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Scope(s): Global Language: English

Capra cylindricornis, Eastern Tur

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Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Chordata	Mammalia	Cetartiodactyla	Bovidae

Scientific Name: Capra cylindricornis (Blyth, 1841)

Common Name(s):

• English: Eastern Tur, East Caucasian Tur

• Spanish; Castilian: Tur oriental

• Russian: Восточнокавказский тур, Дагестанский тур

Taxonomic Notes:

It is still unclear whether or not *Capra caucasica* and *Capra cylindricornis* are two separate species (as followed here), or are a single species with geographically dependent variability, or two semi-species with morphologically intermediate, possibly hybrid population between them (Weinberg, Akkiev and Buchukuri 2010).

Assessment Information

Red List Category & Criteria: Near Threatened B1ab(iii,v) ver 3.1

Year Published: 2020

Date Assessed: November 29, 2019

Justification:

Eastern Tur is listed as Near Threatened. Its extent of occurrence (EOO) is above the threshold of 20,000 km², however the species is known from fewer than 10 locations and there is continuing decline in population size underway; it is suspected that a decline of >10% will occur over the next three generations (estimated at 21 years). Therefore, the species almost qualifies as Vulnerable under criterion B1. This is a difficult species to assess because of its unclear taxonomic status. Its range is relatively small and it is a narrow endemic regardless of its taxonomic status; observed and projected declines justify maintaining the category Near Threatened.

Previously Published Red List Assessments

2008 - Near Threatened (NT)

https://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T3795A10088954.en

1996 - Vulnerable (VU)

1994 - Rare (R)

Geographic Range

Range Description:

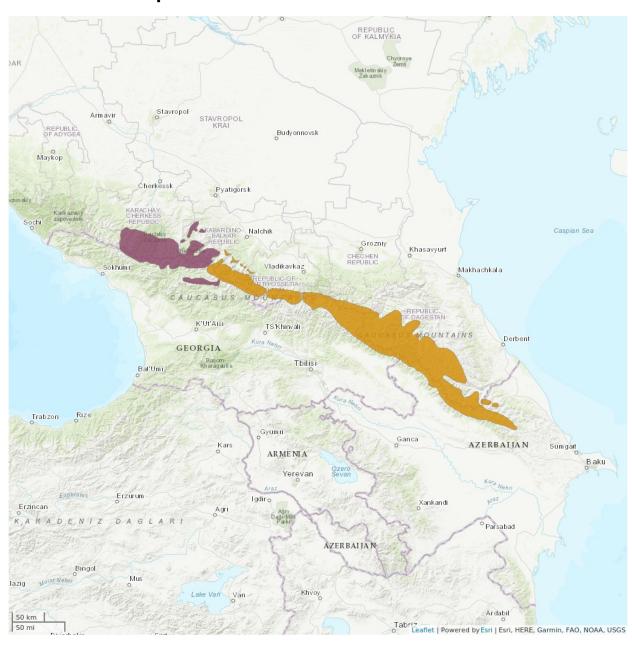
This species is endemic to the central and eastern part of the Great Caucasus along the borders of

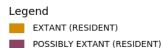
Russia, Georgia and Azerbaijan between 800 and 4,000 m a.s.l. Its range on the north slope begins around the headwaters of the Baksan river east of Mount Elbrus (about 43°10′N, 42°30′E), or slightly more eastwards, at the headwaters of Bezengi river (43°03′N, 43°01′E) (Weinberg, Akkiev and Buchukuri 2010), which approximately corresponds to the headwaters of Inguri river on the south slope in Georgia, and stretches for some 500 km eastwards along both slopes of the Greater Caucasus up to eastern offshoots of Gyumyushlyu mountain of Babadagh mountain massif (40°57′N, 48°29′E). The range is much wider on the northern slope than on the southern slope due the peculiarities of topography. It is more or less continuous with separate locations mainly in the easternmost part of the range in Azerbaijan. Possible geographic barriers are major river valleys cutting across the range and hampering gene flow, like Ardon river valley in the narrowest part of the range in North Ossetia (42°45′N, 43°59′E), or Terek river valley in North Ossetia and Georgia (42°38′N, 44°38′E), and depressions between separate mountain massifs in Azerbaijan. The distribution is widest (up to 60 km) in Daghestan (Magomedov *et al.* 2001) because of the Caucasus Side Range being widest there, while being most narrow in North Ossetia (*ca* 12 km) (Weinberg 2002c).

