BIODIVERSITY CONSERVATION IN THE REPUBLIC OF ARMENIA

THE RED DATA BOOK AND PROTECTED AREAS IN THE COUNTRY
### BIODIVERSITY OF ARMENIA

<table>
<thead>
<tr>
<th>Category</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Size:</strong></td>
<td>29,743 km²</td>
</tr>
<tr>
<td><strong>Higher plants:</strong></td>
<td>3,600 species (incl. 452 in the Red Data Book of which 166 or 37% in protected areas)</td>
</tr>
<tr>
<td><strong>Invertebrates:</strong></td>
<td>17,000 species (incl. 155 in the Red Data Book of which 94 or 61% in protected areas)</td>
</tr>
<tr>
<td><strong>Vertebrates:</strong></td>
<td>535 species (incl. 153 in the Red Data Book of which 115 or 75% in protected areas)</td>
</tr>
</tbody>
</table>
23 years

Invertebrates: 0 species

Vertebrates: 99
• Mammals: 18
• Birds: 67
• Reptiles: 11
• Amphibians: 1
• Bony fishes: 2

Invertebrates: 155 species
• Molluscs: 16
• Insects: 139

Vertebrates: 153
• Mammals: 29
• Birds: 96
• Reptiles: 19
• Amphibians: 2
• Bony fishes: 7
Distribution of animal taxa in the Red Data Book according to the threat categories

<table>
<thead>
<tr>
<th>Taxa</th>
<th>EX</th>
<th>RE</th>
<th>CR</th>
<th>EN</th>
<th>VU</th>
<th>DD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastropods</td>
<td>2</td>
<td>10</td>
<td>2</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bivalves</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Insects</td>
<td>1</td>
<td>38</td>
<td>62</td>
<td>38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Fishes</td>
<td>0.5</td>
<td>0.5</td>
<td>1</td>
<td>3</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Amphibians</td>
<td>1</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reptiles</td>
<td>7</td>
<td>2</td>
<td>10</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Birds</td>
<td></td>
<td>18</td>
<td>65</td>
<td>13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mammals</td>
<td>3</td>
<td>3</td>
<td>10</td>
<td>12</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
Animals declared in the Red Data Book as EX - EXTINCT

1 invertebrate species
2 subspecies of vertebrates
Animals declared in the Red Data Book as Regionally Extinct

2 invertebrate species
3 species of vertebrates
Animals declared in the Red Data Book as CRITICALLY ENDANGERED

50 invertebrate species
12 species of vertebrates
Animals declared in the Red Data Book as ENDANGERED

64 invertebrate species
31 species of vertebrates
Animals declared in the Red Data Book as VULNERABLE

38 invertebrate species
91 species of vertebrates
Animals declared in the Red Data Book as DATA DEFICIENT

16 species of vertebrates
## Distribution of Red Data Book animals in protected areas

<table>
<thead>
<tr>
<th>Taxa</th>
<th>Total No. species</th>
<th>No. species in protected areas</th>
<th>% in protected areas</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gastropods</td>
<td>14</td>
<td>6</td>
<td>43</td>
</tr>
<tr>
<td>Bivalves</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Insects</td>
<td>139</td>
<td>88</td>
<td>63</td>
</tr>
<tr>
<td>Fishes</td>
<td>7</td>
<td>3</td>
<td>43</td>
</tr>
<tr>
<td>Amphibians</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Reptiles</td>
<td>19</td>
<td>17</td>
<td>89</td>
</tr>
<tr>
<td>Birds</td>
<td>96</td>
<td>71</td>
<td>74</td>
</tr>
<tr>
<td>Mammals</td>
<td>29</td>
<td>24</td>
<td>83</td>
</tr>
</tbody>
</table>
About one-third of animals from the Red Data Book are not represented in PAs.
Protected areas in Armenia

The system of protected areas was launched in 1958 with the establishment of Khosrov Forest, Shikahogh and Dilijan state reserves and 6 state sanctuaries.

As in 2016, Armenia has 3 state reserves, 4 national parks, 27 state sanctuaries and 232 natural monuments.

Classified by:

- **Purpose**: international, national and local
- **Categories**: state reserves, national parks, state sanctuaries and natural monuments
New protected areas

The National Strategy of Development of Specially Protected Natural Areas and the National Action Plan (2003-2010) contain the establishment of 11 new protected areas.

The following protected areas were established in 2008-2011:

1. National parks: Arevik and Lake Arpi

2. Sanctuaries: Jermuk Hydrological, Hankavan Hydrological, Khor Virap, Zikatar and Zangezur

3. Pending sanctuaries: Gnishik, Vorotan, Khustup and Kirants
ACTIVITIES AND PROGRESS SO FAR

3. Establish the protected areas of different status in the important areas on a basis of analysis of information on leopard population and habitats.

