

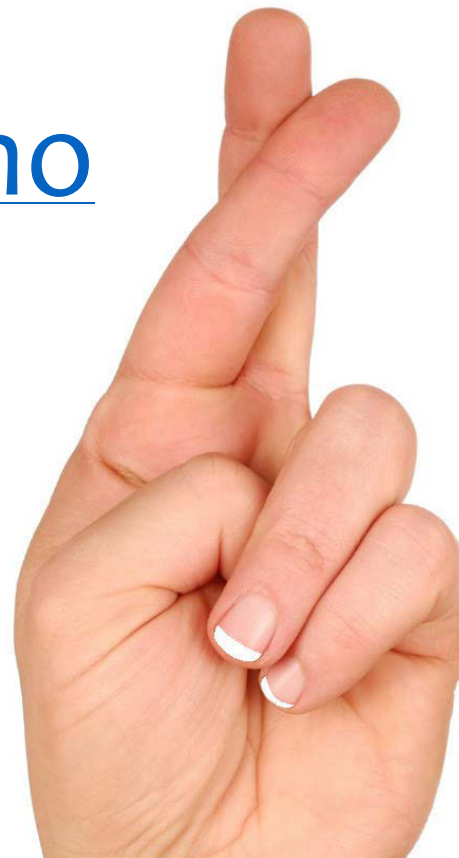
The UK Lakes Portal

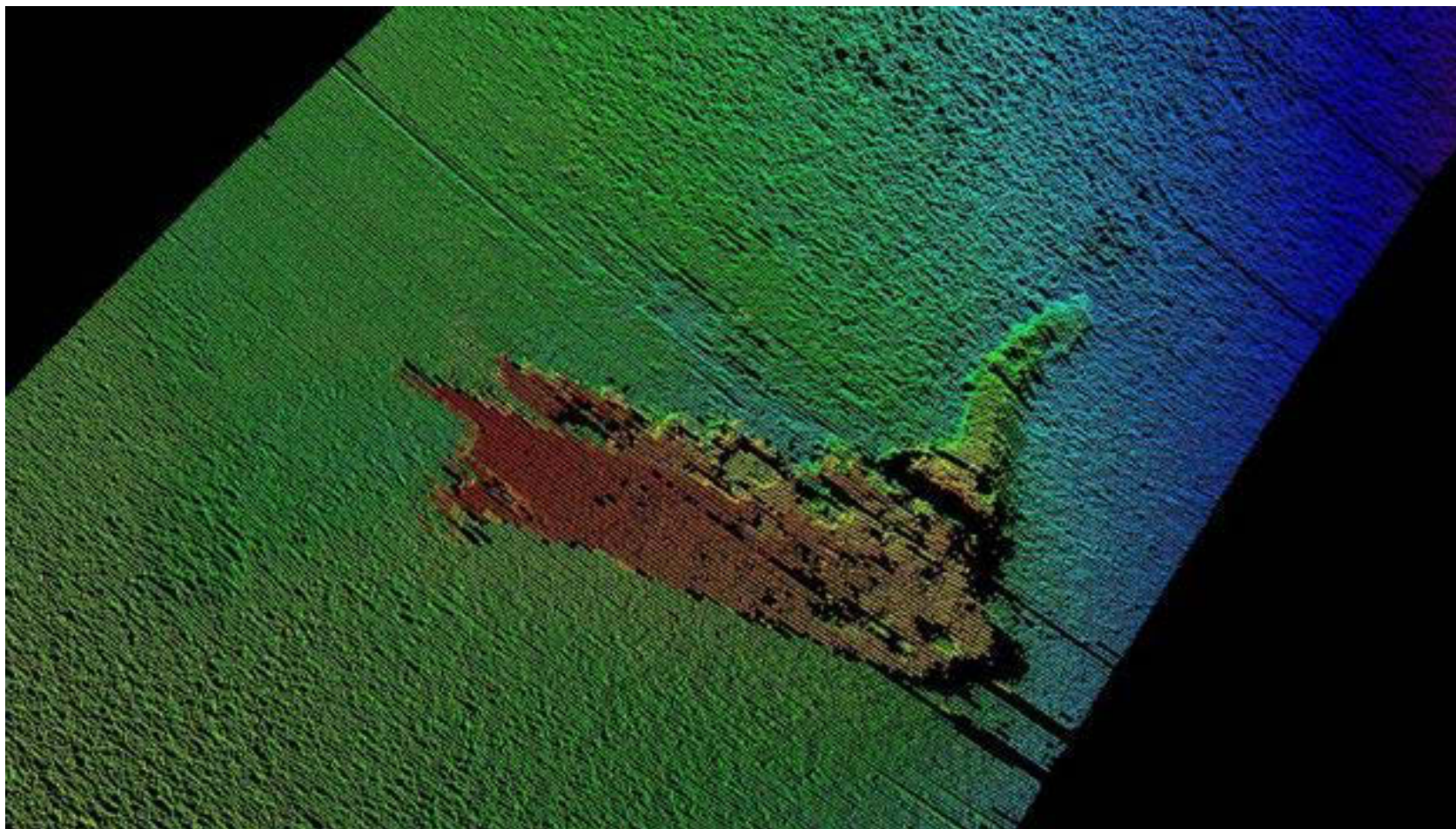
Philip Taylor, CEH

@ScienceAndMaps



Live Demo





<http://www.bbc.co.uk/news/uk-scotland-highlands-islands-36024638>

NEWS

Find local news

[Home](#)[UK](#)[World](#)[Business](#)[Politics](#)[Tech](#)[Science](#)[Health](#)[Education](#)[Entertainment & Arts](#)[Video & Audio](#)[More](#)[Scotland](#)[Scotland Election 2016](#)[Scotland Business](#)[Edinburgh, Fife & East](#)[Glasgow & West](#)[More](#)[Highlands & Islands](#)

Film's lost Nessie monster prop found in Loch Ness

By Steven McKenzie
BBC Scotland Highlands and Islands reporter

13 April 2016 [Highlands & Islands](#)



A still from the movie showing the new prop made following the loss of the 30ft version

Top Stories

Drone hits British Airways plane near Heathrow

A British Airways plane approaching Heathrow Airport is believed to have been hit by a drone before it landed safely, police say.

7 minutes ago

Ecuador quake deaths rise to 235

2 hours ago

Two teens charged over Spalding deaths

7 hours ago

Features



Free-range kids

The children uprooted to live the 1970s
[Good Life](#)



Loch Morar

Water Body ID 21466

Loch Morar is a large freshwater lake located in Highland, Scotland. It is generally deep with low alkalinity and is situated at low altitude.

