

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

LIFE07NAT/GR/000296



International Centre for  
Advanced Mediterranean  
Agronomic Studies  
Mediterranean Agronomic  
Institute of Chania



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



Decentralized Administration  
of Crete  
Forest Directorate of Chania  
Forest Directorate of Lasithi  
Regional Development Fund  
of Crete

Action D.1  
Deliverable D.1

## REPORT ON COMMUNICATION STRATEGY

Prepared by MAICH:

Mr. George Kazakis  
Mr. Dany Ghosn  
Ms. Elektra Remoundou



CHANIA – AUGUST 2013

LIFE07NAT/GR/000296

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

- JUNICOAST -

**Action D.1:** Development and implementation of a communication strategy

**Deliverable D.1:** Report on communication strategy

**Responsible beneficiary:** Mediterranean Agronomic Institute of Chania (MAICh)

**Prepared by:** George Kazakis  
Dany Ghosn  
Elektra Remoundou

Chania August 2013

## Table of Contents

Περίληψη .....	4
Introduction .....	7
The communication strategy .....	10
The communication plan .....	12
The objectives.....	12
The target audiences .....	15
Defining messages .....	16
Identifying channels .....	21
Communication activities planning .....	23
Cooperation .....	26
Communication Plan implementation .....	27
Monitoring and Evaluation .....	33
Conclusions .....	43
List of References.....	44
Annex 1 Time table, budget, list of deliverables and milestones of the communication activities.....	45
Annex 2 Advantages and disadvantages of various communication channels .....	48
Annex 3 Long-term monitoring protocol for the evaluation of the effectiveness of the dissemination action.....	53
Annex 4 Pictures and links to communication materials and events.....	57

## Περίληψη

Οι παράκτιες αμμοθίνες με είδη Κέδρων είναι ένας σπάνιος και πανέμορφος οικότοπος που συναντάται κυρίως στη νότια και δυτική Ευρώπη, σε παραλίες της Μεσογείου και του Ατλαντικού ωκεανού. Σύμφωνα με την οδηγία των οικοτόπων 92/43 της Ε.Ε. έχει χαρακτηριστεί ως **οικότοπος προτεραιότητας, που σημαίνει ότι διατρέχει κίνδυνο εξαφάνισης και η κοινότητα φέρει ιδιαίτερη ευθύνη για τη διατήρησή του**. Στην Ελλάδα ο οικότοπος αυτός βρίσκεται κυρίως στα νησιά του Νότιου Αιγαίου και στην Κρήτη, αλλά και στη δυτική Ελλάδα και την Πελοπόννησο. Η αισθητική και η οικονομική αξία του οικοτόπου έχει ευρέως αναγνωριστεί και οι περιοχές αυτές αποτελούν πόλο έλξης για τον τουρισμό. Παρόλα αυτά οι φυσικές και οικολογικές του λειτουργίες, δεν έχουν ληφθεί σοβαρά υπόψη. Έτσι, ο οικότοπος αντιμετωπίζει διάφορες φυσικές και ανθρωπογενείς **πιέσεις** και απειλείται από το **κόψιμο κλαδιών, τον τουρισμό, τις πυρκαγιές, την εισαγωγή ξενικών ειδών, την έλλειψη φυσικής αναγέννησης των κέδρων, την βόσκηση, τον κατακερματισμό των περιοχών, την οικιστική πίεση και την έλλειψη ενημέρωσης και ευαισθητοποίησης του κοινού**. Το τελευταίο, σε συνδυασμό με την ανεξέλεγκτη ανάπτυξη του τουρισμού, αποτελεί μια από τις κυριότερες απειλές για τον οικότοπο σε όλη την Ελλάδα.

Για το σκοπό αυτό το Μεσογειακό Αγρονομικό Ινστιτούτο Χανίων, με το Εθνικό και Καποδιστριακό Πανεπιστήμιο Αθηνών και τις Διευθύνσεις Δασών Χανίων και Λασιθίου υλοποίησαν το πρόγραμμα LIFE+ Nature Junicoast με τίτλο "Δράσεις για την προστασία των παράκτιων αμμοθινών με είδη Κέδρων στην Κρήτη και στο Νότιο Αιγαίο (Ελλάδα)" ([www.junicoast.gr](http://www.junicoast.gr)). Το πρόγραμμα ξεκίνησε τον Ιανουάριο του 2009 και ολοκληρώθηκε τον Αύγουστο του 2013. Πρωταρχικός σκοπός του προγράμματος ήταν να προωθήσει και να καταστήσει δυνατή την μακροχρόνια προστασία των παράκτιων αμμοθινών με είδη κέδρων στην Ελλάδα μέσω:

α) της ενοποίησης και της διάδοσης της γνώσης για την προστασία, αποκατάσταση, παρακολούθηση και αξιολόγηση του οικοτόπου των παράκτιων αμμοθινών με είδη Κέδρων στην Ελλάδα,

β) της κατανόησης, του προσδιορισμού και του περιορισμού των φυσικών και των ανθρωπογενών απειλών που οδηγούν στη μακροχρόνια υποβάθμιση του οικοτόπου και

γ) του σχεδιασμού και της εφαρμογής δράσεων προστασίας και ευαισθητοποίησης τους κοινού για την αποκατάσταση και την μακροχρόνια προστασία του οικοτόπου στην Κρήτη.

Ως πρόγραμμα επίδειξης, οι δράσεις ευαισθητοποίησης του κοινού και διάχυσης των αποτελεσμάτων πραγματοποιήθηκαν σε εθνικό επίπεδο χρησιμοποιώντας μια πολύ-συμμετοχική επικοινωνιακή στρατηγική. Αυτό έδωσε τη δυνατότητα για προώθηση παρόμοιων δράσεων προστασίας και ευαισθητοποίησης και στο Νότιο Αιγαίο. Η διάδοση της γνώσης, η προώθηση και η παροχή εκπαίδευσης δοκιμασμένων τεχνικών προστασίας και η αύξηση του επιπέδου ευαισθητοποίησης του κοινού εξασφαλίζει την ευρύτερη προστασία αυτού του σημαντικού οικοτόπου προτεραιότητας σε όλη την Ελλάδα. Συνεπώς, η ανάπτυξη και η εφαρμογή μιας επικοινωνιακής στρατηγικής αξιολογείται ως ιδιαίτερα σημαντική και απαντά στα παρακάτω ερωτήματα:

Γιατί είναι απαραίτητη η ενημέρωση για τον οικότοπο; (απειλές, πιέσεις και προκλήσεις)

Σε ποιους απευθύνεται η ενημέρωση; (σε ποιο κοινό στοχεύει το μήνυμα προστασίας)

Ποιο είναι το μήνυμα; (περιεχόμενο της επικοινωνιακής στρατηγικής)

Πως μπορεί να μεταδοθεί το μήνυμα προστασίας; (το σχέδιο και τα διαφορετικά μέσα και υλικά επικοινωνίας, οι επικοινωνιακές δραστηριότητες ή εκδηλώσεις που προσεγγίζουν το κοινό και αυξάνουν την ευαισθητοποίηση).

Η επικοινωνιακή στρατηγική ακολουθείται από ένα σχέδιο επικοινωνίας που καθορίζει αναλυτικά μια σειρά μέσων, υλικών και εφαρμοσμένων δράσεων, ευαισθητοποίησης και ενημέρωσης του κοινού, εκπαίδευσης και δικτύωσης, μέσω των οποίων η στρατηγική τίθεται σε εφαρμογή.

Η αποτελεσματική προστασία μιας τουριστικής περιοχής, όπως είναι οι παράκτιες αμμοθίνες με τους Κέδρους, επιτυγχάνεται μόνο όταν υπάρχει κατάλληλη διαχείριση και εξαρτάται σε μεγάλο βαθμό από τη συμπεριφορά των επισκεπτών προς το περιβάλλον. Για αυτό το λόγο η εκπαίδευση και η ενημέρωση

του κοινού για τη σημασία της διατήρησης και της προστασίας ενός φυσικού πλούτου είναι πρωτίστης σημασίας. Αποδέκτες αυτής της πληροφόρησης δεν αρκεί να είναι μόνο οι επισκέπτες των περιοχών αλλά και οι εμπλεκόμενοι φορείς. Προκειμένου να εξασφαλιστεί η μακροχρόνια προστασία και διατήρηση των περιοχών είναι απαραίτητο να δοθεί έμφαση στην ευαισθητοποίηση των νέων και στην περιβαλλοντική εκπαίδευση στα σχολεία.

## Introduction

Environmental Communication is the planned and strategic use of communication processes and media products to support effective policy-making, public participation and project implementation geared towards environmental sustainability (OECD, 1999 Working Paper of the Working Party on Development Cooperation and Environment). Despite its acknowledged impact, Environmental Communication is rarely integrated in development and/or conservation programs as a strategic tool. It is a two-way social interaction process enabling people to understand key environmental factors and their interdependencies and to respond to problems in a competent way. It aims not only at information dissemination but also at capacity building in social groups to solve or prevent environmental problems. Embedded in a well-defined communication strategy, it makes efficient use of methods, instruments and techniques which are well established in development communication, education, social marketing, public relations and non-formal training, etc. It is closely related to non-formal environmental education that is learning processes encompassing knowledge, values, socio-economic and technical skills related to procedures that facilitate the change of norms and practices towards sustainable development through problem solving action.

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. In Greece, they are mostly confined to the South of the country especially in the Regions of Crete and South Aegean. Their aesthetic and economic value has been widely recognized as they receive ample weight of the tourist industry; however, their physical and ecological functions have received little attention. They are facing various natural and anthropogenic pressures and are threatened mainly by tourism (mainly woodcutting, littering and trampling), forest fires, alien species, restricted natural regeneration of the *Juniperus* species, grazing and browsing, building pressure, habitat fragmentation, climate change and more importantly lack of public awareness. Rapid and uncontrolled tourism growth in combination with lack of environmental education and public awareness is

considered one of the most serious threats to this priority habitat throughout Greece.

In view of this, the Mediterranean Agronomic Institute of Chania, the National and Kapodistrian University of Athens and the Region of Crete (Forest Directorates of Chania and Lasithi) implemented a LIFE+ Nature project entitled “Actions for the conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean (Greece)”, known as JUNICOAST ([www.junicoast.gr](http://www.junicoast.gr)). The project started on January 2009 and was completed by August 2013.

The primary aim of the JUNICOAST project was to promote and enable the long term conservation of the coastal dunes with *Juniperus* spp. in Greece through:

- a) The consolidation and dissemination of a knowledge base for the protection, restoration, monitoring and evaluating of coastal dunes with *Juniperus* spp. habitats in Greece,
- b) Understanding, quantifying and halting natural and anthropogenic threats that contribute to the long term degradation of the habitat and
- c) Designing and implementing concrete conservation and public awareness/dissemination actions for the restoration and the long term protection of the coastal dunes with *Juniperus* spp. habitats in Crete.

