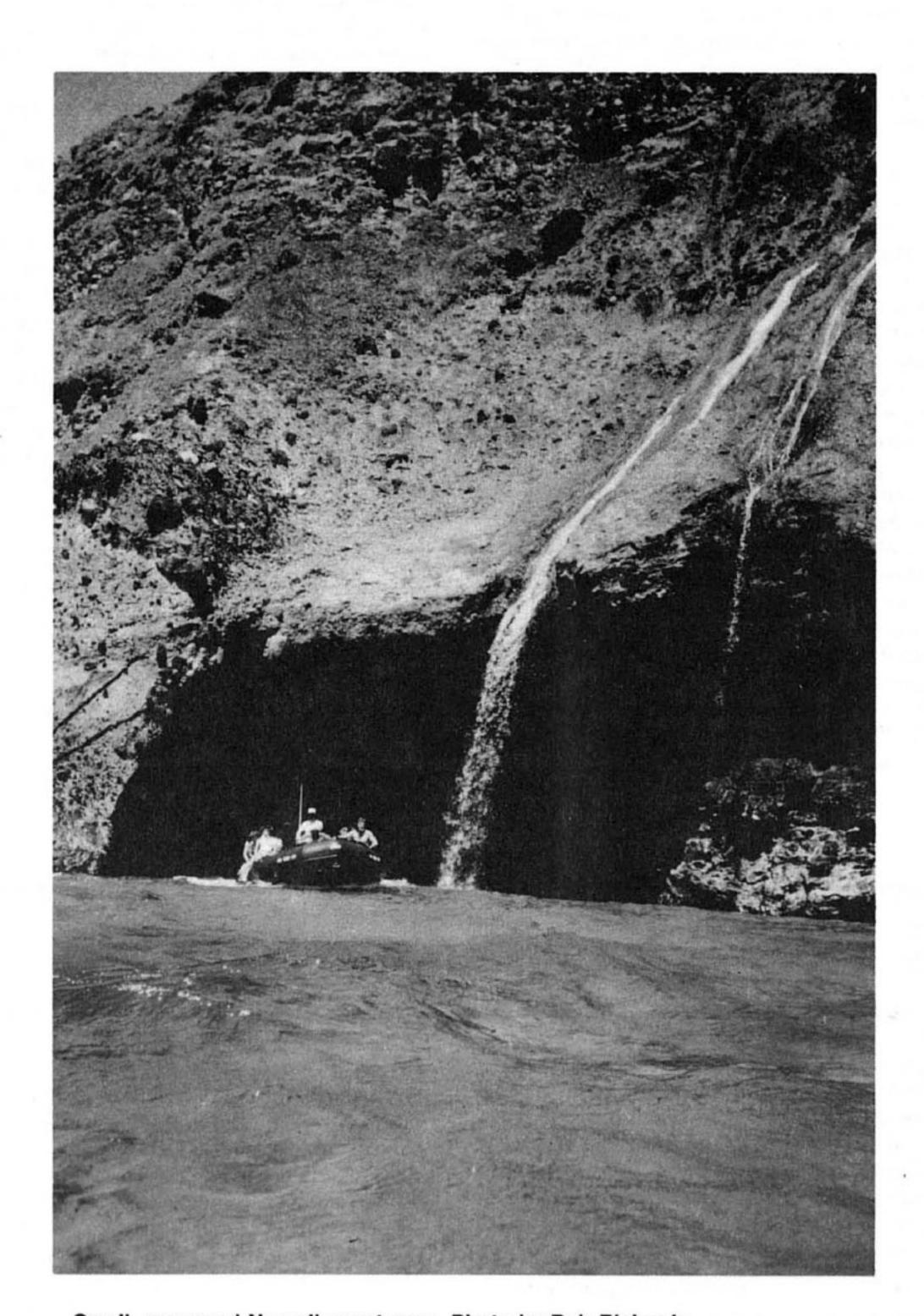
The 1987 Na pali Coast Sea Caves Expedition

By Dave Bunnell

he lush, volcanic island of Kauai is Inot a place generally associated with caves, even of the volcanic type. Oldest of the Hawaiian islands, its volcanic landscape has been heavily eroded into impressive canyons and valleys. Nowhere is this erosion more spectacular than along the Na pali coast on the northwestern edge of the island. Dramatic pinnacles rise above lush valleys and waterfalls cascade directly into the sea along a seven-mile stretch of coast accessible only by sea, or by hiking the Kalalau trail, originally built by the ancient Hawaiians. The beauty of the Na pali coast has made it a popular tourist destination on Kauai. Among the attractions the coast offers are a series of large "world class" sea caves.

We first heard of these caves through fellow grotto member, Bob Henderson, who visited the area in the summer of 1984. Bob returned with photographs and tales of huge sea caves with spectacular waterfalls and tunnels receding into the darkness. Many were large enough to take big boats through and many tour operators offer motorized raft trips to these "spectacular sea caves." Bob thought the caves were comparable in size to Painted Cave on Santa Cruz Island and were probably lava tubes that intersected the ocean. He had even seen a high lead in one that he couldn't reach...

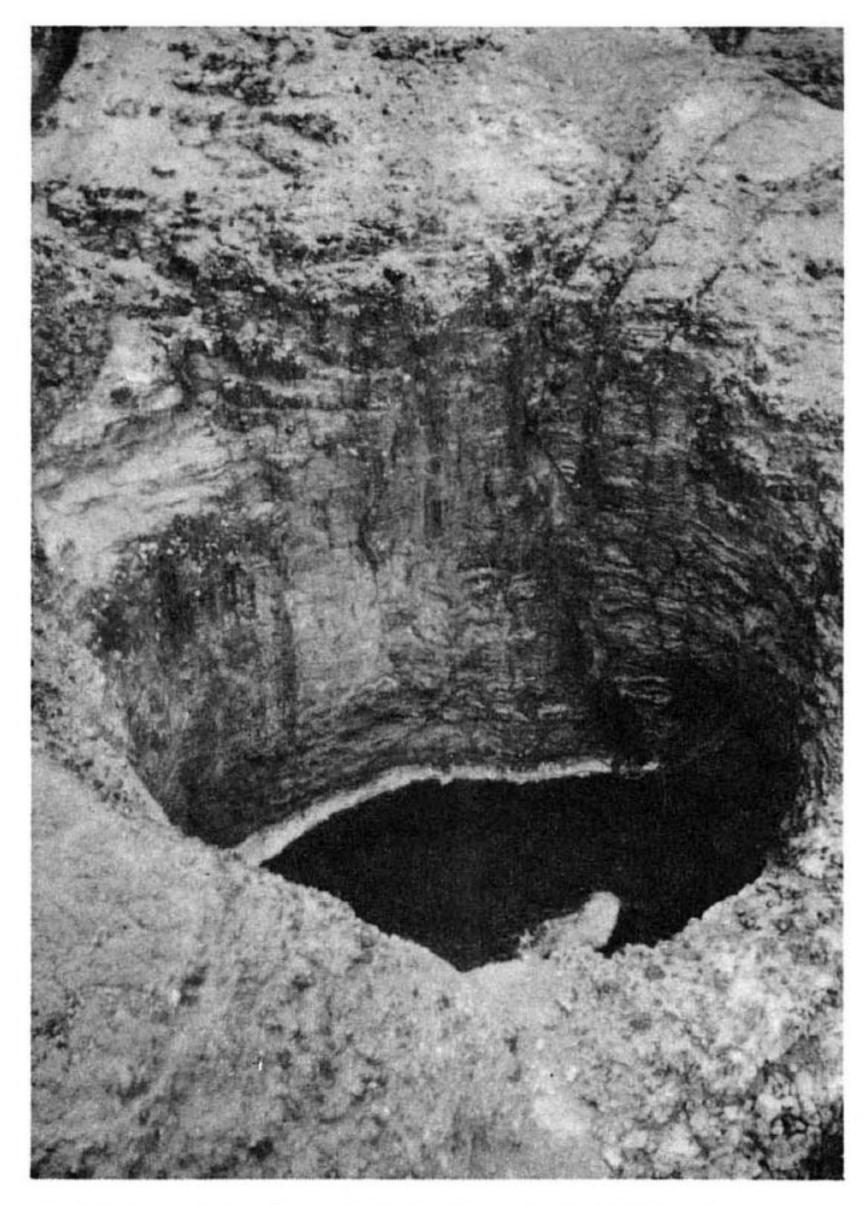
This sounded like a great opportunity to expand our sea caving horizons beyond our usual California endeavors, so I planned a small expedition to explore and map these caves. The trip was set for August because this is the time of year when the seas recede from the coast and are generally calm. Winter, by contrast, brings huge surf to the area and many of the caves are inaccessible. Joining me were veteran sea cavers Bill Liebman, Ed Moody, Bob Richards and Carol Vesely. Our primary logistical problem was finding an affordable way to reach the caves. Charter boats or rentals there were prohibitively expensive. The only way to do it was to bring our own boats. Ed, Bob, and Bill split to cost of an inflatable "three-man kayak." I had previously acquired an inflatable (Ampac) boat with an 8 hp engine, which I hoped could be brought on an



