

Orchid Observers is a research project investigating how the flowering period of orchids in the UK is being affected by climate change. By gathering photographs of flowering orchids and combining them with data from orchid specimens in the Natural History Museum's collections, we can plot flowering times against a series of climate variables.

What to do

- Carefully read these instructions so you know what information to record about the orchids. Print a copy to carry with you if you wish.
- 2. Go for a walk to find one of the 29 species of orchids we're studying in this research. You can go anywhere in the UK, anytime between April and September. The Identification Guide shows you which species we are targeting, their preferred habitats and the months they are likely to be in flower.
- 3. Once you find a wild orchid plant, please take one photograph of the flower spike, taken from the side. You can use any camera; SLR, compact, mobile phone or tablet. Please ensure the photo is in focus, using a macro setting if your camera has one.
- 4. Make a note of the following:
 - the date
 - the exact location of the orchid (you will pinpoint it using a Google map when you enter your data online)
 - the common or scientific name of the orchid, if you know it
- 5. Look for insects visiting the orchid and photograph them if you can.
- 6. Upload your photos at **www.orchidobservers.org** to contribute your data to the research.
- 7. (Optional) While online you can also identify your orchid, verify other people's identifications, and annotate Museum specimens collected over three centuries. All this will gather a time series of orchid flowering dates for climate change research.

Responsible fieldwork

Please follow the guidelines below to ensure the activity is safe for you and for the environment

- never pick or uproot wild orchids even common species are declining
- please take care not to trample or damage any plants while looking for orchids to photograph
- check weather reports in advance of your walk and wear appropriate clothing, waterproofs, sunscreen etc
- supervise young children at all times
- take care over uneven ground and wear suitable footwear
- don't put yourself in danger by walking too close to busy traffic, cliff tops, rivers, lakes or similar hazards
- make sure you know what to do in an emergency and can call for help if necessary

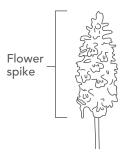
If you do not have internet access to upload your data, you can post your photographs with your name, contact details and the information requested in point 4 above to Orchid Observers, Angela Marmont Centre for UK Biodiversity, The Natural History Museum, Cromwell Road, London SW7 5BD. Please ensure the location is given as a grid reference or latitude/longitude.

Turn to the next page to see a checklist of the orchids included in this research



This example shows the kind of photo that is best for our research

- in focus
- from the side
- flower spike fills the frame



The following orchid species are included in the Orchid Observers project:

Common spotted-orchid (Dactylorhiza fuchsii)

Heath spotted-orchid (Dactylorhiza maculata)

Early marsh-orchid (Dactylorhiza incarnata)

Southern marsh-orchid (Dactylorhiza praetermissa)

Northern marsh-orchid (Dactylorhiza purpurella)

Common fragrant-orchid (Gymnadenia conopsea)

Heath fragrant-orchid (Gymnadenia borealis)

Marsh fragrant-orchid (Gymnadenia densiflora)

Early-purple orchid (Orchis mascula)

Pyramidal orchid (Anacamptis pyramidalis)

Green-winged orchid (Anacamptis morio)

Burnt orchid (Neotinea ustulata)

Common twayblade (Neottia ovata)

Lesser twayblade (Neottia cordata)

Bird's-nest orchid (Neottia nidus-avis)

Bee orchid (Ophrys apifera)

Fly orchid (Ophrys insectifera)

Man orchid (Orchis anthropophora)

Frog orchid (Coeloglossum viride)

Autumn lady's-tresses (Spiranthes spiralis)

Creeping lady's-tresses (Goodyera repens)

Small-white orchid (Pseudorchis albida)

White helleborine (Cephalanthera damasonium)

Marsh helleborine (Epipactis palustris)

Bog orchid (Hammarbya paludosa)

Musk orchid (Herminium monorchis)

Lesser butterfly-orchid (Platanthera bifolia)

Greater butterfly-orchid (Platanthera chlorantha)

Coralroot orchid (Corallorhiza trifida)