Being a LIFE + demonstration project, public awareness and dissemination of the results were obligatory. The communication activities of the JUNICOAST project have been carried out on a National level using a multi-stakeholder communication strategy allowing the promotion of similar concrete conservation and dissemination actions in the South Aegean, disseminate the lessons learnt, promote and provide training of the trialed techniques and methods nationally, as well as raise public awareness ensuring the wider conservation of this priority habitat throughout Greece. Consequently, the development and the implementation of a **“communication strategy” were deemed necessary.**

The **objective** of this deliverable is to report on the communication strategy and the communication plan that have been developed and implemented within the framework of the Junicoast project.

For the purpose of this report, **“communication”** is defined as: “the activity of conveying information through the exchange of thoughts, messages, or information,



as by speech, visuals, signals, writing, or behavior. "**Communication strategy**" is "a well-planned series of actions aimed at achieving specific and clear goals through the use of communication methods, techniques and approaches". "**Communication plan**" "is a document describing the means by which project communications will occur and who need what information, how it will be communicated, where and how".

## The communication strategy

Information about dune systems, their values, characteristics, functions and dynamics were incorporated into a communication strategy to raise public awareness about basic understanding of the nature of dune systems and their role as a sand reserve for the beach. The Junicoast communication strategy provides a framework for communication and addresses various possible **communication channels** such as Internet/TV/radio stations/newspapers, **communication materials** such as brochures/posters/reports/videos/promotional materials and **communication activities** such as community and environmental education events/workshops/conferences, publications/networking.

The Junicoast communication strategy goals were:

- To promote and enable the long term conservation of the coastal dune with *Juniperus* spp. habitat in Greece and
- To design public awareness, education, training or networking activities for the protection and long term restoration of coastal dune with *Juniperus* spp. habitats.

Based on a process of stakeholder consultation ([Stakeholder Consultation & Community Survey for Chrysi island](#), [Gavdos island](#), [Kedrodasos](#), [Falasarna](#) and [Effectiveness evaluation of stakeholder consultation method](#)), the strategy identified several '**communication partner**' groups including: **central government, local authorities, local communities, tourism operators, environmental education practitioners, conservation practitioners, politicians, general public, media and relevant non-governmental organizations** (NGOs). The success of this strategy depends on the support of multiple stakeholders and provides an opportunity for these multiple stakeholders to implement various communication activities and to achieve the goals of the communication strategy and the main objectives of the communication plan.

The communication strategy was structured around four main questions:

**Why** do we want to communicate about coastal dunes with *Juniperus* spp.? i.e. what are the objectives of the communication, in terms of influencing peoples knowledge, attitudes, decisions and behavior,

**Who** are the communications partners with whom we need to communicate?

**What** will be the content of the communication, in order to meet the stated objectives?

**How** will the communication be conducted? i.e. what communication channels/materials/activities will be used?

The communication strategy was followed by a communication plan that defined a detailed sequence of communication channels and materials and implemented a set of awareness activities through which the strategy was put into effect.

## The communication plan

The Junicoast communication plan implemented the following public awareness, education, training and networking, activities:

- List of awareness, education, training or networking activities:
- Stakeholder consultation
- Development and implementation of a communication strategy,
- Website development,
- Implementation of an environmental education campaign,
- Training of stakeholders (forest directorate staff, government officers, etc),
- Production and dissemination of habitat protection and restoration guidelines,
- Dissemination of findings to the scientific community and Layman's report,
- Production of After-LIFE communication and conservation plans
- Design and installation of Signs
- Establishment of Scientific committee
- Establishment Stakeholder committee
- Networking with other similar LIFE projects

These activities were adjusted taking into account the results of all preparatory actions of the JUNICOAST project in Crete, nature conservation interests and other recreational uses of coastal dunes.

## The objectives

The **main objectives** of the Junicoast communication plan were:

- To promote and advertise the values of coastal dunes with *Juniperus* spp. to the general public and influence decisions-makers.
- To increase key stakeholder's understanding of the threats and pressures that coastal dunes with *Juniperus* spp. are facing and the importance of investing in their sustainable management,

- To raise the general public awareness on coastal dunes with *Juniperus* spp. and to encourage feedback and participation from various stakeholders,
- To guide stakeholders to implement formal and informal environmental education and information sharing activities in a more effective and coordinated way.

The **specific objectives** of each awareness, education, training or networking communication activity are shown in table 1.

Table 1. Specific objectives of each communication activity

Communication activity	Type of activity	Specific objectives
A6 Stakeholders' consultation	Awareness	Establish the stakeholders' level of awareness, perceived values, threats and recommendations for conservation of the habitat in their localities. Exchange of experiences among various stakeholders, Improve interactions and communications between various stakeholders, Promote the general public participation in the protection of habitat 2250*, Increase public awareness
D1 Development and implementation of a communication strategy	Awareness and education	Provide information (values, threats, pressures, code of conducts, etc) about habitat 2250* to the general public in various format, Promote the general public participation in the protection of habitat 2250*, Increase public awareness
D2 Website development	Awareness and education	Improve interactions and communications between various stakeholders, Provide detailed description of the project, its objectives, actions, progress and results, Increase public awareness
D3 Environmental education campaign	Awareness and education	Promote the general public participation in the protection of habitat 2250*, Exchange of experiences among various stakeholders, Provide school teachers with information on the conservation of habitat 2250*, Creation of an educational network, Increase public awareness

<b>Communication activity</b>	<b>Type of activity</b>	<b>Specific objectives</b>
D4 Training for habitat protection and restoration	Awareness and training	Improve capacity building (forest directorate staff, government officers, Transfer of know-how, Promote future best practices
D5 Habitat protection and restoration guidelines	Awareness and education	Promote future best practices, Transfer of know-how Increase public awareness
D6 Dissemination of findings and Layman's report	Awareness and education	Consolidation of knowledge base, Promote future best practices Increase public awareness
D7 Communication and conservation plans	Awareness and education	Contribute to the long-term dissemination of the project results after the end of the project, thus ensuring its long-term sustainability, Contribute to the long-term conservation of the habitat after the end of the project, thus ensuring its long-term sustainability Increase public awareness
C7 Design and installation of Signs	Awareness and education	Increase level of environmental awareness, Reduce visitors' onsite negative impacts
E3 Scientific committee	Awareness	Enhance the effective coordination of the project Advise and evaluate the scientific quality of the deliverables
E4 Networking with similar LIFE projects	Networking and awareness	Exchange of Know how among various European stakeholders working on coastal dunes
E5 Stakeholder committee	Awareness	Link the project with local and National administrative authorities Reduce potential expected risks related to the implementation of the project

### The target audiences

The communication plan was aimed at various stakeholders (national and local government officers, local communities, tourism operators, environmental education practitioners, conservation practitioners, politicians, general public, relevant NGOs). Each activity was designed to target a specific audience with clearly defined messages and implementing approaches.

The target audiences of each awareness, education, training or networking communication activity are shown in table 2.

**Table 2** Target audiences of each communication activity

<b>Communication activity</b>	<b>Target audiences</b>
A6 Stakeholders' consultations	Local communities National and local authorities Conservation practitioners Tourism operators Relevant NGOs
D1 Development and implementation of a communication strategy	General public School children Local communities Tourism operators National and Local authorities Relevant NGOs
D2 Website development	General public
D3 Environmental education campaign	General public School children Environmental education practitioners Local communities Tourism operators National and Local authorities Relevant NGOs
D4 Training for habitat protection and restoration	National and local authorities Conservation practitioners
D5 Production of habitat protection and restoration guidelines	Local communities National and local authorities Conservation practitioners Relevant NGOs
D6 Dissemination of findings and Layman's report	Local communities National and local authorities Scientific community Conservation practitioners

Communication activity	Target audiences
	Relevant NGOs
D7 Production of communication and conservation plans	General public Local communities National and Local authorities Relevant NGOs
C7 Design and installation of Signs	General public
E3 Scientific committee	Scientific committee members
E4 Networking with similar LIFE projects	Consortia working on similar LIFE projects Conservation practitioners Relevant NGOs
E5 Stakeholder committee	Local communities

### Defining messages

After setting the objectives and selecting the target audiences of each awareness, education, training or networking activity of the communication plan, **key messages** to increase the target audience's knowledge, influence their attitudes or affect their behaviors while on (**code of conduct**) and off sites were defined.

Since the level of knowledge are different in different groups, while the capacity for assimilation of knowledge and formation of new behaviors in the area are varied, diversified forms and combinations of materials and training methods were needed.

Key messages were realistic and focused on behavior that is relevant to the target audience and that can actually be adopted. They gave the audience specific advice or alternatives. They did not suggest simply stopping something – they informed the audience what to do instead. They were simple and easily understandable, culturally and socially appropriate, technically correct, brief, relevant, practical and positive.

Key messages were defined by answering the following question: *what is it that you want to say to these audiences to convince them, to move them to action in the service of your objectives?* They were developed on the basis of the stakeholder consultation which involved asking people about their information needs.

The main employed key messages were:



Priority to Nature: "preserving coastal dunes with *Juniperus* spp. is preserving our future"

Enjoy the beauty and preserve the values of coastal dunes with *Juniperus* spp.: "upon leaving, take with you your experiences and memories. Leave behind **ONLY** your footprints"

Coastal dunes with *Juniperus* spp. are "**priority habitats**" which means types of habitats in danger of disappearance,

Coastal dunes with *Juniperus* spp. are under **threat** from human activities,

It is your responsibility to support the conservation of coastal dunes with *Juniperus* spp.

Economic growth depends **also** on the sustainable management of coastal dunes with *Juniperus* spp.

Within these broad key messages, there were more specific messages employed depending on the target audience. These specific messages are listed in table 3. Some messages are relevant to all stakeholders, while others are relevant to specific target audience.

**Table 3** Target audiences and specific messages

Key messages	Target audiences	Specific messages
Coastal dunes with <i>Juniperus</i> spp. are a "priority habitat" which means types of habitats in danger of disappearance	General Public* and Local communities	What are coastal dunes with <i>Juniperus</i> spp., where are they found and why they are in danger of disappearance The biodiversity of coastal dunes with <i>Juniperus</i> spp. is globally important and unique.
	National and local authorities**	National and local authorities have an obligation to protect and sustainably manage coastal dunes with <i>Juniperus</i> spp.
Coastal dunes with <i>Juniperus</i> spp. are under threat from human activities	General Public* and Local communities	Logging, urban development, tourism, forest fires, alien species, coastal erosion, habitat fragmentation, and more importantly lack of public awareness are the major threats to coastal dunes with <i>Juniperus</i> spp. You have a major role to play in reducing these threats (code of conduct while on site) Management of coastal dunes with <i>Juniperus</i> spp. is under-resourced resulting in loss in the economic benefits they provide and there is a need to mobilize resources on a sustainable basis.
	National and local authorities**	National and local authorities have an obligation to protect and to reduce the impacts of various threats.
It is your responsibility to support the conservation of coastal dunes with <i>Juniperus</i> spp.	General Public*	Raise the level of awareness of others about coastal dunes with <i>Juniperus</i> spp., their national and international importance. Utilize and provide experience/ advice on best management practice Report illegal activities to the relevant authorities
	National and local authorities**	Mobilize political support for the conservation of coastal dunes with <i>Juniperus</i> spp. Invest in communication about the values of coastal dunes with <i>Juniperus</i> spp. Provide adequate investment in forest management.
	Local communities	Participate in the process of decision-making Develop improved communication practices Demonstrate good governance and responsible forest management Identifying training / support needs of coastal


Key messages	Target audiences	Specific messages
		dunes Communities Assist with analysis of issues, problems and threats Provide cultural and local knowledge about specific sites
Economic growth depend <u>also</u> on the sustainable management of coastal dunes with <i>Juniperus</i> spp.	General Public*, National and local authorities** and Local communities	Coastal dunes with <i>Juniperus</i> spp. contribute significantly to the national and local economy

\*Including environmental education/conservation practitioners, Media and relevant NGOs

\*\*Including politicians

Since habitat 2250\* is a particularly **attractive destination** for **outdoor recreation** and **camping activities** in Greece, the need to inform and educate the general public is of utmost importance. Consequently, a two-languages **code of conduct** (see table 4, in Greek and English) to promote the general public participation in the protection of habitat 2250\*, to increase their public awareness and to advise visitors and campers how to behave while on-site was developed by the project consortium.

