

## MOUNTAIN SHEEP HARVEST REGULATIONS IN UTAH 1990

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Abstract: Utah has both Rocky Mountain and the desert subspecies of mountain sheep. However, Rocky Mountain bighorn have never been legally hunted in modern times in Utah. Current desert bighorn regulations stipulate that any ram is legal, although taking older rams is encouraged. As a result, no arrests have occurred due to illegal bighorn kills. The "any ram" regulation appears to function as biologically sound because hunter preference is for the oldest of rams and mortality is assumed to be more compensatory than additive. Utah hunters and wildlife enforcement authorities are satisfied with the current regulation. When a Rocky Mountain bighorn hunt does occur, chances are good it will be an "any ram" regulation.

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BACKGROUND

Two subspecies of mountain sheep (*Ovis canadensis canadensis* and *Ovis canadensis nelsoni*) inhabit remote, wilderness areas of Utah. Desert bighorns inhabit the canyon, slickrock, and mesa country of the Colorado River system in southern Utah. The Rocky Mountain bighorns occur sparsely in isolated, northern mountain habitats. Perhaps as many as 800 desert bighorns occur in 6 separate herds across southern Utah. Utah's desert bighorn sheep are native, never having been pushed to extirpation, although several herds have vanished. The Utah Division of Wildlife Resources' (UDWR) goals for management of bighorn sheep include providing recreational hunting opportunities to the public. Consequently, legal hunting of the desert subspecies dates back to 1967. Since 1967, as many as 25 permits have been issued annually, though the average is about 10. Last year (1989), a total of 11 permits were issued. As such, bighorn hunting amounts to less than 0.01% of the licensed hunting activity in the state.

Approximately 400 Rocky Mountain bighorn sheep compromise 8 northern Utah herds. All native Rocky Mountain bighorn sheep were extirpated in the mid-1970s (Smith et al., 1988); hence, these sheep are non-natives, imported from sources outside the state. Reintroduction efforts, first begun in 1966, have been moderately successful. The resultant herds are isolated from one another and occupy habitats of low-to-moderate quality. Population numbers are still low and considered vulnerable to extinction via stochastic events. For these reasons, the UDWR does not currently conduct hunting of the Rocky Mountain bighorn subspecies. The current program emphasizes restoration of Rocky Mountain bighorn to former ranges and careful management of those herds already

re-established. When hunting of the Rocky Mountain race is instituted, it will most likely mirror current desert bighorn regulations. There has never been a legal Rocky Mountain bighorn hunt in Utah in modern times.

#### CURRENT REGULATIONS

From the inception of legal hunting for desert bighorns in 1967, until 1985, sport hunting was limited to mature rams only. A mature ram was defined as either 7 years-of-age or scoring at least 144 Boone and Crockett (B&C) points. Age was to be determined via horn annuli counts, with compensation estimated for broomed and broken tips. Estimating a B&C score (a composite score comprised of 7 separate measurements) in the field is obviously quite error-prone, particularly the closer a ram gets to the 144 minimum. Consequently, "several hunters just barely squeaked by" (J. Guymon, UDWR, Wildlife Biologist, pers. commun.), and a few did not. In the 17-year period (1967-1985) that these regulations were in force, 2 illegal kills occurred by well-meaning hunters who overestimated the target ram's actual age or B&C score. Subsequently, sheep were seized, fines were issued, and once-in-a-lifetime hunters became bitterly disappointed. Due to the difficulty of determining age and score afield, UDWR adopted new, simpler regulations in 1985. The new regulations read "Any ram will be legal; however, permittees are encouraged to take trophy size rams." Additionally, it is unlawful for any person to apply for or possess a bighorn sheep permit who has previously obtained a bighorn sheep permit in Utah. The UDWR also requires that hunters have at least a 15X scope mounted on their rifles to assist ram identification and aging. This "any ram" regulation is presently under consideration for adoption in Arizona and Nevada as well.

#### BIOLOGICAL/GEOMETRIC RATIONALE

Presently, desert bighorn harvests are considered to be well below a level which could adversely impact the herds from which they are taken. Due to the extreme difficulty of censusing desert sheep populations, annual censuses are assumed to account for only 30-50% of the actual population present in each area. For example, on the Escalante Bighorn Unit Survey this year, 100 sheep were seen. Biologists estimate that the actual number is probably between 150 and 200. Nonetheless, only 2 permits will be issued, which is quite conservative. The other desert bighorn herd quotas are equally conservative. Therefore, no adverse effects are predicted upon herd population dynamics.

Bighorn hunters are primarily interested in trophies, and try to take the largest ram possible. Data since 1985 indicate that this is indeed the case—with the small rams being about 3/4-curl. Consequently, the UDWR feels that this regulation results in mortality which is most likely to be compensatory rather than additive.

#### ENFORCEMENT/PROSECUTION

There have been no arrests for violation of the current regulations.

## INTERPRETATION TO HUNTERS IN THE FIELD

In spite of clearly-defined regulations, hunters are still required to attend a 3-hour indoctrination meeting prior to the opening day of the bighorn hunt. During this time, hunters are taught to identify the most mature rams and encouraged to focus their hunting efforts on this age group. Sharp, clear photos are used for illustration.

Utah has developed an objective bighorn ram harvest regulation which better serves the hunter and the state agency than the formerly-used subjective regulations. The regulation allows for the taking of young and sexually mature rams from the herd; but in practice, hunters generally harvest older rams. In this way, mortality is considered to be compensatory rather than additive. Hunters select the trophy they prefer and are very supportive of the present law.

## LITERATURE CITED

- Geist, V. 1971. Mountain sheep, a study in behavior and evolution. Univ. Chicago Press, Chicago and London. 371 pp.
- Smith, T. S., J. T. Flinders and D. W. Olsen. 1988. Status and distribution of Rocky Mountain bighorn sheep in Utah. Proc. Bienn. Symp. North. Wild Sheep and Goat Council. 6:5-12

