

Triturus karelinii

Region: 10

Taxonomic Authority: (Strauch, 1870)

Synonyms:

Triturus cristatus karelini (Strauch, 1870)

Common Names:

| | |
|-----------------------|---------|
| Southern Crested Newt | English |
| Südllicher Kammolch | German |
| Triton Karelina | Russian |

Order: Caudata

Family: Salamandridae

Notes on taxonomy: The exact ranges of members of the Triturus cristatus superspecies are unclear in the central Balkans.

General Information

Biome Terrestrial Freshwater Marine

Geographic Range of species:

This species ranges from the eastern side of the Balkan Peninsula (extreme southeastern Serbia, eastern Macedonia, most of Bulgaria, northeastern Greece, and European Turkey) through western and northern Turkey along the edges of the Black Sea, to the Caucasus (Russia, Georgia and Azerbaijan). There are apparently isolated populations in central Serbia, on the Crimean Peninsula (Ukraine), and in the southern Caspian region of northern Iran. The map for this species largely follows Arntzen, (2003). It can be found from sea level to elevations approaching 2,100m asl (southern Caucasus).

Habitat and Ecology Information:

It can be found in mountain forests (broad-leaved and coniferous species) and their surroundings; the forest steppe and even true steppe sites within the mountains. The majority of such populations are the relics of a former forest fauna. Within these landscapes, these populations inhabit slopes and plateau covered with meadows or xerophytic vegetation. Such habitats are especially widespread in the parts of the species' range in Crimea and southern Azerbaijan. In general, T. karelinii seems to be more resistant to xeric habitat conditions than other Triturus newts. Breeding takes place in slow moving stream pools, ponds and occasionally drainage ditches. The female deposits approximately 100 to 250 eggs; these are individually wrapped in aquatic vegetation. The species can withstand some degree of habitat modification.

Conservation Measures:

It is listed on Annex IV of the EU Natural Habitats Directive, and on Appendix II of the Bern Convention. It is listed in a number of national and sub-national Red Data Books and Lists. It is recorded from many protected areas. It is present in the largely protected Hyrcanian Forests of Iran. The species was re-introduced near Sochi Town in Sochi National Park (Russia).

Threats:

Deforestation and pollution of wetlands by agrochemicals appear to be the main threats to this species. In the former Soviet Union there is significant commercial collecting of this species for the pet trade. In Turkey there are no immediate threats to this species, as it is widespread and found in many habitat types. Within Iran it is threatened by urban sprawl along the Caspian coast and foothills, agricultural development (rice cultivation) and logging. In the Balkans, there has been loss of breeding habitats in recent years due to decreased spring rains, perhaps as a result of global climate change.

Species population information:

In West Asia it is reasonably common in suitable habitat. Within the former Soviet Union habitat loss has caused the decline of many populations (especially in the Crimea and the Caucasus).

| <u>Country Distribution</u> | Native - Presence Confirmed | Native - Presence Possible | Extinct | Reintroduced | Introduced | Vagrant |
|---------------------------------------|-------------------------------------|----------------------------|--------------------------|-------------------------------------|--------------------------|--------------------------|
| Azerbaijan | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Bulgaria | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Georgia | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Greece | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Islamic Republic of Iran | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Macedonia, the former Yugoslav Republ | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Russian Federation | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Turkey | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Ukraine | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Serbia and Montenegro | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

| <u>FAO Marine Habitats</u> | Native - Presence Confirmed | Native - Presence Possible | Extinct | Reintroduced | Introduced |
|----------------------------|-----------------------------|----------------------------|---------|--------------|------------|
|----------------------------|-----------------------------|----------------------------|---------|--------------|------------|

Major Lakes

Major Rivers

Upper Level Habitat Preferences

1.4 Forest - Temperate

Score

1

Lower Level Habitat Preferences

Broadleaf Forest

Score

1

| | | | | |
|------|--|---|--------------------------|---|
| 3.4 | Shrubland - Temperate | 1 | Conifer Forest | 2 |
| 3.8 | Shrubland - Mediterranean-type Shrubby Vegetation | 2 | Cool Crops and Towns | 9 |
| 4.4 | Grassland - Temperate | 2 | Deciduous Broadleaf Wood | 1 |
| 5.1 | Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls) | 1 | Dry Tropical Woods | 2 |
| 5.2 | Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks | 1 | Dry Woody Scrub | 2 |
| 5.4 | Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands | 2 | Fields and Woody Savanna | 2 |
| 5.5 | Wetlands (inland) - Permanent Freshwater Lakes (over 8ha) | 2 | Grass Crops | 2 |
| 5.7 | Wetlands (inland) - Permanent Freshwater Marshes/Pools (under 8ha) | 1 | Low Sparse Grassland | 2 |
| 5.8 | Wetlands (inland) - Seasonal/Intermittent Freshwater Marshes/Pools (under 8ha) | 1 | Mediterranean Scrub | 2 |
| 11.1 | Artificial/Terrestrial - Arable Land | 1 | Mixed Forest | 1 |
| 11.2 | Artificial/Terrestrial - Pastureland | 1 | Shrub Deciduous | 2 |
| 11.4 | Artificial/Terrestrial - Rural Gardens | 2 | Urban | 1 |
| 11.5 | Artificial/Terrestrial - Urban Areas | 2 | Woody Savanna | 2 |
| 12.2 | Artificial/Aquatic - Ponds (below 8ha) | 1 | | |
| 12.5 | Artificial/Aquatic - Excavations (open) | 9 | | |
| 12.7 | Artificial/Aquatic - Irrigated Land (includes irrigation channels) | 2 | | |
| 12.9 | Artificial/Aquatic - Canals and Drainage Channels, Ditches | 2 | | |
| 13 | Introduced vegetation | 2 | | |

