

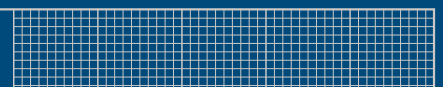


**ElAR Volume 4: Offshore Infrastructure
Technical Appendices
Appendix 4.3.6–8
Intertidal Bird Surveys at Two Potential
Grid Connection Cable Landfall Locations
–Winter 201920 and Autumn 2020**

Kish Offshore Wind Ltd

RWE  **SLR** **GoBe**
APEM Group

www.dublinarray-marineplanning.ie



Dublin Array Offshore Wind Farm EIAR

Intertidal Bird Surveys at Two Potential Grid
Connection Cable Landfall Locations
- Winter 2019/20 and Autumn 2020

Date: February 2021

Revision: 2

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Acronyms

Term	Definition
AA	Appropriate Assessment
ACIEEM	Associate Member of the Chartered Institute of Ecology and Environmental Management
Dublin Array	Dublin Array Offshore Wind Farm
EU	European Union
GIS	Geographical Information System
IG	Irish National Grid
IWeBS	Irish Wetland Bird Survey
LAT	Lowest Astronomical Tide
NPWS	National Parks and Wildlife Service
RWE	RWE Renewables Ireland Ltd
SLR	SLR Consulting Ireland
SPA	Special Protection Area
VP	Vantage Point

1 Introduction

- 1.1.1 SLR Consulting Ireland (SLR) was commissioned by Kish Offshore Wind Limited and Bray Offshore Wind Limited in November 2019 to carry out a non-breeding intertidal bird survey programme for two potential landfall locations in Dublin Bay for the proposed Dublin Array Offshore Wind Farm (Dublin Array).

1.2 Project Background

- 1.2.1 Dublin Array Offshore Wind Farm (Dublin Array) is a proposed offshore wind farm on the Kish and Bray Banks. The Kish and Bray Banks are located approximately 10 km off the east coast of Ireland, immediately south of Dublin city off the coast of Dun Laoghaire, Co. Dublin and Bray, Co. Wicklow. The offshore wind farm will be located within an area of approximately 54 km², in water depths ranging from 2 metres to 30 metres at lowest astronomical tide (LAT). The project is being developed by Kish Offshore Wind Limited and Bray Offshore Wind Limited (hereafter referred to as the applicant). The shareholders in both companies are RWE Renewables Ireland Ltd (formerly Innogy Renewables Ireland) and Saorgus Energy Limited.
- 1.2.2 At this stage of the project development the applicant has identified a number of potential landfall locations for the proposed sub-sea grid connection cable. Three potential landfall locations are currently being considered at Shanganagh Cliffs, Shanganagh Park in South Dublin (Shankill Beach) and Poolbeg. Dependent upon the location of the grid connection point or points a maximum of three cable circuits will be required. Up to two cable circuits may be required to come ashore at either Shanganagh Cliffs or at Shanganagh Park. An alternative configuration may include up to three cable circuits to Poolbeg with no cable circuits coming ashore at Shanganagh Cliffs or at Shanganagh Park. A combination of cable routing of one or two circuits to Poolbeg and one or two circuits to a Shanganagh area landfall may also be required.
- 1.2.3 Shankill Beach is a shingle beach which stretches for approximately 4.5 km from the electoral district of Killiney South in a southerly direction to the electoral district of Shankill / Shanganagh. The foreshore width along the beach is relatively narrow, ranging approximately 15 to 20 m from the upper shore to the highwater mark. The intertidal zone is also relatively narrow with an approximate horizontal range difference of 5 to 7 m between the high and low water mark.

- 1.2.4 The Poolbeg peninsula is located in the eastern Docklands, adjacent to both Dublin Bay and the River Liffey and east of the River Dodder and Grand Canal Dock, occupying a historic gateway location to the city. It is currently home to many of the Dublin region's major power, sewage, storage and port facilities, as well as a number of industrial uses, and it has active deep water berthing and docking facilities on its northern edge. The peninsula also contains a number of areas of open space, including Sean Moore Park and Irishtown Nature Park. Its southern shore opens on to Dublin Bay and is bordered by a beach. The third potential landfall location is on the southern shore of Poolbeg peninsula. This shore is separated from the intertidal area by narrow strip of sand sparsely vegetated with marram grass *Ammophila arenaria*. There are also stretches of rock armour along this shore.
- 1.2.5 Existing data for non-breeding intertidal birds are available for the potential landfall location at Poolbeg via previous ornithological studies and the Irish Wetland Bird Survey (IWeBS)¹, however IWeBS does not cover either of the potential landfall locations at Shankill Beach, hence the requirement for surveys at those locations, the results of which form the subject of this report. Existing data for the potential landfall location at Poolbeg are not provided here but will be presented separately in the relevant offshore baseline reports.
- 1.2.6 The study area for the two potential landfall locations at Shanganagh Cliffs and Shanganagh Park (Shankill Beach) (see Section 2.1.1 and Figure 1; Appendix A.1) lies outside any EU site designated for nature conservation. The closest Special Protection Area (SPA) designated for the protection for bird species is Dalkey Islands SPA (Site Code: 004172), which is situated approximately 3km north of the northern boundary of the study area. Dalkey Islands SPA is designated for the protection of Roseate Tern (*Sterna dougallii*), Common Tern (*Sterna hirundo*) and Arctic Tern (*Sterna paradisaea*). All three of these species are breeding migrants to Ireland. As the current study relates to non-breeding birds, this SPA is not relevant to the scope of this report.

