Fall 2016

Ground Truth

A Publication of the Diablo Trust - A Northern Arizona Collaborative Grassroots Land Management Team



The Diablo Trust is a 501(c)(3) land management team created in 1993 to promote the social, biological, and economic sustainability of 426,000 acres of intermingled federal, state, and private lands southeast of Flagstaff, AZ, by engaging in a collaborative stewardship process that is in harmony with the natural environment and the broader community.

The phrase "Learning from the land and sharing our knowledge, so there will always be a West" captures our mission.

<u>Ground Truth</u> is the publication of the Diablo Trust, mailed free-of-charge to everyone on our mailing list. If you would like to be added to or removed from the mailing list, please contact us at:

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Contributors are solely responsible for the content of their articles, and the opinions expressed in the articles, linked materials, and comments are not necessarily those of the Diablo Trust.

A Pronghorn Success Story

by Norm Lowe

Pronghorn antelope, which have been a dynamic part of the grasslands and woodlands of the Diablo Trust area for thousands of years, almost disappeared twenty years ago. Many experts studied the problem but couldn't agree on the cause, which could include: too many roads, highways, and barb wire fences; an increase in woodlands cover giving predators the advantage; cattle and elk grazing, which reduces critical spring forb forage; changes in plant diversity due to desertification; increases in recreation activity and hunting pressures; and genetic weakening from interbreeding in small herd sizes. Diablo Trust, using its collaborative model, worked closely with



Two pronghorn antelope spotted on Bar T Bar Ranch in June.

Monitoring for the Future by Jeremy D. Krones

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A central tenet of Diablo Trust is "learning from the land," as it is phrased in the organization's slogan: *Learning from the land and sharing our knowl*edge, so there will always be a West.

To those actively involved with the Trust, that means consistent examination and continual evaluation of the land and its resources as they change over time. However, this is not a new idea to Diablo Trust nor to the community from which the Trust was founded.

Diablo Trust began in 1993, but in 1990 there was the Forage Resource Study Group (FRSG), a collaborative monitoring group dedicated to cataloging and addressing the most pertinent issues of our rangelands in the western Little Colorado River watershed: soil erosion, a loss of biological diversity, over-utilization of natural resources, lack of pasture rest, and a change in plant composition, among other natural resource concerns.

FRSG is unique because it is the oldest continuous utilization monitoring program in Arizona, and it is a collaborative effort between land management agencies, sportsmen, and ranchers. The original participants were from the AZ State Land Department (ASLD), AZ Game and Fish Department (AGFD), US Forest Service (USFS), Soil Conservation Service (SCS – now known as the Natural Resources Conservation Service, NRCS), Coconino Cattle Growers, Rocky Mountain Elk Foundation (RMEF), Coconino Sportsmen, AZ Wildlife Federation, Northern Arizona University (NAU) School of Forestry, Bar T Bar Ranch, Flying M Ranch, and Clear Creek Ranch.

In March of 1991, after over eight months of meetings, the FRSG produced the Forage Re-Continued on page 5

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Getting to Know . . . **Joey Dahms**

Rangeland Management Specialist, Natural Resource Conservation Service

Joey is the new rangeland management specialist for the NRCS at the Flagstaff field office. He was born in Tucson and spent most of his life there, not including



mers he spent in the White Mountains. Joey recently graduated from the University of Arizona with a degree in natural resources, focusing in rangeland ecology and management. He worked as an intern with the NRCS in both Springerville and Tucson, and worked on numerous research projects during school. While he has been able to explore most of Arizona, he is excited to call Flagstaff his new home.

Born in: Tucson, AZ

Childhood Hero: Chuck Norris

Current Hero: My dad

Contribution to the Flagstaff Community: Helping to conserve the landscapes we all love.

Favorite Hobbies: Fishing, botanizing, Netflixing, and road tripping

Fondest Outdoor Memory: Hiking with my dad and running into a pack of wolves.

Favorite Western: Unforgiven

Favorite Western-wear item: Boots

Favorite Ranch Recipe: Beans

Currently Unrealized Life Dream: Visiting every single US state

Possible (or Actual) Ranch Nickname: Sloppy Joe

Favorite College Class: Vegetation Management

Favorite Quotation: "Do what you can, with what you have, where you are." - President Teddy Roosevelt

President's Message by Norm Lowe

These pages show it's been a good summer for Diablo Trust. Our popular Annual Camp-out was held in a new location in the grasslands on the Diablo Canyon boundary between



the Bar T Bar and Flying M ranches. Also, several days of agency-led group forage monitoring were completed this summer to document progress in meeting our collaborative management goals for healthy ecosystems.

