

The Last Stronghold: Cheetah in Iran

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Introduction:

Once distributed from the Indian subcontinent through Afghanistan, Turkmenistan and Iran to the Arabian Peninsula and Syria, the Asiatic cheetah (*Acinonyx jubatus venaticus*) is now one of the most endangered members of the family Felidae in the world. The last physical evidence of the cheetah in India was of three shot in 1947 by the ruler of the then Korea state. Since then, the cheetah rapidly disappeared from most of its range (Nowell & Jackson, 1996). Over the past 20 years, Iran has been the last stronghold for the Asiatic cheetah, known in Iran as *yuz*, although there have been occasional reports of cheetahs across the border in Pakistan.

Background in Iran:

Before World War II, the cheetah population was estimated to be around 400, ranging in almost all of the steppes and desert areas of the eastern half of the country and some western terrains near the Iraqi border (Harrington, 1971), but the advent of the jeep after the war marked the beginning of a decrease of this animal, largely through slaughter of their essential prey species, the gazelle (Lay, 1967). As a result, the cheetah population declined greatly in number. In 1956, the former Iranian Game Council declared the gazelle as protected by law and the cheetah too, in 1959. The gazelle population recovered in many areas and so did the cheetah. Cheetah sightings increased in different localities, particularly inside the gazelle habitats, revealing a remarkable resurgence of its population and the efficacy of conservational measures. In the late 1970s, the cheetah population was estimated to be 200-300 for the whole of the country (Firouz, 1976), while some other experts believing it as an over-estimation noted an approximate number of 100, including 30 cheetahs for Khosh Yeilagh area (Joslin, 1984), where cheetah sighting was so common (e.g. in two cases in 1970 and 1973, 13 and 9 animals were seen just during a couple of hours). The cheetah range appeared to include all the desert areas of the eastern half of the country which consists of vast expanses of largely unpopulated terrains.

In 1979, the country witnessed a revolution, which interrupted wildlife conservation for a few years. So many areas were occupied by livestock and the flat plains and steppes became the field of manoeuvre for armed 4WD vehicles and motorbikes chasing desert species, such as Persian gazelle *Gazella subgutturosa*, Jebeer gazelle *Gazella bennettii*, onager *Equus hemionus onager*, and also the cheetah. Gazelles declined in many areas, so the cheetahs had to move toward the foothills and mountainous habitats to avoid human persecution. On the other hand, because of the remarkable reduction in gazelle numbers, the cheetahs had to look for a new food source, wild sheep *Ovis orientalis* and wild goat *Capra aegagrus*, which, in their mountain habitat, had not suffered the same pressures as the gazelles. Khosh Yeilagh PA, which was once considered the best cheetah habitat in Asia, was devastated and the last cheetahs were observed in 1983. The cheetah disappeared from many of its former ranges and was limited to some remote areas with a reliable prey population and relative safety.

Present Status:

Today the Iranian cheetah is one of the most endangered felids in the world. Its population is estimated to be around 50-60 restricted to the main desert areas around Dasht-e-Kavir at the eastern half of the country:

1. Ariz&Bafq PA: Bordering the city of Bafq, eastern Yazd province is one of the most important cheetah reserves, with an area of 250,000 ha. The area has large numbers of wild sheep, wild goat and Jebeer gazelle. Persian leopard *Panthera pardus saxicolor*, the largest subspecies occurs in relative high numbers. It is estimated that there are at least 10 cheetahs in the area, and because of the size of the region; the cheetah density is fairly high compared with the other cheetah reserves. Unfortunately, because of high conflict between humans and the cheetah, two tragedies took place during the past years; in 1994 two cubs were killed and the third captured (kept in Pardisan Park in Tehran as the only captive Asiatic cheetah in the world, called Marita-cover photo of Cat News_28- but died on Dec 23, 2003). Also, in June 2003 three two month old cubs were burned by a local herder.
2. Daranjir WR: Some 100 km northeast of the city of Yazd with an area of 150,000 ha. Due to protective measures, the region has recently been improved and herds of Jebeer gazelle, wild sheep and wild goat can be observed. It is estimated that the area is home of around 7-10

