

LIFE+ Nature

SIMARINE-NATURA (LIFE10NAT/SI/141)

**PREPARATORY INVENTORY AND ACTIVITIES FOR THE
DESIGNATION OF MARINE IBAS AND SPAS FOR THE
MEDITERRANEAN SHAG (*PHALACROCORAX ARISTOTELIS
DESMARESTII*) IN SLOVENIA**



LAYMAN'S REPORT



Project identity card

Acronym: SIMARINE-NATURA

Project title: Preparatory inventory and activities for the designation of marine IBAs and SPAs for *Phalacrocorax aristotelis desmarestii* in Slovenia

Project code: LIFE10NAT/SI/141

Coordinating beneficiary: DOPPS – BirdLife Slovenia

Project manager: dr. Urška Koče (ursa.koce@dopps.si)

Associated beneficiaries: Ministry of the Environment and Spatial Planning of Republic of Slovenia, Public Institute Strunjan Landscape Park

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Colophon

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LIFE NATURE AND BIODIVERSITY

The LIFE programme is the EU's funding instrument for the environment and climate action. The general objective of LIFE is to contribute to the implementation, updating and development of EU environmental and climate policy and legislation by co-financing projects with European added value. LIFE Nature and Biodiversity provides targeted funding for species conservation actions, supporting projects aimed at conserving threatened species listed in the annexes of the EU Habitats Directive, Birds Directive and the IUCN European Red List. More than 400 listed species - everything from large mammals to molluscs - have been targeted at least once by a LIFE project.

NATURA 2000

Natura 2000 is a European network of special protection areas designated by the EU member states. The main objective of the network is to conserve valuable biodiversity for future generations. Areas of nature are protected with the aim to ensure conservation of plant and animal species and habitats which are rare or endangered at European level. The EU has established Natura 2000 as a vital part of the implementation of the Habitats Directive and Birds Directive. Upon accession to the EU, Slovenia prepared a list of areas complying with the requirements of both Directives.

The project **SIMARINE-NATURA (LIFE10NAT/SI/141)** is aimed at the designation of marine IBAs and SPAs for the Mediterranean Shag (*Phalacrocorax aristotelis desmarestii*) in Slovenia. The project ran from 2011 to 2016 under the auspices of DOPPS – BirdLife Slovenia. It is co-financed by LIFE, the financial instrument of European Union for the environment.



Photo: Bojan Škerjanc



Photo: Bia Rakar



Photo: Iztok Škornik



Photo: Tone Trebar (www.naturephoto-tone.com)

The Mediterranean Shag in Slovenia's Sea

Marine birds in Slovenia's sea

Slovenia's sea is a small part of the Adriatic Sea. Teeming with life, the area is home to the following habitats and species of EU importance: coastal lagoons, river estuaries, marine reefs and submarine meadows inhabited by seahorses, fan mussels, Mediterranean fan worms, marine birds, dolphins, and sea turtles. Their presence here is a constant reminder that Slovenia's sea is definitely worth protecting.

More than 40 marine bird species, many of them endangered, have been observed in the area of Slovenia's sea and on the seashore so far. The term marine birds (or seabirds) refers to species that depend on marine environments for all or part of their lifecycle or population. Seven marine bird species that occur within the area of Slovenia's sea are of international importance: Mediterranean Shag (*Phalacrocorax aristotelis desmarestii*), Mediterranean Gull (*Larus melanocephalus*), Yellow-legged Gull (*L. michahellis*), Little Tern (*Sternula albifrons*), Common Tern (*Sterna hirundo*), Sandwich Tern (*Thalasseus sandvicensis*), and Black-throated Loon (*Gavia arctica*).

The Mediterranean Shag

In the period 2002–2011, DOPPS – BirdLife Slovenia conducted a series of population counts which provided the information on the number of Mediterranean Shags roosting along the Slovenian coast. In the surveyed period, Shag numbers stood between 2,100 and 2,400 birds during the summer population peak, which is 7–8% of the total post-breeding population size and significantly above the minimum qualifying threshold for the designation of Important Bird Areas (IBAs). These results were used as the basis for the designation of the first IBAs, which covered coastal roosts within shellfish farms, in 2011. However, no data was available at the time to indicate the importance of Slovenia's sea as feeding grounds for Mediterranean Shags.



Photo: Iztok Škornik



Photo: Hernán Piñera (creativecommons.org/licenses/by/2.0/)



Photo: Tomaž Mihelič

The European Shag (*P. aristotelis*) is a fish-eating seabird of the cormorant family (Phalacrocoracidae), which inhabits European and North African coastal sea waters up to the depth of 80 m and depends entirely on the marine environment for food. Its subspecies, the Mediterranean Shag, is only found in the Mediterranean and Black Sea, where the number of breeding pairs distributed within numerous colonies is estimated at 10,000. After breeding on the islands further south in the Adriatic, Mediterranean Shags congregate, in great numbers, in the Northern Adriatic. Every summer, about 6,000 Shags occur in the Gulf of Trieste, drawn here by its shallow, fish-rich waters that provide excellent feeding grounds.

Slovenia's sea provides these birds with sufficient food supplies, undisturbed roosts, and safety in the post-breeding period. Their needs are met both by the natural conditions of this marine ecosystem which offers an abundance of fish for Shags to feed on, as well as by the area's artificial biotopes, in particular shellfish farms, where they can roost.



