

Iranica Desk

The migratory bird count, aligned with the global calendar, was conducted in Mazandaran Province this year. Following the assessment of migratory birds in the Miankaleh Wetland, a record-breaking number of birds was observed. This positive development is largely attributed to the increased rainfall experienced in the region. This year's summer and autumn rains have significantly impacted the Miankaleh Wetland. These rains flooded parts of the previously dried areas, with some regions experiencing water levels gaining up to 30 centimeters. This transformation is particularly notable as it revitalized sections that had been dry for several years, offering a renewed habitat for various species.

Record number of species
According to the recent census, a remarkable 65 species of marine and shorebirds have arrived in the Miankaleh Wetland for wintering. This marks a new record in recent years and indicates a positive trend for the wetland's ecosystem.

Historically, before the extensive retreat of the Caspian Sea, the Miankaleh Wetland was a haven for migratory birds, hosting around one million annually. However, the ongoing retreat has significantly reduced their numbers in recent years, posing a challenge to the region's biodiversity. Severe droughts had previously dried up the western part of the wetland, leading to concerns about its ecological health. However, this year's rains have revitalized these areas, creating the potential for a threefold increase in migratory bird presence. This resurgence offers hope for the restoration of the wetland's former glory. Although the restored sections of the Miankaleh Wetland may face the possibility of drying out again in the summer, the rains of late summer and autumn this year have provided crucial water levels. These levels, ranging from five to 30 centimeters, have created an ideal environment for migratory birds, such as ducks and shorebirds, to winter in the area. The increased water expanse provides essential feeding and resting grounds for these birds.

International recognition
The registration of the Gulf of Gorgan in 1975, along with the Miankaleh Wetland, as the first international wetland site on the Ramsar Convention list, underscores the ecological importance of this region. This recognition highlights that this gulf and its surrounding areas constitute a valuable environmental ecosystem, worthy of protection and conservation efforts. The Miankaleh Wetland plays a significant role in sustaining the Caspian Sea's ecological cycle. Furthermore, it directly impacts the livelihoods of local communities, with approximately 500,000 to 1 million people from the region affected by the health and vitality of the Gulf of Gorgan. The



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wetland's well-being is intrinsically linked to the socio-economic stability of the surrounding areas. The Miankaleh Wetland extends from the Miankaleh village in Behshahr to Ashuradeh in Golestan Province, encompassing a diverse range of habitats. This region, due to its suitable water expanse with rich food resources and aquatic life, serves as a crucial stopover for migratory birds.

Avian diversity and wildlife sanctuary
The wetland hosts over 40 species of migratory birds during winter and more than 100 species of native aquatic and shorebirds each year, contributing to its rich biodiversity. This wetland, with its wildlife sanctuary spanning approximately 22,000 hectares, supports a diverse array of plant life, including oleaster and wild pomegranate trees that provide food for several bird species. As a result of its diverse habitats and abundant resources, the Miankaleh Wetland has been able to host over 500 animal species. Its significant biodiversity has led to its designation as one of the biosphere reserves in the world by international environmental protection organizations, highlighting its global ecological importance.

A paradise for birds
The Miankaleh Wetland should rightfully be called a paradise for birds and birdwatching enthusiasts. Covering an area of 48,000 hectares, it is located in the eastern part of Mazandaran Province, adjacent to Golestan Province, and

annually hosts migratory birds. Every year, from mid-September to mid-winter, the wetlands and reservoirs of Mazandaran Province welcome various bird species from the colder regions of the Caspian Sea bordering countries. These birds journey to find warmer locations and abundant food resources, relying on the province's wetlands for sustenance and shelter.

