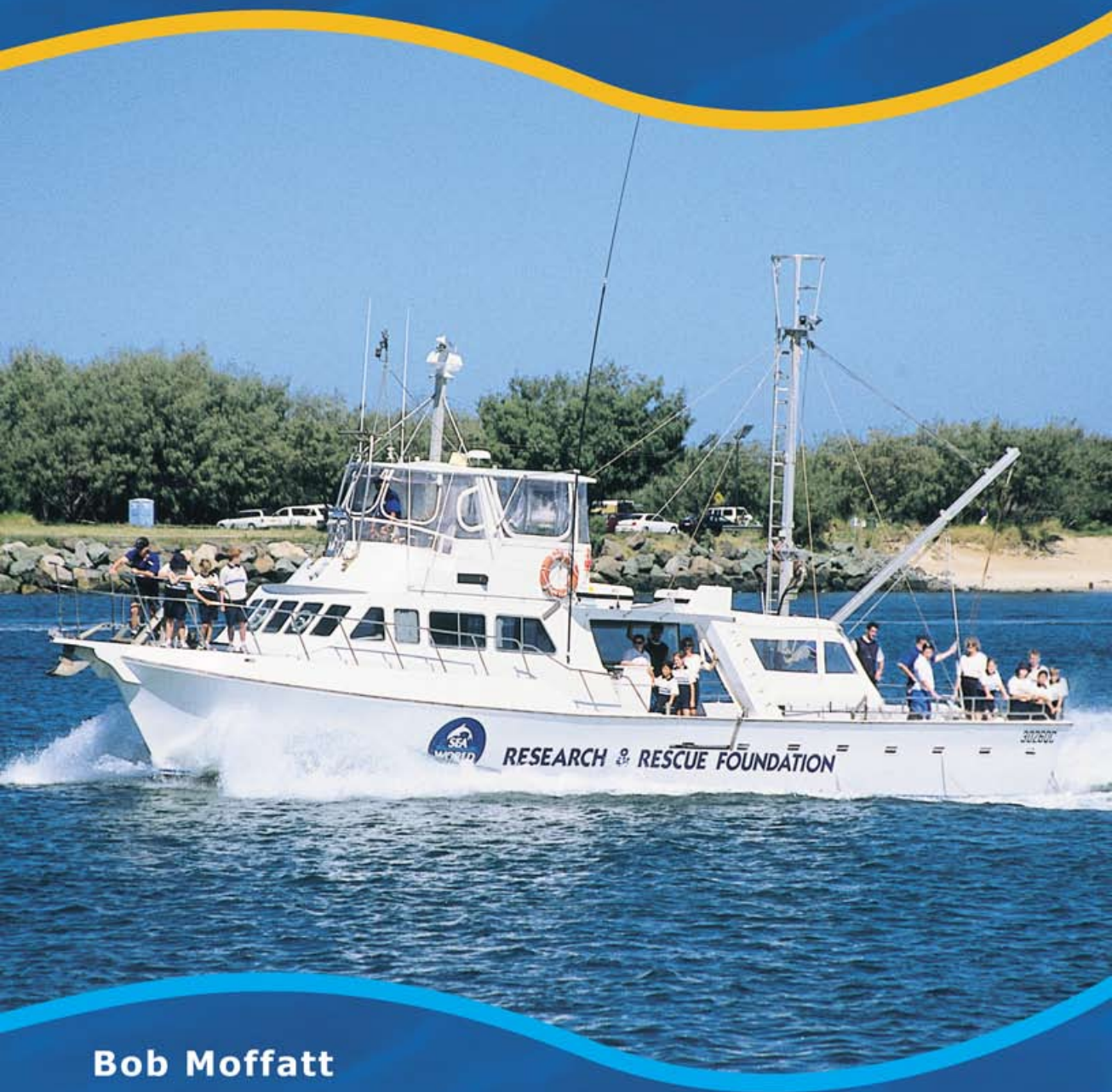




Marine Reader Series

# Our Day on a Research Boat



Bob Moffatt

## Copyright 2025

© The Moffatt Group Australia Pty Ltd 2024. ABN 81 086 521 084. All rights reserved. Except under the conditions described in the *Copyright Act 1968 of Australia* and subsequent amendments, no part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without permission of the publisher.

Wet Paper Publishers and Consultants  
14 Milbong Tce  
Ashmore Q 4214 AUSTRALIA  
Telephone: (07) 5597 2806 Facsimile:  
(07) 5539 4187  
www.wetpaper.com.au



**ISBN 978-1-86283-215-2**  
**(EPub) January 2025**

National Library of Australia HARD COPY Cataloguing-in-Publication data

Moffatt, Bob  
Our Day on a Research Boat  
ISBN 1 86283 062 2 (bk. 12).

