EXPLORING THE RICH BIODIVERSITY: A DIVE INTO THE FLORA AND FAUNA OF THE REPUBLIC OF UZBEKISTAN

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Annotation. *This article delves into the diverse plant and animal life found in Uzbekistan. Through this exploration, readers are introduced to the unique ecosystems and species that thrive in the country's varied landscapes, from deserts to mountains. The theme sheds light on the importance of conservation efforts in preserving Uzbekistan's rich biodiversity and highlights the interconnectedness of flora and fauna in maintaining a healthy environment. By showcasing the beauty and significance of Uzbekistan's natural world, this theme inspires a deeper appreciation for the intricate web of life that exists within the country's borders.The theme of identity and self-discovery is a common and profound theme in literature, as characters often grapple with questions of who they are and where they belong. This theme can manifest itself in various ways, such as characters facing internal conflicts about their true selves, struggling to find their place in the world, or experiencing personal growth and transformation through their journey of self-discovery. Through exploring this theme, authors often delve into the complexities of human nature and the search for meaning and purpose in life.Nestled in the heart of Central Asia, Uzbekistan is a country renowned for its stunning landscapes, ancient cities, and rich cultural heritage.*

But beyond its historical landmarks and bustling markets lies a world of diverse wildlife and lush vegetation waiting to be explored.

Key words: *biodiversity, the arid deserts ,Kyzyl Kum, Tian Shan , the snow leopard , markhor goat, saiga antelope , ecosystem, rare species , endemic, mountain, foothills, fish , Aral sea.*

The flora of Uzbekistan has more than 3700 species of plants. 20% of the species are endemic (more no where to meet); a large part of their grows in the mountains. Flora of steppes and deserts consists of unique bushes. On the low plains developed tree, shrub, and herbaceous vegetation. Tugai forests are characterized by thickets of cane and Candiria.In the landscape of the upland plains-grass, trees, shrubs are found on water streams. Here grow different types of onions, Tulips, rhubarb, irises. The high foothills are dry motley grass steppe on dark serozems. On rocky areas grow shrubs-almonds, curchava, cherry.In the low mountains — mostly growing valuable wood species — Zaravshan juniper. Also common hardwood - maple, hawthorn, different forms of wild Apple, pistachio, walnut, birch, willow, poplar, cherry magalebka. The low is very rich in shrubs: honeysuckle, barberry, rose hips, tavolga, thickets of wild vineyard. Very diverse set of herbs: Clary sage, zizifora, rhubarb, sorrel, Tulip, Pskov onion (valuable medicinal plant). In the middle mountains grows wild rose and other shrubs. In the highlands only 30% of the soil is covered with vegetation. Here grows mainly tipchak.As well as plant and animal life of Uzbekistan is diverse. Here you can meet many representatives of Asian fauna. Among them are: mammals (wolf, big-eared hedgehog, a Fox, a corsac, a hare-tolai, turtle, Gazelle, antelope, wild boar, markhor, mountain sheep, badger, stone marten, bear, snow leopard, ermine, Siberian mountain goat, prestigiosa rat, Jackal and Bukhara deer, Bokhara horseshoe bat, eared bat gopher, jerboa), reptiles (geckos, Agama, sand boa, arrow-snake, Central Asian Cobra, Copperhead snake, get snake, Alay), birds (Houbara bustard, avdotka, Sandgrouse, saja, Dun Nightjar steppe Buzzard, Jay,

