The antiquated engine belched smoke into the clear Andean skies as the wild west train climbed toward the village of Manzanar at the foothills of the Andes. Our aged wooden car creaked and groaned, swaying to the pulse of the narrow-gauge track. The Chilean local passengers staring at our group of 16 were finally overwhelmed by curiosity, wondering where we were from? ‘De donde eras’? ‘Norte Americanos?’ on man asked? And why were we sitting in the midst of a pile of oars and rafting gear? We explained that we had come from the United States to raft one of South America’s most scenic rivers in Chile, the Bio Bio River. The name Bio Bio comes from the Mapuche Indian word for the song of a local flycatcher, the Chilean
Elaenia. We were with Sobek Expeditions first commercial trip in 1979, and would take 8 days to run the river’s wild course through still pristine mountains and Auracaria forests.

Chile’s second longest river, the Bio Bio is named after a Mapuche Indian word for the song of a native bird. This famous river originates in the heart of Mapuche-Pehuenche territory along the Andean Mountain Spine. The Andes are impressive, predominately volcanic and the world’s longest mountain range over 4,500 miles (7200 km) long, spanning the entire length of the west coast of South America from Colombia to Patagonia. The highest mountain, Aconcagua (just to the northeast of Santiago, in neighboring Argentina), measures 22,831 feet (6,891m); the average altitude makes it the world’s second highest mountain range to the higher Himalayas. Bordering Argentina, Chile is a long, narrow country measuring 2,600 miles (4160 km) in length and just 113 miles (181 km) across at its widest.

Volcano Llaima to the east of lake Gualletue, the headwaters of the Bio Bio River Chilean Andes

The nacimiento, or birthplace of the Bio River originates from a series of lakes at the base of the volcano Llaima 10,353-foot (3,125m) and Sierra Nevada 8,461-feet(2,554 m). The first lake, Lago Galletue, is a shimmering alpine lake near the windswept altiplano of the Argentine border, with an outlet that flows east for a few miles before it received the outflow of nearby Icalma Lake. The Bio Bio then turns its course northwestward, meandering through pampas grasslands and open Araucaria forests in a broad Andean valley while merging with minor tributaries such as the Lonquimay and the Rahue before entering a mountain valley, then basalt canyons next to Volcan Callaqui to the north. The scenery from a distance is similar to the eastern slopes of my home in the Washington Cascades in the open forested grasslands.
formed in the shadow of Mt Rainier and Mt St Helens. But here there are no ponderosa pines, but Auracaria forests.

Locally known as Alto Bío, the river begins to form steep rapids as it enters narrow valleys just south of Volcan Callaqui, then rages in steep cascades of whitewater through narrow basalt canyons. Passing through steep gorges, the Bio Bio presents the greatest white-water challenge in South America with boiling drops and technical sections before it finally emerges into the Andean lowlands and flows west. Here the river becomes tranquil passing through farmland and the village of Santa Bárbara and the town of Los Angeles (near San Fernando) before it discharges into the Pacific Ocean at Concepcion Bay in the Gulf of Arauco, covering a distance of 236 miles (380 km). (Unfortunatly today December 2018 as I review my journal written in 1979, the river has two dams, roads, and expanded townsites. The wildness is gone, forgotten.)

I was invited by Richard Bangs, Sobek Expeditions write about the first commercial descent of the river in 1979, when the Bio Bio was amazingly pristine and wild, giving us an unforgettable adventure into a then pristine part of Chile. There were still primary forests of monkey puzzle trees Araucaria, Antarctic beech Nothfagus, and tan oak Lithocarpus forests in the mountains, framed by distant volcanic peaks straddling the border between Chile and Argentina. The river was technically difficult, and they ran the first exploratory run in 1978; our group was the first commercial trip. But logistics was not easy as Chile had undergone political unrest since the US CIA backed overthrow of Marxist Salvador Allende six years ago that was now replaced by a military dictatorship of Augusto Pinochet. Then president Pinoche presented its mission as a "national reconstruction," but there was much turmoil, and we needed to be careful to avoid any political discussions. Since that time today (2018) there are two newly constructed dams on the alto Bio Bio that have created environmental issues, and roads that have brought tourism into the area. Its wildness is gone.