My career has been working in rangeland conservation. A few years back I earned a Masters in Sustainable Communities from Northern Arizona University to better focus on sustainable ways we as a society can fit into our wide open landscapes. Noted ecologist Aldo Leopold said it well: "A thing is right when it tends to preserve the integrity, stability and beauty of the biotic community. It is wrong when it tends otherwise." The mission of Diablo Trust fits Leopold's land ethic: "to demonstrate innovative approaches to restore and support a diverse, flourishing community of human, plant and animal life in the Diablo Trust area" including "encouraging ranching and other traditional livelihoods which will sustain the open space nature of the land for generations to come." Over the years the Diablo Trust has worked with its two ranches to restore over 100,000 acres of open grasslands. The ranches are now in the process of installing several miles of pipeline to provide wildlife-friendly waters to much of this area. This work significantly improves habitat for pronghorn antelope and other wildlife while it improves cattle ranching operations.

Diablo Trust has done well at facilitating meetings between the ranches and state and federal agencies to assure a balance of multiple benefits are achieved for both managers and the biotic community. A new focus for this fall is to remake our Diablo Trust brochure to help us activate greater community participation in our collaborative land stewardship process. Thanks for your participation. I invite you to visit our web site to find your own particular area of interest.

Morm Lowe Norm Lowe, President

Contact: president@diablotrust.org



What is a REAL Working Landscape? Is it Sustainable?



I was asked recently what makes DT different from other collaborative conservation groups, such as Grand Canyon Trust or the Quivira Coalition. We don't host controversial seminars, we intentionally stay away from the hot topics, and we don't publish beautiful fourcolor brochures. What

Judy Prosser with NAU students and their professor on a recent soil monitoring trip to the Bar T Bar Ranch.

DT does do is invite people to see what these two working cattle ranches are doing: to learn what a real Working Landscape is. Every collaborative conservation group forms out of a need. Ours was to be heard and to teach others about how the business of ranching can be beneficial for the whole ecosystem: wildlife, watersheds, vegetation, soils, people that recreate on the ranches, and the people that make their livings from the enterprise.

Be it the characteristics of these land managers (ranchers) or the culture of the DT, we are not as outgoing as some would like us to be. We can be accused of being workaholics. We are people that like to stay home and get the job done; to see the results of our work on the ground. We are not fond of meetings and have even been accused of being anti-social! Time is usually of the essence and the social aspect of collaboration takes valuable time!

On the other hand, we know that it is valuable time. We know that the social part is part of the 'whole,' and, given the world we live in today, most people are so far removed from the land and what it produces, not to mention where their food comes from, that it is a fundamental necessity we keep our doors, and meetings, open to you: the public.

We still do a lot of the same things we have been doing for over 100 years, and for four family generations. Does that mean we practice "sustainable ranching?" I don't know if we meet Whole Foods' or Chipotle's standards, but I know that both these ranches were founded on the plainspoken principle of improving the land.

Continued on page 8

Office Note by Jeremy D. Krones

Reading through this issue of <u>Ground Truth</u>, you will see some changes. Some of it is structural, but most of it is content. And the changes won't end with this issue – to recycle a quote used by Judy Prosser, in her President's Message from the Winter 2015 issue, "The only thing that is constant is change."



It can be upsetting to see a dif-

ferent newsletter in your mailbox every few months, but that is not what is going to happen. The same <u>Ground Truth</u> will be delivered, packed with information, research, and updates, but with small tweaks, made with careful consideration to both retain our loyal stakeholders, and to gain new ones.

For example, this past year we received a number of comments from Diablo Trust friends concerned that we were becoming too much of a 'ranching' organization. My usual response was that while we, as Diablo Trust, exist *because* of the Bar T Bar and Flying M ranches, we do not exist solely *for* them. We were founded and continue to work towards sustainability on the 426,000 acres of public and private lands the two ranches cover. The ranches are independent entities, and we are here for education, advocacy, and unanimity when it comes to issues, projects, and goals on the ranches and the lands they manage.

We have a few new segments in this issue, including Good Reads (pg 7), Plant Spotting (pg 12), and Rust from the Range (pg 12). The 'Ask a Rancher' column (pg 4) was started last issue to answer the questions many people might have about ranching but just haven't been able to ask yet. There are also two wildlife-related articles for your enjoyment, and other regular features, like a ranch essay from -T- and a new "Getting to Know . . . " segment (pg 2)!

There is so much more to see and learn about the Diablo Trust landscape, and we will do our very best to bring that education to you, as well as to provide you with opportunities to learn from the land yourself.

So take some time, find a segment you enjoy, and let us know what more we can do to make sure you're getting what you want out of Diablo Trust!

Jeremy D. Krones, Program Manager Office: 210 Peterson Hall, Northern Arizona University Contact: (928) 523-0588 or info@diablotrust.org



Ask a Rancher

Participants of Diablo Trust events are welcome to write a question on a pink "Ask a Rancher" form to be answered here, or email info@diablotrust.org with the subject line: **Ask a Rancher**.

