### Project Update: October 2010

# The report of the field works of Flora and Fauna in the Vachan part of Pamir in Tajikistan from 25 August to 30 September 2010.

From the third decade at August till the end of September in 2010 we organize the field works of flora and fauna in the Vachan part of Pamir in Tajikistan. There participated students, scientific staff and drivers in the expedition. There were surveyed the pool of Panj river and its affluence. We analyze the territory of Shugnan and Ishkashim region of Pamir in the republic of Tajikistan. We asked local people in the villages about the plants names and there usage. And with the help of local people we collect the example herbariums of these plants. We also asked about which kind of animals use different types of plants and in which seasons of the year (spring, summer, autumn and winter).

We collect the herbarium materials and make superintendence of animals in Vachan region in the heights of 2200 to 4000 miter under the sea level. Was collected the material of scarce plants and animals which are inhabited at these territories. Was collected the seeds of the plants. Perfomquadrated a very big capacity of the work.



The field works group in Homestay Langar village Vachan, Ishkashim Pamir, Republic of Tajikistan.



Stronghold in Ishkashim mountain in Vachan part of Badakhshan (Pamir)







The researcher worker to study the Acantholimon pamiricum in Mountain of Ishkashim in Vachan part of Badakhshan (Pamir)

Research expedition in Vachan part of Badakhshan (Pamir)

Sheep and goal in high livestock in Vachan part of Badakhshan (Pamir)







The researcher worker to collect the seeds Myricaria squamosa in Mountain of Ishkashim in Vachan part of Badakhshan (Pamir)

The trees of Betula pamirica in the h= 3200 in Vachan part of mountain Badakhshan (Pamir)

Crop land with Triticum compactum in Vachan part of mountain Badakhshan The rare species of Fauna in Vachan part of mountain Badakhshan

Apollo

Parnassius Apollo Linnaeus, 1758

Brigade Lepidoptera

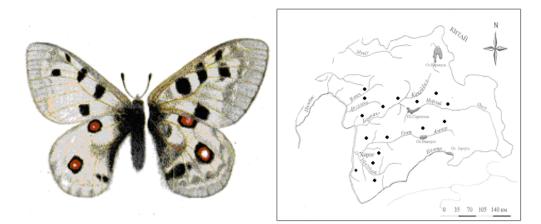
Lepidoptera

#### The family of Papilonidae

#### Papilonidae

Status. Declining. Listed in Red Book of USSR. Needs protection.

Range. Found in all regions of GBAO at heights of 1600 m asl.



Habitat. Stony slopes and high mountain grassland.

Number and tendency of over patching. Scanty. At the last years in leaps and bounds is canceled.

**Main limiting factors.** Feeds on plants of *Sedum* family, particularly *Sedum album*. Harvested by local people.

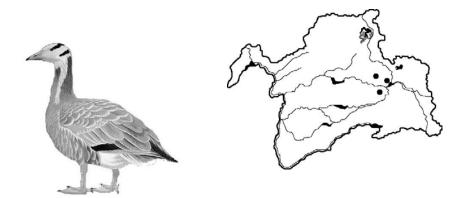
**Biology**. In a year it can produce one generation. Adult butterfly is observed in July-August; they feed on flowers. Eggs and feeding caterpillars found mainly on *Sedum album*. During the winter time young caterpillar will stay in their eggs.

Cultivation. Was not observed.

Protection. Listed under CITES.

**Action Required.** Don't change the character of vegetation, bite and cut the places of inhabited kinds, to stop the trapping of butterflies by local people.

Mining Goose (English version) - Anser indicus Latham, 1970



Status. Threatened.

**Range.** In Tajikistan you can find *Anser indicus* only in Pamir. Previously, *Anser indicus* was much more widespread. In recent years has been found in the Rankul and Yashilkul areas.

**Habitat.** Fresh or brackish water, especially the lakes on the islands, in the marshes and swamp areas.

**Numbers.** In the 1971 in Pamir the number of Anser indicus Latham was about 500-550 individual. In 1975 was about 950-980 and in the 1977 this number aroused till 1030 individuals. There is not any special information about the number of Anser indicus Latham in the eightieth. In the 1994-1995 was supervised the catastrophic decreasing number of Anser indicus Latham in Pamir, and this number was about 50-60 individuals in the all areal.

Rehabilitation of the number was in the 1998-1999. In the 2001 in Zorkul was made a slot for 125 fallows. In the 2002 in Rangkul were registered only 12 fallows. In the Karakul at present time have slot about 60 fallows every year. In 2004 were registered 6-fallows in the Yashilkul. The total number of Anser indicus Latham in the territory of Pamir now is about 212 fallows.

**The main limited factories.** The demolition of slot island places during the wind and water erosion; the death of blocking owing to acceleration the level of the water; influencing the predatory (hill-fox and blued), especially in the period of staying in the eggs and exclusion of pullus; braconerstvo and factor of disturbance in the places of slot and span.

