



## FOUND IN NATURE IN UZBEKISTAN AND KEPTED IN CAPTIVITY COLUMBIFORMES

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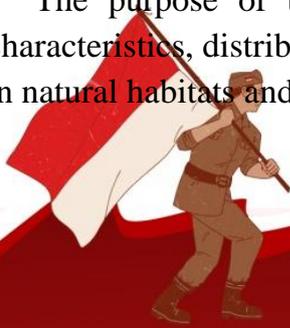
**ABSTRACT** *This article examines representatives of the order Columbiformes (pigeons and doves) found in natural ecosystems of Uzbekistan and those maintained in captivity. The study analyzes species composition, ecological distribution, biological characteristics, and adaptation mechanisms of wild populations inhabiting mountains, steppes, river valleys, and urban environments. Special attention is given to domesticated forms derived from the rock pigeon, including racing, ornamental, and meat-type breeds widely kept in controlled conditions. The paper evaluates their ecological significance, economic value, and reproductive biology, particularly the production of crop milk and strong pair bonding behavior. Based on comparative ecological analysis and literature review, conclusions are drawn regarding sustainable conservation of wild species and effective management of captive breeding systems in Uzbekistan.*

**Keywords:** *Columbiformes, pigeons, doves, Uzbekistan fauna, biodiversity, wild populations, captive breeding, domestic pigeon, ecological adaptation, conservation biology, poultry management.*

**Introduction** - The order Columbiformes (pigeons and doves) includes a widely distributed and ecologically adaptable group of birds represented by the family Columbidae. These birds inhabit diverse ecosystems ranging from forests and mountains to deserts and urban environments. In Uzbekistan, Columbiformes are an integral part of the national avifauna and play an important role in ecological balance, seed dispersal, and food chains.

In addition to wild populations, domesticated forms of pigeons are widely bred in captivity for ornamental, sporting (racing), and meat production purposes. The long history of pigeon domestication has resulted in numerous breeds with specialized characteristics. Studying both wild and captive Columbiformes is important for biodiversity conservation, sustainable wildlife management, and agricultural development.

The purpose of this study is to analyze the species composition, ecological characteristics, distribution, and breeding status of Columbiformes in Uzbekistan, both in natural habitats and in captivity.





## Columbiformes Found in Nature in Uzbekistan

**Literature Review** - Scientific literature describes Columbiformes as one of the most evolutionarily successful avian groups. Classical ornithological works (Dementiev & Gladkov; Flint et al.) provide detailed taxonomic descriptions of species distributed across Central Asia. Modern ecological studies emphasize their adaptive capacity to anthropogenic landscapes and urbanization.

### 1. Rock Pigeon (*Columba livia*)

- Native to rocky cliffs and mountainous regions.
- Widely adapted to urban environments.
- Ancestor of domestic pigeons.
- Found throughout Uzbekistan.

### 2. Eurasian Collared Dove (*Streptopelia decaocto*)

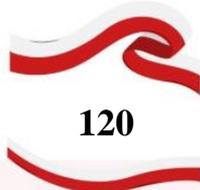
- Common in rural and urban areas.
- Expanding distribution range.
- Adapts well to agricultural landscapes.

### 3. European Turtle Dove (*Streptopelia turtur*)

- Migratory species.
- Prefers forest edges and farmlands.
- Population decreasing in some regions due to habitat loss.

### 4. Stock Dove (*Columba oenas*)

- Found in forested and mountainous areas.
- Less common compared to other species.





These species contribute to ecosystem stability by dispersing seeds and serving as prey for predators.

Research Methodology- The study employed the following methods:

**Literature Analysis** – Review of regional ornithological publications and biodiversity reports.

**Field Observations** – Monitoring of Columbiform species in mountain, steppe, riparian, and urban ecosystems of Uzbekistan.

**Comparative Ecological Analysis** – Evaluation of habitat preferences and adaptation strategies.

**Farm and Loft Surveys** – Observation of captive breeding systems and management practices.

**Descriptive Statistical Method** – Analysis of population trends based on available monitoring data.

The research covered different ecological zones including Tien Shan foothills, river valleys (tugai forests), agricultural lands, and urban centers.

**Analysis and Results** - Field observations confirm that Columbiformes are widely distributed across Uzbekistan:

Rock Pigeon (*Columba livia*) – Found in mountainous cliffs and urban buildings; highly adaptable.

Eurasian Collared Dove (*Streptopelia decaocto*) – Common in settlements and agricultural areas.

European Turtle Dove (*Streptopelia turtur*) – Migratory species inhabiting forest edges and farmlands.

Stock Dove (*Columba oenas*) – Less common; associated with wooded areas.

Conclusion - Columbiformes in Uzbekistan represent a biologically adaptable and economically valuable group of birds. Wild species contribute to biodiversity and ecosystem functioning, while domesticated pigeons support agricultural production and cultural traditions.

For sustainable development, it is recommended to:

- Strengthen biodiversity monitoring programs.





- Implement habitat protection measures.
- Promote responsible captive breeding practices.
- Maintain genetic diversity in domestic breeds.
- Raise public awareness about conservation.

Balanced interaction between conservation of wild populations and development of pigeon breeding practices is essential for maintaining ecological stability and economic benefits.

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