Photo: Luka Kastelic



Photo: Urška Koče



Photo: Simon Kovačič



Photo: Mirko Kastelic



Photo: Luka Novak



Photo: Urška Koče



Photo: Brina Knez

Major issues

Data on the number of Mediterranean Shags moving to communal roosts along the Slovenian coast highlight the importance of Slovenia's sea and the area of the Gulf of Trieste for the feeding of the species. DOPPS – BirdLife Slovenia realized that conservation of such an important population of the Mediterranean subspecies of the European Shag, listed under Annex I of the Birds Directive and protected under the Barcelona Convention as well as the Bern Convention, should be ensured across all marine areas relevant for the survival of the species during its stay in Slovenia. The SIMARINE-NATURA project was started to address the following conservation challenges:

- Unfavourable conservation status of the area
 - Less than 1% of Slovenia's sea was located within protected areas or Natura 2000 sites.
 - Lack of knowledge about the distribution, abundance and diet of the Mediterranean Shag in Slovenia's sea
- In the past no studies were carried out to confirm the importance of Slovenia's sea as feeding grounds of Mediterranean Shags in their post-breeding period.
- Poorly coordinated spatial management among different stakeholders
- Although relatively small in surface area, Slovenia's sea abounds in activities that affect the marine ecosystem, negatively for the most part.
- Low public awareness and lack of relevant knowledge
- Most people are relatively unaware of the international importance of Slovenia's sea for the conservation of the Mediterranean Shag and other endangered species, and fail to fully comprehend the threat to this sensitive ecosystem.
- Potential risk of spillage of oil or oil derivatives into the marine environment

There are two international ports with increasing maritime transport in the Gulf of Trieste (Koper and Trieste). Shipping lanes run accross Slovenia's sea.

Project area

The project area covered part of Slovenia's sea within the Gulf of Trieste. Slovenia's sea is part of the Gulf of Venice, i.e. the northernmost part of the Adriatic Sea, which is divided by an imaginary line that connects the cape Kamenjak in Croatian Istria with the Po River Delta in Italy. The total surface area of Slovenia's sea is about 400 km², half of it in the shallow Gulf of Trieste. At 47 km, the Slovenian coast takes up a low 36% of the coast of the Gulf of Trieste, and the air distance between its extreme ends is only 17 km.

Project objectives

The main objective of the SIMARINE-NATURA project is to improve considerably the conservation status of Slovenia's sea in order to provide legal groundwork for conservation of the Mediterranean Shag. To this aim, the following project tasks were undertaken:

- Collect the data about the distribution, abundance and diet of the Mediterranean Shag.
- Identify and designate marine IBAs (Important Bird Areas) and SPAs (Special Protection Areas – Natura 2000 sites) for the Mediterranean Shag.
- Make guidelines for the management of marine SPAs (Natura 2000) for the Mediterranean Shag.
- Draw up an action plan to follow in the event of oiled birds and other wildlife species affected by spillage of crude oil and oil derivatives into the marine environment.
- Raise the awareness of the general public and educate young people about the nature conservation issues facing the Mediterranean Shag and the importance of Slovenia's sea for the conservation of the species.
- Strengthen the communication among local stakeholders.

Identification of IBAs for the Mediterranean Shag in Slovenia's sea

Identification of marine IBAs according to BirdLife International criteria

Important Bird and Biodiversity Areas (IBAs) are worldwide bird habitats which make important breeding, feeding, roosting and migrating routes for birds. In the framework of the IBA programme and under the auspices of BirdLife International, these areas are identified, monitored, and managed in a manner that ensures long-term conservation of bird populations. Compared to land habitats, marine environment was insufficiently evaluated until recently, largely due to poorly accessible and incomplete data. To remedy the situation, part of the IBA programme focuses on seabirds and their habitats.

The IBAs for the Mediterranean Shag in Slovenia's sea have been identified in accordance with the internationally recognized ornithological criteria of BirdLife International. IBA identification is based on the data held by DOPPS – BirdLife Slovenia and the results of recent ecological studies conducted in the framework of the SIMARINE-NATURA project in the years 2011–2014.

Research into the Mediterranean Shags in Slovenia's sea

HOW MANY MEDITERRANEAN SHAGS ROOST ALONG THE SLOVENIAN COAST?

Population counts at three communal roost sites within shellfish farms in Debeli rtič, Strunjan and Sečovlje salt pans were conducted to determine the number of Mediterranean Shags roosting along the Slovenian coast and establish trends in the species' population dynamics throughout the year. The times of departure from roosts and the shape and colour-based selection of buoys were the subject of a separate study. According to the study, Shags are not the earliest of risers; most of them only leave their roosts after 8 a.m. (in summer). They prefer buoys in the colours of their plumage (black, white). They are slightly less attracted to red, yellow, and blue buoys, while vertically floating buoys are not suitable for roosting due to their poorer stability.

THE NUMBER OF MEDITERRANEAN SHAGS ON COMMUNAL ROOST SITES ALONG THE SLOVENIAN COAST

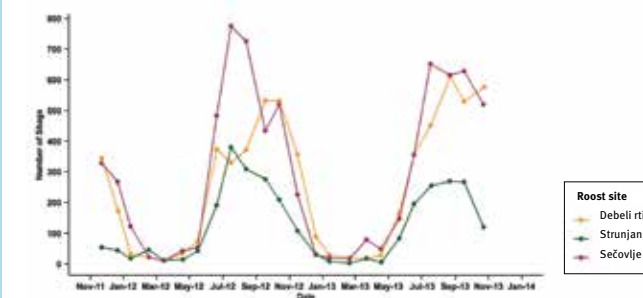


Photo: Tilen Basle



Photo: Dejan Bordjan

Photo: Gregor Šubic



Photo: Urška Koce



Photo: Dare Fekonja



Photo: Urška Koce



Photo: Dare Fekonja

MONITORING DAYTIME MOVEMENTS OF MEDITERRANEAN SHAGS

Telemetry studies were conducted to determine the typical features of daytime feeding grounds of individual birds. State-of-the-art GPS equipment was used to ensure precise and accurate capture of location in 30-minute intervals. The studies showed that Mediterranean Shags normally forage within a relatively small area during the day, and rarely wander around. Certain birds change their feeding grounds commonly but others remain loyal to a single site for months, or even years. The same finding also applies to roost sites.