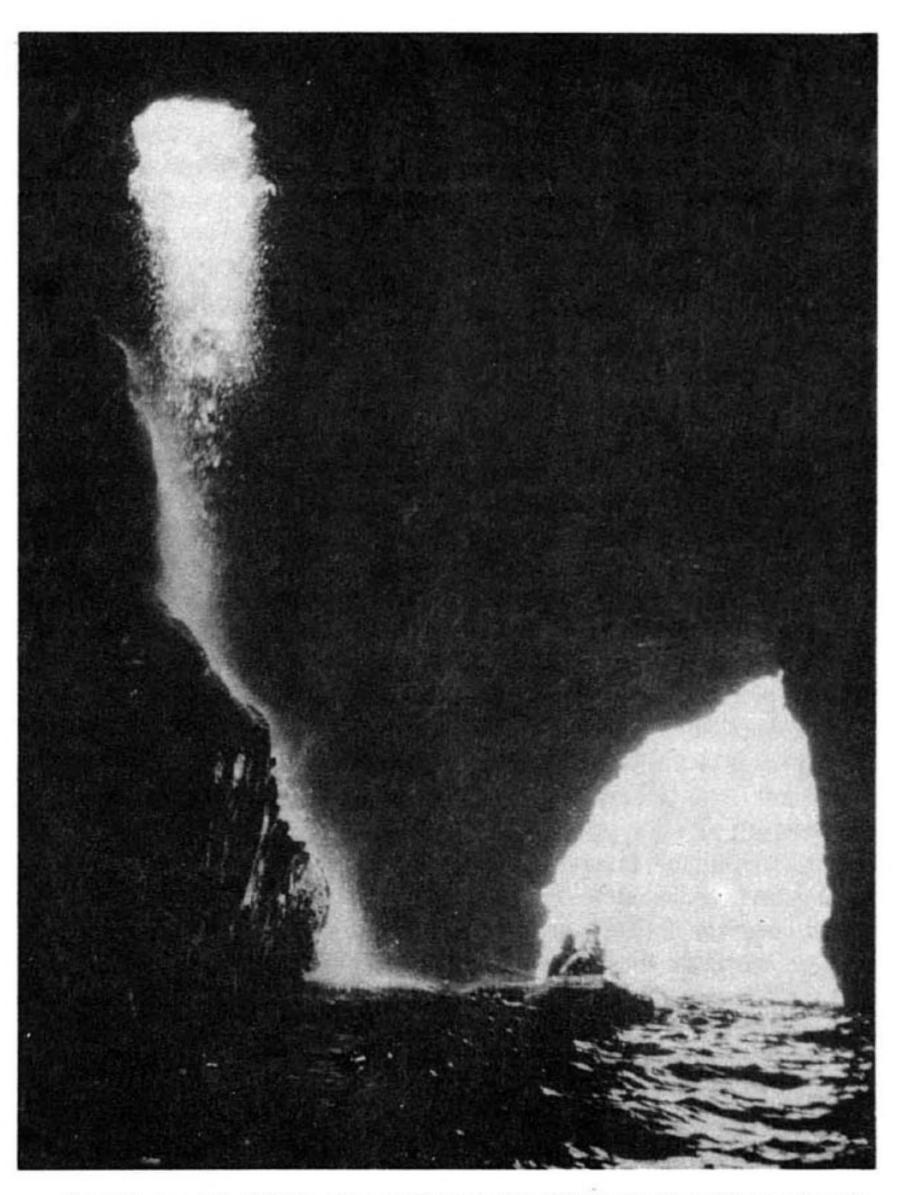
Small, unnamed Na pali coast cave. Photo by Bob Richards.

airplane. I packed it up in three huge duffle bags, the heaviest of which was the engine: 70 lbs, still within legal limits for check-in bags. I wrote the Kauai Division of State Parks and obtained permits to camp for five nights (the maximum allowable) at Kalalau Beach, which would be a good base from which to explore the caves—indeed, several large caves could be reached on foot from there.

On our day of departure, we could finally relax once the boats had been successfully checked in. We flew to Lihue, Kauai, where I had reserved a small van to transport us and the boats. We ran into our first hitch when the rental car company informed us that camping was not permitted with their vehicles! Apparently, there have been many problems with vandalism, particularly at the Kalalau trailhead at Ke'e Beach. Fortunate-







Looking out the Waihuakua entrance. Carol Vesely, Dave Bunnell and Ed Moody are in the expedition's raft. Photo by Bob Richards.

ly, we established contact with the folks at Captain Zodiac, the largest of the tour operators. They were interested in our project and provided us a place to leave our van. They also provided useful information about the caves and their proper names.

One of our first moves was to attempt, at Bill's suggestion, a reconnaissance of the coastline by air. For over \$100 each, we took a 90-minute helicopter tour which covered much of the island. The deep canyons of Waimea and the waterfall-ringed summit caldera of Mt. Wailaelae (wettest spot on earth) were mind-boggling sights. As we lingered over our first look at the Na pali, we noted impressive littoral features: a huge littoral collapse pit locally known as the Queen's Bath, numerous large cave entrances with waterfalls tumbling over the edge, a huge arch with a nearby waterfall which fed a small creek flowing through it into a pristine sand beach. We could also see that the caves were fewer as one went west from Kalalau beach.

