Diving accident surveys

Dear Editor,

There are two main areas relating to diver safety that by their very nature require an ongoing investigation if evidence-based advice is to be provided to reduce their incidence. These are the questions concerning the actual influence of health factors on diver safety and the factors that influence the occurrence of diving-related incidents and problems of all types and severity.

Because of the wide range of diving conditions around the world and the intercontinental mobility of both recreational and professional divers, there is a need for the sharing of information and ideas internationally. Such a solution is not amenable to performance through the efforts of any single individual or research unit. It will necessitate the ongoing cooperation of many individuals, organisations, and groups already involved in collecting such data. It must be both ongoing and multicentric and must have a central coordination to keep those involved informed of what is occurring and to facilitate the dissemination of findings to the wider diving community.

Although safety research has suffered a severe setback recently in many countries through the over restrictive application of confidentiality laws intended to guard personal data, this is not preventing research into road traffic accidents, so there is hope for common sense to prevail in relation to diving-related casualties. In addition, there is an inhibiting fear that information will be hijacked by lawyers and used in court. There must be sufficient anonymity of those providing reports and of the details provided to mitigate, if not eliminate, such risks.

There is a need for an umbrella of patrons to provide international legitimacy and be the fund holder. Some of the most obvious primary patrons would be SPUMS, DAN, PADI, BSAC and NZU, with others being encouraged to join. We in Australia have data from fatalities and non-fatal incidents and it is believed that many unused data exist in other countries, hopefully available to an ethical investigation.

It is hoped that this letter will encourage an active discussion of the suggestion. Such a project will face almost insurmountable active and passive resistance but is believed to be in the long-term interest of all who dive.

Douglas Walker

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Key words

Letters (to the Editor), diving, safety, accidents, epidemiology

Book review: Mastering rebreathers

Dear Editor

I appreciated the thoughtful review of my book, *Mastering Rebreathers*, provided for the SPUMS Journal by Lynn Taylor. I do, however, wish to clear up one misunderstanding. The comment about the AP Valves Inspiration rebreather being absent from the book (and especially the appendices) is quite pertinent. However, it was implied that I perhaps purposely excluded the unit. This was not the case.

I contacted AP Valves on five different occasions to have their products included. I did this while writing text copy, writing the specific rebreather appendices, and again when contacting manufacturers for the Rebreather Supporters section. AP Valves declined to participate in every instance. Since my policy was not to include a manufacturer appendix unless they reviewed the section for accuracy, I was, unfortunately, unable to provide any information on their product. I am hopeful that will change in the next edition.

Jeff Bozanic

E-mail: < jbozanic@hqonline.net>

Key words

Letters (to the Editor), book reviews, technical diving

Book reviews

Diving and subaquatic medicine

Carl Edmonds, Christopher Lowry, John Pennefeather and Robyn Walker

4th edition, 736 pages, hardback ISBN 0340806303

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First review

Although only an occasional practitioner of diving and hyperbaric medicine, on numerous occasions I have had recourse to turn to my copy of the third edition of this classic text. Now ten years old, it has become distinctly tatty. Hence, I welcomed the opportunity to peruse the fourth edition of what has been a favourite source of wisdom.

It is, of course, a larger tome (by approximately 160 pages), but is actually smaller in bulk, presumably due to the finer paper used by the new publishers. There is no appreciable diminution in quality. There is an additional author (Robyn Walker, the current SPUMS President), and there are additional chapters addressing areas not felt to be adequately covered in previous editions. Certainly the diving population and scope of diving has changed in the last ten years and this is reflected in the expansion of thirty nine chapters to seventy. Appropriately, there is now a section focusing on medical standards for diving, including chapters dealing with asthma, diabetes, and the extremes of age.

The more specialised forms of diving, 'technical diving', as well as its simplest form, 'breath-hold diving', now warrant separate chapters within the specialised diving section. Included here is also a chapter dealing with divers with disabilities, although it could be argued that this would have been better placed within the medical standards section.

Overall, the organisation of the contents is a significant improvement on the third edition.