From: Anonymous

How do you decide what pastures to use, and how many cows to put on a pasture?

From an interview with Kit Metzger (Flying M Ranch)

From Bob Prosser (Bar T Bar Ranch)

As a friend in the Forest Service says, "the only way to find out how many cattle you can run in a pasture is to put them in there."

There are two initialisms you should know: AUM, or "Animal Units per Month," and ADA, or "Animal Days per Acre." AUMs are general units for planning and recording. If you had 200 head of cattle in a pasture for a month during a season, that pasture has 200 AUMs. The next time the permit is up for discussion or you're starting the next graze-plan, you can say "we've done 200 AUMs for the last few years, but the land is really taking a beating, so let's decrease to 150 AUMs." To figure out an ADA, which is more specific, you go out to the pasture and make a square X by X paces, and determine if that will hold a cow a day, based on the forage and water availability.

And then, Kit says, "you do the math." Most of your planning comes from knowing the outcomes of previous years: how many ADA one pasture has over another, and what your AUMs were. If you're not sure, it doesn't hurt to go out and do some monitoring!

But another factor to consider is that while this one area might hold a cow a day for ten days, in what condition will it hold that cow? Is it good feed or poor? You also have to remember to save, say, some of that ground in case of drought later in the season, or if the elk move on or off that area (depending on the season).

You want to be conservative when it comes to deciding land use and herd management. PT

We at Bar T Bar use a rotation system that is based on *not using* a pasture the same time each year. In the winter country we are gone during the summer growing season, so we are just basically allocating available forage for the winter. Since we are there in the spring growing season, we try to rest each pasture one spring out of three.

Determining how many cows or calves and how long they stay in a pasture is based on historical data adjusted for vegetative production above or below the average. The long term average is different for every pasture but ranges from 4 to 8 Animal Days per Acre.

Although this is based on data, it is still an art to schedule the whole season, and requires monitoring during the grazing period.

Let's say there are 3600 acres in a pasture and long-term average is 5 ADA, then there would be 18000 available. If production is 80% of normal then it would be 14,400 Animal Days. If the herd is 300 cows it would be (14400/300) or 48 days of grazing.

In the summer country, since we are there during the growing season, the forage base changes daily as the rains come. We use the same historical averages, but use more of a reverse(early or late) use between 2 pastures, or rotate between many pastures changing the order, and in some cases an Annual Deferment between 2 pastures.

The summer country rotations are very fluid as rains vary from year to year. $\ensuremath{\mbox{\tiny DT}}$

Pasture	Acres	Yeat 87-88	Year 88-89	Year 89-90	Year 90-91	Year 91-92	Year 92-93	Year 93-94	Year 94-95	Year 95-96	Year 96-97	Year 97-98	Year 98-99	Year 01-02	Year 02-03	Year 03-04
"66"	9012	813	1746	1931	1228	1203	1628	1136	715	1330	1460	636	1377	1049	257.5	293
Hopi House	9921	440	1728	1879	1167	178	1176	1355	1267	1367	882	1687	1314	1530	148.3	116
Pitchfork	8930	1911	1705	2152	1337	1331	1407	1332	1421	1188	1306	1123	1150	1049	320.6	278
Pitchfork Total	27863	3164	5179	5962	3732	2712	4211	3823	3403	3885	3648	3446	3841	3627	726.5	688
North Coon Mtn.	5980	1556	1031	1283	972	571	1706	1412	709	983	743	737	803	1236	400.5	383
South Coon Mtn.	5876	774	1066	795	938	330	784	1144	1089	817	680	514	663	741.7	10.52	388
West Coon Mtn.	5711	649	412	459	524	534	545	846	922	702	348	478	164	411.2	87.72	264
oon Mtn. Total	17567	2979	2509	2537	2434	1435	3035	3402	2720	2502	1771	1729	1630	2389	498.8	1034
King Tank	4673	546	570	230	356	287	484	816	1036	1295	766	755	846	612.8	79.46	610
Jeff Tank	5669	383	790	949	995	371	1280	490	972	1102	637	1243	954	1659	114.1	396
Wolfolk	11011	1588	808	1670	1613	1091	1741	1270	1302	1410	794	1130	1294	854.7	336.2	1191
Volfolk Total	21353	3117	2168	2849	3564	1749	3505	2576	3310	3807	2197	3128	3094	3127	529.7	2198
North Total	66783	9260	9856	11348	9730	5896	10751	9801	9433	10194	7616	8303	8565	9144	1755	3919
N. Canyon View	1272				100				307	193	95	145	122	9.57	108.23	82.5
S. Canyon View	683	2	8	2	8 B								98	72.17	124	67.5
Dipping Vat	215				· · · · ·				37	63	32	20	38	1.8	105.94	24.9
Dagg's Ridge	1038	in a second	1	la mana	Consel.		and and	Sec. 1	130	185	104	157	139	89.77	198.04	122
og Valley Calving	2664	633	519	438	456	202	536	617	415	529	194	518	377	473.2	338.9	432
Big Dog Valley	5888	1506	1691	1546	1030	696	450	1273	1436	2076	622	1227	388	1066	401.3	1049
Red Tank	1381	608	382	308	561	348	331	215	242	127	268	200	347	222.5	391.9	190
West Clounch	3648	252	340	241	1031	492	1089	976	771	833	33	774	716	524.9	996.7	742
East Clounch	3557	475	962	425	616	474	936	898	830	465	212	206	953	658.3	1237	406
North Crater	1064	627	367	601	416	249	382	297	256	260	153	143	265	0	132.7	23.3
South Crater	1771	450	150	192	237	228	531	240	293	199	197	140	213	173	211.2	35.5
Pratt	3952	423	153	419	344	479	298	148	335	380	490	384	566	647		
Walker	1354	257	210	235	231	89	221	391	355	72	134	114	315	135.7	92.31	147
Out Back	600						388	297	135	107	102	60	160	0		83.5

