ΓΕΩΠΟΝΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ
AGRICULTURAL UNIVERSITY OF ATHENS

LIFE ANDROS PARK

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"Conservation of priority species and habitats of Andros Island protected area integrating socioeconomic considerations"

ACTION A.1

Final Report
on the Plant Communities and their Seasonal and Spatial Variation of the Target Habitat including the Results of the Base Study

AGRICULTURAL UNIVERSITY OF ATHENS

April 2019

ΓΕΩΠΟΝΙΚΟ ΠΑΝΕΠΙΣΤΗΜΙΟ ΑΘΗΝΩΝ AGRICULTURAL UNIVERSITY OF ATHENS
ΙΝΣΤΙΤΟΥΤΟ ΑΓΡΟΤΙΚΗΣ ΟΙΚΟΝΟΜΙΑΣ ΚΑΙ ΚΟΙΝΩΝΙΟΛΟΓΙΑΣ (ΙΝΑΓΡΟΚ) ΕΛΛΗΝΙΚΟΣ ΓΕΩΡΓΙΚΟΣ ΟΡΓΑΝΙΣΜΟΣ - ΔΗΜΗΤΡΑ
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Contents

Executive Summary

During Action A.1 the flora and vegetation of the Vori and Lefka sites were studied. Specimens from all plant species growing within the boundaries of the study sites, as well as in neighbouring areas were collected. Species collections were made on parallel and transverse transects to the streams, in order to cover all different habitat types of the study area. Plant collections were made at different seasons in order to cover the flowering periods for all plant species of the area.

The flora of the study areas consists of 234 vascular plant taxa. The majority of the plant species have a wide distribution in the Mediterranean region or even larger areas. Most aquatic species or species of wet habitats are common in the riparian habitats of the Aegean islands, with the exception of some species (e.g. *Primula vulgaris*) that are mainly distributed in mainland areas.

The endemic element is represented by 12 taxa, most of them inhabiting dry slopes close to the streams. Two flagship plant species of Andros Island (i.e., *Galanthus ikariae*, *Scilla andria*) grow within the priority habitat 91E0* in Lefka and Vori stream, respectively. The endemic species collected are *Centaurea raphanina* subsp. *mixta*, *Crepis neglecta* subsp. *graeca, Filago cretensis, Galanthus ikariae*, *Hymenonema graecum, Erysimum senoneri* subsp. *senoneri, Dianthus diffusus, Scilla andria, Silene pentelica, Sedum eriocarpum* cf. subsp. *cycladicum, Hypericum cycladicum* and *Limonium proliferum*. All these species are endemic to Greece and some of them have restricted distribution ranges confined in southern Greece. The most important endemic plant species of the study site are *Galanthus ikariae*, *Scilla andria* and *Hypericum cycladicum*. These species will be included in the monitoring program and the ex situ conservation actions (living collections will be kept at the Botanical Garden and seed accessions will be deposited at the Seed Bank of AUA).

Data from the national Project «Infrasrtucture development of large-scale spatial data (1:5000) for the terrestrial protected areas of Natura 2000 network» has been used in order to compile habitat types maps of the study sites. Using the Orthophoto maps of the Greek National Cadastre we produced a habitat type map and a vegetation unit map of the study sites. Nine habitat types were recognized: Sand dunes of Malcolmietalia, Floating vegetation of water loving plants in rivers, Mediterranean high grass and sedge meadows (Molinio-Holoschoenion), Reeds, Phrygana with *Sarcopoterium spinosum*, Greek *Quercus coccifera* forests, Forests of oriental Plane (Platanion orientalis), Thermomediterranean galleries (Nerio-Tamariceteae) Alluvial residual Alnus forests (Alnion glutinoso-incanae).

For the needs of the present Project, current vegetation units distributed at the study sites were mapped, irrespectively of the habitat type maps created for the needs of the project

«Infrasrtucture development of large-scale spatial data (1:5000) for the terrestrial protected areas of Natura 2000 network». Vegetation maps of Vori and Lefka streams include the following vegetation units: Sedge, Reed, Alnus glutinosa, Nerium, Platanus, Evergreen shrub.

An assessment of the habitat types and the vegetation units of the study sites was implemented. Regarding the priority habitat type 91E0*, B and C assessment has been assigned in Vori and Lefka sites, respectively. Vori wetland is one of the most important wetlands of Andros Island. In the wetland as well as along the streambed there are multiple threats that are interrelated. Flooding events have destructed alder and platanus stands, have carried and deposited alluvial material in adjacent meadows, cultivated fields and terraces, as well as within the riverbed and delta, altering wetland's structure. The wetland has been largely enclosed by sedimentary materials (soil, tree branches, and dry canes) that hinder the smooth flow of water, forming a permanent water cover and anaerobic conditions locally throughout the year. A road construction that crosses the wetland along the seaside also prevents wetland drainage. Permanently stagnant waters cover a large part of Vori estuaries, mainly at the NE part of the wetland, resulting to the loss of all alder trees at this part of the wetland.

Regarding the structure and composition of Vori alder stand, a complete absence of alder regeneration characterizes the whole delta area. All alder trees are ± coincident, with younger trees about 7-10 years old to be present in some cases along the stream. Alder forms a pure stand at the delta area and sparse *Salix alba* and *Platanus orientalis* trees exist in some cases. There is not a real shrub layer. Lianas, mainly *Vitis vinifera* subsp. *sylvestris* and *Hedera helix*, climb on alder trees oppressing them. The understorey of alder stand is mainly occupied by *Carex pendula* and *Equisetum telmateia*. *Typha domingensis* also exists in permanently flooded sites, accompanying mainly by *Scirpoides holoschoenus*, *Juncus acutus* and *Tripidium ravennae* at the borders of alder stand. As alder stands of Andros form the southernmost limits of this habitat type, several characteristic species of the habitat (e.g. several *Carex* spp. and *Chaerophyllum* spp.) are totally missing. The floristic composition, however, of the Vori alder stand is similar to those distributed in central and southern Greek mainland. Alder stand degradation is evident by the replacement of alder mainly by *Rubus sanctus* and *Arundo donax* in inland locations and along the river, and by sedges towards the coastline.

Εκτενής περίληψη

Στο πλαίσιο της Δράσης Α.1 μελετήθηκε η χλωρίδα και η βλάστηση των περιοχών μελέτης στα ρέματα Βόρης και τη Λεύκας. Συλλέχθηκαν δείγματα από όλα τα φυτικά είδη που εντοπίσθηκαν να αναπτύσσονται εντός των ορίων των περιοχών μελέτης, καθώς και σε γειτονικές θέσεις. Οι συλλογές των ειδών πραγματοποιήθηκαν σε κάθετες και παράλληλες διατομές σε σχέση με τα ρέματα, ώστε να καλυφθούν όλα τα ενδιαιτήματα που υπάρχουν στις περιοχές μελέτης. Οι συλλογές πραγματοποιήθηκαν, επίσης, σε διαφορετικές εποχές του έτους ώστε να καλυφθούν οι περίοδοι ανθοφορίας όλων των φυτικών ειδών των περιοχών μελέτης.

Η χλωρίδα των περιοχών μελέτης περιλαμβάνει 234 είδη αγγειωδών φυτών. Τα περισσότερα είδη έχουν ευρεία εξάπλωση στην περιοχή της Μεσογείου ή και σε ακόμη ευρύτερες περιοχές. Τα περισσότερα είδη που εντοπίσθηκαν στα υγρά ενδιαιτήματα των περιοχών μελέτης είναι κοινά σε παρόχθια ενδιαιτήματα και άλλων νησιών του Αιγαίου. Εξαίρεση αποτελούν ορισμένα είδη (π.χ. *Primula vulgaris*) που κυρίως εξαπλώνονται σε ηπειρωτικές περιοχές.

Το ενδημικό στοιχείο εκπροσωπείται από 12 taxa, τα περισσότερα από τα οποία αποικίζουν τις ξηρές πλαγιές των λόφων που περιβάλλουν τα ρέματα. Δύο εμβληματικά φυτικά είδη της Άνδρου (*Galanthus ikariae* και *Scilla andria*) αναπτύσσονται εντός του τύπου οικοτόπου προτεραιότητας 92Ε0*. Τα ενδημικά είδη που συλλέχθηκαν είναι τα *Centaurea raphanina* subsp. *mixta*, *Crepis neglecta* subsp. *graeca, Filago cretensis, Galanthus ikariae*, *Hymenonema graecum, Erysimum senoneri* subsp. *senoneri, Dianthus diffusus, Scilla andria, Silene pentelica, Sedum eriocarpum* cf. subsp. *cycladicum, Hypericum cycladicum* και *Limonium proliferum*. Όλα αυτά τα είδη είναι ενδημικά στην Ελλάδα και ορισμένα από αυτά έχουν περιορισμένες γεωγραφικές εξαπλώσεις στη Νότια Ελλάδα. Τα σημαντικότερα ενδημικά φυτικά είδη των περιοχών μελέτης είναι τα *Galanthus ikariae*, *Scilla andria* και *Hypericum cycladicum*. Αυτά τα είδη θα συμπεριληφθούν στο πρόγραμμα παρακολούθησης ειδών και στις δράσεις εκτός θέσης διατήρησης (ζωντανές συλλογές θα διατηρούνται στον Βοτανικό Κήπο του Κτήματος Αγαδάκη και συλλογές σπερμάτων θα κατατεθούν στην τράπεζα σπερμάτων του ΓΠΑ).

Η χαρτογράφηση των τύπων οικοτόπων των περιοχών μελέτηςπραγματοποιήθηκε με δεδομένα από το εθνικό πρόγραμμα «Ανάπτυξη Υποδομών χωρικών δεδομένων μεγάλης κλίμακας (1:5000) για τις χερσαίες προστατευόμενες περιοχές του δικτύου Φύση 2000». Οι χάρτες τύπων οικοτόπων και μονάδων βλάστησης δημιουργήθηκαν σε υπόβαθρο των ορθοφωτοχαρτών του Εθνικού Κτηματολογίου. Εννέα τύποι οικοτόπων αναγνωρίσθηκαν στις υπό μελέτη περιοχές: Θίνες με λειμώνες της Malcolmietalia, Επιπλέουσα βλάστηση υδρόβιων φυτών σε ποτάμια, Υγροί μεσογειακοί λειμώνες

με υψηλές πόες της Molinio-Holoschoenion, Καλαμιώνες, Φρύγανα με *Sarcopoterium spinosum*, Ελληνικά δάση πρίνου, Δάση πλατάνου (Platanion orientalis), Θερμομεσογειακές στοές (Nerio-Tamariceteae) και Αλλουβιακά δάση με *Alnus glutinosa* (Alnion glutinoso-incanae).

Για τις ανάγκες του παρόντος προγράμματος χαρτογραφήθηκαν οι υπάρχουσες μονάδες βλάστησης των περιοχών μελέτης, ανεξάρτητα από τους χάρτες τύπων οικοτόπων του προγράμματος «Ανάπτυξη Υποδομών χωρικών δεδομένων μεγάλης κλίμακας (1:5000) για τις χερσαίες προστατευόμενες περιοχές του δικτύου Φύση 2000». Οι χάρτες βλάστησης των περιοχών Βόρης και Λεύκας περιλαμβάνουν τις εξής μονάδες βλάστησης: Αλίπεδα, Καλαμιώνες, Δάση σκλήθρου, Διαπλάσεις με πικροδάφνη, Δάση πλατάνου, αειθαλείς θαμνώνες.

Στο πλαίσιο της δράσης Α.1 πραγματοποιήθηκε επίσης αξιολόγηση των τύπων οικοτόπων και των μονάδων βλάστησης των περιοχών μελέτης. Όσον αφορά τον οικότοπο προτεραιότητας 91E0*, αξιολογήθηκε ως Β και C στις περιοχές της Βόρης και Λεύκας, αντίστοιχα. Ο υγρότοπος της Βόρης είναι ο σημαντικότερος υγρότοπος της Άνδρου. Εντός του υγροτόπου, όπως επίσης και κατά μήκος του ρέματος υπάρχουν πολλαπλές απειλές που αλληλοσυνδέονται μεταξύ τους. Πλημμυρικά φαινόμενα έχουν καταστρέψει τις συστάδες σκλήθρου και πλατάνου, έχουν μεταφέρει και αποθέσει αλλουβιακά υλικά στα παρακείμενα λιβάδια, καλλιεργούμενους αγρούς και αναβαθμίδες, όπως επίσης κστην κοίτη και την εκβολή του ρέματος, τροποποιώντας τη δομή του υγροτόπου. Ο υγρότοπος έχει μπαζωθεί από φερτά υλικά (έδαφος, κλαδιά δέντρων, ξηρά καλάμια) που εμποδίζουν την ομαλή ροή του νερού και δημιουργούν λιμνάζοντα ύδατα και αναερόβιες συνθήκες τοπικά σε όλη τη διάρκεια του έτους. Η κατασκευή ενός δρόμου που διασχίζει τον υγρότοπο κατά μήκος της ακτογραμμής, επίσης εμποδίζει της αποστράγγισή του. Μόνιμα στάσιμα ύδατα καλύπτουν πλέον σημαντικό τμήμα των εκβολών του ρέματος της Βόρης, κυρίως στο ΒΑ τμήμα του υγροτόπου, οδηγώντας σε νέκρωση όλων των σκλήθρων σε αυτό το τμήμα.

Όσον αφορά τη δομή και τη σύνθεση των συστάδων σκλήθρου, η πλήρης έλλειψη αναγέννησης του σκλήθρου χαρακτηρίζει ολόκληρη την περιοχή του δέλτα. Όλα τα δέντρα σκλήθρου φαίνεται να είναι σχεδόν ομήλικα, με ορισμένα άτομα ηλικία 7-10 ετών να είναι παρόντα κατά μήκος του ρέματος σε ορισμένες περιπτώσεις. Τα σκλήθρα σχηματίζουν αμιγή συστάδα στην περιοχή των εκβολών, ενώ μεμονωμένα άτομα *Salix alba* και *Platanus orientalis* υπάρχουν διάσπαρτα. Δεν υφίσταται πραγματικός όροφος θάμνων. Αναρριχόμενοι θάμνοι, κυρίως *Vitis vinifera* subsp. *sylvestris* και *Hedera helix*, σκαρφαλώνουν στα σκλήθρα καταπιέζοντάς τα. Ο υπόροφος του δάσους σκλήθρων καταλαμβάνεται κυρίως από *Carex pendula* και *Equisetum telmateia*. Η *Typha domingensis* επίσης συναντάται σε μόνιμα πλημμυρισμένες θέσεις, συνοδευόμενη συνήθως από *Scirpoides holoschoenus*, *Juncus acutus* και *Tripidium ravennae* στα περιθώρια της συστάδας των σκλήθρων. Πολλά χαρακτηριστικά είδη των αλλουβιακών

δασών σκλήθρων (π.χ. διάφορα είδη *Carex* και *Chaerophyllum*) απουσιάζουν από τη Βόρη, μιας και αυτή η συστάδα σκλήθρων της Άνδρου αποτελεί το νοτιότερο σημείο εξάπλωσης αυτού του τύπου οικοτόπου. Η χλωριδική σύνθεση, ωστόσο, του δάσους σκλήθρων της Βόρης είναι παρόμοια με αυτήν που παρουσιάζει ο συγκεκριμένος οικότοπος και σε άλλες περιοχές της νότιας ηπειρωτικής Ελλάδας. Η υποβάθμιση της συστάδας των σκλήθρων γίνεται υποδηλώνεται από την αντικατάσταση του σκλήθρου κυρίως από *Rubus sanctus* και *Arundo donax* στις εσωτερικές θέσεις του υγροτόπου και κατά μήκος της κοίτης του ρέματος, και από αγρωστώδη και κυπερίδες προς την ακτογραμμή.

