A Gift of Nature

The riches of the San Pedro River aren’t counted merely in gold.

BY CHRISTINE MAXA

"Wow!" exclaims Mark Petti of the Nature Conservancy as he looks through a pair of field glasses at a merlin hawk, “He almost got that sparrow. This is a phenomenal display of power and speed. A rare treat.”

The merlin dives adroitly for its breakfast during an uncommon appearance in the grasslands along the San Pedro River in southeastern Arizona’s San Pedro Riparian National Conservation Area. Like most raptors, the merlin uses its opened talons to strike the killing blow as it stoops on its prey. Not much of a glider, the merlin, once called pigeon hawk, performs its hunt with shallow swoops.

A northern harrier, a visitor to the conservation area during migration and wintertime, becomes an interloper in the hunt. Though more common than merlins, harriers still teeter toward trouble as a species and are listed on the Audubon Society’s Blue List. This red-flag list signifies species of concern.

Harriers like to fly low to the ground since they use their sense of hearing to locate prey. This one gets in the way of the agile merlin and its target prey.

The merlin, frustrated by the harrier’s interceptions, retreats into the tangle of cottonwood trees along the San Pedro River.

The longest free-flowing river left in Arizona, the San Pedro is a popular hangout for birds. Almost 400 bird species have perched along the river’s upper course between the galleries of cottonwoods and willows along its banks to the uplands of the San Pedro Valley. About 250 of these species migrate along the river, 100 nest there, and 50 to 60 species make accidental appearances.

The north-flowing river starts as a seep in the desert grassland hills, called Sierra de los Ajos, unfolding from the Sierra Madre Occidental in Sonora, Mexico. This trickling start evolves into a solid, but slender, stream by the time it flows into Arizona. From the border, it eventually empties into the Gila River 100 miles north.

The river flows unimpeded while passing through the conservation area, a 40-mile-long sanctuary located between the U.S.-Mexico border and St. David, Arizona. The Bureau of Land Management has protected the area since 1988 and describes it as the most extensive riparian ecosystem remaining in the desert Southwest. The conservation area is especially important to wildlife because of special protection from environmental detriments, such as grazing, mining, irrigation, off-road vehicles, and fires.

The San Pedro has come into the national spotlight, racking up a list of important designations. Considered one of the most important bird flyways in the world, the river received Congress’s first-ever designation as a Riparian National Conservation Area in 1988. The American Bird Conservancy has designated it a Globally Important Bird Area, and the Nature Conservancy has added it to the Last Great Places of the World list. The Nature Conservancy calls the San Pedro a treasure.

Left, a merlin, also known as a pigeon hawk, searches for sparrows and other prey while overlooking the verdant riparian corridor of the San Pedro, right, the longest free-flowing river left in Arizona.
Pedro one of the world’s most important desert rivers.

Designations aside, the San Pedro River has always been a focal point of civilizations that lived in the area. It’s a useful river, and over a 13,000-year span of time many cultures have used it, starting with the mammoth-hunting Clovis Culture, continuing through agricultural Hohokam and Sobaipuris cultures, into Spaniard and military occupation, and currently hosting Sierra Vista and several nearby businesses.

Remnants of civilization lie all along the river in the form of relics and ruins. More than 250 prehistoric and historic sites have been logged in the conservation area, and experts expect to find more. A serendipitous glance might reveal a chiseled arrowhead resting in the sand. At the Charleston Narrows, where canyon walls squeeze the river into a narrow corridor, the Hohokam pecked petroglyphs into the upper rocks centuries ago.

The Spanish led expeditions, set up missions, and established cattle ranches in the area. They left behind the presidio of Santa Cruz de Terrenate, their unsuccessful attempt to quell the Apache Indians. The Mexicans moved into the San Pedro Valley after their declaration of independence from Spain in 1821, but the Apache Indians forced them out, too. Anglo homesteaders moved there in the 1850s, resettling cattle ranches.

By the 1880s, the area rocked with raucous mining-town life precipitated by the silver mines in nearby Tombstone. The several stamp mills along the San Pedro actually shook the ground when they were in operation, which was 24 hours a day. The mills, along with the brothels and bars, kept the river a spirited place.

