

# FISC Information Booklet 2025

Everything you need to know about FISCs



Photo: Matt Harding



## Contents

Acknowledgements.....	3
The Botanical Skills Ladder.....	4
Introduction.....	5
FISC FAQs.....	6
How much does it cost? .....	6
When and where do the FISCs run? .....	6
How do I book? .....	6
What time does it start and end? .....	6
How many tests? .....	6
What equipment do I bring? .....	6
I have an electronic Flora/ key, can I use this during the test? .....	7
What sort of plants will there be to identify? .....	7
How do I write the names? .....	7
How high a grade will I get? .....	7
How are the tests marked? .....	7
Will I pass? .....	8
When will I know the results? .....	8
Who runs the FISCs? .....	8
Is a FISC for life? .....	8
Geographical coverage of FISCs .....	8
The heavy bit - misconduct .....	8
Can I appeal my result? .....	9
How is my data handled? .....	9
BSBI protocols for running a FISC.....	9
Who's Who in a FISC .....	10
Personnel required .....	11
Lab Test 1 .....	12
Lab Test 2 .....	13
Field test .....	14
Marking.....	14
Lab Test 1 .....	14
Lab Test 2 .....	15
Field test.....	15
Totalling up the scores to allocate FISC Levels.....	16
How to detect a FISC Level 6.....	16
Useful bits for running a FISC.....	17

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BSBI would like to thank CIEEM, FPCR Consultancy, Arvensis Ecology and TEP Consultancy for their input into the development and review of FISCs. We would also like to thank all previous FISC Providers, Assessors and candidates for their feedback over the years.

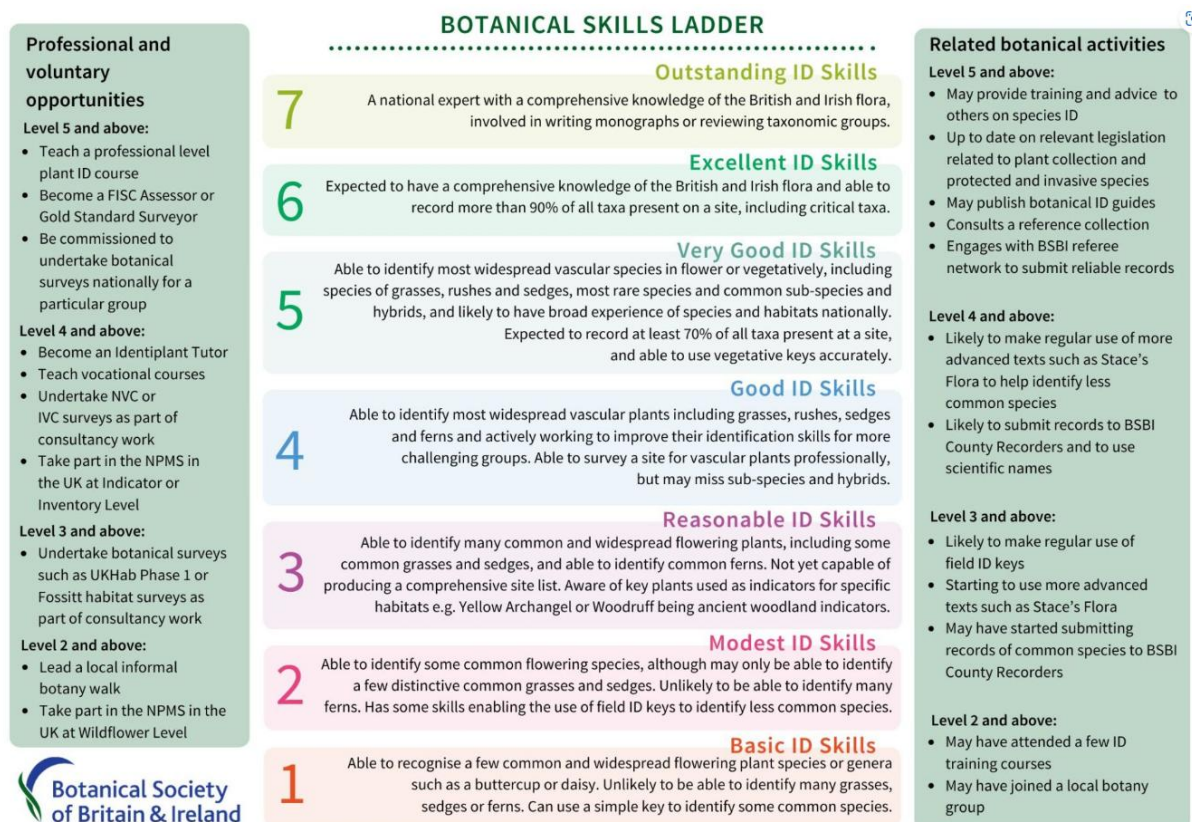
This booklet is reviewed and updated annually by BSBI's FISC Development Working Group (FDWG), a voluntary group consisting of a number of experienced Assessors, which reports to BSBI's Skills and Training Committee. BSBI is extremely grateful for their continued support and expertise.

