

Safeguarding the Lesser White-fronted Goose Fennoscandian population

in key wintering & staging sites
within the European flyway

LAYMAN'S REPORT



LIFE10 NAT/GR/000638

The Project Identity

Title:

Safeguarding the Lesser White-fronted Goose Fennoscandian population in key wintering and staging sites within the European flyway

EU Code: LIFE+10 NAT/GR/000638

Project areas: Greece, Bulgaria, Hungary, Finland

Start date: 01/09/2011

End date: 30/04/2017

Project Duration: 68 months

Total budget: 2,279,485 €

EC contribution: 1,668,071 €

Norwegian Environment Agency contribution: 350,000 €

Project Coordinator: Hellenic Ornithological Society/BirdLife Greece

Project partners:

Forest Research Institute - Hellenic Agricultural Organization "Demeter", Greece

Ministry of Environment and Energy, Greece

Bulgarian Society for the Protection of Birds/BirdLife Bulgaria

Hortobágy National Park Directorate, Hungary

Secretariat of the African-Eurasian Migratory Waterbird Agreement (UNEP/AEWA Secretariat)

WWF Finland

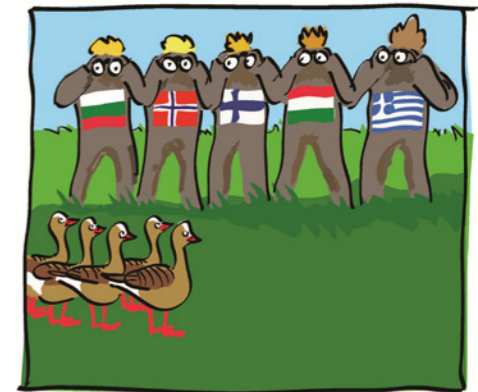
Metsähallitus Natural Heritage Services, Finland

Project website: www.wwf.fi/lwfg

Facebook: Safeguarding the Lesser White-fronted Goose



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Conservation without borders for the Lesser White-fronted Goose: Our mission

Our mission was to safeguard the rarest waterbird of Europe, the Fennoscandian population of the Lesser White-fronted Goose;

Critically Endangered in Europe and numbering only 15-20 pairs when the LIFE+ Project began in 2011. Our mission was to ensure that the extremely small population would not spiral uncontrollably towards extinction.

A **flyway approach** was necessary for the development of a wide conservation network with the objective to implement concrete conservation measures, as well as to be able to have a long lasting effect on the species. A comprehensive set of conservation actions were implemented from 2011 to 2017 that aimed to provide safe and good quality habitats for the Lesser White-fronted Goose in Europe.

We evaluated the threats that the Lesser White-fronted Goose faced in Europe and brought together key stakeholders at the

most important staging and wintering sites of the European flyway, to join us on our ambitious mission. Using high technology as well as more traditional, on-the-ground monitoring methods, while also utilizing available legislation tools we strived to ensure that the European flyway of the Lesser White-fronted Goose was safeguarded and that it would remain so also after the end of the Project, allowing the Lesser White-fronted Goose a real chance to return from the brink of extinction and roam the European skies once again.



LIFE Nature and Biodiversity is one of the main strands of the European Union's funding programme for the environment. It supports projects that contribute to the implementation of the EU's Birds and Habitats Directives, the Natura 2000 network and that contribute to the EU's goal of halting the loss of biodiversity.



Natura 2000 is an EU wide network of nature protection areas established in 1992. The aim of the network is to assure the long-term survival of Europe's most valuable and threatened species and habitats. It is comprised of Special Areas of Conservation (SAC) designated by Member States under the Habitats Directive, and also incorporates Special Protection Areas (SPAs) designate under the Birds Directive. The Project has been implemented in 7 Special Protected Areas in Northern Greece, Bulgaria and Hungary.

The Lesser White-fronted Goose



The Lesser White-fronted Goose *Anser erythropus* is Europe's rarest and most endangered breeding goose. It breeds in the arctic and its range once extended in a vast and continuous area in the lower arctic that ranged from northern Scandinavia all the way to eastern Siberia.

Due a severe drop in the population the Lesser White-fronted Goose breeding range is now fragmented in separate populations. Although the Lesser White-fronted Goose is globally classified as Vulnerable by the IUCN, the Fennoscandian population that was once the most common breeding goose species in the alpine region of Norway, Sweden and Finland is now ranked as Critically Endangered within the EU numbering only approximately 30-35 pairs.

