

Saving **SALTPANS**

A crucial habitat for migratory birds



Salt pans: safe havens for birds

Bird migration is one of the most extraordinary phenomena known to the world. Twice a year, billions of birds fly monumental distances – crossing continents and country borders – to reach their ideal place to breed or to escape harsh winter conditions. Many of them choose the same routes year after year. The East Atlantic flyway, stretching from the Arctic via Western Europe, all the way to South Africa, is one of the main migratory routes. It is used by many species such as the avocet.

During migration, birds face a multitude of dangers and obstacles. One of the biggest threats is the loss of their main resting sites and feeding grounds along their migratory route.

Artificially created basins invaluable for birds

Man-made habitats which we call salt pans, have emerged at a number of key stop over sites along the East Atlantic flyway, and have become invaluable for the survival of migratory birds. These artificially created basins containing sea water, are an extraordinary example of interdependence between birds and people.

The salt pans are used for the production of salt, generating work and income for people, and they have become an integral part of the cultural heritage of many countries. Often situated within larger natural wetland areas, such as estuaries and (salt) marshes, salt pans also represent a safe haven for migratory birds, which depend on them for foraging and rest after their long journeys.

Endangered habitat

The problem is that salt pans are gradually becoming an endangered habitat. In order to stop their abandonment, which leads to the loss of their incredible value for birds and people, BirdLife partners along the East Atlantic flyway have teamed up and launched a new project, aiming to restore and promote nature and bird-friendly management practices in salt pans.

BLACK-WINGED STILTS FEEDING IN TUNESIAN SALT PAN



H. Azafaf



Arnold Meijer / Blue Robin

BREEDING SLENDER-BILLED GULLS, PIED AVOCET AND COMMON TERNS

Braving the elements, and more...

Many of the world's migratory birds are in decline. Travelling great distances pushes them to the limit of their endurance. To be able to make it to their destinations, they require good weather conditions, resting places and adequate food resources at multiple stop-over sites along their journey. They also need good quality habitats in their wintering and breeding grounds. Other threats to migrant birds that need attention include collision with energy sector infrastructures (including power lines and wind turbines) and illegal killing.

Will busy stop-over sites change into abandoned sites?

Salt pans, with their many dikes, sea water circulation and salt-loving vegetation, offer an ideal resting place and an abundance of highly nutritious food to large numbers of migratory birds. Because each basin has a different water level, many species of waterbirds - big and small - are able to feed on the molluscs, crustaceans and algae found in them. This makes salt pans the perfect stop-over sites for migratory birds on their journeys.

However, similarly to the birds they are sustaining, the salt pans themselves are under threat. Sites are in danger of being abandoned, because they are no longer economically profitable. Furthermore, they are losing their incredible value for birds, due to water pollution and repeated disturbance.

In the face of such a diverse array of threats, the conservation of migratory birds depends on international collaboration and a coordinated response across the entire East Atlantic flyway.

Together, for migratory birds and people

Salt pans are a wonderful example of how nature conservation and economic opportunities can be aligned. BirdLife has developed strategies to restore salt pans and improve their management. Together with a range of stakeholders, we work on new business plans that are compatible with bird conservation and serve to decrease levels of disturbance and pollution in salt pans. This is achieved by creating new ecotourism opportunities and teaching programmes, by monitoring pollution and disturbance and by working with local people to raise awareness and ensure benefits.

We already achieved a few milestones, like:

- ▶ National Species Action Plans developed for Eurasian spoonbill and black-tailed godwit in four West African countries;
- ▶ Increased capacity for conservation in eight countries in West Africa;
- ▶ Publication and free distribution of the first migratory waterbird identification guide for Northern Africa in Arabic.