## The Botanical Skills Ladder

Botanical skills can be described and self assessed using the seven levels of the Botanical Skills Ladder. One can self-assess their own skill level based on the brief descriptions in the Ladder.

It must be noted that the Botanical Skills Ladder is **separate** from the Field Identification Skills Certificate (FISC) levels. Although one would expect a person with a FISC Level 3 to have the skills listed for Level 3 on the Botanical Skills Ladder, they are not necessarily equivalent concepts and so should not be confused. Field skills relevant to Level 1 to 6 can be independently assessed by undertaking a FISC assessment, following FISC protocols and quality assurance. Level 7 on the Botanical Skills Ladder cannot be assessed through a FISC, as there is no field skill element associated with this level and hence there is no FISC Level 7. There is a substantial difference between defining broad skill levels against which someone may self-assess (which is what the Botanical Skills Ladder is designed to do), and rigorously testing the ability to identify plant species in the field, which is what FISCs (with associated detailed protocols and QA) is designed to do.

The botanical skills ladder can be downloaded from the [BSBI website](https://www.bsbi.org.uk/bsbi-website).





## Introduction

This guide to Field Identification Skills Certificates (FISCs) is aimed at anyone wanting to take a FISC, and also for those with the appropriate skill level, training and approval from BSBI interested in running a FISC.

The first half of the guide runs through what you should expect as a candidate, with a list of Frequently Asked Questions.

The second part of the guide provides the FISC protocols – the standards by which FISCs are set and marked, so there is full transparency for all, on how FISCs are run and what to expect.

Why do a FISC?

- Does your work or your voluntary activities include field botany and plant recording?
- Do you want to quantify your plant ID skills?
- Do you know where you are on the Botanical Skills Ladder (see p4)?

**Many ecological consultancies and statutory agencies such as Natural England recognise FISCs as an empirical assessment of your skill and your employability as a botanist. We are enormously grateful that we have been able to work with CIEEM (Chartered Institute for Ecology and Environmental Management), FPCR Consultancy, Arvensis Ecology and TEP Consultancy. These organisations, in addition to the FISC Development Working Group more recently, have been active in helping BSBI develop our protocols and review the FISCs.**

All FISCs undergo a stringent Quality Assurance (QA) process to ensure that the protocols outlined here are followed, there is consistency across Providers, and results are fully checked and ratified. Through the QA process, candidates can be assured that they will be awarded a qualification that is robust, fair, and standardised and which is regarded as the industry standard in field plant identification skill assessment, recognised by employers across the sector, including the professional body for ecologists, CIEEM.

What does a FISC entail? In 2006, the BSBI trialled a new system for assessing skill levels for vascular plant identification and the first FISCs were launched in 2008.

There are three parts to a FISC (yielding four separate scores) and sitting the test takes the best part of a day. There are two lab tests where a number of specimens are laid out for identification: the easier ones without books and keys, the more difficult with books and keys. After lunch there is a visit to a field site where candidates record everything that they can see for roughly 1½ to 2 hours.

FISCs are now run by a range of BSBI approved FISC Providers in partnership with BSBI approved FISC Assessors across the UK. BSBI sets the overall standards and maintains the quality assurance process to ensure consistency across all FISCs.

## FISC FAQs

### How much does it cost?

In 2023, new flexible pricing was introduced for FISCs, with no standard price. This is to ensure the costs associated with running FISCs (by local FISC Providers) and coordinating and maintaining FISC standards (by BSBI) can be fully covered. Full cost recovery will help encourage expansion of FISC provision to meet the high demand. Please contact your local FISC Provider for details of pricing and any discounts they may provide e.g. for students or volunteers. The pricing will be reviewed annually by BSBI in consultation with local FISC Providers, taking into account feedback from FISC candidates.

### When and where do the FISCs run?

Check [bsbi.org/field-skills](https://bsbi.org/field-skills) – for locations and the dates of FISCs, which are usually run from early May to the end of August. BSBI is actively recruiting new FISC Providers and Assessors and aim to add new dates and locations to the website as soon as we are made aware of them by the Provider, so it's always best to check the [FISC page on the BSBI website](#) for the latest FISC locations.

### How do I book?

Check on the [BSBI FISC webpage](#) for details of local FISC Providers and the locations and dates available – there will be a link taking you to their booking form and / or contact for further information.

### What time does it start and end?

Check with the FISC Provider that you are booked with, but you will need to set aside a whole day, with a start round 10am, finishing around 5.00pm.