Table 4 Visitors' Code of conduct while on site (in English and Greek)

	Code of conduct in English	Code of conduct in Greek
	Dear visitors,  The following practices would minimize the negative impact on the environment and maintain the natural beauty of the habitat.	Αγαπητοί επισκέπτες,  Οι ακόλουθες πρακτικές θα ελαχιστοποιήσουν τις αρνητικές επιπτώσεις στο περιβάλλον και θα βοηθήσουν στη διατήρηση της φυσικής ομορφιάς του οικοτόπου.
	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 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.

	<b>Code of conduct in English</b>	<b>Code of conduct in Greek</b>
	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.	Μην πετάτε σκουπίδια. Αφήστε τον οικότοπο καθαρότερο απ' ότi τον βρήκατε, μαζέψτε τα σκουπίδια και μεταφέρετέ τα στους κάδους συλλογής ή στους κατάλληλους κάδους ανακύκλωσης.
	Walk on established paths. To prevent damage on vegetation and to reduce soil erosion, please, walk on established paths, where possible.	Περπατάτε στα μονοπάτια. Όπου είναι εφικτό προσπαθήστε να περπατάτε στα μονοπάτια. Ετσι δεν καταστρέφονται τα νεαρά κέδρα και η υπόλοιπη χλωρίδα, ενώ αποφεύγεται η διάβρωση του εδάφους.
	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.	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.
	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	Μην ενοχλείτε. Σεβαστείτε την προσωπική ζωή, την κουλτούρα και τις συνήθειες των άλλων επισκεπτών και των ανθρώπων που ζουν στην περιοχή.
	Upon leaving, take with you your experiences and memories. Leave behind ONLY your footprints!	Φεύγοντας, πάρτε μαζί σας τις εμπειρίες σας και τις αναμνήσεις σας. Αφήστε πίσω ΜΟΝΟ τις πατημασιές σας!
	According to the Greek legislation (Law 392/76 & Law 2160/93) free camping is prohibited.	Σας ενημερώνουμε ότι σύμφωνα με την Ελληνική νομοθεσία (Ν.392/76 & Ν.2160/93) η ελεύθερη κατασκήνωση απαγορεύεται.

### Identifying channels

Communication channels are the means by which messages are set out to target audiences. The communication "means" or "channels" makes the message visual and/or audible to the target audience. Communication means have strong impact on the effectiveness of communication because they form the link between the project and the target audience. There is a wide variety of possible channels:

**Interpersonal channels** such as Public consultations, workshops, letter writing, direct contacts, face to face conversation, telephone, group discussions, excursions and sites visits

**Printed channels** such as brochures and leaflets, letters, technical or research publications, conference proceedings, journals and magazines, reports

**Visual Channels** such as visitor center, posters/display/exhibitions, slides, video

**Mass media channels** such as TV broadcasts, radio broadcasts, newspaper articles, press conference, press releases

**Digital channels** such as websites, CD ROMs, E-mails (newsletter)

The choice of means to communicate the message depends on the communication targets, the characteristics of the target audience, the message, the budget and your experience with the means.

The communication channels and the target audiences of each awareness, education, training or networking communication activity are shown in table 5.

**Table 5** Communication channels and target audiences of each communication activity

Communication activity	Communication channels	Target audiences
A6 Stakeholders' consultations	Interpersonal channels Printed channels Mass media channels Visual channels Digital channels	Local communities National and local authorities Conservation practitioners Relevant NGOs
D1 Development and implementation of	Mass media channels Printed channels Interpersonal channels	General public School children Local communities

<b>Communication activity</b>	<b>Communication channels</b>	<b>Target audiences</b>
a communication strategy	Visual channels Digital channels	Tourism operators National and Local authorities Relevant NGOs
D2 Website development	Digital channels	General public
D3 Environmental education campaign	Interpersonal channels Mass media channels Printed channels Visual channels Digital channels	General public School children Environmental education practitioners Local communities Tourism operators National and Local authorities Relevant NGOs
D4 Training for habitat protection and restoration	Interpersonal channels Printed channels Mass media channels Visual channels Digital channels	National and local authorities Conservation practitioners
D5 Production of habitat protection and restoration guidelines	Printed channels Digital channels	National and local authorities Conservation practitioners Relevant NGOs
D6 Dissemination of findings and Layman's report	Printed channels Digital channels	Local communities National and local authorities Scientific community Conservation practitioners Relevant NGOs
D7 Production of communication and conservation plans	Printed channels Digital channels	General public Local communities National and Local authorities Relevant NGOs
C7 Design and installation of Signs	Interpersonal channels Mass media channels Visual channels	General public
E3 Scientific committee	Interpersonal channels Printed channels Mass media channels Digital channels	Scientific committee members
E4 Networking with similar LIFE projects	Interpersonal channels Printed channels Mass media channels	Consortia working on similar LIFE projects Conservation practitioners

Communication activity	Communication channels	Target audiences
	Visual channels Digital channels	Relevant NGOs
E5 Stakeholder committee	Interpersonal channels Printed channels Mass media channels Visual channels Digital channels	Local communities

### Communication activities planning

The effectiveness of the communication plan depends also greatly on "organization". At this step, a clear division of tasks and responsibilities is essential for success. During the planning phase various deliverables and milestones should be set. If these prerequisites are not met, one risks missing vital steps and deadlines. It must be clear how the team will operate and how communication activities will be coordinated and budgeted.

The following questions were considered when planning the communication activities:

- Which tasks need to be performed during the preparation of the communication activities?
- Which tasks need to be performed during the execution of the communication activities?
- Which persons need to be involved, in which way, during which phases?
- Who coordinates the joint efforts?
- Which deliverables and milestones can be identified, and who is responsible for checking?

The following budget categories were considered in calculating the budget of each communication activity:

**Personnel:** how many employees need to be involved and how much time do they have to work on the project?

**Travel and subsistence:** What are the costs of spending on travel to distribute communication materials or to implement workshops?

**External assistants:** do you need to hire external assistant and experts? If so, how much will this cost?

**Consumables:** What are the costs to design and produce the communication materials and other organizational costs?

**Others:** What are the costs of the infrastructures for the information signs, various presentation equipments, workshops catering and conference fees?

An organized time-table, a detailed budget of each activity and a list of deliverables and milestones with specific deadlines were created for the implementation of the communication activities (see annex 1 time table, budget, list of deliverables and milestones of the communication activities) in order to clarify the sequence of activities required for the communication plan, to keep them on track and to ensure that all activities are executed in a timely manner and within the foreseen cost of each activity. Moreover, the tasks to be performed during the preparation and the execution (see table 6) of each communication activity and their timing were identified. The tasks to be performed and the timing of each awareness, education, training or networking communication activity are shown in table 6.

**Table 6.** Tasks to be performed during the preparation and the execution of each communication activity

Communication activity	Tasks to be performed	Timing
A6 Stakeholders' consultations	Workshop preparation and organization Community surveys Stakeholders interviews Power point presentations Reports on Stakeholder consultation and community surveys for all Cretan sites	Onset of the project
D1 Development and implementation of a communication strategy	Leaflets content and design Posters content and design Code of conduct content and design Key messages T-shirts stamp and content Media publicity content and format	Monthly, throughout the project duration



Communication activity	Tasks to be performed	Timing
	Radio spot content Short-Video content and scenes YOUTUBE presentation Information signs and Notice boards Power point presentations	
D2 Website development	Project website ( <a href="http://www.junicoast.gr">www.junicoast.gr</a> ) content and design	Onset of the project
D3 Environmental education campaign	Educational workshops preparation and organization Power point presentations Content of the educational guideline on coastal dunes with <i>Juniperus</i> spp. Students weeks preparation and organization Local events/guided visits preparation and organization Children fairy tale content and design Education network organization	Monthly, throughout the project duration
D4 Training for habitat protection and restoration	Training workshops preparation and organizations Power point presentations Content of training material	End of the project
D5 Production of habitat protection and restoration guidelines	Content of the guideline for habitat protection and restoration (training material)	Mid way of the project
D6 Dissemination of findings and Layman's report	Preparation/submission of scientific posters and scientific publications Layman's report content and design	Monthly, throughout the project duration, Layman's report by the end of the project
D7 Production of After-LIFE communication and conservation plans	Communication and conservation plans content and design	End of the project
C7 Design and installation of Signs	Content of directional/information signs Design of directional/information signs Fabrication of directional/information signs Installation of directional/information signs	Monthly, throughout the project duration

Communication activity	Tasks to be performed	Timing
E3 Scientific committee	Preparation and organization of scientific committee meetings Power point presentations Minutes of scientific committee meetings	Once per year, throughout the project duration
E4 Networking with similar LIFE projects	Official contacts with consortia working on similar LIFE projects Preparation and organization of networking meetings Power point presentations Report on networking with other similar LIFE projects Report on the success and failures of previous experiences in Europe	Throughout the project duration
E5 Stakeholder committee	Preparation and organization of stakeholder committee meetings Power point presentations Minutes of stakeholder committee meetings	Once per year, throughout the project duration

### Cooperation

The achievement of the objectives of the communication plan is possible only through an effective participatory approach and an efficient cooperation between the various stakeholders involved in the protection and conservation of coastal dunes. The isolation and lack of communication between various stakeholders is definitely counter-productive. For this reason, "cooperation" between the **project partners** and the **various stakeholders** is of utmost importance for the proper implementation of the communication plan.

To achieve the complex and time consuming communication with many different target groups on many different issues, the cooperation between the **project partners** and the **local authorities** is valuable for the improvement of knowledge among civil servants and the improvement of communication between the authorities and the public. Moreover, the cooperation between the **project partners**, the **local authorities**, the **local communities** and the **visitors** is needed for the reduction of the visitors' effects and negative impacts on coastal dunes.

## Communication Plan implementation

The implementation of the communication plan was conducted following a detailed action plan (see table 7) developed in terms of the specific objectives of each communication activity, the target audience, the messages we wanted to deliver, the communication channels, the tasks to be performed before and during the implementation process, the duration and budget of each activity.

The timing of each communication activity was closely coordinated with the other activities of the communication plan. The timing was consistent with the development of stakeholders' awareness and understanding of the issues at stake.

The action plan was not rigid but characterized by a flexibility, which allowed adjusting the activities to the evolution of the situation and to the results obtained with the stakeholders and communities.

