

Lacerta trilineata

Taxonomic Authority: Bedriaga, 1886

Synonyms:

Region: 8

Common Names:

Balkan Green Lizard English
Riesensmaragdeidechse German

Order: Sauria

Family: Lacertidae

Notes on taxonomy: Mayer and Beterlein (2002) documented genetic divergences among Greek populations of *Lacerta trilineata* nearly as large as those between *Lacerta viridis* and *L. bilineata*. The taxonomic meaning of these results remains to be investigated (Crochet and Dubois 2004).

General Information

Biome Terrestrial Freshwater Marine

Geographic Range of species:

This species is present from coastal Croatia, Bosnia-Herzegovina, and Serbia and Montenegro, east to Bulgaria, southeastern Romania, Albania, Macedonia, Greece (including the Ionian Islands and many Aegean Islands including Crete, Lesvos and Rhodes), and western and central Turkey. It ranges from sea level to at least 1,600 m asl.

Habitat and Ecology Information:

This species is found in dry areas with a Mediterranean climate. It is found on or in bushy areas, sand dunes, drystone walls, buildings and abandoned cultivated land. It can also be found close to streams and ditches. It is an egg-laying species.

Conservation Measures:

This species is listed on Annex II of the Bern Convention, and on Annex IV of the European Union Habitat and Species Directive. In general there appear to be no conservation measures needed for this species. However, there is a need to ensure the survival of distinct isolated populations and to further research threats to this species throughout its range.

Threats:

There appear to be no major threats to this species. Populations in Romania are threatened through by loss of steppe habitat largely due to agricultural intensification (CoE, 2003). A number of distinct island populations are threatened, such as *L. t. citrovittata* of Tinos Island, Greece.

Species population information:

It can be a common species.

Country Distribution	Native - Presence Confirmed	Native - Presence Possible	Extinct	Reintroduced	Introduced	Vagrant
Albania	<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"/>
Greece	<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"/>
Romania	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input 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"/>
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
----------------------------	-----------------------------------	----------------------------------	---------	--------------	------------

Major Lakes

Major Rivers

Upper Level Habitat Preferences	Score	Lower Level Habitat Preferences	Score
3.8 Shrubland - Mediterranean-type Shrubby Vegetation	1		
10.2 Coastline - Sand, Shingle or Pebble Shores (incl. sand bars, spits, sandy islets, dune systems)	1		
11.1 Artificial/Terrestrial - Arable Land	1		
11.2 Artificial/Terrestrial - Pastureland	1		
11.3 Artificial/Terrestrial - Plantations	1		
11.4 Artificial/Terrestrial - Rural Gardens	1		

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"/>

Conservation Measures

Code	Conservation measures	In place	Needed
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"/>
					1.2.2	Implementation	<input checked="" type="checkbox"/>	<input type="checkbox"/>
					1.2.2.1	International level	<input checked="" type="checkbox"/>	<input type="checkbox"/>
				3	Research actions	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
				3.2	Population numbers and range	<input type="checkbox"/>	<input checked="" type="checkbox"/>	
				3.5	Threats	<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 type="checkbox"/>	<input checked="" type="checkbox"/>	
				4.1	Maintenance/Conservation	<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%	<i>Other forms removed from the wild:</i>
Source of specimens in commercial trade	100%	>75%	51-75%	26-50% <25%	<i>Other source of specimens:</i>

Trend in wild offtake/harvest in relation to total wild population numbers over last five years:

Trend in offtake/harvest produced through domestication/cultivation over last five years:

CITES:

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): Wolfgang Böhme, Petros Lymberakis, Rastko Ajtic, Varol Tok, Ishmail Ugurtas, Murat Sevinç, Pierre-André Crochet, Idriz Haxhiu

Notes on Red listing: A number of distinct forms of this species are considered to be threatened, such as *Lacerta t. citrovittata* of Tinos Island, Greece. Some of these may eventually prove to be separate species.