While the content of this publication may have expanded and been updated, the unique style of the previous editions has been retained. Information is presented in a very practical, immensely readable manner. The familiar illustrations and colour plates are still there, as well as the frequent use of illuminating case reports. Some of the more controversial areas, e.g., diabetes and diving, are dealt with by contrasting opinions expressed by separate authors.

While some of the more glaring eccentricities of the third edition are missing, (where, alas, are the current 'return to diving' recommendations for pure-bred English pointers?), the authors' humour and enjoyment of their topics remain self evident.

In summary, the fourth edition is a worthy successor to its predecessors. I am sure it will become an indispensable reference for hyperbaric medicine units and many doctors, other healthcare workers and professional divers. I am glad to have updated mine.

Dennis Boon von Ochssée

Second review

The fourth edition of *Diving and Subaquatic Medicine* is more than a revision of the third edition. It is a very different book from that published in 1992. There is a new author, Robyn Walker, and the whole layout of the book has been altered. The price is a bit of a shock when compared with that of the first edition, published in 1976, which had 398 pages and sold for \$35.00. But that was produced by The Diving Medical Centre, Sydney which means that it was self-published. The success of *Diving and Subaquatic Medicine* has led to it being put out by a large publishing house that has many more overheads leading to a higher price. \$25.00 of the price is GST. However, in 1977 paperbacks were \$4.95 and in 2002 they are \$19.95, so even the cheapest form of publishing has quadrupled in price over 25 years.

In this new edition, the emphasis has been transferred from generalised topics to specific diving diseases, and with the rearrangement and addition of new information the book has grown by 154 pages. For the first time, the various chapters are ascribed to the different authors, a practice which brings it into line with the format of Bennett and Elliott.

The cover makes it clear that the book is directed at those who care for recreational divers, as a group of recreational divers swim across the front cover. However, all forms of diving from breath-hold to saturation are brought to the reader's notice, and their problems explained and the necessary treatments outlined. The whole emphasis of the book is that diving safety requires knowledge, and appreciation of the risks involved and how to reduce them. Reading this book and remembering the lessons to be found in it will improve your knowledge of diving-related diseases and problems, how to avoid them and how to aid and treat those who run into trouble.

The index has been expanded from 14 to 19 pages, although the type size has been reduced in the new edition. A useful innovation is to include illustrations in the index, where they are marked by the page number being in bold type. The useful boxes of specific information and the illustrative case histories have been carried over into the new format.

It takes a while to accustom oneself to the new layout after 26 years of the previous layout, but the new one appeals as it is more clinically oriented than the previous editions. One of the expanded sections is that on sinus barotrauma, which has doubled in size, including 21 new references.

In the third edition the final section was headed 'Related Subjects' and covered deep and saturation diving, hyperbaric medicine, hyperbaric equipment and submarine medicine. The subject of submarine medicine was provided by Dr Dale Molé, a Submarine Medical Officer in the US Navy, and, while fascinating, was largely about nuclear submarines, which are not available to the Royal Australian Navy (RAN). The fourth edition makes no mention of non-diving hyperbaric medicine, which is now a separate, though closely related, specialty.

Submarine medicine is covered by Robyn Walker, who was the head of the Submarine and Underwater Medicine Unit at HMAS PENGUIN for some years. She was involved with the development of RAN's submarine rescue system, which has capabilities that are lacking in the US Navy's Deep Submergence Rescue Vessel (DSRV) and the Royal Navy's LR5 rescue vessel. Both of these require a mother submarine to accept the survivors. The Australian Submarine Escape and Rescue Service (SERS) submersible (Remora) can reach the crush depth of the RAN's Collins Class submarines and has a transfer under pressure (TUP) capability up to 5 ATA. It does not require a mother submarine but mates directly with a surface recompression facility capable of accepting 72 people. This facility is loaded aboard a vessel of opportunity.

