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IMPORTANCE OF PROTECTED AREAS ON RESERVATION OF ZOOCENOSSES FUNCTIONING ELEMENTS

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ВАЖНОСТЬ ОХРАНЯЕМЫХ ТЕРРИТОРИЙ ДЛЯ СОХРАНЕНИЯ ФУНКЦИОНАЛЬНЫХ ЭЛЕМЕНТОВ ЗООЦЕНОЗОВ

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Recognizing of an idea – nature, ecology, and healthy environment – is a very actual theme of last decades. This is not accidental event. Increasing socio-economic necessities of human life have promoted massive and uncontrolled extraction of nature resources resulting unfortunate consequences. Luckily, there is still human's want to preserve and give to new generation the tomorrow's nature more or less unsullied. Therefore, specific organizations review and establish strategic plans, make conventions, contracts and on the assumption of it permanent monitoring has been implemented both of regional and global level as well. By common effort of nature securities there are created protected areas conserving rare, endemic and relict species, which are so important for healthy functioning of ecosystem.

Georgia is one of those 34 ecosystems having rich biodiversity and being as endangered ecosystems (Conservation International), one of those 200 vulnerable ecological regions (WWF), one of those 221, well-known as endemic birds' homeland (Bird Life International). By IUCN category there are: 14 reserves, 8 national parks, 14 nature monuments, 12 wildlife preserves and 2 protected landscapes in Georgia.

History of Georgia's protected areas is very old. In ancient times Rome and Greece saved from harm so called „saint woods” very strongly. Georgia wasn't exceptional country about of which an old history narrates. In mountains there are still preserved so called „icon forests” where cutting the forests has been forbidden. This fact facilitated protection and fresh preservation of those places. In 1912 the first reserve was founded in Georgia, which is known Lagodekhi reserve. This one was the second type of that founded in Estonia (the first reserve in Visland). The area of protected territories reaches to 170 thousand ha in Georgia, presented 2, 4 % of the whole territory. Georgia gains the lead place in possessing protected territories in Caucasian. In our region (Adjara) there are three protected areas: Mtirala national park, Kintrishi reserve and wetlands Ispani I, Ispani II. Each of them is distinguished by their unique landscapes and species biodiversity, requiring natural conservation.

Mtirala National Park. Mtirala National Park is located in historical Adjara. Mount Mtirala is located between the Black Sea and Adjara mountain system. These mountains intercept the humid air from the Black Sea and determine Adjara's very humid climate. Annual precipitation reaches to 4520 mm here, due to which the Mount Mtirala is considered as one of the wettest sites not only in Adjara but in our country as well. The toponym "Mtirala" ("Weeping") was given to this Mount just because of abundant precipitation.

The phytocenosis of Mtirala is rich and diverse. In the territory of the National Park are widespread both, the forest vegetation represented by chestnut groves, beech groves and the mixed forest of Colchic type and evergreen shrubbery of Pontic rhododendron characteristic for Kolkheti. Beech, lime, chestnut, alder and hornbeam can be found in the forest of Colchic type. The underbrush is covered with shrubbery of Pontic rhododendron, Cherry laurel, Black Sea holly, Colchic box tree several kinds of lianas.

The zoocenosis of Mtirala is rich as well. Among amphibians Caucasian salamander, Banded newt, Caucasian toad, Common tree frog, Long-legged frog and Eurasian marsh frog can be found here. Three species of lizard and several species of snakes, such as Grass Snake and Dice Snake, and Caucasian Viper inhabit here. The Ornithofauna of the National Park is quite rich in birds of prey. Here are registered Booted Eagle, Common Buzzard, Goshawk, Sparrowhawk, Eurasian hobby, Common kestrel, as well as the nocturnal birds of prey, such as Eurasian eagle owl and Common scops owl. Among other birds here nest hoopoe, woodpecker, raven, Blackbird, and Golden oriole. Among small mammals the following species inhabit the National Park: badger, weasel, Caucasian (Persian) squirrel, hare, Red fox, mole and wild cat. Among large mammals the Brown bear inhabit the Park. Lynx and wolf can be found here as well. Among ungulates the Roe deer can be found in the forests and rarely – the Wild boar.

