



## LAYMAN'S REPORT

# LIFE DEFENSE NATURE 2MIL

2012-2017









# CHAMBARAN CAMP



The Life project has allowed the first natural inventories to be carried out on this **intensive military training camp**. And what a surprise! The ecological wealth was more significant than expected on two targets : amphibious grassland around the ponds and forest bats.

## A NEW LEASE OF LIFE FOR THE PONDS

A hydraulic assessment of the condition of the dykes and ponds has enabled a program of restoration and maintenance to favour the amphibious grassland.

The end result : increasing the area of amphibious grassland that surrounds the ponds

- **Maintaining the dykes** : cutting down vegetation on dykes and scrub clearance; experimental eradication of locusts (invasive species); changing of overspill installations.

- **Limiting the impact of the two pond chains** : replacement of pond grilles to prevent fish contamination; removal of a receiving pond and restoration of the pond receiving streams.

- **Creation of two pools**, disconnected from the main stream and free of fish; restoration of an existing pool.

### Maintenance is assured

Changing water levels, accentuated by work carried out, restrict overgrowth on the banks. Maintenance of the dykes is handled by the military with training and guidance provided by The conservatoire d'espaces naturels (CEN) Isère and an equipment sharing scheme..

In sensitive areas, military operations and fishing activity are restricted. The public are allowed access for two days to collect lily of the valley.

### A site with exceptional biodiversity

**5,250 sq.m** of established amphibious grassland

European heritage species discovered : Crested newt, marsh fritillary, hazel dormouse, Eurasian beaver...

**75 to 99%** mortality of locusts after 1 or 2 Gamar Method treatments (see page 11)

**23 species** of bat present out of 30 known in the Rhône-Alpes region



## A HOTSPOT FOR BATS

Acoustic detection (120 listening spots) and telemetry have helped to identify **23 species of bat** from the **30 known** in the Rhône-Alpes region. This previously undiscovered bat population has been added to the Natura 2000 decree.

The aim is to restore the roosts and hunting areas for these bats.

### Forestry management to suit the bats

- Training NFO foresters to reconcile forest management and bats.

- Revised forestry development programme (2017-2030) : increasing areas of senescence, alternating processing objective with 50% large and very large logs...

- Rehabilitation of four military buildings, potential roosts, carried out solely by military personnel in two cases.

- Restoration of a forest pool.

# GARRIGUES CAMP



This camp of more than 4,000 ha is **dedicated to military operational preparation**. It is also an exceptional habitat for birds. Despite the pyrotechnical risk\*, the Life project has supported the remarkable bird population on the camp, while increasing training area.

\*The presence of dangerous unexploded underground munitions due to military and wartime activity.

## STABILISING THE FOOD RESOURCE

### Rabbit repopulation

Rabbits are a key species in our scrubland food chain and becoming increasingly rare. This is why the Syndicat Mixte des Gorges du Gardon (SMGG) has constructed **burrows from drystone** : A main warren, three satellite warrens and refuge areas at two separate sites. Releasing individual rabbits has allowed solid nuclei of population to form. A restricted hunting perimeter has been marked out in collaboration with hunters.

### A feeding plot

The SMGG has established a feeding plot for vultures and kites, scavenging birds of prey, a site where carcasses from farms and butchers waste can be drop off.

The Army has provided special attention for each of these tasks, particularly the pioneering work by the 2nd Foreign Infantry Regiment : transporting rocks, scrub clearance, removal of rubble, provision of equipment...

### An exceptional range of birds

Bonelli's eagle, Woodlark, ortolan bunting, grey buzzard, Short-toed snake eagle, common nighthawk, dwarf warbler, European eagle owl, red throated pipit, Egyptian vulture...



## RESTORING FAVOURABLE HABITATS

### Work in the explosives area\*

These birds need vast open habitats to hunt and breed. Following a pastoral and botanical study, areas for brome grassland restoration and agricultural installations have been defined.

