



# SALT RIVER HORSE MANAGEMENT

## End of Year Report 2024





## Introduction

The Salt River Wild Horse Management Group (SRWHMG) continues to perform the scope of work under contract with the State of Arizona (AZDA), with integrity, efficacy, and humanity for all horses in the Salt River Herd. With our large volunteer force and daily presence, we exceed our mission through range stewardship, fertility control, supplemental feed, road patrol, fence maintenance, public education and rescue when needed. We document each injury, birth, death, change and migration of the Salt River wild horses in our app, which also keeps track of their parentage/bloodlines and inbreed percentage. In addition to our work in the field, we provide permanent sanctuary to the horses we have rescued. We are happy to continue to study and manage this cherished herd as the valuable recreational resource they are, at no cost to the state of Arizona or the US Forest Service.

## Herd Health

At the current time, the Salt River herd body conditions are holding steady at 4's on the Henneke Scale. Two horses older than 20, will continue to have declining muscle tone as they age, which we consider normal. The overall herd health is great with no diseases or snotty noses observed. With the mares not being pregnant, they have a lower caloric need, which keeps them in better shape than before on less forage.

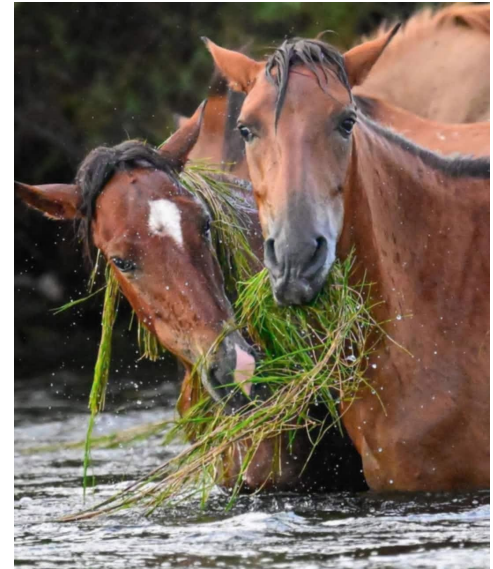
## Forage conditions

The forest received no decent precipitation in the second half of 2024, which caused a severe drought and a need for the feed program to continue. In spite of some claims, the horses did not eat all the forage or ruin it, the forage dried out and died, like it does every year. The rest of Arizona currently also has a lack of forage everywhere. Witnessing Sycamore creek is an example of what the rest of the TNF looks like.



## Additional Diet

The Salt River's volume was decreased on November 14<sup>th</sup> 2024 (Riverswap). This dried out all of the available eelgrass which made our feed program of even greater importance to the horses. It takes many months after the river is up again, for the eel grass to be available again, which usually occurs by August. The horses regularly eat mesquite leaves and beans and are sometimes seen eating salt cedar and giant reed, both considered invasive, but they have never been observed eating cottonwoods or willow trees. SRWHMG has several game cameras pointed at young willows and cottonwood trees proving that horses walk past them every day without eating them.



## Supplemental Feed Program

The supplemental feed program has been necessary since September of 2024. SRWHMG spends an average of \$80,000 to \$100,000 on the feed program per year and it usually is necessary for 5 to 6 months. It is not an easy feat to ensure every Salt River horse receives it's fair share. It takes 4 to 6 volunteers per feed station, and there are currently 4 feed stations worked simultaneously. Volunteers drive the hay truck, and lift the certified weed free alfalfa bales onto hand carts and then divide them into single flakes dispersed every 5 to 10 ft. Including the managing and scheduling of volunteers, it takes an average of 20 people per day to run the feed program. We adjust the amount of flakes, according to how many horses frequent each feed station, so that there is the right amount for each horse. Every last crumb gets eaten. Horses do really well with our regular schedule, our regular locations and the good quality alfalfa. This program also protects the environment by making sure the horses are not starving and eating things they normally wouldn't. The feed stations provides extra left overs for quail and deer as well. Our water stations provide for an array of wildlife like deer, bobcats and coyotes as well as bees and birds.

