

A "walking" shark. Active at night, scavenges bottom for prey. Distinguished by the "double-ocellus" marking.

Burt and I first heard about Triton Bay from Dr. Gerald Allen, an old friend and one of the world's leading ichthyologists. In May 2006, Gerry, along with Dr. Mark Erdman, senior advisor to Conservation International's Indonesian Marine Program, and several other scientists also working for CI, traveled beyond the southern limits of Raja Ampat into the unknown waters of the Fak Fak Regency. The Conservation International team concentrated on Triton and Etna Bays where they hoped to discover a "hot spot," an area of maximum species diversity and endemism similar to what they had found in Raja Ampat five years earlier.

Results from surveys like Mark and Gerry's focus conservation efforts in places that appear to have the greatest potential to preserve the greatest number of species. Indonesia is the likeliest place on earth to look for diversity. A decade ago Brazil was believed to be the most biodiverse country. But as researchers probed deeper into the Indonesian archipelago's vast tracts of mountains, forests and reefs, hidden worlds harboring hundreds of new species were revealed. The province of Papua (formerly Irian Jaya) is now the axis of biological investigations in Indonesia. Home to the world's only tropical glacier and its most extensive mangrove swamp, earth's largest butterfly and its smallest parrot, Papua is already known to shelter half of Indonesia's recorded plants and animals even though detailed studies have barely begun.

Last September the CI expedition's findings made international headlines. The numbers were astounding: 52 species of marine life including 24 fish species were seen by scientists for the first time. The darling of the news reports, of course, was a shark. At least it wasn't a scary shark, just a sweet-faced, previously unrecorded spotted epaulette shark that "walked" along the substrate using its pectoral fins. Unusual? Definitely. But for us, the big news was more than walking sharks. Gerry's excited email reported that he had broken his previous fish count records on three separate occasions. Midway between Fak Fak and Triton in clear, calm water sheltered by a hard coral-dominated reef, he "made two long swims in a scenic bay...characterized by the unusual combination of extremely clear water and significant sedimentation. Once again (for the final time on *this* trip) I broke my record for the most species counted on a single site with 330 species." Scientists know that preserving every existing species is impossible, but in the ocean numbers and diversity are what counts. Gerry had just dived in what may turn out to be the most bountiful place in tropical seas.

A new "hot spot" could also mean a potential destination for divers who don't mind traveling for 48 often-sleepless hours. For example, before the initial survey results for Raja Ampat were published only one liveaboard worked consistently in the area. In Raja Ampat today over a dozen liveaboards make regular runs to reefs unheard of half a decade ago. So, over Christmas and the New Year Burt and I embarked on a voyage from Sorong to Timika and back. Armed with Mark and Gerry's GPS coordinates of the most promising sites for sport divers, we explored a small portion of the undersea wilderness south of Fak Fak including Triton and Etna Bays. During the nearly three weeks we traveled onboard Adventure Komodo with Larry Smith, the sheer marine biomass and the overall diversity of the region's reefs consistently amazed everyone. For once, the eternal post-dinner question that arises on any live-aboard—"where should we dive next?"—was not asked. Everyone knew they were finally in the last best spot.

## Finding New Species

A field biologist is a bit like an outdoor detective whose job is to investigate the habits, habitats, and genealogies of wild animals. At first sight an experienced biologist can often discern a potential new species, but it takes months, sometimes years, of tedious analysis before an animal officially can be declared "new"

Any animal believed to be "new"—never before describedmust be introduced to the scientific community through an established chain of protocol. After several photographed while still alive, the animals are preserved for laboratory their genetics. Once the differences between the collected animals and others in the same genus have been established, the long process of publishing the data begins. Species descriptions, which are reviewed by other scientists, must include photographs, appropriate drawings, a written description, the new animal is placed within the taxonomic scheme and given a Latin species name that usually refers to the place where it was found or the

The marine biologists working in the Bird's Head Seascape have had their hands full analyzing the copious data from Papua's "species factory." Mark Erdman and Gerry Allen believe that habitat diversity is the key reason why so many new species evolved in this remote region. Tectonic movement isolated

numerous small habitats that remained distinct during sea level changes. An have kept neighboring ecosystems segregated and also prevented species

Each of the four potential new species we photographed in the Bird's Head Seascape is markedly different from other members of their respective genera. The red pygmy seahorse The lionfish, soon to be named Pterois steeni, is distinguished primarily by the "flags" at the ends of its dorsal spines.

As far as we know we are the first to photograph the galatheid crab. Found in a barrel sponge it looks a lot pink Lauriea siagiani, except that our crab's carapace is distinctively marked and not quite as fuzzy. After reviewing our scan, the acknowledged expert, Japanese scientist Dr. Keiji Baba, wrote that he had never before seen a crab like the one we found in Triton Bay.

differs from others in the genus Hemiscylliium because of the dark, the gills at the end of the first dorsal band, "an excellent spot character not shared by any other Hemiscylliium," 2007 Conservation International plans to auction the rights to name the new lavish fundraiser in Monaco.