To combat the overgrowth of the site, the SMGG and 2nd Infantry soldiers found solutions to open up **over 95 hectares**, despite the costs and delays caused by the clearance of the pyrotechnical risks.

### Pastoralism to save dry grassland

Herds maintain open areas. To provide them with water, the SMGG has erected two stone constructions, known as lavogne.

Two breeders are now in charge of maintaining the site, thanks to temporary occupation authorisations that guarantee routes that respect biodiversity, as well as military activity.

### Naturalist/Military/hunting management

**95 ha** of restored Mediterranean grassland

**200 ha** of pasture in military areas

**2 nuclei** of rabbit populations established

Maintaining the range of birds in open areas, including **10 endangered species**





# MONT-CAUME



On this **site without military supervision or activity**, the Life project has helped to restore bat roosts and hilly grassland. It has also worked to preserve this jewel of biodiversity from the public attendance.

## MILITARY INSTALLATIONS FOR BATS

Having been widely used for legal and non-legal activities, military galleries on site were not suitable for bats. The conservatoire d'espaces naturels (CEN) PACA removed the car wrecks and other obstructions before sealing the entrances to a pillbox which has now become **a roost for hibernation**, and two connecting corridors, which are perfect for **breeding roosts**.

The closures, made from reinforced concrete, have already proved resistant to break-ins.



## RESTORATION OF HILLY GRASSLAND

Mediterranean grasslands recognised as habitats of community interest, were threatened by the abandonment of the site. After precise inventories, CEN PACA and CEN Rhône-Alpes deforested and cleared the land to allow the 10.4 hectares site to return to its original vegetation profile.

## PRESERVING THE AREAS FROM PUBLIC ACCESS

With a magnificent view of the Mediterranean sea and the Alps, Mont-Caume is certainly attractive ! The natural balance of the area is sometimes threatened by its popularity and requires a full program :

- **Steering the public** towards less fragile areas using a process of ecological and military heritage awareness developed by CEN PACA : 5 information boards and 2 viewpoint tables are accompanied by a digital application.

- **Restricting the impact of motorised transport** by requiring visitors to explore on foot or by bicycle from a parking area and blocking the entrances to natural lanes using natural resources (tree trunks, boulders, etc).

- **Making the public aware** of the fragility of the site and fighting against trampling with pathways created by CEN PACA approved contractors.

These actions have helped to diminish the traffic on the spiny broom moorland, as well as the Mediterranean grassland and the juniper matorral.

**Formerly a military site, now dedicated to nature and discovery**

**10,4 ha** of original vegetation restored : grassland, spiny broom moorland, juniper matorral, oak forest, etc.

**1** hibernation roost and **2** breeding roosts for bats restored

**1,5 km** educational tour

**Parking area, barriers** to restrict the impact of traffic on vegetation



# ASPRETTO BASE



At the Aspretto naval base, the harbour wall of the port houses **the last remaining breeding site in France for the Audouin's gull**. After damage caused by a violent storm, Life ensures the habitat remains viable and breeding pairs are undisturbed.

## RESTORATION OF THE BREEDING ZONE

The Conservatoire d'espaces naturels (CEN) Corse and the military authorities started by **riprapping the dyke** to protect it from storms.

In addition, **the nesting platform has been restored and extended**. To accelerate the attractiveness of the site who have been disturbed by restoration work, CEN Corse planted vegetation on the dyke using seeds collected on site as well as grasses and asphodels.

## RAISING AWARENESS AND PROMOTING RESULTS

As the site becomes more secure, a **virtual tour** has been created with a digital application that evokes a bird's journey through the Gulf of Ajaccio. An information panel has been placed at a nearby tourist centre.

A camera has been installed for monitoring the colony, but it must be removed when the breeding season ends and its images are subject to military approval before they can be used.

In addition, an information board makes fishermen aware of **the risks of accidental capture** (entrapment in nets, by hooks, etc) and the impact of their activities on the species.