Landlocked Sea Caves

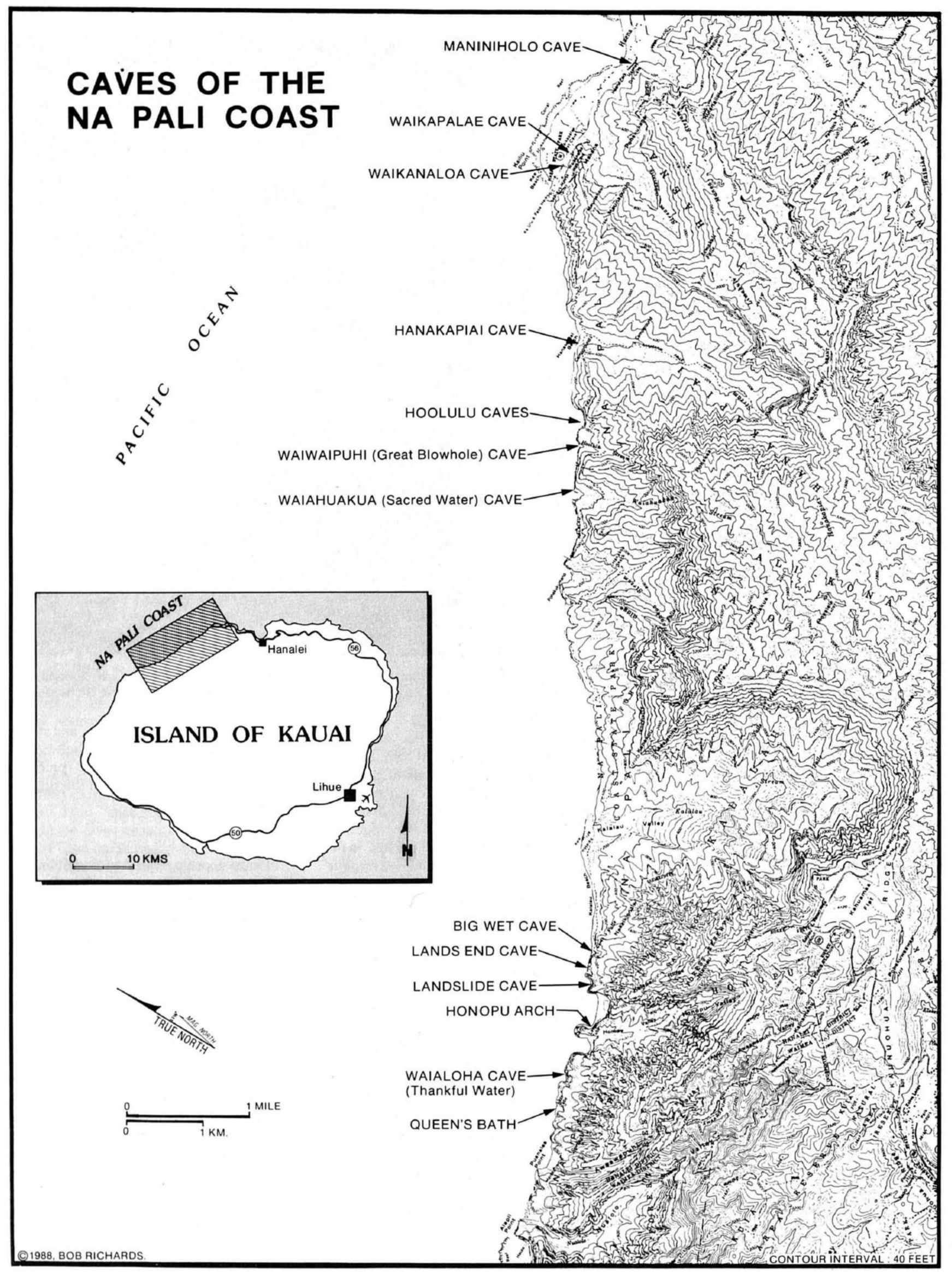
Haena Beach Park is the only camping area near road's end on the Na pali, and here we made our first camp as we prepared for our departure. The three caves shown on the topo near there are well-known tourist attractions.

These sea caves are now landlocked and no longer subject to the pounding surf. Directly across from the park is Maniniholo Cave. It is a broad, dry, flat-floored chamber which penetrates some 200 ft into the cliffside, it has a flat ceiling averaging 10 ft high. A crawlway leads off from a side passage on the left. According to Duffy's Kauai's Incredible North Shore, the cave was once much deeper until a tidal wave carried in tons of sand in 1957. A few miles away near Ke'e Beach is another cave by the road, Waikanaloa. This cave has an impres-sive water-filled entrance chamber whose ceiling is covered with splotches of white, purple, green and orange -a combination of algal growths and metallic oxides leached from the basalt. We surveyed with wetsuits and snorkel gear, putting on a show for the tourists who went no farther than the entrance. The water inside was murky but appeared to be fairly deep. The cave mapped out at 267 ft with a short side passage at the rear of the room. We then backtracked a bit east to the third landlocked cave (Waikapalae), which sits about 100 ft above the road. The entrance is 130 ft wide and leads down a steep breakdown slope to a 240-ft-wide room floored with a beautiful blue lake. This water was considerably clearer than that at Waikanaloa. Low-airspace passages lead off

the back of the entrance room, and at one point created some confusion when Ed, off on a solo "push," experienced problems finding his route back through the maze of ceiling pendants.

Off to Kalalau

Monday morning found us assembling my 12-ft Ampac inflatable on the edge of crowded Ke'e Beach. The surf was calm as we launched, the boat piled high with all our well-tied-down gear and Ed and I sitting on top off it all. Bob and Bill began the 5-mile paddle in the kayak while Carol opted to hike the 12-mile Kalalau trail out to the beach. The trip out was slow going and gave us a good view of the caves. We counted about a dozen and saw numerous tour boats buzzing in and out of the larger ones. Midway out we saw Carol hiking the trail, which follows the cliffs high above the ocean. When we finally arrived at Kalalau, the surf was up a little, but we landed without flipping the boat. However, the beach was steep and we struggled for over half an hour to get boat and gear (all too-well-tied at this point) up on the beach as the surf tried to take it away from us. We found a campsite under one of the many huge shelter caves along the beach, and conveniently located a large waterfall which



tumbles out of the lush valleys above. Although we set up tents to keep our gear out of the sand, there were no insects to bother us.

While waiting for the others to arrive, I went scouting along the beach, looking for caves and enjoying the scenery. (Besides its other natural beauty, Kalalau is also a nude beach.) I noted one large entrance near camp. All along the beach were large shelter caves where people were encamped. At the end of the beach, I reached a huge rockfall which appeared fresh (we later learned it had occurred only six weeks earlier). Picking my way through the rocks, I worked my way over to what appeared to be a partially obscured cave entrance; sure enough, I was soon looking into a huge water-filled borehole passage. Beyond the landslide boats would be needed to explore farther, so I returned to camp to join the others.

Our first mapping effort was in the cave right by our camp. A large sand dune partially obscured the large entrance, which led into a 240-ft-long chamber floored by a waistdeep brackish-water lake. This cave, like many of the caves at Kalalau, is landlocked during the summer months, but open to the sea in winter. The pool is fed by freshwater seeps. On the ceiling above the lake were what appeared to be pillow basalts, formed where hot lava cools and hardens underwater. Big chunks of these had fallen in the past and had left large concave hollows on the ceiling,

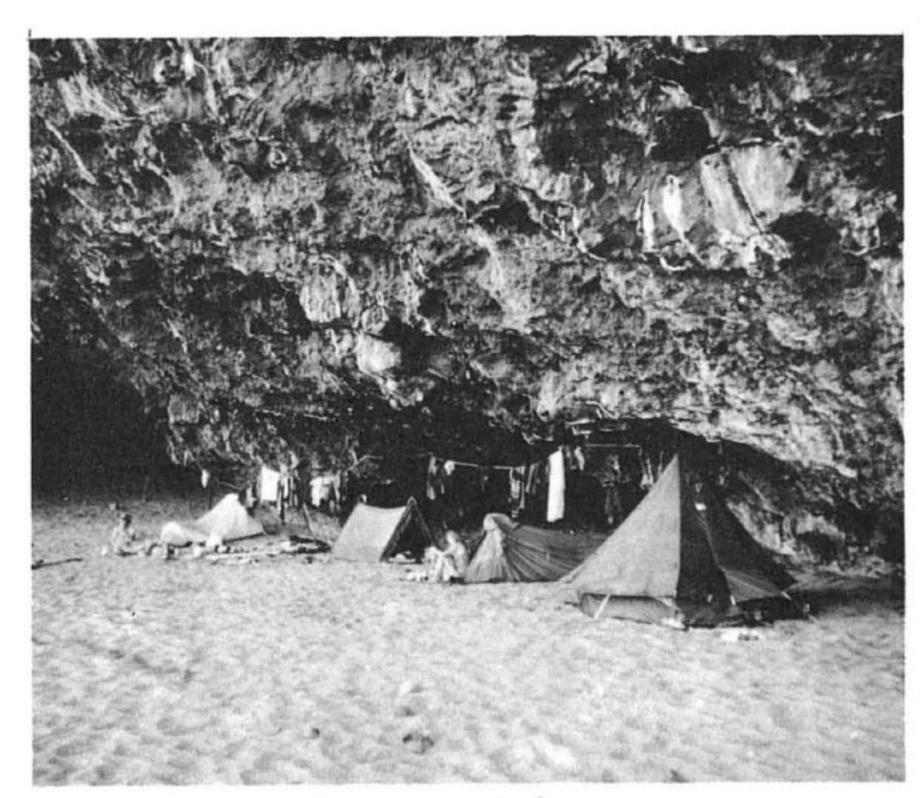
although no evidence of fallen rock was visible on the sandy floor of the lake. We later read that pillow basalts are unknown in Kauai, so their presence in the cave is particularly notable. At first the cave appeared to be a single room, but on the left we found a walking-height side passage which surveyed out at 100 ft. It had formed along a prominent dike, which, as we discovered, was typical of all the caves we mapped. In this passage we were surprised to find walls and ceiling covered with thick deposits of red and white calcite flowstone, even some draperies-more deposition than I've ever seen in a sea cave. One wall had clusters of rounded disks two to three feet wide protruding from the flowstone like a stack of pancakes; judging from one with a broken edge, these calcite-coated discs had an inner core of sand! We finished up with 532 ft of survey. There appeared to be no local name for the cave other than the "Wet Cave" (or so it was labeled on the map inside the outhouse), so we simply dubbed it "Kalalau Beach Big Wet Cave." (When we compared notes and photos with Bob Henderson after the trip, we learned that on his visit to the cave several years before, the floor of the passage had been a good six feet lower and covered with waist-deep water, so this cave probably has a different look to it after each winter's storms.)

