

CARDIGAN TIDAL FLOOD RISK MANAGEMENT SCHEME

Appendix 6.7 - Breeding Bird Surveys



Cyfoeth Naturiol Cymru
Natural Resources Wales



binnies
Enhancing lives, communities
and the environment



Breeding Bird Survey
Cardigan Tidal Flood Risk Management Scheme
May – August 2023

Client: NRW

Survey Dates: May 6th - August 1st 2023

Report Reference: WW/NRW/BBC

Author: Matt Sutton

Contents

Section	Page number
1. Introduction	3
2. Survey Methodology	4
3. Results	5
4. Conservation Assessment	8
5. Summary and Conclusions	8
6. References	8
APPENDIX 1 Survey Details	9
APPENDIX 2 Maps of Birds Recorded on Site During Each Survey	9

1. Introduction

Matt Sutton of Wyndrush Wild was contracted to survey breeding birds on the Teifi estuary at Cardigan. Survey was required from 300m west of Castle Bridge to 300m east of Priory Bridge (see figure 1 below).

The survey area comprises tidal stretches of the Afon Teifi, with associated muddy shores / mudflats exposed at low tide. Brackish reedbeds dominate the southern shore in the eastern part of the site, a WTSWW reserve. The section between the bridges is edged by development and has some limited development of brackish reedbed and stands of sea club-rush, constrained by walled banks. The western section has a muddy southern shore edged by mature broad-leaved trees; the northern bank is mostly walled and edged by development. There is a muddy shore at the western end, past the Quay Street car park.

NRW required an assessment of the breeding bird populations on site to inform the development of a tidal flood risk management scheme.

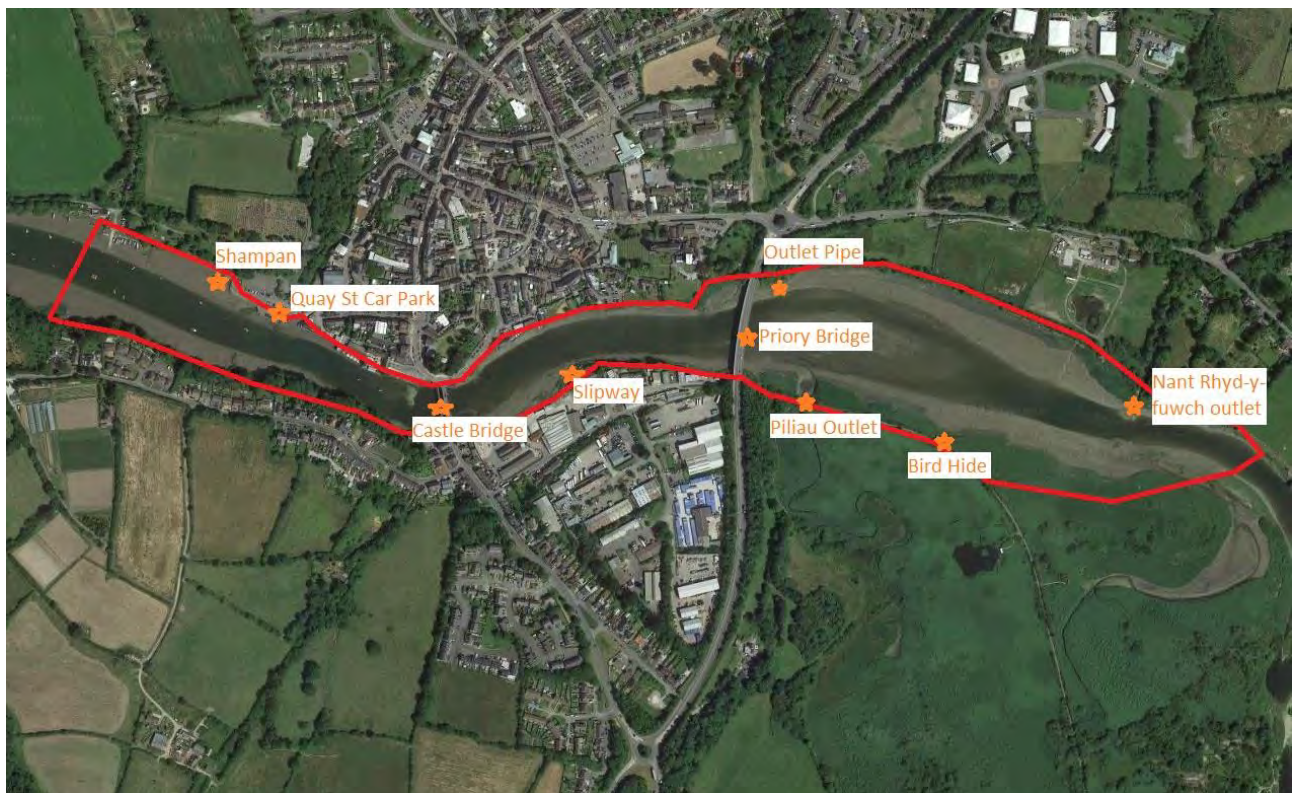


Figure 1. Survey site at Cardigan, with selected features used in text

2. Survey Methodology

Two survey visits were made in May and June, one around low tide and one around high tide. Single survey visits were made in July and August. Time and weather details are given in Appendix 2. May and June surveys began within an hour after dawn to maximise recording of singing birds. A slow walk was made along the path on the southern boundary of the site from Priory Bridge to the bird hide, then along the path on the south side between the bridges. A stop was then made on the north side just west of Castle Bridge, and a final viewing of the western third of the site was made from Quay Street car park.

All birds using the site were recorded. Leica Ultravid 10x40 binoculars and a Kowa Prominar TSN4 telescope were used.

Following the visit, the records made were added to a spreadsheet, with approximate grid references derived from BNHS Grab a Grid Reference duo. Where flocks of birds such as gulls were present, or aggregations of nesting rooks, an approximate centroid was recorded. Maps were then produced to display the approximate distribution of bird territories across the site.