Surface Area	2683 ha
Mean Depth	86.6 m
Maximum Depth	310.0 m
Catchment Area	16852 ha
Grid Reference	NM76129087
Altitude	14 m A.O.D.



lat, lon: 56.9548,-5.6844

☒ Show selected lake ☒ Show all lakes ☐ Show lake catchment

4km
3mi

Parameters

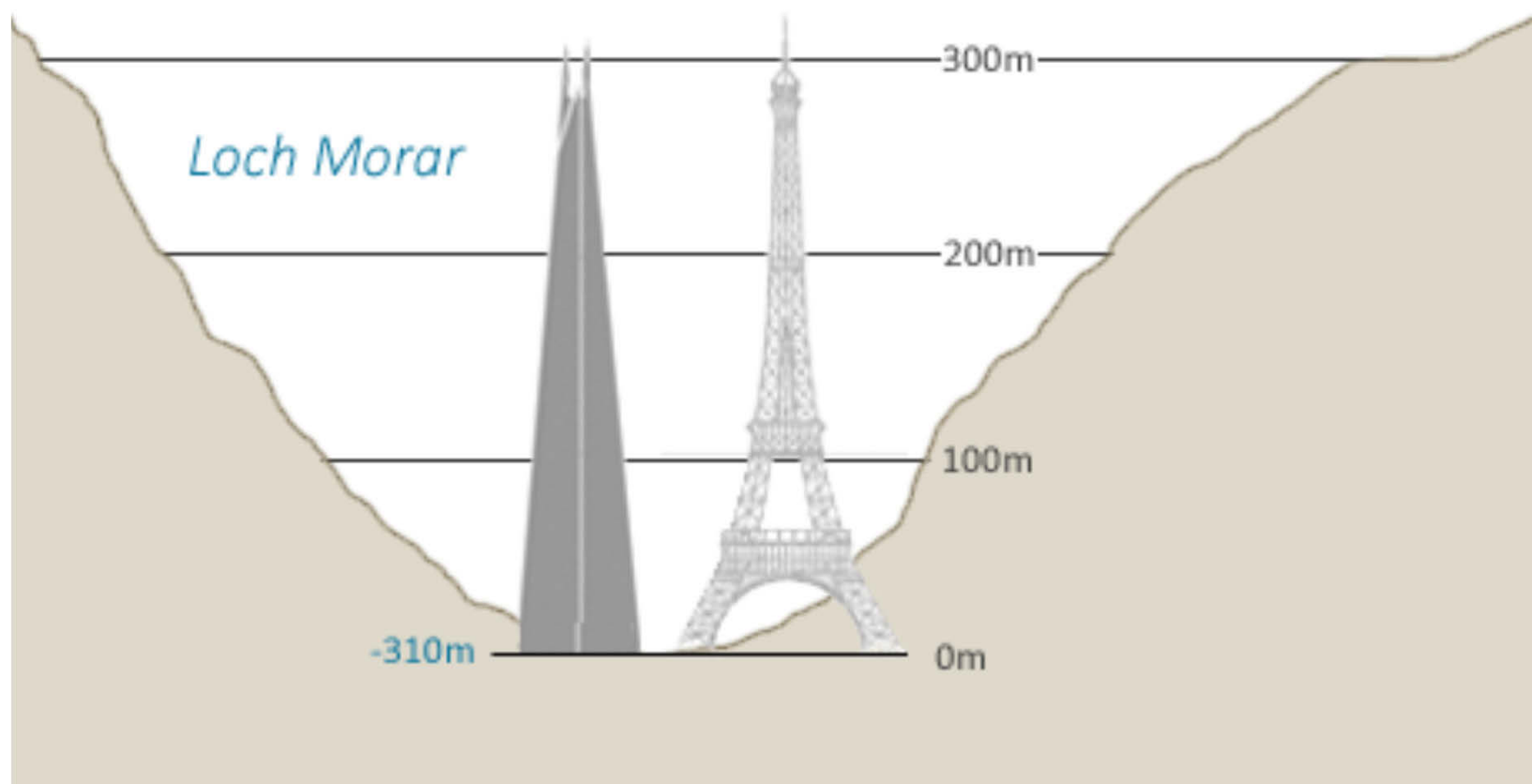
Typology

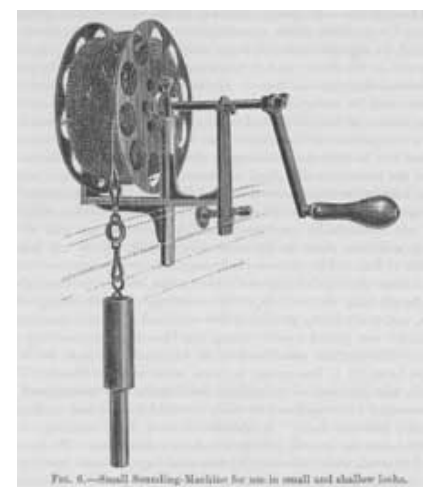
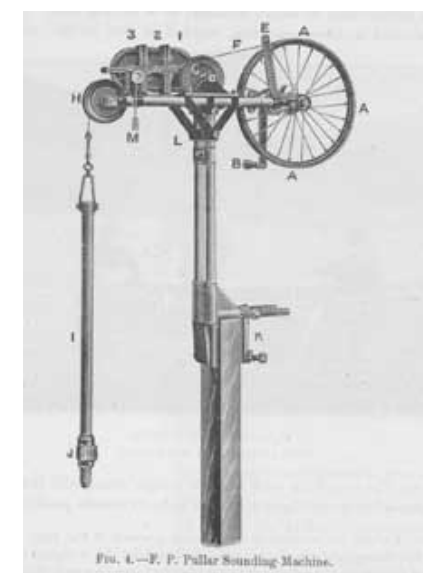
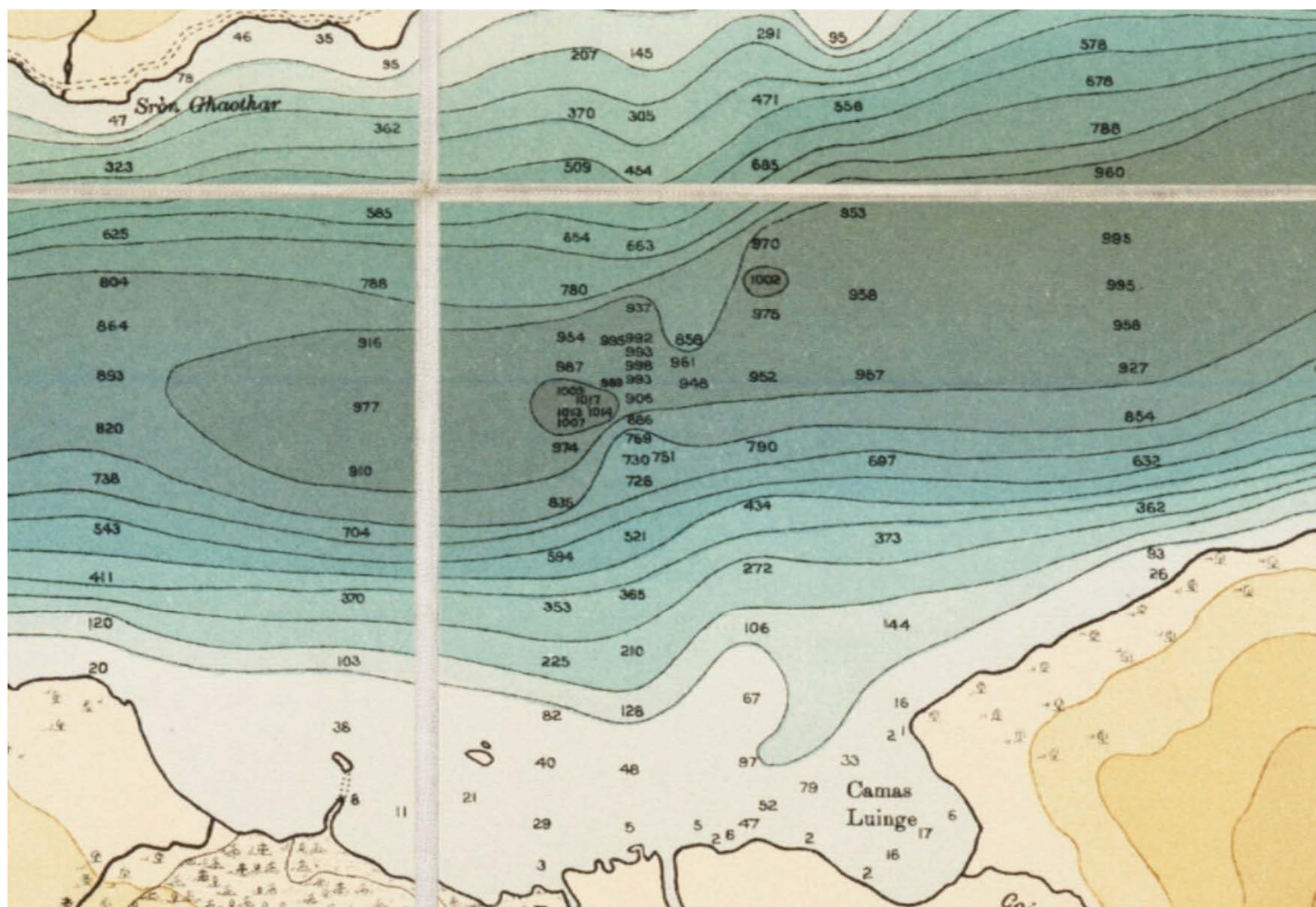
Chemistry

Land cover

Biology

Perimeter Length	59 km
Shoreline Development Index [?]	3.23
Fetch Distance [?]	18 km
Distance to Sea [?]	1 km
Water Body Volume [?]	2323589368 m3
Catchment-to-Lake Ratio [?]	6.3





Murray & Pullar, 1904. <http://maps.nls.uk/view/74400565>

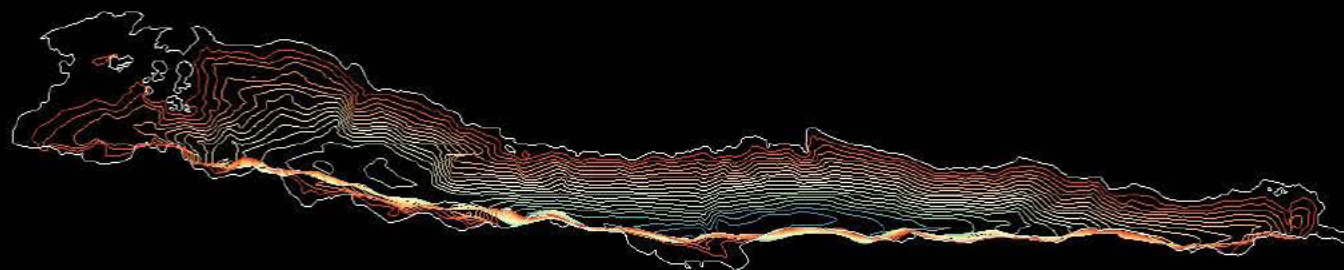


Layers

Custom Plane

Help

Close Controls



The contours were created by first digitising the 1902 survey by Murray & Pullar. I'm fortunate to own a copy of this survey, but it can be viewed freely online [here](#). Digitising, TIN interpolation, contour creating and smoothing were all performed in QGIS. 3D Spatial data is created by the [Qgis2threejs](#) plugin and served by [lamp-server](#) on [Ubuntu](#). The lake outline data was from the open [UK Lakes Portal](#), which contains OS data © Crown copyright and database right (2016).

[<< home](#) | [<< 2D contours here](#)

Loch Lomond / NBN Data



Loch Lomond

Water Body ID 24447

Loch Lomond is a large freshwater lake located in Argyll and Bute, Scotland. It is generally deep with low alkalinity and is situated at low altitude.