### How many tests?

There are three separate elements to a FISC, yielding four separate scores. There are two lab tests, the first of which is ten specimens that should be identified without using any books or keys. Then there are twenty specimens that may be identified using any books or keys, but no reference collections or on-line resources may be used.

The third test is in the field – after lunch you will spend approximately two hours surveying a small site and recording the vascular plant species.

### What equipment do I bring?

A hand lens and ID books – [Stace: New Flora of the British Isles](#) plus a good picture guide such as [Rose: The Wild Flower Key](#) is an appropriate combination. [Poland: The Vegetative Key to the British Flora](#) can also be a useful resource for plants not in flower. Some FISC Providers arrange transport, but do bring wet weather gear including boots/wellies, a clipboard, and possibly a grapnel (although there will be a few to share in case of aquatic plants survey sites). Bring a packed lunch and a drink, a notebook, a [recording card](#) if you are using one and be prepared for any weather for the field test.

**During the FISC you will not be allowed to use a phone or other electronic device**, so please **bring along a watch** to keep track of your time (in the classroom time calls will be given at regular intervals). In the field, depending on the site, the FISC Provider will blow a whistle at set times.

### **I have an electronic Flora/ key, can I use this during the test?**

Unfortunately you cannot use electronic resources (phones, tablets, laptops etc.) during any part of the day.

### **What sort of plants will there be to identify?**

A wide range from a variety of habitats. The lab test will contain species that can potentially come from anywhere in the UK but they will all be vascular plants. Habitat information is not provided for any lab test species to encourage candidates to make use of the key diagnostic features of the plants presented, rather than guessing the species using information on the habitat or using the habitat as a potential shortcut to the species ID. Lab tests are a combination of “I already know this plant” and/or “I have the ability to demonstrate that I can work out what the species is using keys”.

### **How do I write the names?**

Scientific names should be used where possible, but common names can be used, as long as they are unambiguous. If the FISC candidate unknowingly gives a synonymous scientific name (e.g. Stace 2010 names rather than Stace 2019), then the FISC Assessor will attempt to mark these appropriately, as long as the taxonomy is unambiguous and not obscure.

### **How high a grade will I get?**

A FISC can assess Level 1-6 on the Botanical Skills Ladder on p4, BUT even very good botanists don't usually score more than a Level 5 – this is equivalent to what you would expect from a very competent professional field botanist (equivalent to Accomplished-level competence for botanical ID in the CIEEM Competency Framework for professional ecologists), but FISC can also detect Level 6 botanists – although they are a rare breed! There is no FISC Level 7.

### **How are the tests marked?**

In the two Lab tests, candidates are given a mark for each correct identification. Marks are totalled and scores awarded from Level 1-5. Lab test species lists may be shared with candidates upon completion, but in the unlikely event that Assessors manage to mark any lab tests on the day, they are not encouraged to share the actual marks obtained at this stage.

In the Field test, candidate lists are compared with that of the Gold Standard Surveyor who will be surveying alongside them and a Level from 1-5 is awarded depending on the proportion of the number of species correctly identified against the Gold Standard Surveyor total. Species the candidate identifies, which are not recorded by the Gold Standard Surveyor, but which might reasonably be present will also contribute to the score. However, species recorded which are not likely to be present, perhaps due to geography or habitat constraints, will be totalled and may count against the final FISC score as False Positives.

All test papers are kept by the FISC Provider and shared with BSBI for QA purposes, as in formal exams.

Please note that the overall mark awarded is dependent on the FISC Assessor being convinced that the candidate has demonstrated the field skills at the relevant level. Therefore, self marking is not always a good indication and can sometimes be misleading. Expert opinion is required when making a number of decisions in the marking process.

The provisional mark will be sent to candidates within 8 weeks of the FISC by the FISC Provider. All provisional marks will be scrutinised by the FISC QA panel as part of the end of year QA process and could be moderated up or down. It may be that a candidate scores close to a border - in which case the result will receive additional scrutiny, independently of the Assessor, to ensure the appropriate FISC level is awarded.

### Will I pass?

You can't fail! The FISC test allows a botanical field skill level to be assigned to you, your FISC level (Level 1-6). See the Botanical Skills Ladder on page 4 for the general skill level descriptions.

Remember a FISC only assesses the **field skills** relevant to each of the levels on the Ladder. You are awarded a certificate at the end of the year from BSBI stating your FISC level. You may wish to come back in a few years to take the FISC again to see how you have progressed.

