

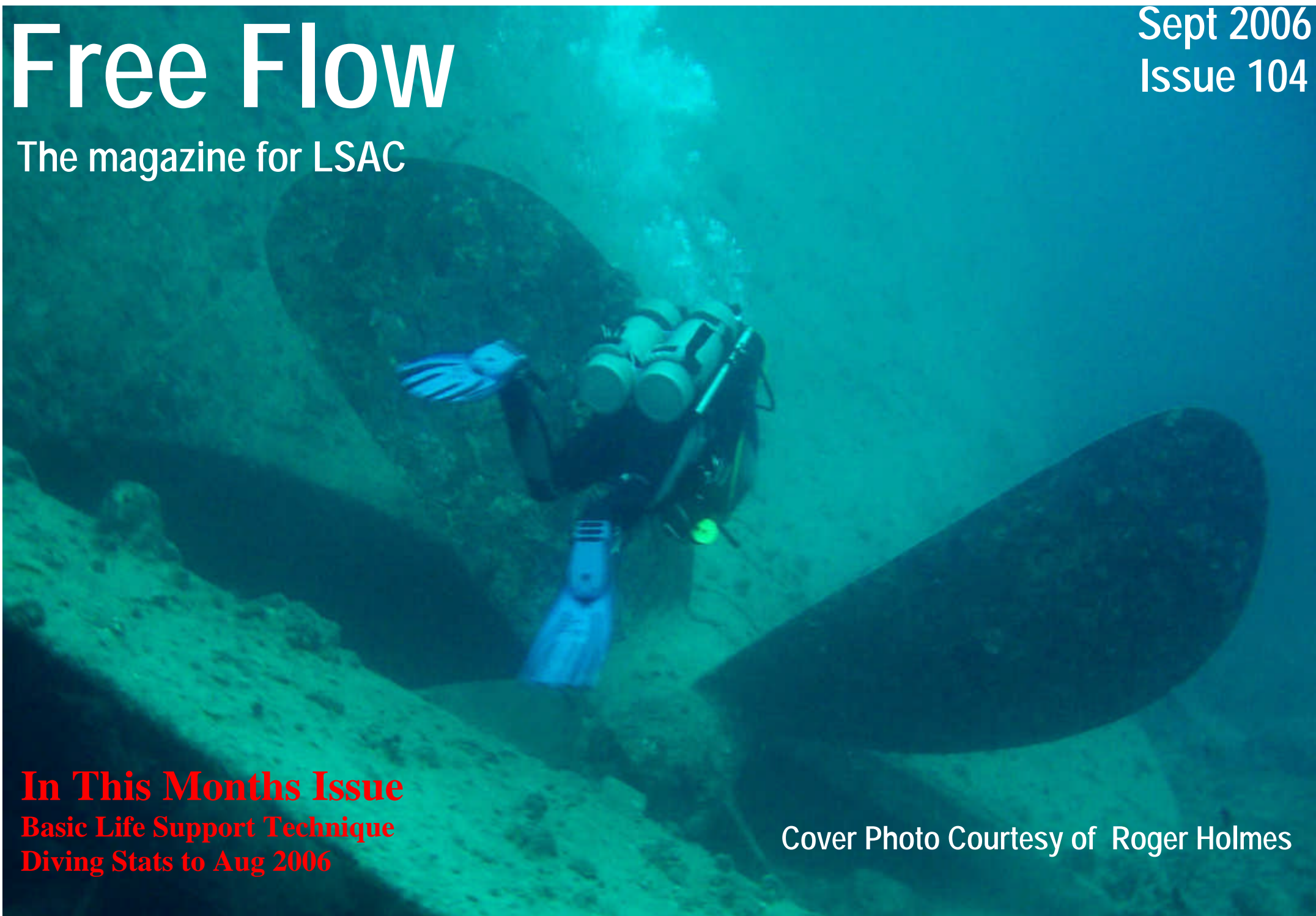
Free Flow

The magazine for LSAC

Sept 2006
Issue 104

In This Months Issue
Basic Life Support Technique
Diving Stats to Aug 2006

Cover Photo Courtesy of Roger Holmes





Free Flow

At all good Newsagents now....
Hence only downloadable from lsac.co.uk

Editors Bit...



I agree with Gary, "Do Travel" to County Cork at the end of July for some excellent diving, particularly the Kowloon

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The AGM is looming large and will be upon us shortly after this edition hits the newspaper stalls. So get yourself along and vote in or vote out, as the case may be, your preferred committee members. (To be strictly correct I should call them club officers)

As yet the dive calendar for next year is not looking too full, except for the Red Sea and Baltimore trip so get your names down ASAP. In particular since yours truly is running the Baltimore trip I would recommend this to you.