Habitat between the two bridges is intertidal, and thus unsuited to nesting birds

3. Results

Species	Map Code	Breeding Status	Estimated No. Territories	UK Status ²
Blackbird	B.	Breeding	2	
Blackcap	BC	Possibly Breeding	1	
Black-headed Gull	BH	Non-breeding		Amber
Blue Tit	BT	Non-breeding		
Bullfinch	BF	Possibly Breeding	1	Amber
Canada Goose	CG	Breeding nearby		
Carrion Crow	C.	Non-breeding		
Cetti's Warbler	CW	Possibly Breeding	1	
Chaffinch	CH	Probably Breeding	4	
Chiffchaff	CC	Probably Breeding	3	
Common Gull	CM	Non-breeding		Amber
Cormorant	CA	Non-breeding		
Curlew	CU	Non-breeding		Red
Dunlin	DN	Non-breeding		Red
Duncock	D.	Probably Breeding		Amber
Feral Pigeon	FP	Probably Breeding		
Goldcrest	GC	Possibly Breeding		
Goldfinch	GO	Probably Breeding		
Greater Black-backed Gull	GB	Non-breeding		Amber
Greenfinch	GR	Probably Breeding	1	Red
Grey Heron	H.	Non-breeding		
Herring Gull	HG	Non-breeding		Amber
House Martin	HM	Non-breeding		Red
House Sparrow	HS	Probably Breeding	2	Red
Jackdaw	JD	Probably Breeding		
Kingfisher	KF	Non-breeding		
Lesser Black-backed Gull	LB	Non-breeding		Amber
Little Egret	ET	Non-breeding		
Magpie	MG	Non-breeding		
Mallard	MA	Non-breeding		Amber
Mediterranean Gull	MU	Non-breeding		Amber
Moorhen	MH	Non-breeding		Amber
Mute Swan	MS	Possibly Breeding	1	
Pied Wagtail	PW	Non-breeding		
Redshank	RK	Non-breeding		Amber
Reed Bunting	RB	Probably Breeding	1	Amber
Reed Warbler	RW	Probably Breeding	6	
Robin	R.	Probably Breeding	1	
Rook	RO	Breeding	39	Amber
Sand Martin	SM	Non-breeding		
Shelduck	SU	Non-breeding		Amber

Song Thrush	ST	Probably Breeding	3	Amber
Snipe	SN	Non-breeding		Amber
Sparrowhawk	SH	Non-breeding		Amber
Swallow	SL	Non-breeding		
Swift	SI	Non-breeding		Red
Teal	T.	Non-breeding		Amber
Woodpigeon	WP	Probably Breeding	5	Amber
Wren	WR	Probably Breeding	10	Amber

¹Birds of Conservation Concern 5

Results for each survey visit are presented in map form in Appendix 1.

Summary of Birds Seen within the Survey Area



Reedbeds within the Teifi Marshes Reserve are well used by reed warblers

The Teifi Marshes reserve provides the key area for breeding birds, with around 5 reed warbler territories in the reedbeds. A pair of reed buntings were probably nesting in the reeds just past the bird hide here. Cetti's warbler was singing near the path on one occasion but is

likely to breed to the south of it. Dunnock and wren were amongst the few other species seen or heard singing along the northern side of the path here. Non-breeding birds foraging in the intertidal area included small numbers of grey heron, little egret, kingfisher, curlew and shelduck. Post-breeding flocks of mallard reached a total of 108 here in late June, whilst several family parties including juveniles presumably raised in nests near the site were mostly recorded downstream from here. Loafing or foraging flocks of black headed gull (up to 33) with smaller number of herring gull (up to 6) were also recorded.

Scrub along the northern bank of the river alongside the Teifi marshes held singing dunnock, chaffinch, chiffchaff, song thrush, woodpigeon and wren.

There is very little potential for breeding birds in the constrained intertidal area between the bridges, although a single singing reed warbler was heard in the small reed area immediately west of Priory Bridge. Family parties of Canada goose, mute swan, mallard and blackbird with fledged young were noted here. Adjoining bushes or trees such as those to the south of the churchyard had territories of species such as greenfinch, goldfinch, song thrush and wren. House sparrow was associated with buildings here. Swifts and hirundines fed over the site.

West of Castle Bridge, the woodland on the southern side holds a rookery, with a total of 39 active nests counted on the first May visit; most nests were obscured by foliage on subsequent visits and were not re-recorded. A small number of jackdaws were also using the rookery. Other birds singing in the woodland here included woodpigeon, wren, goldcrest, robin, chaffinch, great tit, song thrush and chiffchaff. The intertidal area alongside and west of Lower Quay car-park was only used by small numbers of waders and wildfowl during the survey period, including black-headed gull and curlew.



Rookery in woodland to the west of Castle Bridge

4. Conservation Assessment

The site supports only low – moderate numbers of birds during the summer. Reed warblers are the only breeding species clearly nesting within the intertidal area. Most breeding birds are associated with scrub or woodland areas, outside of the intertidal areas which may be impacted by the proposed scheme. These include 2 species on the UK red-list, and 7 on the amber-list. Non-breeding birds using the intertidal area include 5 species on the UK red-list, and 13 on the amber-list. No species occurred in significant numbers.

The site can therefore be considered to be of local significance for its breeding / summering bird populations. The eastern part of the site, alongside the Teifi Marshes reserve, holds the greatest diversity and number of birds. The section between the two bridges, and downstream to the Lower Quay car park, has limited exposed mud and this is reflected in the small number of birds recorded here. The muddy banks opposite and to the west of the car park are used by small numbers of ducks, waders and gulls.

5. Summary and Conclusions

Breeding / summering bird activity between May and August revealed only low – moderate numbers of birds using the site. Reedbeds within the Wildlife Trust reserve, and woodland on the southern shore to the west of Castle Bridge provide the main areas for breeding activity. Only small numbers of waders and waterfowl used the intertidal areas during this period, and these were concentrated in the eastern part of the site. 26 Birds of Conservation Concern were recorded on the site during the survey period, and 7 of these were probably breeding. The site is clearly of local significance for its summer bird populations.

6. References

Marchant, J. (1983). Common Bird Census Instructions. BTO.

