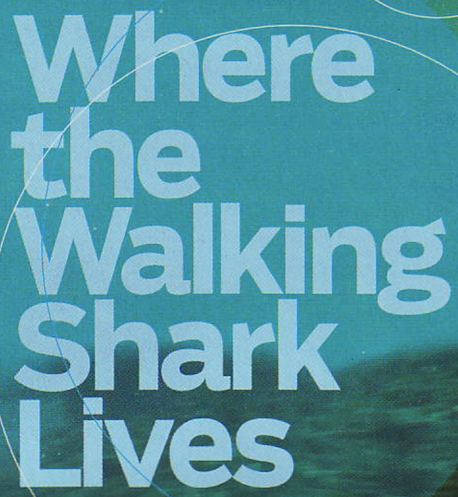


Where the Walking Shark Lives

It's the antithesis of the bleached-out, overfished reefs that divers find around the world—a place where the sea is still bursting with life, and hope for the ocean endures. Pull on a tank in Indonesia's remote Raja Ampat and witness diving's final frontier.

BY BUCKY McMAHON

Swimming with jellyfish near Gam Island, in Raja Ampat; opposite, the walking shark

The next ten years will be the most important in the next 10,000,"

says Sylvia Earle, speaking to a spellbound audience on the luxury live-aboard dive boat the *Seven Seas*, which lies at anchor in the remote Indonesian archipelago of Raja Ampat. Here, hundreds of miles from the nearest town, the night is primordially dark, utterly silent except for the breathy, gently maternal voice of the prophetess, and when she evokes the astronauts, their epiphanies from space—how it is the sea, the sea that is life itself!—it almost feels as if the *Seven Seas* has lifted off and is flying among a billion stars. The wine helps, too.

Dr. Earle, who began diving in suits that are now in museums and who first achieved fame in 1970 with NASA's Tektite II all-women mission, which spent two weeks living beneath the Caribbean Sea, has had the ears of presidents and World Bank officials. At 72, she's still exploring, still diving—still beautiful, too—and still shouldering the burden of a Cassandra who knows that the oceans are everywhere dying.

"We've gone from eating 'the big, the slow, and the tasty,' in E.O. Wilson's words, to consuming everything else, too," she says. "Krill paste is catching on in Europe. Krill paste! We're eating it all!" Dr. Earle has shown us a short film about fishing debris, with teams of volunteers hauling up a huge amount of shredded nets and monofilament longlines, a madman's ball of twine. But it's not the starving masses predicted by Malthus who are depleting the sea. The deadliest offender is the *luxury* seafood market—we of the gourmandizing West. "But it's all bushmeat!" Sylvia says, eyes flashing. "We do nothing to cultivate it; we just extract it as if the supply had no end." Worse still, the assault with trawler and fork is only part of the problem. What with pollution and global warming and coral bleaching, marine habitats are tipping domino style. The Great Barrier Reef is a shadow of itself, the Galápagos fading fast. "We've got a limited time to make a difference," she tells us.

Which brings her talk full circle, back to the *Seven Seas* and my trip mates, many of whom are board members of or big donors to Seacology, a Berkeley-based environmental organization dedicated to protecting islands and their surrounding waters. The ten-day cruise has taken 27 experienced divers on two boats—the *Seven Seas* and my boat, the *Citra Bidadari*, which are both well-appointed, 100-foot-plus modified Balinese schooners—on a vast loop through Raja Ampat, a group of islands northwest of Papua New Guinea. It has certainly been a pleasure cruise, the itinerary chock-full of dives and excursions, but it's also been a fact-finding mission for Seacology, which is touching base with several of its grassroots projects in tiny villages.

Already the culture shock has been extreme. I'm talking about my culture shock getting to know my fellow travelers. These are some rich folks, mainly from the upper strata of California's Bay Area and Silicon Valley—CEOs, IT wunderkinder, A-list attorneys of various stripes—many of whom have inherited wealth or else finished their work early and gone out to play, and who seemingly have no worries in the world, except the worry *about* the world. And while it may be easier for a dolphin to pass through the mesh of a tuna net than for a rich environmentalist to avoid the, um, inconsistency of a Sasquatch-size carbon footprint, the question remains: If not them (us), then whom? And if not here, then where?