¹ The Irish Wetland Bird Survey (IWeBS) is a joint scheme of BirdWatch Ireland and the National Parks and Wildlife Service (NPWS). IWeBS aims to monitor the numbers and distribution of waterbird populations wintering in the Republic of Ireland, in the long-term enabling the spatio-temporal trends to be described for Irish wintering waterbird populations.

- 1.2.7 The next closest EU designated site to the study area is the South Dublin Bay and River Tolka Estuary SPA (Site Code: 004024), which is located approximately 7km to the north of the northern boundary of the study area. This site is potentially more relevant to the current study as it is an important site for wintering waterfowl, being an integral part of the internationally important Dublin Bay complex. At the time of its designation (March 1995), this SPA supported nationally important numbers of a further nine species, namely, oystercatcher *Haematopus ostralegus*, Ringed Plover *Charadrius hiaticula*, Grey Plover *Pluvialis squatarola*, Knot *Calidris canutus*, Sanderling *Calidris alba*, Dunlin *Calidris alpina*, Bar-tailed Godwit *Limosa lapponica*, Redshank *Tringa totanus* and Black-headed Gull *Chroicocephalus ridibundus* (Department of Arts, Heritage and the Gaeltacht, 2015). Other species occurring in smaller numbers include Great Crested Grebe *Podiceps cristatus*, Curlew *Numenius arquata* and Turnstone *Arenaria interpres*. South Dublin Bay is a significant site for wintering gulls, with a nationally important population of Black-headed Gull, but also Common Gull *Larus canus* (330) and Herring Gull *Larus argentatus* (348). Mediterranean Gull *Ichthyophaga melanocephalus* is also recorded from here, occurring through much of the year, but especially in late winter/spring and again in late summer into winter. Although some use of the study area by birds forming part of the South Dublin Bay and River Tolka Estuary SPA cannot be ruled out, given the intervening distance it is considered to be unlikely that there is any regular interchange of birds between the study area and the SPA. This issue will be examined further within the appropriate assessment (AA) screening report and the SPA is not considered further within this report.
- 1.2.8 The above notwithstanding, national IWeBS data were reviewed (Lewis *et al.*, 2019) in relation to the results of the current study in order to provide some context regarding the relative abundance of waterbird species recorded within the study area (see Section 4).

1.3 Study and Report Scope

- 1.3.1 The purpose of this report is to provide robust baseline ornithological survey data of non-breeding waterbird species density, abundance, distribution and patterns of behaviour within the study area during the winter period 2019/20 and autumn period 2020. These data will be used to inform the ecological impact assessment and AA for the project, which will be produced at a later date. The scope was agreed with the client as follows:
- ✦ to carry out monthly survey visits to the study area throughout the winter of 2019/20 and autumn 2020 which would follow the Irish Wetland Bird Survey (IWeBS) methodology;
 - ✦ to analyse data from the field survey visits in a Geographical Information System (GIS); and
 - ✦ to produce a report presenting the results of the field surveys, drawing conclusions where possible.

2 Methods

2.1 Field Survey

- 2.1.1 The field survey methodology is set out below. The methodology and associated recording forms were based on the IWeBS methods (BirdWatch Ireland and NPWS, 2009) with some minor adjustments developed by SLR and agreed with the applicant.
- 2.1.2 Surveys were undertaken by SLR Senior Ornithologist, Sarah Ingham MSc ACIEEM and independent Ornithologist, Nick Veale MSc.
- 2.1.3 Sarah is a Senior Ornithologist with SLR and holds a BSc in Zoology from Anglia Ruskin University, Cambridge, UK and an MSc in Biodiversity and Conservation from Trinity College Dublin. She is an Associate member of the Chartered Institute of Ecology and Environmental Management (ACIEEM). Sarah is an experienced bird surveyor with 11 years' post graduate experience as a professional consultant ecologist/ornithologist.
- 2.1.4 Nick represents Veale Ecology as a Senior Ecologist in the UK and Ireland. Nick has a lifetime of experience as an ornithologist and 19 years professional experience as a consulting ecologist/ornithologist.

Study Area

- 2.1.5 A scoping visit to the potential landfall locations at Shankill Beach was undertaken by Sarah Ingham on Friday 22 November 2019 to identify suitable Vantage Point (VP) locations. The coordinates of the two VP locations selected are presented in Table 1 in both ITM and Irish National Grid (IG) formats.

Table 1 - Vantage point (VP) locations and grid coordinates (ITM and IG)

VP No.	VP Name	X - ITM	Y - ITM	X - IG	Y - IG
1	Shanganagh Park	726303.647	721682.922	326380.392	221654.01
2	Shanganagh WWTP	725982.603	723180.303	326059.264	223151.715

- 2.1.6 These locations were chosen to maximise visibility of birds within the intertidal zone up to 750m to the north and to the south of each potential cable landfall location i.e. a total shoreline distance of 1.5km and looking east out to 1km offshore. Figure 1 in Appendix A.1 shows an outline of the study area together with the 2 VPs, the potential subsea cable route corridors and cable landfall locations. Illustrative plates showing the views from VPs 1 and 2 are presented in Appendix A.2.

Survey Timings

2.1.7 Survey periods lasted three hours and began either four hours before or one hour after high tide or four hours before or one hour after low tide. The survey aimed to capture bird species assemblages and numbers on a range of rising and ebbing tides from each vantage point as presented in Table 2 and Table 3.

