

Waterspout

**New Forest Ice Dive
2010**



2010 Dive Program

The Magazine of Bournemouth & Poole Dive Club

57 years of Adventurous Safe Diving

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Cover Photo – Adrian King - New Forest Ice Dive Jan 2010 – Saeed Rashid.

Chairman’s Blog

Welcome to Waterspout 2010.

There can’t be many diving clubs who have achieved their first dive of the year by the 10 th of January! If that event is anything to go by we have a great season ahead of us.

The policy of actively welcoming PADI divers is bearing fruit and last year saw a welcome increase in the club’s membership. We now have proper procedures in place to enable divers of any background to dive with our club, within the limits of their qualifications. A number of these members have brought other skills to the club which have also been of great benefit. We have continued to maintain our BS-AC affiliation, so any skill development courses offered by the club can follow the national syllabus and enable us to award recognised qualifications. This has lead to a number of Nitrox courses and we are actively planning Dive Management and Boat Handling courses.

This copy of Waterspout shows the Dive Program for 2010 which includes all our favourite local dives such as the Kyarra and Aeolian Sky. An active expeditions program is also in place with trips to West Bay, Bovisand and the Scillies. The Bovisand trip is already well supported with over 20 confirmed bookings, the mid- week format having proved very successful. Weather permitting we will have 2 boats out and dives on both the Scylla and Edystone Rock.

Socially, we are also aiming to be active with a President's Party to award past efforts and launch this year's program. We also have a much awaited instructional visit to the Recompression Chamber planned for the near future.

Our 7 metre diesel inboard RIB remains our biggest asset and it is the availability of our own boat, together with a full program of varied diving which is proving attractive to new members. This year we will be continuing our banded dive fees system and have even managed to reduce the cost of the Band 1 dive to just £18, which has to be one of the cheapest ways to go diving in local waters.

With all this going on it makes me proud to be the chairman of one of the most active, welcoming and experienced clubs on the south coast.

I look forward to seeing you all out on the boat during the year.

Regards Adrian King (Chairman.)

First Dive of 2010



Alongside the picturesque road from Ringwood to Salisbury lies a secluded lake, where on warm summer days anglers sit snoozing by sun-dappled waters and catch the occasional fish (only to put it back later!) and in the afternoon lithe sun-tanned youngsters glide effortlessly on water-skis behind beautiful purpose built powerboats. Meanwhile their families sip cooled drinks on the elevated veranda and then have barbeques as the sun sets dreamily into the nearby forest.

Well in the summer maybe, but in January I can tell you, it don't look like that, especially with snow on the ground and the lake iced over! However such is the madness of divers that it is only when the conditions have reached this level of inhospitability does it occur to them to go diving there. Ice diving is one of those curious specialities, the mere mention of which will set teeth on edge and the most robust of parents asking you if you really know what you are doing! Here again TV has interfered with the UK reality and images of gin clear waters and great towering columns of ice do not prepare you for the reality of a dive under ice in a British Lake. In fact this was the second such expedition undertaken by the Bournemouth and Poole Diving Club, the first of which was exactly 10 years ago and perhaps in support of the Global Warming doom mongers it's been a decade since the ice was thick enough in this area to support anything heavier than a leaf, let alone Tristan. So when a phone call to the New Forest Waterpark revealed that the lake had 6" of ice over it, I was keen to have a go. This necessitated the retrieval of most of my kit from Dorset Diving where I was touched to receive the nearest thing to concern that I have ever experienced from the happy team there. Chris offered some useful advice about the importance of safety ropes, triangular exit holes and some interesting (but untested) suggestions of way marking on the underside of the ice with food colouring and we were off.

The park were kind enough to let us dive there provided Vic accepted all the blame for anything that went wrong and so he was particularly keen to give a thorough briefing. Rule 1 was broken by an unnamed member who stepped upon the ice un-roped and earned one of Vic's more colourful bits of verbal advice. The ice was thick to the edge of the pond and so two holes were cut, one by Alex and Vic about 5 meters out from the pontoon, triangular to aid exit and another at the foot of the ladder for entry. The divers were, Alex, Steve, Tristan, Saeed, Vic, Martin and me.

My first foray under the ice, tied securely to a safety rope was very disorientating. The viz. was poor and the underside of the ice featureless. This meant that once away from the hole, the safety line became vital. Any sense of direction was quickly lost, as was the ability to measure distance. All the complex rope signals, such one for stop, two for go, etc went straight out of my head to be replaced by a vice like grip and a determination not to let go. As confidence grew I went along the pontoon pushing the fenders up out of the way as I went and receiving a reassuring tap on my hand as I OK-ed through the resulting hole. The exit hole couldn't come quickly enough but I was pleasantly surprised how easy it was to exit from the water on to the flat ice. My minimum temperature was 4 degrees (although some had 2 degrees) and my max depth was 3 meters, with a dive time of 15 minutes. Others did similar profiles and the whole experience was great, made all the more so by a hasty retreat to the Old Beams for lunch. I'm definitely keen to do a repeat trip in 10 years time, this time roped and to a series of connected holes on a compass bearing.



See the whole experience for yourself courtesy of Saeed on YouTube – “Bournemouth and Poole Ice Diving” - it’s got over 350 hits so far and some great comments. It’s not every year we get our first club dive done before the end of January! Perhaps this is a sign of a good season to come.

