STATUS OF MOUFLONIFORM (URIAL) SHEEP IN ASIA

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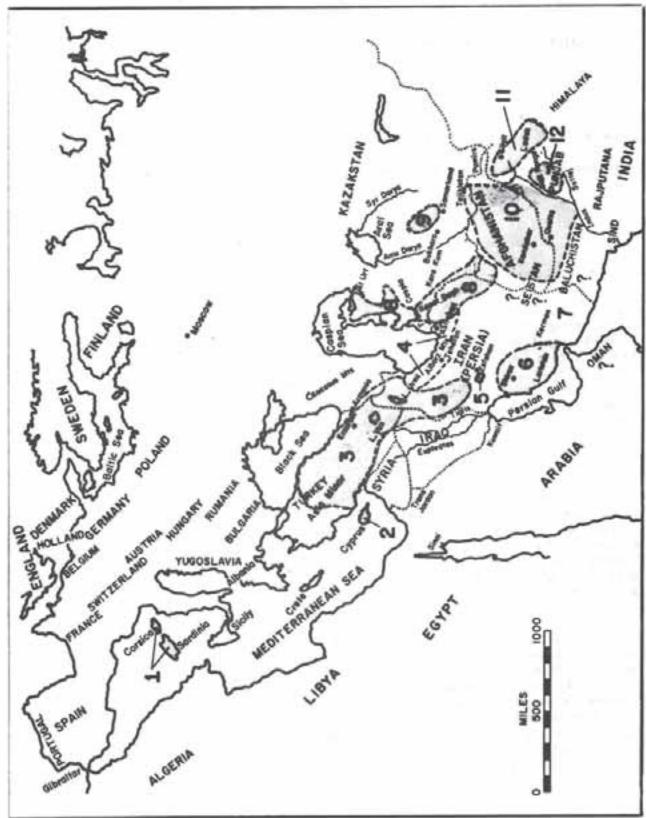
ABSTRACT

Moufloniforms, consisting of 1 species and 9 subspecies in Asia, range from Cyprus through the montane regions of Anatolia, Iraq, Iran, Soviet Turkmenistan, Afghanistan, northwestern India, and Oman. Human encroachments on wild sheep habitats through livestock overgrazing and farming and subsistance overhunting have greatly reduced their numbers. Remnant herds remain in Turkey, Oman, Iraq, Pakistan, Afghanistan, and northwestern India. Significant populations of Asiatic moufloniforms exist only in Soviet Turkmenistan and Iran. Some 200 sheep exist on the island of Cyprus.

INTRODUCTION

Moufloniforms are an anatomically and chromosomally diverse group of wild sheep constituting one species (Ovis orientalis) (Valdez 1978). Valdez (1982) recognized 9 subspecies in Asia. They are distributed from Europe (restricted to the Mediterranean islands of Corsica and Sardinia) to Cyprus, Iraq, Iran, Oman, Soviet Turkmenistan, Afghanistan, Pakistan, and northwestern India (Fig. 1). Males weigh from 55 kg (120 lbs.) to 90 kg (200 lbs.) with shoulder heights of 64 cm (25 in.) to 99 cm (39 in.). Valdez (1982) described the variation in external anatomy as follows:

All possess a clearly delineated white rump patch, males in the winter coat possess a neck ruff (length of neck ruff hair up to 9 inches) restricted to the front of the neck and brisket, and both sexes usually exhibit white legs from the knee to the hoofs. The rump patch is restricted below the base of the tail and the back of the hind quarters. However, they are variable in horn curl shape, presence or absence of a bib, neck ruff, and saddle patch and neck ruff. The bib, neck ruff, and saddle patch are phenotypic characters present only in the winter coat of males.



Distribution of moufloniforms. (1) European mouflon, (2) Cyprian mouflon, (3) Armedian mouflon, red sheep hybrid, (5) Esfahan mouflon, (6) Laristan mouflon, (7) Kerman hybrid, (8) Transcaspian Severtozov's urial, (10) Afghan urial, (11) Ladak urial, (12) Punjab urial. (4) Alborz urial, (9)

Body color varies from chestnut brown grading to blackish in the European mouflon to reddish buff in eastern subspecies; desert forms approach a straw brown color. Punjab and Ladak urials sometimes possess a two-colored saddle patch, black in front followed by a white area, but some may possess only a white saddle patch or none. European, Cyprian and Armenian mouflon ewes commonly lack horns. Basal circumferences of male horns do not exceed 13 inches.

Humankind developed its major animal husbandry advances in the midst of Asiatic wild sheep habitat. Wild sheep have been subjected to the influence of man's often deleterious agricultural practices for thousands of years. Hence it is not surprising that wild sheep have not fared well in many areas of Asia. Humankind's spiralling population growth and the resultant demands on the earth's resources including overgrazing by domestic sheep — and goats and subsistance overhunting spelled doom for many moufloniform populations.