Other new chapters in this section are those on technical diving and its problems, and on diving in contaminated water. The book ends with five appendices (A–F) covering decompression tables from Canada, the UK and the USA, treatment tables and options, the diving medical library, diving medical training and diving medical organisations and useful contacts.

Without a doubt, every serious student of diving medicine should own this book. It is a worthy successor to the three editions that have preceded it, and remains the most clinically oriented diving medicine textbook available.

John Knight

Key words

Book reviews, textbook, underwater medicine

Psychological and behavioral aspects of diving

Baruch Nevo and Stephen Breitstein

ISBN: 0-941332-73-X

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Flagstaff, Arizona 86003-0100, USA

Ph: (+1) 928 527 1055; Fax: (+1) 928 526 0370

E-mail: divebooks@bestpub.com

Copies can be ordered online at http://www.bestpub.com

Price: US\$21.95, postage and packaging extra

When the editor asked me to review this work my immediate question was 'Who are they writing for?' Having read this book several times I am left with the same question. The authors claim to write for a very broad audience, including 'active sport divers, research scientists, diving instructors, and dive supervisors'. The result of their attempt to meet the interests and needs of so many groups is a work that is likely to satisfy no one. Scientists with a serious interest in psychology and diving are likely to find the analysis shallow and will be irritated by minor but frequent inconsistencies in the presentation and interpretation of the literature reviewed. A diver or dive supervisor, who may look to such a book for a straightforward interpretation of the literature on the psychology of diving and for some fairly clear conclusions as to its meaning for practical application, will have to read past the more scientific sections and may still be left wondering what it all means to the diver in the water.

The authors also seem to have been somewhat selective in the areas they have covered, and there is a poor coverage of the literature in some places. For example, they go into considerable detail about the sometimes contradictory, and largely inconclusive, literature on the selection of military divers, but the whole area of the effect of drugs, illicit and licit, prescribed or over-the-counter, is ignored completely. This oversight is significant given the use of medications to combat motion sickness, rhinitis and other diving-related conditions, and the implication of alcohol and cannabis as contributing factors in some diving accidents and deaths. The authors cover the area of stress, anxiety and panic in some detail but overlook the extensive research information now available on personal resilience and the factors that contribute to some individuals' ability to handle fearful situations without excessive anxiety.

Some of the views cited on areas such as social psychology, the psychology of stress, and psychodynamic psychology, seem quaintly old-fashioned from the point of view of current Australasian psychology. This may be a reflection of the authors' origins in the more European influenced psychology of Israel, but there are many other schools of psychology that give far better accounts of the modern interest in risk sports, including diving.

Criticism that might be mistakenly laid at the door of this book regarding the age of some of the studies quoted, and the scanty research in some areas, belongs not with the authors but with this area as a whole. There is a general paucity of studies into the psychology and neuroscience of diving. Considering the number of divers worldwide, both recreational and professional, this disinterest is puzzling. The field of aviation psychology is well established and well researched and, indeed, many diving psychology studies are published in the journal *Aviation*, *Space and Environmental Medicine*. Perhaps diving psychology, like diving medicine, lacks the glamour and the money that apparently comes with altitude.

A minor niggle, but one that persisted in this otherwise well-presented book, is the use of a large font. It is hard to escape the feeling that the publishers sought to make up for the lack of solid content with weight of paper and the number of pages.

Despite the comments above about their neglect of some areas, the authors have made a worthwhile attempt to bring together the relevant literature. This book would be worthwhile for a researcher with an interest in diving psychology, not as a source that can stand alone, but as a basis for a first shallow dip into the rarely explored world of diving psychology.

Tim Williams

Key words

Book reviews, diving, psychology, personality, performance

Reflections on a summer sea Trevor Norton

Soft cover ISBN: 0-09-941616-6 Arrow Books, London, 2002 Distributed in Australia and New Zealand by Random House Ltd Price AUS\$21.95

Loch Ine is a magical place set in the equally beautiful realm of South West Ireland. I visited there in 1968, and was down the road supping a Guinness in Kilkenny in 1969 at the same moment that Norton describes sitting in Donelan's bar in Skibbereen, watching Scott Carpenter step onto the moon on television. A number of my university diving friends from the 1960s, who were contemporaries of Norton's, worked there, so I was delighted to have the opportunity to review *Reflections on a Summer Sea*.