WHAT ARE THE MAIN FEEDING GROUNDS OF THE MEDITERRANEAN SHAG IN SLOVENIA'S SEA?

Bird counts at sea were conducted once a month along an 81 km route divided into shorter sections. All seabird species and their behaviours were monitored and recorded during boat rides at a constant travel speed. Considerably higher densities of Mediterranean Shags were reported in the sections of Slovenia's sea that are further off the coast than those nearer to the coast.

SUMMER DENSITY OF MEDITERRANEAN SHAGS ALONG THE CENSUS ROUTE



Photo: Andrej Medved

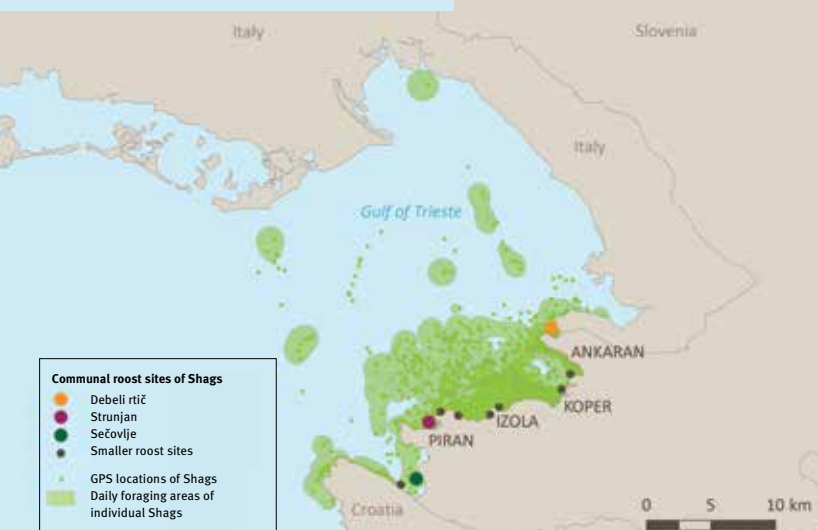


Photo: Eva Vukelič

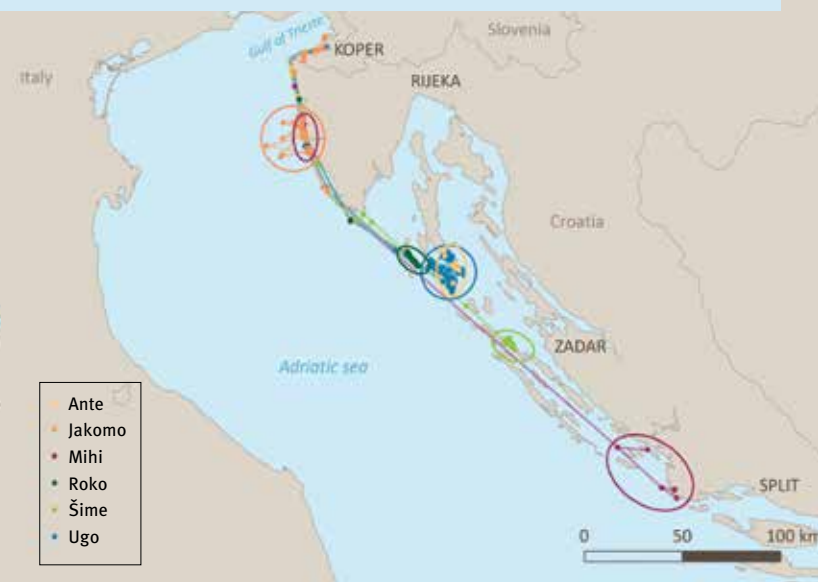


Photo: Urška Koce

THE RESULTS OF THE GPS-TELEMETRY STUDY



MIGRATION OF MEDITERRANEAN SHAGS TO THE CROATIAN BREEDING GROUNDS



WHERE DO MEDITERRANEAN SHAGS GO WHEN THEY LEAVE SLOVENIA'S SEA?

Mediterranean Shags have no respect for national borders. On their yearly migrations, they visit the territorial waters of two or even three countries: Croatia, Slovenia, and Italy. At the end of the autumn they return south to their breeding grounds. Therefore, the conservation of their population in the Adriatic is a joint responsibility of all the countries which share their habitat. In its commitment to these objectives, Slovenia is bound by EU regulations and supported by the nature conservation system Natura 2000.



Illustration: Kristina Krhin

ARI, THE MEDITERRANEAN SHAG

Ari was the first Mediterranean Shag in Slovenia to be tracked using GPS telemetry. Actually, Ari was a young female who spent the autumn of 2012 near Izola, Slovenia. The bird roosted on the levee of the Izola ship workshop, and flew off every day to fish up to 2 km off the coast. Unfortunately, Ari died only ten days after it had been fitted with the tracking device. In an accident somewhere in the Gulf of Koper, Ari broke her left leg and got a severe bruise on her left hip, and could no longer dive or feed. Ari, the pioneer of GPS bird telemetry in Slovenia, was named after the lead character of the children's book 'The First Journey of Ari, the Mediterranean Shag', which was published within the framework of the SIMARINE-NATURA project. Since the sex of the bird was only determined after its death, the bird was given a male name – Ari.



