

# Reintroduction of the Goitered Gazelle in Vashlovani Landscape, Georgia

## Executive summary

The Goitered Gazelle once inhabited the whole of the semi-arid zone of Georgia as part of a contiguous population across the South Caucasus and beyond. As medium-sized grazer occurring in large numbers, the species undoubtedly played a critical role in shaping the landscape, vegetation communities, and therefore biodiversity of the region. Given the continued availability of quality habitat and no material change in land use in recent history, its extirpation from Georgia is likely to be due to previously unsustainable levels of hunting.

Historically, the Goitered Gazelle (*Gazella subgutturosa*), grazed the plains of Azerbaijan and Georgia in abundance, with populations in the Kura-Ara (k)s river lowlands reaching almost to Tbilisi in the early 1900s. Due to agricultural expansion and intense hunting, the species became extinct in Georgia in the 1990s and the total number of animals in Azerbaijan dramatically decreased as well. Today, the Goitered Gazelle is categorized in the IUCN Red List as Vulnerable (VU) and in the Red List of Georgia as well.

Following recent review and site assessments, the biological basis and institutional support for a reintroduction goitered gazelle *Gazella subgutturosa* to Georgia are extremely favorable. A large, uninterrupted area of over 2,000 km<sup>2</sup> defined as the Iori-Plateau-Vashlovani Landscape is available for dispersing gazelles over the long-term, offering the attractive possibility of using the species as a flagship for the conservation of biodiversity across the entire semi-arid-zone of Georgia.

This is contiguous with an area of equivalent size and land use in Azerbaijan presenting the even greater opportunity to re-establish goitered gazelles across the South Caucasus through international cooperation. Vashlovani National Park (VNP) is the most suitable choice for an initial reintroduction site because of its protected status, the presence of rangers, the existing infrastructure, and ecological diversity. The site is connected through Gumuru valley to the adjoining Samukhi (Eldari) steppes and thence to the Iori Plateau, thus facilitating dispersal to the wider landscape. Based on taxonomic considerations, morphological, physiological, and behavioral adaptation, and that a donor population must be large enough to withstand the removal of animals without negative impact, Shirvan National Park in Azerbaijan is the favored source of goitered gazelles.

## Project Background

A field trip was made in April 2012 to carry out a rapid assessment of potential reintroduction sites, including Vashlovani PA, Samukhi, Chachuna Managed Reserve, Davit Gareji, and the Iori Plateau. Driving to, from, and between these sites provided the opportunity to assess connectivity and to gain an overview of the wider area. Vashlovani is the largest protected area within the former distribution of Goitered Gazelles in Georgia and has been designated as the initial release site since it is the only one with legal protection, staff, and infrastructure. An extensive area of suitable gazelle habitat was identified, covering approximately 2000 km<sup>2</sup>, extending along the whole of the south-western sector of the semiarid zone, between the crest of the plateau, which is marked in part by a low escarpment, and the Azeri border and runs from Vashlovani to the northwestern edge of the Iori Plateau.

The Gazelle is important as a flagship for the conservation of the semi-arid zone as a whole, which contains significant biodiversity value: dry steppe and semi-desert; relict dry woodlands; riverine forests in the Alazani and Iori River valleys.

### **The aim of the Project**

Reintroductions continue to be an important conservation action for endangered species. Georgia started the project "Improvement of ecosystem biodiversity in a transboundary Priority Conservation Area, Iori-Mingechauri" which aimed to improve the ecosystem biodiversity in the Iori-Mingechauri transboundary priority conservation area through the rehabilitation of floodplain forest, improvement of PAs management system and reintroduction of extinct gazelle.

Reintroductions are conceptually appealing for a wide variety of reasons, which can span potential benefits for individual species or broader ecosystem functions. Intertwined with such benefits are related motivations or outcomes that can span aesthetic, sociological, cultural, political, or economic aspects.

The Gazelle program was based on the reintroduction of individuals taken from healthy populations in Azerbaijan and released in Georgia. Since the start of the Gazelle Reintroduction Programme, individuals have been translocated to Samukh Steppe in Vashlovani Protected Areas. Presently, the estimated number of Gazelles in Georgia is more than 250 individuals. The gazelle reintroduction in Vashlovani Protected Areas represents one of the best examples of biodiversity restoration in the region.

### **Threats and barriers**

While running the project the Agency of Protected Areas faced difficulties. Manly, the main threat was associated with predators, after an unexpected dog attack event, part of them was killed especially because they settled in captivity or semi-captivity, because of which they did not have a chance to escape from predators and save themselves. In addition, in general, Vashlovani Protected Areas are the habitat of many species of snakes therefore there were frequent cases of snakebites in consequence of which most Gazelles were killed. Herewith, several cases of poaching were revealed as well that hindered the successful implementation of the project.

