New LearnFishID module developed for sea cucumber species

Sea cucumber species identification is a recurrent problem faced in the sea cucumber fishery. Colouration and form are the most commonly used features in identifying species, but some species have several different colouration patterns, and some can change their shape according to external factors such as induced stress or the topography of the bottom.

Sea cucumber species such as sandfish, golden sandfish, white teatfish, black teatfish, brown sandfish, curryfish, blackfish, surf redfish, stonefish, elephant trunkfish, tigerfish, chalkfish, peanut fish and lollyfish all display differences in colouration of their outer skin layer from young age to maturity, or according to habitat conditions and geographical locations, contributing to identification difficulties. And when they are gutted, boiled and roasted, then preserved through drying, smoking or freezing, they become very different from the live form, which creates another identification challenge. Many guidebooks, posters and identification cards have been produced to help with sea cucumber identification.[1] But most relate to the most common commercial species and do not include all the variations of colour and form that can be encountered in the field.

> ## For more information:
>
> *Franck Magron*
> *Reef Fisheries Information Manager, SPC*
> *(FranckM@spc.int)*
>
> *Kalo Pakoa*
> *Fisheries Scientist (Invertebrates)*
> *(KaloP@spc.int)*

LearnFishID sea cucumber module

The LearnFishID sea cucumber module is a Web-based species identification system that can be used to learn to identify 20 different tropical sea cucumber species. It is accessible from the SPC website at: http://www.spc.int/CoastalFisheries/learnfishid/main/seacucumbers.
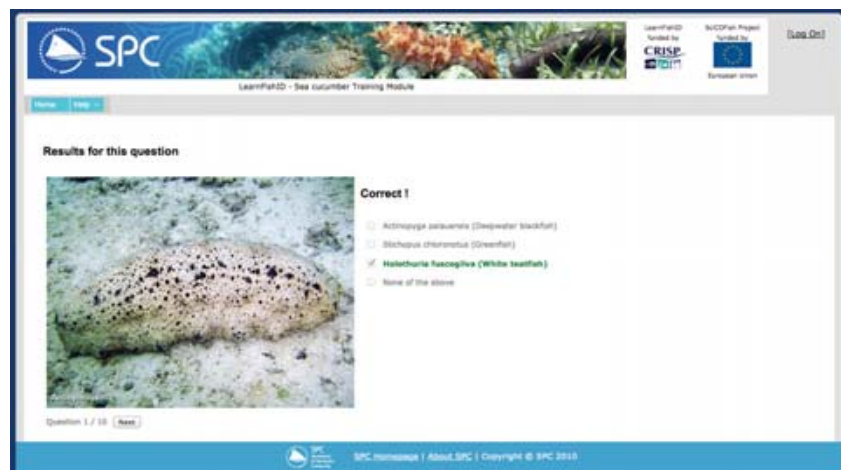
The module contains photographs of 28 species of sea cucumbers taken in 17 Pacific Island countries. The number of species was set at 28 based on the sea cucumber iconography that was available at SPC.

The module allows users to test their identification skills using pictures through multiple choice type questions. Three different skill levels are available — beginner, advanced and expert — allowing users to follow a progressive pattern in their learning. A score is given at the end of each session, enabling users to see how well or how poorly they perform with sea cucumber identification.

In the near future, the module will give the possibility for registered users to contribute photos, which will be verified by a panel of experts before being included in the database. Improvements in this module will depend on feedback from users and contributors.

So, please try it and let us know if this tool deserves to be further developed.

Adult white teatfish are easy to identify. Not all sea cucumber species are... give it a try at: www.spc.int/CoastalFisheries/learnfishid/main/seacucumbers

---

[1] See for example SPC's Pacific Island sea cucumber and beche-de-mer identification cards (available at: http://www.spc.int/DigitalLibrary/Doc/FAME/Manuals/Anon_04_ID_BDM.pdf)