Raja Ampat, after all, is the final frontier, one of the least fished, least populated, healthiest marine environments on the planet. It's also a place where worlds collide—politically, geographically, ethnologically, zoologically—every which way at once. Located just east of the famed Wallace Line (named for the great 19th-century naturalist Alfred Russel Wallace), which separates the fauna of southern Asia from that of Australasia, the archipelago is part of the 131,000-square-mile transition zone known to modern biogeographers as Wallacea. Scientists call Raja Ampat "the epicenter of marine biodiversity," where there are a number of endemics and where new species are discovered nearly every time a marine biologist straps on a tank. Properly protected, it could serve as a kind of evolutionary laboratory and maritime seed bank to jump-start recovery for the whole region and, potentially, in a pinch, the world.

But it's crunch time on the frontier. Historically, the four main islands—Misool, Salawati, Batanta, and Waigeo ("Raja Ampat" means "Four Kings" in Indonesian)—and more than 600 smaller islands and numerous cays have been protected by their remoteness. The tiny population of ethnic Melanesian Papuans, mainly subsistence fishermen, have been excellent conservators. But when they see big commercial boats from Sulawesi and other populous Indonesian islands whose own local waters have been depleted anchor offshore and wipe out the fish stocks with dynamite, they are tempted—indeed, forced—to blow up the reefs themselves to keep at least some of the profit at home. The genius of Seacology has been to cut a better deal for the villages by offering a customized quid pro quo: whatever they need—schools, community centers, solar power—in exchange for long-term protection of the priceless environment. Still, the pressure to extract the islands' wealth, coming from Indonesia's east-looking manifest destiny as well as multinational timber corporations, has been relentless. Seacology, Conservation International, and the Nature Conservancy have all entered into this war of wills as the situation in Raja Ampat has heated up.

"I prefer the term *hope spot* to *hot spot*," Dr. Earle says. "What I'm asking you to do now is hold up a mirror—see who you are, what you do best, how you can help. This is a big place. If we can save it, there's hope for the sea."

BUT IT FUCKS YOU UP, hope does. You internalize all that bad news about the planet, and then you see something like Raja Ampat, a place obviously still being born, and you don't know what to feel. Happy? Anxious? Exposed for a doom-and-gloomer, as the old armor of pessimism begins to crack and a whole new attitude raises its curious head? I felt stirred up from the very first dive—before the dive, really, when we were motoring to a site called Cape Kri, near Waigeo, and saw a Spanish mackerel leap out of the water, jaws inches from a desperate silver-shiny fusilier, predator and prey gracefully arcing ten feet into the air. Everybody

FROM LEFT: AL GIDDINGS; INDONESIAWILD; PREVIOUS PAGES: DAVID DOUBILET (2)

From left: Sylvia Earle in her element; the clear waters of Sagewin Strait, near Salawati

I hadn't realized how low my diving expectations had sunk. It was as if I'd been diving for years on the under-sea version of a prairie, and here was the rainforest.

in the skiff cheered. The sea was full to bursting with life, and we, like explorers in a time warp, were about to plunge into waters as wild as those of the ancient past.

About a thousand yards up-current from a classic mushroom-shaped islet, our Indonesian boatman cut the motor and we scrambled to sort out the gear heaped at our feet. Stop and drop: That's the drill for this sort of high-speed drift-diving. As soon as whoever's fins were on top of my fins got out of the way, I back-flopped into the blueberry-colored sea, kicking hard to catch up with my fleeing companions. We zoomed straight toward the island at a good three-knot clip, the water warm and uncannily clear. We could see the prow of the reef far ahead, where immense schools of barracuda and long-nosed emperor fish were balled up for feeding. Then we were among them, part of the collective chaos. The best critter finders among us searched out such masters of camouflage as the Papuan scorpion fish, its featherlike fins mimicking crinoids, and tiny oddities such as the orangutan crab, a fuzzy orange dead ringer for the great ape.