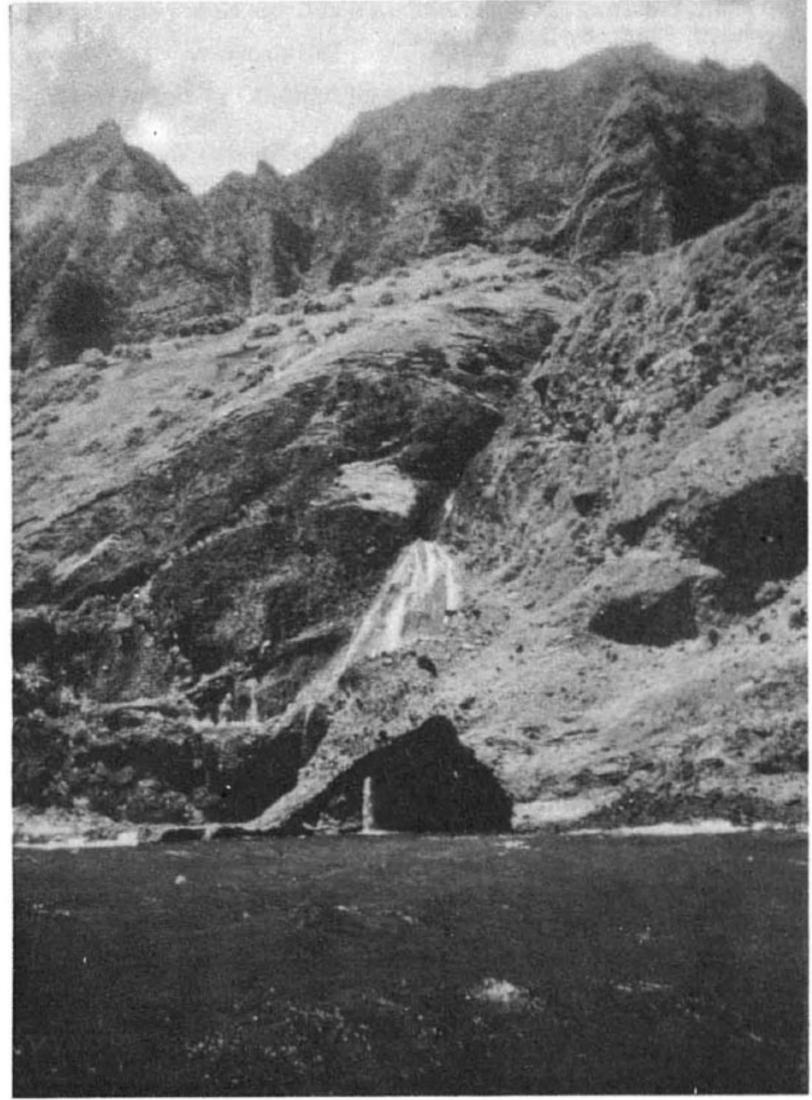
The next morning (Tuesday) we headed for the caves west of Kalalau, some of which are shown on the topo. We noted that the inflatable had lost air, and on closer inspection, found a slit about 1/4-inch wide! Of course, I had brought a patch kit. Or I thought I had. We soon discovered it hadn't come out with us and was back in our van, a 12-mile walk away! Fortunately, the boat has two air chambers and Bill had his ever-trusty roll of duct tape-so we taped it up and Carol and I headed out in it while the others took the kayak, now dubbed the "Jellyfish Express" for the numerous and painful animals which seemed to find their way into the boat at times. Just past the landslide (which looked immense from this viewpoint) we passed Honopu Arch and Beach. Farther beyond we reached an area which one of the tour-boat skippers had described to us, where a waterfall known as Waialoha (Thankful Water) tumbles down the side of a cove by a large cave entrance. We anchored the Ampac at the entrance and used the kayak to ferry people to a beach in the rear. Later, the kayak proved a useful vantage point for the sketcher. The cave was a typical single-passage sea cave (reminiscent of those on Santa Cruz Island in California) which surveyed out to 737 ft. It too was carved along an obvious dike, which convinced us that these caves were entirely wave-cut (i.e., along the less resistant intrusive rock) rather than being lava tubes that had intersected the ocean.

Giving the boat a few pumps (it was slowly leaking, but not too badly; duct tape is amaz-

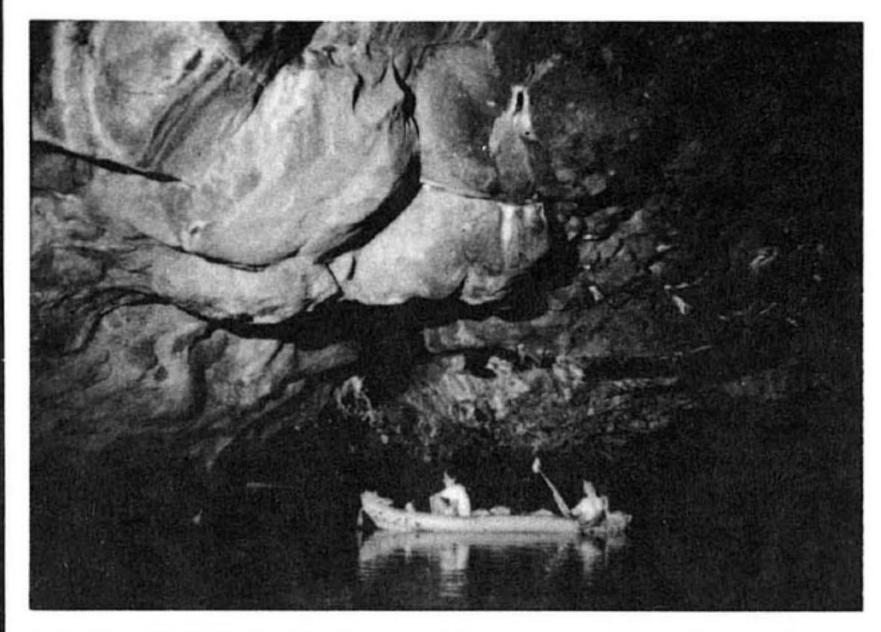
Below: Basecamp of Kalalau Beach. Photo by Bill Liebman.

