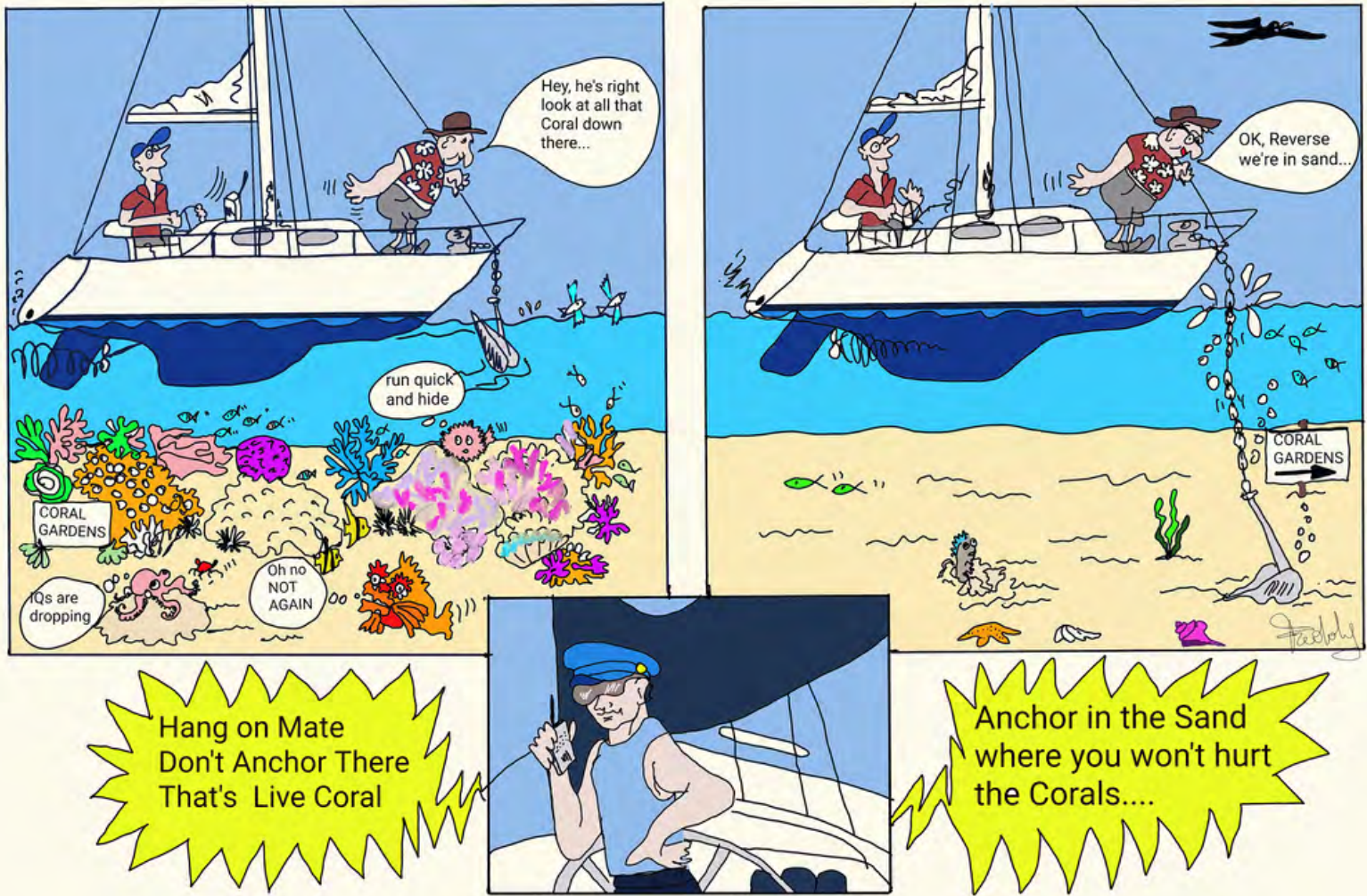


# C.A.R.E.

## Code of Anchoring in Reef Environments.



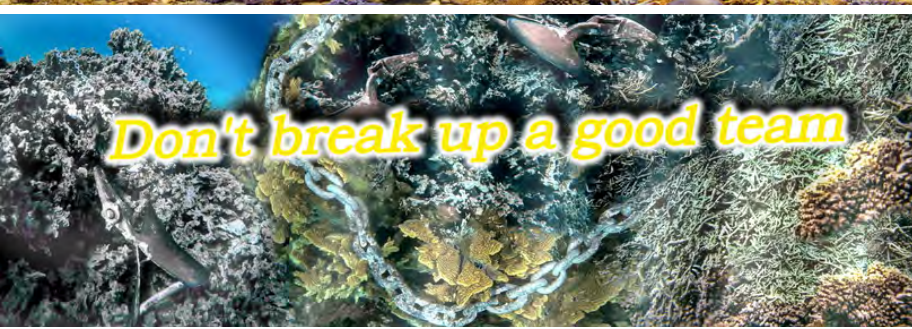
### DO YOUR PART, SAVE CORAL REEFS FROM CARELESS DESTRUCTION.

Coral reefs are one of nature's grandest examples of teamwork. Thousands of species of marine life work together to build the largest living structures in the world. Many of these beautiful communities represent millions of years of continuous growth. Around the world, coral reefs are endangered; climate change, overfishing, reef bashing, shell collecting, dynamite fishing, bleach and pesticide poisoning, siltation, agricultural chemical run-off, sewage contamination, and crown-of-thorns starfish epidemics all contribute to this unhappy state of affairs.

#### *Nature's Teamwork Creates Coral Reefs*



#### *Don't break up a good team*



**THE REEFS HAVE  
PLENTY OF  
TROUBLE ALREADY,  
SO HELP THEM  
OUT...**

**ANCHOR IN THE  
SAND, NOT IN THE**

# C.A.R.E.

Code of Anchoring in Reef Environments.



If you took the family to visit a botanical garden, you would not park your car in the flower beds.

Living coral gardens are as delicate as flower beds and take hundreds or even thousands of years to grow.

Be sure not to park your anchor in the coral gardens.



## ANCHORS AND ANCHOR CHAINS WRECK FRAGILE CORAL GARDENS.

Branching corals get smashed by anchors and anchor chains. More massive corals get turned over, abraded or broken. Coral has a thin, delicate tissue covering the outer portion of the hard crystal skeleton, and it can be torn with the slightest touch.

Even minor abrasions, like brushing against them or walking on the live corals or dropping a dinghy anchor on them, can cause an infection able to kill the entire coral colony. In popular tourism areas, even large coral heads, often hundreds of years old, have died from infections when repeatedly injured by snorkelers standing on them.

Careless captains have already destroyed countless coral gardens everywhere in the tropics by dropping their anchors in the coral or allowing their chain to drag over the corals as the yacht moves back and forth with changes in the wind and tides.

