

# Triturus dobrogicus

**Taxonomic Authority:** (Kiritzescu, 1903)

**Synonyms:**

**Region:** 10

**Common Names:**

Danube Crested Newt	English
Donau-Kammolch	German
Dunaiskii Triton	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 is found in lowlands of the Tisza and Danube River systems from eastern Austria, extreme southern Czech Republic, Slovakia, Hungary, northern Croatia, extreme northern Bosnia-Herzegovina, northern Serbia and western Romania, eastwards to Transcarpathian Plain in southern Romania, northern Bulgaria, southern Moldova (the lower reaches of the Prut River), and extreme southern Odesskaya Province (Ukraine). Animals from northeastern Slovenia (the Mura River) are hybrid forms with Triturus carnifex. It is generally found in lowland areas below 300m asl.

### Habitat and Ecology Information:

The species is found in open habitats with mixed deciduous forests and groves, bushlands, flooded meadows and swamps; agricultural landscapes and villages; riparian groves in the steppe regions. It may in some instances be strictly aquatic. Reproduction takes place in small ponds with stagnant water, channels, ditches and flooded quarries. The species may coexist with fish in oxbows, river margins and other non-temporary waterbodies. May occur in disturbed habitats including those close to human settlement (Griffiths, 1996).

### Conservation Measures:

The species is listed on Appendix II of the Berne Convention and is protected by national legislation over parts of its range (eg. Romania). It is present in a number of protected areas. In parts of this species range, mitigation measures to reduce road kill have been established.

### Threats:

The main threats to the species are rapid anthropogenic destruction (drainage and damming) and pollution of its wetland habitats (especially floodplains). This species is often found in hybrid populations with other crested newt species at the edge of its range. In the southern part of its range, 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 general, populations of this species are rapidly declining through habitat loss.

## Country Distribution

	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Austria	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Bosnia and Herzegovina	<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"/>
Croatia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Czech Republic	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Hungary	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Moldova	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Romania	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Slovakia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Slovenia	<input type="checkbox"/>	<input checked="" 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"/>

## FAO Marine Habitats

Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced
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## Major Lakes

## Major Rivers

## Upper Level Habitat Preferences

1.4 Forest - Temperate
3.4 Shrubland - Temperate
4.4 Grassland - Temperate

**Score**

1  
1  
1

## Lower Level Habitat Preferences

Cool Crops and Towns
Mediterranean Scrub
Urban
Woody Savanna

**Score**

9  
1  
1  
1

5.1	Wetlands (inland) - Permanent Rivers/Streams/Creeks (includes waterfalls)	1
5.2	Wetlands (inland) - Seasonal/Intermittent/Irregular Rivers/Streams/Creeks	1
5.4	Wetlands (inland) - Bogs, Marshes, Swamps, Fens, Peatlands	2
5.5	Wetlands (inland) - Permanent Freshwater Lakes (over 8ha)	2
5.6	Wetlands (inland) - Seasonal/Intermittent Freshwater Lakes (over 8ha)	1
5.7	Wetlands (inland) - Permanent Freshwater Marshes/Pools (under 8ha)	1
5.8	Wetlands (inland) - Seasonal/Intermittent Freshwater Marshes/Pools (under 8ha)	1
11.1	Artificial/Terrestrial - Arable Land	1
11.2	Artificial/Terrestrial - Pastureland	1
11.4	Artificial/Terrestrial - Rural Gardens	2
11.5	Artificial/Terrestrial - Urban Areas	9
12.2	Artificial/Aquatic - Ponds (below 8ha)	1
12.5	Artificial/Aquatic - Excavations (open)	9

### 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 type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.3.1	Mining	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.4	Infrastructure development	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.4.1	Industry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.4.2	Human settlement	<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"/>
6.3.4	Other non-agricultural	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.7	Sediment	<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"/>
1.2.2	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"/>
2	Communication and Education	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2.2	Awareness	<input type="checkbox"/>	<input checked="" 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"/>
3.7	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"/>
4.4	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 type="checkbox"/>	<input checked="" type="checkbox"/>
5.1	Re-introductions	<input type="checkbox"/>	<input checked="" type="checkbox"/>

### Utilisation of Species

Purpose/Type of Use	Subsistence	National	International	Other purpose:
Primary forms removed from the wild	100%	>75%	51-75%	26-50% <25%
Source of specimens in commercial trade	100%	>75%	51-75%	26-50% <25%
<b>Trend in wild offtake/harvest in relation to total wild population numbers over last five years:</b>				
<b>Trend in offtake/harvest produced through domestication/cultivation over last five years:</b>				
CITES: Not listed				

### Red Listing

Red List Assessment: Near Threatened (NT)  Possibly Extinct

Red List Criteria:

Rationale for the Red List Assessment: Listed as Near Threatened because this species is in significant decline (but probably at a rate of less than 30% over ten years) because of widespread habitat loss through much of its range, thus

making the species close to qualifying for Vulnerable.

**Current Population Trend:** Decreasing

**Date of Assessment:** 12/17/2004

**Assessor(s):** Jan Willem Arntzen, Sergius Kuzmin, Robert Jehle, Mathieu Denoël, Brandon Anthony, Claude Miaud, Wiesiek Babik, Milan Vog

**Notes on Red listing:** There are distinct subspecies to the east and west of the Iron Gates of the Danube that may require conservation attention (D. Cogalniceanu, pers. comm.).