1. Readers (Primary) - Oceanography. 2. Oceanography - Juvenile literature.  
I Title. (Series: Kids and Water; bk. 12).

428.6

Marine reader series creators: Bob Moffatt and Jim Grant.  
Printing: Heaneys Performers in Print, Gold Coast, Australia.  
Editing: Rosemary Lancaster, Paula Moffatt and Barbara McKenzie.  
Cover: Trent Moffatt Designs.  
Photography: Wet Paper.

Reviewers: Graham Anderton, Annaliese Caston, Christine Cougan, Jeremy Currie, Taffy Evans, Ralph James, Barbara Jensen, Jim Kneale, Steve Langlands, Kym McKaige, Steve Parsons, Anna Redlich, Nigel Ridgway and Stephanie Smith.

Illustrations: Bob Moffatt, Rose Bedford.

Acknowledgements:

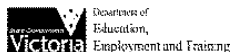
The publishers wish to thank the staff and students of All Saints Anglican College, Qld, as well as Mike and Margaret Halpin, staff at Sea World Marine Education, Ben Lockens (photographer) and Queensland Transport in the production of this book.

This publication was supported by grants from Queensland Transport, NSW WaterWays, Australian Maritime Safety Authority, Marine Board Victoria, South Australia Transport, Western Australian Transport, Marine and Safety Tasmania, Northern Territory Transport and Queensland Government State Development.

The Gould League is supported by staff and other resources supplied by Department of Education, Employment and Training, State Government, Victoria.

Gould League: Genoa St, Moorabbin, Vic, 3189. Telephone: (03) 9532 0909 Fax: (03) 9532 2860. www.gould.edu.au

The Kids and Water Project was printed and published in Australia.





# Our Day on a Research Boat



**Bob Moffatt**

# Contents

Our trip	3
It could be cold	4
Safety drill	5
Sunscreen	6
The crew	7
Underway	8
We learn about the radio	9
The marine biologists	10
Anchoring	11
Marine biology at work	12
Small sea creatures	13
We use the microscopes	14
Lunchtime at last!	15
Glossary	16





## Our trip

Our day at sea started cold and rainy.

All the class was going for a trip to sea on a research boat.

When we arrived we could see the research boat at the wharf.

A research boat is a special boat designed for scientists to study the sea.

These scientists are called marine biologists.

We could see lots of equipment on the boat.

*Has your class been on a trip lately?*

*Why not use this story as a model to write about your own excursion.*



*All boats have special safety gear. Can you see any in this photo?*



## It could be cold

Our teacher made sure we were wearing lots of sunscreen, warm clothing, hats and rubber-soled shoes.

The skipper of the ship was standing on the wharf. He invited us on board.

*Why should we wear  
sunscreen  
on cloudy  
days?*





## Safety drill

First we had to do a safety drill.

One of the crew gave us each a personal flotation device or PFD. He told us where to stand for our safety drill.

The PFD's were all one type. We each wore a PFD 1 for open water. It has a support for your head. If you fall overboard and are knocked unconscious, it keeps your head out of the water.

*Why does a PFD 1 have a head support?*





## Sunscreen

Wouldn't you know it, the sun came out and it got hot. Our teacher squeezed out more sunscreen. We rubbed it into our arms, on our faces and on the backs of our necks. She reminded us it would protect our skin from sunburn.

Australia has the highest rate of skin cancer in the world. Sunscreen helps protect skin from harmful ultraviolet rays. Look after your skin by rubbing sunscreen onto all exposed skin.

*Why are sunglasses recommended for people who do a lot of boating?*







## The crew

We soon got to meet more of the crew members. The person in charge is called the skipper. The engineer looks after the motors. She inspects important equipment on the boat such as the fire extinguishers.

The engineer wore earmuffs to protect her ears from the roar of the engines.

*Does your school have fire extinguishers? Can you find the metal inspection tag? If you can, what is this used for?*



## Underway

As we travelled, the skipper showed us some other important safety equipment.

One of the things we got to see was the radar.

This shows sailors where other ships and coastal landforms are when you can't see them yet. Radar is also used in the fog, rain or at night.