Top This tiny (pygmy) seahorse appears to be a new species, pending description. Middle New species of Lionfish distinguished by long pennants attached to thin dorsal spines. to be named Pterois steeni for U/W photographer Roger Steene. Bottom Unidentified, galatheid (?) crab on Barrel Sponge.







OUTH of Fak Fak, 250 miles of coastline undulates and retreats into myriad channels, inlets and bays. Rivers and waterfalls, some pounding and thunderous, others just muddy trickles, repeatedly score the coast. Fak Fak, with a population of a little more than 100,000, is the largest city on the Bomberai Peninsula which sits below Papua's Bird's Head. By the 14th century the Fak Fak Regency was a crossroads for traders who had traveled east on monsoon winds to exchange metal tools and cloth for Papuan products like the massoy bark used in many traditional medicines and Bird of Paradise feathers. In 1623, the Dutch, firmly in control of the Banda Sea's spice trade, began to map this long stretch of Papuan shoreline. Probably overwhelmed by the region's convoluted coastal topography, the Dutch named only one bay, "Murderers Bay," where a local tribe ambushed and killed several members of the mapping

The old Dutch map was so sketchy it was difficult to tell which of the bays we passed might have been "Murderers." Motoring southeast from Misool, we rounded the cape below Fak Fak and skirted the coast between the mainland and Pulau Adi. Only a handful of villages dotted the shore, but everyone waved friendly waves and, gratefully, there was no sign of spears or shields. Here and there we passed isolated fishing camps where outriggers had dropped their plastic, blue-plaid sails and come to rest on creamcolored beaches. Under a gray sky near Mauwara Island we anchored so close to the mainland that we were in the shadow of a mountain whose 3,000-foot peak disappeared into a low-hanging mist. The lack of significant population contributed to the excellent condition of the reefs. At the moment there is no pressure from commercial fishing operations and the reefs are healthy enough to replenish what the local people take for themselves or to sell in nearby markets. Although Papua is lumber and mineral rich (the world's largest gold mine is located about 250 miles east of Triton Bay), the mountains to the north remain untouched.

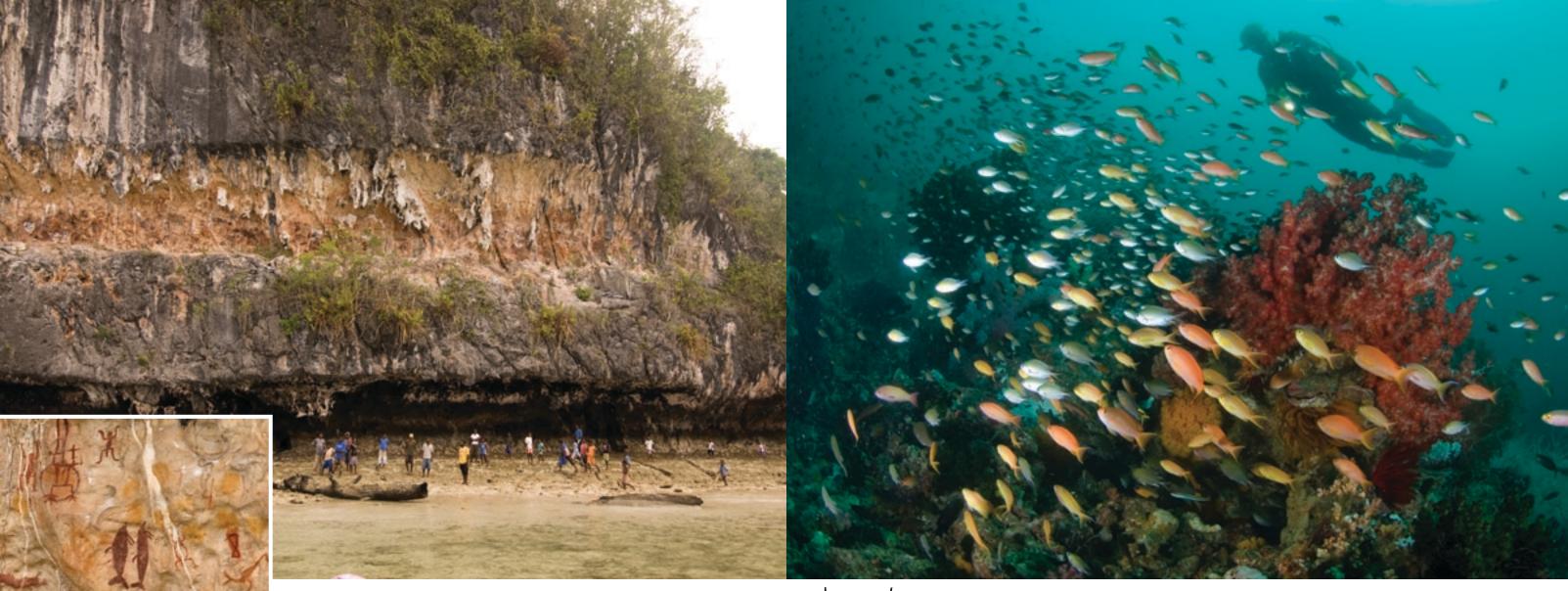
It was late afternoon. We had been motoring for 18 hours and everyone wanted to dive. Larry took his group to the southeast point of Mauwara. Burt and I headed for the northeast tip. We plunged into the cool, dark sea and let the current pull us south along a sheer wall. There was a drop to about 100 feet before the wall met a level substrate smothered with gooey sediment that flows from the mountains during the rainy season. Between 30 and 80 feet, a thick forest of black coral trees dominated the reefscape. The black coral's feathery white branches looked almost iridescent as sweepers and baitfish swirled through, sparkling in the dim light.