Photo: Mirko Kastelic

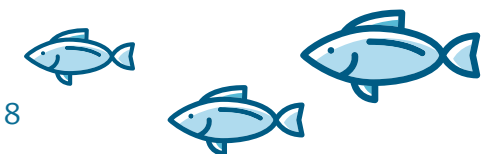
WHAT DO MEDITERRANEAN SHAGS EAT?

Mediterranean Shags swallow their prey whole and then regurgitate undigested parts, e.g. scales and skeletal remains, as balls coated in slimy mucus which then stick to the surface and dry up. The contents of the pellets, especially the otoliths (ear bones) and pharyngeal teeth, provide valuable insight into the type and quantity of prey. About 500 pellets were collected from the communal roosting sites in Debeli Rtič, Strunjan, and Sečovlje. The pellets were then analysed by ichthyologists, who found that Mediterranean Shags feed mainly on fish species not used in human diet. By far the most important food source is the black goby (*Gobius niger*), a species dwelling on the muddy and sandy bottom, the Shags' main foraging habitat in the Gulf of Trieste. Here, Shags can find plenty of alternative to their usual prey, such as the black comber (*Serranus hepatus*) and red bandfish (*Cepola macropht-halma*). The list of species that account for more than 1% of the Mediterranean Shag's prey biomass also includes the big-scale sand smelt (*Atherina boyeri*). Schools of this fish found in the coastal shallows up to the depth of 10 m attracts large groups of shags and gulls that can rise in number to several hundred individuals.

COMMUNAL FEEDING

In particular towards the end of summer and in autumn, Mediterranean Shags congregate in large groups, some consisting of more than 300 birds, and prey on schools of small pelagic fish such as sand smelts (*Atherina* sp.) in shallow coastal waters. Their catch depends on the efforts of the group to herd the little fish towards the coast from where they are no longer able to escape back to sea.

If you have noticed a group of more than 10 Mediterranean Shags, please complete the following electronic form:
<http://simarine-natura.ptice.si/en/be-involved/>.



BLACK GOBY (*GobiUS NIGER*)



Photo: Borut Mavrič

BLACK COMBER (*SERRANUS HEPATUS*)



Photo: Borut Mavrič

SAND SMELTS (*ATHERINA BOYERI*)



Photo: Yuriy Kvach

MEDITERRANEAN SHAG'S REGURGITATES



Photo: Urška Koče

REMNANTS OF FISH SKELETONS

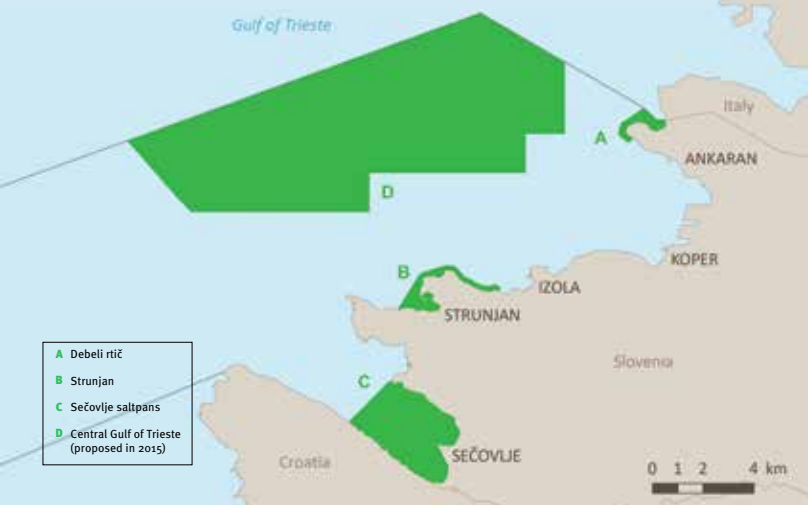


Photo: Borut Mavrič



Photo: Mirko Kastelic

NATURA 2000 SITES FOR THE MEDITERRANEAN SHAG IN SLOVENIA'S SEA



A Debeli rtič
 B Strunjan
 C Sečovlje saltpans
 D Central Gulf of Trieste (proposed in 2015)

SPA STRUNJAN



Photo: Tilen Basle

SPA SEČOVLJE SALTPANS



Photo: Tilen Basle

SPA DEBELI RTIČ



Photo: Tilen Basle

Designation of SPAs (Natura 2000 sites) for the Mediterranean Shag

Natura 2000 is a network of protected areas across the European Union. These areas were designated by EU member states in accordance with the provision of the Birds Directive and the Habitats Directive and are aimed at ensuring conservation of biodiversity. Special Protection Areas (SPAs) were declared under the Birds Directive. The European Court of Justice recognizes IBAs as an appropriate foundation for designation of SPAs.

Communal roosting sites

In the course of the SIMARINE-NATURA project, three SPAs (Natura 2000 sites) were designated on the basis of the IBAs designated prior to the start of the project. The coastal Natura 2000 sites contain communal roosts of Mediterranean Shags on the buoys of shellfish farms and cover a total of 531 ha of the sea.

