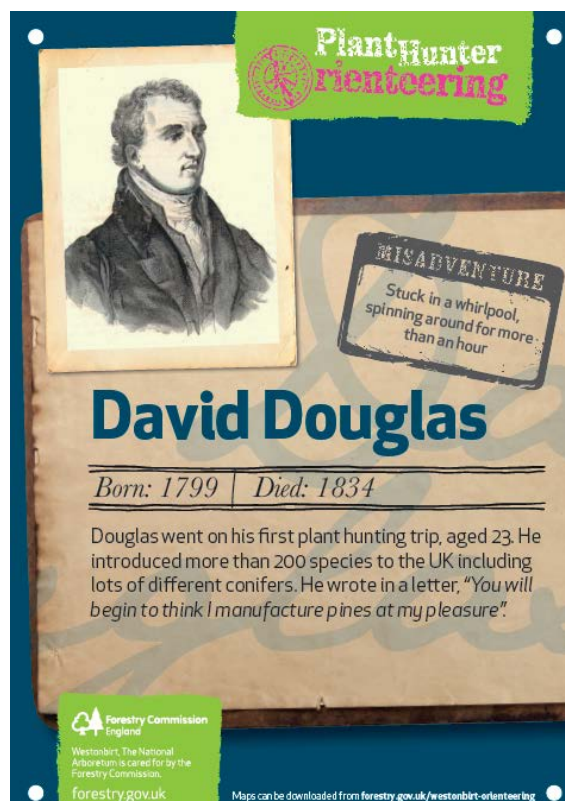


Plant Hunter Orienteering Course Information for group leaders

An orienteering course involves participants navigating around a course of 'controls' using a map. Controls must be visited in a given order, although participants decide on and follow their own route. This pack includes the information necessary to ensure a safe and successful orienteering experience at Westonbirt Arboretum.

The Controls

Westonbirt has two permanent courses situated in Silk Wood. Each course comprises of a number of fixed controls, which consist of a coloured panel fixed to a post. Each panel has information about plant hunters important to our tree collection.



To show they have visited the correct controls, students will be looking for sets of four control points to build up the stories of different plant hunters. Each set comprises of the name of a plant hunter, a country they visited, and two tree species they introduced into the UK that we have in our collection.

The courses

Our two courses aim to provide students with a safe introduction to orienteering – while also encouraging further exploration of the arboretum. It is important for you to pick an appropriate course for your students.

Both courses start from the Welcome Building.

Short course

- There are eight controls to find (1-8), four pink and four green, and includes information about two plant hunters
- Complete quiz A on answer sheet
- Controls are located on or near paths or grass rides
- It requires basic understanding of map orientation and common map symbols
- Suitable for KS2 students
- Time: 30-45 mins – allow an additional 30 mins to return to the Welcome Building

Points to watch

- * C2 – look for the first small path on the left after C1. You will see two pines, one either side of the path. Go a little further
- * If you miss the small path to take you to C3 and C4, go down Palmer Ride, look on your right for C4 and then pick up the path to take you to C3

Long course

- There are 16 controls to find, four green, four pink, four blue, four orange, and includes information about four plant hunters
- Complete both quiz A and B on answer sheet
- Controls are located on or near paths, grass rides, path junctions and off path
- It requires good map orientation skills and understanding of map colours and symbols
- Suitable for KS3+ students
- Time: 45mins – 1 ¼ hours. Allow an additional 20-30 mins to return to the Welcome Building

Points to watch

- * C13 – visible from the path in winter and early spring but long grasses of late spring and summer will hide this control from view. Best to access from Broad Drive
- * C14 – as you come to the end of Broad Drive, continue straight across Waste Drive, up the slope and then take the second path on your right, close to the boundary

Preparing for your visit

What should students bring?

The orienteering courses cover a variety of terrain, and therefore it is vital that students are dressed appropriately. As a minimum students will need:

- Sensible waterproof footwear with non-slip soles
- Clothing suitable for weather conditions – waterproof coat, jumper, hat and gloves in the winter, sun hat and sun screen in summer
- A drink and snack

In addition students will need:

A pen or pencil and clipboard

At least one watch between two pupils

A compass is not necessary for successful completion of our courses

Before your visit

Students will need a basic understanding of orienteering before they arrive at Westonbirt. It would be useful for students to have knowledge of the following:

- Map colours and symbols
- Map scale, the map they will be using is 1:10,000 (1cm on the map = 100m on the ground)
- Map set to features on the ground

Ideas for novice groups

- For novice groups walk them to C1 rather than starting at the Welcome Building – this allows the students to see what a 'control' plaque looks like.
- Instead of sending pairs out split them into groups of 5-6, each with an adult. Each student can navigate between a control.