### When will I know the results?

You can usually expect to receive an email with your provisional result within 8 weeks of taking a FISC. Your FISC Provider will provide you with your overall FISC level and your level for each of the four elements of the FISC test. It is not possible to provide detailed individual feedback. BSBI undertakes quality assurance checks on all FISC provisional results at the end of the season (October-November) to ensure consistency of tests and marking across all FISC Providers. Certificates with final results are sent out by BSBI in December, when the QA process is complete. Provisional results may be moderated and revised during the QA process to ensure all results meet consistent standards.

### Who runs the FISCs?

The Botanical Society of Britain and Ireland awards the FISC, and the FISC tests are run by third parties (FISC Providers and their associated FISC Assessor) working closely with, and accredited by BSBI. FISC Providers can include local Wildlife Trusts, environmental consultancies, Natural England, the Field Studies Council, Plantlife and others.

### Is a FISC for life?

If you are working your way up the Botanical Skills Ladder, it is recommended that you take a FISC every two years. If you are at Level 5, you should take a FISC every three years – at the moment there is not an expiry date on a FISC but this is something we may consider at the next review.

### Geographical coverage of FISCs

There are no Scottish or English or Welsh FISCs, these are all classified as a BSBI FISC. FISCs are run in different locations and the lab test specimens used need to come from a wide variety of different habitats and regions. BSBI is currently exploring the feasibility of also bringing FISCs to Ireland.

### The heavy bit - misconduct

Misconduct is the use of unfair means to influence the outcome of a FISC test. 'Unfair means' include any form of cheating such as use of not allowed equipment (e.g. mobile phone), collusion (e.g. discussing samples or identifications with other candidates during the FISC), impersonation, deliberately running over time in the field test. The FISC operates under exam conditions and any communication with other candidates during the tests should be avoided. Anyone found cheating in a FISC will be disqualified. If you have concerns about misconduct, please contact [fisc@bsbi.org](mailto:fisc@bsbi.org).



### Can I appeal my result?

Please note that the result you achieve is dependent on your Assessor being convinced that you know the plants in Lab Tests 1 and 2 and have given unambiguous answers throughout. Self marking is not always a good indication and can sometimes be misleading. The final result is never approved until the QA later in each year. If you have a valid reason to suspect that the provisional FISC level you have received from the FISC Provider is inaccurate due to there being perceived procedural irregularities during the assessment, you can appeal (see information from your FISC Provider or contact [fisc@bsbi.org](mailto:fisc@bsbi.org) for more information). You must register your appeal within 21 days of receiving your provisional FISC result. Final moderated FISC results following the end of year QA process are not open to appeal.

### How is my data handled?

BSBI and your FISC Provider are joint Data Controllers for your data associated with a FISC you have attended. Please see BSBI's Privacy Policies and those of the FISC Provider for further details of how your data will be handled and stored.

BSBI maintains a central database of all FISC candidates' results, including all candidates who have undertaken a FISC since 2022, as well as a large proportion of those that were taken before that date where this data has been shared with BSBI. This data (candidate name, email address, date and location of FISC, FISC result) is held by BSBI long term to enable overall coordination and quality assurance of FISC provision. If permission has been secured from the candidate, FISC results may be shared with third parties such as employers or other relevant organisations upon request.

You can request to see the data we hold, request its removal or update your contact preferences at any time by either emailing us on [enquires@bsbi.org](mailto:enquires@bsbi.org) or completing this [form](#) (to update your contact preferences). You will have to contact your FISC Provider separately to update the data they hold. Data held by FISC Providers on candidates external to their organisation should be deleted after 3 years.

## BSBI protocols for running a FISC

These protocols were first written in 2006 and were updated following a review in 2017 that included consultants, conservation agencies, CIEEM, and voluntary botanists. Further updates have been added annually since 2023 by the FISC Development Working Group to take account of feedback received.

These are the protocols used by all FISC Providers and Assessors, and the protocols are provided here for transparency, so candidates can see how their marks are calculated.

The BSBI Field Identification Skills Certificate (FISC) is intended to test the complete range of botanical field competencies. BSBI works with a number of approved FISC Providers and Assessors and is working to train and approve more. These protocols act as a guide for current FISC Providers and Assessors and those wishing to become approved to run or assess a BSBI FISC in future.

It is important to note that FISCs should not be offered as the culmination of a taught course. FISCs are intended to test existing inherent and permanent botanical field skills so hot-housing through a course related to the FISC and/or providing coaching just prior to a FISC could invalidate the result.

FISC assessments associated with a botany course need to have either a temporal gap (at least 2 months) or geographic gap (different site for plant identification) between the field course and the assessment, so some species will be “unknown” compared to those studied on the course, plus an independent FISC Assessor. The concept of a mock FISC is supported in principle by BSBI, but separate more detailed guidance should be followed by those planning to run these, in order to ensure that they do not invalidate a future FISC result.