Table 2 - Vantage Point 1 - Survey Dates, Times and Tides

Survey Dates	Survey Times	Tidal Flow	Tide Times
28/11/19	08:30-11:30	Rising	High tide: 12:30
10/12/19	11:10-14:10	Ebbing	High tide: 10:10
11/12/19	11:50-14:50	Ebbing	High tide: 10:50
22/01/20	11:25-14:25	Ebbing	Low tide: 15:30
23/01/20	12:15-15:15	Ebbing	Low tide: 16:15
12/02/20	09:50-12:50	Rising	High tide: 13:50
18/03/20	08:50-11:50	Ebbing	Low tide: 12:50
25/09/20	15:22-18:22	Rising	High tide: 19:22
06/10/20	10:55-13:55	Rising	High tide: 14:55

Table 3 - Vantage Point 2 - Survey Dates, Times and Tides

Survey Dates	Survey Times	Tidal Flow	Tide Times
28/11/19	08:30-11:30	Rising	High tide: 12:30
11/12/19	11:50-14:50	Ebbing	High tide: 10:50
12/12/19	12:30-15:30	Ebbing	High tide: 11:30
22/01/20	11:25-14:25	Ebbing	Low tide: 15:30
23/01/20	12:15-15:15	Ebbing	Low tide: 16:15
12/02/20	09:50-12:50	Rising	High tide: 13:50
19/03/20	10:00-13:00	Ebbing	Low tide: 14:00
16/09/20	07:39-10:39	Rising	High tide: 11:39
21/10/20	11:34-14:34	Rising	High tide: 15:22

Relative Abundance and Species Distribution

- 2.1.8 The numbers and locations of all waterbirds² visible from each vantage point were mapped every 30 minutes throughout the duration of each survey in order to determine the abundance and distribution of birds across a range of tidal states. A separate datasheet and field map were used for each count. Where flocks of birds were present, the location of each flock was recorded on the field map at the approximate central point. Bird flyovers and flypasts were also recorded on field maps and datasheets. However, as these do not represent birds that are using the study area for any behaviours other than transit, these are not counted within the relative abundance or distribution figures presented in this report.
- 2.1.9 If disturbance events were noted during counts (see below), then the focus switched to the disturbance event with the count resuming once the event had concluded.

Flock Behaviours

- 2.1.10 There were four primary flock behaviours observed in all species. These behaviours are listed below together with their definitions:
- ▲ Foraging – Obvious feeding behaviours such as searching in flight above the water, diving for prey, searching along the shore on foot and probing the substrate for prey.
 - ▲ Loafing – Idle flying behaviour not connected with feeding or travelling in any specific direction.
 - ▲ Roosting – Resting on the water, shoreline or rocky outcrops.
 - ▲ Maintenance – Preening, bathing, drying of feathers.
- 2.1.11 The behaviours of each individual bird or flock of birds were recorded as such during each count in order to provide an indication of how birds use the study area.

Disturbance Events and Responses

- 2.1.12 During each survey period, all potentially disturbing events visible from the survey point were recorded, including those where no evidence of disturbance of waterbirds was observed.
- 2.1.13 Potential disturbance events that may have affected the accuracy of each count included:
- ▲ Walkers;

² The term 'waterbirds' is defined as birds that are ecologically dependent on wetlands (Ramsar Convention, 1971) and is synonymous with waterfowl (Wetlands International, 2012).

- ▲ Dogs;
- ▲ Anglers;
- ▲ Bait Diggers;
- ▲ Shell-Fishers;
- ▲ Vehicles;
- ▲ Unpowered Boats;
- ▲ Powered Boats; and
- ▲ Other.

2.1.14 The 'other' category included any potential anthropogenic disturbance events that could not be attributed to one of the other categories. Examples might include people on stand-up paddleboards or kayaks, etc. The nature of each 'other' disturbance event was recorded on each occasion.

2.1.15 For each potential disturbance event the following information was collected on the same recording form as the bird numbers (Appendix A.3):

- ▲ Duration of disturbance; and
- ▲ Disturbance response (where relevant) as follows:
 - Weak – birds move slightly away from disturbance but continue their behaviour;
 - Moderate – birds move to another part of the study area, may return to original position;
 - High – birds move out of the study area completely and are not observed returning.

2.1.16 The approximate distance at which each reaction took place and, where possible, the approximate distance to which birds walked/swam/flew was also recorded. Distances were estimated by eye using the known location of specific features to assist in distance estimation. Where relevant and where possible, the time at which flushed birds returned to the area of disturbance and/or the time at which birds continued the activity they were engaged in prior to the disturbance event, e.g. foraging, was also recorded. However, this was not consistently achieved for practical reasons (i.e. attention was diverted to recording other disturbance events or undertaking half-hourly counts).

Survey Limitations

- 2.1.17 The IWeBS methodology states that winter surveys should be carried out once a month between September and March. However, the commencement of the surveys in 2019 was unavoidably delayed until November and as such, surveys were initially carried out between November 2019 and March 2020, with survey effort doubled in December and January to compensate for the late start date. Surveys were subsequently undertaken during the months of September and October 2020. It is generally regarded as good practice to avoid splitting survey visits across different season. However, in this case, given the habitats present and given that the surveys relate to non-breeding birds, for which abundance and distribution data are unlikely to vary significantly between years, the timing of the survey visits is not likely to have significantly affected the results.