**Table 7.** Detailed action plan of each communication activity

<b>Communication activity</b>	<b>Specific objectives</b>	<b>Target audiences</b>	<b>Communication Channels</b>	<b>Tasks to be performed</b>	<b>Timing</b>
A6 Stakeholders' consultations	<p>Establish the stakeholders' level of awareness, perceived values, threats and recommendations for conservation of the habitat in their localities,</p> <p>Increase public awareness</p> <p>Exchange of experiences among various stakeholders,</p> <p>Improve interactions and communications between various stakeholders,</p> <p>Promote the general public participation in the protection of habitat 2250*</p>	<p>Local communities</p> <p>National and local authorities</p> <p>Conservation practitioners</p> <p>Relevant NGOs</p>	<p>Interpersonal channels</p> <p>Printed channels</p> <p>Mass media channels</p> <p>Visual channels</p> <p>Digital channels</p>	<p>Workshop preparation and organization</p> <p>Community surveys</p> <p>Stakeholders interviews</p> <p>Power point presentations</p> <p>Reports on Stakeholder consultation and community surveys for all Cretan sites</p>	Onset of the project
D1 Development and implementation of a communication strategy	<p>Provide information (values, threats, pressures, code of conducts, etc) about habitat 2250* to the general public in various format,</p> <p>Promote the general public participation in the protection of habitat 2250*,</p> <p>Increase public awareness</p>	<p>General public</p> <p>School children</p> <p>Local communities</p> <p>Tourism operators</p> <p>National and Local authorities</p> <p>Relevant NGOs</p>	<p>Mass media channels</p> <p>Printed channels</p> <p>Interpersonal channels</p> <p>Visual channels</p> <p>Digital channels</p>	<p>Leaflets content and design</p> <p>Posters content and design</p> <p>Code of conduct content and design</p> <p>Key messages</p> <p>T-shirts stamp and content</p> <p>Media publicity content and format</p> <p>Radio spot content</p> <p>Short-Video content and scenes</p> <p>YOUTUBE presentation</p>	Monthly, throughout the project duration

Communication activity	Specific objectives	Target audiences	Communication Channels	Tasks to be performed	Timing
				Information signs and Notice boards Power point presentations	
D2 Website development	Improve interactions and communications between various stakeholders, Provide detailed description of the project, its objectives, actions, progress and results, Increase public awareness	General public	Digital channels	Project website ( <a href="http://www.junicoast.gr">www.junicoast.gr</a> ) content and design	Onset of the project
D3 Environmental education campaign	Promote the general public participation in the protection of habitat 2250*, Exchange of experiences among various stakeholders, Provide school teachers with information on the conservation of habitat 2250*, Creation of an educational network, Increase public awareness	General public School children Environmental education practitioners Local communities Tourism operators National and Local authorities Relevant NGOs	Interpersonal channels Mass media channels Printed channels Visual channels Digital channels	Educational workshops preparation and organization Power point presentations Content of the educational guideline on coastal dunes with <i>Juniperus</i> spp. Students weeks preparation and organization Local events/guided visits preparation and organization Children fairy tale content and design Education network organization	Monthly, throughout the project duration
D4 Training for habitat	Improve capacity building (forest directorate staff, government officers,	National and local authorities	Interpersonal channels	Training workshops preparation and organizations	End of the project

<b>Communication activity</b>	<b>Specific objectives</b>	<b>Target audiences</b>	<b>Communication Channels</b>	<b>Tasks to be performed</b>	<b>Timing</b>
protection and restoration	Transfer of know-how, Promote future best practices	Conservation practitioners	Printed channels Mass media channels Visual channels Digital channels	Power point presentations Content of training material	
D5 Production of habitat protection and restoration guidelines	Promote future best practices, Transfer of know-how Increase public awareness	National and local authorities Conservation practitioners Relevant NGOs	Printed channels Digital channels	Content of the guideline for habitat protection and restoration (training material)	Mid way of the project
D6 Dissemination of findings and Layman's report	Consolidation of knowledge base, Promote future best practices Increase public awareness	Local communities National and local authorities Scientific community Conservation practitioners Relevant NGOs	Printed channels Digital channels	Preparation/submission of scientific posters and scientific publications Layman's report content and design	Monthly, throughout the project duration, Layman's report by the end of the project
D7 Production of After-LIFE communication and conservation plans	Contribute to the long-term dissemination of the project results after the end of the project, thus ensuring its long-term sustainability, Contribute to the long-term conservation of the habitat after the	General public Local communities National and Local authorities	Printed channels Digital channels	Communication and conservation plans content and design	End of the project

<b>Communication activity</b>	<b>Specific objectives</b>	<b>Target audiences</b>	<b>Communication Channels</b>	<b>Tasks to be performed</b>	<b>Timing</b>
	end of the project, thus ensuring its long-term sustainability Increase public awareness	Relevant NGOs			
C7 Design and installation of Signs	Increase level of environmental awareness, Reduce visitors' onsite negative impacts	General public	Interpersonal channels Mass media channels Visual channels	Content of directional/information signs Design of directional/information signs Fabrication of directional/information signs Installation of directional/information signs	Monthly, throughout the project duration
E3 Scientific committee	Enhance the effective coordination of the project Advise and evaluate the scientific quality of the deliverables	Scientific committee members	Interpersonal channels Printed channels Mass media channels Digital channels	Preparation and organization of scientific committee meetings Power point presentations Minutes of scientific committee meetings	Once per year, throughout the project duration
E4 Networking with similar LIFE projects	Exchange of Know how among various European stakeholders working on coastal dunes	Consortia working on similar LIFE projects Conservation practitioners Relevant NGOs	Interpersonal channels Printed channels Mass media channels Visual channels Digital channels	Official contacts with consortia working on similar LIFE projects Preparation and organization of networking meetings Power point presentations Report on networking with other similar LIFE projects Report on the success and	Throughout the project duration

<b>Communication activity</b>	<b>Specific objectives</b>	<b>Target audiences</b>	<b>Communication Channels</b>	<b>Tasks to be performed</b>	<b>Timing</b>
				failures of previous experiences in Europe	
E5 Stakeholder committee	Link the project with local and National administrative authorities Reduce potential expected risks related to the implementation of the project	Local communities	Interpersonal channels Printed channels Mass media channels Visual channels Digital channels	Preparation and organization of stakeholder committee meetings Power point presentations Minutes of stakeholder committee meetings	Once per year, throughout the project duration



## Monitoring and Evaluation

Monitoring and evaluation (M&E) is a critical and indispensable function of the plan. Without feedbacks, it will be very difficult to take wise decisions regarding the way to make the best use of the resources available for the plan or the way to maximize the effect of the following activities. Simple M&E indicators must therefore be developed for the communication activities in terms of time, quantity, quality, implications, and costs (United Nations Development Program, Poverty and Environment Project 2006 - 2009).

Three types of indicators which helped to assess the overall impact of the communications strategy were measured:

1. Activity indicators such as:

- number of communication material produced,
- number of events held.

2. Short-term result indicators such as:

- number of copies of communication material distributed;
- number of actual participants in an activity;
- number of articles or news items published or aired;
- number of persons targeted by a particular activity who actually recall the information, understood the message, or appreciated the campaign.

3. Medium to long-term result indicators such as:

- policy changes: new or changed policy to support the ideas put forward in the campaign.

Moreover, within the framework of the preparatory action A7 “Elaboration of long term monitoring protocols and selection of indicators” of the Junicoast project, a **long term monitoring protocol** that enable the **evaluation of the effectiveness of the dissemination actions** as compared to the initial situation, objectives and expected results was developed (D-A.7: [A compendium with monitoring protocols to](#)

[evaluate the effectiveness of concrete conservation and dissemination actions](#)). For more details on this long term monitoring protocol, please see annex 3.

Below, the performed tasks and the short-term indicators of each communication activity are presented:

#### **Stakeholders' consultations**

The following tasks have been performed:

1 stakeholder workshop at MAICh and

1 community workshop in Gavdos

<b>Event</b>	<b>Date</b>	<b>Number of Participants</b>	<b>number of articles or news published/aired</b>
Stakeholder workshop	25-02-2009	45	7
Community workshop in Gavdos	05-07-2009	22	-

35 interviews with stakeholders

Community surveys in local municipalities (Gavdos, Kissamos, Kantanou-Selinou, and Ierapetra)

<b>Survey</b>	<b>Number of surveys</b>	<b>Number of questionnaires</b>
Community surveys in local municipalities	4	738
Stakeholder survey	1	35

Production of 1 report with stakeholder and community consultation result per site (4) (see deliverables D-A.6.1.1: [Stakeholder Consultation & Community Survey for Chrysi island](#), D-A.6.1.2: [Stakeholder Consultation & Community Survey for Gavdos island](#), D-A.6.1.3: [Stakeholder Consultation & Community Survey for Kedrodasos](#), and D-A.6.1.4: [Stakeholder Consultation & Community Survey for Falasarna](#))

Production of 1 report with results of stakeholder consultation method effectiveness evaluation (see deliverable D-A.6.2: [Effectiveness evaluation of stakeholder consultation method](#))

**Development and implementation of a communication strategy**

The following tasks have been performed:

20.000 project leaflets have been produced and distributed

7.000 project T-shirts have been produced and distributed

One (1) 30 minutes documentary video entitled: "A journey to coastal dunes with *Juniperus* spp." has been produced and 200 copies distributed

A visitor code of conduct has been developed and issued (see table 4, in Greek and English)

1 Radio spot in Greek and English have been produced and broadcasted during four (4) summers seasons (May to October)

Approximately 30 project articles have been published in local or National newspapers

15 notice boards describing the project have been produced and displayed at strategic public places

1.200 colored posters have been produced and distributed

6 TV interviews on coastal dunes with *Juniperus* spp.

1 slide show presentation on coastal dunes with *Juniperus* spp. have been uploaded on Youtube (<http://www.youtube.com/watch?v=odRJzZBZKzw>)

Production of 1 report on the design and implementation of the communication strategy

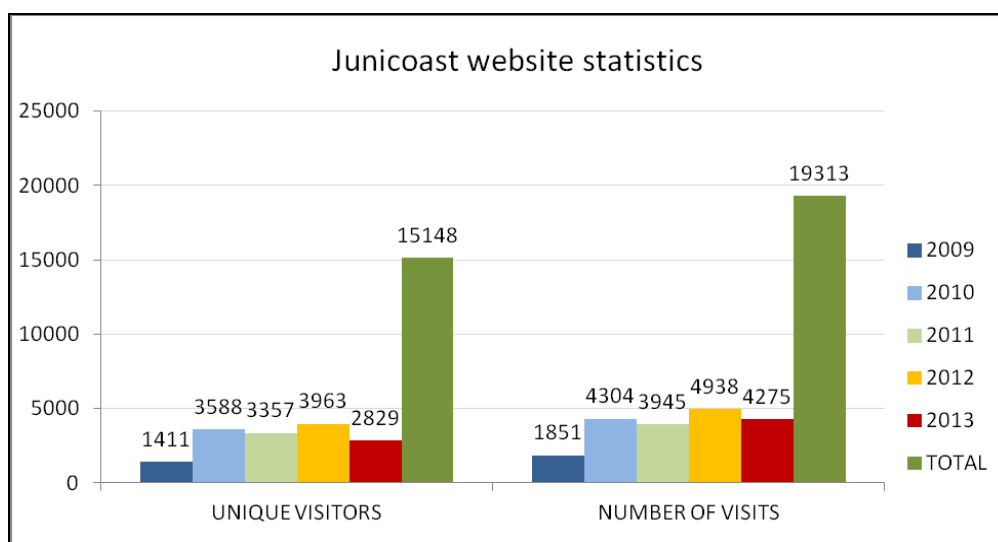
**Website development**

The following tasks have been performed:

Website developed and launched ([www.junicoast.gr](http://www.junicoast.gr)) on March 2009

Website regular maintenance and update

Web statistics available from March 2009 until August 2013



### Environmental education campaign

The following tasks have been performed:

3 workshops for environmental educators

Workshop title	Date	Location	Number of Participants	number of press release or articles
Biodiversity in Crete: "Research, conservation and environmental education actions in Chania"	14-12-2010	MAICh	23	1
Coastal dunes with Juniperus spp.	04-05-2011	Environmental education center of Ierapetra	25	2
Biodiversity protection and creation of school gardens	31-01-2013	MAICh	57	2

4 student weeks and 11 student days

Event	Date	Location	Number of students	Number of schools	number of press release or articles
1st student week	03-07/05/ 2010	MAICh	432	7	2

2nd student week	09-13/05/2011	MAICh	270	7	-
3rd student week	23-27/04/2012	MAICh	370	10	2
4th student week	01-05/04/2013	MAICh	333	09	1
1 University student day	21-06-2011	MAICh	20	1	-
10 student days	09/2012-04/2013	MAICh	639	10	-

20 local events (Target audience: school students, teachers and general public)

Nr.	Date	Location	Number of participants	Type of event
1	5-7-2009	Gavdos	25	Meeting with campers
2	10-01-2010	Kissamos	25	School visit
3	03-03-2010	Kedrodasos	25	Field visit
4	15-04-2010	Kedrodasos	33	Field visit
5	04-08-2010	Kedrodasos	30	Meeting with campers
6	24-06-2011	Chania/Akrotiri	93	Information workshop
7	19-07-2011	Chania/Akrotiri	85	Information workshop
8	03-04/03/2012	Naxos	93	Information workshop
9	03-05-2012	Kedrodasos	40	Field visit
10	08-05-2012	Kantanos	45	School visit
11	09-05-2012	Kedrodasos	50	Field visit
12	10-05-2012	Kedrodasos	45	Field visit
13	16-05-2012	Kedrodasos	55	Field visit
14	01-06-2012	Gavdos	7	School visit
15	28-11-2012	Chania/Mournies	75	School visit
16	15-04-2013	Kedrodasos	34	Field visit

17	25-04-2013	Naxos	100	School visit
18	24-05-2013	Gavdos	8	School visit
19	28-06-2013	Rhodes	60	Information workshop
20	27-08-2013	Chania	75	Final event

Production (4.000 copies) and distribution of a fairy tale entitled: "A journey of a sand grain to the coastal dunes with *Juniperus* spp."

Production and distribution of a teachers' guide for coastal dunes with *Juniperus* spp.

Creation of a small "model" garden with sand dunes and keystone species of habitat 2250\* at the botanical garden of MAICH

Establishment of a local [educational network](#) of schools and environmental education bodies to facilitate and promote basic environmental education on coastal dunes with *Juniperus* spp.

2 workshops for tourism representatives

<b>Title of workshop for tourism representatives</b>	<b>Date</b>	<b>Location</b>	<b>Number of Participants</b>	<b>Number of press release or articles</b>
Tourism and sustainable management of coastal dunes with <i>Juniperus</i> spp.	16-11-2012	Ierapetra	20	1
Tourism and coastal dunes with <i>Juniperus</i> spp.	02-07-2013	Paliochora	11	-

### **Training for habitat protection and restoration**

The following tasks have been performed:

2 training workshops with stakeholders involved in the protection and management of coastal dunes with *Juniperus* spp. (forest directorate staff, government officers)

<b>Training Workshop</b>	<b>Date</b>	<b>Location</b>	<b>Number of Participants</b>	<b>Number of press release or articles</b>
--------------------------	-------------	-----------------	-------------------------------	--

1st	24-04-2013	Naxos	23	3
2nd	27-08-2013	Chania	22	2

### **Production of habitat protection and restoration guidelines**

The following tasks have been performed:

Production (50 hard copies and 200 copies on CDs) and distribution of a "habitat protection and restoration guidelines" to stakeholders involved in the protection and management of coastal dunes with *Juniperus* spp. (Ministry of Environment, Ministry of Agriculture, Forest Service, Municipalities, Region of Crete, Region of South Aegean etc.)

### **Dissemination of findings and Layman's report**

The following tasks have been performed:

Publication of the results of action A.6 (stakeholders' consultation) in the "Environmental Management" peer reviewed scientific journal (*Apostolopoulou, E., Drakou, E.G., Padiaditi, K., 2012, The role of participation in the management of Greek Natura 2000 sites: evidence from a cross-level analysis, Journal of Environmental Management, Vol. 113, pp 308-318*

Publication under review of the results of action A.2 (dune system plant community structure and composition) in the "Plant Ecology and Diversity" peer reviewed scientific journal (*Delipetrou, P., Ghosn, D., Kazakis, G., Remoundou, H., Nyktas, P. and Vogiatzakis, I.N., Vegetation diversity and dynamics of coastal dunes with Juniperus spp. in Crete, Gavdos and Chrysi*).

Poster presentation (NKUA) 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

Poster presentation (NKUA) 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 Technical University of Crete (external assistant, action A.1) and MAICH presented a manuscript entitled: "Imaging Sand Dunes at Kedrodasos Coastal Area,

Crete, Greece" at the 6<sup>th</sup> Congress of Balkan Geophysical Society – held on the 3<sup>rd</sup> to the 6<sup>th</sup> of October 2011 in Budapest, Hungary

Production of 1 report on the dissemination of findings

Production (200 hard colored copies) and distribution of the Layman's report

### **Production of After-LIFE communication and conservation plans**

The following tasks have been performed:

Production (100 hard colored copies) and distribution of the After-LIFE communication plan

Production (100 hard colored copies) and distribution of the After-LIFE conservation plan

### **Design and installation of Signs**

The following tasks have been performed:

Installation of 4 information signs in Kedrodasos

Installation of 7 information signs in Gavdos (2 in Sarakiniko, 2 in Agios Ioannis and 3 in Lavrakas)

Installation of 3 information signs in Chrysi (2 in the East habitat and 1 in the West habitat)

Installation of 2 information signs in Falasarna

All information signs have been installed inside the habitat on strategic locations (main entrance and exit points of the habitat and other strategic points on the main path).

### **Scientific committee**

The following tasks have been performed:

Establishment of the scientific committee

First scientific committee meeting and minutes of the 1<sup>st</sup> meeting

Second scientific committee meeting and minutes of the 2<sup>nd</sup> meeting

Third scientific committee meeting and minutes of the 3<sup>rd</sup> meeting

Fourth scientific committee meeting and minutes of the 4<sup>th</sup> meeting



Meeting	Date	Location	Number of Participants	Number of press releases or articles
1st scientific committee meeting	26-27.09.2009	MAICh	13	1
Site visit	27.09.2009	Kedrodasos	13	1
2nd scientific committee meeting	21.10.2010	MAICh	13	2
3rd scientific committee meeting	25-26.10.2012	MAICh	15	2
Site visit	26.10.2012	Kedrodasos	15	2
4th scientific committee meeting	27.08.2013	MAICh	7	2

### Networking with similar LIFE projects

The following tasks have been performed:

JUNICOAST meets PROVIDUNE (LIFE07NAT/IT/000519)

JUNICOAST meets JUNIPERCY (LIFE10NAT/CY/000717)

JUNIPERCY meets JUNICOAST

Announcement of the meeting in Cagliari in [LIFE Newsletter](#) on September 2012

Production of 1 report on networking with other similar LIFE projects

Production of 1 report on the success and failures of previous experiences in Europe

Meeting	Date	Location	Number of Participants	Number of press releases or articles
JUNICOAST meets PROVIDUNE	26-29.06.2012	Cagliari-Italy	9	1
JUNICOAST meets JUNIPERCY	21-22.11.2012	Nicosia-Cyprus	18	-
JUNIPERCY meets JUNICOAST	25-26.10.2012	Chania-Greece	6	2

### Stakeholder committee

The following tasks have been performed:

Establishment of the stakeholder committee

First stakeholder committee meeting and minutes of the 1<sup>st</sup> meeting

Second stakeholder committee meeting and minutes of the 2<sup>nd</sup> meeting

Third stakeholder committee meeting and minutes of the 3<sup>rd</sup> meeting

Fourth stakeholder committee meeting and minutes of the 4<sup>th</sup> meeting

Regular meetings with representatives of municipalities (Gavdos, Ierapetra, Kissamos, Kantanou-Selinou, Naxos)

Meeting	Date	Location	Number of Participants	Number of press releases or articles
1 <sup>st</sup> stakeholder committee meeting	25-02-2009	MAICh	10	1
2 <sup>nd</sup> stakeholder committee meeting	22-10-2010	MAICh	13	-
3 <sup>rd</sup> stakeholder committee meeting	29-03-2013	FDC	11	-
4 <sup>th</sup> stakeholder committee meeting	27-08-2013	MAICh	11	2

## Conclusions

Outdoor recreation often causes difficult dilemmas in coastal dune management. On one hand, recreation is considered a legitimate and appropriate function of many areas, which are sometimes primarily protected and managed for recreation purpose. In such cases, dunes are either treated as extension of sand beaches, with beach-like forms of recreation, or seen as easily accessible areas for enjoying a natural landscape, plants or wildlife. On the other hand, recreation can result in a loss of the natural qualities and, even worse, in a complete destruction of the area. There is no simple solution to the recreation dilemma. **Only, through adequate sustainable management and proper visitors behavior while on-site (see code of conduct); nature-based tourism can be a compatible and a complementary land use** (Wight, 1993). The future of nature-based tourism is strongly resource dependent and requires access to high quality natural environments.

Since many people will continue to visit the habitats in the future, more effort is needed to mitigate their adverse physical impacts on the sites. **Future impact control measures such as those described in the "after-LIFE conservation and communication plans" of the JUNICOAST project would not only contribute to the long term dissemination of the project results and to the long term conservation of the habitats after the end of the project but would also allow minimizing the effects of visitors while on-site.**

Throughout the project duration and during the implementation of the various communication activities of this communication plan, **it became clear that people are more inclined to accept restrictions when they know the reasons for the rules. It became also obvious that the success of conservation and recreation management depends to a large extent on information and environmental education programmes** mainly those targeted to the **visitors of the sites, the local communities and most importantly to the children. Why most importantly to children? Because environmental education is about values, attitudes, ethics and actions. It is a way of thinking and a way of practice. It is our responsibility to equip our children with the attitudes, values, knowledge and skills necessary to rethink and reshape current patterns of action and to secure healthy, just and sustainable future for all.**

## List of References

Deliverable D-A.6.1.1: [Stakeholder Consultation & Community Survey for Chrysi island](#). Mediterranean Agronomic Institute of Chania, Greece. LIFE07NAT/GR/000296 “Actions for the Conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean (Greece).