## Herd Size

The official flyover herd count done by AZDA and USFS this year was **286**. There have been 8 deaths since then, and 5 foals were born, of which 4 are surviving as of December 31<sup>st</sup> 2024, resulting in a current number of **282 as of December 31<sup>st</sup> 2024**. In our SRWHMG count, we ended 2023 with **311** horses, of which 15 horses were still included, who did not return to the forest this year, resulting in **296** horses currently. Subtracting 8 deaths adding 4 surviving foals, results in an end count of **292** horses in our official count. We do not know exactly why horses are not coming back onto the forest but we suspect that the reservations are removing some horses to the other side of the 87. The difference between the two counts is just 10 horses, so for all intends and purposes we will accept the official herd of AZDA and TNF count of **282** horses.

This is down from the highest herd count during the summer of 2019, which was **463**. The herd will continue to have a negative growth rate due to the fertility control program and the herd growing older. Out of the 282 horses, between 120 -140 horses stay in the northern mountainous quadrant and only use the river sporadically. Therefore **between 140 and 160** Salt River wild horses consistently use the riparian area of the lower Salt River, which is not too much for the large acreage and 10 miles of river.

## First Quarter

- In January, 25 yr old mare **America** was reported in declining condition and missing from her band a week later, then was never seen again. She had some suspected teeth problems, and is presumed deceased.
- In February 8th, **Tex**, a 24 yr old stallion was found deceased at Coon Bluff. He was observed the previous few days with mild colic symptoms. Tex was a senior stallion on his own and had lost his band several years ago. He died from age related decline. His carcass was left in the forest to go back to the earth. We had documented his entire life, Tex left 16 known offspring of which 7 are still alive.
- On March 18<sup>th</sup> the carcass of **Sunny** (Steph x Kayo) was found in the northern hills. Sunny was a healthy 8 yr old bachelor stallion. It appeared to have been a traumatic event with blood around him, but no bullets were found, which made us suspect the mountain lion again.
- On March 24<sup>th</sup>, a filly was born to 5 yr old mare **Venus** (Athena x Sarge), who was the first mare left “open” to give birth. It took a surprisingly short time for Venus to become pregnant. She had received her primer/booster in 2020 and had 4 booster shots after. She became pregnant 13 months after her last booster. The new filly was sired by 8 yr old lead stallion Orion, (Three Socks (Wisdom x Hope) x Moon) . These are very strong bloodlines and the filly is very healthy; the public helped to name her “**Iris**”. Mare Venus was boosted again after the birth of Iris, which was hopefully in time.
- On March 27<sup>th</sup> a colt was born out of mare Spring (Winter x Hardy) and sire Lindor (Cholla x Robin). Spring was not purposely left open, but became pregnant just 10 months after her last booster, this is very unusual, since no other mares in the herd have become pregnant so fast. The public helped to name the colt “**Wonder**”.

## Second Quarter

- On April 4<sup>th</sup> a third Salt River foal was born in the hills, who the public helped to name “**Strider**”. He is out of mare Sacajawea (Winnetou (Flicka x Iroquois) and Mick. Great grandmother Flicka is a daughter of Shadowfax and ms. Shadowfax, making Strider the great great grandson of Shadowfax. Sacajawea was not purposely left open but became pregnant 11 months after her booster, which was one month before her 5<sup>th</sup> PZP booster.
- On May 25th, a colt was born to mare Cece ( Bebe (Babs x Uncle Sam) by stallion Little Bob) and stallion Widget (Squiggle x Halftail), this mare was not left open purposely, but after reviewing her last PZP darting, the dart mechanism failed to fire. The colt named **Gogo-Gadget**, was attacked by bachelor stallions and was taken to the vet hospital, but did not survive.

## Third Quarter

- On August 2<sup>nd</sup> the body of 5 year old mare **Cascara** (out of mare Bayberry and stallion Cisco) was found floating in the river. Many horses have been observed with mesquite bean colic this week after the rains, and she is presumed to have died from mesquite bean obstruction, and possible rupture of the colon.
- On August 16<sup>th</sup>, a 9 yr old mare named **Daisy** (out of mare ladybird and Tex) was found deceased across the river on August 16<sup>th</sup>, the cause of death appeared to have also been Colic.



