

DPLR1\1086

Darwin Plus Local - Final Report (1)

Officer: Carlos Jimenez

Section 1 - Darwin Plus Local Project Information (Essential)

Project Reference Number

DPL00041

Q1. Project Title

No Response

Overseas Territory(ies)

Sovereign Base Areas of Akrotiri and Dhekelia (on Cyprus)

Lead Organisation or Individual

Enalia Physis Environmental Research Centre

Partner Organisation(s)

No other partner

Value of Darwin Plus Local Grant Award

£49,996.00

Project Start Date

01 April 2023

Project End Date

31 March 2024

Project Leader Name

Carlos Jimenez

Project Website/Twitter/Blog etc.

<https://enaliaphysis.org.cy/>

Report Author(s)

Report Date

21 April 2024

Project Summary

No Response

Project Outcomes

Checked **Biodiversity: improving and conserving biodiversity, and slowing or reversing biodiversity loss and degradation;**

Checked **Climate Change: responding to, mitigating and adapting to climate change and its effects on the natural environment and local communities;**

Checked **Environmental quality: improving the condition and protection of the natural environment;**

Checked **Capability and capacity building: enhancing the capacity within OTs, including through community engagement and awareness, to support the environment in the short- and long-term.**

Section 2 - Project Outcomes (Essential)

On a scale of 1 (high – outcome substantially exceeded) to 5 (low – outcome substantially did not meet expectation), how successful do you think your project has been?

1 - Outcome substantially exceeded

Project outcomes and justification for rating above

The project's objectives and outcomes were met and exceeded the expectations by tackling first the information deficit on the biodiversity and health of four selected EU Priority Habitats (Habitat Directive and the Barcelona Convention), but also with the inclusion of three additional types that were not originally considered: mixed and sandy bottoms, and the planktonic environment (inside the cave). From no information available, the project substantially improved the knowledge produced by systematic surveys of the habitats because there is for the first time Baseline information of the shoals' biodiversity. The managers of the Episkopi Special Area of Conservation (ESAC) are now able to contextualize the importance of the shoals in terms of habitats and species diversity (supporting material SM1). The database of biodiversity will assist in elaborating monitoring activities (what, why and how) and research program and proposals. What is also significant is that the geomorphological characteristics and ecological diversity of the submarine cave is now on the desk and in the minds of the ESAC managers. The cave is no longer a simple dark hole that only attracted the interest of a few divers in the country. It is now a complex system with unique ecosystems and processes operating in the dark but connected in different pathways with the other three habitats. This new perception, outcome of the project, is shared with the

dive centres visiting the shoals and by the ESAC managers and other stakeholders that participated in the first and final workshops (supporting material SM2). The change operated by the project on their perception is reflected in the social media (supporting material SM3).


In relation to the geomorphology of the cave, the project changed significantly the original notion about the cave's structural complexity that it was based on the only available source, a years-old sketch. The project produced an accurate representation of the cave and a 3D model (supporting material, SM4). With this new information, ESAC managers and other stakeholders, such as researchers and divers, can plan activities and identify areas of special attention (i.e., hotspots of diversity or damage). The diving sector will use the map and 3D model to brief divers about how to perform safely the immersion paying particular attention to the cave's characteristics and the distribution of the species. The project also achieved the goal of producing baseline data of the users (divers) visiting the shoals. The results generated basic socioeconomic data (supporting material, SM5) to be used in further surveys to expand and complement the characterization of this stakeholder's sector.


The training and education of the graduate student participating in the project, is proceeding beyond the original goal of writing a dissertation thesis. The work and the techniques learned (and improved as well by the student), are going to be presented in an international symposium (June 2024) and published after peer-review (supporting material SM6).


The final and successful outcome is a list of recommendations (based on evidence and 145 hrs diving time) for the management of the shoals (supporting material SM7).


Supporting Evidence - file(s) upload


 [SFF 54 Acceptance-MailSymp-Livorno-JUNE2024](#)


 19/04/2024


 17:10:52


 pdf 235.5 KB


 [Abstract Present Public Int.Symp.-Livorno-Italy-June2024](#)


 19/04/2024


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 [Certificate-Student-Thesis-Jubilee-Shoals-05.04.2024](#)


 19/04/2024


 17:10:29


 pdf 184.93 KB


 [SM1 List of participants - Closing event](#)


 19/04/2024

 17:09:39


 pdf 769.36 KB


 [SM1 List of participants - First event](#)


 19/04/2024


 17:09:39

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 [Darwin-Plus-Local-Report-Supporting Material-JUBILEE SHOALS-19.04.2024](#)

 19/04/2024

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Supporting Evidence - links to published document/online materials