2.2 Data Analysis

- 2.2.1 On completion of the field surveys waterbird count data were digitised and entered into ArcGIS (version 10.5.1). Species distribution and relative abundance across the entire survey season were mapped for each vantage point using proportional symbology, i.e. the numbers of each species recorded during each count are presented in proportion to one another using circular symbols increasing in size, thus illustrating the relative abundance and distribution of species usage of the study area across the entire survey season. Maps are presented for each species in Figures 2-1 to 2-26 and 3-1 to 3-31 for VP1 and VP2 respectively.
- 2.2.2 In order to provide some context to the current survey data relative to national species populations, the peak count for each species, from each VP location, on each survey date (i.e. the peak count recorded on any one of the six half-hourly counts) has been identified, allowing comparison with the most recently available 5-year peak species counts (2011/12 to 2015/16) recorded at I-WeBS sites supporting waterbird numbers of national importance (Lewis *et al*, 2019). Given that the IWeBS dataset covers a five-year period, it is acknowledged that there are some limitations in the direct comparability of these two datasets. As such, a degree of caution is warranted when making comparisons in numbers. However, by comparing the peak counts for each species between the two datasets, some context in numbers of birds using the study area can be gleaned relative to the national population.
- 2.2.3 Summary disturbance data recorded at each VP are presented in this report in order to provide information regarding existing levels of disturbance within the study area. However, the detailed analysis of disturbance data was outside the scope of this study and as such, it was not deemed necessary to map disturbance events and responses within the GIS.

3 Results

3.1 Field Survey

Relative Abundance and Species Distribution

- 3.1.1 The relative abundance and the distribution of individual species recorded within the study area are shown in Figures 2-1 to 2-26 and 3-1 to 3-31 for VPs 1 and 2 respectively. These figures illustrate how the various species tend to use the site across the survey season. The figures are arranged taxonomically in order to best illustrate any taxonomic variations or similarities in site usage by species assemblages. Count data for each individual count on each date (six counts per survey date) are provided in Appendix A.3.
- 3.1.2 Overall, these figures show that the majority of waterbird taxa such as gulls, wildfowl, divers, cormorants and shags were recorded on or over the water offshore out to 1km. As expected, wader species such as oystercatchers, ringed plover and greenshank tended to be observed foraging along the water's edge. The shoreline was less utilised by waterbirds owing to its narrow foreshore and absence of a strand, with the exception of the mouth of the Shanganagh River, which enters the sea approximately 200m to the north of VP2. Small to medium sized flocks of gulls and waders (c. n = 2-40+) were recorded foraging in this area throughout the survey season.

Peak Count Data

- 3.1.3 Table 4 and Table 5 show, for VP1 and VP2 respectively, the peak counts of each waterbird species recorded, for each survey date, throughout the survey period. Table 4 and Table 5 also show the proportional frequency of observation for each species, i.e. the proportion of half-hourly counts on which each species was recorded, in order to show how regularly each species uses the survey area.

Table 4 - Peak counts of waterbird species recorded from VP1 on each survey date, the number of half-hourly counts in which each species was observed and the proportional frequency of those observations (i.e. the proportion of half-hourly counts on which they were recorded – n=54)

Species	No. of Counts in Which Species Observed	Proportional Frequency of Observations	Peak Counts								
			28/11/19	10/12/19	11/12/19	22/01/20	23/01/20	12/02/20	18/03/20	25/09/20	06/10/20
Mute Swan <i>Cygnus olor</i>	1	2%	11	-	-	-	-	-	-	-	-
Brent Goose <i>Branta bernicla</i>	1	2%								1	-
Common Scoter <i>Melanitta nigra</i>	6	11%	22	13	-	-	-	-	-	-	-
Red-breasted Merganser <i>Mergus serrator</i>	7	13%	-	2	-	-	-	-	2	4	2
Red-throated Diver <i>Gavia stellata</i>	26	48%	2	2	-	4	-	1	2	2	2
Great Northern Diver <i>Gavia immer</i>	10	19%	1	1	-	1	-	2	-	-	2
Great Crested Grebe <i>Podiceps cristatus</i>	17	31%	5	3	-	2	-	-	-	4	2
Shag <i>Phalacrocorax aristotelis</i>	41	76%	4	3	4	14	3	-	4	4	3
Cormorant <i>Phalacrocorax carbo</i>	21	39%	1	1	3	6	-	3	3	1	1
Grey Heron <i>Ardea cinerea</i>	6	11%	-	-	2		1	2	1	1	-
Oystercatcher <i>Haematopus ostralegus</i>	14	26%	-	11	-	17	7	6	6	-	-

Species	No. of Counts in Which Species Observed	Proportional Frequency of Observations	Peak Counts								
			28/11/19	10/12/19	11/12/19	22/01/20	23/01/20	12/02/20	18/03/20	25/09/20	06/10/20
Ringed Plover <i>Charadrius hiaticula</i>	4	7%	-	-	33	-	1	-	5	-	10
Sanderling <i>Calidris alba</i>	1	2%	-	9	-	-	-	-	-	-	-
Greenshank <i>Tringa nebularia</i>	1	2%	-	-	-	2	-	-	-	-	-
Turnstone <i>Arenaria interpres</i>	12	22%	9	14	-	16	2	-	15	-	-
Mediterranean Gull <i>Ichthyaeus melanocephalus</i>	8	15%	3	-	-	-	-	-	-	5	-
Black-headed Gull <i>Chroicocephalus ridibundus</i>	43	80%	184	16	5	38	7	-	6	32	32
Common Gull <i>Larus canus</i>	15	28%	-	-	-	-	-	-	2	8	6
Black-legged Kittiwake <i>Rissa tridactyla</i>	1	2%	-	-	-	4	-	-	-	-	-
Lesser Black-backed Gull <i>Larus fuscus</i>	2	4%	-	-	1	-	7	-	-	-	-
Herring Gull <i>Larus argentatus</i>	29	54%	11	2	1	29	4	-	6	24	11
Greater Black-backed Gull <i>Larus marinus</i>	33	61%	5	3	-	8	-	-	2	4	3
Unidentified Gull	4	7%	-	-	80	-	-	-	-	-	-