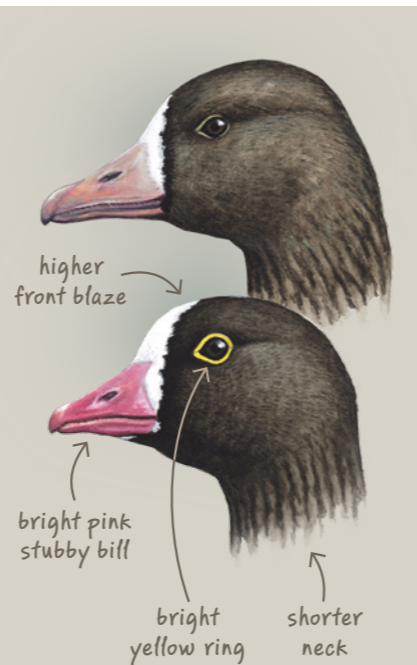
The Fennoscandian population winters in northern Greece, and is the smallest of the Lesser White-fronted Goose populations that can be found wintering in wetlands from south east Europe all the way to Japan.

The look-alike challenge

There is a very strong resemblance between the Lesser and the Greater White-fronted Goose that is a much more abundant species whose hunting is allowed in most of its range.

Often, Lesser and Greater White-fronted Geese feed, roost and fly together in mixed flocks and as a result advanced observation skills are required in order to identify the species correctly. Unfortunately, the resemblance of the Lesser White-fronted Goose with the Greater White-fronted Goose but also with other grey geese can lead to accidental shooting and poaching of the species.

Surveying and monitoring large flocks of geese in order to identify the few Lesser White-fronted Goose individuals amongst them was a challenge we had to face with large amounts of patience, appropriate winter clothing and if we were lucky enough, good company.



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How can you distinguish an adult Lesser White-fronted Goose from an adult Greater White-fronted Goose?

- It is smaller in size
- The neck is shorter and darker brown
- The head is more box shaped and a uniform dark brown
- The bill is stubby, almost as long as its height at the base and bright pink
- The white front blaze reaches higher up to the crown
- It has a bright yellow ring

A small goose with a great history

The history of the Lesser White-fronted Goose can be traced a couple of million years back in the splits of goose evolution, however our active involvement with the species begun in the 1980s when the first monitoring programmes started at its breeding and wintering grounds in Europe. In Greece the species is protected since 1985, while in 1988 the first conservation project was implemented that provided much needed population data for the species.

During the 1990s close collaboration between conservation programmes in Finland and Norway resulted in a significant increase on our knowledge for the species, while the use of satellite transmitters revealed the Lesser White-fronted Goose flyway and highlighted the importance of Greece, Hungary, Russia and Kazakhstan during the species life cycle. Increased knowledge resulted in cooperation between NGOs and governmental bodies, and the development of the first International Species Action Plan for the Lesser White-fronted Goose.

The LIFE Programme has been instrumental in the development of the Lesser White-fronted Goose network amongst relevant countries

and organizations especially along the Fennoscandian flyway, as well as in the implementation of essential conservation actions. Since 1997, five LIFE projects have been implemented, and since 2005 a multinational stakeholder approach in the selection of project partners has been followed, as the most effective way to achieve successful results in Lesser White-fronted Goose conservation. Our involvement might be part of a very small fraction in the history of the Lesser White-fronted Goose, but during this time we have seen that collaborations on a flyway level of a migratory species can have successful results.



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Lesser White-fronted Goose migration routes



The migratory journey of the Fennoscandian Lesser White-fronted Goose begins around the middle of August, following the summer breeding season in northern Scandinavia.

The Kanin peninsula in northwestern arctic Russia is the first important stop from which the population will split and follow two distinct routes. The European route includes the Baltic countries and eastern Hungary and ends in late September early October in Northern Greece, in Kerkini Lake and the Evros Delta. The remaining population follows a more adventurous route through Russia, Kazakhstan and Ukraine. Lesser White-fronted Goose pairs that have managed to breed successfully will chose the European route, whereas unsuccessful breeders will follow the route through central Asia.