PIED AVOCET

Arnold Meijer / Blue Robin



LITTLE EGRET

Arnold Meijer / Blue Robin



H. Azafzal

Connecting across borders

For abandoned salt pans to perform their important function for birds in the larger wetland systems, restoration is key. BirdLife will work with local cooperatives, governments and companies to rebuild the dikes, water systems and other infrastructure, needed for the harvesting of salt and for nesting and resting birds. BirdLife is working to actively connect to other salt pan areas and work with national and international organisations, to share lessons learned and promote the sustainable management of salt pans along the flyway.

For each of the salt pans included in our project along the East Atlantic flyway, we have developed action plans, detailing the local situation, threats and activities necessary to save them.

EURASIAN SPOONBILL



Arnold Meijer / Blue Robin

Following the French example

Ligue pour la Protection des Oiseaux: LPO – BirdLife France

France is blessed with a long coastline, well visited by birds. Indeed, many important salt pans are located along the French Atlantic coast. In recent years, LPO has been involved in the management of two of these sites: Noirmoutier island and Ré island. These salt pans are situated within protected areas and Ramsar sites, and have become an example of effective and responsible salt pan management.

The main threats to these salt pans are the increase in invasive species, the neglected maintenance of the salt pan borders, and the overexploitation of mudflats.

To tackle these threats, LPO is partnering with experts and salt pan companies to implement activities related to water management, site monitoring, and the development of management plans for

salt producers. Currently, it is a requirement for salt producers to develop a management plan following an environmental assessment. Furthermore, the mowing of pastures is regulated, and is forbidden during the breeding season. Finally, the flora of the site is being managed and protected, with invasive plants being removed, and the water network is maintained in accordance with environmental requirements.

An important factor contributing to the success of this project is that in France, salt pan management sits within the agricultural sector, instead of the industrial sector. This ensures more opportunities for funding and regulation for responsible management. LPO has secured the support of local authorities, the French Ministry of Agriculture, and the artisanal salt producers cooperation. The support and understanding of these stakeholders is crucial for the success of this conservation project.

The results have been outstanding to date: 180 species, like the avocet, little egret, brent and black-winged stilt, now call the islands their (temporary) home.

As part of the Salt Pan Recovery Project, LPO is sharing their experiences with other BirdLife partners to promote best practice along the flyway.

More information

Noirmoutier: www.birdlife.org/datazone > Noirmoutier
Ré: www.birdlife.org/datazone > Anse du Fiers

CONTACT LPO:

- 🌐 <http://ile-de-re.lpo.fr>
- ☎ +33 (0)5 46821234
- ✉ dominique.aribert@lpo.fr



BLACK-WINGED STILT

H. Azafzal

Restoring the Salines de Lixus

Groupe de Recherche pour la Protection des Oiseaux au Maroc:
GREPOM – BirdLife Morocco

Lixus salt pans are situated near the Atlantic coast of Morocco. This is part of the reason they are attractive to migratory birds, with many of them navigating along the coast lines. The salt pans, and various freshwater marshes, are part of the low Lookos wetland complex. One of the most important wetland areas in the country, with a great diversity in terms of vegetation and habitats.

This complex is highly attractive for Palearctic migrants. Ducks in particular spend the winter season here. Over 50 species breed in the complex, including the ferruginous duck and the long legged purple swamphen. Flamingos and rare species, such as Audouin's gull and the Eurasian spoonbill are regular visitors of the Lixus salt pans.

Threats to the site

The low Lookos wetlands, which include the Lixus salt pans, face various threats including illegal hunting, pollution and disturbance from activities in the sea port and industrial areas nearby. The greatest threat to the birds however, is abandonment of the salt pan, which would cause it to dry out and become overgrown with vegetation.

What Birdlife wants to achieve

- Documenting the ecological and economical importance of the salt pans;
- Restoring important habitats and ecological elements together with the local government;
- Working with a local cooperative to start up the salt production again;
- Promoting sustainable ecological and cultural tourism around the salt pans and nearby archaeological sites.