Species		No. of Counts in Which Species Observed	Proportional Frequency of Observations	Peak Counts								
				28/11/19	10/12/19	11/12/19	22/01/20	23/01/20	12/02/20	18/03/20	25/09/20	06/10/20
Sandwich Tern	<i>Thalasseus sandvicensis</i>	2	4%	-	-	-	-	-	-	-	18	-
Common Guillemot	<i>Uria aalge</i>	12	22%	-	3	-	8	-	-	4	-	2
Unidentified Auk		2	4%	-	-	-	-	-	-	-	-	4
Black Guillemot	<i>Cephus grylle</i>	17	31%	2	-	-	2	-	-	4	4	2

Table 5 - Peak counts of waterbird species recorded from VP2 on each survey date the number of half-hourly counts in which each species was observed and the proportional frequency of those observations (i.e. the proportion of half-hourly counts on which they were recorded – n=54)

Commented [MG(1)]: add ref to VP2

Species	No. of Counts in Which Species Observed	Proportional Frequency of Observations	Peak Counts								
			28/11/19	11/12/19	12/12/19	22/01/20	23/01/20	12/02/20	19/03/20	16/09/20	21/10/20
Common Scoter <i>Melanitta nigra</i>	1	2%	-	14	-	-	-	-	-	-	-
Red-breasted Merganser <i>Mergus serrator</i>	12	22%	-	-	-	-	-	2	2	2	2
Red-throated Diver <i>Gavia stellata</i>	18	33%	-	2	-	4	-	2	2	-	2
Great Northern Diver <i>Gavia immer</i>	4	7%	-	1	-	-	-	-	1	-	2
Great Crested Grebe <i>Podiceps cristatus</i>	11	20%	-	-	-	-	-	2	-	7	2
Northern Fulmar <i>Fulmarus glacialis</i>	3	6%	-	-	-	-	-	-	1	1	-
Gannet <i>Morus bassanus</i>	1	2%	-	-	-	-	-	-	-	-	2
Shag <i>Phalacrocorax aristotelis</i>	44	81%	4	9	2	7	1	3	3	4	5
Cormorant <i>Phalacrocorax carbo</i>	18	33%	-	-	-	-	1	1	2	1	2
Grey Heron <i>Ardea cinerea</i>	3	6%	-	-	1	-	-	2	-	1	-

Species	No. of Counts in Which Species Observed	Proportional Frequency of Observations	Peak Counts								
			28/11/19	11/12/19	12/12/19	22/01/20	23/01/20	12/02/20	19/03/20	16/09/20	21/10/20
Oystercatcher <i>Haematopus ostralegus</i>	21	39%	10	7	13	11	19	5	11	12	3
Ringed Plover <i>Charadrius hiaticula</i>	6	11%	-	-	60	30	6	12	-	-	-
Knot <i>Calidris canutus</i>	3	6%	-	22	-	-	-	-	-	-	-
Redshank <i>Tringa totanus</i>	1	2%	-	-	-	-	-	-	-	3	-
Greenshank <i>Tringa nebularia</i>	4	7%	-	-	-	-	-	-	2	2	2
Bar-tailed Godwit <i>Limosa lapponica</i>	1	2%	-	-	-	-	-	-	-	-	7
Turnstone <i>Arenaria interpres</i>	14	26%	9	9	-	-	14	10	7	11	-
Little Gull <i>Hydrocoloeus minutus</i>	2	4%	-	2	-	-	-	-	-	-	-
Mediterranean Gull <i>Ichthyaetus melanocephalus</i>	8	15%	3	1	-	-	-	1	-	2	-
Black-headed Gull <i>Chroicocephalus ridibundus</i>	42	78%	120	100	30	25	42	27	3	19	11
Common Gull <i>Larus canus</i>	7	13%	-	-	-	-	6	3	2	2	2

Species	No. of Counts in Which Species Observed	Proportional Frequency of Observations	Peak Counts								
			28/11/19	11/12/19	12/12/19	22/01/20	23/01/20	12/02/20	19/03/20	16/09/20	21/10/20
Black-legged Kittiwake <i>Rissa tridactyla</i>	2	4%	-	11	-	-	-	-	-	-	-
Lesser Black-backed Gull <i>Larus fuscus</i>	15	28%	2	5	12	12	7	-	-	-	-
Herring Gull <i>Larus argentatus</i>	38	70%	10	18	-	16	27	12	4	26	18
Greater Black-backed Gull <i>Larus marinus</i>	26	48%	5	4	8	8	11	2	1	3	2
Unidentified Gull	4	7%	-	-	10	17	-	-	-	-	-
Sandwich Tern <i>Thalasseus sandvicensis</i>	3	6%	-	-	-	-	-	-	-	6	-
Common Tern <i>Sterna hirundo</i> / Arctic Tern <i>Sterna paradisaea</i>	1	2%	-	-	-	-	-	-	-	3	-
Common Guillemot <i>Uria aalge</i>	8	15%	-	2	-	2	-	-	4	6	1
Razorbill <i>Alca torda</i>	4	7%	-	-	-	-	-	-	-	3	-
Unidentified Auk	1	2%	-	-	-	-	-	-	-	-	6
Black Guillemot <i>Cepphus grylle</i>	13	24%	2	2	-	-	-	2	2	2	2