In many areas, moufloniform survive only as remnant populations. Their high fecundity, resistance to livestock disease, and their ability to benefit from agricultural practices by feeding on cultivated crops enable them to survive where most other wild ungulates would have been extirpated.

Only in Iran and the Soviet Union did Asiatic moufloniforms greatly increase in modern times. The progressive conservation programs of the two countries resulted in the establishment of wildlife refuges in prime moufloniform habitat (Firouz 1971). In one national park alone in northeastern Iran there were about 10,000 Transcaspian urials. After the recent revolution in Iran, the national parks and wildlife refuges remain intact and as a consequence wild sheep continue to exist in large numbers. The establishment of large refuges with an adequate protective system can prevent their extirpation over large areas of Asia, but considering the worsening ecomonic and political situation of Southwest Asia, it is unlikely that tracts of land will be set aside for wildlife refuges.

STATUS OF MOUFLONIFORM POPULATIONS

The following discussion is a cursory overview of the status of populations of moufloniforms by subspecies in Asia. Refer to Figure 1 for approximate distributions of moufloniform sheep.

Cyprian Mouflon (0.o. gmelini)

Armenian mouflon formerly occurred through most of Anatolia, northeastern Iraq, southern Armenia in the USSR and northwestern Iran through at least the Central Zagros in western Iran. Only in Iran do large numbers still exist. On Kabudan Island in Lake Rezaiyeh (Urmia) there are an estimated 1,000 wild sheep while substantial numbers occur in scattered populations on the mainland. In Anatolia, van Haaften (1974) reported only 100 animals In 1970 in the Konya-Bozdag Reserve 270 km south of Ankara. They have been extirpated through most of their former distribution outside of Iran. Their status in the Soviet Union is unknown.

Transcaspian Urial (0. o. arkal)

The \mathcal{T} ranscaspian urial (photo) occurs in large numbers in northeastern Iran and the Soviet Union in Turkmen SSR. There were a minimum of 20,000 in Iran up to 1980 and several thousand occur in the USSR in the Kopt Dagh Mountains.

Severtzov's Urial (O. o. severtzovi)

Severtzov's urial occurs only in the Soviet Union northwest of Samarkand, Turkmen SSR. There are protected populations in nature reserves but population numbers are unavailable.

Laristan Mouflon (O. o. laristanica)

Within the Bamou National Park north of the city of Shiraz in southwestern Iran there were an estimated 2,500 animals in 1980. Several thousand occur in scattered populations throughout southwestern Iran.

Afghan Urial (O. o. cycloceros)

Only remnant populations remain in Pakistan and Afghanistan. Schaller (1977) reported occasional sightings in Khambu Hill in the Kirthar National Park and the Geshk area south of Quetta, Pakistan. For the Baluchistan Province of Pakistan the population is estimated at 2500 to 3000 (Roberts, these proceedings). Fortunately, large numbers exist in southeastern Turkmen SSR in nature reserves such as the Badchyz Wildlife Reserve.

Punjab Urial (O. o. punjabiensis)

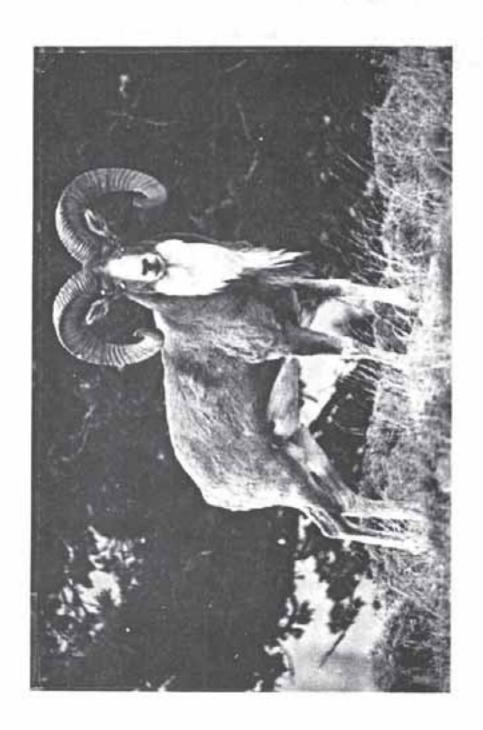
This subspecies was once common in the Kala Chitta and Salt ranges of the Punjab region in India. Schaller (1977) estimates a world population of no more than 2,000 animals, lower numbers yet are reported by Roberts (these proceedings).

Ladak Urial (O. o. vignei)

Schaller (1977) reported fewer than 1,000 in Pakistan and recent estimates by Roberts (these proceedings) range from 1200 to 1400. For Indian, Mallon (these proceedings) gives an estimate of 1000 to 1500 Ladak urials. This subspecies faces difficulties throughout its range in northern Pakistan and India.

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Ovis orientalis arkal (Photo by R. Valdez)

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