

Altar Valley Conservation Alliance

2019 ANNUAL REPORT



Conserving the Altar Valley for future generations

DEAR FRIENDS,

Living and working at the Elkhorn Ranch enables me to view the Altar Valley through the eyes of people from all over the country. People from other places experience the marvel of traveling from dry pokey desert through surprisingly productive grassland past saguaros rooted on rocky south facing slopes into sky islands with secret springs and pines. People who live and scurry about within canyons of skyscrapers are awestruck by the wide-open view of the sparsely populated working landscape of the Altar Valley. People from cold damp places soak in the Arizona sunshine. People from different perspectives and political persuasions - whether nature lover or momentary cowgirl or high-tech parent desperate to turn their kids loose outdoors - experience the best of human camaraderie within a rich western landscape stewarded by people who genuinely care.

People instinctively know this place is special ~ that's why many of them return year after year and bring their children and grandchildren. When they make the mistake of asking me questions, little do they know how long they might be trapped listening! They hear a story of a place where tropical creatures cross paths with Rocky Mountain

creatures, resulting in species diversity of international acclaim. They learn that Kitt Peak National Observatory, surrounded by the dark sky environment relatively devoid of the light of human habitation, is of critical international astronomy importance. They see subtle sign of different waves of human travel and occupation left centuries ago. Sadly, but importantly, they witness elements of the tragic reality of today's US-Mexico border situation.

The collaborative conservation environment engendered by the ranching neighbors and partners that work together as the Altar Valley Conservation Alliance (AVCA) showcases, in my opinion, the best of humankind. Amidst an era gripped by conflicts, the work here demonstrates the best of what people can accomplish. Highlights of this

year's achievements include: hundreds of hours of partnership work on the Altar Valley Watershed Plan, targeted for completion in December 2020; the signing of a co-operative agreement between the Buenos Aires National Wildlife Refuge (BANWR) and AVCA; work on a Safe Harbor Agreement for the endangered masked bobwhite quail, which this year saw documented nesting and natural production in the wild on BANWR; and about 3000 acres of brush management treatments to enhance grasslands spread across three ranches.

The year of 2020 promises to be an important one! Join us in celebrating the 25th year of watershed based collabo-

rative conservation in the Altar Valley. Mark your calendar and shine up your boots to dance with the Grassland Band at the Mountain Oyster Club on Saturday, September 19th, 2020. Keep an eye on the development of the Watershed Plan, designed to guide the next 25 years of conservation projects and stewardship. Take a moment to wish AVCA's first employee, Sherie Steele, well as she leaves us to enjoy retirement. Watch for changes at the AVCA website and within our staff, as we

take steps to ensure the sustainability of this great organization into the future! Please sign up for The Rainmaker to keep up with the news. Please consider supporting AVCA financially with a one-time or recurring donation. These are tangible ways that each of you can join the community actively *Conserving the Altar Valley for Future Generations*.

Thank you and Happy Holidays!



Mary Miller
Executive Director

On behalf of the Altar Valley Conservation Alliance Board of Directors, Science Advisory Board and Staff



SHERIE STEELE



After ten years with the Altar Valley Conservation Alliance, Sherie Steele will be retiring at the end of 2019. Sherie was the Alliance's first employee, and helped to shape the Alliance into the professional organization that it is today. Sherie's many previous careers (high school teacher, farmer, small business owner

and professional fundraiser!) brought valuable knowledge and skills to the organization. As AVCA's Program Administrator, Sherie was responsible for keeping track of many of the behind-the-scenes details. While we will miss Sherie, we're excited for her and her next adventure! She and her family will be leaving Tucson, and are on the hunt for a retirement property to enjoy. In the next month, we hope you'll join us in reaching out to Sherie to share your appreciation for her hard work for the Alliance over the years and congratulate her on her retirement!

Sherie's e-mail address is:
alliance@altarvalleyconservation.org.

MOUNTAIN & PRAIRIE PODCAST



At our annual fundraising event this fall, we were lucky enough to have Ed Roberson of the Mountain and Prairie podcast join us for the evening. Two years ago, Ed featured Sarah King and the Alliance on an episode of his podcast. The

podcast features interviews with a wide variety of individuals living in the American West. Ed's talk at the Mountain Oyster Club centered around his conclusions from years of hosting his podcast - despite diverse backgrounds, podcast guests doing good work are united by a love of place and abundant investments in caring for those places. The Alliance and all of the individuals involved in the work of conserving the Altar Valley for future generations represent the best of coming together for a common love of place. You can find more information about Ed at www.mountainandprairie.com, along with Mountain and Prairie podcast episodes (also available via the Apple or Google apps), and book recommendations.

THE ALLIANCE'S MISSION AND VISION

The Altar Valley Conservation Alliance is a collaborative conservation organization founded in 1995, and incorporated as a 501(c)3 not-for-profit organization.