AREVIK NATIONAL PARK
2010-present

- Established in 2009 due to cooperation between Ministry of Nature Protection, WWF and CEPF
- Preparation of management and business plans is underway
- Supported by Ministry of Nature Protection and Caucasus Nature Fund

![Map of Arevik National Park](image)

Legend:
- Cities
- Rivers
- State Border
- Lakes
- Protected Areas
  - Planned Protected Area
  - State Sanctuary
  - National Park
  - State Reserve

34401.8 ha
ACTIVITIES AND PROGRESS

KHOSROV FOREST STATE RESERVE

2007-2010

1. Development of ecotourism capacities and infrastructure

2. Professional training and awareness-raising

3. Now supported by Ministry of Nature Protection and Caucasus Nature Fund

23213 ha
ACTIVITIES AND PROGRESS

SHIKAHOGH STATE RESERVE

2007-2010

1. Development of ecotourism capacities and infrastructure

2. Professional training and awareness-raising

3. Now supported by Ministry of Nature Protection and Caucasus Nature Fund

12137.075 ha
“Shikahogh” State Reserves
ACTIVITIES AND PROGRESS

ZANGEZUR STATE SANCTUARY

2010-ongoing

1. Established in 2009 by Ministry of Nature Protection, WWF and CEPF

2. Capacity building within the ongoing UNDP/GEF project

25870.64 ha
“Zangezur” Sanctuary

Gogy Lake
ZANGEZUR STATE SANCTUARY
ACTIVITIES AND PROGRESS

KHUSTUP STATE SANCTUARY

2010-ongoing

1. Pending for establishment within the ongoing UNDP/GEF project

2. Capacity building
In 2011 December 23 between Ministry of Nature Protection of Republic of Armenia and Department of Environment – Islamic Republic of Iran was signed agreement of bilateral cooperation on biodiversity conservation.
In 2012 July 17, was signed bilateral agreement between Ministry of Nature Protection of Republic of Armenia and Department of Environment – Islamic Republic of Iran on Establishing a Peace and Friendship Park at the joint border area. As well as in future separation of ecological corridors between these two countries Dizmar and Arevik protected areas.
In the frame of mentioned agreement it is planned to jointly apply to UNESCO for future inclusion those areas as biosphere protected area.
During 2013 for separation of ecological corridors and migration routes there were implemented mapping activities and exploration of ecological corridors for animal migration routes of the RA Syuniq Region, Arevik National Park.
Based on the analysis of previous work there were collected information supplemented for the (UNESCO) - The International Biosphere Reserve licensing format
For connection of Dizmar protected area and Arevik National Park as well as for freely movement of Animals in the border areas there were implemented mapping activities in 6 ecological corridors. Those areas are located in Karchevan, Alvanq, Nrnadzor rural communities and in the areas of Meghri town and the approximate size of that areas are 3416.11 ha.
During the workshop “National parks and conservation management of coastal areas” in 2013 November in RA, Meghri we pass to the Iranian side digital version of GIS maps and materials, on the base of these materials there were consent of the areas for ecological corridors in Peace and Friendship Park at the joint border area.
By the support of WWF Armenian branch in the Aevik national Park and in the places of Eco-corridors were established photo-traps for the exploration of population size and animal movements. Also photo-traps were established in southern part of Zangezur range for exploration of migration routes of big mammals.
On July 2015 there were 12th Armenian-Iranian intergovernmental commission meeting. During that meeting were exchange of information about activities going on in the areas of Dizmar and Arevika National Park.
For effectively establishing a Peace and Friendship Park at the joint border area, we expressed our readiness to create scientific working groups from scientific organizations to do joint scientific investigations in those areas. (migration routes and eco-corridors).
1. Preparation and signing of memorandum of understanding with Iran’s Department of Environment
2. Good linkage between protected areas of Armenia, Azerbaijan and Iran with prospects for becoming a successful Econet
THE ESTABLISHMENT OF ARMENIAN - IRANIAN TRANSBOUNDARY
“PEACE PARK" IS PROPOSED IN THIS AREA
Some species conservation projects in Armenia
Endangered animals

Armenian mouflon

Caucasian leopard
LEOPARD SURVEYS
ARmenian Viper Radio-telemetry

Since 2004 – cooperation between Scientific Center of Zoology and Hydroecology NAS RA and St. Louis Zoo (USA) within the project “Using radiotelemetry to study the movement patterns, home range size and habitat preference of the Armenian viper *Montivipera raddei*."

2004-2006: study site 1, Khosrov

2007-2009: study site 2, Abovian

2009-2011: study site 3, Shikahogh

The results have been regularly presented in annual reports of Khosrov Forest and Shikahogh state reserves and were used during the boundary delineation of these PAs.
ARMENIAN VIPER RADIO-TELEMETRY
ARMENIAN VIPER RADIO-TELEMETRY
RESEARCH AND CONSERVATION OF THE DAREVSKY’S VIPER

Since 2006 – field research and viper conservation (construction of watering sites for livestock, habitat fencing etc.) due to financial support by BP/CLP and UNDP/GEF.
THANK YOU FOR YOUR ATTENTION !