### 3rd World Seabird Twitter Conference

From 12 to 14 April 2017, 1 500 contributors exchanged 6,200 tweets with an audience of 3.5 million followers. CEN Corse carried out an online presentation of results from the Life project and sent a number of tweets (Seen 4,114 times).



## SUSTAINABLE TRANQUILLITY FOR BREEDING PAIRS

Naval command has been permanently ordered to refrain from all disturbance during the breeding season. CEN Corse has installed **a gate and fencing, chains and information and restriction panels**, including for maritime access. The ONCFS has also carried out operations for prevention.

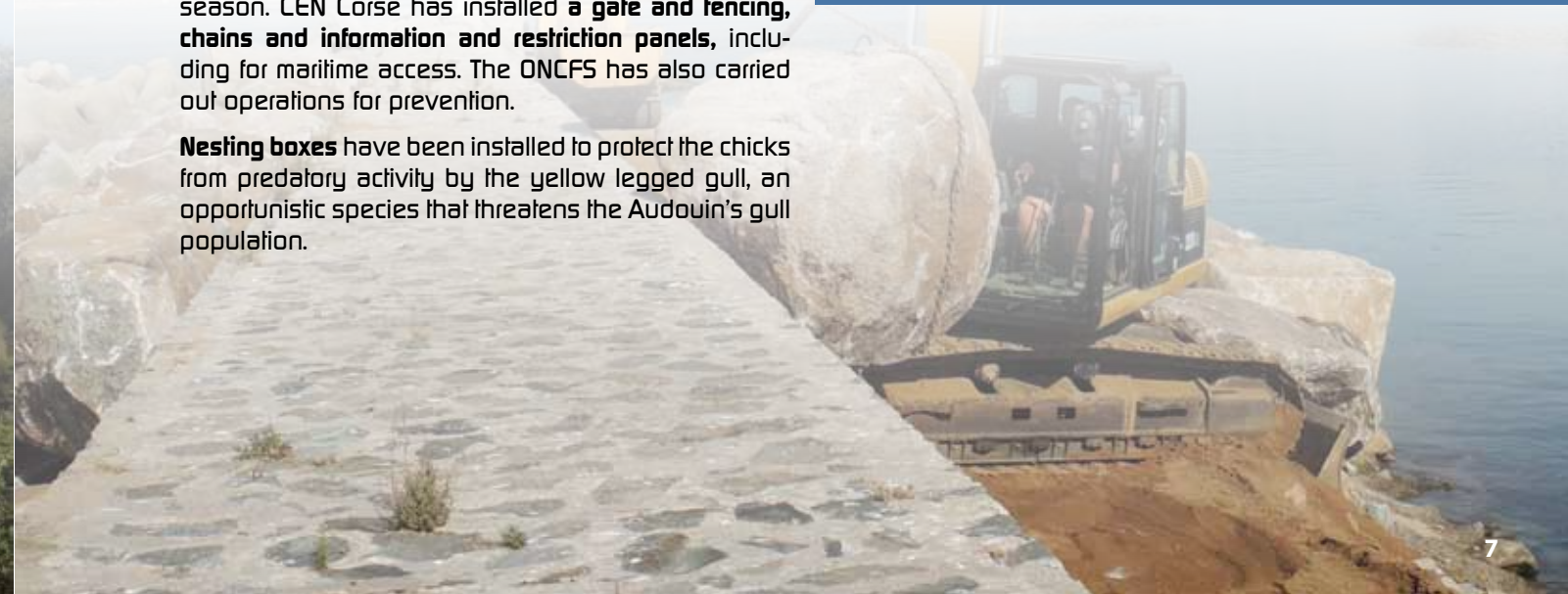
**Nesting boxes** have been installed to protect the chicks from predatory activity by the yellow legged gull, an opportunistic species that threatens the Audouin's gull population.

**Preserving the last nesting site of the Audouin's gull**

**160 sq.m** of nesting platforms restored

**30** nesting boxes created

**40 à 60** couples, with numbers stabilising after the works





# ENABLING MUTUAL UNDERSTANDING

Naturalists and the military are from very different worlds that rarely work together. The Life training and communications program has been decisive in the integration of biodiversity protection into daily management camp and at a national level.

