

## Status Of Oregon Rocky Mountain Goats

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*Abstract:* Mountain goats (*Oreamnos americanus*) were reintroduced to the Wallowa Mountains of northeast Oregon in 1950. This population increased to an estimated 40 animals by 1966. Hunting seasons from 1965-68 resulted in the harvest of 20 animals. This herd stagnated and low productivity resulted in low population numbers through 1985. Three supplemental transplants from 2 sources totaling 33 animals were conducted in 1985, 1986, and 1989. A dramatic increase in kid productivity starting in 1990 has resulted in a 2001 population estimate of 200 mountain goats. The Elkhorn herd started in 1983 with a total of 21 animals from 3 sources and now numbers an estimated 170 goats. Limited hunting was initiated in 1997 and 4 tags were authorized in 2001 with nearly 4,800 applicants for these permits. Sixteen goats were trapped in the Elkhorn Mountains in July, 2000 and moved to the Hat Point Plateau on the western rim of Hells Canyon.

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Mountain goats are indigenous to Oregon but were extirpated during or prior to European settlement (ODFW 2001). Elliot (1901) references a mountain goat specimen from the early 1800's obtained from "mountains adjacent to Brant Island, Columbia River, Oregon." Grant (1905) discussed the taxonomy of mountain goats and reports: "The first specimens of the mountain goat to be described, came from the Cascade Mountains on the Columbia River in Oregon and of course now stand as the type of *Oreamnos montanus*, having been first described by Rafinesque in 1817". Other early reports by Richardson (1829), Townsend (1839), Suckley and Gibbs (1860), Grinnell and Fannin (1890), Hornaday (1906), and Miller (1924); coupled with recent archaeological findings reported by Randolph and Dahlstrom (1977), Leonhardy and Thompson (1991) demonstrate mountain goats were indigenous to northeast Oregon and the northern portion of the Oregon Cascades.

Mountain goats have been actively managed in Oregon following

reintroduction efforts initiated in 1950. Although mountain goat numbers were low and static through the 1980's, populations have increased dramatically during the past decade and current status of Oregon populations are discussed in this paper.

### SURVEY TECHNIQUES

From 1962 through 1982, goats were counted and classified annually from fixed-wing aircraft during mid to late summer. Summer ground surveys were occasionally incorporated with aerial surveys from 1983-1995. Since 1996 ground surveys have become the predominant method of surveying goats in the Wallowa and Elkhorn Mountains. Fixed-wing flights are currently used to compliment ground surveys and search for goats in habitats adjacent to core use areas. Though time consuming, ground surveys allow observation of a greater number of animals and provide more accurate classification information. Count and classification surveys are conducted from late July through September, and goats are

generally classified as adults or kids. However, in the Wallowa Mountains yearling animals are classified when possible to provide information on annual recruitment.

## **POPULATION STATUS**

### **Wallowa Mountains**

The Wallowa mountain goat herd originated from 4 separate releases (Coggins et al, 1996). The population grew from the original transplant of 5 animals in 1950 to a minimum population of 30 animals by 1966. The population declined following 4 years of hunting in the mid 1960's, and remained static with low kid recruitment through 1989. During this time period total count from annual surveys did not exceed 32 animals (Table 1). Additional transplants in 1985, 1986, and 1989 totaled 33 animals (Coggins et al, 1996)). Late summer kid to adult ratios increased following the 1989 release and have remained moderately high with a mean of 39 kids/100 adults since 1990 (Table 1). Observations of nannies with twins have not been uncommon. The 2001 population estimate for the Wallowa Mountains was 200 goats. Mountain goats continue to pioneer habitats adjacent to traditional core use areas, establishing subpopulations in vacant areas of the Wallowa's.

### **Elkhorn Mountains**

The Elkhorn Mountains encompass approximately 126 km<sup>2</sup>, and lie west of Baker City, Oregon. Mountain goats were established from 3 releases during 1983-86 totaling 21 goats (Coggins et al, 1996). Late summer kid to adult ratios have been good since 1987 with a mean of 46 kids/100 adults for the 1987-2001 period (Table 2). This population has increased rapidly and continues to pioneer vacant habitat within the Elkhorn Mountains.

