



*From the MixCache.com library*

SAMPLE COPY

# Wildlife and Fauna of Estonia

MixCache.com

SAMPLE COPY

## Table of Contents

- **Introduction**
- **Chapter 1** Estonia's Natural Geography and Climate
- **Chapter 2** A Brief History of Nature Conservation in Estonia
- **Chapter 3** Forests: Estonia's Green Heart
- **Chapter 4** Wetlands and Bogs: Estonia's Mysterious Marshes
- **Chapter 5** Coastal Habitats and the Baltic Sea
- **Chapter 6** Islands of Estonia: Oases of Biodiversity
- **Chapter 7** Meadows and Alvars: Semi-Natural Grasslands
- **Chapter 8** Rivers and Lakes: Inland Water Ecosystems
- **Chapter 9** Mammals of Estonia: Large Carnivores
- **Chapter 10** Ungulates and Other Large Herbivores
- **Chapter 11** Small Mammals: Hidden Residents
- **Chapter 12** The Birds of Estonia: An Overview
- **Chapter 13** Seabirds and Waterfowl
- **Chapter 14** Birds of Forests and Woodlands
- **Chapter 15** Birds of Meadows, Wetlands, and Grasslands
- **Chapter 16** Raptors and Owls: Estonia's Birds of Prey
- **Chapter 17** Amphibians: Life Between Water and Land
- **Chapter 18** Reptiles: Ancient Survivors in Estonia
- **Chapter 19** Fishes of Estonian Waters: Freshwater and Marine
- **Chapter 20** Insects and Invertebrates: The Hidden Majority
- **Chapter 21** Pollinators and Their Role in Ecosystems
- **Chapter 22** Rare and Endangered Species of Estonia
- **Chapter 23** Human Impacts: Agriculture, Forestry, and Urbanization
- **Chapter 24** Conservation Efforts and Protected Areas
- **Chapter 25** The Future of Estonia's Wildlife and Fauna

## Introduction

Estonia, situated in the northeastern corner of Europe on the edge of the Baltic Sea, is a land defined by its captivating blend of wild landscapes, abundant wildlife, and longstanding traditions of nature conservation. This small country, bordered by Finland, Latvia, and Russia, encompasses a rich spectrum of habitats—from dense forests and pristine wetlands to windswept coastal meadows and more than a thousand diverse islands. Despite its modest size, Estonia hosts an impressive array of animal and plant life, making it one of the most biodiverse areas in northern Europe.

One of the most remarkable features of Estonia is its sheer breadth of habitats. Nearly half of the country is still cloaked in forest, providing sanctuary for large mammals such as the brown bear, wolf, and Eurasian lynx—species that have become rare or vanished in many other parts of the continent. Wetlands, bogs, and raised mires offer vital refuge to specialized flora and fauna, especially various species of amphibians and birds, many of which depend on these unique environments for survival. The country's extensive coastlines and offshore islands support internationally significant communities of waterbirds, migratory species, and rare invertebrates, underlining Estonia's global importance for nature conservation.

The interplay of environmental diversity and relatively low human population density has been crucial in preserving Estonia's wildlife. Unlike many parts of Europe where intensive agriculture and urbanization have drastically reduced natural habitats, Estonia maintains large swathes of unfragmented wilderness. Its river systems and lakes nurture robust fish populations, and centuries-old meadows—shaped by traditional human practices—host some of the richest plant communities on earth. Yet, these semi-natural habitats require ongoing stewardship to maintain their ecological value.

Estonia's pivotal location along the East-Atlantic migratory flyway further elevates its role in international biodiversity. Each year, millions of birds use Estonia as a crucial stopover or breeding ground, transforming the skies and landscapes with their seasonal arrivals and departures. The country's policies reflect a deep respect for these natural wonders: a comprehensive network of national parks, nature reserves, and landscape protection zones underscores Estonia's commitment to safeguarding its living heritage.

Despite these successes, Estonia's wildlife faces ongoing challenges. Habitat loss, changes in land management, climate change, and the persistent pressures of modern development threaten many of its species and ecosystems. Nevertheless, a strong conservation ethic—evident in both government initiatives and the vibrant activities of

non-governmental organizations—offers hope for the continued preservation of Estonia’s wild places.

This book, “Wildlife and Fauna of Estonia: A Guide to the Wildlife and Fauna of Estonia,” explores the wealth of life found across the Estonian landscape. Each chapter unfolds a part of the country’s ecological story, from the towering forests of Alutaguse to the flower-rich meadows of Laelatu and the bird-busy wetlands of Matsalu. It is both a celebration of biodiversity and a call to cherish and protect these remarkable natural treasures—ensuring that the wild heart of Estonia beats strong for generations to come.

SAMPLE COPY

## CHAPTER ONE: Estonia's Natural Geography and Climate

Estonia, perched in the northeastern corner of Europe, is a country where the wild and the cultivated meet in a landscape shaped by ancient forces and a maritime soul. It sits strategically on the eastern coast of the Baltic Sea, bordered by Finland across the Gulf of Finland to the north, Russia and the vast expanse of Lake Peipsi to the east, and Latvia to the south. This position, between approximately 57.3 and 59.5 degrees North latitude, places it firmly within the temperate zone, though with significant northern characteristics. The country's total area is around 45,339 square kilometers, a considerable portion of which, 4.6%, is covered by internal waters.