I ducked inside a fish-filled crevice and peered out while surgeonfish massed in the brisk current. I wanted to spend the rest of the dive here watching the parade, but Burt's signal called me out. To my right the reef bent inward and Burt was there, hovering over a small mound of rock jutting out of sediment. I turn on my light and focused the beam on the sea floor. Whatever Burt was playing with didn't look solid; it kept changing size and shape. Then I realized he was teasing a mimic octopus out of its hole. For an instant the octopus levered itself straight up, then with an almost audible force, it slammed back into its refuge.

In the morning dolphins led us across another bay where we dodged dark smudges of islands that barely broke the surface. Dr. Kal Muller, author of *Underwater Indone*sia and the first person to show us the marine wonders of Komodo National Park, had also joined us on this trip. Kal had been living in Papua for 14 years, and he was on the boat to lecture about the history and culture of what he calls "the land of extremes." Near the port of Kaimana where Kal says the Dutch tried to establish trading outposts from the late 17th century onward, we entered an inlet framed by massive limestone walls. Millennia ago early Papuans created rock art in this bay, but the local people believe the designs decorating their cliffs were painted by spirits. As the ship glided past



Local sailboat/Cliff face behind Lobo village in **Triton Bay** 



Tourists getting a close view of the Rock Art paintings while locals greet rare visitors. These paintings, between 3000-5000 ears old, are found on sea-side cliffs of Bitsyara Bay, on Papua's west coast.

karst bluffs marked with red palm prints, yellow lizards and black outlines of fish, we observed the scene in silence as if we could sense the ghosts that might still haunt this place. When we reached the village everyone prepared to go on shore, except for me. The night before, Kal had given me a book on rock art so I hung back—content to be alone with the book and the ship's binoculars.

Ethnologists believe rock art is a unifying aspect among all humanity. It is the oldest surviving art form and has been found in places as seemingly unrelated as the Sahara and France. Little is known about the people who created the paintings near Kaimana except that they used locally available products to produce their designs. The pigments have been analyzed and contain charcoal, ground shells and iron-rich minerals like the burnt-orange hematite staining these white-faced rocks. Because the majority of the designs are natural objects, mostly sea birds or fish, the theory is the artists were depicting their dependence on the sea. Until about 7,000 years ago it was still possible to walk from Australia's Torres Strait to the island of New Guinea across what is now the shallow, muddy Arafura Sea. Perhaps wandering Aborigines tired of a life between the tides left their mark on these hard-walled galleries before they moved to higher ground to farm sweet potatoes and raise pigs.

NE Selat Iris, Usually found hiding in a small hole with only it's head visilble. Fairly common but often overlooked by divers.

