



Republic of San Marino

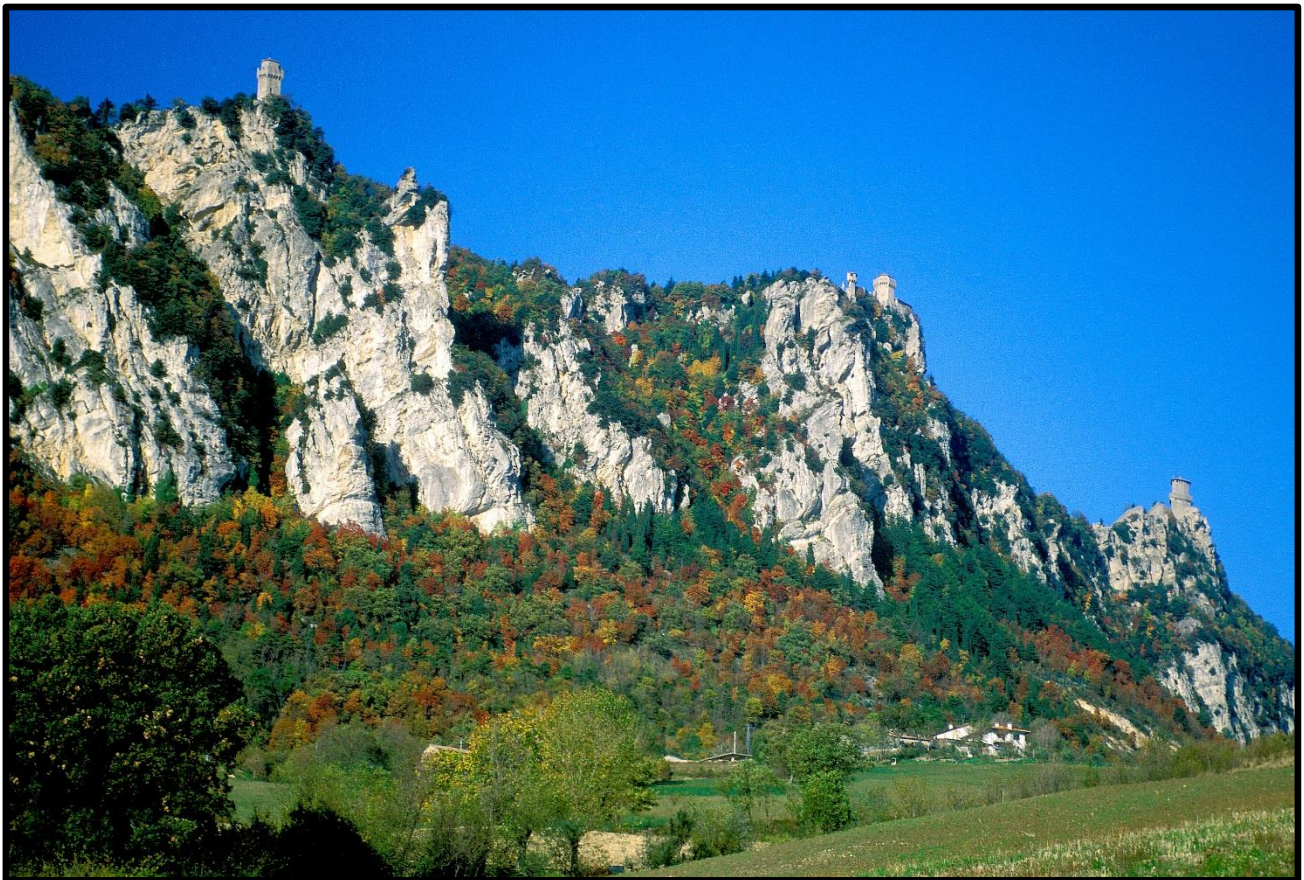
Convention on Biological Diversity (CBD)



**6th National Report
(2021)**

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Introduction

The Republic of San Marino is a micro-State of 61.19 km², which is completely surrounded by the Italian territory. It is located in central-northern Italy, approx. 15 kilometres from the Adriatic Sea. It became a member State of the Convention on Biological Diversity (CBD) on 26 January 1995 through ratification.

In February 2016, the Republic of San Marino submitted its 5th National Report, which described the characteristics of the territory, the general ecological framework, the state of conservation, the trends of and threats to biodiversity and the actions taken until that moment to implement the Convention with reference to the Strategic Objectives and the Aichi Targets.

Subsequently, in February 2018, the “National Biodiversity Strategy and Action Plans (NBSAP) of the Republic of San Marino” was drafted. The aim was to implement a rational and concrete operational plan, suitable to the small size of the territory, for the achievement of the three main objectives of the Convention on Biological Diversity:

- conservation of biological diversity;
- sustainable use of biological diversity;
- fair and equitable sharing of the benefits arising out of the utilisation of genetic resources, including by appropriate access to genetic resources and by appropriate transfer of relevant technologies.

In parallel to the implementation of the CBD, the Voluntary National Review on the 2030 Agenda Goals was drafted in 2021. This Review was discussed within the Working Group for Sustainable Development and benefited from the support of all Directors of the Public Administration Departments, as well as the contributions of the civil society through the Associations and Organisations operating in the territory, including Friday For Future Movement.