[REDACTED]

[REDACTED]



[REDACTED]

[REDACTED]

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[REDACTED]

Project Challenges

A challenge to the project was the logistics associated to the surveys of the habitats of the Jubilee Shoals, particularly because the nature of the diving conditions. The surveys at the shoals started at 17m depth and extended down to 45m depth. These conditions required diving under the most stringent safety measures and following technical and rebreather diving procedures. For example, we planned the dives in a manner that (i) allowed long decompression times (1-2hrs), (ii) early dives starting before 07:00 every day, (iii) long surface intervals between days of work (ca. 18hrs), (iv) one full day of rest in the middle of the survey for the two team of divers, (v) contingency plan for emergencies and access to hospitals and decompression chamber. Following this protocol, the total time of diving was 145 hrs (four research divers), which is a significant effort to produce the underwater data.

A very common issue when surveying for biodiversity is the taxonomy of the organisms. More often than not, there are organisms that their taxonomy can only be resolved with molecular and/or morphological analyses, which are time and resource consuming. We dealt with this business-as-usual difficulty by identifying the species in the database to the lowest taxonomy level only when possible. For those cases with unresolved taxonomy, they were classified as "morpho-species" (a common practice) and we aim to provide samples to experts in the corresponding groups for their opinion and analysis if external resources are secured.

Lessons Learned

In this kind of projects that require difficult logistics and are very demanding in terms of resources, highly-trained participants, and to a large degree dependent of external factors, such as the weather conditions, many aspects can go wrong or not work at all according to expectations. The success of the project was in part due to the enthusiasm and genuine interest of the participants and informal collaborators to produce first-time important knowledge about the shoals' habitats, and to contribute to their protection. This passion-driven attitude is not enough; there must be well planning and evaluation of options to cope with seen and unforeseen circumstances. The experience of ENALIA's staff in this type of surveys, facilitated the setting of achievable goals through a well-planned set of activities, allowing for contingency measures (e.g., extended days of field-work and additional/substitute highly-trained divers, if necessary).

Section 3 - Project Finance (Essential)

Project Expenditure

Project Spend (indicative) since last Annual Report	2023/24 Grant (£)	2023/24 Total actual Darwin Plus Costs (£)	Variance %	Comments (please explain significant variances)
Staff Costs				
Consultancy Costs				
Overhead Costs				
Travel and Subsistence				
Operating Costs				
Capital Items				
Others				

Total	49,996.00	50,260.32	0.53
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Please provide a short narrative summary on project finances.

Budget line OPERATING COSTS: During fieldwork, an underwater light (essential for the surveys inside the cave), sustained irreparable damage, necessitating its replacement for continued operational efficiency and safety of the divers. This replacement cost was added to the operational budget, resulting in a [REDACTED] increase over the anticipated expenses. To cover this unexpected expenditure, available funds (£[REDACTED] from the underspent portion of the OTHERS budget line (-[REDACTED] variance) were allocated to OPERATING COSTS. Enalia Physis (Lead organization) provided an additional sum (£[REDACTED] as cofunding for the purchase of the replacement UW light.

Less money was spent than originally calculated in the OTHERS budget line because there was no charge for the conference room for the two workshops and the number of participants was less than expected (the corresponding catering was significantly reduced).

For the project's successful execution, Enalia Physis provided its computer and laboratory facilities, and diving equipment (e.g., steel tanks for compressed air, UW cameras, air regulators, dive computers).

The overall percentage of change in the project's total budget was 0.53% ([REDACTED]).

Section 4 - Contribution of Project to Darwin Plus Programme Objectives

Please select up to **one** indicator that applies within **each group/indicator list (A, B, C, D)** and report your results for that indicator in the text box underneath. If you do not have relevant results to report for any of the indicators in a particular group, you can leave them blank.

Please also submit some form of evidence (above) to demonstrate any results you list below, where possible.

Group A: Capability and Capacity - Core Darwin Plus Standard Indicators (select one)

Unchecked **DPLUS-A01: Number of people from key national and local stakeholder groups completing structured and relevant training.**

Unchecked **DPLUS-A02: Number of secondments or placements completed by individuals of key local and national stakeholders.**

Unchecked **DPLUS-A03: Number of local/national organisations with improved capability and capacity as a result of project.**

Checked **DPLUS-A04: Number of people reporting that they are applying new capabilities (skills and knowledge) 6 (or more) months after training.**

Unchecked **DPLUS-A05: Number of trainers trained reporting to have delivered further training by the end of the project.**

Group A Indicator Results

If understood correctly, the training of ONE MSc student in the project corresponds to this indicator. ONE trainee learned new techniques of underwater research, implemented them during the project and even improved a few of them. Results are going to be reported in the thesis and in an international conference.

