Santa Catalina Bighorn Sheep Reintroduction Project

December 18 through 31, 2014

BRIEFING

The following is a summary of Catalina Bighorn Sheep Reintroduction activities on the Coronado National Forest. This project status update covers the period from December 18 through 31, 2014.

LINKS

For project background and previously-reported information on project events, including photos and videos, as well as meeting notes and minutes please visit www.azgfd.gov/catalinabighorn.

Additional project information can be obtained by visiting the Arizona Game and Fish Department Facebook page at www.facebook.com/CatalinaBighorns, the Arizona Game and Fish Department webpage at www.azgfd.gov/catalinabighorn, the Arizona Desert Bighorn Sheep Society webpage at www.adbss.org or by visiting the Catalina Bighorn Advisory Committee webpage at www.catalinabighornrestoration.org. This update is a public document and information in it can be used for any purpose.

TO SUBSCRIBE

If you would like to receive project updates as they are published please send your email address to jsacco@azgfd.gov.

LAMBS: THREE NEW ADDITIONS!!

During this reporting period, 3 new lambs were observed. See the Research Field Notes Section below for further details.

RESEARCH FIELD NOTES

On December 27, 2014, during research field observations, an Arizona Game and Fish Department researcher monitoring the Catalina bighorn sheep observed 2 lambs amongst a group of 5 bighorn sheep (4 ewes and 1 ram). The lambs appeared to be about 1 week old. The biologist maintained a long distance between himself and the sheep to keep disturbance to a minimum and was unable to read the ear tags necessary to identify to which ewes the lambs belonged.

On December 28, 2014, a Department researcher observed a new lamb with ewe ID #436 and was able to capture video of the lamb playing and jumping on the ewe's back. Video is available here.

Because females with new lambs are especially sensitive to disturbance, there are trail restrictions in place inside the Bighorn Sheep Management Area to minimize any negative impacts from human disturbance on the sheep. Both trailhead notices and volunteers on the trail have been reminding hikers of the potential

adverse impacts to the sheep caused by dogs or by people hiking more than 400 feet off-trail within the bighorn sheep recovery area during lambing season. For additional information, please visit the U.S. Forest Service webpage at www.fs.usda.gov/coronado/.

MORTALITIES

During this reporting period there was one sheep mortality. On December 23, 2014, Arizona Game and Fish Department biologists confirmed the death of sheep 447, a ewe from the Plomosa Mountains released in the Catalinas on November 21, 2014. The sheep's collar last transmitted its location on December 9, 2014. On December 11, 2014, a very high frequency (VHF) mortality signal transmitted from 447's collar; however, the collar did not transmit a GPS mortality alert, leading biologists to believe that the collar may have been malfunctioning. On December 12, 2014, a fixed winged aircraft (Cessna) equipped with telemetry equipment was used to help determine the location of the sheep. Over the next several days, multiple attempts were made on foot to find the sheep. During this period, biologists encountered several obstacles, including torrential rain, and observed a rockslide avalanche in a small canyon that had been used earlier in the day to access the area.

Due to the rugged, steep, and rocky canyons, the telemetry signal was difficult to pinpoint and access. Once biologists found the sheep's location, they discovered the GPS transmitter in a narrow and rocky drainage, and it was buried and covered by litter. The combination of these factors impeded the timely discovery of the sheep. Upon investigation of sheep 447, biologists confirmed that the cause of death was predation by mountain lion. The location of sheep 447 was less than ½ a mile away from the kill location for sheep 435, which was confirmed to have been killed by a lion on December 7, 2014. The proximity of the kill sites to one another in both time and space indicates that the same lion may have preyed on both sheep. Biologists also discovered a white-tailed deer carcass cached nearby. The lion has not yet been located.

CAUSE OF DEATH INVESTIGATION FOR EWE #643

The following reports the results of an investigation into the cause of death for ewe ID #643, an adult ewe from the Plomosa Mountains released into the Catalina Mountains on November 18, 2013. On November 12, 2014, two biologists located the intact carcass of ewe #643. The carcass was lying on its right side, there were no wounds on the body, and a small amount of blood beneath the nostrils was observed. During the necropsy (similar to an autopsy), the biologists noted a dark bruised area on the left arch of the ribs. Inside the abdomen, they found a large clot of blood that appeared to be connected to a ruptured mass on the liver. The lung tissue near the backbone was mottled and darker red than the lung tissue near the breast bone.

Tissue samples were collected by the biologists and sent to a veterinary diagnostic laboratory for analysis. While some abnormalities were probably masked by the natural decay of the tissues, the pathologist diagnosed an infection of the liver based on the presence of white blood cells, sick liver cells and hemorrhage. It appears that ewe #643 had a pocket of infection on her liver that ruptured, causing death from septic shock. It is impossible to determine how her liver became infected. The abnormality on her body wall suggests external trauma, which may have penetrated her abdomen or caused severe blunt trauma that then allowed bacteria from the intestinal tract to establish an infection. The original external trauma may have healed while infection developed inside. No lesions were detected in the other submitted tissues (heart, lungs, spleen, and kidney). Additional testing was done for mycoplasma pneumonia, bluetongue, and epizootic hemorrhagic diseases; none of those disease agents were detected.

CURRENT POPULATION STATUS

As of December 31, 2014, 40 collared sheep are known to be alive.

COMMUNICATION AND COORDINATION

The next written briefing will be provided on January 16, 2015.

CONTACT

Mark Hart is the Public Information Officer for this project and can be reached at (520) 628-5376.

PHOTO

Below are two photos of sheep ID #454. The adult ewe was captured in the Plomosa Mountains east of Quartzite and then released into the Catalina Mountains on November 21, 2014. Photos taken by a U.S. Forest Service subcontractor. Photo credit: Sunny Swick.