

New underwater writing slate eases survey work

Many types of underwater recording devices have been developed over the years, but waterproof paper and a mounting board remain the most commonly used and reliable recording devices in marine surveys. Data-sheets can be photocopied onto waterproof paper and the diver simply needs to fill in the boxes while moving along underwater. Once completely filled, the sheet is taken out and replaced with a new one. But keeping the record sheet firmly on the mounting board is a challenge for surveyors.

Paper clips, rubber bands and masking tapes are used to hold record sheets in place; however this has not solved the problem of record sheets falling out due to broken rubber bands or falling paper clips when moving against even the slightest current. When handling additional equipment such as a measuring tape or an underwater camera, keeping the sheets in place can become difficult, time consuming and even risky, especially when a surveyor must try to catch loose pages on ascending from a deep dive.

A new underwater slate

A new underwater mounting slate combines waterproof paper and a writing slate in one unit. Originally developed by Kim Friedman, the new slate made of PVC foam (www.foamalite.ie) has two main parts, a mount and cover held together by hinges and a lock to open and close the slate to place and retrieve sheets. The lid is attached with a steel ruler, and a pencil and safety line are tethered to it. The PVC foam material provides an extra writing surface in addition to the record sheet for recording eventual additional information. Flexible and durable PVC material is easy to work with and hard to break in comparison to rigid boards. Despite the weight of hinges and screws the slate is positively buoyant – it stays afloat on the surface if accidentally dropped overboard, and if lost underwater it



Using the slate to measure sea cucumbers and record data during field work in Fiji (image: K. Pakoa).

ends up at the surface with record sheet intact, allowing recovery of data. The new slate uses one-sided A4 forms, such as the invertebrate record sheet. Several sheets can be held in the slate, but a maximum of three sheets is recommended for underwater recording.

Distribution

So far, the new slates have been provided to the Tonga Ministry of Fisheries, Marshall Islands Marine Resources Authority, Vanuatu Fisheries Department, Solomon Islands Ministry of Fisheries and Marine Resources, Tuvalu Ministry of Natural Resources, Samoa Ministry of Agriculture and Fisheries and Papua New Guinea National Fisheries Authority. More slates will be distributed this year to the Fiji Department of Fisheries and partner non-governmental organisations, the Cook Islands Ministry of Marine Resources and the Palau Bureau of Marine Resources. The slates are produced by SPC's Coastal Fisheries Science and Management Section under the European Union-funded Scientific Support for the Management of Coastal and Oceanic Fisheries in the Pacific Islands Region (SciCOFish) project.

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