Primary targets of the Republic of San Marino

As the small territory of the Republic of San Marino lies entirely within the Italian peninsula, it is inevitably subject to the same environmental pressures and biodiversity threats as are present on a larger scale. However, at a local level, there are unique problems affecting the territory, which are localised and extremely urgent and which require specific solutions for the small San Marino State. In this regard, the following primary targets have been identified:

- **T1) Ensuring legally binding protection for biodiversity.**
- **T2) Using natural resources and ecosystems in a sustainable way with a view to preserving biodiversity.**
- **T3) Increasing the knowledge of the biological diversity heritage present in the territory.**
- **T4) Promoting a broad and easily accessible knowledge of the concept of biodiversity.**

In the context of these targets, the following priority strategies for action have been identified, on the basis of the main problems affecting the Republic:

- **Priority strategies for T1 “Ensuring legally binding protection for biodiversity”.**
 - S1) Establishing legal instruments for the protection of the most endangered living species and ecosystems.
 - S2) Promoting knowledge of environmental regulations in order to encourage compliance therewith and optimise their application.
 - S3) Promoting the proper development and management of hunting practices.
 - S4) Wherever possible, integrating the concept of biodiversity protection into draft laws on land management.
- **Priority strategies for T2 “Using natural resources and ecosystems in a sustainable way with a view to preserving biodiversity”.**
 - S5) Ensuring sustainable urban development by rationalising land consumption with a view to minimising the impact on biodiversity.
 - S6) Recovering aquatic environments, ensuring that their quality profile is sufficient to support life for a multitude of organisms.
- **Priority strategies for T3 “Increasing the knowledge of the biological diversity heritage present in the territory”.**
 - S7) Carrying out research and monitoring activities, as well as research projects to increase current knowledge about biodiversity.

- Priority strategies for T4 **“Promoting a broad and easily accessible knowledge of the concept of biodiversity”**.
 - S8) Promoting effective education on the concept of biodiversity at school level.
 - S9) Promoting environmental tourism to enhance San Marino's biodiversity heritage.
 - S10) Creating a platform to enhance the “Clearing-House Mechanism” and promoting the exchange of information between research bodies and the population.

The 6th National Report is therefore an update of the state of conservation, trends of and threats to biodiversity in the Republic of San Marino (with reference to the 2016 5th Report) and an assessment of the actions taken to achieve the targets set out in the National Biodiversity Strategy and Action Plans (NBSAP). For each of the priority strategies listed above, at least one action has been envisaged with a view to achieving the target by a specific date. All interventions are promoted by the State and implemented at a national level. The reference offices are the Ministry of Territory and Environment, San Marino Naturalistic Centre (CNS) and the Environmental and Agricultural Resources Management Office (UGRAA).





Actions taken to achieve the primary targets

Primary target T1

Ensuring legally binding protection for biodiversity

Actions S1

Establishing legal instruments for the protection of the most endangered living species and ecosystems

Action	Description	Responsibility	Deadline
S1-A1	Drafting a regulation or updating an existing regulation for the protection of fauna and natural habitats	CNS - UGRAA - Ministry of Territory	2025
<p>Law no. 137 of 19 July 2021 "Protection of wild fauna in the Republic of San Marino" was passed to protect and safeguard wild fauna populations belonging to the taxonomic groups of invertebrates and vertebrates, which permanently or temporarily live on the territory of the Republic of San Marino. This Law will be used as a legal basis to support all future interventions and actions aimed at protecting the biodiversity and habitats of the Republic of San Marino, such as the establishment of new protected areas or the financing of projects for the conservation of the most endangered living species. The "Regulation on collaboration between citizens and the Administration for the protection and shared regeneration of common goods" was drafted specifically to encourage the management and improvement of public areas, including natural areas, with potential benefits for wild fauna.</p> <p>This action, which was carried out well before the deadline established, has significantly increased the State's scope for intervention in favour of biodiversity protection, thus enabling decisive progress towards achieving Primary target T1. Next step will be the creation and regulation of protected habitats.</p>			
Additional information			
Implementation of the measure			
Implemented		Partially implemented	
X			
Aichi Targets:		2	
Marginal Aichi Targets:		1, 3, 5, 7, 11, 12, 14, 15	
Sustainable Development Goals:		13, 15	

Action	Description	Responsibility	Deadline
S1-A2	Drafting a regulation or updating an existing regulation on the use of herbicides and pesticides in general	UGRAA - Ministry of Territory	2025
<p>Law no. 108 of 22 July 2011 “Provisions on marketing, sale and use of phytosanitary products and related adjuvants” regulates the use of herbicides and pesticides. The list of products that can be used is automatically updated according to Italian and European regulations. In order to obtain the licence to carry out agricultural activities, every five years operators are required to attend a refresher course on the products that can be used.</p> <p>As the list of products that can be used is constantly updated in line with European regulations, and several agricultural operators are converting to organic farming, the action is proving effective.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
X			
Aichi Targets:			3
Marginal Aichi Targets:			7
Sustainable Development Goals:			6, 15



Action	Description	Responsibility	Deadline
S1-A3	Providing subsidies for organic farming, by promoting crop diversification, encouraging the cultivation of local plants and implementing environmental improvement practices for wildlife purposes	UGRAA - Ministry of Territory	2025
<p>The aim of Delegated Decree no. 155 of 22 September 2020 is to consolidate and update the transposition of the European Union legislation on the production, labelling and marketing of organic products, as well as to regulate its implementation. This Delegated Decree envisages various types of contributions to agricultural operators in order to encourage conversion to organic farming.</p> <p>Currently about 25% of the total arable land in the Republic of San Marino is managed through organic farming. Only one year after the transposition of the legislation, this result can be considered positive; however, greater efforts are needed in the field of environmental improvement for wildlife purposes.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
X			
Aichi Targets:		3, 13	
Marginal Aichi Targets:		7	
Sustainable Development Goals:		15	



Actions for S2**Promoting knowledge of environmental regulations in order to encourage compliance therewith and optimise their application.**

Action	Description	Responsibility	Deadline
S2-A1	Promoting the organisation of public meetings on issues related to biodiversity legislation in force	Ministry of Territory - CNS	2025
<p>Local media reported on the entry into force of new regulations concerning the protection of wild fauna and on organic farming. In addition, stakeholders (farmers, breeders, hunters) were adequately informed through specific meetings.</p> <p>Laws and legislative updates on biodiversity were all enacted during the COVID - 19 pandemic; for this reason, public meetings were often postponed. Various initiatives to disseminate information are currently planned (posters, conferences, publication of information booklets), which are specific to different age groups, professional categories, hunters and breeders.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
	X		
Aichi Targets:		1	
Marginal Aichi Targets:		-	
Sustainable Development Goals:		4	

