



## Appendix 7.3

### WINTERING BIRDS

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# 2022-2025 Wintering Bird Survey Summary

## **Broadwater Lake, Hillingdon**

On behalf of London Borough of Hillingdon

Issue: 01

Issue date: 16 June 2025

## Version Control

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16/06/2025	01	First issue

Issue to:

London Borough of Hillingdon

Written by: Dr Stephanie Harper  
Harper Environmental Limited  
[www.harperenvironmental.co.uk](http://www.harperenvironmental.co.uk)

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# 1 Introduction

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## 1.1 Background

Wintering Bird Surveys (WBS) have been undertaken at Broadwater Lake (the Site) during 2022, 2023, 2024 and 2025.

The surveys were required to support a planning application to develop a new outdoor, water-based activities centre (Hillingdon Water Sports Facility and Activities Centre – HWSFAC) at Broadwater Lake.

## 1.2 Purpose of this report

The wintering bird surveys were undertaken to establish the wintering bird assemblage for the lake and the population size of each species, using the standard survey methodology that is comparable with other available published data (for the Site, the Colne Valley Gravel Pits (CVGP) and for the UK).

This standalone report details the summary results for each year side by side, and pulls out the key findings. An assessment of the importance for the site for each species has been made using the full dataset.

A record of non-waterbird species present during winter was also undertaken in 2023 and 2024, to provide a complete wintering species list for the Site.

The raw data including weather data has been provided as a separate factual report:

- Harper Environmental Ltd (2025). 2022-2025 Wintering Bird Survey Factual Report.

## 1.3 The Site

The Site forms part of the Mid-Colne Valley SSSI and is designated for “*significant ornithological interest, particularly for the diversity of breeding woodland and wetland birds, and for the numbers of wintering wildfowl*”<sup>1</sup>.

The whole Site covers an area of approximately 76 hectares (ha) and is approximately centred on National Grid Reference TQ 04396 89593. The Site comprises an access road from Moorhall Road, the lake itself with an associated lagoon (south-east corner of the lake), a peninsula at the south-east corner, an existing sailing club (Broadwater Sailing Club) at the north end of the lake, parts of the margins of the lake, and islands set within the lake. Part of the western and southern banks of the lake and adjacent open water lie just outside the red line boundary (these areas were included within the survey area). The site red line boundary and immediate surrounds are shown in Figure 1.1 below.

There are also two discrete land parcels that fall within the same ownership; a hawthorn woodland to the east, and a grassland field to the south. These lie outside the boundary of the SSSI. They were not included in the scope of surveys as breeding bird habitat within these areas will not be subject to impacts from proposed development.

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<sup>1</sup> Available: [1003469.pdf \(naturalengland.org.uk\)](https://naturalengland.org.uk/1003469.pdf)

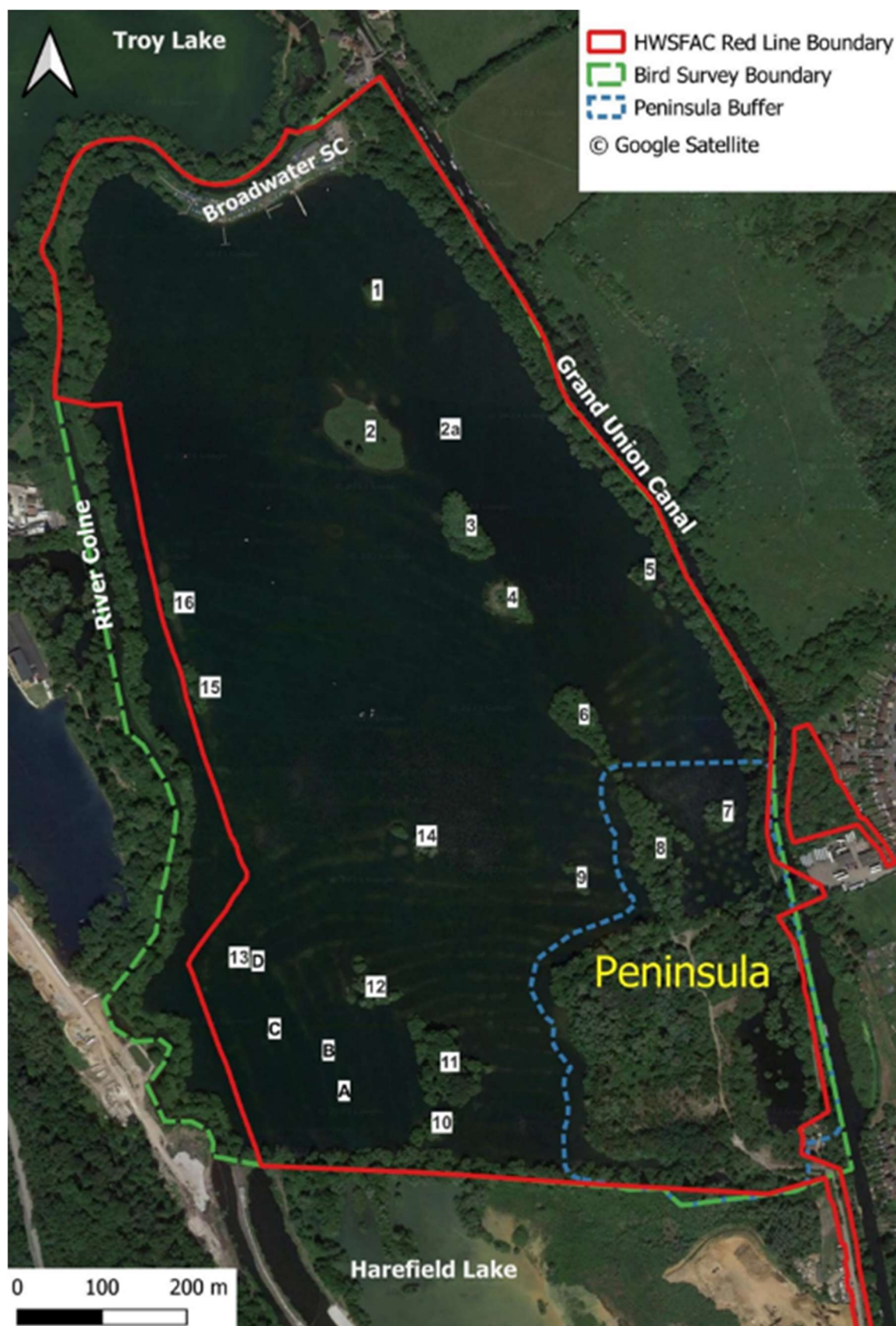


Figure 1.1 The site red line boundary, showing the numbering of islands.

## 1.4 Surveyors and Authors

The vast majority of the wintering bird surveys were carried out by Bill Haines, who also produced all the maps of the results and reviewed this report for accuracy. Bill, who has a Bachelor's degree in Environmental Sciences (BSc Hons), has over 25 years' experience in undertaking professional ornithological surveys and has worked in a wide variety of habitats in the UK including wetlands, urban and suburban, farmland, woodlands coastal and estuarine, and upland and lowland heathland, using a wide range of scientifically proven survey methodologies. He is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

Dr Jonty Denton also undertook some of the wintering bird surveys in 2022-2023. Dr Jonty Denton is a freelance Chartered Ecologist of over 30 years' experience, with Natural England licenses for Bats, Dormice, Great Crested Newt, Natterjacks, Sand Lizard, Smooth Snake, and White-clawed Crayfish. His clients include Natural England, the National Trust, Crown Estates, County Trusts, Butterfly Conservation, the Ministry of Defence, Royal Parks, and many County and District Councils, as well as the Environment Agency and Thames Water. Jonty is a highly experienced ornithologist having carried out ornithological surveys (for breeding and wintering birds), including pioneering studies of impact on birds of construction of bridge crossings and specialist surveys of impacts of piling works on Brent Geese in Langstone harbour. Jonty has travelled widely across all the continents and has seen over 50% of the world's avifauna.

This report was written by Dr Stephanie Harper. Stephanie has a BSc (Hons) and PhD in Environmental Sciences and holds a Natural England Level 1 class licence for bats. She has 18 years of experience in ecological survey and consultancy.

This report was reviewed by Martin Scott, Senior Director of Ornithology at RPS, who has over 25 years' experience in ornithological surveying in across offshore wind, road, rail, solar, nuclear, and tidal projects.

## 1.5 Constraints

The full site (whole red line boundary) plus adjacent offsite areas (namely much of the western edge of Broadwater Lake) was surveyed.

## 2 Legislation and Conservation Status

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The Wildlife and Countryside Act 1981<sup>2</sup> (as amended) is the principal legislation affording protection to UK wild birds. Under this legislation all birds, their nests and eggs are protected by law and it is an offence, with certain exceptions to recklessly or intentionally:

- Kill, injure or take any wild bird;
- Take, damage or destroy the nest of any wild bird while in use or being built;
- Take or destroy the egg of any wild bird;

Species listed on Schedule 1 of the Wildlife and Countryside Act 1981 (as amended) are specially protected at all times.

A number of birds feature on the Natural Environment and Rural Communities (NERC) Act, Section 41 (S41)<sup>3</sup> as species which are of principal importance for the conservation of biodiversity in England. The S41 list is used to guide decision-makers such as public bodies, including local and regional authorities, in implementing their duty under section 41 of the NERC Act, to have regard to the conservation of biodiversity in England, when carrying out their normal functions. This Act supersedes the UK Biodiversity Action Plan (UK BAP) list of priority species.

### 2.1 Conservation Status of Birds

In addition to statutory protection, some bird species are classified according to their conservation status, such as their inclusion on the Red and Amber lists of Birds of Conservation Concern (BoCC) in the UK, 5 (Stanbury, et al 2021)<sup>4</sup>:

- Red list (high conservation concern) species are those that are Globally Threatened according to IUCN criteria; those whose population has declined rapidly (50% or more) in recent years; and those that have declined historically and not shown a substantial recent recovery;
- Amber list (medium conservation concern) species are those with an unfavourable conservation status in Europe; whose population or range has declined moderately (between 25% and 49%) in recent years; those whose population has declined historically but made a substantial recent recovery; rare breeders; and those with internationally important or localised populations;
- Green list (low conservation concern) species fulfil none of the above criteria.

### 2.2 Key to Status of Species

As set out above, legal protection and conservation status are material considerations when identifying key species / ecological receptors.

Table 2.1 presents the key that has been applied to the results (in Section 4) to make this status clear.

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<sup>2</sup> Available: <http://www.legislation.gov.uk/ukpga/1981/69>

<sup>3</sup> <http://jncc.defra.gov.uk/page-5705>

<sup>4</sup> Stanbury et al. December 2021. The status of our bird populations: the fifth Birds of Conservation Concern in the United Kingdom, Channel Islands and Isle of Man and second IUCN Red List assessment of extinction risk for Great Britain. British Birds, 114; pp723-747.

Table 2.1 Key to legal and conservation status of bird species

Key	Definition	Abbreviations
<b>Bold type</b>	Schedule 1 of the Wildlife and Countryside Act 1981 (as amended)	WCA Schedule 1 species (Sch1)
	Conservation status - Red list of Birds of Conservation Concern (BoCC) in the UK, 5 (Stanbury, et al 2021)	Red list
	Conservation status - Amber list of Birds of Conservation Concern (BoCC) in the UK, 5 (Stanbury, et al 2021)	Amber list
*	Natural Environment and Rural Communities (NERC) Act, Section 41	NERC-S41 listed species (NERC S41 or just S41)
No shading	Conservation status - Green list of Birds of Conservation Concern (BoCC) in the UK, 5 (Stanbury, et al 2021)	Green list

## 2.3 SSSI Designated Species

As a unit of a SSSI, the site is designated in part for the variety of species that form its overwintering waterbird population. There are two designated features of relevance to this report:

- Aggregations of non-breeding birds - variety of wintering species; and
- Aggregations of non-breeding birds - population of tufted duck *Aythya fuligula*.

The definition of both of these designated features is: “Localities which regularly support 1% or more of the total British non-breeding population of any native species in any season and non-breeding waterbird assemblages of over 20,000 individuals will qualify for SSSI selection.”

The total number of wintering species present at Broadwater was mentioned within the original designation for the SSSI which stated:

*“The ornithological interest of the site is considerable, with over 70 breeding, and **80 wintering species** of bird regularly recorded. This high diversity reflects the close proximity of the wide range of habitats present: woodland, scrub, grassland, running and standing water, marginal fen and gravel banks.... Many species of wintering wildfowl are attracted to the extensive water areas; the numbers of tufted duck frequently reach levels of national importance, and pochard and shoveler occasionally reach levels of similar significance. In winter Broadwater’s island are also the site of a large cormorant roost.”*

## 3 Methodology

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The method of evaluation is set out below. Results are presented in Section 4. Interpretation and a brief discussion is presented in Section 5.

### 3.1 Desk Study

At the start of the surveys (2022) protected species records within 2km of the Site were obtained from:

- Greenspace Initiative for Greater London (GiGL);
- Herts Biological Records Centre (HBRC); and
- Buckinghamshire and Milton Keynes Environment Records Centre (BMERC).

### 3.2 Standard Observation Method

The standard methodology for the wintering bird surveys broadly followed the ‘look-see’ method used for the Wetland Bird Survey (WeBS)<sup>5</sup> and the species monitored were those recorded for WeBS.

For all surveys, the number of birds of each species was counted and each bird (or groups of birds in the case of a tight or a loose flock) spatially mapped in the field.

The data was subsequently digitised in QGIS (a free and open-source geographical information system).

Birds that were seen overflying the site and not interacting with it (e.g. not looking to land) were excluded from any totals and subsequent analyses.

### 3.3 Timing and Survey Effort

Counts were undertaken on days when no sailing occurred (‘non-sailing’ days) and also (in 2022-23 and 2023-24) prior to any sailing activities occurring, to establish the baseline without sailing disturbance.

A single observer (or sometimes two observers) walked around the perimeter of the lake and mapped the distribution and numbers of birds. This was done once each ‘non-sailing’ visit.

Standard wintering surveys may be undertaken by a single surveyor as the changes to the number of birds and species composition are relatively discrete and low in frequency.

The times of day that these counts were carried out varied, with some counts being made in the mornings and others in the afternoon, the latter generally finishing at about sunset. These afternoon counts were to attempt to ascertain the presence and composition of any gull roost that may have been present on the lake. No specific surveys were conducted for gulls, as it was found that any potential gull-roost counts could be observed during or after a waterbird count on the same day.

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<sup>5</sup> [https://www.bto.org/sites/default/files/webs\\_methods.pdf](https://www.bto.org/sites/default/files/webs_methods.pdf)



### 3.4 Weather

On each visit weather details were noted. As the surveys were undertaken across a whole season, a range of weather conditions were encountered. There were no days where visibility caused surveys to be abandoned, though during some visits, visibility was somewhat reduced temporarily, either due to mist or heavy rain. This did not constrain the survey results on those days due to the level of survey effort.

### 3.5 Evaluation Method

The BTO website<sup>6</sup> identifies the evaluation of internationally and nationally important species levels as follows:

*"Criteria for assessing the international importance of wetlands have been agreed by the Contracting Parties to the Ramsar Convention on Wetlands of International Importance (Ramsar Convention Bureau 1988). Under criterion 6, a wetland is considered **internationally important** if it regularly holds at least 1% of the individuals in a population of one species or subspecies of waterbird, while criterion 5 states that any site regularly supporting 20,000 or more waterbirds also qualifies. Britain and Ireland's wildfowl belong, in most cases, to the northwest European population and the waders to the east Atlantic flyway population (Wetlands International 2012). A wetland in Britain is considered **nationally important** if it regularly holds 1% or more of the estimated British population of one species or subspecies of waterbird."*

The evaluation methodology is an extension of that used for the evaluation of national and international wetland sites, and is as follows:

1. Using the survey data, the peak count and median count of each species of wintering bird at the Site is established and the highest number regularly present at the Site is identified;
2. This number is then calculated as a percentage of the official estimated UK national population levels (BTO);
3. The percentage is compared to a series of arbitrary bands to produce a classification of importance for each species, using a geographic scale. The bands used for each classification are given in Table 3.1.

