

s our raft began to wrap around a boulder in the middle of the rapid, I looked down at the water rushing below us. My four companions and I were piled up against the front tube in an attempt to squeeze the raft through a narrow gap between our boulder and the one next to it. Crushed by some six hundred pounds of men, wetsuits, life jackets, and helmets, I felt icy water beginning to rush over my legs. For a giddy moment, I thought we were going to make it. Then, the raft lurched up against the rock and I tumbled out into the rapid. It was my first baptism in the Cotahuasi, a river that I knew well.

Over the past five years, I have done archaeological fieldwork in the Cotahuasi Canyon of southern Peru. Descending violently from the top of the Andes into the Pacific, the river has carved the deepest canyon in the world (11,500 feet from mountain peak to river bottom). Shaped by volcanic eruptions, tectonic uplift, glaciers, and the relentless flow of water, the valley is a spectacular landscape of sheer two-thousand-foot cliffs, towering waterfalls, and unstable hillsides.

Ruins Maple Mitte-knuckle, down-river ride to save Peru's past

by Justin Jennings

My colleagues and I work in the upper reaches of the valley, from the towns of Cotahuasi to Puica, tracing the region's prehistory from the earliest Paleoindians to the Incas (11,000 B.C.—A.D. 1532). However, the remote middle area of the valley, from the towns of Cotahuasi to Iquipi, remains an archaeological mystery. There are no roads into this section of the valley, and the foot trails are often cut by land-slides or swept away by summer rains. The only way to explore this portion is to ride the eighty miles of whitewater that churns through it.

A continual cascade of challenging rapids, the Cotahuasi River was only first successfully navigated by a small group of kayakers in 1995. The trickle of adventure enthusiasts that followed was drawn to the river because it offered, in the words of kayak guides, "the ultimate river trip"—a week-long whitewater journey through a remote and beautiful canyon. These adventurers left the valley not only impressed with the river but also intrigued by ancient terraces, tombs, and ruins they visited on the valley's flanks. I have heard tales, seen photos, and read accounts of various expeditions. The existence of pristine, undocumented, archaeological sites down-river piqued my interest but also raised concern about the impact that these people have had on the sites they visited. Some rafters have col-

www.archaeology.org



lected potsherds, ripped textiles off mummies, and climbed on top of fragile walls. These visitors are a new threat to remote sites already damaged by looters. One of the kayak guides I met, Marc Goddard, shared my interest in the ruins and my concern for their preservation. We developed a friendship and he invited me to join a trip down the Cotahuasi earlier this year.

Goddard and his partner, Laurence Alvarez-Roos, own Bio Bio Expeditions, a company that organizes river trips in Africa and South and North America. Their business is part of the burgeoning adventure rafting industry that is making it easier and less time consuming for people to travel off the beaten path. One result is that adventure tourists are now exploring archaeological sites that not long ago were protected by their isolation. Convinced that archaeologists needed to be more aware of the damage such tourism might inflict on ancient sites, I accepted Goddard's invitation. A trip down the river would give me a chance not only to visit the sites but also to understand how the rafters experienced these places. I was fully aware that the first attempted commercial descent of the river by another company in 2001 had ended tragically with the death of a client. Nonetheless, my curiosity, combined with Goddard's spotless safety record, overcame my fears and I started packing.

July. There were eleven staff members—three guides (including Goddard and Alvarez-Roos), two gear boat skippers, four safety kayakers, a cinematographer, and a nurse—and eight rafters. Among them was a lanky computer specialist in his thirties, a fifty-something aerobics trainer, and a middle-aged couple that owned a snowboarding shop. Three of the clients had never rafted or camped before. Two days before we left the city, seven staff members loaded the rafts, kayaks, tents, food, and

The Cotahuasi River snakes through the deepest canyon in the world, 11,500 feet from the lowest point of the river to the top of the highest mountain. The Grand Canyon's maximum depth is 6.000 feet.

cooking equipment onto trucks and took off for the Cotahuasi. In the valley, they would load this baggage on thirty burros, hike ten hours down-river to where our boats would be launched, and set up camp. Meanwhile, we left Cotahuasi in three Toyota Land Cruisers and began a steady, leisurely, climb into the Andes. By the morning of the next day, we were driving on a dusty, dirt road crossing the high grasslands. On our right, we passed by Nevado Corupuna (21,696 feet), one of Peru's most sacred peaks during the Inca Empire. Johan Reinhard and Jose Antonio Chávez's discovery of Inca sacrificial victims on Corupuna, Ampato, and other snow-clad mountains nearby made headlines in the mid-1990s. A few hours later, we reached the valley rim and began our slow, winding descent to the town of Cotahuasi. At dawn on the following day, our personal gear was loaded on to a caravan of twenty burros, and we began our long hike.

