

Slovakia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Slovenia	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Sweden	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Switzerland	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" 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"/>

Native - Presence Confirmed Native - Presence Possible Extinct Reintroduced Introduced

FAO Marine Habitats

Major Lakes

Major Rivers

Upper Level Habitat Preferences

Score

Lower Level Habitat Preferences

Score

1.4 Forest - Temperate	1	Broadleaf Forest	1
3.3 Shrubland - Boreal	1	Conifer Boreal Forest	2
3.4 Shrubland - Temperate	1	Conifer Forest	1
4.4 Grassland - Temperate	1	Cool Broadleaf Forest	1
5.5 Wetlands (inland) - Permanent Freshwater Lakes (over 8ha)	2	Cool Conifer Forest	2
5.7 Wetlands (inland) - Permanent Freshwater Marshes/Pools (under 8ha)	1	Cool Crops and Towns	2
5.8 Wetlands (inland) - Seasonal/Intermittent Freshwater Marshes/Pools (under 8ha)	1	Cool Fields and Woods	1
5.13 Wetlands (inland) - Permanent Inland Deltas	2	Cool Mixed Forest	2
10.2 Coastline - Sand, Shingle or Pebble Shores (incl. sand bars, spits, sandy islets, dune systems)	2	Deciduous Broadleaf Wood	1
11.1 Artificial/Terrestrial - Arable Land	1	Dry Woody Scrub	1
11.2 Artificial/Terrestrial - Pastureland	1	Fields and Woody Savanna	1
11.4 Artificial/Terrestrial - Rural Gardens	1	Grass Crops	1
11.5 Artificial/Terrestrial - Urban Areas	2	Low Sparse Grassland	1
12.2 Artificial/Aquatic - Ponds (below 8ha)	1	Mediterranean Scrub	1
12.5 Artificial/Aquatic - Excavations (open)	1	Mixed Forest	1
12.7 Artificial/Aquatic - Irrigated Land (includes irrigation channels)	1	Shrub Deciduous	1
12.8 Artificial/Aquatic - Seasonally Flooded Agricultural Land	1	Urban	1
12.9 Artificial/Aquatic - Canals and Drainage Channels, Ditches	1		

Major threats

Conservation Measures

Code	Description of threat	Past	Present	Future	Code	Conservation measures	In place	Needed
1	Habitat Loss/Degradation (human induced)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1	Policy-based actions	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.1	Agriculture	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2	Legislation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.1.1	Crops	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.1	Development	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.1.1.3	Agro-industry farming	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.1.1	International level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.1.4	Livestock	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.1.2	National level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.1.4.3	Agro-industry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.2	Implementation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.4	Infrastructure development	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.2.1	International level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.4.1	Industry	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.2.2	National level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
1.4.2	Human settlement	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	1.2.2.3	Sub-national level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2	Invasive alien species (directly affecting the species)	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2	Communication and Education	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
2.2	Predators	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	2.2	Awareness	<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"/>	3	Research actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.3	Water pollution	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.2	Population numbers and range	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.1	Agriculture	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.3	Biology and Ecology	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.2	Domestic	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	3.4	Habitat status	<input type="checkbox"/>	<input checked="" type="checkbox"/>
6.3.3	Commercial/Industrial	<input checked="" type="checkbox"/>	<input checked="" 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"/>
					3.8	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 checked="" type="checkbox"/>	<input type="checkbox"/>
5.1	Re-introductions	<input checked="" type="checkbox"/>	<input 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%	>75%	51-75%	26-50%	<25%	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, 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): Sergius Kuzmin, David Tarkhnishvili, Vladimir Ishchenko, Natalia Ananjeva, Nikolai Orlov, Boris Tuniyev, Theodore Papenfuss, S

Notes on Red listing: The subspecies, *Pelobates fuscus insubricus* is reported to be declining significantly in most of its northern Italian distribution. The disappearance of populations of this form is possibly due to the habitat alteration and general urbanisation (F. Andreone, pers. comm.). The species is extremely threatened in France.