THE ALLIANCE'S MISSION STATEMENT:

We work through a strongly collaborative, science-based, community driven and integrated approach to:

- **CONSERVE** healthy and productive working landscapes, including soil and water conservation, wildfire management, habitat conservation and protection of native species, and other environmental initiatives.
- **PROMOTE** a thriving agricultural economy by encouraging improved ranching and farming practices, diversification and innovation, and by supporting programs and policies that support more effective, long-term economic development.
- **SUSTAIN** a resilient rural community by retaining and renewing the cultural and historical traditions of the Altar Valley.

THE ALLIANCE'S VISION:

Ranchers and other agriculturalists work effectively with our partners to conserve healthy and productive working landscapes, promote a thriving agricultural economy, and sustain a resilient rural community enriched by the culture and history of the Altar Valley.



GIS MAPPING IN T

WHAT IS GIS?

GIS stands for Geographic Information System. At first glance, GIS is a magical map making machine! Technically speaking, GIS is a framework for gathering, managing, and analyzing data. Rooted in the science of geography, GIS integrates many types of data about a place. Skilled technicians can layer information visually to make a map; and more importantly, they can ask questions of the data to reveal deeper insights that help people understand situations and make smarter decisions.

WHERE DOES THE INFORMATION COME FROM?

GIS information comes from many sources, including satellites, photographs, unmanned aerial devices (drones), and smartphones. A lot of information is publicly available and widely shared, while other data is available for a fee or considered private. Many organizations use computer programs made by the Environmental Science Research Institute (ESRI), which helps different parties share information and create and analyze maps. Since there are so many types of information, it is always critical to understand the source of the information and how it was collected. This information is called meta-data, or data about data. A skilled GIS technician pays as much attention to the meta-data as the data itself.

To the right: University of Arizona students using an iPad app called Collector to take monitoring photos at the Elkhorn/Las Delicias Watershed Demonstration Project. The photos went directly into the Altar Valley GIS System. (Photo thanks to Emilio Carrillo.)



MEET ROBERT DAVIS: ALTAR VALLEY GEOGRAPHER

Robert Davis is a geographer - a person who studies places and the relationships between humans and the environment. His company, the Quiet Creek Corporation (www.thequietcreek.com), is contracted to manage the AVCA GIS system. The Quiet Creek does “analysis and interpretation of imagery with the aim of inferring the properties of objects within those images.” Robert is a highly skilled GIS technician with a knack for asking good questions, figuring out how to use data to find answers, and building maps to help explain complex situations. He has developed many ties with other GIS practitioners in the region, and is involved with the Arizona Geographic Information Council, which was established by legislation in 2009. The Council is the state’s primary forum and oversight group for geographic information and technology issues and coordination efforts.

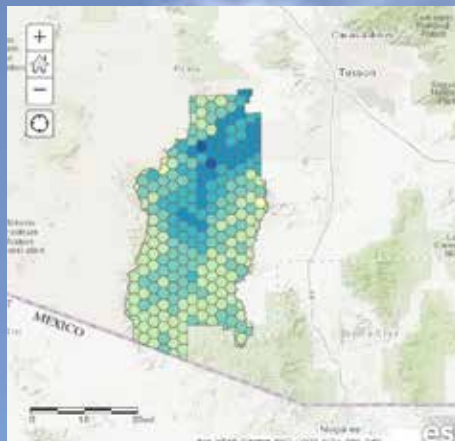
THE ALTAR VALLEY

AVCA'S WEB MAP PORTAL

As the Alliance increasingly began to use GIS mapping, Robert Davis developed an online map page that is housed within our website. On this page, you can find up-to-date geospatial information about the Altar Valley. By clicking each map you're taken to an interactive ArcGIS portal. The ArcGIS system allows an individual to interact with the maps via the ability to turn layers on and off, changing the basemap, using the "swipe tools" to swipe layers on and off dynamically, and display layers based on a range of years (for some of the maps). Several of these maps update in real time. For example, the Fire Information Map shows near current weather and satellite-detected hot-spots of fire smoke within the Altar Valley, allowing for automatic updates reflecting that information.



The Alliance's use of GIS has included the creation of mapping layers from the Altar Valley Resource Assessment that was completed in 2000, allowing the dynamic use of the data.



The hexagons show stream density throughout the Altar Valley. The hexagons allow for large amounts of data that might be difficult to digest at a small-scale to be readily understood.



This map shows the Altar Valley ecosites in a layer that can be turned on or off. The data is valuable as its own map, but it is also valuable when overlapped with other mapping data layers.