Actions for S3

Promoting the proper development and management of hunting practices

Action	Description	Responsibility	Deadline		
S3-A1	Developing a new Wild Fauna and Hunting Plan that takes into account the trends and the status of species under hunting pressure	Observatory on Wild Fauna and the related Habitats	2020		
<p>2019-2023 Wild Fauna and Hunting Plan of the Republic of San Marino is a land management tool specifically focusing on hunting activities. It contains guidelines, which aim at creating a balance with environmental, agricultural and fauna conservation aspects.</p> <p>These guidelines were at the basis of the development and drafting of the new plan, for the purposes of achieving a balance among the various environmental, agricultural and hunting expectations.</p> <p>In addition to the new Wild Fauna and Hunting Plan, Law no. 52 of 2 April 2007 on the "Protection of wild fauna and the implementation of the Wild Fauna and Hunting Plan" enables, through a decree, to update the reference regulations with a view to coping with the changing natural conditions of the territory. For example, following the assessment of the status of wild populations through monitoring, it is possible to reduce the number of animals that can be killed in case of species in difficulty or, conversely, to increase hunting pressure on excessively increasing populations.</p>					
Additional information					
Implementation of the measure					
Implemented		Partially implemented		Not implemented	
X					
Aichi Targets:			2		
Marginal Aichi Targets:			9, 12		
Sustainable Development Goals:			15		

Actions for S4

Wherever possible, integrating the concept of biodiversity protection into draft laws on land management

Action	Description	Responsibility	Deadline
S4-A1	Adopting procedures to assess the effects of territorial and sectoral plans on the environment and biodiversity	Ministry of Territory	2025
<p>In recent years, the Public Administration has begun to operate in the various sectors falling within its competence with a view to environmental protection, the safeguarding of the landscape and the sustainable use of resources, in line with European requirements. The Guidelines for the study and assessment of environmental impact (VIA) are updated in line with changing regulations. However, they are not accurate enough to assess the effects on biodiversity. The definition and production of data for the establishment of a set of nature-related indicators are therefore included among the necessary actions.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
		X	
Aichi Targets:		2	
Marginal Aichi Targets:		3, 7, 17, 20	
Sustainable Development Goals:		11, 15	



Primary target T2**Using natural resources and ecosystems in a sustainable way with a view to preserving biodiversity****Actions for S5****Ensuring sustainable urban development by rationalising land consumption with a view to minimising the impact on biodiversity**

Action	Description	Responsibility	Deadline
S5-A1	Integrating the concept of biodiversity and its protection into all development stages of the new General Town Planning Scheme	Ministry of Territory	2025
<p>The main strategic instrument aimed at urban regeneration and sustainability in San Marino is the recent draft General Town Planning Scheme - SM 2030 "Garden of Europe - Microcosm of Biodiversity", which aims at increasing the safety, inclusion and sustainability of the Republic's urban settlements. The draft Scheme aims at a regeneration of the urban context, which may also become an opportunity to encourage the reconversion and energy efficiency of buildings, as well as to create a network of physical and virtual connections able to link public services and attraction poles with the consolidated city. Environment is a key issue as it proposes the strengthening of San Marino's ecological system by enhancing indigenous ecosystems and natural resources. In particular, the Plan has the following objectives: a) to ensure the continuity of ecological networks; b) to protect and enhance natural areas, parks and green areas; c) to safeguard ecosystems and biodiversity; d) to repopulate indigenous fauna; e) to reforest and renaturalise parts of the anthropogenic territory. In order to pursue these objectives, the Plan envisages a series of actions, such as: ecosystem connection of parks included in the Detailed Plan to create a linear park; enhancement and reforestation of the area around Mount Titano; systematisation of public and private green areas for the creation of ecological corridors; enhancement of services and slow mobility routes within the natural areas.</p> <p>This project, which is of considerable importance from the point of view of enhancing and preserving the natural heritage, has unfortunately not yet been finally adopted.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
		X	
Aichi Targets:		2, 17, 20	
Marginal Aichi Targets:		4	
Sustainable Development Goals:		11, 15	

Actions for S6

Recovering running and stagnant aquatic environments, ensuring that their quality profile is sufficient to support life for a multitude of organisms

Action	Description	Responsibility	Deadline
S6-A1	Improving the sewage system to reduce organic pollution in watercourses	Ministry of Territory	2025
<p>Nutrient monitoring carried out in 2019 on the 3 main San Marino watercourses (Ausa, San Marino and Marano) shows trophism levels that definitely need to be improved. Indeed, in some places San Marino's sewerage system still presents some deficiencies and defects, which worsen water quality, especially during adverse weather events. Network repair projects are currently underway. Since the 2000s, the separation of foul and storm water drainage systems has been implemented.</p> <p>With Delegated Decree no. 91/2021, the Republic of San Marino made some regulatory changes to the "Environmental Code" envisaged by the existing Delegated Decree no. 44/2012, thus effectively introducing a ban on the discharge of industrial waste water into torrents. Thanks to this legislative measure, industrial processing water can no longer be discharged into watercourses, but has to be channelled exclusively into the public sewerage system, and the relevant environmental tax has to be paid at the same time.</p> <p>For orographic or technical reasons, some areas of the territory are not served by a foul water drainage system. Therefore, it is necessary to extend the waste water collection network throughout the territory in order to further improve the quality of watercourses.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
	X		
Aichi Targets:		8, 11, 14	
Marginal Aichi Targets:		-	
Sustainable Development Goals:		6, 15	