Surface Area	7073 ha
Mean Depth	37.0 m
Maximum Depth	189.9 m
Catchment Area	76321 ha
Grid Reference	NS37049448
Altitude	4 m A.O.D.



lat, lon: 56.1130,-4.6211

☒ Show selected lake ☒ Show all lakes ☐ Show lake catchment



Parameters

Typology

Chemistry

Land cover

Biology

Perimeter Length	138859 km
Shoreline Development Index [?]	4.66
Fetch Distance [?]	14255 km
Distance to Sea [?]	2255 km
Water Body Volume [?]	2617021840 m3
Catchment-to-Lake Ratio [?]	0.1

Loch Lomond – Biology Data

[Parameters](#)[Typology](#)[Chemistry](#)[Land cover](#)[Biology](#)

This tab provides an indication of species occurrence in and around the lake. The data is provided by the [National Biodiversity Network \(NBN\)](#) and its use is subject to the [NBN Gateway Terms and Conditions](#). These results are not indicative of the full range of species found at the site and should be used accordingly. For more information about this tab please read [Where do the biological data come from?](#)

[Fetch NBN Data](#)

Start and end year: 2000

[This site can be viewed on NBN Gateway](#)[New observation for this lake](#)Filter table by UK Lakes Groups: [algae](#) [amphibians](#) [birds](#) [crustacea](#) [fish](#) [fungi](#) [insects](#) [mammals](#) [molluscs](#) [other invertebrates](#) [plants](#) [reptiles](#) [all](#)☐ Show only species in UK Lakes Group containing freshwater species

Found 1446 taxa around this lake.

