

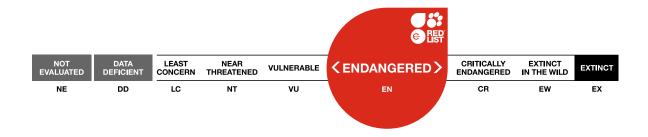
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Scope(s): Global Language: English



# Capra caucasica, Western Tur

Assessment by: Weinberg, P.



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## **Taxonomy**

| Kingdom  | Phylum   | Class Order |                 | Family  |
|----------|----------|-------------|-----------------|---------|
| Animalia | Chordata | Mammalia    | Cetartiodactyla | Bovidae |

Scientific Name: Capra caucasica Güldenstädt & Pallas, 1783

#### Common Name(s):

• English: Western Tur, Tur, West Caucasian Tur

• Spanish; Castilian: Tur occidental

• German: Westkaukasischer Steinbock

• Russian: Западнокавказский тур, Кубанский 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 a morphologically intermediate, possibly hybrid population between them (Weinberg, Akkiev and Buchukuri 2010).

#### **Assessment Information**

Red List Category & Criteria: Endangered B1ab(i,iii,v) ver 3.1

Year Published: 2020

**Date Assessed:** November 29, 2019

#### Justification:

*Capra caucasica* is listed as Endangered because its extent of occurrence is around 3,300 km<sup>2</sup>, it is known from fewer than five locations, and the species is impacted by habitat loss and degradation. Also, the number of mature individuals is not much above 2,500.

#### **Previously Published Red List Assessments**

2008 - Endangered (EN)

https://dx.doi.org/10.2305/IUCN.UK.2008.RLTS.T3794A10088217.en

1996 – Endangered (EN)

1994 - Rare (R)

# **Geographic Range**

#### Range Description:

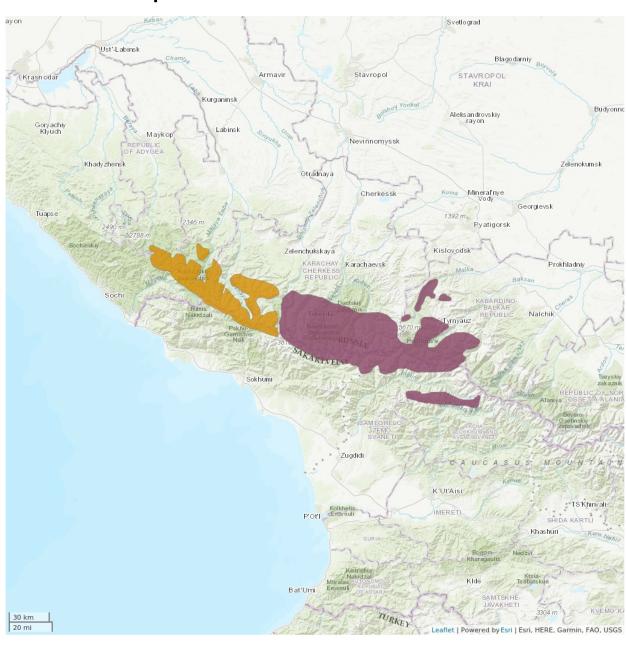
This species is endemic to the western part of the Great Caucasus Mountains in Georgia and Russia. Its range stretches in a narrow stripe from Abago Mountain massif (43°53′N, 40°08′E) (Trepet 2014) to the Large Zelenchuk River headwaters on the northern slope (approximately 43°21′N, 41°17′E) and Bzyb River headwaters on the southern slope. Slightly westwards, already in Teberda River valley animals