Action	Description	Responsibility	Deadline
S6-A2	Ensuring greater river continuity through the construction of works such as fish ladders or through the demolition or restructuring of weirs, following the best environmental engineering practices	Ministry of Territory	2025
<p>Most of the watercourses in the territory have thresholds or weirs built in the past, which constitute an impassable obstacle for fish. Some studies are currently being carried out to determine the most appropriate type of intervention to solve this problem. Considering the costs and complexity of the interventions, priority will be given to the most critical situations or those with the greatest ecological relevance. In order to guarantee the level of outflow necessary for aquatic life and not to damage the balance of the ecosystems involved, the Integrated Water Service manager (Public Utilities Autonomous State Corporation) is entrusted with the definition of the water balance and the flow rates of the three main hydrographic basins in San Marino territory.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
		X	
Aichi Targets:		11	
Marginal Aichi Targets:		6, 14	
Sustainable Development Goals:		6, 15	



Action	Description	Responsibility	Deadline
S6-A3	Promoting the maintenance and construction of drinking troughs and small ponds	UGRAA - Ministry of Territory	2025
<p>The Environmental and Agricultural Resources Management Office, in collaboration with San Marino Naturalistic Centre and San Marino Hunting Federation, has created more than a dozen ponds and small reservoirs in strategic places throughout the territory to ensure a water resource for fauna and to combat the increasingly early and prolonged periods of drought. In addition, farmers have been given the opportunity to receive subsidies to build reservoirs for irrigation purposes, which can also be used for the management of fauna.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
X			
Aichi Targets:		11, 12, 15	
Marginal Aichi Targets:		5, 7	
Sustainable Development Goals:		6, 15	



Primary target T3**Increasing the knowledge of the biological diversity heritage present in the territory****Actions for S7****Carrying out monitoring activities and research projects to increase current knowledge about biodiversity**

Action	Description	Responsibility	Deadline
S7-A1	Funding research projects in the field of nature/environment and publishing them	CNS - Ministry of Territory	2025
<p>Since 2018, the following monitoring, research and study activities have been carried out:</p> <ul style="list-style-type: none"> • Roe deer (<i>Capreolus capreolus</i>) censuses in the Republic of San Marino, March 2018. • Artificial breeding and recovery of Italian barbel (<i>Barbus plebejus</i>), which is typical of the San Marino torrent, Gorgascura gorge and adjoining stretches, 2018. • Contribution to the knowledge of San Marino's orthoptera fauna, 2018. • Report on stray dogs in the Republic of San Marino, 2018. • Genetic analyses on brook barbel (<i>Barbus caninus</i>) in the Valle ditch, 2018. • Reproduction of South European nase (<i>Protochondrostoma genei</i>) and its reintroduction in the Marano torrent, 2019. • Studies on gliridae, hazel dormouse (<i>Muscardinus avellanarius</i>) and garden dormouse (<i>Eliomys quercinus</i>) in the territory of the Republic of San Marino, 2019. • Contribution to the knowledge of underground fauna of the Voragine del Titano, 2019 • Corvid monitoring in the territory of the Republic of San Marino, 2013 - 2019. • Monitoring of common nesting birds in the Republic of San Marino, 2008 - 2020. • Studies on the presence of wild boars (<i>Sus scrofa</i>) in the Republic of San Marino, 2013 - 2020. • Verification of the results of reintroduction and support projects through artificial introduction of indigenous fish species of the Republic of San Marino, 2014 - 2020. • Environmental improvement for wildlife purposes of the breeding sites of birds of prey, 2016 - 2020. • Studies on the presence of rare micromammals in the Republic of San Marino, 2020. • Studies on phyto-zoocenoses characterising habitats that are particularly interesting in terms of conservation (Pennicciola arid grassland, Ca' i Gessi aquifer), 2021. • Reorganisation, classification and cataloguing of the groups of invertebrates, present in the territory and collected in the Museum, which have not yet been specifically studied, 2021. 			

- Project for the conservation and recovery of the Apennine yellow-bellied toad population (*Bombina pachypus*) in the Republic of San Marino, 2021.
- Studies on bats in the Republic of San Marino, 2005 - 2021.
- Monitoring of tiger mosquito (*Aedes albopictus*) in the territory of the Republic of San Marino, 2009 - 2021.

The monitoring of indigenous species is mainly carried out by San Marino Naturalistic Centre. Due to its numerous commitments involving schools and other areas of competence, the Centre has difficulty in estimating the status of all species present in the territory. Priority was given to taxa and to species under hunting pressure or in difficulty due to climate change and disturbing human activities. Particular attention was paid to fish populations, amphibians, ornithofauna, bats and species requiring selection interventions due to excessive numbers of individuals. Thanks to the collaboration with independent researchers and enthusiasts, new taxa have been reported for the territory of the Republic of San Marino. This suggests a level of knowledge of the local biodiversity that needs to be improved and implemented. More than 150 new species of vascular plants have been identified, while the following animals were found: *Bittacus hageni*, *Zeryntia cassandra*, *Acrometopa macropoda*, *Meconema meridionale*, *Meconema thalassinum*, *Metaplastes pulchripennis*, *Barbus caninus*, *Bufo viridis*, *Hemidactylus turcicus*, *Coronella girondica*. In the immediate future, given the intention to study and establish new protected areas, the monitoring of plant associations and fauna populations in areas of high naturalistic value is planned.

Publications since 2018:

- Casali S., Busignani G., Casali L., (edited by), 2019. Natural History Essays, Studies and Research activities in the Republic of San Marino. Vol. IV (2012 – 2018). San Marino Naturalistic Centre, Borgo Maggiore – Republic of San Marino.
- Sandro Casali, 2019. Speleone il geotritone e i suoi strambi amici. Carlo Filippini Publishing, Borgo Maggiore, Republic of San Marino.

