

Friends of Ironwood Forest Board of Directors Monument Tour, November 2009. From left to right – Lahsha Brown (Executive Director), Royce Ballinger, Allyson Kumataka, Ted Richardson, Mike Quigley, and Chris McVie.



The Allyson Kumataka Memorial Restoration Site

Allyson Kumataka was one of the volunteers who helped early on with the Waterman Mountains buffelgrass effort in 2009. She passed away while hiking high on the slopes of Mt. Whitney on 30 July 2010. Not only did Allyson pull buffelgrass and contribute to restoration projects on the Monument, she also served on the Board of Directors for the Friends of Ironwood Forest. We will always remember Allyson for her dedication and warm and caring nature.

We are naming the Waterman restoration site in her honor - The Allyson Kumataka Memorial Restoration Site, previously known as the “Harlow Jones Site”. (Harlow Jones was the perpetrator of the land disturbance and buffelgrass infestation). The site was an 18-acre scar on the north side of the Watermans south of Avra Valley Road and near the entrance of the Silverbell mine. The site is located on Ironwood Forest National Monument and managed by the Tucson BLM Field Office.

After Mr. Harlow Jones was declared a trespasser in the mid-90s on federal land and forced to level out the land that he had disturbed, The 18 acre patch of disturbed land became a waist-high monoculture of buffelgrass. In 2005, AZ Sierra Club held “Buffelgrass Pull” events once a year, but the BG came back aggressively each year. BLM paid contractors to spray the site in summers of 2008 and 2009. The spraying helped, but did little abatement of buffelgrass re-growth and germination.

In June 2010, using heavy equipment BLM made a thorough landscape reshaping of the entire disturbed landscape, carefully shaping terraces along contours while leaving abundant surface litter and rocks to promote rainwater absorption. July 2010 marked the beginning of this restoration project under the leadership of the Tucson Chapter of AZNPS and the active support of BLM. Without this effort, six months later the entire site would again be overridden with buffelgrass emerging from the abundant seed bank already in the soil. AZNPS has teamed up with volunteers from the Dove Mountain Hiking Club and Friends of Ironwood Forest for this project. Soon, the Boy Scouts will become involved as well.

First Step : Planting woody species

Taking advantage of soft, newly worked ground, in July and August volunteers hand planted seed of Foothill palo verde, ironwood, creosote, and catclaw acacia. We planted entire pods, as we had so much ground to cover. No soil amendments were made at the time of planting. By early September already thousands of emerging palo verde tress became apparent. By November, baby ironwood and creosotes became apparent. By mid-November, many of the palo verdes were already eight inches high. Emergence is spotty across the site, with some notable bare areas. Additional plantings will be made over the next two years as needed.

Second Step : spraying out emerging buffelgrass to favor growth of native species.

Buffelgrass seedlings actively emerged and grew between the first weeks of August through the middle of October. During those 10 weeks, volunteers sprayed buffelgrass with backpack sprayers using Round Up Pro two to three days per week. In all the 18 acres of disturbed land was spot sprayed with six separate passes. In addition to the core 18 acres, an additional eight acres of peripheral desert was sprayed to kill out plants that had established in the open desert. As we killed back the buffelgrass, the native emerging species visibly responded to the newly available light and moisture.

We anticipate the need to continue spraying re-emerging buffelgrass during the Feb-April and Aug-Oct windows for at least the next three years, with diminishing buffelgrass populations over time.

Third Step : Inventory and Monitoring of Native Plant Restoration

Besides the four native woody species that we hand planted, a total of more than 35 native species spontaneously emerged throughout the site. The most prolific and widespread pioneer species were *Dasyochloa pulchellum* (desert fluffgrass), *Tequilia canescens* (woody crinklemat), *Enceli farinosa* (brittlebush), and *Aristida adscensionis* (sixweeks threeawn).

Under the direction of AZNPS volunteer Carianne Funicelli Campbell, we have laid out six 50m transects to monitor the vegetation coverage and species dynamics over time. In addition to plants, we will also monitor bird, reptile, and insect populations.

Fourth Step : Understanding and fixing the problem spots

In the 1990s, Harlow Jones illegally used this site to run a decorative rock crushing and sieving operation. The smoothing out of the site resulted in variable soil textures. Areas of finely ground up and sifted rock are now essentially bare of vegetation. There are four such problem areas, each one between 5000 and 10,000 sq. ft. Soil samples from the four problem areas were analyzed and no serious toxicity or deficiency was detected. UA Soil Scientist James Walworth evaluated the results and the site and came to the conclusion that the soil just needs to be amended with organic matter and protected from erosion. We are now engaging Boy Scout groups to adopt each of these problem areas as troop and Eagle Scout projects.

Looking forward

With the significant emergence of woody species from the 2010 plantings, we anticipate a dramatic visual transformation of the site over the next five years. Our biggest challenge will be the vigilant and constant suppression of new buffelgrass emergence until the desert finally succeeds in healing itself.