



Actions for the conservation of coastal dunes
with *Juniperus* spp. in Crete and the South Aegean (Greece)





EU's funding instrument for the environment
contribute to the implementation, updating and development
of EU environmental policy and legislation

**NATURE &
BIODIVERSITY**

- Flora and Fauna species
- **Habitats**
- Areas of Natura 2000 network

**ENVIRONMENT
POLICY &
GOVERNANCE**

- Air
- Water
- Recycling
- Energy
- Climate

**INFORMATION &
COMMUNICATIO
N**

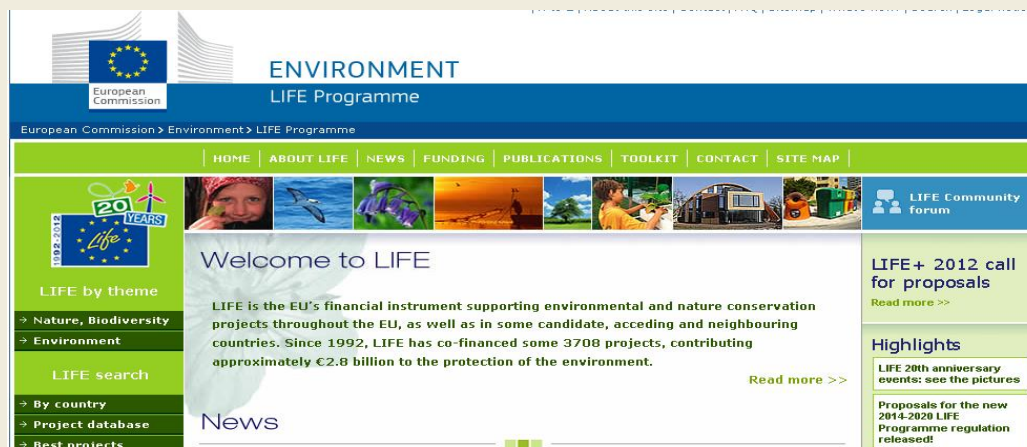
- Communication and awareness raising campaigns
- Environment
 - Nature conservation
 - Biodiversity
 - Forest fires



LIFE I (1992 - 1995)
LIFE II (1996 - 1999)
LIFE III (2000 - 2006)
LIFE+ (2007 - 2013)



<http://ec.europa.eu/environment/life/index.htm>



The Habitat: Coastal dunes with *Juniperus* spp. (code: 2250*)



Coastal dunes with *Juniperus* spp. have been classified as a “**priority habitat**” (code 2250*) by the 92/43 EU Habitat Directive which means **types of habitats in danger of disappearance of which the Community has a particular responsibility for their conservation.**



The Habitat 2250* in Europe





The Habitat 2250* in Greece

17 Natura 2000 sites



Nr.	Code	SITE NAME
1	GR2230002	LIMNOTHALASSA KORISSION (KERKYRA)
2	GR2140001	EKVOLES ACHERONTA (APO GLOSSA EOS ALONAKI) KAI STENA ACHERONTA
3	GR2220003	ESOTERIKO ARCHIPELAGOS IONIOU (MEGANISI, ARKOUDI, ATOKOS, VROMONAS)
4	GR2310001	DELTA ACHELOOU, LIMNOTHALASSA MESOLONGIOU - AITOLIKOU, EKVOLES EVINOU, NISOI ECHINADES, NISOS PETALAS
5	GR2320011	YGROTOPOI KALOGRIAS-LAMIAS KAI DASOS STROFYLIAS
6	GR2550005	THINES KYPARISSIAS (NEOCHORI - KYPARISSIA)
7	GR2550003	NISOI SAPIENTZA KAI SCHIZA, AKROTIRIO AKRITAS
8	GR2540002	PERIOCHI NEAPOLIS KAI NISOS ELAFONISOS
9	GR3000003	ETHNIKO PARKO SCHINIA - MARATHONA
10	GR4340001	IMERI KAI AGRIA GRAMVOUSSA - TIGANI KAI FALASARNA - PONTIKONISI, ORMOS LIVADI - VIGLIA
11	GR4340015	PARALIA APO CHRYSOSKALITISSA MECHRI AKROTIRIO KRIOS
12	GR4340013	NISOI GAVDOS KAI GAVDOPOULA
13	GR4320003	NISOS CHRYSI
14	GR4220020	NISOS MILOS: PROFITIS ILIAS - EVRYTERI PERIOCHI
15	GR4220006	NISOS POLYAIGOS - KIMOLOS
16	GR4220014	KENTRIKI KAI NOTIA NAXOS: ZAS KAI VIGLA EOS MAVROVOUNI KAI THALASSIA ZONI (ORMOS KARADES - ORMOS MOUTSOUNAS)
17	GR4210005	RODOS: AKRAMYTIS, ARMENISTIS, ATTAVYROS, REMATA KAI THALASSIA ZONI (KARAVOLA-ORMOS GLYFADA)

Threats

- Restricted natural regeneration
- Tourism
- Lack of public awareness
- Solid waste disposal
- Fire
- Grazing
- Wood cutting
- **Climate change**

The *Juniperus* species

Juniperus macrocarpa Sm.



The *Juniperus* species

Juniperus phoenicea L.





The “Junicoast” Project

Title: “Actions for the conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean” (Greece)

Start date: 1-1-2009

End date: 31-12-2012

Extension: 31-8-2013

Total budget: 1.501.210 €

EC contribution : 1.125.908 € (75%)

Co-financing: 375.303 € (25%)

Beneficiaries

Coordinating Beneficiary:

Mediterranean Agronomic Institute of Chania (MAICh)



Associated Beneficiaries:

National and Kapodistrian University of Athens (NKUA),
Faculty of Biology, Department of Botany



Decentralized Administration of Crete

Forest Directorate of Chania

Forest Directorate of Lasithi

Region of Crete

Regional Development Fund of Crete



Committees

Scientific committee:

Prof. Panagiotis Dimopoulos

Prof. Of Botany and Plant Ecology
University of Patras

Dr. Louis F Cassar

Director of the Institute of Earth Systems
University of Malta

Prof. Kerry B. Godfrey

School of Hospitality and Tourism Management
Ontario, Canada

Mr. Antonio Vizcaino and Mr. Javier Jimenez Romo

Municipality of Valencia, Spain

Stakeholders committee:

- Municipality of Ierapetra
- Municipality of Kissamos
- Municipality of Kantanou-Selinou
- Municipality of Gavdos
- Decentralized Administration of Crete
- Decentralized Administration of Aegean
- Ministry of Environment Energy and Climate Change

External monitoring team:

Dr. Georgia Valaora

Astrale Regional Coordinator

Aim and Objectives

The **aim** of the project was to promote and enable the long term conservation of the priority habitat 2250* "Coastal dunes with *Juniperus spp.*" in Greece.

The **specific objectives** of the project were:

- To contribute to the consolidation and dissemination of a knowledge base for the protection, restoration, monitoring and evaluating of coastal dune with *Juniperus spp.* habitats in Greece.
- To understand, quantify and halt natural and anthropogenic threats that contribute to the long term degradation of the habitat.
- To design and implement actions for the protection and long term restoration of coastal dune with *Juniperus spp.* habitats.
- To provide support for better environmental governance in Natura 2000 sites through stakeholder involvement and training.

Actions



9 Preparatory actions



8 Concrete conservation actions



7 Public awareness and dissemination actions



6 Project operation and monitoring actions

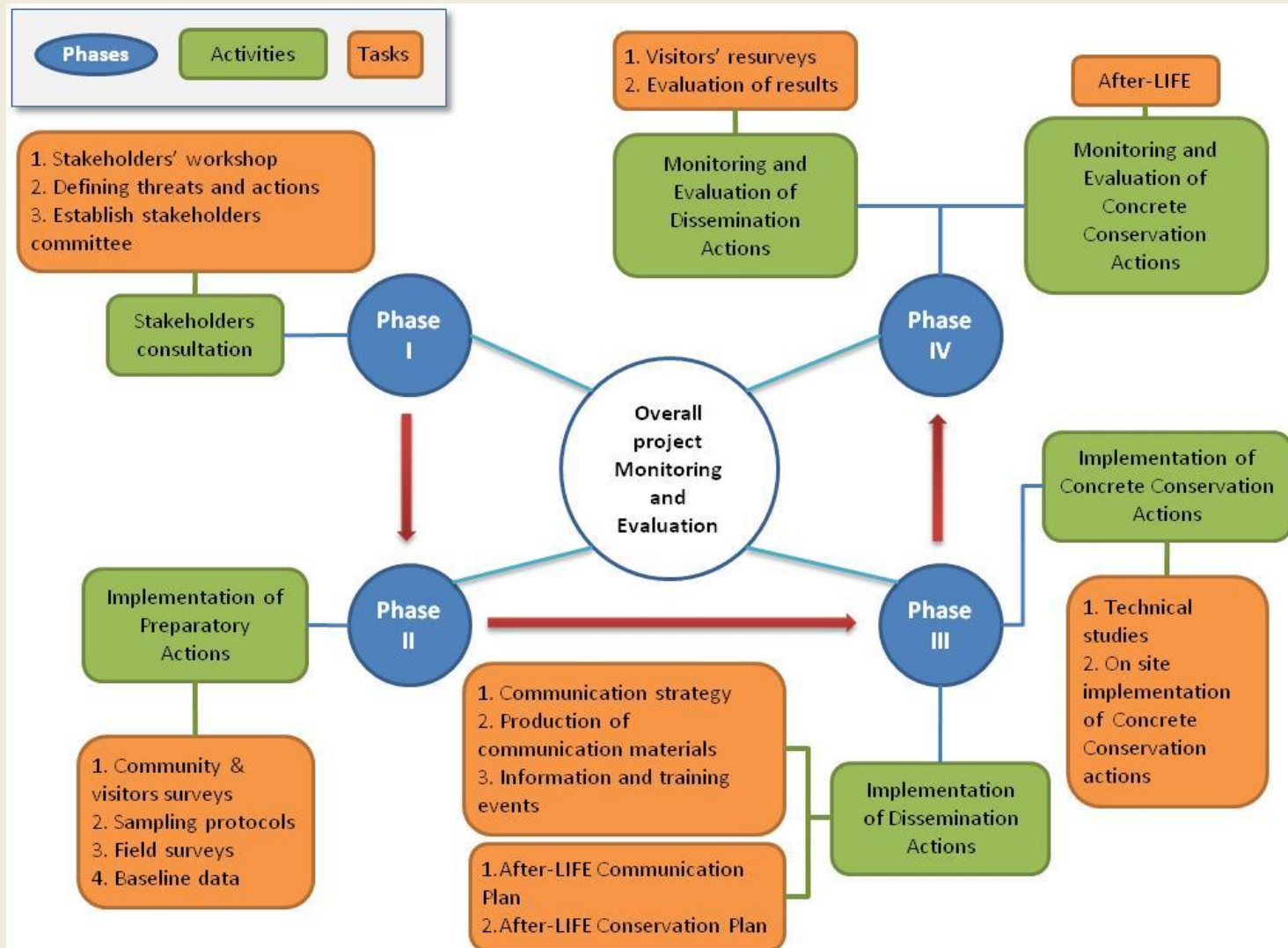
32 Deliverables



14 Milestones



Schematic presentation of working method



Time table

				2009				2010				2011				2012				2013			
				I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV	I	II	III	IV
				2	5	8	11	2	5	8	11	2	5	8	11	2	5	8	11	2	5	8	11
				3	6	9	12	3	6	9	12	3	6	9	12	3	6	9	12	3	6	9	12
A. Preparatory actions, elaboration of management plans and/or action plans	A1	MAICH	Landform and land degradation processes in dune systems																				
	A2	MAICH	Determining the dune system plant communities' composition and structure																				
	A3	NKUA	Composition and structure of <i>Juniperus</i> populations																				
	A4	MAICH	Habitat mapping																				
	A5	MAICH	Visitor impact assessment																				
	A6	MAICH	Stakeholder consultation																				
	A7	MAICH	Elaboration of long term monitoring protocols and selection of indicators																				
	A8	NKUA	Elaboration of target habitat protection and restoration specifications																				
	A9	MAICH	Determination of the Governance structure and legal status																				
C. Concrete conservation actions	C1	FDC/FDL	On site habitat demarcation																				
	C2	FDC/FDL	Waste removal																				
	C3	NKUA	Enhancement of juniper regeneration																				
	C4	NKUA	Restoration of the floristic composition and structure of the target habitat 2250*																				
	C5	FDC/FDL	Fore dune stabilization through vegetation restoration																				
	C6	FDC/FDL	Visitor management intervention and infrastructures																				
	C7	MAICH	Design and installation of Signs																				
	C8	MAICH	Ex situ conservation and propagation of keystone species																				
D. Public awareness and disseminatio n of results	D1	MAICH	Development and implementation of a communication strategy																				
	D2	MAICH	Website development																				
	D3	MAICH	Environmental education campaign																				
	D4	MAICH	Training for habitat protection and restoration																				
	D5	MAICH	Production and dissemination of habitat protection and restoration guidelines																				
	D6	MAICH	Dissemination of findings to the scientific community and Layman's report																				
	D7	MAICH	After-LIFE communication and conservation plans																				
E. Overall project operation and monitoring	E1	MAICH	Project coordination and management																				
	E2	MAICH	Monitoring and evaluation of the effectiveness of the project																				
	E3	MAICH	Scientific Committee																				
	E4	MAICH	Networking with other similar LIFE projects																				
	E5	MAICH	Stakeholder Committee																				
	E6	MAICH	External auditing																				