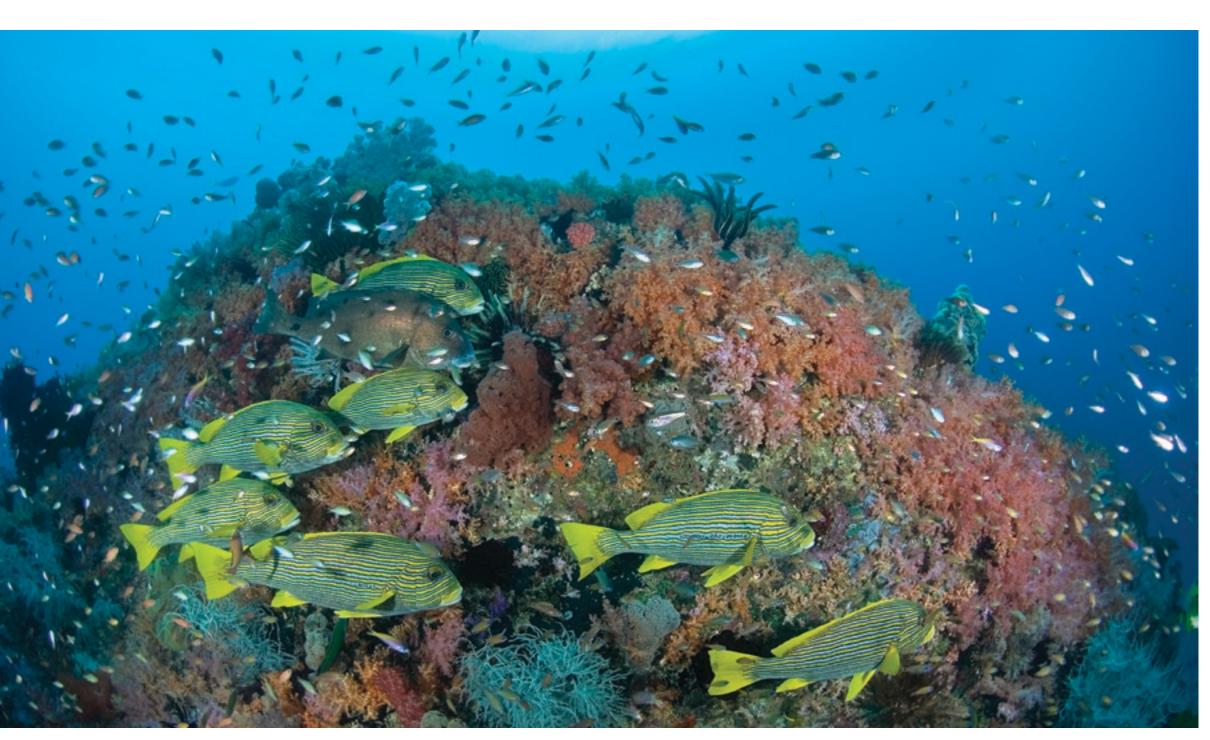
HE tide was falling near an unnamed island outside the mouth of Triton Bay. There was a strong current and we didn't have the best visibility thanks to the murky water that filled the bay on its way out to sea. Truthfully, if you can control your buoyancy and handle your camera, you really want to be in the thick of it, even on the outgoing tide. Anyway, it's almost impossible to escape the currents in this stretch of Papuan coastline, characterized by a constantly retreating and advancing shore, which acts as a crossroads for marine species traveling on the currents.

Powerful oceanic waterways flow north-south from the Banda Sea and out of the relatively deep water trench between the Kai and Aru island groups. The eastern edge of these currents is pushed by the shallow barrier of the Arafura Sea straight into Triton and Etna Bays where the alluvial plains end and mountains meet the sea. Innumerable islands, some not even charted, range in length from several miles to just 20 feet in diameter, and spread out west to east off the coast between Kaimana and Etna Bay. Changing sea levels and active plate tectonics have shaped these islands, bays and the reefs surrounding them. The evolution of species endemic to Papua began over 10 million years ago when the islands we were exploring were stepping-stones across the Melanesian Arc of the Pacific Plate, Indonesia's Ring of Fire.

Some islands were absorbed by the landmass that became New Guinea as it traveled north. Other islands drifted away from the invading monster, but a few anchored themselves close to shore and close to each other. It was this newly formed chain of

Diver with Anthias (Fairy Basslets) and Damselfish

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Sweetlips being cleaned near a soft coral covered boulder. Various reef fish complete the scene.

solid substrate that acted like a sieve and strained incipient life from shifting oceanic currents. Yet the undersea life that evolved around each island remained somewhat distinct. The tremendous rush of fresh water running off the mainland then (and now) prevented much of the normal neighborly mixing of larvae. Now, when maturing marine larvae sweep through, they are caught and deposited within this relatively compact but uniquely segregated island aggregation. Here they are nurtured on reefs that have become "species factories" according to Mark and Gerry.

Underwater, everything happened at a delirious pace. We worked our way around a series of boulders about 40 feet high. One was covered in diminutive orange soft corals and schools of sweetlips, the next by waves of anthias and damselfish on steroids. There was hardly a bare spot on those boulders. Every inch was occupied by some type of invertebrate. It was as exciting as our exploratory dives with Kal and Gerry around Horseshoe Bay along the southern edge of Komodo National Park back in 1992. The abundance of tunicates, holothurians, and encrusting sponges was reminiscent of those now famous Komodo reefs where nutrients borne by cool, often-green water nourish copious species of sessile animals. Beneath a shelf tucked away from the current, three lionfish circled through a cloud of sweepers. One of the fish was the newest species in the genus Pterois. Found in murky water, it resembles the common lionfish (*P.* volitans) except for the fleshy "flags" flying from the ends of its dorsal spines which are narrower and lack the distinct banding of the volitans. The new lionfish will be called P. steeni after Gerry Allen's longtime dive buddy and marine life photographer extraordinaire, Roger Steene.