Stanbury, A., Eaton, M., Aebischer, N., Balmer, D., Brown, A., Douse, A., Lindley, P., McCulloch, N., Noble, D., and Win I. (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: 723-747.

Appendix 1: Survey Details

Month	Date	Start Time	Tide	Weather
May	6 th	6.00	High	Cloudy, dry, light breeze
	25 th	6.00	Low	Clear, sunny, light breeze
June	13 th	5.30	High	Sunny, still
	23 rd	5.35	Low	Still, warm, cloudy
July	1 st	9.00	Mid-High	Cloudy, mild, light breeze
August	1 st	6.30	Low-Mid	Cloudy after rain

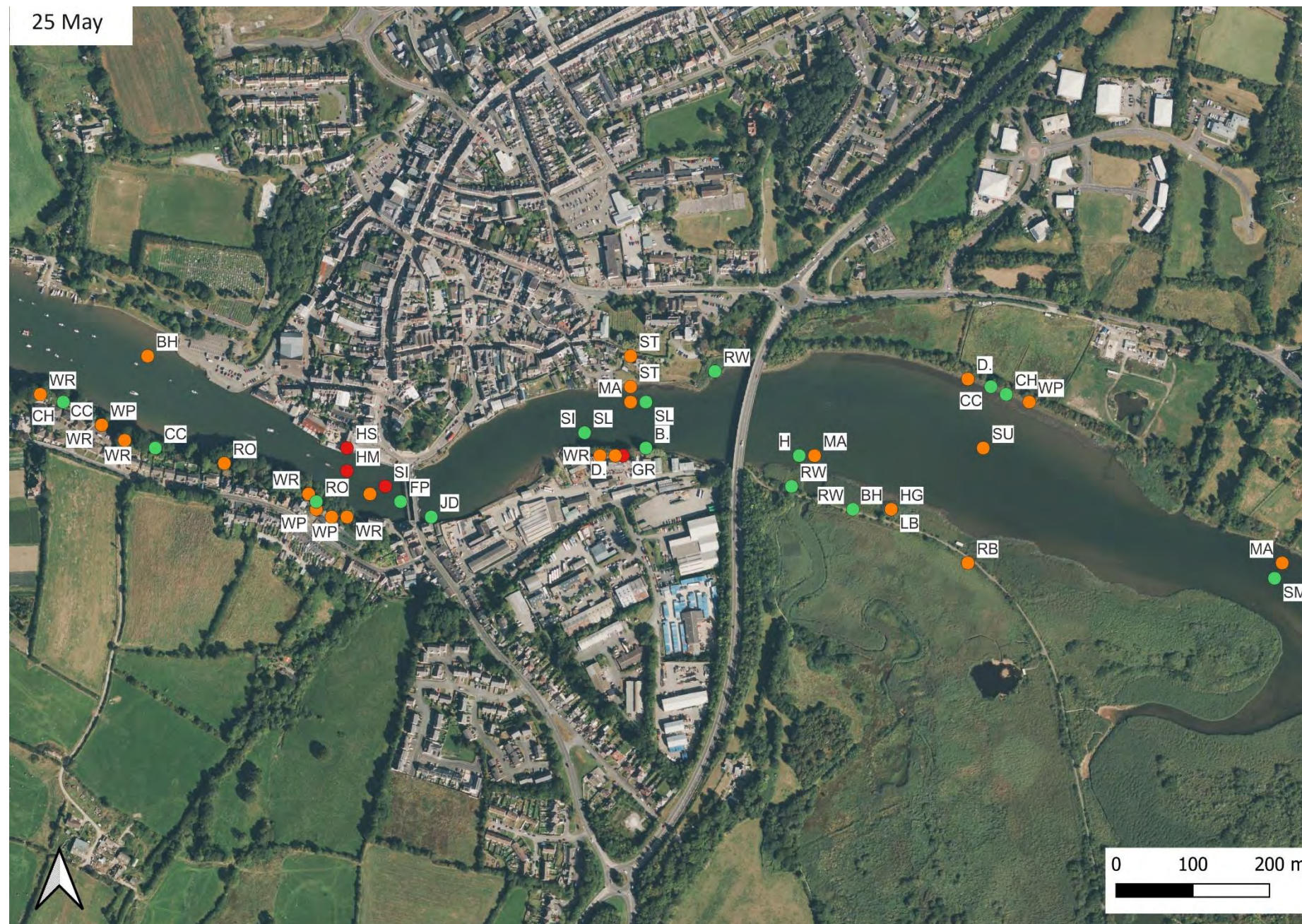
Appendix 2: Maps of Birds Recorded on Site during each Survey

Species codes are included in the above table.