Project Progress and Activity Reports

LIFE Project Number
LIFE07NAT/GR/000296

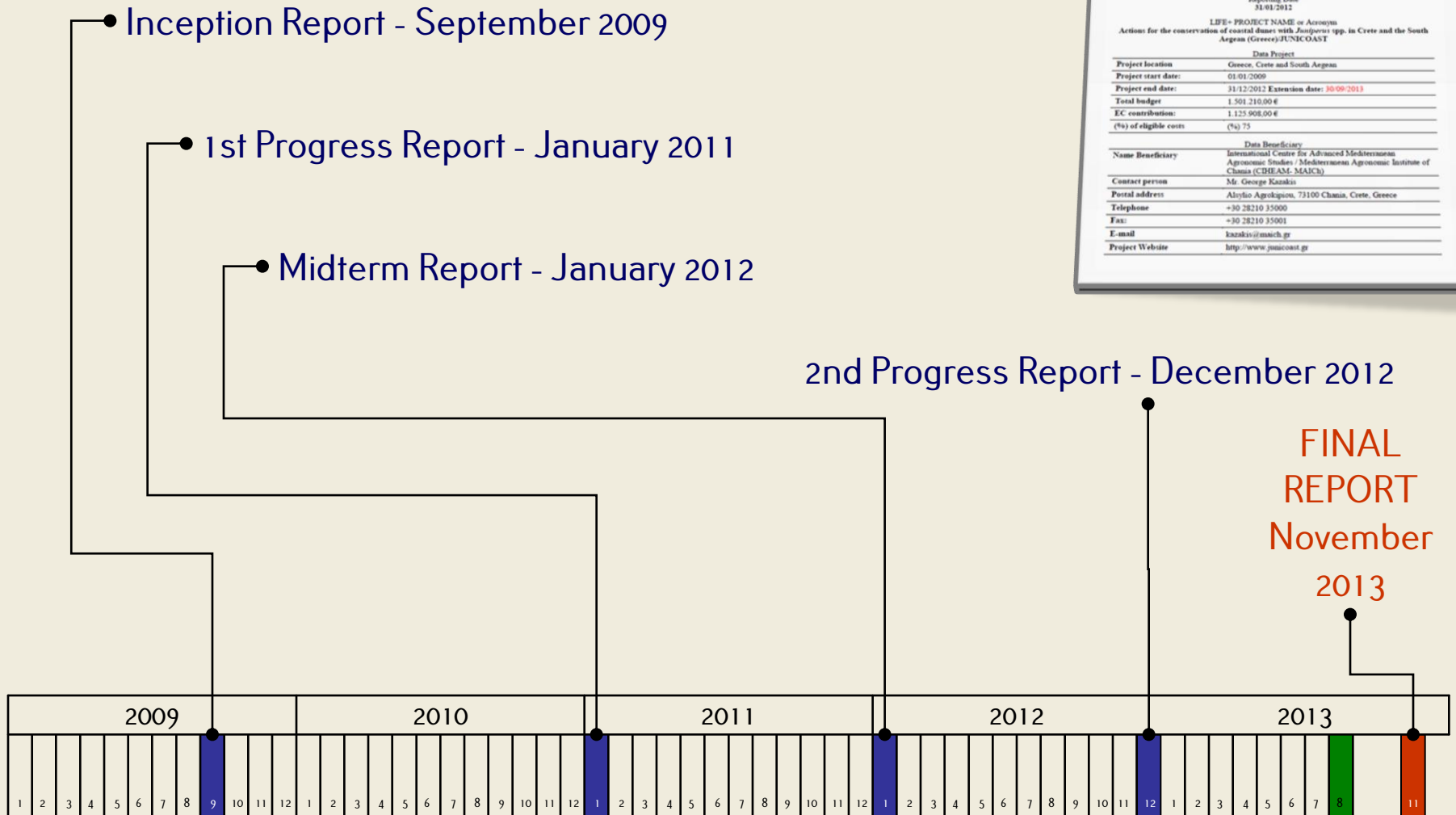
Mid-term Report
Covering the project activities from 01/01/2011 to 31/12/2011

Reporting Date
31/01/2012

LIFE - PROJECT NAME or Acronym
Actions for the conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean (Greece)/JUNICOAST

Data Project	
Project location	Greece, Crete and South Aegean
Project start date:	01/01/2009
Project end date:	31/12/2012 Extension date: 30/09/2013
Total budget	1.501.210,00 €
EC contribution:	1.125.908,00 €
(%) of eligible costs	(%) 75

Data Beneficiary	
Name Beneficiary	International Centre for Advanced Mediterranean Agronomic Studies / Mediterranean Agronomic Institute of Chania (CIHEAM- MARCH)
Contact person	Mr. George Kazakis
Postal address	Alysiio Agrokipsion, 73100 Chania, Crete, Greece
Telephone	+30 28210 35000
Fax:	+30 28210 35001
E-mail	kazakis@march.gr
Project Website	http://www.junicoast.gr



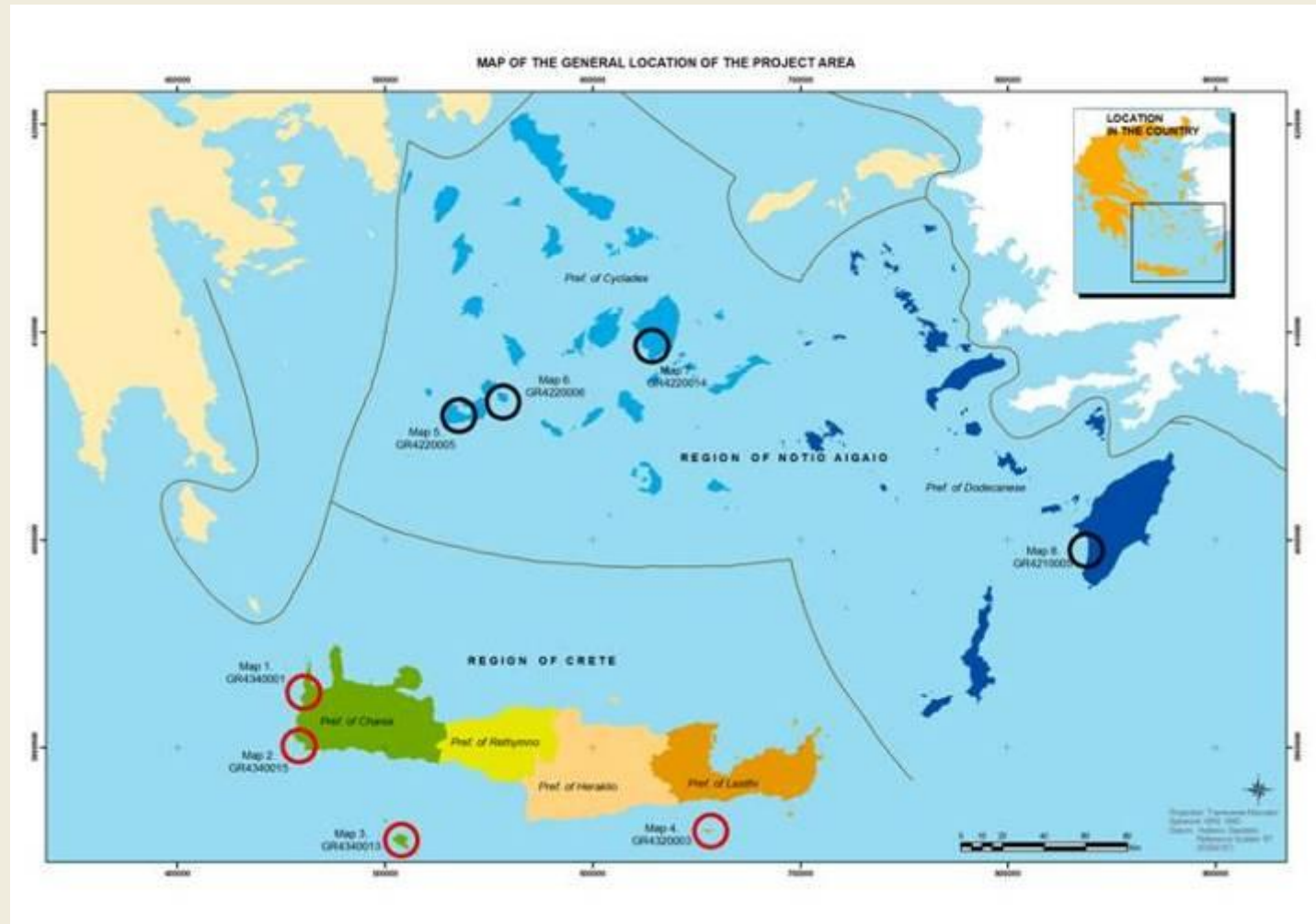
Project Areas

Crete:

- Gavdos island
- Kedrodasos
- Falasarna
- Chrysi island

South Aegean:

- Rodos
- Naxos
- Milos
- Polyaigos



KEDRODASOS



KEDRODASOS



GAVDOS



GAVDOS - SARA KINI KO



GAVDOS - AGIOS IOANNIS



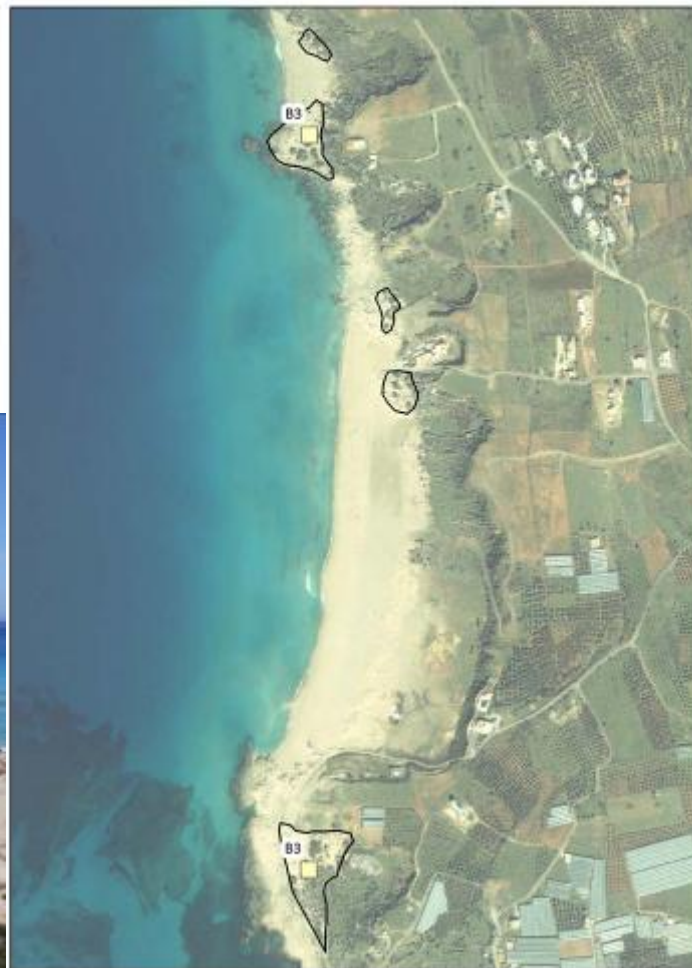
GAVDOS - LAVRAKAS



FALASARNA



FALASARNA - 10mX10m Permanent plots, and community type per plot



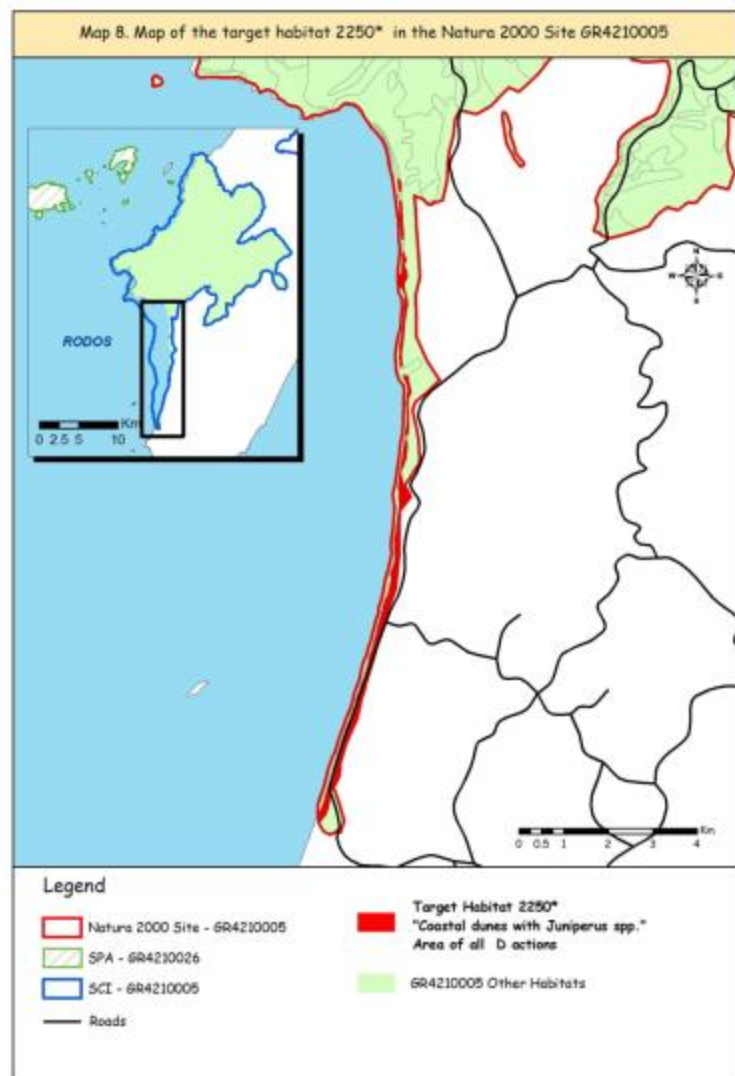
CHRYSI



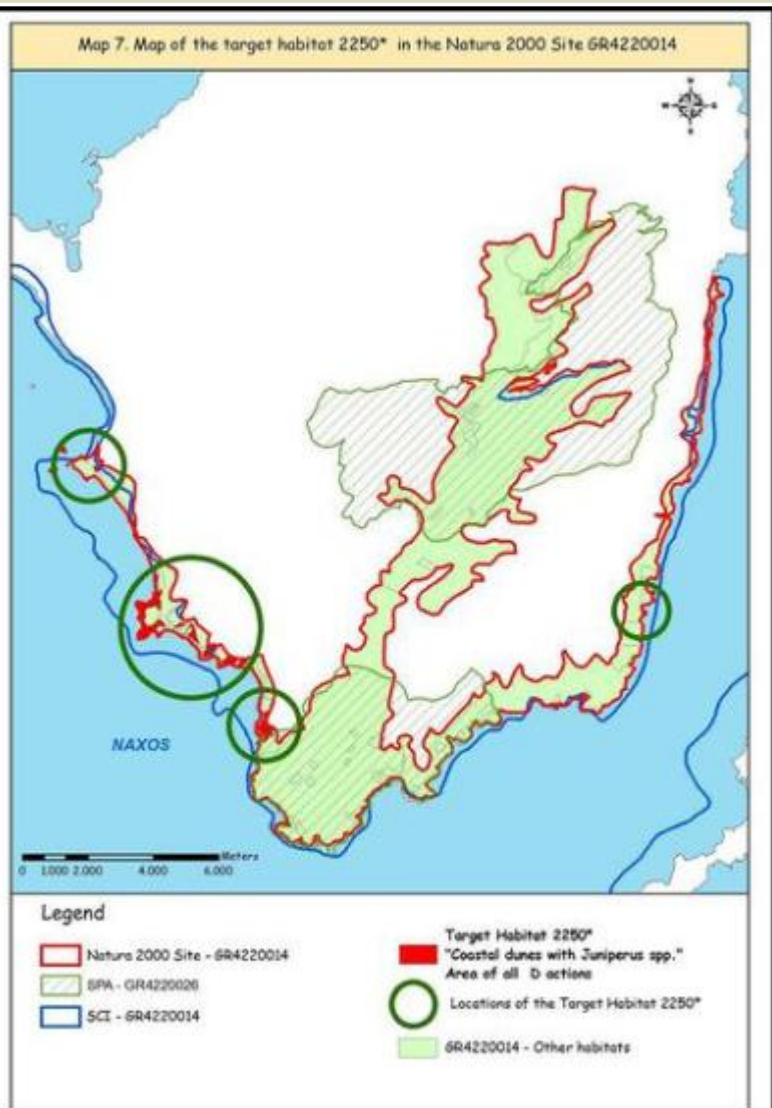
CHRYSI



RHODES ISLAND



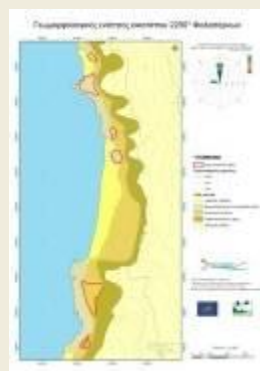
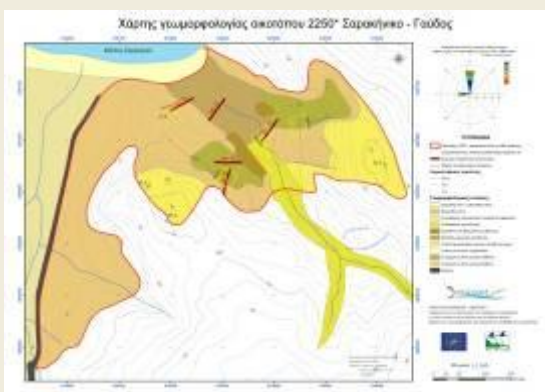
NAXOS ISLAND