On New Year's Eve *Adventure Komodo* traveled beyond our newly found submerged paradise, far beyond any world we knew. Early on New Year's Day, Larry woke the crew and passengers with his loud shouts, "Kamoros on the back deck, Kamoros on the back deck." As much as all the guests wanted to explore diving's newest hot spot, we also wanted to meet the Kamoros, an ethnic group Kal had studied and photographed since 1996.

Numbering about 20,000, the Kamoros occupy a 200-milelong stretch of coastal lowlands from Etna Bay east to the Asmat region. Ten years ago while documenting mining installations, Kal heard about a Kamoro initiation ceremony to be held in Timika Pantai. Even though most Kamoros lived as opportunistic hunter-gatherers, few knew they still held initiation ceremonies or even carved their amazing ancestor poles and

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Middle The liveaboard, Adventure Komodo and a jungle-clad waterfall reflect in the mirror-like waters of Etna Bay. **Bottom** Tambelo "worms", actually are bivalve mollusks that are a staple part of the Kamoro diet. They not only look-like a worm but they taste like one as well, actually more like a "wormy" oyster.

Top Kamoro people of Timika Pantai Village

shields. Kal's visit changed all that. What he found was a people whose rich cultural life had been outwardly subdued to the point of invisibility by missionaries and the Dutch government, especially during the years between the two world wars. Encouraged by talks with village elders and a stipend from the mine, Kal has promoted a resurgence of Kamoro festivals and traditional styles of wood carving. And so here we were, a dozen scuba divers from the United States, pockets stuffed with millions of rupiah to buy carvings and ensure a very happy new year for the Kamoros and an adventure for us.

The ship rocked and rolled at anchor in front of the sand bar that guards Timika Pantai. On this first day of 2007 the Arafura Sea, never more than 150 feet deep, was a cappuccino-colored mess of waves, wind and tidal currents. Fifteen feet is not an unusual tidal drop here. To complete our day on shore it was raining buckets. Tossed about by waves and currents, the dinghies puttered along beside a Kamoro canoe. In the lee of the sand bar Made, a divemaster and dinghy captain, steered our dinghy straight for the beach where we tumbled out in the midst of a riotous welcome dance. Resigning ourselves to being drenched all day (I wish I'd worn my wetsuit) we all joined in and boogied our way to the village.

The events of the day included a dance with performers wearing complete *mbi-kao* masks and thick bustles of cassowary feathers. After the dance we watched a carving demonstration and had a chance to sample local foods including sago cakes and Tambelo worms. Tambelo worms ("They taste just like oysters"—if you say so) are bivalves and members of the shipworm family that burrow in wharf pilings or free-floating wood. But the most prized Tambelos, or as Kal writes, "the longest, slimiest and therefore the best," burrow into mangrove trees. For me this was not a Happy Meal—in more than one respect. When eight-inch-long Tambelo worms, pulled straight out of a rotten mangrove tree, are touted as the tastiest menu item, believe me, you hang on to that soggy packet of crackers you secretly stashed in your T-shirt pocket. Shivering and soaked through our clothes, we selected carvings from a semi-circle of statues, paddles, and mini *mbitoros*, Kamoro ancestor poles. Driving rain darkened the intricately worked wood while Kal patiently described to each new owner the meaning behind the design of every carving. I couldn't help but notice that no one purchased a black-tinted carving. The night before we arrived, Kal explained that a carving's black "paint" was derived by splitting open an old ABC carbon-zinc battery and dying the wood with the electrolyte paste inside.

By now it was late afternoon and the waves were so treacherous one of the dinghies swamped twice on the way back to the ship. Fortunately everyone survived their nextto-last dunking of the day. When we finally maneuvered to Adventure Komodo's stern, Captain Andy yelled out that the only way we could "safely" get back on board was to leap from the dinghy into the churning sea, grab the rope tossed from the deck, and let the crew pull us up to the dive platform. I let Burt figure out what to do with the cameras. I held my glasses in my teeth and went for it. Later in the rolling salon, fortified by warm showers and hot chocolate, we voted to tough out the storm through the night while motoring back to Triton Bay.

Our reward for withstanding 24 hours of waves crashing over the bow, plates crashing in the galley, and a couple of people crashing down the stairs, was Selat Iris. Just east of the mouth of Triton Bay, Selat Iris lay between Pulau Aiduma and the mainland. Small, undercut dollops of islands clustered in the slot, and Aiduma's karst walls were darkened by fresh water runoff laden with nutrients that feed the reefs. There were so many emerald-topped islets within sight that it was just a matter of choosing the right one for our first dive. Gerry described a site he called "White Rocks," so Burt and I went there. Larry picked the inland side of a mushroom-shaped island from among this labyrinth of limestone.