clearly demonstrate morphological features close to those of *Capra cylindricornis* (like faint spiraling twist of the horns), and from there to Bezengi River valley a morphologically intermediate population occurs (Weinberg, Akkiev and Buchukuri 2010). However, current genetic studies do not clarify taxonomy of Tur (Manceau*et al.* 1999, Pidancier*et al.* 2006, Zvychainaya 2008,). Thus, the present length of the range of typical *Capra caucasica* hardly exceeds 120 km. The distribution reaches its maximal width in Karachay-Cherkessia, near the headwaters of Laba and Large Zelenchuk Rivers - up to 30 km, and it is considerably wider on the northern slope than on the south slope due to topographic reasons. Consequently, the range of the Western Tur is the smallest one among all species of the genus *Capra*. Distribution of tur in general is the widest—up to 70 km—in Kabardino-Balkaria, where morphologically intermediate, possibly hybrid population occurs (Weinberg, Akkiev and Buchukuri 2010). Comparing old published information and photos with current data, there is an impression that the hybridization zone may be expanding westwards because *Capra cylindricornis* is much more numerous with much larger range, thus minimizing geographic range of Western Tur. So, a sort of absorbing hybridization may be occurring.

#### **Country Occurrence:**

Native, Extant (resident): Georgia; Russian Federation

# **Distribution Map**





#### Compiled by:

IUCN (International Union for Conservation of Nature) 2020





### **Population**

The total population estimate in the late 1980s was *ca* 12,000 animals (Weinberg *et al.* 1997), but in recent years numbers have been declining significantly (P. Weinberg, unpubl. data). In 2001, numbers were estimated at 6,000-10,000 (Krever *et al.* 2001). If considered as inhabiting only the westernmost part of the Caucasus within Krasnodar Kray, Adygea, western Karachay-Cherkessia in Russia, Abkhasia region in Georgia, then the population is small. There were about 2,000-2,500 Tur in the Caucasus Biosphere Nature Reserve until 2015 (Romashin 2001, Trepet 2014), but latest data indicate growth to more than 3,000 in 2016-2017 (Trepet 2018). In Georgia, in the 1990s, 2,500 animals were been estimated (NACRES 1996), and in the 2000s, 1,000 animals (Kopaliani and Gurielidze 2009). However, more recent data prove just about 100 Western Tur in Georgia (Gurielidze 2018). Such absolutely different figures may have been caused by varying approach to Tur taxonomy. The total population was given at 5,000-6,000 animals by Weinberg (2004), but current estimate might be closer to 4,000-5,000, not only because of decrease but also due to different taxonomic approach (Weinberg, Akkiev and Buchukuri 2010). Thus, the apparent decline from 6,000-10,000 in 2001 to 4,000-5,000 in 2019 would be non-genuine.

**Current Population Trend:** Decreasing

### Habitat and Ecology (see Appendix for additional information)

The habitat and ecology of Western and Eastern Tur do not differ noticeably. Western Tur are more influenced by high precipitation and heavy snow cover. They mostly inhabit subalpine and alpine zones between 800 and 4,000 m asl. They rarely live in forests outside of the snowy season, probably because forest in the West Caucasus is composed predominantly of fir *Abies alba* and spruce *Picea spec.* and forms closed stands. Where pine *Pinus* sp. is more abundant, Western Tur stay more readily in forests (Kotov 1968). During the region's harsh winters, tur concentrate on sunny slopes, with 30 to 80% of the animals staying below timberline; during the summer, tur expand their distribution to slopes of different exposures (Kotov 1968). Tur make diurnal and seasonal migrations up to 20 km long, but usually much less and mostly vertical (Kotov 1968)

At high population densities, summer herd size average 11.7 animals, while in winter this rises to 20.3 individuals (Kotov, 1968). Population densities in summer may reach 13 animals/km², more than tripling in wintering areas to 44 animals/km² (Kotov 1968). The sex ratio usually favors females (Kotov 1968, Romashin, 2001). Snowy winters decrease population densities significantly (Trepet 2014).

The rut lasts from mid-November until the beginning of January; birthing season takes place in May-July. Only one kid is born. One month after parturition, average proportion of kids is 13%, but yearlings only 5-9% (Kotov 1968, Romashin, 2001). Snowy winters significantly decrease juvenile proportion (Trepet 2014). Mortality and survival rates are not known but may be expected the same as in Eastern Tur *Capra cylindricornis* (Veinberg 1984, Magomedov *et al.* 2001). Hence the generation length may be estimated the same – 7 years. Western Tur are being preyed upon by wolf *Canis lupus* and lynx *Lynx lynx*, but snow avalanches cause most natural deaths in adult animals (Kotov 1968). Wolf population density depends upon tur population density but not *vice versa* (Trepet 2014). The leopard *Panthera pardus*, while formerly a major predator of *C. caucasica*, is now very rare in the Caucasus.