Show 10 entries

Quick Search:

Common Name	Name	Rank	NBN Group	Observations	UK Lakes Group
Reed Bunting	+ Emberiza schoeniclus	Species	bird	43	bird

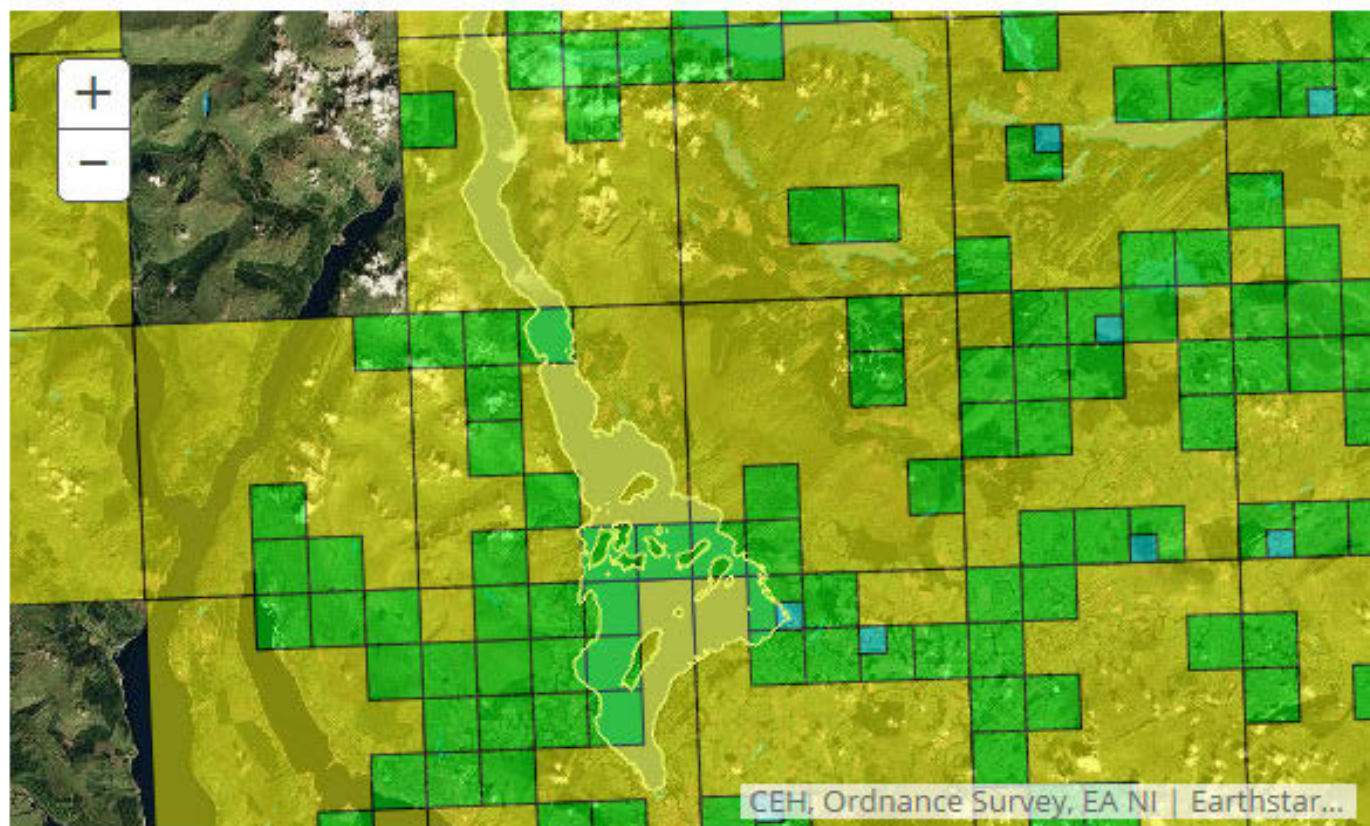
Showing 1 to 1 of 1 entries (filtered from 1,446 total entries)

[Previous](#)

1

[Next](#)