We both hit the jackpot. At White Rocks we descended down a wall of magnificent crimson soft corals. There wasn't a lot of hard coral cover in Triton Bay because the water is often quite turbid and swirls with freshwater runoff. Hard coral larvae are pelagic and do not survive long in brackish water, so the 585 species of hard corals (75 percent of the world's known hard coral species) identified so far in the region congregate in the clearer water closer to Fak Fak. I didn't miss the hard corals, as the largest soft coral specimens I've ever seen overwhelmed me. Soft coral rules in Triton Bay. We tried to circle our hands around the base of the fattest colonies; they must have measured at least 18 inches in diameter! At 40 feet the soft corals gave way to acres of feeding orange tubastrea. Shoals of fish charged past. Selat Iris has to be the last vestige of primeval sea – there were so many fish in the water. Almost hypnotized by the living mass I decided there was no worthy way to capture this dive in a photograph. There was just too much energy to distill down to a two-dimensional image, but we finned as hard as we could and gave

Larry was shaking with excitement when we met him on the dive deck. "We saw everything! A super rare velvetfish to a grouper bigger than me!" he exclaimed. "Plus there's a swim though that runs under the entire island. We could park a Volkswagen in there."

Later, under a night sky filled with a full moon so bright it blotted out the starlight, we made an exploratory dive beneath a crumbing lump of karst with a lone scrub palm clutching the seaward side. It was our first dive on this rubble-strewn slope, and we hoped it will be as prolific as the reefs had been. Within minutes we spotted a glowing squid and a pair of scarlet Tozeuma shrimp. A tiny cuttlefish tried to fool us by hovering near a fluffy sea pen. The next sea pen we inspected had half a dozen crabs foraging around its polyps. In fact, a thicket of sea pens sprouted from the substrate, an indication of the intense current that flows through here most of the time. The tide was slack and we are thankful for the reprieve. We were able to move easily around the bottom. Everything anchored in the sand was covered with allied cowries. Larry counted seventeen shells, each smaller than my little fingernail, grouped on a mauve soft coral. About midway through the dive we were surprised to find a red-blotched harlequin shrimp (H. picta, not normally observed in these waters) feeding on a red sea star marked with blue spots. As good as that was, the find of the night was the walking epaulette shark. It's slender, spotted body blended in so well with the substrate that we didn't even notice the small shark until it moved slowly away from our light beams, propelling itself forward on paddle-shaped pectoral fins. This species of shark has been made famous as of late, as it seems to have become the poster creature for the newly discovered biodiversity of the region in the national media.

Adventure Komodo weighed anchor after the night dive to begin the long run back to Sorong. No one wanted to leave Selat Iris but we knew we had stuck a huge gold star over what was once a blank spot on most divers' maps. During dinner most of us were too excited by what we had experienced on this trip to stop talking about the diving. Eventually, after tea and a rich tiramisu, the conversation turned to what will be done to protect this area. Burt, Larry, and I related to the rest of the group what we had learned from Mark, Gerry, and Conservation International.

Top Tail-spot Combtooth Blenny on

**Bottom** Common throughout the range. Present in Fak-Fak/Triton Bay region. Male displays to attract females and warn other males to stay away from its territory.





onservation International has delineated an extensive 70,000-square-mile network of reefs, islands, and shoreline as Papua's Bird's Head Seascape. This area includes Raja Ampat, Cenderawasih Bay and the Triton/Fak Fak region. CI defines seascapes as "large, multiple-use marine areas, defined scientifically and strategically, in which government authorities, private organizations, and other stakeholders cooperate to conserve the diversity and abundance of marine life and to promote human wellbeing." Combined with Raja Ampat, the area south of Fak Fak to Etna Bay has been recognized as having, "the highest coral reef biodiversity yet recorded for an area its size anywhere in the world." Some of the factors that have contributed to the region's pristine condition—minimal population scattered over an expansive region, for example—might also allow uncontrolled exploitation of marine life as well as forest and mineral resources. Western and Indonesian non-governmental organization (NGOs) must decide how to preserve this extraordinary ecosystem while promoting sustainable development for the people who live within it. Mark Erdman has written that, "the establishment of a multiple-use network of ecologically connected and resilient marine protected areas" is paramount. Currently a little over 10 percent of the Bird's Head Seascape is protected with most of that area lying within the Cenderawasih National Park, Indonesia's largest marine protected area.

Ten percent seems like such a token amount of habitat preserved to represent this most biodiverse region. When we visited with Mark and Gerry while they were working near Selat Iris last January, Gerry's enthusiasm was boundless. "Today I discovered another new fish species so I'm up to 25 for this region. Usually I'm pleased with one or two. This place has more species per mile than anywhere on the planet."