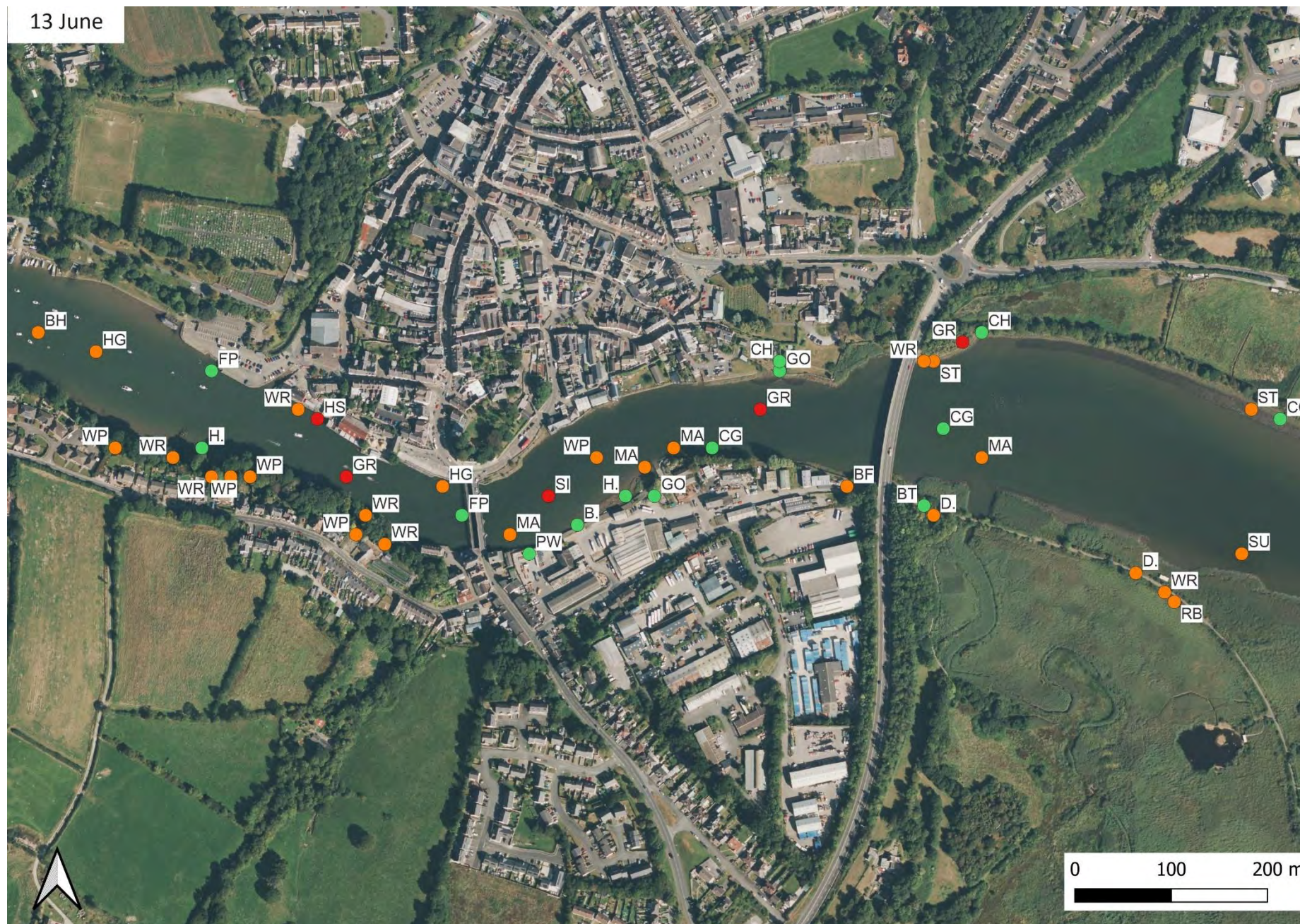
The maps of bird behaviour use standard BTO activity codes (Marchant, 1983). Only Birds of Conservation Concern are mapped.