### Who's Who in a FISC

The Botanical Society of Britain and Ireland (BSBI) facilitates a **FISC Development Working Group (FDWG)**, that reports to the BSBI Skills and Training Committee. This working group, along with BSBI's Training Coordinator, updates the FISC Provider/ Assessor Pack documents each year and provides support, training and information for FISC Providers, Assessors and candidates, and carries out quality assurance of FISC results to maintain consistent standards.

A FISC Provider/Assessor Pack is sent to FISC Providers and Assessors each year and includes the following:

1. FISC Provider Memorandum of Agreement
2. FISC Information Booklet (this booklet)– with a) information for candidates and b) FISC protocols
3. FISC Assessor Training Powerpoint
4. FISC Appeals Process
5. FISC Misconduct Process
6. FISC Quality Assurance Process
7. FISC Assessor QA proforma and marking guidance
8. FISC Marking Spreadsheet template

**FISC Provider** – these are the organisations (or individuals) responsible for delivering FISCs, taking FISC bookings and providing facilities and a FISC Assessor (see below). FISC Providers must sign an annual agreement with BSBI to ensure FISC follows consistent standards and protocols. Providers must have an agreement in place with a BSBI approved FISC Assessor and a BSBI registered Gold Standard Surveyor (see below) which outlines their respective responsibilities. The Provider should also ensure they have sufficient professional indemnity and public liability insurance in place. Example FISC Providers include environmental consultancies, local Wildlife Trusts or Natural England. Only BSBI approved Providers who have signed the agreement will be listed on the BSBI FISC webpage. FISC Providers will need to be able to provide suitable personnel, facilities and equipment (see list below) and good communication with FISC candidates. Taking a test is stressful enough; it is important to provide a supportive atmosphere.

**FISC Assessor** - FISCs must be run and assessed by someone who is an excellent botanical recorder/ ecologist at or above FISC Level 5. BSBI recruits, trains and approves FISC Assessors. The FISC Assessor is contracted by the FISC Provider (also approved by BSBI and with whom a MoA is signed) and is responsible for following BSBI protocols in setting and marking the tests, collecting and coordinating specimens for the tests, and selecting and risk assessing a suitable field site. The FISC Assessor is also responsible for organising a **Gold Standard Surveyor (GSS)** for the field element of

the test, who should be approved and registered with BSBI. It is best practice for the FISC Assessor and GSS to be separate individuals in order to ensure both standardisation and adequate supervision for the field test. It is recommended that the FISC Provider ensures that an adequate budget is in place to pay for the services of both a FISC Assessor and a GSS. In some specific circumstances (where agreed by BSBI's FISC Development Working Group), the FISC Assessor may also be the Gold Standard Surveyor, but adequate arrangements need to be in place to ensure that there are sufficient helpers during the field test and that the individual has no familiarity with the field site in advance of the field test date. The latter may be achieved by delegating part of the Assessor role to another suitably qualified individual agreed with the FDWG.

There are three separate tests for a BSBI FISC, yielding four separate scores.

- Lab test of ten specimens
- Lab test of twenty specimens
- Field test lasting around two hours (yielding two scores)

### Personnel required

1. FISC Assessor and a separate Gold Standard Surveyor, both of whom are at least FISC Level 5 and approved by BSBI (see above)
2. Bookings contact to take bookings and provide information to FISC candidates before and after their test day. This is a role that should ideally not be undertaken by the Assessor (or anyone involved in marking a FISC) to ensure that the marking process is as unbiased as possible. The FISC Provider must be confident that any prior knowledge of candidates does not compromise the marking of the FISC. Candidates need to be allocated a candidate code before the FISC, which will be used on all test papers and throughout the marking process to ensure that marking is undertaken anonymously.

### Facilities, Equipment and Processes required (see also FISC Provider MoA)

1. Sufficient lab/ work-room space for the appropriate number of candidates to undertake Lab Test 1 and 2 with specimens.
2. Clearly numbered labels for the specimens – these are easily printed off and laminated (this means they can be wiped clean and reusable).
3. Large plastic trays (cat litter trays are ideal!) to contain specimens.
4. It is useful to have some spare hand lenses for the candidates.
5. Assessors should make sure that this misconduct statement is read out at the start of the lab tests: "The FISC takes place under exam conditions. Any misconduct will be taken seriously. The FISC protocols define misconduct as the use of unfair means to influence the outcome of a FISC test. 'Unfair means' include any form of cheating such as use of not allowed equipment (e.g. mobile phone), collusion (eg. discussing samples or identifications during the FISC), impersonation, deliberately running over time in the field test. Anyone found cheating in a FISC will be disqualified."
6. Test 1 (Lab): Ten relatively common and relatively easy to identify species, i.e. species that cannot be confused with anything else. These are the first ten species for identification without any books, ID guides or other aids (see Lab Test 1 below).
7. Test 2 (Lab): Twenty plant specimens already collected (or grown in pots), with a good proportion representing regions of the UK that are **NOT** represented by the field test location vegetation (see Lab Test 2 below).