1. Introduction

This "Interim Report on the plant communities and their seasonal and spatial variation of the target habitat including the results of the base study" is a Deliverable in the frame of Action A.1 of LIFE ANDROS PARK project (LIFE16 NAT/GR/000606).

The working team consists of the following members of the Agricultural University of Athens (AUA):

a/a	Name	Institution, Role	Function
1	Panayiotis Trigas	AUA, permanent staff	Assistant Professor
2	Themistoklis Adamopoulos	External contributor to AUA	Forester-Environmentalist
3	Panayiotis Georgiou	AUA, permanent staff	Teaching and Research Associate

2. Study Areas

Andros is the northernmost island in Cyclades, situated close to the large West Aegean island of Evvia, thus forming a link between the Central and West Aegean islands with effects on environmental characteristics and the composition of its biotic communities. There are two study areas in Andros Island (Fig. 1):

1) the stream of Vori that flows into the coast of Vori, and
2) the stream of Lefka that flows into the coast of Lefka.

Both streams have a SW-NE direction and are heading to the NE, finally forming small estuaries at the northeast facing side of the Island. Vori is more easily accessible than Lefka and receives more visitors. Inhabitants and/or seasonal visitors include farmers, livestock growers, bee keepers, swimmers and nature lovers. Hunting is prohibited by Law. Both sites are away of other touristic sites of the island.

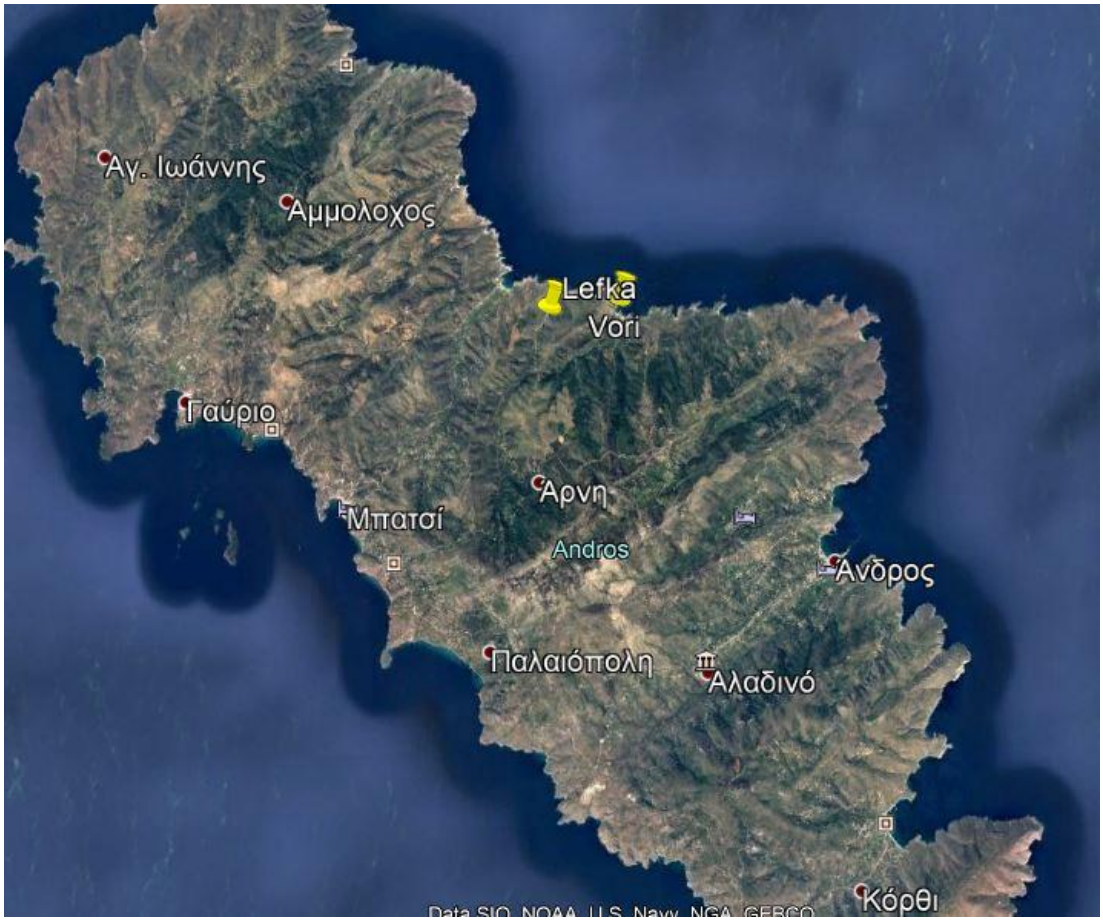


Fig.1. Andros island and the position of the two sites Vori and Lefka.

3. Habitat types

3.1 Methods of classification and mapping

Data from the national Project «Infrasrtucture development of large-scale spatial data (1:5000) for the terrestrial protected areas of Natura 2000 network» has been used in order to compile habitat types maps of the study sites. The project subject was the authentication of the terrestrial SCI and SPA external boundaries, as well as the update, description and delimitation of terrestrial habitat types in all SCI of Natura 2000 network in 1:5.000 scale (Implemented by National Cadastre SA in 2015 and approved in 2018).

The Orthophoto maps of Greek National Cadastre (Hellenic Cadastre and Mapping SA) have been used, namely the grids 576-940, 572-940, 572-910, 576-910. The Greek Grid Coordinate System (EGSA87) has been used for habitat types mapping, using ArcGIS and Autodesk Map 3D 2012 software.

Vegetation sampling was performed from April to June 2018. Seventeen vegetation plots were formed, 12 in Vori and five in Lefka. Habitat classification follows the Natura 2000 synecology (habitat classification and descriptions) in the site GR4220001 (Andros: Vitali Bay and central mountainous area) part of which are the two sites of Life Andros Park. The Braun-Blanquet phytosociological classification of cover was taken into account for vegetation sampling. Data from the National Project "Monitoring and evaluation of habitat types of Community interest in Greece" (2016) has also been considered and used.

The given external boundaries of the two sites have been re-shaped slightly to correct for displacement errors. It has been taken for granted that the Orthophoto maps are in the correct geographical position.

So, two types of mapping have been produced:

A. The map of current official habitat types of Natura 2000, inside the (corrected) Study Area boundaries.

B. The vegetation types map, inside the above mentioned boundaries. These vegetation types may or may not be identical to Natura 2000 habitat types.

3.2. Habitat type description

In the table below, the habitat types that are found within the boundaries and in the close vicinity of Vori and Lefka sites are listed and their local basic characteristics are presented.

s/n	Habitat code	Habitat name	Local basic characteristics
1	2230	Sand dunes of Malcolmietalia	*Sedum litoreum-Centaurea spinosa* found in partially stable coastal sand dunes, often with fine gravel. Loose stands with therophytic grasses and other herbaceous species. Tends to coastal phrygana with *Centaurea spinosa*.
2	3260	Floating vegetation of water loving plants in rivers	*Apietum nodiflori* in level areas or mountain base.
3	6420	Mediterranean high grass and sedge meadows (Molinio-Holoschoenion)	*Juncus acutus* comm. Saline meadows that colonize alluvial deposits, usually near the sea (where salt water flows), in wet cavities on dunes or on the lower riversides near the river's junction with the sea.
4	72A0	Reeds	Typhetum domingensis reeds where *Typha domingensis* dominates in sites of fresh water near the few estuaries of Andros.
5	5420	Phrygana *Sarcopoterium spinosum*	Phrygana is the basic and commonest

			vegetation in the island. Located in many different ecological conditions, ranging from the coast (coastal rocks) to the upper parts of the mountain. There are two coastal types of phrygana in the studied sites one of which is the community *Centaurea spinosa-Sarcopoterium spinosum*. Another coastal phrygana type is a low-growth community of *Genista acanthoclada- Erica manipuliflora* comm.
6	934A	Greek *Quercus coccifera* forests	It is a type of vegetation that grows in deep soils on a substrate of mica schist, usually in protected ravines or abandoned terraces once cultivated. The habitat type considered is an important part of the landscape and consists of high shrub residues which are re-colonizing the abandoned terraces.
7	92C0	Forests of oriental Plane (Platanion orientalis)	Platanion orientalis I. et V. Karpati. They are typically riparian forests along permanently flowing rivers or small mountain torrents. The river bed is built of boulders and the slope of the stream reaches about 5%. The Plane tree forests are important types of vegetation that play an important role, in terms of their anti-erosion capability, while are also important features of the landscape.
8	92D0	Thermomediterranean galleries (Nerio-Tamariceteae)	*Nerium oleander* comm. and Arundetum donacis. This type of habitat combines 2 types of vegetation (*Nerium oleander* comm., Arundetum donacis), which have common elements but they are distinct. The Arundetum donacis plantation includes disturbed terrestrial reeds, with *Arundo donax* as the dominant species. Found in flat alluvial terraces, at low altitudes along permanent and periodic flow rivers. An important type of habitat for erosion control.
9	91E0*	Alluvial residual Alnus forests (Alnion glutinoso-incanae)	*Alnus glutinosa-Equisetum telmateia*. It is a unique and very rare forest on a marsh dominated by *Alnus glutinosa*. It is found in very few sites in Andros, in freshwater and slightly salty swamps. Deep alluvial soils are flooded especially in the spring. The forest is disturbed, which is evident from the presence of abundant *Rubus sanctus* in the composition of the bush subsoil. Very important type of habitat (and types of vegetation) due to the

			scarcity of *Alnus glutinosa* in the Aegean islands. It is one of the last remnants of such forests in the Aegean region and the eastern Mediterranean.

3.3. Maps of habitat types

Current official habitat type map comes from the fore-mentioned nationwide Project «Infrasrtucture development of large scale spatial data (1:5000) for the terrestrial protected areas of Natura 2000 network». The current mapping has been analyzed through the ArcGIS tools and the results have shown the following (Figs. 2-3):

A.	**Site: Vori**	
s/n	**HABITAT TYPE**	**Area (str)**
1	1056	0,31
2	1062	0,52
3	1068	0,36
4	2230	0,13
5	5420	3,67
6	72A0	9,48
7	91E0	34,38
8	92C0	36,53
9	934A	0,25
	Sum	**85,63**

B.	**Site: Lefka**	
s/n	HABITAT TYPE	Area (str)
1	1062	2,60
2	5420	12,01
3	72A0	17,84
4	92C0	24,98
	Sum	**57,43**

The habitat types 1056, 1062 and 1058 are artificial, different types of cultivated land (the natural types of habitats have been previously described). The 91E0 priority habitat type of *Alnus glutinosa* is not depicted on the map of the Lefka site since most of the *Alnus glutinosa* stands previously

existing, were destroyed during 2012 flood events. On the contrary, alder stands still occupy a large part the delta in the site of Vori.

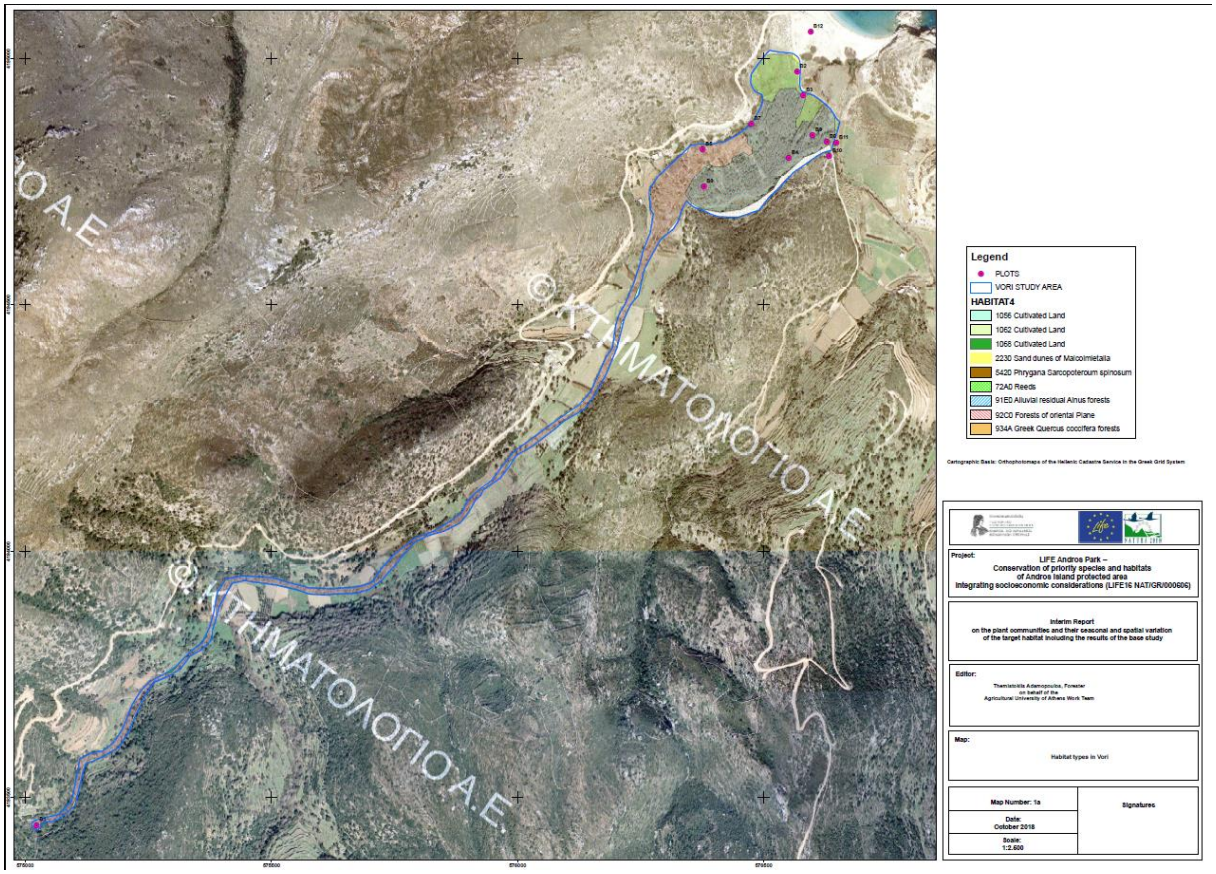


Figure 2. Map of habitat types at the Vori site.