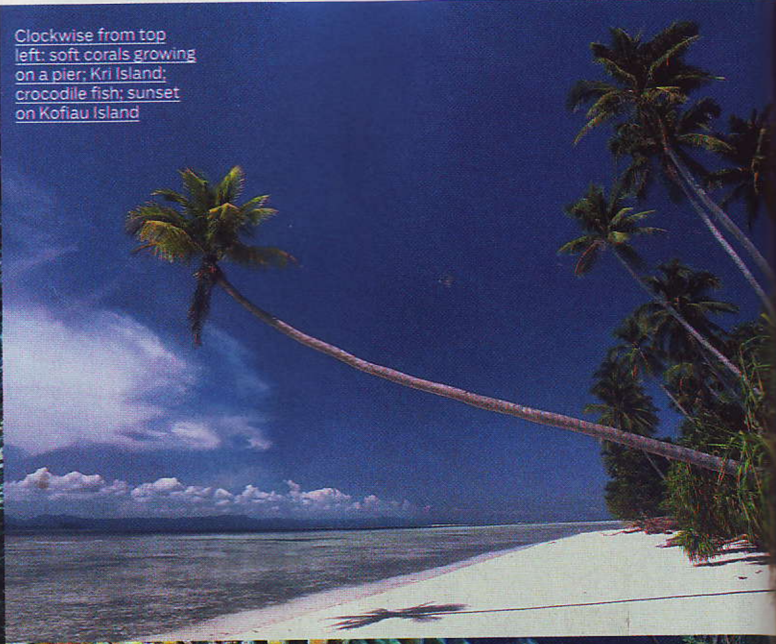
During the pre-dive briefing, Dr. Mark Erdmann, a marine biologist for Conservation International and a volunteer guide on this trip (his wife, Arnaz Mehta, is Seacology's Indonesian rep) with nearly 20 years' experience diving Indonesian waters, told us the currents that carve these Raja Ampat mushrooms are so strong that from the air the islands look like ships trailing wakes; in fact, one such island, mistaken for a Japanese ship, was bombed by U.S. pilots during WWII. We also learned that in 2001 Erdmann's friend and fellow marine biologist Gerry Allen set the then world record at Cape Kri for the most species of fish identified during a single dive: 283. So we were ready for the current and we were ready for the fish. But nothing can really prepare you for your first dive at Raja Ampat.

There are about 60 species of coral in the Caribbean; there are closer to 600 in Raja Ampat. And the reefs here support more than 1,000 species of fish, which means if you latch on to a good handhold and start counting, mental fatigue sets in long before you've stopped seeing something new. I hadn't realized just how low my diving expectations had sunk, kicking around hard-bitten, bleach-stricken, fished-out seascapes. It was as if I'd been diving for years on the undersea version of a prairie, and here at last was the rainforest.

After the dive, all of us aboard the *Citra Bidadari* had the same idea: Ransack the ship's library and put a name to some of the odder creatures we'd just seen. "I love it," business consultant Kris Billeter said. "Everybody's just totally nerding out with the fish-identification books." On the sofas of the saloon, we kibitzed and conferred, Macs on laps, UV cables downloading underwater shots to Paint Shop Pro. Bob and Rosie Heil had just come from China and Tibet; this was their second—or was it third?—trip to Raja Ampat. Suzanna Jamieson, from Düsseldorf, was nuts about nudibranchs. As my roommate, Eric Kanowsky, an IT-startup wizard, put it, "The more you dive, the smaller the things you look for." Everybody had done a ton of diving, and everybody rated Cape Kri among their best all-time.

During the morning's second dive, Sardine Reef, we drifted right into a school of bump-head parrotfish, four-foot monsters, about a dozen of them ripping at the coral like blue buffalo and totally oblivious to us. Sardine Reef is also a good place to see the green turtle—a parrothead with a shell—and the giant clam, a creature with no face at all but in a class of its own when it comes to color. Taken together, the two dives were like an entire career—and all before lunch. Kinda gets your hopes *way* up.

And this is the thing we shouldn't have believed but already half expected: Raja Ampat just kept topping itself. At dawn on the third day, the two Seacology boats, which had kept apart to avoid overcrowding the dive sites, steamed together into Mayalibit Bay, essentially



Clockwise from top left: soft corals growing on a pier; Kri Island; crocodile fish; sunset on Kofiau Island

CLOCKWISE FROM TOP LEFT: DAVID DOUBILET; INDONESIAWILD;

I noticed my dive computer flashing, warning me I was about to go into decompression mode—a big no-no, especially in a strong current.

unchanged since Wallace's three-month collecting expedition in 1860. At its southern entrance, the bay is as narrow as a river winding between mountains, an equatorial fjord, before opening up to an inland sea nearly dividing Waigeo into two halves. When Seacology had first approached Waifoi village in 2007 to see what they'd like to have in exchange for limiting fishing in the bay to traditional subsistence catches, they said they wanted sidewalks—nice, wide cement walkways to replace the dirt tracks that held puddles and mosquitoes and disease. And so, that noon, Seacology's board members and donors, festooned with crowns of trumpet vines, were given a hero's welcome, parading into the village center along that cement path at the head of a marching band of drums and fifes. Everybody was given a piece of cake and a seat in the shade. Babies cried, elders speechified, hands were shaken, and then all feasted on a spread of fish and swimming crabs and local mussels.

