



The Borderlands Photographer

Published September 2012, *Tubac Villager* newspaper, (Tubac Az USA)

Friends of Our Heritage, Part 2 - Friends of the Santa Cruz River

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On a map, the backwards-J shape of the upper Santa Cruz River defines our borderlands region of Arizona. The Gadsden Purchase of 1853 left the international flavor of the river intact, with the bottom



This is farmland at the river in Mexico. Agriculture along the entire length of the upper Santa Cruz has degraded its ecology by destroying marshes along its banks.



The length of open riparian habitat lining the river banks, densest at Tumacacori.

section of the J remaining in Mexico. The river flowed south from the Canelo Hills, and then turned northwards to the Gila River, the boundary of the newly-purchased territories.

A century ago, more or less, and practically overnight in a geological sense, the river became diminished due to groundwater pumping and agriculture. All the rivers of the southwest, many of them tiny and fragile, were thus degraded. Today, groups of dedicated volunteers work to preserve remnants of our natural heritage from the onslaught of development growth.

One such group is the Friends of the Santa Cruz River (Foscr). A portion of the river, roughly from Rio Rico to Amado, hints of its former grandeur of cottonwood-willow riparian habitat surrounded by mesquite bosque. The river flow is supported by water effluent discharged from the Nogales Wastewater Treatment Plant to the south, augmented by some fresh flow and seepage from the local geography. The trees lining the path of the river, mainly cottonwoods requiring shallow water, depend upon that flow, and the intentions of private landholders.

About 20 years ago, realizing with shock that the river had no protections, Sherry Sass and a few others started Foscr to do just that. She says national groups stayed away because of the river's effluent dependency. There were no governmental agencies responsible since the land is privately owned.

Since then, Foscr's major achievements include supporting a decade-long effort to upgrade the treatment plant, constant trash cleanup and public education efforts in tandem with the Anza Trail Coalition and the Tumacacori National Historical Park. Foscr's outgoing president is Jen Parks and the new incoming one is Scott Vandervoet. Agreeing with most area residents, Jen thinks the water plant upgrade was a major achievement for fish and humans alike: "the river now smells like a real river!"

For several miles here at Tubac, a visitor enjoys a reminder of the lush watery world of yesterday's river. This stretch is the purview of Foscr. A small exception to the challenge of private property is 300 acres adjoining Mission San José de Tumacácori, a recent acquisition by the park. History runs through this country like the river, and adding this land was crucial to portraying the historical context of the park.



Foscr co-founder Sherry Sass, at left, with outgoing group president Jen Parks.

Foscr partners frequently with the park as part of its public education outreach, providing glue to link our cultural heritage with our natural heritage. Historically, Sherry says the river's Tubac section enjoyed a broad riparian ("river associated") habitat zone, because ground water is shallow here due to the geology underneath and there was generous natural replenishment from the surrounding mountains and springs. Thus, Europeans came.

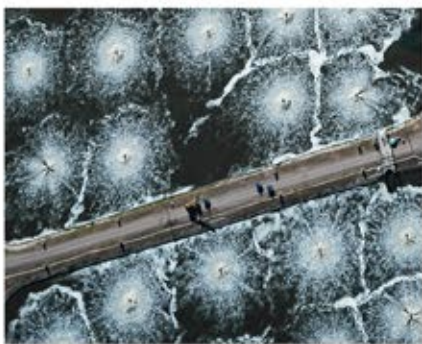
In the past, explains Sherry, increased agricultural development suppressed tree regeneration & understory regeneration resulting in big habitat changes. This was manifested in the disappearance of cienegas, a series of marshes, along rivers throughout the southwest. The cienegas, mosquito habitat fringed by mesquite bosques, functioned as sponges, moderating flooding and slowing water flow. Quiet water and mosquitos are loved by the native fish: Longfin dace, Gila topminnow, Sonoran sucker, and Desert sucker.

Mesquite bosques once extended all the way north to Tucson, but most were cut down to make space for agriculture in the fertile soil beneath. Guilt for this ecological damage over the centuries was shared by both native and white man, compounded more recently by the rapacious appetite of the latter.

Recently Foscr did some advocacy work involving guidance to the new Palo Parado bridge construction. For me personally, as a granite-hard conservationist, my position regarding all new roads and bridges is summarized



Monsoon floods, as seen here near Amado, flush fish into the river from tributaries.



The Nogales waste water treatment plant provides millions of gallons of ground flow per day.

verbosely as “No.” However, Foscr’s view was somewhat more nuanced. The group tried to induce the bridge’s design to be as river-friendly as possible, with “weep holes a no-no,” urging against holes in the bridge surface through which oil and other grimy stuff could fall to the river below. Instead, Foscr wanted to flush pollutants off to basins at the ends of the bridge. Alas, this advice wasn’t accepted, says Sherry.

Ongoing group-sponsored work includes the RiverWatch water monitoring program which provides data used by Arizona Dept. of Environmental Quality.

Foscr projects include water harvesting workshops with Watershed Management Group of Tucson, using techniques of gravity from road runoff and contoured basins to filter water naturally. This, along with planting native plants, reduces erosion from the scars of development which harms both the land surface which loses the soil and the river water which gains it.

Also, Foscr is in the beginning phases of an EPA grant which will entail testing private wells, with the object of monitoring ground water, finding contaminants and providing advice to property owners on alternatives.

For the future, in our dreams, says Sherry, Foscr would like to have a guaranteed source of water for the river. Currently, the treaty between US & Mexico provides for 10 million gallons per day from Mexico and 4 million from US side. If Arizona were in fact restricted only to the 4 million, it wouldn’t be enough.

Threats on the horizon include proposed mines that would pollute ground water near the river, including Mexico’s El Pilar copper mine and mines proposed for the Patagonia mountains. Also, Foscr worries about the IOI, or International Outfall Interceptor, a hazard-laden pipeline under Nogales Wash linking the water treatment plant. Its condition is poor; it ruptures easily; and responsibility for it

resides with frustrating bureaucratic opaqueness at the International Boundary Water Commission, under the U.S. State Department.

And not the least problem is the permanent need for cleanup of trash that is both dumped locally and drifts northward from the Nogales area.

Big, tough problems for a small, friendly friends group.

As with many non-profits, fundraising requirements can eclipse other tasks. For Foscr, as the groundwater aquifer drops, membership must rise. So the reader is hereby called to attention, summoned to Foscr's website, www.friendsofsantacruzriver.org, cajoled to dip a toe in the river and requested to become a friend of the Friends!