An almost land-locked seawater loch, rectangular in shape and with an island in the middle, Loch Ine (now Hine) measures nearly one kilometre long by 700 m wide, over 40 m at its deepest. It is connected to the sea at its SE corner by a narrow passage 150 m long and only 12 m wide at its narrowest point. For three quarters of a century it has been a natural field laboratory for several generations of marine biologists, and as such, is one of the birthplaces of the modern science of marine ecology.

This is the story of a privately-owned laboratory where Professor Norton spent fourteen 'wonderful summers' during the 1960s and 70s, as a PhD student and later as a member of the 'remarkable menagerie of eccentric and talented ecologists' who constituted the 'summer faculty'. It is a nostalgic portrait of what seems a more innocent time, when Sunday after-supper sing-songs were the norm, the laboratory was lit by candles, and everyone slept under canvas in old-fashioned bell tents.

Most importantly, however, this is an affectionate portrait of two remarkable scientists, Professor J A ('Jack') Kitching, who owned the laboratory for many years, and Professor John Ebling, better known to doctors as the editor of the two volumes of the *Textbook of Dermatology*. These two true intellectuals, neither of whom was primarily a marine biologist, had a major impact on marine biology. This was not only through their field work at the Loch, but for their personal influence on many students who, like Norton, went on to be leaders in their particular fields. Norton describes, for instance, how his first summer at the Loch determined the very nature of his thesis and subsequent career.

Scattered amongst the numerous delightful anecdotes on Ireland, the Irish, the history of the Loch and its laboratories (for there were more than one), and daily life at Kitching's laboratory, are snippets on the research activities that were the main focus. Halfway through the book there is a superb, succinct three-page synopsis of the science of marine ecology dropped casually into the midst of a chapter.

The one fault in Norton's writing is that there is a little too much on the minutiae of daily living and not enough on the science. I suspect the majority of readers will leave this book, like I did, wishing for a better understanding of the work done at Loch Ine and the impact of the research techniques developed there. Some of the research projects languished for over 15 years before they were published – Jack Kitching had a dislike of what he called 'quick-offs'! A bibliography would have been useful.

Equally, although diving was obviously a major tool in this research, there is little detail about diving activities. A vivid description is given of how Kitching dived the Rapids in the late 1940s wearing a weighted, upturned, modified bucket on his head, complete with diver-to-surface communications and volunteers (students) pumping furiously to supply him with air. To Norton's knowledge, Kitching's first research dives were in made in 1931 in Devon, making him the first marine biologist ever to dive in British waters.

All good things must come to an end, and the final sections of the book chronicle the increasing tensions between Kitching and his colleagues and the sad breakdown in his collaboration with Ebling, Norton and others. Eventually in 1987, after over 40 years, the University of Cork took receipt of Jack's land and laboratory, and a remarkable chapter in twentieth-century science closed. We are indebted to Trevor Norton for painting such a delightful picture of this special time and place, and to his wife Win, also a marine biologist, for her many pen and ink sketches throughout the book. Read it and enjoy your own reflections on a summer sea.

Michael Davis

Key words

Book reviews, history, biology, general interest

Hard hat divers wear dresses Bob Kirby

662 pages, hard cover, illustrated Olive Press Publications, Los Olivos, CA, USA Available only from HDS SEAP, 340 S Kellogg Ave Ste E, Goleta, CA 93217, USA

Ph: (+1) 805 692 0072; Fax: (+1) 805 692 0042

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Price: US\$40, postage and packing extra

The fact that this book has been written by Bob Kirby should be enough of a review for the many who have met Bob and Claudia to send off for it. For those who need more information, read on.

Now and again a book comes along that tells it how it was, pulling few punches and in language from the world of the working diver that could be said to have been a bit roughened by vigorous use.