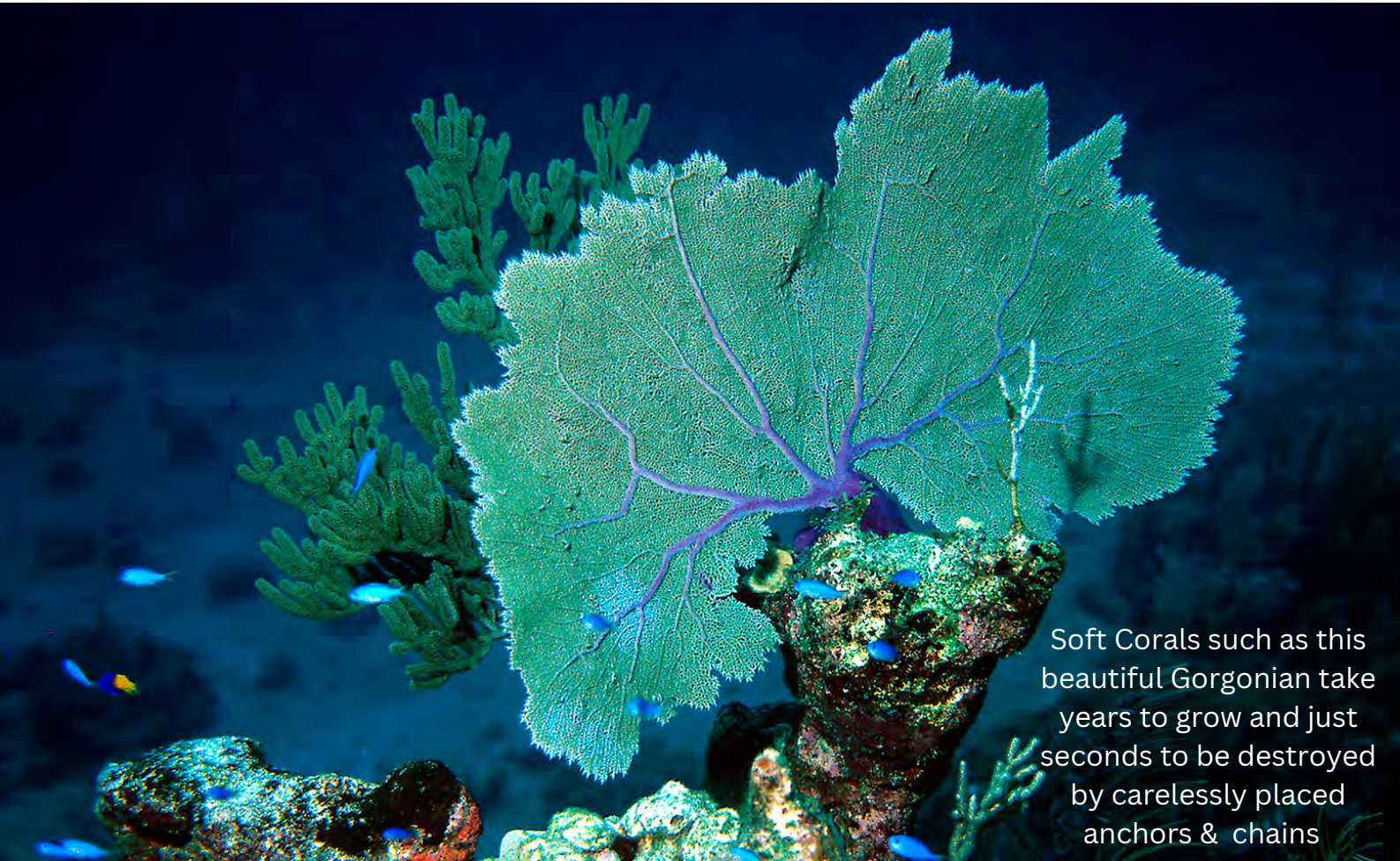
# C.A.R.E.

Code of Anchoring in Reef Environments.

## EACH ANCHOR MAKES A DIFFERENCE.

Looking at a seascape of coral reefs, it's hard to imagine how one anchor could do much damage. But good places to anchor are few and far between, and there are many anchors.

Anchor and chain damage - month after month, year after year - destroys reefs much faster than the coral can regrow.



Soft Corals such as this beautiful Gorgonian take years to grow and just seconds to be destroyed by carelessly placed anchors & chains



**Join with boaters who love the sea.**

**Show your seamanship; anchor with C.A.R.E.**

**In the sand, not in the coral.**



# C.A.R.E.

## Code of Anchoring in Reef Environments.

### HOW TO ANCHOR IN THE SAND.



- Carry the right gear.
- Carry enough chain or chain and line to anchor in 30 meters (100 feet). A good windlass is essential for larger boats.
- A recording depth sounder will help you find sand areas to anchor in deeper water when there are no sandy areas in shallow water.
- Look before you drop the hook.