Talking of dive trips, this months edition has made way for the new BLS (Basic life Support) technique as presented by Richard and \Fran over the last few weeks. A copy of the BSAC guidelines are presented below, so dive reports are slipped back to the next edition. (There is also another good reason for not including any dive reports, but I will let you guess what that could be)

Pete

Page 3 Luvlies

Free Flow
Sept 2006



Do I look relaxed in this ? There comes a time when after a cracking day's diving the world seems a wonderful place.

If you would like to become Miss or Mr Oct or know someone who should be, then please email me with the photo and a brief description of why the person should be a page 3 lovely.

Chairmans Knock

WHATS ON - INTEREST NIGHTS

15/8	-	Dvd/Video - Fran	
22/8	-	Drysuit Repair Night - Fran/Claire	
29/8	-	NO CLUB (Bank Holiday)	
5/9	-	New AV/CPR (for All club members) - Richard	(TRY DIVE NIGHT)
12/9	-	New Zealand - Carl Gamble	(TRY DIVE NIGHT)
19/9	-	Ireland - Pete Barnard	
26/9	-	AGM	
3/10	-	Marine Biology - Ann-Marie Barnard	
10/10	-	Scotland 2007 - Fran	
17/10	-	Digital Photography - Ian Jennings	
24/10	-	Twinsets - Roger Holmes	
31/10	-	Bsac Instructor Scheme - Alex Bullard	
7/11	-	Zenobia and Cyprus - Kev Parker	
14/11	-	Marine Archaeology - Pete Hennessey (to be confirmed)	
21/11	-	South China Seas - Alex Bullard	

All of the above start at 19.30 in room H27

As you can see the interest night calendar is filling up well, but there are still some spaces available, including all 2007!! All of these presentations take a lot of time to put together so please make the effort to come along and support your fellow club members.

Regards

Chairman Roj

Eds Note: In particular one not to miss is the interest night on the 19th Sept, I'm informed there might be some stories of time spent wandering with an Irish Tinker and discovering the delights of Nail Soup. Although these are best delivered and received after a few measures of alcohol.

Odds and Ends

Divernet News, dateline 21 August 2006

Irish wreck threat

The *Kowloon Bridge*, a popular wreck site near Baltimore in Ireland, could be salvaged and lost to divers and resident marine life.

Following news that the wreck's owner is considering selling it for salvage, dive centres are concerned at both the loss of the wreck itself and the ongoing impact this would have on local diving tourism.

One centre, Baltimore's Aquaventures, is co-ordinating a petition for the wreck to remain as a top diving attraction and home to a broad array of marine creatures.

The *Kowloon Bridge* is a massive, 300m bulk carrier, sunk in 1986 at Baltimore's Stag Rocks. With a tonnage of 169,080 tons, it is claimed to be the world's heaviest wreck.

The combination of the ship's iron ore cargo and its hull steel is reportedly worth millions of pounds. The wreck's owner bought the ship in 2005.

The *Kowloon Bridge* lies in 36m of water but rises to within 6m of the surface, providing opportunities for divers of all experience levels.

Divers find WW1 British submarine

Powered by CDNN - CYBER DIVER News Network
by ANDREW PICKEN

EYEMOUTH, UK (19 July 2006) -- An intact First World War submarine has been discovered in deep waters off Eyemouth after divers initially mistook it for a sunken fishing trawler.

Divers from Edinburgh and South Queensferry were part of an expedition that found the wreck virtually unscathed despite lying 200ft down on the floor of the North Sea for more than 85 years.

It is thought to be a British submarine known as the H11, which was lost in 1920 while under tow.

Members of the South Queensferry Sub Aqua Club (SQSAC) are awaiting confirmation from the Royal Navy that the submarine was not manned before they carry out further investigations of the torpedo-carrying vessel.

Stevie Adams, 43, a BT engineer from South Queensferry, who is the SQSAC's diving officer, said four members of the club were among the party who discovered the wreck earlier this month.

He said: "We initially thought it was a trawler and because visibility was poor on our first trip we couldn't decipher exactly what it was.

"We managed to get down again and this time it was much clearer, and to our amazement we found this great big submarine. We think it was being towed to be scrapped before it sank.

"What we don't know is if there was any crew on board so we are waiting for the Admiralty to get back to us on that before we go poking about any further.