Deliverable D-A.6.1.2: [Stakeholder Consultation & Community Survey for Gavdos island](#). Mediterranean Agronomic Institute of Chania, Greece. LIFE07NAT/GR/000296 “Actions for the Conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean (Greece).

Deliverable D-A.6.1.3: [Stakeholder Consultation & Community Survey for Kedrodasos](#). Mediterranean Agronomic Institute of Chania, Greece. LIFE07NAT/GR/000296 “Actions for the Conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean (Greece).

Deliverable D-A.6.1.4: [Stakeholder Consultation & Community Survey for Falasarna](#). Mediterranean Agronomic Institute of Chania, Greece. LIFE07NAT/GR/000296 “Actions for the Conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean (Greece).

Deliverable D-A.6.2: [Effectiveness evaluation of stakeholder consultation method](#). Mediterranean Agronomic Institute of Chania, Greece. LIFE07NAT/GR/000296 “Actions for the Conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean (Greece).

Deliverable D-A.7: [A compendium with monitoring protocols to evaluate the effectiveness of concrete conservation and dissemination actions](#). Mediterranean Agronomic Institute of Chania, Greece. LIFE07NAT/GR/000296 “Actions for the Conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean (Greece).

OECD, (1999). Applying Communication Tools Towards Sustainable Development. Working Paper of the Working Party on Development Cooperation and Environment.

United Nations Development Program, Poverty and Environment Project (PEP, 2006 – 2009). Harmonizing Poverty Reduction and Environmental Goals in Policy and Planning for Sustainable Development.

Wight, P. 1993). Eco-tourism: ethics or eco-sell? Journal of Travel Research, 31(3), 3–9.

## Annex 1 Time table, budget, list of deliverables and milestones of the communication activities

Time table of the communication activities

Actions/Communication activity	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
A6 Stakeholder consultation	■	■	■	■																
C7 Design and installation of Signs					■	■	■	■	■	■	■	■	■	■	■	■				
D1 Development and implementation of a communication strategy	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
D2 Website development	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
D3 Implementation of an environmental education campaign	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
D4 Training of stakeholders					■	■	■	■					■	■	■	■	■	■	■	■
D5 Production and dissemination of habitat protection and restoration guidelines					■	■	■	■	■	■	■	■	■	■	■	■				
D6 Dissemination of findings to the scientific community and Layman's report					■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■
D7 Production of After-LIFE communication and conservation plans					■	■	■	■					■	■	■	■	■	■	■	■
E3 Scientific committee	■	■					■	■					■	■	■		■	■	■	
E4 Networking with other similar LIFE projects	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■	■				
E5 Stakeholder committee	■	■					■	■					■	■	■		■	■	■	

Budget of the communication activities

Communication activity	Budget categories (€)				
	Personnel	Travel and subsistence	External assistants	Consumables	Others
A6 Stakeholders' consultations	20.000	3.600	-	400	-
D1 Development and implementation of a communication strategy	20.000	1.000	18.500	35.000	-
D2 Website development	31.500	-	-	1.500	-
D3 Environmental education campaign	33.000	12.000	2.000	5.000	10.000 catering
D4 Training for habitat protection and restoration	22.000	10.000	11.000	5.000	-

<b>Communication activity</b>	<b>Budget categories (€)</b>				
D5 Production of habitat protection and restoration guidelines	10.000	-	4.000	6.000	-
D6 Dissemination of findings and Layman's report	24.000	2.000	-	5.000	5.000 conference fees
D7 Production of After-LIFE communication and conservation plans	Free of Charge (LIFE + 2007 Common Provisions)				
C7 Design and installation of Signs	24.400	10.000	5.000	9.000	20.000 Infra-structures
E3 Scientific committee	12.000	20.000	-	-	-
E4 Networking with similar LIFE projects	5.000	6.500	5.000	-	-
E5 Stakeholder committee	5.000	-	-	-	-

## List of deliverables of the communication activities

<b>Communication activity</b>	<b>Name of the deliverable</b>	<b>Deadline</b>
A6 Stakeholders' consultations	Report on community surveys and stakeholder consultation Effectiveness evaluation report on stakeholders consultation methods	30.09.2009
D1 Development and implementation of a communication strategy	Report on Communication strategy	31-8-2013
D5 Production of habitat protection and restoration guidelines	Habitat protection and restoration guidelines	31-12-2012
D6 Dissemination of findings and Layman's report	Report on dissemination of findings Layman's report	31-8-2013

<b>Communication activity</b>	<b>Name of the deliverable</b>	<b>Deadline</b>
D7 Production of After-LIFE communication and conservation plans	After-Life communication plan After-Life conservation plan	31-8-2013
E4 Networking with similar LIFE projects	Report on Networking with other similar LIFE projects Report on the success and failures of previous experiences in Europe	31-12-2012

## List of milestones of the communication activities

<b>Communication activity</b>	<b>Name of the milestone</b>	<b>Deadline</b>
D2 Website development	Project website activation	31-3-2009
D3 Environmental education campaign	Educational workshops, students week, local events and networks	31-8-2013
D4 Training for habitat protection and restoration	Training workshops	31-8-2013
C7 Design and installation of Signs	Installation of directional and information signs	31-12-2012
E3 Scientific committee	Establishment of the scientific committee	31-3-2009
E5 Stakeholder committee	Establishment of the stakeholders committee	31-3-2009

## Annex 2 Advantages and disadvantages of various communication channels

<b>Interpersonal Communication channels</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Points to remember</b>
Public consultations	Good venue for two-way communication. Reaches large and well-defined groups. Opportunity for stakeholders to voice opinions and ask questions.	Often too large-scale to reach common agreements. People sometimes afraid to speak in public. Time limitations and difficult when atmosphere is hostile	Often required by law with the purpose to involve stakeholders in planning process.
Workshops	Good venue for two-way communication, to gain insight in issues and ideas, and to stimulate knowledge & skills development.	Good preparation and facilitation needed. Transparency needed throughout about purpose and actions with outcome.	This is an active instrument, which needs true participation of all involved.
Meetings - discussions	Good venue for two-way communication; more suitable to reach consensus because of smaller groups.	Needs skilled facilitators or discussion leaders.	Informal process to explore a specific issue, involving different stakeholders on a basis of equality.
Focus group discussions	Good way to gain insight in issues and perceptions, and to stimulate involvement and active participation.	Careful preparation needed to guide the participants through the process.	Small group of stakeholders or citizens that can be used to assess reactions to plans. It has no formal advisory role.
Excursions and sites visits	Visit to the site under discussion.	Can be, but not necessarily, expensive.	Local youth, school classes, citizens
Personal interviews	Very effective to obtain in-depth knowledge about issues and perceptions among	Very time-consuming and costly.	Designing and conducting interviews is specialized task.



<b>Interpersonal Communication channels</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Points to remember</b>
	different stakeholders.		
Telephone	Informal, direct and two-way contact, making it easily accessible to many people.	Can be costly and time-consuming.	Information numbers that people can ring to get information or give feedback. Service has to be made known.

<b>Printed communication channels</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Points to remember</b>
Brochures & Leaflets	Can reach large number of people; costs can be controlled – when produced in large number cost efficient, can be kept in store to answer questions.	Little chance of feedback; if distributed in the wrong way easily overlooked; mass distribution will result in high wastage, limited space to explain details.	Plan the distribution with care; always pre-test a draft with the target group to check if the message gets across.
Letters	Personal mode of communication, relatively high chance of being noticed and read by intended target group (when personalized); mail-merge software makes it easier to send personalized letters to larger groups.	Unsuitable for very large groups.	Requires up to date database with names, addresses.
Reports	Can present information in detail	Can easily be overlooked because of high number reports published; little feedback option.	Develop guidelines for level and tone of voice; lay out can attract attention, plan distribution and publicity well in

<b>Printed communication channels</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Points to remember</b>
			time.
Journals & Magazines	Good way to reach specialized audience; articles are usually printed without cost (free publicity).	Limited circulation, little feedback.	Keep lists of specialized journals and names, phone numbers of editors, built a relation with most important editors.

<b>Visual communication channels</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Points to remember</b>
Visitor center	Attractive way to present information; if staff available direct feedback opportunity; chance to appeal to all senses: strong impact.	Will not reach target groups that are not interested. Costly to built/rent and maintain.	How to attract the right target groups, how to ensure financial continuity.
Displays/Exhibitions / Posters	Attractive way to present information, if staff is present there is a direct feedback opportunity.	Can be costly.	Go for lightweight, portable and easily changeable systems; Don't present too much information.
Slides	Attractive, eye catching, potential for strong impact. Useful support to other communication activities. Direct feedback often possible.	Needs special equipment and darkened room, slightly tricky in use.	Always test equipment beforehand.
Video	Suitable to address groups of various sizes. Easy to	Expensive to produce, needs professional skills,	

<b>Visual communication channels</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Points to remember</b>
	transport and to reproduce. Different options for distribution.	no feedback possible, difficult to change.	

<b>Mass Media communication channels</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Points to remember</b>
TV broadcasts	Potential for high impact, accessible for large audience, audience can be targeted.	With increasing number of channels more difficult to reach large audience, no control over final message (dependent on editors and journalists).	
Radio broadcasts	High local interest; accessible for large audience, audience can be targeted, low production costs.	Contact does not mean communication, lacks personal appeal, scheduling can be problematic, no control over final message (dependent on editors and journalists).	Keep an updated list of media addresses and contact persons, follow up phone call increases chances of publication, maintain good relations with important editors.
Newspaper articles	Usually wide circulation; information can be distributed quickly.	No control over final message (dependent on editors and journalists).	
Press conference	Chance to deliver more complex information to media; has opportunity for	Staff needs to be trained in media contact.	Requires careful preparation.

<b>Mass Media communication channels</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Points to remember</b>
	feedback.		
Press releases	Cheap way to draw attention of media to newsworthy events; suitable for fairly straightforward issues; can be produced on short term.	Media receive large numbers of press releases; difficult to attract attention, requires writing skills, no direct feedback from journalists.	Keep an updated list of media addresses and contact persons, follow up phone call increases chances of publication, maintain good relations with important editors.

<b>Digital communication channels</b>	<b>Advantages</b>	<b>Disadvantages</b>	<b>Points to remember</b>
Websites	Attractive way to present high variety of information, feedback and interaction possible, relatively easy to update, insight in number of users, potential to reach high number of people.	Not accessible for everyone, requires technical expertise	How to attract target groups to the website? Ensure linkages with popular target group sites and ensure high ranking with search engines.
CD ROMs	Suitable medium to present complex and high quantity of information, relatively cheap to reproduce, easy to distribute.	Requires special equipment to use, requires technical expertise to develop.	Check CD Rom use in target group first.
E-mails (newsletter)	Effective medium to approach small and large number of people, cheap, fast, direct, possibility for feedback.	Difficult to stand out in large number of e-mails sent each day.	Necessary to attract attention right away. Be direct, avoid long messages.

(Source: National strategy (2001) for Communication, Education and Public Awareness (CEPA) in support of wetland conservation in Hungary).