Cachemire

Iquipi

As the trail wound down through agricultural terraces and fruit orchards, we passed a train of llamas festooned with bells and ribbons. The sight must have been common in the past; an important road once ran through the valley from the Inca capital of Cuzco to the coast. Relying on a system of runners, the Inca emperor was said to have been

able to get fresh fish from the sea to the § capital in two days. Although the exact path of the Inca road through Cotahuasi remains unknown, I imagined that we were walking on the remnants of this ancient artery. By late morning, we had left the area of springfed agriculture and entered a barren zone of red and brown sandstone. The topography became more severe as the day progressed, and the path sometimes narrowed to a twofoot ledge etched into the side of thousandfoot cliffs. An hour before dusk, we passed through a forest of cacti and descended to the campsite. After a quick meal, everyone climbed into sleeping bags and quickly fell asleep. At dawn, we broke camp, loaded the gear rafts, and put on our safety equipment. Our adventure on the water had begun.

Over the next six days, I floated down the river with two housemates from Sacramento, a T.V. news producer from Toronto, and a Peruvian national kavaking champion. At times, we had lazy conversations about sports, politics, and history as we paddled through calm stretches of the river. At other times, we used the raft's tubes as pillows as we waited for a rapid to be scouted or a broken oar to be replaced. Most of the time, we listened to our guide Gian Marco Vellutino, the kayaking champion, bark orders at us as we tried to navigate through scores of class 3, 4, and 5 rapids, the latter being the most dangerous rapids that people run. Our boat wrapped around a rock once, we rode a few of the rapids backward with a couple of us in a tangle of legs, arms, and paddles at the bottom of the boat, and all of us tumbled out of the boat for at least one unintentional bath. For the most part we giddily bounced off rocks and plunged over ledges. By three o'clock in the afternoon, we began to look for the day's campsite. Soon we would unpack the boats, set up camp, enjoy some rum at happy hour, and eat dinner by flashlight. At dawn, we prepared to get on the water again for another day of rafting.

Our busy schedule allowed us only a couple of hours at dawn or dusk to scramble

Rafters Don and Didi Moscoe and the author (left to right) explore the remains of an Inca period building at the site of Cachemire on the north bank of the river.



up the canyon's slope to visit ruins. Nonetheless, my companions and I explored three sites. The first Avahuasi was a collection of at least thirty tombs found above the modern village of Velinga. The seven-foot-tall circular stone towers were badly looted, but enough bones and ceramic fragments remained to identify them as collective burials from the Late Intermediate Period (A.D. 1000-1476), a period of political fragmentation throughout Peru. Toccec. the second site, was a large Prehispanic village a few yards above one of our campsites. The inhabitants had built a series of terraces into the slope and then constructed rectangular buildings atop the terraces. Some of these structures were incredibly well preserved, with intact niches. wall plaster, and roof beams. The site, occupied between A.D. 750 and 1532, witnessed not only the political woes of the Late Intermediate Period but also the rise and fall of the Wari and Inca empires.

The last site we explored, Cachemire, was a village inhabited during the Inca occupation of the valley and the first decades following the Spanish Conquest (A.D. 1476–1570). A large, abandoned, colonial house, surround-

ed by a cistern and several grinding stones, stood almost perfectly preserved near the base of the site. The Inca sector was a warren of standing and toppled wall fragments. Along the uppermost fringe of the site, we photographed finely decorated Inca and local ceramics, textiles, spindles, wooden cups, and utensils from several immense looted tombs.

A catalog of sites we visited fails to capture the archaeological experience we had. Despite the turbulence of water below us, it was hard not to think about the ancient people of the region. Reminders of the past were everywhere. When our raft passed by a particularly treacherous stretch of foot trail, we would wonder how a route through the valley could have been engineered and maintained in antiquity. Cascading rows of long abandoned agricultural terraces inspired discussions on long-term environmental change and humankind's ability to adapt to harsh conditions. Vistas of looted cliff tombs led to conversations on ancient Andean religion and social organization. On three evenings, we slept on top of ancient terraces, and I was not alone in feeling a deeper connection to the valley's inhabitants as we gazed up at the stars. I once awoke in the pre-dawn hours to a vista of crumbling walls glowing in the soft moonlight.