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## **Bibliography**

- , 1995, , Amphibian Populations in the Commonwealth of Independent States: Current Status and Declines, Kuzmin, S.L. Dodd Jr, C.K. and Pikulik, M.M., , Pensoft, Moscow
- Puky, M. et al., 2003, , Preliminary herpetological atlas of Hungary, , pp. 86, Varangy Akciócsoport Egyesület, Budapest
- Arnold, E.N., 2003, , Reptiles and amphibians of Europe, , 288, Princeton University Press,
- Vogrin, M., 2002, Amphibians, , Nature in municipality Kidricevo, Vogrin, M., , 99-106, Municipality Kidricevo,
- Litvinchuk, S.N. and Borkin, L., 2000, Intraspecific taxonomy and nomenclature of the Danube crested newt, *Triturus dobrogicus*, Amphibia-Reptilia, , 21, 419-430, ,
- Crnobrnja-Isailovic, J., Dzukic, G., Krstic, N. and Kalezic, M.L., 1997, Evolutionary and paleogeographical effects on the distribution of the *Triturus cristatus* superspecies in the central Balkans, Amphibia-Reptilia, , 18, 321-332, ,
- Arntzen, J.W. and Wallis, G.P., 1999, Geographic variation and taxonomy of crested newts (*Triturus cristatus* superspecies): morphological and mitochondrial DNA data, Contributions to Zoology, , 68, 181-203, ,
- Puky, M., 2000, A kétéltűek védelme Magyarországon (Conservation of amphibians in Hungary), , Gerinces állatfajok védelme (Conservation of vertebrate species), Faragó, S., , 143-158, Nyugat-Magyarországi Egyetem Erdőmérnöki Kar, Sopron
- Kuzmin, S.L., 1995, , Die Amphibien Russlands und Angrenzender Gebiete, , , Westarp – Spektrum, Magdeburg - Heidelberg
- Thorn, R., 1968, Les Salamandres d'Europe, d'Asia, et d'Afrique du Nord, , , 376 pp, Éditions Paul Lechevalier, Paris
- Dely, G., 1967, , Kétéltűek-Amphibia: Magyarország Állatvilága, Faunae Hungariae, , , Akadémiai Kiadó, Budapest
- Kuzmin, S.L., 1999, , The Amphibians of the Former Soviet Union, , , Pensoft, Sofia-Moscow
- Kalezic, M. and Dzukic, G., 2001, Amphibian status in Serbia and Montenegro (FR Yugoslavia), FrogLog, , , 45, , ,
- Kuzmin, S.L., 1996, Threatened amphibians in the former Soviet Union: the current situation and the main threats, Oryx, , , 30, 24-30, ,
- , 1997, , Atlas of Amphibians and Reptiles in Europe, Gasc, J.-P., , 494, Societas Europea Herpetologica & Museum National d'Histoire Naturelle, Paris
- Jehle, R., Hödl, W. and Thonke, A., 1995, Structure and dynamics of central European amphibian populations: A comparison between *Triturus dobrogicus* (Amphibia, Urodela) and *Pelobates fuscus* (Amphibia, Anura), Australian Journal of Ecology, , , 20(3), 362-366, ,
- Cogalniceanu, D. and Miaud, C., 2002, Age, Survival and Growth in *Triturus dobrogicus* (Amphibia, Urodela) from the Lower Danube Floodplain, International Association Danube Research, , , 34, 777-783, ,
- Puky, M., 2003, Amphibian mitigation measures in Central-Europe, , Proceedings of the International Conference on Ecology and Transportation, 26-31 August, 2003, Lake Placid, New York, USA, Irwin, L.C., Garrett, P. and McDermott, K.P., , 413-429, Center for Transportation and the Environment, North Carolina State University, USA,
- Arntzen, J.W., 2003, *Triturus cristatus* Superspecies Kammolch-Artenkreis, , Handbuch der Reptilien und Amphibien Europas. Schwanzlurche (Urodela) IIA., Grossenbacher, K.G. and Thiesmeier, B., , 421-514, Aula-Verlag, Wiebelsheim
- Griffiths, R.A., 1996, , Newts and Salamanders of Europe, , , 188 pp, Poyser Natural History, London
- Cogalniceanu, D. and Miaud, C., 2003, Population age structure and growth of four syntopic amphibian species inhabiting a large river floodplain, Canadian Journal of Zoology, , , 81, 1096-1106, ,
- Arntzen, J.W., Bugter, R.J.F., Cogalniceanu, D. and Wallis, G.P., 1997, The distribution and conservation status of the Danube crested newt, *Triturus dobrogicus*, Amphibia-Reptilia, , , 18, 133-142, ,
- Kovács, T., 2002, Monitoring of amphibians and reptiles along the Drava River, FrogLog, , , 52, , ,
- Böhme, W., Grossenbacher, K. and Thiesmeier, B., 1999, , Handbuch der Reptilien und Amphibien Europas, band 4/I: Schwanzlurche (Urodela), , , , Aula-Verlag, Wiesbaden, Germany.