Bibliography

- Arnold, E.N., 2003, , Reptiles and amphibians of Europe., , 288 pp., Princeton University Press., Princeton and Oxford.
- Çevik, I.E., 1999, Trakya'da Yasayan Kertenkele Türlerinin Taksonomik Durumu (Lacertilia: Anguinae, Lacertidae, Scincidae), Tr. J. of Zoology, , 23(1):, 23-35, ,
- Gruber, U. and Fuchs, D., 1977, Die Herpetofauna des Paros-Archipels (Zentral-Ägäis), Salamandra, , 13(2), 60-77, ,
- Henle, K., 1985, Ökologische, zoogeographische und systematische Bemerkungen zur Herpetofauna Jugoslawiens., Salamandra, , 21(4):, 229-251, ,
- Kasapidis, P., Provatidou, S., Maragou, P. and Valakos, E.D., 1996, Neue Daten über die Herpetofauna von Lesbos (ägäische Inseln, Griechenland) und einige biogeographische Bemerkungen über die Inseln des nordöstlichen ägäischen Archipels., Salamandra, , 32(3):, 171-180, ,
- Kasperek, M., 1990, Zur Herpetofauna des Beckens von Köyceğiz, Türkei (Dalyan-Region), Salamandra, , 26(2/3):, 155-164, ,
- Nettmann, H.K. and Rykena, S., 1984, Lacerta trilineata - Riesensmaragdeidechse., , Handbuch der Reptilien und Amphibien Europas, Band 2/I., Echsen II (Lacerta), Böhme, W., , pp. 100-128, Aula-Verlag, Wiesbaden.
- Nöllert, A., Nöllert, C. and Ritter, A., 1986, Einige Beobachtungen zur Herpetofauna der bulgarischen Schwarzmeerküste und Südwestbulgariens (Teil 2 - Die Reptilien), Herpetofauna, , 8(44):, 30-34, ,
- Özdemir, A. and Baran, U., 2002, Research on the Herpetofauna of Murat Mountain (Kütahya-Usak), Turk J Zool, , 26:, 189-195, ,
- Schmidtler, J.F., 1986, Orientalische Smaragdeidechsen: 2. Über Systematik und Synökologie von Lacerta trilineata, L. media und L. pamphylica (Sauria: Lacertidae), Salamandra, , 22(2/3), 126-146, ,
- Schmidtler, J.F., 1986, Orientalische Smaragdeidechsen: 3. Klimaparallele Pholidosevariation., Salamandra, , 22(4), 242-258, ,
- Sowig, P., 1985, Beiträge zur Kenntnis der Verbreitung und Ökologie der Amphibien und Reptilien Kretas., Salamandra, , 21(4):, 252-262, ,
- Tok, C.V., 1999, Resadiye (Datça) Yarımadası Kertenkeleleri Hakkında (Gekkonidae, Agamidae, Chamaeleonidae, Lacertidae, Scincidae, Amphisbaenidae), Turkish Journal of Zoology, , 23(1):, 157-175, ,
- Werner, Y.L., 1988, Herpetofaunal survey of Israel (1950-1985), with comments on Sinai and Jordan and on zoogeographical heterogeneity., , The zoogeography of Israel, Yom-Tov, Y. and Tchernov, E., , Dr. W. Junk Publishers, Dordrecht, Netherlands
- Gasc, J.-P., Cabela, A., Crnobrnja-Isailovic, J., Dolmen, D., Grossenbacher, K., Haffner, P., Lescure, J., Martens, H., Martínez-Rica, J.P., Maurin, H., Oliveira, M.E., Sofianidou, T.S., Veith, M. and Zuiderwijk, A., 1997, , Atlas of Amphibians and Reptiles in Europe., , pp. 494, Societas Europaea Herpetologica and Musée National d'Histoire Naturelle, Paris
- Baran, I. and Atatür, M.K., 1998, , Turkish herpetofauna (amphibians and reptiles), , , Republic of Turkey Ministry of Environment, Ankara
- Sivan, N. and Werner, Y.L., 1992, Survey of the reptiles of the Golan Plateau and Mt. Hermon, Israel, Israel Journal of Zoology, , 37, 193-211, ,
- Uğurtas, I.H., Yildirimhan, H.S. and Öz, M., 2000, Herpetofauna of the eastern region of the Amanos Mountains (Nur), Turk. J. Zool., , 24, 257-261, ,

Werner, Y.L., 1988, Herpetofaunal survey of Israel (1950-1985), with comments on Sinai and Jordan and on zoogeographical heterogeneity., , The zoogeography of Israel., Yom-Tov, Y. and Tchernov, E., , , Dr. W. Junk Publishers, Dordrecht, Netherlands

Crochet, P.-A. and Dubois, A., 2004, Recent changes in the taxonomy of European amphibians and reptiles., , Atlas of Amphibians and Reptiles in Europe. Re-edition., Gasc, J.-P., Cabela, A., Crnobrnja-Isailovic, J., Dolmen, D., Grossebacher, K., Haffner, P., Lescure, J., Martens, H., Martínez Rica, J.P., Maurin, H., Oliveira, M.E., Sofianidou, T.S., Veith, M., Zuiderwijk, A., , , Muséum national d'Histoire naturelle, Paris

Mayer, W. and Beyerlein, P., 2002, Genetische Differenzierung des *Lacerta viridis/bilineata* Komplexes und von *Lacerta trilineata* in Griechenland: mitochondriale DNA-Sequenzen., Mertensiella, , , 13, 52-59., ,

Council of Europe, 2003, Convention on the Conservation of European Wildlife and Natural Habitats. Group of experts on the conservation of Amphibians and Reptiles. Malmö (Sweden), 26-27 September 2003., , Report T-PVS (2003) 18, , , , ,

Nettmann, H.-K., 2002, Die Smaragdeidechsen (*Lacerta s.str.*) – Eine Übersicht über Verwandtschaft und Formenvielfalt., Mertensiella, Rheinbach, , , 13:, 11-32, ,

Sindaco, R., Venchi, A., Carpaneto, G.M. and Bologna, M.A., 2000, The reptiles of Anatolia: a checklist and zoogeographical analysis., Biogeographia, , , 21:, 441-554, ,