



Workshop on Species-Information Gathering and Management Issues

Location: Inis Mór

Date: 10/06/16-12/06/16

AranLIFE Project Team:

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Background

Whilst the AranLIFE project is concentrating its work on the specific management of priority grasslands and Limestone pavement, it felt there was a need to gather additional information at a wider level both at species level within grasslands but also the overall species diversity within the islands. Obtaining the necessary expertise would have been cost prohibitive for the project therefore the project contacted Dr Liam Lysaght of the National Biodiversity Data Centre to consider using the islands as part of their annual Bioblitz. This approach meant that a number of expert species recorders visited the Island in June 2016 and enabled AranLIFE to gather up-to-date information on the location and abundance of a range of species and was a significant contribution to the species recording dataset for the island.

As part of the workshop AranLIFE asked a number of recorders to travel around the island and identify what they considered where the main issues, positive and negative, in the long term survival of particular species/habitats found on the island and what could be addressed to ensure positive future prospects.

Format of the Workshop

The group gathered on Friday evening where they received an introduction to the project and the project team. Health and safety issues were addressed and recorders were directed to specific habitats and places of interest throughout the island by the project team. Transport was arranged and refreshments were provided throughout the weekend.

Number of Recorders

Thirty-two recorders covering many disciplines from invertebrates to fungi came to Inis Mór to contribute to the Species-Information Gathering Workshop (Table 1) and allotted a total of 2256 terrestrial species records over the course of the workshop.



Table 1. Recorders and their expertise

Phil Tifft	Bats
Kate McAney	Bats, Terrestrial Mammals
Ruth Hanniffy	Bats, Terrestrial Mammals
Barry O'Donoghue	Birds
Dermot Breen	Birds
Penny Bartlett	Birds
Maurice Eakin	Bryophytes, Plants
Kieran Connolly	Fungi
Brian Nelson	Invertebrates
Erin Jo Tiedeken	Invertebrates
Grace Bond	Invertebrates
Karen Shevlin	Invertebrates
Medbh Burke	Invertebrates
Paula Tierney	Invertebrates
Ronan FitzPatrick	Invertebrates, Plants
Neil Browne	Molluscs
Pauline Clerkin	Moths
Philip Strickland	Moths
Michael O'Connell	Moths, Invertebrates
Amanda Browne	Plants
Ana Csergo	Plants
Andy Bleasdale	Plants
Anna Csergo	Plants
Caitriona Douglas	Plants
Edwina Cole	Plants
Janice Fuller	Plants
Louise Duignan	Plants
Maria Hohn	Plants
Yvonne Buckley	Plants
Chris Peppiatt	Plants, Bats
Olwen Gill	Plants, Butterflies
Patrick McGurn	Plants, Butterflies, Moths
Rebecca Jeffrey	Terrestrial mammals, Birds
Ferdia Marnell	Terrestrial mammals

Results

A total of 2256 terrestrial species records were collected over the course of the workshop amounting to a total of 777 species (Table 2) from 28 different taxa (Table 3).



Table 2. Numbers of species recorded on Inis Mór in some of the terrestrial groups of species

Flowering plants, conifers, ferns and horsetails	393
Mosses & liverworts	55
Birds	69
Butterflies	15
Moths	167
Birds	69
Terrestrial mammals	9 including 3 bat species (Leislers, Common Pipistrelle, Brown long-eared)

Table 3. Number of terrestrial taxa recorded on Inis Mór during species-information gathering workshop

acarine (Acari)	insect - hymenopteran
annelid	insect - moth
bird	insect - orthopteran
centipede	insect - true bug (Hemiptera)
conifer	insect - true fly (Diptera)
fern	lichen
flowering plant	liverwort
fungoid	millipede
fungus	mollusc
horsetail	moss
insect - beetle (Coleoptera)	reptile
insect - butterfly	spider (Araneae)
insect - dragonfly (Odonata)	springtail (Collembola)
insect - earwig (Dermaptera)	terrestrial mammal

Many species of conservation interest were recorded during this workshop. Ten plants of conservation interest were recorded, six of which are Red Data Book species (Table 4).