PREPARATORY ACTIONS

A1. Landform and land degradation processes in dune systems



ACTIONS
FOR THE CONSERVATION
OF COASTAL DUNES WITH
JUNIPERUS spp. IN CRETE
AND THE SOUTH AEGEAN
(GREECE)

LIFE07NAT/GR/000295



CIHEAM
Mediterranean Agronomic Institute of Chania



National and Kapodistrian
University of Athens (NKUA)
Department of Botany
Faculty of Biology



Region of Crete,
Regional Development Fund
Forest Directorate of Chania
Forest Directorate of Lassithi

Δράση A.1
Παραδοτέο A.1.1

ΓΕΩΜΟΡΦΟΛΟΓΙΑ ΤΩΝ ΠΑΡΑΚΤΙΩΝ ΑΜΜΟΘΙΝΩΝ ΜΕ ΕΙΔΗ ΚΕΔΡΩΝ ΣΤΗΝ ΚΡΗΤΗ

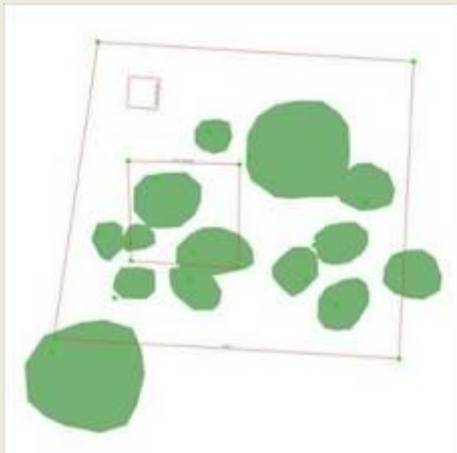
Υπεύθυνος δικαιούχος: Μεσογειακό Αγρονομικό Ινστιτούτο Χανίων
Συντάκτης: Παναγιώτης Νύκτας
Με τη συνεργασία του
Πολυτεχνείου Κρήτης
Εργαστήριο Εφαρμοσμένης Γεωφυσικής
Αντώνης Βαφειδής
Hamdan Hamdan

Ομάδα εργασίας: Γιώργος Καζάκης
Dany Ghosh
Ηλεκτρα Ρεμούνδου



ΧΑΝΙΑ - ΙΟΥΝΙΟΣ 2010

A2. Determining the dune system plant communities' composition and structure



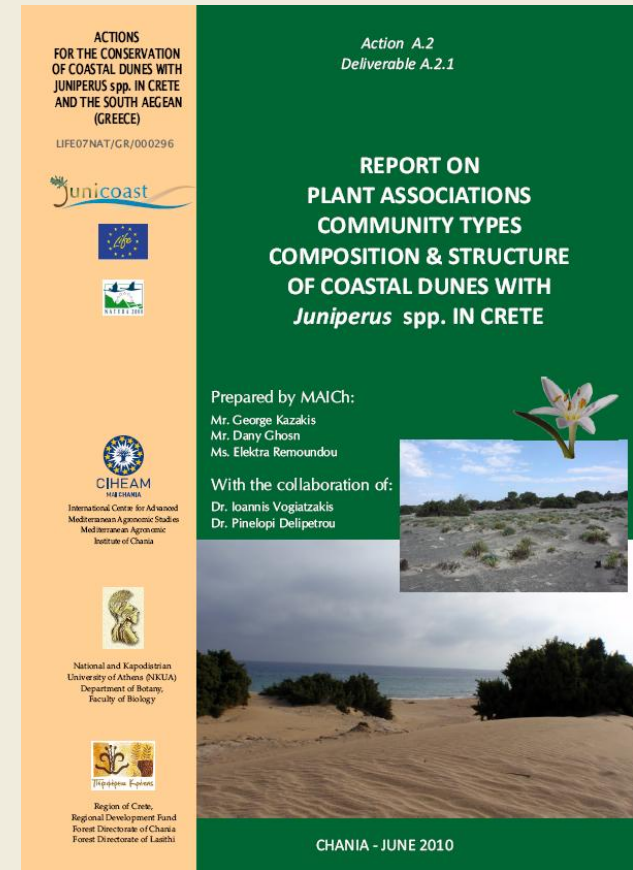
30x30m plots 10x10 m relevé 3x3 m relevé

Number of species : 142

Families: 33, Poaceae (14%), Compositae (13.4%) and Fabaceae (11.3%)

Life forms: 6, Therophytes (56%), Chamaephytes (16%)

Endemic species: 4.9% (7 / 142)



A3. Composition and structure of *Juniperus* subpopulations

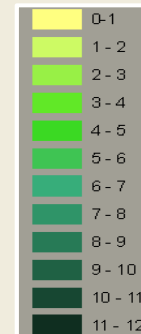
Maps of population density (Method: Ordinary Kriging)



Sampling points










Individuals/100 m²



A3. Composition and structure of *Juniperus* subpopulations

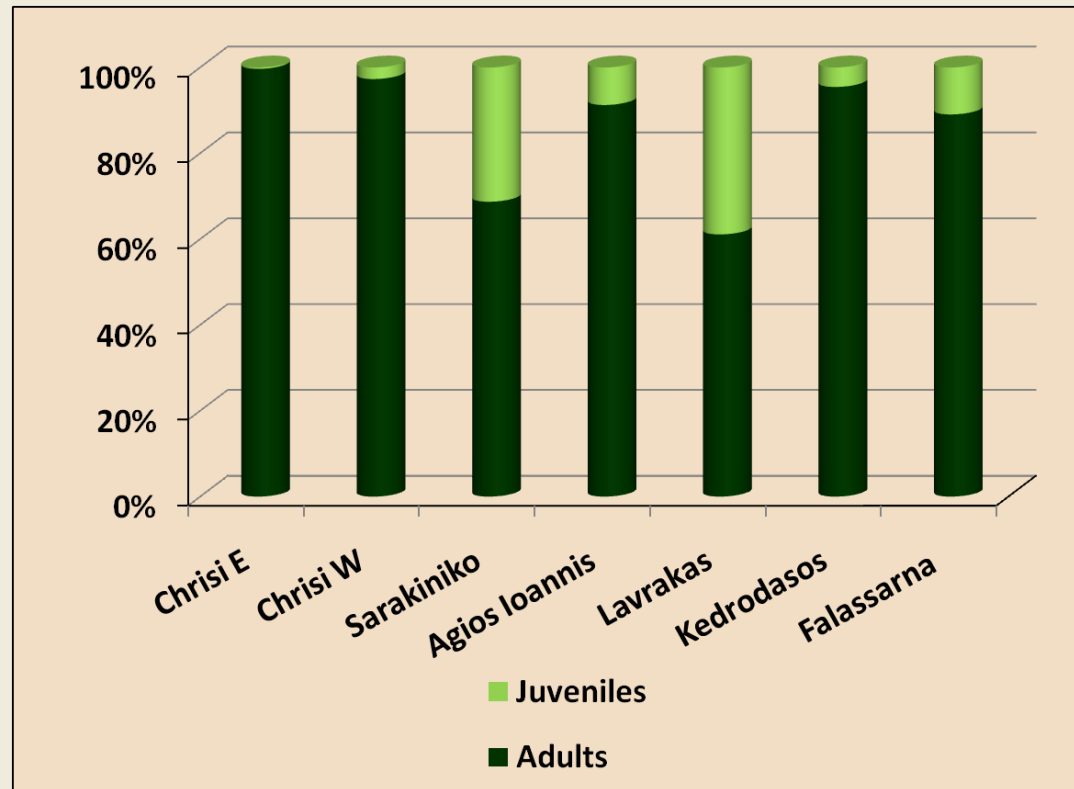
Sex Ratio of *Juniperus macrocarpa*



Chrisi E		M/F = 1.68
Chrisi W		M/F = 1.24
Sarakiniko		M/F = 1.12
Agios Ioannis		M/F = 1.03
Lavrakas		M/F = 0.97
Kedrodasos		M/F = 1.04
Falassarna		M/F = 1.04

A3. Composition and structure of *Juniperus* subpopulations

Regeneration of *Juniperus macrocarpa*



A3. Composition and structure of *Juniperus* subpopulations

Age of subpopulations (measured by tree rings)





	Population mean age(years)	Maximum age (years)
Chrysi East	180 - 200	344
Sarakiniko	150-180	212
Ag. Ioannis	190-210	296
Lavrakas	100-120	159
Kedrodasos	70 - 100	150




A4. Habitat mapping

**ACTIONS
FOR THE CONSERVATION
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JUNIPERUS spp. IN CRETE
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(GREECE)**


LIFE07NAT/GR/000296

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Mediterranean Agronomic Institute of Chania



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University of Athens (NKAU)
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Faculty of Biology






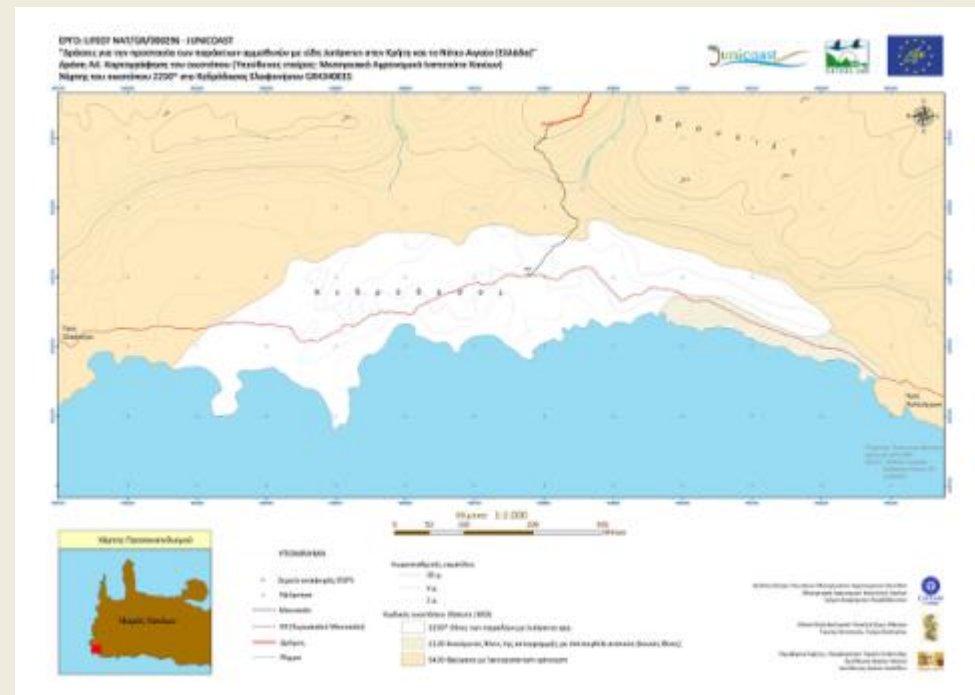
Region of Crete,
Regional Development Fund
Forest Directorate of Chania
Forest Directorate of Lasithi

Action A.4
Deliverable A.4

MAPS OF THE HABITAT 2250* IN CRETE

Prepared by MAICH:
Mr. George Kazakis
Mr. Dany Ghosn
Ms. Elektra Remoundou



A4. Habitat mapping

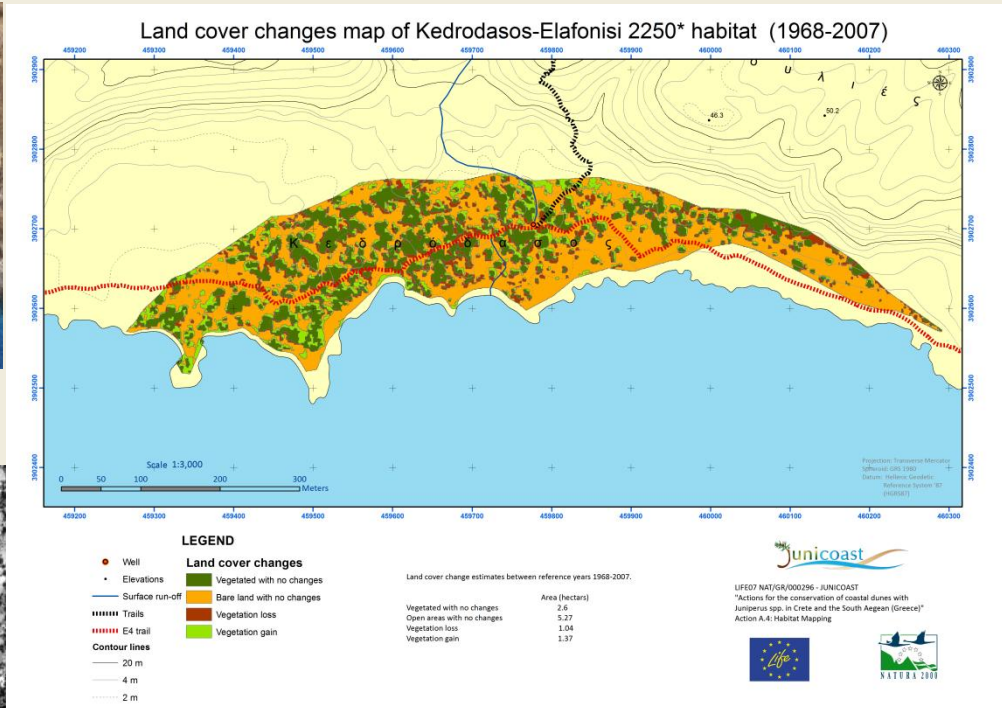
Mapping of Land Cover Changes



Kedrodasos (2007)