Mark spoke quietly about the problems scientists, NGOs and governments face while trying to preserve a place like Papua's Bird's Head Seascape. "Even though I feel like we have an excellent opportunity to achieve the goals we've set, especially in Triton Bay, I still feel a sense of urgency." He explained that in Triton the modest local population was willing to accept a financial incentive to keep commercial fishing operations out of the area. But this may not hold true in the more populated regions around Fak Fak. Mark fears Indonesia's policy of moving fishing fleets from depleted areas in the west to its untapped eastern waters could have disastrous effects throughout the Seascape.



Top Left Found on sandy substrates and feed on soft corals and sea pens

Top Right The Fak-Fak/Triton Bay region has an abundance of Allied Cowries. Allied Cowries are various species of molluscs that associate and match their color to a host, usually coral.

Middle Gobies live commensally on Soft Corals. They blend into the backkground by matching their color to their host. They feed on the corals mucus, bits of dead tissue and food they scavenge from the polyps of the filter feeding coral.

**Bottom Left** These crabs live on sea pens and steal food (planktonic) that the sea pen captures.

Bottom Right This beautiful but ommon member of the goby family is seldom noted by divers due to its small size and habit of hiding amoungst the arms of branching Acropora

Worm.



The divers on Adventure Komodo had a lot to ponder as the ship motored around the tip of the Bomberai Peninsula. There was one more island group near Fak Fak left to explore before we docked in Sorong. I should have been excited at the prospect of another unknown reef but, secretly, I was out of sorts and melancholy. I realized I didn't want to wake up at Pulau Pisang in the morning because when I did it meant this trip would soon come to an end.

Still, I hadn't figured out a way to stop time and Pisang was as lovely an anchorage as we'd visited on this trip. As a pale sun tinted the sky, I could see a half dozen deserted beaches in need of a picnic. Male hornbills left their nests to hunt, their broad wings reverberating through the cool morning air like muted helicopters. In the wheelhouse Larry and Burt slurped soupy Mee Kuah noodles laced with incendiary sambal as they discussed what reefs to target on our last full day of diving. They decided to explore a point just a few hundred yards from the boat. On our way to the dive site the angle of the sun revealed a dome of shallow corals only 15feet below the surface. We stopped the dinghy, put our faces in the water and decided to dive right there.

Because it was so early we were set up to shoot macro, but below us was yet another incredible wide-angle scene. An intricate web of hard coral covered a rounded seamount whose sides became more vertical as they plunged into deeper water. Sea whips and fans grew at right angles to the bulging walls, indicating the direction of the current around Pulau Pisang. Nestled in the rough branches of an acropora colony was a goby with magenta eyes and a bright yellow belly. It was a beauty and I'm surprised we hadn't noticed this species until this time. I swam ahead of Burt looking for unusual nudibranchs but stopped when I noticed a tiny aberration on a sea fan. If the fan had been feeding, fluffy polyps fully extended, I never would have seen the unusual pygmy seahorse wound around one of its branches. We've been photographing pygmies for over a decade but we had never seen one like this. It had a deep crimson wisp of a body like H. denise, but it was covered with contrasting bumps resembling H. bargibanti. According to Gerry Allen our find was probably a new species. He too had observed and photographed it in Raja Ampat, and was only waiting on the "science" before it could officially be called "new." We spent so much time with the pygmy that even breathing nitrox we had to surface before we fully explored this new site.

When we surfaced, Ali and Made, who normally idled the dinghy close to our bubbles, were a few hundred yards away leaning over the side of the inflatable. As soon as they heard our signal, they hauled in a bucket and zipped across a smooth sea mottled with reflections of clouds. Before he cut the outboard I could see Ali's broad smile. He leaned over to grab the camera and then showed us what he had in the bucket. We inflated our BC's for a better look at a wad of tan and gold sargassum. Entangled in the weed were two sargassum frogfish. Ali and Made left us to round up anyone else who wanted to see these special fish. Burt and I floated contentedly beside the frogfish and watched them settle back into their seaweed home. I said a private thank you to the gods of digital photography because we had plenty of space on our memory card and didn't have to go back to the boat to change film as in the days of old. One of the fish was bloated from its last meal and resembled an inflated pufferfish. I wondered what

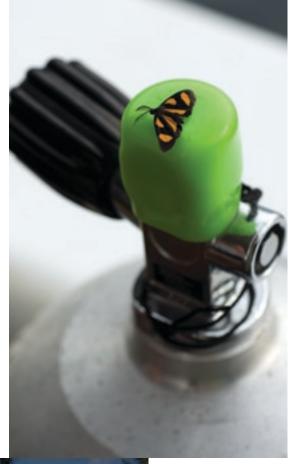




Top Allied cowries, in this case a Spindle Cowrie are common in Triton Bay. These molluscs are found mimicing their hosts seafan or soft coral. Note; yellow Brittled Sea Star wrapped around a branch of the Seafan. Bottom Indonesia, Papua, Fak-Fak, Pulau Semai

Soft coral grows prolifically near the surrface in Triton Bay. Silversides are so abundant they often obscure the reef and the view of the surface





it had eaten. Aquarium expert and self-proclaimed "fish nerd" Scott Michael once told me that even though these frogfish normally feed on small invertebrates and fish also living in the sargassum, they are total gluttons and will eat just about anything, including each other!

