



Kevin Clark/The Idaho Statesman

FLYING FLEECE: Tim Ferguson, a wildlife technician with the Idaho Fish and Game Department, holds onto two female bighorn sheep flown in from the Big Creek drainage area to the Caldwell Airport. The sheep will be studied by F&G in Caldwell through the

summer in an attempt to find out why the herd's newborn have such a high mortality rate. Last year all 10 newborn sheep monitored in the Big Creek drainage died within a month of birth. The Big Creek drainage flows into the Middle Fork of the Salmon River.

BABY LAMB HAMS IT UP



Katherine Jones/The Idaho Statesman

This male bighorn lamb isn't shy. He was born two weeks ago at the Caine Veterinary Center in Caldwell. This lamb and others are expected to be infected by their mothers with a deadly virus affecting the herd.

By Stephen Stuebner
The Idaho Statesman

CALDWELL — DNA "fingerprinting" research confirms that Salmon River bighorn sheep carry a unique strain of *pasturella hemolytica*, a virus that causes pneumonia and death, officials said Thursday.

Dr. Alan Ward, University of Idaho veterinary microbiologist in Caldwell, said the DNA fingerprints mean that the bighorn sheep contracted the virus on their own, and not from domestic sheep.

The virus has been killing scores of wild sheep and lambs in subherds within the Frank Church-River of No Return Wilderness, an expanse of 2.3 million acres in Central Idaho.

Researchers find Salmon River bighorns carry a rare virus

Two years ago, officials were concerned that the Pine Creek herd may have been contaminated by domestic sheep grazing nearby. Ward said the tests done on bighorn sheep in the Salmon River herd reveal two new strains of the virus, specific to bighorn sheep.

"Here we have a strain of *pasturella* that's never been seen before. That's exciting information," he said.

Sixteen other strains had been isolated previously, all from domestic sheep.

The DNA fingerprinting tests bring researchers a small step closer to isolating stress factors that cause Salmon River bighorn lambs to die soon after birth and have caused a 50 percent decline in the once-estimated herd of 3,000 animals.

Three male bighorn lambs, born to ewes flown to Caldwell from Central Idaho last month, will undergo similar tests as they grow sick in the coming weeks, said Dr. Dave Hunter, state veterinarian. The lambs are expected to acquire the disease from their mothers through normal contact. DNA fingerprinting should provide clues as to the exact stress factors causing *pasturella hemolytica* to kill the animals.

"*Pasturella* is the final nail in the

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coffin, but we need to know that's causing it," Hunter said Thursday as he put two bouncing males on display at the Caine Veterinary Center.

If the lambs get sick as expected, veterinarians will use antibiotics to try to keep them alive, he said.

Suspected stress factors causing the critters to contract the virus include:

- The drought's impact on herd populations and food vitality.

- Diseases spread from other wild animals such as moose, elk, deer or antelope.

- Non-native plants.

- Natural cycles — the Morgan Creek subherd of about 200 animals has "nose-dived" in 30-year cycles to fewer than 50 in the

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1930s, early 1960s, and possibly the 1990s.

- Contact with domestic sheep in isolated pockets where the two graze in common areas.

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