Group B: Policies, Practices and Management- Core Darwin Plus Standard Indicators (select one)

Unchecked	DPLUS-B01: Number of new/improved habitat management plans available and endorsed.
Unchecked	DPLUS-B02: Number of new/improved species management plans available and endorsed.
Unchecked	DPLUS-B03: Number of new/improved community management plans available and endorsed.
Unchecked	DPLUS-B04: Number of new/improved sustainable enterprises/ community benefits management plans available and endorsed.
Unchecked	DPLUS-B05: Number of people with increased participation in local communities / local management organisations (i.e., participation in Governance/citizen engagement).
Checked	DPLUS-B06: Number of Local Stakeholders and Local Communities (people) with strengthened (recognised/clarified) tenure and/or rights.

Group B Indicator Results

If understood correctly, the involvement of FIVE local persons in the project corresponds to this indicator. FIVE locals who are related to the diving sector participated in the project. By their own initiative, they maintain the mooring system at the 1st pinnacle minimizing impacts by third party anchoring.

Group C: Evidence and Best Practices - Core Darwin Plus Standard Indicators (select one)

Unchecked	DPLUS-C01: Number of best practice guides and knowledge products published and endorsed.
Unchecked	DPLUS-C02: Number of new conservation or species stock assessments published.
Checked	DPLUS-C03: New assessments of habitat conservation action needs published.
Unchecked	DPLUS-C04: New assessments of community use of biodiversity resources published.

Unchecked **DPLUS-C05: Number of projects contributing data, insights, and case studies to national Multilateral Environmental Agreements (MEAs) related reporting processes and calls for evidence.**

Group C Indicator Results

If understood correctly, ONE new assessment of biodiversity in the habitats of the Jubilee Shoals that is part of a MSc degree thesis will be published and disseminated after the defence of the thesis. The document will also include a socioeconomic survey (indicator DPLUS-C04).

Group D: Sustainable Benefits to People, Biodiversity and Climate - Core Darwin Plus Standard Indicators (select one)

Unchecked **DPLUS-D01 Hectares of habitat under sustainable management practices.**

Unchecked **DPLUS-D02: Number of people whose disaster/climate resilience has been improved.**

Unchecked **DPLUS-D03: Number of policies with biodiversity provisions that have been enacted or amended.**

Group D Indicator Results

Not applicable.

Section 5 - Project Partnerships, Wider Impacts and Contributions

Project Partnerships

Even though the Government of the Territory was not directly involved in this project as an official partner, it is important to highlight their supportive role throughout the project. Since the writing of the proposal for the project, the ESAC managers provided advice, suggestions and information about the shoals. Their initial input and constant feed-back was very useful and it is greatly appreciated.

Local divers and dive centres were not formally partners in the project but they were involved by providing logistics and sharing their knowledge about the shoals' difficult diving conditions and particularities of the geomorphology. The support of these local stakeholders and their interest to protect the shoals, were important assets to the project because with their engagement the project's presence is facilitated in the community.

In the Supporting Material section, we provide photos of the meetings with ESAC managers and other stakeholders including local dive centres (SM2 Workshops), including an example of what the latter posted about the project in the social media (SM3 Posts Social Media).

Wider Impacts and Decision Making

At the time of writing, we are still in the process of sharing the information and outcomes of the project with several stakeholders. The information is already available for the ESAC managers to assist in decision making and, according to their feedback, we will provide additional information in the format they request (e.g.,

document, presentation, etc.). Since the collection of information and data is significant, there are analyses that still need to be completed as part of the MSc thesis (SM6 Training and Education) and will certainly contribute to the ESAC managers' new perspective of the shoals.

In relation to the last point above, all interested parties, including us, were pleasantly surprised by the Jubilee Shoals complexity and extent. The area of interest at the shoals is larger than what was commonly assumed. Before the project, the 1st pinnacle was all what was considered in the state of the knowledge. After the project, it is clear that the shoals are an unique ecosystem composed by different habitats and a wider view is needed for the management and protection of the shoals.

Sustainability and Legacy

The project was successful beyond the original expectations. This is in part because the motivational force was, and still it is, the protection and management of the shoals, including the study of the habitats. All participants and informal collaborators believe that this project was the starting point for a long-term cause to achieve the ultimate goal, that is, protection of the shoals.

With the support of Darwin Plus, we have secured the means to continue the work initiated in this project but with emphasis on the pervasive effect of derelict fishing gear in the shoals. The staff and collaborators in the new project (Project Reference: DPL00082), are the same and will continue benefiting from the first project as the baseline information/knowledge is utilized in multiple ways in research and management, but also for the search of means to support further activities.