- **SPA Debeli rtič** is a completely marine area measuring a total of 91 ha. The area was listed for inclusion in Natura 2000 in 2013. The Mediterranean Shag is the only protected species.
- **SPA Strunjan** covers the saltpans of Strunjan, Stjuža, the inner part of the Strunjan Bay and the 250-metre maritime littoral belt between the Strunjan and Kane capes. The maritime part takes up 153 ha (over 80% of the SPA). It was listed for inclusion in Natura 2000 in 2013. Besides the Mediterranean Shag, the area boasts

LITTLE TERN (*STERNULA ALBIFRONS*) COMMON TERN (*STERNA HIRUNDO*)



Photo: Augustin Povedano



Photo: Darinka Mladenovič

SANDWICH TERN (*THALASSEUS SANDVICENSIS*)



Photo: Kajetan Kravos



Photo: Eva Vukelič

two other protected bird species: Mediterranean Gull (*Larus melanocephalus*) and Sandwich Tern (*Thalasseus sandvicensis*).

- **SPA Sečoveljske soline** covers the area of Sečovlje salt pans with San Giorgio channel (Kanal sv. Jurija) and the inner part of the Piran Bay up to the Seča cape. The marine part of the SPA measures 287 ha (just under 30% of the SPA). The area has been included

in Natura 2000 since 2004, and the Mediterranean Shag was listed for inclusion in 2013. Other protected seabird species in the area include Black-throated Loon (*Gavia arctica*), Yellow-legged Gull (*Larus michahellis*) and Mediterranean Gull (*L. melanocephalus*), as well as Common Tern (*Sterna hirundo*), Little Tern (*Sternula albifrons*) and Sandwich Tern (*Thalasseus sandvicensis*).

Species	Breeding (b.p.)	Wintering (ind.)	Summering (ind.)	Natura 2000 sites
Mediterranean Shag (<i>Phalacrocorax aristotelis desmarestii</i>)		550	1,500–2,400	Debeli rtič, Strunjan, Sečovlje salt pans, Central Gulf of Trieste
Yellow-legged Gull (<i>Larus michahellis</i>)	40–220		15,000–25,000	Sečovlje salt pans
Black-headed Gull (<i>Larus melanocephalus</i>)			6,000–20,000	Strunjan, Sečovlje salt pans
Sandwich Tern (<i>Thalasseus sandvicensis</i>)		10–20		Strunjan, Sečovlje salt pans
Common Tern (<i>Sterna hirundo</i>)	80–165			Škocjan bay, Sečovlje salt pans
Little Tern (<i>Sternula albifrons</i>)	20–70			Sečovlje salt pans
Black-throated Loon (<i>Gavia arctica</i>)		10–50		Sečovlje salt pans

MEDITERRANEAN GULL (*LARUS MELANOCEPHALUS*) YELLOW-LEGGED GULL (*LARUS MICHAHELLIS*)



Photo: Kajetan Kravos



Photo: Ivan Esenko

BLACK-THROATED LOON (*GAVIA ARCTICA*)



Photo: Tone Trebar (www.naturephoto-tone.com)

SPA Central Gulf of Trieste

Foraging site

On the basis of surveys conducted in the course of the SIMARINE-NATURA project, IBA Central Gulf of Trieste was identified and approved by BirdLife International. This area is a key foraging site for Mediterranean Shags in Slovenia's sea. It is a completely marine area covering 7,963 ha of Slovenia's sea. The Institute of the Republic of Slovenia for Nature Conservation submitted the proposal for inclusion in Natura 2000 to the Ministry of the Environment and Spatial planning in 2015. The Mediterranean Shag is the only protected species in the area. More than 1 % of entire Mediterranean population (310–400 individuals) regularly forage in the area in summer time.

Guidelines for the management of Natura 2000 sites for the Mediterranean Shag

In the scope of the SIMARINE-NATURA project, we have also prepared guidelines the conservation of Mediterranean Shags in Slovenia's sea. The detailed conservation measures are listed in the manual Conservation of the Mediterranean Shag and other marine birds in Slovenia's sea (in Slovenian). In order to ensure suitable living conditions for the Mediterranean Shag in Slovenia's sea, the following needs to be provided:

- **ENOUGH FOOD.** Mediterranean Shags may suffer hunger due to shortage of food (fish) caused by excessive fishing and destruction of seafloor habitats.
- **SAFETY.** Mediterranean Shags may lose their lives getting caught in fish nets, colliding with fast vessels, or due to spillage of oil and oil derivatives.
- **SUITABLE HABITAT.** Discontinuation of shellfish farming would result in loss of key habitats for safe and undisturbed roosts. Should this happen, supplementary roosts would need to be provided in the areas along the Slovenian coast.
- **PEACE.** Excessive disturbance of Mediterranean Shags may prompt the species to leave the areas which are key to its survival, for example its roosts and feeding grounds.

