

A Proposal for a Pamir International Peace Park

George B. Schaller

Abstract—Wildlife surveys in the Pamir Mountains of Pakistan, Afghanistan, China, and Tajikistan revealed that Marco Polo sheep (*Ovis ammon polii*) roam back and forth across the frontiers of these countries. There has been a considerable decline of wildlife in recent years. The creation of an international peace park of about 50,000 km² (19,305 miles²) would offer the four countries one option of cooperatively protecting and managing not only Marco Polo sheep and other species but also the rangelands upon which the livelihood of local peoples depend.

Introduction

From the Pamirs, with their wide valleys and mountain chains, radiate the Kunlun, Hindu Kush, Karakoram, and Tian Shan, four of the highest and most rugged ranges on Earth. The Pamirs lie principally in Tajikistan at elevations of 3,500 to 5,000 m (11,483 to 16,404 ft) and more, but they also extend into Kyrgyzstan, China, Afghanistan, and barely south into Pakistan. The flagship species, the icon of these uplands, is the Marco Polo sheep (*Ovis ammon polii*), first noted by Marco Polo in 1273 when he commented on the “great quantities of wild sheep of huge size” after he found their long, curving horns. With their habitat harsh, remote, and difficult to access, Marco Polo sheep had by the late 1800s become the most coveted of trophies by foreign hunters—and they still retain this almost mythical aura. However, the sheep have decreased greatly in recent decades, as have other wildlife in the region, because of unsustainable hunting by local herdsman, the military, and others, and there is great need to devise some form of protection for the landscape. An international peace park is one option.

Peace Park Planning

While conducting wildlife surveys in northern Pakistan during the early 1970s, I was told that Marco Polo sheep occur only in two small areas around the Kilik and Khunjerab passes bordering China. Visiting the two sites in late 1974, I found only skulls (fig. 1); the animals, I was told, were now in China. Pakistan established the Khunjerab National Park (now 2,270 km²/876 miles²) the following year (Schaller 1977). China created the Taxkorgan Nature Reserve in 1984 along

the Pakistan border, in effect establishing a trans-boundary reserve, a designation that was formalized between China and Pakistan in 2000. I checked on the status of wildlife in the Taxkorgan Reserve during the summers of 1985 and 1986. We saw Marco Polo sheep females and young (fig. 2) but no males, and we were informed that at this season many animals are now in Afghanistan and Tajikistan. Realizing that the species could only be adequately protected and managed through trans-boundary cooperation and joint conservation initiatives, we urged “the creation of one large reserve” that encompasses the four countries and preserves the integrity of the mountain landscape (Schaller and others 1987).

At the time Afghanistan was at war and Tajikistan would soon be in turmoil, making it inadvisable to plan projects there. The idea of trans-boundary reserves was successfully applied in many parts of the world during the following years (Hamilton and others 1996; Sandwith and others 2001). The purposes of such reserves include cooperation between countries for mutual benefit, better management of joint resources, and encouragement of good neighborly relations through conservation. After nearly two decades, I resumed surveys of Marco Polo sheep, this time in Tajikistan (2003, 2005) and Afghanistan (2004). Having evaluated the situation in these four countries, I can now suggest potential borders for a Pamir International Peace Park.

Different levels of protection would apply to different areas of the peace park and include both ecological and cultural considerations: 1) strictly protected areas and other forms of reserve, 2) hunting concessions to help raise funds for conservation and the local communities, and 3) areas in which nomadic herders can maintain their traditional lives. Each country would, of course, decide on the type of zoning that would be most effective and appropriate. Such a peace park would benefit not just Marco Polo sheep, ibex (*Capra ibex*), snow leopard (*Uncia uncia*), and other species that travel across frontiers, but all plants and animals, as well as protect the environment upon which local people depend for their livelihood.

The four countries already have a scattered network of protected areas along their borders and all of these could be incorporated into a peace park. Pakistan has the Central Karakoram National Park (9,738 km²/3,760 miles²) bordering the Khunjerab National Park and both border China's Taxkorgan Reserve. In addition, Pakistan has made a major effort to provide economic incentives to communities promoting sustainable use of natural resources by, for example, sharing entrance fees to parks and trophy hunting fees. Pakistan and India might also become formal conservation partners in a peace park by adding a part of Ladakh adjoining the Line of Control (Raja 2003; see also The Himalayan Journal, vol.59, 2003). Marco Polo sheep do not occur east of Khunjerab National Park, but other mountain species, such as ibex and snow leopard, are found there.

George B. Schaller, Field Biologist and Vice President of International Conservation, Wildlife Conservation Society, Bronx Park, NY, U.S.A.

