

all on one day site. Many nudibranchs. Lion fish, clown wrasse, rockmovers, scorpionfish seen frequently. Captain and second mate did not respond with appropriate concern for diver who got "skin bends." Lots of miscommunication, reluctance to contact DAN, delay in oxygen treatment, delay in seeking medical attention. Seemed more concerned about keeping a dive schedule than the health of the divers. Cockroaches landed on you in bed and were on food, and the tables with food. All parts of the boat inundated. Need to bug bomb the boat on a regular basis to avoid grossing out passengers. Set up to get 5 dives, incl night dive (8am, 10:30am, 2pm, 4:30pm, 8pm). As dives were shallow, long bottom time (over an hour) was the norm, which left shorter intervals than desired. Could be cause of "skin bends." Would prefer pre-breakfast dive at 7am, then 10:30am, 1:30pm, 4:30pm, and 8pm. Gives longer interval after deepest dive and should help avoid problems. Second mate was unhelpful Did not work well with others. Did not help the divers, even when it was her job. Divemasters insisted on "follow the leader" dives, showing "Ainteresting sights" along the way. Inexperienced divers rushed to a site, crowding out others and scaring fauna from sight. Photographers found it difficult to compose pictures while others were jostling for position. When asked if we could dive away from the group, some divemasters OK, others upset. With the good viz, the limited area of dive sites, and shallow depths, felt the "herding" was unnecessary and limited photographic opportunities, especially for

experienced (almost 500, over 500 dives for myself and husband) divers. Notified 10 days before start of trip of \$100 fuel surcharge/person. Thought this was unfair, as the trip had otherwise been paid for 3 months in advance. Great camera-only table with pressurized air. Several camera-only rinse buckets. Good method of passing cameras to divers once in water. Crew knowledgeable of cameras and helped divers with minor difficulties. Shot 29 rolls of film on 27 dives, so good diverse subject matter and photo ops. Nice sites w/ only minor surge, so easy to maneuver. Lava rocks gave easy purchase to steady cameras. Independent charging station.

KIRIBATI (CHRISTMAS ISLAND)

Nai'a, May 2005, Wendy McIlroy (doctorwen@yahoo.com), Valencia, PA. Experience: Over 1000 dives. Vis: 50 to 100 Feet. Water: 84 to 86 F. I spent two weeks as part of an expedition to study the Phoenix Islands ecosystem's recovery from a severe coral bleaching episode in 2002. David Obura and Sangeeta Mangubhai, our coral scientists, had been on two previous Phoenix Islands expeditions, when the object was to study pristine reefs isolated from most human development. A National Geographic article from February 2003, documented the second of these trips, in early 2002. Our current trip was to be a pleasure trip to see these untouched reefs. Unfortunately, a severe hotspot of ocean warming occurred here in late 2002, and a

somber report of dead coral led five people cancelled the trip. The rest of us decided to change the focus to research, inviting the scientists who had been there previously to come along and see if they could determine the severity of damage and potential for recovery. It was indeed a severe bleaching episode — the temperature gauges set during the 2002 trip and recovered during this one indicate that the ocean heated up to well over the bleaching “baseline” of 86F for five months — all the way up to 88.7F for a significant amount of time. The result is staggering — in many places the coral is not only dead but reduced to rubble. The “Coral Castle” site in Kanton lagoon, shown in its former glory in the NG article, is intact but nearly 100% dead. Huge stacks of table coral in a sea of staghorn coral, all dead. It must have been an amazing sight before its demise. Watching the fish swimming there is analogous to watching children playing in a junkyard or a war-ravaged city. It is heartening to see the spirit of the children, but incredibly sad knowing that their future is in serious doubt. This is but one of many ecosystems being lost to ocean warming. There were areas on some smaller islands where some recovery is occurring. Is the new growth just a last gasp before the next wave of heat? Or will these living corals be able to withstand higher temperatures? It will take years to know. A particularly interesting reason for studying this area is its remoteness. Recovery from bleaching episodes in other areas of the world is generally aided by “reseeding” of coral polyps from nearby undamaged reefs. In islands this remote, can this reseed-