Table 4. Plants species of conservation interest recorded during the species –information gathering workshop (NT: Near Threatened, R: Rare, LC: Least Concern, V: Vulnerable)

TAXON NAME	COMMON NAME	IRISH RED LIST CATEGORY	IRISH RED DATA BOOK SPECIES
<i>Astragalus danicus</i>	Purple Milk-vetch	NT	R
<i>Centaurea scabiosa</i>	Greater Knapweed	NT	
<i>Coeloglossum viride</i>	Frog Orchid	NT	
<i>Crambe maritima</i>	Sea-kale	NT	NT
<i>Gentiana verna</i>	Spring Gentian	NT	
<i>Helianthemum oelandicum</i>	Hoary rock-rose	NT	R
<i>Ophrys apifera</i>	Bee Orchid	LC	NT
<i>Primula veris</i>	Cowslip		NT
<i>Saxifraga rosacea</i>	Irish Saxifrage	NT	
<i>Viola hirta</i>	Hairy Violet	VU	V



Questionnaire

AranLIFE selected a number of people to answer questions when they were out recording to get an expert view of habitat management. Selected recorders were from a range of professional backgrounds, both government agencies academics and professional ecologists. This was a unique opportunity to gather their thoughts and impressions of the habitats and projects work on the island.

The main points of the questionnaire responses were:

- Scrub encroachment of species-rich calcareous grassland is a major threat on the island. However an element of scrub was still deemed to be a positive feature for wildlife. General consensus was that up to 10% of the area scrubbed up was an acceptable, but greater than that the loss of species rich grasslands was problematic.
- Maintenance of the low-intensity traditional management strategy is key to conserving the species-rich habitats
- Inis Mór has a fantastic wealth of species-rich habitat over a relatively large area in comparison with similar habitat on the mainland which would be confined to small isolated areas.
- Further research work in to Bumble bees on the island and how their nesting patterns relate to field conditions would be interesting
- Using a range of key indicator species would be useful in assessing the impact of management.
- Machair habitat at Lararna is overgrazed by rabbits and consideration should be given to some form of rabbit control
- The socio-economic issues are central to the success of management on the Aran islands

Here is a summary of the responses to each question

Q1 Based on your visit to the island what are your views on general condition of the habitats of the island specifically Machair, Calcareous Grasslands, Limestone Pavement and their Mosaics.

- Scrub encroachment is an issue on Inis Mór which is not as evident on Inis Meáin which supports large number of lepidoptera species, including most of the Burren specialities.
- Pretty good condition but there is evidence of encroachment
- Relative to other areas in the country hosting similar habitats, I feel the condition of the habitats on the island is generally quite good.
- The machair hosted the expected species complement but was quite mossy in character and appeared to be suffering from rabbit grazing in the areas close to the airstrip.
- Herbicide application did not appear to be an issue on the island.
- Fantastic diversity ... especially the species-rich grasslands. It's reassuring to know that so much of the island (Inis Mor) is wall-to-wall habitat of high conservation value (unlike much of the country where such botanical variety occurs as small 'islands' only).



- In general the other habitats were in good quality. My impression of the small fields was that they were of less interest for invertebrates, the more interesting species being seen in unenclosed areas.

Q2 What are the main threats to the different habitats? List any ongoing, past or potential activities that threaten the overall condition of the habitat.

- Scrub encroachment and the resultant loss of species-richness in the grassland and the pavements clearance of limestone. It still goes on, not on the scale it once did and really should never be allowed.
- Undergrazing / no clearance of scrub. Loss of calcareous grassland species.
- Potential overgrazing. This could have a significant impact on Small Blue habitat and numbers.
- The escape of invasive species needs to be tackled and prevented.
- Land abandonment, scrub encroachment and past land reclamation and improvement have and are currently shaping this landscape.
- The lack of invasive species, low intensity farmland, lack of traffic etc all contribute to high biodiversity. But against that the island has reduced species diversity as they are offshore and lack many habitats.
- There is under recording of many insect groups and some research on these would be useful
- Relaxation of the current pastoral regime due to the high costs and low returns from cattle raising

Q3 If you were to implement a management plan on any farmed area you visited would you have any additional actions, grazing times or do you feel the status quo is sufficient.

