Lamb Production And Survival Of A Bighorn Sheep Population In Central Idaho.

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Abstract: Long-term monitoring allows for the establishment of baseline data over extended time periods and gives biologists the opportunity to quantify data into predictive management strategies. The Rocky Mountain bighorn sheep (*Ovis canadensis*) population in the Big Creek drainage of the Frank Church-River of No Return Wilderness in Central Idaho experienced a sudden population decline from 1988 to 1990 as the result of a *Pasteurella* related die-off. Extensive monitoring of the population during that period provided information on lamb production and survival during the die-off phase of a *Pasteurella* die-off. A replicate survey of lamb production and survival was conducted during the summer of 2001 to assess the recovery stage of the die-off. The average number of lambs:100 ewes was established for three different lambing areas across three different time periods. These were compared to similar data collected during the summers of 1989 and 1990. Chi-square analysis of this data showed significant differences between total 1989-90 ratios and 2001 ratios but not between lambing areas in each of the die-off and 2001 periods. Results show a high survival ratio through the beginning of August 2001(avg. 86:100) compared with a significantly lower ratio in August 1989 (avg. 19:100) and August, 1990 (avg. 12:100). Thirteen years of lamb:ewe ratio data, collected between 1985 and 2000, were regressed against precipitation. Lamb recruitment through the following spring was positively correlated with March precipitation.