Kedrodasos (1968)



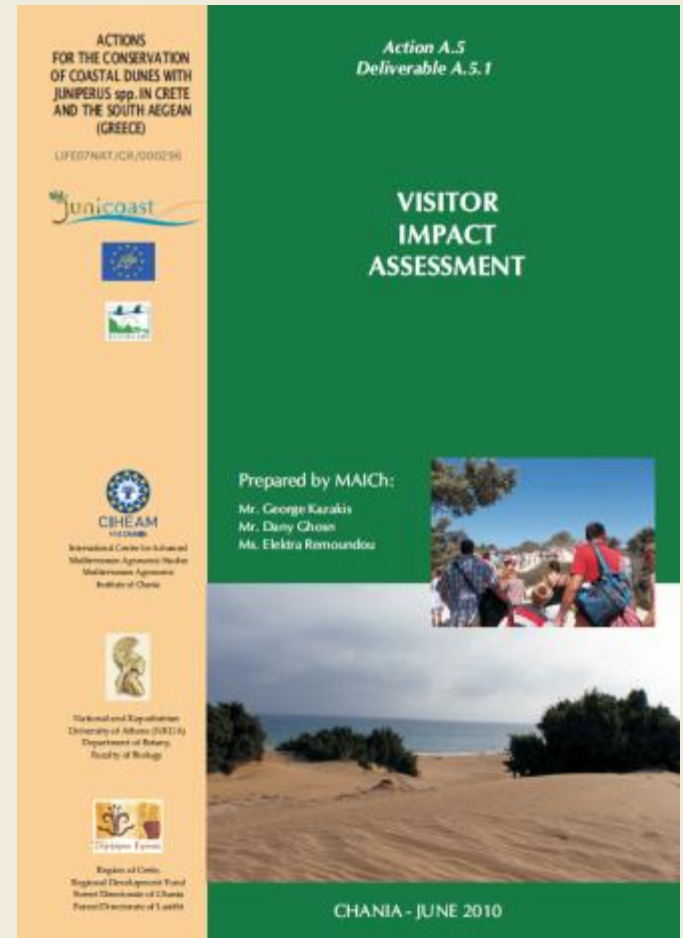
A4. **Habitat mapping**

Mapping of Land Cover Changes

Vegetation cover change	Area(ha)					
	Lavrakas Gavdos	Agios Ioannis Gavdos	Falasarna	Kedrodasos	Chrysi East	Chrysi West
	1945-2007	1945-2007	1968-2007	1968-2007	1968-2007	1968-2007
Maintained open areas	30.11 (31%)	14.57 (63%)	2.122 (77%)	5.267 (51%)	18.8 (49%)	26.97 (49%)
Vegetation decline	4.05 (4%)	1.15 (5%)	0.145 (5%)	1.044 (10%)	2.74 (7%)	2.5 (4%)
Vegetation increase	19.10 (20%)	2.97 (13%)	0.333 (12%)	1.365 (13%)	4.87 (13%)	4.936 (9%)
Maintained vegetation cover	43.99 (45%)	4.48 (19%)	0.158 (6%)	2.606 (26%)	12.14 (31%)	20.7 (38%)
Total	97.25	23.17	2.758	10.282	38.55	55.106

A5. Visitor impact assessment

- Social survey
- Spatial distribution of the visitors use
- Patterns of use (trails, camping locations and hotspots)
- Assessment of sites condition (damage on Juniper trees, cover of root exposure, ground cover vegetation and a litter survey)



A5. Visitor impact assessment

KEDRODASOS: half of visitors (54%) camp for two or more days

GAVDOS: majority of visitors (65%) are staying for 5 or more days. Visitors going to Gavdos on a daily trip accounted only for 2%.

CHRYSI: majority of visitors (67%) are mainly visiting the island on a daily trip and returning to Ierapetra in the afternoon. Only 13% of the visitors to Chrysi are staying for more than 2 days.

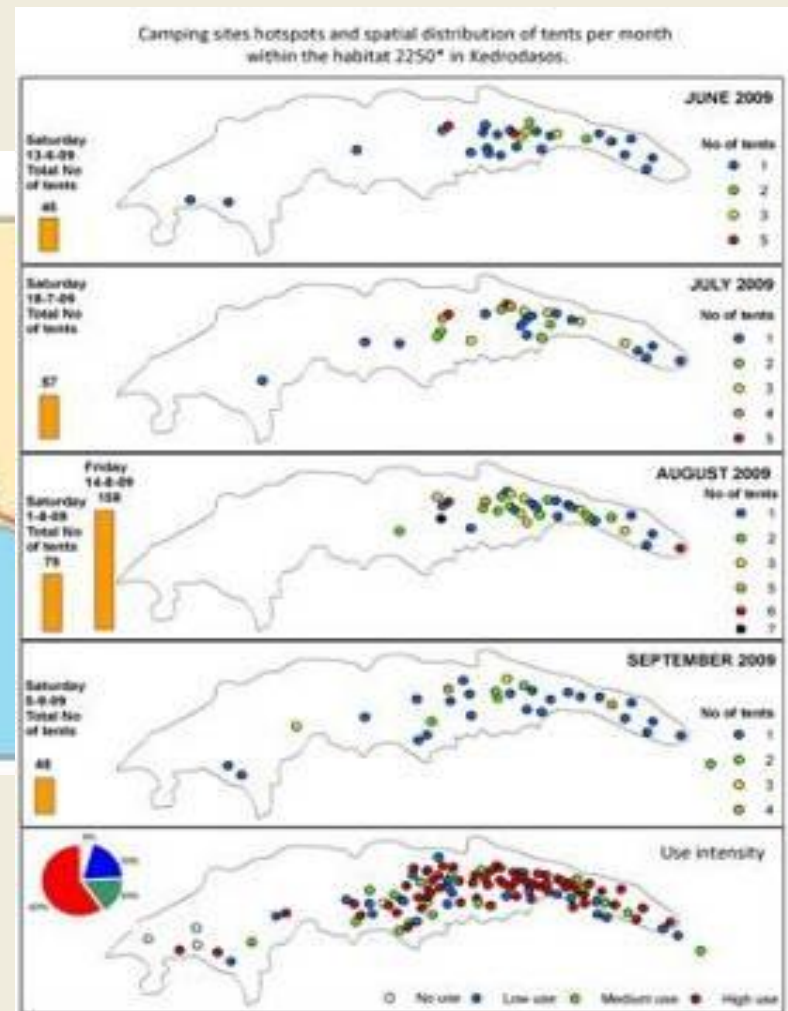
Level of environmental awareness: moderate (only 35% of the visitors knew that the habitat is included in the Natura 2000 network)

A5. Visitor impact assessment

Trail mapping



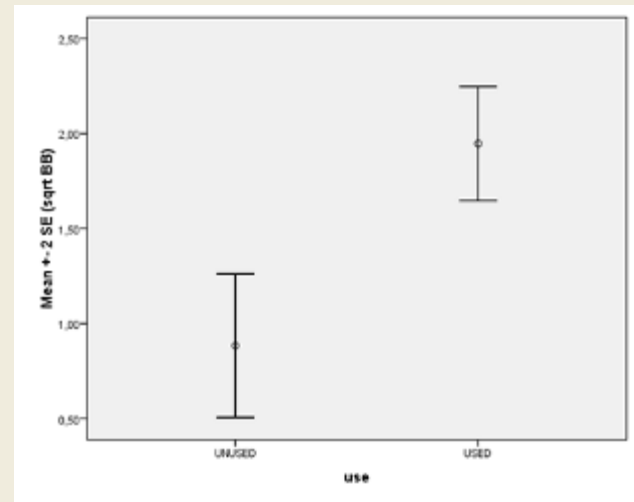
Mapping of camping sites



A5. Visitor impact assessment

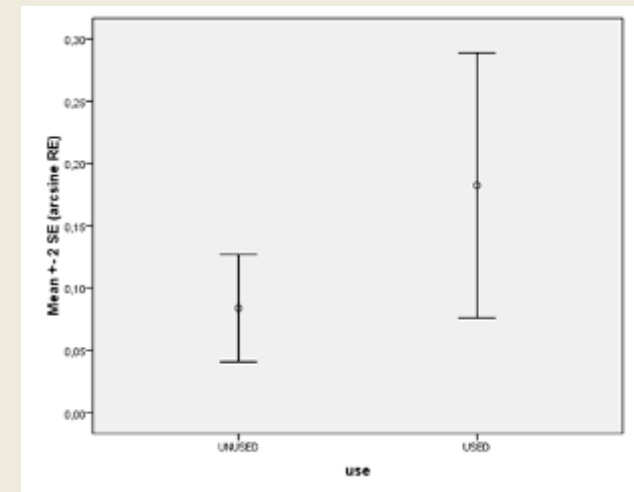
Damage on Juniper trees

(significant difference between used and unused plots)



Cover of root exposure

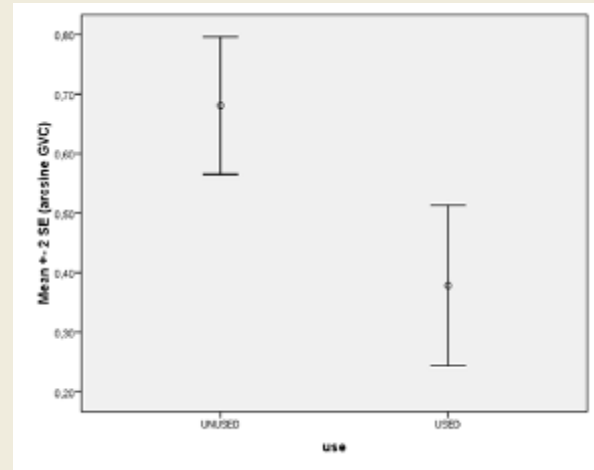
(significant difference between used and unused plots)



A5. Visitor impact assessment

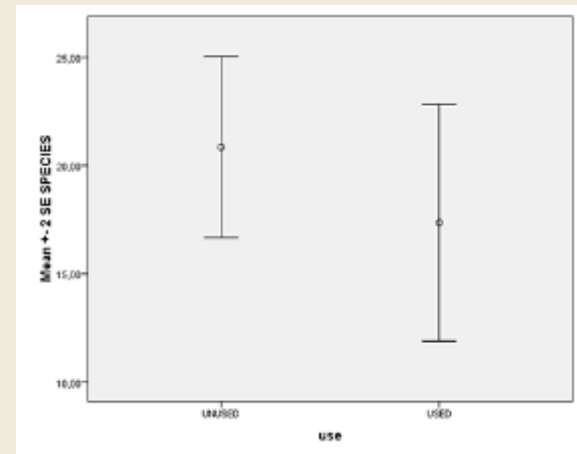
Ground vegetation cover (%)

(No significant difference between used and unused plots since most species are therophytes)



Number of plant species

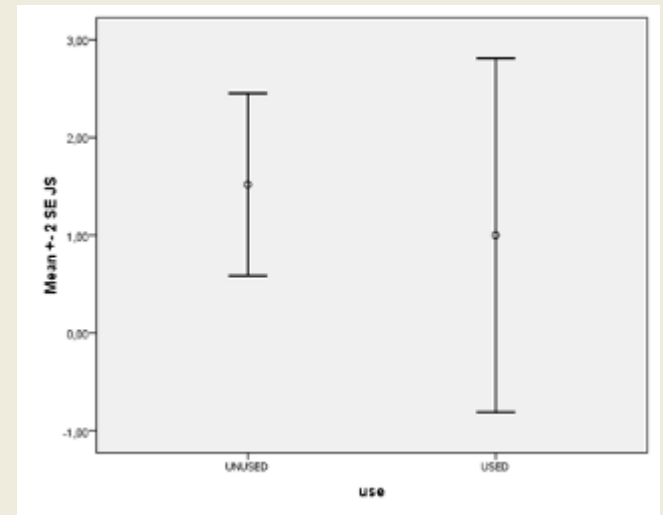
(No significant difference between used and unused plots since most species are annuals)