Our small group met in Santiago in Chile’s largest city located in the more comfortable temperate zone of South America. Santiago is only half-way south in Chile’s midsection; and at the extreme southern reaches is land’s end of South America at Tierra de Fuego. At the train staion we transferred all our rafting and personal gear: four large rolls of neoprene that would inflate to Avon Professional rafts, a pile of ten-foot-long ash oars, dozens metal ammo boxes to keep our gear dry, and the six-foot-long aluminum alloy pipes that fit together to form rowing frames. We had 8 clients, and 4 world-class white-water kayakers that would join us, and kayak along side our 8 day rafting descent.

We boarded the diesel train in the evening that would carry us overnight to Victoria, then south to Temuco, a small farming village in the Andean foothills 370 miles (614 km) to the south of
Santiago. Arriving in the morning, our rafts and gear were transferred to an old wood structure and train station platform, and we sat on the pile of equipment waiting for the arrival of the steam-powered, narrow-gauge engine with antiquated cars. This was our transport that would take us up an old spur railroad into the Andes. We could see the train from a distance as if finally arrived, leaving a vapor trail of steam down the tracks behind it. The train unloaded its passengers, and we then hefted the rafts and some of our gear into a baggage car, and with gear and oars beside us, spread out on the antique red leather bench seats. Within a half an hour and on time, the steam engine belched a cloud of dark smoke, sending sparks scattered over the tracks, and lurched, staggered its way out of the station, ascending the low grade into the Andes as the boiler fueled the steam engine to send us on our way. I felt launched into a time warp of 100 years prior in the North America wild west.

The train ascended the mountain foothills from Temuco, a small town in the heart of Chile’s wine-growing region that was once the northern limit of the Araucanians, native Indians who have singularly avoided Spanish conquest. The people derive their popular name form the araucaria, or Chile pine, known also as the monkey-puzzle tree because its long spidery branches covered with stiff green needles that resemble monkey tails. The Araucanians call themselves Mapuche the “people of the land.” They are for the most part sedentary, agricultural people who in centuries past hunted guanacos, pumas, and armadillos, and when their security was threatened, invaders. In the years of the expansion of the Incan empire, under Tupa Inca’s leadership during the years 1463 to 1493, the Incas were stopped in their
conquests at the Maule River, some fifty miles north of the Bío-Bío. There fierce Mapuches armed with bows and arrows defeated the Inca.

In the century that followed The Bio-Bío River continued to be a geographical landmark of importance to the citizens of the country. During the Conquest of Chile, the Spanish conquistador Pedro de Valdivia and his soldiers founded forts and towns along the Bio-Bío River basin. The aim was to establish military posts to facilitate progress towards the south. The Mapuches resisted the Spanish forces under Valdivia, who was slain in battle against the Mapuches in 1553. For almost 300 years the Mapuche aboriginals impeded any movement south and the conquest of southern Chile did not go beyond the Bio-Bío River, remaining the de facto boundary between the two nations. For 300 years after, the Mapuches continued to resist conquest and assimilation until 1882. Through violent invasion, occupation and annexation of Mapuche territories in what the Chilean government called "Pacification of Araucanía," the Bio-Bío region and areas further south began to be populated by invaders. Many cities were founded and land was allocated to local aristocrats and European settlers, mostly Germans, Italians and Croats. The Mapuche were displaced from their ancestral lands, became servants and farmhands of the colonizers, or were forced to wander in search of food and shelter. The slow but inevitable effects of contact and commerce have brought the Mapuche into the modern age. Now they raise wheat and barley as well as the traditional maize and potatoes, and breed cattle and sheep, like much of Chile’s rural population; but the Mapuches continue to be one of the largest functioning indigenous societies in South America.

As our train pulled into Manzanar, I felt as if we had stepped into the American west of 100 years ago. The main street was occupied by Chilean cowboys called Huasos, with their horses lined up and tied to wooden pole hitching posts. We felt the excitement of imaginary time travelers as we walked through the streets to meet the host of our Sobek Expeditions group, Edmundo Faherenkorg. Edmundo, whose German grandfather had immigrated into the Lonquimay Valley 50 years ago, had accompanied Sobeks first exploratory trip in 1978. He would not be joining us on the river, but would spend the night with us in Manzanar. Edmundo brought us in the afternoon to a magnificent waterfall Salto de Indio on the Cuquen River, and on the next day will drive us over a mountain pass with amazing views of Longuimay and Tolquaca volcanoes, and follow a primitive road that descended into the Longquimay valley to his father’s ranch.