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Figure 1—The Pamirs in China, near the borders of Pakistan and Afghanistan with the skull of a male Marco Polo sheep, about 9 years old at time of death (photo by author).



Figure 2—Female Marco Polo sheep in molt with young (photo by author).

The staff of China's Taxkorgan Reserve also protects some surrounding areas. A small trophy hunting site along the Tajikistan border has recently been expanded, and there are plans to create another protected area in that region.

The Afghan Pamirs remain currently under the local control of a commander. President Hamid Karzai banned hunting in Afghanistan for 5 years in March 2005 and at the time of writing (May) is assembling an environment department. The Big Pamir Wildlife Reserve (679 km²/262 miles²) was designated in the 1970s but never legally established; it was primarily used for trophy hunting until Russia entered the country in 1979. Our 2004 survey found that the reserve still has viable wildlife populations, and we also noted two other areas, totaling 550 km² (212 miles²) that are only seldom used by Kirghiz herders and would benefit from reserve status. The rest of the 2,500 km² (965 miles²) or so of the Afghan Pamirs would need a flexible land use plan that recognizes the stewardship role of the local people.

Tajikistan has a strictly protected area, the Zorkul zapovednik (870 km²/336 miles²) along the Afghan border, though actual protection is minimal. East of Zorkul is the Murgab Company, a hunting concession of about 2,200 km² (849 miles²). It is the only area in the Tajik Pamirs that has an active guard force, privately funded, and not coincidentally the finest Marco Polo sheep population in the country. Russia built a border fence near the Tajik-China border, several kilometers within Tajikistan, leaving a no-man's-land in which Marco Polo sheep persist and move back and forth into China and Afghanistan. This strip of land requires protected status, especially from border guards who hunt wildlife for food.

As the map (fig. 3) shows, these various areas could readily be linked to create a Pamir International Peace Park of about 50,000 km² (19,305 miles²). There is need for a cooperative framework, established at an international workshop, where each country shares information, has a policy dialogue, sets priorities, agrees on principles, and, most important, decides on specific actions. These might include establishing relevant legislation, conducting basic research on wildlife and rangelands, developing joint programs to raise funds from development organizations, creating joint education and training programs, and developing compatible goals for trophy hunting and sharing the economic benefits with communities. My discussions with relevant officials in Tajikistan, Afghanistan, and China elicited positive responses with respect to the creation of a peace park; I have not visited Pakistan so far. The President of Tajikistan, Imamali Rahmanov, has approved a peace park as part of a larger plan for protected areas submitted by the State Committee on Environment and Forestry. [A four-country workshop was attended by officials in September 2006 in Urumqi, China, and the peace park idea was formally endorsed. A second workshop will be held in Dushanbe, Tajikistan, in December 2007.]

It should be noted that the Tajik National Park in the western Pamirs is not included in the proposed peace park. This large park (26,000 km²/10,039 miles²) with a land area covering 18 percent of Tajikistan, virtually lacks infrastructure, knowledge of status of wildlife, and various aspects of development essential to a functional reserve (see also Hamilton and others 1993). It deserves a major conservation effort in itself.

