

# Study Looks At Cattle Grazing on Contaminated Grasslands

By Donna Reibslager

Scientific concern about the effect on agricultural plants from heavy metals used for fertilizers and pesticides has risen in recent decades. This awareness has led to an emerging concern about the cattle that graze on contaminated land, including areas surrounding old mining sites. A study completed in 2012 by a University of Arizona graduate student, "Bio-accumulation of Heavy Metals from Soil to Plants in Areas Contaminated by Acid Mine Drainage in SE Arizona", sought to

address this concern as it applies to the practice of cattle grazing in and around Patagonia area mining sites. The study conducted a comprehensive analysis of the soil adjacent to old mining sites in the Patagonia Mountains to identify metal contaminants and established to what degree they exceeded the Arizona Department of Environmental Quality (ADEQ)'s guidelines for acceptable levels.

Until recently, no studies had been conducted to evaluate the amount of metals that grasses in the Alum Gulch, Flux Canyon, and Harshaw Creek areas

are accumulating, or to determine to what extent such grasses may be affecting cattle from ranches located in the Harshaw mining district.

The research identified several sites where grasses that are available to cattle that graze in the area are polluted. The author alludes to the risk that contaminants ingested by livestock such

as these may not only result in disease and deformity in the animals, but are likely to affect the health of those who consume the livestock. She says that "though the mineral tolerances of cattle vary...research shows that grasses laden with metals increase the risk of disease, death, or carcass contamination if the animal goes to slaughter."

By measuring the lead and cadmium levels in Sonoita Creek above the point where it converges with the mining district, and comparing those levels with the high metal content of waters below the mines in Alum Gulch, Flux Canyon, and Harshaw Creek, the research also concluded that toxic levels of metal contamination from the mines are being carried downstream into Sonoita Creek.

## Thought-Provoking Ideas About Human Habitats

By Lynn Davison

Phillip Allsopp gave a fascinating talk on human habitats at this year's EarthFest celebration. He believes we humans have done a piss-poor job creating homes and neighborhoods that promote our own health, comfort and creativity. His talk was peppered with relevant pictures, stories and statistics that demonstrate our failure to design and build communities that work for the people who live in them. Many of these examples come from around Phoenix, although he claims Phoenix is not much different from most places in the U.S. Allsopp says Patagonia is much more like his idea of good human habitat.

Allsopp, who is trained as a human ecologist, a public health practitioner, and an architect, thinks that everyone deserves a home made with quality materials that is aesthetically pleasing and affordable. Further, Allsopp suggests that, if we reinvested a chunk of the billions spent in the healthcare system to treat chronic diseases and instead used the money to build good quality healthy homes, we would significantly reduce the prevalence and severity of chronic diseases in this country. The homes he envisions would be smaller than the average size house today, sited to take best advantage of environmental assets, made of high quality materials available in the current marketplace, and designed to minimize unnecessary costs related to permitting and financing (which take up a hefty portion of today's building costs).

Even for the skeptic, Allsopp's ideas about human habitat and health are thought provoking. You will see more of the Allsopps in Patagonia. He and his wife, who directs the Amerind Museum in Dragoon, Arizona, come to Patagonia often. His new company, Smart Pad Living, has also made a proposal to CHOP to build affordable homes on their new property.

## Getting the Word Out About Lending Shed

By Linda Huffstetler-Dearing

First of all, thank you to all community members who have donated items to the Community Lending Shed. We have received many new items since our first article in the PRT. These include bedside commodes, more walkers, shower and tub benches and adult diapers for use in our community.

As we began this project, our volunteer coordinator, Linda Huffstetler-Dearing, began to be asked whether or not the shed had adult diapers or briefs. Over and over, we heard from seniors who live on small monthly pension checks who needed diapers but whose checks ran out before the end of the month and they had no way to purchase supplies. At the time, we only had a few that had been donated by the Patagonia United Methodist Church, so we began to inquire about resources available to assist seniors with incontinence needs. Our search took us to Southern Arizona Diaper Bank (SADB), and Family Healthcare Amigos has made application to partner with SADB in order

to be an ongoing provider for adult diapers and briefs.

In the interim, a new organization created by Jorge Gonzalez out of Tucson, Southern Arizona Saving our Seniors (SASOS), brought down over 100 diapers and briefs to be used by Mountain Empire residents. At this point, we have more donors than borrowers or users of our service. Not a week goes by without a donation from someone in our community, including three estates in the past month. We know some of you reading this article have a need for either durable medical equipment or diapers. Please reach out to Linda at phone number 394-0268 (cell number 520-256-7213). Your request will be held in strictest confidence. If you or someone you know needs our assistance, please contact us and we will do everything we can to find what you need. Help us get the word out to community members who could use this service.