Early the next morning the sun touched the ridges of Araucaria forests to the east of the mountains we would cross. We departed with rafts and gear in Edmundo’s cattle truck for their estancia or working ranch above Lonquimay, expecting to reach there late in the morning. From Manzanar we drove up the valley of the Rio Cautin, then began winding our way over a
auracaria ridge that gave us a wonderful view of the volcano Lonquimay and Tolquaca to the northwest. The primitive road descended on dirt tracks southeast approximately 30 miles (48 km) to his father’s ranch. The drive in the shadow of Longuimay occasioned more of Edmundo’s stories of the area, which was once settled solely by the Araucaria Indians when his father arrived. We had lunch and the working Huasos gave us horsemanship demonstrations on their trained Pacifino horses used for working cattle.

We left the estancia in the early afternoon to drive to the source of the Bio Bio another 10 miles (16 km) away, crossing the river on an old wooden bridge. Edmundo followed a dirt track toward Laguna de Gualletué (Mapuche for “land where the oak trees grow”) near our put in at 3995 feet (1145 meters) elevation where we would make our camp in a forested grassland.
Unloaded the rafts, equipment and set up tents where we had a sweeping view of this beautiful lake with Volcano Lliama rising in the distance to the south. We finished setting up and rested,
Volcan Llaima in Conguillo National Park captivated with the lake framed with the reflection of Llaima, and colorful flocks of ducks and parrots active nearby.

An Indian farmer appeared in the distance across the lake hiking towards us with a tethered rope attached to a goat following behind him. A friend of Edmundo, he was bringing us a gift for
Rio Cuquen and the salto de Indio area near Manzanar
a traditional Chilean asado. Once he arrived, he greeted our group with a welcoming smile, then proceeded to tie up the goats back legs, then while it struggled cut the throat of the bleating animal and bled it into a wood bowl. Edmundo gestured he wanted us to partake of a Chilean delicacy reserved for special occasions, Nachi, or warm goat blood. Mixed with salt, onion, and
lemon juice, the bowl was passed around. Some of us tried it, and although I was repulsed, I managed a sip, trying to imagine V-8 juice, but barely kept it down. Our Chilean friend gutted the goat, then roasted our dinner over a large open fire, a delicious introduction to Chilean Asado, roasted meat. Finishing a great meal, we sat back gazing at the symmetrical cone of Llaima casting a deep shadowed reflection in a sunset on the lake. A fire-red alpenglow faded away with dusk.

Outlet of Icalma Lake below Lago Guallatue

DAY 1 We broke camp and began to set up for our put in below the outlet of Galletue Lake. Our team of four kayakers, and 8 passengers were guided by four experienced oarsmen who were all highly skilled by years on the Colorado River. They included seasoned guides Dave Shore, Jim Slade, John Yost, and Jack Morrison the only one who had flipped a raft in a 10-year career that included some 40 trips down the Colorado River. His flip had been on the Bio Bio, a testament to the river’s power and difficulty with Class V rapids. We spent much of the next morning rigging up for our expedition. The rafts were rolled out and, with the help of a high-volume pump, inflated. Four separate chambers create the oblong perimeter of a raft, with two thwarts placed in the center to add stability. Each chamber is inflated to drum-hard tightness, so the raft rides high and firm in the water; the chambers are separated by baffles so that, in the unlikely event one should pop because of a sharp rock, the other three will keep the boat afloat.

Rowing frames were assembled, essential to provide stability and rigidity to the raft and equipped with oarlocks. When lashed securely into the midsection of the craft, the frame allows gear to be tied onto a wood panel floor section that is dropped between the thwarts.
Coolers, ammo boxes, stove, fuel, water jugs, heavy cast-iron Dutch oven all secured to the deck, while the water-tight black bags containing our clothes are tied into the rear bilge section. The weight of the gear, riding low in the boat, adds further stability to the raft in the torqueing and twisting of powerful river hydraulics. Everything is lashed down securely, either to the boat or frame or both, to prevent its loss in case of a flip.