A5. Visitor impact assessment

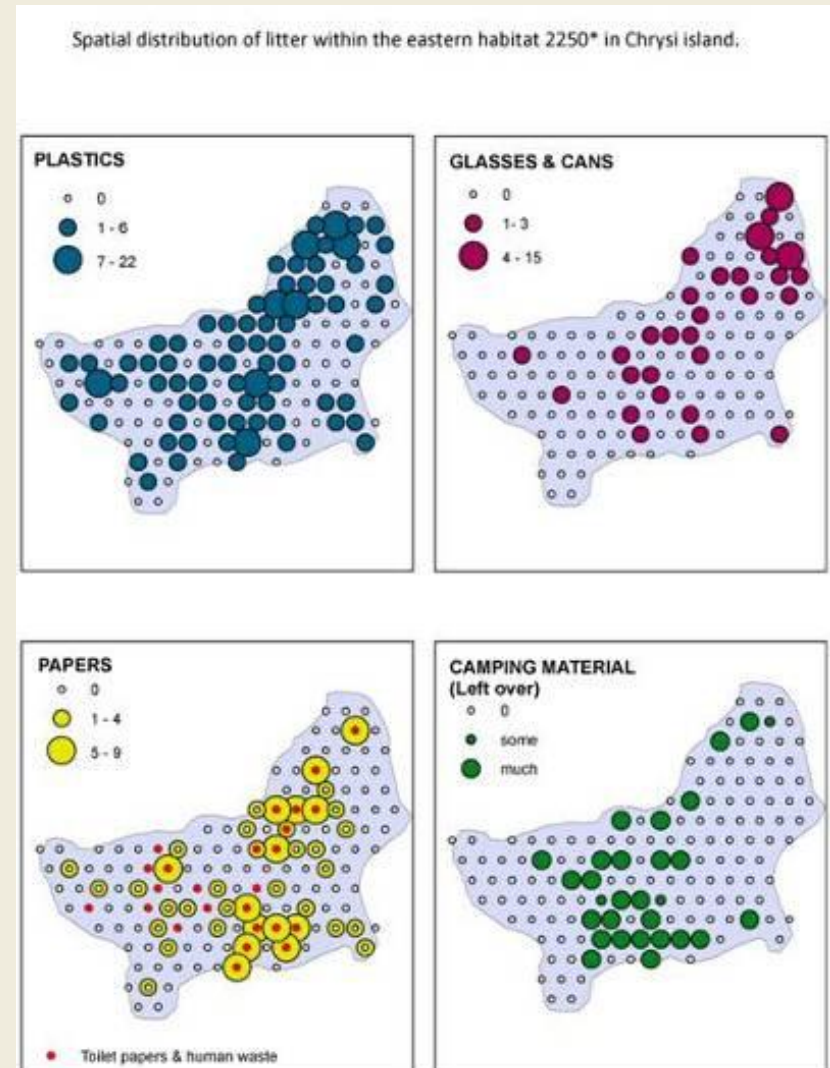
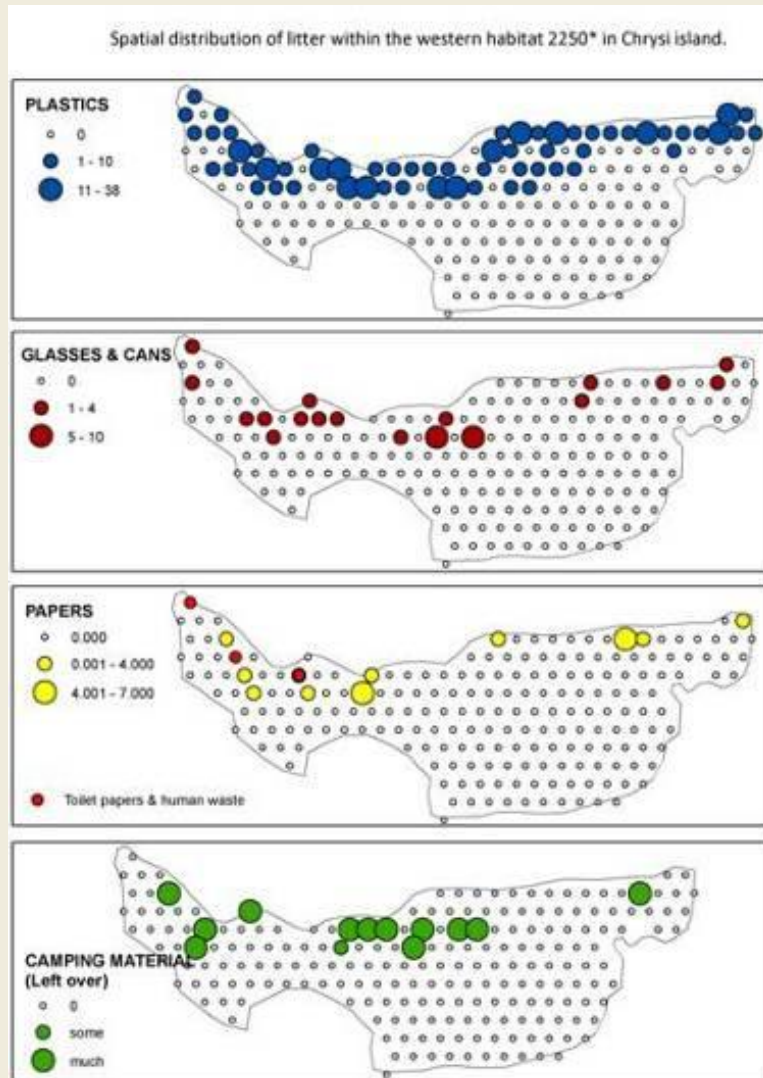
Number of *Juniperus* seedlings

(No significant difference between used and unused plots. The germination of the seeds and the survival of the seedlings depend on various environmental factors)



A5. Visitor impact assessment

Litter Survey





A6. Stakeholder consultation



A6. Stakeholder consultation

Conclusions

- Threats related mainly to tourism, overgrazing, fire risk, Pine encroachment and cutting of branches are perceived to be compromising the status of the habitat at all sites,
- Existing management of all sites is considered as insufficient or ineffective presently,
- Governance issues are proving barrier to the effective management of the habitat,
- Systematic monitoring and information collection regarding the habitat-is currently limited or non existent.

Recommendations

- Need to raise awareness of stakeholders and local communities regarding the values and threats,
- Need to design and apply an appropriate code of conduct while on sites,
- Need to establish the impact of visitors on the habitat at all sites,
- Implement appropriate yet feasible visitor management and conservation actions,
- Greater engagement and collaboration between stakeholders and the involvement of the local communities,
- Engage children in awareness raising and conservation actions for the habitat,
- Visitor management actions need to be discussed collectively with stakeholders to ensure their feasibility, maintenance and long term feasibility given current absence of management authority and maintenance funds.

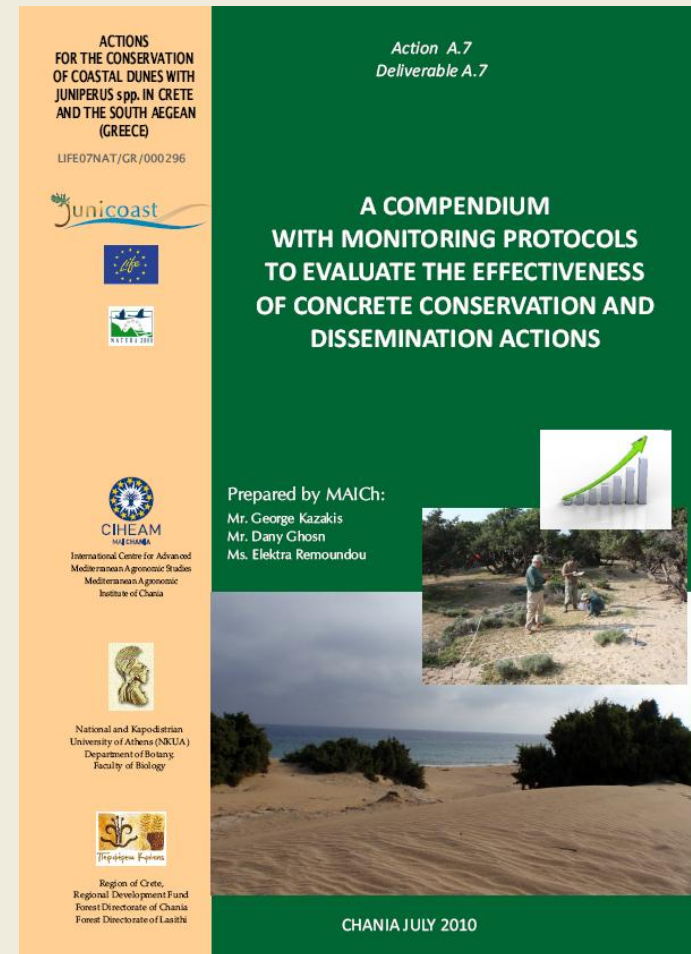
A7: Elaboration of long term monitoring protocols and selection of indicators

5 monitoring protocols and 10 monitoring indicators:

- 1: Amount, distribution and composition of litter
- 2: Number of broken branches, cover of root exposure (%), ground vegetation cover (%), and total number of plant species
- 3: *Juniperus* regeneration
- 4: vegetation cover of keystone species, sex ratio of *J. macrocarpa* and presence of invasive species
- 5: Level of public environmental awareness

Indicators description includes:

- Background and objectives
- Sampling design
- Field methods
- Data handling, analysis, and reporting
- Personnel requirements and training
- Operational requirements
- Standard Operating Procedures (SOPs)



A8. Elaboration of target habitat protection and restoration specifications




- Degradation factors for each site
- Deviation from desired state
- Habitat threats
- Recommended actions





A9. Determination of the Governance structure and legal status


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LIFE07NAT/CR/000296

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Mediterranean Agronomic Studies
Mediterranean Agronomic
Institute of Chania

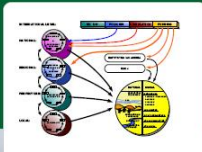

 **National and Kapodistrian
University of Athens (NKUA)**
Department of Botany,
Faculty of Biology

 **Region of Crete,
Regional Development Fund
Forest Directorate of Chania
Forest Directorate of Lassithi**

**Action A.9
Deliverable A.9.2**

**DETERMINATION
OF GOVERNANCE STRUCTURE**

Prepared by MAICH:
Dr. Kalliope Padiati

CHANIA MARCH 2010

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 **Region of Crete,
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**Δράση A.9
Παραδοτέο A.9.2**

**ΠΡΟΣΔΙΟΡΙΣΜΟΣ
ΤΗΣ ΔΟΜΗΣ ΔΙΑΚΥΒΕΡΝΗΣΗΣ**

Συντάκτης:
Dr. Καλλιόπη Πεδιαδίτη

Μετόφραση:
Βιργινία Κόλκου

XANIA ΜΑΡΤΙΟΣ 2010

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Mediterranean Agronomic Studies
Mediterranean Agronomic
Institute of Chania

 **National and Kapodistrian
University of Athens (NKUA)**
Department of Botany,
Faculty of Biology

 **Region of Crete,
Regional Development Fund
Forest Directorate of Chania
Forest Directorate of Lassithi**

**Δράση A.9
Παραδοτέο A.9.1**

**ΔΙΕΡΕΥΝΗΣΗ
ΤΟΥ ΝΟΜΙΚΟΥ ΚΑΘΕΣΤΩΤΟΣ
ΤΟΥ ΟΙΚΟΤΟΠΟΥ 2250*
ΣΤΗΝ ΕΛΛΑΔΑ**

Γιώργος Χ. Σιμώκος
Διπλόγος




XANIA - ΝΟΕΜΒΡΙΟΣ 2009

A9. Determination of the Governance structure and legal status

Conclusions:

- The analysis of the governance structure showed **a fragmentation of responsibilities and a lack of clarity** regarding the form of governance and delegation of responsibilities resulting in confusion and inability to determine accountability.
- The analysis of the responsibilities of various agencies and services recognized the **lack of Management Bodies** who should have the authority to ensure the effective management and long-term protection of the areas. **The legislation is not considered to be a problem, but rather the lack of its enforcement.**
- Limiting factors for the relevant bodies included: **lack of adequate funding, difficult access to the areas, and incomplete information on the necessary measures to be implemented.**
- The Greek legislation does not provide specific provisions to protect the habitat 2250*. The protection of this habitat occurs under general provisions on the environment through legal and administrative acts related to protected goods, which are in direct relation to the habitat (coast, dunes, beach, etc.).

Concrete Conservation Actions

C1. On site habitat demarcation

Technical description: Chestnut poles diameter 8-10cm, height 2m. Distance between sticks depended on the topography, the vegetation and the area of each site.



Concrete Conservation Actions



C2. Waste removal



Concrete Conservation Actions

C3. Enhancement of juniper regeneration

Fencing young individuals of *Juniperus macrocarpa*



Concrete Conservation Actions

C4. Restoration of the floristic composition and structure

Planting female individuals of *Juniperus macrocarpa*



Rooted cuttings

Concrete Conservation Actions

C4. Restoration of the floristic composition and structure

Removal of invasive *Pinus brutia*
by uprooting young individuals



Concrete Conservation Actions

C4. Restoration of the floristic composition and structure

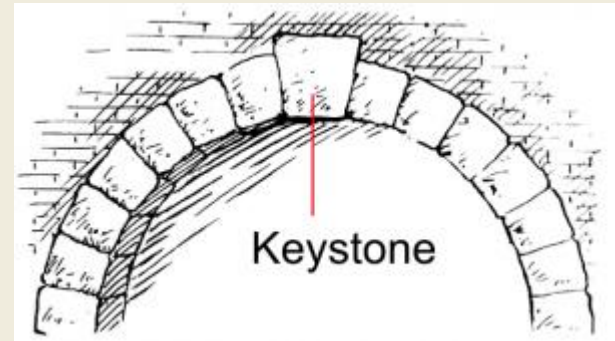
Planting keystone species of habitat 2250*



Pancratium maritimum



Centaurea pumilio



Concrete Conservation Actions

C4. Restoration of the floristic composition and structure

Eradication of alien species



Carpobrotus edulis



20/5/2011



4/6/2012



20/5/2011

Concrete Conservation Actions

C5. Fore dune restoration



Concrete Conservation Actions

C6. Visitor management intervention and infrastructures

Path deliniation and installation of wooden boardwalks



Installation of wooden tables and benches



Concrete Conservation Actions

C6. Visitor management intervention and infrastructures

Path delineation

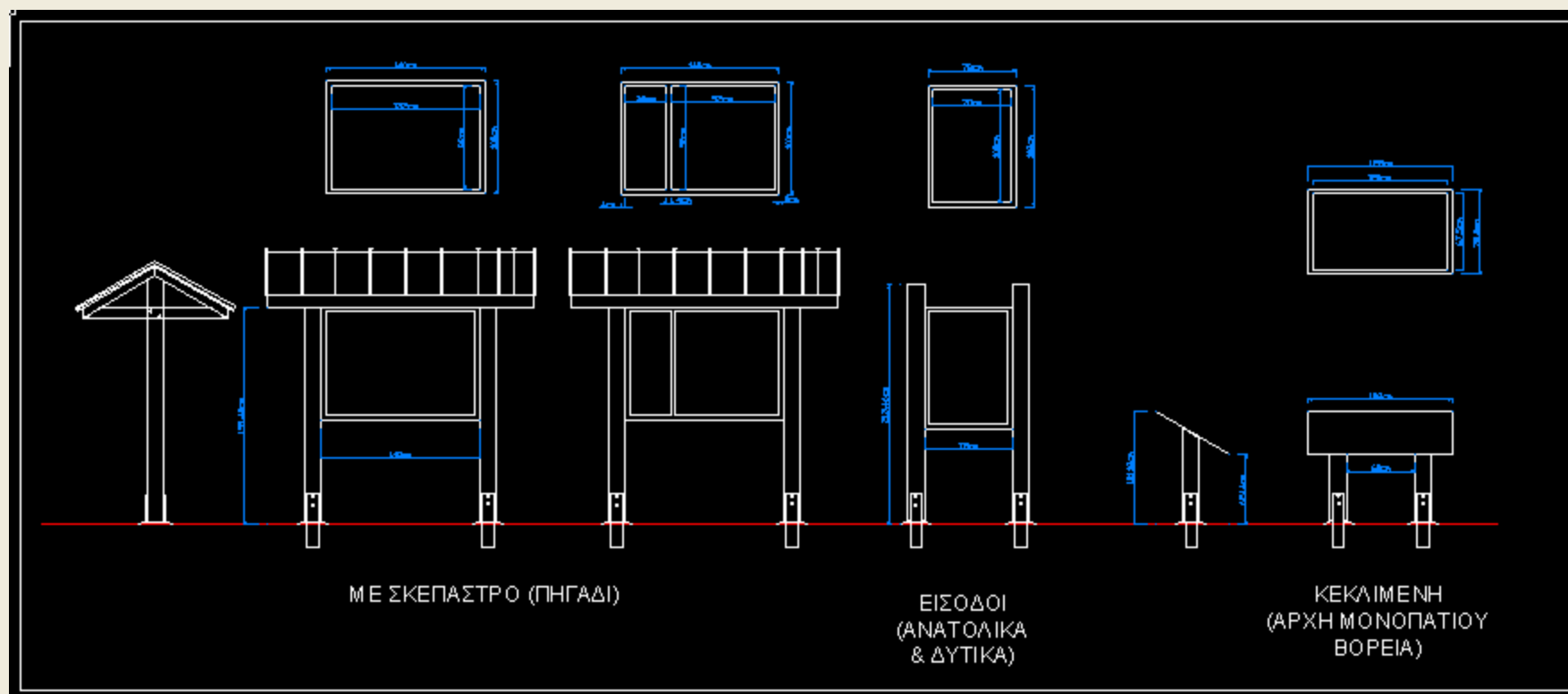


Concrete Conservation Actions

C6. Visitor management intervention and infrastructures

Installation of wooden boardwalks, width 1,50m





Concrete Conservation Actions

C7. Design and installation of Signs

Information sign at the entrance of the habitat



Καλώς Ήρθατε στο Κεδρόδασος

Welcome to Kedrodasos

Το **Κεδρόδασος** ενέχει στην περιοχή ΝΑΤURA 2000 "Παράλια από Χρυσοκελίτσια μέχρι Ακρωτήριο Κρής" η οποία έχει χαρακτηριστεί ως Τόπος Κοινοτικής Σημασίας (ΣΒΑ340013). Σύμφωνα με την κοινοτική και εθνική νομοθεσία το Κεδρόδασος είναι οικοτόπος προτεραιότητας και αυτός στις "Παραδοσιακές Αμπελουργικές και Κτηνοτροφικές Χερσίδες". Στο Κεδρόδασος φύονται δύο είδη κήδρεων, λιγότερο συνηθισμένα από λιγότερο φημισμένα.