Additional information		
Implementation of the measure		
Implemented	Partially implemented	Not implemented
X		
Aichi Targets:		12, 19
Marginal Aichi Targets:		1
Sustainable Development Goals:		6, 15

Action	Description	Responsibility	Deadline
S7-A2	Monitoring the status of non-indigenous species	CNS - UGRAA - Ministry of Territory	2025
<p>Populations of non-indigenous species that have long settled in the territory are subject to control and monitoring, as in the case of nutria (<i>Myocastor coypus</i>). In order to prevent the excessive spread of this rodent, specific protocols have been put in place to enable action to be taken, where necessary, in a timely manner and in synergy with various State Offices. The territory of San Marino is not adequate to support a large population of nutria, as it does not have watercourses suitable for their needs. However, the natural dispersion of this species results in the arrival of new individuals from Italy every year. In recent years, reports of other non-indigenous species have increased within the Republic of San Marino. On two occasions, flocks of ring-necked parakeets (<i>Psittacula krameri</i>) have been reported flying near residential or green areas. Currently, it seems that this species has not yet settled in the territory; however, given their rapidly expanding distribution in the Italian peninsula, it is likely that in the next few years it will also settle in San Marino territory. No protocols of action have yet been drawn up. The presence of raccoons (<i>Procyon lotor</i>) has been reported twice, but there are no other reports either from hunters or from photo-traps. A population of these animals has been widespread for years in the Italian regions bordering the Republic of San Marino; therefore, it is not unlikely that some individuals have passed through or settled in the territory. Given the exceptional nature of the sightings, no protocols of action have yet been drawn up. A similar situation concerns the Louisiana crawfish (<i>Procambarus clarkii</i>), which has been reported on some occasions at the border of the Republic of San Marino, where torrents have deeper waters and substrates suitable for this species. Given the local hydrological characteristics, it is unlikely that this crustacean will be able to move up the watercourses and spread throughout the territory; however, considering that its populations are growing in neighbouring Italian areas, regular on-site inspections are carried out. With regard to insects and other invertebrates, the situation is similar to that in Italy, and monitoring and control activities are carried out only for species, which are interesting from an agronomic or health point of view.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
X			
Aichi Targets:		9, 11, 12	
Marginal Aichi Targets:		-	
Sustainable Development Goals:		15	

Primary target T4**Promoting a broad and easily accessible knowledge of the concept of biodiversity****Actions for S8****Promoting effective education on the concept of biodiversity at school level**

Action	Description	Responsibility	Deadline
S8-A1	Carrying out at least one theoretical lesson per year on biodiversity addressed to all students of a specific school level	CNS - Ministry of Education	2025
<p>In recent years, the State has greatly invested in an important aspect, i.e. education and training on the general themes concerning the environment, climate change and the importance of biodiversity. In San Marino school system, these concepts are part of the more comprehensive subject of “Environmental and Sustainable Development Education”. This subject includes a wide range of activities aimed at promoting among the young the knowledge of the natural environment, raising their awareness of major environmental issues and encouraging them to behave in such a way as to avoid waste of natural resources.</p> <p>More specifically, an ad-hoc lesson on biodiversity is annually held for junior high school students (12 - 14 years old) in order to educate the entire San Marino school population. This Action, of considerable educational importance, has been suspended due to the COVID-19 pandemic, but it will be resumed as soon as the conditions allow.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
	X		
Aichi Targets:		1	
Marginal Aichi Targets:		-	
Sustainable Development Goals:		4	

Actions for S9
Promoting environmental tourism to enhance San Marino's biodiversity heritage