**Always arrive in an anchorage with plenty of daylight** so you can locate a safe, sandy place to drop the hook. In shallow water, you can usually see the sandy areas. Dark patches can be coral or seagrass. Experienced captains plan to arrive before 15:00 (3PM) when the sun is high, and it's easier to see the reefs. **Polaroid sunglasses are a must to cut down surface reflection.**

Normal View



Polaroid Sunglasses View

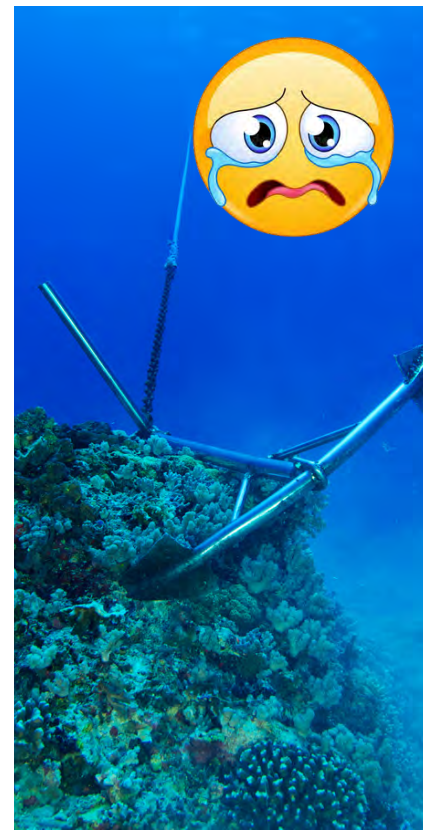


Drop the anchor when the bow is over a sandy area large enough so the chain will be in the sand even when the boat swings with the wind or tide. **The chain can cause as much damage as anchors.**

If you can't see the bottom, **a recording depth sounder will show you where there is no coral.** A sand or mud bottom shows as a flat, smooth line on the sounder.

**If you don't have a recording depth sounder,** lower the anchor until it just touches the bottom and feels the chain or anchor line as the boat drifts back. **If it "grumbles," it's in coral.** Lift it clear of the bottom right away and let the boat drift a little, then try again. When the anchor is in mud or sand there is no vibrating grumble on the anchor chain.

**Ease out the anchor if it gets into coral.** If the chain begins to grumble after you anchor, take the hint. Motor up over the anchor, lift it out of the coral and move. Anchoring in the coral all day or all night keeps on doing damage as the boat drags the chain back and forth through the coral.



# C.A.R.E.

## Code of Anchoring in Reef Environments.

### DO YOUR PART, EVERYONE SHOULD C.A.R.E.

#### SUGGESTIONS TO SPREAD THE C.A.R.E.

- Post comments and images on social media and mention the Code of Anchoring in Reef Environments. Add comments like, “This is a great anchorage. The coral gardens are beautiful here. We always anchor in the sand or use the available moorings; if you come here, you should too!”
- If you talk with your friends on the VHF and invite them to anchor near you add comments like, “The coral gardens are magnificent, be sure to anchor in the sand so you don’t damage them.” Or, “You’ll have to anchor deep because the shallow water is full of live corals.” Others will hear your comments on the radio and think about their own anchoring habits.
- Inform Boat Charter Agencies: If you charter a boat in a coral reef area and the company briefing does not include the Code of Anchoring in Reef Environments, tell them it’s important to add it to their briefing. It won’t help a charter business of the tourist industry to have coral gardens near the best anchorages damaged or destroyed.
- Help other boaters: If you see another boat looking for a spot to anchor, help out. Give suggestions like, “Hey, it’s good over there in that sandy area.” Or “That’s not a good spot to anchor; that’s a lovely coral garden.”
- Help the corals: If someone has already anchored in the coral garden, drop by and nicely explain coral is a living creature and very delicate. Anchors and anchor chains really do much harm. Most boaters respond well, weigh anchor and relocate.

### BE SAFE, ANCHOR WITH C.A.R.E.



Modern anchors like this Rocna are designed for soft bottoms.

# C.A.R.E.

## Code of Anchoring in Reef Environments.

### **ANCHORING IN CORAL IS ALSO A BAD IDEA FOR YOUR VESSEL'S SAFETY.**

The holding power of anchors is measured when they are set in sand or mud. Fine, delicate corals crumble and clog the anchor flukes. If the wind changes or picks up, the yacht can and probably will drag; a recipe for disaster if the wind changes to offshore.