The area of **Kedrodasos** is included in the Natura 2000 site "Paralia apo Chrysokelitsia mechi Akrotiri Kriis" which has been characterized as a Site of Community Importance (GB4340013). According to the National and European legislation, Kedrodasos has been identified as a priority habitat (Coastal Dunes with Juniperus species, code: D504*) due to its threatened status. The Juniperus species growing in Kedrodasos are Juniperus monosperma and Juniperus phoeniceus.

Αγαπητοί επισκέπτες,

Αυτός εκπαιδευτικός φυλλάδιος περιέχει πληροφορίες σχετικά με το Κεδρόδασος, την ιστορία του, την φύση του, την αμπελουργία και την κτηνοτροφία. Είναι σημαντικό να διαβάσετε αυτό το φυλλάδιο και να ακολουθήσετε τις οδηγίες που υπάρχουν μέσα.

Dear visitors,

This educational leaflet contains information about the Kedrodasos, its history, its nature, its viticulture and its livestock. It is important to read this leaflet and follow the instructions that are inside.

- Αποφύγετε να ανεβαίνετε κλίμακες ή να διαβάζετε στην οδό.
- Προσπαθήστε να κρατάτε καθαρά τα ποταμίσια βουτιά.
- Μην αφήνετε φαγητά σκουπίδια στην άσφαλτο, στην οδό.
- Σεβαστείτε την αρχαία τοιχογραφία και τους άλλους ιστορικούς.

Φύλαξη της φύσης με την ΚΑΠΟΔΙΣΤΡΙΑ ΚΑΙ ΤΟ ΚΑΡΑΒΙΟΝΑΥΤΟ.

Διαβάστε την ιστορία του Κεδρόδασου στην ιστοσελίδα του Κεδρόδασου.

- Do not climb the ladders and read on the road.
- Do not leave food or trash on the asphalt, on the road.
- Collect your rubbish.
- Respect ancient wall paintings and other historical.

Do not climb a tree, there is always a risk of being hurt.

Respect your fellow visitors, the history, cultural heritage, habits and traditions of the local community.

Do not remove or touch any element of the natural environment and cultural sites.

Enjoy learning, only with your own experience and intuition. Learn before you enjoy!

Το Κεδρόδασος είναι ένα από τα πιο σημαντικά μνημεία της φύσης στην Ελλάδα. Είναι σημαντικό να διαβάσετε αυτό το φυλλάδιο και να ακολουθήσετε τις οδηγίες που υπάρχουν μέσα.

The Kedrodasos is one of the most important natural monuments in Greece. It is important to read this leaflet and follow the instructions that are inside.

Concrete Conservation Actions

C7. Design and installation of Signs

Two-sided information sign inside the habitat



Concrete Conservation Actions

C7. Design and installation of Signs

Project panel



Τίτλος
LIFE+ Nature & Biodiversity Nature & Biodiversity
2007-2013
LIFE/NAT/GR/00296

"Δράσεις για τη προστασία των παράκτιων αμμοθινών με είδη *Juniperus* στην Κρήτη και στο Νότιο Αιγαίο (ΕΛΛΑΔΑ)"

"Actions for the conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean (Greece)"

Διάρκεια / Duration: 2007-2013
Υποστηρικτής / Bulgaria: 1.601.216 €
Χρηματοδότηση Ε.Ε. LIFE / E.C. Finance LIFE: 75%
Παράγοντες / Co-Finance: 25%

ΠΕΡΙΟΧΕΣ / PROJECT SITES



Συντονιστής Δραστηριότητας



Συντονιστής Δραστηριότητας



Habitat description panel

Παράκτιες αμμοθίνες με είδη *Juniperus*

Geographical distribution

Η παράκτια αμμοθίνη με είδη *Juniperus* είναι ένας από τους πιο σημαντικούς τύπους οικοσυστημάτων παράκτιας ζώνης στην Ελλάδα. Βρίσκεται κυρίως στην Κρήτη και στο Νότιο Αιγαίο, όπου αποτελεί σημαντικό μέρος του φυσικού περιβάλλοντος.

Characteristics

Οι παράκτιες αμμοθίνες με είδη *Juniperus* χαρακτηρίζονται από την παρουσία της *Juniperus* spp. και την ανάπτυξη της βλάστησης στην άμμο. Η αμμοθίνη αποτελεί ένα σημαντικό μέρος του φυσικού περιβάλλοντος, καθώς προσφέρει προστασία από την εξάριση και την αλάτιση.

Threats

Οι παράκτιες αμμοθίνες με είδη *Juniperus* αντιμετωπίζουν διάφορα threats, όπως η εξάριση, η αλάτιση, η κατασκευή κτιρίων και η ανάπτυξη της βλάστησης στην άμμο.

Conservation actions

Οι δράσεις για την προστασία των παράκτιων αμμοθινών με είδη *Juniperus* περιλαμβάνουν την προστασία της αμμοθίνης από την εξάριση και την αλάτιση, την ανάπτυξη της βλάστησης στην άμμο και την προστασία της αμμοθίνης από την κατασκευή κτιρίων.

Coastal dunes with *Juniperus* species

Geographical distribution

Coastal dunes with *Juniperus* species are one of the most important types of ecosystems in the coastal zone in Greece. They are found mainly in Crete and the South Aegean, where they constitute a significant part of the natural environment.

Characteristics

Coastal dunes with *Juniperus* species are characterized by the presence of *Juniperus* spp. and the development of vegetation on the sand. The dune is an important part of the natural environment, as it provides protection from erosion and salinization.

Threats

Coastal dunes with *Juniperus* species face various threats, such as erosion, salinization, construction of buildings and the development of vegetation on the sand.

Conservation actions

Actions for the protection of coastal dunes with *Juniperus* species include the protection of the dune from erosion and salinization, the development of vegetation on the sand and the protection of the dune from construction of buildings.



Site-specific panel

Κεδρόδασος Οικότοπος 2250* - Kedrodasos Habitat 2250*



Ο Οικότοπος Το Κεδρόδασος είναι σημαντικό οικοσυστήμα, που διαφέρει από όλα τα άλλα δάση στην Ελλάδα. Είναι ένας από τους τελευταίους που υπάρχουν στην Ελλάδα. Είναι ένας από τους τελευταίους που υπάρχουν στην Ελλάδα. Είναι ένας από τους τελευταίους που υπάρχουν στην Ελλάδα.

Οι Κεδρίδες Οι Κεδρίδες είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae. Είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae. Είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae.

Η Χλωρίδα Η χλωρίδα του Κεδρόδασος είναι πολύ διαφορετική από τα άλλα δάση στην Ελλάδα. Είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae. Είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae.

Απειλές Τα Κεδρόδασα είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae. Είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae. Είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae.

The Habitat

Kedrodasos is a very old habitat, which is the habitat type "Oak & Beech with Juniper" (code 2250). It is one of the last remaining habitats of its kind in Greece. It is one of the last remaining habitats of its kind in Greece.

The Junipers

Junipers are members of the Juniperaceae family. They are a very old species, which is one of the last remaining species of its kind in Greece. They are a very old species, which is one of the last remaining species of its kind in Greece.

The Flora

The vegetation of the Kedrodasos is very different from the other habitats in Greece. It is a very old species, which is one of the last remaining species of its kind in Greece. It is a very old species, which is one of the last remaining species of its kind in Greece.

Threats

One of the main threats to the Kedrodasos is the loss of its natural habitat. This is due to the fact that the Kedrodasos is a very old species, which is one of the last remaining species of its kind in Greece. This is due to the fact that the Kedrodasos is a very old species, which is one of the last remaining species of its kind in Greece.

Αγαπητοί επισκέπτες, οι ακόλουθοι κανόνες θα σας βοηθήσουν να προστατέψετε το Κεδρόδασο, να μην το καταστρέψετε και να το διατηρήσετε ως φυσικό χώρο.

Dear visitors, the following practices would minimize the negative impact on the environment and maintain the natural beauty of the habitat.

- Μην κόβετε κλαδιά και τους κλώνους.** Αποφύγετε να κόψετε κλαδιά και κλώνους, καθώς αυτό θα προκαλέσει την αποξήρανση των κλαδιών και την απώλεια της φυσικής ομορφιάς του Κεδρόδασου.
- Don't cut juniper tree branches.** Don't cut or break the branches of the juniper, as this will lead to the drying of the branches and the loss of the natural beauty of the habitat.
- Μην πετάτε σκουπίδια.** Μην πετάτε σκουπίδια στο Κεδρόδασο, αλλά κρατάτε τα μαζί σας και πετάξτε τα σε ειδικά σημεία.
- Don't litter.** Don't throw your rubbish in the Kedrodasos, but keep it with you and dispose of it in the appropriate rubbish bins.
- Κολλήστε στα σκουπίδια.** Εάν έχετε σκουπίδια, κολλήστε τα στα σκουπίδια. Μην πετάτε σκουπίδια στο Κεδρόδασο, αλλά κρατάτε τα μαζί σας και πετάξτε τα σε ειδικά σημεία.
- Collect your rubbish.** If you have rubbish, collect it in the rubbish bins. Don't throw your rubbish in the Kedrodasos, but keep it with you and dispose of it in the appropriate rubbish bins.
- Παράβατε στα μονοπάτια.** Μην περπατάτε στα Κεδρόδασα εκτός των μονοπατιών. Τα μονοπάτια είναι τα μονοπάτια που έχουν κατασκευαστεί για να προστατεύσουν το Κεδρόδασο.
- Walk on established paths.** Don't walk on the Kedrodasos except on the paths. The paths are the paths that have been built to protect the Kedrodasos.
- Αποφύγετε το άναμμα φωτιάς.** Τα Κεδρόδασα είναι πολύ εύφλεκτα και η φωτιά μπορεί να καταστρέψει το Κεδρόδασο. Μην περπατάτε με φωτιά στο Κεδρόδασο.
- Avoid lighting fires.** Kedrodasos is a very flammable habitat and fire can destroy it. Don't light fires in the Kedrodasos.
- Μην ενεργείτε.** Τα Κεδρόδασα είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae. Είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae. Είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae.
- Don't touch.** Don't touch the Kedrodasos. The Kedrodasos is a very old species, which is one of the last remaining species of its kind in Greece. It is a very old species, which is one of the last remaining species of its kind in Greece.

Φωτογράφιση: Είναι πολύ σημαντικό να φωτογραφείτε το Κεδρόδασο. Είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae. Είναι ένα είδος δένδρου που ανήκει στην οικογένεια Cupressaceae.

Upon leaving: Take with you your experiences and memories. Leave behind ONLY your footprint!

- Seed collection of *Juniperus macrocarpa*, *J. phoenicea* and 30 other keystone species
- Storage of collected seeds at the seed bank of MAICh
- Protocols for seed collection, handling and storage of collected keystone species
- Protocols for seed germination of collected keystone species
- Propagation of *Juniperus macrocarpa*, *J. phoenicea* and other keystone species
- Collection and propagation of female cuttings of *J. macrocarpa*

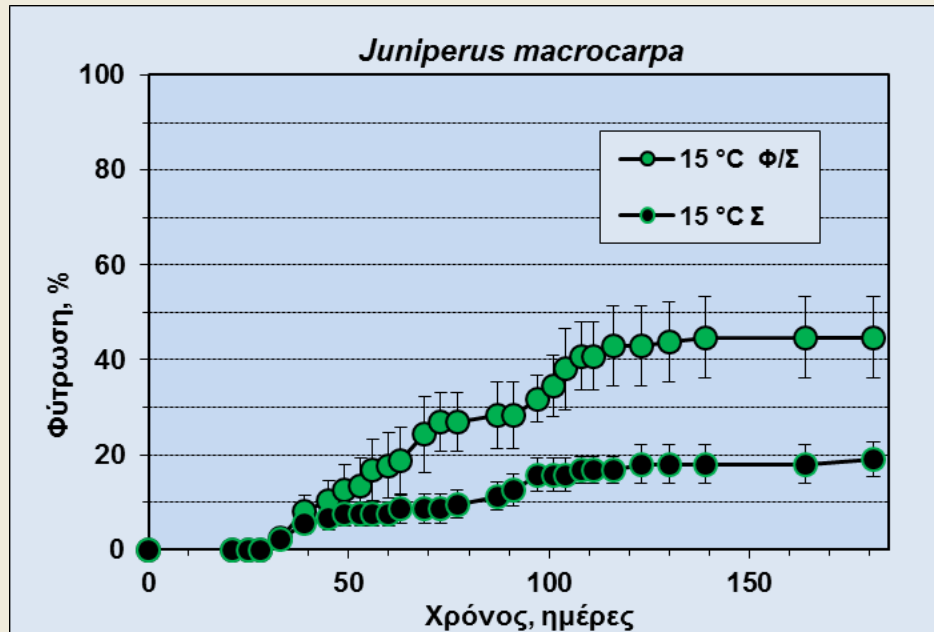
Concrete Conservation Actions

C8. *Ex situ* conservation and propagation of keystone species



Concrete Conservation Actions

C8. *Ex situ* conservation and propagation of keystone species





PUBLIC AWARENESS AND DISSEMINATION OF RESULTS

[illegible]

D1. Development and implementation of a communication strategy

Posters
T-shirts
Radio spot (Gavdos FM)
Project presentation on YOUTUBE



Actions for the conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean

Habitat

Coastal dunes with *Juniperus* species are widespread along the sandy coasts of 8 countries of Southern and Western Europe, mainly on Mediterranean and Atlantic coastlines. In Greece, it can be found in 16 Natura 2000 sites mainly in the South, the Aegean islands and Crete. This rare and beautiful habitat has been classified as a "priority habitat" (code 2250*) by the 92/43 Habitat Directive which means types of habitats in danger of disappearance of which the Community has a particular responsibility for their conservation.