Monitoring (continued from page 1)

source Study Group Report to Livestock Operators and Natural Resource Agencies. This report proposed that potential solutions to the issues seen across the landscape address the number of grazing animals, both livestock and wildlife, and the duration of time plants are exposed to consistent grazing. Weather pattern fluctuations were addressed indirectly, recognizing that animal numbers and utilization must be responsive to shifts in weather patterns and the resultant changes in habitat capacity.

Monitoring was recognized as one of the important cooperative efforts amongst agencies and livestock operators. Specific methodologies and techniques would have to be decided upon by the appropriate natural resource agencies and livestock operators, per their organizations' mission and goals.

The group determined that it was important to collect data on forage and browse utilization, plant vigor, plant production, plant recovery, precipitation, and evidence of wildlife and livestock using the pasture (through scat counts).

The FRSG developed its own charter and established quarterly review meetings. It committed to evaluate game survey and hunt results to make recommendations to the AGFD and the Game and Fish Commission. The FRSG also committed to evaluate forage conditions quarterly to assist in livestock management planning.

Based on manpower and funding limitations, the group determined that utilization cages were the preferred monitoring technique for collecting the necessary data. Estimates of use and utilization are evaluated for three seasons: Spring (March to June), Summer (July to October), and Winter (November to February). Cages are relocated annually in the late winter dormant season (March).



Steve Cassady leads the discussion on what can be found in this cage on Bar T Bar Ranch

Key forage species, including cool and warm-season grasses and palatable shrubs, are caged at each of the existing 46 sites. Cage locations were selected because they were areas that sustained use by both wildlife (particularly elk) and livestock.

The resource concerns of the early 1990s are being rectified through the FRSG and other measures taken by Diablo Trust and its partners. These measures include creative hunt area designations in Game Management Units 5A and 5B, creative hunt structures which address timing of the hunts and permit numbers, livestock reductions by participating ranches due to drought and other concerns, and an aggressive program of rangeland improvement consisting of grassland restoration and water development.



A pronghorn antelope spotted on a recent FRSG monitoring day on Bar T Bar Ranch

However, the progress of the last two decades did not necessarily come easily: the agency representation changes constantly due to transfers, promotions, and retirements, and there are now four ranch owners rather than the original six due to a change in ownership of three of the participating ranches. Funding prioritization is also an on-going struggle at all of the participating agencies. The group is currently being led by representatives of the AGFD and NRCS.

Despite the turnover in leadership and participation, the FRSG continues to be a functional workgroup. Trust remains high amongst the participants, and its views and comments are solicited by the Arizona Game and Fish Department in formulating hunt recommendations for Game Management Units 5A, 5B, and 6A.

The current participating ranches are the Flying M, Bar T Bar, Raymond Wildlife Area, and Hopi 3 Canyon Ranches. In recent survey trips, participants included representatives of the AGFD, NRCS, ASLD, University of Arizona Extension Service, and Diablo Trust, along with each participating ranch. No FRSG monitoring is currently done on USFS land.

There is always room to grow, especially with a group like the FRSG. There is always room for public comment and participation, and the FRSG leadership is eager to teach any interested parties about what they do and why it's done. 26 years of existence for the FRSG is no accomplishment in and of itself; the positive changes to the landscape and rangeland within its sphere of influence are what matter most.

To learn how you can join an FRSG monitoring session, contact the Diablo Trust office: info@diablotrust.org or (929) 523-0588

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On the Ground with Diablo Trust

More color photos and captions can be found at www.diablotrust.org or on our Facebook page.