The Lesser White-fronted Geese remain in Greece until the middle of March. During spring migration they follow a shorter route through the grasslands of Hortobágy National Park in Hungary, Lithuania, Estonia and Finland. At the end of May - early June they will reach the Valdak Marshes in Norway and finally their breeding grounds in northernmost Norway.

Challenges & problems

Although the Lesser White-fronted Goose is a protected species of which hunting is not allowed, birds continue to be lost as a result of both poaching and accidental shooting during hunting, which targets other waterfowl and especially geese. This can be particularly problematic considering the great resemblance between the Lesser and the Greater White-fronted Goose, which is a widely spread, common and legally hunted species. Additionally, other human activities such as unrestricted movement of vehicles in the wetlands, tourism, fishing as well as hunting can scare the Lesser White-fronted Geese and force them to move to potentially less safe feeding and roosting areas.

The Lesser White-fronted Goose is a habitat specialist which, unlike most other goose species in the Western Palearctic that have increased in numbers in the recent decades, still prefers to feed mainly on natural grasslands and less so on agricultural fields. Staging and wintering sites for the species include low-growth natural flood grasslands, the continuous degradation of which has put additional strain on the Lesser White-fronted Goose.

A lot still remains unknown about the Lesser White-fronted Goose. Although we have a good grasp of the Fennoscandian flyway at least in Europe, gaps in knowledge still remain. This includes the location of key staging and wintering sites: if there is no knowledge of the sites frequented by the geese, measures to protect them at these sites cannot be implemented, leaving the birds unprotected. The lack of knowledge is a particularly serious threat for the Fennoscandian population, as due to its very small size, potential threats and unknown factors can have a catastrophic effect.

The LIFE+ Project for the Lesser White-fronted Goose was designed to minimise the most important threats to the species at many of the key sites along the European flyway, through the implementation of a comprehensive set of conservation and communication actions.

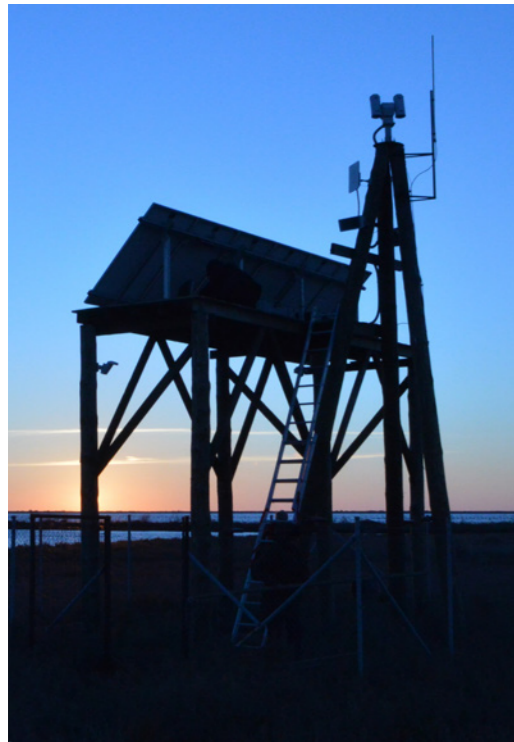


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What did the Lesser White-fronted Goose project do?

The LIFE+ Project implemented a series of concrete conservation, monitoring, policy, communication and education actions at the key staging and wintering sites of the Lesser White-fronted Goose in Europe. The selection of actions was made following the outcomes and lessons learned during previous projects as well as priority activities outlined in the International Action Plan for the species.

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A novel and high-tech remote **surveillance and patrolling system** operated in Greece, while combined patrolling schemes were also developed and operated in Bulgaria.

A wide-reach **campaign run, against illegal killing** in the Greek wetlands, which targeted the public as well as key stakeholders, like the hunting community, aiming to reduce the possibility of illegal shooting.

The diet of the Lesser White-fronted Goose was analysed in Greece and Hungary, and **habitat management actions** were subsequently designed and implemented that resulted in almost 800 ha of additional available habitat.

National Action Plans were drafted in Greece, Bulgaria and Hungary for the species, which described the necessary actions needed to be implemented, their timeframe, as well as the pertinent authority responsible for their implementation.

A comprehensive **environmental education** programme was developed and run in schools of northern Greece that included the production of environmental education kits as well as additional tools and outputs. Additionally, the project engaged the public in Lesser White-fronted Goose conservation through the organisation of numerous outreach events as well as the publication of a variety of editions.

