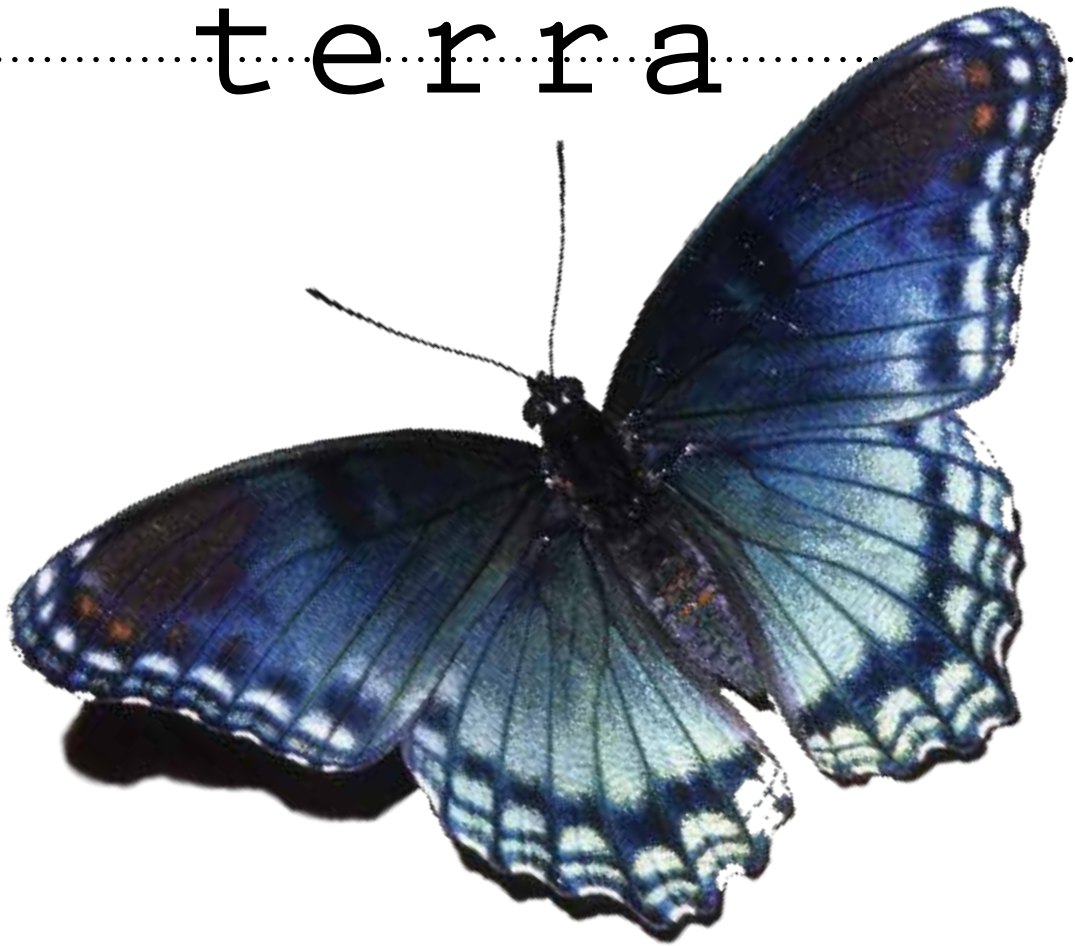


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ONE MAN ON A MISSION: BUTTERFLIES OF NORTH AMERICA

Exploring our world

|

Preserving our heritage

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Ríos en Rivers in *el bronco* rough country

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Our adventures into the river canyons of eastern Sonora began in the early 2000s after spending several years working throughout the bronco (rough) state of Sonora, México. My best friend was an avian biologist working in Sonora, and I had always been intrigued by birds, natural history, and landscape exploration.



Our trips were driven by biological interest, deeply embedded wilderness exploration genes, and our desire to fill information gaps about the Sonoran countryside and its biota.

Anyone who has explored rural Sonora by road knows it is an exercise in patience—and withstanding a lot of jarring.

Visiting locations few scientists have been is sometimes challenging, as roads are few and often private. Backpacking has a place, but it is difficult to locate water in many areas, distances are great, and the ability to stay out for extended periods is limited.

The answer to this dilemma had been there the whole time—the rivers of Sonora. Since Sonora is battered by relentless sunshine there aren't many rivers, but the rivers that are large enough to be runnable by raft are beautiful, biologically interesting, and surprisingly roadless and remote.

When we searched for information and guidance on running rivers in Sonora, we were surprised to find that there didn't seem to be anyone who had floated them before.

We finally heard of two people who had run a few stretches, but couldn't get many helpful details. Quite a few people told us that we were crazy. By our first boat trip on the upper Río Yaqui in 2003, we still knew next to nothing about the rivers and what surprises they might hold.

