

Title	Silwood Park plant list
General metadata	
Abstract	Plant species sighted in Silwood Park
Keywords	Plant diversity, habitats
Is this part of a larger study?	No
Individual: Primary contact	Mick Crawley
Position	Emeritus Professor of Plant Ecology
Address	Department of Life Sciences, Imperial College London
Organization	Silwood Park, Buckhurst Road, Ascot, Berkshire SL5 7PY. United Kingdom
Phone	+44(0)2075942216
Email address	m.crawley@imperial.ac.uk
Web address	<a href="http://www.imperial.ac.uk/people/m.crawley">http://www.imperial.ac.uk/people/m.crawley</a>
Individual: Associated parties	Catalina Estrada
Position	Ecological Analyst and Facility Manager
Address	Silwood Park, Buckhurst Road, Ascot, Berkshire SL5 7PY. United Kingdom
Organization	Department of Life Sciences, Imperial College London
Phone	+44(0)2075942217
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Funding	Mick Crawley: Department of Life Sciences, Imperial College London
Data set status and accessibility	
Status	
Latest update	January 2024
Latest archive date	January 2024
Metadata updated	January 2024
Accessibility	
Storage location and medium	"Research group space: SilwoodLTE", Imperial College London, ICT department
Usage rights	Open access
Data request	To Catalina Estrada with form: <a href="https://drive.google.com/file/d/0BxBDRAfqBCDLZjVtay01ZVVFLVk/view">https://drive.google.com/file/d/0BxBDRAfqBCDLZjVtay01ZVVFLVk/view</a>
Geographic metadata	
Geographic description	Silwood Park Campus from Imperial College London, Buckhurst Road, Ascot, Berkshire SL5 7PY, United Kingdom. Silwood Park campus, with 78 ha, contains acid grasslands, scrubland, ancient woodlands and few decades old oak-dominated woodlands. Silwood Park experiences an average annual rainfall of 698mm with little seasonal pattern (1987-2022). Mean hourly temperature is 10°C with July max of 23 °C and January min of 1.4 °C (1987-2022).
Bounding coordinates	

Latitude	51.4126
Longitude	-0.6452
UK National grid	
Square	SU
Easting	94318
Northing	69046
<b>Temporal metadata</b>	
Temporal description	
Begin	1983
End	2022
<b>Taxonomic metadata</b>	
Taxonomic authority	
Type	Website
Author	NBN Atlas (National Biodiversity Network)
Authority	UKSI (UK species inventory by Natural History Museum)
Link	nbnatlas.org
<b>General Information</b>	
Taxonomic level: Kingdom	Plantae
Taxonomic level: Phylum	Tracheophyta
	Bryophyta
	Marchantiophyta
Taxonomic level: Species	Tables: SilwoodPlants_species.csv, SilwoodTaxa.csv
<b>Methods metadata</b>	
Data collection	<p><u>Silwood Plant list to 2015:</u> Professor Mick Crawley collected this data, including plant identification, name of locations and habitat classification. Part of this data has been included in book The Flora of Berkshire by M. Crawley 2005.</p> <p>Locations: Locations across the dataset are not unique to physical places on campus. For instance, the same location; same nothing/easting and name, often appears with different site numbers. Similarly, locations that are part of field experiments appear with slightly different names, location and different site numbers when surveyed across years. Site numbers appear to belong to a larger dataset (Flora of Berkshire book) therefore no attempts have been made to make any change to locations from the original data set. Habitat classification is not consistent across time either, for example a physical location can be called “arable” and “cultivated” when surveyed at different times.</p> <p><u>Bryophytes and Liverwort list:</u> Identification by Sinan Gurlek, Master student in cohort 2022-2023. He wrote: “The species recorded by myself, Sinan Gurlek, are the results of an amateur bryologist. There are still many species to be discovered for careful eyes and I hope the next surveyor can be able to finalise this list. As a starting point, check the brick wall piece in front of the gym building, as it contains many species that I wasn't able to study properly. From one amateur bryologist to another, thank you for your interest in mosses”</p>

Quality control	<p>Mick Crawley has collected data included in ‘SilwoodPlants_species’ from which guarantee consistency of plant identification. Habitats, site names and site numbers are not always consistent across years for the same place (see Data Collection).</p> <p>Plant identification included in “SilwoodBryophyteSuvey” was done by amateur bryologist Sinan Gurlek</p> <p>Curation of data files and creation of metadata has been done by Catalina Estrada since in April 2020. Please read README_SilwoodPlants.txt to see specific changes to raw data.</p>
Data table metadata	
Number of tables	5
	SilwoodPlants_species.csv
	SilwoodPlants_records.csv
	SilwoodPlants_sites.csv
	SilwoodTaxa.csv
	SilwoodBryophytes.csv
Format	.csv, .txt