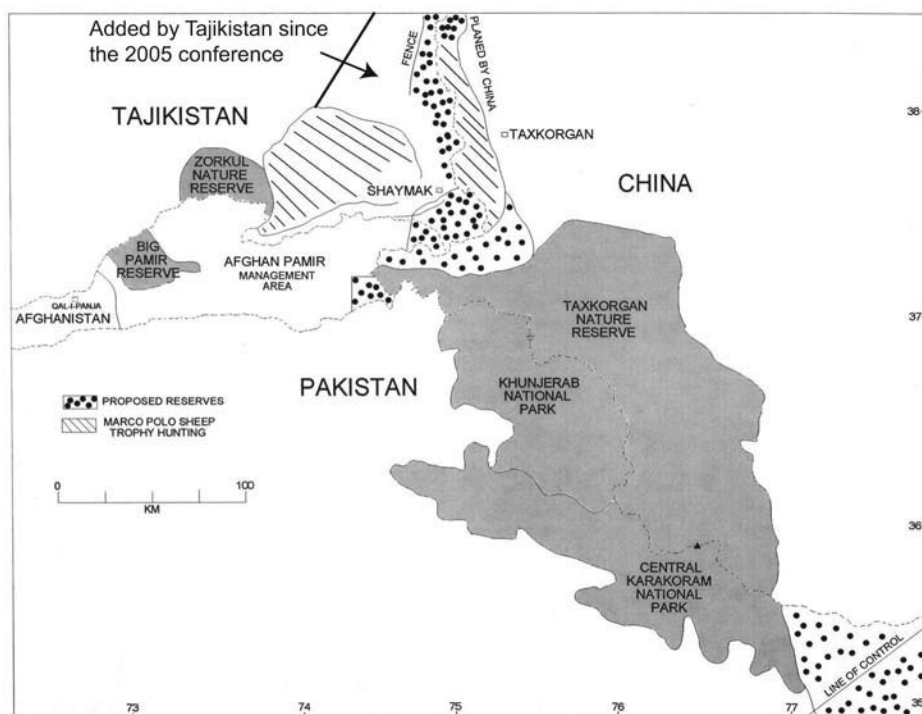


Figure 3—The proposed Pamir International Peace Park along the borders of Pakistan, China, Afghanistan, and Tajikistan, showing existing and suggested protected areas and hunting concessions. [Arrow indicates proposed reserves added since the 2005 conference.]

Marco Polo Sheep Numbers

Management of any resource requires adequate knowledge. Trophy hunters pay about U.S. \$25,000 for killing a Marco Polo sheep in Tajikistan and China and perhaps Afghanistan at some future date. The income derived from such hunts could contribute significantly to conservation and community development. However, the number of animals must be known, as must the number of trophy-sized males that can be sustainably shot in a population. Furthermore, given intermittent deep snows and droughts, both of which may lead to malnutrition, and the occasional impact of disease, sheep populations need to be monitored to detect major changes. Marco Polo sheep have so far been little studied (Fedosenko 2000; Petocz 1978). Number estimates that have been published are often outdated or of questionable accuracy, and a principal task of a peace park would be to census populations and monitor them.

In the 1960s several hundred Marco Polo sheep frequented Pakistan, but numbers dropped then precipitously due to illegal hunting, especially during the construction of the Karakoram highway, so that by the end of the 1980s only occasional small herds visited seasonally from China (Rasool 1989). I was told that as many as 120 animals are said to enter Pakistan at present. No figures for sheep numbers in China are available at this time. [Subsequent census results show a count of 2,175 Marco Polo sheep in October to November 2005 (see *Journal of Wilderness*, August 2006: 44).] In 1986, Schaller and others (1987) saw 89 sheep and estimated 150 in the corner of the Pamirs where the four countries meet.

Petocz (1978) censused Marco Polo sheep in the Afghan Pamirs in 1973 and tallied 1,260 animals, but he estimated 2,500 to include those he may have overlooked. Our survey in 2004 (fig. 4) revealed that the range of the species had contracted since the 1970s due to unrestricted hunting. We counted 624 Marco Polo sheep, a minimum figure because we did not visit every valley, and animals are known to cross the frontier seasonally into Tajikistan and China.

Various counts have been made in Tajikistan since the early 1990s but none were comprehensive. It is believed that a great decline in numbers has occurred since the 1960s. The *Action Plan on Conservation* (Republic of Tajikistan 2003) gives a total population figure of 3,000 to 5,400, and Breu and Hurni (2003) estimate 3,000 to 14,550. In June and July 2003, we censused four blocks of terrain known to have substantial sheep numbers at that season. In three blocks, totaling 937 km² (362 miles²) sheep densities varied from 0.3 to 0.5 animals/km². The fourth block comprising 800 km² (309 miles²) within the Murgab Company hunting concession had a density of 1.4 animals/km². We revisited that hunting concession in March 2005 (fig. 5), at a time of year when wildlife had concentrated low on hills to avoid deep snow, and counted 2.7 animals/km², partly in the same area we had censused in 2003. Incidentally, the concession prohibits the killing of snow leopards and brown bears, and two of the former were seen during the 2005 census.

The number of Marco Polo sheep in Kyrgyzstan is unknown. The distinction and geographic separation, if any, between the Marco Polo sheep and the so-called Tian Shan argali (*O. a. karelini*) further north, remains obscure.



Figure 4—The Little Pamir, Afghanistan, looking south toward the Pakistan border. Our expedition yaks are in the foreground (photo by author).



Figure 5—The southern Pamirs in Tajikistan with a herd of male Marco Polo sheep (photo by author).

Conclusion

There is considerable interest in preserving the ecological integrity of the Pamirs and in promoting development programs there. For example, WWF-Pakistan promoted the idea of a “Pamir International Conservancy” at a conference in 2003, the Aga Khan Foundation in Kabul proposed a program entitled “Pamir Conservation: Pamir Integrated Development” in 2004, and Fitzherbert and others (2003) endorsed the peace park idea. My surveys in the four countries and personal contacts contribute to these preliminary ideas by providing a specific, immediate, and limited goal that would advance the conservation process in a critical area through the creation of a Pamir International Peace Park. The area would also qualify as a Biosphere Reserve. The need now is to transform the concept into action.

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