# **Trip report from Georgia and Armenia**

#### 1. Introduction

Armenia and Georgia (country not US state) have recently gained some popularity among birdwatchers but still remain unknown for most mammal fans.

Both countries are situated in so called 'Greater Caucasus' ecoregion listed as one of the most biologically diverse places on Earth. It is one of WWF's 35 'priority places' and one of 34 'biodiversity hotspots' identified by Conservation International.

Over 7,000 species of plants are found in the ecoregion (with a quarter found nowhere else!). The fauna of the Caucasus is comparably rich with 153 mammal species (1/5 endemic), 400 bird species, 87 reptiles (21 endemic!), 14 species of amphibians and 200 species of fish.

Despite relatively small area (69,700 km2 and 29,743 km2 respectively) Armenia and Georgia have no less than 20 different landscapes/biomes. From high altitude deserts to lowland swamps, from subtropical forest to arid grassland. No other country in Europe is blessed with comparable diversity!

Forests cover nearly one-fifth of the Caucasus and 12% of them are considered natural.

Not surprisingly large mammal community used to live in both countries. No less than 109 species were identified in Georgia and 83 in Armenia. The region was also cradle for many domesticated animals, including sheep and goat which still have their wild equivalents living in the Caucasus Mountains.

Greater Caucasus action plan drafted by WWF is probably the best source of information on the environmental issues of the region (see: http://www.wwf.de/fileadmin/fm-wwf/Publikationen-PDF/Kaukasus\_OEkoregionaler\_\_Naturschutzplan\_\_May06.pdf).

Thanks to the effort of governmental and non-governmental organizations many ecologically important areas of Greater Caucasus are, at least nominally, protected.

#### There are:

- 9 national parks, 14 nature reserves 17 managed (hunting) reserves, 4 natural monuments, and
  2 protected landscapes in Georgia (8 more planned!),
- 2 national parks, 3 state reserves, 19 state sanctuaries in Armenia (7 more planned!),

Although those figures seem impressive, large parts of key wildlife habitats in Georgia and Armenia still remain unprotected. Level of protection of gazetted reserves is also far from European standards. Poaching, forest clearance, dam building and new tourism developments in mountainous areas are posing mayor threats to regional biodiversity, both inside and outside protected areas.

It is hard to underestimate the achievements of local conservationist who managed to create so many protected areas. Wars, corruption, local traditions, tolerance towards poaching and 'money first' mentality still make preservation of nature a challenging if not dangerous task in Caucasus.

There is a number of NGOs active in Georgia and Armenia which deserve support, such as:

- 1) Caucasus Nature Fund (<a href="http://caucasus-naturefund.org/">http://caucasus-naturefund.org/</a>,)
- 2) World Land Trust (http://www.worldlandtrust.org/)
- 3) WWF (http://wwf.panda.org/what\_we\_do/where\_we\_work/black\_sea\_basin/caucasus/),

Web pages of the above mentioned organizations are rich source of information on the best mammal watching locations in the ecoregion.

Apart of well-known foreign conservationist there is also number of local NGOs working in Greater Caucasus which are worth mentioning Armenian Foundation for the Preservation of Wildlife and Cultural Assets (FPWC- www.fpwc.org, www.sunchild.org) which manages Caucasus Wildlife Reserve is definitely one of them.

## 2. Practicalities

Our visit Georgia and Armenia took place in September and October 2013 (between 29 of September and 9<sup>th</sup> of October). That was a perfect time for visiting Armenia but little too late for visiting some parts of Georgia. Our plans were affected by heavy rains in northern part of that country. Higher slopes of Caucasus were already covered with snow which made mammal tracking a challenging task. From the other hand we have avoided the summer heat in Armenia and hit the middle of deer rut in Borjomi - Kharagauli National Park in Georgia (which usually starts after the first frost). To sum up the best period for visiting the region is probably around mid-September or late spring.

Ten days, which we have for our disposal, are definitely not enough for exploring Georgia and Armenia. Local animals are well aware of dangers posed by humans and, by consequence, shy. It is necessary to spend some time in wildlife locations in order to have a minimum the chance to see any mammal.