Finally, all was ready: the oarsman had their own rafts in the river, braced with feet between the gear on the floorboard, and a spare oar tied by slip-knot within easy reach; passengers took their places in the front section for weight balance against the black bags in the rear. All the tied-in gear was checked and double-checked; lifejackets were pulled snug, and finally we launched, getting one last view upstream of the snowy crown of the Volcán Llaima rising above Lago Galletue; downstream, the river. It was a scenic and tranquil place, with open auracaria forests mixed with grass fields. The excitement ran high and we anticipated an incredible adventure.

The current took us north and within several miles the river joined the other source of the Bio Bio from Lago Icalpa, doubling the volume of the river. The first twenty-five miles the river
meandered through alpine Andean forest of araucaria and flowed smoothly across a broad foothill plateau; above the gentle banks, green fields sloped gradually to the bases of the surrounding mountains. Horsemen decked out in silver spurs and leather rode to the edge of the river and waved at us. We floated past of a small stream that passes through Lonquimay a dusty, small town reminiscent of the U.S. West a century ago. Huasos rode their horses smartly down the dirt streets, and there were several oxen teams pulling heavy, double-yoked carts. It takes years to train two oxen to work together. When one dies, the other will not accept a new partner.

spent the morning floating with Jim Slade, who had explored many rivers all over the world with Richard Bangs. I had first met him in 1978 on the Bulolo Watut in Papua New Guinea along with John Yost and Dave shore. Jim had lost much weight after guiding on the Omo River in Ethiopia, as he had contracted Bilharzia, a flagellated amoebic parasite. After our trip in New Guinea, he returned to the US and had treatment at the Mayo Clinic, a week of a toxic Antimony IV that would kill the parasite before him. Jim shared about his experience on the Bio Bio last years first run, compared to guiding the Colorado in the Grand Canyon, a river he described as a roaring brown torrent with twice the flow of the Bio Bio and huge standing waves. He emphasized most of its rapids can be run straight down the middle, but a "technical" river like the Bio Bio is more challenging, full of obstacles requiring more careful planning and maneuvering than the Colorado.
He had rowed and explored the river last year with Richard Bangs and George Wendt, the owners of OARS and Sobek Expeditions first run. I asked if I could row in this easier section of the river, just to exercise, and practise my working a loaded raft. I remembered to point the bow in the direction of where you dont want to go and pull hard. I was not skilled, and in this easy section and I was so captured by the scenery and in conversation with Jim I misread the first major rapid small rapid, and dropped through a tight series of small boulders almost getting us stuck. Jim hadn’t said anything to me until now, and it was time to concentrate. We were just beginning to feel the Bio Bio’s strength.

The river left the plateau, and began to enter a steeper mountain valley with a forest of Antarctic beech Nothofagus, Auracauria and scented wild fuscia vines hung with blood red clusters of flowers. Here the river flow is roughly a thousand cubic feet per second, which will grow to two or three thousand by take-out by the end of our expedition. Its green, snow-fed waters are a cold 55 degrees even at the height of summer. The initial Class I and II rapids, while sometimes tricky and "technical," are mild compared to the terrifying rapids we will run later downriver.

Our first night’s camp is just upriver of the Lonquimay River tributary located on a broad embankment. To the north we have a vista of jagged, snow covered peaks that we will float by tomorrow. We savored a dinner of fresh vegetables and fruit, enjoying the bonfire warmth and familiarity beneath a crisp sky speckled with stars. The night was our real introduction to the Southern Hemisphere as the southern constellations appeared including the southern cross and Orion: our latitude was about 36 degrees south, the southern equivalent of Carmel, California.

Afterward there is a call for songs. I start several, John Denver folk songs like 'Country Roads", and most join in. But there is no guitar, and the singing quickly dies out after my repertoire that not only included John Denver, but the Brothers four and Simon and Garfunkel folk songs most knew well. We continue to stare at the night sky by the campfire. Presently the sky became darker exposing the milky waay and constellations, of which the most familiar is Orion. Listening to the current of the river, I quickly fell asleep in my tent.