More information

www.birdlife.org/datazone > Marais Larache

CONTACT GREPOM:

- <https://fr-fr.facebook.com/GREPOM.org/>
- +212 537 84 76 63
- @bourass_khadija@yahoo.fr



Reviving the Sado Estuary salt pans

Sociedade Portuguesa para o Estudo das Aves:
SPEA – BirdLife Portugal

The Sado Estuary is a large estuary with extensive mudflats and saltmarshes, located on the Atlantic coast in the Setúbal district. The inner part of the estuary is bordered by rice fields and reed beds, whereas the south-western parts are sheltered from the open sea by a sandbar. Even though the Sado Estuary salt pans are part of a nature reserve with the same name, it is no less in need of protection. Better said: it is in need of some work.

To wintering waterbirds, especially waders, Sado Estuary is a true el dorado. They visit in internationally significant numbers. For some, the salt pans are more than a winter patch: important numbers of breeding black-winged stilts, avocets and Kentish plovers reside in the area. The salt pans, together with the mudflats and the rice-fields are important feeding ground for the egrets and herons from nearby breeding colonies.

Threats to the site

The main threat to these salt pans is the loss of their economic value. The area is a nature reserve and people know how and when to come there to enjoy the bird spectacle. However, if the salt pans are no longer maintained for their economic value, the biology of the area will change rapidly. The salt pans' biodiversity will decline, leading to less birds, and consequently, less tourism. In fact, the Sado Estuary nature reserve already includes many abandoned salt pans.

What Birdlife wants to achieve

- Restoring the physical and functional structure of the salt pans;
- Developing sustainable economic activities to keep the salt pans profitable;
- Promoting education, tourism and ecosystem services.

More information

www.birdlife.org/datazone > Sado estuary

CONTACT SPEA:

- <http://www.spea.pt>
- (+351) 21 322 04 30
- @domingos.leitao@spea.pt



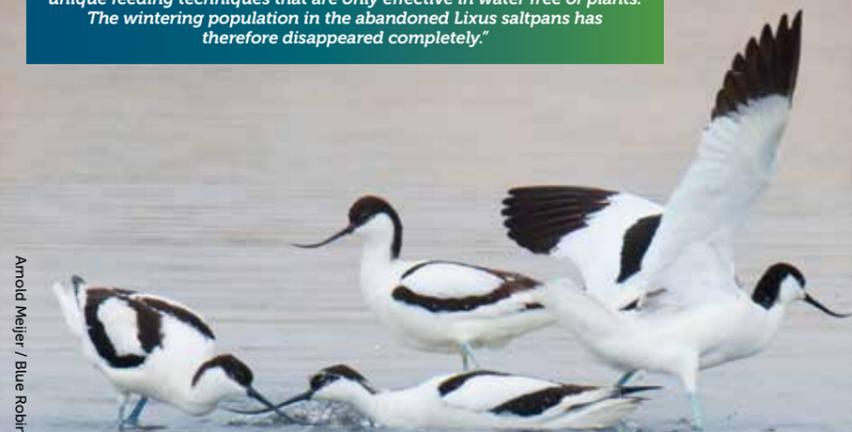
HOW TO JOIN?

ACTIVITIES WE WANT TO COLLABORATE ON WITH YOU:

- Getting stakeholders involved and organised;
- Working on a business plan for the salt pans;
- Developing a communication strategy for the promotion of ecotourism and education projects;
- Organising guided tours and creating tourist information points about salt pans, bird watching and archaeology;
- Producing educational materials.

FLAGSHIP SPECIES: PIED AVOCET

"Pied avocets forage in the shallow brackish water of the Larache wetlands. Overgrown salt pans are of no use to them, because of their unique feeding techniques that are only effective in water free of plants. The wintering population in the abandoned Lixus salt pans has therefore disappeared completely."



Arnold Meijer / Blue Robin

FLAGSHIP SPECIES: DUNLIN

"Dunlins depend on the Sado Estuary salt pans for roosting and feeding during the high tide periods. Ideal conditions for them are shallow water in the pools and short grass or no vegetation on the dikes. Recovering and managing the salt pans will ensure good roosting and feeding conditions for these birds."