Section 6 - Communications & Publicity

Exceptional Outcomes and Achievements

During the duration of the Project DPL00041 "Assessing and protecting marine biodiversity (Jubilee Shoals, SBAA Akrotiri, Cyprus)", we have curated representative material aimed at promoting it to the public. This promotional material comprises photographs and videos strategically designed to inform the public about our work and evoke a sense of involvement in the project.


The photographs utilized for promotion primarily showcase the unique ecosystems present in the project area, captivating the interest of the public. To enhance relatability and engagement, many of these photographs feature individuals actively participating in project activities, allowing the public to connect with the energy and purpose behind our actions.


In addition to photographs, we have also created videos with the dual purpose of impressing and informing viewers. These videos offer glimpses into the various sampling activities conducted throughout the project duration, presented in a cohesive narrative that immerses viewers in a day in the field with our research team. By providing an insider's view of our work processes and achievements, these videos aim to foster a deeper understanding and appreciation of the project's goals and outcomes.


Through our carefully curated promotional materials, we strive to not only disseminate information but also to inspire a sense of ownership and participation among the public. By showcasing the beauty of the marine ecosystems we are working to protect and highlighting the active involvement of individuals in our project activities, we aim to galvanize support for marine biodiversity conservation efforts in our region.


Photo, video or graphic to be used for publicity and communications.


Please upload at least one relevant and engaging image, video or graphic that you consent to be used alongside the above text in Defra, JNCC or NIRAS communications material.


 [DPL00041 -Swimming in the dark. - SBAA-Cyprus - Vassilis Tsiairis-ENALIA](#)


 23/04/2024


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 [DPL00041 -Reef wall - SBAA-Cyprus - Vassilis Tsiairis-ENALIA](#)


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 [DPL00041 -Photoquadrat Survey - Vassilis Tsiairis-ENALIA](#)


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 [DPL00041 -Mapping - SBAA-Cyprus - George Oikonomidis-ENALIA](#)


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 [DPL00041 -Decompression - SBAA-Cyprus - Vassilis Tsiairis-ENALIA](#)


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 [DPL00041 -Crossing the cave - SBAA-Cyprus - Vassilis Tsiairis-ENALIA](#)


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 [DPL00041 -Coralligenous- SBAA-Cyprus - George Oikonomidis-ENALIA](#)

 23/04/2024

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Photo, video, and/or graphic captions and credits.

[Redacted content]

I agree for the Biodiversity Challenge Funds Secretariat, Administrator, and/or JNCC to publish the content of this section.

Yes, I agree for the BCFs Secretariat and/or JNCC to publish the content of this section.

Please list any accounts that you would like tagged in online posts here. This can include project pages, partners' pages or individuals' accounts for any of the following platforms: LinkedIn, Facebook, Twitter, or Instagram.

Project page: <https://enaliaphysis.org.cy/2023/05/30/3530/>

LinkedIn: <https://www.linkedin.com/company/enalia-physis-environmental-research-centre/>

Facebook: <https://www.facebook.com/Enaliaphysis>

Twitter: <https://twitter.com/enaliaphysis>

Instagram: <https://www.instagram.com/enaliaphysis/>

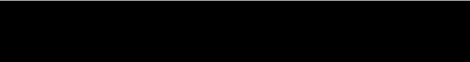
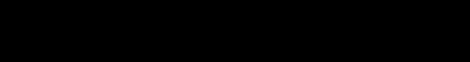
Instagram Individual: https://www.instagram.com/vasilis_resaikos/

Section 7 - Darwin Plus Contacts

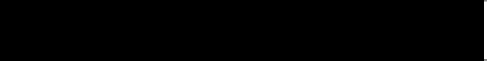
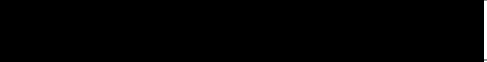
Please tick here to confirm that you have read and acknowledge the BCF's Privacy Notice on how contact details will be used and stored and that you have sought agreement from anyone that you are sharing personal details with us on their behalf.

I confirm I have read the Privacy Notice and have consent to share the following contact details

Project Contact Details

Project Contact Name	Carlos Jimenez
Role within Darwin Plus Project	Project Leader
Email	
Phone	
Do you need further sections to provide additional contact details?	<input checked="" type="radio"/> Yes

Additional Project Contact Details

Project Contact Name	Marios Papageorgiou
Role within Darwin Project	Principal Finance Contact
Email	
Phone	
Do you need further sections to provide additional contact details?	<input checked="" type="radio"/> No