**DAY 2** A great breakfast of omelets with salsa, and fruit, and the camp is packed up by late morning. Once on the river we pass a balseadore, a heavy cabled ferry dating from the river's Gold Rush days in the 1930's. Chilean farmers wave to us from the shore. The Bio had flowed gently these first few days, sweeping us past grassland and forests of Auracaria. Drifting farther north into the mountains that afternoon, I noticed the flora and geology began to change the further we floated into the mountains. The towering araucaria pines, which can grow to 150 feet high, now was mixed with an untouched forest of tan oak, groves of cedars, and cyprus draped with long shags of Spanish moss. We floated in a few small stretches of Class I rapids.
By late afternoon we left the small one family farms behind and were floating north towards into the wild, forested mountains as the sun dropped behind peaks to the west. We had stopped earlier in the day at a hot spring that bordered the river, but after several hours continued along the river until we reached the outlet of the tributary Rio Ranquil where we found a sandy beach and made camp. Downstream lay the remote village of Troya where we visited a few hours and met Santiago Torres, a weathered 60-year old sheep rancher who wore a dusty Irish cap and large silver spurs on his boots. He provided us with a six-month old lamb for our dinner, which we roasted that night over an open fire. Our camp was along the left bank, not far from the outlet of Lago Jesus y Maria where we would hike to the next morning. The night air is cold, and I put on my fleece jacket as we huddle by an open fire. We have a supper of lamb asado, potatoes, tomato and onion salad. Another clear night of stars spread across the Milky Way.

**DAY 3** At 8:30 we rise early for breakfast, then hike to Lago Jesus y Maria, passing through fields of wildflowers under a backdrop of steep, snowy granitic mountains. We stop to examine the ruins of a mill next to the river constructed with heavy, rough-hewn Coigue (Chilean oak) timbers, then ascended a good trail and before long we reached the lake setting, taking in the beautiful scene that rivaled Twin lakes in Yosemite, California. The lake was a deep-blue color set within a sun-dappled glacial basin encased by 6,000-foot-high granite points, spires, flutes, and snow chutes descending steep valleys on its flanks. I enjoyed the open forest the wildflower meadows; but the schedule required we return to the Bío-Bío before noon.

After lunch we continued to float through pristine araucaria forests, and encountered our first series of rapids with names that include jugbuster and Zorro. We pass under a hand-made suspension bridge built by locals, and it looked rather precarious hanging above the river. We stopped at a back eddy below, and two of the kayakers hike up to the middle of the bridge, set up their kayaks and sit ready to brace, and push off 30 feet into the middle of the river. Amazing as Fred Young, one of the kayakers was featured in the Wide World of Sports television series in a difficult white-water sequence of the Zambesi in Africa.

We come to our first rapid named Jugbuster. We stopped to scout, put on our helmets, and passed through one by one, crowding the hydraulic cushion around the left to avoid an enormous hole in the middle of the river. Each of the passengers were instructed to highside if and when it was missed and entering the hole. Highsiding is throwing your weight at the threatening wave or rock, not away from it, which is the natural impulse. It helps keep the boat from flipping or getting pinned against a rock. Constant, vigorous highsiding is a survival art to survive giant waves. We made it through with only one raft hitting the hole, and at lunch we stop at the Lolco River outlet.
There are more rapids in the afternoon, and with every passing mile the river was showing us a combination of the best features a river can have: resplendent scenery, powerful rapids, clear water, and good fishing. Dave, one of our younger passengers, broke out his fly rod and cast his nylon line over the stern. Minutes later he had a heavy strike, and with a long fight brought a five-pound brown trout flopping into the bilge. He was elated and threw the line in again. Within seconds he had another strike, and another five-pounder. Trout were introduced into the rivers of Chile, and have spread throughout the region well.

The river began descending into a steeper mountain valley with quiet sections and where the impact of human habitation disappeared. There was a sense of leaving behind the commonplace, of gliding toward the unknown. As we began to enter the steep, glaciated volcano slopes, Mount Callaqui came into view in the distance above the river, rising dramatically above the cliffs topped by Araucaria. It is a beautiful place, with Callaqui rising above the green forests throughout the afternoon, and with high steep hills, and sweeping vistas of the river overlain with layers of trees, each one bluer in the distance. Kites like seagulls skim up and down the river; a cormorant can be seen on a rock in the middle of the rapids. The mountain was silhouetted magnificently in gold from the late evening sun. We gather firewood upriver and glide through quiet sections of flow with slanting evening light streaming through the forest onto the river, highlighting the spectacular vista of Callaqui.