Reed Bunting... 😊

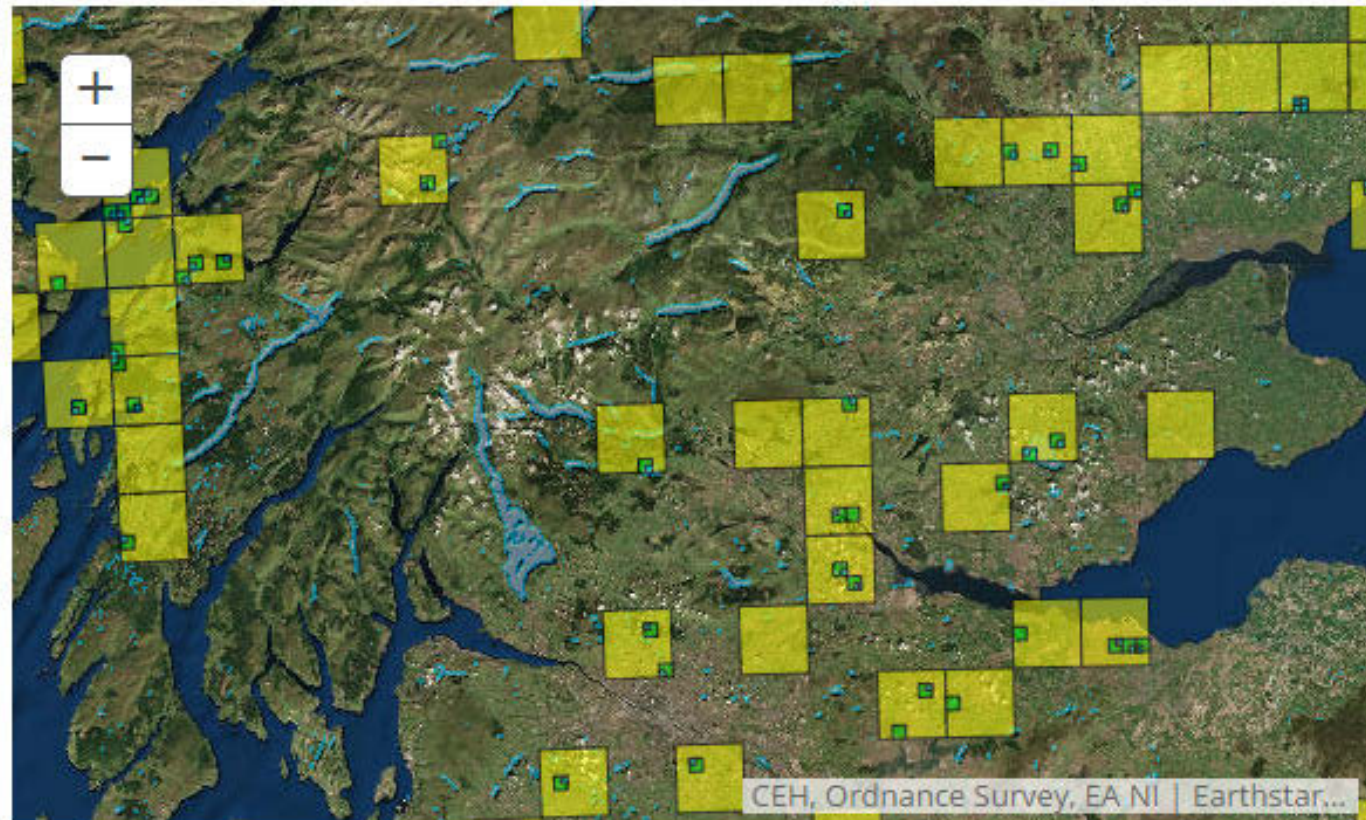


lat, lon: 56.1130,-4.6211

☒ Show selected lake ☒ Show all lakes ☐ Show lake catchment

Showing records of *Emberiza schoeniclus* (since 2000)

Common Reed... ☹



lat, lon: 54.3601,-2.9458

☒ Show selected lake ☒ Show all lakes ☐ Show lake catchment

Showing records of *Phragmites australis* (since 2000)

Loch Lomond – Biology Data

[Parameters](#)[Typology](#)[Chemistry](#)[Land cover](#)[Biology](#)

This tab provides an indication of species occurrence in and around the lake. The data is provided by the [National Biodiversity Network \(NBN\)](#) and its use is subject to the [NBN Gateway Terms and Conditions](#). These results are not indicative of the full range of species found at the site and should be used accordingly. For more information about this tab please read [Where do the biological data come from?](#)

[Fetch NBN Data](#)

Start and end year: 2000

[This site can be viewed on NBN Gateway](#)[New observation for this lake](#)Filter table by UK Lakes Groups: [algae](#) [amphibians](#) [birds](#) [crustacea](#) [fish](#) [fungi](#) [insects](#) [mammals](#) [molluscs](#) [other invertebrates](#) [plants](#) [reptiles](#) [all](#)☐ Show only species in UK Lakes Group containing freshwater species

Found 1446 taxa around this lake.

Show 10 entries

Quick Search:

Common Name	Name	Rank	NBN Group	Observations	UK Lakes Group
Reed Bunting	+ Emberiza schoeniclus	Species	bird	43	bird

Showing 1 to 1 of 1 entries (filtered from 1,446 total entries)

[Previous](#)

1

[Next](#)

Enter records for the Loch Lomond (WBID 24447)

Where Was It?

What Did You See?

Search UK Lakes:

Loch Lomond (WBID 24447)

*

Provide the name of the location within the site to help observations to be relocated.

Enter a spatial reference:

NS377957



*

British National Grid



Or search for a place on the map:

[Search](#)

Or simply click on your rough position on the map.

Good. 100m square selected. We've switched to a satellite view to allow you to locate your position even better.

Habitat:

Inland water



Standing waters



Overall comment:



Enter records for the Loch Lomond (WBID 24447)

Where Was It?

What Did You See?

Date:

20/04/2016






Recorder Name:

Taylor, Philip



Enter the recorder's name, if different.

Please enter all the species you saw at one site on a single day and any other information about them. Then move to the **Where was it?** tab before submitting your records.

Species 	Quantity	Stage	Certainty	Identified By	Comment	Sensitivity	Add photos
 Common Reed - <i>Phragmites australis</i> flowering plant 	10	▼	Certain ▼	Taylor, Philip		Not sensitive ▼	Add images
		▼	▼	Taylor, Philip		Not sensitive ▼	Select a species first

Use * as a wildcard when searching for species names.

[Submit](#)

UK Freshwater Species List

Group	Native	Non-Native	Total	%Native
Freshwater_Alga			5956	
Freshwater_Macrophyte	1111	110	1221	91%
Freshwater_Invertebrate			5796	
Freshwater_Amphibian	15	51	66	23%
Freshwater_Fish	69	35	104	66%
Freshwater_mammal	5	3	8	63%
Freshwater_Reptile	1	5	6	17%
Grand Total	1201	204	13157	



Llyn Conwy – Land Cover



Llyn Conwy

Water Body ID 34400

Llyn Conwy is a small freshwater lake located in Conwy, Wales. It is generally shallow with low alkalinity and is situated at mid altitude.

Surface Area	41 ha
Mean Depth	7.7 m
Maximum Depth	22.0 m
Catchment Area	137 ha
Grid Reference	SH78014618
Altitude	455 m A.O.D.



lat, lon: 52.9990,-3.8192

☒ Show selected lake ☒ Show all lakes ☐ Show lake catchment

0.3km
1000ft

Parameters

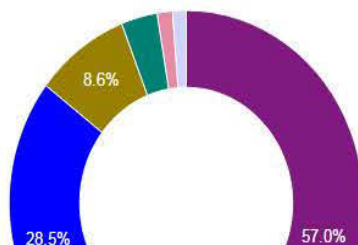
Typology

Chemistry

Land cover

Biology

Lake catchment land cover based on [CEH Land Cover Map of Great Britain, 2000](#). This is a national scale analysis and should be treated as a guide to the surrounding area, not a site-specific study.



0.00%	1.1 Broad-leaved/ mixed woodland
0.00%	2.1 Coniferous woodland
0.00%	4.1 Arable cereals
0.00%	4.2 Arable horticulture
0.00%	4.3 Arable non-rotational
0.00%	5.1 Improved grassland
0.00%	5.2 Setaside grass
0.00%	6.1 Neutral Grass
0.00%	7.1 Calcareous grass
8.62%	8.1 Acid grassland
0.00%	9.1 Bracken
56.98%	10.1 Dense dwarf shrub heath