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<sup>6</sup> [Species Threshold Levels | BTO - British Trust for Ornithology](#)

Table 3.1 Importance criteria used to assess each bird species.

Percentage of GB wintering population	Importance
>1%	National
>0.5%	Regional
>0.1%	Borough (equivalent to County, Metropolitan etc)
>0.01%	Local
<0.01% <sup>(s)</sup>	Local
<0.01% <sup>(g)</sup>	Zone of influence (Zol) (insignificant) i.e. important within the site only
<sup>(s)</sup> Species with special status (Sch 1, S41 or Amber or Red listed) <sup>(g)</sup> Birds of low / no conservation concern - green list species or common species not assessed for conservation status	

The importance for each year and the overall importance (highest importance recorded across the 3 years) have been shown in Table 4.1.

This method has been updated for this report.

If a species is considered to be non-native then the evaluation defaults to 'Zone of Influence / non-native' (e.g. Canada goose, Egyptian goose).

Birds not "regularly present" (defined here as present on less than 3 monitoring dates and / or present only in 1 or 2 months across the 6-month monitoring period) may be regarded as not forming a component part of the wintering assemblage. Gulls are somewhat of an exception as these typically arrive at the Site through the afternoon and overnight on the open water, therefore they are typically under-recorded.

Kingfisher has also been assessed although there is no published data for the wintering population - kingfisher are present all year round and therefore the breeding UK population figure has been adopted as the same number present during the winter.

Hybrids are not a species and usually occur infrequently in very small numbers. These have not been assessed or reported.

### 3.6 Recording of non-waterbird species

During the winter 2023-24 surveys, records were kept of non-water bird species encountered (seen or heard) at the Site in January and / or February.

During the winter 2024-25 surveys, records of non-water bird species were made each month.

Land birds are much more cryptic in winter so establishing their numbers as individuals or pairs was not possible, however it was possible to record a tally of species.

A species was considered to be a regular member of the wintering assemblage if it was present on three or more survey visits in either of the monitoring years.



## 4 Results

Table 4.1 below provides the maximum counts per winter of each regularly present species over the 3 years of monitoring, and the importance per year as well as the overall importance (highest evaluation over the 3 years).

Species information			Maximum count per winter			% of the GB wintering population			Regularly present?	Importance			
Species (English)	Abbrev.	GB 1% (BTO)	2022-23	2023-24	2024-25	2022-23	2023-24	2024-25		2022-23	2023-24	2024-25	Highest value over 3 years
Black-headed Gull	BH	22000	919	425	250	0.042	0.019	0.011	Yes	Local	Local	Local	Local
Cormorant	CA	620	40	40	269	0.065	0.065	0.434	Yes	Local	Local	Borough	Borough
Canada Goose	CG	Non-native	75	105	40				Yes	Zol	Zol	Zol	Zol
Common Gull	CM	7000	44	5	5	0.006	0.001	0.001	Yes	Local	Local	Local	Local
Coot	CO	2000	75	131	363	0.038	0.066	0.182	Yes	Local	Local	Borough	Borough
Egyptian Goose	EG	Non-native	16	25	6				Yes	Zol	Zol	Zol	Zol
Gadwall	GA	310	26	14	16	0.084	0.045	0.052	Yes	Local	Local	Local	Local
Great Crested Grebe	GG	170	14	12	47	0.082	0.071	0.276	Yes	Local	Local	Borough	Borough
Greylag Goose	GJ	1400	110	57	91	0.079	0.041	0.065	Yes	Local	Local	Local	Local
Goldeneye	GN	190	13	18	2	0.068	0.095	0.011	Yes	Local	Local	Local	Local
Grey Heron	H.	450	18	12	21	0.040	0.027	0.047	Yes	Local	Local	Local	Local
Herring Gull*	HG	7300	40	27	7	0.005	0.004	0.001	Yes	Local	Local	Local	Local
Kingfisher*	KF	7700*	2	3	3	0.000	0.000	0.000	Yes	Local	Local	Local	Local
Lapwing*	L.	6200	65	38	29	0.010	0.006	0.005	Occasional visitor all 3 years	Local	Local	Local	Local
Lesser Black-backed Gull	LB	1200	20	12	14	0.017	0.010	0.012	Yes	Local	Local	Local	Local
Little Grebe	LG	150	7	3	2	0.047	0.020	0.013	Yes	Local	Local	Local	Local
Mallard	MA	6700	26	38	26	0.004	0.006	0.004	Yes	Local	Local	Local	Local
Moorhen	MH	3000	10	16	12	0.003	0.005	0.004	Yes	Local	Local	Local	Local
Mute Swan	MS	500	4	4	12	0.008	0.008	0.024	Yes	Zol	Zol	Local	Local
Oystercatcher	OC	2900	2	2	3	0.001	0.001	0.001	Occasional visitor all 3 years	Local	Local	Local	Local
Pochard	PO	230	302	145	72	1.313	0.630	0.313	Yes	National	Regional	Borough	National
Red-crested Pochard	RQ	Non-native	6	1	4				Occasional visitor all 3 years	Zol	Zol	Zol	Zol
Shoveler	SV	190	315	30	73	1.658	0.158	0.384	Yes	National	Borough	Borough	National
Teal	T.	4300	25	6	0	0.006	0.001	0.000	Yes (but none 2024-5)	Local	Local	Local	Local
Tufted Duck	TU	1300	455	467	237	0.350	0.359	0.182	Yes	Borough	Borough	Borough	Borough
Wigeon	WN	4500	77	12	3	0.017	0.003	0.001	Yes	Local	Local	Local	Local

\* Kingfisher GB 1% not reported; resident breeding population 3850 pairs (2016) (assume GB wintering population is 7700)

Table 4.2 provides the species list for non-waterbirds during winter 2023-4 and 2024-5.

Common Name	2023-24	2024-25	Regularly recorded?
Blackbird	X	X	Y
Blackcap	X	X	Y
Blue Tit	X	X	Y
Buzzard	X	1 record	Y
Carrion Crow	X	X	Y
Chiffchaff	X	X	Y
Collared Dove	X	Offsite only	Y
Chaffinch	X	X	Y
Coal Tit	X	NR	Y
<b>Cetti's Warbler</b>	X	X	Y
<b>Dunnock*</b>	X	X	Y
<b>Firecrest</b>	1 record	NR	
<b>Fieldfare</b>	X	NR	Y
Feral Pigeon	X	NR	Y
Green Woodpecker	X	1 record onsite +2 offsite	Y
Goldcrest	X	X	Y
<b>Grey Wagtail</b>	X	X	Y
Goldfinch	X	X	Y
<b>Greenfinch</b>	X	Overflying only	Y
Great Spotted Woodpecker	X	X	Y
Great Tit	X	X	Y
Jay	X	X	Y
Jackdaw	X	X	Y
<b>Kestrel</b>	1 record	NR	
<b>Kingfisher</b>	X	X	Y
<b>Red Kite</b>	X	X	Y
<b>Lesser Redpoll*</b>	X	1 record	Y
Long-tailed Tit	X	X	Y
<b>Mistle Thrush</b>	X	NR	Y
Magpie	X	X	Y
<b>Meadow Pipit</b>	1 record	NR	
<b>Marsh Tit</b>	X	X	Y
Nuthatch	1 record	X	Y
Pied Wagtail	X2 (March)	NR	
Robin	X	X	Y
<b>Reed Bunting*</b>	X	NR	Y
<b>Redwing</b>	X	X	Y
Ring-necked Parakeet	X	X	Y
<b>Skylark</b>	NR	Overflying only (Oct)	
<b>Stock Dove</b>	X	X	Y
<b>Starling*</b>	1 record	Offsite only	
<b>Sparrowhawk</b>	X	NR	Y

Common Name	2023-24	2024-25	Regularly recorded?
Siskin	X	X	Y
Song Thrush*	X	X	Y
Treecreeper	X	X	Y
Woodpigeon	X	X	Y
Wren	X	X	Y
Total number of species: 47			
Total number of species recorded regularly: 41			

## 4.1 Evaluation

### 4.1.1 Wintering waterbirds

Overall 26 waterbird species were counted as being regularly present at Broadwater Lake over the three winters of monitoring.

The trend is generally for declining numbers – in 2022-3 pochard and shoveler were recorded at Nationally important levels (above 1% of the UK population) but neither have been recorded above 1% in the two winters since. Numbers of other ducks (teal, goldeneye, wigeon) have decreased significantly over the monitoring period. Tufted duck numbers were also down 50% in 2024-25 compared with the previous 2 years. The use of the Site by gulls was also recorded to decline.

Increasing numbers of some species were recorded, for cormorant, coot, great crested grebe, grey heron and mute swan.

Taken over three years, the Site is assessed as having value at the National level, given the recorded numbers of pochard and shoveler above 1% of the GB wintering population in 2022-23.

In 2023-24 the highest value of the Site was at the Regional level and in 2024-25 at the Borough level.

### 4.1.2 Total wintering assemblage

Overall 66 bird species were recorded using the Site regularly during the winter in 2023-25.

This compares with 1985 when the SSSI designation recorded over 80 species regularly using the SSSI.

Species recorded occasionally and not considered to be regularly using the Site (so not included in Table 4.2) were firecrest, kestrel, meadow pipit, pied wagtail, skylark and starling.

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# 2022-2025 Wintering Bird Survey Factual Report

## **Broadwater Lake, Hillingdon**

On behalf of London Borough of Hillingdon

Issue: 1

Issue date: 18 August 2025

## Version Control

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Date	Issue	Description
18/08/2025	01	First issue

Issue to:

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Written by: Stephanie Harper

Reviewed by: Bill Haines

Harper Environmental Limited

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# 1 Introduction

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## 1.1 Background

Wintering Bird Surveys (WBS) have been undertaken at Broadwater Lake (the Site) during 2022, 2023, 2024 and 2025.

The surveys are required to support a planning application to develop a new outdoor, water-based activities centre (Hillingdon Water Sports Facility and Activities Centre – HWSFAC) at Broadwater Lake.

## 1.2 Purpose of this Factual Report

This standalone report provides the details of site visit dates and weather, maps and tables of data with no interpretation.

A summary report has been produced separately providing the summary results for each year side by side, and pulls out the differences. An assessment of the importance for the site for each species has been made using the full dataset.

- Harper Environmental Ltd (2025). 2022-2025 Wintering Bird Survey Summary Report.

## 1.3 The Site

The Site forms part of the Mid-Colne Valley SSSI and is designated for “*significant ornithological interest, particularly for the diversity of breeding woodland and wetland birds, and for the numbers of wintering wildfowl*”<sup>1</sup>.

The whole Site covers an area of approximately 76 hectares (ha) and is approximately centred on National Grid Reference TQ 04396 89593. The Site comprises an access road from Moorhall Road, the lake itself with an associated lagoon (south-east corner of the lake), a peninsula at the south-east corner, an existing sailing club (Broadwater Sailing Club) at the north end of the lake, parts of the margins of the lake, and islands set within the lake. Part of the western and southern banks of the lake and adjacent open water lie just outside the red line boundary (these areas were included within the survey area). The site red line boundary and immediate surrounds are shown in Figure 1.1 below.

There are also two discrete land parcels that fall within the same ownership; a hawthorn woodland to the east, and a grassland field to the south. These lie outside the boundary of the SSSI. They were not included in the scope of surveys as breeding bird habitat within these areas will not be subject to impacts from proposed development.

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<sup>1</sup> Available: [1003469.pdf \(naturalengland.org.uk\)](https://naturalengland.org.uk/1003469.pdf)





Figure 1.1 The site red line boundary, showing the numbering of islands.



## 1.4 Surveyors and Authors

The surveys were led by Bill Haines, who also collated all the data and produced maps of the results. Bill, who has a Bachelor's degree in Environmental Sciences (BSc Hons), has over 25 years' experience in undertaking professional ornithological surveys and has worked in a wide variety of habitats in the UK including wetlands, urban and suburban, farmland, woodlands coastal and estuarine, and upland and lowland heathland, using a wide range of scientifically proven survey methodologies. He is a full member of the Chartered Institute of Ecology and Environmental Management (CIEEM).

This report was written by Dr Stephanie Harper. Stephanie has a BSc (Hons) and PhD in Environmental Sciences and holds a Natural England Level 1 class licence for bats. She has 18 years of experience in ecological survey and consultancy.

## 1.5 Constraints

The full site (whole red line boundary) plus adjacent offsite areas (namely much of the western edge of Broadwater Lake) was surveyed.

Weather constraints are noted in the weather tables below. As the surveys were undertaken across a whole season, a range of weather conditions were encountered. There were no days where visibility caused surveys to be abandoned, though during some visits, visibility was somewhat reduced temporarily, either due to mist or heavy rain. This did not constrain the survey results on those days due to the level of survey effort.