The volcanic basement rock of the Andes were becoming revealed in cliffs of columnar basalt, pumice, and andesite, the igneous substratum of the great range. That evening we camped upstream above the entrance of a narrow canyon that marks the beginning of the rivers largest rapids wedged for miles between canyons of basalt. We watched a full moon rise to the west and form a sliver hue on Mount Callaqui, with steam and smoke rising from its glaciated summit. Tomorrow we would attempt to climb as far up the mountain as possible, ascending a trail above the basalt cliffs. At dusk, the volcano lights in yellow to mauve alpenglow. A continuous cloud of steam rises above the side vent near the summit, and I watch the glaciers turn from yellow in the evening sun to crimson as the sun sets.

That evening we feasted on fresh caught trout cooked over an open fire, along with leftover goat asado mixed into a stew, and corn on the cob. We spread coals from our campfire beneath and on the lid of the Dutch oven with a dessert inside. We had to wait only a short time for this exotic dessert concoction: a fresh cherry-vanilla pudding. So delicious and it disappeared quickly as we feasted, with soft conversation exchanged while listening to the sound of the river.

**DAY 4** We rise at 6:30 AM to a spectacular view of a sunrise on the river and behind the mountain. This is the day we can hike to the base of Mt Callaqui, whose summit is 10,482 feet
(3,164 m), (a year later it had erupted in 1980). After climbing our way up the steep canyon wall along a goat trail that navigated above the cliff walls, we discovered several small cleared fundos or farms. Our group soon made acquaintance with one of the isolated, shy families homesteading here that were living in rough-hewn log houses. Hardy pioneers, these people depended on their own ingenuity for tools, and upon livestock for transportation, working the fields, and logging the trees, and on full harvests to get them through the cold winters. Their
only link with the outside world was a single transistor radio and a horse trail that left their area called Malla for Lonquimay. Most had never before seen outsiders. When they informed us of a trail that led to the base of mount Callaqui, we found it and began to climb through a magnificent old growth forest of giant beech, Coigue or tan oak Lithocarpus, and giant Nothofagus, the Antarctic beech.

We ascended a steep trail through woods and meadows to snow-fed Malla falls, which is a torrent during the day when the snow is melting. This is araucaria country, filled with forests of these spiny, primeval conifers which grow only in Chile. Jim stops to stroke the sharp scales, taking care to go with the grain of the spines. He then goes on to rope an araucaria pine cone, green, and the size and shape of a pineapple. Its soft, almond-shaped seeds tasted like piñon nuts, perhaps because they are a kind of piñon nut.

The trail skirted well above the canyon walls of the Bio Bio and gave us our first close view of the volcano. Below lay Malla Falls thundering 100 feet from the gently meadows mesa over a columnar basal cliff. This spectacular waterfall originates from several glaciers at the base of Callaqui ad cascades through a series of large drops until it reaches the river below. This must have been a favorite hunting location for the once thriving Mapuche Indians before modern
man hunted its wildlife of guanaco and deer to local extinction. Today only huemel deer and a few puma survive in the wild.

Finally gaining the alpine meadows above the stunted, windswept groves of monkey puzzle trees, our small group relaxed in the deep grass tussocks and wildflowers while enjoying a commanding view of the surrounding Andes mountains and volcanoes. In the distance past a ridge of Araucaria trees to the south, the volcanoes of the Ringlet of Fire rise up one by one: Sierra Nevada, Lonquimay, Llaima, Tolhuaca, and Villarica. Callaqui means "Pike;" Llaima means "Reawakened One;" Lonquimay means "densely forested mountain." Only gusts of wind disturbed the silence here, but eventually they whipped a cloud cap around the summit. We decided not to climb the summit, and turned back, tired arriving in camp late that evening while late shadows of evening cast over the river. A fire was going, and we celebrated our trek with a feast of lamb stew, fresh tomatoes, avocados and goat cheese, topped with a dessert of blackberry cake cooked in the coals over the now popular Dutch oven.