- On August 24<sup>th</sup>, **King** a 28 yr old retired lead stallion, was found actively dying at Goldfield. Our veterinarian Jennifer Johnson administered Bam Kit for sedation and Dermosidan and Banamine to reduce his suffering. While we were waiting for someone to come with a gun to dispatch him, Kings heart stopped on its own. No barbiturates were used that can be harmful to wildlife. We had planned to leave his body to go back to the earth as it was in an in-accessible area down a steep hill, for the trailer to pick it up. However, we had to remove the body later on, because the Forest Service requested this. It was a difficult task dragging it up the hill to where the trailer had access and it cost a lot of effort and resources since we also paid for the removal.
- On September 19<sup>th</sup>, 25 yr old mare **Cholla** was humanely euthanized by AZDA officer Ken Davis to prevent a very long suffering death. After monitoring her for months, it was clear that her hip displacia was fast deteriorating and she could no longer keep up with her band. When she could no longer walk, the mutual decision between SRWHMG and AZDA was made to euthanize her. We appreciate AZDA Officer Ken Davis.

## Fourth Quarter

- On November 6<sup>th</sup> 2024 a filly was born to mare Nichy, who was left open purposely. Her foal was not expected until 2025, but she became pregnant faster than expected after 5 booster dartings with PZP. The public voted to name her Lainey, her sire is Luna. This brings the herd count to **283**.
- On December 21st a very old stallion, Burnie was found down and dying and was humanely euthanized. This brings the herd count back to **282**.

## Historic herd numbers:

- In 2018 we had 89 foals of which 56 are still surviving today (64%).
- In 2019 we had 109 foals of which 71 are still surviving today. (65%)
- In 2020 PZP started taking effect and we had 17 foals of which 14 are still surviving today. (80%). *(without PZP, the number of mares and births would have increased to 125 foals of which approximately 81 would be surviving (65%).*
- In 2021 we had only 2 foals, of which only one survived. *(without PZP, the number would have been 135 foals of which 95 would be surviving (65%)*
- In 2022 we had only one foal, and sadly it did not survive. *(without PZP, it would have been 150 foals of which 98 would be surviving (65%).* In addition the 2020 foal crop of 45 mares would have given birth to their first foals in 2022, which would have added approx 23 foals (50% because maiden mares foals have a lower survival rate)
- In 2023 we had 2 foals, of which one survived. *(would have been 173 foals of which 113 would be surviving (65%),* plus 45 additional mares from 2021 would have come into breeding age and foaled, of which 25 would be surviving (50%)
- In 2024 we had 5 foals, of which 4 are surviving. *(we would have had 200 foals of which 130 would be surviving, plus 50 additional mares from 2022 would have come into breeding age, of which 25 foals would be surviving.)*

## A. Growth Rate

Resulting from our fertility control, in the last 4 years combined, we have had only 9 foals, of which 6 foals are surviving as of December 2024. Mathematically the program has already prevented over 850 foals from being born and the foal count without PZP in the last 4 years would have realistically been **600** surviving foals. Of those foals, half would have been females who come into breeding age 2 years later, who's foals come into breeding age 2 years later, etc etc.

Another way to calculate how large the herd would have been today without fertility control, would be to take the highest herd number in August of 2019, **463**, and double it every 5 years (NOT every 4 years) which would have been **926** at the end of 2024. This compares fairly accurately to our documented real growth numbers before PZP.

