



MALACOFAUNA OF THE HISSOR RESERVOIR IN NATURAL CONDITIONS AND GEORGE ILONA HISSOR REGION

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ABSTRACT

In this article, the malacofauna of the Gissar reservoir and the Ilonli gorge of the Gissar ridge and the diversity of species (after the family Buliminidae) were studied. 5 subfamilies, 12 genera and 38 species are represented, constituting 22.22% of the malacofauna.

Terrestrial mollusks are an important part of communities of living things. In many biotopes they make up a significant part of the communities of destructors of dead organic matter and phytophages. In turn, mollusks serve as food for many species of vertebrates and invertebrates, often making up a significant part of the diet. And some species are specialized malacophages. The role of mollusks is also important as intermediate hosts of parasites, primarily flatworms, the final hosts of which are various species of vertebrates and, sometimes, humans. Some large species can reach large numbers in agroecosystems and often cause some harm (primarily on homestead farms), spoiling some garden crops. At present, the fauna of terrestrial gastropods in Uzbekistan in general, and in the Gissar Range, has been studied extremely poorly. Only a few works are known. (A. Pazilova, F. Gaibnazarova). The purpose of this work is to study the species composition of terrestrial gastropods in the vicinity of the Gissar reservoir and the Ilonli gorge of the Gissar ridge. Based on this, the following tasks were set: 1 - master the methodology for collecting terrestrial mollusks; 2 - identify places of concentration of rare and protected species in neighboring states for the study area. The studies were conducted from March 2019 to March 2021. The following biotopes were selected: Chul, Adyr, Tau.

The vertical profile was studied from the vicinity of the Gissarak reservoir to the east to the left tributary of the Gissar, then towards the south and along the gorge. Ilonli - in the upper plant zones to the subalpine.

Chul. Located at an altitude of 650–900 m above sea level. The malacofauna of this belt has been studied in the following biotopes: gardens and orchards, banks of rivers and ditches.

In gardens and vegetable gardens, on the grass, in fallen leaves and in rotting plant debris, the following was found: *Deroceras laeve* (5), *Dagreste* (6), *Candacharica levanderi* (3).

Along the banks of rivers and ditches, among thickets of grasses, we identified: *Cochlicopa nitens* (10), *C. lubrica* (6), *Vallonia costata* (11), *Pupilla muscorum* (14), *Angomphalia regeliana* (4), *C. levanderi* (3), *Zonitoides nitidus* (9).

On undeveloped lands in subshrubs and on the stems of grass thickets, *Xeropicta candaharica* (25) forms dense populations.

Thus, in the Chul belt we found 11 terrestrial mollusks. The species characteristic of this belt is *X. candaharica*.

Adyr covers the entire hilly-undulating foothill space with a loess cover, occupies most of the territory of the northwestern part of the Gissar ridge. Adyr, according to the scheme of K.Z. Zakirov (1955), is divided into two subzones or two tiers: 1) lower Adyr, where the relief is calm, 500–900–1200 m; 2) upper, where the relief is relatively sharp with frequent exposures of subsoil rocks; its height is 1000–1500 m. The vegetation of the lower Adyr consists of the following ranks: *Philomis thapsoides*, *Prosalea drupacea*, etc. The vegetation of the upper Adyr is represented by almond trees, which survived only in places more or less remote from populated areas.

In the Adyr belt we studied the following biotopes: at the foot of the slopes, among subshrubs: *Pseudonapaeus sogdiana* (17), *Sphyradium doliolum* (13), *Chondrulopsina intumescens* (9), *Xeropicta candaharica* (15), *Gibbulnopsis signata* (21).

Along the ditches among thickets of grasses, under stones, the following were found: *Cochlicopa nitens* (11), *C. lubrica* (9), *Pupilla muscorum* (18), *Vertigo pygmaea* (5), *Phenacolimax annularis* (13), *Angiomphalia regeliana* (4), *D. laeve* (3), *D. agreste* (5), *Zonitoides nitidus* (5), *Vallonia costata* (15).

Not far from streams, among bushes, under stones, *C. levanderi* (5), *C. roseni* (7), *C. kaznakovi* (3) develop.

A total of 17 species were identified in the Adyr belt.

Tau. According to natural-historical conditions, this belt can be divided into two stripes or subzones.

1. Bottom the tau subzone (stage) - a transitional strip from the underlying adyr zone - is characterized by the presence of ephemeral plants with more or less xerophilic long-growing steppe-type dominants. Tree and shrub forms are displaced for various reasons, mainly as a result of human activity. The height of the strip is 1400–1800–2100 m above sea level. m.

In this subzone, basically the same complexes of terrestrial mollusks were found as in the Adyr belt.

2. There are almost no ephemeral plants in the upper subzone. Trees and shrubs are better developed here. Under similar conditions, the number of species of more or less mesophilic plants gradually increases.

In this subzone, mollusks live in various biotopes: on tree and shrub vegetation, on rocks and screes, on the banks of streams and springs.

We found 8 species in tree and shrub vegetation on gravelly slopes: *S. doliolum* (10), *G. signata* (15), *Pupilla triplicata* (12), *Vertigo antivertigo* (12), *Puramidula rupestris* (7), *Pseudonapaeus albiplicata* (4), *Chondrulopsina intumescens* (8), *L. maculata* (5);

In the biotope of shrubs with screes, 6 species are found: *Ps. kasnakovi* (5), *Ps. otostomus* (4), *Ch. fedtschenkoi* (10), *Leucozonella rubens* (6), *L. mesoleuca* (7), *Macrochlamys sogdiana* (2).

Rocks and screes are poorer in mollusks than other biotopes. Here, among the stones and plant remains, 6 species are observed: *Leucozonella rufispira* (4), *L. retteri* (3), *L. caria* (1), *Vallonia ladacensis* (10), *Macrochlamys turanica* (5), *P. anzobica* (10).

Along ditches and springs, as well as near streams among thickets of plants, 11 species live: *Cochlicopa nitens* (5), *C. lubrica* (10), *C. lubricella* (9), *Vallonia costata* (11), *V. pulchella* (8), *Pupilla muscorum* (10), *Vertigo antivertigo* (7), *Columella columella* (6), *Deroceras laeve* (3), *Candacharia rutellum* (2), *Zonitoides nitidus* (10).

In the malacofauna of the Gissar reservoir and the Ilonli gorge of the Gissar ridge, it stands out for its diversity and richness of species (after the family Buliminidae). Here it is represented by 5 subfamilies, 12 genera and 38 species, constituting 22.22% of the malacofauna.

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