## 3. Itinerary

Our Caucasus trip started in Kutaisi airport in Georgia, which has the low cost flight connection with Poland (provided by wizzair.com). Alternatively there are many airlines operating flights to Tiblisi (capital city of Georgia) or Erevan (capital city of Armenia). Wizzair is probably still the cheapest option.

EU citizens are not required to have a visa (neither a passport) in Georgia. Armenia is also trouble free as far as the paperwork is concerned- visas are stamped on the border. But there some issues to remember. First, all border crossing between Azerbaijan and Armenia are closed, as those countries are, at least officially, in a state of war. Similarly Georgia do not allows foreigners to cross border with separatist republics of Abkhazia and Ossetia. Border between Russia and Georgia is also closed for nationals of non CIS countries.

Our journeys lead from Kutaisi to Armenia's capital city- Erevan (with stops in famous Georgian cave town in Vardzia and castle in Ahaltsike.

After spending some time in Armenia's Caucasus Wildlife Refuge- 100 km from Erevan, we came back to Georgia and visited: Vashlovani, Lagodekhi and Borjomi-Kharagauli National Parks.

We used local transport (minibuses) for all internal travels, with the exception of Vashlovani, where privately hired car was the only practical option. Minibuses run between most towns and villages of the region. Cheap taxies are also plentiful. Hiring private car (especially 4WD with driver) constitute an unnecessary expense, although many tourist prefers to do so.

Cheap accommodation is available in most small and larger villages of Georgia and Armenia. During our trip we stayed in private local guesthouses and park lodges (in Vashlovani and Caucasus Wildlife Refuge).

Knowledge of Russian language helps as very few people in Georgia and Armenia speak English.

# 3. Visited locations

## 3.1. Vardzia

We haven't seen any mammal in Vardzia but the place is worth exploring. A narrow canyon of the river Mtkvari leads to the cave town made in the second half of the twelfth century by famous Georgian hero- empress Tamara. The caves stretch along the cliff for some five hundred meters and in up to nineteen tiers. In addition to that ruins of three castles stand on the high cliffs of the valley which leads to the complex. The scenery could not be less spectacular. Cliffs in Vardzia are home to many birds such as Griffons, Egyptian and Bearded Vultures, Golden Eagles, Short-toed Snake-eagles, and Long-legged Buzzards, Levant Sparrow hawks, Peregrine Falcons, Crag Martins, Blue Rock Thrush Rock Nuthatch and Rock Sparrows. We were lucky to see a beautiful pair of Griffons landing on the cliff just above the caves. The town caves seem to be good place for bats too, but haven't explored them much.

### 3.2. Caucasus Wildlife Refuge

Caucasus Wildlife Refuge (CWR) is a privately managed protected area bordering Armenia's largest and oldest nature reserve- Khosrov Forest. The refuge was established by local NGO- Armenian Foundation for the Preservation of Wildlife and Cultural Assets in collaboration with World Lands Trust and IUCN Netherlands, which provided a grant to fund the protected area and its expansion over the five years.

Since the establishment of the reserve FPWC has reduced poaching in CWR by organizing well-motivated and professional ranger force. At the moment Refuge plays its nominal role providing relatively safe place for wildlife from the whole surrounding area. State's Khosrov Forest Reserve, seems to be heavily poached at the moment.

Unfortunately the area of CWR is also far from being secured. The Refuge has no legal status of protected area which makes it vulnerable for 'development' initiatives. Even Khosrov Reserve which nominally enjoys the status of national park is targeted by many investors willing to transform it into convenient playground for Armenian elites. Roads, hotels, and fancy villas are planned, or have already been built in the reserve (some under the cover of park facilities). Khosrov Forest Reserve protected area has recently lost its most biologically valuable part- Urts Ridge, which was transformed into a 'managed' hunting ground for Armenian and Russian hunters (by no coincidence the ridge is the also stronghold for Armenian mouflon).

