



FSC BioLinks Development Plan for Training Provision

Outline of the development pathways for volunteers investigated within the FSC BioLinks development phase consultation from April 2016 to January 2017.

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1 Introduction

BioLinks is an upcoming Field Studies Council biodiversity project which received development phase funding from the Heritage Lottery Fund. One of the key outcomes of the project is to facilitate the development of volunteers to a high competency level in the **identification and recording** of a selected range of difficult-to-identify and data-deficient species groups. The creation of species records by volunteer biological recorders is vital to understanding, maintaining and conserving our natural heritage. Achieving this goal will strengthen the biological recording community and support the existing volunteer-led schemes and societies that are often under-resourced and provide this critical environmental monitoring service to help safeguard our natural heritage.

2 BioLinks Consultation

The BioLinks development phase (April 2016 to January 2017) involved consulting with a range of current volunteer biological recorders, potential volunteer biological recorders and sector professionals. Throughout the consultations volunteer motivations and barriers to participation were discussed and a full summary of the findings can be found in the **FSC BioLinks Consultation Report**. Volunteers indicated that a major barrier to participation is often the lack of opportunities for personal development through structured training. The consultation also indicated that it is essential that activities have clearly labelled difficulty levels so that participants can assess if the activity is suitable for their current competency level.

3 Focus species groups

The focus species groups for the BioLinks project were selected using evidence gathered through previous HLF projects (Biodiversity Training Project and Invertebrate Challenge) and feedback received in the BioLinks consultations during the 2016 BioLinks development phase (for more information please see the **FSC BioLinks Consultation Report**). All of the focus species groups are currently data deficient regionally and considered difficult-to-identify as they include species that require the use of a microscope in order to reach a reliable identification.

Eight focus species groups were identified for inclusion in the project:

- **Aculeate Hymenoptera** (bees, ants and wasps)
- **Arachnids** (spiders, harvestmen and false scorpions)
- **Beetles** (ladybirds, longhorn beetles, carrion beetles, ground beetles and seed & leaf beetles)
- **Freshwater invertebrates** (freshwater snails, insect larva and dragonflies & damselflies)
- **Non-marine Molluscs** (slugs, terrestrial snails, freshwater snails and freshwater bivalves)
- **Soil invertebrates** (earthworms, woodlice, centipedes, millipedes and false scorpions)
- **True bugs** (shield bugs, hoppers, plant bugs, water bugs and psyllids)
- **True flies** (hoverflies, craneflies, soldierflies, blowflies, tachinids and picture-wing flies)

Section 7 on page 7 of this document contains structured course pathways incorporating the focus species groups highlighted above (though please note that freshwater invertebrates is replaced by a plan for freshwater insects and other focus freshwater invertebrates are included in the plans for their respective taxonomic group). These taught courses will be complemented by other project activities (see Section 6 on page 6 for further details) and the training course pathway for each focus species group is structured according to the **BioLinks Volunteer Learning Pathway** (see Section 5 on page 4).



4 Training Locations

The BioLinks project aims to facilitate training ‘hubs’ that would act as a base for volunteers and a venue for a high proportion of the project activities (including regular drop-in identification support workshops to provide accessible support and mentoring from the project staff and experts).

Two established training hubs have been highlighted for inclusion within the project:

- **FSC Preston Montford Field Centre** Shropshire
- **British Entomological & Natural History Society HQ** Berkshire

Two new training hubs have also been highlighted for inclusion within the project:

- **FSC Bishops Wood Field Centre** Worcestershire
- **FSC Bushy Park Field Centre** London

In addition to training courses and field events, training hubs will host regular drop-in identification support workshops to provide accessible support and mentoring from the project staff.

Residential courses will be delivered at training centres with residential and catering facilities and the following training centres will be included within the project:

- **FSC Preston Montford Field Centre** Shropshire
- **FSC Juniper Hall Field Centre** Surrey

In order to improve the reach of the project beyond the areas serviced by the training hubs, a small number of BioLinks training courses and field events will be planned at additional training facilities (such as Birmingham Museum Collections Centre, RSPB Sandwell Valley, WWT London Wetlands Centre, Tower Hamlets Cemetery Park, Lesnes Abbey Wood and FSC Amersham).

5 BioLinks Volunteer Learning Pathway

The BioLinks Development Plan for Training Provision (located on the page 4) has been designed to provide a clear outline of how the project activities will enable development of volunteer participants in four key competencies:

Knowledge

Skills

Motivation

Confidence

A range of activities (see Section 6 on page 6 for further details) will be delivered to ensure that progression is facilitated across all four competencies. The **BioLinks Volunteer Learning Pathway** is a tool for volunteers to use to assess their competency level and determine which activities are suitable for them as individuals. This enables volunteers at different competency levels to participate within the BioLinks project by allowing them to determine which activities are suitable for them. The pathway also allows volunteers and assessors to measure the progression of volunteers through the competency levels. This resources was produced in consultation with the Botanical Society of Britain & Ireland regarding their highly regarded Field Identification Skills Certificate (FISC).