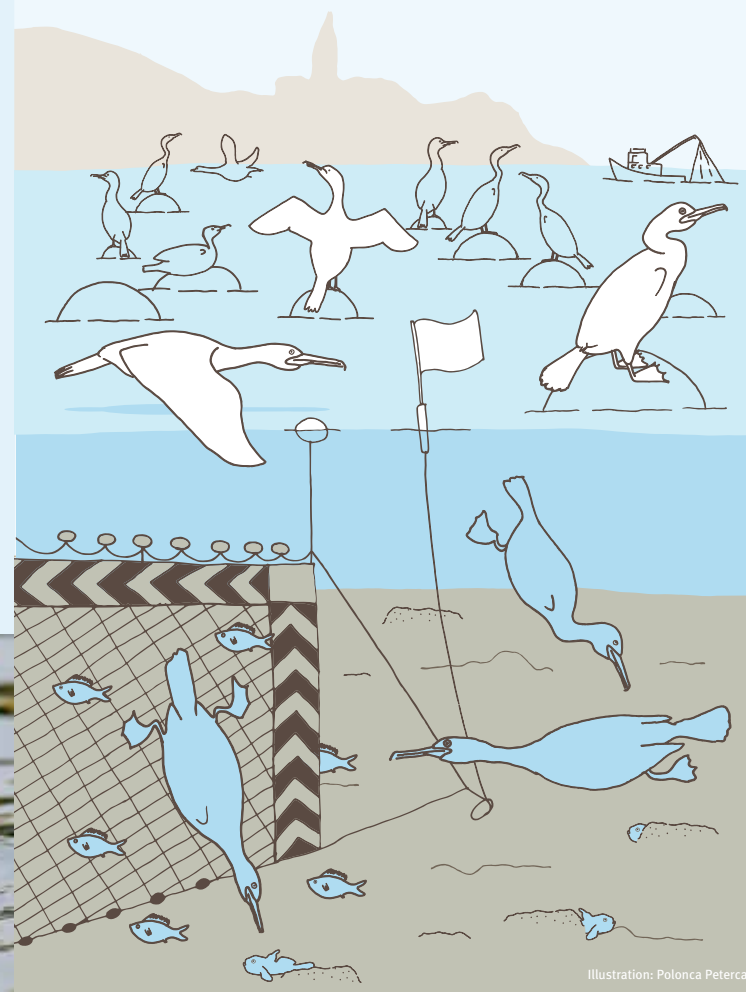


Illustration: Polonca Peterca

Recommended measures:

- Maintenance of the current status or improvement in the status of seafloor habitats.
- Prevention of excessive fishing, especially of seafloor fish.
- Prevention of accidental by-catch of Mediterranean Shags in fishing gear.
- Preservation of suitable roosts.
- Prevention of excessive disturbance at roosts.
- Ensuring environmental safety on navigation routes and in ports.
- Activation of the action plan for oiled birds resulting from spillage of oil and oil derivatives into the marine environment.

By means of these Natura 2000 measures, Slovenia will preserve Mediterranean Shag habitats and the natural resources that are necessary for the survival of the species. It will thus protect crucial parts of the marine ecosystem, such as seafloor habitats and associations.

The action plan for oiled birds and other wildlife species affected by spillage of oil or oil derivatives into the sea

Correct measures taken upon occurrence of oiled birds and other wildlife species can save their lives

The action plan to be followed upon the turn-up of oiled birds and other wildlife species has been prepared in co-operation with a group of experts from DOPPS – BirdLife Slovenia, Slovenian Administration for Civil Protection and Disaster Relief, Slovenian Environment Agency, Slovenian Maritime Administration, Luka Koper (Port of Koper), Koper Veterinary Clinic, and the University of Primorska. The plan is vital for the mitigation of consequences suffered by the birds and

other wildlife in accidents resulting in spillage of oil and oil derivatives into the marine or coastal environment. The primary aim of the plan is to ensure that appropriate action is taken during rescue of oil-soaked wildlife, which can considerably improve their chances of survival. The plan is activated in line with the national Civil Protection and National Disaster Relief Plan for maritime accidents. This ensures emergency rehabilitation of affected seabirds and complements the measures for the conservation of protected bird species populations in Natura 2000 sites that will be implemented in the framework of the Operational Programme for Management of Natura 2000 Sites in Slovenia.



Photo: arhiv DOPPS



Photo: Bia Rakar



Photo: Bia Rakar



Photo: Tomaž Remzgar



Photo: Tomaž Remzgar



Photo: Bia Rakar



Photo: Bia Rakar

Public awareness-raising

Educational activities

Particular attention was paid to educating the youth. In classrooms and outside in the open young people learned about the Mediterranean Shag and other seabirds as well as the marine ecosystem in general. We organized a youth ornithological camp and numerous lectures and guided tours for elementary and secondary school pupils as well as university students.

Exhibitions

In cooperation with the Slovenian Museum of Natural History, we set up the exhibition “The Mediterranean Shag and Protection of Slovenia’s Sea”, which was shown in the biology-themed display case for a year and attracted almost 25,000 museum visitors. The documentary about the Mediterranean Shag was playing throughout the exhibition, and young visitors were also given a children’s book and colouring book about Ari, the Mediterranean Shag.

After the closing of the exhibition, the contents of the exhibition was transferred onto upright billboards as part of the touring exhibition that will continue to spread the knowledge and awareness about the natural heritage and the need to protect Slovenia’s sea and people of all Slovenian regions for a long time after the project completion.



Photo: Remi Jouan



Photo: arhiv DOPPS



Photo: Ciril Mlinar Cic

THE SIMARINE-NATURA PROJECT IN THE MEDIA

Throughout the project, the Mediterranean Shag was also advertised and popularized through a variety of media. TV and radio contributions, newspaper articles, scientific papers, and other publications in the media can be seen on the project website: <http://simarine-natura.ptice.si/en/gallery/media/>

Promotion at the Strunjan Landscape Park

In promoting the project we worked closely with the Strunjan Landscape Park, which is also an associated beneficiary in the SIMARINE-NATURA project. Park staff, together with the employees of the Sečovlje Salina Landscape Park, carried out a series of lectures for the general public, presentations and guided tours of the park and at fairs, published articles in print and online media, TV and radio shows, as well as mass distribution of project-related publications. When the park's new visitor centre opened in 2013, the Mediterranean Shag contents found their place in its permanent exhibition.