Poaching, land encroachment, mining overgrazing and tree felling are also constantly threating local biodiversity. In addition to that one of the Armenian cement plants is situated in close proximity of the reserve. Heavy dust generated by the factory is known to cover the reserve from time to time.

Despite those factors Khosrov and CWR remains one the most important protected areas in Armenia and Caucasus.

The reserves has no less than:

- 5 species of wild cats including Caucasus leopard (documented!), Lynx, Wild cat, Jungle cat and Manul (Pallas cat). The fifth species of cats- tiger (*Panthera tigris* ssp. *Virgat*) was eradicated from the area in late forties;
- 3 species of canids (Wolf, Jackal, Red fox);
- largest population of Syrian bear in Armenia (Ursus arctos syriacus),
- largest population of Bezoar goat (Capra aegagrus) and Armenian mouflon (Ovis ammon gmelini) in Armenia.
- 4 species of vultures nesting in one place Bearded vulture (Gypaetus barbatus), Egyptian vulture (Neophron percnopterus), Eurasian griffon vulture (Gyps fulvus), Eurasian black vulture (Aegypius monachus),

- 4 species of grouse including: Caspian Snowcock (*Tetraogallus caspius*), Chukar (*Alectoris chukar*), Grey Partridge (*Perdix perdix*) and the Common Quail (*Coturnix coturnix*).
- large population of birds of prey, including nesting Golden Eagle (Aquila chrysaetos).

Khosrov/CWR is also a perfect place for other wildlife: 8 species of snakes, 5 species of amphibians, three species of scorpions and famous giant camel spiders are all present in the mountains of the reserves. Some just behind the door of CRW base, so do not attempt to walk barefoot there!.

The undisputable king of the place is Persian Leopard (*Panthera pardus ciscaucasica*). Monitoring conducted by PFWC and WWF Armenia has revealed the presence of at least 3 individuals in the mountains of Khosrov. During our stay we had a chance to see markings made by one of the cats, which confirms the existence of this magnificent animal in the ecosystem. Try your luck!

Despite the fact that leopards are in the center of all conservation measures adopted by Armenian authorities, survival of that cat is under threat. Poaching is taking a heavy toll not only on the leopard population (there was at least 5 confirmed cases of leopard poaching in Armenia in the last 10 years!) but also on its prey base (bezoar goat, Armenian mouflon and wild boar). Only recently PFWC has managed to stop the cruel practice of helicopter 'sport hunting' in Khosrov.

PFWC which protects the area of Caucasus Wildife Refuge has also conducted serious research on its natural assets. I strongly recommend a unique collection of camera trap films which available on the web page of the organization (http://www.sunchild.org/).

PFWC is also gradually opening the Caucasus Wildlife Refuge for ecotourism. Recently build educational Centre provides the base for exploration of the area. You can either sleep there or camp the mountains. The latter option is, of course, much more interesting.

Exploration of the area is made on a horse back. Unfortunately CWR has a tendency for making tracking parties too large. Our group usually consisted of 2 rangers, 2 tourist, 6 horses and 1 dog which made it look as fancy old fashioned expedition but scared most of the wildlife away.

One of the reasons to visit Caucasus Wildlife Reserve is meeting its staff. The person number one and coordinator the whole venture is Ruben Khachatryan (Director of FPWC), who also directs Erevan zoo. Two other guys: Manuk Manukyan and Gor Hovhannisyan are making the whole reserve working. They have not only a deep knowledge of the mountains and local environment but also strong motivation to preserve the place. Both Manuk and Gor were selected as 'exemplary rangers' in the World Land Trust's programme 'Keepers of the Wild'.

Although we have not seen many animals in CRW we were quite satisfied with the results of the trip. Our checklist for three day stay includes:

- several Bezoar goats,
- Syrian brown bear,
- Wild boar,
- Red fox,
- European hare,
- Birds: Bearded vulture, Egyptian vulture, Eurasian griffon vulture, Chukar (Alectoris chukar), Golden Eagle and Common Quail,
- giant camel spider.

The only stuff we really missed were Armenian mouflons, regularly seen in some parts of the reserve.

Never mind. The scenery of the reserve made our trip an unforgettable experience.