Country Occurrence:

Native, Extant (resident): Azerbaijan; Georgia; Russian Federation

Distribution Map





Compiled by:

IUCN (International Union for Conservation of Nature) 2020







Population

Following a period of increase between the 1940s and 1960s numbers have since declined. In the late 1960s and early 1970s the total numbers were estimated to be between 25,000 to 30,000 animals (Kuliyev 1981, Ravkin 1975), but by the late 1980s had declined by >30% to between 18,000 and 20,000 head, of which ca 2,000 occurred in Georgia (Weinberg et al. 1997). The latest data suggest that there are no fewer than 3,000 animals in Georgia (Kopaliani and Gurielidze 2009; Georgian Biodiversity Database 2013, Ilia State University 2014). In Azerbaijan, in mid-1940s about 2,000 Tur had been harvested annually (Vereshchagin 1947) and if these data are accurate, at least 20,000 animals should have inhabited the country at that time. There was a decline since then. In 2006-2007, 5,300 Tur have been counted on the southern slope, and 1,000 more could occur on the northern slope (Guliyev, Weinberg and Askerov 2009). Since then, an overall census has not been carried out in Azerbaijan, but results of surveys conducted in summer 2013 came up with estimates of more than 13,000 animals (Yarovenko and Weinberg 2013), which might be too optimistic. Final assessment for nowadays could be the following: total population in Azerbaijan hardly exceeds 10,000, more likely it is about 7,000-8,000 animals. Of these, less than 2,000 occurred in Zakatala and about 1,300 in Ilisu Nature Reserves in 2018 (A. Muradov, pers. comm). Magomedov et al. (2001) suggested that there were up to 20,000 Tur in Daghestan alone, but this may be too optimistic, and later estimates are 15,000 tur (Babaev et al. 2017). In Russia, besides Daghestan, there are up to 4,000 tur in North Ossetia, including about 1,000 Tur in North-Ossetian Nature Reserve (Weinberg 2018), about 8,000 animals in Kabardino-Balkaria (Akkiev 2018). Even though, the taxonomic status of this latter population remains unclear and maybe just a half of this number belongs to C. cylindricornis inhabiting the Kabardino-Balkarian Highland Nature Reserve, the rest being hybrid (see Weinberg, Akkiev and Buchukuri 2010). At least some 2,000 Eastern Tur occur in Chechnya and Ingushetia. Currently, Eastern Tur numbers definitely grew since the beginning of 2000s in the Central Caucasus, after local conflicts stopped and political and social situation stabilized in the countries involved, and the total numbers are about 31,000-32,000 animals now.

Current Population Trend: Stable

Habitat and Ecology (see Appendix for additional information)

Eastern tur inhabit elevations between 1,000 and 4,000 m a.s.l. Although the mountains in their range can reach 5,000 m asl, Tur seldom rise above 3,500 m asl. They live in forests found up to 2,600 m, and in subalpine and alpine meadows and rocky talus slopes at higher elevations. Animals avoid thick forests on gentle slopes, but stay readily in open forests growing on steep precipitous slopes. During winter, the proportion of animals dwelling below timberline increases (Veinberg 1984). On average, 34% of Eastern tur lived in the forest throughout the year in Georgia (Ekvtimishvili 1952). Some forest-dwelling populations in Azerbaijan may be completely (Vereshchagin 1938), or more possibly semi-isolated from subalpine and alpine zones. In summer, adult males typically inhabit higher altitudes than females and young (Veinberg 1984). During the harsh winters, tur concentrate on sunny slopes; during the summer, animals expand their distribution to slopes of different exposures (Veinberg 1984, Zalikhanov 1967, Magomedov*et al.* 2001). Seasonal migrations rarely exceed 5 km (Veinberg 1984, Zalikhanov 1967). Eastern tur consume 256 plant species in Daghestan (Abdurakhamanov 1977).

