

INTERNATIONAL PERSPECTIVES ON THE PREVENTION OF WILD LIFE CRIME  
ATHENS, 23-24/11 /18, HELLENIC SOCIETY FOR THE PROTECTION OF NATURE



# **Beyond Themis. Capitalizing experience in combating environmental crime.**

**Dr Jorgos Sbokos, HB Coordinator Life Natura Themis GR/14/GIE/000026**

**Inspired by LIFE ENPE  
Crete, 23,24/10/18**



**Experience worth sharing**

# PRESENTATION OUTLINE

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- Geoinformation map
- Administrative data crosscheck
- Photo App
- Police drones
- Environmental crime unit
- Satellite image analysis
- Canine team

**Applicable**

**Affordable**

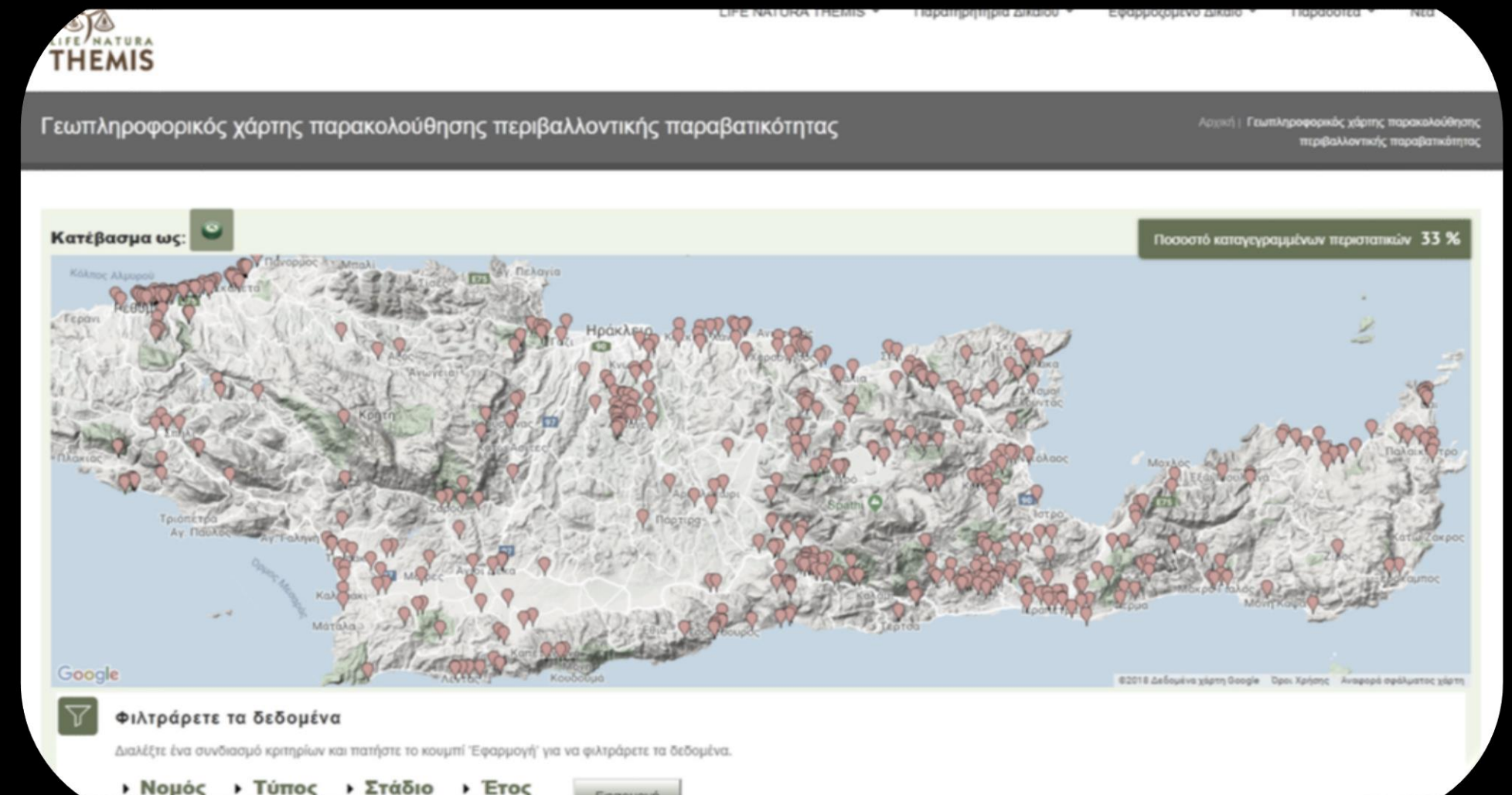
**Effective**

## **Key criteria**

**Legislative & economic perspective**

# GEOINFORMATION MAP

## Crime mapping - Life Natura Themis (Observatories Crete)



Scientific research supports our point: Green crime is committed in our backyard. Nobody can actually picture it out, as offenders usually come when nobody is around. Crime mapping helps in keeping a fluid situation steady, imprinting an invisible action, giving wildlife a voice. The geoinformation map assists:

- better planning of environmental patrols,
- qualitative and quantitative assessment of green crime,
- prediction of crime commission,
- interdepartmental cooperation in law enforcement,
- awareness awakening of local communities.