4 May

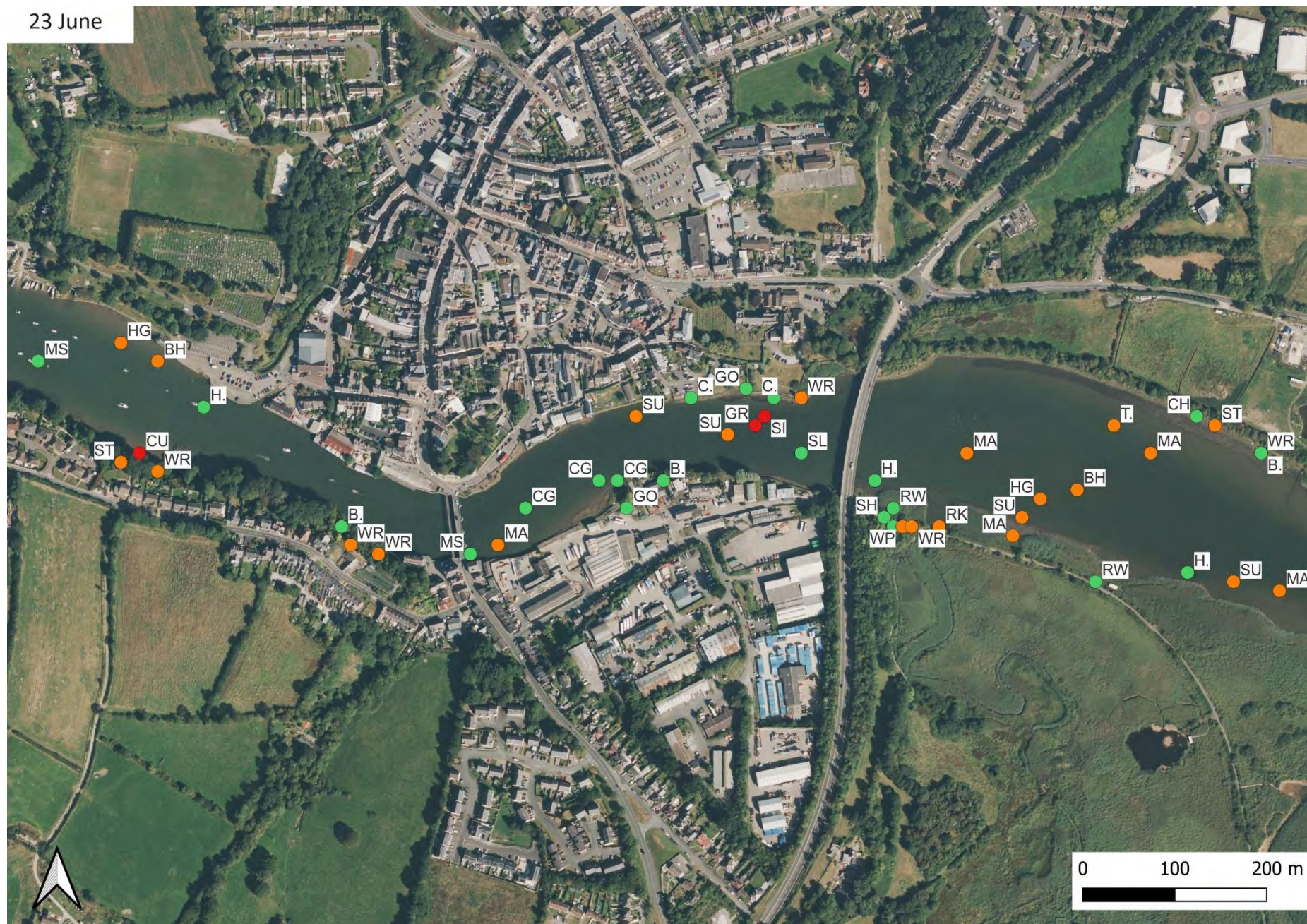




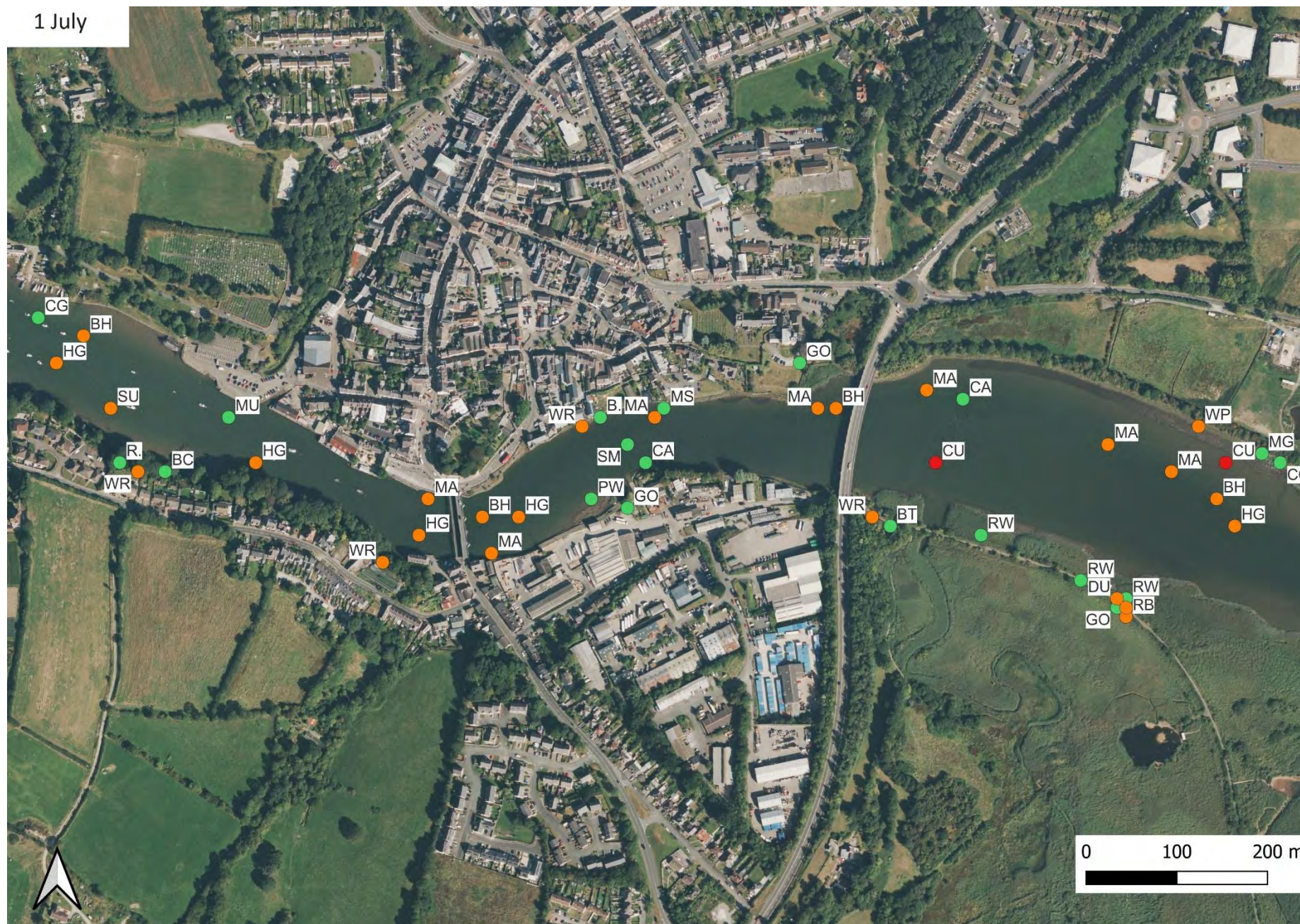
13 June



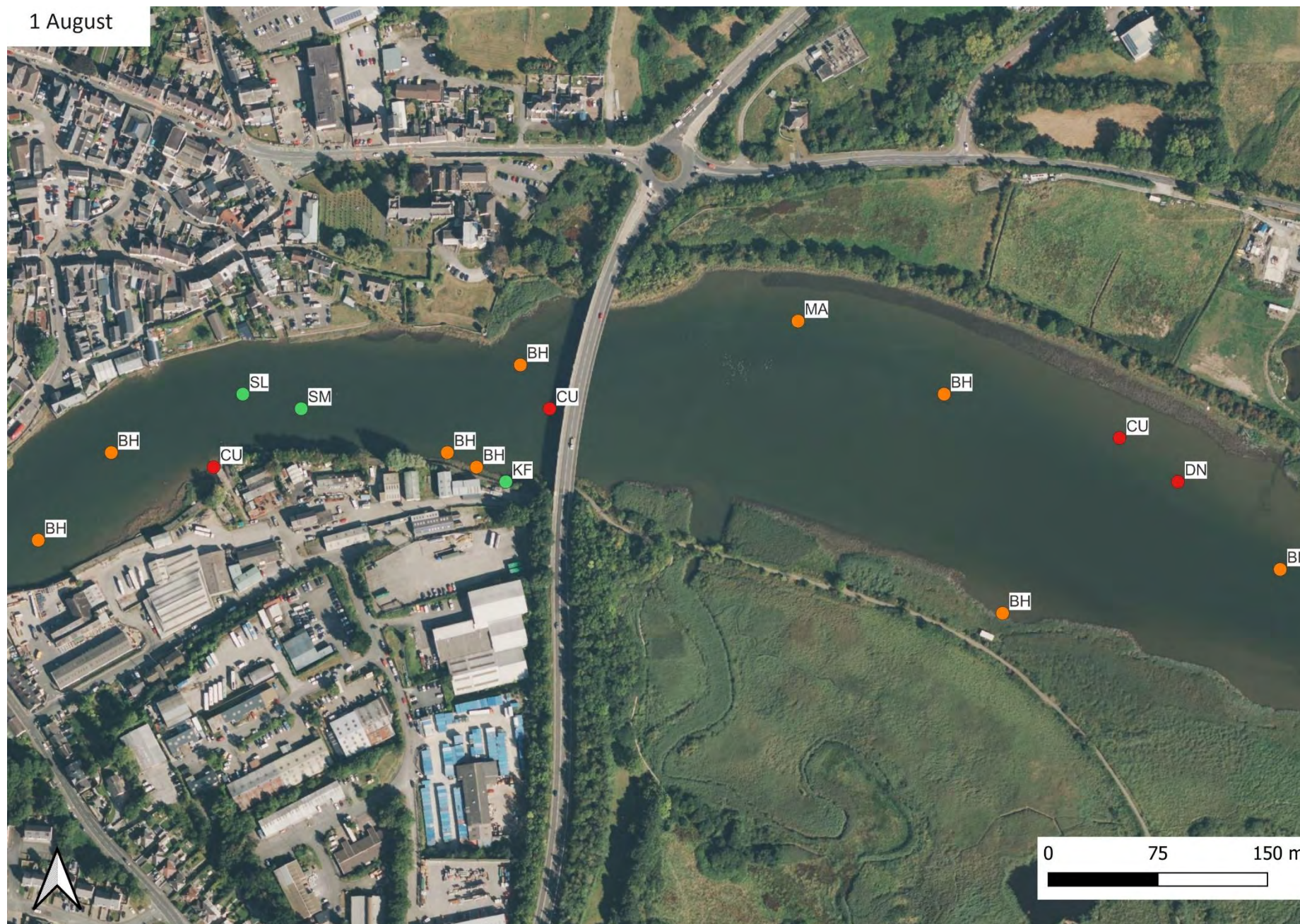