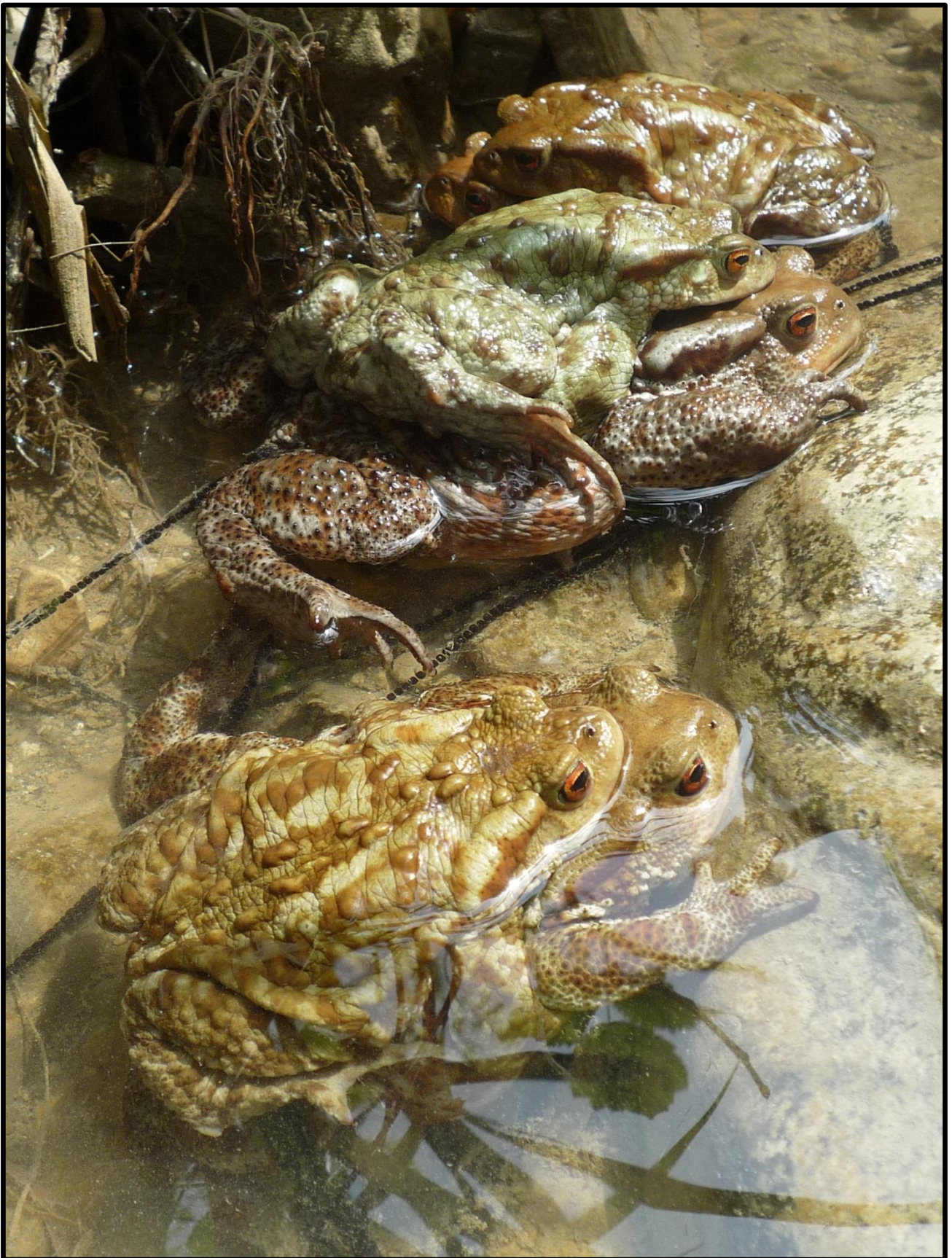
Action	Description	Responsibility	Deadline
S9-A1	Organising excursions for residents and tourists to promote and enhance San Marino's natural heritage of biodiversity	Ministry of Territory, Ministry of Tourism	2025
S9-A2	Advertising the naturalistic aspect and the heritage of biodiversity	Ministry of Territory, Ministry of Tourism	2025
<p>In order to enhance the environmental heritage from a tourist point of view, the Republic of San Marino has drawn up a strategic plan (Sustainable Tourism Development Project), which offers new forms of hospitality, based on slow mobility and networks of footpaths and cycle routes. This overcomes the model of mass tourism, characterised by accommodation facilities concentrated mainly in the historic centre.</p> <p>Contact with nature and outdoor activities are a priority in the promotion of products and destinations. Indeed, only in places where there is a strong focus on nature will it be possible to develop sustainable, long-lasting and, above all, self-sustaining tourism formulas. The Republic of San Marino aims at relaunching "Green" Tourism by exploiting its vocations such as hiking, cycling or horseback riding, trekking in its various forms (literary, photographic, etc.), sports, biodiversity and nature, proposing the rediscovery of nature trails, such as the Titano Pathway.</p> <p>To support this new form of tourism, environmental measures are integrated into incentives, investment schemes and special funds. However, worth considering is that, in a small territory such as the Republic of San Marino, environmental tourism may generate dual effects: on the one hand, it contributes to socio-economic and cultural development; on the other hand, it may cause degradation and disturb natural ecosystems. For this reason, tourist activities involving sensitive environments must be properly managed.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
	X		
Aichi Targets:			1
Marginal Aichi Targets:			3, 20
Sustainable Development Goals:			4

Actions for S10**Creating a platform to enhance the “Clearing-House Mechanism” and promoting the exchange of information between research bodies and the population**

Action	Description	Responsibility	Deadline
S10-A1	Developing the website of San Marino Naturalistic Centre, on which research activities can be published and developments on biodiversity knowledge can be shared	CNS - IT Office	2020
<p>San Marino Naturalistic Centre (CNS) includes the Institute for studies, research activities and documentation and the Museum of Natural History. It was established with the aim of creating a cultural centre on Natural Sciences, contributing to the dissemination of knowledge on nature and promoting the enhancement of San Marino's environmental heritage. It is currently provided with a limited area on the State Museums' website, which is not easily accessible and not very user-friendly. Considering the numerous educational and dissemination activities carried out by the CNS, it hopes to have greater visibility and the possibility of implementing contents (texts, articles, research activities, publications), in order to provide tourists and San Marino citizens with a more effective tool contributing to the knowledge and protection of biodiversity.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
		X	
Aichi Targets:			1
Marginal Aichi Targets:			19
Sustainable Development Goals:			4

Action	Description	Responsibility	Deadline
S10-A2	Promoting the organisation of public meetings on issues related to biodiversity	CNS - Ministry of Territory	2025
<p>In addition to the numerous training activities for students and teachers, Public Offices and Associations promote annual public meetings on environmental, sustainability and biodiversity issues. The local media, through articles, publications, television and radio broadcasts, also regularly contribute to the dissemination of naturalistic culture and the promotion of biodiversity concepts.</p>			
Additional information			
Implementation of the measure			
Implemented	Partially implemented	Not implemented	
X			
Aichi Targets:			1
Marginal Aichi Targets:			-
Sustainable Development Goals:			4





Assessment of the achievement of the primary targets and conclusions

As already indicated in the preceding Report, in recent years, the Public Administration has begun to operate in the various sectors falling within its competence with a view to environmental protection, the safeguarding of the landscape and the sustainable use of resources, in line with European requirements. Following the adoption of the National Biodiversity Strategy (NBSAP), since 2018 the Public Administration, in particular the Department of Territory and Environment, has started to focus on biodiversity issues by adapting the administrative legal framework and preparing specific actions.

A fundamental step in this direction was, for example, the adoption of **Law no. 137 of 19 July 2021 "Protection of wild fauna in the Republic of San Marino"**, which, besides filling an anachronistic regulatory gap, constitutes the basis for the development of a whole set of regulations aimed at the conservation of species and habitats.