Parameters

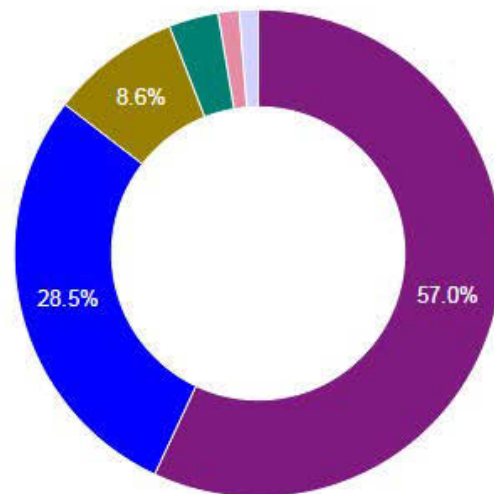
Typology

Chemistry

Land cover

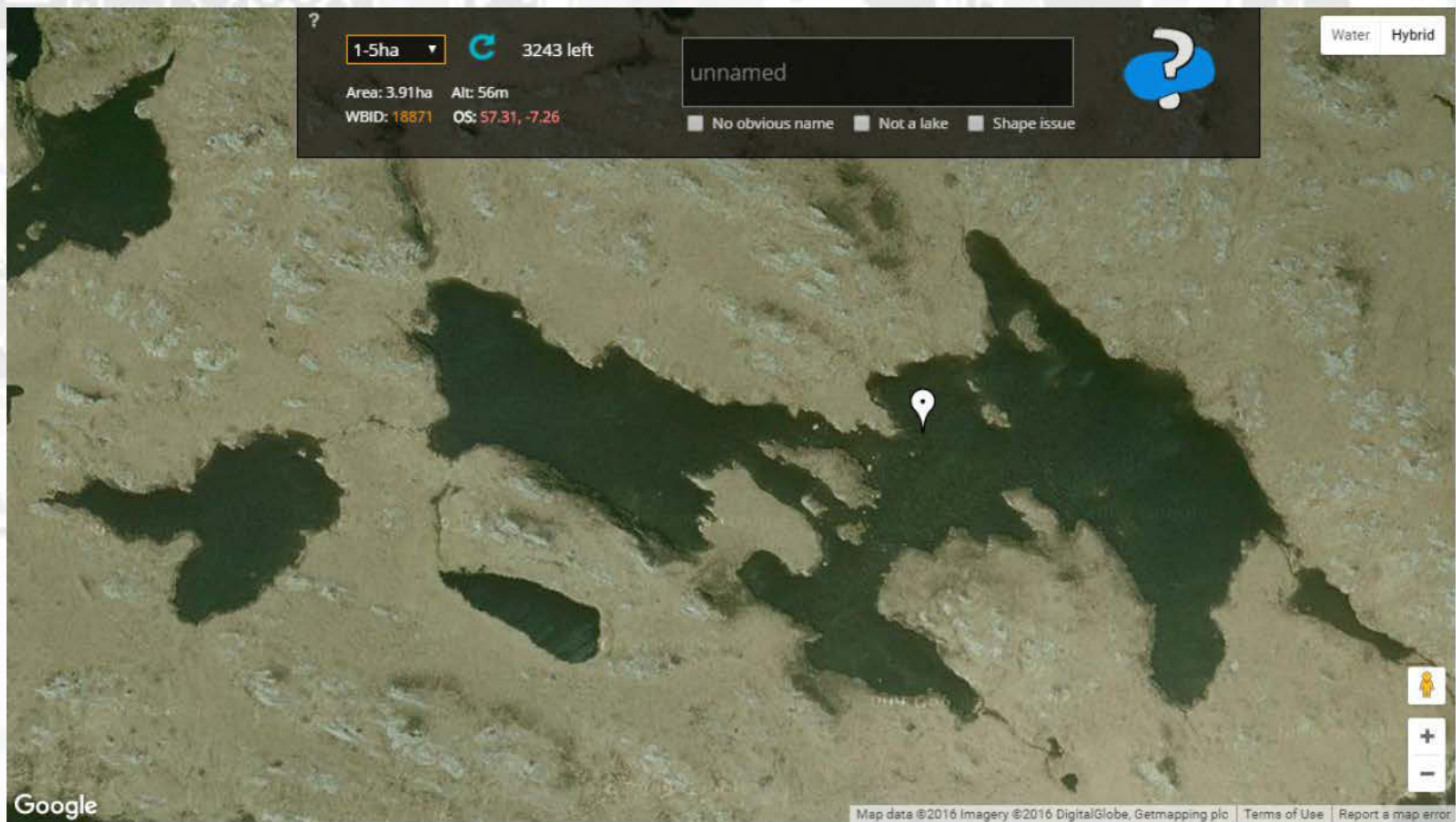
Biology

Lake catchment land cover based on [CEH Land Cover Map of Great Britain, 2000](#). This is a national scale analysis and should be treated as a guide to the surrounding area, not a site-specific study.



0.00%	1.1 Broad-leaved/ mixed woodland
0.00%	2.1 Coniferous woodland
0.00%	4.1 Arable cereals
0.00%	4.2 Arable horticulture
0.00%	4.3 Arable non-rotational
0.00%	5.1 Improved grassland
0.00%	5.2 Setaside grass
0.00%	6.1 Neutral Grass
0.00%	7.1 Calcareous grass
8.62%	8.1 Acid grassland
0.00%	9.1 Bracken
56.98%	10.1 Dense dwarf shrub heath
1.41%	10.2 Open dwarf shrub heath
0.00%	11.1 Fen, marsh, swamp
3.28%	12.1 Bog (deep peat)
28.47%	13.1 Inland water
0.00%	15.1 Montane habitats
1.23%	16.1 Inland bare ground
0.00%	17.1 Suburban/rural development
0.00%	17.2 Continuous urban
0.00%	18.1. Supra-littoral rock
0.00%	19.1. Supra-littoral sediment
0.00%	20.1 Littoral Rock
0.00%	21.1 Littoral Sediment
0.00%	21.2 Saltmarsh
0.00%	22.1 Sea/Estuary

Lake Naming



Compare a selection of historic maps to modern map or satellite layers

1. Select a category: Great Britain


2. Select a map series: OS 1:1 million-1:10K, 1900s

[Zoom to extent](#)


1. Select a category: Bing / OS / OSM / MapBox

2. Select a map series: OS Opendata

[Zoom to extent](#)



Historic OS map showing Loch na Lice Baine and Loch Fada. The map is titled 'Loch na Lice Baine' and 'Loch Fada'. It includes a scale bar for 100 m and a '100 m' label. The map is part of the 'OS 1:1 million-1:10K, 1900s' series.



Modern OS Opendata map showing Loch na Lice Baine and Loch Fada. The map is titled 'Loch na Lice Baine' and 'Loch Fada'. It includes a scale bar for 100 m and a '100 m' label. The map is part of the 'OS Opendata' series.

[NLS Historic Maps Subscription API layer](#)

Connectivity



Windermere

Water Body ID 29233

Windermere is a large freshwater lake located in Cumbria, England. It is generally deep with moderate alkalinity and is situated at low altitude.