- 3.1.4 There were at least 25 species of waterbird recorded from VP1 and at least 30 species recorded from VP2 throughout the survey period. As expected, in general, *laridae* (gull species) and *phalacrocoracidae* (shags and cormorants) were the most frequently occurring taxa using the study area.
- 3.1.5 Black-headed gull was recorded during 80% of counts from VP1 throughout the season, making it the most frequently recorded species recorded at VP1 and the second most frequent species at VP2, recorded 78% of the time. Black-headed gull showed peak counts of 184 and 120 individuals at VP1 and VP2 respectively, both recorded in November. Shag was the most frequently recorded species at VP2, present in 81% of counts, while it was the second most frequent species at VP1 (76%) with the peak counts of shag during any survey period being 14 at VP1 and 9 at VP2, recorded in January and December respectively. The only other species recorded during >50% of counts were herring gull (recorded during 54% of counts from VP1 and 70% of counts from VP2, with peak counts of 29 and 27 respectively) and great black-backed gull (recorded during 61% of counts from VP1 and 48% of counts from VP2 with peak counts of 8 and 11 respectively).
- 3.1.6 Red-throated diver was the next most frequently recorded species with birds recorded during 48% of counts from VP1 and 33% of counts from VP2, but was only recorded in low numbers with a peak count of 4 recorded at both VPs.
- 3.1.7 Excluding gulls, the highest peak count for any species at both VPs was ringed plover (VP1: n=33; VP2: n=60). However, when we inspect the frequency of this species (Table 4 and Table 5), the data shows that at VP1, ringed plover were only recorded during 7% of the counts during the survey period, with the peak count of 33 recorded once in December. Similarly, at VP2 ringed plover was only recorded during 11% of counts with the peak count of 60 also recorded in December. These data show that although some peak counts of ringed plover were relatively high, the frequency of their occurrence within the study area was low.
- 3.1.8 All other species were recorded in frequencies of less than 21 times (39%) over the entire season with peak counts below 25 at both VPs.

Flock Behaviours

- 3.1.9 Foraging was the most frequent behaviour recorded throughout the entire survey season at each vantage point (VP1: 53%; VP2: 48%;). Loafing was the next most frequent behaviour observed, followed by roosting and maintenance respectively. Chart 1 and Chart 2 provide illustrative representations of these proportions.

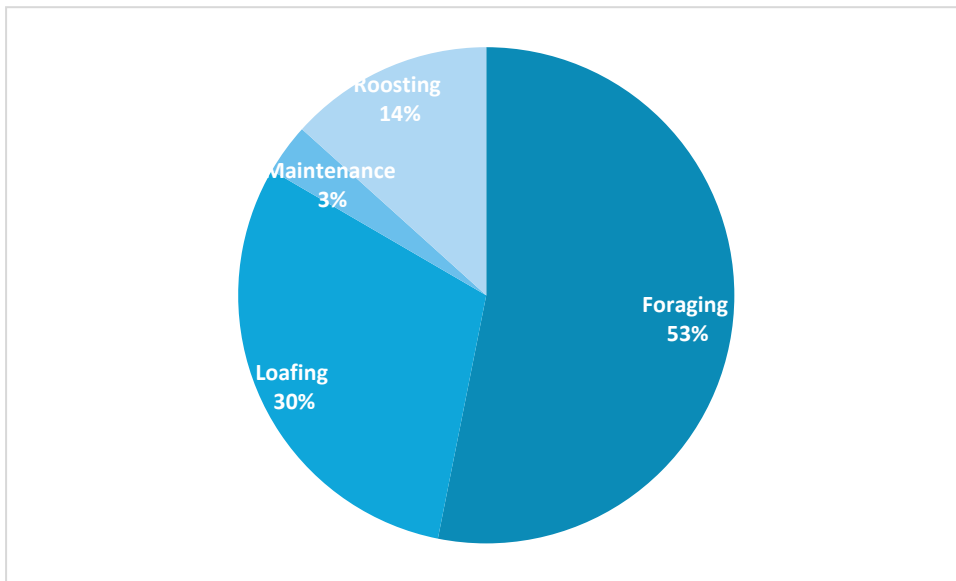


Chart 1 - Proportion of observations of four primary behaviours by all species recorded from VP1 throughout the survey season