Photo: arhiv Krajinskega parka Strunjan



Photo: arhiv Krajinskega parka Strunjan



Photo: arhiv Krajinskega parka Strunjan



Photo: Bojana Lipej



Photo: Bojana Lipej



Photo: Bojana Lipej



Photo: Urška Koče

Strengthening the network of stakeholders

Workshops for stakeholders

Collaboration between various users and managers of the marine environment is key to the harmonisation of nature conservation objectives and social and economic interests in the marine environment. With this aim, we held four workshops for stakeholders, which presented the objective of the SIMARINA-NATURA project and the results of studies into the Mediterranean Shag, and proposed the new SPA Central Gulf of Trieste. Two workshops were specifically dedicated to discussions about Natura 2000 activities for the Mediterranean Shag and its interactions with other Shags, which could contribute to the quality of area management guidelines. Workshops were attended by nature conservationist researchers, state and local decision-makers, owners of shellfish farms, fishermen, fisheries consultants, maritime experts, and representatives of maritime industries.

Networking

- Participation in the BirdLife International Marine Task Force (from 2011 on)
- IBA identification training with the Portugal partner of BirdLife International, SPEA (Lisbon, 19th – 20th December 2012)
- Participation in the ECOTONE Telemetry Workshop (Wierzbica, 5th – 9th April 2013)
- Participation in the conference Biodiversity in the Mediterranean Basin (Koper, 11th – 13th March 2015)
- Participation in the LIFE Marine Platform meeting (Madrid, 26th – 27th March 2015)
- Co-organization of two trainings of volunteers within the international projects POSOW (www.posow.org) and HAZADR (www.hazardr.eu) (Sežana, 21st – 23rd November 2013 and Piran, 25th – 26th May 2015)
- Participation in the international Conservation Biology Workshop (Koper, 17th – 19th June 2015)
- Participation in the international workshop Protecting seabirds in the Mediterranean, organized by BirdLife Malta (Malta, 23th – 25th November 2015)
- Participation in the national task force for the preparation of the Operational Programme for Support from the European Maritime and Fisheries Fund 2014–2020 (2013–2014)
- Participation in the consultation for the preparation of national Marine Strategy Framework (2012–2015)

Life after LIFE

The SIMARINE-NATURA project provided legal groundwork for the protection of the Mediterranean Shag, although this groundwork alone does not guarantee a bright future for the species. In order to ensure the species' conservation, Slovenia will have to adopt measures for the management of activities of Natura 2000 sites that will ensure favourable living conditions for Mediterranean Shags. The umbrella document which specifies the conservation objectives and measures applicable to the Mediterranean Shag in Natura 2000 sites is the Operational Programme for Natura 2000 Sites in Slovenia 2015–2020 (PUN2000).

In line with our mission to protect birds and their habitats, DOPPS – BirdLife Slovenia will continue to work towards the wellbeing of the Mediterranean Shag and the marine environment. Our priorities in this field are: to study the interactions between Mediterranean Shags and other seabirds and fisheries; to take an active part in the planning of conservation activities in co-operation with the neighbouring Adriatic countries and BirdLife International; and to support further promotion of the conservation of seabirds and the entire marine ecosystem in Slovenia and wider, across the Gulf of Trieste.

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Acknowledgements

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STAKEHOLDER WORKSHOP PARTICIPANTS

Marked with *, Chamber of Agriculture and Forestry of Slovenia, Komunala Koper d. o. o., Ministry of Agriculture, Forestry and Food – Hunting and Fisheries Sector, Morigenos, National Institute of Biology – Marine Biology Station Piran, Fisheries Research Institute of Slovenia, representatives of shellfish farmers, representatives of fishermen

EDUCATIONAL INSTITUTIONS AND MUSEUMS

Primary school (OŠ) Prade, OŠ Antona Ukmarja Koper, OŠ Ivana Babiča – Jagra Marezige, OŠ Lucija, OŠ Lucija – Podružnična šola Strunjan, OŠ Ivana Cankarja Trbovlje, OŠ Šmartno na Pohorju, OŠ Sveta Trojica v Slovenskih Goricah, OŠ Zalog Ljubljana, OŠ Mala Nedelja, OŠ Jožeta Kraja Rakek, OŠ Jela Janežiča Škofja Loka, OŠ Slivnica pri Celju, OŠ Šmarje, OŠ Šmartno v Tuhinju, OŠ Bršlin Novo mesto, OŠ Toneta Šraja Aljoše, CŠOD – Dom Burja, Gimnazija Piran, Gimnazija Koper, Ginnasio Antonio Sema Pirano, Gimnazija Vič, Biotechnical Faculty of the University of Ljubljana, Faculty of Natural Sciences and Mathematics of the University of Maribor, Faculty of Mathematics, Natural Sciences and Information Technologies of the University of Primorska, Università degli studi di Trieste, Slovene Museum of natural history

Project publications and production



A short documentary on the Mediterranean Shag and the SIMARINE-NATURA project, production EKO FILM.ORG (directed by Gregor Šubic) is available on the project website: <http://simarine-natura.ptice.si/en>

EXTERNAL ASSISTANTS

Ana Dolenc, Primož Bajec (URSP), Srečko Bogatec (URSZR), mag. Zvezdan Božič (URSZR), Anka Doblekar, Dare Fekonja (PMS), Mojca Jernejc Kodrič (PMS), mag. Martina Kačičnik Jančar (ZRSVN), Bojan Marčeta (ZZRS), dr. Borut Mavrič (NIB-MBP), Nace Mihelič, Daniela Milotti Bertoni, dr. Lovrenc Lipej (NIB-MBP), Peter Maričič (UP in Vet. amb. KP), Polonca Peterca, Mojca Pipan, Anja Pitamic, Darja Pretnar, Zorka Sotlar (ARSO), Domen Stanič, Iztok Škornik (KPSS), Peter Škrlep (Primer d. o. o.), Gregor Šubic, dr. Davorin Tome (NIB), dr. Al Vrezec (PMS in NIB), Matjaž Žetko (ARSO)