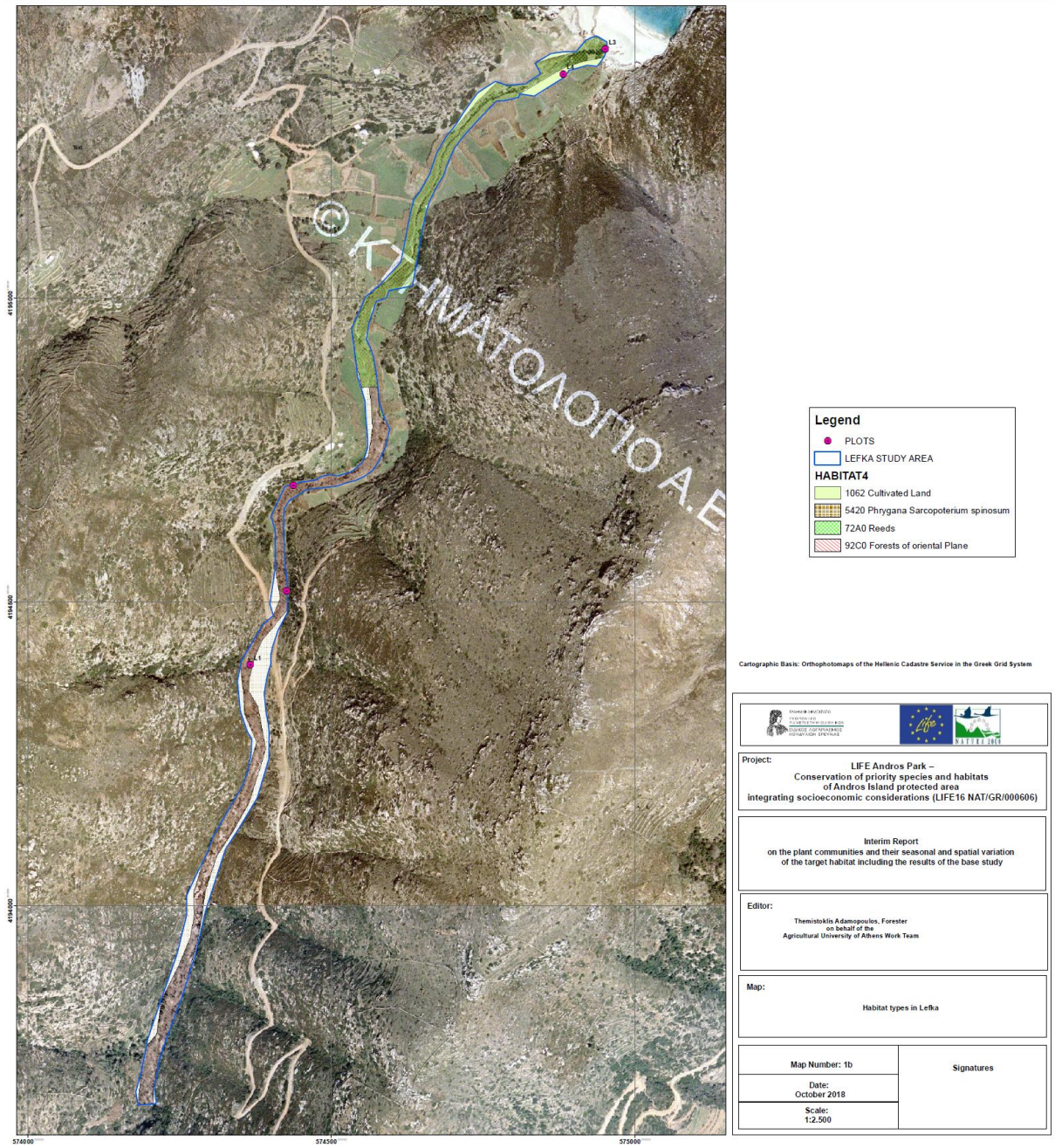


Figure 3. Map of the habitat types at the Lefka site.

4. Vegetation and plant species sampling

4.1 Vegetation sampling

A total of 17 vegetation plots were set, 12 in Vori and 5 in Lefka. Vegetation Sampling Spreadsheets are shown in Appendix 1. The spreadsheet contains basic field sampling data such as site, sample number, sample area, date, elevation, physiography, gravel percent, vegetation unit and cover per storey layer. There are three layers, i.e., tree, shrub and herbaceous layer. Ecological observations related to conservation status are made.

Following the sampling data forms of the Natura 2000 network monitoring, the future trend and future status are estimated and recorded. The **Future trend** categories are FV, U1, U2 and XX, and they are specified as follow:

FV Favourable: No P or T of high importance and up to 1 of medium importance or positive impacts balance higher number or importance of P or T (P=Pressure, T=Threat)
Non favourable-Insufficient: Up to 3 P or T of medium importance or positive impacts balance higher number or importance of P or T
Non favourable-Bad: At least 1 T or P of high importance and/or more than 3 P or T of medium importance without positive impacts being able to balance them
Unknown: Not able to assess P or T

The **Future Status** categories are also FV, U1, U2 and XX, and they are specified as follow:
FV Favourable: Structure and functions are expected to be in FV status in more than 75% of the studied locality
Non favourable-Insufficient: Structure and functions are expected to be in FV stat in 50-75% of the studied locality and not more than 25% in U2 status.
Non favourable-Bad: Structure and functions are expected to be in FV status in less than 50% of the studied locality or more than 25% in U2 status.
Unknown: Not able to asses future conservation status in > 50% of the studied locality

Summarizing the above categories, they are shown in the Table below.

Future Trend			
FV No P or T of high importance and up to 1 of medium importance or positive impacts balance higher number or importance of P or T	U1 Up to 3 P or T of medium importance or positive impacts balance higher number or importance of P or T	U2 At least 1 T or P of high importance and/or more than 3 P or T of medium importance without positive impacts being able to balance them	XX Not able to assess P or T
Future status			
FV Struct. & funct. are expected to be in FV status in more than 75% of the studied locality	U1 Struct. & funct. are expected to be in FV stat in 50-75% of the studied locality and not more than 25% in U2 status	U2 Struct. & funct. are expected to be in FV status in less than 50% of the studied locality or more than 25% in U2 status	XX: Not able to asses future conservation status in > 50% of the studied locality

The cover-abundance of the species in the sample area is recorded according to the following classification:

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover < 5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

In the tree and shrub layers the maximum height is recorded. Also, in the tree layer the DBH (Diameter at breast height) range is recorded.

4.2 Plant species sampling

Specimens from all plant species growing within the boundaries of the study sites, as well as in neighbouring areas were collected. Species collections were made on parallel and transverse transects to the streams, in order to cover all different habitat types of the study area. Plant collections were made at different seasons (24-26/11/2017, 22-24/02/2018, 29-30/04/2018, 12-13/05/2018, 02/06/2018, 20-22/07/2018), in order to cover the flowering periods for all plant species of the area. All collected specimens have been properly dried and the vast majority of them have been identified. All specimens will be formally deposited in ACA Herbarium before the completion of A.1 Action.

5. Vegetation units of the study sites (including composition and structure of *Alnus glutinosa* stands)

For the needs of the present Project, current vegetation units distributed at the study sites were mapped, irrespectively of the habitat type maps created for the needs of the project «Infrasrtucture development of large-scale spatial data (1:5000) for the terrestrial protected areas of Natura 2000 network». Vegetation maps of Vori and Lefka streams include the following vegetation units:

1. Sedge
2. Reed
3. Alnus glutinosa
4. Nerium
5. Platanus
6. Evergreen shrub

The rank roughly corresponds to a transect from the sea towards inland. So, the sedge and reed communities are closer to the sea whereas Platanus and the evergreen shrub are more distant from the sea.

Sedge is the community with *Juncus acutus* as dominant species. It grows on saltmarshes near the sea. It can be matched to the habitat type 6420. It has been encountered in vegetation sampling plot B2 in Vori and L3 in Lefka. It is observed in very wet soil up to marsh with stagnant water. *Juncus acutus* dominates this vegetation unit, together with *Scirpoides holoschoenus*, *Mentha longifolia* and *Cirsium creticum*. The reeds *Phragmites australis* and *Arundo donax* are also present but not dominant. *Tripidium ravennae* is present in Lefka. The communities of *Arundo donax* or *Phragmites*

australis (and *Typha domingensis*) are defined as **Reeds,** even if not all of them share the same environment in terms of salinity. It could be matched to the habitat type 72A0. All of them live close to fresh water but *A. donax* might form stands in drier sites as well. All the above species may be dominant, depending on the local environmental conditions. *Arundo donax* usually dominates the communities it forms, whereas *Phragmites* and *Typha* create richer plant communities with numerous accompanying taxa. Although not encountered in any vegetation sampling plot, elements of this vegetation type could be detected in the marginal plots B3 in Vori and L4 in Lefka.

Alnus glutinosa plant communities in the study sites always correspond tothe priority habitat type 91E0*, as all current or former (destroyed) alder stands exclusively grow on alluvial deposits. *Alnus glutinosa* is mainly a Euro-Siberian tree species, and its presence in the dry region of Kiklades islands is especially rare. *Alnus glutinosa* forms a dense/compact stand in Vori, whereas it is fairly rare in Lefka. In fact, alder forest constitutes the most extensive vegetation type in the study area of Vori.

In Vori, *Alnus glutinosa* has been encountered as dominant in vegetation sampling plots B4, B6 and in a marginal condition in plots B3, B5 and B7. In some areas it is marginal and degraded, forming clusters or even stands of dead trees, otherwise dominated by *Phragmites*, *Typha* or *Sedges*. In its best condition, it reaches 15 m high and the dbh ranges from 18-28 cm. It often forms coppice and re-sprouts from the roots and the lower part of the trunk. Under favourable conditions, it is accompanied by *Equisetum telmateia*, *Carex pendula*, *Brachypodiun sylvaticum* and *Rubus sanctus*. All the stands are grazed by domesticated herbivores, mainly goats. Thus, regeneration of Alnus is almost impossible at the study sites. Alder seedlings have often been observed, both in Vori and Lefka streams, but the young plants were consumed by the goats during their growing season (ca. April to August).

Most currently existed alder stands are degraded and in some cases they are completely collapsed. Flood episodes during 2012 and the followed changes in the hydrological conditions, especially at the delta area of Vori stream, had a negative impact on the conservation status of the alder stands.

In Lefka, alder nowhere forms a compact cluster or stand. In the sampling plot L1 it is observed as a regeneration seedling on the bank line of the rivulet in a *Platanus* community. In the plot L3 it is also observed as a regeneration seedling beside to a small pond. In the plot L5 it is a co-dominant tree in a *Platanus* community, with presence in the herbaceous layer.

Nerium plant communities are characterized by stands of *Nerium oleander* as the dominant species of the overstory, i.e. where no trees are present or they are very sparse. *Nerium* can also

often be observed in the understory of *Platanus* stands. Co-dominant species may include *Juncus*, *Typha*, *Arundo* or even *Vitex agnus-castus*. It can be identical to the habitat type 92D0. It may reach 3-4 m high. It has been encountered in vegetation sampling plot L4 in Lefka.

Platanus are the stands of *Platanus orientalis* as the dominant tree. Understory species may include *Nerium oleander*, *Myrtus communis* and sedges. Essential element of the stream ecosystem along with *A. glutinosa* stand. *Alnus glutinosa* is in some cases a co-dominant tree (but sparser in cover) as in the L5 vegetation sampling plot. It is identical to the habitat type 92C0. It has been encountered in vegetation sampling plot B1 in Vori and in plots L1, L2, L5 in Lefka. It is the most extensive vegetation type in Lefka and the second most extensive in Vori. It may reach 15m high with dbh ranging from 20-35cm. It suffers some dying of branches and trunk parts, but it regenerates easily, both by re-sprouting on the trunk and by seedlings in open surfaces near running fresh water.

Evergreen shrub includes areas where evergreen shrubs such as *Quercus coccifera*, *Quercus ilex*, *Pistacia terebinthus*, *Pistacia lentiscus, Erica manipuliflora* and *Arbutus unedo* are dominant, in the form of bushes or small trees. This vegetation type may include *Genista acanthoclada* and *Cistus creticus* as understory species. It can be identical to the habitat type 934A. It exists only in Vori.

Phrygana is the plant community where xerophyllous small shrubs are dominant. These species include *Sarcopoterium spinosum*, *Cistus creticus*, *Cistus parviflorus*, *Genista acanthoclada*, *Anthyllis hermanniae, etc.* It is identical to the 5420 habitat type.

At the **Vori** site, new mapping results in terms of plant communities, are:

s/n	Plant_community	Area (str)
1	Alnus glutinosa	32,52
2	Evergreen shrub	2,73
3	Platanus	25,96
4	Reed	17,88
5	Sedge	6,61
	TOTAL	**85,70**

At the **Lefka** site, new mapping results are:

s/n	Plant_community	Area (str)
1	Alnus glutinosa	0,28
2	Nerium	4,24

3	Platanus	34,80
4	Reed	15,75
5	Sedge	0,37
6	Phrygana	2,04
	TOTAL	**57,48**

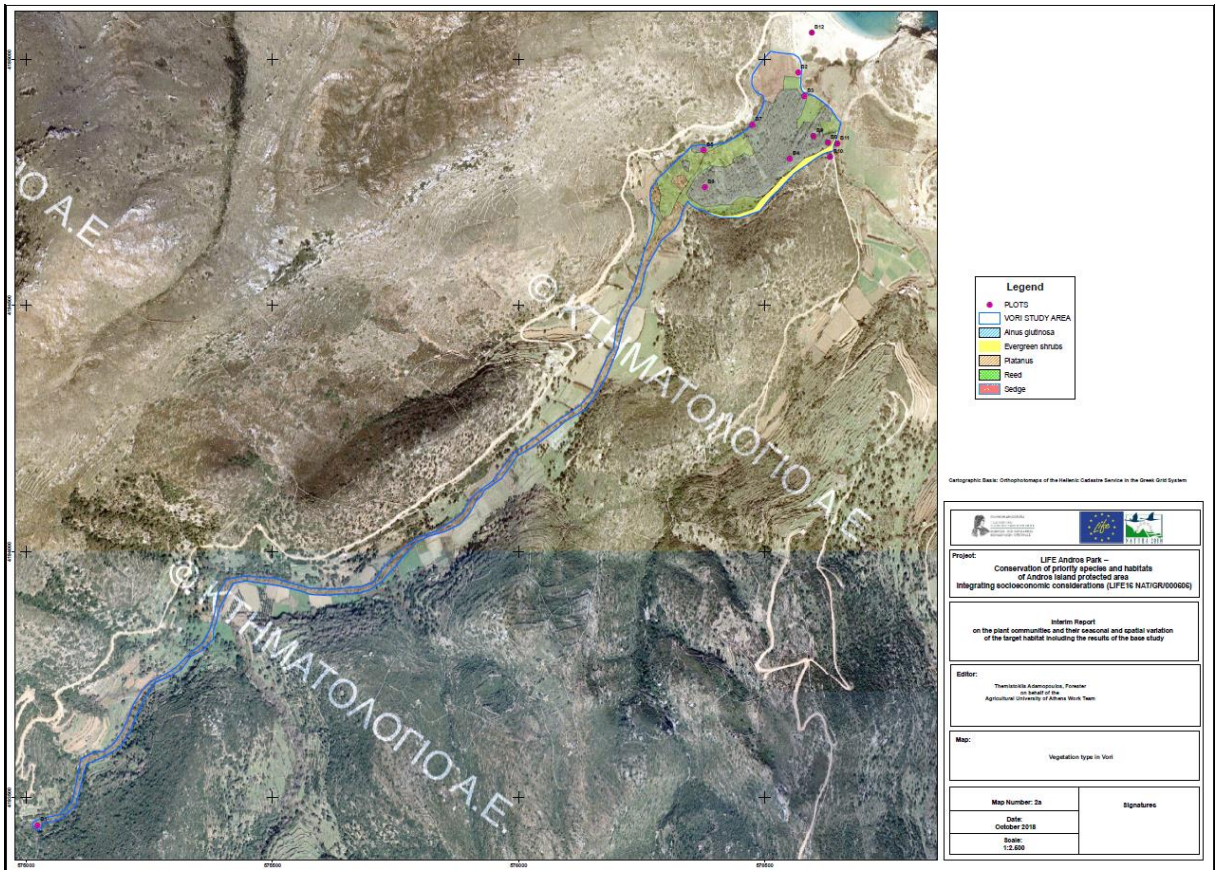


Figure 3. Vegetation units map of Vori site.