The Lesser White-fronted Goose was **monitored** throughout its European migration route. New monitoring teams were formed and trained and as a result new staging sites were revealed. Updated monitoring data have shown changes in the temporal migration pattern of the Fennoscandian Lesser White-fronted Goose but have also revealed the increasing importance of Europe for the Western main Lesser White-fronted Goose population.

Project Areas

The project implemented conservation actions in **7 Natura 2000 sites** for which the Lesser White-fronted Goose is a priority species.

- **In Greece**

Project actions were implemented at the Lake Kerkini, Lakes Ismarida-Vistonida and Evros Delta National Parks.

- **In Bulgaria**

Actions were implemented at the Batova, Zlatiata and Pyasachnik Reservoir wetlands.

- **In Hungary**

The Hortobágy National Park was included as the main migration stop-over site for the species in central Europe.

- **In Finland**

Communication actions were implemented at the Finnish Bothnian Bay coast and the Northern Finnish Lapland.



x3



x3



x1



The Lesser White-fronted Goose in the Greek wetlands

Lesser White-fronted Goose monitoring was conducted at the wetlands of northern Greece where the species stages and winters. With the collaboration of the Management Authorities of Lake Kerkini, Lakes Ismarida-Vistonida and Evros Delta National Parks, the Lesser White-fronted Geese were closely monitored from the moment of arrival in autumn until their departure the following spring.

During the first monitoring season of the project in 2011-2012, a maximum of 75 Lesser White-fronted Geese were observed in the Evros Delta, while by the 2015-2016 wintering season a total of 144 Lesser White-fronted Geese arrived in Greece. This is number may still seem very small, it is however the highest since the winter of 1987-1988 when 142 individuals were recorded.

Up until 2012 the Lesser White-fronted Geese arrived in Greece around the middle of October and even occasionally early November in Kerkini Lake, and departed from Evros Delta in March. This pattern now seems to be shifting, as during the

course of the project the Lesser White-fronted Geese arrived progressively earlier in Greece and also spent more time in Kerkini Lake. Since the departure time remained more or less constant the overall period that the species wintered in Greece increased from 130 days during the winter of 1987-1988 to 188 in that of 2016-2017.

During the project, the Lesser White-fronted Goose flock was annually observed in Kerkini Lake and Evros Delta. There were no observations at Ismarida Lake, a former popular site for the species, while in 2013 1-2 Lesser White-fronted Geese were observed and photographed in Koronia Lake SPA.



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What is the impact of hunting on the Lesser White-fronted Goose in Greece?



Even though the Lesser White-fronted Goose is protected throughout most of its range, hunting is still considered the most important threat for the species internationally.

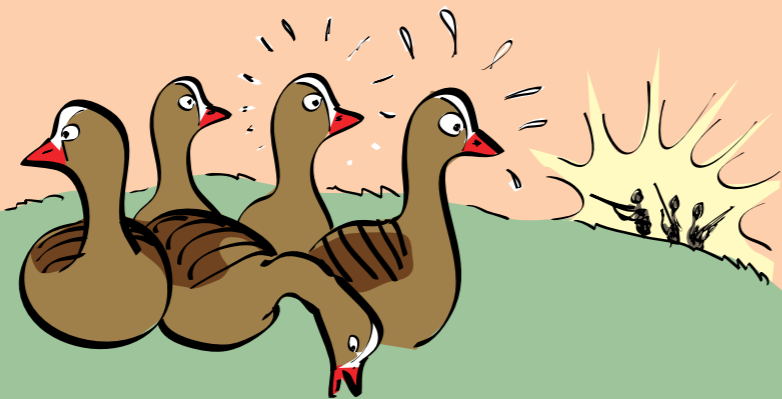
Due to the very close resemblance to the Greater White-fronted Goose, as more common species whose hunting is mostly allowed, the Lesser White-fronted Goose can be accidentally shot.

Additionally, hunting can be a disturbance factor especially if it takes place in proximity to protected areas and can also have detrimental effects to waterbirds and wetland health in generally due to the amounts of lead contained in the shot.

Hunting activity was assessed at the Evros Delta by the Forest Research Institute. The Evros Delta, a Natura 2000 as well as a Ramsar site, is the most popular goose hunting site in Greece. Possibly due to the recent economic recession in Greece and unfavorable weather conditions, hunting activity was relatively low during the research period.

