### **Convention on the Conservation of the European** Wildlife and Natural Habitats (Bern, 1979)





COUNCIL CONSEIL OF EUROPE DE L'EUROPE



### **Emerald Network in Armenia**

KICK OFF MEETING OF THE EU/CoE JOINT PROGRAMME EMERALD NETWORK, PHASE II

KIEV, UKRAINE, 24-27 April 2013

## Armenia



Area – 29740 sq. km Altitudes – 375 – 4095 m a.s.l.

Population ~ 3,500.000

Flora ~ 3600 species of vascular plants ~ 100 plant species per 1 km2.

Fauna~ 500 species of *vertebrates* 17,000 ~ species of invertebrate **pic.3** 

### SPECIALLY PROTECTED NATURE AREAS OF ARMENIA

- State Reserves
  <<Khosrov Forest>>
  <<Shikahogh>>
  <<Erebuni>>
- National parks
- <<Dilijan>>
- <<Lake Sevan>>
- <<Lake Arpi>>
- <<Arevik
- <u>26 State Reservations</u>
- 230 Nature Monuments



#### Emerald Network Program in Armenia

#### First direction

- One of the Emerald sites "Khosrov Forest" State Reserve's Application was presented for the European Diploma of Protected Areas as well as the works done the Ministry of Nature Protection of RA.
- It was mentioned that the procedure has started at November 2011 by submitting application according to the format approved by the Council of Europe.
- At February 9, 2012 in Strasburg at the Group of specialist "European Diploma of protected areas" meeting the report was submitted which after the discussions was accepted. The next step of the procedure was the organization of workshop in Armenia on April 2012.

### «Khosrov Forest» State Reserve SNCO

#### **Established:** 1958

Total area: 23 213,500 ha

#### **Location:** Ararat Marz

**Purpose:** protection of the Azat , River water resources, juniper and oak, arid mountain vegetation, landscapes, rare animals and plants.

"Khosrov Forest" State Reserve SNCO currently manages "Goravan Sands" established in 1959 and "Khor Virap" sanctuaries established in 2007 Pic.10



#### <<KHOSROV FOREST>>STATE RESERVE



#### Map of <Khosrov Forest> State Reserve



### Emerald Network Program in Armenia

The Armenian "Khosrov Forest" State Reserve will be the first protected area and the Emerald network site awarded European Diploma in the Caucasus.

#### Emerald Network Program in Armenia

- Regarding the above mentioned we have an idea related to the establishment of transboundary Emerald site with Georgia- "Lake Arpi" National Park in Armenia /Emerald and Ramsar site/ and "Javakheti" National park in Georgia.
- We have already an example with Georgia, "Lake Arpi" National Park in Armenia /Emerald and Ramsar site/ established in 2011 with "Javakheti" National park and five wetland Sanctuaries in Georgia established in 2010 are considered as transboundary protected area.

### << Lake Arpi >> National Park

<< Lake Arpi >> National Park in Armenia /Ramsar site/ established in 2011





#### Emerald Network Program in Armenia

Meanwhile "Lake Arpi" National Park is one of the Emerald Network sites in Armenia. Moreover I think this site can be a transboundary Emerald site with Georgia. Hence, in future we can present it with Georgia to apply for the award of the European diploma.

#### Emerald Network Program in Armenia

- Second direction of our work in the Second phase we would like to connect with Frame Convention on Climate change.
- We consider that synergism between these two Convention will be very fruitful and useful. Now there are works on Third National Communication on climate change in Armenia. During this work vulnerability of natural ecosystems of Armenia will be evaluated and we would like to evaluate such vulnerability from climate change for Emerald Network sites. This issue was discussed with Armenian coordinator of climate change programs in Armenia and now we have agreement for joint work.

The base for this work will be model of ecosystem's distribution based on the Holdridge's "Life zones" system. In our program we want to evaluate risks from climate change for:

- 5 Emerald Network sites "Khosrov Forest" State reserve, "Sevan" National park, "Lake Arpi" National park, "Plane grove" State sanctuary, "Impassable brushwood" in Syunik region.
- Further distribution of 5 invasive and expanding plant species connecting with climate change (Ailanthus altissima, Silybum marianum, Robinia pseudacacia, Astragalus galegiformis, Tanacetum vulgare).
- For 2 habitats G1.37 Irano-Anatolian mixed riverine forests and D6.16 (15.115) Interior Central European and Anatolian Salicornia, Microcnemum, Sueda and Salsola swards.
- For 7 plant species, 4 invertebrate and 15 vertebrate animal species.
- We consider that such modeling of changes in sites, ecosystems and distribution of plant and animal species will be good basis for future work for new sites and protected nature areas establishment as well as during conservation and adaptation measures elaboration.

#### "Areas of Special Conservation Interest" Emerald Network Program in Armenia

Nine sites 206 697, 5 ha 7 % of the total area



### **Emerald Sites in Armenia**

- "Sevan" National park 0000001-AM
- "Lake Arpi" National park
- **000002-AM**
- "Khosrov Forest" State Reserve
- **0000003-AM**
- "Khor Virap" State Sanctuarie
- **0000004-AM**
- "Yerakh range"
- **0000005-AM**

"Khustup" 000006-AM
"Lori Lakes" 000007-AM
"Impassable brushwood 000008-AM
"Plane Grove" State
0000009-AM Sanctuarie

### Sevan" National park "Areas of Special Conservation Interest" (ASCI)









### "Lake Arpi" National park "Areas of Special Conservation Interest" (ASCI)









### "Khosrov Forest" State Reserve "Areas of Special Conservation Interest" (ASCI)







#### "Yerakh range" "Areas of Special Conservation Interest" (ASCI)



004 – Khor-Virap





005 – Erah range

### Khustup mountain and Lori lakes "Areas of Special Conservation Interest" (ASCI)









007 – Lori lakes

#### "Syunik Impassable brushwood" and "Plane grove" State Sanctuarie "Areas of Special Conservation Interest" (ASCI)







Plane grove

- According to our examinations the species of flora and fauna of Armenia that are included in the Resolutions 4 and 6 and Appendices to Bern Convention include
- 7 species of vascular plants,
- 5 species of invertebrate animals,
- 143 species of vertebrate animals, including 117 species of birds.
- 10 ecosystems.

## Vascular plants – 7 species



Dactylorhiza chuhensis



Steveniella satyrioides



Ligularia sibirica



Paeonia tenuifolia



Dracocephalum austriacum



Carex acuta



Microcnemum coralloides

## Mammals – 13 species



Panthera pardus



Ursus arctos



Capra aegagrus



Ovis orientalis



Rhinolophus hipposideros







Lynx lynx



Lutra lutra

# Birds – 117 species



Aegypius monachus



Neophron percnopterus



Pelecanus oncocratulus



Ardeola ralloides



Marmaronetta angustirostris



Ciconia nigra



Charadrius alexandrinus

## Reptiles – 4 species



Elaphe quatuorlineata



Emys orbicularis



Testudo graeca



Mauremys caspica

## Fish – 3 species



#### Samanejewia aurata



Aspius aspius



Barbys capito

## Invertebrate animals – 5 species



Vertigo angustior



Cerambyx cerdo



Rosalia alpina



Maculinea nausithous



Leucorrhinia pectoralis

G1.6-Beech forest

## Habitats - 10



C1.3411-Water crowfoot communities



15.115-Continental glasswort swards



C1.224-Bladderwort colonies



G3.4E-Ponto-Caucasian Scots pine forests



G1.A1-Oak-hornbeam forest

### Plans

Promote ideas
Publishing a calendar
Organizing workshop
Scientific investigations
Planning future activities