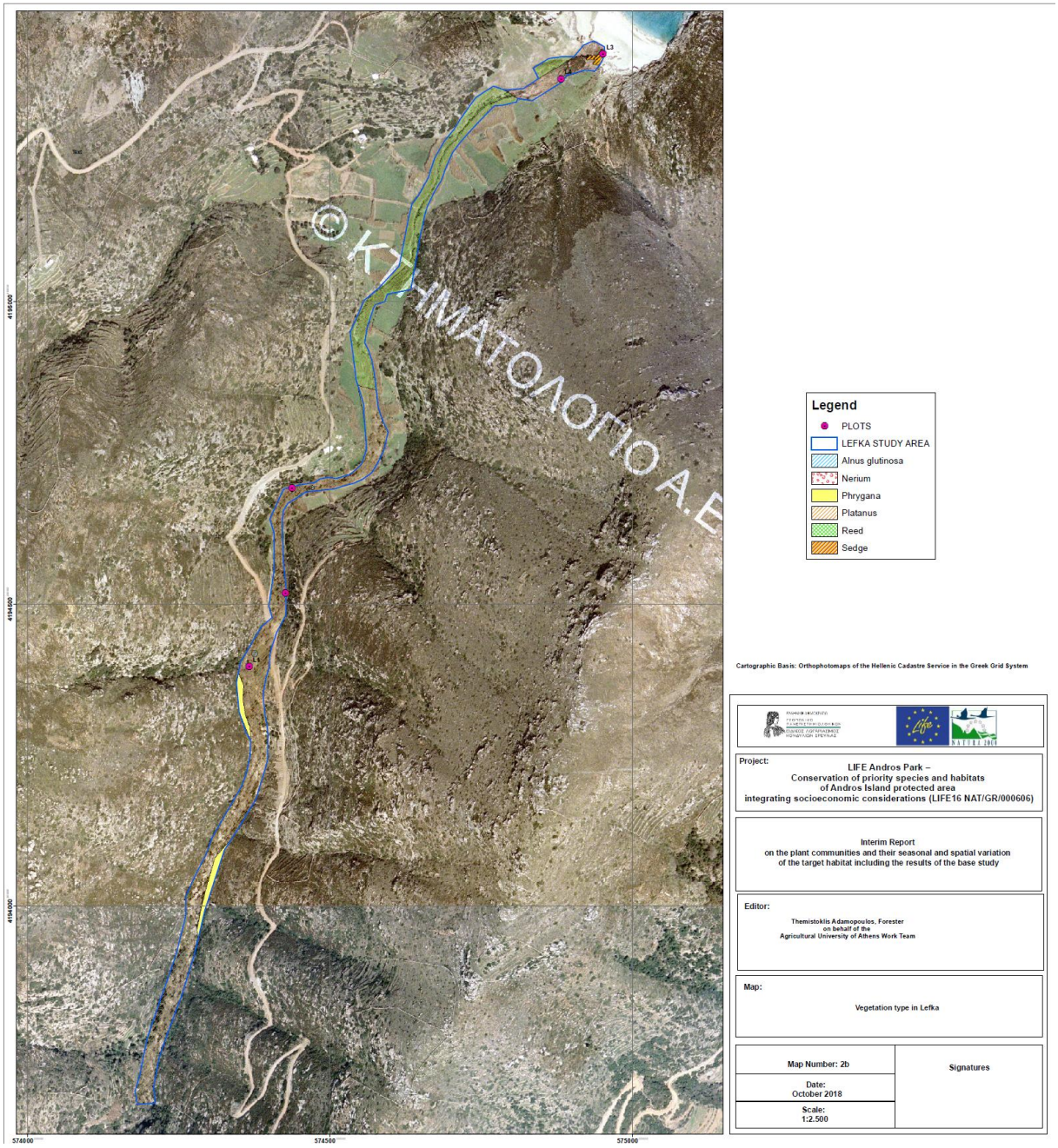


Figure 4. Vegetation units map of Lefka site.loristic composition of the study sites

6. Floristic composition of the study sites

The identification of the plant material collected in the study sites is still in progress. Most of the specimens, however, have been already identified and they are included in the following floristic catalog of the Interim Report. Plant names are place in alphabetical order within the major vascular plant groups (vascular cryptogams, gymnosperms and angiosperms). The following abbreviations regarding collection sites have been used at this stage: (V: Vori stream, L: Lefka stream, 1: flooded or wet places along the stream and delta, 2: ± dry places at the surroundings of the streams, and 3: sand-dunes at the estuaries of the streams). Plant species nomenclature follows Dimopoulos et al., 2013, 2016 and Strid 2016.

6.1 Floristic catalog of the study sites

Vascular cryptogams

Aspleniaceae
Asplenium trichomanes L., (V1, L1)

Dennstaedtiaceae
Pteridium aquilinum (L.) Kuhn in Kersten subsp. *aquilinum*, (V1, L1)

Equisetaceae
Equisetum arvense L., (V1, L1)
Equisetum ramosissimum Desf., (V1)
Equisetum telmateia Ehrh., (V1)

Pteridaceae
Adiantum capillus-veneris L., (L1)

Gymnosperms

Cupressaceae
Cupressus sempervirens L., (L1)

Ephedraceae
Ephedra foeminea Forssk. (L1)

Angiosperms

Acanthaceae
Acanthus spinosus L., (V2)

Aceraceae
Acer sempervirens L., (V2, L2)

Amaryllidaceae
Galanthus ikariae Baker (L1)

Anacardiaceae
Pistacia lentiscus L., (V1, V2, V3, L2)
Pistacia terebinthus L. subsp. *terebinthus*, (V2)

Apiaceae
Daucus guttatus Sm. in Sibth. & Sm., (V2)
Foeniulum vulgare Mill., (V2, V3)
Helosciadium nodiflorum (L.) W.D.J. Koch, (V1, L1)
Lagoecia cuminoides L., (V2, L1)
Malabaila involucrata Boiss. & Spruner in Boiss., (V2)
Scaligeria napiformis (Spreng.) Grande, (L2)
Tordylium apulum L., (V2)
Torilis nodosa (L.) Gaertn., (V2, V3, L2)

Apocynaceae
Nerium oleander L., (V1, L1)

Araceae
Arisarum vulgare O. Targ. Tozz. subsp. *vulgare*, (V1, L1)
Arum concinnatum Schott, (V1, L1)

Araliaceae
Hedera helix L., (V2, L2)

Aristolochiaceae
Aristolochia rotunda L. subsp. *insularis* (Nardi & Arrigoni) Gamisans, (V1)
Aristolochia rotunda L. subsp. *rotunda*, (L2)

Asphodelaceae
Asphodelus ramosus L., (V1, V2, V3, L2)

Asteraceae
Achillea ligustica All., (V1, V2, L1)
Aetheoriza bulbosa (L.) Cass., (V1, V2)
Andryala integrifolia L., (V3)
Anthemis arvensis L., (V1)
Anthemis chia L. (V1)

Anthemis rigida Heldr. subsp. *rigida*, (V2, V3)
Atractylis cancellata L., (V2)
Calendula arvensis L., (V2)
Carduus pycnocephalus L., (V1, V2, L2)
Centaurea raphanina Sm. subsp. *mixta* (DC.) Runemark, (V2, L1, L2)
Centaurea spinosa L., (V3, L1)
Cichorium spinosum L., (V3)
Cirsium creticum (Lam.) d'Urv., (V1, V2, V3, L1)
Crepis commutata (Spreng.) Greuter, (V3)
Crepis foetida L., (V3)
Crepis fraasii Sch.Bip., (V2)
Crepis neglecta L. subsp. *graeca* (Vierh.) Rech. f., (V2, L1, L2)
Dittrichia viscosa (L.) Greuter, (V1, V2, L1)
Filago cretensis Gand., (V2)
Filago pyramidata L., (V2, L1)
Glebionis segetum (L.) Fourr., (V2)
Helichrysum stoechas (L.) Moench. subsp. *barrelieri* (Ten.) Nyman, (V2)
Hymenonema graecum (L.) DC. (V2)
Hypochaeris achyrophorus L., (V2)
Pallenis spinosa (L.) Cass., (V1, V2)
Phagnalon rupestre (L.) DC. subsp. *graecum* (Boiss. & Heidr.) Batt., (V1, V2)
Picnomon acarna (L.) Cass., (V2, L1)
Reichardia picroides (L.) Roth, (V2, V3)
Scolymus hispanicus L., (V2, V3)
Silybum marianum (L.) Gartn. (L1, L2)
Sonchus asper (L.) Hill. subsp. *glaucescens* (Jord.) Ball, (L2)
Sonchus oleraceus L., (L1)
Tolpis umbellata Bertol., (V1,V2)
Tragopogon porrifolius L.
Urospermum picroides (L.) F.W. Schmidt, (V1, V2, L1)

Betulaceae
Alnus glutinosa (L.) Gaertn. subsp. *glutinosa*, (V1, V2, L1)

Boraginaceae
Echium arenarium Guss., (V2)
Echium plantagineum L., (V2)

Brassicaceae
Biscutella didyma L., (L2)
Cakile maritima Scop., (V1, V3)
Eruca vesicaria (L.)Cav., (V1, V2)
Erysimum senoneri (Heidr. & Sartori) Wettst. subsp. *senoneri*, (V2)
Malcolmia flexuosa (Sm.) Sm. subsp. *naxensis* (Rech. f.) Stork, (V1, V2, V3, L2)
Matthiola tricuspidata (L.) R. Br. in W.T. Aiton, (V1)
Nasturtium officinalis R. Br. in W.T. Aiton, (V1, L1)
Sinapis alba L., (V1)

Campanulaceae
Campanula spatulata Sm. in Sibth. & Sm., (V2)

Caryophyllaceae
Cerastium comatum Desv., (V1, V2)
Cerastium glomeratum Thuill., (V2, L1)
Dianthus diffusus Sm., (V2)
Holosteum umbellatum L., (V1)
Petrorhagia dubia (Raf.) G. López & Romo, (V2, L1, L2)
Polycarpon tetraphyllum (L.) L., (V3, L1)
Silene colorata Poir., (V2)
Silene gallica L., (V1)
Silene pentelica Boiss. (L1, L2)
Silene sedoides Poir. subsp. *sedoides*, (V3)

Cistaceae
Cistus salviifolius L., (V2)

Convolvulaceae
Calystegia silvatica (Kit.) Griseb., (V1, V2)

Crassulaceae
Sedum eriocarpum Sm. cf. subsp. *cycladicum* Kit Tan & Polymenakos (V3)
Umbilicus rupestris (Salisb.) Dandy, (L2)

Cyperaceae
Bolboschoenus maritimus (L.) Palla in W.D.J. Koch, (V1, V3)
Carex pendula Huds., (V1)
Cyperus longus L. subsp. *badius* (Desf.) Bonnier & Layens, (L1)
Isolepis cernua (Vahl) Roem. & Schult., (V1, L1)
Scirpoides holoschoenus (L.) Sojak, (V1, L1)

Dioscoreaceae
Dioscorea communis (L.) Caddick & Wilkin, (L2)

Ericaceae
Arbutus unedo L., (V2)
Erica arborea L., (V2)
Erica manipuliflora Salisb., (V2, L2)

Euphorbiaceae
Euphorbia peplus L. (L1)
Mercurialis annua L., (V2, L2)

Fabaceae
Anthyllis hermanniae L., (V2, V3, L1, L2)

Anthyllis vulneraria L. subsp. *rubriflora* (DC.) Arcang., (V2)
Bituminaria bituminosa (L.) C.H. Stirt., (V2, L1)
Calicotome villosa (Poir.) Link in Schrad., (V2)
Genista acanthoclada DC., (V2, L2)
Hymenocarpos circinnatus (L.) Savi, (V2)
Lotus angustissimus L., (V2)
Lotus preslii Ten., (V1)
Medicago littoralis Rohde ex Loisel., (V3)
Medicago marina L., (V3)
Medicago murex Willd., (V1)
Medicago orbicularis (L.) Bartal., (V1, V2, L1)
Medicago polymorpha L., (V2)
Securigera securidaca (L.) Degen & Dorfl., (V1, V2, L1)
Spartium junceum L., (V1, V2)
Trifolium campestre Schreb. (V1, V2, L1)
Trifolium patens Schreb. in Sturm, (V1)
Trifolium repens L., (V1, V2, L2)
Trifolium scabrum L., (V2)
Trifolium spumosum L., (V2)
Trifolium stellatum L., (V2)
Trifolium uniflorum L., (L1)
Trigonella corniculata (L.) L. subsp. *balansae* (Boiss. & Reut.) Lassen in Greuter & Raus, (V2)
Vicia hybrida L., (V2)
Vicia lutea L., (V2)
Vicia villosa Roth. subsp. *microphylla* (d'Urv.) P.W. Ball, (L1)

Fagaceae
Quercus coccifera L., (V1, V2)
Quercus ilex L., (V1, L2)

Geraniaceae
Erodium cicutarium (L.)L'Her. in Aiton, (V2)
Geranium lucidum L., (V1, V2, L1, L2)
Geranium molle L. (V2, L1)
Geranium purpureum Vill., (V1, L1)

Hyacinthaceae:
Muscari comosum (L.) Mill., (V1, L2)
Scilla andria Speta (V1)