sorokoput, Warbler, Finch, oatmeal, lentils, big turtle, black vulture, Griffon vulture, vulture, Himalayan snowcock, lammergeier, lesser, jackdaw, pheasant, cuckoo, yellow Wagtail, magpie, black crow, southern Nightingale, bearded tit, reed Bunting, great reed Warbler), insects and etc.In the waters there are about 70 species of fish: Aral salmon, Amu Darya trout, pike, Aral roach, Aral barbel, carp, silver carp, catfish, pike, perch,snakehead, common carp, white Amur.Uzbekistan's natural world is very diverse. It is composed of desert areas and snowy mountains, rivers and completely dry lands. The most part of its territory lies in the Turon plain, where there are no sudden steep-drops and hills. The Turon plate and mainland, which later became the Tian Shan and Pamir -Alai Mountains, were formed in the Paleolithic period. Later, the sea covered the plate for a long time. The mountain chains are thought to have fully developed during the Alps orogenesis. The mountain ranges blocked the humidity from the Indian Ocean. It caused considerable climatic change: the weather became dry and huge desert areas appeared. As rivers and winds kept changing their directions, the upper layer of soil was continuously displaced from one place to another. It led to the formation of the Kyzyl Kum and Kara Kum deserts.Mountains and foothills make up about one-fifth of the territory of Uzbekistan. The highest point is 4,643 meters. Mountains cover the east of the country. Uzbekistan embraces western parts of the Tian Shan and Pamir-Alai mountain ranges, respectively. The mountain ranges are very different: there is a sharp contrast of heights, foothills, canyons, and watersheds.There are also small mountains such as Aktau, Karakchitau and the western part of the Zarafshon mountain range with their smooth shape. Rather big depressions stretch between the mountains: Kashkadarya, Surkhandarya, Zarafshon, and Samarkand. The largest depression is the Ferghana Valley - 370 km long and 190 km wide. It is surrounded by mountain ranges on three sides except on the western face. On the border with Afghanistan, there is the huge Amu Darya depression.Like flora, Uzbekistan’s fauna is also very diverse. One can find many representatives of Asian fauna. Among them are: mammals (wolf, big-eared hedgehog, vixen, hare - toloy,

tortoise, djeyran, saygak, wild boar, spiral horny billy-goat, mountain sheep, badger, stone marten, bear, snow leopard, ermine, Siberian mountain billy-goat, lamellitoothed rat, jacal, Bukharan deer, Bukharan, sharp-eared night gopher, jerboa), reptiles (heccons, agama, sand boa, arrow-snake, Central Asian cobra, quadristripe sledge runner, Alay , birds (pretty bustard, dun goatsucker, jay, shrike, mountain finch, bunting, lentil, grand turtle-dove, black griffon, lammergeyer, bearded vulture, jackdow, pheasant, cuckoo, yellow wagtail, magpie, black crow, southern nightingale, whiskered tomtit, cane bunting,), insects, etc.

The lack of ocean and sea moisture created deserts and steppes, which together with the mountains, occupy two-thirds of the territory. The sandy and rocky Kyzylkum desert with relief takyrs also crosses the borders of Turkmenistan and Kazakhstan, ending in the northwest with the Aral Sea. Its area is estimated at 300 thousand km². There are mountains composed of Paleozoic shale. It is noteworthy that the scarlet dunes of Kyzylkum hide rich reserves of fresh water in their depths. Muruntau gold mine was discovered in the desert of the Zarafshan suburb of the Navoi Region, and the uranium ore pit was discovered near the town of Uchkuduk. The most extreme temperatures are registered here in summer and winter, and in spring, during the blooming of wild tulips, one can admire incredibly spectacular views. Fine-toed gophers, gerbils, marmots, barking cats, fox-corsac, tufted larks, desert warblers, as well as gurza and aefa snakes live here.

The Aral sea. It is no exaggeration to say that the case of the Aral Sea is one of the greatest environmental catastrophes ever recorded. Humans have made use of the waters of the Aral basin for thousands of years, borrowing from its two major rivers: the Amu Darya, which flows into the Aral Sea from the south; and the Syr Darya, which reaches the sea at its north end. As the twentieth century began, irrigated agriculture in the basin was still being conducted at asustainable level. After the Russian Empire was replaced by the Soviet Union, this began to change. Traditional agricultural practices were destroyed by collectivization, and Soviet planners sought products that could be exported for hard currency. They