**Nesting of colonies and marginal groups.** Half of the population doesn't participate always in the duplication. The slot will be made in the soil, in the special loosened pit with poor structural material, and sometime the structural material isn't at all. In the bond you can find about 4 to 6 eggs sometime even 8-eggs. Staying in the eggs will continued 20-22 days. Both of the genders will care the issues. Bleeding starts after withdrawal of pullus and passes very quickly. It feeds from the plants in the grassland shore, algae and gamma rids.

**Ways of protection.** Included to Red Book of Tajikistan (1988, 1997). Chase at Anser indicus Latham in Tajikistan is prohibited. Special important step of surviving and rehabilitation of the number of Anser indicus Latham in Pamir is building the Zorkul conservation in 2000.

**Necessary ways of protection.** It is necessary for security organization to advocacy the Anser indicus Latham during making the slop in the period at 35 to 40 days in order to survive the bond and pullus. In consideration of that, that the major part of Zorkul lake is consist of shoaling water, it is real that it needs to make little islands in the territory of the lake, in which can make slop Anser indicus Latham's.

The Brigade of Wilds

Carnivora

The Cat's Family

Felidae

Snow Leopard (English version)

Uncia uncia Schreber, 1775



**Status.** Uncommon kind, it has tendencies number to curtailment, about it was written in Red Book of MSOP, Red Book of USSR, Red Book of Tajik SSR and Red Book of Tajikistan. It needs permanent protection.

**Proliferation.** You can meet Uncia uncia Schreber in Darvaz (Yakhchisor, Kevron, Viskharv, Kurgovad), in Vanj (Gushkhun, Rovand, Abdulkaor), in Rushan (Bartang, Khuf, Badjo), in Shugnan (Sokhcharv, Nishusp, Suchan, Debasta, Vankala, Djelondi), Roshtkala (Vezdara, Lodjvar, Zanudj, Sejd, Djavshangoz), Ishkashim(Sist, Vrang, Zong), Murgab(Zorkul, Alichur, Modiyan, Shaymak, Karakul).

**Number.** In the areal the number of Uncia uncia Schreber is high. The amount is about 250-300 individuals. From the speech of local catchers in the period from 1985 to 2002 from Yakhchisor to Zigara in the length 15-20kilomitre was cached about 12-individuals. **The place of inhabitation.** You can meet it in a height from 1100 to 5500 miter. It likes to stay in hard passable, clint places. In the habited places the concentration of mountainous and rotary-beak goats, mountainous sheep's, thereupon which he make daily allowance and seasonal migration.

**Biology.** Sexual maturity begin in the 2-3 years of life; the chute pass in the end of December-March.

The continuation of pregnancy is about 90-110 days, in label 1-5, often 2-3 cats, the periodical pregnancy is about 2-years.

Rare and vestigial kinds, which needs for security in GBAO RT.

The reasons of contraction the number and areal. The contraction of wild Ungulates, hare and people who want to catch them.

**Measure of protection and reproduction.** The protection is prohibited, catching with shooting is under claim. In order to save these kinds of animals there is National Tajik Park, Zorkul state conservation and the range of preserve in Pamir. There is a convention in the 1-st supplement of international trade of wild kinds of floras and faunas, which are under dump. It is necessary to reinforce the scramble with people who are catching them. Making coefficient advocacy for protection of this kind.

The Brigade of Artiodactyls

Antiodactyla

The family of cavicorn

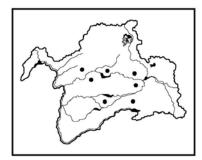
Bovidae

Pamir Mountainous sheep (Arkhar)

Ovis ommon polii Blyth, 1841

## ПАМИРСКИЙ ГОРНЫЙ

**5APAH (APXAP)** Ovis ommon polii Blyth, 1841





**Status.** Rare kind with implacable abridgment of areal and number. Was published in Red Book of SSR Tajikistan and Red Book of Tajikistan, it needs for protection.

**Proliferation.** The areal of Arkhara is scarcely covered the all territory of Pamir and the riverhead of Gund, Shakhdara and Vakhan.

**Number.** From the last analysis we made conclusion that the number of Arkhara in Pamir isn't arising from 4-6 thou. Individuals. But vice versa is dwindling.

**The place of inhabitation.** The place of inhabitation of Arkhara is wide intermountain valley and mildly sloping mountains of Pamir, which are in height 3500 miter under the level of lakes. He executes few seasonal migrations.

**Biology.** Run in Pamir go in December and January. In duplication participate Arkhara which is 2,5 years old. The pregnancy will continue till 5-months. The young Arkharas will be born in the end of Mai and in the beginning of June.

**The reasons of decumulation the number of Arkharas.** The intensive scarcely the wholeyear of catching the arkharas, and dabbling the number of wolves in Pamir, are the results of decumulation of the Arkharas and declining their numbers.

**The measures of safeguard and reproduction.** To catch the Arkharas is blockage. You will pay doomage if you catch the Arkhara illegally. There is, in Tajikistan a Tajik national park, Zorkul State conservation and the rank of refugees in Pamir, which can normally function and dabble the number of Arkharas. It is necessary wider popularize the safeguard of Arkharaz. It is desirable to make regular report of the number, learning the biological individuals and doing something in order to scale up the number of Arkharas in the modern territory of areal.