Adrian King

Expeditions Officer

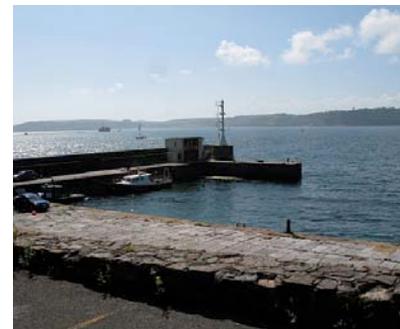
Fort Bovisand diving 2009 and 2010



Coming back from Nemo, the deep water diving tank in Belgium, on the Eurostar (always start an article with a bit of name dropping) a chance remark about mid-week diving made me think about Fort Bovisand as a venue.

For those of you who don’t know it, Fort Bovisand is one of 22 forts built in the

Plymouth area to guard against attack from the French in the 19th century (the first granite stones were laid in 1845). Then, in 1970, two divers (one a retired naval commander) obtained a lease from the Ministry of Defence to use the Fort as a dive centre, and it’s remained one ever since.



Just like Marmite, they say you either hate or love Bovisand and I love both. It is an amazingly atmospheric place but it has changed from when I first dived there. The inner part and casements are off limits to anybody non-military and all the diving, accommodation (shown on the left) and catering is at the front, overlooking the harbour. The diving is run by Discovery Divers and managed by Danny and the accident prone (at least for the few days we were

there) Dave, both ex-Navy and both very professional and competent on the boats, but incredibly laid back when at the Fort.

The wrecks are incredibly numerous and the different flora and fauna compared to our are also loads of lovely, lovely gullies.

Turned out that 16 people were interested so down for a Thursday and Friday of diving. dates with good, neapish tides and although water was a little frisky at times. It meant that and scenic dives in the Sound and Whitsand

We managed the Scylla, James Egan Layne about these below) and Danny managed to put us on Hilsea Point and the Mewstone for a bit of scenic.



granite rock can make for very limestone South Coast. There

in July of last year we headed Discovery Divers had given us the weather was sunny, the we were limited to the wrecks Bay.

and Persier wreck wise (more

So what sort of diving can you expect around Bovisand?

First, some of the wrecks

The Scylla The most well known wreck in the area has to be this one. This is (was) a Leander-class frigate that served in the Royal Navy between 1970 and December 2003. She was bought by the National Marine Aquarium and sunk on the 27th of March 2004 in Whitsand bay and lies in 24 m of water. The first time I dived this wreck was with a buddy who actually served on the ship – and he showed me his cabin! It has been estimated that this wreck alone has boosted the local economy by over a £million a year – Poole Bay next?

The James Egan Layne was torpedoed in 1945 and is in 24 m of water at high tide. Although the ship was originally 419ft long, the bow and stern have separated and now lie about 15m apart – can anybody remember when the mast was still on this ship? A very atmospheric wreck.

After they blew the mast off this wreck it became a little trickier to find - no GPS then and the echo sounder was a rope and anchor. However, we got some marks, dropped in and missed it completely. After that endless drift looking at a very boring bottom we came upon a very broken-up wooden wreck plus its keel pins. I've still got a few of those and would like to see if anything is still there.

The Rose Hill sank towards the end of World War I and her broken wreckage now lies in 30m of water.

The Coronation was a 140ft man-of-war carrying 90 cannons that sank in a storm more than 300 years ago. The ship was originally thought to have been found in shallow waters just off Penlee Point in 1967 but, ten years later, the discovery some distance away of a second site with more cannons and a pewter plate bearing the crest of the ship's captain seemed to contradict this. It's probable that both sites are the scattered remains of the Coronation. They're listed under the Historic Wrecks Act and can only be dived with special permission (which can be obtained if you dive from Fort Bovisand).

The Glen Strathallen was originally designed to be a 150ft steam trawler, but was first converted into a pleasure yacht, then deliberately sunk as a site for divers in 1970. Unfortunately, the wreck became a hazard to boats and had to be blown up. Although only a boiler and the bow are recognisable now, it still makes a pleasant dive, with quite a few wrasse and dogfish around the wreckage.

The Persier lies fairly upright but partially collapsed in about 30m of water. The wreck is protected from north and north-westerly winds, which usually means good visibility. Originally named War Buffalo, the ship was torpedoed in 1945, some distance from the Devon coast. After being hit, she was abandoned and thought to have sunk there. However, in 1969, a bell engraved with the name War Buffalo was brought up off wreckage found closer to shore in Bigbury Bay and it's believed the ship's engines continued running her towards the coast until she finally came to rest there.

Now some of the scenic stuff

The harbour itself offers some good, shallow diving and is a voluntary conservation marine area. I saw my first seahorse there – beautiful.

The Breakwater is exactly that, a huge mass protecting Plymouth harbour. Loads of nudibranchs and cuttlefish. I was followed for virtually the whole of a dive by one these intelligent animals and (in those pre- dry suit days) as I was grovelling head first under some rocks I looked behind and there it was, upside-down, copying me.

At **Hilsea Rock**, large pinnacles rise from a depth of 35m to around ten metres below the surface – they can be spotted from a boat if the visibility is good. There are sweeping gullies to dive in, with hard and soft corals.

The Mewstone is a small, rocky island east of Fort Bovisand, which has a rather strange history. In 1744, a local man who had committed a minor crime was sentenced to live there for seven years. After he'd served his time, his daughter decided to stay on the island, got married and raised her own family there. Almost 200 years later, you can still see the remains of a house tucked away in the rocks on this barren outcrop. The surrounding waters have incredible scenery and are great for drift dives. Also, if you're lucky, you can pick up lead shells fired from the surrounding gun placements.