"It just amazes me that it has sat there for so long, in such a good condition, and nobody knew about it.

"The difficult part is the onshore detective work but we have a few people working on that."

The submarine is around five metres tall and 45 metres long and is lying on her port side with the bows clear of the seabed.

There is little damage to the submarine with the conning tower, periscopes and hatches in good condition according to Mr Adams.

Iain Easingwood, who runs the Marine Quest Boat Charter in Eyemouth which took the divers out to the submarine, said the wreck was known about locally.

He said: "My dad was a fisherman for over 40 years in these waters and he was always getting his nets caught around this spot so we knew there was something there. It was always assumed it was a trawler but to find out it was a submarine, and in such good condition, is just amazing.

"When they all came back up and told us what had happened they were understandably excited at what they had discovered and I think we'll be back to find out more about it."

Mr Easingwood estimates there are at least another 20 wrecks in the area that have still to be explored by divers.

The H11 was reported as possibly being lost while under tow although other maritime records indicate she was also scrapped that year with no note of ever being lost.

Experts at the Submarine Museum in Gosport and navy officials are looking into the discovery to try and shed more light on the vessel's past.

The H11 was built in the United States and was released to British forces when the Americans joined the war in 1917.

THE BRITISH SUB^{8Ω} AQUA CLUB

BSAC Basic Life Support Guidelines 2006

General Points

The following guidance has been prepared by the Safety and Rescue Skills Advisor and endorsed by the National Diving Committee to update our guidance and procedures in light of current advice and guidance available from all relevant sources. Key changes are highlighted in boxes within the text below for ease of reference.

Background to changes

The techniques for life support and resuscitation taught by the BSAC currently are based on an international collaboration between experts in resuscitation medicine from the world's major resuscitation organisations and are therefore consistent not only with other agencies providing training to lay rescuers, but also with the techniques used by doctors, nurses and others working in medical services around the world. These techniques are all based on the best evidence as to what is most effective.

As knowledge advances a regular review of this evidence is needed and such a review took place in 2005 leading to the publication of the *2005 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations* (CoSTR, Ref 1). This formed the scientific basis for the European Resuscitation Council (ERC) Guidelines for Resuscitation (2005) (Ref 2) and the Resuscitation Council (UK) Guidelines 2005 (Ref 3).

The BSAC has considered the revised guidelines and this document represents the BSAC recommended technique for basic life support. The training materials for the Diver Training Programme and Skill Development Courses will be revised to incorporate these changes. It will take time for courses and training materials to be updated and for changes in practice to be disseminated. During this period there will be some variation in practice between individuals. There is no evidence that the "old" techniques based on guidance published in 2000, were dangerous or ineffective, however this new approach is recommended and is based on the best available evidence as to what is most effective. Changes in practice such as this emphasise the importance of always keeping these rescue skills current and in practice by regular up-to-date training.

Changes to BSAC Guidance and Training

Terminology

The revision of the Resuscitation Guidance for the BSAC is an opportunity to bring nomenclature in line with that used by other rescue agencies and resuscitation training agencies.

The term "Resuscitation" refers to a wide variety of techniques to promote recovery in casualties who have suffered cardiac and/or respiratory arrest. These techniques encompass some which are appropriate for lay rescuers with minimal and often no equipment, through rescuers with progressively more training and facilities, to those methods only available in hospitals.

The technique first introduced in the Diver Training Programme at ST2 and referred to as "Resuscitation" should be referred to as "Basic Life Support".

The rationale for this is:

- This is consistent with other training agencies which use this term for this technique which requires no equipment
- The term “Basic Life Support” emphasises the purpose of the technique (i.e. to maintain the viability of the casualty)
- It reduces the expectation that this technique alone will promote full recovery
- It therefore emphasises the need to obtain help urgently
- It will potentially reduce the likelihood of self-recrimination in the rescuer in the event of an unsuccessful rescue attempt
- It is consistent with the principle of progressive training with the introduction of pocket mask, oxygen enrichment and airway adjuncts later in training in the rescue SDCs

The technique generally referred to as “Artificial Ventilation” (“AV”) throughout the DTP and SDCs should be renamed “Rescue Breathing”.

- This again promotes consistency across agencies
- It also emphasises a distinction between other types of artificial ventilation taught currently in the Rescue First Aid SDC

Thus “Basic Life Support” encompasses rescue breathing and cardiac compressions only.