GIS AT WORK IN THE ALTAR VALLEY

Over the last year, the Alliance has led a collaborative process to develop the Altar Valley Watershed Plan and identify priorities for the next decades of conservation in the valley. Two of the main issues addressed in the plan are channel incisement/erosion and mesquite encroachment. AVCA and partners are developing concepts and writing profiles for 15-20 high-priority watershed management projects. The profiles will include preliminary engineering design, costs, permitting requirements, and timelines.

During this planning process, the Watershed Working Group has used GIS to help visualize and share information on known variables about the Altar Valley landscape. The group has started to use the layers of data to understand where variables intersect, and explore how all of the pieces fit together. Rather than viewing the Altar Valley solely through individual parts or layers, the GIS mapping interface allows the group to come closer to understanding the valley as an overlapping, continuous whole. Thus, GIS is an essential tool for collaborative conservation work, in that it allows vast quantities of information to be accessible and shared, to ask and answer questions, and reveal important stories.

FINANCIAL OVERVIEW

Between November 1, 2018 and October 31, 2019, the Alliance received \$29,833 in cash contributions. In the same time frame, the Alliance administered \$271,267.70 of grant money that went to work in the Altar Valley. The Alliance received \$40,000 in new grant funds from the Freeport McMoRan Copper & Gold Foundation, matched by monitoring time donated by the University of Arizona Tierra Seca Club at the Elkhorn/Las Delicias Demonstration Project. The Alliance's grant from the Arizona Department of Environmental Quality put \$193,437.14 to work on the ground on three different ranches as part of our multi-year experimental brush management project. We also received \$2,186.33 in funds from our multi-year National Fish & Wildlife grant that went toward brush management in the Altar Valley. The U.S. Fish and Wildlife Service Partners Program provided \$13,709.90 that funded an erosion control workshop on a ranch. The Alliance's Western Sustainable Agriculture Research & Education grant (in partnership with the University of Arizona) invested \$18,829.64 in brush management workshops and concepts in the valley. Finally, the Alliance received \$3,104.67 from the U.S. Department of the Interior - Bureau of Reclamation WaterSmart grant that is supporting the Altar Valley Watershed Plan.

Grants and donations give us the financial resources to further our mission. However, no amount of money can substitute for the collaborative, cooperative spirit of mutual respect and support that is demonstrated among our many partners, stewards and friends. Below is a list of the wonderful groups and persons that share our mission and our vision for the Altar Valley, and continually put their resources and time into conserving the Altar Valley for future generations.

ALLIANCE PARTNERS

Altar Valley School District
Archaeology Southwest
Arivaca Fire District
Arivaca Boys Ranch
Arivaca Watershed Education Task Force
Arizona Antelope Foundation
Arizona Association of Conservation Districts
Arizona Department of Agriculture
Arizona Department of Environmental Quality
Arizona Department of Forestry and Fire Management
Arizona Farm and Ranch Group
Arizona Farm Bureau
Arizona Game & Fish Department
Arizona Game & Fish Department, Tucson Habitat Partnership Committee
Arizona Land & Water Trust
Arizona Revegetation & Monitoring Co.
Arizona-Sonora Desert Museum
Arizona State Land Department
BKW Farms
Buckelew Farm
Buenos Aires National Wildlife Refuge
Bureau of Reclamation WaterSmart: Cooperative Watershed Management Program
Cascabel Conservation Association
Chilton Ranch
City of Tucson Water Department
Commotion Studios
Coronado National Forest
Cross-Watershed Network
Cuenca Los Ojos Foundation
Desert Archaeology, Inc.
Diamond Bell Ranch
Elkhorn Ranch
Freeport McMoRan Copper & Gold Foundation
Friends of the Buenos Aires National Wildlife Refuge

Global Rangelands
Jarillas Ranch
JE Fuller Hydrology & Geomorphology, Inc.
King's Anvil Ranch
King's 98 Ranch
Brad Lancaster
Larry Humphrey
Lower San Pedro Watershed Alliance
Malpai Borderlands Group
Marley Ranch
National Fish and Wildlife Foundation
Noon Ranch
Old Hayhook Ranch
Palo Alto Ranch and Baboquivari Peak Ranch
Pima County Natural Resources, Parks and Recreation
Pima County Office of Sustainability and Conservation
Pima County Regional Flood Control District
Pima Natural Resource Conservation District
Quiet Creek Corporation
Quivira Coalition
Rancho Santa Lucia
Rancho Seco
Rangeland Hands, Inc.
Robinett Rangeland Resources, LLC
Safari Club International, Arizona Chapter
San Fernando School District
Santa Margarita Ranch
Robert Schmalzel
Sierrita Mining & Ranching Co.
Sky Island Alliance
Southern Arizona Cattlemen's Protective Association
Southern Arizona Rangeland Honey
Southwest Decision Resources
Stockwell Honey Company
The Loft Cinema