23 June



1 July



1 August



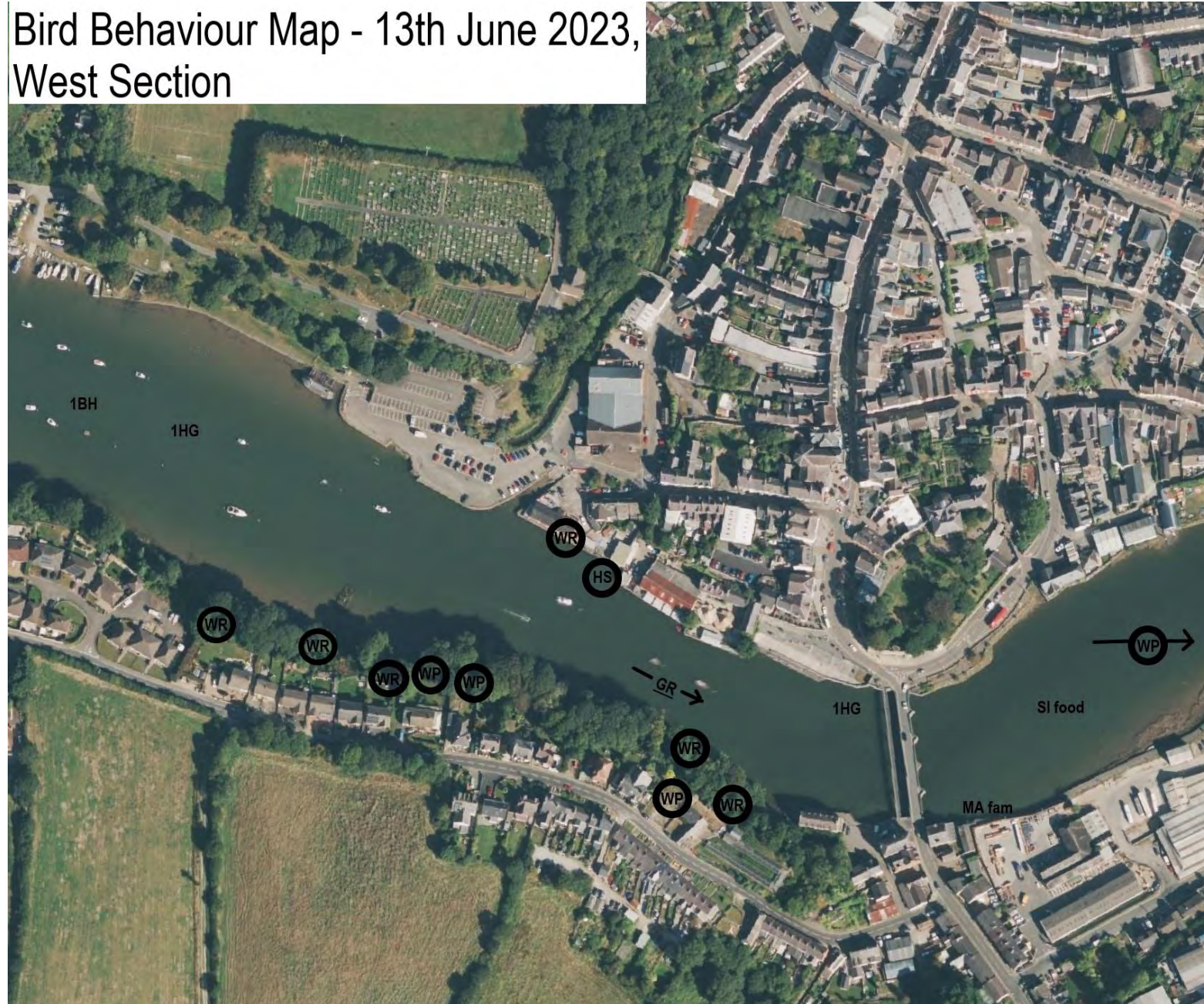
Bird Behaviour Map - 4th May 2023, West Section