As one might expect, the most spectacular tales of earlier rafters were farfetched. We found no gold or sacrificial victims. We did not even find any unbroken pots. Yet the sites that we did see were some of the best preserved in the valley, and much could be learned from them in the future. Goddard and Alvarez-Roos had brought me down the river to explain to them the region's prehistory and help develop a preservation plan for the sites. I would have liked to seal

each of them in a giant bubble. After all, our visits to the ruins clearly had a negative impact on the sites. At Toccec, for example, one of the staff members inadvertently kicked over a portion of a terrace. Though, as my fellow rafters told me, visiting remote sites accessible only by river gave them an appreciation of past lives that cannot be found in a museum or in a visit to major archaeological excavations.

Drifting down the Cotahuasi. the rafters and I caught a glimpse of how the common person lived in the Andean past. We walked fourteen miles along the same paths they would have walked. We set up our camps and ate our meals on agricultural terraces, where these people toiled, joked, and drank corn beer centuries ago. Just as they did, we awoke at first light to the sounds of the river. As one rafter suggested, you begin to understand more about life in ancient Cotahuasi by feeling the cold at night, tasting the air, and shooing away the insects day after day.

While the Peruvian government claims rights over all sites of archaeological significance, they don't have the resources to monitor them all. Therefore, it is up to



Ancient pots, gourds, textiles, and wooden objects from a looted tomb. Below, tour leader Marc Goddard, left, and compatriot David Brill navigate a vicious class 5 rapid.





tour operators to establish their own conservation strategies. Bio Bio Expeditions has adopted a "take nothing but pictures, leave nothing but footprints" policy for all archaeological sites in the Cotahuasi Valley. Our group built no fires on terraces and hung no heavy equipment on terrace or structure walls. During our trip, I encouraged Goddard and Alvarez-Roos to choose specific areas for camping and cooking and to keep these areas the same

for future visits. I also stressed the importance of leaving all artifacts in situ and the possibility of developing a marked path within all ruins to mitigate the damage done by individual exploration. The two partners hope to implement these suggestions for future trips and set up guidelines for other expeditions to follow.

N OUR LAST DAY IN THE RIVER, we paddled out of the mountains and onto the coastal plain. The frenetic pace of the water slowed and the river braided—our greatest challenge now became avoiding the shallowest channels and steering clear of the shrimp traps along sections of the river. By early afternoon, we had reached the end of our journey, dragged the rafts out of the water, loaded everything (including ourselves) onto a flatbed truck, and driven the short distance to the town of Iquipi. In the shadow of a statue of a river shrimp in the town plaza, I drank a cold beer and looked at the other nineteen members of the group. My first thought was that we all needed a hot shower, but soon my mind wandered back to the conversations I had had over the course of the trip.

Everyone expressed an appreciation for Cotahuasi's ruins and said they wanted to preserve these sites for generations to come. I hoped adventure tourists in other iso-



While these cliff-face tombs have not been archaeologically studied, many have been looted by explorers and locals. At Cachemire, two skulls bear witness to the destruction of Peru's past in this remote region.

lated regions held similar views, but I also knew that this wasn't always the case. Governments, especially in the developing world, cannot be expected to police every

archaeological site. Instead, the onus of protecting many remote ruins falls on adventure guides and their clients. The basic procedures that we developed on our trip are easy and cheap ways to mitigate much of the damage caused by such travelers. Archaeologists, cultural resource managers, and other informed members of the public need to work more closely with the adventure tourism industry to implement preservation plans. One of the clients, a Canadian businesswoman, said that our days looking up at trails, terraces, and ruins reminded her of the "resilience of the human spirit."

The human spirit may be resilient, but the ruins are not. Bio Bio Expeditions went down the Cotahuasi again this summer, and a few Peruvian companies hoped to begin to run the river regularly in the next couple of years. Unless conservation strategies are implemented immediately, many of the valley's archaeological treasures, and the lessons that we can derive from them, may be lost forever.

JUSTIN JENNINGS is a lecturer at the University of California at Santa Barbara and a research associate at the Cotsen Archaeological Institute. His work focuses on the impact of the Wari and Inca Empires on the people of the Cotahuasi Valley. For further reading, visit www.archaeology.org.