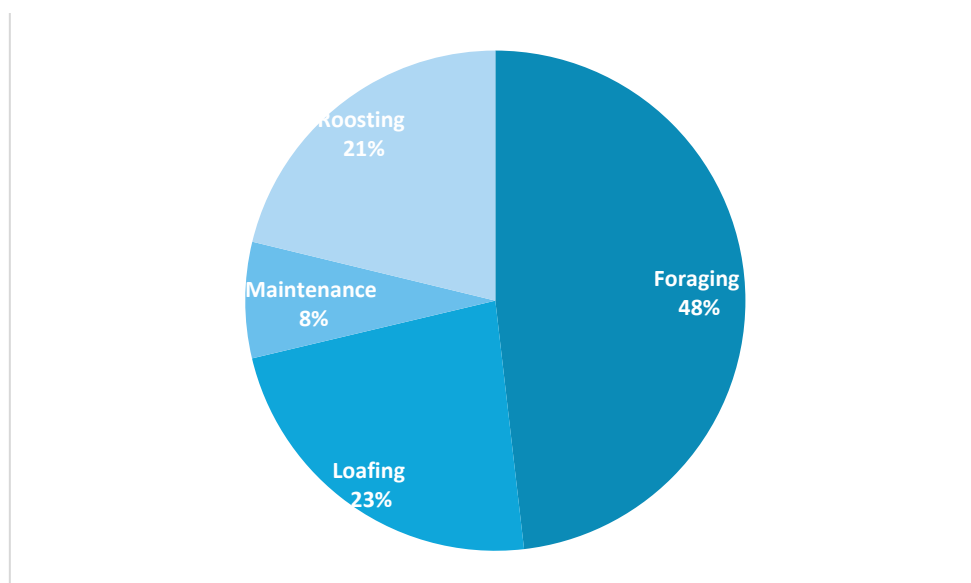


Chart 2 - Proportion of observations of four primary behaviours by all species recorded from VP2 throughout the survey season

3.1.10 It must be noted that some species would not have displayed all of these behaviours and some species may have displayed only one or two of these behaviours. The time spent engaged in each behaviour is also likely to vary by species. The behavioural data are presented for all species combined in order to provide an overall indication of site usage only.

Disturbance Events and Responses

3.1.11 A total of 83 disturbance events were logged over all surveys at both VPs throughout the survey season (VP1: n = 32; VP2: n = 51). There were four disturbance types recorded. The number of disturbance events of each type recorded at each vantage point is provided in Table 6. Further details of each event are provided in Appendix A.3.

Table 6 - Number of disturbance events of each type recorded at each VP throughout the survey season

Disturbance Type	Vantage Point 1	Vantage Point 2	Total
Walkers with dogs	28	42	70
Walkers without dogs	2	3	5
Power boat	1	0	1
Other (stand-up paddle-boarder)	1	6	7
Total disturbance events	32	51	83

3.1.12 Walkers with dogs were the most frequently recorded source of disturbance recorded at both vantage points throughout the survey season (VP1: n = 28; VP2: n = 42). There was a higher number of walkers with dogs recorded at VP2 than at VP1. This may be attributed to the fact that there is a dog walking park located in Shanganagh Park which is adjacent to VP1 and as such, walkers were perhaps more likely to walk their dogs in the park than on the shoreline within the viewshed of VP1.

3.1.13 Oystercatcher was the species recorded as being most frequently disturbed throughout the survey season at both vantage points (VP1: n = 10 events; VP2: n = 23 events; see Appendix A.3 for data). This is most likely because it was the species most frequently recorded distributed along the shoreline (Figures 2-11 and 3-11), whereas many of the other species were primarily distributed over or on the water.

3.1.14 The strength of behavioural response to disturbance events by birds (all waterbird species combined) recorded from both VPs is provided in Table 7. Further details of each event are provided in Appendix A.3.

Table 7 - Strength of behavioural responses to disturbance events by birds recorded from both VPs throughout the survey season (all waterbird species combined)

Disturbance Type	No Response	Weak	Moderate	High	Total
Walkers with dogs	12	6	35	17	70
Walkers without dogs	0	0	4	1	5
Power boat	0	0	1	0	1

Disturbance Type	No Response	Weak	Moderate	High	Total
Other (stand-up paddle-boarder)	0	2	5	0	7
Total	12	8	45	18	83

3.1.15 The majority of behavioural responses to disturbance events were recorded as being moderate in strength, i.e. birds moved to another part of the site and may have returned to their original position later. Most of these moderate disturbance events were caused by walkers with dogs (n = 35). This disturbance type was also noted as being the source of the greatest number of high responses to disturbance events (n = 17), i.e. birds moved out of the study area completely and were not observed returning). There were only 6 responses to walkers with dogs which were recorded as being weak, i.e. birds moved slightly away from disturbance but continue their behaviour. There were 12 disturbance events relating to walkers with dogs which elicited no response, these all related to birds on the water or flying.

4 Discussion and Conclusions

4.1 Peak Count Data

4.1.1 Peak counts for each of the waterbird species which were recorded within the study area during the survey period are shown in Table 8. By way of providing context to the results of the current study, these data are presented alongside the most recent national non-breeding population data, i.e. the national five year mean peak count IWeBS data for the period 2011/12-2015/16 (Lewis *et al.*, 2019), where such data are available. The proportion of the national population recorded at each vantage point is also presented.