Monthly Meeting on the Land: June 10, 2016





FRSG Monitoring: June 27 - 29, 2016









Soil Testing on the Bar T Bar: August 06, 2016



Professor Nancy Johnson, NAU School of Earth Sciences & Environmental Sustainability, with students Aradhana Roberts, Joe Sweet, and Zach Sumner. (left photo by Richard Johnson)



Exclosure Monitoring: August 08, 2016





Good Reads for the Western Life Book Club

<u>Next Meeting</u>: Tuesday, October 18 @ 5:30PM



In Wildlife Wars, Terry Grosz serves up fascinating stories-alternately hair-raising, hilarious, and heart-wrenching-from his 30-year struggle to protect wildlife in America. A natural storyteller, Grosz writes about the remarkable characters he met-on both sides of the law-as he matched wits with elk poachers, salmon snaggers, commercial-market duck hunters, and a host of other law-breakers. Best of all, though, these stories are so remarkably entertaining you won't want to put them down.

<u>Wildlife Wars</u> was the 2000 National Outdoor Book Award winner, Nature & the Environment Category.

> **Barefoot Cowgirl Books** 18 N. San Francisco Street Flagstaff, AZ 86001

Buy your book at Barefoot Cowgirl Books and get 10% off as part of the book club!

What Else Have We Read?

June - Buffalo for the Broken Heart by Dan O'Brien

July - <u>The Story is the Thing</u> by Amy Hale Auker

August - <u>Burntwater</u> by Scott Thybony

September - Half Broke Horses by Jeannette Walls

For more book reviews and Book Club updates, please visit our website, <u>www.diablotrust.org/news</u>, contact the office: info@diablotrust.org or (928) 523-0588, or sign up for the club listserv at <u>bit.ly/dtbookclub</u>.

June Book Review

by Patti Van Tuyl

Buffalo for the Broken Heart by Dan O'Brien

At the heart of Dan O'Brien's memoir is his profound love for the northern Great Plains, with "grass swaying in the wind to infinity and a sky that takes up half the world," and all the wildlife that makes its home there. On his small cattle ranch in western South Dakota, he modifies his cattle's grazing areas in order to restore native grasses that he believes have been destroyed through widespread cattle ranching. He tells the story of his shift to raising buffalo (bison) instead of cattle, from the initial small experimental stage to the formation of the Wild Idea Buffalo Company, which sells buffalo meat by mail order. The author's account of the decimation of the bison in the 19th century and his view that bison have a more earth-friendly pattern of grazing than do cattle stimulated discussion in the book group. If cattle had the open range to graze, one reader suggested, might their grazing pattern not be more like that of bison? Another discussion focused on the ready acceptance of death as part of the natural cycle of life among people who spend their lives on farms and ranches, witnessing birth, life, and death day after day. Interesting people, challenging adventures, and an engaging writing style, as well as O'Brien's passion for restoring the Great Plains, make for an excellent read. Highly recommended!

July Book Review

by Jeremy D. Krones

The Story is the Thing by Amy Hale Auker

Amy Hale Auker's beautiful novel is a simple but entrancing introduction for anyone unfamiliar with the 'cowboy life,' and a reflective piece of familitarity for anyone already living the life. Unconventionally structured, <u>The Story is the Thing</u> takes the reader on a journey through the minds of four different narrators whose lives intersect and separate throughout the book, creating a snake of a story that winds through the hardships of marriage and family, drugs and violence, and loneliness and depression – all while maintaining a positive lens towards the beauty of solitude and the vital importance of friendship.

Told primarily from the voice of Katy Benson, a ranch daughter and cowgirl to whom the stories of Charlie and Julie were told, and to whom Uncle Bill left his diaries and most of his other possessions, this is a love story between two friends tied with a memoir of an old man who had seen so much in his long life.

The author, Amy Hale Auker, was kind enough to join the book club for our discussion surrounding her book. Most of the hour was spent talking about her writing process and inspirations, and the trials of being an author in this day and age. This book - and the author - comes highly recommended by the Book Club.

Pronghorn (continued from page 1)

the Arizona Game and Fish Department (AGFD) on several fronts to improve conditions. While livestock grazing in pastures was easily planned and managed to benefit antelope, elk numbers were very high and the elk stayed on critical land areas too long.

According to Rick Miller, retired AGFD wildlife specialist, hunting permits were used to reduce elk by 50%. Rick helped find and administer special grant funding to cooperate with the ranches to do massive clearing of invading juniper to open up grasslands and migration corridors. Diablo Trust coordinated with the Arizona Antelope Foundation to install smooth bottom wires at a raised height on fences. Radio collars were installed on a sampling of animals and it was learned there are two distinct herds, one which spends the whole year in the lower valley areas and one which summers on Anderson Mesa. Targeted coyote control was shown to also improve fawn survival.