Look at a map of Estonia, and you'll immediately notice its intricate coastline and numerous islands. The mainland's edge, a lengthy 3,794 kilometers, is a mosaic of bays, peninsulas, and straits. Sprinkled off the western and northern shores are over 2,200 islands and islets, varying dramatically in size and character, adding a distinct maritime flavour to the country's geography. The two largest of these, Saaremaa and Hiiumaa, stand out as substantial landmasses with their own unique environments and coastlines.

Delving beneath the surface, Estonia's geological story is one of immense age and subsequent sedimentary layering. The bedrock is part of the ancient East European Craton, a stable block of the Earth's crust that consolidated some two billion years ago during the Paleoproterozoic era. This crystalline basement, composed of igneous and metamorphic rocks like gneiss, quartzite, and granite, lies hidden beneath younger deposits, typically around 100 meters deep in the north but dipping significantly deeper, up to 800 meters, in the south.

Overlaying this ancient foundation are sedimentary rocks from the Paleozoic era, specifically from the Cambrian to Devonian periods, deposited between 650 and 350 million years ago. These layers, primarily limestone and sandstone, are the result of vast, shallow seas that covered the region for millions of years, accumulating sediments and organic matter. While extensive surface exposures of these ancient layers are rare, they do make appearances along riverbanks and, most dramatically, in the striking feature known as the Estonian Glint.

The Estonian Glint is a segment of the much larger Baltic Klint, a monumental limestone escarpment that stretches for 1,200 kilometers across the Baltic Sea region. In northern Estonia, this cliff face reveals the geological history layer by layer, exposing Cambrian sandstones and clays at its base, topped by harder Ordovician

carbonate rocks. It's a dramatic geological staircase carved by erosion, reaching its highest point in Estonia at Ontika, where it stands some 56 meters above sea level.

However, the most pervasive sculptor of Estonia's modern landscape was the colossal power of continental glaciers. The last ice sheet retreated from the area between 13,500 and 11,000 years ago, leaving an indelible mark on the terrain. As the ice melted, it deposited vast amounts of material – moraine, sand, gravel, and clay – often dozens of meters thick, particularly in the south. This glacial legacy is evident in the rolling moraine hills found in the southern uplands and the elongated, flat-topped hills scattered across the central parts of the country.

The retreat of the ice also created a complex network of features. Glacial rivers carved valleys and deposited sediments, forming sandy areas where the ice front paused. In the northeast, curious landforms known as *kriiva*, resembling dunes but with sedimentary layers suggesting formation in ice lakes, add another layer of geological intrigue. The immense weight and subsequent melting of the ice sheet also rechanneled streams and left behind the depressions that would become Estonia's numerous lakes and extensive peat bogs. Large erratic boulders, transported by the ice from as far away as Scandinavia, are scattered across the landscape, silent sentinels of this icy past.

Speaking of water, Estonia is remarkably rich in it. Beyond the extensive coastline and islands, the mainland is dotted with over 1,500 lakes and an intricate web of some 7,000 rivers, brooks, and canals. While many of these water bodies are small, collectively they cover a significant portion of the country's area. The largest inland sea is Lake Peipsi, shared with Russia, a vast body of water that dominates the eastern border. To the south, Lake Võrtsjärv is the second largest, a significant feature in the landscape.

Estonia's rivers, though generally not long by international standards (only about 1% exceed 50 km), are vital arteries crisscrossing the land. The longest is the Pärnu River in the west, stretching for approximately 145 kilometers. The Emajõgi River holds a culturally significant place, connecting the two largest lakes, Võrtsjärv and Peipsi, and flowing through the city of Tartu. The Narva River forms a part of the eastern border with Russia, linking Lake Peipsi to the Gulf of Finland. These rivers and lakes, shaped by glacial history and underlying geology, form diverse aquatic environments.

Moving from the solid earth and fresh water to the air above, Estonia's climate is a fascinating blend of maritime and continental influences, sitting in a transitional zone in the northern temperate belt. The proximity of the Baltic Sea to the north and west, and the distant but still impactful influence of the Atlantic Ocean and its North-Atlantic Stream, moderate the temperatures, making the climate milder than might be expected for its latitude.

This creates a climate with four distinct seasons of nearly equal length. Winter, typically the coldest months of January and February, can see average temperatures dropping below freezing, particularly inland. While coastal areas benefit from the sea's warming effect, eastern Estonia experiences colder conditions, with temperatures occasionally plummeting to  $-25^{\circ}\text{C}$  or even lower, though such extreme cold rarely lasts for extended periods. Snow cover is common, especially in the eastern and southern parts of the country, contributing to picturesque winter landscapes.

Spring arrives as temperatures begin to rise above freezing, initiating the thawing of the land and water bodies. This season can be relatively dry and mild. Summers, generally from June to August, are moderately warm. Average temperatures in July, the warmest month, range from around  $17.8^{\circ}\text{C}$  on the islands to  $18.4^{\circ}\text{C}$  inland, although short periods of higher temperatures exceeding  $30^{\circ}\text{C}$  can occur, particularly away from the coast.

Autumn, often wet and windy, sees precipitation levels typically increasing, with September sometimes being the wettest month. Precipitation is spread throughout the year, averaging between 550 and 700 millimeters annually, with late summer often receiving the heaviest rainfall. The driest months tend to be February and March. This cycle of seasons, driven by the interplay of oceanic and continental air masses, dictates the rhythms of life across Estonia's varied landscapes, influencing everything from plant growth to animal activity patterns.

---

*This is a sample preview. Purchase the book to read the full content.*

Visit [MixCache.com](https://MixCache.com) to purchase the complete book.

SAMPLE COPY