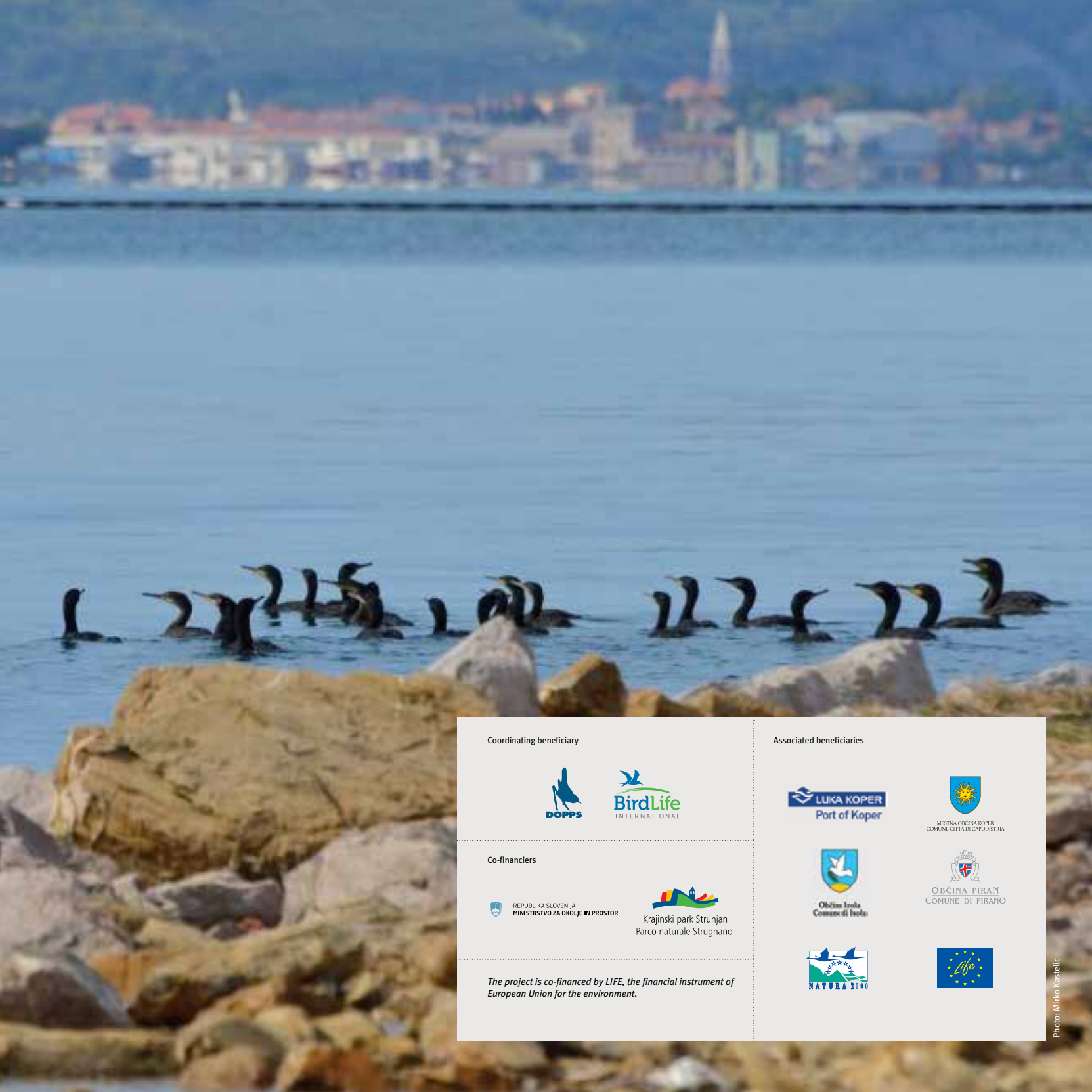
CREATORS OF THE DOCUMENTARY

Listed in the film credits

PHOTOGRAPHERS AND ILLUSTRATORS

Tilen Basle, Vlado Bernetič, Stefan Berndtsson, Jiří Bohdal, Dejan Bordjan, Ivan Budinski, M. Buschmann, Aris Christidis, Marco Colombo, Dick Daniels, Ivan Esenko, Dare Fekonja, Brian Gatwicke, Tilen Genov, Stefano Guerrieri, Ana Hace, Luc Hoogenstein, Brocken Inaglory, Remi Jouan, Mirko Kastelic, Anže Kacin, Mirko Kastelic, Brina Knez, Urška Koce, Polona Kotnjek, Simon Kovačič, Kajetan Kravos, Matija Križnar, Yuriy Kvach, Bojana Lipej, Tihomir Makovec, Borut Mavrič, Shawn McCready, Andrej Medved, Tomaž Mihelič, Darinka Mladenovič, Ciril Mlinar Cic, Luka Novak, Brylie Christopher Oxley, Hernán Piñera, Miha Podlogar, Augustin Povedano, Dejan Putrle, Bia Rakar, Graham Robertson, Borut Rubinič, Matthias Schnellmann, Boštjan Surina, Bojan Škerjanc, Iztok Škornik, Gregor Šubic, Davorin Tome, Brian Tomlinson, Tone Trebar, Andreas Trepte, Tomi Trilar, Duša Vadnjal, Milan Vogrin, Eva Vukelič, Kristina Krhin, Vladimir Leben, Polonca Peterca (illustrations)

DOPPS – BIRDLIFE SLOVENIA STAFF



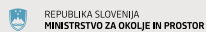
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