To date, over 100,000 acres of grasslands have been restored in an antelope-friendly fashion. In the mid 1990s, an unsustainable average of only six fawns survived per 100 does. According to Tom McCall, current AGFD wildlife specialist for Region II, where the Diablo Trust ranches are located, though fawn survival did decrease some due to a dry spring season, now about 37 fawns survive per 100 does and total herd sizes are stable. Hunting quotas are conservative.

According to Tom Mackin, Diablo Trust's wildlife chair and leading northern Arizona wildlife volunteer, Diablo Trust has been doing the right things to improve wildlife conditions. Waters are maintained well and the big black tire drinker troughs ensure yearround animal access to most areas. The Landowner Compact Agreement *(see next page)* also helps reduce off-road disturbances to animals and natural habitat.

Watch our calendar for wildlife-themed Days on the Land to get large and small animal experts and wildlife groups out to visit key habitat areas. Contact our office if you are interested in wildlife oriented volunteer opportunities. ^{DT}

Talk from the -T- (continued from page 3)

and leaving it in better condition than when we found it. It was a given that we were to take humane care of our livestock. Both my grandfather, Boss Chilson, and my father, Ernest Chilson, were pioneers in water development and range management. My husband, Bob Prosser, has the same gene. We may call it climate change now, but believe me, it is not a new concept for ranchers in the Southwest to have to deal with drastic climate cycles. For those of us that make a living by producing a product from the land, it has always been a challenge to deal with the issues presented us by Mother Nature.

I can tell you that one of the more difficult features of ranching today is that of the paperwork crisis. Government regulation is truly on steroids. It is a wonder we have time to do anything productive, as everything from replacing a post in the ground (that was already there) to cutting one tree(in an area where they were cut before) to cleaning a tank (that is already there) requires clearances from one or more divisions among one or more government agencies. We might have tipped the scales a bit in the wrong direction to ever see real work get done on public lands again. Time is not of the essence within those government walls, and we are "collaborators" who try to develop relationships with our agency participants and who try to ensure we are working towards common landscape goals. It is a new world, and we wonder why our children, the 4th generation, don't want to come back and run our ranches!

Now – off the soapbox. What I was originally trying to say is that we may not have as many organized field trips as you would expect, or perhaps you couldn't come on the last one. We want you to know that you are always welcome to call or email us and we will give you a tour of the Bar T Bar, and genuinely try to answer any questions you may have. Our contact information is below. In the meantime, enjoy a beautiful Fall!! ^{or}

Judy Prosser, Bar T Bar Ranch Contact: (928) 289-2619 or info@bartbar.com



Save the Date: Annual Christmas Party Friday, December 16 at 5:00PM

Stay Informed: www.diablotrust.org/calendar

Landowner Compact Agreement



Flying M and Bar T Bar Ranches are AGFD Hunting Units 5A, 5B, and 6A. To view the full color map, please visit: www.diablotrust.org/news/LCA.

On August 22, signs were installed on the main entrances to the Flying M and Bar T Bar Ranches that outline a new system for access to state and private lands on the ranches. There is no fee involved.

The signs are the first public educational tools in the Arizona Game & Fish's (AGFD) Landowner Compact Agreement Program. The Compact Agreement was created in response to growing concerns from private landowners and public land leaseholders about an increase in hunting and recreation on their private and leased state trust lands, and an increase in illegal activities on the ranches. The Compact Agreement is part of the AGFD's ongoing efforts to ensure continued recreational access to privately owned lands within Arizona. Each ranch that is a part of the Landowner Compact Program establishes ranch rules, which visitors must follow to lawfully access the ranch. If someone breaks the rules they may lose privileges of access to any of the ranches that are enrolled in the compact. In future issues, we will discuss why the Flying M and Bar T Bar ranches specifically decided to participate in the Landowner Compact, and what each ranch's rules are.

What is the Landowner Compact?

- A way to recognize landowners that already work with the AZ Game and Fish Department to provide access
- A way to develop a relationship with landowners
- A way to help landowners manage recreational use of their property
- A way to promote a land-use ethic for recreation and for agriculture

The following Arizona ranches have joined the Landowner Compact:

- Babacomari
- Big Boquillas
- Fort Rock
- Kings Anvil

- O'Haco
- Double O
- Bar T Bar
- Flying M

Each ranch that is a part of the ranch compact has its own ranch rules, which visitors must abide by to lawfully access the ranch. These rules can be found on pages dedicated to each ranch under the menu heading "Landowner Compact Access" on the AGFD Landowner Relations website, below.

It is not the intent of the Diablo Trust ranches to eliminate or micromanage their visitors; it is their hope to learn who their visitors are and to provide an opportunity for outreach to those who enjoy recreating on the ranches.