Bird Behaviour Map - 4th May 2023, East Section



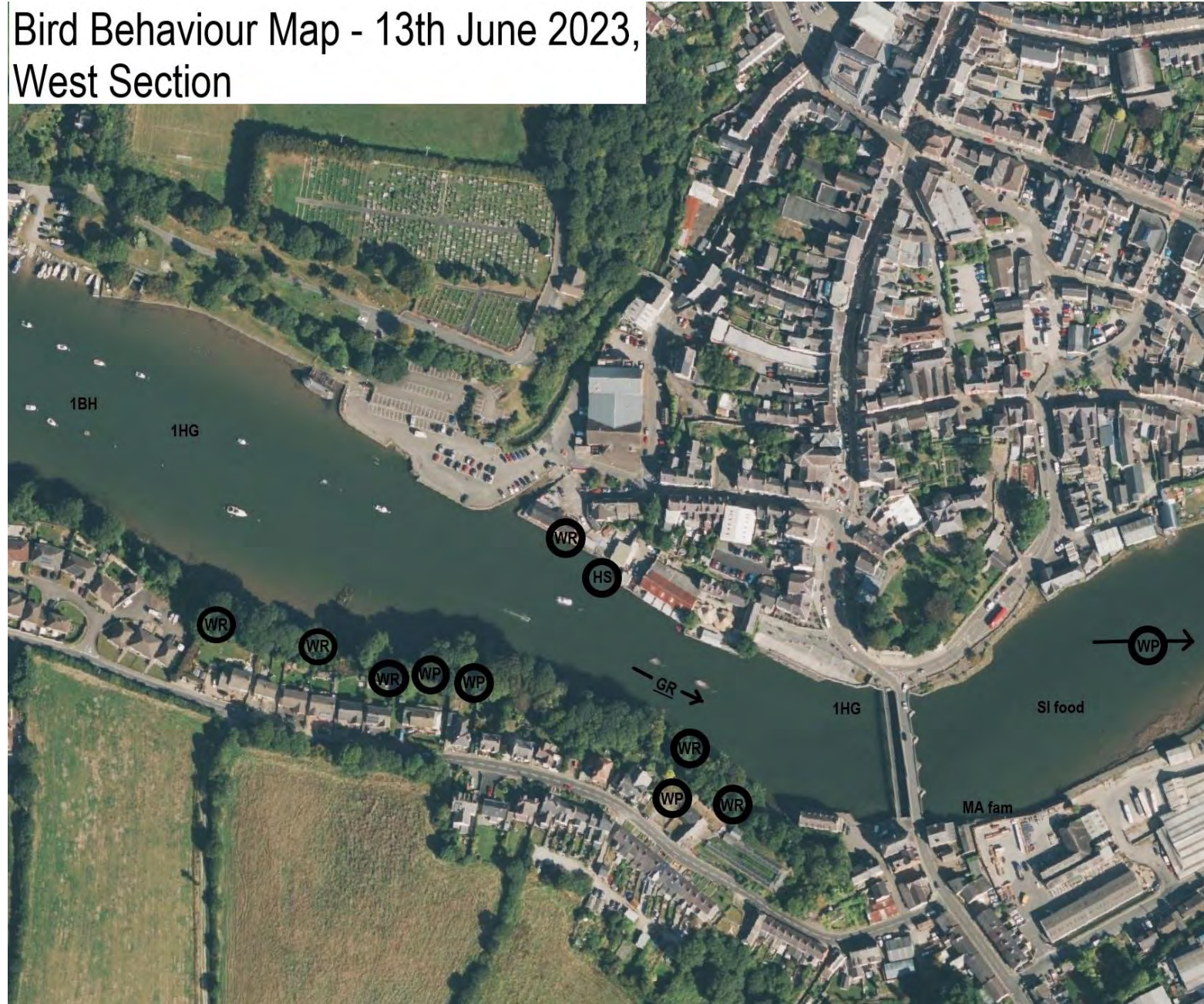
Bird Behaviour Map - 13th June 2023, West Section



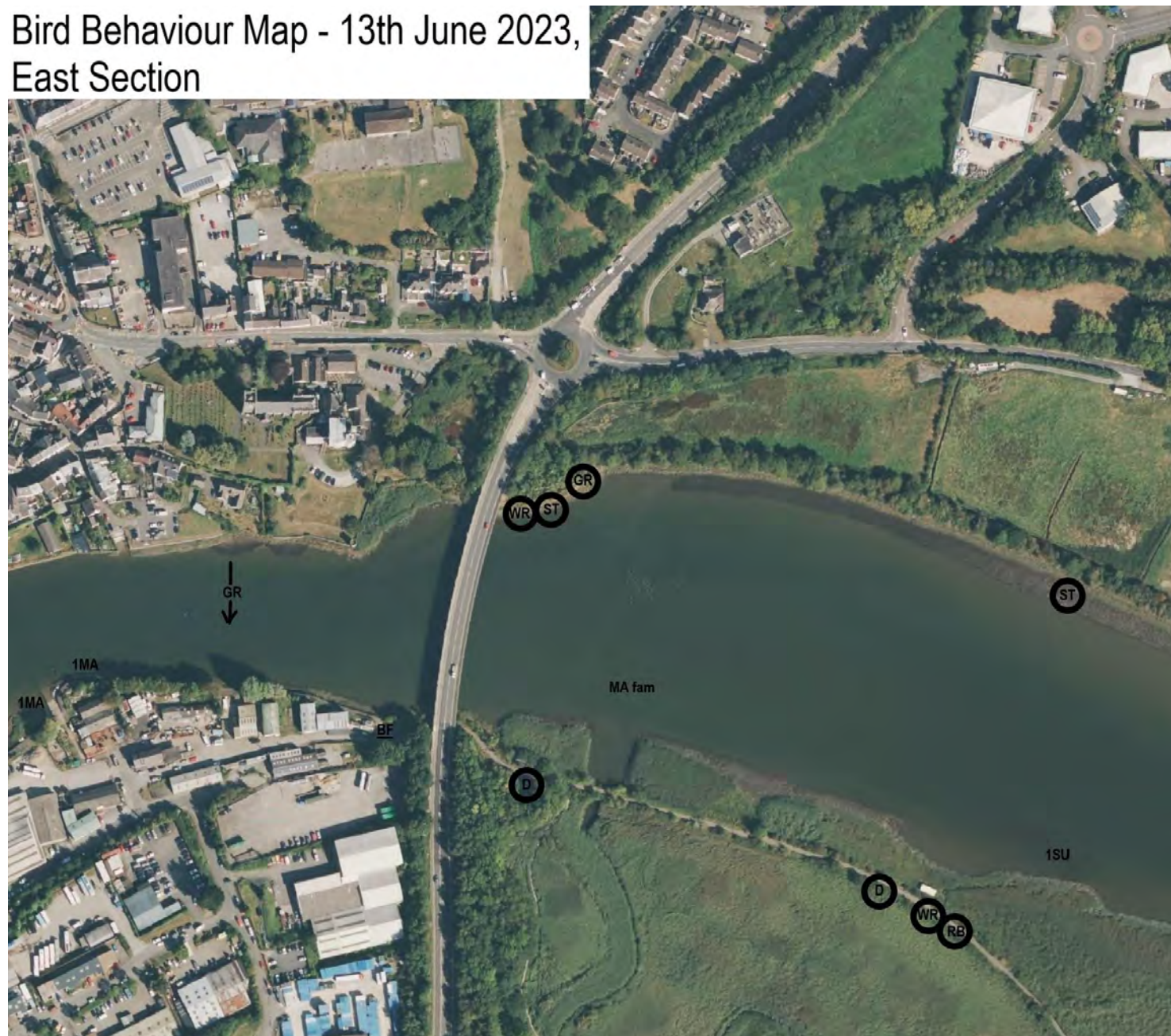
Bird Behaviour Map - 25th May 2023, East Section