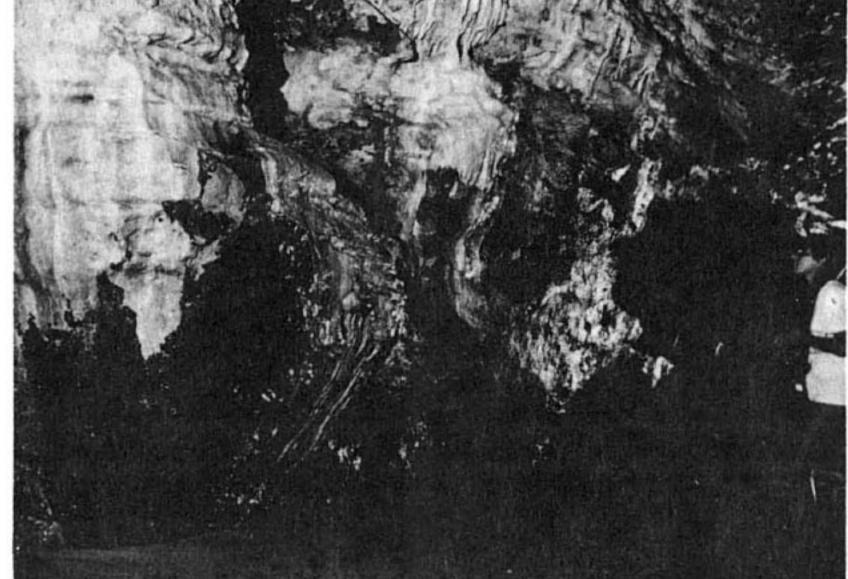
Right: Scenic Na pali coast. Photo by Bob Richards.





KALALAU BEACH BIG WET CAVE NA PALI COAST STATE PARK ISLAND OF KAUAI, HAWAII KALALAU BEACH Na Pal Clitts 60 FEET 20 METERS ENTRANCE SCALE 35) Formations. PLAN VIEW (Data in Feet) Flowstone Sand Floor SUUNTO and TAPE SURVEY BY: D. Bunnell, Wm. Liebman, E. Moody. B. Richards, C. Vesely. DATE: 4 Aug. 1987 TOTAL SURVEYED TRAVERSE: 532 ft., 162 m ©1988, BOB RICHARDS





Top right: Paddling through Kalahua Wet Cave. Note pillow basalts overhead. Photo by Dave Bunnell.

Middle right: Red and white calcite formations in Kalalau Wet Cave. Photo by Dave Bunnell.

Lower right: Dry, sandy floored passage in Kalalau Wet Cave. Note dike in ceiling. Photo by Dave Bunnell.

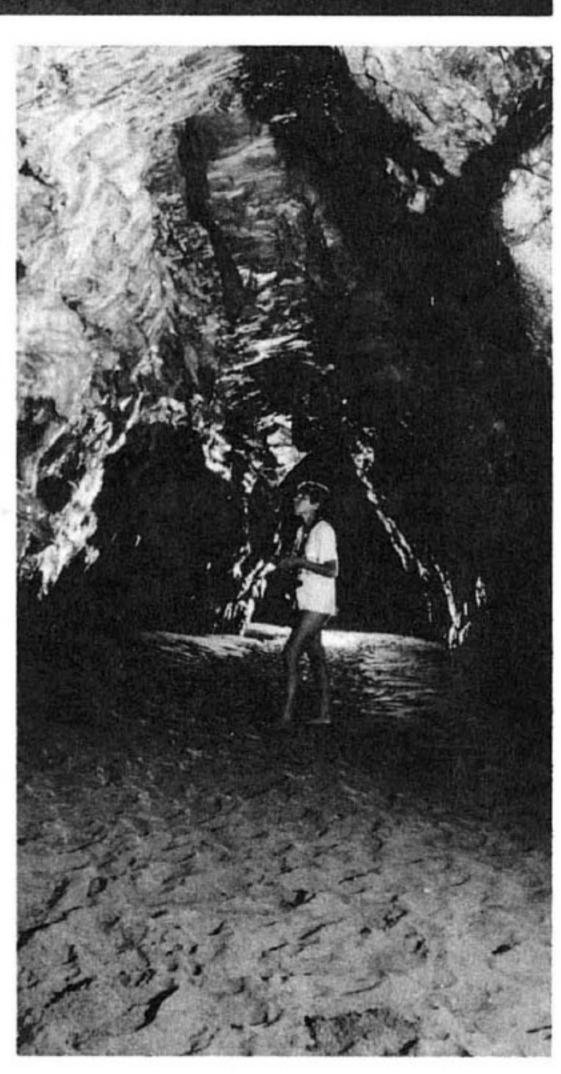
ing stuff), we headed on to the Queen's Bath, a unique littoral feature. The bath is a huge circular hole in the basalt over 60 ft across and 60 ft deep formed by roof collapse into a wave-cut void. The collapse has formed an island of rock in the center of a circular pool. A short tunnel leading into the bath is all that remains of the cave. The Queen's Bath is a popular destination for the tour-boats, which anchor inside and allow their passengers to take a dip. We watched the skipper from one boat climb about 30 ft up the wall and leap into the deep water below—all part of the show for the tourists.

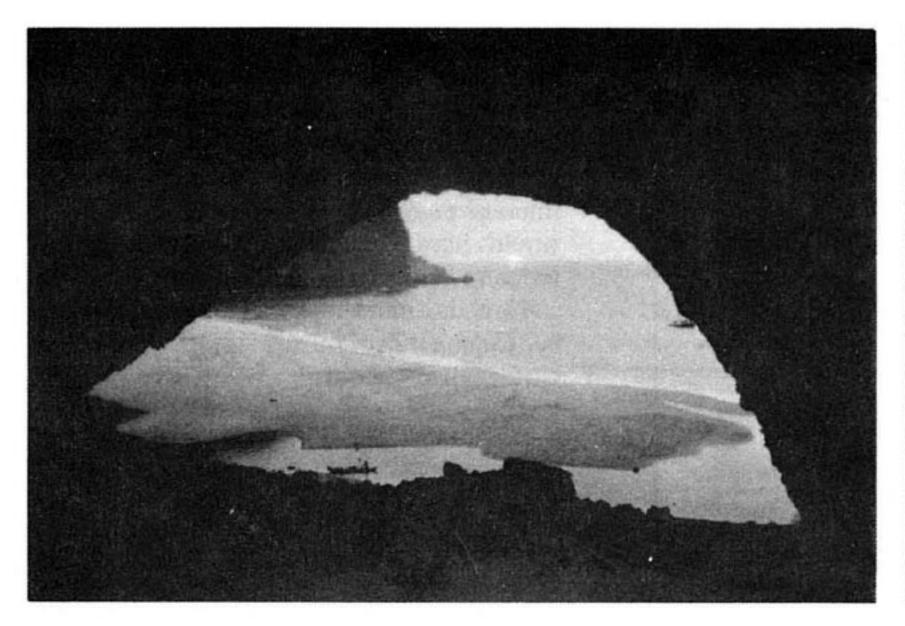
While Carol, Ed, and Bill finished up the survey of the "Bath," Bob and I scouted several miles farther west, but found only three small caves, none deemed worthy of survey. Back at the camp, we headed for the landslide cave I'd located the day before. Everyone was impressed with the view down the "borehole" and the blue-green water. This water was deep, requiring a swimming survey. Snorkeling along, I noted that the bot-

tom was floored with large rounded rocks and the passage walls were considerably undercut below the surface of the water. The water was quite clear and deep—I estimated about 30-40 ft. Large red fish about a foot long (perhaps snapper) and a few red anemones were all the life we saw in this landlocked pool. The main room was about 100 ft wide and 180 ft long to a passage trending left into darkness. Our lights revealed no obvious underwater continuation and we ended the survey with 367 feet.

