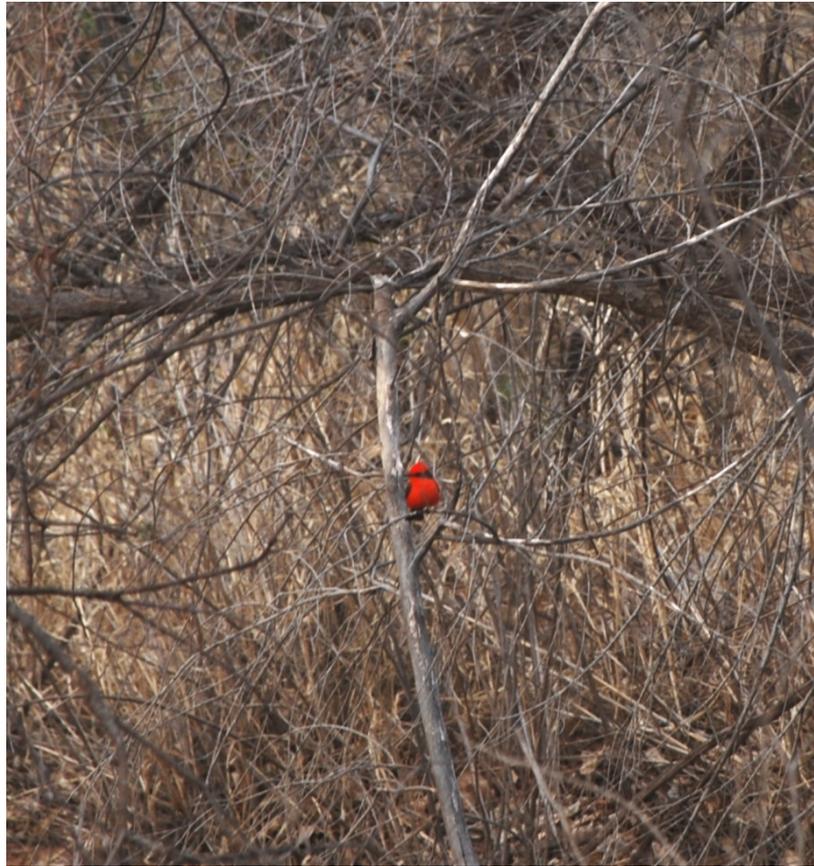


SAN PEDRO RIPARIAN NATIONAL CONSERVATION AREA



San Pedro Riparian National Conservation Area

National Landscape Conservation System

FY 2011 Annual Manager's Report

NATIONAL LANDSCAPE CONSERVATION SYSTEM
FY 2011 Manager's Annual Report

BLM



NATIONAL LANDSCAPE CONSERVATION SYSTEM
FY 2011 Manager's Annual Report

Introduction

Accomplishments within this report reflect the time period October 1, 2010 thru September 30, 2011.

1. Site Name: San Pedro Riparian National Conservation Area, Address: San Pedro Office, 1763 Paseo San Luis, Sierra Vista, AZ 85635, (520) 439-6400,
Website:http://www.blm.gov/az/st/en/prog/blm_special_areas/ncarea/sprnca.html
2. Manager: Mark Rekshynskyj
3. San Pedro Project Office, Tucson Field Office, Gila District, Arizona State Office
4. Arizona-Idaho Conservation Act, Public Law 100-696 (November 18, 1988)
“The Secretary shall manage the conservation area in a manner that conserves, protects, and enhances the riparian area and the aquatic, wildlife, archeological, scientific, cultural, educational, and recreational resources of the conservation area.” Public Law 100-696, Sec. 102.(a)
5. Acreage: approximately 57,000 acres of public, state and private land within its designated boundaries.
6. Estimated Annual Visitation: 118,990

1. Natural and Heritage Resources Conditions

Natural resources trends:

- The San Pedro Riparian National Conservation Area (SPRNCA or NCA) is among the last, highly bio diverse, wild areas left in the country. Biodiversity encompasses grasslands, desert scrub, mixed scrub-grassland, aquatic habitat, riparian habitat, cottonwood/willow woodlands, mesquite Bosque's, and wetland habitat. Species utilizing this land include approximately three hundred sixty-five species of birds, over eighty-two species of mammals, approximately forty-three species of reptiles and amphibians, numerous fish species of which two are native, and of course a plethora of insects. Of these species approximately fifteen are special status species including gray hawk, Mexican garter snake, yellow-billed cuckoo, and lesser long-nosed bat. Additionally, there are several endangered species with the high potential for being present within the NCA, including ocelot and jaguar. This biodiversity is, at the moment, stable. Some species have an upward trend and others are remaining constant. When the NCA was first established in 1988 there was an increase in biodiversity as well as with numbers within that biodiversity. Today, these species are faced with the encroachment of the neighboring urban area and the many issues that

come along with this encroachment. At the top of the list of issues is the depletion of ground water and subsequently surface water in the river. If the water issue is not solved soon The San Pedro Riparian NCA will be put in peril.

- Inventories done in 2011 include: All 43 miles of river has been inventoried and assessed for native fish species. We continue to document that only two of the thirteen native fish inhabit the resource. The majority of the fish habitat is unsuitable for reintroduction of the eleven species no longer in the system. This is due to water quantity and quality issues, and exotic species that have invaded the river. Endangered and special status species including Gray Hawk, Huachuca Water Umbel and Southwestern Willow Flycatcher, are inventoried annually. Inventory of the flora within the NCA is on a three year cycle of monitoring/inventory to assess trends.
- Infestations of tamarisk (*Tamarix chinensis*, including related species and hybrids) occur throughout the SPRNCA, with the most severe infestations situated adjacent to the San Pedro River north of the historic town of Fairbank. Isolated populations of tamarisk to the south of Fairbank functionally serve as extended seed sources, increasing potential for further spread along the San Pedro River. Russian knapweed (*Acroptilon repens*) control was continued at six prior known locations and one location found during 2011. Russian knapweed is an introduced, deep-rooted, long-lived perennial with rhizomatous roots that also produces biochemical's inhibiting the growth of native plants (allelopathy). These features of Russian knapweed make cultural control difficult, and allow it to outcompete native species and form monocultures that are not conducive to native plant or wildlife species richness.

Heritage resources trends

- The cultural resources of the management area represent a diverse array of site types, cultures, and time periods. There are approximately one hundred fifty recorded cultural resource properties in the national conservation area. Among these areas, there is The Murray Springs site which dates back to the Clovis Hunters some 11,200 years ago. Murray Springs has been nominated for the National Register of Historic Places, has enormous public use values and has an interpretive trail. Also among the cultural resources is The Presidio of Santa Cruz de Terrenate which has an interpretive trail and is on the National Register of Historic Places. The Presidio of Santa Cruz de Terrenate dates from 1539 to 1820 with the Spanish presence in the southwest encompassing exploration, mining, ranching, establishment of mission system, and an attempt at establishing permanent settlements. Another important site, the town of Fairbank dates back to transportation and commerce during the American Settlement from 1853 to 1912. Fairbank is on the National Registry, has high visitation of the public and even still holds ties to the community with its' descendants still living in the area and holding reunions at the town. The overall condition of the heritage resources in the San Pedro Riparian National Conservation Area (SPRNCA or NCA) varies greatly. The prehistoric resources are in stable

condition. The majority of historic resources (90%) that have not been stabilized are in very poor condition. Seven percent of properties that have been stabilized are in fair condition. Properties that have either been restored or that are in the process of being restored are in excellent condition include the San Pedro House and the Fairbank Schoolhouse.

- A variety of restoration projects took place on the NCA. Erosion control was implemented on an access road which had become impassable due to erosion. A fence was put in to protect a spring fed pond and get it ready for future restoration including fish reintroductions. Huachuca water umbel augmented at Murray, Horsethief, and Frog Springs. Ongoing efforts to preserve, protect, stabilize, and interpret historic buildings and structures at Fairbank Historic Town site and other SPRNCA historic sites continue. Historic preservation projects undertaken during FY2011 included:
 - Removal of a chain-link and barbed wire fence and installation of a period-appropriate garden-type fence around the Adobe Mercantile Building and adjacent Small House
 - Repair to eroded and missing adobe elements on the Mercantile Building
 - Stabilization of the Small House, including installation of a new corrugated metal roof with materials salvaged from a historic barn on other TFO lands
 - Repair to gutters and fascia damaged by tree limbs
 - Development of new interpretive displays for the Fairbank Schoolhouse, and updating of some existing displays and materials
 - Removal of hazard branches/limbs/stumps around structures and public areas
 - Removal of a concrete slab constructed by BLM in 1988 for office trailers, and re-contour of the area
 - Implementation of mitigation measures for safety hazards noted in 2011 Gila District Health & Safety report
 - Adobe wall preservation at Presidio Santa Cruz de Terrenate (annual “Terrenate Mud Party”, a collaborative effort among BLM, other Federal agencies, our partner group – the Friends of San Pedro River, and individual volunteers)
 - Repairs completed for three historic corrals: Land, Fairbank South, and Little Boquillas Ranch.



