

# SEA KAYAK SAFETY AND RESCUE

GORDON BROWN



A MANUAL FOR ALL SEA KAYAKERS



A MANUAL FOR ALL SEA KAYAKERS

# SEA KAYAK SAFETY AND RESCUE

GORDON BROWN

 Pesda Press LTD

[www.pesdapress.com](http://www.pesdapress.com)

**Front cover:** *Rescue in a cave, West Skye.*

**Back cover:** *Two's company, three would be ridiculous.*

First published in Great Britain 2019 by Pesda Press

Tan y Coed Canol

Ceunant

Caernarfon

Gwynedd

LL55 4RN

© Copyright 2019 Gordon Brown

ISBN: 9781906095635

The Author asserts the moral right to be identified as the author of this work. All rights reserved. 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 the prior written permission of the Publisher.

Printed and bound in Poland, [www.hussarbooks.pl](http://www.hussarbooks.pl)

## **D E D I C A T I O N**

This book is dedicated to the memory of Duncan R Winning OBE,  
always a true and honest friend who gave his time and knowledge freely.

## ABOUT THE AUTHOR

Gordon has recently moved from the Isle of Skye in Scotland to Vancouver Island in Canada. He has a lifetime's experience of kayaking in all its forms and well over thirty years of coaching sea kayaking. In 1992 he completed both sea kayak and white water kayak BCU Level 5 coach qualifications, and was involved in the development, training and assessment of these awards until they were discontinued when the award scheme was reorganised. In 2016 he completed a Masters Degree in Performance Coaching and has produced a set of three instructional DVDs in the *Sea Kayak with Gordon Brown* series, the world's first sea kayak rescue video, *Over ... and Out*, as well as writing the book *Sea Kayak*, also by Pesda Press.

Gordon believes that everyone has the potential to achieve more, and that a creative and supportive environment can lay the foundations for the greatest advances in personal development. He values the importance of taking time to reflect and learn from the experience. His most rewarding experiences are when helping someone else achieve their potential.

He likes acoustic folk music, close friends and good food although not necessarily in that order.

Gordon has previously said that he has the best job in the world. He still believes that to be true and looks forward to his time on the water with all students.



Photo: Angus Mackie

# THANKS AND ACKNOWLEDGEMENTS

Thanks are due to very many people who have helped shape this book – any omissions are my fault alone and I extend my sincerest apologies to you if you feel missed out. To all of the students I have learned from over the years, a huge thank you. The photographers who were patient with my requests: Angus Mackie of Scotland 360, Kate Duffus, Mark Boyd, Michaela MacDonald, Roger Aguirre Smith and Rowland Woollven – many thanks, your work has made this book better. The many friends and paddlers who responded to my requests, as well as those of the photographers, thank you.

To all the team at Pesda Press for their encouragement, cajoling, timely reminders and artistry; you bring a special magic to everything you touch, thank you.

Morgan at North Water in Vancouver for being generous with time and products for testing.

Sean at the McMurdo Group for supplying a PLB for evaluation and teaching purposes.

## **The companies who sponsor my endeavours:**

Kokatat for supplying clothing that exceeds expectations;

Valley Sea Kayaks for supplying kayaks that work for me;

Werner Paddles for supplying paddles to power my fun.

For my children, Kirsty, Eilidh and Iain, who make it all worthwhile.

Finally, a huge thank you to Morag, my long-suffering wife, who guides me, reads and comments on everything, and generally forces me to focus.

All images by Gordon Brown unless individually credited.



*Gordon using VHF. Photo: Rowland Woolfven*

## Introduction

**“MAYDAY, MAYDAY, MAYDAY, this is Sea Kayak Gordon, Sea Kayak Gordon, Sea Kayak Gordon.**

**MAYDAY, Sea Kayak Gordon.**

**My position is one mile due west of the Skye Bridge.**

**I have one unconscious person in the water and require immediate assistance.**

**We are a group of four kayakers.**

**Over.”**

**“Mayday, Sea Kayak Gordon, Stornoway Coastguard, say again your position over ...”**



## Introduction

It was a normal day out. There was nothing to indicate that this day would be any different from the others. We were two groups; one of six almost complete beginners and another of three who had some experience and certification. Both groups were led by experienced coaches and shared the same plan – paddling a mostly sheltered downwind run of about six miles with a stop for lunch at the most protected place on the way.