The Big Ones

As Wednesday dawned, we were eager to survey the larger caves to the east of Kalalau. We were concerned about the inflatable, which now had a worse leak than before, but we had spoken to one of Captain Zodiac's skippers (they run a daily pickup/dropoff service to the beach), who had promised to bring our patchkit from our van parked back at their manager's home. So we decided we'd try one more day of "pump and tape" to keep the



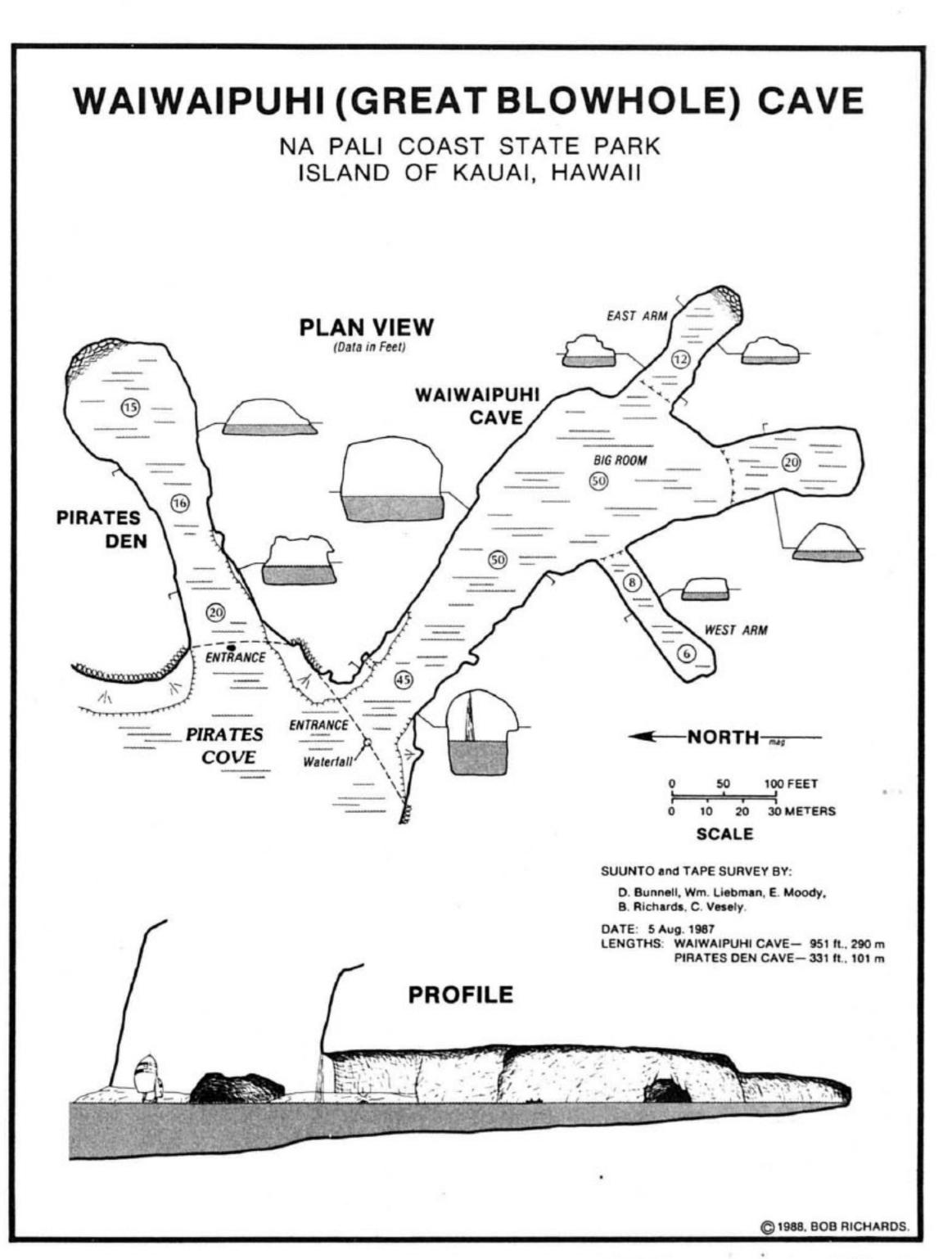


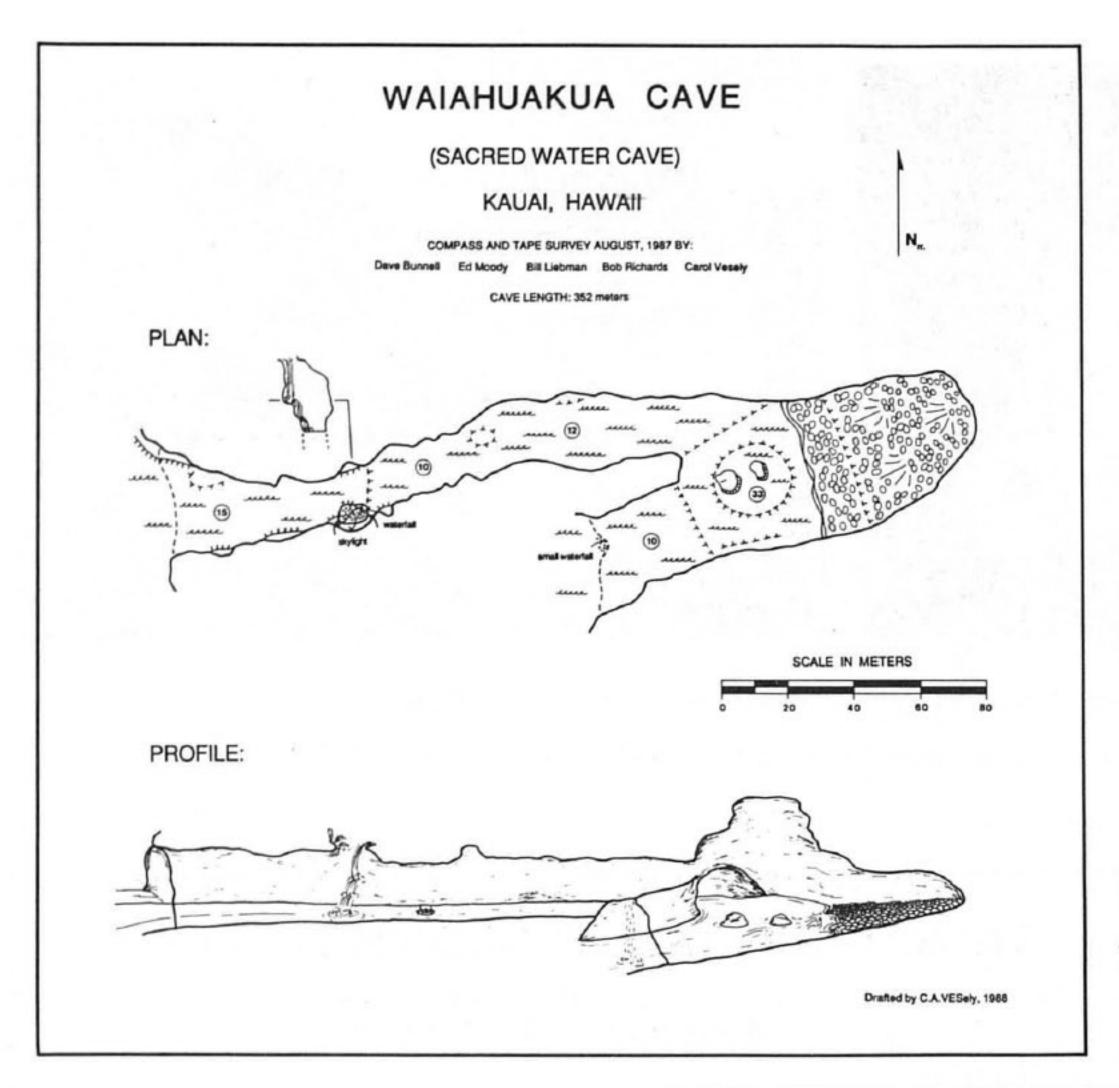


survey rolling and hope to repair the boat before we had to ferry the gear out on Sunday. We launched inflatable and kayak amid a somewhat rougher than normal surf and headed for the great caves some three miles to the east.