The Eddystone Lighthouse and Hans Deep. Both of these offer some of the best visibility, pinnacles, coral and wall diving in the UK. They stand in 55m and 65 m of water respectively, a mile apart and about 10 miles out from the Fort. Conditions were too rough last year but maybe this time?

This year we have 22 divers going down on July 7th, 8th and 9th of July. Hopefully we can do most of the sites above in the day, with perhaps a BBQ, night (dusk) dive and definitely the Eddystone pub in the evenings. Marvellous!

And now for something completely different at Bovisand. Many years ago a group of us went down to Bovisand and, as does happen, were completely blown out by the weather. There

was a bar on top of the casements then and while looking out at the Eddystone Lighthouse, flashing and tempting us, we noticed that in the surrounding rocks was a very interesting bit of water movement. A gully was channelling the water and with nowhere else to go the waves that were formed became huge and then dumped themselves into a large rock pool. Padded out with wetsuits and Guinness we toddled off and swam around to take a look. Sure enough, if you were very stupid you could ride the waves in and be deposited into the amazingly deep pool. We called it sump lumping and as far as I know the only damage done was some sprains and a few cracked ribs.

The other bit of bad weather entertainment was watching the basic air diving trainees (the BAD lads – motto ‘there’s no F in time’ – which gives you some idea of their level!) doing Geronimo’s off the harbour wall. More wet-suiting and Guinness and we were doing the same thing. Great fun.

Without sounding like a holiday brochure, whether it’s fine or rough Bovisand is a really tremendous place.

John Lewis (Expeditions Officer)

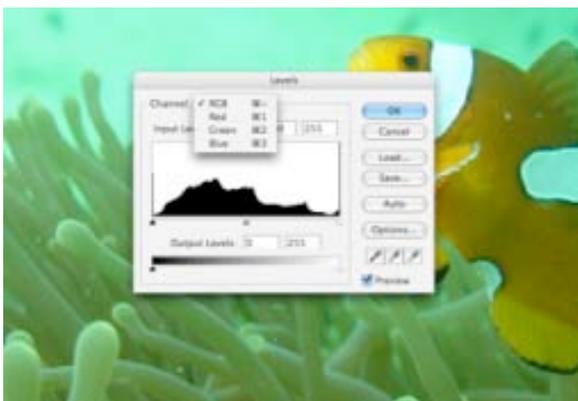
Saeed’s Digital Clinic

Photoshop tutorial - using levels and correcting backscatter.

Finally here is one of the Photoshop tutorials I have given at the clinic. Hope it help you out.

There are a few things in this image that need to be cleaned up. First the blue/green colour cast needs to be addressed, which I would say is the most common fault that needs to be fixed on underwater compact camera photos. I could easily use the Underwater action I used in the turtle tutorial, but this time I’m going to look at the levels editor

Image>Adjustments>Levels.



Yes of course I could have used the levels adjustment layer which would have given me the freedom to change my adjustment at anytime, but for this exercise I’m going to just use the plain old fashioned levels, and I will talk about adjustments layers in a later tutorial.

Levels will show you the histogram “A histogram illustrates how pixels in an image are distributed by graphing the number of pixels at each colour intensity level. The histogram shows whether the image contains enough detail in the shadows (shown in the left part of the histogram),

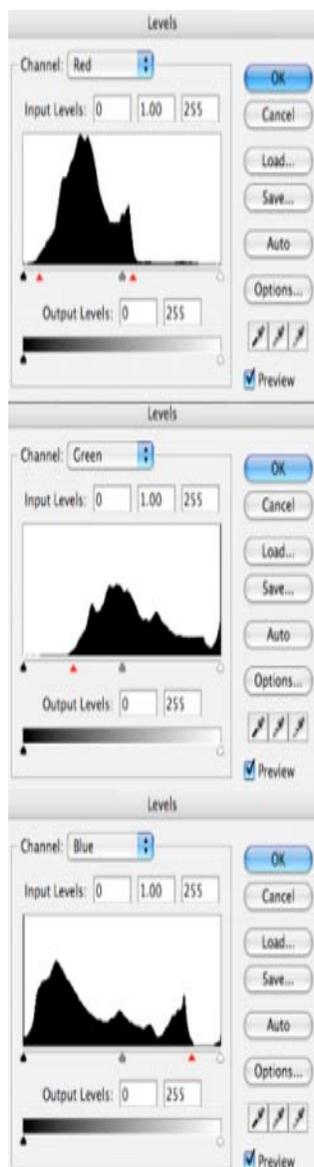
midtones (shown in the middle), and highlights (shown in the right part) to make a good correction.”

In levels you can adjust either globally or by colour channel.

Looking at the individual colour channels you can easily see that in the red channel that there is no detail in the highlights and very little in the shadows, the green channel has no detail in the shadows and the blue channel has lost a little detail in the highlights.

To correct this you need to move the black arrow under the histogram right, and move the white arrow left until they are under the graph and some detail returns to the shadows/highlights and repeat on all channels as needed. The middle arrow adjust the gamma. “Gamma can be described as the measurement of contrast that affects the midtones of an image, but is actually quite a complex subject, with much more to it than making pictures look lighter or darker”

It’s worth trying to set your black, grey and white points. You do this by using the eye droppers on the bottom right of the levels window. Select the black point tool (left) and click on a part of your image that should be black, do the same with the white point tool (right) and finally the grey point. Remember that you don’t have to set all of the points if you don’t want too.



Lastly it’s always worth mentioning/trying the “Auto” adjustments. Auto levels, Auto contrast and Auto colour.

