

WHO CARES? HOW TO ENGAGE THE UNAWARE PUBLIC

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Abstract

Sapphire Coast Marine Discovery Centre (SCMDC) has taken on the challenge of engaging those people in the wider community who are unaware of issues facing the marine environment and has found that the best way to 'hook them' is through their children.

SCMDC provides hands-on, environmental educational programs that are different to school-based learning experiences. By educating school children about the importance of looking after the environment, they in turn help us to educate their parents. We know some people will never willingly participate in any engagement with organisations such as ours – and these are often the people that impact the environment negatively. We like to think 'outside the box' and sometimes the best way to approach these people is through their stomachs!

One of our newest projects involves showcasing the local oyster industry to primary and secondary students through a series of in-class visits and excursions. Local oyster growers donate their time and resources to provide an insight into the operation of this important local industry. Students learn about the biology of oysters, how oysters are grown, harvested and marketed, and how the activities of humans within the catchment can affect water quality in the estuary and ultimately the quality of the oyster itself. We are finding that an increasing number of parents are showing interest in this project.

Our other educational programs include visits to the rocky shore to experience life in the intertidal zone, tours of a local fish processing plant to learn about where our seafood comes from, fish dissections, snorkelling tours and more. All of our programs emphasize the importance of protecting, conserving and sustaining our unique marine environment and natural resources for the enjoyment of future generations.

Introduction

Many organisations struggle with how to engage the wider public, particularly regarding environmental issues. The Sapphire Coast Marine Discovery Centre (SCMDC) is no exception. Since our establishment in 2008, we have grappled with how to involve the wider community in marine environmental issues, particularly as the main industries in our town are timber and fishing and many locals are both cynical and suspicious about environmental messages. Often we find we are 'preaching to the converted', but to really make an impact, we need to 'reach the rest of them'. There are plenty of people in this world who just don't care about the environment and it is these people we hope to educate. In the few years that we have been in operation, we are starting to reach these

people, both through their children, and through their stomachs in a way we like to call 'education by stealth', that is teaching visitors without them realising they are learning.

The way to a man's heart

The old saying goes, 'the way to a man's heart, is through his stomach'. In our experience, we have found that an effective way of engaging the wider community is by talking about food. In our case, seafood.

One of our newest programs is titled 'Grow Your Own Oyster'. With funding from the Australian Government's 'Caring for our Country' and Oceanwatch Australia, the Southern Rivers Catchment Management Authority (SRCMA) has contracted the SCMDC to deliver this exciting educational project that showcases the local oyster industry. The three year project sees students from four local schools located within the Bega Valley Shire (two primary school classes and two secondary school classes) examine the oyster industry with the assistance of local oyster farmers, at absolutely no charge to the school. Students gain an insight into the workings of a local aquaculture industry including an overview of various cultivation methods, the entire farming process from oyster spat to market and the importance of monitoring and maintaining good water quality. Local oyster farmers generously donate their time, their expertise, their boats and even some of their oysters so that the students can learn more about this important local industry. It is also hoped the project might entice some young locals to explore a new career path!

The project consists of a series of class visits by a marine scientist/teacher and an oyster farmer, and excursions to local oyster leases. Similar concepts are covered in both the primary and secondary program and are aligned with science, marine studies and agriculture curricula.

The first visit to the classroom examines the biology of oysters. Internal anatomy, presented via a simple oyster building exercise for primary school students and an oyster dissection for secondary students. The second class visit looks at the various cultivation methods used to grow oysters, how these have changed over time (e.g. the shift from tarred wooden infrastructure to the more environmentally friendly recycled plastic gear) and the importance of aquaculture. The final class visit explores the process of harvesting and preparing oysters for sale.

The class visits are supplemented with excursions that allow students to examine oysters growing in situ. Students see the various cultivation methods up close via a tour of the estuary on an oyster punt. The excursions also allow classes to experience the day to day operations on an oyster farm and assist the farmers in processing their harvest.

The project is now in its second year and continues to grow. Feedback from the schools involved is positive and the teachers and classes are enthusiastic about participating each year. A growing number of parents are also coming along to the excursions with the primary school classes, eager to learn more about how oysters are grown, and perhaps even get a free sample!

Learning can be fun

We do not claim to have all the answers, but in our limited experience, we have found that some things work better than others. The feedback we receive from our visitors consistently praises our 'hands on' approach to education. This is achieved through a number of methods:

- Interactive educational displays that encourage visitors to touch and explore
- Holiday workshops with environmental and/or scientific concepts that include a take-home creation
- Outdoor education programs that see visitors immersing themselves in the local marine environment
- Educational experiences held outside the traditional classroom allow students/visitors an up-close look at local industry
- Bringing the sea to your school via our outreach programs
- Scientific presentations to the general community

Touching experiences

Within our centre, two of our most popular displays involve specimens that visitors can touch. The first is a small touch tank that is stocked with a small selection of local intertidal invertebrates. This display provides a representative sample of organisms likely to be encountered on a visit to a rocky shore. Visitors are supervised by a staff member whilst they are able to see an anemone retract its tentacles after being touched, or feel a sea star's many tube feet adhere to their hand.