Fairbank Mercantile as work is progressing

- During FY2011, planning was completed for other rehabilitation projects at Fairbank and elsewhere on the SPRNCA. This included completion of NEPA clearance process, coordination with other agency programs, and consultation with partners and SHPO. These included the stabilization of four wood structures at Fairbank (the “Teacher’s House”, Garage, Outhouse, and Chicken Coop); and stabilization of adobe wall remains at the old hotel at Contention; and at the historic Brunckow Cabin.



Fairbank Mercantile with slab removed and new fence put up

2. Recreation Facilities, Roads, and Trails Conditions

The overall condition of physical facilities, including roads and trails within the San Pedro Riparian National Conservation Area, are fair to good.

- There has been no comprehensive travel or management plan developed for the San Pedro Riparian National Conservation Area. There are approximately 3 miles of poorly maintained system gravel roads available for public use to access the trailheads. There are approximately 58 miles of multiple-use, non-motorized trails within the San Pedro Riparian National Conservation Area. As a result of the very few miles of vehicular routes open to the public, and the excellent trail inventory completed for the SPRNCA, current management and staff consider the specific development of travel and transportation planning will be accomplished during San Pedro Riparian National Conservation Area resource management planning.

Construction

- Prior to the completion during FY 2011 of trailhead and trail reconstruction and maintenance projects, funded through the American Recovery and Reinvestment Act (ARRA), the ten major trailheads that provide access to the San Pedro Riparian National Conservation Area were in fair to poor condition. These sites provide legal, physical access to the SPRNCA, approximately

every eight miles from north to south, and greater access near sites or areas of significant cultural or natural interest. Further, the trailheads are often the first exposure to the SPRNCA that the public receives.

- All SPRNCA trailheads were reconstructed using identical thematic design, materials, and techniques, in order to create permanent, low-maintenance, trailhead facilities for the public. Construction was completed in March 2011, and was accomplished with labor provided by small American business interests.
- Over 30 miles of the San Pedro trail system received reconstruction or maintenance during the fiscal year. This work was accomplished with funding from the ARRA; with labor supplied by various Arizona conservation corps employing young people.

Maintenance

- Information regarding the SPRNCA's unit deferred maintenance backlog is not available at this time. In general, the largest need in the unit regards the annual repair and maintenance of the 125 miles of SPRNCA boundary fencing. The repairs to boundary fencing due to flood damage, old age and illegal cutting has been and remains a constant strain on the minimal staff (Park Ranger and Student Conservation Association interns) assigned to perform this work.

Signage

- The SPRNCA has not developed an approved sign plan. However, since designation much effort has gone into the development of highway portal signs, boundary signs, trailhead kiosks, interpretive displays, trail markers, and various regulatory or emergency signing which meet the standards of BLM Manual policy. The above mentioned signage has been developed to reflect agency and SPRNCA-specific design features and requirements. As stated above, funding from the ARRA allowed for the design, purchase and installation of permanent trail markers. This design will be incorporated in to future sign planning.

3. Outreach, Environmental Education, Interpretation, and Volunteers

Outreach

- Naturally, many of the actual visitors to the SPRNCA obtain interpretive and regulatory information about the Area from signs, brochures, and kiosks at the various trailheads. They receive information from the Public Contact Representative at the San Pedro Project Office in Sierra Vista and from the volunteers at the San Pedro House and the Fairbank Schoolhouse, from outfitter –guides operating under a Special Recreation Permit, and from BLM staff in the field. During the year there are various annual events, such as the Fairbank Reunion, International Migratory Bird Day and the Southwest Wings Nature and Birding Festival. Information about the SPRNCA is also gathered from various BLM and public websites.

Visitor Centers.