<b>File name</b>	<b>SilwoodPlants_species.csv, SilwoodPlants_species.txt</b>		
<b>Description</b>	<b>Species and infraspecies recorded in database by Mick Crawley up to 2015</b>		
Size	136 KB		
Case sensitive	No		
Number or records	1523 rows		
Number of attributes	9 columns		
Orientation	Variables (attributes) included as columns		
Data table structure and attribute description			
Attribute name	Definition	Type	Attribute description
trimmed	Plant scientific name including variety or subspecies, hybrid species or unidentified species within genera ( <a href="#">Link to table SilwoodPlants_records.csv</a> )	String	Text Scientific name updated April 2020 using NBN, The plant list and Stace 2019
family	Name of plant family the taxon belongs to	String	Text Scientific name updated April 2020 using NBN and Encyclopedia of life (eol.org) Data collected using R package taxize
genus	Name of plant genus the taxon belongs to	String	Text Scientific name updated April 2020 using NBN and Encyclopedia of life (eol.org)
species	Name of plant species the taxon belongs to	String	Text Scientific name updated April 2020 using NBN and The Plant List
hybrid	Name of hybrid species	String	Text

			Scientific name updated April 2020 using NBN and The Plant List NA: taxa is not a hybrid species
subspecies	Name of plant subspecies the taxon belongs to	String	Text Scientific name updated April 2020 using NBN and The Plant List NA: not an infraspecific taxa
variety	Name of variety or cultivar the taxon belongs to	String	Text Scientific name updated April 2020 using NBN and The Plant List f. = from NA: not an infraspecific taxa
id	External identification code for the taxon	String	16- character string comprising a six-letter prefix and a running series of ten digits. NHMSYS prefix for keys assigned by Natural History Museum NBNSYS prefix for keys created by JNCC  Many no UK native plants are not included in the atlas. When infraspecific id codes are not available, ID of species is used.  NA: id not available
id_type	Name of external database where id is collected	String	Text nbn: National Biodiversity Network Atlas (nbnatlas.org)

<b>File name</b>	<b>SilwoodPlants_sites.csv and SilwoodPlants_sites.txt</b>		
<b>Description</b>	<b>Information of recording sites in species list recorded by Mick Crawley up to 2015</b>		
Size	200 KB		
Case sensitive	No		
Number of records	2279 rows		
Number of attributes	7 columns		
Orientation	Variables (attributes) included as columns		
Data table structure and attribute description			
Attribute name	Definition	Type	Attribute description
site.number	Unique number given to a particular location in Silwood Park campus or surrounding areas ( <a href="#">Link to SilwoodPlants_records.csv</a> )	Integer	No consecutive numbers Min: 1, Max:10289 Physical locations are not always consistent in the site.number the location is given across time. Please read "Data Collection" section for more explanation

location	Name given to a particular location based on a landmark and/or field name on campus. Some names or landmarks no longer belong to the campus or are not currently used.	String	Text Physical locations are not always consistent in the name the location is given across time. Please read “Data Collection” section for more explanation
easting	Great Britain, National Grid, easting (Ordnance Survey)	Floating point	Geographic coordinate Six digits
northing	Great Britain, National Grid, northing (Ordnance Survey)	Floating point	Geographic coordinate Six digits
latitude	Latitude: north-south position WGS84	Floating point	Geographic coordinate
longitude	Longitude: east-west position WGS84	Floating point	Geographic coordinate
habitat	Rough classification of the habitat where taxa was found	String	Text Physical locations are not always consistent in the habitat the location is given across time. Please read “Data Collection” section for more explanation
experiment	Indicates whether the site is part of a recorded field experiment	String	Nominal Names of long-term experiments and Maintained land in silwood Park with more information about each found here: <a href="http://www.imperial.ac.uk/silwood-park/research/silwood-lte/">http://www.imperial.ac.uk/silwood-park/research/silwood-lte/</a> NA: site does not belong to an experiment