Respected access is open access

The above information, and more, can also be found at: https://agfdlandownerrelations.com/.



An example of the Compact Agreement signs, located at most of

the State Land entrances to both the Flying M and Bar T Bar.



From the Calendar: Summer 2016 Events

Monthly Meeting on the Land: June 10th

While not initially planned this way, our Monthly Meeting in June was our 'make-up' for our Annual Sportsman & Recreation Day on the Land in April – for anyone who was there for our day in the spring, you know how *blown away* we were. (For those who weren't there: we had 60mph winds!)

We met again at the Flying M Ranch, and this time had just a few stops planned but otherwise left it open to the audience. We started in a small prairie dog town, and had a long discussion with Kit Metzger about how the landscape and resources have changed since the prairie dogs arrived in the 1960s, and some actions the ranches and agencies are taking to stem their impacts.



L-R: Iric Burden, Alan Kessler, Steve Cassady, Andrew Brischke, Dan Daggett, Jim Parks, Kay Johnson, Kit Metzger, Jack Flowers, Calun Johnson, Arnie Schlittenhart, Bill Towler.

We then went to a larger town in Roosevelt Flat; we also visited these two towns during the Prairie Dog Day on the Land in March. At this location our conversation focused more on the impact of a denuded landscape: erosion, a rise of unpalatable (and even inedible) species, and a clustering of cattle grazing away from the praire dogs, which causes more issues. Our last stop was at a grassland restoration project by Number 2 Center, where, with support of the AZ Game & Fish Department, Kit and her crew are clearing juniper trees to benefit the native grasslands, and the livestock and wildlife who enjoy those pastures.

The conversations ranged from how the prairie dogs and grassland restoration projects impact the ranches both negatively and positively, to how the two issues interact with each other (as Kit explained, she has noticed that if she leaves the juniper trees cut but on the ground, prairie dogs are more reticent to move into that pasture, presumably because of visibility issues). We hope to have many more thought-provoking field trips like it in the future! or

Annual Camp-out: August 20th-21st

This year's Camp-out was held on the eastern rim of Diablo Canyon, on Bar T Bar Ranch near Dog Valley. A total of 40 guests showed up, ranging from Diablo Trust old-timers to brand new visitors, interested in seeing and learning what the Diablo Trust community does.

We started the event at a Forage Resource Study Group (FRSG) cage, where Steve Cassady (AGFD), Iric Burden (NRCS), and Laura Dorsey (Bar T Bar Ranch) gave a short synthesis of the data as it has been recorded over the last 26 years. After a short discussion about the usefulness of the data and the continuation of the monitoring efforts in general, we moved up the road to a historic exclosure installed in the early 1950s by the Soil Conservation Service (SCS, now named the Natural Resource Conservation Service, or NRCS) to study the vivacity and tendencies of certain wild flora, such as Western Wheatgrass.

Our first activity at the exclosure was a small contest to guess how large it is. Answers ranged from 3 acres to 60; the two winners, Janet Krones and Kit Metzger, both guessed 12 acres. The actual size, according to GoogleEarth, is 13.1 acres.

After walking around inside the exclosure, we went outside the fence and Andrew Brischke (UA Cooperative Extension) taught us how to use a new tablet app to more efficiently record and summarize pace-frequency monitoring data in the field. We wrapped up this stop by walking around the exclosure to a large prairie dog town. While still in the grazed area of the pasture, it looks different than the other side of the exlosure because of the presence of the prairie dogs. The soil and flora of the grazed areas were very different than inside the exclosure, where cattle have been absent for at least sixty years. There are pros and cons to each of the three distinct floral communities, and it is important to remember that you see something as 'good' or 'bad' depending on what your short and long-term goals are for the area in question.

Dinner started shortly thereafter, and we had quite an amazing spread of pot-luck dishes: fruit and green salads, chips and dips, casseroles, and potatoes. The dessert table was no less delectable, with multiple cakes, cookies, brownies, and fruit trays. As in the past, beer was provided by our friends at Mother Road Brewery in Flagstaff. We also used reusable plates and cups from Friends of Flagstaff's Future, who have a free 'zero waste' program.

There was a bit of rain at the end of dinner, but in general the evening had only cloud cover.

The next morning we took a hike down into Diablo Canyon to see some modern and ancient archaeology, including an old sheep camp, and ancient Native American cliff dwellings. It was a wonderful morning, and everyone expressed great appreciation for the opportunity to explore this part of the ranch and see such beauty in the canyon.

In all, this Camp-out was a success and we only look forward to many more reunions and gatherings of friends and family! **D**

On the Ground with Diablo Trust

More color photos can be found at www.diablotrust.org or on our Facebook page.