On the day

Things to cover on arrival at Westonbirt

Cover the following, as appropriate, with students before they start.

- Basic map colours, symbols and scale
- Map setting
- It is useful to do a 'map walk' with students to check understanding of and reinforce the above points
- Explain about control points. There is a separate worksheet for recording information from each control point.
- Issue at least one map per pair.

- Brief the participants about the course you expect them to follow
- Give a time limit for the orienteering activity and a meeting point
- Brief participants on what to do if they get lost. Highlight the perimeter boundaries of the area, any out of bounds areas and hazards. The Plant Hunter Orientation courses are based in Silk Wood only and students should be instructed not to cross any walls or fences.
- If you are using compasses, instruct your students to follow a due East bearing (90 degrees) if they become lost. This will bring them back to the Downs area and central facilities.

Health and Safety

Decide group sizes. Ideally students should be sent in pairs or small groups.

Consider the health and safety issues relating to taking groups out of school and participating in orienteering activities. A sample risk assessment for the course is attached. **For further details please contact the Learning Team on 0300 067 4856, learning.westonbirt@forestry.gov.uk**

Lastly ensure that all your helpers understand their specific roles .

We strongly recommend that you walk the course to familiarise yourself with locations before bringing your group.

Large groups

To prevent students from following one another (particularly on our shortest course or when leading a large group) try

- Sending pairs out at timed intervals e.g. one every two minutes.
- Sending half the group round the course one way and the other half in reverse.
- Using more than one course - with the most able on the longer course.

Alternative Orienteering Activities

- Consider a timed score suitable for Y5 & 6. A timed score event is when the controls are visited in any order – with the object being to collect as many as you can within a given time. One hour is a suitable amount of time.
- An alternative is a star event. In a star event students are sent off from a central point to one control at a time. After they have found each control they return to the central location to get their next control. This allows for increased safety and regular checks on student progress. It is also suitable for large groups and groups with students of wide ability (more experienced students just visit more controls). At Westonbirt you can do a star event by using C5 as a central location for the short course and C10 for the longer course. By allocating a different control to each pair you can reduce following, but bear in mind that some controls are easier to find than others – ensure students are able to find the control they are sent to. N.B. make a simple chart (see below) to keep track of the controls each pair has visited.

Student pairs	Control number															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
J. Smith / P Brown		X		X												

What are the lines and colours on the map?

As with any other map, the symbols and colours on our orienteering map represent different features in the landscape. However, although these symbols are easy to recognise they are NOT necessarily the same as those found on a standard Ordnance Survey map. It is therefore valuable to go through the map with students to ensure they understand the map before sending them out on a course.

The Colours

There are five basic colours on orienteering maps:

- Black** Often represents 'man made' features such as buildings, walls, bins and fences. It is also used to represent rock features and boulders. Paths and tracks are also shown in black, but not roads, which are shown in brown.
- Green** Various shades of green represent different types of woodland. Often the shade of green indicates how easy or difficult it is to move through. For example, light green or white areas are suitable for running or walking through, whereas dark green areas indicate thick, dense bushes or scrub and are best avoided.
- Yellow** Indicates open areas. Bright yellow usually represents open area such as playing fields or larger open spaces. Pale yellow is often used to show thinly wooded areas or rough grassland that may be less accessible.
- Brown** Pale brown normally indicates a hard or artificial surface such as gravel, tarmac and playgrounds etc.
- Blue** As with other maps, blue represents water such as rivers, ponds, streams and lakes.

The Lines

All orienteering maps have parallel lines drawn vertically on the map. The tops of these lines have an arrow indicating magnetic north. These lines will only be relevant if using a compass.

The answers!

