Chapter 3

- What does 'the big smoke' mean?
- In what ways would living in the city be different from living in the country?
- How does Applejack help Maddy when she is feeling upset by all of the changes around her?
- Create a timeline of events in Maddy's life so far, including emotions and important people.
- Locate Geographe Bay on a map.
- How are Grandad and Maddy catching crabs?
- Why are stories like the 'Mary Celeste' so intriguing?

### Chapter 4

- What does 'pores over books' mean?
- What is the difference between archaeology and palaeontology, and how are they similar?
- What might 'amazed silence' look and feel like?
- How do we know that Grandad is passionate about looking after the marine environment?
- List some things that Maddy sees while she is underwater, using adjectives to describe how they look and move.

- How does Maddy's journal reflect what she will do in the future?

### Chapter 5

- How many schools has Maddy been to in her life so far?
- Why is Maddy's mother moving the girls again?
- How has moving closer to her grandparents had a positive influence on her?
- How is the ocean described? What other ways could the ocean be described in different types of weather?

### Chapter 6

- How was the Viking way of fishing different from modern fishing techniques?
- What does SCUBA stand for?
- Why is it important to do so much training before you SCUBA dive?
- Why does Maddy want to attend the lecture? Give your reasons using information from the story so far.
- Why did ships of the past carry whale oil? Which towns in Australia were once 'whaling stations'? When did they close down and why?
- After reading the story of Grace Bussell and Sam Isaacs, consider what made them rescue these people despite the treacherous surf, and what was probably going through their minds.

### Chapter 7

- Why are shipwrecks spooky and ghostly for many people?
- What is in a maritime archaeologist's heaven?
- Using the website listed in Chapter Seven, find out about the different types of sailing ships. Compare and contrast these ships—size, what they are used for, who would sail on them and what they were made of.
- How can a shipwreck be like a skeleton?
- List the various ways Maddy feels when she is underwater.
- Why is Maddy's dad concerned about her wanting to be a maritime archaeologist?
- Who is Indiana Jones? Why might her dad be concerned that she wants to be like him?
- Why do whales beach themselves, and why is it important for people to care for them when this happens?
- Imagine writing a diary entry about helping the pilot whales. Engage with the story, as well as how you think it would feel, smell, sound and look like.

### Chapter 8

- Why is Maddy's final year of high school a blur?
- How does Grandad's death impact Maddy?
- What does 'defer' mean, and how will it help Maddy?
- What is the underwater observatory in Busselton?
- Where does the saying 'that would suit you to a T' come from, and what does it mean?
- In three words, how would you describe Maddy's time at university?

### Chapter 9

- Find where *Rapid* sank and some historical facts about it.
- Why would a boat be named *Dirk Hartog*?
- What made Maddy call out: 'I don't want to leave, I'm not ready to leave!'
- What does the word 'horrendous' mean?
- Why is a shipwreck described as 'treasure', instead of the silver coins found in 1978 aboard the sunken *Rapid*?

### Chapter 10

- What is a curator?
- Use an atlas to find the Morning Reef, and write a diary entry imagining you are either Maddy discovering the shipwreck or one of the passengers on board when it sank.
- How did you feel after reading the story of *Batavia*?
- What is dendrochronology?
- How does maritime history help us to understand the world? Give an example using the results of the dendrochronology.
- What is photogrammetry, and how is this similar but different from photography?

- How has Grandad been a positive influence in Maddy's life?
- Why is Maddy known as, The Shipwreck Mermaid?

**Cool Shipwreck facts**

- Have a read through the various facts about shipwrecks, and think about how you could present some of this information to your classmates in a fun and interactive way.

AUTHOR OF NOTES

**VANESSA RYAN-RENDALL**