Bibliography

- Eggert, C., 2002, Use of fluorescent pigments and implantable transmitters to track a fossorial toad, *Herpetological Journal*, , 12, 69-74, ,
- , 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,
- Tarkhnishvili, D.N. and Gokheshvili, R.K., 1999, The amphibians of the Caucasus, *Advances in Amphibian Research in the Former Soviet Union*, , 4, 1-229, ,
- Andreone, F., Fortina R. and Chiminello, A., 1993, Natural history, ecology and conservation of the Italian spadefoot toad, *Pelobates fuscus insubricus*, *Scientific Reports, Soc. Zool. La Torbiera*, , 2, 1-96, ,
- 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
- Pestov, M. and Anufriev, V., 2001, The Frog Princess and Other Projects, *FrogLog*, , 46, , ,
- Dely, G., 1967, , Kétéltűek-Amphibia: Magyarország Állatvilága, Faunae Hungariae, , , Akadémiai Kiadó, Budapest
- Puky, M. and Vogel, Z., 2000, , Amphibian road kill survey in Balaton - Uplands National Park and recommendations to mitigation measures, , , , Infra Eco network Europe (IENE) Project Report,
- Mlynarski, M., 1966, *Plazy I Gady Polski, Państwowe Zakłady Wydawnictw Szkolnych, Warszawa*, , 75, , ,
- Smit, G., 1998, DAPTF-Netherlands Report, *FrogLog*, , 28, , ,
- Garanin, V.I., 2000, The distribution of amphibians in the Volga-Kama region, , *Advances in Amphibian Research in the former Soviet Union*, , 5, 79-132, ,
- Kuzmin, S.L., 1999, , The Amphibians of the Former Soviet Union, , , Pensoft, Sofia-Moscow
- Grossenbacher, K., 1994, Rote Liste der gefährdeten Amphibien der Schweiz, , Rote Liste der gefährdeten Tierarten in der Schweiz, BUWAL, , 33-34, BUWAL (Bundesamt für Umwelt, Wald und Landschaft), Bern
- 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 Europaea Herpetologica & Museum National d'Histoire Naturelle, Paris
- Schád, P., Puky, M. and Kiss, I., 1999, A Naplás-tó Természetvédelmi Területen élő kétéltűek vonulási sajátosságai, *Természetvédelmi Közlemények*, , 8, 161-172, ,
- Mazanaeva, L.F., 2000, The distribution of amphibians in Daghestan, *Advances in Amphibian Research in the Former Soviet Union*, , 5, 141-156, ,