I led the more experienced group, which comprised Tom, Dick and Sally and we worked on how to turn the kayaks in the wind before setting off. There were several places in the first mile where the wind was strong enough to make turning awkward and we exploited these opportunities. The group were controlling their kayaks well enough to journey the quarter-mile to an island, which was in a more exposed situation. From there, we returned to the coast to meet the other group for lunch. On the way, the group continued to develop the control of their kayaks with the wind from the side.

After lunch the groups separated again with the plan of meeting up at the car park in Kyleakin to share transport back to base. There were a couple of headlands where the wind was creating waves but these were no bigger than 20cm. So far, so good, but things were about to change.

In the bay before the second headland, one of the experienced group members, Dick, capsized and exited his kayak. He attempted a self rescue but failed and I helped him back into his kayak. When Dick's spraydeck was back on, I went to help Tom who was struggling to keep off the rocks. Once clear of the headland I looked behind me and saw that Dick was back in the water, out of his kayak. I gave the other two group members instructions to keep together and paddle into the sheltered area behind the rock, which was less than fifty metres away, and wait for me to return.

I went back to Dick, performed another rescue and escorted him towards the other two. Upon reaching the next small headland, I saw the upturned hull of one kayak and Sally attempting to pull Tom upright, using a type of rescue known as a 'Hand of God'. They were approximately two hundred metres from my position. I gave very specific instructions to Dick who was beside me. "Paddle carefully towards where I will be, while you support yourself, making sure that you stay upright." The last thing I needed was another capsized.

As I approached, Sally succeeded in pulling Tom all the way upright from his upside-down position, but due to Sally being off balance, having struggled for some time and not expecting to pull Tom upright, they fell inwards towards each other and both capsized. Sally stayed in her kayak and held on to Tom's upturned kayak while attempting to keep his head above the surface as much as possible. I paddled past the two discarded paddles and grabbed onto Tom's buoyancy aid pulling his head above the water and instructed Sally to exit her kayak.

## Introduction

By the blue-tinged colour of Tom's face, it was obvious that he was in poor shape. He didn't respond to his name being called and made no eye contact, but fortunately his coughing, gurgling, gasping breaths at least indicated that he was still breathing. With Sally in the water holding onto the front of my kayak, Dick coming towards us carefully and me holding onto the casualty, I took out my VHF radio and made a MAYDAY call to the coastguard. Between keeping Tom's head above the water, talking with the coastguard and guiding a nearby fishing boat towards our position, I was instructing Dick's rescue of Sally. When the rescue was complete, I told both Dick and Sally to go to shore, land and wait for me. By now we were only around 150 metres from shore. I released Tom's spraydeck and got him into the water ready to be lifted onto the fishing boat. Suddenly, a great skua or bonxie landed on the bow of my kayak. I have never had one of these birds land on my kayak before and I thought it was a bit ironic that this piratical scavenger should choose now to have a rest so close to the semi-conscious casualty. The bonxie flew off as the boat arrived.

Unfortunately, the fishing boat could not come alongside as it was too shallow. I manoeuvred Tom into his cockpit and pulled him upright by using a type of rescue known as a 'scoop' and with the casualty draped over my deck, reverse paddled into deeper water to where the fishing boat was waiting. Holding onto the fishing boat and Tom was awkward as the boat was rolling quite a bit. Its rubbing strake was hitting my shoulder every time it rolled towards me.

The lifeboat radioed their ETA, just one minute away, so I made the decision to remove myself from the fishing boat and await the lifeboat. At this moment, the other group came around the corner and assumed that I had been helping the fishing boat with some problem or other. When they saw the lifeboat approach, their coach instructed them to go ashore to where the others were.

With the casualty safely on the lifeboat, I connected a tow to Tom's kayak and made my way to shore to join the group.