### Annex 3 Long-term monitoring protocol for the evaluation of the effectiveness of the dissemination action

**Indicator:** Level of public/environmental awareness

#### **Sampling design**

The level of public/environmental awareness will be estimated by conducting a social survey i.e. interviews with visitors at each site. Questionnaires will be used in order to establish the visitors' level of environmental awareness regarding the habitat sensitivity. Questionnaires will be conducted in English or Greek, depending on the native language of the interview subject (visitors). Visitors will receive a verbal introduction of the aims of the survey and a copy of the questionnaire to help them choose their answers. Interviews will be transcribed and content analysis will be performed for qualitative responses (Sarantakos 1993). Social surveys will be conducted at all Cretan study areas namely Gavdos (Sarakiniko, Agios Ioannis and Lavrakas), Chrysi (East and West sites), and Kedrodasos. Base line data is available (see Deliverable A.5.1 "Visitors' impact assessment"). The time of re-sampling will be summer 2012.

#### **Field methods**

The following section provides an overview of the field operations in order to conduct the social survey. These procedures are described as "*Standard Operating Procedures*" (SPOs).

##### **SOP#1: Preparations and equipment setup prior to field season**

The field crew is advised to complete the following activities to prepare the field work in order to establish the visitors' level of environmental awareness regarding the habitat sensitivity.

- Review the entire protocol

- Get familiar with the questionnaire

- Retrieve and review prior data for reference

- Visit actual study areas to become familiar with each site

Inspect equipment and compile the items listed below

Equipment List

Hard-copy map of the study site

Hard supports

Questionnaires

Digital camera

First-Aid kit

Pens

#### SOP#2: Conducting the questionnaires

Visitors will receive a verbal introduction of the aims of the survey and a copy of the questionnaire to fill up their answers.

#### SOP#3: Data management

Data management involves field data entry, daily backup, office data transfer, storage and archiving, and meta-data documentation. Field data entry should be done on a Desktop computer equipped with Access-compatible software (Excel or Microsoft Access). The file should be labeled with the study area, theme, and person's initials. The data file should be located in a folder labeled with the study area. Data backup should be done at the end of data entry and backed up in two different places.

#### SOP#4: Reporting

After the fieldwork and data management are completed, a report that documents field activities and describes the types and amount of data that were collected should be produced. In addition, an Appendix Table should be created listing Plot ID, Date, observers. Visitors' perception about the main threats, the protection status of the sites and the reasons why the sites are protected should be provided.

Facility and equipment needed for the work are limited to a computer, statistical software for analysis and word-processing software for reporting.

#### SOP#5: Preparations and equipment storage at the conclusion of field season

At the end of the field season, it is imperative that all questionnaires be inventoried. The data and resulting products (e.g., reports) should also be organized and archived. To accomplish this, the field crew should follow these steps:

- Organize and photocopy all questionnaires and notes. Give all data to the project manager for safekeeping

- Make sure all data has been entered into the electronic database and saved in the proper folder

- Complete end-of-season report

## Questionnaire template



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

JUNICOAST "Actions for the conservation of coastal dunes with *Juniperus* spp. in Crete and the South Aegean (Greece)" is a 56 months (2009-2013) LIFE+ Nature and Biodiversity project funded under the first call for the EU LIFE+ programme (2007-2013). JUNICOAST aims to promote and enable the long term conservation of the coastal dunes with *Juniperus* spp. habitats in Greece. The project described the current situation in all Cretan sites (Chrysi, Gavdos, Kedrodasos-Elafonisi and Falasarna), designed/implemented habitat restoration actions, visitor management interventions, and actions for public awareness and environmental education.

**This survey is being carried in order establish the visitor's level of environmental awareness regarding coastal dunes with Junipers.**

Date:

Gender:

Country of origin:

Age:

**Please indicate whether you believe the following statements are TRUE or FALSE:**

	<u>TRUE</u>	<u>FALSE</u>	<u>Don't Know</u>
Chrysi is protected because of the presence of:			
... the <i>carretta carretta</i> turtle			
... the sea shells			
... the antiquities - ancient monuments			
... the coastal dunes with juniper trees habitat			
Other reason? (please specify)			
Chrysi is a National park			
Chrysi is a NATURA 2000 site			
Chrysi is a designated Site of Community Importance			
Chrysi has a designated Special Protection Area for birds			
Chrysi is <b>NOT</b> protected			

**Please indicate your level of agreement or disagreement with the following statements: Please circle your response**

	Strongly Disagree	Disagree	Neither	Agree	Strongly Agree
Visitor camping damages the <u>Juniper trees and coastal dunes</u>	1	2	3	4	5
The island's beaches with <u>Juniper trees and coastal dunes</u> are well managed.	1	2	3	4	5
Visitors should be restricted from going to certain parts of the island in order to protect the <u>Juniper trees and coastal dunes</u> .	1	2	3	4	5
The island's beaches with <u>juniper trees and coastal dunes</u> <b>do not</b> require further protection	1	2	3	4	5
Visitors should be required to carry their personal rubbish back from the island	1	2	3	4	5

**What of the following do you believe represent a threat to the coastal dunes with Junipers in Chrysi? Please tick all that are relevant**

Reduced natural regeneration		Rubbish and litter waste management		Animal grazing	
One day visitors		Cutting of branches and roots		Fire	
Campers		Lack of environmental awareness		Human waste management	
Other?					

<b>Your education</b>	No formal education		
	Primary education		Post-secondary (non-tertiary) education
	Secondary education		Tertiary education (university)

**Thank you for completing this questionnaire**  
**To find out more about the JUNICOAST, please visit [www.junicoast.gr](http://www.junicoast.gr)**



## Annex 4 Pictures and links to communication materials and events



Stakeholder consultation workshop at MAICH (25-02-2009)



3rd stakeholder committee meeting (Forest Directorate of Chania, 29-03-2013)




Community workshop in Gavdos (05-07-2009)



On site discussion with campers (Kedrodasos 4-8-2010)





**Αγασθαίο επισκέπτες,**

Βρίσκεστε στη διαδρομή της φυσικής ομορφιάς του ακρωτηρίου:

**Μην κόβετε κάτω από τους κέρκους**

ακόμα και αν φαίνονται άβυσσοι, βράζουν στη συγκράτηση ή άμμο, στη στήριξη των κέρκων και αποτελούν σημαντικό παράγοντα της φυσικής ομορφιάς των ακρωτηρίων.

**Μην πετάτε σκουπίδια**

Αφήστε τον κόσμο καθαρότερο απ'ότι τον βρήκατε, μαζέψτε τα σκουπίδια και μεταφέρετε ή στους κάδους συλλογής ή στους κατάλληλους κάδους ανακύκλωσης.

**Παρατάτε στα μονοπάτια**

Όπου είναι φηκτό προσπαθήστε να περπατάτε στα μονοπάτια. Έτσι δεν καταστρέφονται τα νιφάρ κέρκων και η υπέροχη γλάφυρα, ενώ αποφεύγεται η ομίχλη και η διάβρωση του εδάφους.

**Αποφύγετε το άσπρα φούτες**

Τα κέρκων δεν είναι πορφυροκόκκινος είδος και δεν αναγεννιούνται μετά τη φωτιά. Μην ανάψετε φωτιά κοντά στα κέρκων ή κοντά σε πυκνή βλάστηση, υπάρχει πάντα κίνδυνος πυρκαγιάς.

**Μην ενοχλείτε**

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

**Φεύγοντας**

Πάρτε μαζί σας τις εμπειρίες σας και τις αναμνήσεις σας,

**Αφήστε πίσω ΜΟΝΟ τις πατημασιές σας!**

**Dear visitors,**

The following practices would allow minimizing 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 trapping the sand and so 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 bins.

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

**Avoid lighting fires**  
The juniper is not a fire-resistant species and it does not regenerate after fire. Do not light fires near the Junipers or near dense vegetation, there is always a risk of fire.

**Respect your fellow visitors and the host community**  
Keep noise levels to a minimum to avoid disturbing others, respect the privacy, cultural heritage, habits and traditions of host communities. Seek permission before photographing other people.

**Do not remove or mark any feature of the natural environment and cultural sites, take with you only your experiences and memories, leave behind you ONLY your footprints!**

UFI + 0094 on Benidorm2016 (2007 - 2015) <http://ufi0094.com/2016>  
«¿Por qué, por qué te vas? ¿Por qué te vas? ¿Por qué te vas? ¿Por qué te vas?»  
Beni Ayuda (Udable) Esperanza (Udable) (2016)  
Website: [www.juniperproject.org](http://www.juniperproject.org) E-mail: [info@juniper.org](mailto:info@juniper.org)

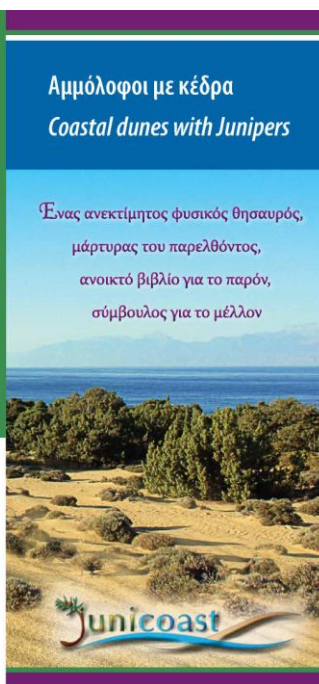
AYUNTAMIENTO DE BENIDORM  
C/ ALFONSO X EL MAGNO, 1  
46100 BENIDORM (VALENCIA)  
TEL: 966 88 00 00  
FAX: 966 88 00 01  
WWW.BENIDORM.ES

AYUNTAMIENTO DE BENIDORM  
C/ ALFONSO X EL MAGNO, 1  
46100 BENIDORM (VALENCIA)  
TEL: 966 88 00 00  
FAX: 966 88 00 01  
WWW.BENIDORM.ES

AYUNTAMIENTO DE BENIDORM  
C/ ALFONSO X EL MAGNO, 1  
46100 BENIDORM (VALENCIA)  
TEL: 966 88 00 00  
FAX: 966 88 00 01  
WWW.BENIDORM.ES

Αμμόλοφοι με κέδρα  
*Coastal dunes with Junipers*

Ένας ανεκτίμητος φυσικός θησαυρός,  
μάφτυρας του παρελθόντος,  
ανοικτό βιβλίο για το παρόν,  
σύμβουλος για το μέλλον

[illegible]

### Coastal dunes with *Juniperus*

Coastal dunes with *Juniperus* spp. (*Juniper*) are distributed along the sandy coasts of Southern and Western Europe, on Mediterranean and Atlantic coasts. This rare and beautiful habitat has been classified as a "priority habitat" by the Habitat Directive which means types of habitats in danger of disappearance. In Greece, it can be found mainly in the Aegean islands and Crete.

Today, coastal dunes with *Juniperus* spp. are threatened by uncontrolled tourism, logging, forest fires, restricted natural regeneration of *Juniperus*, grazing and lack of public awareness. However, global climate changes might have an adverse effect on coastal juniper dunes. These threats need to be managed in a sustainable way in order to ensure the habitats long term conservation.