The 2001 population estimate was 170 mountain goats. During July 2000, 16 goats were captured and relocated to a new site in Hells Canyon, Oregon.

### **Hells Canyon**

In July 2000, 16 goats were transplanted from the Elkhorn Mountains to the Hat Point Plateau on the western rim of Hells Canyon. Monitoring of radio collared individuals and ground observations indicate most individuals remained near the release site. Kid production during 2001 was of concern since the transplant contained only yearling males. However, summer ground surveys during 2001 documented 6 new kids. Hells Canyon 2001 population estimate was 20 goats.

### **Dispersal**

Small numbers of mountain goats have recently been observed in mountain ranges 30-110 km from the Wallowa and Elkhorn Mountains. Single goats have periodically been observed in the Wenaha-Tucannon area 110 km north of the Wallowa's. The Vinegar Hill and Strawberry Mountain ranges lie 30 km and 70 km, respectively, southwest of the Elkhorn Mountains. In each area 3-6 goats have been observed on a regular basis and are believed to be year round residents. This natural dispersal demonstrates the ability of mountain goats to pioneer available habitat in nearby ranges.

## **HUNTER HARVEST**

Regulated hunting of mountain goats was initiated in the Wallowa Mountains in 1965 and continued annually through 1968. A total of 23 tags were issued and 20 animals, including 13 males and 7 females, were harvested. During that time period the goat population declined and hunting was stopped following the 1968

Table 1. Late summer count and classification information for Mountain Goats in the Wallowa Mountains, Oregon, USA, 1962-2001.

| Year | Total Count | Adults  | Kids | Kids/100 Adults <sup>a</sup> |
|------|-------------|---------|------|------------------------------|
| 1962 | 12          | 8       | 4    | 50                           |
| 1963 | --          | --      | --   | --                           |
| 1964 | 26          | 18      | 8    | 44                           |
| 1965 | --          | --      | --   | --                           |
| 1966 | 29          | 18      | 11   | 61                           |
| 1967 | 21          | 17      | 4    | 24                           |
| 1968 | 12          | 9       | 2    | 22                           |
| 1969 | 10          | 8       | 2    | 25                           |
| 1970 | 17          | 12      | 5    | 42                           |
| 1971 | 22          | 17      | 5    | 29                           |
| 1972 | 18          | 17      | 1    | 6                            |
| 1973 | 18          | 16      | 2    | 13                           |
| 1974 | 15          | 13      | 2    | 15                           |
| 1975 | 20          | 17      | 3    | 18                           |
| 1976 | 19          | 17      | 2    | 12                           |
| 1977 | 17          | 11      | 5    | 45                           |
| 1978 | 22          | 18      | 4    | 22                           |
| 1979 | 24          | 20      | 4    | 20                           |
| 1980 | 32          | 23      | 8    | 33                           |
| 1981 | 19          | 14      | 5    | 36                           |
| 1982 | 15          | 13      | 2    | 15                           |
| 1983 | 12          | 11      | 1    | 9                            |
| 1984 | 10          | 8       | 2    | 25                           |
| 1985 | 17          | 12      | 2    | 17                           |
| 1986 | --          | --      | --   | --                           |
| 1987 | 26          | 20      | 6    | 14                           |
| 1988 | 8           | 8       | 0    | 0                            |
| 1989 | 7           | 8       | 1    | 13                           |
| 1990 | 31          | 23      | 8    | 35                           |
| 1991 | 28          | 21      | 7    | 33                           |
| 1992 | 25          | 19      | 6    | 32                           |
| 1993 | 37          | 28      | 9    | 32                           |
| 1994 | 51          | 38 (b)  | 13   | 34                           |
| 1995 | 68          | 51 (c)  | 17   | 33                           |
| 1996 | 73          | 47 (a)  | 26   | 55                           |
| 1997 | 106         | 75 (d)  | 27   | 36                           |
| 1998 | 101         | 66 (e)  | 26   | 39                           |
| 1999 | 126         | 88 (f)  | 38   | 43                           |
| 2000 | 163         | 113 (g) | 50   | 44                           |
| 2001 | 162         | 119 (h) | 43   | 36                           |

<sup>a</sup>Yearlings are included in adult ratio.