Auto Levels works by expanding the levels in each of colour channels to give you an image that has a fuller tonal contrast, basically it adjust the black and white point of the image.

Auto Contrast automatically adjusts highlights and shadows to fix poor image contrast. Auto Contrast is similar to the Brightness/Contrast command, which is a fast, easy way to adjust an image’s tonal range while sacrificing some image detail. But Auto Contrast is designed to preserve image detail and also to complement the Auto Levels command, to create a more accurate tonal and color-correction workflow

Auto colour combines a combination of both auto levels and auto contrast. “The Auto Color command adjusts the contrast and color of an image by searching the image to identify shadows, midtones, and highlights. By default, Auto Color neutralizes the midtones using a target color of RGB 128 gray and clips the shadows and highlight pixels by 0.5%. You can change these defaults in the Auto Color Correction Options dialog box”

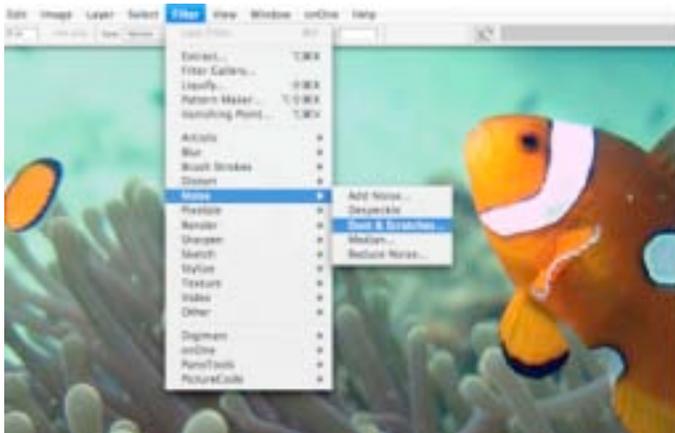
Auto colour adjust can work very well, but it may not on your image, if it doesn't work just undo the command and try something else.

One little tip is to remember that there is a "fade" option that can be used after most tools in Photoshop, I sometimes like to use this option when I'm doing any colour correction Edit>Fade.... It allows you to "knock back" (make less intense) any operation like a filter, colour adjustment or even a brush.

Once all the colour correction has been finished (but remember you can always go back and adjust things later if you really need too) it 's time to do any retouching, on this image there is a fare bit of debris floating around which needs to be removed. If I had all the time in the world I would us the healing brush and the clone tool to fix this, but there is a quicker way.

Using the Dust and Scratches filter is a quick way of sorting out problems like this. First using the lasso selection tool, select the area you need to retouch. On this image there are more area that needs attention, I prefer to work in small section but select as much as you feel comfortable with and select the dust and scratches filter Filter>Noise> Dust and Scratches.

The best way to use this filter is to start the radius and levels at 0. Drag the radius up until the



partials in your image start to blend into the background be careful not to go too far otherwise it can start to look "cartoony" by increasing the radius you will loose some edge detail but by dragging the levels up you can get some of it back. Again be careful not to go to far or the particles will come back. Repeat as needed.

Any stubborn or sensitive areas may need to touched up using the tools I talk about just now. The Healing brush would be my first option here. To use it first choose a brush big enough to cover the blemish and with 0% hardness so that the edges blend it the rest of the image. Here for the spot on the fishes back I have chosen a 65 pixel brush, then find an area similar to the area you want to touch up and press "alt" on keyboard click on and off the sampled area and take your finger off the keyboard. Then go to the area to that need correction and paint. You should see a cross were you are copying from and a circle where you are copying too. Try and change as few pixels as possible as the fewer you change the less apparent your touching up will be. Also if you are touching up a large area try and simple different areas, otherwise you may get repetitive pattern appearing.

Almost finished now. One of the final steps would be to sharpen the image. As I said in one of my quick tips "Almost all images that have been scanned or taken with a digital camera need a little sharpening" I'm going to use the same method as before using the High pass filter.

Drag the background layer down to the new layer icon in the layers pallet to duplicate it.



Then select the new copied layer and apply the high pass filter Filter>Other>High Pass. Start by taking the radius slider down to 0 and drag it up until you start seeing the edges of you image appear, when you start to see any colour bleed though stop.

Once you have applied the high pass filter you then need to change the blending mode of this layer in your layers pallet to Overlay and you should see your image sharpen, don't forget that if you need to lessen the

affect you can change the opacity in the layer pallet. If you need a stronger effect try changing the blending mode to soft or hard light.



The last thing this image needs is cropping. Some people may say “why didn't you crop it to start, you could have saved some time with some retouching”, but I always like to see what I have before I crop, as the image can look very different once it's been touched up and colour corrected.

Saeed

Diving Officers Report

I've a feeling that 2010 is going to be a good year for the club and things are already looking up, with a hardy few (7) venturing under the ice at the New Forest Water Park in early January. Suffice to say it was cold and gloomy, but the general banter and session in the pub afterwards made it all worthwhile. The Youtube video and article in the Echo were an added bonus for the club (thanks to Saeeds efforts – how did he take his own photo?) and hopefully will generate some new members.

By the time this makes it into print seven (including two new) members should also be on their way to becoming sports divers and for the first time this is an all PADI crossover. I'm planning a couple of sessions at Vobster to complete most/all of the training and would be grateful for any help offered on these days, as they should be fairly intense.

I think this will be the way club training operates from now on, taking in PADI trained Open Water/Advanced Divers and supplementing their skills to give them the tools to dive safely in UK waters, so this year will provide a useful learning experience to everyone concerned.

