SKILLS AND KNOWLEDGE FOR LICHENOLOGISTS

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To be a proficient lichenologist you have to develop a wide range of skills which may take a number of years to acquire. This may take the form of formal courses, workshops, field meetings and mentoring. To help you make the most of the support on offer and to identify areas where additional knowledge will be helpful the Education and Publications Committee has produced a list of skills and knowledge for lichenologists.

In addition, this list may be used by tutors when designing courses aimed at students at Beginner, Intermediate and Advanced stages, although the BLS does not recognise this as a formal accreditation scheme.

The list is of skills and knowledge is given below and a pdf proforma for use by course tutors is available on the BLS website.

**Beginner stage students should:**
- Understand the concept of lichen symbiosis and how lichens are named
- Understand basic lichen morphology e.g. crustose, foliose and fruticose
- Be familiar with terminology associated with asexual reproduction
- Be familiar with terminology associated with sexual reproduction
- Use FSC identification guides
- Use “Dobson” for species identification purposes
- Use a hand lens
- Use the C and K chemical tests
- Use appropriate collecting and storage techniques and protocols
- Be aware of the BLS website and local groups/meetings

**Intermediate stage students should:**
- Understand the meaning of the terms associated with lichen structure and be able to recognise these structures
- Understand the meaning of the terms associated with asexual reproduction and be able to recognise these structures
- Understand the meaning of the terms associated with sexual reproduction and be able to recognise these structures
- Use “The Flora” (The Lichens of Great Britain and Ireland)
Use the BLS and other websites to aid lichen ID
Use the Pd chemical test
Use a UV lamp
Recognise acidic and basic rocks
Recognise acidic and basic barked trees
Use a dissecting microscope
Use a compound microscope
Prepare a slide for microscopy e.g. squashes and sections
Calibrate a microscope and measure dimensions
Be familiar with recording procedures using the BLS database and spreadsheets
Understand the concept of environmental drivers of lichen distribution
Assist in the surveying of specific lichen habitats e.g. using Scheidegger quadrats

Advanced stage students should be able to:

Develop and demonstrate confidence in the identification of specific genera
Be confident in setting up a compound microscope
Use oil immersion
Prepare slides of key lichen structures to aid identification, including the use of stains e.g. for asci and spores
Identify lichen communities
Recognise habitats and key indicator species
Be able to access and use “grey literature”
Make up chemicals for ID purposes
Carry out advanced survey techniques using quadrats and relevés
Be familiar with the conservation status of lichens
Plan and effectively carry out a lichen survey
Write up the findings of a lichen survey in report format
Undertake both generic and dynamic risk assessments