

# The Rimrock Report

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The University of Arizona,  
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## You're going to build ramps for what?

*"In the twilight glow I see her.... Blue eyes crying in the rain..."* Any of you ever go to a Willie Nelson concert back in the 70's? If so, you may recall that as one of the few places you were likely to see cowboys and hippies, lawyers and welders, old folks and young, all in one place having a good time. The crowd at one of these events was certainly a mixture, brought together by something they had in common: their love of Willie Nelson music in spite of or because of his long red hair, bandanna and wore out guitar. So what does this have to do with range? Well, when I was first approached about doing a workshop at the V-V to construct escape ramps for bats and other wildlife and install them in livestock watering troughs, old Willie came to mind. I envisioned a similar crowd, brought together by a common task, but probably with somewhat different goals. A couple months ago, Dan Taylor with Bat Conservation International and Larry Bright, Wildlife/Fish/Rare Plants team leader for the Prescott National Forest were looking for a location to do one of these workshops and Larry thought the V-V would be perfect. Turns out he was right.



On June 17<sup>th</sup> we had about 15 people spend the day at the ranch headquarters not only building the escape structures (~130 of them) but also learning about the ecology of bats and their importance to agriculture. Many of you are aware that bats eat insects such as mosquitos, oftentimes consuming up to

their body weight in bugs in a single night. Some species are also important pollinators. Now, you may have some of the same questions I did originally: "Do bats really use water troughs that much? Do they really drown in them? Can't you just put a 2x4 in the tank for them to crawl out on?" The answers according to Dan, and the NRCS's Stu Tuttle who has extensively researched the subject

### Inside this issue:

YOU'RE GOING TO BUILD RAMPS FOR WHAT?	2
WELCOME JIOHN KAVA	3
FIRE FUEL AND RANGE FORAGE PROJECT	3
THE VIEW FROM THE RIM	4
JUST ME TALKING	4

"Do bats really use water troughs that much?  
Do they really drown in them? Can't you just put a 2x4 in the tank for them to crawl out on?"



## You're going to build ramps for what? Continued...

are: "Yes", "Yes", and "No, not really". Bats need pooled water to swoop in and drink in mid-flight. This water often comes in the form of livestock troughs. They apparently do sometimes swoop too low and end up in the water. What I was not aware of is that while swimming out, they tend to go to the side of the tank and swim around the edge. So they will pass right under a post or board placed in the tank. So a ramp designed to meet the edges of a trough and go all the way to the bottom is what really fits the bill. These structures are not just for bats however; birds, rodents, reptiles, etc... will use them too.

OK, so maybe now you can see why wildlife oriented people would be interested in this, but you may still be wondering about the cowboys. Well, as with a lot of natural resource or range management situations, good ideas are good for more than one reason. Dan presented data showing that cattle intake, weight gain, and performance are enhanced by clean drinking water. So it makes sense that water without dead critters in it is cleaner and more palatable. What rancher doesn't want better performance from his or her animals? I'll bet most of them probably enjoy wildlife and could do without a few mosquitos as well. So, that group of 15 people I mentioned earlier consisted of ranchers, researchers, agency professionals, conservationists and the media. Now I know this type of workshop is not the only place you'll get a diverse group working together, it happens all the time. But I think this was a productive day and one you should know about. For more information on these ramps, go to [www.batcon.org](http://www.batcon.org) and look for "Water for Wildlife" under the conservation programs tab. And look for these ramps around northern Arizona, there should be about 130 new ones in troughs on allotments in the Prescott and Coconino forests in the near future.



Photos on this page courtesy of George Couch,  
USDA-NRCS, Phoenix



## Welcome John Kava

I would like to introduce the newest member of the University of Arizona and V-V range program team: John Kava. I asked John to tell you all a little bit about himself.