Tom was transferred from the lifeboat to a waiting ambulance and taken to hospital for treatment, including a 24 hour stay on high-flow oxygen.

During a telephone debrief with the coastguard later, I was informed that it took 16 minutes from the time of my MAYDAY call until the lifeboat arrived on the scene, and a further 25 minutes until the casualty was in hospital.

Tom was fortunate. I'd trained for this eventuality for many years. The coastguard was able to pick up my MAYDAY call. There was a fishing boat close by. The lifeboat was about two miles from our location. It could have been so different. Frankly, Tom could have died.

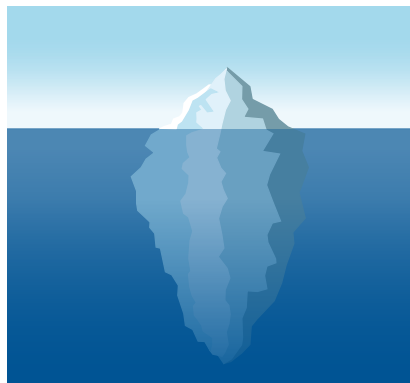
Whatever made you stop, pick up and buy this book is not important. What is important is the fact that you have picked it up and have started to read through it. The lessons contained within the stories at the start of each chapter are designed to give an introduction to the techniques about to be discussed. There are mistakes described within these stories, some are real-life incidents reported as they happened, while others are second hand and perhaps embellished over the years of telling. All are designed to be thought provoking and help you, the reader, develop appreciation of some of the things that can go wrong when paddling on the sea. By paying attention to these stories, you will be developing awareness of the type of incident you may have to deal with when out by yourself or with your friends.



*Photo: Rowland Woolfven*

The oceans of the earth are a serious and unforgiving environment and one where conditions can change very rapidly, from benign to extreme within minutes. Sea kayaking is not without risk, and incidents can, and do, occur. Dealing with these incidents is a stressful physical activity that takes place in a dynamic environment in real time. Additionally, the mental strain during the incident is huge, and attention can often be focused only on the casualty and not on the bigger picture.

When considering sea kayak safety and rescue it would be simplistic to think only of the hard skills and mechanics of rescuing yourself or someone else. That is only the tip of the iceberg. The underlying safety processes are often forgotten, meaning that many people may make the same, or similar, mistakes time and time again. A seemingly simple incident can quickly escalate into an emergency situation, perhaps putting life at risk, and requiring the assistance of outside agencies, such as in the true story you've just read.



*Iceberg.*

By developing an understanding of the complexity of incidents, as well as how to limit their potential escalation by using decision-making processes, you will be able to avoid many incidents or, at the very least, nip them in the bud. In the following chapters we will look at these processes and how to put them in place. Anxiety, fear, decision making and observation are all areas which have been written about by experts. At the end of the book there is a bibliography of accessible writing and papers from journals which I have enjoyed reading.

All of the techniques in this book are intended to be used, tried, tested and adapted by anyone reading it. You cannot cross an ocean by standing on a beach looking at the water. Likewise, it is not possible to learn purely from a book something that is practical in application; however it does go a long way to help. To turn these techniques into skills requires deliberate practice. To apply them skilfully requires using them in the context of the conditions paddled.



*Photo: Kate Duffus*

Throughout the book, I have chosen to use ‘casualty’ to describe the person being rescued. Although not strictly the correct usage in the English language, it is the term used by the lifeboat teams and I prefer it to ‘victim’, which has undertones of a targeted incident by a perpetrator. ‘Rescuer’ is used to indicate the person carrying out the technique. In most of the stories, the names of the participants have been changed.

By thinking ahead and realising that safety is something we have the ability to influence, it is possible to avoid many fairly common incidents. A list of common and less common incidents is included at the end of the book. There is no one right answer for every situation. Instead, for each incident, there are usually several correct solutions, though sometimes just one will be completely obvious.

I hope the worst doesn’t happen. If it does, I hope that after reading this book you will be better prepared to help yourself and those around you.