I felt like that bloated frogfish as we gulped down a late, hurried lunch and waited for our tanks to be refilled. It was late afternoon before we could safely get back in the water to explore the seamount. There was just enough daylight for one more dive. This time Made dropped us on the inside curve of the reef and we descended to about 60 feet intending to cruise the seamount's perimeter. There are no signs of rivers or waterfalls around Pisang and the sea here is much clearer than inside Triton Bay. I could see down to at least 80 feet where a ridge of reef extended from the dome. A mild current was hitting the ridge and dropping over the outer edge where male flasher wrasses were displaying over a tangled mass of sea whips. I no-

ticed a moving patch of white in the far distance but could not make it into a familiar form. It disappeared and returned, always at the edge of the visibility. Then Burt saw it too, and we realized we had been watching a manta ray, its belly a flash of white, circling back and forth in the dark afternoon sea. The manta approached the ridge and passed so close I could almost touch it. I held back and waited for Burt to turn off the strobes so he could photograph it without startling the ray. After six passes our manta glided off into the indigo water below the ridge. It was our last gift from this extraordinary sea.

We know that preserving an area as vast as the Bird's Head Peninsula Seascape is a balancing act between the needs of the environment and the needs of the people. But our experiences in a place still so pure evoked the idea that this is what the ocean must have been like before any of us needed anything from the sea. Salt water covers three quarters of our planet. The Pacific Ocean alone is larger than all the continental land masses combined. Despite its vastness, all of its complex habitats—arctic ice floes, kelp forests, tropical reefs, mangrove-studded estuaries—are threatened. Even though we know that Papua's Bird's Head Seascape can not survive in isolation, that it is inextricably bound to the mountains, forests and rivers that surround it, indeed to the rest of the planet's oceans, we hope there is enough foresight and wisdom on earth to preserve this one small, very special place—the last best place. **FM** 

Top A moth, attracted by Adventure Komodo's deck lights, rests on a tank value.

Bottom Nusurumi Island

## **Larry Smith**

We had just returned home after charting the new sites south of Fak Fak when we learned of Larry Smith's untimely death on March 20, 2007. Larry's knowledge of marine animals and their habitats revolutionized the way we dive. He could call in a school of jacks with a whistle or find a frogfish so camouflaged that it was invisible to everyone else. Because of Larry we all know what a "critter" is and how to find one. We eagerly dive in places—muddy slopes, mangrove swamps, mucky harbors—we would have shunned before Larry taught us that Edward Abby wasn't just describing the desert when he wrote "there are no vacant lots in nature." Larry was the undisputed King of Muck. He was also our brother, our soul mate and our third musketeer.

For the past 17 years Larry lived and worked in Indonesia exploring uncharted reefs and often discovering new species. He dived with the best—Stan Waterman, David Doubilet, the Deloaches, Paul Humann—and he always said he learned something valuable from every person who came on his boat. We believe it was more of a two-way street, and that Larry gave way more than he received.

I think Kal Muller, our honorary fourth musketeer, was the first person to call Larry the "best divemaster in the world." Larry was also a father figure to the various crews he worked with over the years. If you were fortunate enough to have dived with Larry, you saw first hand how he treated his team. He shaped the lives of many young Indonesian men by teaching them how to interact with people from different cultures. Because of their relationships with Larry and his clients, many Indonesians were able to broaden their horizons, learn invaluable skills and improve their lives.

Larry, Burt and I planned the Fak Fak trip for over a year. It was the best exploratory trip any of us had ever taken. Every dive was better than the last, every village trip more exciting than the one before. Larry found a brand new adventure around every bend. I can still feel his hand grab my shoulder after an incredible dive at a new site, still hear his voice shaking with excitement. "We're out here doing it, Maurine," he said. "We're really doing it, just like we planned."

None of us wanted to leave Triton Bay, especially Larry. When he hugged Burt goodbye he said, "Burt, we're so lucky, we've been to dive heaven right here on earth." That special spot in Selat Iris will be named "Larry's Dive Heaven" in his honor. A friend advised us not to be too sad about Larry because he was up in dive heaven teaching all the angels to hunt critters they never knew they had. Larry's spirit will be with us every time we slip beneath the surface of the sea, every time we take another trip to dive heaven. Selamat jalan, Larry.