# SATELITE IMAGE ANALYSIS

## **Surveillance technologies - Agenzia Regionale per la protezione dell' Ambiente (Giuseppe Sgorbati)**

The observation of surface changes or anomalies on earth provides significant data on human activity. Forestry, fires, landfills, water use, use of pesticides can be surveilled. It is just a matter of interpreting images and proceed to ground investigation.

Image comparison reveals torching for creating grazing lands and illegal logging.

Color changes indicate possible plant diseases, vegetation threats, or extensive pesticide usage.

Remote sensing of high vegetation combined with low rainfall leads to illegal water abstraction.

Monitoring river route, wideness and lenght reveals illegal constructions on the riverbanks.

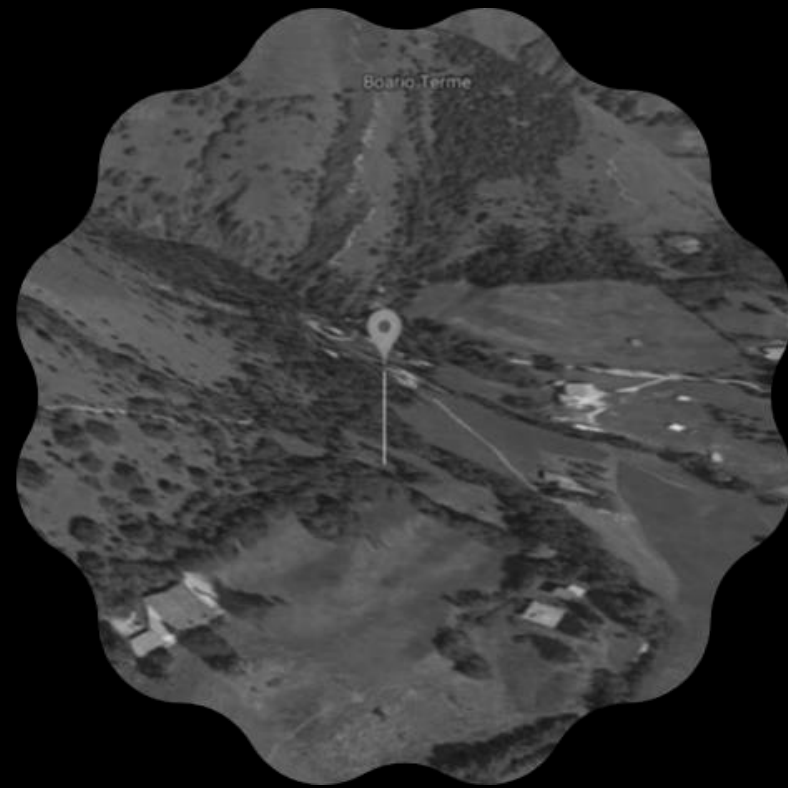
Hidden waste disposal sites or landfills can be seing from above. Thermal emmissions show decomposition.

Surveillance prevent illegal storage of non waste endangering forest fires.



# Drones

Italian Plan against illegal hunting  
(Giuseppe Tedeschi, Claudio Marrucci)