- Gorovaya, V.I. and Dzhandarov, I.I., 1987, Distribution and ecology of *Pelobates fuscus* in Northern Caucasus, , Problemy Regionalnoi Fauny i Ekologii Zhivotnykh, , , 4-10, , Stavropol
- Borkin, L.J., Litvinchuk, S.N., Rosanov, J.M. and Milto, K.D., 2001, Cryptic speciation in *Pelobates fuscus* (Anura, Pelobatidae): evidence from DNA flow cytometry, Amphibia-Reptilia, , , 22(4), 387-396, ,
- Vogrin, N., 1997, The Status of Amphibians in Slovenia, FrogLog, , , 20, , ,
- 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, ,
- Lacoste, V. and Durrer, H., 1999, Past distribution and current status of the Common Spadefoot (*Pelobates fuscus*) in the plain of the Upper Rhine and strategies of reintroduction, , Current Studies in Herpetology: Proceedings of the 9th Ordinary General Meeting of the Societas Europaea Herpetologica 25-29 August 1998, Le Bourget du Lac, France., Miaud, C. and Guyétant, R., , 239-247, Societas Europaea Herpetologica, Le Bourget du Lac, France
- Eggert, C. and Guyétant, R., 1999, Age structure of a Spadefoot toad *Pelobates fuscus* (Pelobatidae) population, Copeia, , , 1999, 1127-1130, ,
- Nyström, P., Birkedal, L., Dahlberg, C. and Brönmark, C., 2002, The declining spadefoot toad *Pelobates fuscus*: calling site choice and conservation, Ecography, , , 25, 488-498, ,
- Noellert, A., 1984, Die Knoblauchkrote, , Wittenberg Lutherstadt, Zimsen Verlag, Die Neue Brehm Bucherei, 265, , , ,
- Parent, G.H., 1985, Précisions sur la répartition du Pélobate brun, *Pelobates fuscus* (Laurenti, 1768), en France, Alytes, , , 4(2), 52-60, ,
- 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,
- Kovács, T. and Papp, M., 2002, Breeding pond survey in Hungary: and example of successful cooperation, FrogLog, , , 50, , ,
- Baran, I. and Atatür, M.K., 1998, , , Turkish herpetofauna (amphibians and reptiles), , , 214 pp, Republic of Turkey Ministry of Environment, Ankara
- Fog, K., 1995, Amphibian conservation in Denmark, FrogLog, , , 13, , ,
- Demirsoy, A., 1996, , , Tükiye Omurgalileri, Sürüngenler, , , 205 pp, Meteksen, Ankara
- Vogrin, N., 1997, A new record of the common spadefoot *Pelobates fuscus fuscus* (Laurenti, 1768), in Slovenia (Anura: Pelobatidae), Herpetozoa, , , 10(1/2), 89-90, ,
- Savage, R.M., 1942, The burrowing and emergence of the spade-foot toad, *Pelobates fuscus fuscus*, Proceedings of the Zoological Society of London, , , 112, 21-35, ,
- Lada, G.A., 1994, On the biology of *Pelobates fuscus* in the Central Chernozomyom region, , Flora i Fauna Chernozemya, , , 74-83, , Tambov
- Andreone, F., 2000, *Pelobates fuscus insubricus*: distribuzione, biologia e conservazione di un taxon minacciato. Piano d'Azione - Action Plan, , , , Progetto LIFE-NATURA 1998 "Azioni urgenti per la conservazione di *Pelobates fuscus insubricus*" n. B4-3200/98/486. Relazione al WWF Italia e alla Comunità Europea.,
- Andreone, F. and Pavignano, I., 1988, Observations on the breeding migration of *Pelobates fuscus insubricus* Conalia, 1873 at a ditch in north western Italy (Amphibia, Anura, Pelobatidae), Bollettino del Museo Regionale di Scienze Naturali - Torino, , , 6(1), 241-250, ,
- Ferri, V., 2002, Crisis less severe for the Po Valley Spadefoot, *Pelobates fuscus insubricus*, FrogLog, , , 49, 1-2, ,
- Bannikov, A.G., Darevsky, I.S., Ishchenko, V.G., Rustamov, A.K. and Szczerbak, N.N., 1977, , , Opređitel' Zemnovodnykh i Presmykayushchikhsya Fauny SSSR [Guide to Amphibians and Reptiles of the USSR Fauna], , , , Prosvechshenie, Moscow
- Eggert, C. and Guyétant, R., 2003, Reproductive behaviour of spadefoot toads (*Pelobates fuscus*): daily sex ratio and males' tactics, age, and physical condition, Canadian Journal of Zoology, , , 81, 46-51, ,
- Kovács, T., 2002, Monitoring of amphibians and reptiles along the Drava River, FrogLog, , , 52, , ,
- Puky, M., 2001, Herpetological methods: I. On the use of the road transect method in surveying amphibians with examples from different zoogeographical regions of Hungary, Opuscula Zoologica, Budapest, , , 33, 75-81, ,
- Eiselt, J., 1988, Krötenfrösche (*Pelobates* gen., Amphibia salientia) in Türkisch-Thrakien und Griechenland, Ann. Naturhist. Mus. Wien; (B), , , 90, 51-59, ,