8. Not essential, but useful - lower power microscopes for dissection.
9. Test 3 (Field): A relatively small site where the candidates can record vascular plants for roughly two hours, complete with owner permissions and also legal permissions if SSSIs are used. The site should have at least 100 species, but should also not be too species rich. The survey area should be demarcated using a red line boundary on a map and made clear to all candidates. Ideally refreshments (e.g. water, tea and coffee) should be available
10. Candidate's transport to the field site should be co-ordinated – this can range from providing directions to candidates travelling in cars, to hiring a minibus (especially for sites with restricted parking). If running more than one FISC per year, it is best to use different sites, and use different sites each year (or at least have a selection of sites that are used in random rotation).
11. Risk assessment – there must be a risk assessment available for both the lab/ work-room space and field site and there should be a nominated first aider on hand.
12. Booking system – an online system for candidates to book places on a FISC plus provision of FISC dates and locations to BSBI's Training Coordinator for BSBI FISC promotion on the FISC webpage.
13. Advanced communication - provision of information to candidates about the FISC (including this booklet and the appeals process) and the arrangements and timings for the day.
14. Submit provisional marks, on the Marking spreadsheet template, to BSBI's Training Coordinator for the annual QA process according to the relevant timetable.
15. Provisional results communication - share provisional marks with candidates within 8 weeks of their FISC, including a breakdown of their provisional levels by test . Please ensure you explain that: "These provisional marks will be quality assured by BSBI at the end of the field season to ensure consistency of tests and marking across all FISCs. Provisional marks may be moderated and revised during the QA process to ensure all results meet consistent standards. BSBI will send you your final score in your FISC certificate by December".
16. Cooperate with the BSBI QA process and appeals process, in a timely manner, as required.
17. Assessors are encouraged, where possible, to submit the GSS species list to BSBI (via their VCR or iRecord or directly) so that these site records can be used for science and conservation purposes.

### Lab Test 1

The first lab test consists of ten specimens. These should be species that are completely uncontroversial to identify and should be reasonably widespread and common or at least very obvious (for example, Sea Holly, *Eryngium maritimum* could be included as it is unlikely to be confused with anything else, even though it is not necessarily widespread, being confined to coasts) or Daisy *Bellis perennis*. Grasses, sedges and rushes are probably best avoided unless very obvious and cannot be confused with anything else (a good example of flowering Cock's-foot *Dactylis glomerata* for example). Species such as Holly *Ilex aquifolium*, and Ivy *Hedera helix* can be included and other species should be in flower and/or fruit if possible so as to provide obvious features.

The aim of the first lab test is to provide appropriate marks for Level 1-3 candidates. Candidates at Levels 4-5 should get most, if not all, of Lab Test 1 right.

## Lab Test 2

Twenty different species are provided. Material can be vegetative or flowering/fruiting/sporing, but as books and keys can be used in Test 2, it's worth bearing in mind that most material should be able to be keyed out. [John Poland's Vegetative Key](#) has changed this part of the test – previously vegetative material of, for example, *Stellaria nemorum* had been used but no candidates were able to identify it (even Level 4 and 5 candidates) although this is a relatively easy species when flowering. At least one vegetative species should be included.

Roughly half the second test species should represent very specific regions or habitats (ie, distinctly southern, south-western, northern, montane, coastal, alpine, or saltmarsh species that do not occur in the test area). This can only practically be done by using specimen collectors around the country. It is not sufficient to use, for example coastal species that also colonise inland – they should be specifically and exclusively coastal (i.e. not just *Puccinellia distans* or *Cochlearia danica*).

To use collectors, it is advisable to recruit three or four collectors well in advance, and to check the sort of species they can collect and also how many of each species. Specimens collected a few days beforehand, sealed in a plastic freezer bag and posted in a padded envelope first class, normally survive well if put in a fridge on receipt until the test (but check condition of specimens on receipt!). On past experience, Crown Vetch does not travel well, Boraginaceae wilt quickly and Geraniaceae drop their petals.

If you grow your own specimens, a species in a pot (unlabelled) is fine, but do check for horticultural varieties or sub-species if bought from a garden centre.

