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2 - The Havelock North Village Press,Thursday March 23, 2000

Reef balls, a positive payback

" As the reef balls attract marine growth they end up looking really good"

A Group of Napier people has sought and gained permission from the Hawkets Bay Regional Council to conduct a six month reef ball trial in the water from Westshore to Bayview, between the beacons. Effectively designed to mimic a natural reef; the concrete reef balls are increasingly being used around the world to salvage imperiled reefs and while artificial reefs can't eradicate the causes of reef destruction, they can help to restore the balance of the reef system by creating new habitats for marine populations. We spoke to Dave Head who, with half a dozen others, has registered the company Reefball NZ Ltd, and he says the idea of reef balls is really starting to take off in this country with a team from Waikato University building an artificial reef at Mount Maunganui as a research experiment and interest being shown by other groups throughout New Zealand. So what are reef balls exactly and why are they gaining so many fans in the marine world.

Firstly, we have to say that artificial reefs are not an entirely new concept. For years people have been creating reefs from tyres, sunken ships, old cars, concrete culverts and assorted rubble. But these can often do more harm than good through leaching harmful chemicals into the ocean, and damaging natural reefs when currents dislodge these objects and toss them around the sea floor. Reef balls, on the other hand, are ecologically friendly things made from stable, non-toxic concrete with a textured surface and nooks and crannies for marine life.

"There are six or eight different reef ball moulds available according to the marine life you wish to encourage in an area. As most of the weight is concentrated in the base of the ball, it sits on the sea floor without moving even in turbulent seas," explains Dave "A lot of natural coral reefs were history when a force 10 hurricane in Jamaica but reef balls were not affected because they are designed to stay put."

Crayfish holes

There are many reasons why natural reefs have been destroyed around the world - run-off from silt into the sea, build-up of agricultural effluent, spray and fertilizer run-off, over-zealous dredging and exploitative fishing practices etc. but the beauty of the reef balls is their ability to bring life back into a damaged area. A reef ball can be specially configured to suit the local neighborhood holes underneath for crayfish to shelter, special holes if moray eels are in the area, small holes for wee fish. It all depends on what sort of life you want to encourage and while the Napier group will initially concentrate on smaller reef balls (3-4tt diameter) until they build up their skills in making the structures, later on they hope to build up reefs with a multitude of sizes of balls.

Gaining momentum

The idea for reef balls came from Florida diver Todd Barber and his company The Reef Ball Development Group has "planted" more than 10O,OOO of the balls around the globe in the last seven years, although they have been creating and placing artificial reefs since the 1970s. In one trial in the States, a reef ball was found to have more life on it after one year than a concrete culvert that had been placed on the sea bed 10 years prior and the balls are approved by environmental regulatory authorities throughout the States and in many other parts of the world.

A good example of how artificial reefs are working in Australia is on the Great Barrier Reef Artificial snorkeling trails are diverting divers from fragile natural reef systems by providing a new destination for sightseeing snorkelers. Because coral grows so painfully slowly (an inch in 15 years) the Great Barrier Reef cannot afford (in terms of ecological sustainability) to allow divers to continually damage the coral by knocking the tips off it.

"As the reef balls attract marine growth, they end up looking really good after a while and you can even specially sculpture them into shapes to mimic the natural environment," explains Dave who also suggests that they could be used under jetties and wharves around the Ahuriri area to boost dispirited youngsters who hover at the wharves edge desperately trying to hook a spotty...

Positive paybacks

So why haven't they taken off in New Zealand yet?

"It is hard to actually get permission in this **country to put the things in the** water. The laws in this country do not take into account positive paybacks for the environment; they are so focused on the negatives," proffers Dave. '"The Ministry for the Environment has spent in the vicinity of $24 million dollars since 1994 on sustainable management stuff and some of their recommendations have been for the most nebulous things! Yet reef balls are such a simple, cost-effective way of giving something back to the ocean."

After extensive consultation with local Maori, Dave says the tangata whenua have given their "blessing' to have some reef balls put in the water in Napier and as the Port was one of their earliest traditional gathering areas, they're keen to see more fish return to the area. The depletion of in-shore fisheries (within 1 km of the shore) is a prime area to re-establish marine life and Dave is keen to get started.

"The educational component of the Reef Ball Group is also vital. I'd like to see kids getting involved in making their own reef balls to make them more aware of the plight of the sea and service groups in the Bay could get behind the project by helping to finance materials, for example," says Dave who is keen to see community-based reef ball projects get off the ground.

And here's a novel idea for you - in America there is an offshoot to the Reef Ball Development Group called Eternal Reef's whereby you could have your cremated remains incorporated into a reef ball and implanted into an artificial reef. One man said "I can think of nothing better than having all that (marine) action going on around me all the time after I am gone - just make sure that the location has plenty of snapper and grouper!"

If you would like to find out more about reef balls and their potential in the Bay, you can contact Dave Head on 835 2111 or **dghead(@hotmail.com** or Dave Allison on 835 5691 or e-rnail d_allison@clear.net.nz.

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