- While there are no “visitor centers” in the SPRNCA, there are two information centers and bookstores operated under an Assistance Agreement by the Friends of the San Pedro River at the San Pedro House 364 days a year, and the Fairbank Schoolhouse open approximately 170 days a year.

Environmental Education

- The Friends of the San Pedro River provided over 200 educational events during FY 2011: conducting general interpretive nature walks; conducting bird walks; sponsoring eleven all-day hikes, sponsoring history walks; sponsoring bird walks at the City of Sierra Vista Environmental Operations Plant (which feeds reclaimed water to the SPRNCA through Murray Springs); conducted 5 evening nature walks, and continued to implement an organized program for school children which is comprised of a walk and a classroom session. Several dozen of the events served hundreds of local school children.



BLM – San Pedro Riparian NCA Outreach at Southwest Wings

Interpretation

- The overarching theme for all interpretation for the San Pedro Riparian National Conservation Area begins with: water. Since before the arrival of human beings to the valley, this Area has been, and continues to be, significant for its riparian ecosystem. Other interpretation provided, be it avian migration, Clovis cultural sites, beaver reintroduction, Spanish hegemony, or the evidentiary diminishment of the river associated with urban and rural development, begins with the story of: water. In this arid region, it has always been about water.

Volunteers

- The Friends of the San Pedro River contributed over 11,000 hours of volunteer time towards the enjoyment and edification of the public. The dollar value of their time is over \$200,000, or three full-time employees. Many of the projects and outcomes of volunteer participation in the conservation, protection, and enhancement of the San Pedro Riparian National Conservation Area have been mentioned above.

4. Science

The San Pedro Riparian National Conservation Area is known throughout the world for its' immense diversity. Not only is the diversity of this area important but also that it is the last standing free flowing expansion of water for three hundred miles in the southwest. The San Pedro is the last of its kind which, by law, deserves to be conserved and protected. Part of conserving and protecting this important resource is the monitoring of species. The ongoing monitoring of upland and riparian vegetation, avian populations, threatened and endangered species, and hydrology is consistently being conducted.



Banded Vermillion Flycatcher

- The San Pedro Avian Resources Center is a volunteer-based mist netting bird banding project, headed by the Natural Resource Specialist. This project is just entering its seventeenth year of operation. Along with local knowledge, the data also contributes to a bigger picture. The information gained from these banding stations is playing a major role in management actions along with about every aspect of the continued preservation of the San Pedro Riparian National Conservation Area.
 - Two banding stations are being operated in the SPRNCA one at San Pedro House and the other by Green Kingfisher Pond.
 - The data being collected at these banding stations is contributing to the local knowledge of avian: migration, molt migration, production, and survival.
 - The data is inputted into national databases both at the Institute of Bird Populations and the bird banding laboratory where population trends, migration paths, and much more can be seen and analyzed.
 - Analysis of the data from this effort is showing population trends of avian species which gives clues to ecosystem health.
- Beaver (*Castor canadensis*) were reintroduced to the San Pedro Riparian NCA after having been extirpated by fur trappers by 1894. A total of 15 beaver were reintroduced during 1999, 2000, and 2002. The purposes of beaver reintroduction on the NCA were many. As a keystone species, beaver may have a large influence on

community diversity and ecosystem structure through their tree felling and dam building behavior. Beaver dams may increase storage capacity and lead to greater flows during dryer periods, which may result in enhanced flow in intermittent streams. Beaver impoundments may increase the area of riparian habitat, and elevate water tables through groundwater recharge. By functioning as sediment traps, beaver ponds accumulate organic matter, and also reduce erosion potential. By doing so, beaver dams may reduce the sediment carrying capacity of the stream and deposition.