Although no Lesser White-fronted Geese were recorded in any of the hunting bags checked, hunting was still considered a threat for the species since it took place at the same time as the Lesser White-fronted Geese wintered in the area (mostly in January) and at a very close proximity to their roosting and feeding areas.

Additionally, hunter awareness was very low and other protected species of wildfowl were found within the hunting bag (Greylag Goose, Shelduck, Ferruginous Duck).



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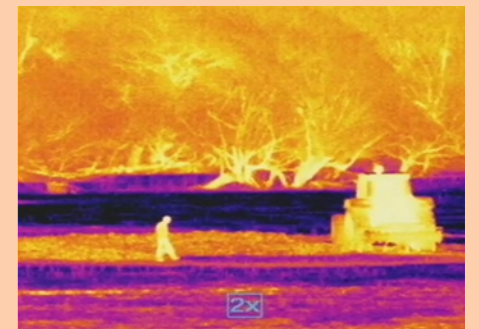
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A Smart Patrolling System for the Lesser White-fronted Goose in Greece

To minimize the threat of hunting and illegal shooting in Greece, the Smart Patrol System (SPS) was designed and operated by the Hellenic Ornithological Society (HOS) for five wintering seasons at the main Lesser White-fronted Goose sites in Greece, Kerkini Lake, Ismarida Lake and Evros Delta. Using infrared and daylight long-distance cameras, the main Lesser White-fronted Goose roosting and feeding areas were under surveillance during the day and also during the night and any potentially threatening events for the Lesser White-fronted Geese (other wildfowl) were assessed and dealt with accordingly.

No Lesser White-fronted Goose fatalities were recorded during the period that the SPS operated, and this can also be confirmed by the monitoring results that showed an equal or higher number of Lesser White-fronted Geese departing from Greece each spring, than the number that had arrived the previous autumn. Illegal shooting was however recorded on a number of times, also on protected, iconic species like the Red-breasted Goose and the Dalmatian Pelican.

In total at least 750 patrols took place during five wintering periods (2012-2013 until 2016-2017) that also contributed to dissemination of information regarding the Lesser White-fronted Goose on the ground, to stakeholders including hunters, fishermen, tourists and authorities. Patrolling was conducted in collaboration with more than 40 wardens in total from the local Forest Services. This is the first time that combined patrolling takes place between an NGO and a pertinent authority. This unique collaboration between the HOS and the local Forest Services significantly contributed to hunting law compliance and zero Lesser White-fronted Goose mortality.



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Combined patrolling schemes in Bulgaria

Increased mortality from accidental shooting and illegal killing is a major threat for the Lesser White-fronted Goose in Bulgaria, where 10 cases of shot individuals have been registered since 1890. During the project combined patrols as well as monitoring missions, coordinated by the Bulgarian Society for the Protection of Birds (BSPB) took place in three Natura 2000 sites in which Lesser White-fronted Goose had been observed in the past (Batova, Pyasachnik Reservoir and Zlatiyata), and a permanent patrolling system in protected areas in Bulgaria was developed.

Although the recorded hunting activity was very low and no significant hunting violations were recorded, the collaboration between the BSPB and the state authorities responsible for hunting control was significant and was transferred to areas where intense goose hunting takes place (Shabla, Durankulak and the Burgas lakes).

No Lesser White-fronted Geese were observed in any of the project sites (Batova, Zlatiyata and the Pyasachnik Reservoir) and monitoring efforts extended to adjacent regions that included the Svishtov – Belene lowland, the Burgas lakes, the Shabla and Durankulak lakes in north eastern Bulgaria and the Ovcharitsa reservoir, Danube plain and Struma valley. A few Lesser White-fronted Goose

individuals were identified amongst very large Greater White-fronted Goose flocks in Svishtov – Belene and the Burgas, Shabla and Durankulak lakes. It seems likely that although Bulgaria is an important site for the Lesser White-fronted Goose, it is not a staging site for the Fennoscandian population.



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Setting up frameworks for Lesser White-fronted Goose conservation Local & National Action Plans



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Although the Lesser White-fronted Goose is legally protected throughout its range, National Action Plans help to coordinate and push implementation of conservation action, and are thus foreseen by the International Species Action Plans as well as national legislation. National Action Plans for the Lesser White-fronted Goose were drafted for Greece, Bulgaria and Hungary according to international and national guidelines and obligations, to ensure effective, coordinated, long-term and legally binding conservation of the species on a national level.