This is the first book by Bob Kirby, who only really learned to read after being fired from the college at which he taught for being deficient in this skill due to dyslexia. Bob is a remarkable man, who with Bev Morgan formed Kirby and Morgan, the current version of that other great combination of names in diving, Siebe and Gorman.

Bob Kirby has lived a life filled with love for his wife of over 50 years, Claudia, his two sons, and his grandchildren. Also very important to Bob and Claudia is diving history, a fact reflected in his enthusiastic support of the Historical Diving Society, USA, and the Santa Barbara Maritime Museum. All this I know from reading Bob's warts and all, tell it as it was book, *Hard hat divers wear dresses*.

The book is a set of 34 short stories in chronological order ('sort of'), which take us from Bob's youth, when he enlisted in the US Navy, right on through to a very active semi-retirement in Carpinteria, California. Within these 34 stories are many twists and side tales to make this a very interesting read. The style is reminiscent of the American author Bill Bryson, with wry comments on human nature peppering and enlivening the text.

Then there are the people we meet, famous and not so famous, whose rich characters form the main part of the story. As far as I can tell, no names have been changed to protect the guilty. Funny and at times tragic tales are accompanied by contemporary photographs and some drawings. The cover is a painting of an abalone diver working the bottom wearing standard dress; all artwork is by Bob.

This collection of Bob's tales is also a patchwork of diving history, mainly Californian abalone and commercial diving. But it should be noted that the abalone industry of California and its characters were in the main responsible for developing the modern commercial offshore diving business. Oceaneering, Cal Dive, Kirby Morgan, DSI, Divecon, International Divers, and more all began in California then went on to conquer the world.

A diving history or a rags-to-riches fairy tale this book is not. It is entertaining, full of great tales, and is of special interest to all who know a bit about diving and the diving industry. Not just restricted to diving, odd stories look at such events in Bob's life as working with Jim Cameron on the movie *The Abyss*.

This is a future collector's item for sure. Previous limited edition books (1,000 copies) published under the auspices of the Historical Diving Society (HDS) have sold out quickly. It is sold only through the HDS, USA, and if you are quick these can be personally signed and dedicated by Bob for you.

Bob Ramsay

Key words

Book reviews, autobiography, diving industry, general interest

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South Australia 5000. **Phone:** +61-8-8222-5116 **Fax:** +61-8-8232-4207

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Contact: Lorenzo Boccabella Email: <boccabella@qldbar.asn.au>

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This intensive course runs over three days and has been approved by SPUMS to teach doctors to examine divers to AS 4005.1 standards.

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Venue: Sea World Nara Resort, Gold Coast, Queensland

Contact: Dr Bob Thomas, Brisbane

Phone: +61-7-3376-1056

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Dates: 27 to 30 August, 2003

Venue: Hotel Grand Chancellor, Hobart, Tasmania

Contact: Corry van den Broek

Email: <corry.vandenbroek@dhhs.tas.gov.au>

UNDERSEA AND HYPERBARIC MEDICAL SOCIETY 36th Annual Scientific Meeting

Dates: 19 to 21 June, 2003

Venue: Hilton, Quebec City, Canada **Contact:** Don Chandler, UHMS,

10531 Metropolitan Avenue, Kingston,

Maryland 20895, USA **E-mail:** <uhms@uhms.org>

UHMS web site: http://www.uhms.org

37th Annual Scientific Meeting Preliminary Notice

Dates: 24 to 27 May, 2004

Venue: Four Seasons Hotel, Circular Quay, Sydney **Contact:** International Conferences & Events (ICE)

E-mail: <uhms@iceaustralia.com>

ASM web site: http://www.iceaustralia.com/uhms2004

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Dates: 27 to 31 August, 2003 **Venue:** University of Copenhagen

The Panum Institute Blegdamsvej 3 C

2200 Copenhagen N, Denmark

Contact: EUBS 2003, c/o Department of Anaesthesiology Centre of Hyperbaric Medicine, Righospitalet Blegdamsvej 9, DK-2100, Copenhagen, Denmark

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