Animals form mixed, adult male-female groups in November, just prior to rut. These disband by mid-January or the beginning of February at the latest and adult males and females live separately until the next rutting season (Veinberg 1984). Females give birth predominantly to just one kid (Veinberg 1984).

Proportion of kids may exceed 20% in Azerbaijan (Kuliyev 1981) and Daghestan (Magomedovet al. 2001), but reach only 16.5% in North Ossetia, while yearlings make above 7% there (Veinberg 1984). Sex ratio favours males in protected populations (Weinberg 2002a). Mortality is about 60% in juveniles (Veinberg 1984), and about 20% in animals 1-9 years old, being higher in males than females (Magomedov et al. 2001). Yearly changes of overall group size depends on the reproductive cycle. Rugged and precipitous terrain reduces group size (Veinberg 1984, Weinberg 2004). Mean group size also correlates with population density (Magomedovet al. 2001). Overall mean group size is below 10 in North Ossetia (Veinberg 1984), but reached ca. 78 in Azerbaijan (Kuliyev 1981). Average population density varies from 0.15 to 17 animals/km² (Weinberg 2002c). Eastern Tur serve as prey to wolf Canis lupus and lynx Lynx lynx, and are also killed by snow avalanches. However, the significance of these factors differs along the species ranges. Snow avalanches cause most natural deaths among adult animals in the Central Caucasus (Veinberg 1984, Zalikhanov 1967) but not so in less snowy Daghestan, where wolf is the main natural enemy (Magomedov et al. 2001). Golden eagles Aquila chrysaetos and, supposedly, bearded vulture Gypaetus barbatus hunt newborn and small juveniles (Magomedov et al. 2001, Veinberg 1984). Eastern Tur coexist with Caucasus chamois Rupicapra r. caucasica on the northern slope in the Central Caucasus and on the southern slope in the Eastern Caucasus (mainly Azerbaijan), but the latter is much less numerous; in Daghestan and Chechnya, it is sympatric with the wild goat Capra aegagrus, which dominates in the forest but seldom rises above timberline (Weinberg 1999).

Systems: Terrestrial

Use and Trade

This species is hunted for food by local human communities.

Threats (see Appendix for additional information)

Poaching and livestock grazing are the major threats to the Eastern Tur, combined with the impacts of severe winters. Poaching is probably the most significant cause of the recently observed serious declines. Livestock grazing results in competition for resources, especially with domestic sheep and goats. The species is also impacted by habitat loss and degradation (NACRES 2017, Weinberg *et al.* 1997).

Conservation Actions (see Appendix for additional information)

It is included in Category III in the Georgian Red List (Decree 2014) and thus legally protected there. Hunting, including foreign trophy hunting, is forbidden in Georgia, but is permitted under license in Azerbaijan and Russia (Daghestan, North Ossetia). This species of Tur is found in several Nature Reserves: about 4,000 in Kabardino-Balkarian (Russia), 1,000 in North-Ossetian (Russia), 700 in Lagodekhi (Georgia), and 2,000 in Zakatala (Azerbaijan). Other protected areas with this species include Alania National Park (Russia), Tushetian and Kazbegi Strict Nature Reserves (Georgia), and Ilisu Nature Reserve with Kakh Sanctuary and Ismailly Nature Reserve together with a sanctuary of the same name, and the newly founded Shakhdagh National Park (Azerbaijan). Strangely enough, there are no nature reserves or national parks in Daghestan, the principal area of the species range harboring the largest part of the population.