Another interactive display, a beachcombing table, features an assortment of marine treasures that have been collected by local beachcombers. The display features examples of various shark egg cases, crustacean exoskeletons, sea dragon skeletons, seal skulls, whale baleen and more. Children and adults alike delight in the fact that they are welcome to pick up and touch everything, take a guess at what the specimens are, and then find out what is on the table and some additional information about the items.

Slime, fossils, marine mobiles and more

During school holidays, we offer indoor art, craft and science workshops for children. These sessions allow children to get 'messy' creating an artwork or experiment that they can take home. All of these workshops have a marine theme and an educational component. For example, children can make a pot of slime to take home whilst learning about the properties of wet sand and other non Newtonian fluids. Other workshops we have conducted in the past include:

- Marine fossil workshops where children make their own fossil whilst learning about how fossils are formed and what conditions are required for fossil formation
- Seaweed bath jelly workshops involve making a bubble bath gel using seaweed extract whilst learning about the amazing array of everyday products that we use and eat everyday that contain seaweed extract
- Deep diver workshops where children make their very own diver in a bottle whilst learning about how marine creatures and even SCUBA divers sink and float and about the effects of pressure at depth

We are continually revising and revamping these holiday activities. The goal in all of our workshops is to make marine science fun. Parents are required to attend these sessions with their children (for supervision and assistance), so in entertaining their kids, we're educating them too.

Up close and personal

Without doubt, our most popular educational program is our rocky shore ramble, where visitors are given a guided tour of a local rock platform with a marine scientist. We use our rock pooling adventures as a platform to educate participants on the amazing diversity of marine life, the important role they play within the marine environment, the possible effects of climate change on these and other marine organisms and the importance of protecting and conserving these marine habitats.

Similarly, our guided snorkel tours allow visitors to experience the wonders of the underwater world and observe a number of different aquatic habitats, each with their own unique organisms and physical attributes. Guided geology tours allow discussion of the impacts of climate change on sea level and other coastal management issues. Whenever we are conducting an outdoor education program, we are sure to remove any rubbish where we can safely do so, to spread the word about the issue of marine debris and its devastating effects on the marine environment.

Bringing the sea to schools

The SCMDC has recently developed an outreach educational program that can visit schools that are unable to visit the centre. This increasingly popular program allows students and teachers to learn more about the marine environment with the use of a mobile touch tank stocked with a selection of intertidal species (anemones, crabs, chitons, sea stars etc.) and an interesting array of dried specimens. The educational content can be varied depending on the age group but focusses on requirements of living organisms, classification, food chains and webs and adaptations of marine organisms. These programs can also be tailored to educate students about a specific coastal or marine topic such as marine pollution.

Annual Marine Science Forum

About to enter its fifth year, the SCMDC's annual Marine Science Forum presents marine science to the general public. Each year, six marine scientists are invited to attend and speak about their topic of expertise. In the past, speakers have presented on topics including oceanic circulation, the role of population genetics in marine conservation, the benefits of marine protected areas, and the use of fisheries science in managing fish stocks to name a few. The forum continues to grow each year and is the ideal platform for marine scientists to communicate their research findings to the general public. The most popular and attended talks are by those researchers that discuss how their research findings impact the general public. When asked about possible future topics, attendees continually request topics about local issues and topics that influence or impact their daily lives. For example, sea level rise, climate change and its impact on coastal development, fishing etc. To engage as much of the local community as we can, we encourage speakers to discuss why the local community should care about what they are doing.

Marine Discovery Centres Australia

There are a host of other centres that are engaging the general public in marine conservation. The SCMDC is one of a number of marine discovery centres located throughout Australia. Established in 2005, Marine Discovery Centres Australia (MDCA) is a collaborative group comprised of a number of marine discovery centres (MDCs). The centres are quite varied in terms of their management and organizational structure, with some being part of schools, some government-funded and others being community-based not for profit organisations. Despite these differences, all share a common goal, to use hands-on educational experiences to inform and inspire their visitors about marine and coastal environmental issues and conservation. The MDCs use a variety of educational programs and interactive displays to achieve this goal and many work with a number of agencies and organisations to deliver environmental messages.

For more information about MDCA, visit www.mdca.org.au

Conclusion

The SCMDC employs a number of strategies in an attempt to engage the wider community in marine environmental issues. The most effective strategies include engaging children through interactive displays and educational programs (and as a result, engage parents and even grandparents too) and discussing the effects of various marine conservation issues on the supply and quality of seafood, a popular choice amongst many diners. So often, the environmentally disengaged say "but why should I care?" By relating marine issues directly to something of value to them, such as their favourite fishing spot, or those local oysters that they can't get enough of, or their popular local beach, it is hoped that they will see that they should care.