

SPRNCA – Alternatives Development

Field Trip: Range

March 21, 2014 (8am – 5pm)

Participants:

- Glenn Minuth, Cochise College
- Carol Moore
- Steve Saway, Huachuca Hiking Club
- Mary Darling, City of Sierra Vista and Cochise College
- Paul Hendricks
- Tricia Gerrodette, Huachuca Audubon
- Greta Andersen, Western Watersheds Project
- Mike Hayhurst, Brookline Ranch
- Tate Coleman, Three Brothers Ranch
- Rena Tucker, AZGFD
- Lamar Smith, retired UA now a contractor hired by Hereford NRCD
- Mary Anne Black, Lucky Hills Ranch
- Rachel Thomas, Hereford NRCD
- Jim Lindsay, Brunckow Ranch
- Vi Hillman, BLM
- Darrell Tersey, BLM
- Eric Baker, BLM
- David McIntyre, BLM
- Amy Markstein, BLM

Babocomari Allotment - Mike Hayhurst: Brookline Ranch

Stop 1: Highway 82 at Landfill Road.

- Treated with spike herbicide 7 years ago to kill whitethorn acacia. Didn't kill any of the larger mesquite. Goal was to restore the range and bring back native grasses.
- Compared the Hayhurst side with the other side of the road which had not been treated and was still covered with whitethorn.
- *Q: Wildlife difference?*
 - Quail population has increased 3-4 times
 - After 3-4 years the deer reappeared
- Want to leave dead whitethorn acacia on the land to provide cover for the grass to get started.
- Spike herbicide: only works on woody plants; doesn't kill mesquites; only goes a short depth into the soil. The herbicide is in pellets that are spread by aerial delivery—need rain to dissolve the pellets.



Stop 2: Hayhurst Ranch

- 100 head of cattle (1200 AUMs).
- When Mike first started there was 500 head on the ranch, and not a blade of grass on the place.
- 2 things have improved the condition: rotational grazing and veg treatments.
- Problem with losing the BLM allotment: ranch will become a hobby ranch; whole ranch will look like the wildcat development that is currently on private land.
- He grazes SPRNCA in winter because they are not as drawn to stay at the river when it's cooler. Only grazes the riparian in the coldest parts of the year.
- Groundwater level has risen from 40 to 21 feet since veg treatment.
- He urges BLM to do veg treatments on the uplands, and right after treatment put cattle in.
- Visited a spot by the banks of the Babocomari, on the boundary of BLM and private land. Cows had been in here and grazed it in the winter.
 - Grazed for 2-2.5 months in the winter.
 - Proud of what is happening here with winter grazing.
- *Q: Filling in a goal of the NRST, but what does that have to do with grazing?*
 - Grass wouldn't be near as healthy without grazing.
 - Down below fence line there is illegal grazing. Compare this to that unmanaged grazing.
- NRCS veg treatments work better where this is a limestone bottom. NRCS indicated that veg treatments would be less effective near the house due to the lack of a limestone bottom. After treating above the house a spring became wet again. He noted deposition in the ditch on the way to the river.
- *Q: Does grazing remove cottonwood seedlings?*
 - Cottonwoods and Willows grow near bare gravel banks. If it wasn't grazed it would be overgrown and more susceptible to fire.
Cottonwood/willow seedlings – nothing is going to promote reproduction. Cottonwoods eventually disappear.
- First cattle were brought here by Father Kino. Historical records show that there were more cienega-marshes, and now there are cottonwood/willows forests.



Three Brothers Allotment

- *What were these areas like historically?*
 - According to great-grandfather it was historically grassland.
- Trying to establish Coordinated Resource Management Plan (CRMP) for all of Tucson Field Office grazing allotments.
- Just now starting the CRMP (plan for projects and veg treatments. Funding is from the Farm Bill. Farm Bill is NRCS driven).
- There is one water on state land and one water on BLM land.
- Test hole where there is permission to use for cattle.
- ARS wells are not monitoring wells because they can be used for cattle waters.
- Need water improvements first, and then fences to manage use.
- On the 3 brothers there is one cattle water on the SPRNCA.
- Only fence on the allotment is the fence to nowhere.
 - This fence needs to be fixed and improved (fence to nowhere – just stops and doesn't connect).
- The fence to nowhere needs to be completed:
 - Fences wash out when it rains.
 - If fences wash out then someone needs to fix the fence and if the fence isn't fixed then the illegal grazing on the NCA will continue.
- Area here is currently being grazed.
- Allotment boundary is the fence that keeps cattle out of the river.
- Ecological Site: Loamy uplands here; Clay Loam Upland in a few patches.
- BLM brush treatments policy:
 - Veg treatments are a tool that can be used to meet the goals and objectives identified in the RMP.
- Aerial spray = \$50/acre
- Hwy 83 Powerline road to Charleston could be a scenic byway; access for hunters, hikers, etc. (right now the road is for administrative use only but could be considered for other access as part of the new RMP).