Ever the scientist, Sylvia Earle carefully examined an odd-shaped, snakeskin-textured fruit, took out her camera and photographed it from every angle, and then ate it for dessert. She was more effusive than anybody about the diving we'd enjoyed so far, though with a caveat. "This is the way it's supposed to be everywhere," she said. "A coral reef is a true metropolis, with millions of interconnected lives."

AT ALJUI BAY, on the west side of Waigeo, the oddest beast I've ever seen came crawling out of the dark in the weirdest place I've ever dived. The dive site, a shallow patch of muck, lay underneath the dock of a pearl farm, a far-flung place, to be sure, like a trading post out of a Conrad novel. A moonless night set the proper mood for poking about with dive lights. The first creature my scuba buddies illumined was a giant sea snail caught in the act of extruding a gelatinous string of Ping-Pong-ball-size eggs onto one of the dock's outer pylons. Just inside the first row of pillars, a fire urchin, the size and color of a jack-o-lantern, with short spines and what appeared to be feathers, lay cheek by jowl with a sea hare—a grandiosely proportioned sea slug, a regular Jabba the Hutt. Mesmerized, I watched a certain flatworm, trying to figure

ACCESS + RESOURCES

Raja Ampat and beyond

GETTING THERE: Singapore Airlines flies to Singapore from LAX and JFK (round-trip, $1,150; singaporeair.com); from there you can fly via domestic carriers to Manado, on the island of Sulawesi, or to Bali's Denpasar International Airport and connections to all outer-island destinations. Cathay Pacific flies from LAX and JFK to Denpasar via Hong Kong (round-trip, $1,250; cathaypacific.com). **WHEN TO GO:** The dry season, from May to October, is the best time to visit (and dive). **GETTING AROUND:** Garuda Indonesia, by far the country's best domestic carrier, flies daily between Denpasar and Manado (from $100 one-way; garuda-indonesia.com). Merpati Nusantara Airlines (merpati.co.id) and Lion Air (lionair.co.id) also fly many routes to remote islands.

Raja Ampat

WHAT TO DO: Seacology runs dive trips to numerous international destinations but does not plan to return to Raja Ampat before 2010 (seacology.org). However, you can book the same luxury live-aboard that Seacology chartered to Raja Ampat, the *Seven Seas* (from $340 per night; thesevenseas.net). **GETTING THERE:** From Manado, fly Merpati to Sorong ($120). **WHERE TO STAY:** In one of the boat's eight staterooms, all with en suite bathrooms and A/C.

Baliem Valley, New Guinea

WHAT TO DO: Here you'll see Dani men in headdresses of boars' teeth and vibrant bird of paradise feathers. Hike to the village of Kilise and stay in a grass hut overlooking a canyon. **GETTING THERE:** Hop a daily flight on Garuda from Denpasar to Jayapura ($253), then one of ten daily Trigana Air flights to Wamena ($110; trigana-air.com). **WHERE TO STAY:** In Wamena, bunk at the Baliem Valley Resort (from $110; baliem-valley-resort.de), a stylish bungalow property. In Kilise, sleep at the village guesthouse ($6).

Togian Islands, Sulawesi

WHAT TO DO: These limestone islands are home to spectacular coral reefs and plenty of wildlife, including reef, hammerhead, and the occasional whale shark, plus dolphins and dugongs. There's even a sunken B-24 bomber. **GETTING THERE:** It takes about two days no matter your route. From Manado, fly Merpati to Gorontalo ($70), where you'll board a 15-hour ferry to Wakai, the main harbor on the Togian Islands. **WHERE TO STAY:** Kadidiri Paradise Resort, on Kadidiri Island (bungalows, $32, all-inclusive; 011-62-464-210-58).