The two *Juniperus* species growing in this habitat are *Juniperus macrocarpa* and *Juniperus phoenicea*. The presence of other shrubs and herbs adapted to grow in such an unfavorable environment forms another aspect of interesting vegetation.

Threats

Over the last decades, coastal dunes with *Juniperus* spp. have been subjected to **severe** anthropogenic pressure and are mainly threatened by **uncontrolled** tourism growth, **lack** of public awareness, **forest fires**, **grazing** and **littering**.

The above-mentioned threats in combination with the restricted natural regeneration of the *Juniperus* spp. and **climate change** which is expected to affect all natural ecosystems, confirmed the need to undertake **concrete conservation and management** actions in order to protect and to ensure the long-term sustainability of this priority habitat.

Project

JUNICOAST is a European project implemented in the framework of the LIFE + Nature and Biodiversity program. JUNICOAST aims to promote and enable the long term conservation of the coastal dunes with *Juniperus* spp. habitats in Greece by consolidating a knowledge base for its protection, restoration and monitoring, by halting present natural and anthropogenic threats and implementing actions for its protection and restoration.

The project includes

- 4 preparatory actions investigating the biotic and abiotic factors that influence the habitat structure and quality
- 8 concrete conservation actions targeting the main natural and anthropogenic threats
- 7 public awareness and dissemination actions and
- 6 project operation and monitoring actions

Project area

Uncontrolled tourism, Lack of public awareness, Forest fires, Grazing, Littering

Restoration of degraded dunes, Enhancement of *Juniperus* natural regeneration, Dune path definition

Dear visitors,

The following practices would minimise the negative impact on the environment and maintain the natural beauty of the habitat.

- Don't cut juniper tree branches.** Even if they seem dry, do not cut tree branches for firewood, as these branches allow sand trapping encouraging further dune formation.
- Collect your rubbish.** If you've carried it in, carry it out. Don't burn or bury rubbish, and if you come across other people's rubbish, do the environment a favor: take it with you and dispose it correctly in the appropriate rubbish bin.
- Walk on established paths.** To prevent damage on vegetation and to reduce soil erosion, please, walk on established paths, where possible.
- Avoid lighting fires.** *Juniper* is not a fire-resistant species and it does not regenerate after fire. Do not light fires, there is always a risk of fire. **In case of emergency call 199.**
- Respect your fellow visitors and the local community.** Keep noise levels to a minimum to avoid disturbing others, respect the privacy, cultural heritage, habits and traditions of local community.

Upon leaving, take with you your **experiences and memories**. Leave behind **ONLY** your **footprints**.

Junicoast
Nature & Biodiversity (2007-2013) LIFE/NAT/GR/2007/0016

Address for the conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean Islands:
www.junicoast.gr - info@junicoast.gr
Budget: 7,332,294 € - L.T. Number: 002-1796 - In Receipt: 1796
Beneficiary: Environmental Science Centre (ESC) - Agios Dimitrios
Contact: Mediterranean Science Institute (P.O. Box 36635), P.O. Box 65, Chania, Crete, 74100, Greece
Tel.: +30 2825 398831/3171, Fax: +30 2825 13881

Address for the conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean Islands:
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D1. Development and implementation of a communication strategy

Video production



D1. Development and implementation of a communication strategy

Code of Conduct

Αγαπητοί επισκέπτες, οι ακόλουθες πρακτικές θα ελαχιστοποιήσουν τις αρνητικές επιπτώσεις στο περιβάλλον και θα βοηθήσουν στη διατήρηση της φυσικής ομορφιάς του οικοτόπου.



Μην κόβετε κλαδιά από τους κέδρους. Ακόμα και αν φαίνονται ξερά, βοηθούν στη συγκράτηση της άμμου, στη στήριξη των κέδρων και αποτελούν σημαντικό παράγοντα της φυσικής ισορροπίας των αμμοθινών.

Don't cut juniper tree branches. Even if they seem dry, do not cut tree branches for firewood, as these branches allow sand trapping encouraging further dune formation.



Μην πετάτε σκουπίδια. Αφήστε τον οικότοπο καθαρότερο απ' ότι τον βρήκατε, μαζέψτε τα σκουπίδια και μεταφέρετέ τα στους κάδους συλλογής ή στους κατάλληλους κάδους ανακύκλωσης.

Collect your rubbish. If you've carried it in, carry it out. Don't burn or bury rubbish, and if you come across other people's rubbish, do the environment a favor: take it with you and dispose it correctly in the appropriate rubbish bins.

D1. Development and implementation of a communication strategy



Περπατάτε στα μονοπάτια. Όπου είναι εφικτό προσπαθήστε να περπατάτε στα μονοπάτια. Έτσι δεν καταστρέφονται τα νεαρά κέδρα και η υπόλοιπη χλωρίδα, ενώ αποφεύγεται η διάβρωση του εδάφους.

Walk on established paths. To prevent damage on vegetation and to reduce soil erosion, please, walk on established paths, where possible.



Αποφύγετε το άναμα φωτιάς. Τα κέδρα δεν είναι πυρόφιλο είδος και δεν αναγεννούνται μετά τη φωτιά. Μην ανάβετε φωτιά, υπάρχει πάντα κίνδυνος πυρκαγιάς. **Σε περίπτωση ανάγκης τηλεφωνήστε στο 199.**

Avoid lighting fires. Juniper is not a fire-resistant species and it does not regenerate after fire. Do not light fires; there is always a risk of fire. **In case of emergency call 199.**



Μην ενοχλείτε. Σεβαστείτε την προσωπική ζωή, την κουλτούρα και τις συνήθειες των άλλων επισκεπτών και των ανθρώπων που ζουν στην περιοχή.

Respect your fellow visitors and the local community. Keep noise levels to a minimum to avoid disturbing others, respect the privacy, cultural heritage, habits and traditions of local community.

D1. Development and implementation of a communication strategy

Φεύγοντας, πάρτε μαζί σας
τις εμπειρίες σας και τις αναμνήσεις σας.
Αφήστε πίσω **ΜΟΝΟ** τις **πατημασιές** σας!

Σας ενημερώνουμε ότι σύμφωνα με την Ελληνική
νομοθεσία (Ν.392/76 & Ν.2160/93) η ελεύθερη
κατασκήνωση απαγορεύεται.

Upon leaving, take with you
your experiences and memories.
Leave behind **ONLY** your **footprints!**

According to the Greek legislation (Law 392/76 & Law
2160/93) free camping is prohibited.

D1. Development and implementation of a communication strategy

Exhibition “Agrotikos Augustos” Chania 2012, 2013



[illegible]

D2. Website development

<http://www.junicoast.gr>



D3. Environmental education campaign

School teachers' educational booklet



Environmental education workshop - Chania



D3. Environmental education campaign

Site visits to Kedrodasos with school teachers and students



D3. Environmental education campaign

Environmental education workshop - Naxos



D3. Environmental education campaign

Organisation of Student weeks - MAICH



D3. Environmental education campaign

On-site discussions with campers :

In Gavdos



In kedrodasos



D3. Environmental education campaign

Environmental education workshop co-organized with the
Environmental Education Center of Ierapetra



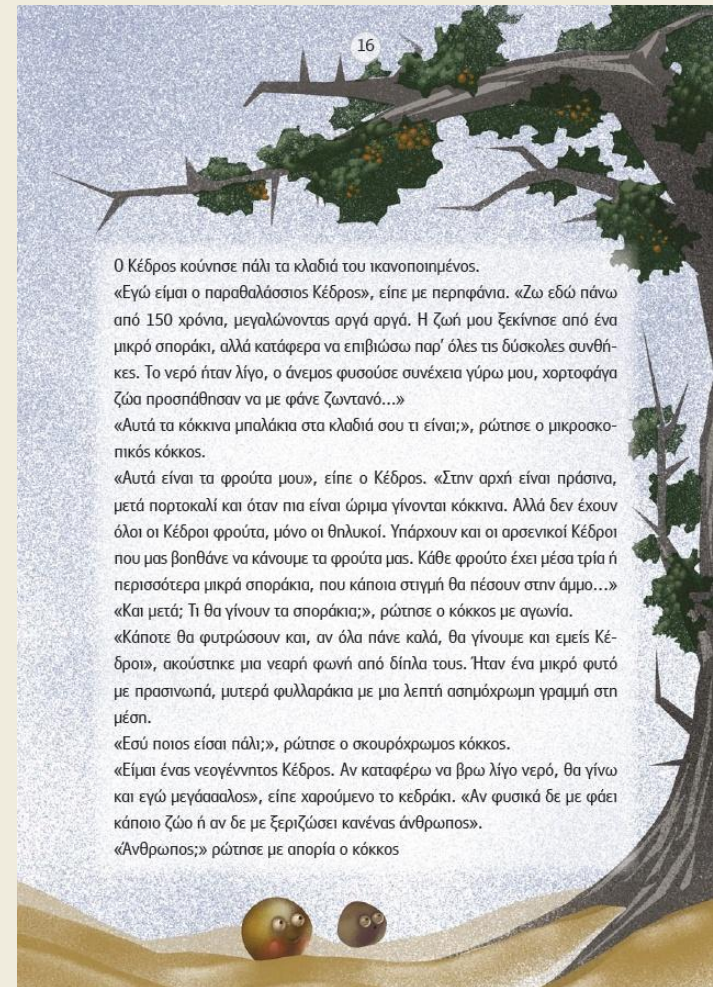
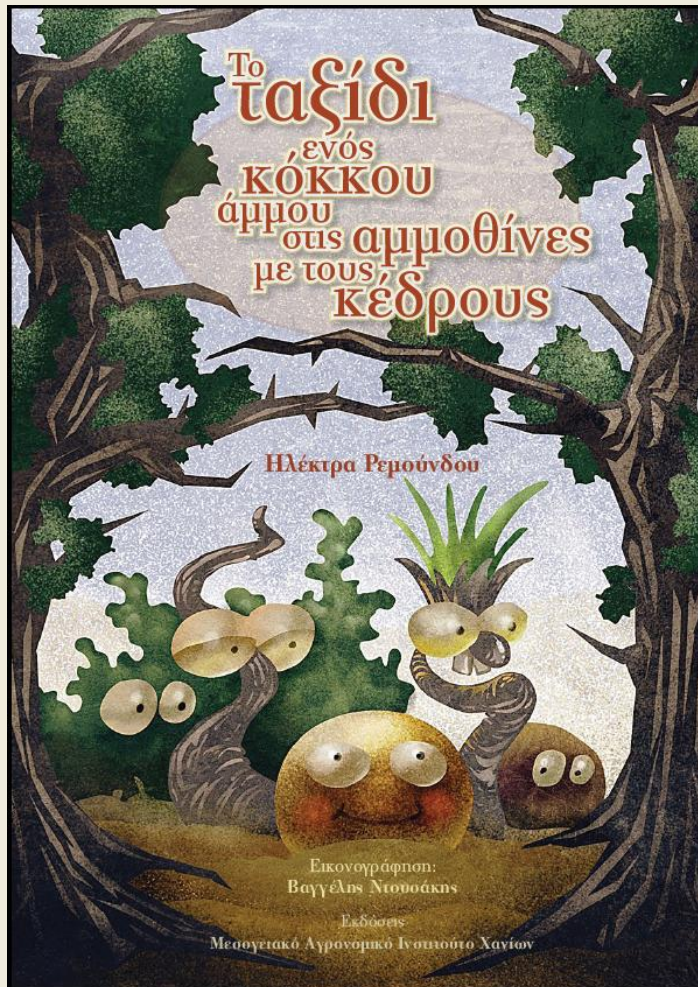
D3. Environmental education campaign

Student information at summer camps in Akrotiri-Chania



D3. Environmental education campaign

Children fairy tale



D4. Training for habitat protection and restoration

Training workshop - Naxos

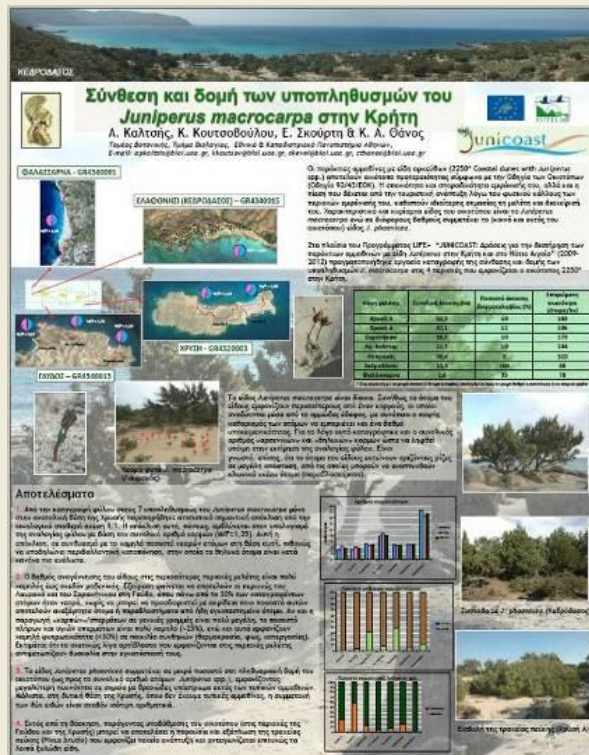




D6. Dissemination of findings to the scientific community and Layman's report

The associated beneficiary NKUA presented a poster in Greek entitled: “Σύνθεση και δομή των υποπληθυσμών του είδους *Juniperus macrocarpa* στην Κρήτη” at the 5th Panhellenic Congress of Ecology that was held on 07-10.10.2010 in Patras.

The associated beneficiary NKUA presented a poster entitled: “Population data analysis of *Juniperus macrocarpa* subpopulations in four sites at Crete towards the implementation of specialized conservation actions” at the 12th Congress of Hellenic Botanical Society that was held on September 2011 in Rethymno.



D6. Dissemination of findings to the scientific community and Layman's report

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Participation in the management of Greek Natura 2000 sites: Evidence from a cross-level analysis

Evangelia Apostolopoulou^{a,1,3}, Evangelia G. Drakou^{a,2,3}, Kalliope Pediaditi^{b,*,3}

^a Department of Ecology, School of Biology, Aristotle University of Thessaloniki, UPB 119, 54124 Thessaloniki, Greece

^b Mediterranean Agronomic Institute of Chania, Makedonias 1, Chania, Crete 73100, Greece

The image shows the front cover of a report. The background is a photograph of a wide, pebbly beach under a clear blue sky. In the distance, there are some green bushes and a small white building on a slight rise. The sea is visible on the right side. At the top, there is a dark blue horizontal band with white text. The title of the report is written in large, dark blue Greek letters in the center. At the bottom, there is another dark blue horizontal band with white text.

