

## ***ECO KOH TAO - ECO NEWSLETTER***

### ***What's Happening on Koh Tao***

#### ***Edition 7, February 2010***

#### **2010 NEW YEAR REPORT**

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**It has been a LONG time since I have sent out an update. With so much going on it is often hard to find the time to sit and pen thoughts and elaborate on initiatives as they transpire. I know many of you are interested in what is going on in the Eco World on Koh Tao and I apologise for a severe lack of correspondence.**

##### **1. Eco Koh Tao and Save Koh Tao – What's the Relationship?**

Many people often ask how we relate to the Save Koh Tao group and whether or not we work with them, whether we ARE them or whether we work in opposition to them. All very good questions.

Eco Koh Tao is an independent organization set up to try and instil better dive practices and management techniques for Koh Tao,. Working closely with Crystal Dive Resort, one of Koh Tao's biggest schools we feel we have a great influence on ever growing numbers of divers through this partnership.

Eco Koh Tao is one of the more active members of The Save Koh Tao community group that comprises both a Marine Conservation Branch and a land conservation branch. We are predominantly involved with the Marine Conservation side of the conservation work but help out on land conservation projects also.

Save Koh Tao develops and co-ordinates and maintains a number of conservation projects on the island and we take an active involvement in as many of these as we can. In isolation we also run a number of our own projects on Koh Tao that mirror what the Save Koh Tao Group does but albeit in a separate part of the island that is more accessible for us. This aids the marine conservation in two ways...

1. It helps to broaden the awareness of divers and the dive community by allowing us easier access to projects close to us and those with which we can more easily, actively get involved with and

2. It broadens the geographical base of conservation projects as the Save Koh Tao Group focuses a lot of its ongoing projects (EMP/Reef Check, Coral Nurseries, Artificial Reefs) on the south, east & south-east part of the island whereas a lot of our work focuses on the north & west parts.

So in summary it is best to say that Eco Koh Tao works alongside Save Koh Tao with similar aims and goals and the same overall desire, to preserve Koh Tao's natural resources for the benefit of all stakeholders – business owners, residents, visitors – all of whom rely on these natural resources for their own survival.

Hopefully you can join us sometime in our quest to preserve the magical island paradise that is Koh Tao and its surrounds.

## **2. Junkyard Reef – Artificial Reef for Everyone**

One of our major projects at Eco Koh Tao for 2009 was the establishment of an in-house reef adjacent to the dive school in Mae Haad. It was started by a dedicated band of divers in February using nothing but some old household appliances and furniture, a bit of cement and a beach to provide the sand moulds for our bases.

Over the course of a few days objects were designed and developed and using the extensive logistical expertise of a longtail boat and a bit of rope we hauled the structures about 300 metres off shore and sunk them in 10 metres of water.

Shelving, televisions, chairs and tables, standing fans all provided the focus of what became known as Junkyard Reef. We developed our own prototype buoy line and anchoring system for the site so that we could moor up our boats and use it for our dive schedules.

Over the past 12 months the site has developed a little ecology of its own as organisms have moved into this new 'real estate' and started to create a working ecosystem. Fish were the first to move in and we've watch many grow and develop, especially a very small harlequin sweetlips that is now a fully fledged 'teenager'. Invertebrates weren't too far behind but the biggest surprise has been the natural recruitment of some hard corals to the site.

To aid coral recruitment we have also developed a couple of different methods of simple mid-water coral nurseries in which the corals have grown extremely well. Some of the 'baby' corals have developed from fragments found in the surrounding area. Others have been picked up from nearby reefs where nets and other fishing gear had killed much marine life but also broken some of the corals. These fragments were transplanted to our nursery site have developed very well.

None of this work would have been possible without the help of numerous divemasters, divemaster trainees, instructors and other volunteers helping to develop and expand the site into what it is today. The site has been used for recreational dives, Advanced Open Water course dives, Open Water course dives, night dives and has been dived by many from the beach as it provides an interesting and readily accessible site.

In 2010 we hope to develop Junkyard Reef in many ways:

- expanding the physical structure of the site
- transplanting our grown corals from the nurseries to these structures
- developing new coral nurseries

- improving monitoring techniques over those nurseries
- Improving monitoring of fish and invertebrates for the site
- Using it more regularly for entry level divers and courses with limited objectives requiring extensive natural reef environments

So hopefully you can join us on your next visit and help to develop your own piece of history.

For images see [www.ecokohtao.com/proart.html](http://www.ecokohtao.com/proart.html)

### **3. Major Project 2009 – Buoyancy World**

The Save Koh Tao Group's major project for 2009 was the development of an artificial reef structure called Buoyancy World. The concept design was an idea from Eco Koh Tao's founder and was voted on by attending members way back in March 2009.

We all know that buoyancy is one of the most crucial skills for divers to master if we are going to protect the environment. We also know that, and you only have to look around sites like White Rock and Twins when doing your safety stop, the amount of damage caused by divers with poor buoyancy, often beginners.