Looking back at that initial excursion it was like a gringo's first time stepping across the border in Nogales. We barely got our feet wet. It was a short stretch of the Río Yaqui that, while remote, was relatively tame.

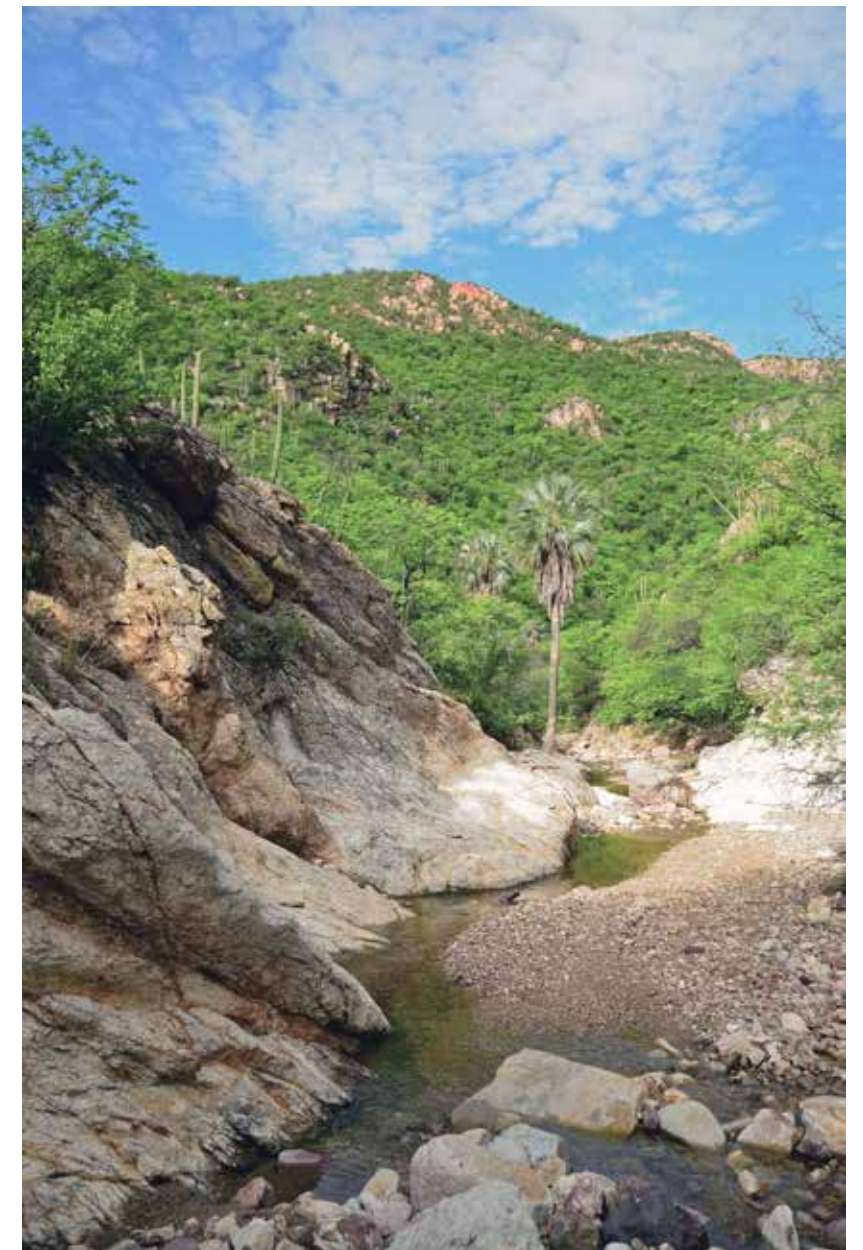
The next monsoon season in 2004 we floated in a two-person inflatable kayak down the Río Bavispe from Granados to the Río Yaqui and then to Sahuaripa. This trip was more bold and certainly an eye-opener. Giant tropical figs and deep remote side canyons greeted us. We encountered fresh jaguar tracks in the mud, neotropical river otters, and a good list of flora and fauna at the northern ends of their range.

And there were no other humans . . .

Left, from top: Dramatic canyon walls along the Río Aros.

Roads in eastern Sonora are just a beginning of the challenge.

Right, from top: Native palms line side canyons along the rivers of Sonora, Mexico. This is "babiso" (Sabal uresana); there are also "palmas" (Brahea brandegeei). Río Bavispe joins the Río Aros, making for an impressive southwestern river.





On this trip we had no clue what was around each bend—impassable rapids, narco drug fields, exciting rare plants and birds. We found all of these things, but more importantly we found a strong and long-term connection to this amazing area.