Considering that agricultural land and public green areas make up approximately 50% of San Marino's territory, the efforts made to encourage their conversion to organic management represent another fundamental element in reducing negative impacts on ecosystems. Indeed, thanks to the adoption of **Delegated Decree no. 155 of 22 September 2020**, already 25% of the total arable land is managed through organic farming, with positive effects in the immediate future.

Thanks to the small size of the country, its "streamlined" administrative and political procedures, as well as the ease of social interaction, biodiversity issues have become more relevant within Government and community programmes. Also thanks to the active promotion of education and training by the Department of Education, the concepts relating to the value and functioning of biodiversity are widely shared and integrated in society.

Despite the economic crisis, which has characterised these last few years, and the lack of a specific working group for research activities, the Republic of San Marino has considered it essential to increase knowledge of the status and conservation of habitats and species, as well as of direct and indirect threats. To this end, it has promoted and applied monitoring protocols for the main fauna and vegetation groups (in particular vertebrates), which are interesting from a conservation and management point of view, with the coordination of San Marino Naturalistic Centre. The aim of this activity is also to identify and map sensitive areas, as they are now and in the light of climate change, in order to implement specific protection actions.

The data obtained from the in-depth studies carried out in recent years have allowed to significantly increase the knowledge of the habitats and species of the national territory and have led to the reporting of new taxa for the updating of the national check-lists.

The Republic of San Marino is suffering from the environmental impacts linked to a significant land consumption caused by the excessive and disorderly urban development outside the historic centres of its nine municipalities. Building density is accompanied by a generalised and progressive process of land consumption and environmental degradation, which threatens biodiversity and has

a considerable impact on the preservation of habitats and species. Among the direct consequences of the current high rate of urbanisation are the loss, fragmentation and erosion of habitats and the impairment of their ecological and functional role, with several negative effects on the survival of populations and species, soil permeability, rise in temperature and on hydrogeological balance. These processes, which are considered, also at a European level, the main cause for biodiversity loss, generally lead to a reduction in ecological resilience. This situation was generated, at least in part, by a lack of or incomplete and unsatisfactory integration of the need to protect biodiversity into territorial planning instruments, both at large scale and locally.

Another critical point concerns the health of aquatic ecosystems and the management of surface waters. The deterioration in the quality of watercourses in recent decades is partly due to climate change, which is responsible for prolonged dry periods in summer and autumn, and partly to recurrent sewage discharges and the presence of impassable thresholds for fish. Considering the current general situation, structural interventions for environmental restoration are absolutely essential. Moreover, in order to achieve an integrated and multidisciplinary approach to the management of watercourses, the Technical Rules Implementing the Detailed Plan of Protected Natural Areas must be adopted.

The National Biodiversity Strategy (NBSAP) envisages specific actions to improve the situation with regard to these two issues; however, the failure to adopt the new General Town Planning Scheme, together with the technical and economic difficulties of interventions on the sewage network and riverbeds, have so far not allowed to take action. By 2025, set as the deadline for the implementation of the actions envisaged in the Strategy, it is hoped that the objectives of the relevant Priority Strategy will be achieved.

In conclusion, out of the seventeen Actions related to the ten Priority Strategies of the National Biodiversity Strategy of the Republic of San Marino, eight can be considered as implemented, five have been partially implemented and four have not yet been implemented. Only three years after the Strategy was drafted, the results can be considered satisfactory.

Check-list and local status of vertebrates in the Republic of San Marino

Legend

Status according to the IUCN criteria	
DD	Data Deficient
LC	Least Concern
NT	Near Threatened
VU	Vulnerable
EN	Endangered
CR	Critically Endangered
RE	Regionally Extinct

For some anthropophilic species, the term "invasive" has been chosen, as they are not significant in terms of conservation.

Population trends of ornithological fauna	
↑	Low Increase
↑ ↑	High Increase
↓	Low Decrease
↓ ↓	High Decrease

Fish check-list and local status in the Republic of San Marino	
Scientific name	STATUS (RSM)
<i>Leuciscus souffia (Telestes muticellus)</i>	EN
<i>Barbus plebejus</i>	EN
<i>Barbus caninus</i>	CR
<i>Rutilus rubilio</i>	EN
<i>Leuciscus (Squalius) cephalus</i>	VU
<i>Cobitis taenia</i>	EN
<i>Anguilla anguilla</i>	EN
<i>Chondrostoma genei</i>	RE (Reintroduced)

Check-list and local status of amphibians in the Republic of San Marino	
Scientific name	STATUS (RSM)
<i>Speleomantes italicus</i>	VU
<i>Triturus carnifex</i>	VU
<i>Lissotriton vulgaris</i>	VU
<i>Bombina pachypus</i>	CR (Restocking)
<i>Bufo bufo</i>	LC
<i>Bufo (Bufotes) viridis</i>	VU
<i>Hyla intermedia</i>	LC
<i>Pelophylax lessonae/P. klepton esculentus</i>	LC
<i>Rana dalmatina</i>	VU
<i>Rana italica</i>	VU

Check-list and local status of reptiles in the Republic of San Marino	
Scientific name	STATUS (RSM)
<i>Anguis fragilis</i>	LC
<i>Lacerta bilineata</i>	LC
<i>Podarcis muralis</i>	LC
<i>Podarcis sicula</i>	VU
<i>Chalcides chalcides</i>	VU
<i>Tarentola mauritanica</i>	VU
<i>Hemidactylus turcicus</i>	VU
<i>Hierophis viridiflavus</i>	LC
<i>Coronella austriaca</i>	DD
<i>Coronella girondica</i>	VU
<i>Zamenis longissimus</i>	VU
<i>Natrix natrix</i>	LC
<i>Natrix tessellata</i>	DD
<i>Vipera aspis</i>	VU