<b>File name</b>	<b>SilwoodPlants_records.csv and SilwoodPlants_records.txt</b>		
<b>Description</b>	<b>Individual plant records recorded by Mick Crawley up to 2015</b>		
Size	1.8 MB		
Case sensitive	No		
Number of records	32367		
Number of attributes	6		
Orientation	Variables (attributes) included as columns		
Data table structure and attribute description			
Attribute name	Definition	Type	Attribute description
record	Unique number given to each taxon recorded at one point in time	Integer	No consecutive numbers Min: 1, Max: 253296
trimmed	Plant scientific name including variety or subspecies, hybrid species or unidentified species within genera ( <a href="#">Link to SilwoodPlants_species.csv</a> )	String	Text Scientific name updated April 2020 using NBN, The plant list and Stace 2019 (see ‘Taxonomic authority’ above)

site.number	Unique number given to a particular location in Silwood Park campus or surrounding areas ( <a href="#">Link to SilwoodPlants_sites.csv</a> )	Integer	No consecutive numbers Min: 1, Max:10289 Physical locations are not always consistent in the site.number the location is given across time. Please read “Data Collection” section for more explanation
date	Date the taxon was recorded	Date	dd/mm/yyyy min: 23/09/1983 max: 01/10/2015
note	Field notes from particular record	String	Text It is limited to specific coloration of flowers or if plant was in seedling form NA: not additional information
CollectorID	Name code of person responsible for collection and entry of data	String	Nominal m.crawley

<b>File name</b>	<b>SilwoodTaxa.csv, SilwoodTaxa.txt</b>		
<b>Description</b>	<b>Plant species recorded in Silwood Park (including plants in both datasets) with supraspecific taxonomic classification</b>		
Size	767 KB		
Case sensitive	No		
Number of records	13031 rows		
Number of attributes	5 columns		
Orientation	Variables (attributes) included as columns		
Data table structure and attribute description			
Attribute name	Definition	Type	Attribute description
ScientificName	Recorded species current scientific name	String	Scientific name updated May 2020 using NBN and after
taxon	Organisms taxonomic rank	String	Nominal species, species hybrid, species aggregate, genera, generic hybrid, family, order, class, phylum, subphylum, kingdom, species hybrid.
name	Taxonomic rank classification	String	Text
id	External identification code for the taxon	String	16- character string comprising a six-letter prefix and a running series of ten digits. NHMSYS prefix for keys assigned by Natural History Museum NBNSYS prefix for keys created by JNCC BMSSYS prefix for keys assigned by British Mycological Society

			NA: not available
id_type	Name of external database where id is collected	String	Text nbn: National Biodiversity Network Atlas (nbnatlas.org) Many no UK native species are not included in the atlas. NA: not available

<b>File name</b>	<b>SilwoodBryophytes.csv, SilwoodBryophytes.txt</b>		
<b>Description</b>	<b>List of Bryophytes and Liverwort species recorded in Silwood Park</b>		
Size	5 KB		
Case sensitive	No		
Number of records	44 rows		
Number of attributes	9 columns		
Orientation	Variables (attributes) included as columns		
Data table structure and attribute description			
Attribute name	Definition	Type	Attribute description
Record	Consecutive number given to each record	Integer	Min: 1
Latitude	Latitude: north-south position WGS84	Floating point	Geographic coordinate. Decimal degrees (DD)
Longitude	Longitude: east-west position WGS84	Floating point	Geographic coordinate. Decimal degrees (DD)
Date	Date species was recorded	Date	Date dd/mm/yyyy NA: not available
Phylum	Common name of Phylum the species recorded belongs to	String	Nominal Moss: Phylum Bryophyte Liverwort: Phylum Marchantiophyta
CommonName	Common name given in England to species recorded	String	Common name using National Biodiversity Network Atlas (nbnatlas.org) NA: not available
ScientificName	Recorded species current scientific name	String	Scientific name using National Biodiversity Network Atlas (nbnatlas.org)
CollectorID	Code name for recorder	String	See full names and details in SilwoodCollectors.csv
Notes	Additional information	String	Field notes

Data anomalies	Plant list to 2015: Locations: Locations across the dataset are not unique to physical places on campus. For instance, the same location; same northing/easting and name, often appears with different site numbers. Similarly, locations that are part of field experiments appear with slightly different names, location and different site numbers when surveyed across years. Site numbers appear to belong to a larger dataset (Flora of Berkshire?)
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Supplemental descriptors	
Publications	2
Order	By year of publication
	Crawley MJ and Harral JE (2001) Scale dependence in plant biodiversity. <i>Science</i> , 291:864-868. DOI: 10.1126/science.291.5505.864
	Crawley MJ (2005) Silwood Park and its history. In: Crawley MJ, ed. <i>The Flora of Berkshire</i> . Harpenden, Hertfordshire, UK: Brambleby Books, 215–253.
How to cite dataset	Contact <a href="mailto:c.estrada@imperial.ac.uk">c.estrada@imperial.ac.uk</a>
How to acknowledge dataset	Contact <a href="mailto:c.estrada@imperial.ac.uk">c.estrada@imperial.ac.uk</a>
Additional information	A map showing hoy tables are connect by key variables: <a href="#">SilwoodPlants_DatabaseMap.pdf</a>