

General Guidelines Covering all Dives

The following is a list of do's and don'ts for conducting dives:

- After a period of activity at the surface, such as kitting up, take a short rest in order to get your breathing and heart rate back under control prior to entering the water.
- During a decent, stop at 6 metres and perform a leak and general equipment check. This stop and check of a minute or so further allows the body to acclimatise to the new environment. Temperature and light level acclimatisation may take several minutes (up to 25 minutes for major light level change). However, this brief stop will allow the cardio-vascular system to return to near normal rates
- Make a slow descent without excess exercise. Either free-fall or use hand over hand techniques with shot lines in tidal areas. Finning down the line will use a lot of energy and produce CO₂ which in turn predisposes us to narcosis and a range of other problems
- Having reached the bottom take another brief period to adjust equipment and attain correct buoyancy. This stop further allows the body a chance to return to a near surface functioning state so that it operates to maximum efficiency
- During a dive, wherever possible use 'pull and glide' techniques rather than heavy finning (with suitable respect for the environment). Use of the arms reduces CO₂ generation and breathing stress
- If at any point during a dive a stressful situation arises – STOP! Take 3 deep breaths (focus on breathing out), think and act in that order. Try and prioritise problems. Say "I have gas, I can breathe". There is now no urgency to commence an ascent. If at the end of the planned time something happens which slows egress, providing bailout systems are (and they should be) carried there is now no need to panic. In any emergency situation put your mind back on the surface and ask yourself what you would do there in the same situation
- If the depth of the dive is known, carry a decompression schedule for the planned dive time and another schedule for the planned dive time plus 5 minutes
- If the depth is uncertain, carry a decompression schedule for assumed depth and planned time and another schedule for the assumed depth plus at least 3 metres and the same planned time

- For any dive, carry an additional schedule for the longest time and deepest depth assuming a decompression on bottom mix, based on the quantity of bottom mix gas carried
- Always plan for the deepest depth of the dive even if this portion is only 'a bounce'. If the wreck bottoms at 40 metres but most of the dive is at 38 metres, plan for 40 metres. Do this deep water section early on in the dive
- Avoid saw tooth profiles, especially in relatively shallow water
- Maintain ascent rates of 10 metres/minute or less. Even from deep water including micro bubble stops as required
- As with a no-stop dive were it is wise not to return directly to the surface it is also wise not to return directly to the first decompression stop. One or two minutes spent waiting 3 metres below the first stop are beneficial when considering tissue over pressurisation and will have no noticeable affect on the remaining decompression.
- Avoid unnecessary delays in deep-water on bottom mix, such as starting up a wall after a planned bottom time and taking excessive time to stop and look without modifying your decompression schedule. Micro bubble stops of one to three minutes are not seen as excessive delays
- Do not reduce stop time arbitrarily. Do not make assumptions on stop time reduction if using a non planned gas without first computing for the effects
- When reaching the first stop and if using a time device which works in whole minutes, wait until the minute has incremented and then start the timing at that stop
- If a stop involves a gas switch, start the stop timing after at least 3 to 4 breaths using the gas
- Maintain stop depth accuracy to +/- 0.5 meters, preferably in a horizontal position as this offers optimum comfort for long periods and helps maintain a centralised decompression level
- After completing the final stop ascend half way to the surface and stop for a further 2 to 5 minutes
- Whilst waiting for the boat to pick you up, stay on the highest available FO2
- Upon entering the boat after a long period of decompression, spend at least 5 minutes breathing your highest available FO2 on the surface

- Hydrate with non acidic drinks at least 12 hours before a planned extended decompression dive. Hydrate again prior to the dive and immediately afterwards
- Avoid alcohol, caffeine and decongestants prior to diving.
- Analyse all gas prior to diving
- Ensure all gases are properly and visibly labelled prior to diving. Maximum operating depth should be especially visible on decompression cylinders.
- Use 1.4 PO₂ on technical level exposure as a bottom mix, and 1.6 PO₂ as a maximum decompression mix.

It should be noted that decompression is not a finite science and although some of the mentioned procedures may appear precise in their nature, they are only offered as a practical guide of avoidance of DCI.

Further information on micro-bubble (Pyle) stops can be found on:

<http://www.bishopmuseum.org/research/treks/palautz97/deepstops.html>