Control Number	Set Colour	Plant Hunter Information
1	Pink	Paperbark maple
2	Pink	Ernest Wilson
3	Green	Western yellow pine
4	Pink	Tibetan cherry
5	Green	David Douglas
6	Pink	China
7	Green	Sitka spruce
8	Green	Western North America
9	Orange	Japanese walnut
10	Blue	Guaitecas cypress
11	Blue	William Lobb
12	Blue	Chile
13	Blue	Antarctic beech
14	Orange	Roy Lancaster
15	Orange	Katsura
16	Orange	Japan

The courses

Short (controls 1-8)

Pink set featuring Ernest Wilson

Bonus

Q How did he break his leg?

A In a rock avalanche

Green set featuring David Douglas

Bonus

Q How many miles did he travel over the Rocky Mountains?

A 300 miles

Long (controls 1 – 16)

Pink set featuring Ernest Wilson – bonus question as above

Green set featuring David Douglas – bonus question as above

Blue set featuring William Lobb

Bonus

Q What is the world's southernmost conifer species?

A Guaitecas cypress

Orange set featuring Roy Lancaster

Bonus

Q What does Katsura smell of in autumn?

A Burnt sugar

Risk Assessment for Orienteering

This risk assessment is provided as guidance only. It contains the specific risks associated with using the orienteering courses in Silk Wood (NB: separate risk assessments covering the general risks associated with visiting the arboretum are also available on request).

It is your responsibility to carry out your own assessment. For further guidance please telephone 0300 067 4856. We recommend a pre-visit if you are unfamiliar with Silk Wood.

Location	Silk Wood, Westonbirt National Arboretum	
Activity	Using Plant Hunter Orienteering courses	
Persons at risk	School children (aged 7-18) and adult helpers, school staff, members of the public, special needs groups, Westonbirt education staff	
Emergency Numbers		
Emergency Services	999	
Westonbirt Arboretum	0300 067 4891	
Tetbury Hospital	(01666) 502336	
HAZARDS	LEVEL OF RISK (LOW, MEDIUM or HIGH)	
Outside Environment		
1. Terrain – trips, slips and falls	1. Low	
2. Weather	2. Low	
3. Woodland pools	3. Low	
Dogs		
1. Dog faeces	1. Medium	
2. Attack by dogs	2. Low	
Missing participants or marshals	Medium	
Supervision and personal safety	Medium	
RISK CONTROL MEASURES		
Hazard		
Terrain	<ul style="list-style-type: none"> • Courses are planned to avoid steep areas. • Participants should be clearly briefed about steep banks in preliminary safety talk. • Ensure adequate adult supervision (see supervision and personal safety) • Students must wear appropriate shoes • Trail conditions are monitored regularly to ensure they are maintained, particularly after severe weather • In wet conditions group leader should specify that students walk rather than run around courses. 	

Weather	<ul style="list-style-type: none"> • Participants must bring appropriate clothing and footwear – as a minimum a warm jumper, hat, gloves and waterproof coat should be brought while in the summer a water bottle would also be advisable. • Spare clothing must be brought by school leader • Choose an appropriate course for your group (see general guidance) • Participants should be clearly briefed about weather in preliminary safety talk.
Woodland pools	<ul style="list-style-type: none"> • Courses are planned to avoid areas with woodland ponds. • Guidelines will be given to groups on the importance of good hygiene when in the outside environment and particularly when near water during initial group safety talk.
Missing participants or officials	<ul style="list-style-type: none"> • Runners should be sent out in pairs (as a minimum). For younger groups an adult should accompany each group. • The perimeter of Silk Wood is defined by walls/fences and participants should be clearly briefed about boundaries in preliminary safety talk. • The school leader must bring a student list and monitor finishers' control cards to ensure everyone has returned. • Courses are graded with the shorter course on main footpaths and rides. Choose an appropriate course for your group (see general guidance) • Ensure adequate adult supervision (see supervision and personal safety) • The arboretum has an emergency procedure for lost persons and this will be deployed in the event of a missing runner.
Supervision and personal safety	<ul style="list-style-type: none"> • An accompanying teacher/helper will have the responsibility as a back marker when walking along trails • A clear finish time and meeting place should be set before participants start the courses. • Students should be made aware of appropriate behaviour at the start of the day • The group leader must carry safety equipment including; first aid kit and mobile phone. • Supervision ratios will fulfil LEA guidelines – we recommend a minimum of 1:6 staff:students for KS2 and 1:10 staff:students for KS3+ • Participants should be instructed to stay in pairs and not approach strangers. • Marshals should wear a bib to ensure they are easily recognisable.