- During 2011, the location of beaver dams was determined through BLM wildlife biologist's observations and wet/dry mapping data.
- The annual spring and fall fish monitoring was conducted in April and September by Jerry and Sally Stefferud, Dr. Paul Marsh, and the BLM wildlife biologist.
 - We continue to document that only two of the thirteen native fishes inhabit the resource. The majority of the fish habitat is unsuitable for reintroduction of the eleven species no longer in the system. This is due to water quantity and quality issues, and exotic species that have invaded the river.
 - Fish numbers were low to moderate, with the remaining two species of native fish, longfin dace (*Agosia chrysogaster*) and desert sucker (*Catostomus clarkii*), documented at the Charleston site.
- The federally endangered Huachuca water umbel (*Lilaeopsis schaffneriana* var. *recurva*) and southwestern willow flycatcher (*Empidonax trailii extimus*) continues to be monitored on the NCA by EEC, Inc. as required under species specific conservation measures of the biological opinion "Proposed Ongoing and Future Military Operations and Activities at Fort Huachuca." Fort Huachuca has been instrumental in assisting BLM in this endeavor.
 - There were three documented southwestern willow flycatchers in the SPRNCA in 2011.
 - Huachuca Water Umbel was introduced at three sites in the SPRNCA in 2011.
- The thirteenth annual BLM and volunteer wet/dry monitoring effort was conducted in June along the San Pedro River within the US and Mexico, during the driest time of year. Maps showing the results from the wet/dry monitoring effort allow comparison of river conditions over time, the percentage of river that is wet or dry, and establish an important baseline for evaluating the upper reach of the San Pedro River.
 - During FY 2011, approximately 50 miles of the Upper San Pedro River were mapped during the wet/dry effort. Segments along the Babocomari River, Curry Draw, and Horsethief Draw were also mapped.



Volunteers conducting riparian monitoring

5. Partnerships

- We are a key member of the Upper San Pedro Partnership (USPP), a consortium of 21 federal, state, local, and private agencies. The USPP was established for coordination and cooperation in the identification, prioritization and implementation of comprehensive policies and projects to assist in meeting water needs in the Sierra Vista Sub watershed of the Upper San Pedro River Basin. Furthermore, the USPP is responsible for the preparation of annual reports to Congress regarding steps to be taken to reduce overdraft and restore sustainable yield of groundwater in the Sierra Vista Sub watershed by 2011.
 - During FY 2011, staff attended approximately 30 Technical, Political Action, and Executive Committee meetings.
- Under an assistance agreement, we are privileged to have a well-established and successful “Friends” group, the Friends of the San Pedro River (FSPR) organization. The FSPR help in our mission by providing a most important task of outreach to the public. By providing information about the SPRNCA to the public, they are strengthening the message of conservation, enhancement, and protection of our resources. They also provide help to the San Pedro staff on projects in which “extra man power” is needed.

6. Planning and Business Practices

We currently operate under the San Pedro River Riparian Management Plan and Environmental Impact Statement, and Record of Decision, August 1989. Additional lands acquired during completion of the Management Plan identified above are managed under the Safford Resource Management Plan and Environmental Impact Statement, July 1994. Funding to begin a pre-plan was requested and received. Pre-plan efforts will begin in 2012.

7. Manager's Corner:

I would like to personally thank the following staff for their participation in creating this document.

Catie Fenn - Outdoor Rec Planner
Marcia Radke – Wildlife Biologist
Heather Swanson – Natural Resource Specialist
Jim Mahoney – Outdoor Recreation Planner
Ben Lomeli – Hydrologist
Karen Simms – Acting Assistant Field Manager
Jeff Simms – Wildlife Biologist
Chris Schrage – Historic Preservation Specialist
Bob Steele – Park Ranger
Jody Barker – Public Contact Representative
Amy Markstein – Step Student