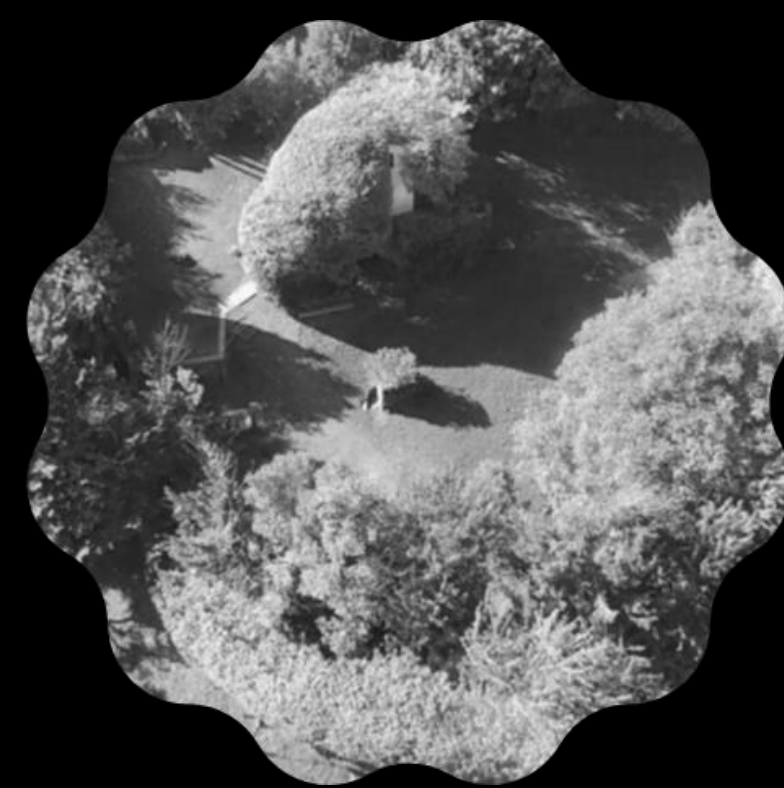
## Approach inaccessible locations

Indicate possible escape routes



## Harmless remote surveillance

Keep police unit safe from armed hunters



## Captured photos as prosecution proof

Video footage reveals traps & techniques



**Data crosscheck**

SUBSIDIES FOR GRAZING  
TORCHING FOR GRAZELAND

**Life Natura Themis (Observatories Crete)**

Torching has been "traditionally" used by farmers as a tool of creating grazing land.  
The "Agricultural Policy Aid Scheme" produces digital map files with the data of beneficiaries.  
The data became accesible to Fire Service Officers.  
Subsidies have been recalled in lands where torching was registered.  
Within three years, the torching ratio fall by 70%.





Carina

Patrols in Chania & Rethimno

# Cretan Canine Team

NATURAL HISTORY MUSEUM OF CRETE



Daika

Patrols in Heraklion & Lassithi

More than 100 poisonous baits have been delivered from the Cretan Canine Team for Detecting Poisoned Bounds within the first two months of action.

Giannis Grigorakis & Spiros Nistikakis are since July 21, 2016 combating wildlife crime together with Carina and Daika.

# MONITORING

**LIFE NORTHERN**

**BALD IBIS** JOHANNES FRITZ

## POACHING ALERT

*Identify offenders at crime scene*

Real-time anti poaching tags help prevent species extinction. Permanent monitoring via satellite informs about the GPS positioning and alerts a police task force to further investigate and prosecute.



# ENVIRONMENTAL DAMAGE REPORT

Themis application for smartphones



## SNAPSHOT

### AWARENESS OF DAMAGE OR THREAT



upon becoming aware of environmental damage or even the threat of a damage, users are able to shoot a photo with their smartphone device.

## MMS

### TAG AND SEND PHOTO TO HSPN



Users tag the photos with georeference data and attach a short text describing the damage or the threat. After that they send the MMS to the central server

## REGISTRATION

### AUTOMATIC INSERTION OF REPORT



The database is monitored by the Ministry of Environment and the project's partner SYGAPEZ which then takes appropriate steps to initiate investigations.

## NOTIFICATION

### DIRECT REPORT TO LOCAL AUTHORITIES



SYGAPEZ may order the local administrative authorities for immediate preventive, repressive or rehabilitative action.

LEARN MORE AT [LIFETHEMIS.EU](http://LIFETHEMIS.EU)



*Hellenic Society for the Protection of Nature*

# COMPLAINT APPLICATION

*Guaranteed user anonymity and personal data protection.*

# POLICE

## Environmental crime unit

A small adjustment with a big effect: By decision of the Police Directorate of the Prefecture, the "Environmental Crime Prosecution Units" may be created. A call will initiate that existing personnel get seconded internally. Two officers in each regional unit will staff each unit with no extra charge for the Ministry's budget.

Inspired by the scheme of the Massachusetts environmental police, each unit refers directly to two state prosecutors in the Region specialized in environmental crime prosecution.

Additional training will be provided by Life Themis Partners, special military forces and state prosecutors. The crimes prosecuted are already listed and statistically tracked by the Environmental Observatories of Life Themis. There is no administrative collision as the new Law on the protection of Natura Habitats (Law 4519/18) foresees the cooperation with the police in prosecuting wildlife crime.



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**Go beyond Themis.  
Share your experience.  
Be proud of your work!**

**Dr Jorgos Sbokos, HB Coordinator Life Natura Themis GR/14/GIE/000026**



LIFE NATURA THEMIS

**GR/14/GIE/000026 Heraklion Bar association**

Promoting awareness of  
wildlife crime prosecution and  
liability for biodiversity  
damage in NATURA 2000  
areas in Crete.