Hypericaceae
Hypericum cycladicum Trigas (V2)

Juncaceae
Juncus acutus L. (L1)

Lamiaceae

Ballota acetabulosa (L.) Benth., (V2, L1, L2)
Lamium purpureum L, (V1, V2)
Lavandula stoechas L., (V1, V2, L2)
Mentha longifolia (L.) Huds., (V1, L1)
Mentha pulegium L., (V2)
Micromeria graeca (L.) Rchb., (L2)
Micromeria nervosa (Desf.) Benth., (V2)
Origanum vulgare L. subsp. *hirtum* (Link) A. Terracc., (L1)
Phlomis fruticosa L., (L2)
Satureja thymbra L., (V1, V2, L2)
Stachys cretica L. subsp. *cretica*, (V1, V2, L1)
Teucrium capitatum L., (V2)
Teucrium divaricatum Heldr. subsp. *divaricatum*, (V2)
Thymbra capitata (L.) Cav., (V2, L1, L2)

Linaceae
Linum strictum L. subsp. *spicatum* (Pers.) Nyman

Lythraceae
Lythrum hyssopifolia L., (V1)

Malvaceae
Malva multiflora (Cav.) Soldano, Banfi & Galasso in Banfi, Galasso & Soldano, (V1, V2, L2)
Malva sylvestris L., (L1)

Moraceae
Ficus carica L., (V2)

Myrtaceae
Myrtus communis L., (V1, L1, L2)

Oleaceae
Olea europaea L., (V2, L2)

Orobanchaceae
Bellardia trixago (L.) All., (V2)

Oxalidaceae
Oxalis pes-caprae L., (V1)

Papaveraceae
Papaver rhoeas L., (V2, L2)

Plantaginaceae
Plantago bellardii All., (V2)
Plantago coronopus L., (V2, V3)

Plantago lanceolata L., (V2)

Platanaceae
Platanus orientalis L., (V1, L1)

Plumbaginaceae
Limonium proliferum (Urv.) Erben & Brullo, (V3)

Poaceae
Aegilops triuncialis L. subsp. *triuncialis*, (V2, L1)
Aira cupaniana Guss., (V2)
Arundo donax L., (V1, L1)
Avena barbata Link in Schrad, (V1, V2, V3, L1)
Brachypodium distachyon (L.) P. Beauv., (V2)
Brachypodium retusum (Pers.) P. Beauv., (L2)
Brachypodium sylvaticum (Huds.) P. Beauv. subsp. *sylvaticum*, (V1)
Briza maxima L., (V3)
Bromus diandrus Roth, (V1, L2)
Bromus hordeaceus L., (V3)
Bromus madritensis L., (L1, L2)
Bromus rigidus Roth, (V1, V2)
Bromus sterilis L., (V1, V2, V3, L1, L2)
Catapodium rigidum (L.) C.E. Hubb. in Dony, (V1, V2)
Cynodon dactylon (L.) Pers., (V3)
Dactylis glomerata L., (V2, V3)
Echinaria capitata (L.) Desf., (V1)
Gastridium ventricosum (Gouan) Schinz & Thell., (V1, L1)
Hordeum marinum Huds., (V3)
Hordeum murinum L. subsp. *leporinum* (Link) Arcng., (V1, L1)
Hyparrhenia hirta (L.) Stapf in Prain, (V2)
Lagurus ovatus L., (V1, V3, L1, L2)
Maillea crypsoides (d'Urv.) Boiss. (V3)
Melica minuta L. subsp. *minuta*, (V2)
Phleum exaratum Griseb., (V1, V3)
Phragmites australis (Cav.) Steud., (V1, L1)
Polypogon maritimus Willd. subsp. *maritimus*, (V3)
Polypogon viridis (Gouan) Breistr., (L1)
Sorghum halepense (L.) Pers., (V2)
Tripidium ravennae (L.) H. Scholz subsp. *ravennae*, (V1, L1)

Polygonaceae
Persicaria lapathifolia (L.) Delarbre subsp. *lapathifolia*
Polygonum aviculare L. subsp. *neglectum* (Besser) Arcang., (V1)
Polygonum maritimum L., (V3)
Rumex conglomeratus Murray, (V1)
Rumex tuberosus L. subsp. *creticus* (Boiss.) Rech. f., (V1, L2)

Potamogetonaceae
Potamogeton nodosus Poir., (V1, L1)

Primulaceae
Anagallis arvensis L., (V1, V2, V3, L2)
Cyclamen hederifolium Sol. ex Aiton, (L2)
Primula vulgaris Huds.
Samolus valerandi L., (V1, L1)

Ranunculaceae
Clematis vitalba L. (L1)
Delphinium peregrinum L., (V2)
Delphinium staphisagria L., (L1)
Ficaria verna Huds., (V1)

Rosaceae
Crataegus monogyna Jacq., (L1, L2)
Pyrus spinosa Forssk., (V2)
Rubus sanctus Schreb., (V1, L1)
Sarcopoterium spinosum (L.) Spach., (V1, V2, L2)

Rubiaceae
Galium caminianum Schult., (V2)
Galium spurium L., (V1)
Rubia tinctorum L., (V1)
Valantia hispida L., (V2, L2)

Salicaceae
Salix alba L., (V1)

Santalaceae
Thesium bergeri Zucc., (V2)

Scrophulariaceae
Scrophularia heterophylla Willd., (L1)
Verbascum phlomoides L., (L1)
Verbascum sinuatum L., (V1, V2, V3, L1, L2)

Smilacaceae
Smilax aspera L., (V1)

Tamaricaceae
Tamarix parviflora DC., (V3)
Tamarix tetrandra Pall. ex M. Bieb., (V1)

Typhaceae
Typha domingesis Pers., (V1, L1)

Urticaceae
Parietaria cretica L. (V2, L1)
Parietaria judaica L., (V1, L1)
Urtica membranacea Poir. in Lam. & al., (L1)
Urtica pilulifera L., (V1)

Valerianaceae
Centranthus ruber (L.) DC. in Lam. & DC., (V2, L2)

Verbenaceae
Vitex agnus-castus L., (V3)

Veronicaceae
Veronica anagallis-aquatica L., (V1, L1)

Vitaceae
Vitis vinifera L. subsp. *sylvestris* (C.C. Gmel.) Hegi, (V1)

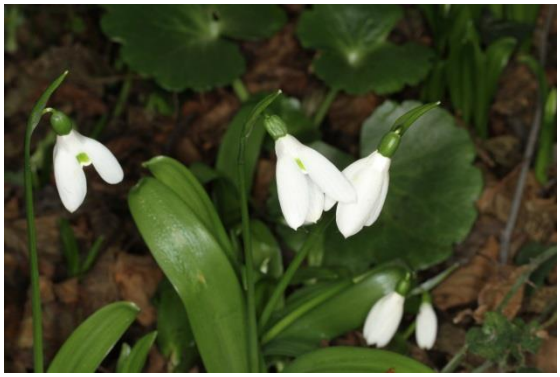
6.2 Floristic analysis and important plant species

The flora of the study areas consists of 234 vascular plant taxa. The majority of the plant species have a wide distribution in the Mediterranean region or even larger areas. Most aquatic species or species of wet habitats are common in the riparian habitats of the Aegean islands, with the exception of some species (e.g. *Primula vulgaris*) that are mainly distributed in mainland areas.

The endemic element is represented by 12 taxa, most of them inhabiting dry slopes close to the streams. Two flagship plant species of Andros Island (i.e., *Galanthus ikariae*, *Scilla andria*) grow within the priority habitat 91E0* in Lefka and Vori stream, respectively. The endemic species collected are *Centaurea raphanina* subsp. *mixta*, *Crepis neglecta* subsp. *graeca, Filago cretensis, Galanthus ikariae*, *Hymenonema graecum, Erysimum senoneri* subsp. *senoneri, Dianthus diffusus, Scilla andria, Silene pentelica, Sedum eriocarpum* cf. subsp. *cycladicum, Hypericum cycladicum* and *Limonium proliferum*. All these species are endemic to Greece and some of them have restricted distribution ranges confined in southern Greece. The most important endemic plant species of the study site are presented below:

Galanthus ikariae

Galanthus ikariae is an impressive bulbous plant growing in wet and shady places along streams in four Aegean Islands (Ikaria, Andros, Skyros and Naxos). It is rare at its entire distribution range, and probably Andros hosts the largest populations. It is distributed along the streams, mainly at the central part of the island and its population are scattered, and usually include few hundred individuals that grow crowded in small areas at the understorey of *Alnus glutinosa* and *Platanus orientalis* woodlands. In the study area, few clusters of individuals were observed at the upper part of Lefka stream. As the riparian forest of Lefka has been destroyed by flood events, the plants are exposed to the sunlight and the future of Lefka population is especially uncertain. The restoration of the alluvial *Alnus glutinosa* forest in Lefka stream will have a beneficial effect on the conservation of the local *Galanthus ikariae* population. It has been evaluated against IUCN criteria and it has been classified as Vulnerable (VU).



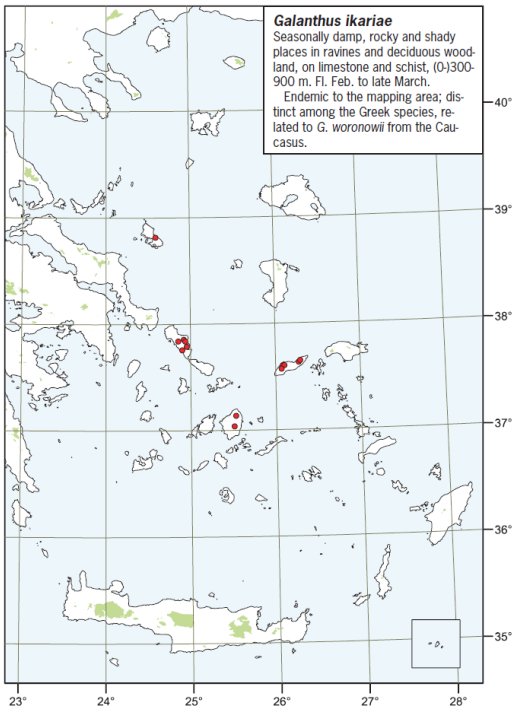


Figure 5. Individulas of *Galanthus ikariae* growing in wet and shady habitat in Andros (left), and the entire distribution range of the species (left, from Strid 2016).

Scilla andria

Scilla andria belongs to the group *S. bifolia* s.lat., a taxonomically critical group and it is considered endemic to the Cyclades, distributed in Andros, Tinos, Naxos and Kimolos. It grows in similar habitats with *Galanthus ikariae*, but also grows in less wet and shady sites from the latter. The two species often grows sympatric at the understorey of riparia forests in Andros. The species is somehow rare but its habitat does not face any serious immediate threat in Andros. In the study area is especially rare; only few individuals were observed, growing in the alder alluvial forest of Vori stream estuaries.

Figure 6. *Scilla andria* in its natural habitat (left), and individual with white flowers (right).

Hypericum cycladicum

Hypericum cycladicum was discovered during fieldwork for the Action A.1 of Life Andros Park project, and was described as a species new to science in November 2018 (Trigas 2018). The *locus classicus* of this species is the dry slopes north of Vori *Alnus glutinosa* stand, close to Vori beach. Similar plants have been observed in Mykonos, Paros and Naxos and the species is currently considered endemic to these islands. It is related to the widespread *H. perfoliatum* and the Cretan endemic *H. trichocaulon*. In Andros the species is known from Vori and Lefka areas, while an older collection from Mt Kouvara also belongs to this species. The species is rare in its entire distribution range, but further studies are necessary in order to clarify its conservation status.

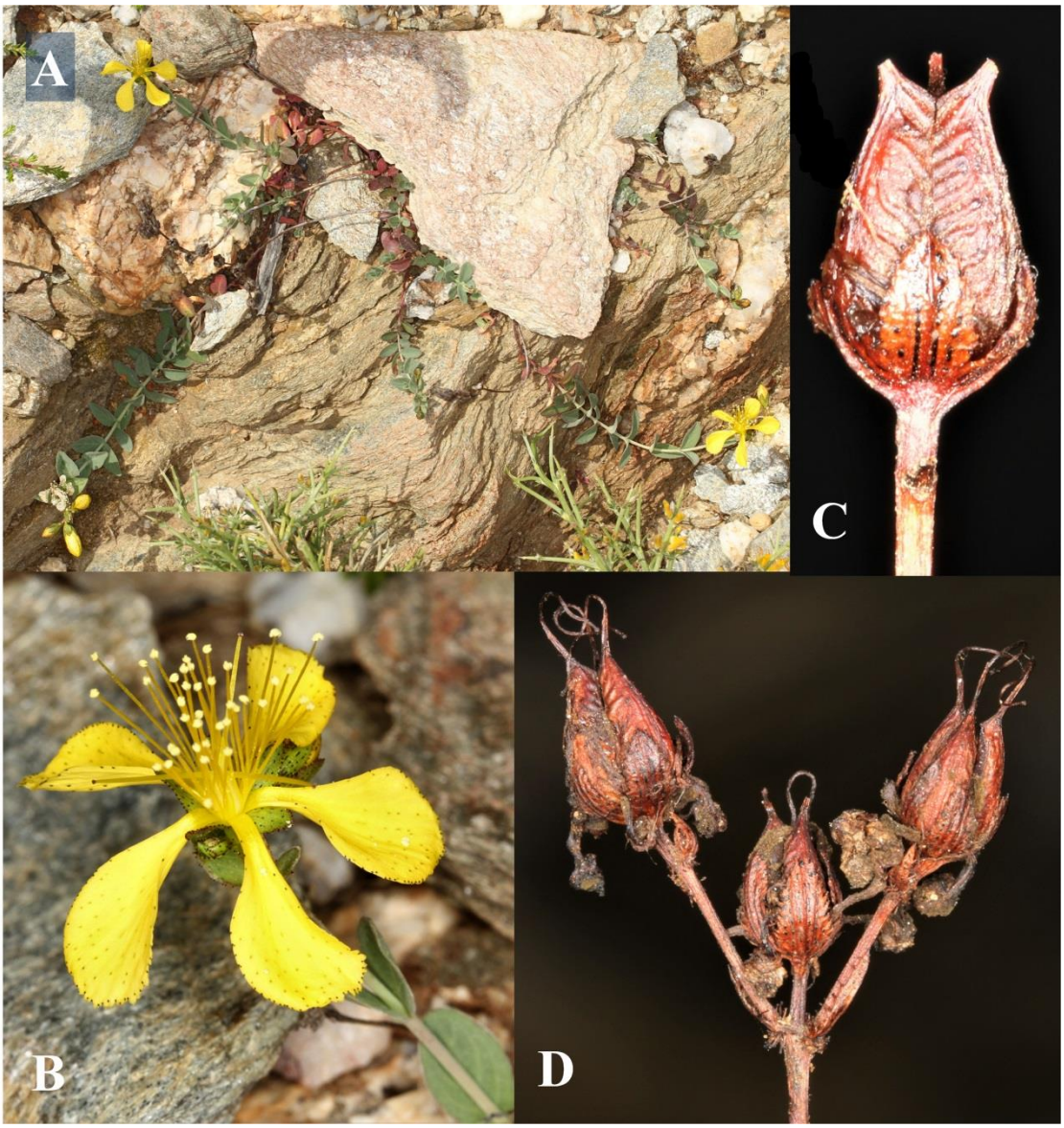


Figure 6. *Hypericum cycladicum*, (A) individual with simple, procumbent flowering stems, (B) flower, apical view, (C) mature capsule with sepals, showing the elongate vesicles, (D) stem with mature capsules (from Trigas 2018).