## 3.3. Vashlovani National Park and Reserve

Vashlovani National Park and Reserve, located in the Kakheti region of Eastern Georgia protects the arid and semi-arid ecosystems. The first reserve in this place was established in 1935 and after several enlargements has now the surface of 84.80 km². In the year 2003 another part and Vashlovani ecosystem was declared National Park. Combined the protected area covers 396 km².

Vashlovani protected areas are situated 130 km from Georgian Capital City- Tiblisi. Directorate of the reserve is situated in the village of Dedoplistkaro some 40 km from the park. Foreigners willing to visit the area should register there as Vashlovani is situated on the border with Azerbaijan. That's make it a 'sensitive' zone. Another reason for visiting Dedoplitskaro are jackals (*Canis aureus*), which wander around the village at night (we had a chance to spot one).

There is a number of good accommodation options inside the park- most developed in the framework of the World Bank programme. There are several camping places, bungalows and rangers stations open for visitors.

The environment of Vashlovani is both rich and diverse. The area is covered by steppe and woodland (mostly composed with wild pistachio and juniper trees). The park is also known for deep canyons and badland's like limestone hills. Gallery forest, which stretches along Alazani river are considered to be unique for the whole of Georgia.

46 species of mammals are known to live in the area. Brown bear (*Ursus actros*), Lynx (*Lynx lynx*), Junge cat (*Felis chaus*), Jackal (*Canis aureus*), Indian porcupine (*Hystrix indicus*), Hare (*Lepus europaeus*) and Wild Boar (*Sus scrofa*) are among the most important. River Alazani is one of the last strongholds of European Mink (*Mustela Lutreola*) and European Otter (*Lutra lutra*). For the number of years presence of Caucasian Leopard was also confirmed in the reserve. Vashlovani is also probably the last place were Striped Hyenas (*Hyaena hyaena*) live in Georgia.

Park authorities are currently conducting a new programme of reintroduction of Persian gazelles (*Gazella subgutturosa*) into reserve. That species was eliminated from Varshovlani in 60'. Unfortunately two previous attempts of reintroduction failed due to the combination of faults made by reserve staff and poor quality of gazelle breeding material.

This time the project is backed financially by WWF which makes it more likely to succeed. Reintroduction of gazelles should be considered as a key element for the restoration of Vashlovani ecosystem- this species provided a food base for local predators including leopards, wolves and hyenas.

Due to the combination of poor weather and lack of experience of our local guide we haven't seen many mammals in the reserve. However we have also the chance to see many tracks of wildlife: such as jackal, lynx and bear in limestone canyons of Datvis Khevo ('Brown bear gorge') as well as mink and otter tracks on the Alazani river bank near the Mijnis Kure rangers station.

We were also unlucky to miss a bear which destroyed bee hives in the park's ranger station the night we stayed there.

# 3.4. Lagodekhi Nature Reserve

Lagodekhi is a protected area situated 100 km from Vashlovani. The area is located in the northeast of Georgia on the southern slopes of Greater Caucasus. Humid climate makes its flora unique for all the whole country.

Lagodekhi is well known for virgin beech and hornbeam forests as well as for high level of endemism. 121 species of flora are endemic to this part of Caucasus and 7 to the protected area itself.

Lagodekhi is one of the oldest protected areas in Caucasus. The uniqueness of the place was recognized in the beginning of the 20<sup>th</sup> by Polish biologist Ludwik Mlokosiewicz, who helped to create the first forest and hunting reserve in the area. A number of species of local fauna and flora still bear the name of this famous naturalist- Caucasian Black grouse (*Tetrao mlokosiewiczi*) and Caucasian Peony (*Paeonia mlokosewitschii*) are among the most known.

Lagodekhi is rich mammal fauna. This is the only place in Georgia where East Caucasian Tur (*Capra cylindricornis*) is fairly common. The animals a regularly seen near the meteorological station and around Black Cliff Lake. High mountains of Lagodekhi also harbor population of Caucasian chamois (*R. r. caucasica*). Lover slopes of the mountains are home to Red and Roe deer and Wild Boar. Wolves, brown bears ad lynx are also there but dense vegetation makes any sighting unlikely.