- cheetahs. In 2002, camera traps twice photographed a mother accompanied by two yearling cubs, in August and November.
3. Naybandan WR: 180 km south of Tabas, Yazd province, is the largest reserve in Iran with 1.5 million ha. Naybandan has recently been given legal protection and is known today to hold the highest population of the Iranian cheetah - at least 15. A fairly low population of Jebeer gazelle and also wild sheep and wild goat inhabit the area. Furthermore, the striped hyena (*Hyaena hyaena*) is the only large carnivore present in the area, with a high population. Naybandan has been a traditional passage for drug smugglers from the Iran's eastern border with Afghanistan, so that fear of being caught by the smugglers inhibited poachers. Thus the cheetah could survive without protective measurements in the area. At present, preventive activities by the Iranian Army on the Afghan border has limited smugglers' activities while conservation has been enhanced remarkably by the Iranian Department of the Environment (DOE) in recent years.
 4. Kavir NP: Some 50 km southeast of the capital, Tehran, with 670,000 ha. Once called the "Iran's Little Africa", Kavir was the habitat of almost all the Iranian desert species, but after the revolution in 1979 human persecution led to eradication of the onager and a decline in the Persian gazelle to a few dozen. It is estimated that there is a population of less than 10 cheetahs in the area, often seen in the valleys and dried river beds looking for wild sheep and Jebeer gazelle.
 5. Khar Turan NP: Southeast of Shahrud, Semnan province, with an area of 1.4 million ha. Khar Turan is the second largest reserve in Iran, and because of its large size and difficult desert situation, most of its species were able to save themselves against poachers during the critical period of the early 1980s. The area has one of the richest diversities in its mammal species in the country, and has the largest population of onager in Iran as well as a good number of both species of gazelles, wild sheep and wild goat, which ensure cheetah survival. The area is estimated to be home of 12-15 cheetahs and occasional sighting of the animal with cubs indicates a growing population.

The above five areas are fragmented reserves located in the deserts of the eastern half of the country, but it does not seem that cheetah range is merely limited to these five. Since August 2002, the Iranian Cheetah Society (ICS) has begun to carry out continuous surveys to establish cheetah existence in four more areas in Esfahan and Yazd provinces between Kavir NP in the north and Dareh Anjir to the south with a total area of more than one million ha:

1. Abbas Abad PA: A desert habitat with an area of more than 400,000 ha, located near the city of Naein. The reserve is a habitat for wild sheep, wild goat and a small population of Jebeer gazelle. Apart from some skins in the past decade, 4 cheetah tracks were found since October 2002 till November 2003 in the area.
2. Ardestan FA: With an area of more than 400,000 ha just southern Kavir NP, the region has been supposed to be a possible cheetah habitat and ICS has gathered so many reports belonging to the past decade, including a reliable report on a few animals killed 3 years ago to prevent livestock harvest. Last July, ICS received a report that a cheetah killed some small livestock in the area, but surveys revealed that the animal in charge was a lynx.
3. Desert FA of Northern Karkas Mountain: With around 200,000 ha the area has the lowest chance of being cheetah habitat, particularly due to its very low number of prey species. A reported observation of a cheetah among tamarix jungle in mid-1990s could not be so reliable. However, Mooteh WR, the best gazelle habitat in the country and a possible cheetah area from past times is only a few dozen km to the west.
4. Siahkuh PA: Recently established to protect by law, the 200,000 ha reserve is located near the city of Ardakan. Fairly good populations of prey species occur in the area and there have been a few reliable reports on cheetah sightings, including a mother with two cubs.

Moreover, recently in Miandasht WR, near the northeastern border of Khar Turan, a group of three (mother with two yearling cubs) were filmed. It was more than a decade since cheetah was reported in the area.

Today, the Iranian cheetah is on the verge of extinction. The fastest land animal in the world runs toward a gloomy future unless humans help it to win the race.

Since Sep 2001, the joint project, "Conservation of the Asiatic Cheetah and its Associated Biota" has been launched by the Iranian DOE and UNDP/GEF in which the New York-based Wildlife Conservation Society (WCS), IUCN Cat Specialist Group (CSG) and Cheetah Conservation Fund (CCF) have been involved.

The Iranian Cheetah Society (ICS), an Iranian, non-profit NGO established in Aug 2001, works to save the last Iranian cheetahs. The society was founded by three young enthusiastic students of natural resources. With their five years experience in studying the cheetah before its official establishment, ICS has made remarkable progress in its activities to save the cheetah in Iran in the past two years. ICS is based in Tehran and has 300 members from all over the country. Its main goals are:

- Public awareness about the cheetah and its associated biota through education, mainly in local communities
- Reducing human-cheetah conflict by implementing socio-economic programmes
- Biological surveys to learn more about the Iranian cheetah
- Conservation of the cheetah in its natural habitat, particularly with public participation.

