



Darwin and Darwin Plus Fellowships Reporting Guidelines

Darwin Fellows are expected to submit two reports to the Darwin Initiative, in which they have the opportunity to report on their experiences gained during the Fellowship, and on any other issues they would like to raise. Please look at the formats for both reports provided overleaf and contact us if you have any questions.

Darwin Fellows are expected to prepare the reports in conjunction with the Lead Organisation who are responsible for ensuring their submission and that reporting deadlines are adhered to.

You are required to provide:

- A brief Interim Report at the half way point (maximum 3 pages) submitted within one month of the half way point.
- A Final Report within one month of completion of the Fellowship (maximum 6 pages excluding annexes).

LTS will read all reports submitted but will only provide a written review of the Final Report – please do not expect feedback from the Interim Report unless there are specific concerns about the progress of the Fellowship. LTS will provide a written review of the Final Report within 2 months of receipt – if you have not heard from us within that timescale, please feel free to contact us for an update.

Please send your report by email to Darwin-Projects@ltsi.co.uk and include the name of the Darwin Fellow in the subject line.

If you have any additional queries about reporting, please feel free to email.



Darwin Fellowship - Interim Report

Due within one month of the half way point of your Fellowship (*maximum 3 pages*)

Darwin Fellowship reference	DPLUS101
Name of Darwin Fellow	Ioanna Angelidou
Lead organisation	Centre for Ecology & Hydrology
Fellow's organisation(s)	Joint Services Health Unit in Cyprus
Fellow's role within the organisation (prior to Fellowship)	<ul style="list-style-type: none"> Member of the local organising committee for COST Action CA17122 Alien CSI in Akrotiri Education and Environment Centre, Cyprus. Worked at the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) database for terrestrial invertebrates team Europe and Central Asia with Easin List and Assessors Member of the local organising committee for the 24-hour Bioblitz on the Akrotiri peninsula Member of the organising committee for the COST Bioblitz that will take place next year
Start/end date of Fellowship	01 August 2020 - 31 March 2022
Location of Fellowship	Cyprus
Darwin Fellowship grant value (£)	£29,060.00
Type of work (e.g. research, training, if other please specify)	Research
Main contact in lead organisation	[REDACTED]
Author(s) and date	Prof Helen Roy, Dr Kelly Martinou, Dr Francesca Mancini, Ioanna Angelidou, 17/05/2021

1. Background

This Darwin Fellowship complements the Darwin Plus funded study "Addressing drivers of ecological change in Lake Akrotiri SBA", aims to quantify the ecosystem services provided by the wetland of Akrotiri, and how different drivers (including urbanisation, invasive species and climate change) will impact these benefits to people. In addition, this fellowship provides the opportunity to extend the Flower-Insect Timed (FIT) Count protocol to other habitats across the SBAs through increased community engagement. The overarching research aims are:

1. Identify the indirect (underlying causes) and direct (pressures) drivers of biodiversity and ecosystem change around the Akrotiri wetland
2. Document the ecosystem services relevant to the Akrotiri wetland using various approaches including IPBES Nature's Contributions to People and CICES
3. Apply and test TESSA, an expert-based modelling Toolkit for Ecosystem Service Site-based Assessment and if it works well for the case of Akrotiri she will communicate the results to all relevant stakeholders in Akrotiri
4. Consider the potential to model the consequences for Nature's Contributions to People for the different drivers by adopting different modelling approaches as suggested by IPBES in through three modelling approaches.

I am responsible for undertaking the research under the leadership of Professor Helen Roy (UK Centre for Ecology & Hydrology (UKCEH)), Dr Angeliki Martinou (JSHU) and Dr Francesca Mancini (UKCEH). The team (co-supervisors and I) meet on regular intervals (online) to assess progress and discuss next steps with Dr Martinou providing day-to-day supervision at the JSHU. I have planned to visit the CEH three times during the fellowship, in order to work with Professor Roy and ecological modellers (particularly Dr Mancini) to develop my capacity for using such approaches. However, due of Covid-19, the planned visits at the CEH scheduled for the previous time period, had to be cancelled.