Surface Area	1436 ha
Mean Depth	21.3 m
Maximum Depth	64.0 m
Catchment Area	24877 ha
Grid Reference	SD39229584
Altitude	37 m A.O.D.



lat, lon: 54.3601,-2.9458

☒ Show selected lake ☒ Show all lakes ☐ Show lake catchment

10km
6mi

Parameters

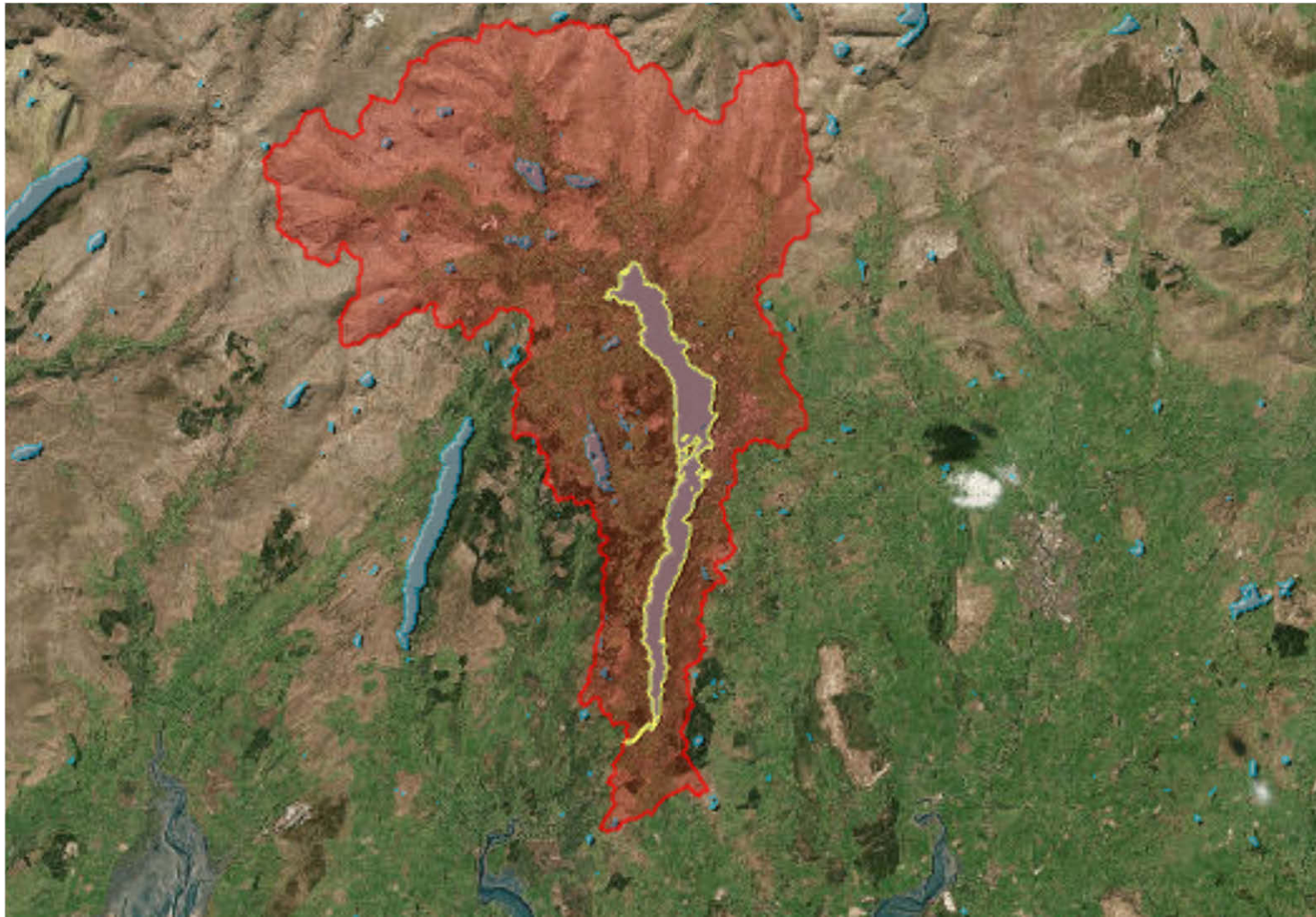
Typology

Chemistry

Land cover

Biology

Perimeter Length	52 km
Shoreline Development Index [?]	3.88
Fetch Distance [?]	9 km
Distance to Sea [?]	2 km
Water Body Volume [?]	305845933 m3
Catchment-to-Lake Ratio [?]	17.3



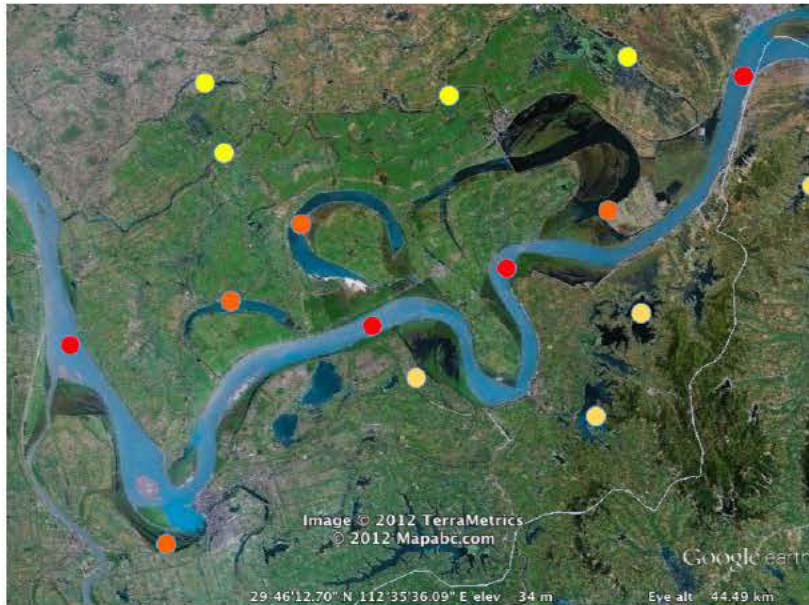
Windermere Catchment



Esthwaite Water Catchment



Blelham Tarn Catchment



Hydroscape

CONNECTIVITY & STRESSOR INTERACTIONS

How does connectivity influence the distribution of organisms & nutrients within and between landscapes?

How is this relationship altered by different stressors, singly and in combination?