Similar national action-planning processes were followed in all three countries and included the establishment of a national working group, drafting the status report and the National Action Plan for the species using all available knowledge, stakeholder consultation and adoption by the relevant ministry. As also identified by the International Single Species Plan for the Lesser White-fronted Goose, hunting, illegal killing and habitat loss were identified as major threats for the species in Greece, Bulgaria and Hungary.

All the three plans include a list of threats for the species, corresponding actions and authorities responsible for the implementation. Even though all three National Action Plan processes were initiated in 2012, only the Hungarian plan was adopted by the end of the project. Lengthy administrative procedures in Greece and Bulgaria highlight the difficulty

of the transition of international as well as NGO-driven nature conservation activities into the national biodiversity agenda.

On a local level in Greece, Local Action Plans for the eradication of illegal killing at the main Lesser White-fronted Goose sites, were developed and adopted as Ministerial Decisions by the Ministry of Environment and Energy. The Plans are implemented by the Forest Directorates of Serres, Kavala and Evros, and foresee coordinated action of all local authorities that are involved in the monitoring of illegal killing and poaching, and the enforcement of hunting legislation at Kerkini Lake, Ismarida Lake and Evros Delta respectively.

AEWA Lesser White-fronted Goose International Working Group

The Project contributed directly to the implementation of the AEWA International Single Species Action Plan (ISSAP) for the Lesser White-fronted Goose and was a major driving force behind the further development of the conservation of the species within the EU and beyond.

In the framework of the Project, two meetings of the AEWA Lesser White-fronted Goose International Working Group were co-financed by the project and organised by the Secretariat of the African-Eurasian Migratory Waterbird Agreement (UNEP/AEWA Secretariat). The 2nd Meeting of the AEWA Lesser White-fronted Goose International Working Group took place in Kerkin Lake, Greece, in November 2012. The main outcomes

of the meeting included the agreement to establish a network of critical sites for the Lesser White-fronted Goose as well as a common monitoring scheme based on the monitoring network developed during the LIFE+ Project. The Working Group and the agreement for the extension of the working group membership to include the Eastern population of the Lesser White-fronted Goose and thus achieving global population coverage.

The 3rd Meeting took place in Trondheim, Norway, in April 2016 and its main outcomes included the selection of 9 critical sites for the species for which urgent concrete conservation actions will be implemented, the Evros Delta being one of them. The group also concluded on the main steps to be taken regarding the pending revision of the ISSAP for the species and agreed on a concrete workplan for 2016-2019.



IRAN



KAZAKHSTAN

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Lesser White-fronted Goose International Monitoring Network

A major obstacle in the conservation of the Lesser White-fronted Goose has been the lack of knowledge regarding the location of the staging sites of the species even within Europe.

To fill in these knowledge gaps, a comprehensive monitoring plan was developed for the Lesser White-fronted Goose along its Fennoscandian migration routes that included the publication of standard monitoring instructions and a field guide.

Additionally, a network of field observers was created and an email alert system was set up, through which members of the Lesser White-fronted Goose field network were notified when the Fennoscandian flock was on migration, in order to prepare for monitoring expeditions in suitable areas in their respective countries.

In order to increase the quality and quantity of observations in the field, three Lesser White-fronted Goose identification and monitoring training seminars were organized in Hortobágy National Park by WWF Finland. Birdwatchers and ornithologists from countries along the Lesser White-fronted Goose migration routes attended, including Azerbaijan,

Bulgaria, Estonia, Greece, Hungary, Iran, Iraq, Kazakhstan, Lithuania, Poland, Romania, Russia, Serbia, Slovakia, Turkey and Ukraine.

Trained participants formed new field teams on the ground and the most significant results included the first confirmed observation of a larger Lesser White-fronted Goose flock in Lithuania, large number of observations in north-eastern and south-western Poland and in southern Hungary, the first records of an alive Lesser White-fronted Goose in Serbia for decades and the observation of two Lesser White-fronted Geese in Koronia Lake in Greece for the first time after approximately 100 years.