BioLinks aims to complement any existing training provision by signposting participants to equivalent activities provided by other organisations. This will allow the project to concentrate on the delivery of activities that are currently absent from the regional provision and fill any gaps in the learning pathway for volunteer biological recorders and to deliver best value for money. The clearly defined competency levels will assist external tutors and training providers in labelling the difficulty of their training courses to ensure consistency throughout the sector.



The *BioLinks Volunteer Learning Pathway* is divided into different competency levels down the left-hand side, starting with the lowest competency level at the bottom and rising to the highest competency level at the top.





6 Activities for volunteer development

Taught courses covering specific subjects and practical skills are key to ensuring that volunteers have access to experts in order to develop their **knowledge** and **skill** competencies. Structured course pathways have been created for each of the focus species groups selected for this project. Each structured course pathway includes courses pitched at the introductory, beginners, intermediate and advanced levels. The project will assess the demand for specific courses within each pathway on an annual basis, considering the existing regional provision and the current competency level of project volunteers with regards to each focus species group. Section 7 provides more detail regarding the focus species group courses that will be considered and Section 7.8 the predicted number of introductory, beginners, intermediate and advanced level courses that will be delivered during each year of the years within this project.

Field events improve **knowledge** of wildlife in the field as well as allowing the development of social relationships with mentors and peers, and are therefore key to developing **motivation** and **confidence**. Field recorder days will be hosted by the project and field events hosted by other organisations will be signposted to. Field events are often aimed at a wide variety of competency levels and may incorporate learning about a range of focus species groups (and groups not targeted by the project). Where BioLinks field events are more specialised or aimed at a specific competency level, they will be labelled as such.

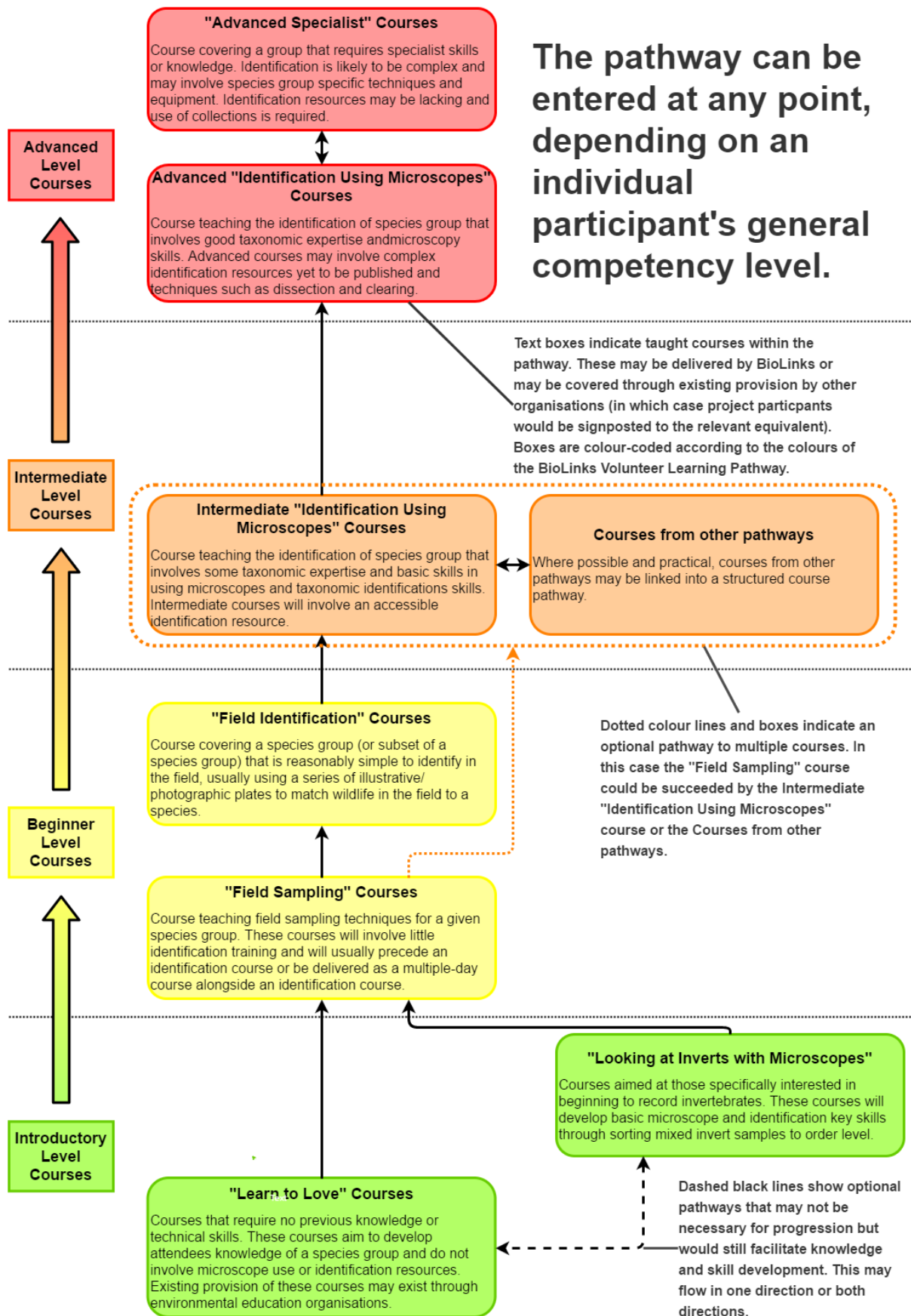
Collections workshops that engage volunteers with natural history collections are essential for demonstrating how to develop the **skills** needed to use this resource. Workshops will inform volunteers regarding the composition and accessibility of local natural history collections and incorporate practical techniques for using collections and building personal reference collections. Furthermore, the workshops will develop relationships with the collections managers and the biological recording community.