So along the lines of theme parks or amusement parks around the world the idea as suggested to build a new dive site that could become Buoyancy World, an artificial location of enough interest to attract entry level divers away from some of our natural sights.

The **aim or objective** was to construct a series of objects on land and submerge them to make an interesting, fun dive site where 'new divers' could be taken to practice their skills before being taken to our 'nice' or 'good' natural sites that are currently being well overused. It will also double as a research site for the propagation of coral nurseries.

To this end a number of dive schools including Eco Koh Tao and Crystal Dive after much planning came together to construct a variety of objects to be sunk to create this new site. Anemones with clownfish, an Octopus, a tree and a bamboo forest were among some of the ideas developed and are now awaiting deployment.

The location for the site (near Twins) has been chosen to allow dive boats to still visit that natural site and the hope is that a percentage of the divers on that boat will actually go to the artificial site for some if not all of their dive. In this way we can reduce the pressure on a natural site that is receiving far too many divers.

As of the beginning of February 2010 the structures are still on land awaiting deployment which will hopefully take place in the coming weeks. The site will quickly become a popular destination and well worth a visit when diving Koh Tao.

### **4. Eco Koh Tao and Crystal Dive Staff Training**

Having environmentally concerned and educated divers can only come from having environmentally aware and educated dive leaders. To this end Eco Koh Tao has teamed up with Crystal Dive to provide Koh Tao EMP (Ecological Monitoring Program) and Reef Check training to all its staff and will become a prerequisite of employment at these organizations in the future.

Changes need to be made to the way we interact with the natural environment. This is obvious to informed stakeholders but not so to the average member of the community. Especially in a place like Koh Tao where the entire community relies on the business brought in by the local reefs. To protect these resources people need to understand the issues and believe that change is possible and this comes from the leaders themselves.

## **5. Giant Clam Nursery**

In March 2009, Save Koh Tao received 1000 juvenile giant clams and we put them down in 10 cages in Ao Leuk on the islands east side. This project is part of a larger program to restore the populations of ecologically important giant clam species which have been depleted due to over extraction and human activities. The goal of the project is to allow the juvenile clams to mature in a predator free, but natural, environment and then transplanted out onto the reef when they become more mature.

It was anticipated that not all the clams would survive in any project dealing with juveniles due to several factors – predation, disturbance events, disease and natural attrition. Mortality rate was high in the beginning but levelled off once they had established themselves.

In 2010 we will receive more juvenile clams and hope to be able to improve on the survival rates of this important species.

## **6. Save Koh Tao Back in Action for 2010**

Our monsoon months are often a time for rest, reflection and recuperation after a busy year. Save Koh Tao takes an extended break and we limit our activities similarly.

But the year is well and truly upon us. Who can believe a month of the new year has already disappeared. Save Koh Tao kicked off the new year with its first meeting on January 15 to discuss how things went last year and initiatives for the new year.

### **2008 – 2009 Summary of the current projects from the past 2 years**

- **Land/Underwater clean-ups**
- **Giant Clams** – we will be getting another 1,000 giant clams and 10 more cages donated to us in 2010.
- **Hin Fai – Koh Tao Biorock**
- **Buoyancy World**-we hope to put Buoyancy World into the water the 1st week of February.
- **Mooring Buoys** – we have 3 more of the Shallow reef marker lines with the yellow buoys already tied on and will be installing more in 2010
- **Island Zoning** – The creation of an Island zoning and management report is being undertaken by Dr. Anond, Dr. Sukanan, Dr. Orapan, and others.
- **Sea Turtles Nursery/head-starting program** – The turtles that hatched in Laem Tien last fall are being watched over in Chumporn and will return to Koh Tao for the festival to be released.
- **Ecological Monitoring Program** – Reef Check Ecodiver
- **Tanote Bay Erosion Control**

## **New Projects for 2010**

- **Coral Spawning and Recruitment Study and Coral Larvae Culturing Project** with Dr. James True of Prince of Songkla University.
- **Mooring Buoy Sand Anchor Construction and Installation** together with the Department of Marine and Coastal Resources.
- **Remote Sensing of Sea Water Temperature, Coral recruitment monitoring** with Mohidol University
- **Circum-Island Trawling Protection Devices** to deter illegal fishing.
- **Mid-Water Coral Nursery construction and installation** near the islands most threatened dive sites.
- A second **Giant Clam Nursery** site
- Installation of a **Wreck Dive Structure**

Save Koh Tao's Marine Branch meets on the 5<sup>th</sup> of every month at 7pm at the government offices in Chalok Baan Khao and all are welcome.

For more information log onto [www.marineconservationkohtao.com](http://www.marineconservationkohtao.com)

## **7. Movie of the Month: The End of the Line – Overfishing & its effects**

Every year more and more documentaries are produced that help raise awareness about the plight of our planet and what we are doing to it. Anyone with marine conservation in mind might be interested in our current selection.

### **The end of seafood by 2048**

Imagine an ocean without fish. Imagine your meals without seafood. Imagine the global consequences. This is the future if we do not stop, think and act.