State Name: Arizona
San Pedro Riparian NCA
Manager: Mark Rekshynskyj

Table 1: SCIENCE (table continues on next page, please scroll to the right)										
Location	Project Name	Discipline	Research Contributor/ Collaborator/	Project Description	Status	Products	Applications	Outreach Options	BLM Contributions	Partner Contributions
		<i>Geology, Paleontology, Hydrology,</i>			<i>Ongoing, 1st year, or completed</i>	<i>Provide citations and web addresses where applicable</i>	<i>How the research has or will be used</i>	<i>Identify projects or stories that may be of interest to the public</i>	<i>To date by year</i>	<i>To date by year</i>
San Pedro Riparian National Conservation Area	San Pedro Avian Resources Center	Ornithology	BLM Natural Resource Specialist	The San Pedro Avian Resources Center is a volunteer based constant mist netting bird banding station.	ongoing	Data inputted into nation wide databases with Institute for Bird Populations and Bird Banding Laboratory	Data inputted into nation wide databases with Institute for Bird Populations and Bird Banding Laboratory	Local avian trends		
San Pedro Riparian National Conservation Area	Beaver reintroduction	Wildlife biology	BLM Wildlife biologist	Beaver (<i>Castor canadensis</i>) were reintroduced to the San Pedro Riparian NCA after having been extirpated by fur trappers by 1894. A total of 15 beaver were reintroduced during 1999, 2000, and 2002. By 2008, the estimated beaver population on the Upper San Pedro River was at least 150, based on about 20 colonies with 33 dams on the NCA, with additional beaver reported in Mexico and as far north as Aravaipa Canyon. During 2009, the location of beaver dams from 2000-2008 was determined through BLM wildlife biologists' observations and wet/dry mapping data. ArcGIS was used to map the expansion and site fidelity of these dams from 2000-2008.	ongoing	Final research paper will be written by BLM wildlife biologist	Final research paper will be written by BLM wildlife biologist	Public will be given information on beaver.		
San Pedro Riparian National Conservation Area	fish monitoring	fisheries	BLM Wildlife biologist	The annual spring and fall fish monitoring	ongoing	Complete species present data within the San Pedro Riparian NCA	Provides professionals with species presence.			
San Pedro Riparian National Conservation Area	Huachuca water umbel survey	botany	Engineering and Environmental Consultants, Ic.	Huachuca water umbel survey	ongoing.	Provides professionals with species numbers and locations	Professionals are able to track species			
San Pedro Riparian National Conservation Area	Southwestern willow flycatcher survey	Ornithology	Engineering and Environmental Consultants, Ic.	Southwestern willow flycatcher survey	ongoing	Provides professionals with species numbers and locations	Professionals are able to track species			
San Pedro Riparian National Conservation Area	wet/dry monitoring	hydrology	BLM staff and volunteers	The tenth annual BLM and volunteer wet/dry monitoring effort was conducted on June 21 along the San Pedro River within both the US and Mexico, also during the driest time of year. Maps that result from the wet/dry monitoring effort allow comparison of river conditions over time, the percentage of river that is wet or dry, and establish an important baseline for evaluating the upper reach of the San Pedro River.	ongoing	Provides professionals with baseline hydrologic data	Provides professionals with baseline hydrologic data			
San Pedro Riparian National Conservation Area	Russian knapweed (<i>Acroptilon repens</i>) control	botany	BLM Wildlife biologist	Follow up treatment of knapweed at six sites.	ongoing		Provides professionals with information on invasive species eradication.			

San Pedro Riparian National Conservation Area	Tamarisk control	botany	BLM Wildlife biologist	Continuation of Tamarisk eradication. Total of three acres done in 2011.	ongoing						
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State Name: Arizona
 Unit: San Pedro Riparian NCA
 Manager: Mark Rekshynskjy

Table 2: PARTNERSHIPS (table continues on next page, pleas scroll to the right)								
Location	Project Name	Partners	Project Description	Status	Results	Outreach Options	BLM Contribution	Partner Contribution
						<i>Identify projects or stories that may be of interest to the public</i>	<i>Funding To date by year</i>	<i>To date by year</i>
San Pedro Riparian NCA		Friends of the San Pedro	Operating San Pedro House	Ongoing.	Providing public outreach, education and a bookstore.		Facility Maintenance and repair-\$11,000 (approx)	2,064 Hours. \$44,974.56
San Pedro Riparian NCA		Friends of the San Pedro	Operating museum and information center at Fairbank	Ongoing.	Providing public outreach, education and a bookstore.		Facility Maintenance and repair-\$6,000 (approx)	800 Hours. \$17,432
San Pedro Riparian NCA		Friends of the San Pedro	Fairbank Days	Annual event	Provide set up of facilities		0	256 Hour. \$5,578.24
San Pedro Riparian NCA		Friends of the San Pedro	International Bird Migratory Days	Annual event	Provide set up of facilities		0	200 Hours. \$4358.00
San Pedro Riparian NCA		Friends of the San Pedro	Fairbank Reunion	Annual event	Provide set up of facilities		0	130 Hours. \$2832.70
San Pedro Riparian NCA		Friends of the San Pedro	Nature Walks	Ongoing.	Providing public outreach and education		0	624 Hours. \$13,596.96
San Pedro Riparian NCA		Soutwest Wings	Birding festival	Annual event	Providing public outreach and education		0	320 Hours. \$6972.80