Major threats

| Code | Description of threat | Past | Present | Future |
|---------|--|-------------------------------------|-------------------------------------|-------------------------------------|
| 1 | Habitat Loss/Degradation (human induced) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1.1 | Agriculture | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1.1.1 | Crops | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1.1.1.3 | Agro-industry farming | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1.1.4 | Livestock | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1.1.4.3 | Agro-industry | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1.3 | Extraction | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1.3.3 | Wood | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1.3.3.2 | Selective logging | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 1.3.3.3 | Clear-cutting | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3 | Harvesting (hunting/gathering) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3.5 | Cultural/scientific/leisure activities | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3.5.3 | Regional/international trade | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6 | Pollution (affecting habitat and/or species) | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6.1 | Atmospheric pollution | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6.1.1 | Global warming/oceanic warming | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6.3 | Water pollution | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6.3.1 | Agriculture | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6.3.2 | Domestic | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 6.3.3 | Commercial/Industrial | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7 | Natural disasters | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 7.1 | Drought | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9 | Intrinsic factors | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9.3 | High juvenile mortality | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 9.5 | Low densities | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |

Conservation Measures

| Code | Conservation measures | In place | Needed |
|---------|--------------------------------|-------------------------------------|-------------------------------------|
| 1 | Policy-based actions | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1.2 | Legislation | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1.2.1 | Development | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1.2.1.1 | International level | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1.2.1.2 | National level | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1.2.1.3 | Sub-national level | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1.2.2 | Implementation | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1.2.2.1 | International level | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1.2.2.2 | National level | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 1.2.2.3 | Sub-national level | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 3 | Research actions | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3.1 | Taxonomy | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3.2 | Population numbers and range | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3.3 | Biology and Ecology | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3.4 | Habitat status | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3.5 | Threats | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3.6 | Uses and harvest levels | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3.7 | Cultural relevance | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3.8 | Conservation measures | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 3.9 | Trends/Monitoring | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4 | Habitat and site-based actions | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4.1 | Maintenance/Conservation | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4.2 | Restoration | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4.4 | Protected areas | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 4.4.2 | Establishment | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| 4.4.3 | Management | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5 | Species-based actions | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5.1 | Re-introductions | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5.3 | Sustainable use | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5.3.1 | Harvest management | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| 5.3.2 | Trade management | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Utilisation of Species

| Purpose/Type of Use | Subsistence | National | International | Other purpose: |
|--|-------------------------------|-------------------------------------|-------------------------------------|---------------------------------|
| 13. Pets/display animals, horticulture | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input checked="" type="checkbox"/> | |
| Primary forms removed from the wild | 100% <input type="checkbox"/> | >75% <input type="checkbox"/> | 51-75% <input type="checkbox"/> | 26-50% <input type="checkbox"/> |
| | <25% <input type="checkbox"/> | Other forms removed from the wild: | | |

| | | | | | | |
|---|-------------------------------------|--------------------------|--------------------------|--------------------------|--------------------------|-----------------------------------|
| 1. Whole animal/plant | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Source of specimens in commercial trade | 100% | >75% | 51-75% | 26-50% | <25% | Other source of specimens: |
| Wild | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | |
| Trend in wild offtake/harvest in relation to total wild population numbers over last five years: | | | | | | Unknown |
| Trend in offtake/harvest produced through domestication/cultivation over last five years: | | | | | | Unknown |
| CITES: | Not listed | | | | | |

Red Listing

Red List Assessment: Least Concern (LC) Possibly Extinct

Red List Criteria:

Rationale for the Red List Assessment: Listed as Least Concern in view of its wide distribution, tolerance of a broad range of habitats, presumed large population, and because it is unlikely to be declining fast enough to qualify for listing in a more threatened category.

Current Population Trend: Decreasing **Date of Assessment:** 12/17/2004

Assessor(s): Jan Willem Arntzen, Theodore Papenfuss, Sergius Kuzmin, David Tarkhnishvili, Vladimir Ishchenko, Boris Tuniyev, Max Sparreb

Notes on Red listing:

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