ICS has focused a remarkable part of its activities on education, mainly on juveniles and youth, both at local community level, where people are in direct conflict with the cheetah and should co-exist with the cheetah, and also in cities where informing people about this invaluable wealth is so necessary. On the other hand, since less is known about the Asiatic cheetah compared with its African cousin, it needs to be studied in the wild and ICS has paid lots of attention and energy to this. Recent surveys have shown that one of the cheetah's main prey species is wild sheep, and so a plan to study wild sheep behaviour and demography has been undertaken by ICS since winter 2002. Also, long-term surveys have been conducting on wolf and hyena as two main cheetah rivals in Iran since Dec 2001. At present, local education has the highest priority for the Iranian Cheetah Society and fundraising is the most important concern.

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Notes:

FA: Free Area

HPA: Hunting Prohibited Area

PA: Protected Area

WR: Wildlife Refuge

NP: National Park

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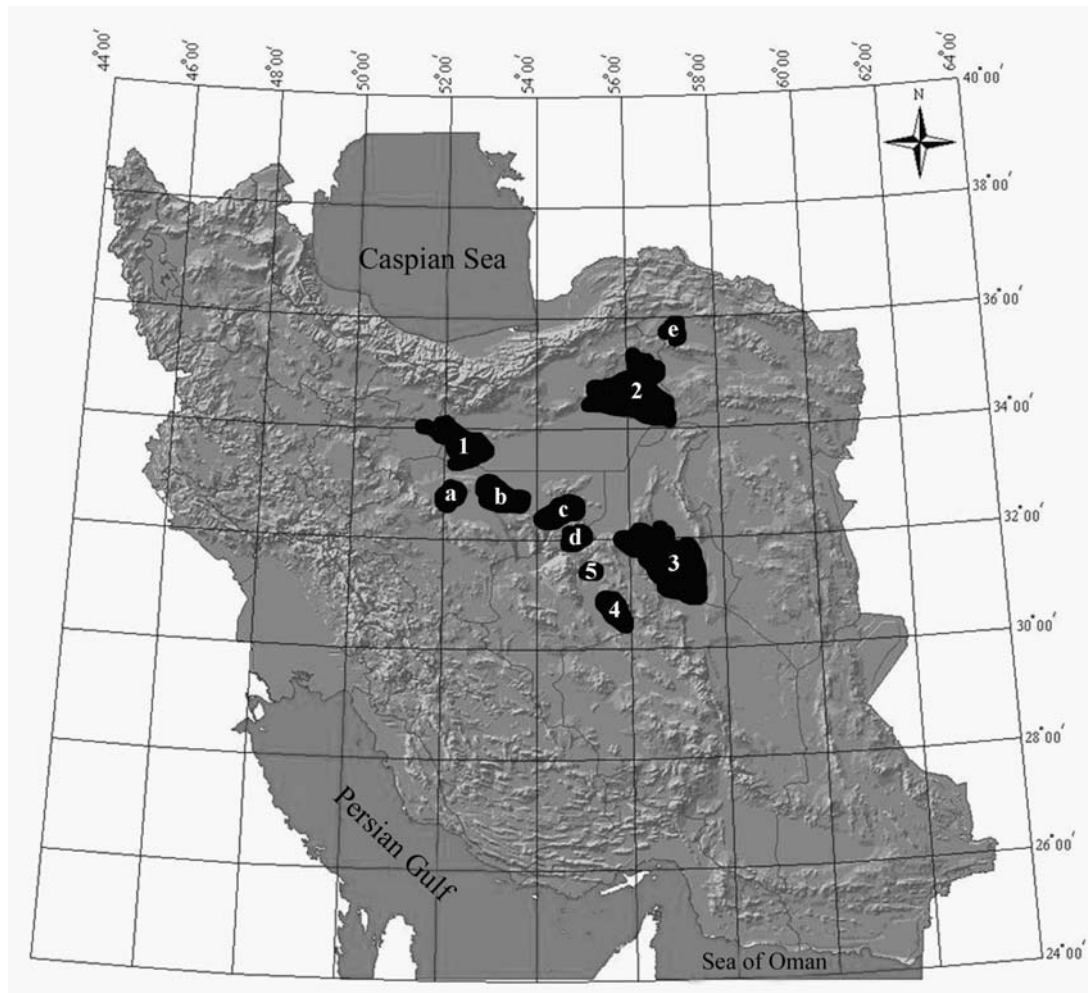


Figure1. Cheetah Distribution in Iran

Selected Areas: 1)Kavir NP, 2)Khar Turan NP, 3)Naybandan WR, 4)Bafq&Ariz PA, 5)Daranjir WR
Potential Areas: a) Desert FA of Northern Karkas Mountain, b)Ardestan FA, c)Abbas Abad PA,
d)Siahkuh PA, e)Miandasht WR. (Copyright © 2004 Iranian Cheetah Society)