*Guidance for selection of specimens (A separate QA pro forma will be provided to FISC Assessors)*

1. Across the two tests there should be a minimum of **eight grasses, sedges and rushes**, with at **least one member from each family**, as these families are crucial for identifying higher level candidates.
2. **Ferns/horsetails/clubmosses** should be included and there should be **at least two** over the two lab tests.
3. There should be a **hybrid, or a sub-species** where the sub-species is identifiable under test conditions.
4. There should be at least **one true aquatic species**.
5. There should be **at least one non-native species**.
6. There should be at least **one Nationally Rare or Scarce species** and the whole range of species across the two tests should not be all common and/or widespread.
7. This is probably the most difficult to specify but there should be **at least one Level 6 species**. Less common fine-leaved pondweeds (i.e. a bit more challenging than *Stuckenia pectinata*) are probably all Level 6; hybrid sedges, hybrid willow-herbs and sedges in a vegetative state (other than *Carex hirta*) are also appropriate.
8. The same species should not be used in the lab tests across multiple FISCs run in the same year and ideally species should be mixed up year to year (eg. avoiding repeating the same aquatic plant in consecutive years).
9. Avoid duplication of species in Lab test 2 and field sites where possible.
10. Avoid the use of more than one species from the same genus in the same lab test with the exception of rushes and sedges and other potentially challenging taxa.
11. Avoid apomicts and critical taxa in the lab tests. The FISC is not designed to test a candidate's ability to identify apomictic/apogamous taxa across a wide range of groups and



these typically should be avoided (eg. *Taraxacum*, *Rubus*, *Hieracium*) unless for very common/ obvious species.

12. Similar species should not be placed close together physically in lab tests to ensure that incorrect material is not inadvertently added to the wrong tray eg. *Carex*, *Juncus*.

**Allow 1 hr 45 min for both Lab Test 1 and Lab Test 2** – there is no need to allocate a specific time to Lab Test 1 but candidates should hand in their papers before moving on to the second lab test as they can then have access to their books and keys.

### Field test

Around 2-3 hectares of relatively safe (i.e. in health and safety terms) habitat is required, such as limestone grassland with some scrub areas, or short fen, or not too wet sedge swamp, or broad-leaved woodland. The area to be surveyed should be made very clear to the candidates – if using a small area within a larger reserve, it should be fenced or taped off clearly. It should be made clear whether or not hedges are to be surveyed. Provision of a map of the site with red line boundaries demarcated could be useful.

A relatively small site with fairly distinct boundaries is required. Points to consider include:

- Small enough to survey thoroughly within two hours
- Large enough for individual surveys to be carried out and for 'invigilation' to be effective.
- A separate Level 5 (at least) Gold Standard Surveyor will be needed who records alongside the candidates for the same length of time. The list generated by the Gold Standard Surveyor is used to compare against the candidates' list.

### Marking

All candidates should be assigned a unique candidate code so that test papers are anonymised for marking. A **FISC Marking Spreadsheet template** and a detailed Assessor marking guide is provided to Assessors to allow for the accurate calculation of provisional scores. Marking requires a skilled botanist to make decisions about a number of factors including False Positives, benefit of the doubt species, appropriate scoring of hybrids and sub species etc., and the marking is carefully scrutinised in the final quality assurance process before each candidate's marks are finalised.

Scores should be entered against the candidate's code, with the FISC level for each part of the test calculated automatically by the spreadsheet.

### Lab Test 1

- Mark out of 10.
- One mark for every correct and completely unambiguous answer. Answers can be scientific names or common names but must be completely unambiguous.
- Half marks can be awarded for a correct genus name or ambiguous but partly correct common name.

### Examples:

1. The specimen is *Leucanthemum vulgare*. One mark is given for *Leucanthemum vulgare*. One mark is given for Ox-eye Daisy.
2. If spelling is a bit off, but still understandable, then award a full mark IN THE FIRST LAB TEST (not in the second when resources are allowed for checking spelling).

3. Half a mark is given in the unlikely event of *Leucanthemum* being the only answer given (or, for example *Leucanthemum superbum* being the answer.
4. Half a mark for Daisy.

#### *Lab Test 1 Scoring*

Level	Scores
5	9+
4	7-8.5
3	5-6.5
2	3-4.5
1	0.5-2.5

#### Lab Test 2

As above, but spelling should be accurate as resources can be used (although the odd spelling mistake, as long as still completely unambiguous, is not an issue). Scientific names are recommended for this test.

#### *Lab Test 2 Scoring*

Level	Score
5	16+
4	13-15.5
3	9-12.5
2	5-8.5
1	0.5-4.5

#### Field test

This is the most difficult part of the FISC to mark and it generates two separate scores: the % of the Gold Standard's score and the False Positive score.

Let's assume for simplicity that the Gold Standard Surveyor records 100 species. This then makes a Level 5 pass for this section 70 species (70%) of the Gold Standard's total. Genus names can score a half mark ONLY if for example *Carex* sp. is written once (if there are three sedges on the site, three instances of *Carex* sp. does not get one and a half marks). Unambiguous scientific OR common names are acceptable.