## A WELL PREPARED SOLDIERS

It's essential to **train military staff to the ecological wealth** present on the sites, especially in view of teams turnover. For example at the Garrigues camp, such dialogue has allowed the safeguarding of a pair of Short-toed snake eagles by delaying military activity until after the nesting period.

**Mutual understanding is also encouraged by shared activities** such as the assistance given by soldiers in ringing the Audouin's gulls in Asprelto

At a national level, the Ministry of the Armed Forces has developed a range of tools : a specific «biodiversity» module as part of the «impact assessment» training for environmental officials, a revitalisation of «operational preparation and the environment» training as well as a week-long best practice seminar on this topic (Souge mai 2017).



## ADAPTING THE BEHAVIOUR OF MANAGERS

As part of the project, **the military provided training to all participants** (naturalists, businesses, etc) : this consisted of understanding military activity, the risk of explosions and safety guidance

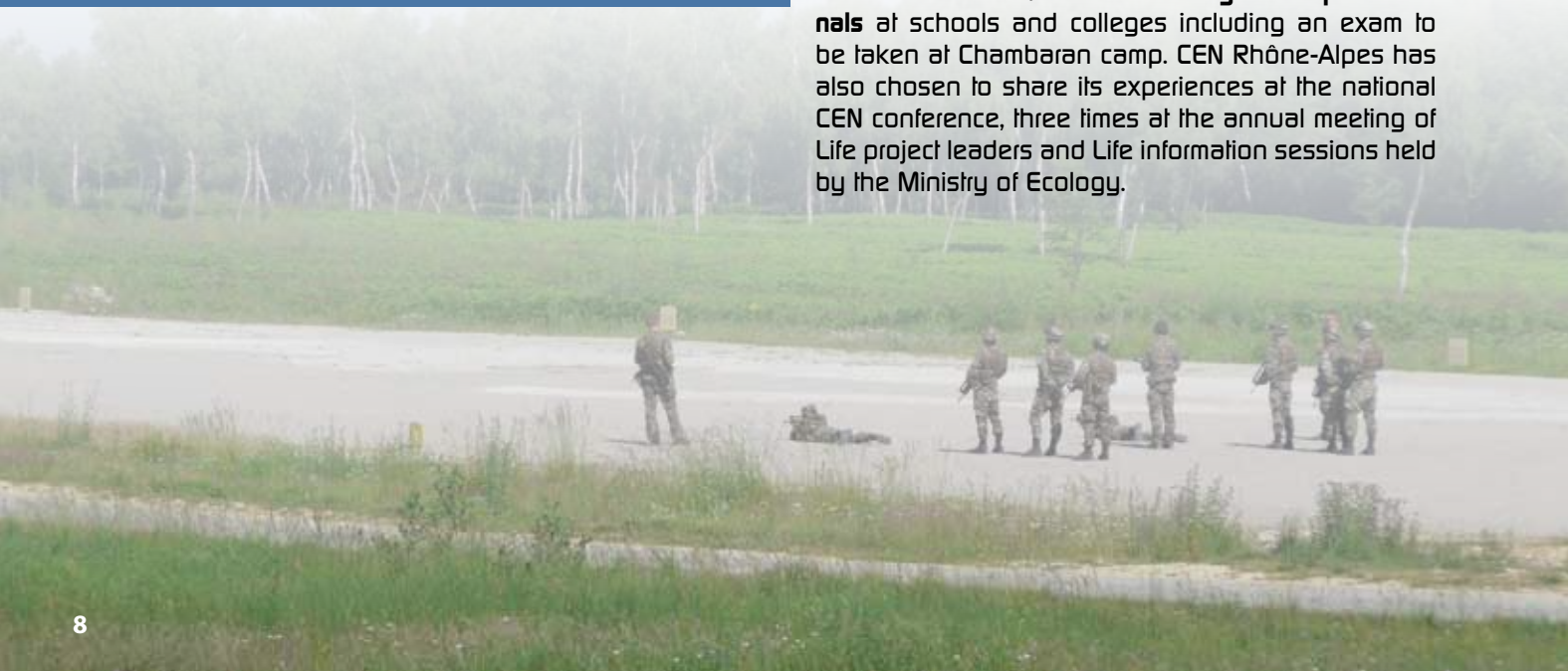
Elsewhere, **training has also been deployed among future natural environment management professionals** at schools and colleges including an exam to be taken at Chambaran camp. CEN Rhône-Alpes has also chosen to share its experiences at the national CEN conference, three times at the annual meeting of Life project leaders and Life information sessions held by the Ministry of Ecology.

