

Catalina Bighorn Sheep Reintroduction Project February 17, 2014 – March 2, 2014

# LAMBS

Last week biologists observed another lamb, bringing the total to 3 lambs observed this season. Biologists observed the lambs from a great distance to reduce disturbance to the mothers and their young. Lambing is the most critical stage in the life cycle, and it is for this reason that there are trail restrictions in place inside the bighorn sheep management area. 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/.

## **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 February 17 to March 2, 2014. For project background and previously-reported information on project events, please see the earlier project status updates available at: <a href="http://www.azgfd.gov/catalinabighorn">www.azgfd.gov/catalinabighorn</a>.

Additional project information can be obtained by visiting the Arizona Game and Fish Department Facebook page at <u>https://www.facebook.com/azgafd#!/CatalinaBighorns</u>, the Arizona Game and Fish Department webpage at http://<u>www.azgfd.gov/catalinabighorn</u>, the Arizona Desert Bighorn Sheep Society webpage at http://www.adbss.org or by visiting the Catalina Bighorn Advisory Committee webpage at <u>http://www.catalinabighornrestoration.org/</u>. 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 to jsacco@azgfd.gov.

### **CURRENT POPULATION STATUS**

The original release of 31 sheep consisted of 21 adult females or ewes, three yearling/juvenile ewes, five adult males or rams, and two yearling/juvenile rams. Thirty of the released sheep were outfitted with satellite GPS collars to provide managers with up-to-date information to help make adaptive, data-driven decisions. As of March 2, 2014, 17 of the 30 collared sheep were known to be alive on the mountains.

To date there have been thirteen bighorn sheep mortalities. Eleven of the sheep were killed by mountain lions, one died as the result of predation by an unidentified cat such as a small mountain lion or a bobcat, and another died from myopathy. To date, two of the offending lions have been removed. To follow are

the details of each mortality, the result of the investigation, and management actions. Additionally, the habitat evaluation map showing corresponding block numbers for the project area is included below (see Figure 1).

On February 21, 2014, a one and a half year old ram (ID #59) was found in Habitat Block 39 (fair). This area is characterized by scrub oak desert grassland and steep slopes with fair visibility. The investigator observed a mountain lion as he approached the site, and upon examination of the site, determined that the mortality was due to mountain lion predation. Pursuit of the lion was initiated the following morning and for the next few days, however, efforts to locate the lion were unsuccessful.

On February 18, 2014, an adult ram (ID #51) was found in Habitat Block 59 (fair). This area is characterized by steep rugged slopes and cliffs with fair visibility. Investigators were delayed in getting to the location due to the difficult terrain. Upon examination of the sheep's skull, they determined that the cause of the mortality was mountain lion predation. The advanced stages of decomposition on the sheep suggested that the lion that killed the sheep had not returned to the site for some time and therefore pursuit was not initiated.

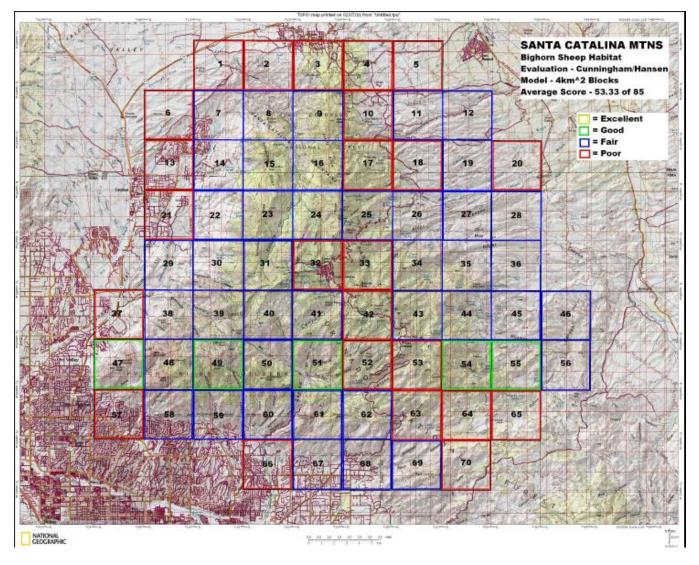


Figure 1. Cunningham Hansen Habitat Evaluation Map.

# **COMMUNICATION AND COORDINATION**

The next written briefing will be provided on March 7, 2014.

# **PROJECT PERSONNEL**

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

### **RESEARCH PROJECT FIELD NOTES**

Research biologists have been on the ground documenting changes in sheep group size and composition. In recent weeks, several solitary sheep have banded together in larger groups. The formation of such bands is encouraging news for this project as past research on bighorn sheep has demonstrated that they are much safer if they join up in larger, more compact groups because many eyes and ears helps to dilute predation risk to any one in particular with the increased vigilance. Additionally, as noted above, some of the sheep now have lambs with them, and biologists anticipate that several more ewes will become mothers in the near future.

## **OTHER REMARKS**

### <u>Habitat</u>

During the course of these updates, we have focused on the interactions between sheep and mountain lions. The goal of the project is to have a sustainable population of bighorn sheep that live in balance with mountain lions in a naturally functioning ecosystem. This is a lofty goal that embodies the essence of reintroduction efforts to restore a missing component to the ecosystem in an effort to make it whole. Critical to accomplishing a successful restoration is having habitat available that supports the needs of the species being reintroduced. The cause of the extirpation of bighorns from the Catalinas in the early 1990s was largely speculative, yet many believed that one of the causes was the unnatural build up of brush due to fire suppression activities. Dense underbrush may provide predators with an advantage by allowing them to stalk in on their prey without detection. Several reports following the Bullock and Aspen fires suggested they had helped to remove the brushy component and opened up the habitat so that sheep would be able to better elude predation. For instance, one study indicated that 24% of the available sheep habitat had burned and that habitats would be more suitable for sheep post-fire than they were in the early 1990s. Although the Bullock and Aspen fires in 2002 and 2003 helped to open some of the landscape, as time passes, natural fuels are once again beginning to accumulate in some areas where past fire intensity may have been low. In addition, there is a large area of sheep habitat that has not burned in several years, and biologists believe this area would benefit from the reintroduction of fire.