# The Akrotiri Salt Lake

A fascinating wetland

## **Unique species**

Some of the **plants** growing around Lake Akrotiri salt lake are only found in Cyprus and many other species are **endangered** across Europe.



This salt lake and its surrounding marshes and pools are recognised as one of the eastern **Mediterranean region's most important wetlands,** qualifying as a Wetland of International Importance under the Ramsar Convention.

## Over 300 bird species

Of the different birds recorded in the area, about **100 species** are listed in Annex I of the EU Birds Directive as strictly protected, due to their endangered and vulnerable status.

## 27 Different habitat types

These are defined by the European Habitats Directive and support hundreds of plant and bird species.

# Part of the local culture

Soft **basketry** at Akrotiri, has been designated by UNESCO in 2017 as a **traditional craftsmanship**, and part of the intangible heritage of Cyprus. Basket weaving highlights the close historic **connection of local people with the rich wetlands** of Akrotiri Peninsula. Raw material for basket weaving are sedges, rushes and other grasses collected sustainably from the salt lake, brackish marshes and freshwater wetlands of the area. This relationship of local people with the wetlands has highly contributed to their conservation.

Wetlands represent a very important part of our environment. Wherever they are, these natural habitats provide us with multiple benefits:



#### Improving water quality

The vegetation can absorb pollutants and trap sediment from soil erosion and surface runoff.



#### Supporting biodiversity

Although wetlands only cover a small area, they are globally important diversity hot spots.



#### Minimising impact of floods

Wetlands can be seasonally or permanently flooded, providing water storage which can reduce the effects of flooding.



#### Protecting coastline from erosion

A 'must' stop for

migratory birds

Greater Flamingo and

Shelduck are some of the

other species such as the Demoiselle crane use the wetlands as a staging area in autumn and spring.

Other rare birds like the endangered **Ferruginous** 

Black-winged stilt nest in

this unique environment.

duck and the

species that winter here on their route between Europe and Africa, while

Coastal wetlands can stabilise the shoreline and protect it from storm surges and other maritime impacts.



#### **Providing unique habitats**

Wetlands give shelter for animals and specialised plants, many of which are only found in these environments.

# Facing numerous threats

These important ecosystems are under

### increasing and changing pressures



#### **Climate change**

Two significant consequences of climate change are **increasing temperatures** and **decreasing summer rainfall**. As some countries become drier, wetlands like Akrotiri could remain dry for longer periods or with **low water levels** and the plant and animal species that depend on the water could suffer.



#### **Human activities**

Due to its beautiful and diverse nature, tourism in the region is common. However, sometimes this can be bad for the environment if it means **pollution from human activities** and that lots of people drop litter and trample significant and sensitive areas. Fortunately, some activities linked to tourism can **prevent our trip from having adverse effects** and even contribute to the conservation of the region.

Further human activities threatening these species include **illegal hunting** of endangered birds and the **introduction of invasive alien species**.

#### **Invasive alien species**

In the Akrotiri wetland, Australian Eucalyptus trees were planted in the first half of the 20th century to drain the wetland and reduce the available habitat for mosquitoes. Reducing the wetland habitat increases **pressure for all the animal and plant species** supported. Although mosquitoes found in wetlands are considered a nuisance by many people they are an important food source for many animals and male mosquitoes can pollinate wetland flower species. However, there are concerns about some of the invasive alien mosquitoes that could arrive in the wetland and **vector diseases**. Other invasive alien species, like the Golden Wattle *Acacia saligna* in Akrotiri, can also **compete for space and water** with local plants and can displace them, threatening their survival.



#### Water use

Building development, canals, dams and reservoirs without proper control can have a negative effect on wetlands. Water diversion for irrigation, domestic and industrial use can lead to loss of wetlands due to water restriction.



#### Agriculture

Surrounding farming land can also damage the environment. For example, **pesticides** can harm many species while **fertilizer runoff and sewage discharge** can lead to an excess of nutrients and result in excessive growth of algae, which can also have **negative impacts** on other species.

# The Akrotiri Environmental Education Centre

Wetland education and conservation

The pressures this wetland faces can be reduced with conservation, sustainable use and increased awareness of the importance and fragile balance of these ecosystems. Some of these conservation measures include:

- Education
- Carefully managing human access
- Managing local water use
- Controlling pollution
- Working with local agriculture, industry and tourism to minimise impacts
- Increased monitoring and sharing of information on wildlife



For example, on the Akrotiri peninsula the **Akrotiri Environmental Education Centre** (**AEEC**) increases awareness of the significance of the ecosystem in Akrotiri. The AEEC undertakes a range of educational activities with visitors and school children. The AEEC receives over 10,000 school children each year!

For more information about the Akrotiri wetland, please visit the <u>Akrotiri Environmental Education Centre</u>. If you would like to know more about the work UKCEH, JSHU and the AEEC are undertaking on the Akrotiri salt lake, please visit our Researching Invasive Species in Kýpros (RIS-Ký) **ris-ky.info** where you can see a range of resources we have created, including invasive species guides, guides to mosquito management and pollinator guides. If you want to know more about our Pollinator Monitoring Scheme – Kýpros, please visit **POMS-Ký**.