Big massive corals can trap an anchor, and chains wrap around and partly under them, making it difficult or impossible to retrieve the anchor without diving on it. That can be disastrous if the wind is up and there are waves. Many captains have had to jettison their anchor and all their chain after their anchors were trapped solidly in massive coral heads.

**The Rocket Cruising Guides to New Caledonia ([cruising-newcaledonia.com](http://cruising-newcaledonia.com)) and Vanuatu ([cruising-vanuatu.com](http://cruising-vanuatu.com))** provide exact GPS coordinates for 390 anchorages throughout both countries and every one of them is in the sand. During our surveys, we found potential anchorages where there was no suitable sand areas and we did not include these in the guide.

### **RESTRICTED ANCHORAGES**

Some coral reef areas are restricted, and unauthorized vessels may not enter or anchor. Violations could result in hefty fines. Be sure to inquire with the proper authority before entering into a new anchorage.

**[The Great Barrier Reef Marine Park Authority](#)** and the Queensland Department of Environment and Heritage provide **[zoning maps and important information](#)** about boating in the Great Barrier Reef Marine Park.

Elizabeth and Middleton Reefs, Coringa-Herald and Lihou Reef in the Coral Sea, Ashmore and Mermaid Reefs, the Yves Merlet islands in northwest Australia are National Nature Reserves. Visitors sometimes require permits before entering these reserves. Information about visiting these locations can be found on the **[Australian Marine Parks Website](#)**



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Se

**Australian Marine Parks**

# C.A.R.E.

## Code of Anchoring in Reef Environments.

### NEW CALEDONIA HAS RESTRICTED CORAL REEF RESERVES WHERE VESSELS MAY NOT ENTER AT ANY TIME.



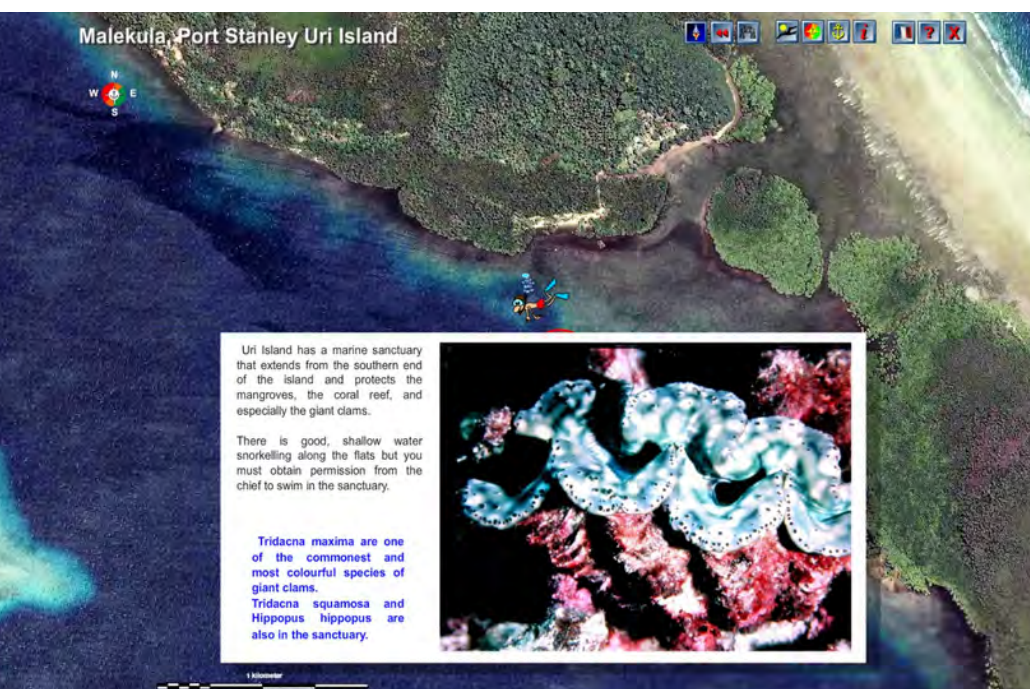
These include Ilot Surprise and Lelizour and the atolls Astrolabe, Petrie, Pelotas, Petit Guilbert, Gros Guilbert, Seche-Croissant, Yves Merlet, and Ilot Goeland (seasonal).