Last year was fairly uneventful, although as I was reminded at the AGM, we did get two members bent early on in the season. In both cases neither diver did anything wrong and can consider themselves unfortunate, but can we learn anything from these events? Here are my thoughts:

- You don't have to do anything wrong to get bent, unfortunately it's a sad fact of diving that occasionally people get bent "in the tables". So if you do show any signs after a dive irrespective of the profile, go and get yourself checked out;
- Always make sure you are properly hydrated before a dive, especially the deeper longer ones. There is an old climbing test – if your urine is highly coloured in the morning- don't climb that day – this isn't a bad rule for diving;
- It happened early on in the season, now I'm not saying they were out of shape, but the fat knackers know who they are! On a serious note, it does pay to try and get into shape before the diving season starts.

Unfortunately, the weather at West Bay wasn't so good last August, not helped by the domestic cold front, which had set in as I was off to Mexico the following week. It did get me thinking that we used to do two trips to West Bay – one in May followed by the August Bank holiday jaunt. The weather was often better on the earlier trip, so I've popped a weekend into the dive program. With a few new members there might be some demand to visit some old favorites that we haven't been out to for a while!

Lets hope for a flat calm and sunny 2010, with 20 m viz on every dive – well we can all dream.

Safe Diving

Vic

A Cautionary Tale

This is probably a diving myth – I've heard the story from two or three different sources and always involving a different club – but it's entertaining and an illustration of the dangers of messing with things you don't recognise. And if you've heard it – or one of its variations – or even told it to me, I apologize, but it's a good few years since I last heard it doing the rounds and I think it's worth dusting off again.....

Imagine a calm, blistering hot summer day at a Kimmeridge overrun with hordes of divers in dozens of RIBs and squidgies, all making the most of the fine weather. One boat belonged to an inland branch - I've heard Slough mentioned and Harlow and Staines but always in a slightly sniffy way. Must be inlanders – you'd never get someone local being this daft (well, yes you would, but that's another story entirely...). Anyway, this happy bunch had done their first dive and taken their inflatable to Worbarrow Bay for a shallower dip, drifting across the rocky ground and observing the usual crop of misshapen military overshoots from the army range inland. Youthful novice (goes the tale) spots an interesting and attractive looking lump of 'something' - about a foot long, cone-shaped and rust-coloured but wrapped in what looks at first glance to be a white lace doily. Closer inspection reveals it to be a delicate, powdery white tracery, similar to tubeworm tubes but more fragile and, apparently, oozed out of the metal itself. Thinking it would look good on the mantelpiece our novice happily returns to the surface bearing this goody and passes it up to the boat handler. This individual - who, it appears, is far more experienced and worldly-wise - takes the proffered object and smartly drops it over the other side of the boat and straight back into the water. When our novice has hauled himself onboard and wiped the surplus gunk from his gloves there follows a brief but penetrating lecture on the dangers of picking up unknown pieces of military ordnance from the seabed and bringing them to the surface. Somewhat abashed, our novice strips off his gloves, tidies his gear away and helps the other pairs back into the boat.

All is well until the gloves – and the remaining gunk - start to dry out in the warm sunshine, at which point said gunk, which – you've guessed it – is actually phosphorus, does its thing and spontaneously ignites. The gloves start to smoulder and it isn't long before someone detects the unwelcome aroma of burning neoprene. The boat is brought to an abrupt halt and a certain amount of barely-controlled panic ensues whilst the offending articles are located and hurriedly flung overboard, whereupon they continue to bob around on the surface, fizzing, spitting and emitting a plume of acrid smoke. There follows another even briefer and even more acrimonious lecture on the dangers of picking up unknown pieces of military ordnance and bringing them to the surface. During which time, the portion of wetsuit on which our by now mortified novice first wiped his gloves i.e. his backside, previously protected by being sat on but now exposed to the full glare of the sun, also dries out and bursts into flame. There follows further pandemonium; the novice is unceremoniously pitched back into the water and eventually stripped of his irretrievably damaged suit – although not before his buttocks receive a number of extremely painful burns. It is at this point that the phosphorus rubbed from the suit and onto the boat finally dries and obligingly sears a distressingly large hole right through the tube.

Some time later – some considerable time later – several dozens of divers, all merrily engaged in hauling boats, packing gear or just hanging around enjoying the general bustle and busyness are witness to the sight of a dive-boat limping slowly across the bay, one tube blackened and deflated, the other supporting a near-naked diver lying face down along the surviving tube and clearly in some discomfort.

And this, my children, its why we don't mess with whole, smashed or gently leaking shells, bombs, grenades, mines, rockets and torpedoes. Or indeed with any other nasties the greatest military minds have managed to devise and then seen fit to abandon to a watery grave, there to wait for some inquisitive and foolhardy diver to pick them over....

Paul Bluett

The Cenotes of Mexico

Last September saw Andy Judd, Dave Haselden and myself jetting out to the Yucatan Peninsula for ten days Cenote diving. I had dived there on previous occasions, but only had chance to do one off trips – on this visit I'd have the chance to do it properly in the company of divers that I knew and trusted.

Cenote is a general term given to the entrance to a flooded cave system and the Yucatan is full of them. The things that are special about these flooded systems are the:

- clarity of the water, all of which has been filtered through the limestone. The water can be so clear that the light from your torch seems to run out. I reckon that we had viz of over a 100 m in places!
- formations (take a look at the front cover), during the last ice age, these caves were dry allowing calcite deposits to form. Now the caves are flooded, you can swim/fly through these fairy grottos, which is pretty amazing;
- its possible to dive through haloclines, where salt and freshwater meets, personally I'm not that keen, its like wearing glasses that someone has smeared grease all over, but there are some mad fools (usually American) who like it.