Eastern Sonora is a tortured landscape of steep, rugged terrain. Deep canyons drain the high Sierra Madre to the east. Spring and early summer are brutally dry, hot, and sunny. There are a few roads and even fewer people.

Here in these deep canyons the Neotropics reach their northernmost extent and transition to more temperate environments. All of this is a mere 200 miles from Tucson, Arizona.

During the summer monsoon season this normally grey and leafless landscape of Sinaloan thornscrub transforms into a lush and green short-tree forest full of life. Fresh water flows everywhere. Normally stagnant or even dry rivers turn into powerful brown torrents carrying sediment, tree trunks, and the occasional rafter, toward the sea.

The Río Yaqui is the largest watershed in northwest México and is formed by two forks—the Ríos Aros and Bavispe. The

Aros drains almost the entire northern Sierra Madre including areas far into Chihuahua. The Río Bavispe drains the rest of the northern Sierra Madre, parts of northeastern Sonora, and even part of Arizona.

These mighty watersheds come together in the middle of nowhere, which is exactly where we wanted to be.

Floating down the Bavispe in 2004 we had a bit of a shock when we hit the Río Aros. It was huge. It was much bigger than we anticipated and made the Bavispe look like a small backwater.

As we looked up the Aros and its magnificent canyon, our longing to explore its secrets embedded itself. The Aros promised to be even wilder.

We knew the area was nearly devoid of human settlements until one reached the other side of the Sierra Madre spine in Chihuahua. That is a lot of wild, unexplored country!

That moment was the inspiration for what would be four more boating expeditions between 2005 and 2012 to thoroughly explore the Río Aros and its tributaries.





In 2005 we organized a large expedition with many full-sized rafts and a cadre of biologists with various specialties. This expedition helped to get the area recognized as an important biological region, and data we collected were used by Mexican biologists and resource managers to kill a dam proposal on the Aros shortly thereafter.

The importance of the area for wildlife has caught the attention of other biologists and conservationists. In 2003 the Northern Jaguar Project (NJP) purchased a 10,000-acre ranch near the Aros-Bavispe confluence in hopes of helping to protect habitat for breeding jaguars that inhabit the area. That reserve has grown to over 50,000 acres and is protecting breeding

jaguars and other wildlife in the region. NJP has also funded important research projects and has been instrumental in gaining recognition for the area in both the U.S. and México. All of our later rafting and overland expeditions would not have happened without their support.

The following photos are from our latest expedition in mid-July of 2012. This trip included two days in the car and nine days on the river. We were four biologists and two support crew floating on two inflatable kayaks and two full-size inflatable catamarans.

We successfully documented a high diversity of plants and wildlife and enjoyed scenery on par with the best in the world.

The trip had many unplanned adventures, but thankfully these always make the best memories.

For more images and information about the expedition, visit WildSonora.com

The Northern Jaguar Project is a U.S.-based non-profit partnering with Mexican counterparts to protect the northernmost breeding population of the western hemisphere's largest cat. For information: NorthernJaguarProject.org or scan the QR code with your smartphone for their latest jaguar video.



Pages 20-21: Summer rains mean the highest plant, reptile, and insect activity. Blooming Oxalis latifolia.

Far left: Along the Río Aros there is a higher density of black hawks (a species of concern in North America's Sky Island region) than any location the expedition has ever seen; black hawks feed almost exclusively on fish and amphibians, so their survival is directly tied to aquatic ecosystems.

Above: Big but tranquil water.



Clockwise from opposite page top: Black-necked garter snake (Thamnophis cyrtopsis) in its aquatic element. Gila monster (Heloderma suspectum), one of two venomous lizards in North America (the other is the beaded lizard, also found in Mexico). Singing male Mazatlán toad (Ollotis mazatlanensis). Sonoran whipsnake (Coluber bilineatus) basking on a warm rock



December 13, 2011



July 19, 2012



Left: La Morita, the largest rapid on the Río Aros at two very different flow levels. In April 2011 (top), a typically dry time of year, the flow was about 60 cubic meters per second (CMS), and we portaged our boats and gear through the channel in the foreground, which was perhaps moving at three CMS. In the bottom photo, during this expedition, the summer rains pumped the river up to a raging 250 CMS.

Above: One of the kayakers getting some serious water.

Right: One morning the river rose so quickly (after an overnight rain in a distant part of the watershed) that our camp was inundated and our inflatable kayak navigated the next rapids without benefit of a captain.





Left, from top: The author showing where the inundated camp was formerly pitched. Some of the crew relaxing after a hard run. The land is full of surprises, such as signs of previous industry—this stone wheel is part of a grinding mechanism, possibly for processing roasted corn (pinole).

Above: Aaron Flesch maneuvering his cat through a swift-water section—showing just how big the Aros is during the summer season.