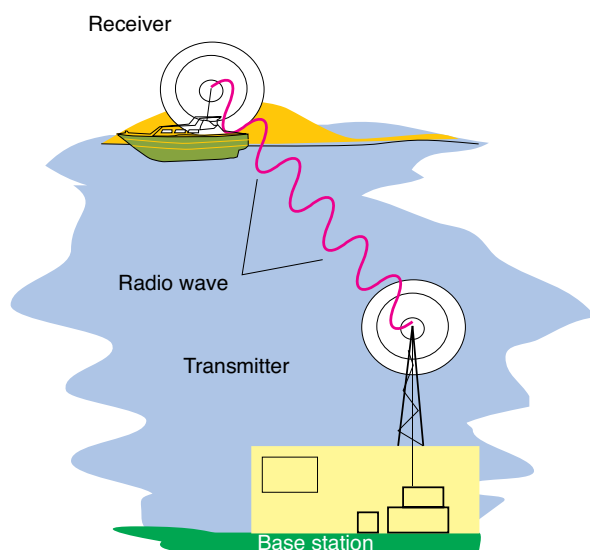


## We learn about the radio

All ships need marine radios so the crew can keep in touch with people in other boats and on land.

The radio operator showed us how to use the radio to talk and listen and get a weather forecast.

He told us that the weather decides what you can do on a ship and where you can go. We were lucky and had good weather for most of our day out.





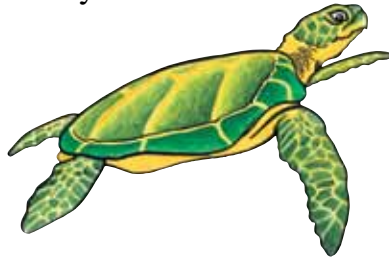
## The marine biologists

The marine biologists had to collect some water samples and tiny sea animals and plants called plankton.

First they had to find their study site. They showed us on a chart where we would be going. Can you see the parallel rules on the chart?

What do you think they could be used for?

*What is the difference between a chart and a map?*





## Anchoring

When we arrived at our destination, the marine biologists lowered the heavy steel anchor. They had to be careful not to get in the way of the rattling chains as the anchor dropped to the bottom of the ocean.