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## 2 2022-3 Survey Dates and Weather

Visit No.	Date					Weather					Additional Weather Notes
		Activity	Personnel		Survey Times	Cloud (oktars)	Wind (Direction and Beaufort No.)	Precip <sup>n</sup>	Temp. (°C)	Visibility	
Scoping Survey	13/11/2022	Sailing Day	JD	Start	08:20	0/8	Calm	0	N/R	Moderate / Poor	Misty from start - 10:00, clearing by 11:10
				Finish	09:00	0/8	Calm	0	N/R	Moderate / Poor	
				Start	N/R	0/8	Calm	0	N/R	Moderate	
				Finish	N/R	0/8	Calm	0	N/R	Good	
1	19/11/2022	Non-sailing Day	JD/BH	Start	08:30	7/8	NW 1	0	8	Good	
				Finish	N/R	7/8	NW 1	0	10	Good	
2	27/11/2022	Sailing Day	JD/(MC)	Start	N/R	8/8	N 1-2	YES	N/R	Moderate	
				Finish	N/R	8/8	N 1-2	YES	N/R	Moderate	
				Start	N/R	8/8	N 1-2	YES	N/R	Moderate	
				Finish	N/R	8/8	N 1-2	YES	N/R	Moderate	
3	04/12/2022	Sailing Day	JD/BH	Start	08:20	8/8	NNE 1	1	4	Moderate	Slight mist throughout
				Finish	09:30	8/8	NNE 1	0	5	Moderate	
				Start	09:30	8/8	NNE 1	0	5	Moderate	
				Finish	10:40	8/8	NNE 1	0	5	Moderate	
4	08/12/2022	Non-sailing Day	BH	Start	11:05	0/8	NNW 1-2	0	2	Excellent	
				Finish	14:25	0/8	NNW 1	0	2	Excellent	
5	18/12/2022	Sailing Day	JD /BH/MC/JH	Start	08:30	8/8	SE 1	0	1.5	Good	Lake >80% frozen - No Sailing Sleet showers at end of survey
				Finish	11:00	8/8	SE1	2	2	Good	
6	24/12/2022	Non-sailing Day	JD	Start	N/R	7/8	Calm	0	N/R	Good	
				Finish	N/R	7/8	Calm	0	N/R	Good	
7	08/01/2023	Sailing Day	JD/BH/MC/JH	Start	08:25	2/8	W 2-3	0	8	Good	Showers, then heavy rain from ca 09:30 - end of survey. Visibility poor at times
				Finish	09:20	6/8	W 1	0	14	Good	
				Start	11:20	8/8	W 1	4	14	Moderate/ Poor	
				Finish	12:00	8/8	W 1	4	14	Moderate/Poor	
8	13/01/2023	Non-sailing Day	BH	Start	10:40	2/8	W 4-5 (6)	0	9	Excellent	Mostly sunny, dry but with a stong, gusty W wind
				Finish	15:00	4/8	W 3-4 (5)	0	9	Excellent	
9	24/01/2023	Non-sailing Day	JD	Start	N/R	7/8	Calm	0	N/R	Good	Southern & Eastern parts of Lake still iced over
				Finish	N/R	7/8	Calm	0	N/R	Good	
10	26/01/2023	Non-sailing Day	JD	Start	N/R	0/8	NE 4-5	0	N/R	Excellent	Cool, with strong breeze, Some of southern area still iced-over
				Finish	N/R	0/8	NE 4-5	0	N/R	Excellent	
11	29/01/2023	Sailing Day	JD/BH/JH	Start	08:15	8/8	SW 1-2	0 (1)	4	Good	
				Finish	09:15	8/8	SW 1-2	0	4	Good	
				Start	10:45	8/8	WSW 2-3	0	5	Good	
				Finish	11:45	8/8	WSW 2-3	0	6	Good	
12	07/02/2023	Non-sailing Day	BH	Start	13:40	0/8	SSW 1	0	5	Excellent	
				Finish	17:00	0/8	ENE 1	0	4	Excellent	
13	12/02/2023	Sailing Day	BH/JD/JH/MC	Start	08:10	8/8	SSE 1-2	0	7	Moderate/Good	Dull & overcast throughout

				Finish	08:50	8/8	calm	0	7	Moderate/Good	
				Start	11:30	8/8	SSE 1-2	0	8	Moderate/Good	
				Finish	12:10	8/8	SSE 1-2	0	8	Moderate/good	
14	19/02/2023	Sailing Day	BH/JD/JH	Start	08:00	6/8	WNW 1-2	0	8	Good	
				Finish	09:10	3/8	WNW 1-2	0	9	Excellent	
				Start	11:10	6/8	WNW 1-2	0	9	Excellent	
				Finish	12:00	5/8	WNW 1-2	0	10	Excellent	
15	23/02/2023	Non-sailing Day	JD	Start	N/R	N/R	N/R	N/R	N/R	N/R	
				Finish	N/R	N/R	N/R	N/R	N/R	N/R	
16	12/03/2002	Sailing Day	BH/JD/JH	Start	08:10	1/8	WSW 2-3	0	8	Excellent	
				Finish	08:55	6/8	WSW 2	0	8	Excellent	
				Start	11:15	8/8	W 2-3	0	9	Good	
				Finish	11:55	8/8	W 2	0	10	Good	
17	14/03/2023	Non-sailing Day	BH	Start	13:25	6/8	W2-3	0	8	Good/Excellent	Sun-glare on water
				Finish	15:50	7/8	W 1-2	0	8	Excellent	
18	19/03/2023	Sailing Day	JD/JH/MC	Start	08:30	6/8	SE 1	0	9	Excellent	
				Finish	10:00	6/8	SE 1	0	9	Excellent	
				Start	11:10	7/8	S 2	0	10	Good	
				Finish	12:30	7/8	S 2	0	10	Good	
19	24/03/2023	Non-sailing Day	JD	Start	10:00	2/8	SW 1-2	0	N/R	Excellent	Torrential downpours at 12:00 & 123:00 on strengthening SW wind
				Finish	14:00	8/8	SW 4-5	3	N/R	Moderate/Good	

### 3 2022-3 Results

English Vernacular Name	Visit No.																				Max no.	Median
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	Max no.	Median
Black-headed Gull	5	21	2	40	91	260	4	50	240	300	60	90	100	100	250	400	260	150	150	50	400	95.5
Cormorant	4	7	8	4	3	2	1	1				4	12	15	19	8	25	16	34	28	34	8
Canada Goose	4	10	1	10		2	1	8			1	12		8	13		18	2	10	6	18	8
Common Gull		2		2	1	5	1	1	10	40		1	6	32	1	3	10	2	15	5	40	3
Coot	6	8	6	6	2	32	3	7	11	4	4	18	6	5	10	20	14	11	14	4	32	6.5
Egyptian Goose	1			2	2	2	2	12	1			2	1	4	2	2	2		2	2	12	2
Gadwall	12	1		4	4	24	22	1	2	6	1		3	4	4		4	3	4	2	24	4
Great Black-backed Gull	1					4		3		2											4	2.5
Goosander											1										1	1
Great Crested Grebe	6	6	1	3	2	9	1	2	1	1		1	1	4	2	2	2	2	2	2	9	2
Greylag Goose					110	8						6	1	1	3	1	4		8	2	110	3.5
Goldeneye	1	1	4	2	1	5	1	3	5	2		9	2	5	5	4	10	1	8	6	10	4
Grey Heron				1	1		1	1	1	1		4	3	1	4	8	10	3	4		10	2
Herring Gull			6			3				40							1				40	4.5
Kingfisher					1								1						1		1	1
Lapwing	31			1					2				52								52	16.5
Lesser Black-backed Gull			2		2					20			1			1	1	1	2		20	1.5
Little Grebe	4	5	1	1	4	1		2	2		1	2	1	2	2	1	1	1	1		5	1
Mallard	8	4	6	4	6	10	14	5	4	6	8	6	9	8	4	4	4	2	4	4	14	5.5
Moorhen	1	1	1	1	1	3	1	1	1	2	2	2	2	2	1	1	1	1	3	1	3	1
Mandarin Duck																	1		1		1	1
Mute Swan		1					1												2		2	1
Oystercatcher													1	2	2	2	2		2		2	2
Pochard	14	48	128	161	158	94	80	101	50	62	32	26	27	19	34	3	54	30	32	14	161	41
Pintail	2																				2	2
Red-crested Pochard						4	4	6		3			5	5							6	4.5
Snipe																		1			1	1
Shoveler	50	26	22	34	16	119	39	26	174	60	115	85	76	126	114	60	11	16	20	2	174	44.5
Smew						1	1	1	1			1									1	1
Teal	4	1				19				6	2								2		19	3
Tufted Duck	54	89	190	168	28	191	70	28	195	24	20	36	44	61	129	12	63	20	104	18	195	57.5
Water Rail										1											1	1
Wigeon	4				1	5		4	9	28	38	20	22	26	19	6	26	20	10	2	38	14.5
Hybrid Goose													1								1	1
Mallard x domestic duck hybrid		2															2				2	2
<b>Totals</b>	<b>212</b>	<b>233</b>	<b>378</b>	<b>444</b>	<b>434</b>	<b>803</b>	<b>247</b>	<b>263</b>	<b>709</b>	<b>608</b>	<b>285</b>	<b>325</b>	<b>377</b>	<b>430</b>	<b>618</b>	<b>538</b>	<b>526</b>	<b>282</b>	<b>435</b>	<b>148</b>	803	404
<b>No. of Species</b>	<b>19</b>	<b>17</b>	<b>14</b>	<b>17</b>	<b>19</b>	<b>22</b>	<b>18</b>	<b>20</b>	<b>17</b>	<b>19</b>	<b>13</b>	<b>18</b>	<b>23</b>	<b>20</b>	<b>19</b>	<b>18</b>	<b>23</b>	<b>18</b>	<b>24</b>	<b>16</b>	24	18.5

## 4 2023-4 Survey Dates and Weather

Visit No.	Date					Weather					Additional Weather Notes
		Activity	Surveyors		Survey Times	Weather	Wind (Direction and Beaufort No.)	Precip <sup>n</sup> .	Temp. (°C)	Visibility	
1	03/10/2023	Non-Sailing	BH	Start	10:00	1/8	W 2-3	0	14	Excellent	Light shower 13:30 - 13:35
				Finish	14:10	6/8	W 3 (4)	0	17	Excellent	
2	15/10/2023	Sailing Day	JD/MC	Start	07:30	?	?	?	6	?	
				Finish	?	?	?	?	?	?	
				Start	12:00	?	N 1	?	6	?	
				Finish	?	?	N 1	?	?	?	
3	24/10/2023	Non-sailing Day	MC	Start							
				Finish							
4	27/10/2023	Non-sailing Day	BH	Start	09:30	8/8	SSE 1	2 (3)	10	Moderate	Slight Mist at start; Rain clearing by 10:00
				Finish	13:30	6/8	S 2		14	Good	
5	29/10/2023	Sailing Day	BH/JD/MC/SH/JP	Start	08:20	2/8	S 1-2	0	11	Good	Heavy rain during post-sailing count easing towards end of survey
				Finish	09:00	5/8	S 1	0	11	Good	
				Start	11:20	8/8	SW 1-2	4	10	Moderate / Good	
				Finish	12:05	8/8	SW 1-2	2	10	Moderate / Good	
6	31/10/2023	Non-sailing Day	MC	Start	?	?	?	?	?	?	
				Finish	?	?	?	?	?	?	
7	09/11/2023	Non-sailing Day	BH	Start	09:00	4/8	SW 2	0	8	Good	
				Finish	12:40	5/8	SW 2	0	10	Good	
8	12/11/2023	Sailing Day	BH/JD/TS	Start	08:20	8/8	E 1	1	5	Moderate	
				Finish	09:00	8/8	E 1	1	6	Moderate	
				Start	10:45	8/8	E 1	1	8	Moderate / Good	
				Finish	11:30	8/8	E 1	0	10	Moderate / Good	
9	24/11/2023	Non-sailing Day	BH	Start	09:00	7/8	NW 3-4	0	8	Good	Windy & Cool
				Finish	12:50	6/8	NNW 3	0	8	Good	
10	26/11/2023	Sailing Day	BH/JD/TS/MC/SH/PM/SL/GB	Start	08:30	6/8	SW 1	0	0	Good	Light Drizzle at end of post-sail survey
				Finish	09:25	8/8	SW 1	0	1	Good	
				Start	11:55	8/8	SSE 1	0	2	Good	
				Finish	12:40	8/8	SSE 1	1	2	Good	
11	05/12/2023	Non-sailing Day	BH	Start	10:50	8/8	N 2-3	1	6	Good	Occasional light rain
				Finish	14:20	8/8	N 1-2	1 (2)	9	Good	
12	10/12/2023	Sailing Day	BH/JD/DW/MC/TS/ JH	Start	08:15	6/8	SSW 2	0	8	Good	Heavy Rain & a stiff breeze during post-sailing survey
				Finish	09:25	6/8	SSW 2-3	0	9	Good	
				Start	11:10	8/8	SW 4	4	8	Moderate	
				Finish	11:45	8/8	SW 4	3	9	Moderate	

13	17/12/2023	Sailing Day	BH/JD/MC/TS	Start	08:50	7/8	SSW 3-4	0	9	Moderate / Good	
				Finish	09:45	6/8	SSW 3-4	0	9	Good	
				Start	11:15	7/8	SW 3-4	0	9	Good	
				Finish	11:40	8/8	SW 3-4	0	10	Good	
14	18/12/2023	Non-Sailing Day	BH	Start	09:40	8/8	SW2	0	10	Good	
				Finish	13:20	8/8	SW2	0	11	Good	
15	09/01/2024	Non-Sailing Day	BH	Start	08:30	7/8	ENE 2	0	1	Good	
				Finish	12:15	1/8	ENE 3	0	3	Excellent	
16	14/01/2024	Sailing Day	BH/MC/SL/TS/PM/JH	Start	08:25	6/8	W 1	0	2	Good	
				Finish	09:30	6/8	W1	0	3	Good	
				Start	11:10	6/8	WNW 1-2	0	4	Good	
				Finish	11:45	5/8	WNW 1	0	4	Good	
17	21/01/2024	Sailing Day	BH/JD/TS/SL	Start	08:30	6/8	SW 3-4	0	8	Good	20% ice Cover
				Finish	09:15	6/8	SW 3-4	0	8	Good	
				Start	11:10	8/8	WSW 4	0	8	Good	15% ice cover
				Finish	12:00	8/8	WSW 4	0	9	Good	
18	25/01/2024	Non-Sailing Day	BH/MC	Start	12:10	8/8	SW 1-2	0	12	Good	
				Finish	14:50	8/8	SW 2	0	12	Good	
19	06/02/2024	Non-Sailing Day	BH	Start	08:30	8/8	WSW 3 (4)	0	12	Good	
				Finish	11:55	7/8	WSW 3 (4)	0	12	Good	
20	11/02/2024	Sailing Day	BH/MC/SL/TS/PM/JH	Start	08:30	8/8	NNW 1	3	7	Moderate / Good	Heavy rain for first part of survey
				Finish	09:30	6/8	NNW 1	0	7	Good	
				Start	11:20	6/8	WNW 2	0	8	Good	
				Finish	12:05	5/8	WNW 2	0	10	Good	
21	18/02/2024	Sailing Day	BH/JD/MC/TS	Start	08:35	7/8	NW 1	0	11	Good	Heavy overnight rain
				Finish	09:20	7/8	NW 1	0	11	Good	
				Start	11:15	7/8	WNW 2	0	12	Good	
				Finish	12:00	7/8	WNW 2	0	12	Good	
22	29/02/2024	Non-Sailing Day	BH	Start	07:25	8/8	SSW 2	0 (1)	10	Moderate	Raining for most of survey, sometimes heavy
				Finish	10:45	8/8	SSW 2	3 (4)	11	Moderate / Poor	
23	11/03/2024	Non-Sailing Day	BH	Start	08:00	8/8	N 1-2	0 (1)	7	Moderate	Slught drizzle at start, dull, cool, overcast
				Finish	12:15	8/8	N 1-2	0	9	Moderate	
24	17/03/2024	Sailing Day	BH/JD/MC	Start	08:30	8/8	S 2	3	10	Moderate	Persistent moderate/ heavy rain during pre-sail survey
				Finish	09:20	8/8	S 2	3	11	Good	
				Start	11:20	8/8	SSW 2	0 (1)	11	Good	
				Finish	12:10	8/8	SSW 2	0	11	Good	

## 5 2023-4 Results

English name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	Max
Black-headed Gull	166	14	42	30	6	35	153	32	369	4	1	2	12	122	6	2	4	65	161	7	77	64	375	425	425
Cormorant	4	14	21	5	5	40	10	1	3	8	2	11		7	1	8	9	15	23	23	17	8	20	24	40
Canada Goose	105	7				27		2	4		46	4	10	7	4	12	5	4	44	76	21	60	33	32	105
Common Gull			1	2	2		5	1		2		1	2	2	1	2	1	1	3	1	2	1	3	3	5
Coot	131	84	72	87	107	79	78	79	85	51	62	55	60	73	72	76	115	72	55	72	44	89	70	52	131
Egyptian Goose		11			11		6		3	10		25	16	4	4	5	4	4	3	3	8	3	7	5	1
Gadwall	14	14	6	7	11	1	2	2	4	4	4	9	5	1	1	1	3	4	3	5	4	4	3	14	7
Great Crested Grebe	12	6	1	5	4	2						1					11			3	3		5	6	25
Greylag Goose	21								57		44		1		1					1	1	1	3	6	3
Goldeneye							1			3	4	7	6	11	7	9	18	8	4	7	3	6	2		14
Grey Heron	4	1	3	2	5			1	1		1		2	3		2	3	7	4	12	9	1	3	12	12
Herring Gull	6	1	27	11	15	6	8		3				3	3				2	4		2				57
Kingfisher	1			2				1											2	3	1	2		2	18
Lapwing							21				38	36	8	2											12
Lesser Black-backed Gull	7	3	1	12	2	3	4		2				1	2			1	3					4	2	27
Little Grebe	2	1		1				1				2					2	1	3	2					3
Mallard	9	6	7	12	19	14	6	9	1	5	11	4	6	3	7	17	7	7	12	23	37	26	15	38	38
Moorhen	16	2		6	3	3	5	5	6	3	11	4	3	5	5		1	5	5	4	3	7	9	2	12
Mandarin Duck													1												3
Mute Swan		1	2	2		1	2	2		2	4							2		3	3				38
Oystercatcher															1	1			1	1	1				16
Pochard																			2		2				1
Pintail	6		12	26	48	32	145	141	89	84	89	114	89	83	41	61	121	57	1	6	4	44	73	54	4
Red-crested Pochard			1																						1
Snipe																						1		1	2
Shoveler	12	3	9	12	14		30	8	4	13	8	9	6	17	3		12	8	1	16	11	11	12	19	145
Smew	2				2						2								1	6			1		1
Teal	186	99	79	130	170	90	109	149	275	210	187	302	228	300	207	159	467	163	42	45	48	187	162	151	1
Tufted Duck																	1								3
Water Rail				10	7					1	5					4	12	10	2	2	4	3	8		30
Wigeon							1										1								6
Hybrid Goose	1																				1		1		467