Arnold Meijer / Blue Robin



HOW TO JOIN?

ACTIVITIES WE WANT TO COLLABORATE ON WITH YOU:

- Restoring the salt pans;
- Several ecotourism activities;
- Awareness-raising activities with schools.

Protecting the Cabo de Gata salt pans

Sociedad Española de Ornitología: **SEO** – BirdLife Spain

In Spain, at the salinas de Cabo de Gata, the rugged beauty of the coastal mountains is covered with dry vegetation, and an area of salt pans supporting steppe vegetation. These salt pans are situated near one of the Southern most parts of Spain and are only separated from the sea by a narrow strip of land. The main human activities in the area are farming, salt production and tourism.

The canals and lagoons of the Cabo de Gata salt pans are home to various species of waterbirds, especially resting migratory birds. The site hosts four of the twenty species in Europe restricted to the Mediterranean when breeding.

Threats to the site

The main threat to these Spanish salt pans, which may have been exploited since Phoenician times, is their abandonment. The loss of salt production would not only be a significant cultural loss, but also a disaster for birds. Ecotourism has already been developed in the area, which is visited by many tourist bird watchers. However, without the salt pans providing an attractive habitat to the birds, the site will change dramatically, and so will its value for birds and nature loving tourists.

What Birdlife wants to achieve

- ▶ Maintaining the salt exploitation and keeping it profitable through the valorisation of natural products;
- ▶ Developing complementary activities such as birdwatching, environmental education and ecotourism;
- ▶ Modifying the design of the salt pans, by establishing and maintaining an ecological flow of water, in order to allow their use by waterbirds, even if their exploitation ends.

More information

www.birdlife.org/datazone > Cabo de Gata

CONTACT SEO:

- 🌐 <http://www.seo.org>
- ☎ +34 91 434 09 10
- @ jorueta@seo.org



Improving management of the Thyna salt pans

Association Les Amis des Oiseaux: **AAO** – BirdLife Tunisia

The Thyna salt pans in Tunisia, situated at the centre of the Gulf of Gabès, are amongst the last remaining commercially exploited salt pans in Tunisia. Due to high tidal movement, these salt pans are almost unique in the Mediterranean, and they provide an important habitat for a wide variety of waterbirds.

The Thyna salt pans are an important stop-over site for migratory birds, and feeding habitat for waterbirds more generally. The site is important for wintering species, and large numbers of waterbirds breed at Thyna. Birds feeding on the nearby mudflats also use the salt pans as a high-tide roost.

Threats to the site

Due to continuous human activity in the salt pans and from nearby cities, there is a risk of disturbance of roosting or breeding birds, and areas used to forage for food become less attractive. Many people visiting the salt pan area are unaware of the disturbance they cause. Stray dogs and wild boar, showing invasive behaviour, also pose disturbance and predation threats. Apart from that, pollution has become an important problem with a municipal land-fill nearby, and illegal and uncontrolled dumping of waste inside and around the salt pan.

What Birdlife wants to achieve

- ▶ Restoring and monitoring waterbird nesting and resting habitats;
- ▶ Developing a participatory management scheme, including stakeholders;
- ▶ Developing a programme of ecotourism, teaching- and recreational activities which offers opportunities and income for local people;
- ▶ Controlling invasive species;
- ▶ Monitoring and controlling illegal waste dumping;
- ▶ Supporting local appreciation for the nature- and social values of the Thyna salt pans.

More information

www.birdlife.org/datazone > Thyna

CONTACT AAO:

- 🌐 <https://www.facebook.com/AAO.tn/>
- ☎ +216 53 937 127
- @ aao.org@gmail.com



جمعية أحياء الطيور
Association "Les Amis des Oiseaux"



Arnold Meijer / Blue Robin

FLAGSHIP SPECIES: GREATER FLAMINGO

"Greater flamingo concentrate in large groups at Cabo de Gata. They visit the salt pans to feed during spring and returning from their breeding grounds in summer. Here, flamingos turn pink by eating algae and crustaceans that contain pigments called carotenoids."