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Managing natural grasslands for the Lesser White-fronted Goose

The Lesser White-fronted Goose diet was analysed in Greece and Hungary and a series of habitat management actions were planned and implemented. In both countries, the preferred food source for the Lesser White-fronted Goose was grasses, whereas they also consumed a variety of other plants (including halophytic vegetation) depending on their availability. In Hungary, high grazing pressure as well as the partial presence of shallow water areas was also a key factor influencing the feeding of the species.

Analysis of the LWfG feeding behaviour also took place at Kerkini Lake, Greece, where the Lesser White-fronted Geese feed on the mudflats of the lake shore and depart from the area only when the feeding area floods or when the relative cover of natural foods falls to a very low level.

Habitat management actions took place at the Evros Delta in Greece and in the Hortobágy National Park in Hungary. To increase Lesser White-fronted Goose food availability inside the protected area of Evros Delta, mechanical removal of the dominant halophytic vegetation, which is favoured less by the species was followed by seeding of grasses on selected plots. The results showed that food availability increased inside fenced selected plots in which geese fed and a series of actions were recommended to be followed by the area managers.

In Hortobágy, management mainly included water level and vegetation management at the fishpond system of the National Park. An overgrown pond of ca. 125 ha was restored by the removal of reed to provide a resting area for geese and a suitable habitat for many other waterbirds.

Additionally, appropriate water management in three fish ponds provided the Lesser White-fronted and other geese with a mosaic habitat of mud banks that offered freshly grown vegetation, while mud islands and higher water level fishponds offered an optimal resting place.



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Lesser White-fronted Goose diet facts

- A total of 1028 Lesser White-fronted goose droppings were collected and analysed
- At least 32 different plants were identified from these droppings in Kerkini Lake and 18 in Evros Delta
- *Echinochloa crus-gallii*, a type of wild grass, where available, was the preferred food choice for the Lesser White-fronted Goose in Kerkini Lake and in Hortobagy National Park, constituting up to 58% of the plants found in the droppings
- In Evros Delta 20% of the Lesser White-fronted Goose diet consisted of halophytes, despite their relatively low nutritional value
- There is no food or habitat competition between the Lesser White-fronted Goose and the grazing water buffaloes in Kerkini Lake
- The Lesser White-fronted Goose is a habitat specialist that can feed on a variety of plants according to their availability



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Campaign against illegal killing in the wetlands of Northern Greece

To engage with stakeholders as well as the public, the HOS in collaboration with the Greek Ministry of Environment and Energy run a campaign against illegal killing in northern Greek wetlands.

The campaign included the production and broadcast of a TV and Radio spot, a full length documentary, the production of a Good Practice Guide for Hunting in Wetlands, media work in local and national level, event implementation and the adoption of Local Actions Plans (LAPs) as Ministerial Decisions for the effective coordination of pertinent authorities in the enforcement of hunting legislation.

Additionally, several training seminars were organized for wardens and hunters, with the participation of 340 persons, in which emphasis was given to the identification of the Lesser White-fronted Goose and other protected waterfowl, protected areas and hunting legislation and enforcement.



Public awareness for the Lesser White-fronted Goose

Significant efforts were put into public awareness and engagement in LWfG conservation – particularly around the key project sites in Greece. Project communication and dissemination activities were implemented on a broad scale throughout the project period focusing on multiple target groups and also expanding outside the boundaries of the project sites.

Two websites were developed and operated for the project (international www.wwf.fi/lwfg and Greek www.ornithologiki.gr/nanoxina), where all project material is available. Similar websites have been launched by project partners (ie. www.fri.gr).

A number of attractive communication materials were produced in all project partner languages (Greek, English, Bulgarian, Hungarian, and Finnish) as well as in Norwegian and Sami, and distributed to relevant stakeholders and national authorities. Materials included a project leaflet, poster, sticker and calendar, special issues for the members' magazine for the HOS and the BSPB, as well as 12 signboards that were erected in key sites in Greece, Bulgaria and Hungary.



More than 900 articles were released in local, national and international press and digital media, as well as numerous TV and radio interviews. Additionally, the project was presented in a number of international and national workshops, conferences and events reaching an audience of more than 20,000 persons.