Πρόγραμμα LIFE+ ΦΥΣΗ ΚΑΙ ΒΙΟΠΟΙΚΙΛΙΟΤΗΤΑ (2007-2013)

Δράσεις για την προστασία των
παράκτιων αμμοθινών με είδη κέδρων
στην Κρήτη και στο Νότιο Αιγαίο

Layman's report

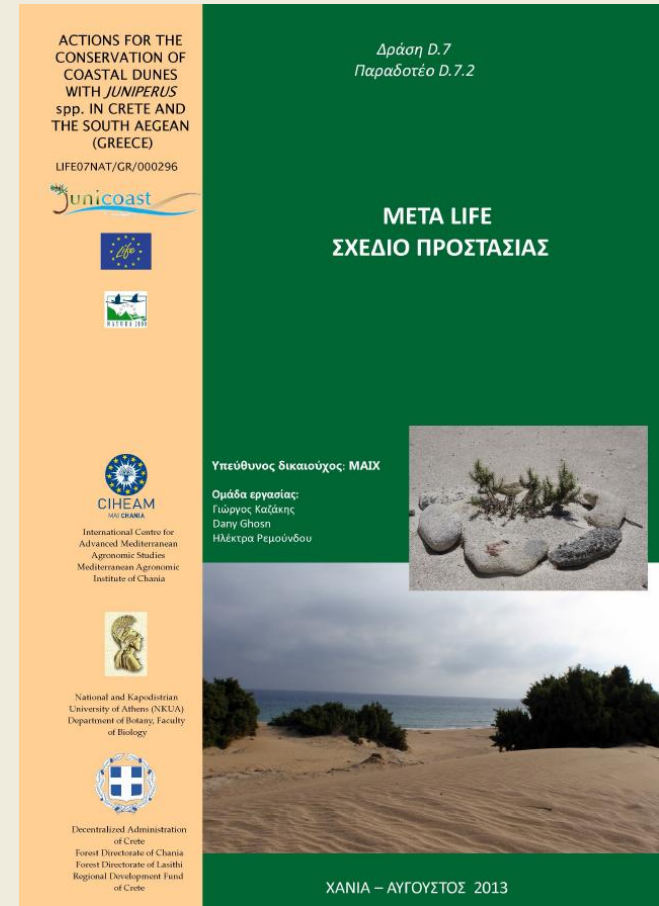
D7. “After-LIFE” communication plan

The **after-LIFE communication plan** identify and propose communication activities which will be implemented after the end of the project.



D7. “After-LIFE” conservation plan

The **after-LIFE conservation plan** identify and propose conservation and management activities which will be implemented after the end of the project.



OVERALL PROJECT COORDINATION AND MONITORING



E2. Monitoring of the effectiveness of the dissemination actions

The dissemination actions of the project included among others:

1. The leaflet of the project produced and distributed (ferry boats, and on-sites) at the beginning of the project
2. The radio spot aired during two consecutive summer seasons (May-September 2011 and 2012)
3. Various events and Media publicity since the beginning of the project
4. Information signs installed at the entrance/exit and within all the habitat areas.

The monitoring of the effectiveness of the dissemination actions was implemented by collecting questionnaires at the beginning (2009) and at the end (2013) of the project.

ΕΡΩΤΗΡΗΤΑΙΟ ΓΙΑ ΤΗΝ ΠΡΟΣΤΑΣΙΑ ΤΩΝ ΠΑΡΑΓΩΓΩΝ ΑΡΧΟΝΤΙΝΩΝ ΜΕ ΕΙΔΗ ΙΧΘΥΩΝ ΣΤΗΝ ΚΡΗΤΗ ΚΑΙ ΣΤΟ ΝΗΣΟ ΑΡΓΙΟΛΗ (ΕΛΛΑΔΑ).

Το πρόγραμμα JUNCOCOST "Στόχος για την προστασία των παραγωγών αρχοντινών με είδη ιχθυών στην Κρήτη και στο Νέο Αργίολο (Ελλάδα)" είναι ένα πρόγραμμα διάρκειας 56 μηνών (2009-2013) που υλοποιείται στα πλαίσια του LIFE+ για τη Φύση και τη Βιοποικιλότητα. Σκοπός του προγράμματος είναι να διασφαλίσει την μακροχρόνια διατήρηση του οικοτόπου στην Ελλάδα. Το πρόγραμμα καλύπτει τη σημαντική κατάσταση στην Κρήτη (Πόρος, Χανιά, Γαύδος, Νέο Αργίολο και Φακίνο) και σχεδίαζε/εφαρμόζει δράσεις όπως: αποκατάσταση του συστήματος των αρχοντινών, κατασκευή (ή των υπολοίπων διατάξεων) διασύνδεσης των επισκεπτών και δράσεις ενημέρωσης-εκπαίδευσης του κοινού και περιβαλλοντικής εκπαίδευσης. Η έρευνα αυτή πραγματοποιείται για να καταγραφεί το επίπεδο περιβαλλοντικής συνειδητοποίησης των επισκεπτών για τον οικοτόπο των αρχοντινών με είδη ιχθύων.

Ημερομηνία: Φύλο: Ηλικία:

Ποιες από τις παρακάτω προτάσεις πιστεύετε πως είναι **ΣΩΣΤΕΣ** και ποιες **ΛΑΘΟΣ**;

	ΣΩΣΤΟ	ΛΑΘΟΣ	ΔΕΝ ΞΕΡΩ
Η Γαύδος προστατεύεται λόγω της παρουσίας:			
... της κλητικής σελήης αυτής			
... των δέντρων (δρυμίνων κέδρων)			
... των αρχοντινών			
... του ασήκτου αρχοντινών με κέδρους			
Άλλες λόγοι (προσδιορίστε)			
Η Γαύδος είναι Εθνικός Δρυμός			
Η Γαύδος ανήκει στο δίκτυο Natura 2000			
Η Γαύδος έχει χαρακτηριστεί ως Πρωτότυπη Κοινότητα Σχημάτων (SCI)			
Στη Γαύδος έχουν οριστεί Ζώνες Εθνικής Προστασίας			
Η Γαύδος ΑΠΘ προστατεύεται			

Παρακαλώ υποδείξτε κατά ποσό **συμφωνείτε** ή **διαφωνείτε** με τα ακόλουθα παρατηρήσεις:

	Διαφωνώ απόλυτα	Διαφωνώ	Ούτε διαφωνώ/ούτε συμφωνώ	Συμφωνώ	Συμφωνώ απόλυτα
Η καταστροφή υποβαθμίζει το οικοσύστημα των αρχοντινών με τους κέδρους	1	2	3	4	5
Η εφελκυστική διαχείριση των αρχοντινών με κέδρους είναι επιτυχής	1	2	3	4	5
Σε μερικές περιοχές στη Γαύδο πρέπει να απομακρυνθεί ο κήρυκας στους επισκέπτες ώστε να προστατευτούν οι αρχοντινές με τους κέδρους	1	2	3	4	5
Οι παραρτήματα με αρχοντινές να κλείνουν δεν χρειάζονται περαιτέρω μέτρα για την προστασία τους	1	2	3	4	5
Οι επισκέπτες θα έπρεπε να είναι υποχρεωμένοι να πάνε μαζί με τα αρχοντινές τους	1	2	3	4	5

Το κατά τη γνώμη σας αποτελεί απειλή για τις παραρτήματα με αρχοντινές και κέδρους στη Γαύδο:

Παραρτήματα φυσικά στοιχεία	Απειλή και ο διαχειριστής τους	Υπερβόληση
Παραρτήματα επισκέπτες	Κόπηση-απόδοση κλάδων-ρίζων	Πυρκαγιά
Κατασκευαστικά	Εκκένωση κοινότητας/πολεόντων	Ανθρώπινα απόβλητα

Άλλο:

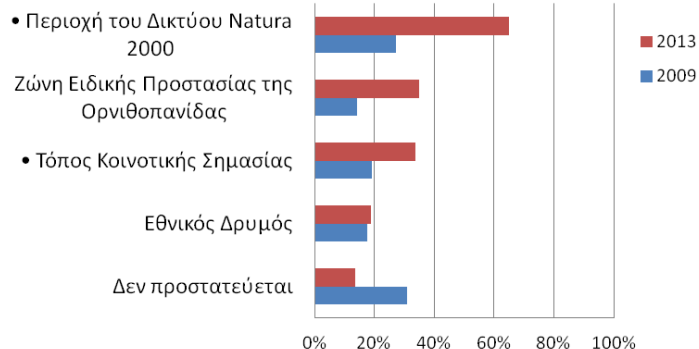
Εκπαίδευση	Πρωτοβάθμια εκπαίδευση	Ανώτατη δευτεροβάθμια εκπαίδευση μη Τριτοβάθμια (ΕΚ)
Μέση δευτεροβάθμια εκπαίδευση (Γυμνάσιο)	Τριτοβάθμια εκπαίδευση (ΑΕΙ, ΤΕΙ, ΜSc, PhD)	
Ανώτατη δευτεροβάθμια εκπαίδευση (Λύκειο)		

Εμπειροπλοία που συμπληρώσατε το ερωτηματολόγιο

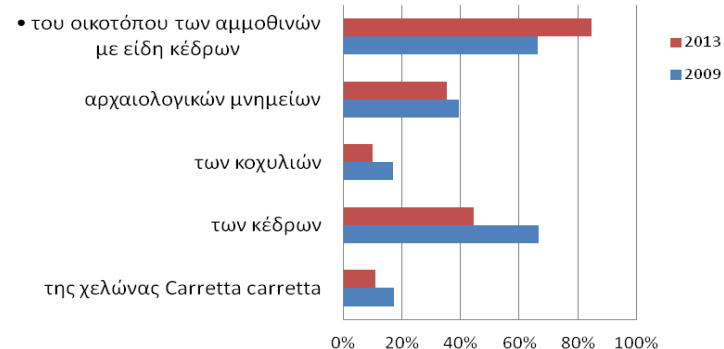
Για περισσότερες πληροφορίες για το πρόγραμμα JUNCOCOST www.juncocost.gr

E2. Monitoring of the effectiveness of the dissemination actions

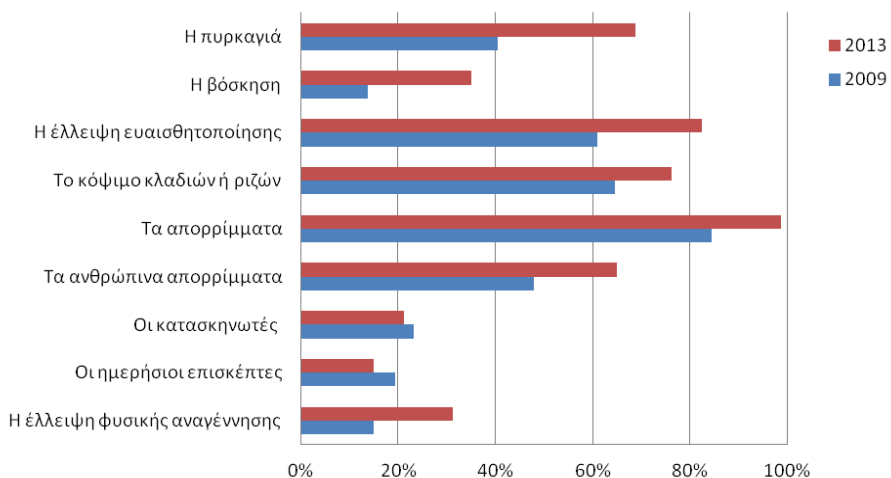
Το Κεδρόδασος είναι:



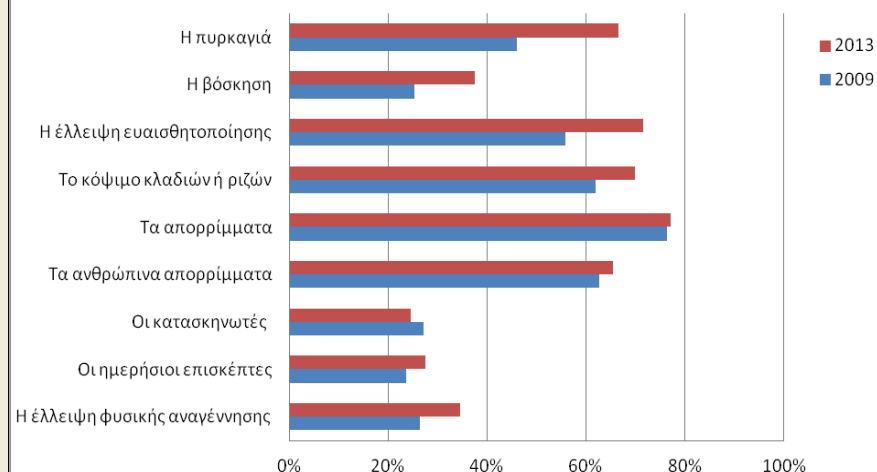
Η Γαύδος προστατεύεται λόγω της παρουσίας:



Ποιά από τα παρακάτω θεωρείτε ότι αποτελούν απειλή για τον οικοτόπο;



Ποιά από τα παρακάτω θεωρείτε ότι αποτελούν απειλή για τον οικοτόπο;



E2. Monitoring of the effectiveness of the dissemination actions

Conclusions:

- **The visitors' level of awareness**, perceived values and threats established on the onset of the project were taken into consideration in defining the sequence of the communication activities, channels and materials. This participatory approach allowed a better planning of the activities which is of utmost importance for the proper implementation of the communication plan.
- **The code of conduct** developed by the project had a very positive response on the visitors' behavior while on-site.
- **Public education** requires a strategic communication plan based on specific objectives, targeted audiences and implementation approach.
- **The installation of information signs** at strategic points (entrance, exit) and within the habitat boundaries increased the visitors' level of environmental awareness, and reduced their negative impacts while onsite.
- The long-term conservation of coastal dunes with *Juniperus* spp. requires **continuous efforts** by all stakeholders in identifying, proposing and implementing communication and conservation activities.

E3. Scientific committee



Visit of Scientific Committee to Kedrodasos 27/2/2009

E4. Networking with similar LIFE projects

PROVIDUNE project - ITALY



JUNIPERCY project - Cyprus




E5. Stakeholder Committee



FINAL EVENT - Chania 27-8-2013



A scenic view of a sandy beach with footprints leading towards the ocean, framed by green trees on either side. The sky is blue with a few clouds, and the ocean is a deep blue. The sand is light-colored and shows ripples and footprints. The trees are green and leafy, framing the scene on both sides.

Upon leaving, take with you
your experiences and memories.
Leave behind ONLY your footprints!