#### *Field Test Scoring*

Level	Score
5	70+
4	55-69
3	40-54
2	20-39
1	<20

Every species that is recorded in the field test **but does not appear on the Gold Standard Surveyor's list** should be scrutinised carefully. This is where it is very useful to have a full list of previous records for the site because it is possible that a Level 5 candidate will see something that the Gold Standard misses.

A reasonable description of a False Positive is where there has been a blatant guess or hedging of bets.

Examples of False Positives include:

1. Where only *Crataegus monogyna* is present on the site and both *C. monogyna* and *C. laevigata* are recorded by the candidate, *C. laevigata* is a False Positive.
2. Where one species is very common on site and this is not recorded by a candidate but a similar one is. For example: *Geranium pyrenaicum* is recorded by a candidate but not *Geranium robertianum*, when *G. robertianum* is very frequent on the site. *G. pyrenaicum* is not known to be present and is therefore likely to be an error.
2. *Stellaria palustris* is a common False Positive in many areas. It has declined rapidly throughout the country, is much rarer than records suggest and is often put down because a *Stellaria* is seen in a fenny site.

#### False Positive Scoring

Level	Score
5	5 or <5
4	6
3	7-8
2	9-12
1	12+

#### Totalling up the scores to allocate FISC Levels

There should be four levels for each candidate. The levels are totalled and divided by 4 – not rounded up – the whole number will become the final level.

Example:

If a candidate scores 5 in Lab Test 1, 4 in Lab Test 2, 5 in the field test and 4 in False Positives, their total is 18 – divide by 4 which gives 4.5, therefore the final level is Level 4.

#### How to detect a FISC Level 6

Level 6 candidates are VERY RARE– they are botanists usually operating at a national level. They will have scored 10 in Lab Test 1, at least 18 in Lab Test 2 and they will have scored the same or more than the Gold Standard Surveyor in the Field test. They will have a False Positive score of 0 or 1.

There is no FISC Level 7.

## Useful bits for running a FISC

### Example pre-test talk to candidates:

The FISC takes place under exam conditions. Any misconduct will be taken seriously. The FISC protocols define misconduct as the use of unfair means to influence the outcome of a FISC test. 'Unfair means' include any form of cheating such as use of not allowed equipment (e.g. mobile phone), collusion (discussing a sample or its identification with another candidate), impersonation, deliberately running over time in the field test. Anyone found cheating in a FISC will be disqualified.

Fire exits are here, loos are over there and Joe Bloggs is a trained first aider. Lunch is at this time and at this time you must meet at this place for transport to the field site.

During all tests please switch off mobile phones and other electronic resources – they must not be used in any way during any part of the tests.

In Lab Test 1 there are no books or keys allowed and no electronic resources. These are relatively straight-forward specimens and you can write what they are using scientific or unambiguous common names. Hand in your paper before you commence with Lab Test 2.

In Lab Test 2 you can use books and keys but no reference collections and no electronic resources. There are 20 specimens and these will be more difficult than Test 1 but don't panic – do what you can then move on to the more difficult specimens and if in doubt, do write the genus even if you don't know the species. Make use of scientific names for this test. If you need to take a specimen back to your desk and there is insufficient material in the tray, move on to the next specimen.

There is 1 point for each correct answer and half for a correct genus.

In the field test, only write what you are sure of, as we count wrong answers including obvious guesses and species we know are absent from the site as False Positives - these can count against you.

**Anyone found cheating in a FISC (for example using non allowed equipment such as mobile phones, conferring, collusion, impersonation, deliberately running over time in the field test) will be disqualified immediately.**

Any questions before we start?"

### Before the field test:

- Health and safety talk
- Boundaries of the FISC site (potentially provide a map)
- Phones and other devices off
- Timing – for example a whistle will be blown once ten minutes before the end of surveying, and twice at the end.

## Example email to candidates from FISC Provider with provisional results 8 weeks after the FISC

Dear FISC Candidate

Please find enclosed your provisional mark for the FISC you took on the **Date** at **Location**.

You have provisionally been awarded a FISC at Level **X**.

The breakdown of your score is as follows:

Lab test 1 Level:

Lab Test 2 Level:

% GSS score Level:

False Positive Level:

Your final certificate will be sent via the BSBI after quality assurance and moderation checks have taken place and is likely to arrive in December.

More details of FISCs can be found on the BSBI FISC [webpage](#). This includes the latest FISC Information [Booklet](#) which goes into detail on how FISCs are awarded.

The BSBI website has a list of providers of [training courses](#) on plant family groups and on particular habitats. The BSBI also offers [training grants](#) towards some of these courses.

May I take this opportunity to wish you luck with all your future botanical endeavours.

If we need to correct your name and/or change your email address please keep us informed and we will ensure certificates are corrected and sent to the appropriate email.

With all good wishes,

**FISC Provider**