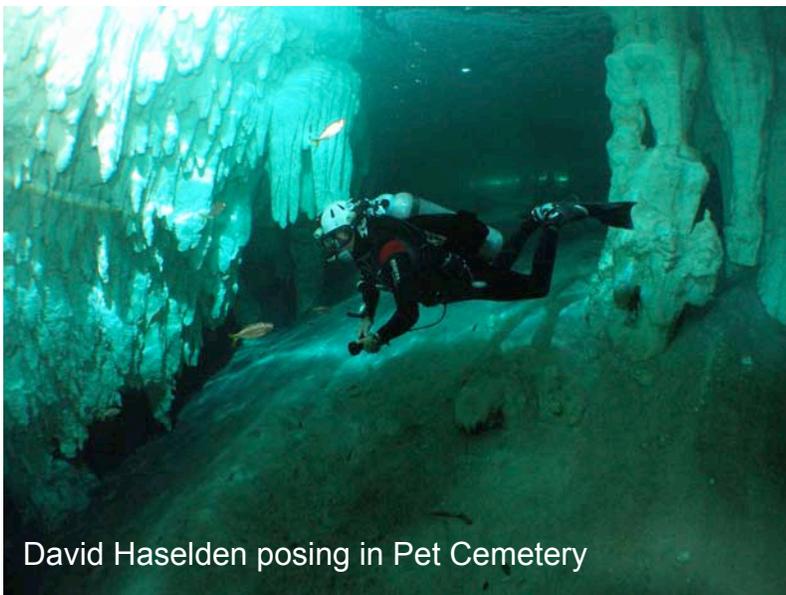


Andy Judd making the cave look big, well he is a midget

Most of the popular dive sites offer easy access, big passages and unparalleled visibility, but don't be deceived, off the beaten track there are some demanding sites, with tight squeezes and entrance pools full of bat guano and mosquitoes to challenge the nerves of most people. I distinctly remember on the return swim to one entrance thinking "was it this tight on the way in?" if I hadn't left plenty of peg markers on the line I might have been persuaded that I'd gone the wrong way.

Possibly my favorite dive of the trip was at a cenote called “Pet Cemetery”, obviously some one was a Stephen King fan or had found a way of getting rid of unwanted cats and dogs (personally I thought they ate them). With a spooky name things started going wrong from the offset, during kitting up my wing inflator started leaking and had to be stripped down, cleaned out and reassembled, these things happen, so I wasn’t too perturbed. Once in the water, we proceeded a surface swim through the cave to the far end of the cavern, at this point my pressure gauge O ring went, I had to isolate the valve and carry on swimming to the far dive platform, hidden in the depths of the cave, get out unkit, go back to the car and cannibalize my spare reg, I was beginning to have second thoughts about diving – sometimes the gods aren’t smiling on you and its best to retreat to a bar! I persevered and having got the gauge back together I switched on the gas to find the regulator was playing up, a quick fiddle and all was well and strangely enough I felt relaxed, bad things come in threes and I’d had mine. By this time a group of tourists had turned up to look at the Cave and Dave and Andy were trying to convince a young lady from Luton that it was perfectly safe to snorkel in the pool. I’m not sure if Andy offered her his snorkel, but she wasn’t convinced and refused to enter the water preferring the mosquitoes!

Eventually we went diving, most of the cenotes have large shoals of fish in the entrance pool

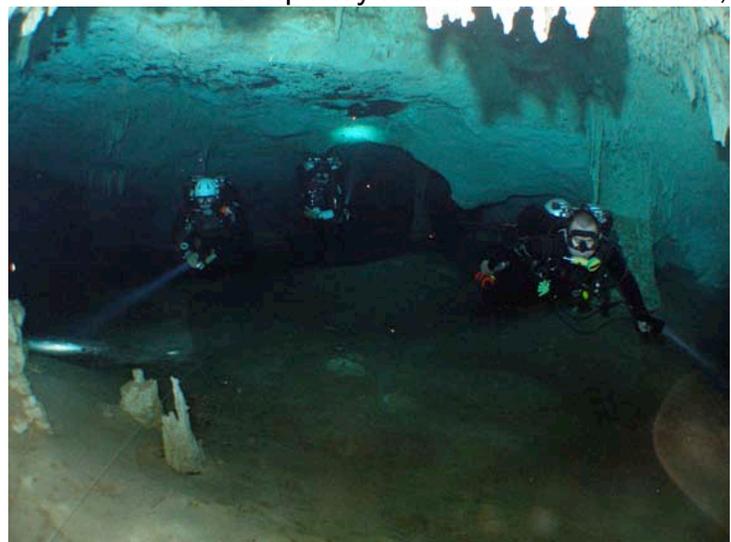


David Haselden posing in Pet Cemetery

and this cave was no exception, except here they had learned to follow divers (well their torches) beyond the daylight zone to find untapped food sources, so the whole dive we were escorted by a handful of fish.