Given the situation, the agency began implementing relevant measures and introduced new approaches to save the gazelles, to which the local population made a great contribution as well. The Agency carried out a large-scale awareness-raising campaign on the importance of the Gazelles pursuant to which the consciousness of local populations has sharply enhanced. Working closely with park rangers, they also routinely monitored the gazelles, greatly reducing poaching. Furthermore, the Gazelles were monitored with telemetry collars, providing previously unavailable data on time allocation, the daily rhythm of activity, and social organization for the species in the wild. Moreover, the Gazelles were released into an environment instead of living in captivity. This method was important not only because they provide valuable information about the species' natural history (movements, activity), but because they were essential for locating animals and knowing whether they are alive or dead, which, in short, is a measure of the success of the project.

### **The outcome of the Project**

The mentioned actions turned out to be beneficial and Vashlovani Protected Areas were favorable habitats for gazelle breeding, as their population size increased significantly. It is noteworthy that the Vashlovani Protected Areas represent the territories under the European Diploma of the Council of Europe, recognizing the European significance of these areas which have remarkable landscapes, exceptional geological features, rich and diverse flora and fauna, including rare species, and ecosystems of particular importance for European biodiversity. The Agency executed fulfillment of its obligations that were the cornerstone for the further development of Vashlovani National Park. Consequently, once tourists visit the area, they find eco-friendly guesthouses, local products, and local cafes harmonized with the environment and nature, which enrich their impressions along with being admired the glamour of Vashlovani Protected Areas.

After the effective implementation of the reintroduction project, local and international visitors began to actively visit Vashlovani National Park and its surroundings, and tourists' motivation to stay in the areas increased since it is possible to spot the Gazelles with binoculars to watch at any time. Nowadays Vashlovani National Park is considered one of the top 5 tourist destinations in Georgia.

### **Legislation and Protected Areas**

Legal Goitered gazelle is listed in the Georgian Red Data Book and is protected by law. National laws concerning hunting and threatened species were radically revised, and hereby recently poaching is fully resolved. Rangers are responsible for protecting wildlife within Vashlovani PA. The national Border Police are stationed at several points in the area, including the bottom of Pantishara gorge and several points further west. The Border Police are technically responsible for enforcing all national laws, though to date may have regarded wildlife as a low priority and even turned a blind to some hunters. This force seems well-trained and organized and it represents a significant potential enforcement resource.

### **Protected Area Network**

Vashlovani (34,753 ha) is the most important protected area in the Georgian semiarid zone. It consists of two sectors, a strict nature reserve (IUCN category I; 10,143 ha) and a national park (category II; 24,610 ha). VPA protects a representative sample of all the habitats of the semiarid zone - semidesert, steppe, scrub, two types of arid light woodland (dominated by pistachio and juniper, respectively), foothill deciduous forest and floodplain forest. It also harbours a wide range of large carnivores and breeding raptors. Chachuna Managed Reserve (5200 ha); Iori Managed Reserve (1336 ha) and Korugi Managed Reserve (2068 ha) are all IUCN Category IV protected areas created to protect stretches of riverine forest in the Iori Valley.

### **Project implementing bodies and Stakeholders**

The NGOs and other organisations that have been involved in efforts to restore Goitered Gazelles to Georgia so far included Dedoplistskaro Municipality, Ministry of Environmental Protection and Agriculture (MEPA), Agency of Protected Areas (APA), Vashlovani National Park and World Wildlife Fund (WWF); BMZ, WWF Germany, Government of Azerbaijan

### **Community Participation & Benefits**

The support of local communities is an important factor in the success of conservation projects. Securing the support of the herding families who depend on the rangelands in and around Vashlovani will be crucial, especially as livestock grazing is essential to maintain rangeland condition and pasture management for gazelles may require negotiated modifications to stocking densities and spatial grazing patterns. At the most basic level, there is a need to minimize the risk of illegal hunting and predation or disturbance by sheepdogs. Opportunities for more direct involvement include participatory monitoring, supplementary wardening and practical work. Enlisting the more committed community representatives as 'gazelle custodians' integrated them fully into the restoration programme. Such roles were especially appropriate to those families resident year-round who may have a greater sense of attachment to the area, but need to be shared among the more numerous wintering families too. In addition, the decision to retain grazing in the interests of grassland management was an indirect incentive. Good contacts have been established with local shepherds through GCCP and these form a sound basis for constructive engagement.

### **Communications, Education & Public Awareness**

Securing official and public support for the restoration programme is essential to its long-term success, especially if the gazelle reintroduction is intended to serve as a model for other species. Good communications and awareness-raising are therefore vital. A simple communications strategy has been developed to identify the different target audiences and the most effective ways to reach them.

The principal audiences are the government, the public, young people, and local communities. The strategy explains the rationale and aims of the programme and encompasses the press, radio, TV and the internet including social media such as Facebook. The aesthetic and cultural appeal of gazelles makes them an attractive subject and facilitates their acceptance by the media. This was supplemented by regular progress updates through press releases, photos, and video clips. These captive gazelles represented the 'public face' of the restoration programme and have a valuable role in raising awareness. It should be noted that Gazelles became the symbol of reintroduction and the "public face" of the restoration programme that had a valuable role in raising awareness. WWF also produced toys of "Gazelles" and they were distributed to wide society to remember people that Gazelles are integral part of Georgia's biodiversity.