„Kintrishi” reserve. Reserve is located between the Black sea and high mountain systems of Adjara-Lazeti. Its area is 13 893 ha. Annual average temperature reaches to +10..+11°C, minimal –3,5°C, and maximal – +22,5°C. Annual average precipitation is 3898 mm. Aim of reservation is protection and inspection of phyto and zoocenoses in Colchicum medium mountains. Its relief is mountainous – steep gradient with many rivers and streams. There are preserved many endemic and relict species in the reserve. Zoocenoses is basely presented by following species: deer, chamois, brown bear, fox, wild cat, salamander and others. From phytocenoses there are distinguished oak tree, yew tree, birch, buxus colchica and others.

Wetland–Marsh – Ispani. Wetlands of Kobuleti are divided into two parts: Ispani I and Ispani II. Today Ispani I is mainly represents degenerated drained swamp the considerable part of which is used for industrial purposes. Regeneration of

once cut alders (*Alnus barbata*) is noted at the shoulders. Ispani II presents the different picture. Despite the devastation of adjacent forest and immediate close to the area urbanized zone, there is pure ecosystem. The peat pillows are well expressed. It represents grass-sphagnum swamp, where Kolkhic elements promote its existence. Ispani Marsh is located in the far southern part of Kolkheti plain, in the Autonomous Republic of Adjara. It is located in 1 m. distance from the Black Sea coast. The complex of marshes is located in Kobuleti district.

From the geological point of view the region is young. Its formation started in the middle of Holocene during last 5–6 thousands years. The region and its coastal part is an important range for 21 species of migratory birds, their recreation and wintery. Sphagnum marshes (*Sphagnum spp.*), swamps (*Alnus barbata*, *Rhododendron ponticum*) and numerous fowl species dwell here (Kaffke A., Gonwenberg J., Matchutadze I., Schultz J., 2000). These places are the wintering and resident site for migratory species (Gruiformes, Anseriformes, Charadriiformes). Quite the numerous populations of herons dwell here (big white heron – *Egretta garzetta*, gray heron – *Ardea cinerea*, *Limnocryptes minimus*, *Scolopax rusticola*, *Galinago galinago* (Goradze R., Matchutadze I., Goradze I., 2002, 2003). From the birds of prey here are *Accipiter nisus*, *Circus melanoleus*. Passeriformes are represented in large amount. Also there are presented the following species of zoocenosis: *Neomys fodiens* and *Crocidura suaveolens*; *Rhinopholus ferrumequinum schrieberi* and *R. hipposoderos Beechsteini*; From diverse zoocenose of Ispani I following species inhabit: *Vespertilio serotinus*, *Apodemus agrarius*, *Scirus vulgaris*, *Lepus capensis*, *Lutra lutra*, *Mustela nivalis*, *Martes foina*. In winter there are noted *Vulpes vulpes* and *Felis silvestris* (Goradze R., Gogmachadze T., Mikashavidze E., 2005). From big mammals there dwell jackals, badgers. Following species of amphibians inhabit also: common triton (*Triturus vulgaris lantzi*), tree frogs. Watland is a good habitat for reptilians: Lizard (*Lacerta rudis*) and snake (*Natrix natrix*, *N. tessellata*, *Elaphe longissima*) (Goradze R., Gogmachadze T., 2005). In stagnant waters it is revealed fresh water fish – 51 species, marine fish – 27 species, anadromous – about 10 species and passing and semi-passing fish – 15 species (Goradze et al., 2003, 2006).

Development of protected areas system is the main aspect for biodiversity conservation and sustainable use of nature resources. With the help of natural conservation it has been provided an opportunity to rehabilitate habitats, species and genetic diversity. At last, by improving this system it has been given the chance to increase society's knowledge about biodiversity which will promote populations' role in joint effort for nature protection.