Guideline change

The main aim of the guidance change has been to reduce the possibility that cardiac compressions are interrupted during basic life support. It has been recognised that such interruptions are common and are associated with reduced chances of survival for the casualty.

The major changes are

- 1) Cardiac arrest is diagnosed if a casualty is unresponsive and not breathing normally.
- 2) Rescuers should place their hands in the centre of the chest, rather than spend more time positioning their hands using other methods.
- 3) Each rescue breath is given over 1 sec rather than 2 sec.
- 4) Use a ratio of compressions to Rescue Breaths of 30:2 for all casualties.
- 5) Once the casualty is on land, on diagnosing cardiac arrest,
 - summon help, leaving the casualty if necessary
 - give 30 compressions immediately
 - follow this by 2 rescue breaths (Unless there are OBVIOUS signs of circulation)
 - give 30 compressions followed by 2 rescue breaths
 - continue compressions and ventilation at 30:2 ratio.

Basic Life Support Sequence

In diving situations it is very unlikely that a lone rescuer will initiate these actions on land or in a boat. The most likely scenario is that Life support attempts will have been initiated in the water by a lone rescuer, and once the casualty is out of the water other members of the diving group will be available for help. Once the casualty is on land or in a boat the following sequence should be followed.

- 1 Make sure you, the casualty and any other divers or bystanders are safe.
- 2 Check the casualty for a response
 - gently shake his shoulders and ask loudly: “Are you all right?”

3a If he responds

- leave him in the position in which you found him provided there is no further danger
- try to find out what is wrong with him and get help if needed
- reassess him regularly

3b If he does not respond

- shout for help
- turn the casualty onto his back and then open the airway by placing your hand on his forehead and gently tilting his head back, keeping your thumb and index finger free to close his nose if rescue breathing is required
- with your fingertips under the point of the casualty's chin, lift the chin to open the airway

4 Keeping the airway open, look, listen and feel for normal breathing

- Look for chest movement.
- Listen at the casualty's mouth for breath sounds.
- Feel for air on your cheek.
- In the first few minutes after cardiac arrest, a casualty may be barely breathing, or taking infrequent, noisy gasps. Do not confuse this with normal breathing. Look, listen, and feel for no more than 10 seconds to determine whether the casualty is breathing normally. If you have any doubt whether breathing is normal, act as if it is not normal.

5a If he is breathing normally

- turn him into the recovery position
- send or go for help/call for an ambulance
- check for continued breathing

5b If he is not breathing normally

- send someone for help or, if you are on your own, leave the casualty and do this yourself; return and start chest compression as follows:
 - o kneel by the side of the casualty
 - o place the heel of one hand in the centre of the casualty's chest
 - o place the heel of your other hand on top of the first hand
 - o interlock the fingers of your hands and ensure that pressure is not applied over the casualty's ribs. Do not apply any pressure over the upper abdomen or the bottom end of the bony sternum (breastbone)
 - o position yourself vertically above the casualty's chest and, with your arms straight, press down on the sternum 4—5 cm
 - o after each compression, release all the pressure on the chest without losing contact between your hands and the sternum
 - o repeat at a rate of about 100/min (a little less than 2 compressions per second)
 - o compression and release should take equal amounts of time

6 Combine chest compression with rescue breaths.

- After 30 compressions open the airway again using head tilt and chin lift
- Pinch the soft part of the nose closed, using the index finger and thumb of your hand on the forehead.
- Allow the mouth to open, but maintain chin lift.
- Take a normal breath and place your lips around his the mouth, making sure that you have a good seal.
- Blow steadily into the mouth while watching for the chest to rise, taking about 1 second as in normal breathing; this is an effective rescue breath.
- Maintaining head tilt and chin lift, take your mouth away from the casualty and watch for the chest to fall as air passes out
- Take another normal breath and blow into the casualty's mouth once more, to achieve a total of two effective rescue breaths. Then return your hands without delay to the correct position on the sternum and give a further 30 chest compressions.
- Continue with chest compressions and rescue breaths in a ratio of 30:2.
- Stop to recheck the casualty only if he starts breathing normally; otherwise do not interrupt resuscitation.

If your initial rescue breath does not make the chest rise as in normal breathing, then before

your next attempt:

- check the casualty's mouth and remove any obstruction
- recheck that there is adequate head tilt and chin lift
- do not attempt more than two breaths each time before returning to chest compressions

If there is more than one rescuer present, another should take over CPR every 1—2 min to prevent fatigue. Ensure the minimum of delay during the changeover of rescuers.