Upland (Cumbria)



Lowland (Norfolk)

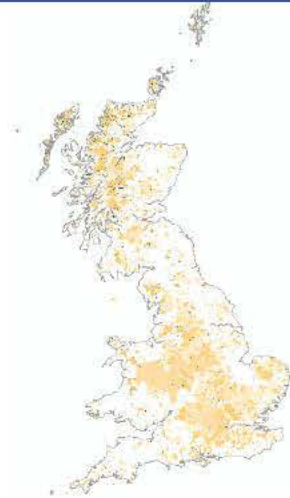


Urban (Glasgow)

Integrating Water-Land-Species Data



Intelligent River Network



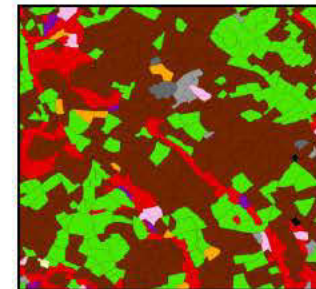
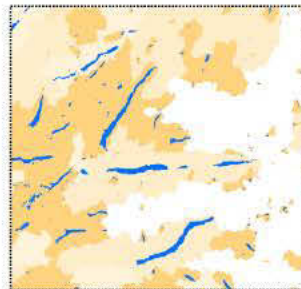
UK Lakes Database



Land Cover Data



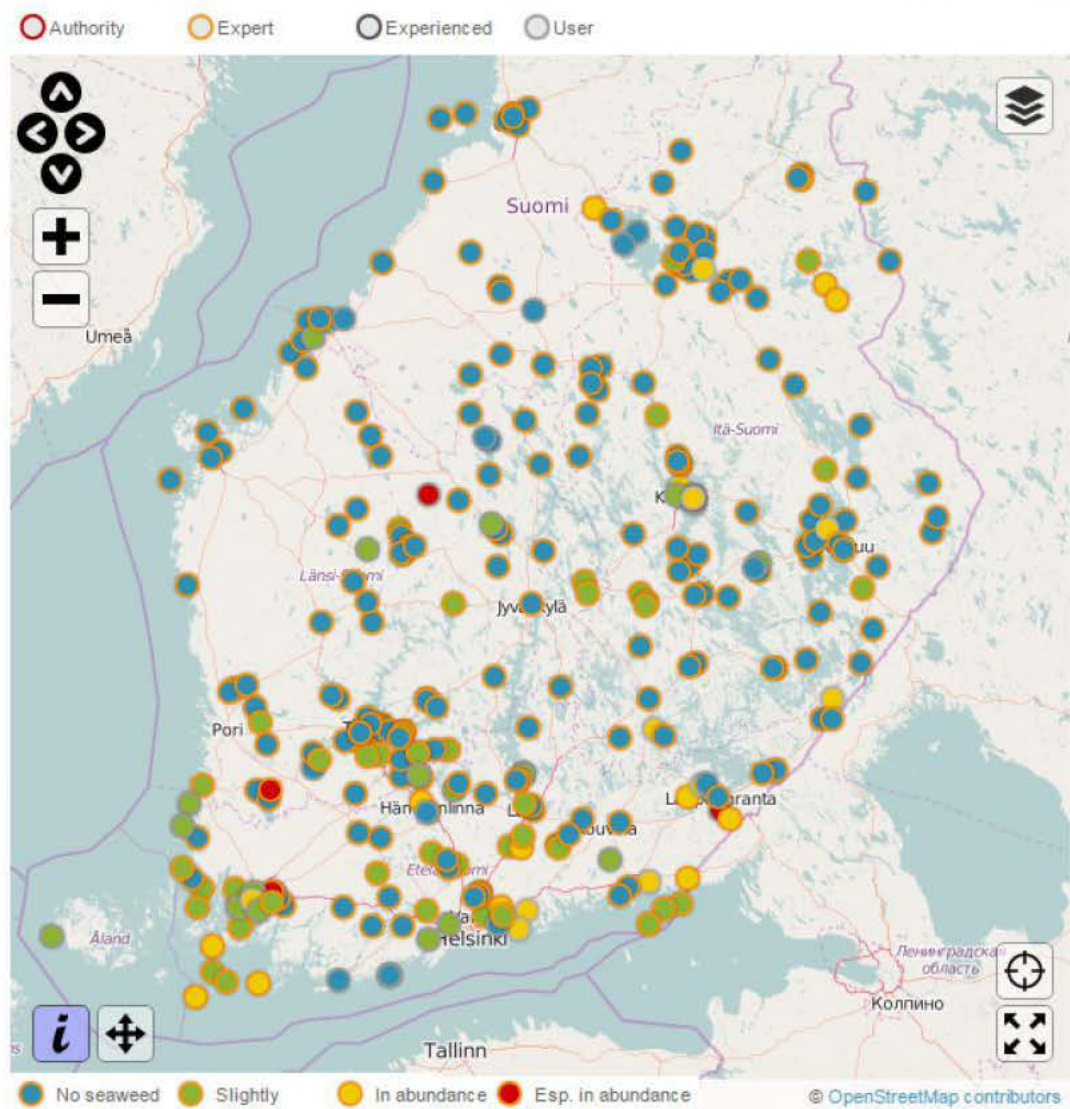
Species Data



National-scale
analysis



Algal Blooms App



Disclaimer about health risks of algal blooms and safety precautions etc

	Location	>
	Date	>
	Photos	>
	Algal ID	>
	Stick test	>
	Bloom size	>
	Site info	>
	Duration	>
	Comments	>

>> More info / EA, SEPA links etc
 Disclaimer about the use of data within this app, Interaction with agencies etc

Same as iRecord App

Same as iRecord App, but allows multiple photos

This is B-G algae, info about it etc

This is duck weed, info about it etc

B-G Algae
 Not Sure

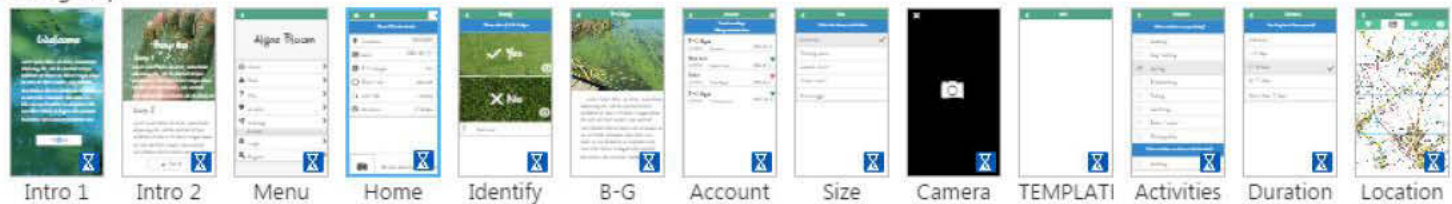


NinjaMock

Project "Algae"



Pages: Default group



<https://eip.ceh.ac.uk/apps/lakes/>

@ScienceAndMaps