The Nature Conservancy
The Rangelands Partnership
Three Points Fire District
Tohono O'odham Nation Fire Department
Tucson Interagency Dispatch Center
U of A CALS Communications and Cyber Technologies
U of A CALS Cooperative Extension
U of A James E. Rogers College of Law, Natural Resource Users Law & Policy Center
U of A Little Chapel of All Nations
U of A School of Anthropology
U of A School of Natural Resources and the Environment
U of A Southwest Center
U of A Student Chapter for the Society for Range Management: Tierra Seca
U of A Wild Cat Research and Conservation Center
US Border Patrol
US Bureau of Land Management
USDA Agricultural Research Service - Southwest Watershed Research Center
US Fish and Wildlife Service Arizona Ecological Services
US Fish and Wildlife Service - Partners for Fish and Wildlife Program
US Forest Service
US Natural Resources Conservation Service
Volunteers for Outdoor Arizona
Watershed Management Group
Western Landowners Alliance
Western Sustainable Agriculture Research & Education
Westland Resources, Inc.
Wildvisions Arizona
Zeedyk Ecological Services



ALLIANCE STEWARDS

If your name was omitted from this list or misspelled, please accept our sincere apology and notify us so that we may correct our records. These lists reflect donations, services and partnerships occurring between November 1, 2018 and October 31, 2019.

Stuart Akpik
Amazon Smile
Aubin Ames
Walter & Lew Armer
Arizona Tax & Business, PLLC
Kerry Baldwin
Joe & Sally Barber
Antony & Amy Barton
Dinah Bear & Roger McManus
Paul Bear & Nancy Buchanan
Cameron Becker
Scott & Ann Bonar
William Boyd
Broken Arrow Crop Insurance
Cordale & Jennifer Brown
William Burke & Nancy Bell Coe
Carianne Campbell
Lenore Carasia
Jose Cisneros
Kwankwai Daranond
Caroline Davidson
Kevin & Cynthia Devine
Earl & Katharine Drake
Elkhorn Ranch
Brad & Jenni Ferris
Larry Fisher & Tahnee Robertson
Kelcy Fowler & Matt Moore
Alden Freed
Rachel Gallery
Barbara Giesen
Golf 'n' Stuff
Elise Gornish & Albert Barberan
Ilse Gudehus
C. Chauncey & Emily H. Hall
Greg & Lorrie Harper
Jeannie Hart
Regis & Katherine Henckler
Peg Hunt

Hush Salon & Day Spa
Charles & Jan Hutchinson
Scott Jones & Devon Thomas
Steve & Louisa Kessel
Susan Kiltie
Delores Kimmel
King's Anvil Ranch
Joe & Sarah King
John & Patricia King
The Judy & Tony King Foundation
Kingfisher Bar & Grill
Mark Klingensmith
Mary Lamy
Walter & Karen Lane
Katherine McCarthy
Michael & Kay McCarthy
Mitchel McClaran
Bill & Mary McDonald
Sharon McDonough-Means
Nancy & George Melling
Paul & Argyro Michelsen
Mick Rusing Family Philanthropic Fund
Charley & Mary Miller
Clara Miller
Janet Miller
Marcus Mitchell & Ren Udall
Brian & Denise Murray
Old Town Feed & Pet
Joellen O'Neil
Dave and Mary Parnell
Eva C Patten
Powder River Imports
Brian Powell
Presidio Group Wealth Management
Cherry Provost
Sarah T. Putnam
William & Marcia Radke
Polly & Kenneth Rattner

Rancho de la Osa
Rancho Santa Lucia
Rocio Reyes Esteves
Anne Richards & John Coolidge
Ed Roberson
Dan Robinett & Linda Kennedy
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Michael Rusing
George Ruyle
Santa Margarita Ranch
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Sherie Steele & Dave Graham
Beth Stein
Pat Stoddard
Priya Sundareshan
Tricia Swift
Walt & Nancy Taylor
Gretchen Theobald
Kathryn Thomas
Julia Thorson
Trico Electric Cooperative, Inc.
Tom & Deanne Urmy
Wendy Vanasco
Vanguard Gabriel Fund
Vaquero Feed & Livestock Supply
Katherine Wesolowski
Stephen Williams & Karen Riggs
Caroline Wilson
Rich & Tamara Winkler
Chris Zeoli & Charlotte Tate





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Tucson, AZ 85736

ANNUAL ALTAR VALLEY COMMUNITY MEETING:

May 20th, 2020 at the King's Anvil Ranch

25TH ANNIVERSARY CELEBRATION:

September 19th, 2020 at the Mountain Oyster Club

BOARD OF DIRECTORS

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Mary Kasulaitis
Dee Lusby
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STAFF

Executive Director: Mary Miller
Conservation & Science Coordinator: Julia Sittig
Community Outreach and Education Coordinator: Sarah King
Program Administrator: Sherie Steele

www.altarvalleyconservation.org