In-Water Life Support

- The rescuers should be aware of their personal safety and minimise danger to themselves and the casualty at all times.
- The casualty must be removed from the water by the fastest and safest means possible.
- The rescuer must make a firm hold on the casualty and maintain this throughout the rescue.
- The rescuer should make the casualty and themselves buoyant at the surface.
- Open the casualty's airway by applying gentle neck extension
- If there is no spontaneous breathing on opening the airway in this way give rescue breaths for approximately 1 minute (10 Rescue Breaths) (See 1 Minute Rescue Breath Sequence Note below)
- If no spontaneous breathing returns, tow casualty while giving rescue breathing at 2 breaths/ 15 seconds

When in standing depth, or at boat prior to landing, continue rescue breathing for 1 further minute(10 Rescue Breaths), then dekit and land as quickly as possible WITHOUT further rescue breathing (See 1 Minute Rescue Breath Sequence Note below)

- Begin basic life support according to the above algorithm i.e. 30 cardiac compressions initially, then two rescue breaths

1 Minute Rescue Breath Sequence

The rationale for this is that the general algorithm is aimed at the majority of cases of sudden cardiac arrest which are due to ventricular fibrillation, when oxygen stores in the body are not reduced. When asphyxia has occurred prior to arrest oxygen stores are likely to have been depleted. A specific case is made in the 2005 guideline for drowning because this is the only readily identifiable cause of asphyxia.

In diving situations where drowning is the likely cause, and early rescue breathing may be of benefit, this is most likely to have been initiated in the water.

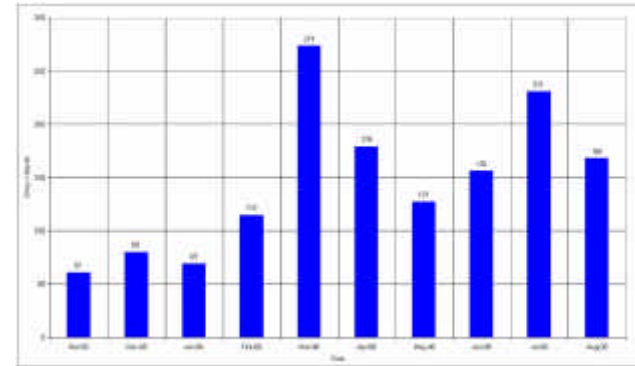
References

1. International Liaison Committee on Resuscitation. 2005 International Consensus on Cardiopulmonary Resuscitation and Emergency Cardiovascular Care Science with Treatment Recommendations. Resuscitation 2005; 67: 157 – 341.
2. European Resuscitation Council. European Resuscitation Council Guidelines for Resuscitation 2005. Resuscitation 2005; 67(Suppl. 1): S1 – S190.
3. Resuscitation Council (UK). Resuscitation Guidelines 2005. ISBN 1-903812-10-0. (available at www.resus.org.uk)

Members Dives To the end of August 2006

The statistics for August are rather surprising coming mainly from two trips: Scapa Flow and Fran & Steve's trip to Malin Head - there are a few Stoney trips making up the numbers - but surprisingly few other trips. This is reflected in the dives per month, dropping down from the high in July.

Does this really mean that there were no other trips and people winding down for the end of the season already?, or just that the sheets haven't got to Neil Brown yet



Highlights of the month were: 1000 hours underwater passed (now 1033), the 1st diver (Fran) passed 100 dives, The total number of dives is now approaching 1500 (currently 1460)