Much quieter now, the San Pedro still nurtures a lively lineup of wildlife, the natural kind, influenced by the Rocky Mountains and Sierra Madre. Its hundreds of species of birds, 87 species of mammals, and 68 species of amphibians and reptiles place the San Pedro with the highest diversity of vertebrate species in the continental United States and second highest diversity of land mammals in the world (only the mountains of Costa Rica harbor more). And it flaunts 180 species of butterflies as well.

Animal tracks adorn the sandy footpaths along the river. Javelina and deer commonly appear. Bobcats and mountain lions make stealthy visits, leaving their paw prints on the damp earth at the water’s edge. And black bears sometimes mosey down from the Huachuca Mountains, especially in times of drought or fire.

Wildlife biologists thought the river might be a travel corridor for jaguars, but historic records revealed the jaguar prefers mountain corridors. Tim Snow, a nongame specialist at the Arizona Game and Fish Department’s Tucson office, says this doesn't mean jaguars wouldn't travel the San Pedro.

"Jaguars may actually use the riparian corridor between mountain ranges," Snow says. "It’s possible, but not probable."

Coatimundis, one of the more common animals peculiar to southeast Arizona, roam the forest along the river. These members of the raccoon family grow to about 4 feet in length from their white-tipped noses to the end of their black-ringed tails; the tail itself makes up half the length of their body. The males are solitary, but females and young travel together in bands of six to 24. Coatimundis crave insects, lizards, fruit, eggs, and nuts.
sometimes eating their meals hanging upside-down from a tree.

Another common mammal, the beaver, made an uncommon appearance in the San Pedro in 1999. The largest rodent in the United States was so prevalent along the San Pedro in the 1800s, trappers nicknamed the waterway Beaver River. The beaver was extirpated by fur-trade trapping by the 1900s. The beaver returned to the San Pedro Riparian National Conservation Area when the Bureau of Land Management and the Arizona Game and Fish Department began a reintroduction program in March 1999. The river currently harbors several well-established colonies.

“We began the reintroduction program in the hope that the beavers would increase the actual surface water and cause the cottonwood and willow growth to return to a more natural setting of willows and broad leaf trees along the banks and cottonwoods further back,” says Snow. “We hope the water will enhance opportunities for native fish and frogs.”

When beavers gnaw down willow trees, they perform a natural pruning service for the thickets, which compels the willows to grow thicker. This supplies a rich habitat for endangered southwestern willow flycatchers found along the river banks.

“Besides shade and coolness,” Snow explains, “birding is the main reason people visit the San Pedro River.”

The big event in the bird world happens in late April and early May when birds make their way from South and Central America to points north. Just about half of all the birds seen in North America have made an appearance along the San Pedro over the years, including such enticing rarities as green kingfishers, northern beardless-tyrannulets, and yellow-billed cuckoos.

“It’s a place where virtually any species could show up suddenly,” says Troy Corman, the department’s Neotropical migratory birds coordinator. “You see a sampling there of the wide variety of birds that frequent southwestern Arizona.”

The birds funnel along the San Pedro’s verdant riparian corridor, which features Fremont cottonwood-Goodyear willow gallery forests, riverine marshlands, and native Sacaton grasslands in a dry mesquite landscape. The riparian cover along the river attracts passerines (songbirds), especially near the Hereford Road access. Passerines tend toward nocturnal migrations. Night flights protect the birds from predators and weather stresses, such as wind and heat.

“After flying all night, the birds are hungry and need protection,” Corman explains. “They see the San Pedro’s green ribbon in the brown desert landscape and head right for it. The river has everything they need to fuel up and protect them from predators.”

Warblers, vireos, flycatchers, orioles, and tanagers make a big show during the spring migration. Snow says the species often mix together with a peak time of arrival for each one. Consequently, the birds flock through the conservation area in waves. One week, vermilion flycatchers dart around like red sparks. The next, yellow warblers flash their saffron plumage.

Visit the conservation area yourself. Take a stroll along the river’s shallow waters beneath a cottonwood and willow canopy. You enter quickly into bird land. Northern flickers announce their presence with a racketey wik-wik-wik-wik. Yellow warblers sound their sweet-sweet-sweet melody. An owl wings resolutely through the shadows; a great blue heron glides silently above. You see a beaver slip like silk beneath the water, and the track a bobcat left upon the sand. Overhead a redtail rides the currents, a darkened silhouette against the sky. You realize the truth of all you’ve heard about the river, and the San Pedro’s gifts are yours.