We flew a bighorn medicating flight in the Silver Bell Mountains once again today. It was the 5th such flight. We captured 6 sheep today, all were recaptures/remedications. We are not finding many newly blind sheep, neither from the air or on the ground while radiotracking (we are spending all our time medicating known blind sheep and not doing any searching for new blind sheep).

During the flight we also found (from the air) a dead sheep being fed upon by a Golden Eagle. This dead 2.5 year-old ewe was blind when we captured and medicated her on 12-22-03. Cause of death was related to her blindness. Another radiocollared ewe also died this weekend. Both skulls were delivered to the UA Veterinary Diagnostic Lab and will be returned to the Department after they are examined.

Mycoplasma-caused Keratoconjunctivitis
To date, we have documented 26 blind sheep in this population of 75-100. The focal point has been around the mine area where one of the first group of goats were removed. Sheep in the Watermans and on Ragged Top appear healthy so far. If these become infected, we may be in for Round 2 or 3. Most of these sheep have been captured and medicated repeatedly; these 26 sheep have been the subject of 56 captures/medications. As long as they are blind we are capturing and medicating approximately once per week. Some have recovered completely and others on the road to recovery. One animal was treated 5 times and another treated 4 times.

The following is a summary of the fate and status of the 26 known-blind sheep:
9 are still blind
7 are now fully recovered
5 are dead
5 fate unknown

Contagious Ecthyma (CE)
Since we first saw Contagious Ecthyma (CE) in the Silver Bells (a month after the goats showed up), it is sweeping systematically through the population. We now have 9 marked animals with clinical signs of contagious ecthyma, a few of these are recovering. My own CE lesions are subsiding and are now just red pimples. There are also 3 other sheep with CE in the population that are not marked because they have their eyesight and can not be captured without a netgun (and there is no need to catch them because there is nothing we can do for them once they have CE). This disease usually runs its course in 4-6 weeks and the intense swelling and scabbing on the nose and muzzle go away. The only significant mortality reported is when a secondary bacterial infection becomes established in the mouth lesions or if newborn lambs have it they may not be
able to nurse. Biopsies of the muzzle scabs of the first 2 animals showed that these animals do have a heavy load of bacterial infection in the scabs. Also, CE is sweeping through this previously unexposed bighorn herd just as this year's lambs are being born. We are finding many ewes that show signs of lactation, but have no lambs with them. We have found 2 still-born lambs -- no doubt the stress of these 2 diseases and the blindness is severely impacting this year's reproduction.

We have the helicopter in the region through Jan. 23rd. We will be conducting another medication flight on January 23rd from noon to dark. This will probably be our last such flight -- the currently-blind animals will be dead or recovered soon after that. Individual animals can be medicated by darting if needed. We will need to conduct a complete coverage survey after we are sure the disease has run its course. This should take place in mid-February unless ground observations tell us we still have blind sheep. When blind they are very difficult to see because they do not move when the helicopter flies over them. A survey while we still have blind, immobile, solitary sheep will not give us an accurate evaluation of the population-level effects of this epizootic.

I spoke with Ken Carothers yesterday and he relayed that George Johnson is going to reimburse the Department for the medication and helicopter time for this effort. I am currently talking to our financial people to see how to make that happen.

JIM

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