Annual Camp-out: Full Moon at Diablo Canyon: August 20-21, 2016



The first stop at was an FRSG cage, where Steve, Iric, and Laura taughts us what the 23+ years of data shows about elk and cattle useage on the ranch.



Musket and Frenchy stayed in the truck for this stop.



Andrew Brischke (UA Cooperative Extension Research Specialist) brought a new app that makes range monitoring much easier, and taught us how to use it.



Back at camp - setting up dinner!



Not only for old friends, the Camp-out is a perfect setting for new ones! Greg Crosman and Norm Lowe get to know each other, with Chaco between them waiting for her dinner.



After breakfast, we took a hke into Diablo Canyon.



First stop was the rock house, an old shepherd camp.



The winds were too strong, and we had an extra card table, so it was turned into a perfect windshield, for some perfect burgers. Bob, Duane, and Bruce were on the grill.



The geology in Diablo Canyon is pretty amazing!

Annual Meeting Friday, February 17 at 8:30AM @ Thornager's on Kiltie Lane

"Wildlife on the Ranches"

Breakfast snacks and coffee will be provided. Stay informed: www.diablotrust.org/calendar

Rust from the Range Interesting historical finds on the ranches

This is a historic blab, or a calf-weaning nose ring, found on Anderson Mesa. A version of this tool is still used today to discourage calves from suckling on their mothers while keeping the pairs together. This blab, probably from the early-1900s, is about 6" x 4". Each spike is about 2" long; while one spike is now bent down, it was originally straight like the others. The holes are to tie a rope through.

Blabs fit in the calf's nose without piercing it, and are re-usable. The spikes disturb the mother cow so she rejects her calf's attempts at suckling. However, today's models are much less 'Medieval' – while this metal blab could cause some serious damage to the udder (just look at those spikes!), modern blabs are made of plastic and are usually just a nose-flap (see picture, from QuietWean). If they have spikes, the spikes are much smaller and duller, so they are just an irritant for the mother and not painful.

Today, calf weaners are used primarily by dairy farmers. Many ranches will wean their calves in the early fall by separating the calves from their mothers – since ranches like the Bar T Bar and Flying M are cow-calf operations, they will sell their calves and ship them away in the early winter, and the 'separation' style of weaning is more practical. However, it requires space (and patience). With limited space, or a different expected outcome, using blabs allow for an easier transition from the calf drinking its mother's milk to eating grass and forage.



Plant Spotting



Common Name: Narrow-leaf yucca Family: Aqavaceae

Scientific Name: Yucca angustissima **Picture Location:** *Flying M Ranch*

The yucca is a native succulent. The central stem can grow up to 4 feet tall, and each 'leaf' is about one inch wide at the base. The stem produces yellow flowers in the late spring, and then produces fruitlike seed pods.

While not eaten by cattle or other livestock, birds and rodents eat the seeds and mule deer are known to forage on the yucca plant. The plants are pollinated by moths, and tend to grow in small clusters, in deep soils. Growth is stimulated by fire, and benefits from grazing pressure.

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"Learning from the land and sharing our knowledge . . . So there will always be a West"

<u>Upcoming Events</u>

Monday, October 17: <u>FRSG Monitoring on Bar T Bar Ranch</u> • 7:00AM - 5:00PM • AGFD, Lake Mary Rd. Bring water, lunch, weather-appropriate clothes, and comfortable footwear

Tuesday, October 18: <u>Book Club</u> • 5:30PM - 6:30PM • Barefoot Cowgirl Books, 18 N. San Francisco St, Flagstaff <u>Wildlife Wars</u>, by Terry Grosz Purchase the book from Barefoot Cowgirl Books for 10% off!

Thursday, October 20: <u>FRSG Monitoring on Flying M Ranch</u> • 7:00AM - 5:00PM • AGFD, Lake Mary Rd. Bring water, lunch, weather-appropriate clothes, and comfortable footwear

Friday, October 28: <u>FRSG Monitoring on Bar T Bar & Flying M ranches</u> • 7:00AM - 5:00PM • AGFD, Lake Mary Rd. Bring water, lunch, weather-appropriate clothes, and comfortable footwear

Friday, December 16: <u>Christmas Party</u> • 5:00PM - 'till the cows come home • TBA Please bring good cheer and a potluck contribution of a dish or drink!

Friday, February 17: <u>Annual Meeting</u> • 8:30AM - 12:30PM • Thornager's on Kiltie Lane • "Wildlife on the Ranches" Breakfast snacks and coffee will be provided. Learn about wildlife on the ranches from respected biologists and ecologists in Northern Arizona

If you have suggestions for events, presentations, or field trips, please do not hesitate to contact us!

For further information on these and other events, please email info@diablotrust.org or call (928) 523-0588. Please also visit our website, **http://www.diablotrust.org/calendar**, for more details on these and future events.