“A goose no less... a lesser white-fronted goose!” Environmental education

Through the implementation of the project environmental education activities the distance between the wetlands, the grasslands and the schools disappeared and Lesser White-fronted Geese flocked into the classrooms! The pupils of the Prefectures of Evros, Serres and Ksanthi were introduced to their rare neighbors and their other waterfowl friends, visited their wintering grounds and spread loud and wide the urgent message on the importance of the Lesser White-fronted Goose conservation in the most creative way.

A comprehensive Environmental Education Programme was developed and launched that included the production of two educational kits for primary and secondary school level, a children's story, a memory game, a colour book, a poster and a floor game. The material was evaluated by the teachers as well as the pupils and distributed to ca. 600 schools and other educational establishments.

More than 6,000 school pupils participated in the Programme through school visits, field trips, open events and the Educational Lesser White-fronted Goose School Network that was created during the project, while more than 400 educators took part through meetings and workshops. The Programme was designed to be implemented by the teachers themselves and to be incorporated into the school curriculum and as a result continue to contribute to Lesser White-fronted Goose conservation long after the end of the LIFE+ Project.



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The continuation of the Lesser White-fronted Goose LIFE+ Project

The LIFE+ Project continued on the legacy of more than 20 years of Lesser White-fronted Goose conservation and succeeded in finally achieving an increasing trend for the species. The knowledge on the species has increased significantly; the Lesser White-fronted Goose network of trained observers has expanded and we can expect that it will continue to the bridge remaining knowledge gaps.

Although illegal killing is still an important threat for the species, the local authorities in Greece and Bulgaria have been directly involved in the project, have developed as a result expertise in Lesser White-fronted Goose conservation issues and are equipped with technology that can allow effective safeguarding of the species at its wintering sites.

The International, National and Local Action Plans for the Lesser White-fronted Goose provide coordinated long term, essential and comprehensive conservation action not only for the Lesser White-fronted Goose but also other protected wintering waterbirds that use the same habitat.

The extensive Environmental Education Programme was specifically designed to be implemented by the local schools that have already embraced it and will continue to do so, creating the new generation of Lesser White-fronted Goose conservationists.



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Our biggest successes

- A 15% annual increase of the Fennoscandian Lesser White-fronted Goose population
- Highest Lesser White-fronted Goose count in Greece since 1973
- Highest Lesser White-fronted Goose count in Finland since 1962
- Zero Lesser White-fronted Goose mortality at the project sites
- The first time a remote, real time wildlife surveillance and enforcement system operating in Europe
- A unique and novel collaboration between conservation NGOs and law enforcement authorities in Greece and Bulgaria
- An extensive analysis on the Lesser White-fronted Goose diet conducted for the first time in Europe
- 800 ha of additional habitat created for the Lesser White-fronted Goose
- New Lesser White-fronted Goose observations and new site discovery
- The development of three National Action Plans for the species
- The implementation of a wide reach campaign against illegal killing implemented for the first time in Greece
- Development of an extensive and comprehensive Environmental Education Programme for the Lesser White-fronted Goose in Greece, implemented by the schools themselves
- Influencing and contributing actively to the international conservation agenda for the species in the framework of the AEWA Lesser White-fronted Goose International Working Group
- The Lesser White-fronted Goose LIFE project receives the NATURA 2000 Award in 2016, at the Cross-border and Networking category and gains international recognition as a conservation success story



The project team



- Project Manager:** Manolia Vougioukalou
- Project Administrator:** Giorgos Sgouros following Thanos Kastritis
- Project Accountant:** Jiannis Mantadis following Eva Stefanaki
- Project Communication Coordinator:** Roula Trigou
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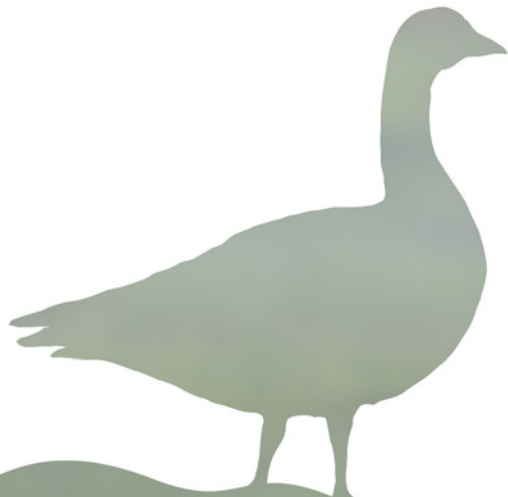
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