ing occur? There is still a fairly healthy fish population, although in the past there were huge numbers of butterfly fish — literally hundreds flocking over the reefs. Now we only see a few per dive. Previously there had also been a lot of mantas. Total for the whole trip: 2. So the fish population is changing. What are the long-term ramifications of all this? There are a lot of questions, and few answers. In 2000 there was a healthy shark population. Between that visit and the 2002 expedition, long-liners came through, with the blessing of the Kiribati government, fishing for shark fins for the Asian market. The shark population has not recovered. Formerly “sharky” sites are fairly barren of sharks. On Nikumaroro (Gardner) Island, the last island we visited and the most remote, it was clear that the shark-finers had not been through, and it was heartening and exhilarating to see healthy populations of gray reef, black tip and white tip sharks, from curious juveniles to fully grown adults. Our best dives were definitely on Nikumaroro. There were a few land visits as well. One highlight was our first island, Phoenix Island, where there is an enormous population of boobies and frigate birds — a real bird-watcher’s paradise. We had a terrific group of people and, as always, the Nai’a crew made us all feel like family. This was my 4th trip on Nai’a, and I have been delighted with everyone. I don’t think there’s a better crew and a happier boat anywhere. We all enjoyed the fish and shark encounters, focusing on the positive. The sharks at Nikumaroro and the large number of Napoleon wrasse at all of the islands were worth seeing. We

had interesting discussions about what we were seeing and what we thought it meant. We know that our participation in this trip was important, and that our main purpose in coming was to bear witness to what's happening. This letter is my attempt to do so.

Nai'a Cruises, May 2005, Bob & Doris Schaffer (seamom@earthlink.net), Fallbrook, CA. Experience: Over 1000 dives. Vis: 50 to 100 Feet. Water: 83 to 87 F, choppy, currents. The Phoenix Islands region (in the country of Kiribati) was hit by an episode of increased water temperature caused by global warming. Reports we received before we left indicated widespread coral bleaching. We were hoping that not all reefs were affected, but we confirmed that formerly pristine reefs were all dead. Once we stopped focusing on the dead coral and started focusing on the abundant fish life and vigorous current diving, things picked up. Plenty of Napoleon wrasse and varieties of angel-type fish, numerous reef fish cascading over the rocks, schools of jacks, barracuda, parrots and bump head parrots, and lots of sharks (although in the northern part of the island chain, which has been overfished to provide shark fins for the Asian markets) they were quite small. In the southern part, (which, presumably, hasn't been hit as hard by shark fishers/finners) white tip, black tip and grey reef sharks were much larger — five feet and more. This was a scientific expedition and two marine biologist coral experts were on board studying the affected reefs and the many patches of new coral that are beginning to regenerate. They were excellent teachers

and we learned a lot. Few anemones and small critters (because of the dead reefs). We left from Samoa and the crossing was 2-1/2 days. This is such a remote region that in three weeks on the water, we never saw another vessel. This was our 30th live-aboard trip and our fourth on Nai'a, which we deem one of the best live-aboards operating. It is a wonderfully comfortable boat with an amazing crew — friendly and attentive and safety-conscious. Owner Rob Barrel was our host and he is so knowledgeable that conversation at every meal was a learning experience. Food is outstanding, too, with several entrée choices at breakfast and dinner and all beautifully presented and served (no buffets). All in all, a great trip despite the destroyed coral reefs and with lots of good adventure including a trip to an uninhabited island to harvest coconut crabs for dinner! UW Photography Comments: A room for camera gear with adequate shelf space and charging receptacles, covered and sheltered, adjacent to but separate from the dive deck.

MICRONESIA

Palau

Ocean Hunter, March 2005, Lisa Vignerot (lvignerot@hotmail.com), Stafford, VA. Experience: 51-100 dives. Vis: 50 to 100 Feet. Water: 76 to 84F., calm, choppy, surge, currents, no currents. Spent a night at the Carolines resort before checking onto the Ocean Hunter. At the airport when we arrived, we were greeted by Zenia from the Carolines Resort with a lei and a smile and were