Birdlife of the area is also worth exploring Caucasian Snowcock (*Tetraogallus caucasicus*) and Caucasian Black grouse are widespread in the reserve. The population of raptors is similarly impressive with three species of eagle (Imperial, Golden and Steppe) as well as Bearded vulture regularly observed.

Unfortunately our plans for exploring Lagodekhi were affected by heavy rain and snow fall. As a consequence we did not venture up in the high mountain as we planned and just made a 4 hour trip to the Nino's Khevi waterfall situated on the lower slopes of the reserve. This beautifully forested area is regularly visited by red deer, but heavy rain scared them off the place.

# 3.5. <u>Borjomi-Kharagauli National Parks</u>

Borjomi- Kharagauli National Park is the largest and most known of Georgian National Parks. It has a total area of 76.000 hectares and its one of the largest protected areas in Europe.

The park is situated in the lesser Caucasus mountains Between the towns of Borjomi and Kharagauli. The beauty of the place was first recognized by Russian Imperial family who hold a summer residence in Likani, next to Borjomi town. During the soviet era Borjomi was a resort town also famous for the production of mineral water. The town fortunes declined rapidly after Georgia gained independence. Russian tourist left and most of the soviet era hotels become abandoned. They were later transformed into temporary shelter for refugees from Abkhazia and Ossetia. As both regions remain under Russian control hotels still accommodate the number of refugees.

However all that bad news for a town turned out to be beneficial for local wildlife. Less people mean less 'development' and fewer disturbances. In 1995 Georgian authorities decided to create a National Park in order to boost local economy by the mean of ecotourism. The park got a substantial support form donor agencies and international NGOs and has now the best tourist infrastructure from all Georgian Protected Areas (shelters, gates, interpretation Centre etc.). Significance of the park was recognized by WWF, which admitted Borjomi- Kharagauli to the PAN network. As was planned Borjomi starts attracting more tourist, but taking into account its size, its still far from being overcrowded.

Any paperwork (permits, payments) should be arranged in the National Park Centre in Borjomi. The park authorities also offer guiding services and horses for rent.

There are several private accommodations available in the towns and villages surrounding the park as well as number of tourist shelters inside. Camping is allowed in designated areas.

Number of trails was demarcated inside the park. Having only one day for our disposal we made a circular walk along the trails number 1 and 9 from the village of Likani to Atskuri. We started it early in the morning and, thanks to that, had a chance to experience the deer rut in the mountains.

Hearing roaring stags form close in the wilds of Borjomi was one of the top experiences of our Georgian trip. However we have decided not to disturb the animals and, by consequence didn't approach them. Keeping in mind that complex rituals of deer rut can easily be altered by people presence we decided to stay on the trail and do not chase the animals.

The only other mammal we saw in Borjomi was Caucasian squirrel (Sciurus anomalus).

## 4. Checklist

Although our mammal checklist is not very impressive it could easily be enlarged in more favorable weather conditions.

Never mind. It's always more interesting to track wildlife than find it next to the corner.

For a genuine wildlife experience both Armenia and Georgia proved to be a perfect destination.

	English Name	Latin name	Place
1.	Bezoar goat	Capra aegagrus	Caucasus Wildlife Refuge
		aegagrus	
2.	Syrian Brown Bear	Ursus arctos syriacus	Caucasus Wildlife Refuge
3.	Wild boar	Sus scrofa	Caucasus Wildlife Refuge
4.	Red fox	Vulpes vulpes	Caucasus Wildlife Refuge
5.	European hare	Lepus europaeus	Caucasus Wildlife Refuge
6.	Jackal	Canis aureus	Vashlovani next to Dedoplitskaro
7.	Caucasian squirrel	Sciurus anomalus	Borjomi- Kharagauli
8.	Caspian red deer	Cervus elaphus maral	Borjomi- Kharagauli
9.	Roe deer	Capreolus capreolus	Borjomi- Kharagauli

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