# CONTENTS

About the Author . . . . .	4
Thanks and Acknowledgements . . . . .	5
Introduction . . . . .	6
Contents . . . . .	II
Safety . . . . .	13
Assessing Risk . . . . .	19
Fear and Anxiety . . . . .	27
Paddling in a Group . . . . .	33
Leadership . . . . .	45
Decision Making . . . . .	53
Reading the Water . . . . .	61
Planning a Trip . . . . .	89
Rock Hopping . . . . .	97
Surf Launching and Landing . . . . .	105
Paddling in a Tide Race . . . . .	113
Paddling at Night . . . . .	119
Towing . . . . .	127
Assisted Rescues . . . . .	149
Self Rescue . . . . .	177
Repairs . . . . .	191
Rescue by Outside Agencies . . . . .	197
Flares . . . . .	211
Cold Water Immersion . . . . .	219
Health Issues . . . . .	227
Equipment . . . . .	235
Appendices . . . . .	248
Index . . . . .	251



*Setting off into the night.*

## Paddling at Night

I am of the sea, yet I am of the land also. I have a story to tell, one of observation and awareness. It was a dark night, the new moon was just showing its silver crescent, and the currents were flowing swiftly as is always the case at this time of the month. The water was flat and there was no wind to speak of, which added to the atmosphere.

Overhead, the northern lights or aurora borealis were dancing their way across the night sky, shimmering green and yellow, often rising to a red azimuth. I knew that there was a lot of bioluminescence after the inlet, just to the east of where you were launching, as I had just come that way.

I watched you dress and carry your kayaks to the water's edge. I watched you all check that you had a glowing light attached to you and that you had a much brighter light that pierced the blackness, and looked like a giant's eye when it was switched on.

These bright lights were extinguished as you got onto the water and then you started counting – “*One, two, three ...*” all the way to “*six*”. Communication is so much easier when you are able to do so using simple words.

You set off cautiously along the inlet, perhaps knowing that there were shallow areas, perhaps thinking that there were obstructions, but not really knowing, as your sight had been reduced to the area around each of you, with its glowing light.

I stayed out of sight behind you all, following at a distance I felt comfortable with. I could hear everything you were saying and feel the anxiety rising well before you lit up the night with your bright lights. As you went into the shallows, I chose not to follow, instead going the other way around the small islet and waiting for you on the other side.

Your lights were off now and it was here that the bioluminescence was at its peak. I watched the whirlpool-like vortices that swirled off your paddles as you made progress, I watched the outline your kayaks made as they cut through the water and I watched as fish darted all over the place. I made you watch, and gasp, as I swam below your kayaks, rolling to face you as I passed so that I could see the look on your faces.

The dark blue of the deep water with its streaks of bioluminescence seemed to be mirrored in the black of the night sky. The aurora and the Milky Way reflecting on the water only added to the impression of flying.

As you set off, heading east, I skirted around the back of you all making sure that you stayed together and no one was left behind. When one of you got a bit separated from the others, I

cleared my throat and immediately heard counting start with “*Five, Six, One, two ...*”. I followed you all of that night, only making my presence known when one of you was not as close as you should have been to the rest of the group. When you went safely ashore, I stayed in the water, for I am not of the land completely.

### **EVERYTHING CHANGES WHEN IT IS DARK – MONSTERS EVERYWHERE**

Conditions benignly paddled in during the day, become unrecognisable at night. Waves appear bigger, the wind feels stronger and the temperature really does drop.

Monsters are everywhere. The psychological difference is that one of our senses – sight, has been muted to such an extent that we have to use others to replace it. Our hearing becomes enhanced, every sound is amplified making it difficult to judge how far away a noise actually is. If you happen to pass close to a heronry, you will hear screeches that will make the hairs stand up on the back of your neck. If it is calm, sound seems to travel much further over water in the dark compared with during the day. It is often possible to hear engines starting and people on land coughing while still a long way away.

Other senses are heightened too – you will be much more aware of how the kayak feels and how it is moving through the water. You might even be able to smell the local restaurant preparing dinner.

### **PREPARATION**

Night paddling doesn't just feel different, there are also physical changes that need to be taken into account. By preparing for night paddling, there is more chance that everything will fall into place when it is needed rather than ending up in some unplanned adventure.