To cut along story short after about 30 minutes we eventually found ourselves in a passage which rose to within 3 m of the surface, before opening up into a huge submerged cavern known as the Blue Abyss, due to the clarity of the water, where the floor of the cave dropped steeply away. Slowly descending we quickly found ourselves in 58 m,

with the cave closing down at around 63m, a quick look at the VR3 showed 18 minutes of stops, with deep stops at 31m, 19m and 12 m. Ascending to 31m, I completed the first deep stop, but realized that I’d dropped below 3rds and didn’t fancy the 30 minute swim out having completed all the deep stops, fortunately the Suunto was only showing stops at 3m, so I slowly ascended (upsetting the VR3) and stuck as low as possible through the entrance passage



so I didn't breach this deco ceiling. The swim back was pretty uneventful, apart from finding the bones of the unfortunate pets (no where near as bad as finding a dead Alsatian in a flooded quarry in north Wales), but I think I'd had my share of excitement for the day, I even got out with my third of gas left, not bad on twin 10's.

As for bad things coming in threes, I'm not so sure, later that afternoon I nearly got hit by a lightning bolt which struck a power line about 10 feet above my head – maybe the gods were just toying with me!

Vic

The Palmers BBQ



Nikki and Brian have kindly offered to hold a club BBQ out at Tollard Royal on the evening of Saturday the 3rd July 2010. Food and drink will be flowing, so I guess the Sunday dive will not be popular with those planning to attend. There's normally plenty of room to pitch tents or crash out. So let's hope it's good weather for the evening with an awful forecast for the Sunday. Please contact Nikki on 01725 516458 a month or so in advance to reserve a place /tent pitch, it should be a cracking evening, especially if Nikki hits the port!!!!

HOW TO...CLEAN BRASS

This page collects together useful knowledge and tips for the cleaning and preservation of brass items recovered from the sea. Most of the knowledge has been acquired through years of trial-and-error and experimentation.

Pre Treatment



Figure 1 Porthole after raising

Having raised your item from the seabed, the first job is to declare the item to the Receiver of Wreck in an attempt to establish ownership of the item. This step should be observed for all items raised from wreck. Items found lying on the seabed which are not obviously from a wreck need not be declared. Declaring an item will simply require you to fill in a form describing the object and the circumstances of its recovery. You will be contacted by the Receiver to acknowledge your droit with a few days, and will then have to wait until the ownership of the item has been established. This wait could be up to a year in length, so is an ideal opportunity to pre-soak your item in water as described in the 'Initial preparation' section below.

Initial Preparation

Having received legal title to the item, the next job is to soak your artefact in fresh water for as long as possible. This will allow the salts to soak out of the item and keep any marine growth from hardening too much. Ideally, brass should be soaked in decreasingly saline solutions for anything up to a couple of years before moving on to the next step.

Fine - That's the 'official' method, but in practise, I have found that skipping the 'soaking' stage doesn't affect the final result.

What is important during preparation is to carefully remove any marine growth that can be shifted without damaging the surface finish of the artefact. Also try to remove as much iron as possible, as this tends to neutralise the acid, shortening the life of your acid bath. I use a blunt screwdriver as a 'chisel' and pick away at the lumps of iron concretion without damaging the surface of the artefact. On portholes, pay particular attention to removing remains of the iron nuts, bolts and rivets, which were used to fasten the porthole. Also remove the remains of the iron deadlight and the deadlight hinge pin as well as the sealing gasket which sits between the porthole flange and the ships hull.

At this stage, you should obtain two containers big enough to hold your artefact. These should be capable of being filled with liquid to completely cover your artefact. Suggestions are: The base of a water butt, the base of a plastic chemical drum/barrel, cold water tank from your loft (don't use your current one!), central heating cistern etc.

It is important that the container is big enough to hold the artefact, but not too big that you'll need gallons of liquid to completely cover it.

It may be possible to dis-assemble your artefact to make it easier to deal with. A good example would be removing a porthole door from its backplate. Use a hammer and a punch to carefully remove the brass hinge pin, and loosen the dogs to free the door. This may have

to wait until the first couple of dips in the acid to loosen things up. It is important to remove any copper or lead items from your artefact, as these will result in an electrolytic reaction, resulting in the brass being copper or lead coated

You'll need some acid. I recommend getting hold of a gallon of 'Hiltons Spirit of Salts'. This is approx 30% diluted Hydrochloric Acid, and is about as strong as you can buy (it smokes when you remove the lid!) This needs to be diluted to about 10% before use. Alternatives (in order of affectiveness) are 'Brick Acid' (from builders merchant), patio cleaner, limescale remover, vinegar, Coca Cola.

You'll need some 'tools'. I recommend a scrubbing brush, nail brush and scotchbrite pads (green scoury pads for washing dishes). An old toothbrush is handy for small fiddly items.

The Acid treatment



Figure 3 Porthole in acid bath

Dilute your acid with tap water until it is approx 10% strength (always add the acid to the water, not water to acid). Hot water can be used which will greatly speed-up the cleaning process. Ensure that your acid bath is in a well-ventilated space before filling with enough diluted acid to completely cover the artefact. Add the artefact to the acid bath and stand back! It should bubble and foam, and give off poisonous fumes, which make you choke (burning your lungs away basically) - this is normal! It's at this time that you regret not doing this outdoors

as the smell of rotten eggs and the site of peeling wallpaper leaves a lot to be desired!



Figure 2 Port Hole after Acid Treatment

While this is going on, fill your second container with enough tap water to completely cover the artefact.

Rinsing

After about 10 minutes in the acid, pull your item from the acid bath (letting as much acid as possible drain back into the acid bath) and completely immerse in the water bath. You can use rubber gloves for this, or use a wooden 'stick' to hook your item. If you use your fingers, be sure to dip them in the water bath pronto :-)

Use the scrubbing brush and nail brush to scrub the artefact, removing as much of the loose material as you can. Don't worry about getting things shiny at this stage - there's a lot more work to do before we get to that stage. If possible, try to take as much of the artefact to bits as is possible.