6 2024-5 Survey Dates and Weather

Visit No.	Date	Activity	Surveyors		Survey Times	Weather	Cloud (oktas)	Weather Wind (Direction & Beaufort No.)	Precip <sup>n</sup>	Temp. (°C)	Visibility	Additional Weather Notes
1	13/09/2024	Non-Sailing	BH	Start	07:45		1/8	NNW 1	Dry	6	Excellent	None
				Finish	12:30		3/8	NNW 1-2	Dry	15	Excellent	
2	18/10/2024	Non-Sailing	BH	Start	11:40		7/8	SW 1	Dry	14	Good	None
				Finish	15:00		4/8	SW1	Dry	16	Good	
3	21/11/2024	Non-Sailing	BH	Start	09:45		8/8	NE 1-2	Dry	1	Good	Cold and a heavy overnight frost; Lake ice-free
				Finish	13:15		6/8	N 1-2	Dry	3	Good	
4	14/12/2024	Non-Sailing	BH	Start	09:40		7/8	NW 2-3	Dry	6	Good	None
				Finish	13:15		2/8	WNW 3	Dry	9	Excellent	
5	25/01/2025	Non-Sailing	BH	Start	09:30		0/8	WSW 1-2	Dry	4	Excellent	None
				Finish	14:10		6/8	WSW 1	Dry	9	Excellent	
6	27/02/2025	Non-Sailing	BH	Start	08:30		4/8	NW 3	Dry	4	Good	None
				Finish	12:10		2/8	NW 2-3	Dry	10	Excellent	
7	06/03/2025	Non-Sailing	BH	Start	12:15		<1/8	S 2	Dry	15	Excellent	None
				Finish	16:10		6/8	S 3-4	Dry	13	Excellent	



## 7 2024-5 Results

English vernacular name	Survey visit							Statistics		
	1	2	3	4	5	6	7	Max	Mean	Median
Black-headed Gull	81	58	94	76	70	250	37	250	95.1	76
Cormorant	269	100	5	5	22	12	25	269	62.6	22
Canada Goose		10			3	40		40	17.7	10
Common Gull		3	2	4	5	3		5	3.4	3
Coot	272	320	349	363	204	82	77	363	238.1	272
Egyptian Goose	1	2		2	3	6	2	6	2.7	2
Little Egret	64	14						64	39.0	39
Gadwall	15	5	16			1		16	9.3	10
Great Black-backed Gull		1			1			1	1.0	1
Great Crested Grebe	47	43	15	7	7	23	26	47	24.0	23
Greylag Goose		19			91		2	91	37.3	19
Grey Wagtail	1							1	1.0	1
Goldeneye				2	2	2	2	2	2.0	2
Grey Heron	21	13	1	7	2	7	6	21	8.1	7
Herring Gull	1	7	2	3		4	1	7	3.0	2.5
Hobby	1							1	1.0	1
Kingfisher		3	1	1	1	1	2	3	1.5	1
Red Kite					1			1	1.0	1
Lapwing				29				29	29.0	29
Lesser Black-backed Gull	3	14		1	3	2	3	14	4.3	3
Little Grebe	2	1	1		2	1	1	2	1.3	1
Mallard	16		6	5	20	10	26	26	13.8	13
Moorhen	12	6	7	2	6	5	7	12	6.4	6
Mute Swan	12	7	6	1	1		5	12	5.3	5.5
Oystercatcher						3	2	3	2.5	2.5
Pochard	2	5	25	72	69	35	21	72	32.7	25
Red-crested Pochard							4	4	4.0	4
Red-necked Grebe							1	1	1.0	1
Sparrowhawk				1				1	1.0	1
Shoveler	73	60	2	23	10	20	59	73	35.3	23
Tufted Duck	134	204	147	163	237	141	148	237	167.7	148
Water Rail			1					1	1.0	1
Wigeon					3			3	3.0	3

## Appendices - Maps

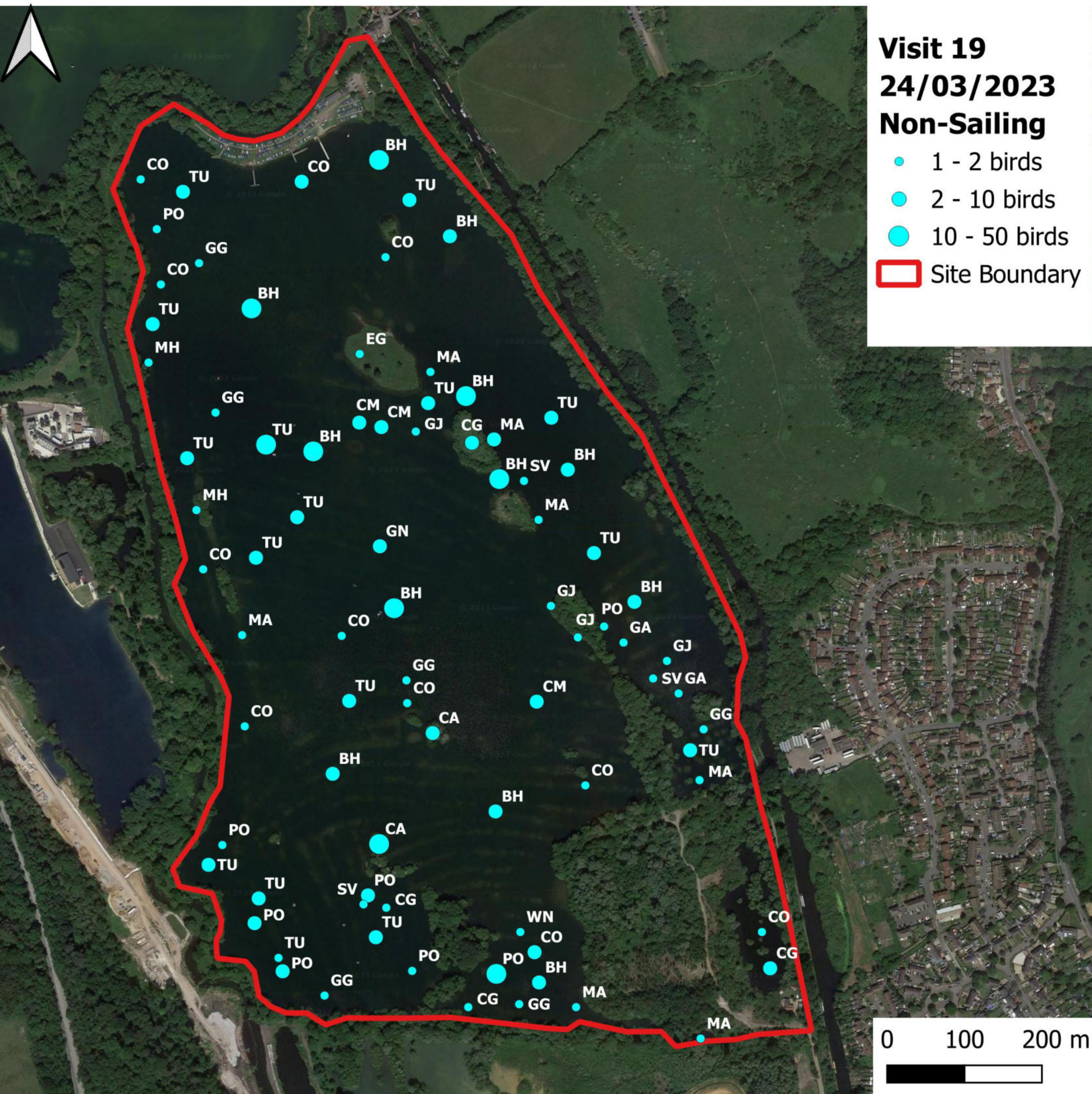
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**Visit 19**  
**24/03/2023**  
**Non-Sailing**