Table 2. Late summer count and classification information for Mountain Goats in the Elkhorn Mountains, Oregon, USA, 1992-2001.

| Year | Total Count | Adults | Kids | Kids/100 Adults <sup>a</sup> |
|------|-------------|--------|------|------------------------------|
| 1992 | 31          | 21     | 10   | 48                           |
| 1993 | 25          | 15     | 10   | 67                           |
| 1994 | 47          | 28     | 19   | 68                           |
| 1995 | 26          | 20     | 6    | 30                           |
| 1996 | 75          | 50     | 25   | 50                           |
| 1997 | 88          | 68     | 20   | 29                           |
| 1998 | 97          | 64     | 33   | 52                           |
| 1999 | 113         | 84     | 29   | 35                           |
| 2000 | 92          | 64     | 28   | 44                           |
| 2001 | 156         | 102    | 54   | 53                           |

<sup>a</sup>Yearlings are included in adult ratio.

Table 3. Hunter harvest of mountain goats taken in Oregon, USA, 1965-2001.

| Hunt Year | Area             | Tags Issued | Harvest |        |
|-----------|------------------|-------------|---------|--------|
|           |                  |             | Male    | Female |
| 1965      | Hurricane Divide | 5           | 4       | 1      |
| 1966      | Hurricane Divide | 5           | 3       | 2      |
| 1967      | Hurricane Divide | 5           | 3       | 2      |
| 1968      | Hurricane Divide | 8           | 3       | 2      |
| 1997      | Hurricane Divide | 1           | 1       | 0      |
| 1997      | Elkhorn Mts.     | 1           | 1       | 0      |
| 1998      | Hurricane Divide | 1           | 1       | 0      |
| 1998      | Elkhorn Mts.     | 2           | 2       | 0      |
| 1999      | Hurricane Divide | 1           | 0       | 1      |
| 1999      | Elkhorn Mts.     | 2           | 2       | 0      |
| 2000      | Hurricane Divide | 1           | 1       | 0      |
| 2000      | Elkhorn Mts.     | 2           | 2       | 0      |
| 2001      | Hurricane Divide | 2           | 2       | 0      |
| 2001      | Elkhorn Mts.     | 2           | 2       | 0      |
| Total     |                  | 38          | 27      | 8      |

season. From 1969 to 1996 no legal harvest of mountain goats occurred in Oregon. In 1997 the goat season reopened in the Willowa and Elkhorn Mountains with one goat tag issued in each area. Annual hunting seasons continue with 2 tags issued in each area during 2001, and 4800 persons applying for these tags. As of October 2001, 35 goats have been legally harvested in Oregon (Table 3).

Oregon law currently allows an individual to hold only one mountain goat tag in a lifetime, and tags are not available to nonresidents. In 2001 the cost of a resident hunting license was \$17.50 and \$91.50 for a goat tag. All tags are issued through a public drawing. The bag limit is currently one mountain goat, and hunters are required to attend a mandatory pre-hunt orientation class, to encourage the

harvest of male goats. All hunters are required to check out through the local ODFW field office within 72 hours of completing their hunt. Currently the goat season occurs during mid September and runs a length of 12 days.

At this time goat hunting opportunities in Oregon are very limited. Tag quotas are applied to small goat hunting areas to ensure an even distribution of harvest and avoid overharvest in areas of easy access. Harvest is focused on adult males to protect adult females. Hunter orientation classes are mandatory to help tag holders distinguish between male and female goats. Oregon's interim mountain goat management plan describes the following criteria to determine hunt areas and tag numbers:

1. The herd must have 5 continuous years of population survey data prior to initiation of harvest.
2. The population within a hunt area must be equal to or greater than 50 animals, and comprise a minimum of 15% males.
3. If the number of observed goats from annual surveys drops below 50 animals for 3 consecutive years no tags will be issued for that hunt area. If annual surveys indicate the number of males is below 15% of the hunt area population, tag numbers shall be reduced.
4. No greater than 5% of a population will be available for annual harvest, and no greater than half of that harvest should comprise adult females. If more than 50% of the annual harvest is made up of adult females then the following years tag quota shall be reduced.

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