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 Colemen, 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 Lindsey, 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.

At this site we looked at one side of the road that had been treated with spike herbicide (tebuthiuron pellets) 7 years ago compared to the other side of the road that had not been treated.

- The first side that we looked at had been treated with spike herbicide 7 years ago to kill whitethorn acacia. The herbicide didn't kill any of the larger mesquite. Goal was to restore the range and bring back native grasses.
- Compared the Hayhurst side (treated with herbicide) to the other side of the road which had not been treated and was still covered with whitethorn acacia.
- *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

At this stop we started at the Brookline Ranch house and walked down to the BLM allotment which the Babocomari River runs through (the River Pasture). We discussed the history of the ranch, grazing rotations, and areas on the ranch that had been treated with herbicide (tebuthiuron). At the River Pasture we discussed winter riparian grazing.

- 100 head of cattle (1200 AUMs) are run on the entire Brookline Ranch (this includes the BLM lease, the state lease, and private land).
- When Mike first started there was 500 head on the ranch, and not a blade of grass on the place.
- Two things have improved the range 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 his BLM allotment which is in the SPRNCA (River Pasture) 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 the 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 nearly as healthy without gazing.
    - Down below fence line there is illegal grazing. Compare this to that unmanaged grazing.
- Natural Resource Conservation Service (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 cottownwood/willows forests.

Three Brothers Allotment (Tate Coleman)

At this stop we looked at the BLM Three Brothers Allotment that is currently grazed. We looked at a fence that had never been completed. We discussed issues with fences and livestock waters on this allotment. We stopped for lunch at the one livestock water that is located on BLM land on the SPRNCA.

- *Q: 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 including the Three Brothers Allotment.
- 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 for this allotment.
- 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 three brothers allotment 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 to anything).
- Fences crossing the washes that feed into the San Pedro River and the SPRNCA 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 herbicide spray application = $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 uses as part of the new RMP).

Lucky Hills Allotment (Mary Anne Black)

At this stop we looked at the BLM Lucky Hills Allotment. We also discussed potential range improvements and some of the challenges of managing livestock use in light of the recent drought.

- There is a spring on this allotment.
- Old Allotment Management Plan (AMP) which had a proposed/planned waterline from Boquillas.
- AMP is an agreed plan for the management of the allotment. AMPs were used to plan out range improvements and manage the allotment prior to CRMPs.
- CRMP is an agreed upon plan but the implementation of the plan still requires site specific NEPA. Maximum benefit for the resource.
- Vegetation treatments blocked out on ridges similar to Mike Hayhurst's vegetation treatments.
- Hills act as a natural barrier for the cattle.
- 50 year old fence on the Lucky Hills allotment boundary.
- Powerline road is currently 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 the 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 there are examples of these structures from Walnut Gulch Experimental Watershed.

- Veg treatments have not been on BLM land yet in the SPRNCA but perhaps they have been implemented on state land?
- *Who leads 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 Allotment has 2 monitoring key areas in the NCA.
- Issues with shooting on public lands and Arizona State Land Department (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:
    - Different ways to plan for AUM reduction in response to drought.
    - Working with NRCS—they provide incentives for reducing AUMs in response to drought.
    - *One suggestion was* to have a proactive meeting with rancher in the fall to talk about drought response.
    - *Another suggestion was* to write a drought response plan that would address managing 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 to talk about drought response. Proposed fencing outside SPRNCA and bad fence between the allotment and the Riparian Area.

Brunckow Allotment (Jim Lindsey)

Stop 1: Brunckow Ranch

At this stop we discussed the history of the ranch and some of the vegetation treatments that Jim Lindsey has done on his private land.

- Lindsey's grandparents homesteaded here in 1930s.
- He has 9 pastures that he uses to rotate his cattle; 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 to prevent erosion.
- Mesquite – cattle do feed off of pods and leaves.
- Nine pastures for rotation on the Brunckow Ranch this allows for better management and control of cattle grazing.
- Gullies are repairing themselves.

Stop 2: Brunckow Hill

At this stop we discussed the grazing rotation, herbicide treatments, and low impact measures to prevent erosion following vegetation treatments. Eric Baker (BLM) did a demonstration on how to measure cattle utilization of forage.

- In August cattle use this pasture (generally).
- Cows have been on and off this pasture.
- This area was treated Feb 2010 (tebuthiuron), aerial application of tebuthiuron pellets – 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 vegetatopm treatments.
- Utilization measurement → have to have a method to measure utilization.
- Vegetation treatments on Brunckow allotment were more successful in killing whitethorn acacia and creosote compared to the vegetation treatments on the Babocomari allotment
- *Eric Baker (BLM) conducted a 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 only have 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.

Stop 3: Water Storage Tank

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. At this site we discussed the retention dikes and had a brief debrief of the entire range field visit.

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

Brief Debrief:

- Good to get out on the ground and look at the allotments.
- Would like to see a Las Cienegas-like approach (biological planning) for the SPRNCA to working through issues and getting projects implemented on the ground.
- Concern about the amount of cover for wildlife that is removed from the herbicide treatments.