-  1 - 2 birds
-  2 - 10 birds
-  10 - 50 birds
-  Site Boundary





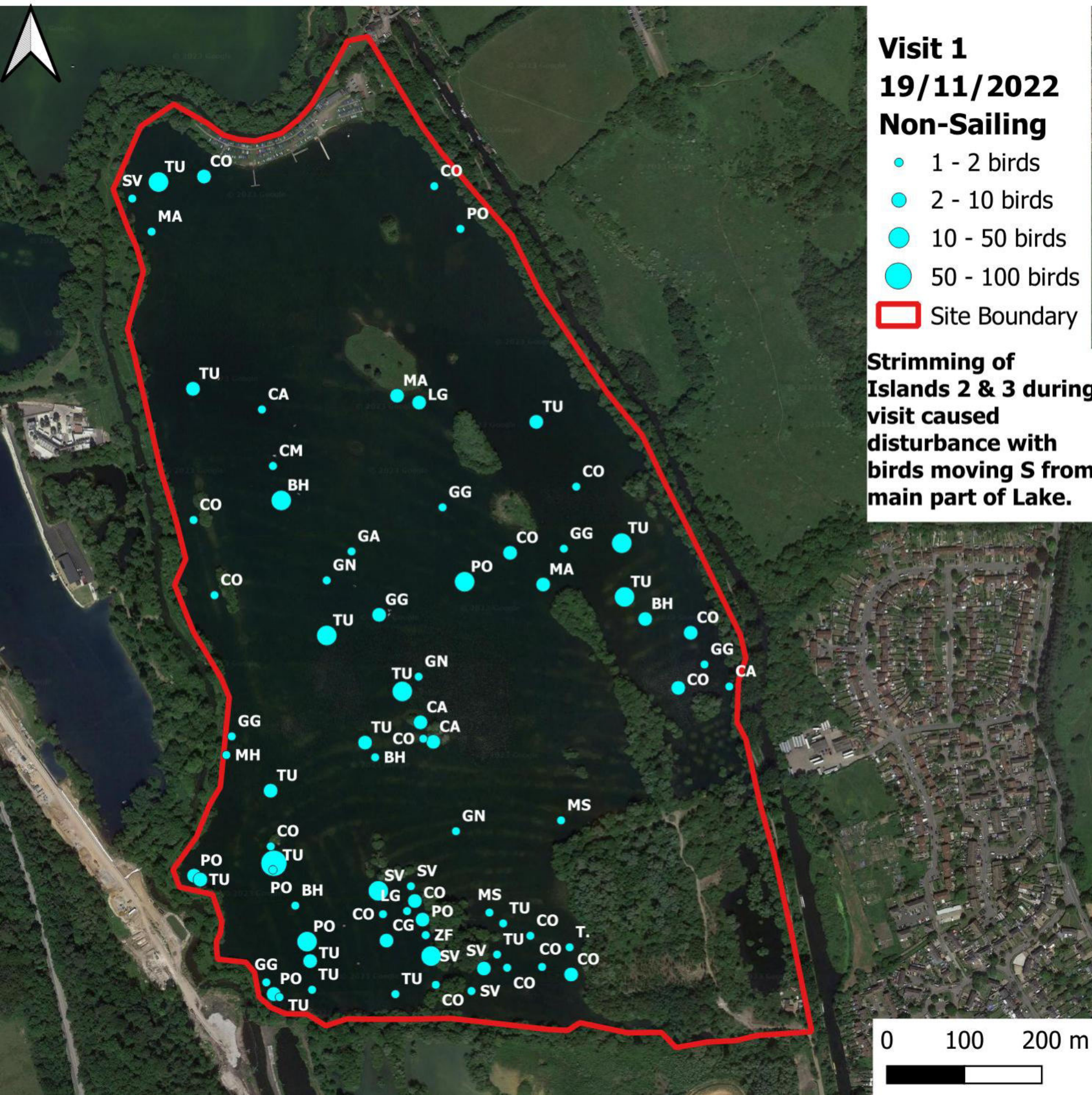


**Visit 1**  
**19/11/2022**  
**Non-Sailing**

- 1 - 2 birds
- 2 - 10 birds
- 10 - 50 birds
- 50 - 100 birds

 Site Boundary

**Strimming of Islands 2 & 3 during visit caused disturbance with birds moving S from main part of Lake.**



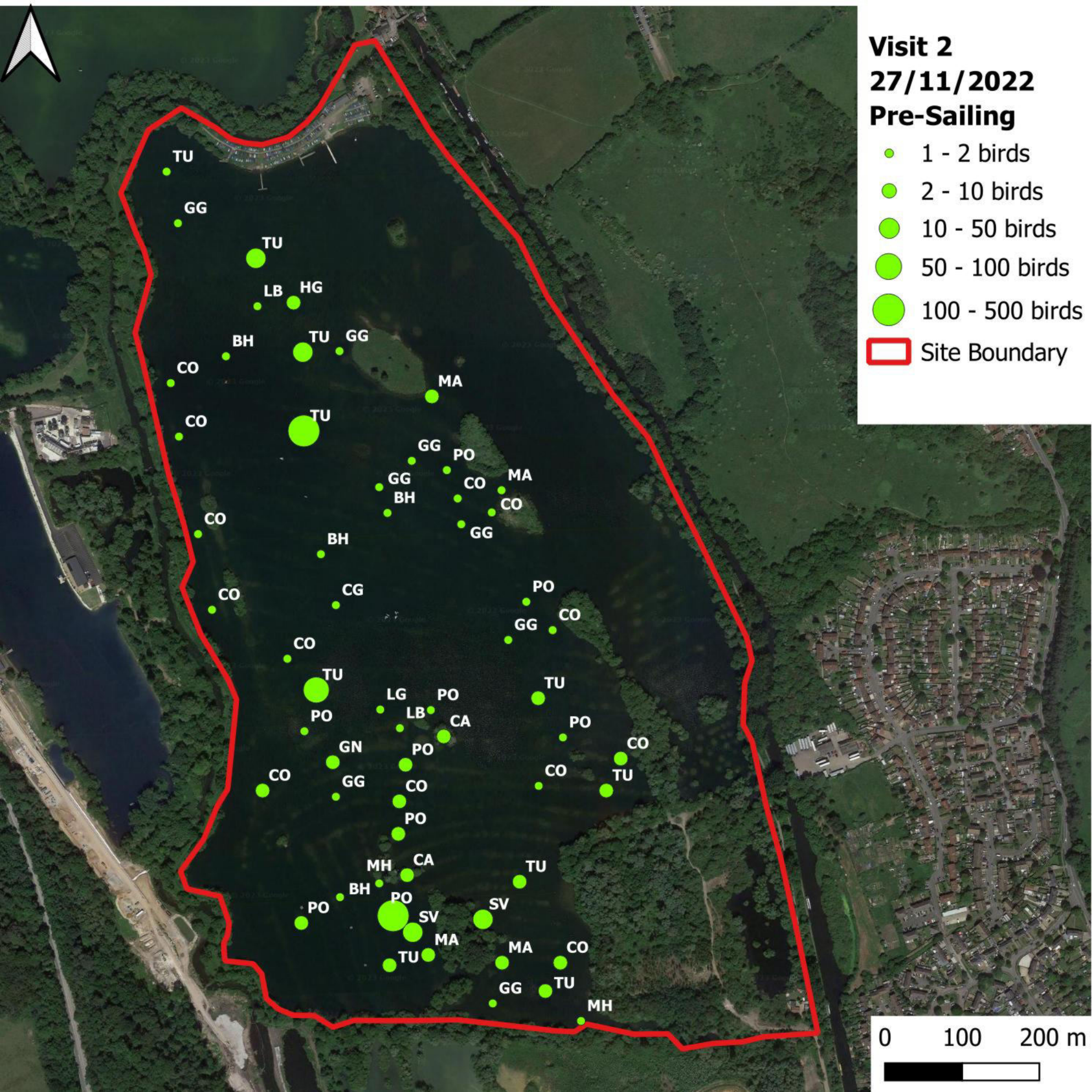




**Visit 2**  
**27/11/2022**  
**Pre-Sailing**

- 1 - 2 birds
- 2 - 10 birds
- 10 - 50 birds
- 50 - 100 birds
- 100 - 500 birds

 Site Boundary

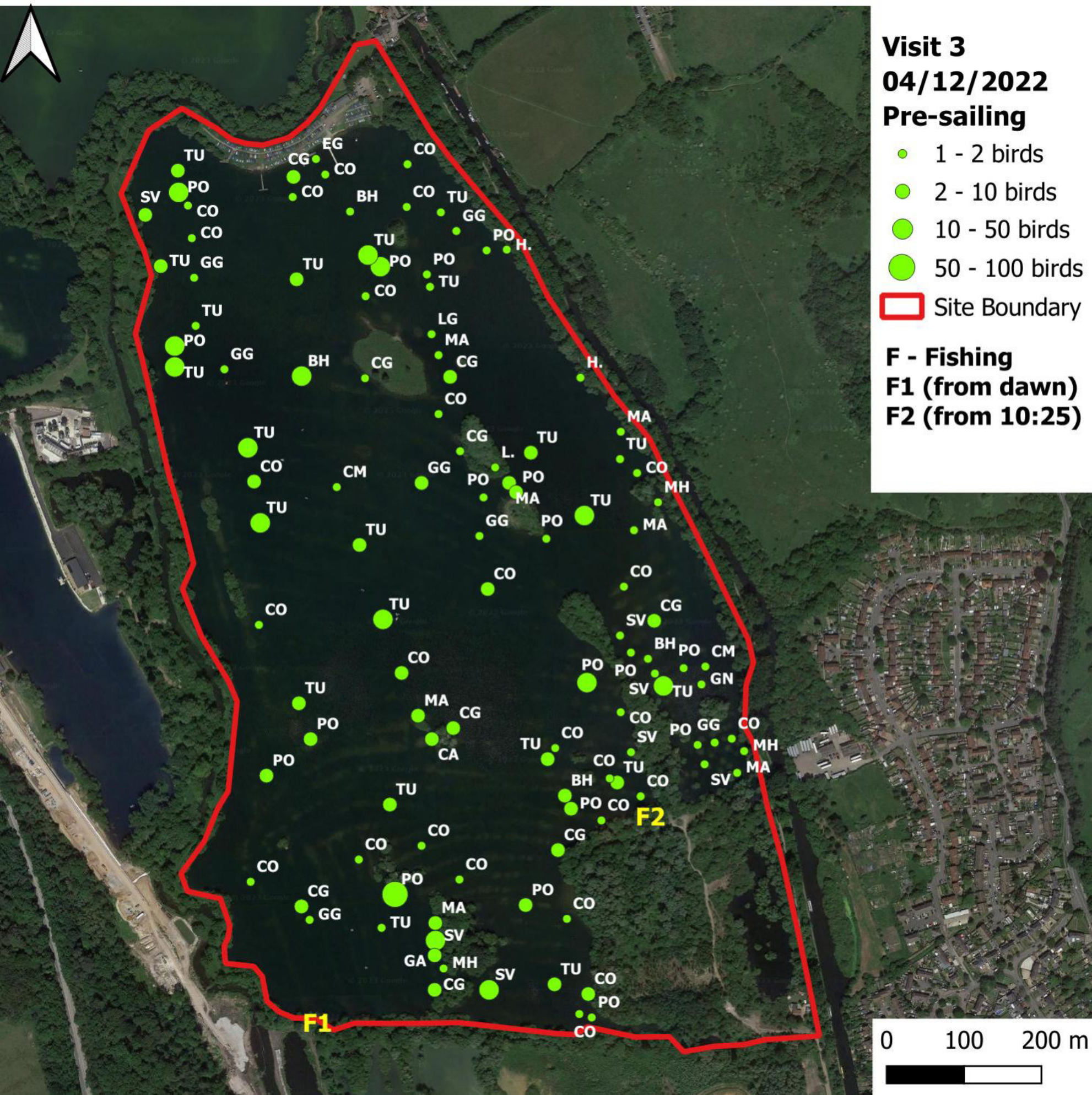




**Visit 3**  
**04/12/2022**  
**Pre-sailing**









**F - Fishing**  
**F1 (from dawn)**  
**F2 (from 10:25)**

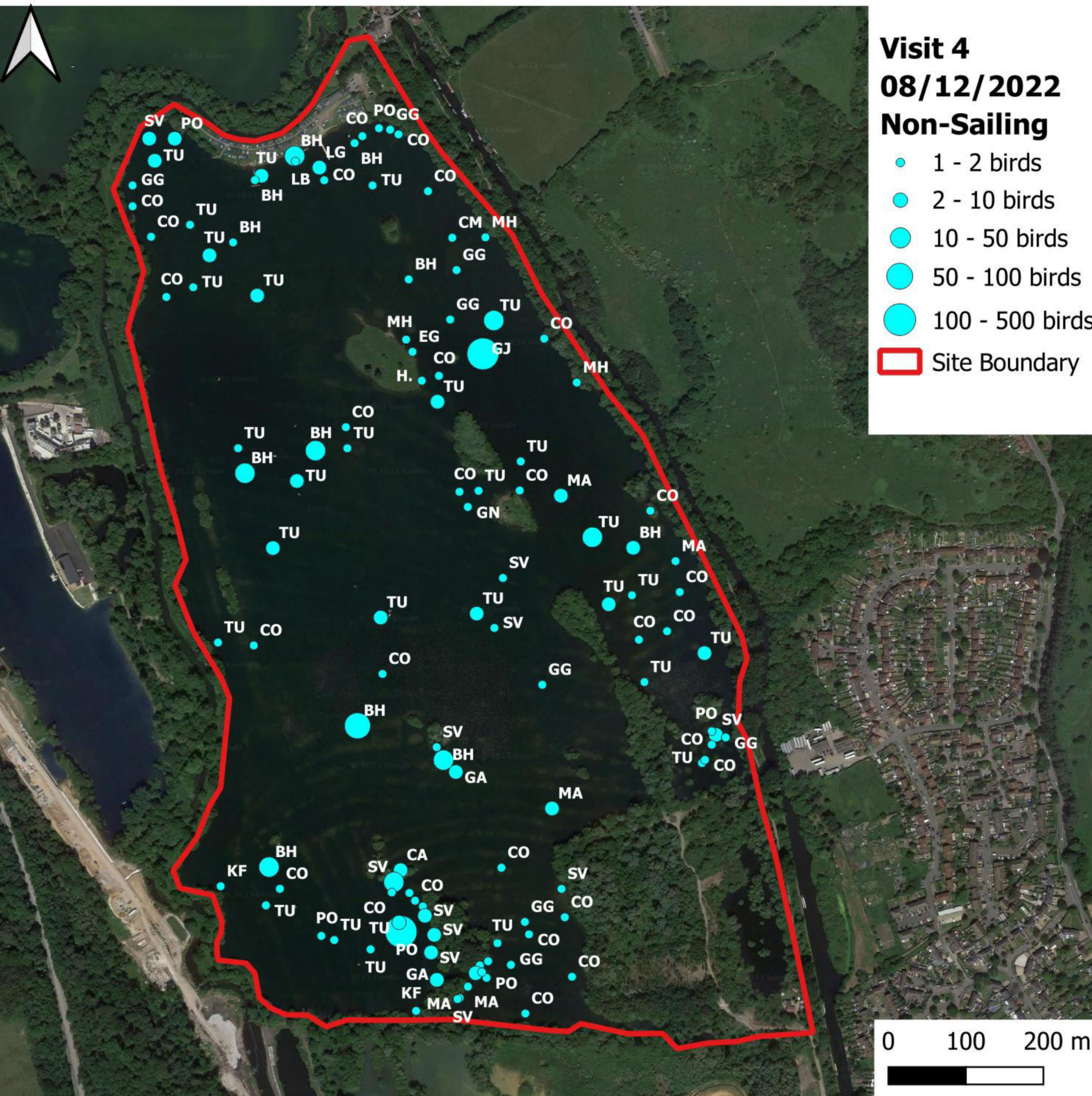


0      100      200 m





-  1 - 2 birds
-  2 - 10 birds
-  10 - 50 birds
-  50 - 100 birds
-  100 - 500 birds
-  Site Boundary





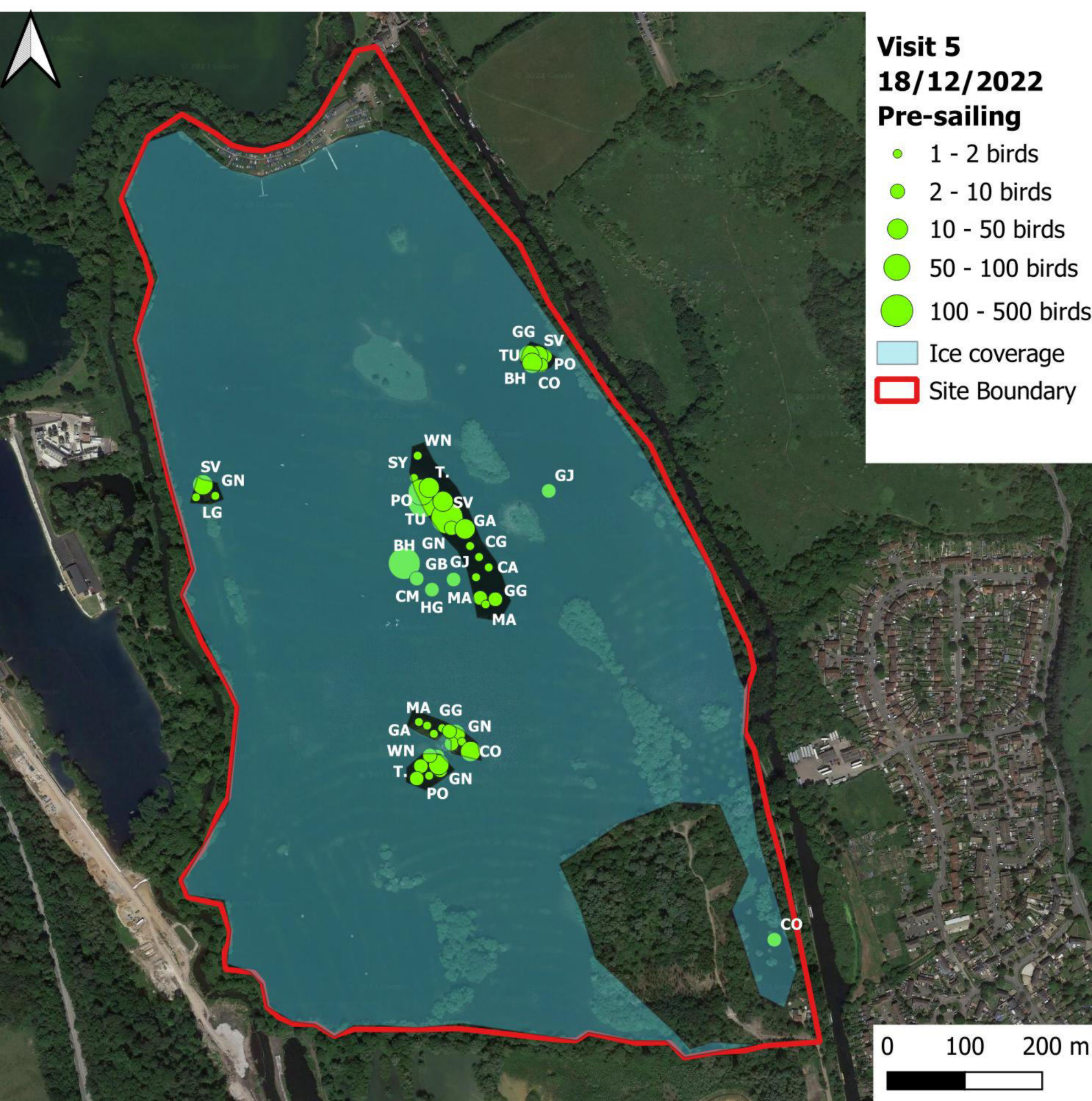


**Visit 5**  
**18/12/2022**  
**Pre-sailing**

- 1 - 2 birds
- 2 - 10 birds
- 10 - 50 birds
- 50 - 100 birds
- 100 - 500 birds

Ice coverage

Site Boundary



0 100 200 m

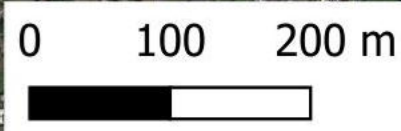
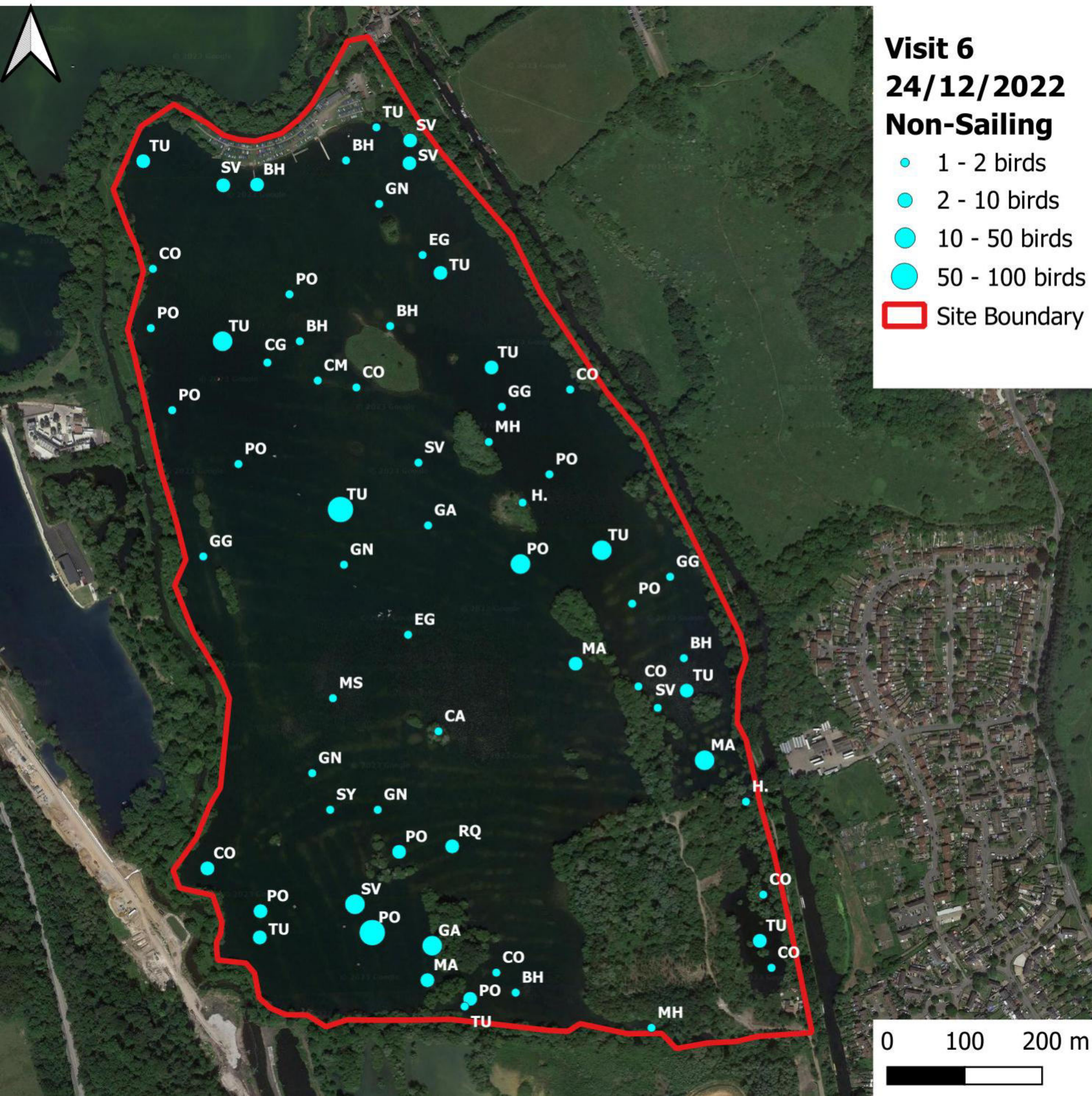