Our first objective was the cave known as Pirate's or in Hawaiian, Waiwaipuhi (Great Blowhole). This seemed a curious name for a cave with a 60-ft-high entrance, but as one of Captain Zodiac's skipper's explained, in the high winter surf this cave does indeed become an impressive blowhole, spraying hundreds of feet out to sea; obviously not the time to visit! In the summertime this cave is a popular spot for the Na pali tour operators, who take their boats right inside the large entrance chamber, stopping to linger under the free-falling waterfall that plummets down over the entrance. When we arrived there were already several of these boats in the area. I piloted the Ampac in and the kayakers followed. Several passages appeared to lead off from the immense entrance chamber. I anchored the Ampac near the entrance and Carol waited onshore, feeling a little seasick from the ride out. This would be a swimming survey, with Ed and I doing tape and compass and Bill chauffering Bob along in the kayak to do sketch. Our main problem would be to keep from getting run over by the large inflatables of the tour operators. At one point we had to await a passing boat as we stretched our tape across the entrance. Also worrisome were the exhaust fumes from their engines; I worried the whole time about carbon monoxide intoxication, but I escaped with just a headache. We surveyed three passages branching off the main room. At the end of the leftmost was a pile of large breakdown where the surf was crashing with incredible force; only by wearing a helmet did I feel safe enough to drag the tape all the way to the wall. Still, I got quite an adrenalin rush when a wave came and knocked me over (despite my best efforts to hang on the wall). We finished this survey as quick as we could, then moved on to the cave next door, which proved to be a single 300-ft-long passage end-

Left: View looking out of Honopu Arch. Photo by Ed Moody. Paddling the Jellyfish Express near Kalalau. Photo by Carol Vesely.





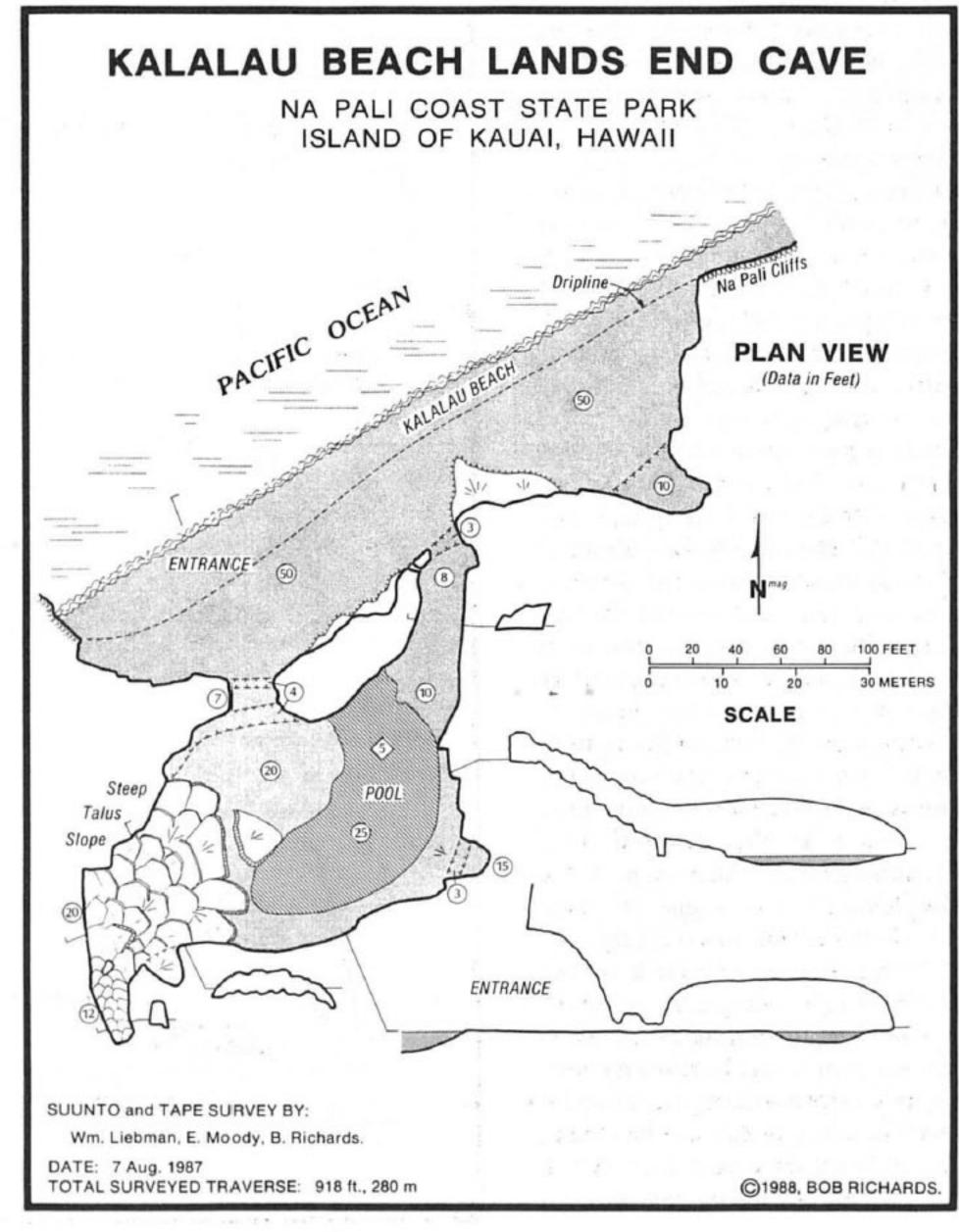
Painted Cave, California). We were also fortunate that the wind and swell were running with us on the trip back to Kalalau, or we might have had to tow the Kayak. The Ampac was leaking badly now and required continuous pumping. It was obvious that we would have to patch it somehow before ferrying our gear out.

Thursday morning came the usual landing by Captain Zodiac and...our repair kit! Unfortunately, Murphy was active and the tube of glue inside was almost rock harduseless. We discussed various options, including hiking out to get some glue. At this point I noticed a couple cruising by in a small inflatable, then dashed over to the water and swam out to ask them if we could borrow some glue. Salvation-they had a tube and would loan it to us! We repaired the boat and decided to give it a night to dry. Fortunately, we still had a nearby mapping project, the Honopu Arch. Three of us paddled over in the kayak while Ed and Bob hiked over the rockfall and did a short swim around the point to Honopu Beach.

This beach is as spectacular a beach as can be found anywhere. Hundreds of feet long and backed by spectacular cliffs, it is bisected by the Arch itself. On the western side is a

ing on a sandy beach. It had no official name, so we dubbed it the Pirate's Den. The main cave mapped out to 951 ft, making it the largest of the sea caves to date.

Bigger caves were to come, however, as a bit farther west lies Waiahuakua (Sacred Water) Cave. Looking into the entrance you can see a waterfall plummeting down through a skylight; at the right time of day, a sunbeam pierces through and illuminates the waterfall. This is probably the most popular of the caves as it allows a through-trip: in the waterfall entrance, around the bend into a huge room and out the larger second entrance. As shown on the map, the cave is horseshoe-shaped. The convention among the tour operators is to always go in the waterfall entrance, as two large inflatables would be hard pressed to pass inside. Again, we would have to do a swimming survey and had to contend with possibly being run over! I decided to hang out in the inflatable near the main entrance and warn or fend off approaching boats (with mixed success, as it proved), as well as pumping it to keep it inflated. This time Carol sketched from the kayak and Bob and Ed swam and ran tape and compass. It took over two hours to do the survey, particularly since several shots had to be taken on a huge cobble pile at the rear of the "Big Room" inside. At one point, a boat came into the cave from the wrong direction and, not having been warned about those inside, almost wiped out the kayak and survey crew! Somewhat unexpectedly, this proved to be the largest of the Na pali caves: 1155 ft long (making it the second longest sea cave in the U.S.A., after