Markus Varesvuo / Aganti

FLAGSHIP SPECIES: LITTLE TERN

"Because of the lack of nesting islets and strong competition from other species, little terns in the Thyna salt pans nest on circulation tracks, exposing their broods to any kind of danger like stray dogs and egg collectors."



HOW TO JOIN?

ACTIVITIES WE WANT TO COLLABORATE ON WITH YOU:

- 📊 Wild fowl winter census (we have been doing this since 1968!);
- 💬 Discussions with the owners (Salins) and advancement in proper management;
- 🔭 Several ecotourism activities;
- 🎓 Awareness-raising activities with schools in the area;
- 🎓 Projects with students.

THYNA SALT PANS



HOW TO JOIN?

ACTIVITIES WE WANT TO COLLABORATE ON WITH YOU:

- 👥 Local Conservation Group (LCG) to actively promote and execute the salt pan project;
- ⚠️ Survey and monitoring of threats;
- 📊 Yearly mid-winter waterbird census & yearly breeding bird census;
- 🔭 Several ecotourism activities;
- 🎓 Awareness raising activities with schools in Thyna;
- 🎓 Projects with students.

Conservation of saltpans as key sites for migratory waterbirds

BirdLife has identified a network of critical sites for migratory birds, called Important Bird & Biodiversity Areas. Amongst them are several saltpans. Together with her international partners, BirdLife contributes to the conservation and valorisation of these saltpans as key sites for migratory waterbirds.

North America

NETHERLANDS

In 2014 and 2015 Dutch supporters sponsored the regional saltpan project for almost € 130.000,-. This can kick-start restoration and management work in saltpans along the flyway.

Danielle van Oijen - The Netherlands, VBN



SADO ESTUARY SALTPANS

We already have some good examples of well-managed saltpans in Portugal and solid scientific knowledge to back up our plans. I am looking forward to seeing the birds return to the abandoned sites after so many years.

Domingos Leitão - Portugal, SPEA



CABO DE GATA SALTPANS

Good partnerships with the salt producing companies of the saltpans will be key. Universities and local governments are keen to cooperate. This collaboration is crucial to achieve bird-friendly management of the saltpans.

Jorge Orueta - Spain, SEO



SALINES DE LIXUS

We are working together with local governments and communities to restore these abandoned saltpans. When I am in the area and see the abandoned saltpans overgrown with vegetation, I can't wait to start the work.

Khadija Bourass - Morocco, GREPOM



Europe

Wadden Sea

Atlantic coast

Sado Estuary

Cabo de Gata

Salines de Lixus

Thyna Saltpans

SALTPANS ON THE ATLANTIC COAST

In France, there are great examples of well-managed saltpans operated by local cooperatives. This is part of our cultural heritage. We have contributed with our specific bird knowledge and hope to exchange this experience along the flyway.

Dominique Aribert - France, LPO



Africa

THYNA SALTPAN

Local people are key! Ecotourism and educative activities will enable us to involve and empower the local population around the Thyna saltpan to change their view on this wetland and their attitudes towards it.

Claudia Feltrup-Azafaf - Tunisia, AAO



Asia

Atlantic



©Vogelbescherming Nederland

Any part of this publication may be used for awareness-raising purposes, providing the sources are referenced and photographers acknowledged.

Lay-out: Blue Robin dtp / Arnold Meijer

Production: Vogelbescherming Nederland, 2016

Photographs: front: Menno van Duijn / Agami; back: Afonso Rocha

Contacts

Vogelbescherming Nederland
Boulevard 12
3707 BM Zeist

Postbus 925
3700 AX Zeist

info@vogelbescherming.nl
www.birdlife.org/saltpan-recovery-project