- Does the current condition reflect current management or past management ?
- Even though the habitat appears to be in favourable condition at present, is there a threat of disimprovement unless the management regime changes.
- Overgrazing by rabbits in the machair is a concern.
- Scrub removal and a traditional grazing regime is imperative for the grasslands/fields. The status quo is not really an option if under-management is the result.
- I think it would be interesting to look at the bumblebees on the island and in particular where do they nest. Are they nesting in the fields or are they concentrated along the ungrazed areas? And do invertebrates respond to grazing and timing of grazing?

Q4 One of the actions involved in the AranLIFE Project is the removal of scrub, particularly Blackberry/Bramble (*Rubus fruticosus*) and Blackthorn (*Prunus spinosa*). The high occurrence of stone walls seems to offer shelter to the plant and it was traditionally removed by hand. Do you feel there is an acceptable level of scrub and if so at what percentage threshold (in terms of total cover of the field) should it be addressed?

- Ideally a little less than is evident at the moment but realise this is hard to achieve with less farming and less people actively involved in farming



- There is never an acceptable level of scrub, as it is always prone to expand. I would be concerned at habitat level if the area is greater than 5% and at field level if it is greater than 10%.
- Given how significant Aran's species-rich grassland are to the country overall resource, I think only a very small percentage threshold is acceptable (maybe 10%)
- I thought the balance of scrub was fine in the areas I visited at.
- Depends on the objectives of the landholders as well as the conservation objectives. If there are some fields that are likely to thicken up with scrub due to natural successional processes and lack of motivation of the landholder to manage then a landscape scale spatial planning approach might suggest that you leave these unmanaged and manage more intensively elsewhere. This would lead to a "zoned" approach to management rather than one general rule.

Q5 Is there any specific species that should be considered where the general management of grasslands is not meeting the overall habitat requirement? If so what additional actions could be considered?

- The focus should always be habitat specific, but attention should also be paid to the species complement. I don't believe that species and habitat priorities are generally that different on the islands. I am thinking of Vertigo, Chough and plant rarities.
- Key indicator species (from different taxons) should be used for assessing habitat quality. Scrub removal and grazing regime seem sufficient actions to halt the loss of grassland diversity.

Additional Comments

- The island is looking great and the species-information gathering workshop proved that there is a wealth of species present. Botanically it did very well on records of priority species which is encouraging.
- The footprint of the project was visible during my visit. I think I could identify participating farms based on the management of habitats at field level. I could certainly identify non-participating farms where management was poor. Well done to all concerned.
- I was concerned that Pheasants were introduced to the island recently. I think that they should be removed but could also be used to highlight the incorrect introduction of species from the mainland.
- The socio-economic issues are central to the success of management on the Aran islands. Understanding the behaviour and motivations of individual farmers is critical to understanding the likelihood of success of current actions and the sustainability of activities like Aran Life in the future.
- Congratulations to the AranLIFE team. It was very well organised and wonderful to have the opportunity to take part.



Discussion

This workshop proved to be very good success on a number of fronts. It was an opportunity to bring together national experts, professional and amateur, and highlight both work of the AranLIFE and the LIFE unit in the management of SAC. It allowed open discussions within the habitat sites of the issues and the problems farmers faced in the management of priority habitats. It gave the AranLIFE team and the stakeholders a greater networking group and contacts which have and will be used over the life of the project.

The workshop also built a tremendous data base of all species present on the island, some beyond the scope of the AranLIFE team to determine, which have been now recorded in the Irelands National Biodiversity Database

The AranLIFE team will take on board many of the issues raised, e.g. rabbits on lararana and the acceptable level of scrub within a habitat in relation to favourable condition. At present 5% is the acceptable level of scrub within a field and the AranLIFE will assess this assessment methodology over the next year.

On a wider level the workshop achieved great interaction between the island community and the surveyors. Moth traps were set up in the primary schools and the moth expert, Philip Strickland and Brian Nelson were able to identify moths with the students. The farmers welcomed the recorders in to their fields, pointed them towards area they thought were good examples of habitat and took an interest on what was found within their farm.