The End of the Line is the first major feature documentary film revealing the impact of overfishing on our oceans

Scientists predict that if we continue fishing as we are now, we will see the end of most seafood by 2048. The End of the Line chronicles how demand for cod off the coast of Newfoundland in the early 1990s led to the decimation of the most abundant cod population in the world, how hi-tech fishing vessels leave no escape routes for fish populations and how farmed fish as a solution is a myth. The film lays the responsibility squarely on consumers who innocently buy endangered fish, politicians who ignore the advice and pleas of scientists, fishermen who break quotas and fish illegally, and the global fishing industry that is slow to react to an impending disaster.

The End of the Line points to solutions that are simple and doable, but political will and activism are crucial to solve this international problem.

We need to control fishing by reducing the number of fishing boats across the world, protect large areas of the ocean through a network of marine reserves off limits to fishing, and educate consumers that they have a choice by purchasing fish from independently certified sustainable fisheries.

The End of the Line - <http://endoftheline.com/>

## **8. Reef Check Thailand and Eco-Tourism**

**THE ECO-WAR IS still raging along the Southern Andaman coast.**

While Phuket clings to the idea of maintaining its unspoilt natural splendour, and its 'paradise' badge, environmentalists despair at the ever-increasing tourist machine spoiling the landscape.

Kim Obermeyer and his team of 11 eco-warriors have set up a base camp and an eco-lodge on Koh Ra Island in Phang Nga province, just north of Phuket. The 39-year-old country co-ordinator for the Reef Check coral reef conservation group, said Thailand needed an alternative option to the 'over supply of high-impact mass tourism'.

"We offer tourists the opportunity to get up close and personal with nature," he said. Guests stay in one of 18 wooden-stilted guest houses in the compound with only a single diesel generator providing electricity each night between 6 and 11pm to compliment the power produced by a battery of solar panels.

Koh Ra is two-hour drive from Phuket and a 30 minute long tail boat ride from the Kuraburi Pier. The island, which was a Japanese outpost during World War II, is covered in evergreen jungles, orchids and butterflies.

More than 60 rai of jungle blankets a 15-kilometre stretch which is home to giant hornbills, scaly anteaters, leopard cats, binturong (a rare bearcat), barking deer, gliding gekko's, flying lizards, and purple hermit crabs.

Mr Obermeyer is waiting for the National Park Committee to grant the island National Park status. If Koh Ra gets the go ahead, the eco-lodge will serve a vital role in assisting managing the National Park, and will help will help monitor the coral reef, with jungle surveying, mapping and solar energy initiatives.

The eco-lodge is financially self-sustainable and was booked out over Christmas and the New Year. "The progress of the lodge is outstanding," he said.

"The solar panels are working and we have completed a number of projects with people from the local communities." The land where the eco-lodge now stands was once home to more than 200 sea gypsies, who foraged for food in the fertile jungles, which are rich in fruit and home to hundred-year-old mango trees.

Today, there are only about 20 villagers left. "We take small groups there to meet the remaining villagers and learn about their lifestyle, we help with projects and hike with their guides in the jungle to learn about traditional uses for wild plants," said Mr Obermeyer.

The eco-warriors have forged a close relationship with the villagers and are currently building them a better well to improve their supply of fresh water. The eco-warriors have initiated a series of coral reef and jungle ecology and conservation projects and are looking for more 'volun-tourists' to help them.

American wildlife biologist, Jarrod Raithel and his wife Heather are teaching the local community about wildlife conservation. The team has planted a vegetable gardens, and set up a chicken farm so villagers are less dependent on 'jungle meat', or rare bird life found in the jungles of Koh Ra.

Mr Obermeyer said that long term source of income was needed to create an effective eco-lodge that provided successful conservation management. “Self-sustenance is the key here, and we don’t have time to wait years while we write grant proposals to donors,” he said. Mr Obermeyer said the ‘volun-tourists’, were the financial foundations of the project and its ongoing success. “We also collaborate with several Thai universities including Chulalongkorn, Kasetsart and Ramkhamhaeng,” he said.

“The Universities use our findings in their reports to the National Parks office.”

For information on how to get involved at the eco-lodge visit [www.thaiecolodge.com](http://www.thaiecolodge.com), or e-mail [info@thaiecolodge.com](mailto:info@thaiecolodge.com)

For more information:

[www.reefcheck.org](http://www.reefcheck.org) and [www.thaiecolodge.com](http://www.thaiecolodge.com)

**Ecodiver Course Dates** – Monthly Usually around Full Moon time

## **9. Join us on Facebook**

If you haven’t done so already please join us at:  
Save Our Coral Reefs... sign up NOW!

[Eco Koh Tao's Facebook Page](#)

## **10. CONTACT US**

If you are interested in getting involved in any of our activities, courses, clean ups, or you have a friend who might be interested, or you simply have some advice or suggestions please feel free to email us at [nath@ecokohtao.com](mailto:nath@ecokohtao.com) or phone Nathan on 0875908548 for more info.

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