*88 environmental managers trained in biodiversity as part of Life*

*30 military personnel taking part in «operational preparation and the environment» training*

*140 providers / students / naturalists trained at Chambaran*

*1 BAC Pro exam on natural environments passed by twenty students at Chambaran camp*



# A BROAD REACH

Beyond the standard tools for project presentation, from websites to kakemonos, communication and awareness have **extended their scope well beyond the project**. The result : improved acceptance of these «irregular» activities and a stronger connection between military and nation.

## ON THE CAMPS

Understanding the importance of biodiversity on these camps required the installation of information sign at each entrance and certain strategic points. Tours promoting natural heritage and military activity have been created on two sites.

Local media partners have been invited to each event: releasing rabbits, restoring the dykes, national «sea festival» day...

Partnerships have also been forged with schools, with discovery days and comic book signings.



## PUBLIC COMMUNICATION TOOLS

A **national photography competition** has helped to provide visual documentation of biodiversity in military lands, previously lacking. The best photos were included in a widely seen exhibition, particularly at the Festival of Wildlife Photography of Montier en Der.

The photos also featured in **six awareness posters** that portray the dissonance between the two worlds.

A **comic book** drawn by 4 students from the Emile Cohl school and coordinated by the writer Olivier Jouvray presents real Life examples of collaborations between environmental managers and the military in a documentary style. Following the official launch by the Military Governor of Lyon, Lieutenant Colonel Pierre Chavancy in October 2015, a **road trip** was taken to the sites featured in the comic book.

## FEEDBACK IN THREE GUIDES

■ Managers face an additional difficulty on military land : **the risk of explosive munitions**. This guide covers the regulatory framework and provides feedback from field visits and procedural indications..

■ **The impact of traffic** has been considered for each of the four project sites. The feedback makes suggestions for organising military activity and managing intrusions in addition to surveillance.

■ Although of silvicultural interest, **the locust** is also an invasive species in natural areas, where it can destabilise pond dykes for example. The guide includes a report on prevention techniques.

At Chambaran, a pond management guide allows the military to manage these areas themselves.

*60 photos of biodiversity on military land across France*

*5 videos, 6 awareness posters*

*100 articles, 11 television reports and 4 radio programmes*

*15 000 people reached on Facebook*





# LIFE : AN IMPULSE, A NETWORK

## INITIATING GOOD PRACTICE IN EUROPE

Soldier and naturalist delegations have travelled abroad to present the Life Défense Nature 2 Mil project :

- to Hungary for the closure of two Life projects on military land : «Eastern-Bakony» and «Hungarian little plain» (May 2014))
- to Oulu in Finland for the 9th European Conference on Ecological Restoration (August 2014).
- to Riga, Latvia, at the European conference on the management of disturbances to species and their habitats in military training areas (May 2015).

During a study trip to Germany at the **US military camps** Grafenwoehr and Hohenfels (US Army in Europe), fifteen people discussed ecological restoration actions and compensatory measures, raising military awareness of the environment...

Each trip was an opportunity for networking and discovering the work being carried out by our peers, providing instruction in how to improve our practices



## THREE SEMINARS, FROM REGIONAL TO EUROPEAN LEVEL

- Asprelto in June 2013 -> meeting partners, resetting the framework for intervention and launching the project dynamic.
- Lyon & Chambaran in June 2014 -> presenting partnerships implemented in France and making concrete proposals for building such partnerships.
- Nîmes & Garrigues in June 2016 -> international conference based around exchange of expertise with representatives from 17 countries and international experience exchange workshops.