Lucky Hills Allotment (Mary Anne Black)

- There is a spring on this allotment.
- Old Allotment Management Plan (AMP) which had a waterline from Boquillas.
- AMP → agreed plan for the management of the allotment. AMPs were used prior to CRMPs.
- CRMP → agreed upon plan but it is still pending NEPA (site specific). Maximum benefit for the resource.
- Treatments blocked out on ridges similar to Mike Hayhurst's treatments.
- Hills act as a natural barrier for the cattle.
- 50 year old fence on the Lucky Hills allotment boundary.
- Powerline road is closed to public access.
- *Option for the upcoming RMP:* Proposed Backcountry Byway along the Powerline Road for high clearance vehicles. Powerline Road runs south from near Highway 82 to the Charleston Lead Mine. Powerline Road was open for many years. When it was proposed for closure by the lessee, tried to use AZGFD Adopt a Ranch program to keep the Powerline Road open. Adopt a Ranch does fencing and other good deeds to keep public access open. However, after that agreement was signed the road was closed.
- Currently having issues with keeping fences up and having trouble with illegal use, and off-road use on Powerline road.
- High amount of traffic through this area.
- Lucky Hills:
 - Only run 90 head of cattle (1080 AUMs) for the combined state and BLM leases (half of the allocated amount) because of the drought.
 - Full allocation is 160 head of cattle for the combined state and BLM leases (1920 AUMs).
 - Plan to allow for treatments within the watershed.
- *What about check dams?*
 - Low impact structure to control erosion → examples from Walnut Gulch.
- Veg treatments have not been on BLM land → state land?
- *Who lead the CRMPs?*
 - AZ NRCS is the lead agency.
- Water tank used to be a water tank:
 - Water line to water tank.
 - Issue with vandalism.
 - Losing livestock to trash.
- There aren't monitoring key areas in the NCA for this allotment. Three Brothers have 2 monitoring key areas in the NCA.



- Issues with shooting on public lands and ASLD land and the resource damage as a result. Would like a shooting range to mitigate for that problem in vicinity of Charleston Lead Mine.
- Drought response plan:
 - AUM reduction.
 - Working with NRCS → they provide incentives for reducing AUMs.
 - Proactive meeting with rancher in the fall to talk about responding to drought.
 - Drought response plan needs to manage use in response to a drought.
 - Send out grazing questionnaires in Oct 1 → that's when you want to reduce in the fall.
 - Drought policy is to send out letter → like to see them reduce numbers.
 - BLM mostly enforces but can rebate grazing fees if you drop your AUMs. Suggested it be written into the CRMP or the RMP and meet during the fall during monitoring. Proposed fencing outside SPRNCA and bad fence between the allotment and the Riparian Area.

Brunckow Allotment (Jim Lindsay)

- Lindsay's grandparents homesteaded here in 1930s.
- He has 9 pastures in rotation; previously he had only 4.
- As a child his family did contouring of the hills behind his house to avoid flooding in a field next to the house.
- What can be done to bring back the natural grasses?
- Big thing is to fix uplands to slow the flow – feed the grasslands.
- 400 acres were treated in 2010 behind the house –killed the whitethorn and brought back more hawks and deer.
- Treatment was aerial application (tebuthiuron pellets) – removed whitethorn acacia and creosote.
- There isn't currently a good herbicide on the market to kill mesquite.
- Jim suggested BLM look closely at herbicide management vs passive measures. Jim mentioned that in July/August he keeps his cattle on private land. In August he puts them onto his allotments (BLM and State). Last August he didn't put them out due to lack of rain. After veg treatments he suggested check dams in gullies.
- Mesquite – cattle do feed off of pods and leaves.
- Nine pastures for rotation → better management and control.
- Gullies are repairing themselves.



Stop 1 at Brunckow

- Fence lines.
- August cattle come here.
- Cows have been on and off.
- Still lots of feed.
- This area was treated Feb 2010 (tebuthiuron), aerial application – pellets have more weight.
- Research on cattle that have been on herbicide treated ground.
- Idea of burning it off.
- Contouring –mechanical, cuts the roots.
- NRCS did an inventory that shows the composition of grass.
- Photographic documentation of changes.
- Erosion structures after veg treatments.
- Utilization measurement → have to have a method to measure utilization.
- Vegetation treatments on Brunckow allotment were more successful than on the Babocomari allotment
- Eric Utilization measurement demo:
 - Utilization is for this years growth (old stuff doesn't count).
 - 50% utilization is used as a visual example. A light to moderate rate of utilization (30-40%) is desired. Beyond 50% utilization, the root damage increases and the plant is not able to adequately recover.
 - With 50% utilization there is a lot of structure missing (issues with wildlife structure habitat).
- When talking about utilization it is important to define what you are talking about. Measurement on key species is different from a cover measurement.
- 50% utilization on key species, might mean you are only using 10% utilization overall.
- Some things growing year round and therefore measuring plant production is not as easy as it sounds.
- BLM benefits from having the rancher out on a daily basis to help determine utilization levels.
- *Benefits from treatment will then be something that is considered in the RMP?*
 - Vegetation treatments will be a strategy that is considered in the RMP.
 - Herbicide application is easier to execute because there isn't ground disturbance which makes cultural clearances easier.
 - Vegetation treatments still need site-specific NEPA clearance and that can take some time.
- *Do you have water in each pasture?*
 - Some pastures need water brought in on a weekly and bi-weekly basis.
- This location had a solar powered well that filled a 3000-4000 gallon storage tank. Wildlife escape ramps have been placed in all livestock drinkers as well as smaller buried water drinkers.

- The 1960s retention dikes have been maintained over the years to help slow erosion concerns and keep more water in the uplands.