Local recording initiatives are a proven method (e.g. regional atlas projects delivered through the Invertebrate Challenge project funded by Heritage Lottery Fund) for **motivating** volunteers to put their skills into practice and encourage self-learning. The BioLinks digital atlas will encourage volunteers to target certain areas within a region that are particularly data deficient or to take ownership of a patch. Other potential initiatives could include the collation of specimens for local collections or photos for online or published identification resources.

Mentoring and support is seen by many as the most useful resource for development of **skills** and **knowledge** with regards to species identification and recording, as well as allowing **confidence** to grow through verification of identifications. Mentoring relationships will be encouraged with tutors/experts and online communities (which can facilitate peer-to-peer mentoring) where possible in order to provide support for those at all competency levels. The project will have a regional officer based in each of the two project regions that will also be able to provide mentoring to project volunteers and assist with verification of species (dependant on their personal competency level for that species group). Additional support and resource access will be facilitated on a regular basis by the project officers through drop-in identification support workshops that will be run at the training hubs.



7 Structured Course Pathways for Focus Species Groups



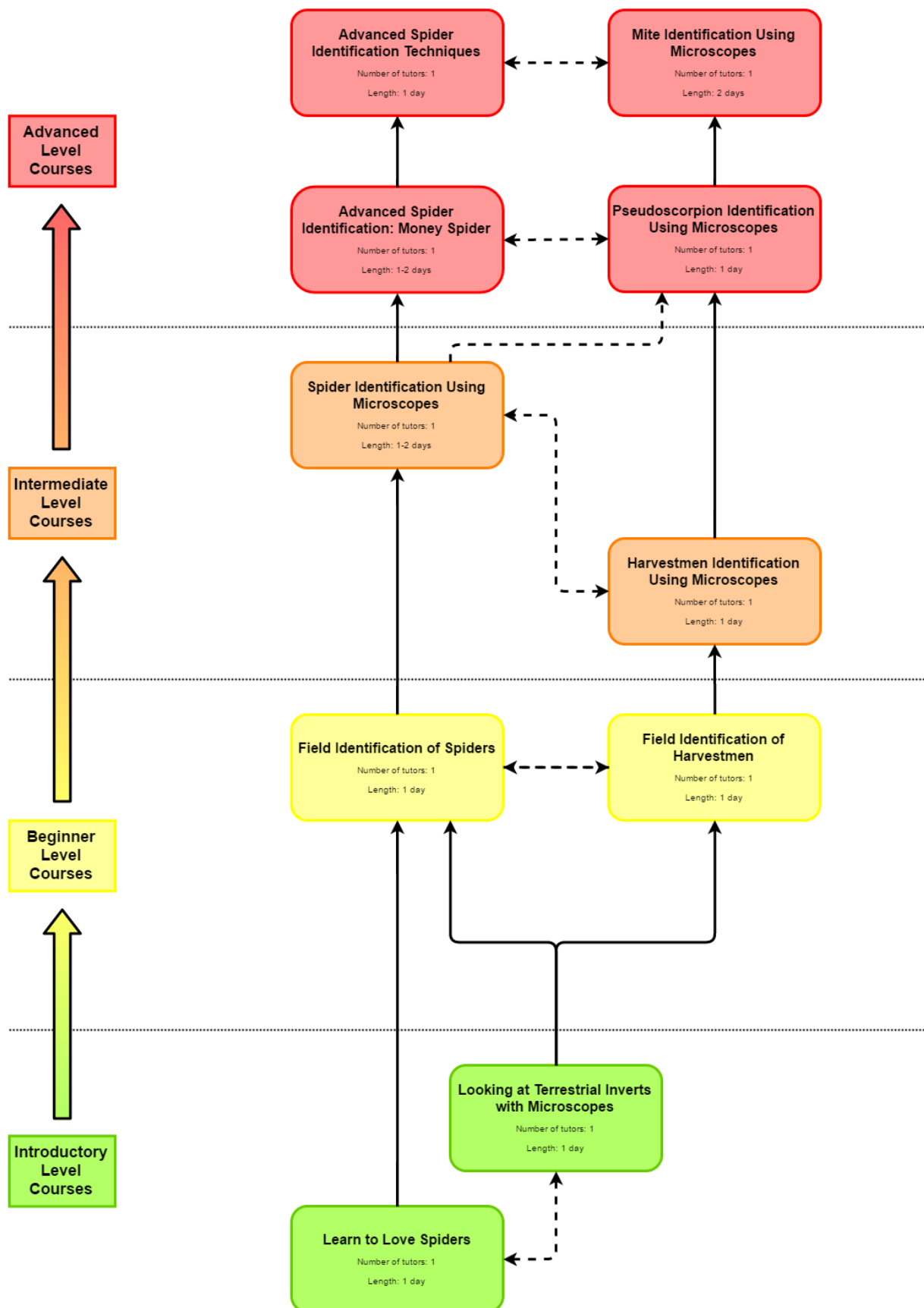


7.1 Structured Course Pathway for Aculeate Hymenoptera



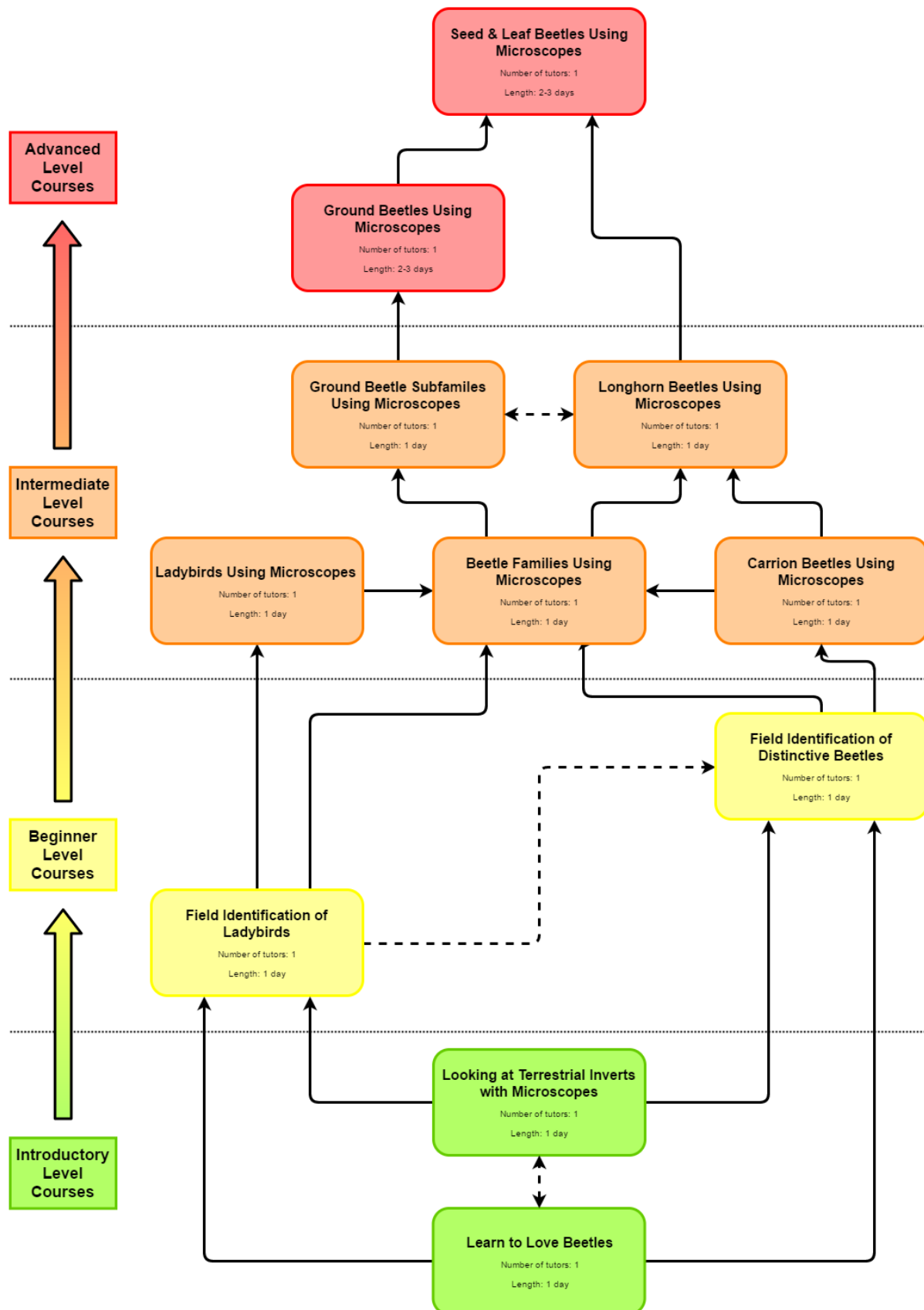


7.2 Structured Course Pathway for Arachnids



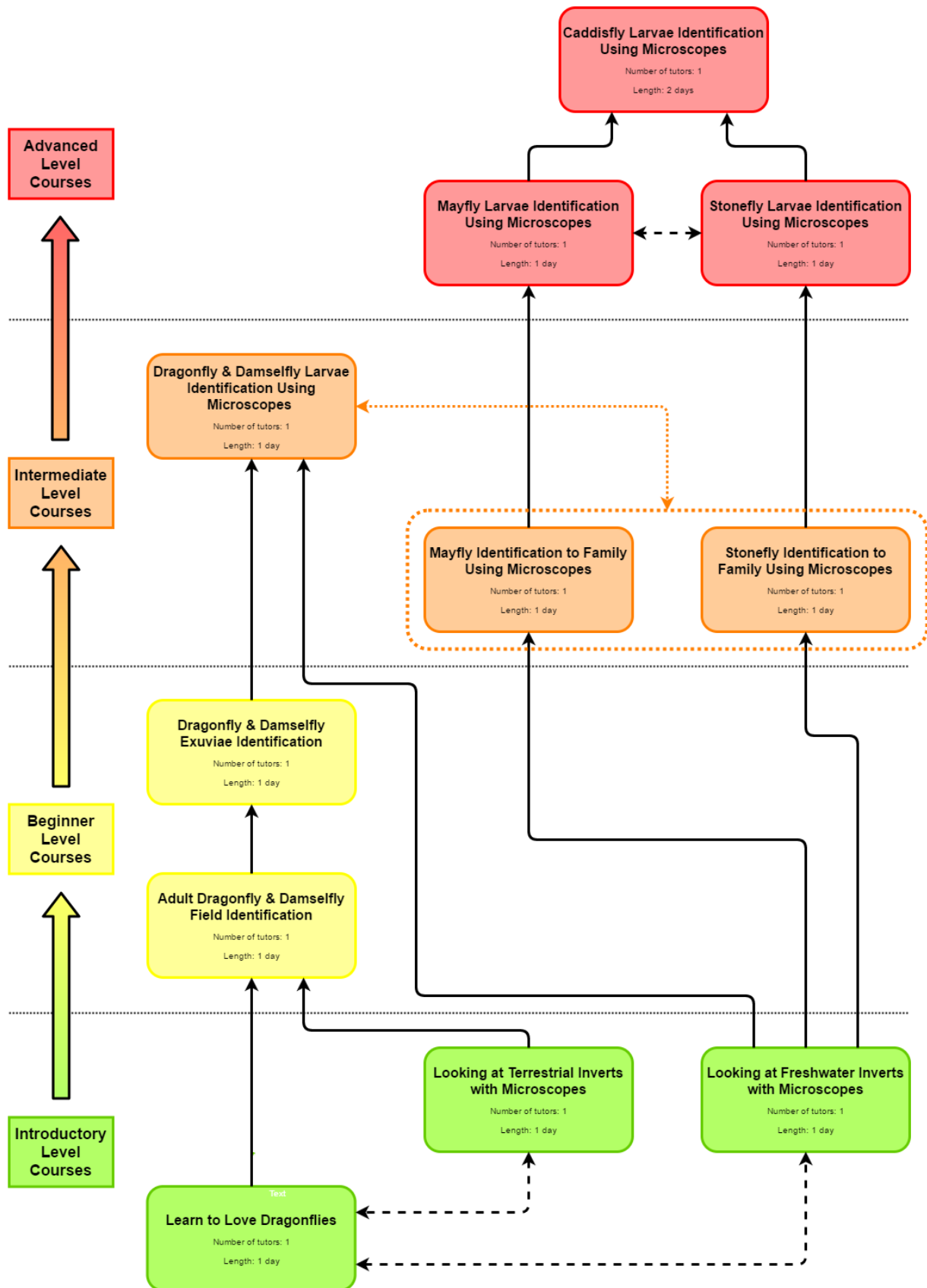


7.3 Structured Course Pathway for Beetles



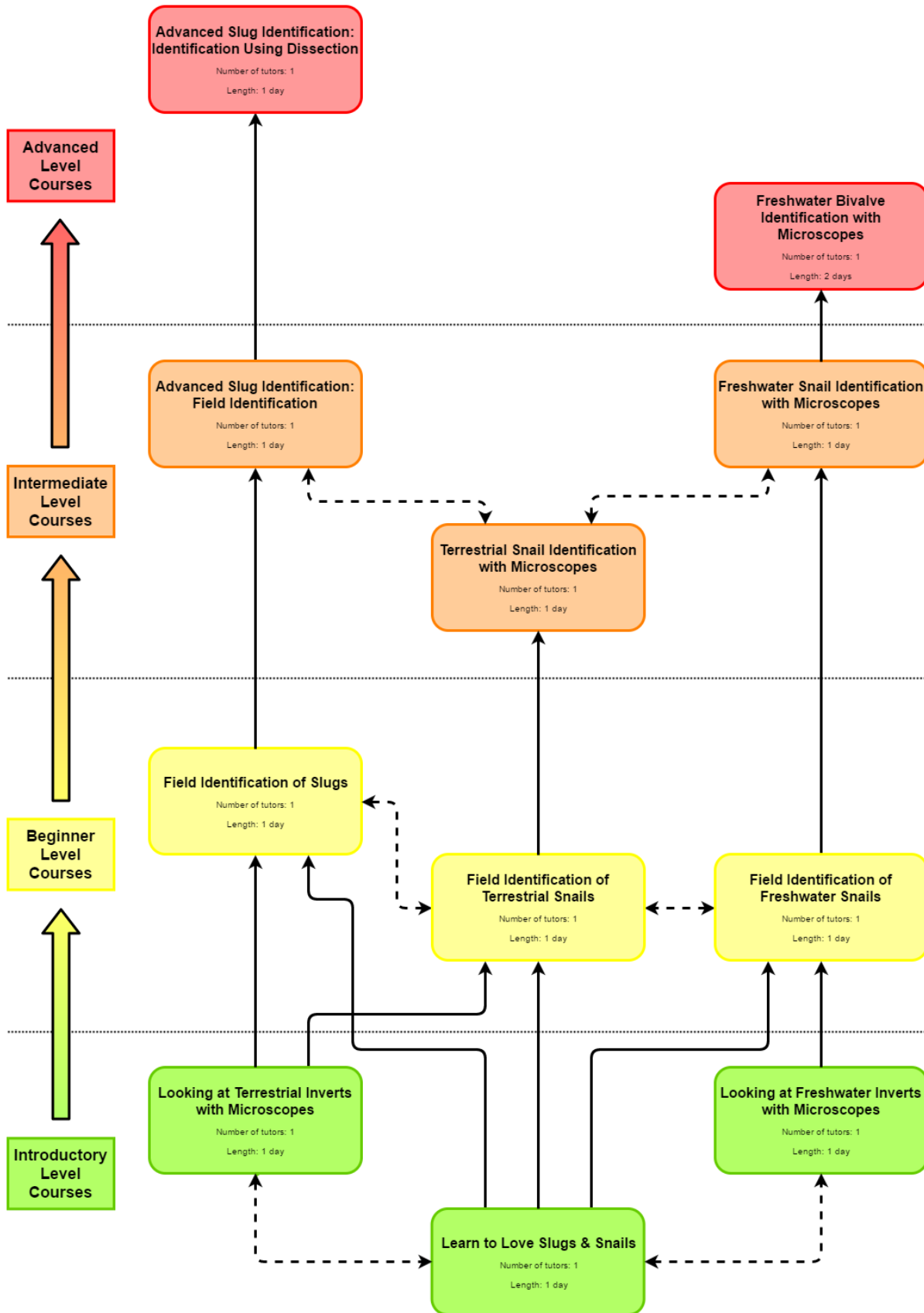


7.4 Structured Course Pathway for Freshwater Insects



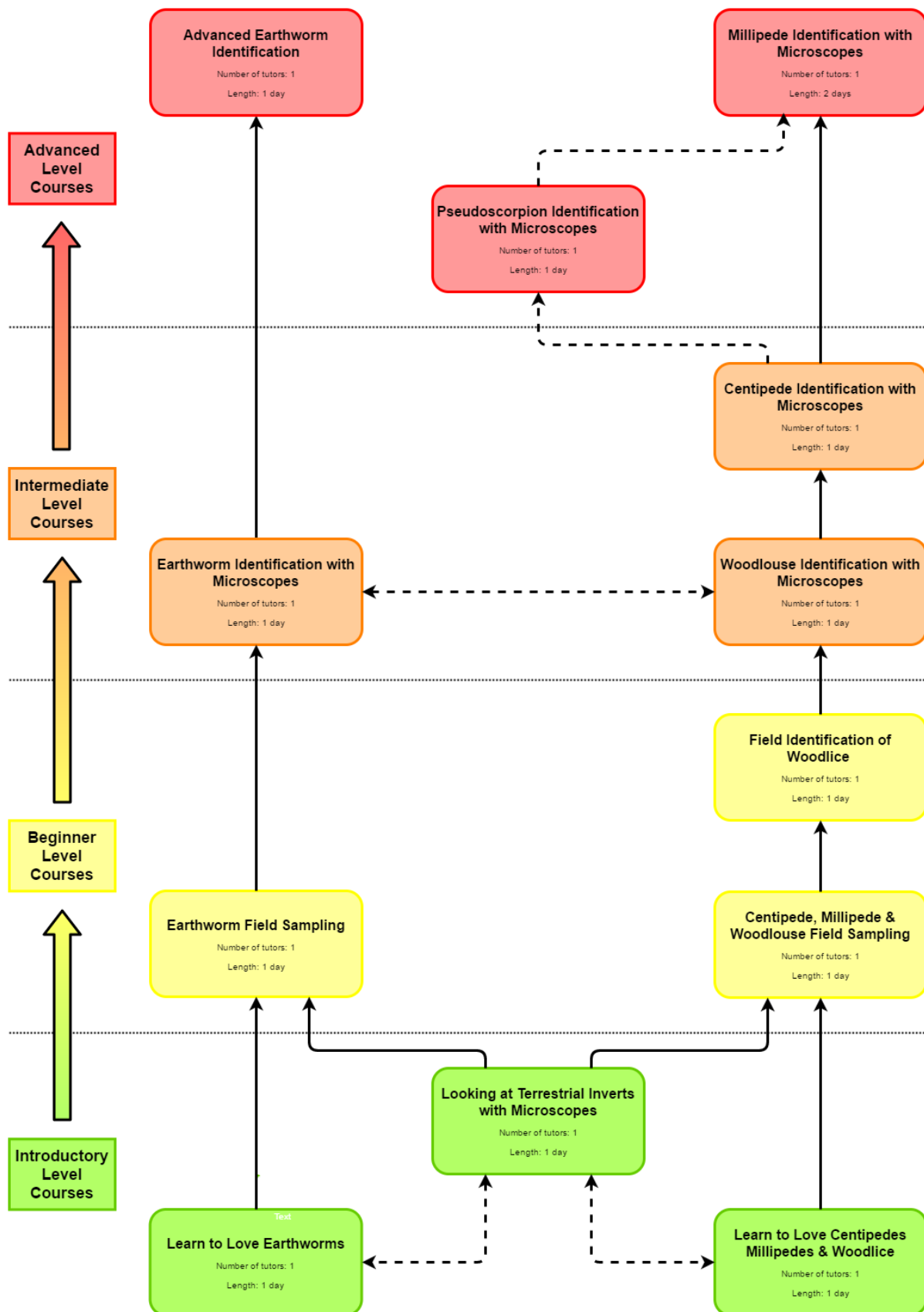


7.5 Structured Course Pathway for Non-marine Molluscs



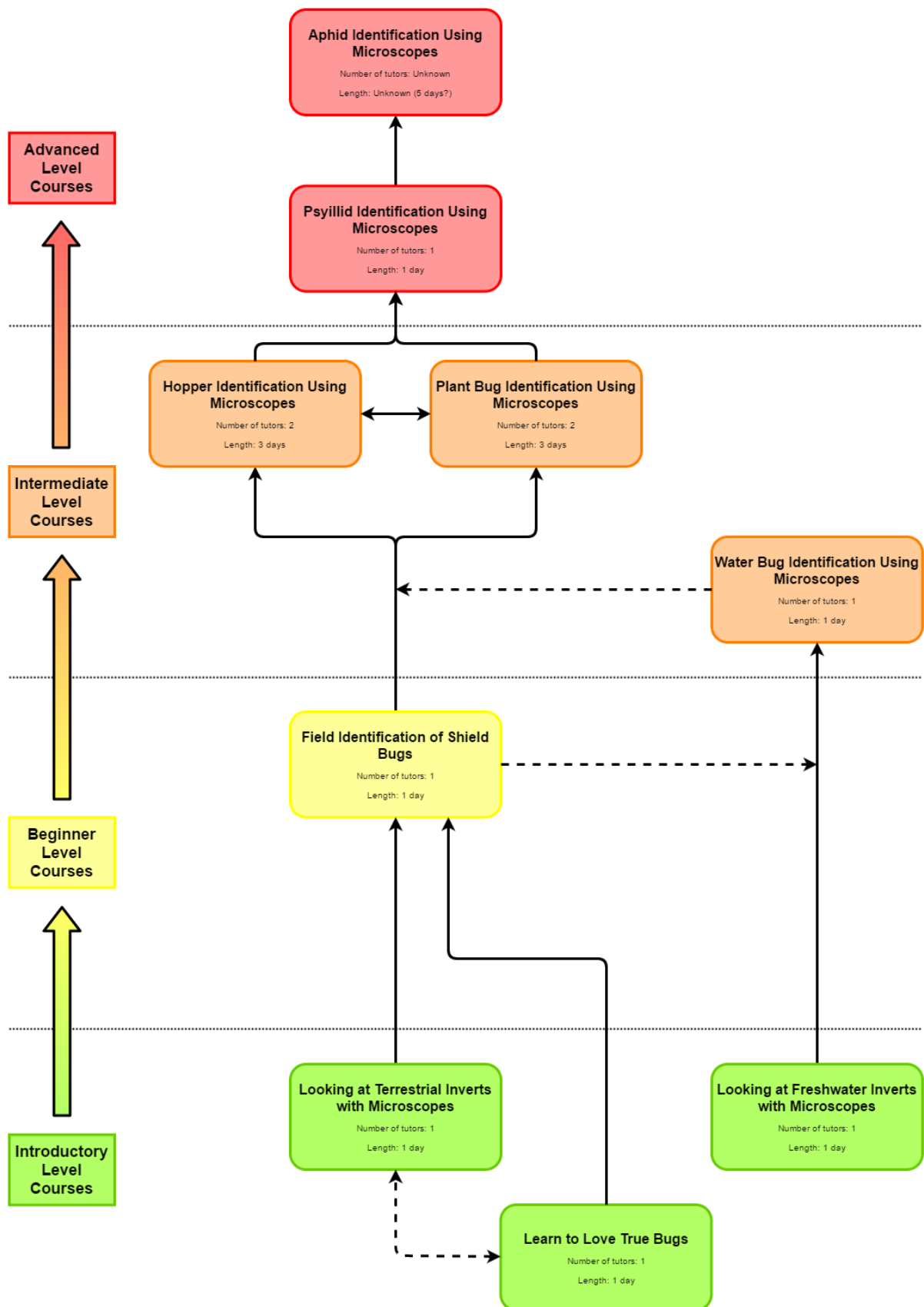


7.6 Structured Course Pathway for Soil Invertebrates



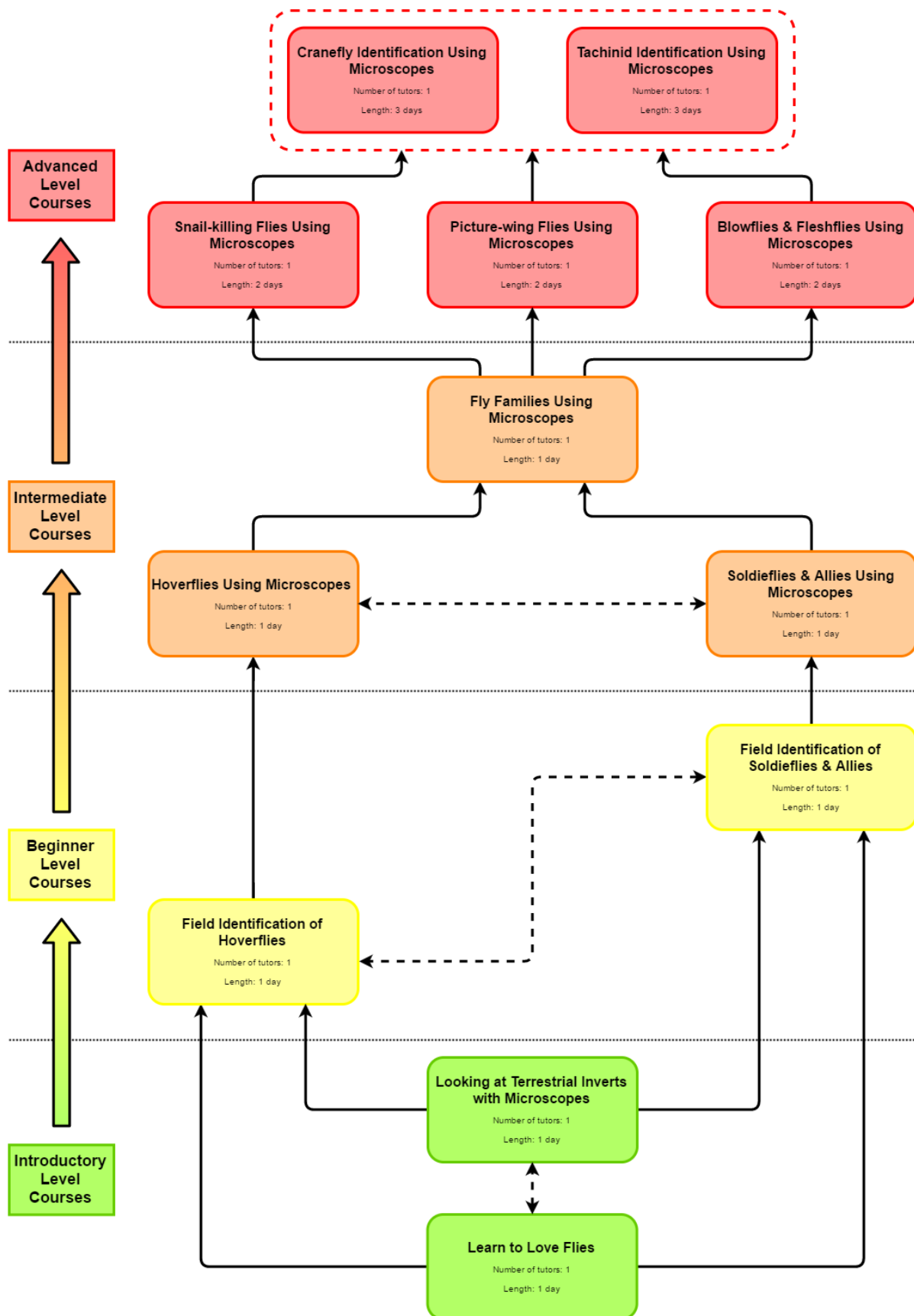


7.7 Structured Course Pathway for True Bugs





7.8 Structured Course Pathway for True Flies