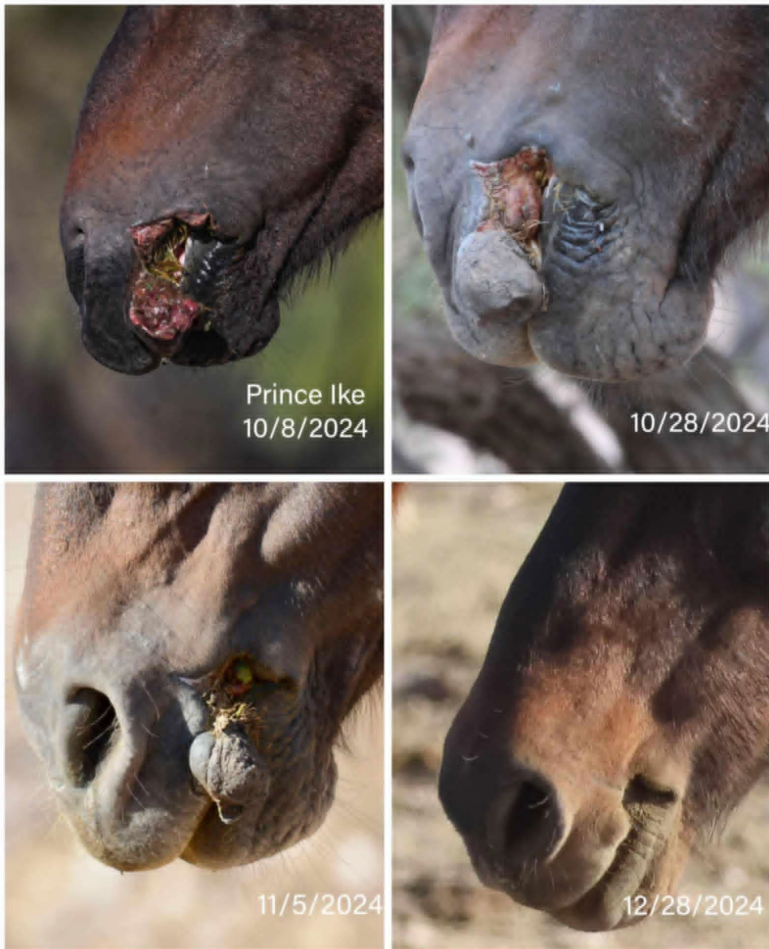
**The factual herd count today, without PZP, would have been over 900 Salt River horses! Had we been able to start our fertility control program when we proposed it in 2014, by today we would have only 150 horses. The Salt River herd number will continue to decline exponentially, because more and more horses are becoming very old. Should our successful PZP program for some reason be discontinued, most mares would start giving birth again within two years and the herd count would double every 5 years again.**

In comparison to removals, fertility control is more effective in the long run. SRWHMG has done what we said we would do and has proven that fertility control is more sustainable than removals, more humane than removals, and less controversial than removals. We have prevented catastrophic herd growth in a humane way, at no cost to state or federal government. Our PZP program is the most successful with the highest efficacy in the country, and our numbers are currently being studied by the Science and Conservation Center.

We are going to officially go with the herd count that the Forest Service and AZDA have adopted, which was 286 and is currently **282** horses. We believe that within the next 4 to 5 years, we can accomplish a herd count between 150-170 horses with limited removals of only unhealthy or old horses, who need to be rescued. After reaching these numbers we need to start being careful not to zero out the Salt River Herd. Because a continued declining population can be a concern to the long term viability of the herd, we have 7 "open" mares, staggered in years, for future viability of the herd. We are aiming for one or two foals per year.

**Through humane fertility control PZP, we are creating sustainability, both financially and ecologically, all while keeping the horses healthy and the public happy.**

*(\*) SRWHMG uses systematic and scientific recording of daily data into our database app, to arrive at herd numbers. Each and every day volunteers add information and pictures of horses and family bands to our app. Each horse is followed from birth to death, including band changes, migratory pattern and any injuries the horse may have had. We can identify each horse in the forest within a few minutes and can send their file at request of the AZDA.*



## Scope of Work in the Field

### Assess and monitor

Since January 1<sup>st</sup> 2024, we have monitored and assessed 63 cases, of which 10 were colic symptoms, during the colic season. Colic season occurs when the mesquite beans are ripe and rain falls on them. The beans then turn acidic and poisonous. Two horses died of colic. (Tex and Cascara) and 8 survived.

25 cases monitored were leg injuries and a hip injury of which one was euthanized (Cholla), 8 were for underweight who all improved, 12 for neck, eyes and face injuries, 2 for mountain lion attack (Ella and Surfer Dude survived) and 5 were other types of minor scrapes.

- These pictures are of Prince Ike, who sustained a torn lip during a stallion battle. The lip took almost 3 months to heal completely.

### Remove deceased horses

Our protocol for removal of dead horses is that if they are along the road or very close to a recreation public area, and the location is accessible by truck, then we will remove the carcass. If the deceased horse is in the forest, we prefer to let nature go back to nature, which benefits predators and scavengers. If barbiturates were used for euthanasia, then we always remove the carcass. We removed and paid for the removal of the body of King.