Balikpapan Bay, Kalimantan

WHAT TO DO: Dive recently discovered WWII wrecks—Japanese military cargo boats torpedoed by the U.S. Navy during the 1942 Battle of Balikpapan—at this industrial port. You'll descend into holds housing coral-encrusted bombs and torpedoes. **GETTING THERE:** Garuda flies daily from Bali ($124). **WHERE TO STAY:** Blue Marlin Dive's luxury teak sailing vessel, *Ikan Biru* ($1,550 per week, all-inclusive; bluemarlindive.com), drops anchor by the wrecks, enabling you to dive as much as possible.

Banda Islands

WHAT TO DO: Archipelago Resorts & Fleet's luxury live-aboard dive yacht, *Archipelago Adventurer II,* sails from Ambon on six- to 14-day trips around these ten tropical gems (from $325 per day, including dives and meals; archipelago-fleet.com). **GETTING THERE:** Fly to Ambon from Denpasar on Lion Air ($274). **WHERE TO STAY:** In the ship's swank staterooms, with plush mattresses, private bath, and A/C.

Roti

WHAT TO DO: Just 300 miles north of Australia, this remote, dry Indonesian isle is the sweetest surf spot you've never heard of—with perfect lefts and rights on empty beaches. **GETTING THERE:** Merpati flies daily from Denpasar to Kupang ($62). You will have to stay overnight, then board a ferry to Roti (four hours; $12). **WHERE TO STAY:** The Malole Surf House (from $100, including surf guide and excursions; rotesurfhouse.com), a boutique property managed by a South American couple. (He's an accomplished surf guide from Uruguay; she's a European-trained chef from Argentina.)

Gili Trawangan, Lombok

WHAT TO DO: For decades, backpackers have made the hop from Bali for a dip in the warm, turquoise waters of the tiny Gili Islands, off the coast of Lombok. Gili Trawangan (pop. 1,000), the farthest out, has the best dining and lodging options. Paddle the Gilis with Karma Kayak (half day, $32; full day, $48; karmakayak.com). **GETTING THERE:** Take the daily two-and-a-half-hour fast boat, the *Mahi Mahi,* from Serangan Harbor, on Bali, direct to Gili T ($70; gili-paradise.com). **WHERE TO STAY:** Kelapa Luxury Villas offers plush one-, two-, and three-bedroom homes with private pools (from $185; kelapavillas.com).

Gunung Rinjani, Lombok

WHAT TO DO: At 12,224 feet, Indonesia's second-highest volcano is a pilgrimage site both for the Hindus of Bali and for Lombok's Muslim Sasak people. From the summit you'll look down on a 3.7-mile-wide caldera with a crescent-shaped cobalt lake, hot springs, and Bali in the distance. **GETTING THERE:** From Bali, fly to Mataram on Merpati ($51). **WHERE TO STAY:** In your tent. The most established outfitter on the mountain, Rinjani Lombok, offers a four-day trek ($270; rinjanilombok.com).

Canggu, Bali

WHAT TO DO: Canggu is home to the island's least trampled beaches and most accessible surf breaks. Challenge yourself at Echo Beach, where you'll paddle out with local and international pros. Beware: The water gets big, riptides tug, boards snap, and a few lives are lost each year. **GETTING THERE:** Canggu is an easy 40-minute, $15 cab ride from the Denpasar airport. **WHERE TO STAY:** Book a luxe beach pad through Bali Ultimate Villas (four- to six-bedroom villas, $400–$2,350; www.baliultimatevillas.com).

Ubud, Bali

WHAT TO DO: Bali's cultural hub is home to painters, craftsmen, musicians, and dancers and is a base for year-round yoga retreats. Balispirit (balispirit.com) is the island's online clearinghouse of all mind/body classes and events. **GETTING THERE:** The $20 cab ride from Denpasar takes about 50 minutes. **WHERE TO STAY:** Ubud Hanging Gardens (doubles from $270; ubudhanginggardens.com), 15 minutes north of town in tiny Buahan, is hard to beat. Guests stay in two-story villas with heated infinity pools overlooking the jade Ayung River.
—ADAM SKOLNICK

Map by Sjissmo

The caves of Misool island

out how something flat could appear to be revolving like a barber's pole in two different directions, when suddenly I felt a prick and an electric jolt. While I'd been gaping at the worm, a battalion of urchins, the mobile kind with long, wicked spines, had crept up to see if I was edible. The bravest of the lot had pronged me in the ankle.