8 Breakdown of Focus Species Group Training Courses by Year

Year 1 The first year will have an emphasis on *recruiting* volunteers to participate in BioLinks project activities (though recruitment will continue throughout the duration of the project). This will include celebratory BioBlitz launch events and a larger proportion of **introductory** courses compared to other years.

Year 2 The second year will focus around *developing* volunteers through **beginner** and **intermediate** courses. Additional **introductory** courses will also be delivered to maintain a higher recruitment rate at this early stage in the project.

Year 3 The third year will focus on *retaining* volunteers that have participated in the project by ensuring that volunteer needs are listened to and met. Feedback will inform BioLinks with regard to the **beginner** and **intermediate** course titles that are in demand.

Year 4 The fourth year will focus on *motivating* volunteers to undertake independent biological recording by providing a purpose through promotion of the BioLinks digital atlas project and an increased number of **intermediate** and **advanced** courses.

Year 5 The fifth year will focus on ensuring the *legacy* of BioLinks is strong and that volunteers feel sufficiently confident, motivated, skilled and knowledgeable to continue biological recording and facilitate others to do the same. This will include providing a higher proportion of **advanced** courses than previous years and a celebratory BioBlitz events to close the project and demonstrate the impact that the project has had on local volunteer biological recorders.

During each year of the project 60 focus species group training courses will be delivered, totalling 300 courses over the lifetime of this 5-year project. The diagram below indicates the predicted number of taught courses that will be delivered at each of the **BioLinks Volunteer Learning Pathway** competency levels covered within the BioLinks project, though this will be reassessed on a regular basis to ensure training provision from other identification training providers is complemented rather than competed with. As volunteers are able to enter at any point in the pathway, courses at all levels will be delivered during each year.