Bird Behaviour Map - 13th June 2023, West Section



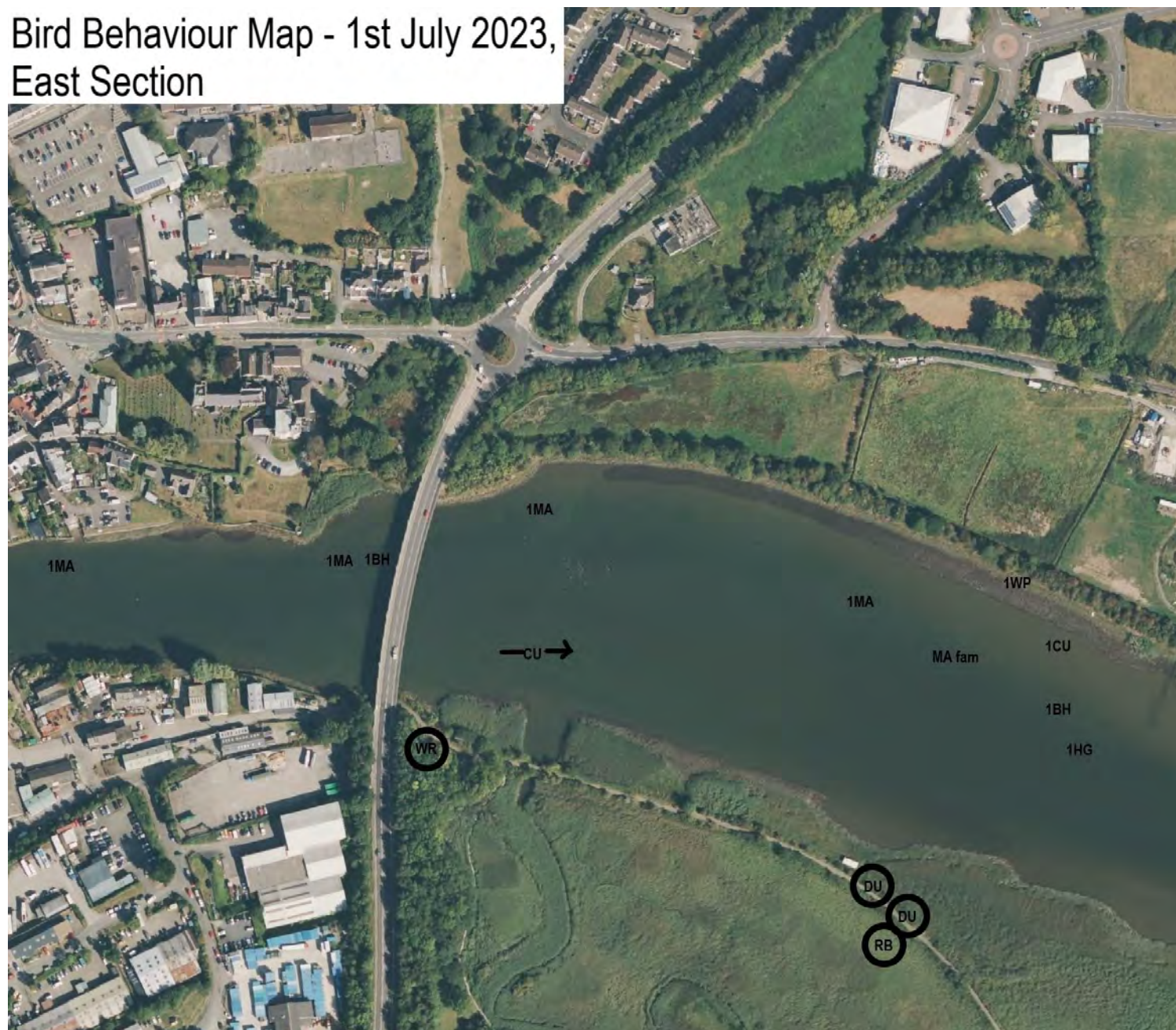
Bird Behaviour Map - 13th June 2023, East Section



Bird Behaviour Map - 1st July 2023, West Section



Bird Behaviour Map - 1st July 2023, East Section



Bird Behaviour Map - 1st August 2023, West Section



Bird Behaviour Map - 1st August 2023,
East Section