*Proverbs 22:6 reads, "Train up a child in the way he should go: and when he is old, he will not depart from it."*



Hi, my name is John Kava, the new Rangeland Management Research Specialist, working on the V Bar V, under Dr. Doug Tolleson. August 2008 will be the 28 year mark of when I left a small diversified farm in Northeastern Minnesota to enlist in the Air Force, as a Radio Operator. After 6 years I trained to become a Space Systems Technician. I worked on the ground-based part of several Defense Satellite Systems. One is very popular today, Global Positioning System or GPS. Anyone heard of it? After retiring in 2000, I returned to the northern prairies to further my education in anything to do with the outdoors. I graduated from North Dakota State University with a M.S. in Natural Resources Management in 2003. Dr. Doug hired me away from ADOT Natural Resources Management Group where I helped manage vegetation along State and Federal highways for public safety and maintaining the road prism. I moved to Arizona from Houston in 2003. In Houston, I was newly graduated, remarried and a stay at home Dad of two daughters. During this time I spent many hours volunteering at school, with athletics, and with the Katy Prairie Conservancy. God obviously planned for me to be in this position. I discovered a deep interest in research during graduate school and am especially intrigued by plants. I also enjoy, and have a knack for passing on what I have learned, especially to youth. I find meeting new people and learning new things motivating. I love being here and look forward to pairing new research with historical data. That means I am looking forward to reliving my childhood days on the farm, with a new twist, I am old enough to appreciate them more.

## Fire Fuel and Range Forage Project



The V-V range program crew has been out enjoying the Arizona weather in June with a group of Texas Aggies working on developing the LEWS/Phygrow methodology for mapping not only fire fuel but forage conditions as well. The Coconino Forest and the V-V have been selected as pilot sites for this study in Arizona. You may recall me writing that the Livestock Early Warning System and the Phytomass Growth Simulator have been applied in arid regions of East Africa, Mongolia and soon in Afghanistan. The same techniques are being tested and modified for use here in the US and Arizona is on the leading edge of this development. John Kava and I have been doing paired transects using a modified version of the quadrat frequency method along with the Phygrow transect method used by the Texas team. Approximately 100 transects will be conducted in the Coconino this summer. Thanks to Tim Brown, Ed Rhodes, Katy Weber, Krystal Lair, Josh Halpin, and Colin Porter for all their hard work. More on this as results become available.



# The View from the Rim

In honor of Fathers Day, here are few quotes:

*“Boy don’t ever be afraid to learn something, you never know when you might need it”*

Roy Tolleson (my father) when I was 16 and griping about having to take algebra...

*“Well, there is a 50 % chance of rain every day, it might rain and it might not”*

A.L. Tolleson (my grandfather) when we had just had some hay rained on and the forecast was for sunshine...

*“Never a hoss that couldn’t be rode and never two cowboys that couldn’t be throwed”*

Joe Patterson (my grandfather) when I was about 2 years old and we had just gotten bucked off and I did not want to get back on...

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## Just me talking...



Well, I have become a lot more familiar with ATV's in the last couple months. I have turned one over, ran out of gas, and rode one through a hail storm. Maybe I should stick with trucks and horses... Otherwise, this has been a busy spring and early summer. You have read in this issue about the wildlife water escape ramp workshop and the fire/forage project. John and I have also been working with Jim Sprinkle (AZ Coop. Ext.), rancher Ray Tanner, and USFS personnel on the Tonto NF near Payson to monitor livestock performance and grazing use and distribution on weeping love-grass. The diet quality on these pastures has been low so we are looking at supplementing protein.

Larry Bright and I have been collecting pronghorn fecal samples to determine the ability of existing fecal NIRS calibrations to monitor pronghorn diet quality. These samples were predicted with calibrations for diet protein and digestibility developed with elk, white-tailed deer, domestic sheep, and domestic goats. Preliminary results indicate that the current elk calibration may be the most useful at determining relative diet quality changes in the antelope. The elk calibration has quite a few samples with western US forages in it so this would make sense. Using the elk calibration would be done in lieu of a pronghorn calibration until such time as one can be developed. Analysis with multi-species calibration for fecal nitrogen appears to be useable right now. Antelope samples can be added to this calibration to result in an updated one in the future.

In addition to diet quality monitoring on the V-V, we have also started looking at some postpartum repro management techniques with 1st calf heifers using endogenous vs exogenous prostaglandin. We should know how that works out when we palpate in the fall. Also, I am still working on the drought management plan template I mentioned last time. Hopefully, that will be posted on the V-V web site soon. The picture to the right was taken the Friday before Memorial Day near Happy Jack. So just look at this when it's 100° outside.

Till next time... **Doug**

