

A SUIT THAT DEFIES THE COLD

Inventor Chris Lyons aims to revolutionise the surfing and diving industries with his heated wetsuit! The lightweight suit features miniature waterproof heaters inserted into recessed pockets and activated at the push of a button. Chris says the unique non-toxic liquid packs heat to 54 degrees celsius within seconds and allow the user to spend up to 90 minutes longer in the water. The heaters can be re-used simply by boiling them in hot water and last five years. Chris, 33, spent hundreds of hours testing his invention in some of Victoria's worst weather conditions along the rugged southern Australian coast. "It was verging on intolerable at times, but there was no other way to experiment with the various prototypes," he said. "The result is a suit that will allow surfers and

divers to spend more time in the water more often and be comfortable throughout... not only are the mini-heaters totally safe, but the suits are functional, flexible and affordable. They do away with the need of having a wetsuit for summer and another for winter."

The packs contain food grade salt called sodium acetate and water, which react when small external buttons are pushed, forcing molecules to convert to a solid state. As the concentrate solidifies, the temperature jumps. The heaters are placed in protective pockets across the lower back and under the arms and can be activated simultaneously or in pairs. The solid concentrate can be melted back to liquid

and re-used "as many times as you can freeze and melt water", according to Chris. Weighing 160 grams each and less than 1.2 centimetres thick, they are contoured into high quality, super stretch neoprene full length suits.

Chris says he decided to "think outside the square" of traditional cold water wetsuits and dry suit systems. "Conventional suits are designed to trap water close to the body, and heat this water using the body. The Hotsuits use chemical reaction mini-packs to instantly heat the upper core, then generate blood flow to warm the rest of the body. The heaters can be activated as soon as you enter the water, or at any time, so you can enjoy the waves or diving conditions without worrying about getting cold. When the packs cool, you can go back to the beach or boat, slip in replacements and return to the water".

For further information, phone Chris Lyons on 0417 520 052 or log onto www.hotsuits.com.au



REEF CHECK TAKES SCUBA TO THE NEXT LEVEL

Reef Check, an international non-profit organisation, is the United Nations' official community-based coral reef program working in over 60 countries around the world. Their mission is to monitor the health of the world's coral reefs, educate the public about coral reefs and empower local communities to conserve them. Reef Check in Australia is headquartered in Townsville, Queensland, on the doorstep of Australia's Great Barrier Reef. It partners with leading Australian marine research organisations, leading tourism companies and dive operations, universities, Government,



local and international volunteers and a variety of other businesses and organisations.

Reef Check Australia's course teaches how coral reefs function, what they need to stay healthy and how you can join marine scientists and survey them. Trainees get the chance to join free-of-charge Reef Check expeditions on the Great Barrier Reef. As Reef Check is active in over 60 countries, you can also join Reef Check teams around the globe!

Module 1 Coral Health (Full-time), Module 2 Video Surveys (Part-time), Module 3 Fish Surveys (Part-time).

Entry requirements: Advanced dive qualification (course entry)

Rescue dive qualification (expedition research entry), First Aid and CPR, 50+ dives

*Full time courses are 5 days per week, part time are 2 evenings and 1 weekend day.

For more information contact (07) 4724 395

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FIREWIRE

AIRPORT SECURITY SURPRISED BY FIND
A WOMAN WAS ARRESTED AFTER MELBOURNE CUSTOMS OFFICIALS DISCOVERED 51 LIVE TROPICAL FISH HIDDEN UNDER HER SKIRT. A SOURCE REPORTED THAT WHERE SHE HID THE FISHES' FOOD DEFIED BELIEF.
Bruce Masterson, Melbourne Sunday Age, 12 June.

MATERNAL INSOMNIA A US/Russian research team has discovered that when whale and dolphin mothers give birth, they don't all sleep for a month to keep up with their insomniac newborns. According to research published in Nature, killer whale mothers gave up their regular five to eight hours' sleep a day completely when supervising their new offspring who swam continuously for about a month without resting. Dolphins exhibited similar behaviour. The scientists speculated that it may indicate a capacity for other mammals, including humans, to cope without sleep.
Weekend Australian, 9-10 July

TAKING HOLIDAYS FOR A GOOD CAUSE

Lindblad Expeditions: These small cruise ships go everywhere from Antarctica to the Galapagos. When a traveller donates \$250 or more to a cause like the Galapagos Conservation Fund, they receive a \$250 travel voucher toward a future trip. **Habitat For Humanity:** Participants in Habitat's Global Village programs spend one to three weeks helping build houses for needy families in any of 60 countries - including Mozambique, Ireland, Samoa, New Zealand, Guyana, and the USA.

Wildland Adventures: This outfit has developed a sort of cross-cultural exchange program with the nomadic Masai in East Africa. The Africans receive direct benefits from tourism and guests are exposed to the tribe's culture. **Mountain Travel Sobek:** This adventure trip organiser works with grass-roots outfits to boost the local economies in countries like India and Sri Lanka. In China it works with the Nature Conservancy by training locals to be Yangtze River guides.