Check-list and local status of birds nesting in the Republic of San Marino		The symbols ↑↓ indicate known trends of the populations	
<i>Anas platyrhynchos</i>		<i>Phoenicurus ochruros</i>	
<i>Pernis apivorus</i>		<i>Phoenicurus phoenicurus</i>	↑
<i>Circus pygargus</i>		<i>Saxicola torquatus</i>	
<i>Accipiter nisus</i>		<i>Monticola solitarius</i>	
<i>Buteo buteo</i>		<i>Turdus merula</i>	
<i>Falco tinnunculus</i>		<i>Turdus philomelos</i>	
<i>Falco subbuteo</i>		<i>Turdus viscivorus</i>	
<i>Falco peregrinus</i>		<i>Cettia cetti</i>	
<i>Phasianus colchicus</i>		<i>Cisticola juncidis</i>	↓
<i>Coturnix coturnix</i>		<i>Acrocephalus scirpaceus</i>	
<i>Alectoris rufa</i>		<i>Hippolais polyglotta</i>	
<i>Gallinula chloropus</i>		<i>Sylvia cantillans</i>	
<i>Fulica atra</i>		<i>Sylvia subalpina</i>	
<i>Charadrius dubius</i>		<i>Sylvia melanocephala</i>	
<i>Columba livia</i>		<i>Sylvia communis</i>	
<i>Columba palumbus</i>	↑↑	<i>Sylvia atricapilla</i>	↑
<i>Streptopelia decaocto</i>	↓	<i>Phylloscopus bonelli</i>	
<i>Streptopelia turtur</i>	↓	<i>Phylloscopus collybita</i>	
<i>Cuculus canorus</i>		<i>Regulus ignicapilla</i>	
<i>Tyto alba</i>		<i>Muscicapa striata</i>	
<i>Otus scops</i>		<i>Aegithalos caudatus</i>	
<i>Athene noctua</i>		<i>Cyanistes caeruleus</i>	
<i>Strix aluco</i>		<i>Parus major</i>	
<i>Asio otus</i>		<i>Periparus ater</i>	
<i>Caprimulgus europaeus</i>		<i>Sitta europaea</i>	
<i>Apus apus</i>	↑	<i>Certhia brachydactyla</i>	↑
<i>Alcedo atthis</i>		<i>Remiz pendulinus</i>	
<i>Merops apiaster</i>		<i>Oriolus oriolus</i>	
<i>Upupa epops</i>		<i>Lanius collurio</i>	
<i>Jynx torquilla</i>		<i>Garrulus glandarius</i>	↑↑
<i>Picus viridis</i>		<i>Pica pica</i>	
<i>Dendrocopos major</i>		<i>Corvus monedula</i>	
<i>Dendrocopos minor</i>		<i>Corvus cornix</i>	
<i>Lullula arborea</i>		<i>Sturnus vulgaris</i>	
<i>Alauda arvensis</i>		<i>Passer italiae</i>	
<i>Hirundo rustica</i>		<i>Passer montanus</i>	
<i>Delichon urbicum</i>		<i>Fringilla coelebs</i>	
<i>Anthus campestris</i>		<i>Serinus serinus</i>	
<i>Motacilla cinerea</i>		<i>Carduelis chloris</i>	↓
<i>Motacilla alba</i>		<i>Carduelis carduelis</i>	↓↓
<i>Troglodytes troglodytes</i>	↓	<i>Carduelis cannabina</i>	
<i>Cinclus cinclus</i>		<i>Emberiza cirrus</i>	
<i>Erithacus rubecula</i>		<i>Emberiza cia</i>	
<i>Luscinia megarhynchos</i>		<i>Emberiza calandra</i>	

Check-list and local status of mammals in the Republic of San Marino			
Scientific name	STATUS (RSM)	Scientific name	STATUS (RSM)
<i>Erinaceus europaeus</i>	LC	<i>Tadarida teniotis</i>	DD
<i>Talpa europaea</i>	LC	<i>Lepus europaeus</i>	LC
<i>Sorex samniticus</i>	LC	<i>Sciurus vulgaris</i>	LC
<i>Neomys anomalus</i>	DD	<i>Glis glis</i>	LC
<i>Suncus etruscus</i>	LC	<i>Muscardinus avellanarius</i>	EN
<i>Crocidura leucodon</i>	LC	<i>Eliomys quercinus</i>	DD
<i>Crocidura suaveolens</i>	LC	<i>Microtus savii</i>	LC
<i>Rhinolophus euryale</i>	VU	<i>Myodes glareolus</i>	DD
<i>Rhinolophus ferrumequinum</i>	VU	<i>Apodemus flavicollis</i>	VU
<i>Rhinolophus hipposideros</i>	VU	<i>Apodemus sylvaticus</i>	LC
<i>Myotis nattereri</i>	VU	<i>Rattus norvegicus</i>	<i>invasive</i>
<i>Myotis emarginatus</i>	VU	<i>Rattus rattus</i>	<i>invasive</i>
<i>Myotis bechsteinii</i>	DD	<i>Mus musculus</i>	<i>invasive</i>
<i>Myotis daubentonii</i>	VU	<i>Hystrix cristata</i>	LC
<i>Myotis myotis</i>	DD	<i>Myocastor coypus</i>	<i>invasive</i>
<i>Myotis blythii</i>	DD	<i>Canis lupus</i>	VU
<i>Pipistrellus pipistrellus</i>	LC	<i>Vulpes vulpes</i>	LC
<i>Pipistrellus kuhlii</i>	LC	<i>Martes foina</i>	LC
<i>Hypsugo savii</i>	LC	<i>Mustela putorius</i>	EN
<i>Eptesicus serotinus</i>	LC	<i>Mustela nivalis</i>	VU
<i>Plecotus auritus</i>	DD	<i>Meles meles</i>	LC
<i>Plecotus austriacus</i>	VU	<i>Sus scrofa</i>	<i>invasive</i>
<i>Miniopterus schreibersii</i>	VU	<i>Capreolus capreolus</i>	LC



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www.istruzioneecultura.sm

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