Conservation measures proposed include:

- 1) create new reserves, particularly in Daghestan on the border with Georgia and Azerbaijan neighboring with Lagodekhi and Zakatala Nature Reserve respectively;
- 2) improve the effectiveness of existing protected areas for prevention poaching and human alteration of habitat;
- 3) strictly enforce protection measures outside the four-month hunting season; if controls are successful and the population responds, then
- 4) consider the possibility of increasing the annual hunting quota,
- 5) systematic population monitoring.

Credits

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Authority/Authorities: IUCN SSC Caprinae Specialist Group (wild sheep and goats)

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Appendix

Habitats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.4. Forest - Temperate	-	Suitable	Yes
3. Shrubland -> 3.4. Shrubland - Temperate	-	Suitable	Yes
4. Grassland -> 4.4. Grassland - Temperate	-	Suitable	Yes

Use and Trade

(http://www.iucnredlist.org/technical-documents/classification-schemes)

End Use	Local	National	International
Sport hunting/specimen collecting	Yes	No	No
Food - human	No	Yes	Yes

Threats

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Threat	Timing	Scope	Severity	Impact Score	
2. Agriculture & aquaculture -> 2.3. Livestock farming & ranching -> 2.3.2. Small-holder grazing, ranching or farming	Ongoing	Majority (50- 90%)	Negligible declines	Low impact: 5	
	Stresses:	1. Ecosystem str	1. Ecosystem stresses -> 1.1. Ecosystem conversion		
		1. Ecosystem str	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
5. Biological resource use -> 5.1. Hunting & trapping terrestrial animals -> 5.1.1. Intentional use (species is the target)	Ongoing	Majority (50- 90%)	Negligible declines	Low impact: 5	
	Stresses:	2. Species Stress	2. Species Stresses -> 2.1. Species mortality		
5. Biological resource use -> 5.3. Logging & wood harvesting -> 5.3.5. Motivation Unknown/Unrecorded	Ongoing	Minority (50%)	Negligible declines	Low impact: 4	
	Stresses:	1. Ecosystem str	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
11. Climate change & severe weather -> 11.3. Temperature extremes	Ongoing	Majority (50- 90%)	No decline	Low impact: 5	
	Stresses:	2. Species Stress	2. Species Stresses -> 2.1. Species mortality		

Conservation Actions in Place

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Action in Place

In-place land/water protection

Conservation sites identified: Yes, over entire range

Percentage of population protected by PAs: 21-30

Occurs in at least one protected area: Yes

In-place species management

Subject to ex-situ conservation: Yes

In-place education

Subject to recent education and awareness programmes: Yes

Conservation Actions Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Conservation Action Needed

- 1. Land/water protection -> 1.1. Site/area protection
- 2. Land/water management -> 2.1. Site/area management
- 3. Species management -> 3.1. Species management -> 3.1.1. Harvest management
- 4. Education & awareness -> 4.1. Formal education

Research Needed

(http://www.iucnredlist.org/technical-documents/classification-schemes)

Research Needed

- 1. Research -> 1.2. Population size, distribution & trends
- 1. Research -> 1.4. Harvest, use & livelihoods
- 1. Research -> 1.5. Threats
- 3. Monitoring -> 3.1. Population trends

Additional Data Fields

Distribution

Estimated extent of occurrence (EOO) (km²): 33265

Continuing decline in extent of occurrence (EOO): No

Extreme fluctuations in extent of occurrence (EOO): No

Number of Locations: 6

Distribution

Continuing decline in number of locations: No

Extreme fluctuations in the number of locations: No

Lower elevation limit (m): 800

Upper elevation limit (m): 4,000

Population

Number of mature individuals: 23,000

Continuing decline of mature individuals: No

Extreme fluctuations: No

Population severely fragmented: No

Habitats and Ecology

Continuing decline in area, extent and/or quality of habitat: Yes

Generation Length (years): 7

Movement patterns: Altitudinal Migrant

Congregatory: Congregatory (year-round)

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