2. Progress

This fellowship began in the summer of 2020 and I have so far:

- Worked on the ecosystem service of Pollination, through Pollinator Monitoring Scheme of K ypros (Poms-k y). Poms-k y is a citizen science programme that aims to motivate, to familiarize and to improve the knowledge of the general public on pollinating insects and their importance on terrestrial ecosystems and the ecosystem services they provide, and also collect data of pollinating insects in Cyprus.
- Organised **public engagement events** to increase uptake of FIT Counts in March 2021.
- In cooperation with other units of the British Bases, **organized an information day for adults** (British and Cypriot) in April 2021, in order to raise public awareness and record pollinating insects in Akrotiri peninsula, through Poms-k y.
- In collaboration with experts, creation of a mobile application, the **FIT Count App**, so citizens could use in order to count insect pollinators, even in a period of lockdown.
- In collaboration with Dr Martinou, creation of **'The Pollinator Monitoring Scheme of Cyprus' Facebook page** in order to reach more citizens and to organize the public engagement events more easily.
- Extend the Pollinator Monitoring Scheme of Cyprus and the FIT Count protocol to other habitats. Testing the impacts of the road network on pollinators.
- Reviewing the literature to gather evidence of ecosystem services relevant to the Akrotiri wetland, and contact with stakeholders in order to collect important information about the wetland.
- Research the expert-based modelling Classifying Ecosystem Services (CICES), Socio-Economic Impact Classification of Alien Species (SEICAT) and Toolkit for Ecosystem Service Site based Assessments (TESSA), in order to understand how they work, and I will start applying the schemes within the next month.
- On the 25th and 26th August 2020, in collaboration with the European Commission, organization of a day to inform teenagers about the importance of pollination and insect pollinators. Recording pollinators in Akrotiri peninsula, through the Poms-k y (Pollinator Monitoring Scheme of K ypros) and filming the process of recording pollinators through Poms-k y and the impressions created in teenagers, for the purpose of promotion in other European countries and be adopted by them as well (find the link here: <https://www.youtube.com/watch?v=CUglohXMjo4>).
- Contribute to the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) database for terrestrial invertebrates across Europe and Central Asia.

Problems encountered during this period:

- The planned visit to the UK Centre of Ecology and Hydrology scheduled for the first month, had to be cancelled. However, it is expected to happen at a later date, if the situation around Covid-19 improves.
- Only a few public engagement events with citizen scientists have been organized until now, as most of them had to be postponed due to Covid-19. More public engagement events will be organised (on a weekly basis), if the situation around Covid-19 improves.

- Similarly organisation of training event for the Pollinator Monitoring Scheme of Cyprus, for teachers within Environmental Education Centre across Cyprus is expected to happen later this summer, when the situation around Covid-19 improves. If face-to-face training remains impossible then I will organise an online training event.

3. Achievements and Outcomes

The main achievements and outcomes to date are:

- 1) In collaboration with the European Commission, filming the process of recording pollinators through Poms-ký and the feedback from participants,
- 2) Public engagement events
- 3) Creation of a mobile application the 'FIT Count App' for citizens
- 4) Extending the Pollinator Monitoring Scheme of Cyprus and the Flower-Insect Timed Count protocol to other habitats across the Limassol (including SBAs), by testing the impacts of roads on pollinators.
- 5) Creation of 'The Pollinator Monitoring Scheme of Cyprus' Facebook page in order to reach more citizens and to organize the public engagement events more easily.
- 6) Working on the Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) database for terrestrial invertebrates team Europe and Central Asia with EASIN list as a contributing author.
- 7) Draft of a manuscript on the FIT Counts dataset collected so far.

4. Impact of COVID-19 on Fellowship

As a result of Covid-19, this fellowship was slightly delayed (it started in August 2020 instead of April 2020). In addition, because of the pandemic, the visit to the UK Centre of Ecology and Hydrology scheduled for the first month was cancelled, and meeting with collaborators at UKCEH and CABI will be planned for a later date. As stated above public engagement and training opportunities have been limited.

5. Safeguarding

Please tick this box if any safeguarding or human rights violations have occurred during this financial year.

If you have ticked the box, please ensure these are reported to ODA.safeguarding@defra.gov.uk as indicated in the T&Cs.

6. Next Steps

- Visit to the UK Centre for Ecology and Hydrology when possible
- Gather more evidence of ecosystem services relevant to the Akrotiri wetland, via meet the stakeholders, and quantification of them
- Organise training and engagement events delayed to date because of Covid restrictions
- Publish data online (Open Access) and transfer Fellowship findings to the Akrotiri community and consider potential for use in the UK OTs
- Participation in in the organization and dissemination of the a Europe-wide Bioblitz that will take place next year