### **LIGHTING**

Some form of personal lighting is essential. Make sure lights have fresh batteries, or at least that a fresh set is easily available.

### **APPROPRIATE CLOTHING**

It is important that everyone takes charge of their own comfort by ensuring they have adequate clothing to cope with whatever the climate may throw at them. For example, in the Scottish Highlands, hail showers can occur at any time of the year and the temperature can drop by 5°C.



No matter how warm you are during the day, you will feel colder at night. If possible, go ashore before it gets dark, have a snack and a warm drink, put on another layer on top and a warm hat. Make sure your storm bag is easily accessible and take spare warm hats, perhaps in a dry bag in the day hatch, in case yours gets wet or someone loses theirs.

### WHEN ASHORE

This is always a good time to check on your location and arrange the lights so that they work efficiently for identification and illumination. If you are walking around, avoid dazzling your companions. If your headtorch is lit, have it around your neck rather than on your head, this way the light shines downwards and not into the eyes of the person you are talking to.



*Headtorch around neck.*

### LIGHTING AND VISIBILITY

Night paddlers need different lights for different purposes.

You need to show an all-round white light so that other water users know of your presence, this doubles as a marker light so that the others in your group can locate you. This can be a low intensity light and there are a few options on the market.

A high intensity light (usually in the form of a powerful headtorch) is great for finding a piece of lost equipment, or illuminating someone in the water. This same high intensity light is also invaluable when approaching the shoreline and coming ashore. When ashore there is normally not the same need for a high intensity light, and something a bit more modest will serve for general illumination.



*Different light sources.*

A low intensity light is necessary to read a chart (see *Retaining night vision* section below).

### PERSONAL MARKER LIGHT

A low intensity marker light should be as high up on the paddler as possible – the top of the head is the best place, as it allows all-round visibility. If placed on the rear of the buoyancy aid where it is completely out of the paddler's sight, it can be obscured by their body when viewed from anywhere other than directly behind. Attaching it into or onto the headtorch band is as good as anything else I've tried. A simple glow stick or snaplight works well but they tend to go out of date, which reduces the brightness and sometimes the glow is so slight that it is of no use. An electronic glow light is good as it is less harmful to the environment and lasts longer than the disposable type.



*Low intensity lights.*

### RETAINING NIGHT VISION

There has been much research into what colour of light is best for maintaining night vision. Traditionally, red was the favoured choice but more recently green has risen in popularity.



*Red light.*

The intensity of the light is more important than the colour. Green, however, allows us to see information that is hidden when using a red light. When using a chart at night much of the information disappears under a red light, while the green one allows better differentiation between the printed colours.

Use a light, of whatever colour works for you, that is sufficiently bright to allow you to carry out the task at hand. Everyone is different and what we see differs greatly, especially in low light conditions. It is important to test what works best for you. I use a normal headtorch with a sliding diffuser, which I have coloured with a spirit



*Modified headtorch.*

marker pen. This transmits enough white light to let me see a chart properly without any distortion of colour but doesn't affect my night vision. If I need more light, I simply slide the diffuser to the side.

### RETRO-REFLECTIVE MARKING

Unless your goal is to remain hidden from view, everything should have retro-reflective patches applied, to allow identification in low light. Available as sew-on material and self-adhesive sheets, it is an inexpensive way to mark your position. In testing carried out by the British Royal Air Force, it was found that a single 25mm x 25mm square of retro-reflective material on top of a helmet resulted in a 400% increase in likelihood of being found at night on the sea.

Many pieces of paddling equipment now come with reflective strips and patches but there are some which do not. Paddles are expensive pieces of equipment, and the most expensive ones are made from carbon fibre, which is black. On the water at night, these almost disappear, and if dropped into the water they become invisible. By putting strips of reflective tape on both sides of the blade and perhaps around the joins between the blades and the shaft, you will transform your paddle into a glowing stick when a light is shone on it.