JRC provides assistance for the conservation of coastal dunes with *Juniperus* spp. in Enderaia (northern Aegean, Greece) in a 4 year (2009–2012) LIFE+ Marine and Biodiversity project funded under the 1st call for the EU LIFE+ programme (2007–2013). JRC004352 aims to coordinate and enhance 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; B) by taking present natural and anthropogenic threats and implementing actions for its protection and restoration; and finally by C) providing support for better environmental governance in July/Aug 2009 sites through stakeholder involvement and training.

The project will describe the current situations in all 10 study sites, will design and implement habitat restoration actions, transfer management interventions, and actions for public awareness and environmental education.

## Πρωτογενής παραγωγή του προγράμματος

### Project sites

**Κρήνη - Costa**

1. Χιλιόβουνο (Dagupan)  
Kochanov - Pichinche
2. Bulokpaya - Achuar
3. Monte Izapay - Chiriqu Island
4. Bopay Salinas - Awaek Island  
☒ Tapachay - Santhika  
☒ Ayay Salinas - Ayay Islet  
☒ Fagadep - Luvuvu

Το πρώτο της Κρήνη το προγράμμα είναι σε διάφορα της προγράμματα.

in Costa Rica all project authors will be implemented.

**Κόστα Ρίκα - South Region**

1. Monte Pajón - Abasco Island
2. Monte Halcón - Awaek Island
3. Monte Salinas - Awaek Island
4. Monte Salinas - Awaek Island

Το πρώτο της Κρήνη είναι το προγράμμα in Costa Rica, αναπτύσσοντας τον κεντρικό του δείκτη, τον κεντρικό δείκτη του προγράμματος.

in South Region the actions of public awareness and dissemination of results will be implemented.





JUNICOAST T-shirts



Project article in local newspaper

#### Πώς μπορούμε να σώσουμε τις αμμοθίνες με κέδρους στη Ρόδο

Posted on Ιουλίου 3, 2013

☆☆☆☆☆ Rate This

Το πρόγραμμα Junicoast μας δείχνει το δρόμο



Αποψή του ακροατηρίου στην ημερίδα του Ακταίου



Ο Γιώργος Καζάνης από το Μεσογειακό Αγρονomicό Ινστιτούτο Χανίων

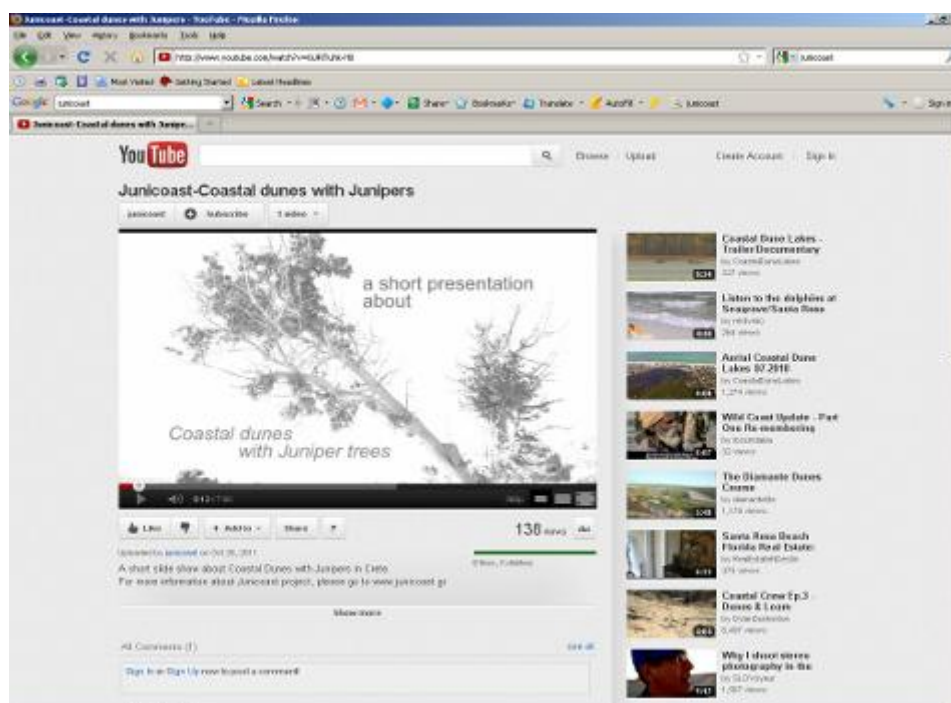
Local information workshop in Rhodes island  
(<http://oikologiarodiaka.wordpress.com/>)







TV interview



Slide show presentation on YOUTUBE

(<http://www.youtube.com/watch?v=odRJzBZKzw>)





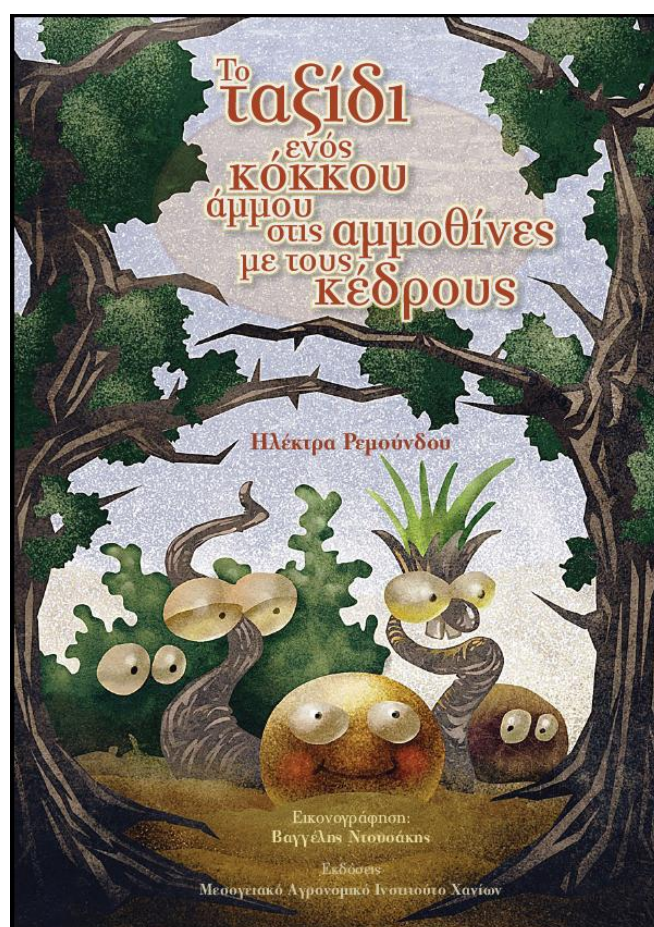
Workshop for environmental educators (14-12-2010)



1st student week at MAICH (03-07/05/2010)



Local event (school visit to Kedrodasos, 15-04-2013)



JUNICOAST fairy tale







3rd scientific committee meeting (MAICH, 25-26/10/2012)



Training workshop (Naxos, 24-04-2013)



3rd scientific committee meeting (Site visit, Kedrodasos. 26-10-2012)



Information sign in Sarakiniko Gavdos





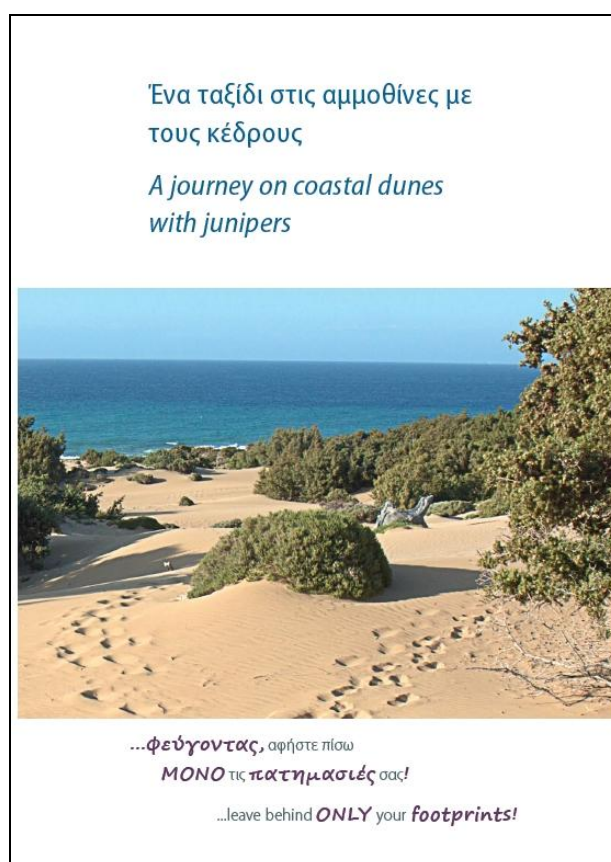
Networking with similar LIFE projects (PROVIDUNE, Sardinia, 28-06-2012)



Networking with similar LIFE projects (JUNIPERCY, Nicosia, 21-11-2012)



Final event (27-08-2013)



Video

## Links to submitted deliverables and other communication materials

Deliverables: <http://www.junicoast.gr/en/publications/deliverables/>

Deliverable A.6.1.1: [Stakeholder Consultation & Community Survey for Chrysi island](#)

Deliverable -A.6.1.2: [Stakeholder Consultation & Community Survey for Gavdos island](#)

Deliverable -A.6.1.3: [Stakeholder Consultation & Community Survey for Kedrodasos](#)

Deliverable -A.6.1.4: [Stakeholder Consultation & Community Survey for Falasarna](#)

Deliverable -A.6.2: [Effectiveness evaluation of stakeholder consultation method](#)

Deliverable -E.2 [Effectiveness evaluation results on dissemination actions](#)

Deliverable -E.4.1: [Report on networking with other similar LIFE projects](#)

Deliverable -E.4.2: [Report on the successes & failures of previous experiences in Europe](#)

Deliverable D.6.1 [Dissemination of findings to the scientific community](#)

Deliverable D.5: [Habitat protection and restoration guidelines](#):

Deliverable D.7.1: [After-LIFE communication plan](#):

Deliverable D.7.2: [After-LIFE conservation plan](#):

Deliverable D.6.2: [Layman's report](#): <http://www.junicoast.gr>

[Project Leaflet](#): <http://www.junicoast.gr>

[Poster](#): <http://www.junicoast.gr>

[Fairytale](#): <http://www.junicoast.gr>

[Video](#): <http://www.junicoast.gr>

[Radio spot](#): <http://www.junicoast.gr>

[YouTube presentation](#): <http://www.youtube.com/watch?v=odRJzBZKzw>

[Press releases, articles and other media publicity](#): <http://www.junicoast.gr/en/publications/publicity/>

[Teacher's guide](#):

[http://www.junicoast.gr/documents/0000/0056/Annex\\_7\\_1\\_Action\\_D3\\_Educational\\_Booklet.pdf](http://www.junicoast.gr/documents/0000/0056/Annex_7_1_Action_D3_Educational_Booklet.pdf)

[Educational network](#): [http://www.junicoast.gr/en/networking/environmental\\_education\\_network/](http://www.junicoast.gr/en/networking/environmental_education_network/)

[Scientific presentations](#): [http://www.junicoast.gr/en/publications/scientific\\_presentations/](http://www.junicoast.gr/en/publications/scientific_presentations/)