Anchorage in the Coral Sea Marine Park, including the Chesterfield Reefs and the Entrecasteaux Marine Reserve, require special permission before entering the area.

These include Ilot Surprise and Lelizour and the atolls Astrolabe, Petrie, Pelotas, Petit Guilbert, Gros Guilbert, Seche-Croissant, Yves Merlet, and Ilot Goeland (seasonal).

Anchorage in the Coral Sea Marine Park, including the Chesterfield Reefs and the Entrecasteaux Marine Reserve, require special permission before entering the area.

New Caledonia also has a network of marine reserves where you can go but must observe the strict environmental protection laws. Six of the reserves have park moorings so yachts won't anchor in the coral or seagrass beds. There are also Melanesian Custom Areas in the Isle of Pines, Lifou, Ouvea and Belep. The Rocket Cruising Guide to New Caledonia ([cruising-newcaledonia.com](http://cruising-newcaledonia.com)) includes a summary of all the protected areas and complete details on park regulations as well as protected species of marine life and fishing regulations throughout the world's largest coral reef lagoon.



**VANUATU'S MARINE RESERVES** are set up by local villagers, and you must talk to the chief of the village near any anchorage for details on which areas are restricted and ask permission for visiting them.



# C.A.R.E.

Code of Anchoring in Reef Environments.

## ABOUT THE AUTHOR RICHARD CHESHER

[richardchesher.com](http://richardchesher.com)



**I fell in love with the sea when I was a teenager**, went to the divers training academy in Florida and became a commercial diver, a SCUBA instructor and professional underwater photographer.

**In 1958 I moved onto my own sailboat**, a 28ft double ended ketch built in 1924, and lived aboard my own yachts ever since.

**My wife Frederique and I have sailed the Pacific** aboard the Moira, a Kelly Peterson 44 cutter, since 1976.

**I got my PhD in marine science** at the Institute of Marine Science in Florida in 1967, specialising in coral reef biology. After a year at Harvard University's Museum of Comparative Zoology, I joined the staff of the marine laboratory at the University of Guam and organized and trained a US Department of the Interior team of 69 marine scientists from all over the world for a Pacific-wide survey of the Crown of Thorns Starfish coral predator. To learn more about the survey see:

[drive.google.com/file/d/1tLY0XWxg5U9drj4tGKSk7y5rt6rgHAvX/view?usp=sharing](https://drive.google.com/file/d/1tLY0XWxg5U9drj4tGKSk7y5rt6rgHAvX/view?usp=sharing)

**I've surveyed coral reefs** in the Florida Keys, Bahamas, Barbados, Virgin Islands, Gulf of Guinea, Africa, Panama, Colombia, Guam, Northern Mariana Islands, Palau, Yap, Philippines, Kiribati, Papua New Guinea, Solomon Islands, Australia, New Caledonia, Fiji, Wallis, Vanuatu, Western Samoa, American Samoa, and Tonga and **sadly I've watched them die...** **When I say careless yacht captains have destroyed countless coral gardens** everywhere in the tropics, I know.

Over the more than 65 years of my sailing and diving on coral reefs, I've personally seen yachts do it. I've seen coral gardens near tropical anchorages before they were turned to rubble by yacht anchors and chains. I've seen many yachts anchored in the coral and seen the damage they were doing. And I've seen the dead, lifeless rubble a few years later. Believe me; it hurts to swim over a dead coral reef you've seen thriving, alive, and beautiful a few years before.

**SO PLEASE, FOR EVERYONE'S SAKE,**

**C.A.R.E. WITH ME**

**ANCHOR IN THE SAND. NOT IN THE CORAL.**