placed cotton high on their list, calling it `white gold,' and the Soviet Union became a net exporter of cotton in 1937. Change accelerated in the 1950s, as Central Asian irrigated agriculture was expanded and mechanized. The Kara Kum Canal opened in 1956, diverting large amounts of water from the Amu Darya into the desert of Turkmenistan, and millions of hectares of land came under irrigation after 1960. A crucial juncture had been reached, and after 1960 the level of the Aral Sea began to drop, while diversion of water continued to increase. While the sea had been receiving about fifty cubic kilometers of water per year in 1965, by the early 1980s this had fallen to zero. As the Aral shrank, its salinity increased, and by 1977 the formerly large fish catch had declined by over seventy-five percent. By the early 1980s, commercially useful fish had been eliminated, shutting down an industry that had employed 60,000. The declining sea level lowered the water table in the region, destroying many oases near its shores. The devotion to irrigated agriculture had other direct effects as well. Much ecologically sensitive land in the river deltas was converted to cropland, and pesticide use was heavy throughout the Aral basin, resulting in heavy contaminant concentrations in the sea. Overirrigation caused salt buildup in many agricultural areas. By the beginning of the 1990s, the surface area of the Aral had shrunk by nearly half, and the volume was down by seventy-five percent.The clay and salt Mirzachul Desert, also called "The Hungry Steppe," is located on the left bank of the Syr Darya River, on the edge of the Fergana Valley, and stretches across the borders of Tajikistan and Kazakhstan. From the south, it is bounded by the foothills of the Turkestan ridge. The approximate area is 10 thousand km². The most common plants here are sedge and camel's thorns.

In conclusion, the diverse flora and fauna of Uzbekistan represent a treasure trove of ecological wealth that must be celebrated, preserved, and protected. Throughout this exploration, we have delved into the stunning landscapes, vibrant ecosystems, and unique species that call Uzbekistan home. From the majestic snow leopards and saiga antelopes of the mountains to the colorful tulips and poppies that blanket the valleys, Uzbekistan's biodiversity is a testament to the

beauty and complexity of our natural world.One of the key takeaways from our exploration is the importance of conservation efforts in maintaining the delicate balance of Uzbekistan's ecosystems. With increasing pressures from human activities such as deforestation, urbanization, and climate change, many species are facing threats to their populations and habitats. By raising awareness, implementing sustainable practices, and supporting conservation initiatives, we can help safeguard the future of Uzbekistan's unique flora and fauna for generations to come.Furthermore, the cultural and economic significance of Uzbekistan's biodiversity cannot be overlooked. Many indigenous communities rely on the natural resources provided by the land for their livelihoods, traditions, and well-being. Through sustainable ecotourism, responsible agriculture, and community-based conservation programs, we can ensure that local communities benefit from the rich biodiversity of Uzbekistan without jeopardizing the fragile ecosystems that support them.As we continue to expand our understanding of Uzbekistan's flora and fauna, it is essential to emphasize the interconnectedness of species and ecosystems. Each plant, animal, and microorganism plays a vital role in maintaining the intricate web of life that sustains our planet. By recognizing and respecting the interdependence of all living beings, we can foster a harmonious relationship with nature that promotes biodiversity conservation, environmental sustainability, and human well-being. The exploration of Uzbekistan's rich biodiversity serves as a reminder of the awe-inspiring beauty and complexity of the natural world. By embracing the diversity of life that surrounds us and taking action to protect and preserve it, we can ensure a sustainable future for Uzbekistan's flora and fauna and for future generations to appreciate and enjoy. Let us continue to marvel at the wonders of nature, deepen our connection with the living world, and commit ourselves to being responsible stewards of the incredible biodiversity that enriches our lives and our planet. Exploring the Rich Biodiversity: A Dive into the Flora and Fauna of Uzbekistan" is a comprehensive study and exploration of the diverse plant and animal species found in Uzbekistan. Uzbekistan is known for its unique and varied ecosystem,

which includes desert, mountains, steppe, and oasis habitats. The country is home to a wide range of plant species, including rare and endangered ones such as the saffron crocus, Tulipa regelii, and the Oriental plane tree. The fauna of Uzbekistan is equally diverse, with species such as the Siberian ibex, snow leopard, and Pallas's cat found in the mountains, and the rare Semirechensk salamander and Amudarya sturgeon in the rivers. The study delves into the ecological importance of these species, their habitats, and the threats they face such as habitat destruction, climate change, and poaching. It also highlights conservation efforts being undertaken in Uzbekistan to protect and preserve its rich biodiversity. Overall, "Exploring the Rich Biodiversity: A Dive into the Flora and Fauna of Uzbekistan" provides a fascinating look into the natural world of Uzbekistan and the efforts being made to ensure its protection for future generations.

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