Repeat Acid/Water cycles until the artefact shows no signs of 'fizzing' in the acid bath. Don't worry if it doesn't seem 'clean' yet. The acid is purely removing the calcium based deposits on the brass, and won't remove old paint, iron, gaskets etc. Don't leave your prize artefact in the acid for more than a day or so....or it will eventually dissolve!

Scrubbing

Having satisfied yourself the acid is doing no further good, remove your item from the water bath and drain it, replacing it with fresh tap water. At this stage it is possible to leave your artefact completely immersed in the water bath. Do not under any circumstances, leave it out in the open air, or partly immerse it in the water bath, Doing so will result in your prized artefact turning bright green and destroying the surface finish. Leaving it sticking out of the

acid bath or water bath will generate a green tide-line on the item, which is very hard to remove later. Break the artefact down into its constituent parts such as removing porthole hinge pins to separate doors from frames, remove dogs (turnbuckles) from their threads (it may be necessary to drill out a brass pin at the top of the thread which prevents the dog being fully unscrewed) Using the scotchbrite pad, scrub the artefact until it becomes a yellow shiny brass colour. This stage can take many hours. You'll get through a couple of pads on a single porthole. The scotchbrite is a mild abrasive and will lightly scratch any polished surfaces. You can use scotchbrite in conjunction with a cream cleaner such as jiff etc or use steel wool, brillo pads. Other options for cleaning at this stage are:

- Do nothing. Some items look better with a dull finish
- Use progressively finer pieces of wet-and-dry sandpaper to produce a mirror-like finish
- Use a wire brush in a drill to get the item cleaner. Beware - this is a harsh technique which will leave the item with a permanent 'brushed' finish
- Use a nylon brush in a drill to get the item cleaner. This is a less harsh technique than the wire brush, and the 'bushing' can be polished out with scotchbrite and brasso.
- Use a shot blaster/bead blaster. This can get the item very clean, very quickly, but will leave it with a permanent 'satin' type sheen which will dull over time giving a very dark appearance.

Final finish

Having 'cleaned' the item with scotchbrite etc, you'll be left with a technically 'clean' piece of brass which is brassy coloured but dull. For polished surfaces, I use a buffing wheel either attached to a bench grinder or a fast drill. Used in conjunction with progressively finer grades of buffing soap, mirrored finished can easily be achieved. Beware that some items look more 'authentic' without being buffed. To finish the item, I tend to use brasso (duraglit) to provide the final finish which will leave your item very shiny. Other options include using baking soda as a mild abrasive or cigarette ash mixed in petroleum gel (as a finishing compound) If you wish to retain this 'gleaming' finish, it will be necessary to lacquer the item before it tarnishes. My own tried and tested technique for this is:

Having polished the item with brasso, wash it with fairy liquid in the bath. Be sure to wash it thoroughly, as we need to remove all traces of polish etc. Rub the fairy liquid into all the cracks and crevices and ensure that all surfaces are washed. You'll be amazed at how much 'cleaner' the item gets at this stage.

Rinse the item in the bath or shower. Remove all traces of detergent. Be careful not to handle the item with bare hands at this time.

Dry the item with a clean towel. Do not handle the item with bare hands.

Quickly 'paint' the item with a good quality laquer. Only apply one coat and do it swiftly. The item will be dry within minutes and can be handled after an hour.

So far, none of my laquered items are showing any signs of tarnishing beneath the laquer. It does save having to polish them! If, on the other hand, you wish to 'tarnish' your item to provide that time-aged 'patina' look, spray it with a weak solution of vinegar and leave for a few hours before rinsing off in tap water.

Other tips

A useful tip for cleaning shell cases, is to avoid the use of acid, as this can leave slight 'water marks' on the surface of the brass which mar the final appearance on the shell case. Instead, put the shell case into the freezer for a couple of days. Boil enough water to fill the shell, then pour the boiling water into the shell case (having removed it from the freezer). The expansion and contraction of the brass case will result in most of the calcium growth/barnacles literally falling off before your eyes. Then clean it in the 'normal' manner using scotchbrite pads etc. Stubborn deposits can be removed by tapping them with a blunt item (plastic handle of screwdriver etc). As the case was polished when it went into the sea, most of the growth on the case should just fall off. Do be careful not to hit the detonator in the bottom of the case. It should be safe, having already been fired, but you never know!

Bring A Friend Diving

We all know a few people who dive, but not with the club. We frequently have spaces on the boat, so why not try and bring a friend along. With a bit of luck they'll like what they find and start diving with us regularly and god forbid even join the elite band of members. Each new member is equivalent to 6 bums on the boat and puts us in better shape for the next year.

Vic

Plea for Articles

Hopefully this issue will inspire some of you to make your own contributions, after all the quality of Waterspout is down to the contributors (irrespective of how hassled they've been thankfully). Rest assured, if you haven't had an article in this edition, I'll be after one for the next!

If you want to see one of your photos on the front of Waterspout or an article included (and even if you don't) please supply a photo or electronic copy or email Vic Cooper.

West Bay 2010



Diving – contact Paul Bluett

Saturday 28th August:

Barbecue on the campsite.

Provided by the social committee.

£8 per adult/ £4 per child

Please let us know on the Saturday morning if you want us to cater for you.

Sunday 29th August:

Dining at the Seagulls Restaurant. Places are relatively limited so please telephone Nikki on 01725 516458 as soon as possible if you wish to join us. Orders can be placed at the restaurant on the night.