Western Tur coexist with Caucasus chamois Rupicapra r. caucasica, dominating over the latter

throughout the year (Kotov, 1968; Romashin, 2001). The proportions of kids in the populations are mutually negatively correlated in both species, but more markedly so in chamois (Romashin 2001). The diet of C. caucasica contains over a hundred recorded species of plants, especially grasses. In winter, animals often browse on pine, spruce and willow. Salt licks are visited mostly in the end of spring to beginning of summer (Kotov 1968).

**Systems:** Terrestrial

#### Use and Trade

This species is hunted illegally for food by local human communities.

### **Threats** (see Appendix for additional information)

Livestock grazing and poaching are the major threats to the Western 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, but since the species currently exists mainly in the Caucasus Nature Reserve, competition with livestock is minimal, and poaching is reportedly almost non-existent there now (Trepet 2018). The species is also impacted by habitat loss and degradation (Weinberg et al. 1997). Comparing old published information and photos with current data, there is an impression that hybridization zone may be expanding westwards, due to much higher numbers of the Eastern Tur, thus minimizing geographic range of Western Tur.

### **Conservation Actions** (see Appendix for additional information)

This species had never been listed in Red Data Books of the USSR and Russia, and thereby was not fully protected. Hunting under licence is permitted in some areas. It is listed as Endangered (EN) in Georgian Red List (Decree 2014) and thus legally protected. This tur is protected in the Caucasus Nature Reserve (Russia), which has played a major part in its conservation (Bannikov 1977, Trepet 2014). It has been reported from Pskhu-Gumista and Ritsa Nature Reserves in Georgia (Abkhazia), but recent surveys indicate that it visits these areas (as almost the whole of the southern slope) only seasonally. The most useful conservation measure at present would be to increase the level and effectiveness of protection in existing reserves, because organization of new ones seems improbable for the time being. Monitoring should be undertaken.

### **Credits**

Assessor(s): Weinberg, P.

Herrero, J. & Michel, S. Reviewer(s):

Contributor(s): Lortkipanidze, B.

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

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## **External Resources**

For <u>Supplementary Material</u>, and for <u>Images and External Links to Additional Information</u>, please see the Red List website.

# **Appendix**

## **Habitats**

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

| Habitat                                    | Season | Suitability | Major<br>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 |       | 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   | Minority (50%)                                      | Negligible declines                                 | Low impact: 4 |  |
|   | Stresses: | 1. Ecosystem stre                                   | 1. Ecosystem stresses -> 1.1. Ecosystem conversion  |               |  |
|   |           | 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   | Minority (50%)                                      | Negligible declines                                 | Low impact: 4 |  |
|   | Stresses: | 2. Species Stress                                   | tality  |               |  |
| 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 stre                                   | 1. Ecosystem stresses -> 1.2. Ecosystem degradation |               |  |
| 11. Climate change & severe weather -> 11.3. Temperature extremes   | Ongoing   | Minority (50%)                                      | No decline  | Low impact: 4 |  |
|   | 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 research and monitoring

Systematic monitoring scheme: Yes

In-place land/water protection

Conservation sites identified: Yes, over entire range

Percentage of population protected by PAs: 71-80

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**

- 2. Land/water management -> 2.1. Site/area management
- 3. Species management -> 3.1. Species management -> 3.1.1. Harvest management
- 4. Education & awareness -> 4.3. Awareness & communications

#### **Research Needed**

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

#### **Research Needed**

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

### **Additional Data Fields**

#### Distribution

Estimated extent of occurrence (EOO) (km2): 3344

Continuing decline in extent of occurrence (EOO): Yes

Extreme fluctuations in extent of occurrence (EOO): No

Number of Locations: 2

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: 3,000-4,000

Continuing decline of mature individuals: Yes

Population severely fragmented: No

**Habitats and Ecology** 

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

Generation Length (years): 7

Movement patterns: Full Migrant

Congregatory: Congregatory (year-round)

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