### Other Rescues.

This year SRWHMG found and rescued 8 abandoned dogs, 5 abandoned cats and assisted in the rescue of one domestic horse who fell into the cattleguard on Goldfield road, with its rider. Our veterinarian sedated the horse, after which firefighters cut the cattleguard. MCDOT later fixed the cattleguard. SRWHMG also assisted in the recovery of a mustang. The mustang escaped from its trainer during a training session in the Tonto National Forest. We located the mustang, darted the mustang with sedation and returned him to his owner.

### Other public assistance

SRWHMG was instrumental in helping Game and Fish catch an illegal trapper in the TNF through the use of our game cameras.

## Implement Emergency Plans

We continue to provide 24-hour emergency response for any situation involving a Salt River horse.

In July of 2024 we found a band of horses that had been harassed and chased. One mare Americana had a lasso around her neck and another had rope burns on her legs and was limping, the entire band seemed distraught.

We responded immediately and darted Americana with BAM Kit, while trying to keep her band nearby. The lasso was removed while she was sedated and she woke up just 10 minutes later and returned to her band. By the next week her injuries had completely healed. This action was very popular with our followers and received more than a million views and 50,000 responses. The perpetrators could have been charged under the Salt River Horse Act, but were unfortunately never found.



Road patrol: Our road patrol program provides for checkups of the most high-risk areas on Bush Hwy, IE: places where people leave gates open, the horse crossing on Goldfield Road, the cattle guards, as well as areas where people cut the fence frequently. Our road patrol team has been very active and busy this year with monitoring the horse crossing on Goldfield road, where we have prevented numerous collisions by making people aware when horses are on the road. Better signage and a flashing light would help a lot at this horses crossing. In addition, the Bulldog/Bush gates are left open by the public continuously and closed by our team every single day. Our road patrol team is in the Tonto National Forest every single day, as well as our field team of course.

Fencing program: We have fixed 12 broken fence lines, 10 cut fence lines and 3 fence lines that were driven into from accidents on Bush Hwy. The instances are always temporarily addressed the same day and permanently fixed within one week.

## Remove Stray Livestock

We have rescued 3 abandoned horses dumped in the TNF and we have placed them all in good homes. In the instance of Ginger who was dumped at Coon Bluff, the perpetrator was caught and charges were pressed. In the instance of racehorse Grace and her foal Breyer no perpetrator was ever found.

SRWHMG discusses all management situations and receives authorization from AZDA before taking any actions. We are enjoying working together with Ken Davis.





## Equine Fertility Control Program

PZP stands for Porcine Zona Pellucida, it is an immuno-contraception. Since the start of our program in October of 2018, we have achieved a negative growth rate within two years which continues exponentially.

We have darted 1379 PZP applications total. We are currently on our 5<sup>th</sup> annual boosters for the older mares and 4<sup>th</sup> annual boosters for the younger mares. After 5 boosters scientifically, mares may take a long time to come back to fertility. We are starting to give selected mares a break from PZP to assure a few foals each year, to maintain genetic viability. So far we have left 8 mares open, of which one gave birth this year after which she was darted again. We have seven remaining open mares, staggered in years, meaning we will not dart them until they have a foal. Our goal is one to three foals per year and time will tell how long it will take for the mares to become pregnant.

As scientifically proven for 40 years, PZP does not harm nor influence the horses' hormones and therefore does not harm or influence their behaviors or social structures. With our intimate knowledge of each band and their behavior, we have not observed any changes from previous non-PZP years.

Each mare is followed through her cycles, pregnancy, and efficacy of PZP and is darted only when it is exactly her time to be darted. Evidence of the safety of PZP is that all of our mares are extremely healthy after 5 boosters, plus, all mothers of foals were darted before giving birth; all of those foals are healthy and show no sign of being affected by PZP.

Out of the 1379 shots taken, we have never missed a horse, never hit a horse in a wrong spot and we have recovered every dart, except for 2. We keep each fired dart in boxes for our records and we also film each darting to review later, in case a mare has a foal.

In 2024, we had 5 foals born, and 4 are surviving as off December 31<sup>st</sup> 2024. Our program is seeing a higher efficacy than similar programs around the country. We pride ourselves greatly on these ground breaking results, which we believe are due to our attention to detail and dedication of our volunteers, directors and president.

## **SRWHMG's Comprehensive Initiatives**

In addition to our record keeping of each horse in the herd, and in addition to our field and fertility control programs, we administer these additional initiatives.