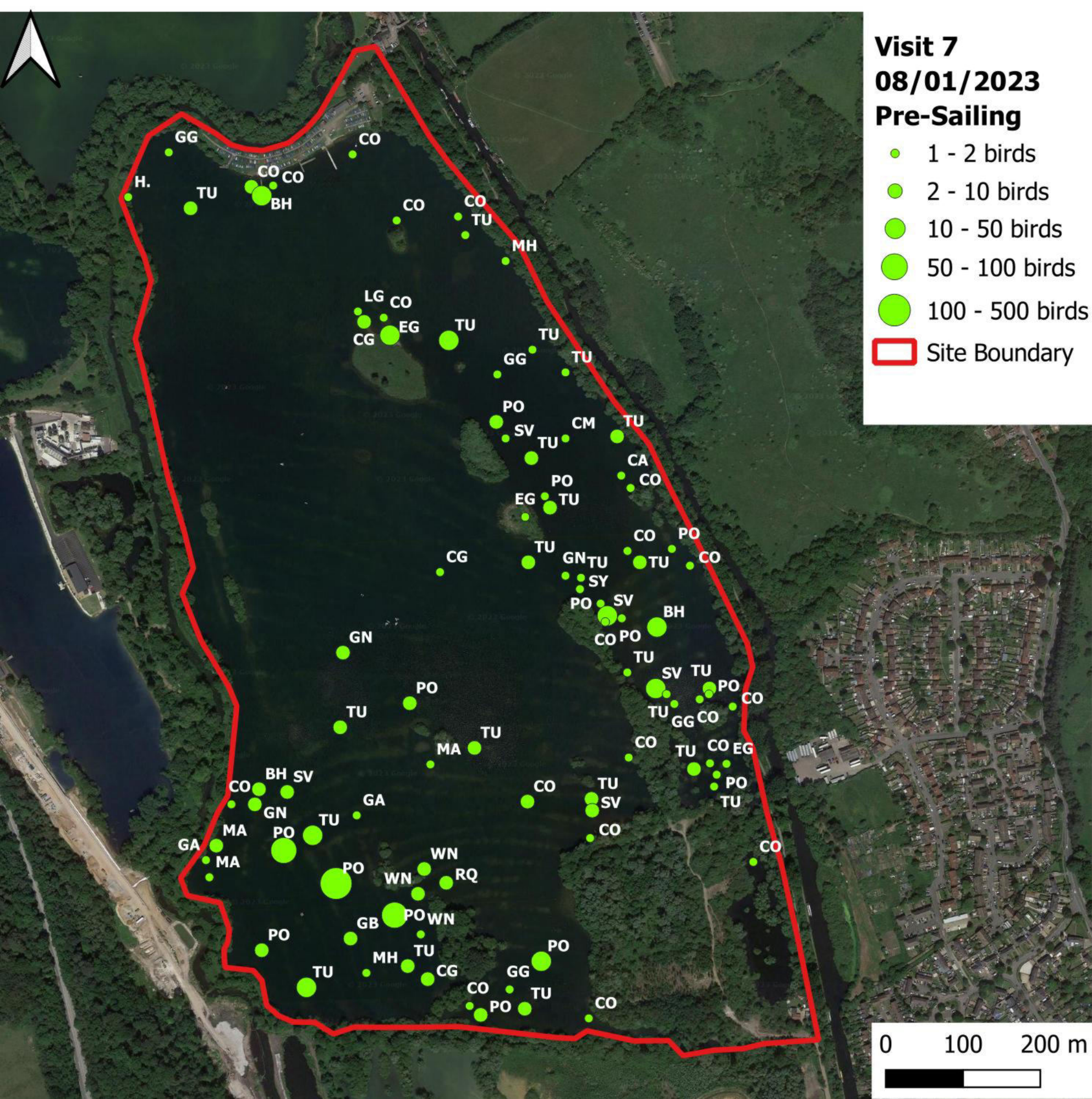
**Visit 6**  
**24/12/2022**  
**Non-Sailing**

- 1 - 2 birds
- 2 - 10 birds
- 10 - 50 birds
- 50 - 100 birds
- Site Boundary





**Visit 7**  
**08/01/2023**  
**Pre-Sailing**



0      100      200 m



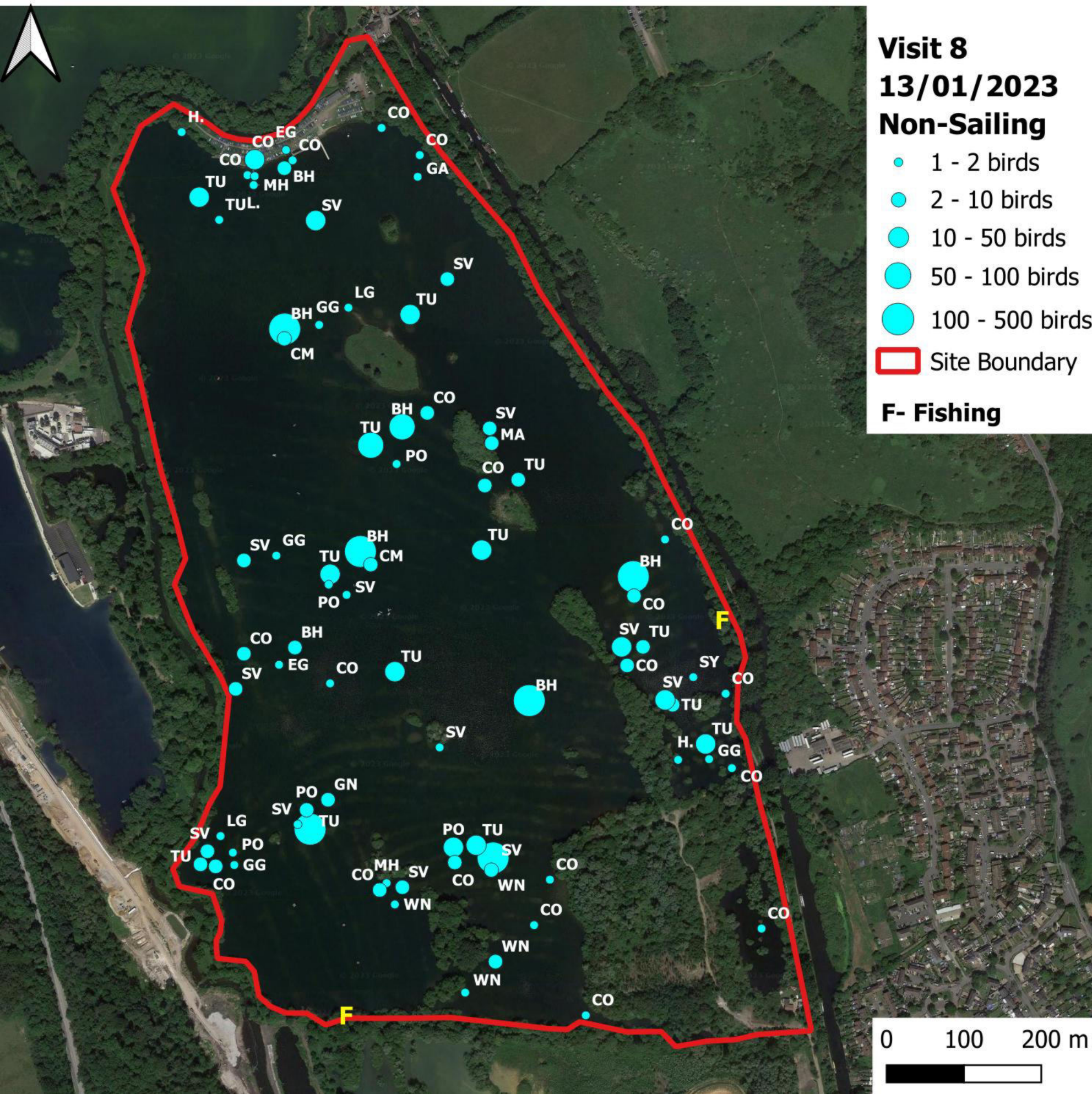


**Visit 8**  
**13/01/2023**  
**Non-Sailing**

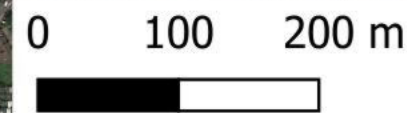
- 1 - 2 birds
- 2 - 10 birds
- 10 - 50 birds
- 50 - 100 birds
- 100 - 500 birds

 Site Boundary

**F- Fishing**





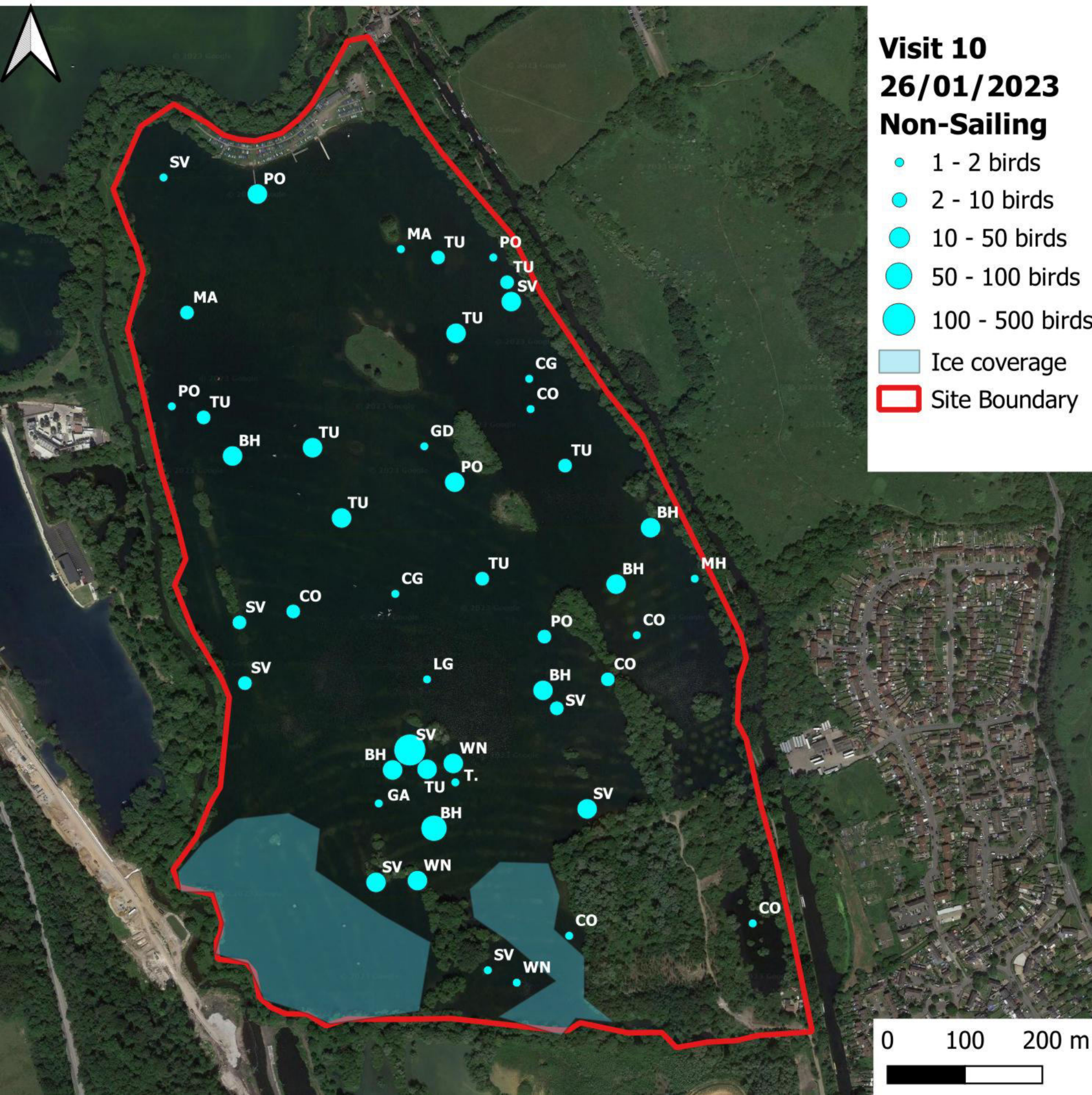






**Visit 10**  
**26/01/2023**  
**Non-Sailing**

- 1 - 2 birds
- 2 - 10 birds
- 10 - 50 birds
- 50 - 100 birds
- 100 - 500 birds
- Ice coverage
- Site Boundary

