

Native - Presence Confirmed Native - Presence Possible Extinct Reintroduced Introduced

FAO Marine Habitats

Major Lakes

Major Rivers

Upper Level Habitat Preferences

1.4 Forest - Temperate
4.4 Grassland - Temperate
11.2 Artificial/Terrestrial - Pastureland

Score

1
1
1

Lower Level Habitat Preferences

Cold Grassland
Cool Broadleaf Forest
Cool Conifer Forest
Deciduous Broadleaf Wood
Forest and Field
Grass Crops
Mixed Forest

Score

9
1
1
1
1
9
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"/>
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"/>
1.3.6	Groundwater extraction	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.3.7	Other	<input checked="" 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"/>
1.4.2	Human settlement	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
1.4.3	Tourism/recreation	<input checked="" 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"/>
9.2	Poor recruitment/reproduction/regeneration	<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"/>
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"/>
3.8	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"/>
4.4.1	Identification of new protected areas	<input type="checkbox"/>	<input checked="" type="checkbox"/>
4.4.2	Establishment	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
4.4.3	Management	<input checked="" 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%	>75%	51-75%	26-50%
1. Whole animal/plant	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Source of specimens in commercial trade	100%	>75%	51-75%	26-50%
Wild	<input checked="" 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 degree of habitat modification,

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): Franco Andreone, Mathieu Denoël, Claude Miaud, Benedikt Schmidt, Paul Edgar, Milan Vogrin, Jellka Crnobrnja Isailovic, Rastk

Notes on Red listing: The subspecies *Salamandra atra aurorae* qualifies for listing as Critically Endangered under criterion B1ab(iii) because its Extent of Occurrence is probably less than 100 km², all individuals may be in a single location, and there is continuing decline in the quality of its habitat in the Bosco del Dosso. The populations in Croatia, Bosnia-Herzegovina, Serbia-Montenegro, and Albania are probably threatened.

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