Bird population increase
Kouros Rabiei, the head of the Wildlife Department at the Mazandaran Province's Department of Environmental, told IRNA that according to this year's census, 250,000 migratory birds wintered in the Miankaleh Wetland. This significant increase shows a threefold rise compared to the previous year, indicating the positive impact of recent conservation efforts and favorable environmental conditions. He noted that approximately 200,000 of the wintering birds in the Miankaleh Wetland were species of ducks and wild ducks, which were attracted to the wetland due to the good rainfall this year and the subsequent flooding of the western section of Miankaleh. Rabiei also mentioned that around 40,000 shorebirds were present in the Miankaleh Wetland this winter, further contributing to the wetland's avian diversity.

Revitalization of dried areas
Rabiei highlighted that the area of the wetland that had dried up over the past three years was revitalized by this year's rains, allow-

ing for a greater extent of the wetland to host these migratory birds. This revitalization is a testament to the resilience of the ecosystem and the importance of water availability for supporting wildlife. He explained that, in addition to the favorable rainfall this year, the issuance of hunting permits in neighboring provinces also played a role, as it indirectly facilitated the significant presence of migratory birds in the Miankaleh Wetland. He emphasized that migratory birds choose habitats for their wintering or summering based on the availability of security and adequate food, conditions that were indeed provided in Miankaleh this year.

Protected species
Rabiei stated that out of the 65 species of migratory birds that wintered in the Miankaleh Wetland, 16 species are considered protected, underscoring the need for continued conservation efforts. He noted that this year, 5,700 flamingos spent the winter in Miankaleh, compared to 5,600 last year, indicating a stable and healthy population of these iconic birds. He continued that in previous decades, the Miankaleh Wetland alone hosted one million migratory birds; however, the retreat of the Caspian Sea and the increase in dry land in the Miankaleh Wetland significantly reduced these numbers. This year, however, there has been a remarkable resurgence in the presence of migratory birds in the wetland, signaling a positive shift in the ecosystem's health.

Endangered species
The official mentioned that approximately four percent of the migratory birds in the Miankaleh Wetland, equivalent to about 10,000 individuals, are classified as endangered. This alarming statistic highlights the critical importance of preserving the Miankaleh Wetland as an international habitat, ensuring the survival of these vulnerable species.

Mazandaran Province's natural beauty
Mazandaran Province itself is renowned for its lush landscapes, featuring dense forests, rolling hills,

and a stunning coastline along the Caspian Sea. The region's diverse climate, influenced by its proximity to the sea and the Alborz Mountains, creates a unique environment that supports a rich variety of flora and fauna. This natural beauty not only attracts tourists but also provides critical habitats for numerous

species, including the migratory birds that flock to the wetlands each year. The province's commitment to preserving its natural heritage is essential for both ecological and economic sustainability.

Aquatic ecosystems
Hundreds of species of migratory birds, both native and non-native, migrate to the wetlands and water bodies of this province for the winter. The rich aquatic ecosystems of Mazandaran Province, benefiting from favorable conditions, provide a safe and expansive habitat each year for the birds that have landed there after covering long distances.

The wetlands and aquatic habitats of Mazandaran Province are among the most beautiful natural attractions of this region, drawing tourists and nature enthusiasts alike. With their significant ecological capacity, they not only enhance the province's tourism appeal but also serve as a pleasant refuge for migratory birds each winter, welcoming tens of thousands of birds. The birds not only add charm to birdwatching in these aquatic habitats, but they also serve as narrators of the biodiversity of the water resources that rest alongside these habitats before continuing on their journey. Their presence is an indicator of the health and vitality of these ecosystems.

In addition to the international Miankaleh Wetland and the two wetlands of Fereydunkenar and Kiasar, Mazandaran Province has 915 water reservoirs covering approximately 18,000 hectares. These reservoirs make them some of the most suitable habitats for migratory birds, providing additional resources and refuge. Most migratory birds spend the cold winter days in the Miankaleh Wetland of Behshahr, benefiting from its unique ecological conditions. The average rainfall in recent months in Mazandaran Province has been 422 millimeters, which represents an increase of about 21% compared to the long-term average of 334 millimeters and a 12% increase compared to the same period last year, further supporting the region's ecosystems.