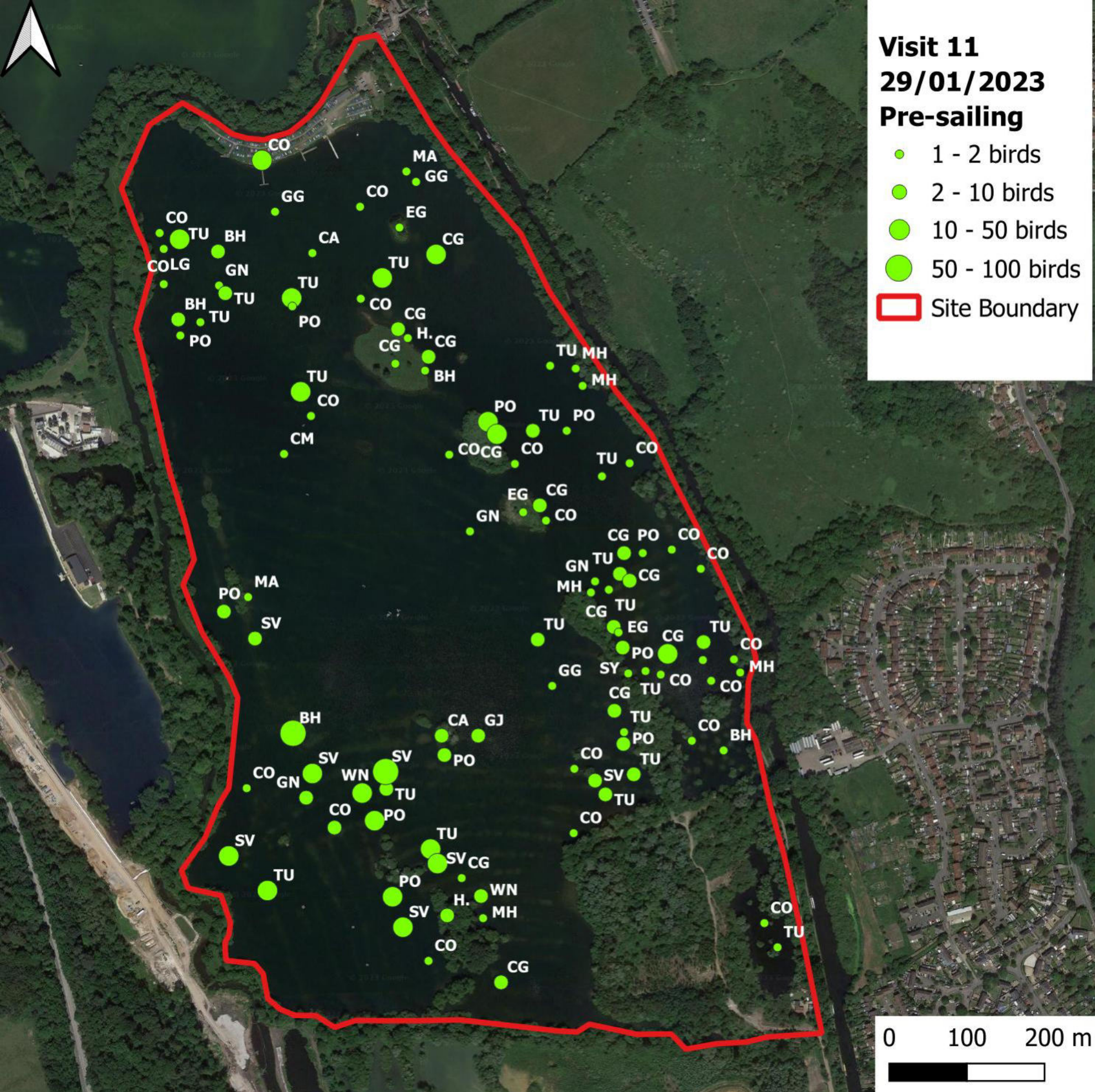






**Visit 11**  
**29/01/2023**  
**Pre-sailing**

- 1 - 2 birds
- 2 - 10 birds
- 10 - 50 birds
- 50 - 100 birds
- Site Boundary



0 100 200 m

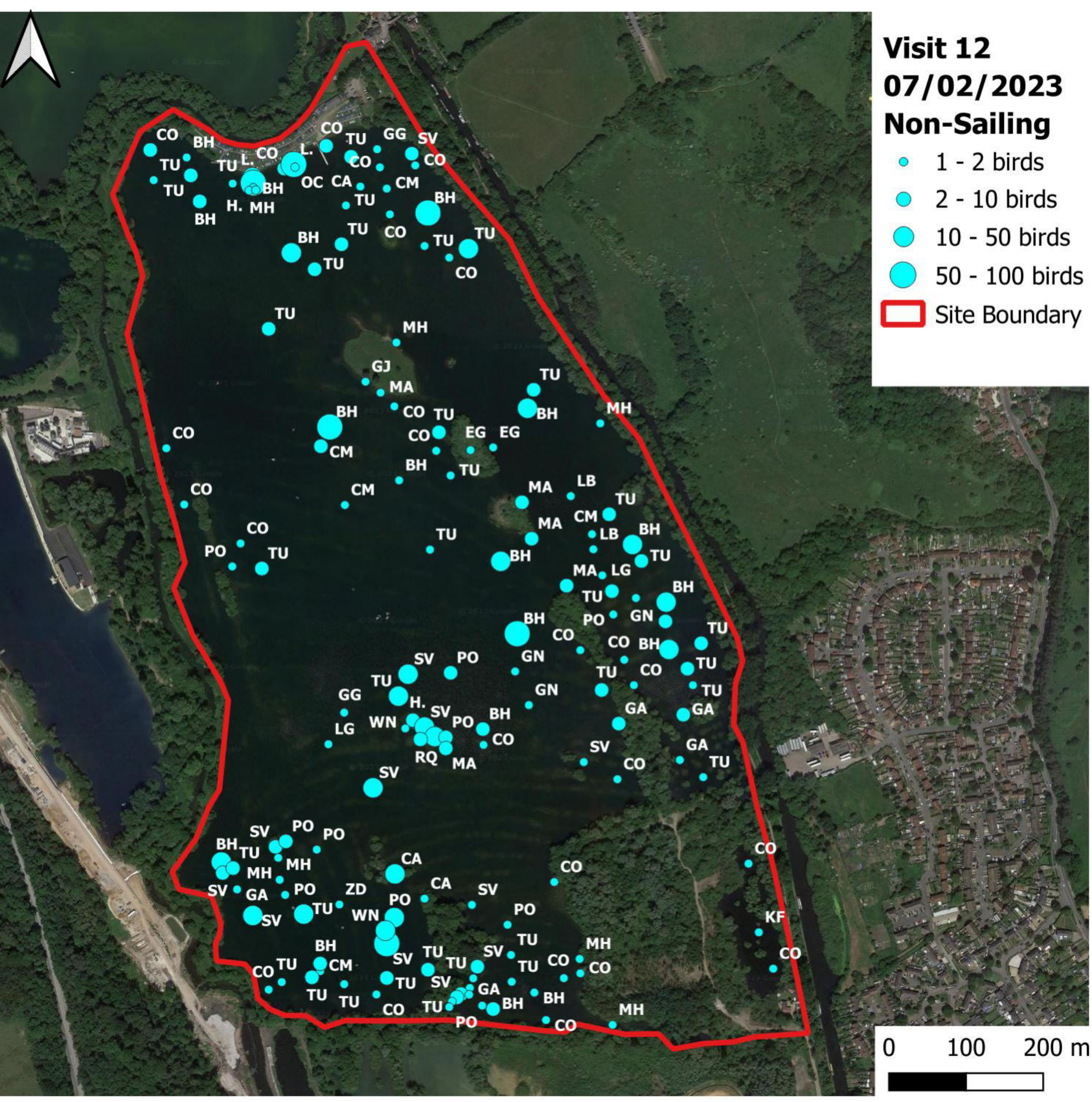






**Visit 12**  
**07/02/2023**  
**Non-Sailing**

- 1 - 2 birds
- 2 - 10 birds
- 10 - 50 birds
- 50 - 100 birds
- Site Boundary

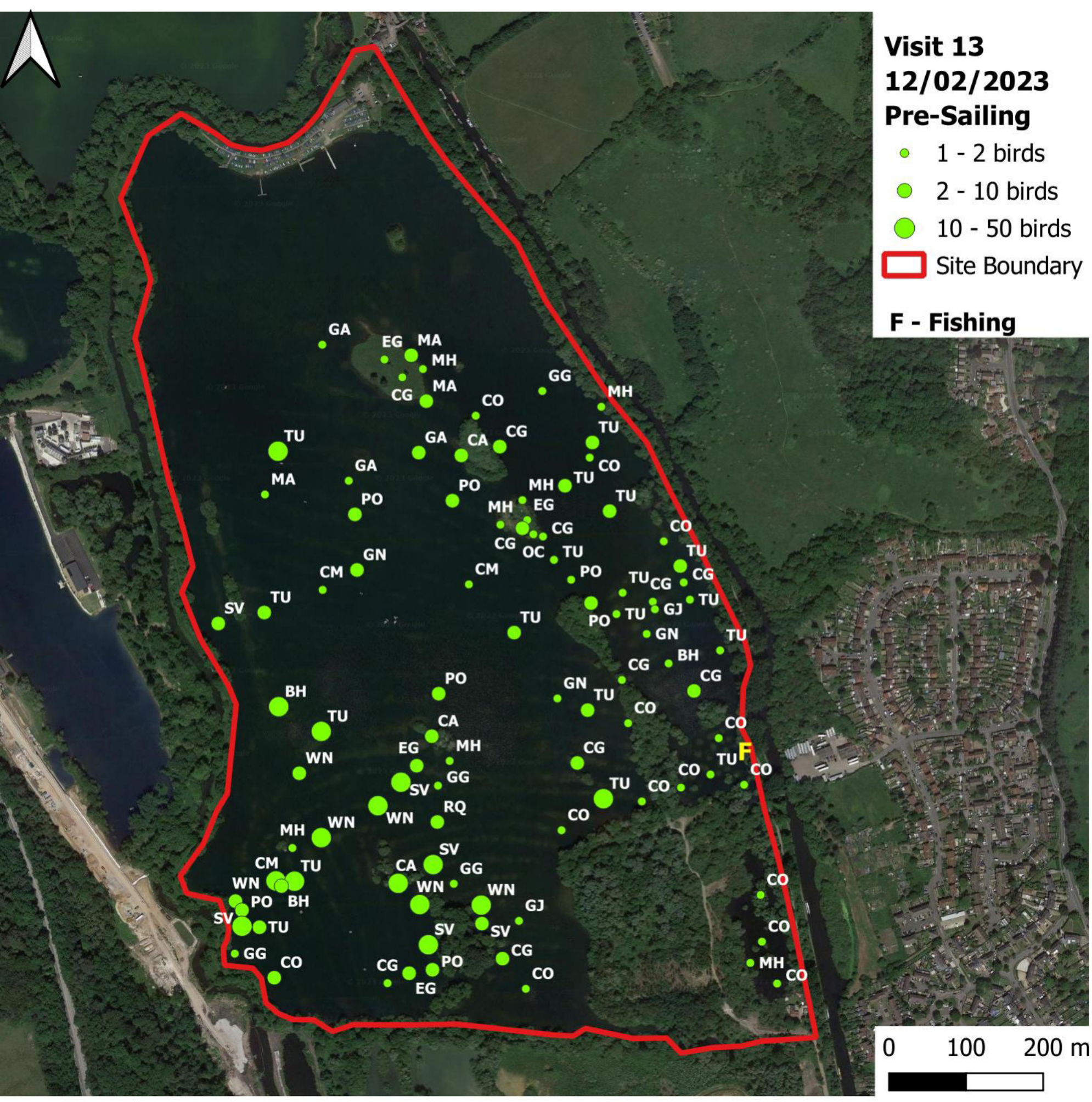




**Visit 13**  
**12/02/2023**  
**Pre-Sailing**

- 1 - 2 birds
- 2 - 10 birds
- 10 - 50 birds
- Site Boundary

## F - Fishing

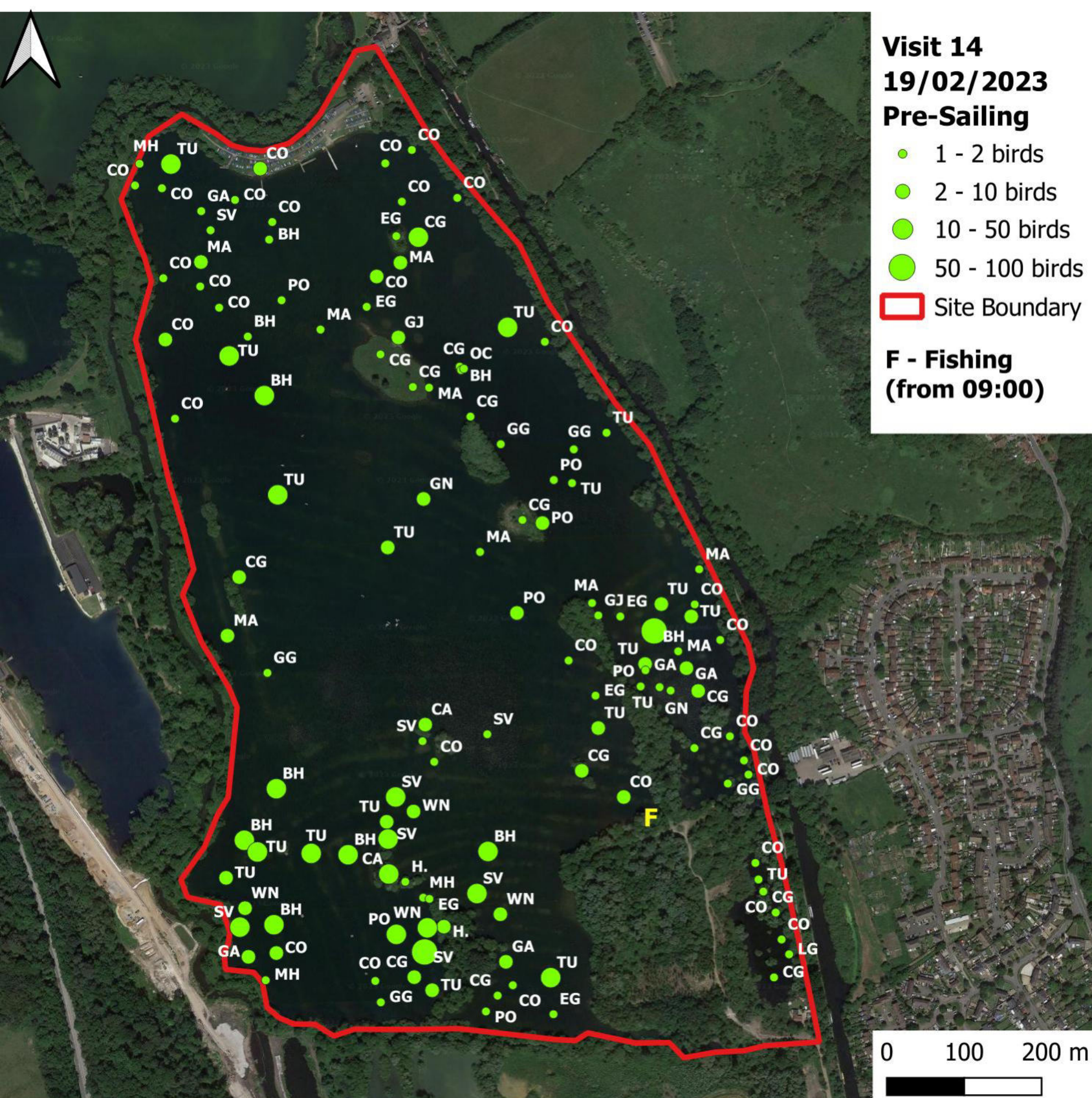




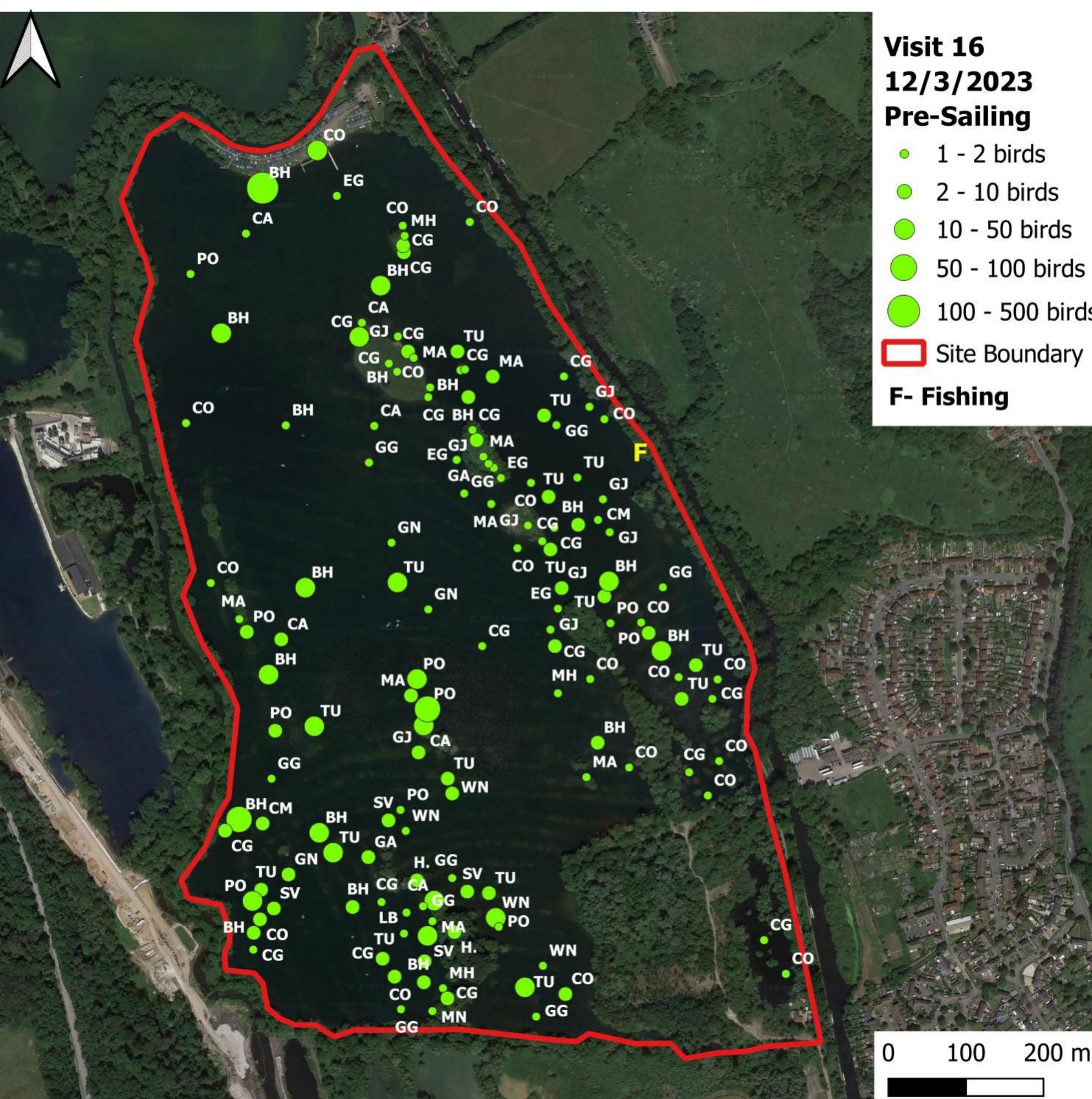
**Visit 14**  
**19/02/2023**  
**Pre-Sailing**

- 1 - 2 birds  
 ● 2 - 10 birds  