These three species will be included in the monitoring program and the ex situ conservation actions (living collections will be kept at the Botanical Garden and seed accessions will be deposited at the Seed Bank of AUA).

6. Importance and assessment of habitat types

The importance of Andros Island for its terrestrial biodiversity is evident by the fact that it has designated as a Natura 2000 site Special area of Conservation (SAC): "Andros: Vitali Bay and central Mountainous area (GR4220001)".

According to the SDF (Standard Data Form) of the Natura 2000 site GR4220001, the assessment of habitat types (present in our sites) is as follows in the next table.

Habitat code	Cover (ha)	Representa-tivity	Relative Surface	Conservation	Global Assessment
2230	3,424	C	B	C	B
5420	6360,532	B	B	B	B
6420	0,738	C	C	C	C
92C0	68,476	A	C	A	B
92D0	4,132	B	C	C	C
91E0*	3,493	B	C	B	B

*: Priority habitat type

Notes: 72A0, 934A are absent from assessment Table without any known reason.

The actual assessment Table of the SDF is shown below.

Κωδικός	PF	NP	Κάλυψη (ha)	Σπήλαια αριθμός	Ποιότητα Δεδομένων	Αντιπροσωπευτικότητα	Σχετική Επιφάνεια	Διατήρηση	Συνολική Αξιολόγηση
1240			84,142		G	B	C	B	B
1410			0,048		G	B	C	B	B
2110			0,786		G	C	C	C	C
2230			3,424		G	C	B	C	B
5420			6360,532		G	B	B	B	B
6420			0,738		G	C	C	C	C
8220			0,896		G	B	C	B	B
92C0			68,476		G	A	C	A	B
92D0			4,132		G	B	C	C	C
9350			160,351		G	B	B	C	C
91E0	1		3,493		G	B	C	B	B
3260		1			G				
3290		1			G				
6220	1	1			G				
1170					M	A		B	B

According to our sampling data, the global assessment of the vegetation types (plant communities) we have encountered in the two sites, is as follows.

s/n	Vegetation communities	Vori	Lefka
1	Sedge	A	B
2	Reed	A	A
3	Evergreen shrub	A	-
4	Alnus	B	C
5	Platanus	B	C
6	Nerium	-	A
7	Phrygana	-	A

Regarding the priority habitat type 91E0*, B and C assessment has been assigned in Vori and Lefka sites, respectively. Vori wetland is one of the most important wetlands of Andros Island. In the wetland as well as along the streambed there are multiple threats that are interrelated. Flooding events have destructed alder and platanus stands, have carried and

deposited alluvial material in adjacent meadows, cultivated fields and terraces, as well as within the riverbed and delta, altering wetland's structure. The wetland has been largely enclosed by sedimentary materials (soil, tree branches, and dry canes) that hinder the smooth flow of water, forming a permanent water cover and anaerobic conditions locally throughout the year. A road construction that crosses the wetland along the seaside also prevents wetland drainage. Permanently stagnant waters cover a large part of Vori estuaries, mainly at the NE part of the wetland, resulting to the loss of all alder trees at this part of the wetland.

During a severe flood episode in 2012, the *Alnus glutinosa* stands of Vori and Lefka streams lost a significant part of their area, corresponding to hundreds of mature individuals. The alder stands of Lefka stream practically disappeared and only remnant trees are currently present at this area. The regeneration of the forest is limited and the former alder stands are gradually replaced by giant cane and *Nerium oleander* formations. Sparse alder seedlings still appear in the area, but they are quickly consumed by goats. Of the three Lefka sample plots with alder taken, only alder seedlings were found in two of them and a mature tree was recorded in the third plot.

In Vori stream a compact alder stand still exists at the delta area, close to Vori beach. However, of the seven Vori sample plots with alder taken, *Alnus glutinosa* stands were in good condition only in four. In none of them there is seedling regeneration, probably because of the grazing mainly by goats. The hydrological conditions of the delta area have probably altered after 2012 flood event. As a result, a part of the former *A. glutinosa* alluvial forest is permanently flooded, and all trees in this part have died. Despite the *A. glutinosa* cover increase after 1945 (when almost any tree has been fallen during World War II), disturbances often come up and fall the ecosystem in a backward direction.

Regarding the structure and composition of Vori alder stand, a complete absence of alder regeneration characterizes the whole delta area. All alder trees are ± coincident, with younger trees about 7-10 years old to be present in some cases along the stream. Alder forms a pure stand at the delta area and sparse *Salix alba* and *Platanus orientalis* trees exist in some cases. There is not a real shrub layer. Lianas, mainly *Vitis vinifera* subsp. *sylvestris* and *Hedera helix*, climb on alder trees oppressing them. The understorey of alder stand is mainly occupied by *Carex pendula* and *Equisetum telmateia*. *Typha domingensis* also exists in permanently flooded sites, accompanying mainly by *Scirpoides holoschoenus*, *Juncus acutus* and

Tripidium ravennae at the borders of alder stand. As alder stands of Andros form the southernmost limits of this habitat type, several characteristic species of the habitat (e.g. several *Carex* spp. and *Chaerophyllum* spp.) are totally missing. The floristic composition, however, of the Vori alder stand is similar to those distributed in central and southern Greek mainland. Alder stand degradation is evident by the replacement of alder mainly by *Rubus sanctus* and *Arundo donax* in inland locations and along the river, and by sedges towards the coastline.

Grazing by sheep and goats is extensive, mainly in Vori. The predominant practice involves uncontrolled flock grazing without the attendance of a shepherd. A large number of over 500 feral goats enter the priority habitat and destroy any new vegetation. This has a disastrous effect leading to complete eradication of emerging *Alnus glutinosa* seedlings, and results in stunted alluvial forest natural regeneration and a serious degradation of their floristic composition. In Lefka stream grazing is less intensive, but remains a major threat for alder seedlings.

Wild fires are quite common during summer and although they have a limited direct effect on *A. glutinosa* forest, the habitat suffers from denudation of the surrounding slopes. Soil erosion follows resulting in heavy floods, as is dramatically evident on the slopes above Vori and Lefka valleys where large areas were recently burnt.

Intense flooding phenomena are responsible for serious degradation of *A. glutinosa* alluvial forests in 91E0* during the last few years. A large number of trees were uprooted, while rocks, trunks and other plant debris were moved downstream, the appearance of several sites has drastically changed and no forest vegetation could be further observed in some cases. The main reason for flooding are recent wild fires, particularly around Vori and Lefka valleys where 40% of the total *Alnus glutinosa* cover area has severely degraded as stated in the LIFE Program habitat description.

7. References

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APPENDIX

1. Photographic Documentation

Photo1. Vori: general view of the *Alnus glutinosa* forest. The damage suffered from the flood of 2012 on the tree tops and most branches is evident.

Photo 2. Vori: some *Alnus* clusters occur outside the main stand initially mapped.

Photo 3. Vori: view of the plot B1 with *Platanus* and *Nerium* in a gravelly riverbed.

Photo 4. Vori: Sedge community in plot B2.

Photo 5. Vori: view of the plot B3 with marginal *Alnus glutinosa* trees along with reeds and sedges.

Photo 6. Vori: view of the plot B4 with mature dense *Alnus glutinosa* stand in good condition.

Photo7. Vori: view of the plot B5 with a marginal *Alnus* cluster, outside the main stand, which suffers top and branch drying.

Photo 8. Vori: view of the plot B6 with *Alnus* in good condition. A characteristic coppice habit.

Photo 9. Vori: view of the plot B7 with severe drying. Regeneration observed at the lower part of the trunk.

Photo 10. Lefka: general view. Plenty of reed stands with the *Nerium* plants could be observed near the coast.

Photo 11. Lefka: view of the plot L1 with disturbed *Platanus* tress, and Nerium plants dominant at the shrub layer.

Photo 12. Lefka: view of the plot L2 with *Platanus* trees near the low flow rivulet.

Photo 13. Lefka: view of the plot L3 with the coastal sedge community.

Photo 14. Lefka: view of the plot L4 with the *Nerium* dominated community.

Photo 15. Lefka: view of the plot L5 of the *Platanus*-dominated community with fragmentary presence of *Alnus* and *Nerium* plants.

Photo 16. Lefka: regeneration of an alder seedling.

2. Sampling Spreadsheets

2.1 Vori vegetation samplings

VEGETATION SAMPLING SPREADSHEET				
PROJECT : ***LIFE ANDROS PARK***				
TEAMWORK: Themis Adamopoulos for AUA			GPS: x2	
SAMPLING DATE: 12/5/2018			SAMPLE NUMBER: B1	
PLACE: Vori			SITE: Vori	
VEGETATION UNIT: Platanus			SAMPLING AREA: 100m2	
PHYSIOGRAPHY: Rivulet				
ELEVATION: 58m	ASPECT: -		SLOPE: - %	
GEOLOGY SUBSTRATE:			STONES & GRAVEL: 40%	
TOTAL PLANT COVER:			LEAF LITTER: YES	
BARREN LAND COVER:			SURFACE ROCK COVER: %	
TREE COVER: 40 %			MAX. HT:	AVG HT: -
SHRUB COVER: 40 %			MAX.HT:	AVG HT: -
PHRYGANA/HERBACEOUS COVER: 45 %			MAX. HT:	AVG HT: -
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: *Rivulet course with gravels. Water flow low. Riverbed with algae. Platanus in bad condition with broken tops and branches. Trunks with hollows*				
FUTURE TREND:				
FV	U1	U2	XX	
FUTURE STATUS:				
FV	U1	U2	XX:	
OBSERVED SPECIES				
SPECIES NAME		**COVER-ABUNDANCE**	**MAX. HEIGHT**	**AVERAGE HEIGHT**
Tree Layer				
1	*Platanus orientalis*	**3**	**15**	
2				
Shrub Layer				
1	*Nerium oleander*	**2b**	**2**	
2	*Pistacia lentiscus*	**2a**		
3	*Myrtus communis*	**+**		
4				
Herbaceous Layer				

1	*Nerium oleander*	**2b**		
2	*Dittrichia viscosa*	**2b**		
3	*Anthemis chia*	**+**		
4	*Trifolium campestre*	**+**		
5	*Smilax aspera*	**+**		
6	*Asplenium trichomanes*	**+**		
7	*Bromus sterilis*	**1**		
8	*Samolus valerandi*	**+**		
9	*Geranium robertianum*	**+**		
10				
11				
12				

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover < 5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

VEGETATION SAMPLING SPREADSHEET					
PROJECT : ***LIFE ANDROS PARK***					
TEAMWORK: Themis Adamopoulos for AUA			GPS: x3		
SAMPLING DATE: 12/5/2018			SAMPLE NUMBER: B2		
PLACE: Vori			SITE: Vori		
VEGETATION UNIT: Sedge (Saltmarsh coastal)			SAMPLING AREA: 50m2		
PHYSIOGRAPHY: Inland from seashore					
ELEVATION: 3m	ASPECT: -		SLOPE: - %		
GEOLOGY SUBSTRATE:			STONES & GRAVEL:		
TOTAL PLANT COVER:			LEAF LITTER:		
BARREN LAND COVER:			SURFACE ROCK COVER: %		
TREE COVER: %			MAX. HT:	AVG HT: -	
SHRUB COVER: %			MAX.HT:	AVG HT: -	
PHRYGANA/HERBACEOUS COVER: 100 %			MAX. HT:	AVG HT: -	
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: *More inland from Centaurea spinosa stand. Less inland from Phragmites stand. Soil very wet*					
FUTURE TREND:					
FV	U1	U2	XX		
FUTURE STATUS:					
FV	U1	U2	XX:		
OBSERVED SPECIES					

SPECIES NAME			COVER-ABUNDANCE	MAX. HEIGHT	AVERAGE HEIGHT
Tree Layer					
1					
2					
Shrub Layer					
1					
2					
3					
Herbaceous Layer					
1	*Mentha longifolia*		**4**		
2	*Cirsium creticum*		**2b**		
3	*Juncus acutus*		**2a**	**1,5**	
4	*Scirpoides holoschoenus*		**2a**		
5	*Bolboschoenus maritimus*		**2a**		
6	*Lythrum junceum*		**2a**		
7					

8				
9				
10				
11				
12				

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover < 5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

VEGETATION SAMPLING SPREADSHEET				
PROJECT : ***LIFE ANDROS PARK***				
TEAMWORK: Themis Adamopoulos for AUA		GPS: x4		
SAMPLING DATE: 12/5/2018		SAMPLE NUMBER: B3		
PLACE: Vori		SITE: Vori		
VEGETATION UNIT: Alnus fringe zone		SAMPLING AREA: 100m2		
PHYSIOGRAPHY: Marsh				
ELEVATION: 10m	ASPECT: -		SLOPE: - %	
GEOLOGY SUBSTRATE:		STONES & GRAVEL: %		
TOTAL PLANT COVER:		LEAF LITTER: YES		
BARREN LAND COVER:		SURFACE ROCK COVER: %		
TREE COVER: 40 %		MAX. HT:		AVG HT: -
SHRUB COVER: %		MAX.HT:		AVG HT: -
PHRYGANA/HERBACEOUS COVER: 80 %		MAX. HT:		AVG HT: -
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: *Soil flooded. Alnus depends on high water table but seems to do bad on flooded soil. Alnus with dried tops and branches. No regeneration. In the plot, 6 Alnus individuals and 1 Salix*				
FUTURE TREND:				
FV	U1	U2	XX	
FUTURE STATUS:				
FV	U1	U2	XX:	

OBSERVED SPECIES				
SPECIES NAME		**COVER-ABUNDANCE**	**MAX. HEIGHT**	**DBH**
Tree Layer				
1	*Alnus glutinosa*	**3**	**6**	12-20
2	*Salix alba*	**2a**		
Shrub Layer				
1				
2				
3				
Herbaceous Layer				
1	*Phragmites communis*	**3**	4	
2	*Arundo donax*	**2b**	5,5	
3	*Equisetum telmateia*	**2b**		
4	*Lotus preslii*	**+**		
5	*Bolboschoenus maritimus*	**1**		
6	*Cirsium creticum*	**1**		