Applying the same reflective tape to the kayak assists in identification and if some thought is put into it, the results will be visible from all directions. Even a 1cm<sup>2</sup> piece of retro-reflective tape will be seen from a considerable distance. Over time the material will degrade resulting in a drop in performance, so monitor the reflective properties of the patches and replace them before they fail completely.



*Retro-reflective tape.*

Be aware that although some manufacturers put retro-reflective patches onto the sleeves of paddling jackets, they are often in the wrong place if you are trying to attract attention. When facing a prospective rescuer and waving at them, the underside of the arm is towards them, but the retro-reflective patch is generally on the top of the arm and can only be seen from behind.

## GROUP CONTROL

Generally, at night, it is important to keep group control tighter than during the day. With reduced senses, especially sight, most people like to be closer to others when they can't see them well. Communication is easier too with everyone closer together.

A realistic way to keep track of everyone while on the water at night is for the members of the group to number themselves. Starting with “one” and going to as many as are in the group, this way everyone has a unique number identifier. Normally the leader starts the count and the others take their turn – “*One – two – three – four – five – six*” – if there are six group members. At any time if anyone feels that they do not know where they are in relation to the others, they can start the count from their number, the other group members should continue the count until the originator is reached.

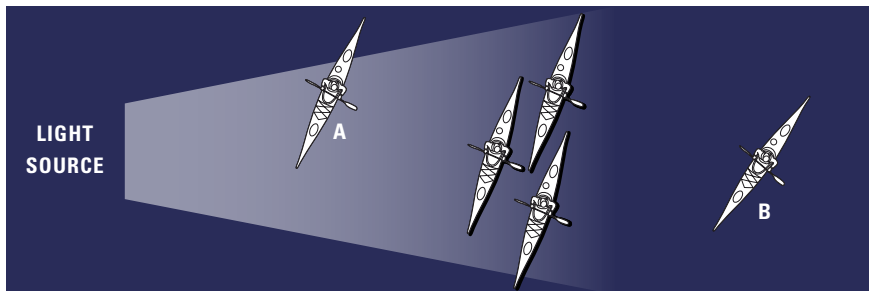
This works well as long as everyone remembers their number and shouts it out at the appropriate time. It is not unusual for someone to remind number *four* that they have to shout out their number. Within a small group of paddlers who know each other, it can be simpler to shout out your name as this will feel much less formal than the numbering method.

## POSITION RELATIVE TO LIGHT SOURCE

Every time you paddle at night, experiment with the best position relative to a light source that allows you to see the other paddlers. By positioning yourself between a source of light, such as the moon, lights on the shore, etc. and the paddlers, the light will illuminate everything thus allowing you to see clearly. The kayaks will appear in their normal colours, with anything white showing up particularly well.



*Position relative to light source.*



*Position relative to light source: from position A you can see colours, from position B you can see silhouettes.*

On the other hand, by being on the dark side, the other paddlers in the group will show up as silhouettes against the lighter background. Even on the darkest of nights, there is enough residual glow in the sky to allow these outlines to appear. Identification will be reduced to counting the number of paddlers, rather than a positive identification of each individual. This is when a low intensity marker light works spectacularly well if it is positioned thoughtfully.



*Silhouette.*

### RESCUES AT NIGHT

Rescues in the dark become much more intense as there is a much greater chance of something becoming misplaced or lost. Everyone should stay very close together and all should have headtorches on and illuminating the paddler(s) in the water. The major downside to this though is the resulting loss of night vision – when the lights are extinguished it becomes very dark.



*Rescue in the dark.*





# SEA KAYAK SAFETY AND RESCUE

GORDON BROWN

Following on from his hugely successful book *Sea Kayak*, Gordon Brown brings his vast experience and unique style to this latest publication *Sea Kayak Safety and Rescue*.

Each chapter begins with a real-life incident which sets the scene and helps to emphasise what follows. The underlying principles are highlighted, practical lessons learnt and the hard skills explored in detail. Numerous colour photos complement and illustrate the text.

This book is essential reading for any sea kayaker, and will be enjoyed and valued by both novice and experienced paddlers alike.



ISBN 9781906095635



9 781906 095635

PESDA PRESS