*What is an anchor used for?*



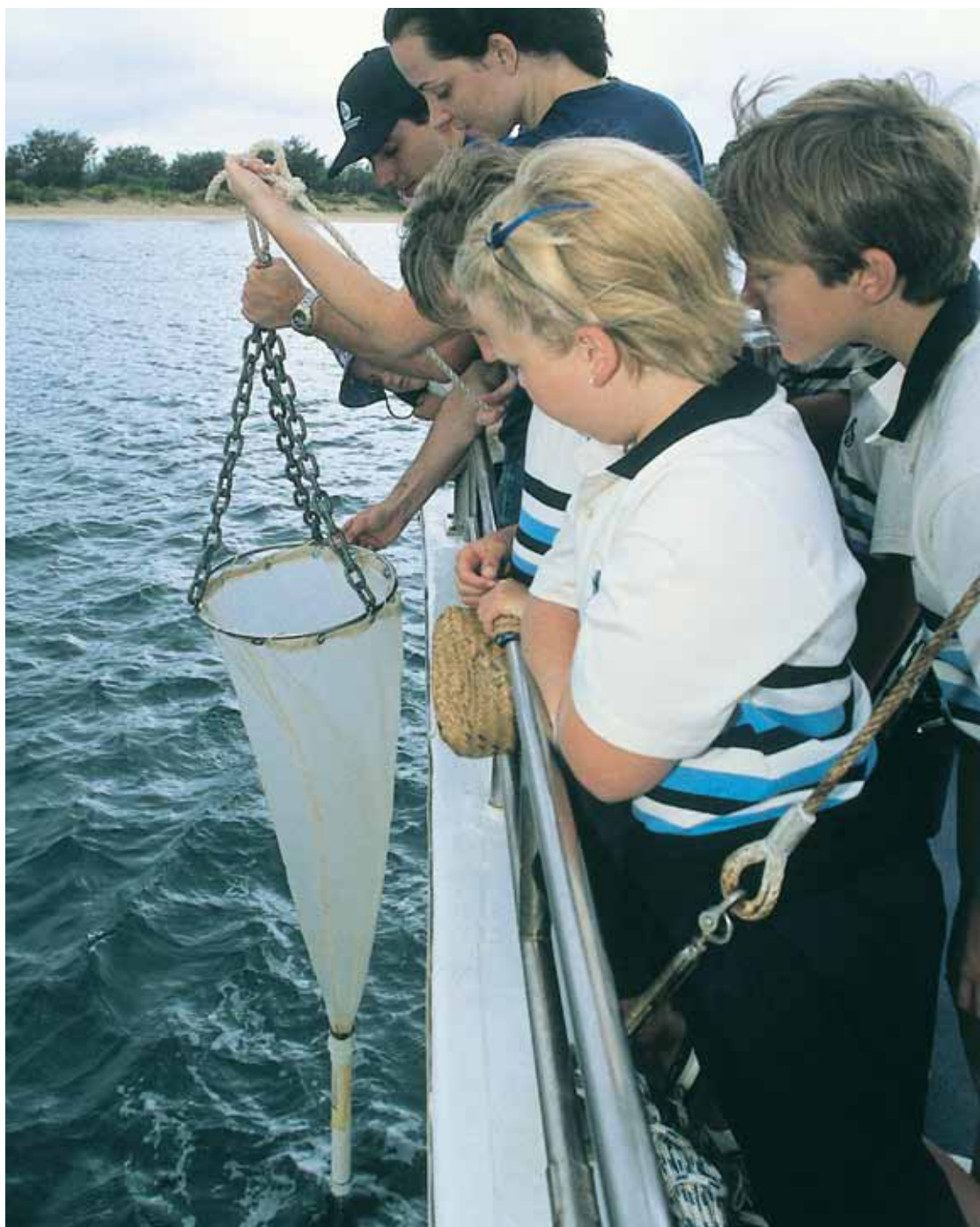
## Marine biology at work

The marine biologists collected samples from different depths by lowering a special water sampler bottle. This bottle was lowered into the water by a wire cable. One of the crew operated a motor, called a winch. This lets the cable down into the sea.

*What is a winch and how does it work?*







## Small sea creatures

The scientists used a special net to catch tiny marine animals and plants. These tiny animals and plants are called plankton and the net is called a plankton net.

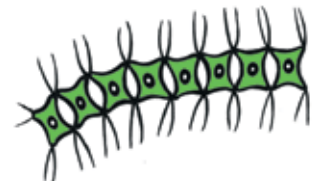
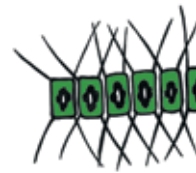
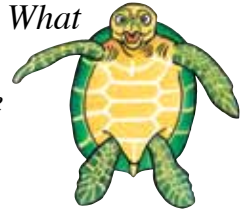
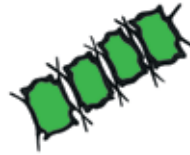
*Where will the  
plankton  
end up  
in the net?*



## We use the microscopes

The marine biologists let us look through their microscopes to see these plankton. This was the best part of the day. I was amazed to see so many different tiny things swimming around in the sea water sample.

*These are my friends the phytoplankton. What special role do they play in the sea?*







## Lunchtime at last!

At last it was time for lunch. We were very careful to sit in the shade and not to allow any rubbish to blow overboard. The marine biologists told us that we can save the sea from pollution if we learn how to minimise our rubbish. When we got back to school, our teacher said our next project was to devise a plan for the school to reduce how much rubbish we make.

*Make a list of 6 things your class could do to reduce rubbish in the sea.*





# Glossary

anchor	heavy object tied to a boat that stops it from drifting
cable	a metal rope
chart	a special map used on a boat or ship, used to mark a position or course at sea
crew	the people who work on a boat
earmuffs	equipment placed on the ears to protect them from loud sounds
engineer	person who designs and fixes equipment
fog	clouds touching the ground
marine biologist	person who studies the life in the sea
marine radio	a radio that can be used to speak to other radios on other boats
PFD	Personal flotation device. Safety equipment people wear to help them float in water.
plankton	tiny plants and animals that float in the water
pollution	things that make the air, soil or water unhealthy for people, plants and animals
radar	a way of bouncing sound waves off things so you know their location
research	investigating interesting things about our world
safety equipment	things that help us remain safe
scientist	person who studies interesting things about our world
skipper	person in charge of a boat
sunscreen	a cream that protects the skin from the sun
ultraviolet	one of the rays of sunlight that damages the skin
wharf	a place where boats can tie up and people can get on and off a platform
wheelhouse	an enclosed place on some boats where the skipper can control the boat
water sampler bottle	special bottle that lets water into it at the depth it is wanted
weather	changing pattern of temperature, cloud, wind and rain
weather forecast	prediction of how the weather is going to change



# A National Marine Education Program



## Level 1

- Book 1 : Everyone Likes the Sea
- Book 2 : Sea Creatures
- Book 3 : At the Beach

## Level 2

- Book 4 : Fun by the Sea
- Book 5 : Working at Sea
- Book 6 : Be Safe at the Beach

## Level 3

- Book 7 : Tourists and the Sea
- Book 8 : All Kinds of Boats
- Book 9 : Rock Pool Life
- Book 10 : Creatures of the Deep
- Book 11 : Shipwrecks
- Book 12 : Our Day on a Research Boat

## Level 4

- Book 13 : Let's Go Sailing
- Book 14 : Food from the Sea
- Book 15 : Classification and Survival
- Book 16 : Sea Creatures at Risk
- Book 17 : Better Boating Behaviour
- Book 18 : Don't Mess with the Sea



Wet Paper



Australian and New  
Zealand Safe Boating  
Education Group