**270** people involved in the seminars

**17** nationalities present at the international conference

**30** French professionals were able to meet their European equivalents



# LIFE, AN INNOVATION TOOL

■ The Conservatoire d'espaces naturels (CEN) Aquitaine provided the first French survey on the **importance of military stakeholders in safeguarding France's natural heritage** :

- **340 military holdings are part of the Natura 2000 network** (dry grassland, megaphorbia and coastal environments)

- Of the **133 habitats of community interest** in France, **129 are on Natura 2000 sites** under military control.

- For species of community interest, **79 out of the 83** present nationally can be found.

■ In addition to the correct application of European laws, French laws **have been modified**. Articles 82 and 83 of the law for restoring biodiversity, nature and landscapes (08 August 2016) allow the transfer of public and private estates from the State to a qualified CEN.

■ A **patent** has been filed by GAMAR for their method of combating locusts, successfully tested at Chambaran camp. Using no chemicals, it achieves 75 to 99% mortality after one or two treatments. It's a revolution !

■ **Statistical processing** of data has been carried out by Marie Leroux Environnement to improve awareness of bats beyond the Chambaran camp.

■ The importance of the **pyrotechnical risk** at the Garrigues camp and the deadlines set by Life have helped to establish a preliminary diagnostic and depollution procedure on the land, allowing management activity to take place.

■ In addition to standard activity as external auditor, our provider has **also helped us with educational support**. Their participation in the project steering committees and their advice have allowed us to better understand the Commission's requirements in terms of administrative and financial aspects

## AFTER LIFE

### CONTINUITY ASSURED FOR EACH SITE

■ At Chambaran, the amphibious grassland will be managed by the military. CEN Isère is developing the 1st management plan for the site. Supplementary work on the dykes has been taken up by the **MINARM and the RMC water agency**.

■ At Garrigues, a **ZPS objectives document** takes over the scrub clearance, maintenance of the warrens and the feeding plot... The SMGG and MINARM will be installing an additional lavogne in 2018.

■ At Mont-Caume, the sale of the land to the **Var Département** as a protected nature reserve is currently under way. A new management plan (2018-2022) includes actions to the benefit of bats and grassland.

■ At Asprelto, activity continues within the organisation of the Natura 2000 site managed by DREAL and MINARM. Regular maintenance is handled by military personnel.

### THE NATIONAL MOVEMENT IS TAKING SHAPE

■ An initial management delegation is due to be established on the forts of Lorraine.

■ The results of the first French report into the Natura 2000 sites working with the Life project have been included in the **environmental action plan for the Army** and have helped to identify priorities for action and agreement.

■ **Two new Life projects between the Army and the CEN** : a Life nature project at the Valbonne camp and a Life governance project.

■ New agreements are being drawn up in Isère and Savoie





## LES CONSERVATOIRES D'ESPACES NATURELS...

...are our technical partners. They manage natural spaces and support communities and users in preserving and promoting this heritage. Their associative status and their neutrality give them the chance to work with those men and women who agree to be associated with the process through the steering committees. For the CEN, biodiversity is a precious resource for the territory and a lever for sustainable development.



Conservatoire  
d'espaces naturels  
Rhône-Alpes

CEN Rhône-Alpes  
Maison Forte  
69390 Vourles

Tel. 04 72 31 84 50  
[www.cen-rhonealpes.fr](http://www.cen-rhonealpes.fr)

## CONTACT

[perine.paris@cen-rhonealpes.fr](mailto:perine.paris@cen-rhonealpes.fr)  
[serge.payan@intradef.gouv.fr](mailto:serge.payan@intradef.gouv.fr)

[WWW.LIFETERRAINSMILITAIRES.FR](http://WWW.LIFETERRAINSMILITAIRES.FR)