 ● 10 - 50 birds  
 ● 50 - 100 birds  
 □ Site Boundary

**F - Fishing**  
**(from 09:00)**





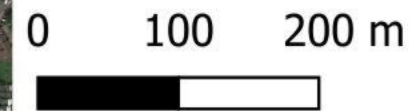
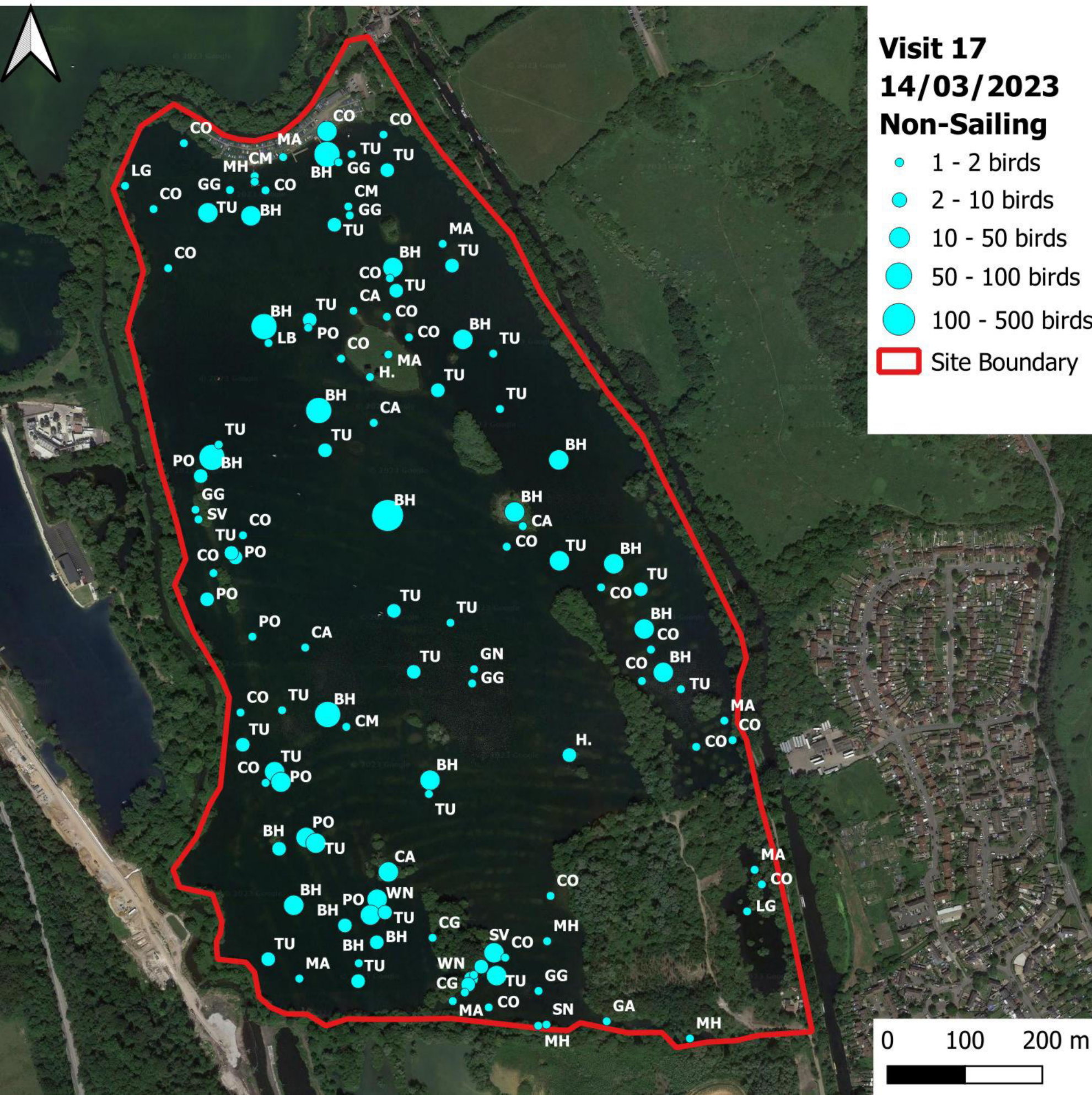






**Visit 17**  
**14/03/2023**  
**Non-Sailing**

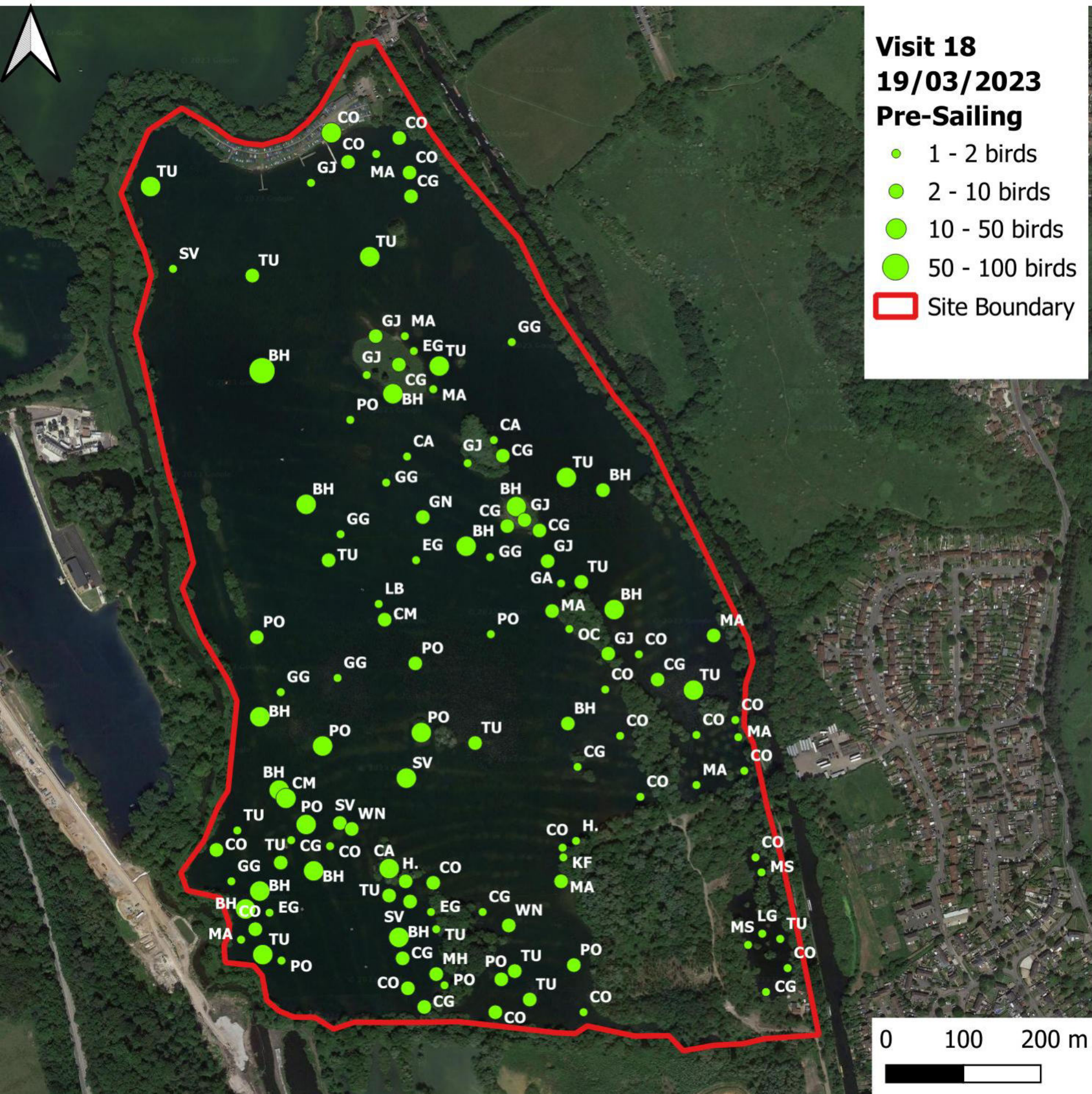
- 1 - 2 birds
- 2 - 10 birds
- 10 - 50 birds
- 50 - 100 birds
- 100 - 500 birds
- Site Boundary







- 1 - 2 birds
- 2 - 10 birds
- 10 - 50 birds
- 50 - 100 birds
- Site Boundary

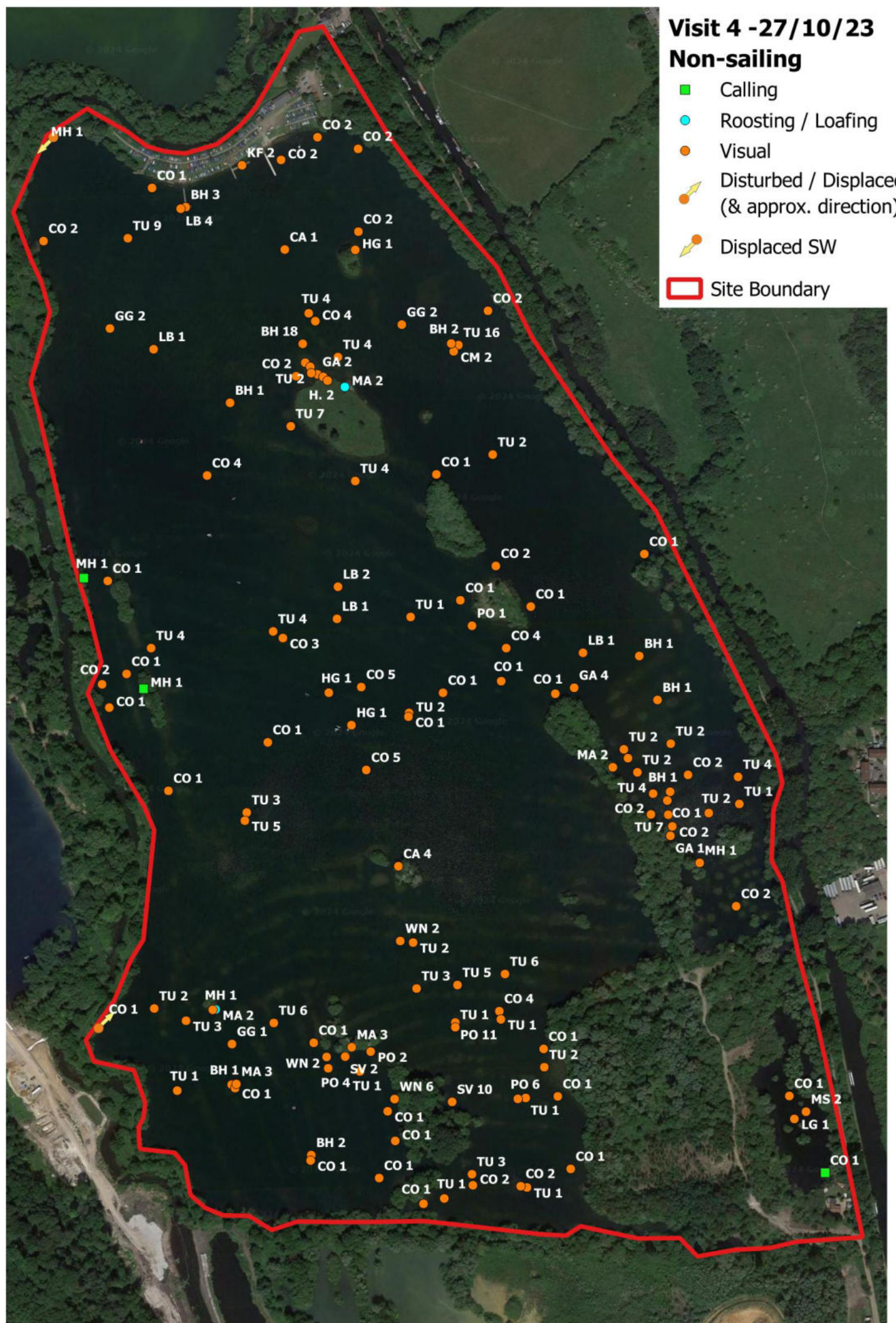




# Visit 4 -27/10/23

## Non-sailing

- Calling
- Roosting / Loafing
- Visual
- Disturbed / Displaced (& approx. direction)
- Displaced SW
- ▭ Site Boundary





**Visit 5 - Non-Sailing**  
**09/11/23**