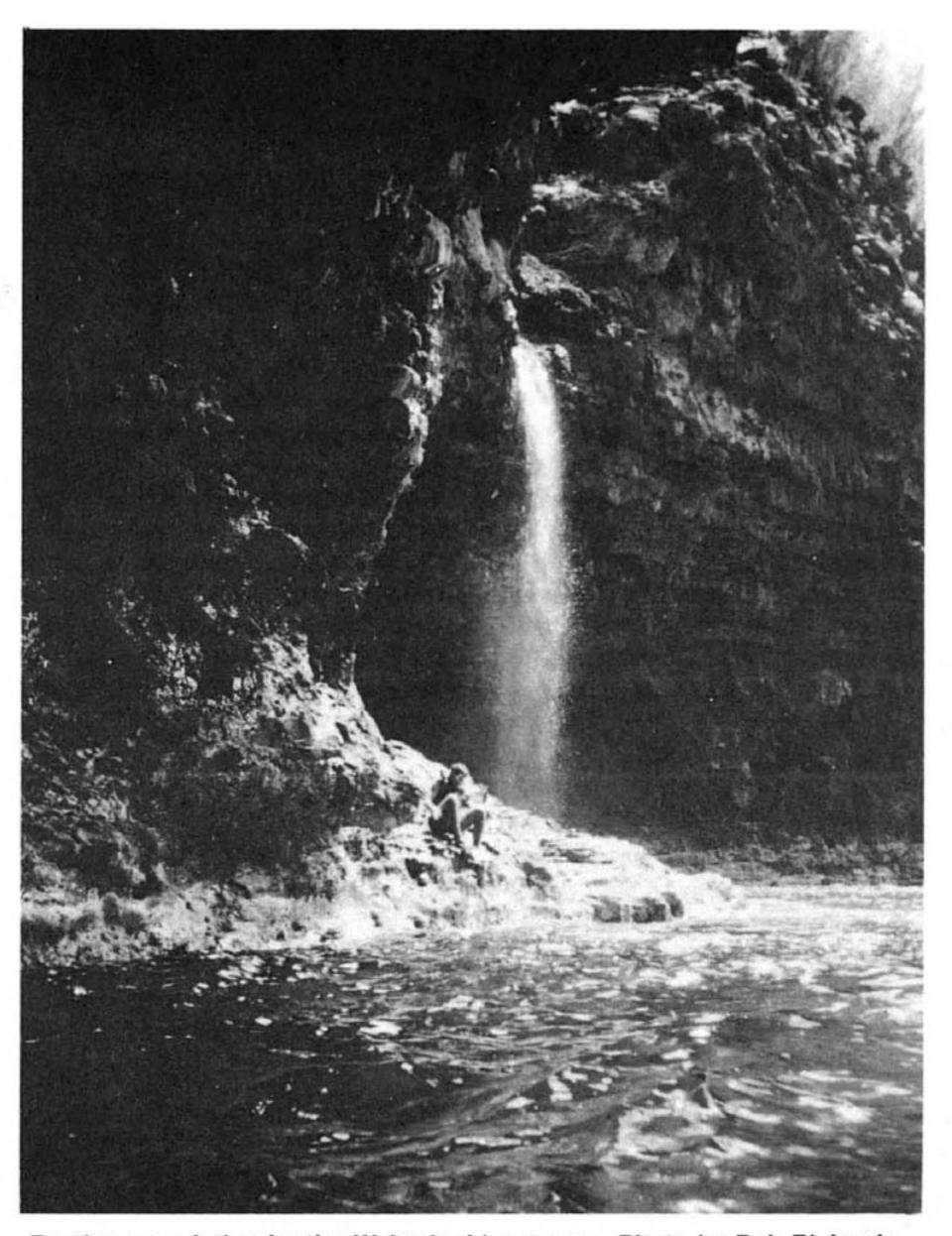
huge shelter cave with an abundance of tufa deposits under a seeping area. The Honopu Arch was determined to be over 250 ft wide and 330 ft long. Adding to the spectacle of the arch is a waterfall that cascades down on the western side and then flows through the arch to the ocean. Honopu Beach and arch were featured in the 1976 remake of King Kong: the explorers land on the beach, hike through the arch and follow the waterfall up-valley. We also heard that a stunt pilot had flown through the arch for another film. When we returned to camp we met up with Nancy Pistole and Matt Oliphant, fellow grotto members who had hiked out the trail to join us for the last part of the expedition. We whiled away the evening taking photos inside Kalalau Big West Cave.

Loose Ends

Friday morning we split into two teams. Bob, Ed, and Bill went to survey Land's End Cave, a cave which Bob had located at the end of the beach. We had all walked past it several times, as it is entered by either of two stoopways tucked back in a shelter cave near the beginning of the landslide area. Inside is a 200-ft-long room floored with a large lake. Where the cave abuts the landslide, a breakdown mountain climbs 60 ft to a terminus. From this and discussions with people who'd been to the cave in the past, we gathered that this had been a much larger cave before the landslide, with another entrance; perhaps the cave was in large part responsible for the landslides. Bob's crew came up with 918 ft of survey, making this the largest of the three caves reachable by foot from Kalalau.

The rest of us planned to survey a group of three caves in a cove west of the Pirate's Cave, which we'd spotted on the trip out. The cove is known to the Hawaiians as "Hoolulu," or "the resting place." Carol and I gave Nancy and Matt a headstart in the kayak while we took the newly-repaired Ampac, intending to rendezvous at the caves. Murphy was active once again, for although the boat was now no longer leaking, the motor simply

Surveyed Caves of the Na pali Coast	
Cave	length, ft
Waiahuakua (Sacred Water) Cave Waiwaipuhi (Great Blowhole,	1155
a.k.a. Pirate's) Cave	951
Land's End Cave	918
Waialoha (Thankful Water) Cave	737
Kalalau Beach Big Wet Cave	450
Maniniholo (Running Fish) Cave	425
Honopu Arch	397
Queen's Bath	369
Kalalau Landslide Cave	367
Pirate's Den	331
Waikapalae Cave	273
Waikanaloa Cave	267



Resting on a ledge by the Waiwaipuhi entrance. Photo by Bob Richards.

didn't want to start. It took over half an hour to get it going, bobbing up and down just beyond the surf zone. We headed directly for the caves, but when we arrived there was no sign of Matt or Nancy. We began the survey, but soon found that the "resting place" was anything but calm today. Without the kayak, Carol needed to stay in the boat to sketch. I attempted to stretch the tape to some of the walls using the boat as a station, but was continuously washed off point. Two of the caves were just too rough to fully explore and the third was a large room which was only halfsurveyed because of these problems. A tour boat came buzzing through (this cave is on the tour) and I must have proved an amusing sight with my helmet and its attached UW light as I was thrown about in the surf. We decided it was fruitless to continue without the others to help (where were they?); frustrated, we headed back to camp. Later we learned that they had cluelessly paddled past all the caves back to Ke'e Beach and had decided to hang out there.

Upon our return to camp we found the others had finished their cave and had headed up into Kalalau Valley above the beach. I decided to check it out too, knowing that lush tropical waterfalls lay above. I met the others at the Ginger Pool, a nifty little pool

beneath some waterfalls ringed by fragrant ginger blossoms. Only encroaching darkness could make us leave this little piece of paradise.

The next day we bid a sad farewell to Kalalau. Matt and Nancy had returned and volunteered to take the Ampac back. With their extra gear two trips were needed. Bob and I hiked the Kalalau trail out—quite a different viewpoint of the coast, and one that offers little evidence of the amazing caves beneath. We had surveyed a dozen caves totalling almost 6500 ft. Because of rough conditions near the end of the week, we had left perhaps five caves which were worthy of survey. However, we had surely hit the biggest and most impressive. In any event, with caves left to survey we shall surely return to this sea caver's paradise.

Postscript: We wish to thank the folks at Captain Zodiac (P.O. Box 456, Hanalei, Kauai, HI 96714) for their invaluable assistance. "Cap'n Z's" runs daily tours to many of the caves in the summer. For the more adventurous, inflatable kayaks are available for rent in the town of Hanalei.

Maps of the remaining six caves we mapped were published in the *California Caver*, Vol. 38, No. 1.