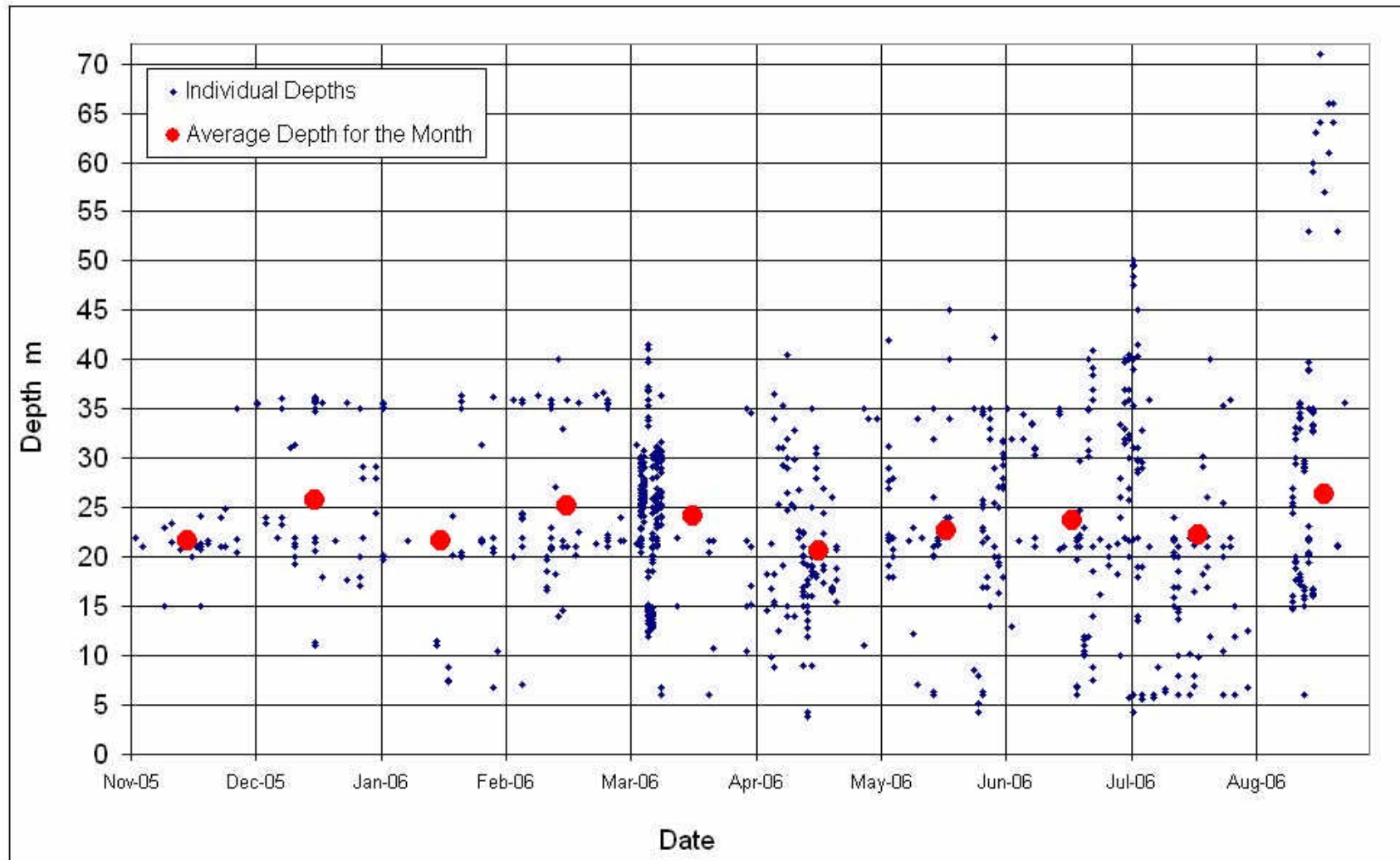
I have recently got some help with the Excel file where I am keeping the statistics (from an Excel Guru at work) and he has done a great job in revamping the file. As such it is making the job much easier to enter the dive data and I can now present the statistic in many more ways:

I can now easily pull out all the dives from one diver - so if you want to check your dives against what I have recorded then let me know.

I can now order the statistics in order of many aspects of diving, namely: TOTAL TIME, Instructing Time, Time x Depth Total (as requested by Peter Hennessey) , Inland Dives, Coastal Dives, Foreign Dives, All Dives, Wreck Dives, Reef Dives, Drift Dives, Other Dives, Night Dives, Training Time, Training Instructor Time, Maximum Depth, Average Depth, Dives at depths of: 0-10m, 10-15m, 15-20m, 20-25m, 25-30m, 30-40m, 40-50m, 50+m and Average Dive Length.

I would list all the leading position in each category, but as Fran is leading most (sometimes with Steve equaling her) I will only list the leaders in the categories where Fran isn't leading.: No of Coastal Dives: Pete Barnard from Neil Brown, No of Wreck Dives: Kevin Parker from Pete Barnard, Maximum Depth: Steve Appleton (from Fran) Average Depth: Bob Mulholland from Kevin Yeates. No of 15-20m Dives: Neil Calver (from Fran), No of 25-30m Dives: Barnard Peter from Brown Neil, No of 30-40m Dives: Claire Stockdale from Pete Barnard, Average Dive Length: Duncan Clarke from Chris Thurman

The main statistic I am showing (overleaf) is plotting the dive depths against time - this clearly shows the range of diving we do as a club, the main trips and the dives distribution through the year.



As usual ... 'Keep the sheets coming in'

10/9/06