I kicked away in haste. About then I saw someone waving his light, a signal to come have a look. It was Erdmann, our go-to guy on the cruise for all the rare or hard-to-find stuff.

The nearly three-foot beastie had the face of a newborn puppy, and it moved with the contorting waddle of an antique wind-up toy, walking—yes, walking!—on the tips of its pectoral and pelvic fins. It was the walking shark, of course, which we had been looking for all along, not quite believing in it. The discovery of two new walking shark species in 2006 by a Conservation International expedition had made international news and had occasioned more than a few waggish *SNL*-inspired blogs: Walking shark? Candygram! This one performed for us under half a dozen dive lights, lurching over the rubble—right fins forward, push! Left fins forward, push!—like a patient undergoing painful physical therapy. It was amazing to watch, and we would have until we ran out of air, but at last, annoyed by the attention, it swam off quite briskly.

There's an evolutionary riddle for you: Why does the walking shark walk when, like any self-respecting elasmobranch, it can swim just fine when it chooses to and, in fact, it walks rather poorly?

The question stuck with me as we steamed south for Misool, where I had my own little Darwinian crisis. I've said that we were all advanced divers on this trip, but I was the least advanced, the one who saw everything last and used up his air supply first, and at a site near Misool's Wayalibatan Channel I was nearly naturally deselected for my lack of fitness. It happened at a spectacular wall called FantaSea, an enchanted forest of gorgonian sea fans waving in the five-knot current. As we had traveled south, the visibility had declined from incredible to merely very good, owing to nutrient-rich upwellings, and the density of fish had just gone crazy. These southern reefs were *loud* with life—the clickings and scrapings of claw and tooth like the din of cicadas—and visually furious, gouts of color flung and splattered.

On this dive, though, everyone was looking for pygmy sea horses, a Raja Ampat specialty. The creature is tiny—about the size of a grain of rice—and mimics perfectly the tint and the texture of its favorite hiding place, the screen-like grid of the gorgonian sea fan. To find the animalcule, you must comb through the leaves as if looking for fleas on a great shaggy dog. Even when your keen-eyed dive guide has found one for you, it's hard to see without a magnifying glass. Yet, with those anise-seed eyes, the blunt plumped muzzle, the cunningly nubbed pastel hide, it has its own curious charisma, equal to the whale's. So people said, anyway. I still hadn't seen one.

I was determined not to be shut out, so every time one of the guides rapped on his tank, I kicked like mad to get into viewing position—up, down, back, forth—until at last: Bingo! Excellent! Tiny! Cool! And then I noticed my Suunto dive computer flashing, warning me I was about to go into decompression mode—a big no-no, especially in a strong current. I also noticed I was nearly out of air. So I signaled to my group that I was heading up and began kicking for the surface. I spent my three-minute safety stop at a depth of 15 feet congratulating myself on having, almost definitely, seen a pygmy. When I broke the surface, the *Citra Bidadari* was nowhere in sight; the Zodiacs were elsewhere as well, and the current was still motoring me toward Antarctica and kicking up four-foot haystacks, which would make me nearly impossible to find. Fortunately, I had a signaling device—a bright-orange inflatable "sausage," for which I silently thanked Seacology's executive director, Duane Silverstein, and his pre-trip checklist. This I held above me at arm's length. It barely topped the waves. I yelled "Help!" a couple of times. That was dumb. Five minutes later, I dropped my weight belt, the first time I'd ever taken that drastic measure, and five minutes after that I began to think I'd really been forgotten, and what a long and lousy death I was going to die.

Of course, the able boatmen of the *Citra Bidadari* would never lose a customer. Twenty-one minutes after surfacing, I heard the growl of an outboard and soon saw my very good friend Dewey racing to the rescue. But in that interval of treading water, I'd had ample opportunity to hold up a mirror, as Sylvia Earle had asked, and see who I was and what I did best. I'm someone who expects the worst, is surprised by the best, and somehow survives to tell the story. So if the worst comes to pass—as I expect it will—and Raja Ampat is blasted to smithereens for frozen fish sticks, and the seas all die and all of us along with them, there's a certain shark in Aljui Bay that's ready to crawl up the beach and start the whole thing over again. o

CORRESPONDENT BUCKY McMAHON'S BOOK *NIGHT DIVER* (ANHINGA PRESS) WAS RELEASED IN PAPERBACK IN MAY.