### **Emergency Response and Horse Welfare**

The Salt River Wild Horse Management Group (SRWHMG) is dedicated to the well-being of Salt River horses, ensuring they are treated humanely in any situation under the Salt River Horse Act. We maintain a 24-hour emergency response service, addressing any urgent needs promptly. For instance, in July 2024, we found a band of horses harassed and injured. Our immediate response included sedating and treating a mare, Americana, showcasing our commitment to their welfare.

### **Road Patrol and Safety Measures**

Our road patrol program focuses on high-risk areas such as Bush Hwy and Goldfield Road. By increasing awareness and monitoring horse crossings, we've prevented numerous potential collisions. We recognize the need for better signage and a flashing light to enhance safety further. Additionally, our team diligently closes gates left open by the public, and provides information to visitors the the TNF, ensuring the continuous protection of the horses and safety of the public.

### **Fencing and Infrastructure Maintenance**

SRWHMG is actively involved in repairing and maintaining fences. This year alone, we have fixed 12 broken fence lines, 10 cut fences, and 3 that were damaged by accidents on Bush Hwy. Each instance is temporarily addressed on the same day and permanently fixed within a week. We also maintain and replace bungee cords on all of the people gates since horses have been known to breach them.

### **Abandoned horses (stray livestock)**

Our commitment extends to rescuing stray livestock and abandoned animals. This year, we have rescued and rehomed 3 abandoned horses. Notably, the perpetrator responsible for abandoning Ginger was caught and charged, showcasing our dedication to accountability.

### **Rescue and rehabilitation**

SRWHMG is dedicated to the permanent care and sanctuary of our rescued Salt River wild horses at our two private facilities. Rescued Salt River wild horses are owned by SRWHMG. All receive regular vet and hoof and teeth care and are fed three times per day. They receive attention from volunteers and toys and enrichments. They live with buddies in large arenas and all are rehabilitated and are doing excellent. The public receives regular updates on them on our special Facebook page called SRWHMG-Wild Rescues.

### **AZDA Engagement**

SRWHMG values collaboration with AZDA. We discuss all management situations and receive authorization before taking action. Our partnership with Ken Davis is particularly rewarding, enhancing our partnership.

### **Additional Environmental Initiatives**

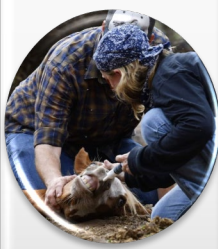
Beyond our primary responsibilities, SRWHMG undertakes initiatives to benefit the local environment and community. These include:

- Spending over 2000 volunteer hours per month on daily forest and riverbank cleanups.
- Rescuing stray pets and abandoned animals from the forest.
- Removing nails, cleaning fire pits, and dousing smoldering fires.
- Removing old downed barbed wire.
- Organizing and participating in large-scale cleanups and graffiti removal.
- Adopting Phon D Sutton and Coon Bluff Roads from MCDOT.





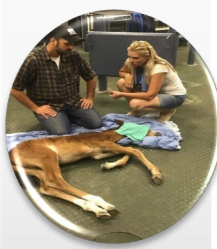
**HABITAT  
IMPROVEMENT**



**EMERGENCY  
RESPONSE**



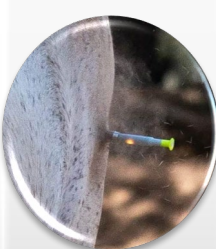
**FENCING  
PROGRAM**



**RESCUE  
PROGRAM**



**VOLUNTEER  
EDUCATION**



**FERTILITY  
CONTROL**



**HERD  
RECORDS**



Our comprehensive approach ensures that we not only meet the requirements set by AZDA but also go above and beyond to preserve and protect the natural environment and its inhabitants. SRWHMG's dedication is evident in every aspect of our work, from emergency responses to community engagement and environmental stewardship. All of us at SRWHMG want to express our gratitude for the ability to manage the Salt River wild horses humanely through our important programs. The continuation of our programs is important to keep the herd in balance and the public happy as well as collecting more science on PZP. We look forward to continuing our partnership with the AZDA and cooperation with the Forest Service.



**SALT RIVER WILD HORSES  
ARE A PUBLIC ASSET,  
WITH HIGH ECONOMIC, ECOLOGICAL  
AND CULTURAL VALUE**