7	*Lythrum junceum*	+		
8	*Trifolium repens*	**r**		
9	*Mentha longifolia*	+		
10				
11				
12				
13				
r: very rare, too small area		+ : very few individuals, small cover		
1 : many, cover 1-5%		3 : any individuals, cover 25 - 50%		
2m : too many (>100), cover < 5%		4 : any individuals, cover 50 - 75%		
2a : any individuals, cover 5 - 12,5%		5 : any individuals, cover 75 - 100%		
2b : any individuals, cover 12,5 - 25%				

VEGETATION SAMPLING SPREADSHEET					
PROJECT : ***LIFE ANDROS PARK***					
TEAMWORK: Themis Adamopoulos for AUA			GPS: x5		
SAMPLING DATE: 12/5/2018			SAMPLE NUMBER: B4		
PLACE: Vori			SITE: Vori		
VEGETATION UNIT: Alnus mature stand			SAMPLING AREA: 100m2		
PHYSIOGRAPHY: Lowland forest in the floodplain					
ELEVATION: 7m	ASPECT: -			SLOPE: - %	
GEOLOGY SUBSTRATE:			STONES & GRAVEL: %		
TOTAL PLANT COVER:			LEAF LITTER: YES		
BARREN LAND COVER:			SURFACE ROCK COVER: %		
TREE COVER: 90 %			MAX. HT:		AVG HT: -
SHRUB COVER: %			MAX.HT:		AVG HT: -
PHRYGANA/HERBACEOUS COVER: 80 %			MAX. HT:		AVG HT: -
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: *Dense closed Alnus mature stand. Alnus in its optimum. Soil wet but not flooded. Alnus has a coppice habit and resprouts from the roots and lower branches. Few top-drying. Some dead material. Grazing of sheep and goats. In the plot, 8 Alnus individuals. Cirsium creticum may be an index of Alnus degradation*					
FUTURE TREND:					
FV	U1	U2	XX		
FUTURE STATUS:					
FV	U1	U2	XX:		
OBSERVED SPECIES					
SPECIES NAME			**COVER-ABUNDANCE**	**MAX. HEIGHT**	**DBH**
Tree Layer					
1	*Alnus glutinosa*		**5**	**15**	20-24
2					
Shrub Layer					
1					
2					
3					
4					
Herbaceous Layer					
1	*Rubus sanctus*		**2b**		
2	*Equisetum telmateia*		**2b**		
3	*Carex pendula*		**2b**		

4	*Arum concinnatum*	**2a**		
5	*Mentha longifolia*	**2a**		
6	*Brachypodium sylvaticum*	**2a**		
7	*Samolus valerandi*	**+**		
8				
9				
10				
11				
12				

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover < 5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

VEGETATION SAMPLING SPREADSHEET				
PROJECT : ***LIFE ANDROS PARK***				
TEAMWORK: Themis Adamopoulos for AUA			GPS: b5	
SAMPLING DATE: 2/6/2018			SAMPLE NUMBER: B5	
PLACE: Vori			SITE: Vori	
VEGETATION UNIT: Alnus			SAMPLING AREA: 200m2	
PHYSIOGRAPHY: Level, by the rivulet				
ELEVATION: 21m	ASPECT: -		SLOPE: - %	
GEOLOGY SUBSTRATE:			STONES & GRAVEL:	
TOTAL PLANT COVER:			LEAF LITTER:	
BARREN LAND COVER:			SURFACE ROCK COVER: %	
TREE COVER: 40%			MAX. HT:	AVG HT: -
SHRUB COVER: %			MAX.HT:	AVG HT: -
PHRYGANA/HERBACEOUS COVER: 70%			MAX. HT:	AVG HT: -
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: Marginal *Alnus* stand. Dead woody mass, dead tree tops. Soil wet, muddy. Trampling by goats. Turkey grazing. *Alnus* regeneration only from the trunk at about 2m from ground. 18 individuals in the plot, 8 of them dead.				
FUTURE TREND:				
FV	U1	U2	XX	
FUTURE STATUS:				
FV	U1	U2	XX:	

SPECIES NAME		COVER-ABUNDANCE	MAX. HEIGHT	DBH
Tree Layer				
1	*Alnus glutinosa*	**3**	**8**	20-25
2				
Shrub Layer				
1				
2				
3				
Herbaceous Layer				
1	*Dittrichia viscosa*	**2b**		
2	*Lythrum junceum*	**2b**		
3	*Scirpoides holoschoenus*	**2b**		
4	*Nasturtium officinale*	**2a**		
5	*Cirsium creticum*	**2a**		
6	*Mentha longifolia*	**+**		

7	*Samolus valerandi*	**1**		
8				
9				
10				
11				
12				
r: very rare, too small area		+ : very few individuals, small cover		
1 : many, cover 1-5%		3 : any individuals, cover 25 - 50%		
2m : too many (>100), cover < 5%		4 : any individuals, cover 50 - 75%		
2a : any individuals, cover 5 - 12,5%		5 : any individuals, cover 75 - 100%		
2b : any individuals, cover 12,5 - 25%				

VEGETATION SAMPLING SPREADSHEET					
PROJECT : ***LIFE ANDROS PARK***					
TEAMWORK: Themis Adamopoulos for AUA			GPS: b6		
SAMPLING DATE: 2/6/2018			SAMPLE NUMBER: B6		
PLACE: Vori			SITE: Vori		
VEGETATION UNIT: Alnus			SAMPLING AREA: 200m2		
PHYSIOGRAPHY: Level, 25m from the rivulet					
ELEVATION: 21m	ASPECT: -			SLOPE: - %	
GEOLOGY SUBSTRATE:			STONES & GRAVEL:		
TOTAL PLANT COVER:			LEAF LITTER:		
BARREN LAND COVER:			SURFACE ROCK COVER: %		
TREE COVER: 70%			MAX. HT:		AVG HT: -
SHRUB COVER: %			MAX.HT:		AVG HT: -
PHRYGANA/HERBACEOUS COVER: 60%			MAX. HT:		AVG HT: -
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: *Alnus* stand somewhat away from the rivulet. Soil sandy, highly drained. Grazing. 21 individuals in the plot, 3 of them dead. One *Platanus* individual.					
FUTURE TREND:					
FV	U1	U2	XX		
FUTURE STATUS:					
FV	U1	U2	XX:		

	SPECIES NAME	COVER-ABUNDANCE	MAX. HEIGHT	DBH
Tree Layer				
1	*Alnus glutinosa*	**4**	**14**	18-28
2	*Platanus orientalis*	**2a**	**12**	30
Shrub Layer				
1				
2				
3				
Herbaceous Layer				
1	*Dittrichia viscosa*	**3**		
2	*Mentha longifolia*	**2b**		
3	*Cirsium creticum*	**2a**		
4	*Rumex conglomeratus*	**1**		
5	*Rubia tinctorum*	**+**		
6	*Urtica pilulifera*	**+**		
7	*Bromus sterilis*	**+**		

8	*Vitis vinifera* ssp.*sylvestris*	+		
9				
10				
11				
12				
r: very rare, too small area		+ : very few individuals, small cover		
1 : many, cover 1-5%		3 : any individuals, cover 25 - 50%		
2m : too many (>100), cover < 5%		4 : any individuals, cover 50 - 75%		
2a : any individuals, cover 5 - 12,5%		5 : any individuals, cover 75 - 100%		
2b : any individuals, cover 12,5 - 25%				

VEGETATION SAMPLING SPREADSHEET					
PROJECT : ***LIFE ANDROS PARK***					
TEAMWORK: Themis Adamopoulos for AUA			GPS: b7		
SAMPLING DATE: 2/6/2018			SAMPLE NUMBER: B7		
PLACE: Vori			SITE: Vori		
VEGETATION UNIT: Alnus-Juncus			SAMPLING AREA: 200m2		
PHYSIOGRAPHY: Marshy ex-closed *Alnus* stand					
ELEVATION: 10m	ASPECT: -			SLOPE: - %	
GEOLOGY SUBSTRATE:			STONES & GRAVEL:		
TOTAL PLANT COVER:			LEAF LITTER:		
BARREN LAND COVER:			SURFACE ROCK COVER: %		
TREE COVER: 10%			MAX. HT:		AVG HT: -
SHRUB COVER: 10%			MAX.HT:		AVG HT: -
PHRYGANA/HERBACEOUS COVER: 100%			MAX. HT:		AVG HT: -
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: ex *Alnus* stand, destroyed by the flood of 2012. *Alnus* regeneration only from the lower part of the trunk. Soil very wet. 12 individuals in the plot, 12 of them dead, at least from top to 3m from ground.					
FUTURE TREND:					
FV	U1	U2	XX		
FUTURE STATUS:					
FV	U1	U2	XX:		

	SPECIES NAME	**COVER-ABUNDANCE**	**MAX. HEIGHT**	**DBH**
Tree Layer				
1	*Alnus glutinosa*	**2a**	**3**	
2				
Shrub Layer				
1	*Nerium oleander*	**2a**	**2**	
2				
3				
Herbaceous Layer				
1	*Juncus acutus*	**3**		
2	*Mentha longifolia*	**2b**		
3	*Typha domingensis*	**2b**		
4	*Cirsium creticum*	**2b**		
5	*Dittrichia viscosa*	**2a**		
6	*Lythrum junceum*	**1**		
7	*Veronica anagallis-aquatica*	**1**		

8				
9				
10				
11				
12				
r: very rare, too small area		+ : very few individuals, small cover		
1 : many, cover 1-5%		3 : any individuals, cover 25 - 50%		
2m : too many (>100), cover <5%		4 : any individuals, cover 50 - 75%		
2a : any individuals, cover 5 - 12,5%		5 : any individuals, cover 75 - 100%		
2b : any individuals, cover 12,5 - 25%				

VEGETATION SAMPLING SPREADSHEET					
PROJECT : ***LIFE ANDROS PARK***					
TEAMWORK: Panayiotis Trigas for AUA			GPS:		
SAMPLING DATE: 30/4/2018			SAMPLE NUMBER: B8		
PLACE: Vori			SITE: Vori		
VEGETATION UNIT: Alnus			SAMPLING AREA: 100m2		
PHYSIOGRAPHY: Alluvium in a level site					
ELEVATION: 4m	ASPECT: -		SLOPE: - %		
GEOLOGY SUBSTRATE:			STONES & GRAVEL: 0		
TOTAL PLANT COVER:			LEAF LITTER:		
BARREN LAND COVER:			SURFACE ROCK COVER: %		
TREE COVER: 70%			MAX. HT:	AVG HT: -	
SHRUB COVER: %			MAX.HT:	AVG HT: -	
PHRYGANA/HERBACEOUS COVER: 85%			MAX. HT:	AVG HT: -	
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: *Alnus* stand at the SE of the plot, with rivulet of flowing water					
FUTURE TREND:					
FV	U1	U2	XX		
FUTURE STATUS:					
FV	U1	U2	XX:		

SPECIES NAME		COVER-ABUNDANCE	MAX. HEIGHT	DBH
Tree Layer				
1	*Alnus glutinosa*	**4**	**8**	
2				
Shrub Layer				
1				
2				
3				
Herbaceous Layer				
1	*Typha domingensis*	**4**		
2	*Carex pendula*	**2b**		
3	*Equisetum telmateia*	**2a**		
4	*Vitis vinifera* ssp. *sylvestris*	+		
5	*Rubus sanctus*	+		
6	*Parietaria judaica*	+		
7	*Tamus communis*	+		
8	*Arisarum vulgare*	+		

9	*Mentha longifolia*	+		
10	*Potamogeton nodosus*	+		
11	*Oxalis pes-caprae*	+		
12				

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover <5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

VEGETATION SAMPLING SPREADSHEET					
PROJECT : ***LIFE ANDROS PARK***					
TEAMWORK: Panayiotis Trigas for AUA			GPS:		
SAMPLING DATE: 30/4/2018			SAMPLE NUMBER: B9		
PLACE: Vori			SITE: Vori		
VEGETATION UNIT: Alnus			SAMPLING AREA: 100m2		
PHYSIOGRAPHY: Alluvium in a level site					
ELEVATION: 4m	ASPECT: -			SLOPE: - %	
GEOLOGY SUBSTRATE:			STONES & GRAVEL: 0		
TOTAL PLANT COVER:			LEAF LITTER:		
BARREN LAND COVER:			SURFACE ROCK COVER: %		
TREE COVER: 80%			MAX. HT:		AVG HT: -
SHRUB COVER: %			MAX.HT:		AVG HT: -
PHRYGANA/HERBACEOUS COVER: 100%			MAX. HT:		AVG HT: -
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: *Alnus* stand, some dead. Flowing water nearby					
FUTURE TREND:					
FV	U1	U2	XX		
FUTURE STATUS:					
FV	U1	U2	XX:		

	SPECIES NAME	COVER-ABUNDANCE	MAX. HEIGHT	DBH
Tree Layer				
1	*Alnus glutinosa*	**5**	**8**	
2				
Shrub Layer				
1				
2				
3				
Herbaceous Layer				
1	*Carex pendula*	**3**		
2	*Equisetum telmateia*	**3**		
3	*Vitis vinifera ssp.sylvestris*	**2b**		
4	*Rubus sanctus*	**2a**		
5	*Cirsium creticum*	**2a**		
6	*Parietaria judaica*	**+**		
7	*Samolus valerandi*	**+**		
8	*Rumex* sp.	**+**		

9	*Galium aparine*	+		
10	*Typha domingensis*	+		
11				
12				

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover <5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

VEGETATION SAMPLING SPREADSHEET					
PROJECT : ***LIFE ANDROS PARK***					
TEAMWORK: Panayiotis Trigas for AUA			GPS:		
SAMPLING DATE: 30/4/2018			SAMPLE NUMBER: B10		
PLACE: Vori			SITE: Vori		
VEGETATION UNIT: Mediterranean shrubs			SAMPLING AREA: 25m2		
PHYSIOGRAPHY: Lower slope					
ELEVATION:9 m	ASPECT: NW		SLOPE: 10 %		
GEOLOGY SUBSTRATE: Schist			STONES & GRAVEL: 20%		
TOTAL PLANT COVER:			LEAF LITTER:		
BARREN LAND COVER:			SURFACE ROCK COVER: %		
TREE COVER: %			MAX. HT:	AVG HT: -	
SHRUB COVER: 95 %			MAX.HT:	AVG HT: -	
PHRYGANA/HERBACEOUS COVER: 40%			MAX. HT:	AVG HT: -	
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: Mediterranean shrubs at the lower slopes of a hill beside the road					
FUTURE TREND:					
FV	U1	U2	XX		
FUTURE STATUS:					
FV	U1	U2	XX:		
SPECIES NAME			**COVER-ABUNDANCE**	**MAX. HEIGHT**	**DBH**
Tree Layer					
1					
Shrub Layer					
1	*Pistacia lentiscus*		**3**	**3**	
2	*Quercus coccifera*		**2b**		
3	*Calicotome villosa*		**2a**		
4	*Pyrus spinosa*		**2a**		
Herbaceous Layer					
1	*Sarcopoterium spinosum*		**2b**		
2	*Vitis vinifera ssp.sylvestris*		**2a**		
3	*Cistus creticus*		**2a**		
4	*Satureja thymbra*		**+**		
5	*Genista acanthoclada*		**+**		
6	*Helichrysum stoechas*		**+**		
7	*Linum strictum ssp. spicatum*		**+**		
8	*Hypericum sp.*		**+**		

9	*Petrorhagia dubia*	+		
10	*Trifolium stellatum*	+		
11	*Avena sterilis*	+		
12	*Trifolium campestre*	+		
13	*Hypochoeris achyrophorus*	+		
14	*Torilis sp*	+		
15	*Rumex sp.*	+		

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover <5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

VEGETATION SAMPLING SPREADSHEET					
PROJECT : ***LIFE ANDROS PARK***					
TEAMWORK: Panayiotis Trigas for AUA			GPS:		
SAMPLING DATE: 30/4/2018			SAMPLE NUMBER: B11		
PLACE: Vori			SITE: Vori		
VEGETATION UNIT: Water community			SAMPLING AREA: 25m2		
PHYSIOGRAPHY: Rivulet					
ELEVATION:3 m	ASPECT:		SLOPE: %		
GEOLOGY SUBSTRATE:			STONES & GRAVEL: %		
TOTAL PLANT COVER:			LEAF LITTER:		
BARREN LAND COVER:			SURFACE ROCK COVER: %		
TREE COVER: %			MAX. HT:	AVG HT: -	
SHRUB COVER: %			MAX.HT:	AVG HT: -	
PHRYGANA/HERBACEOUS COVER: 100%			MAX. HT:	AVG HT: -	
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: Water community in the rivulet at the cross with the road					
FUTURE TREND:					
FV	U1	U2	XX		
FUTURE STATUS:					
FV	U1	U2	XX:		

SPECIES NAME		COVER-ABUNDANCE	MAX. HEIGHT	DBH
Tree Layer				
1				
Shrub Layer				
1				
2				
Herbaceous Layer				
1	*Apium nodiflorum*	**5**		
2	*Nasturtium officinale*	**2a**		
3	*Scirpoides holoschoenus*	**2a**		
4	*Cyperus sp.*	**2a**		
5	*Mentha longifolia*	**+**		
6	*Samolus valerandi*	**+**		
7	*Veronica anagallis-aquatica*	**+**		
8	*Nerium oleander*	**r**		
9				
10				

11				
12				
13				
14				
15				

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover<5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

VEGETATION SAMPLING SPREADSHEET					
PROJECT : ***LIFE ANDROS PARK***					
TEAMWORK: Panayiotis Trigas for AUA			GPS:		
SAMPLING DATE: 30/4/2018			SAMPLE NUMBER: B12		
PLACE: Vori			SITE: Vori		
VEGETATION UNIT: *Centaurea spinosa* comm.			SAMPLING AREA: 25m2		
PHYSIOGRAPHY: Sandy coast					
ELEVATION:3 m	ASPECT: W		SLOPE: 3 %		
GEOLOGY SUBSTRATE:			STONES & GRAVEL: 2%		
TOTAL PLANT COVER:			LEAF LITTER:		
BARREN LAND COVER:			SURFACE ROCK COVER: %		
TREE COVER: %			MAX. HT:	AVG HT: -	
SHRUB COVER: %			MAX.HT:	AVG HT: -	
PHRYGANA/HERBACEOUS COVER: 25%			MAX. HT:	AVG HT: -	
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: Sand dune zone					
FUTURE TREND:					
FV	U1	U2	XX		
FUTURE STATUS:					
FV	U1	U2	XX:		

SPECIES NAME		COVER-ABUNDANCE	MAX. HEIGHT	DBH
Tree Layer				
1				
Shrub Layer				
1				
2				
Herbaceous Layer				
1	*Centaurea spinosa*	**2b**		
2	*Hordeum marinum*	**+**		
3	*Vulpia fasciculata*	**+**		
4	*Medicago marina*	**+**		
5	*Brachypodium retusum*	**r**		
6	*Crepis multiflora*	**r**		
7				
8				
9				
10				

11				
12				
13				
14				
15				

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover <5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

2.2 Lefka vegetation samplings

VEGETATION SAMPLING SPREADSHEET				
PROJECT : ***LIFE ANDROS PARK***				
TEAMWORK: Themis Adamopoulos for AUA			GPS: 11	
SAMPLING DATE: 13/5/2018			SAMPLE NUMBER: 1	
PLACE: Lefka			SITE: Lefka	
VEGETATION UNIT: Platanus			SAMPLING AREA: 100m2	
PHYSIOGRAPHY: Rivulet				
ELEVATION: 28m	ASPECT: -		SLOPE: - %	
GEOLOGY SUBSTRATE:			STONES & GRAVEL: 15%	
TOTAL PLANT COVER:			LEAF LITTER:	
BARREN LAND COVER:			SURFACE ROCK COVER: %	
TREE COVER: 20 %			MAX. HT:	AVG HT: -
SHRUB COVER: 20 %			MAX.HT:	AVG HT: -
PHRYGANA/HERBACEOUS COVER: 50 %			MAX. HT:	AVG HT: -
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: Rivulet course with gravels. Sandy soil. Water flow low. Width of flowing water 4m. *Platanus* degraded with broken branches. In the plot 2 P*latanus* individuals				
FUTURE TREND:				
FV	U1	U2	XX	
FUTURE STATUS:				
FV	U1	U2	XX:	
OBSERVED SPECIES				
SPECIES NAME		**COVER-ABUNDANCE**	**MAX. HEIGHT**	**DBH**
Tree Layer				
1	*Platanus orientalis*	**2b**	**9**	20-30
2				
Shrub Layer				
1	*Nerium oleander*	**2b**	**2**	
2				
3				
Herbaceous Layer				
1	*Dittrichia viscosa*	**2b**		
2	*Scirpoides holoschoenus*	**2b**		
3	*Aegilops triuncialis*	**1**		

4	*Platanus orientalis*	+		
5	*Nerium oleander*	+		
6	*Hedera helix*	+		
7	*Alnus glutinosa*	**r**		
8				
9				
10				
11				
12				
13				

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover < 5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

VEGETATION SAMPLING SPREADSHEET				
PROJECT : ***LIFE ANDROS PARK***				
TEAMWORK: Themis Adamopoulos for AUA			GPS: l2	
SAMPLING DATE: 13/5/2018			SAMPLE NUMBER: 2	
PLACE: Lefka			SITE: Lefka	
VEGETATION UNIT: Platanus			SAMPLING AREA: 100m2	
PHYSIOGRAPHY: Rivulet				
ELEVATION: 27m	ASPECT: -		SLOPE: - %	
GEOLOGY SUBSTRATE:			STONES & GRAVEL: 5%	
TOTAL PLANT COVER:			LEAF LITTER:	
BARREN LAND COVER:			SURFACE ROCK COVER: %	
TREE COVER: 40 %			MAX. HT:	AVG HT: -
SHRUB COVER: 15 %			MAX.HT:	AVG HT: -
PHRYGANA/HERBACEOUS COVER: 80 %			MAX. HT:	AVG HT: -
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: Rivulet course. Shady site. Water flow low. Width of flowing water 3m. *Platanus* in a better condition than that of plot Λ1.In the plot 1 *Platanus* root with 5 trunks				
FUTURE TREND:				
FV	U1	U2	XX	
FUTURE STATUS:				
FV	U1	U2	XX:	

OBSERVED SPECIES				
SPECIES NAME		**COVER-ABUNDANCE**	**MAX. HEIGHT**	**DBH**
Tree Layer				
1	*Platanus orientalis*	**3**	**14**	25-35
2				
Shrub Layer				
1	*Nerium oleander*	**2a**	**2**	
2				
3				
Herbaceous Layer				
1	*Dittrichia viscosa*	**3**		
2	*Asplenium trichomanes*	**2a**		
3	*Mentha longifolia*	**2a**		
4	*Samolus valerandi*	**2a**		
5	*Nerium oleander*	**+**		
6	*Platanus orientalis*	**+**		

7	*Veronica anagallis-aquatica*	**1**		
8	*Apium nodiflorum*	**1**		
9	*Picnomon acarna*	**1**		
10	*Potamogeton nodosus*	**1**		
11	*Geranium lucidum*	**+**		
12				
13				

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover < 5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

VEGETATION SAMPLING SPREADSHEET					
PROJECT : ***LIFE ANDROS PARK***					
TEAMWORK: Themis Adamopoulos for AUA			GPS: l3		
SAMPLING DATE: 13/5/2018			SAMPLE NUMBER: 3		
PLACE: Lefka			SITE: Lefka		
VEGETATION UNIT: Sedge (Coastal Marsh Pond)			SAMPLING AREA: 50m2		
PHYSIOGRAPHY: Coastal Marsh Pond					
ELEVATION: 2m	ASPECT: -			SLOPE: - %	
GEOLOGY SUBSTRATE:			STONES & GRAVEL:		
TOTAL PLANT COVER:			LEAF LITTER:		
BARREN LAND COVER:			SURFACE ROCK COVER: %		
TREE COVER: %			MAX. HT:		AVG HT: -
SHRUB COVER: %			MAX.HT:		AVG HT: -
PHRYGANA/HERBACEOUS COVER: 100 %			MAX. HT:		AVG HT: -
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: Marsh with stagnant water. Wildlife inside (toads and fish). *Alnus* 1 regenerating individual of 0,50m height. Many garbage around. Grazing of goats all around. The road to Lefka is worse than that of Vori but less human impact is noted.					
FUTURE TREND:					
FV	U1	U2	XX		
FUTURE STATUS:					
FV	U1	U2	XX:		
OBSERVED SPECIES					

SPECIES NAME			COVER-ABUNDANCE	MAX. HEIGHT	AVERAGE HEIGHT
Tree Layer					
1					
2					
Shrub Layer					
1					
2					
3					
Herbaceous Layer					
1	*Juncus acutus*		**4**		
2	*Scirpoides holoschoenus*		**2b**		
3	*Typha domingensis*		**2a**	**2,5**	
4	*Saccharum ravennae*		**2a**	**4**	
5	*Parietaria judaica*		**1**		

7	*Delphinium staphisagria*		+		
8	*Alnus glutinosus*		r		
9					
10					
11					
12					
13					

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover < 5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

VEGETATION SAMPLING SPREADSHEET					
PROJECT : ***LIFE ANDROS PARK***					
TEAMWORK: Themis Adamopoulos for AUA			GPS: l4		
SAMPLING DATE: 13/5/2018			SAMPLE NUMBER: 4		
PLACE: Lefka			SITE: Lefka		
VEGETATION UNIT: Nerium			SAMPLING AREA: 50m2		
PHYSIOGRAPHY: Rivulet bank near the coast					
ELEVATION: 4m	ASPECT: -			SLOPE: - %	
GEOLOGY SUBSTRATE:			STONES & GRAVEL:		
TOTAL PLANT COVER:			LEAF LITTER:		
BARREN LAND COVER:			SURFACE ROCK COVER: %		
TREE COVER: %			MAX. HT:		AVG HT: -
SHRUB COVER: 30 %			MAX.HT:		AVG HT: -
PHRYGANA/HERBACEOUS COVER: 80 %			MAX. HT:		AVG HT: -
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: Rivulet bank near the coast with a community of Nerium-Typha-Juncus. Water with very low flow. Many garbage around. Grazing of goats all around.The road to Lefka is worse than that of Vori but with less human impact.					
FUTURE TREND:					
FV	U1	U2	XX		
FUTURE STATUS:					
FV	U1	U2	XX:		
OBSERVED SPECIES					
SPECIES NAME			**COVER-ABUNDANCE**	**MAX. HEIGHT**	**AVERAGE HEIGHT**
Tree Layer					
1					
2					
Shrub Layer					
1	*Nerium oleander*		**3**	**3**	
2					
3					
Herbaceous Layer					
1	*Juncus acutus*		**2b**		
2	*Typha domingensis*		**2b**	**2,5**	
3	*Hordeum murinum*		**2b**		
4	*Cirsium creticum*		**1**		
5	*Lagurus ovatus*		**1**		

7	*Parietaria judaica*		**1**		
8	*Arum concinnatum*		+		
9	*Silybum marianum*		+		
10	*Delphinium staphisagria*		+		
11					
12					

r: very rare, too small area	+ : very few individuals, small cover
1 : many, cover 1-5%	3 : any individuals, cover 25 - 50%
2m : too many (>100), cover < 5%	4 : any individuals, cover 50 - 75%
2a : any individuals, cover 5 - 12,5%	5 : any individuals, cover 75 - 100%
2b : any individuals, cover 12,5 - 25%	

VEGETATION SAMPLING SPREADSHEET					
PROJECT : ***LIFE ANDROS PARK***					
TEAMWORK: Themis Adamopoulos for AUA			GPS: l5		
SAMPLING DATE: 2/6/2018			SAMPLE NUMBER: L5		
PLACE: Lefka			SITE: Lefka		
VEGETATION UNIT: Platanus			SAMPLING AREA: 200m2		
PHYSIOGRAPHY: By the rivulet (both sides)					
ELEVATION: 24m	ASPECT: -		SLOPE: - %		
GEOLOGY SUBSTRATE:			STONES & GRAVEL: 50%		
TOTAL PLANT COVER:			LEAF LITTER:		
BARREN LAND COVER:			SURFACE ROCK COVER: %		
TREE COVER: 40%			MAX. HT:		AVG HT: -
SHRUB COVER: 25%			MAX.HT:		AVG HT: -
PHRYGANA/HERBACEOUS COVER: 50%			MAX. HT:		AVG HT: -
ECOLOGICAL CONSERVATION STATUS - OBSERVATIONS: Plot around an *Alnus* coppice complex of 3 individuals. Rare but existing *Alnus* seed regeneration. Otherwise *Platanus* is dominant. 4 *Platanus* individuals. Gravel with plenty of *Platanus* and *Nerium* regeneration.					
FUTURE TREND: For Alnus U1, for Platanus FV					
FV	U1	U2	XX		
FUTURE STATUS: For Alnus U1, for Platanus FV					
FV	U1	U2	XX:		

SPECIES NAME		COVER-ABUNDANCE	MAX. HEIGHT	DBH
Tree Layer				
1	*Platanus orientalis*	**2b**	**13**	25-40
2	*Alnus glutinosa*	**2b**	**13**	24-30
Shrub Layer				
1	*Nerium oleander*	**2b**	**2,5**	
2				
3				
Herbaceous Layer				
1	*Nerium oleander*	**2b**		
2	*Platanus orientalis*	**2a**		
3	*Scirpoides holoschoenus*	**2a**		
4	*Dittrichia viscosa*	**2a**		
5	*Aegilops triuncialis*	**1**		
6	*Picnomon acarna*	**+**		

7	*Apium nodiglorum*	+		
8	*Samolus valerandi*	+		
9	*Mentha longifolia*	+		
10	*Lythrum junceum*	+		
11	*Pteridium aquilinum*	+		
12	*Alnus glutinosa*	**r**		
13	*Myrtus communis*	**r**		

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