Table 8 - Peak counts of waterbird species recorded from VPs 1 and 2 across the survey period presented in relation to the most recent Republic of Ireland (ROI) non-breeding population (five year mean peak count 2011/12-2015/16) for each species (Lewis *et al.*, 2019) and the percentage of the ROI population recorded in the study area

Common Name	VP1 Peak Count	VP2 Peak Count	ROI Population (five year mean peak 2011/12-2015/16)	% of the ROI Population Recorded from VP1	% of the ROI Population Recorded from VP2
Mute Swan	11	-	7,032	0.2%	-
Brent Goose	1	-	30,295	0.003%	-
Common Scoter	22	14	10,607	0.2%	0.1%
Red-breasted Merganser	4	2	1,913	0.1%	0.1%
Red-throated Diver	4	4	657	0.6%	0.6%
Great Northern Diver	2	2	2,128	0.09%	0.09%
Great Crested Grebe	5	7	1,734	0.3%	0.4%
Northern Fulmar	-	1	No data	-	-
Gannet	-	2	No data	-	-
Shag	14	9	1,948	0.7%	0.5%
Cormorant	6	2	7,967	0.07%	0.03%
Grey Heron	2	2	1,943	0.1%	0.1%
Oystercatcher	17	19	42,875	0.04%	0.04%
Ringed Plover	33	60	10,545	0.3%	0.6%

Common Name	VP1 Peak Count	VP2 Peak Count	ROI Population (five year mean peak 2011/12-2015/16)	% of the ROI Population Recorded from VP1	% of the ROI Population Recorded from VP2
Knot	-	22	13,752	-	0.2%
Sanderling	9	-	7,572	0.1%	-
Redshank	0	3	16,812	-	0.02%
Greenshank	2	2	1,208	0.2%	0.2%
Bar-tailed Godwit	-	7	13,385	-	0.05%
Turnstone	16	14	6,296	0.3%	0.2%
Mediterranean Gull	5	3	439	1.1%	0.7%
Little Gull	-	2	25	-	8%
Black-headed Gull	184	120	57,892	0.3%	0.2%
Common Gull	8	6	30,216	0.03%	0.01%
Black-legged Kittiwake	4	11	No data	-	-
Lesser Black-backed Gull	7	12	20,832	0.03%	0.06%
Herring Gull	29	27	13,959	0.2%	0.2%
Great Black-backed Gull	8	11	4,392	0.2%	0.3%
Sandwich Tern	18	6	No data	-	-
Common Guillemot	8	6	No data	-	-
Razorbill	-	3	No data	-	-
Unidentified Auk	4	6	No data	-	-
Black Guillemot	4	2	No data	-	-

4.1.2 Although caution must be applied when comparing numbers from datasets which are not directly comparable, Table 8 indicates that the peak counts recorded from each VP represent considerably less than 1% of the national population for the vast majority of species recorded during the current survey.

- 4.1.3 There are two exceptions to this finding, namely little gull, for which numbers within the study area appear to represent 8% of the national population and Mediterranean gull, for which the numbers recorded from VP1 appear to represent 1.1% of the national population. However, Lewis *et al.* (2019) report that, although recording gulls during IWeBS counts is optional, comparisons of sites that have consistently opted to do so illustrates that there has undoubtedly been an increase in numbers of wintering little gull and Mediterranean gull in Ireland in recent years. They also report that it is not possible to determine a trend for either species in Ireland based on IWeBS data, due both to the fact that counting gulls is optional and that, in the case of little gull, the species is predominantly pelagic and so are not often seen from the coast (Lewis *et al.*, 2019). Thus, for little gull the mean national population is likely to be much greater than 25 and therefore the two birds recorded from VP2 are likely to represent much less than 8% of the national population. It is also noted that the species was recorded during one count only in December, which is likely to represent an irregular and random sighting rather than a record of conservation significance. For Mediterranean gull, the national population is growing rapidly and given that gulls are not counted at all IWeBS sites the current national population is likely to be greater than the figure of 439 provided by Lewis *et al.* (2019). The peak count of five recorded during the surveys is therefore likely to represent less than 1% of the national population, although these birds are likely to form part of a nationally important population wintering within the wider Dublin Bay area.
- 4.1.4 There are several species for which national wintering population data are unavailable, namely northern fulmar, gannet, kittiwake, Sandwich tern, common guillemot, razorbill and black guillemot. Sandwich tern is a summer migrant to Ireland so is not covered by the IWeBS data while The remaining species are largely pelagic in winter, with only rare occurrences along the coast outside of the breeding season. As such, it is likely that accurate national wintering population estimates for these species are not possible. This is also evident in the very low peak counts and frequencies of these species recorded during the current study and as such, these numbers are unlikely to be of national importance.
- 4.1.5 Based on Table 8, it can be concluded that numbers of all waterbird species recorded from each VP during the winter survey season 2019/20 are not of national importance.

4.2 Flock Behaviours

- 4.2.1 Foraging was the most frequent behaviour recorded from each vantage point (VP1: 53% and VP2: 48%;), this applies to shorebirds and species foraging in or over the water. Loafing was the next most frequent behaviour observed, followed by roosting and maintenance respectively. The relatively low proportion of birds roosting (VP1: 14% and VP2: 21%), the majority of which relate to gulls, indicates that there are no sites within the study area which are regularly used for roosting by significant numbers of shorebirds.

4.3 Disturbance Events and Responses

- 4.3.1 By far the most frequently recorded source of disturbance was from walkers with dogs, followed by walkers without dogs, stand-up paddle-boarders and a motorboat. Disturbance events relating to walkers with dogs were recorded in every month apart from November 2019. Boat-related activities were only recorded on one occasion and stand-up paddle boarders were recorded on seven occasions.
- 4.3.2 In summary, of the 83 disturbance events, 45 led to a moderate response and 18 led to a high response, mostly affecting birds using the foreshore.
- 4.3.3 Although there are no data available to compare the survey data against, these results suggest that anthropogenic disturbance of waterbirds using the foreshore within the study area is currently moderate to high.

References

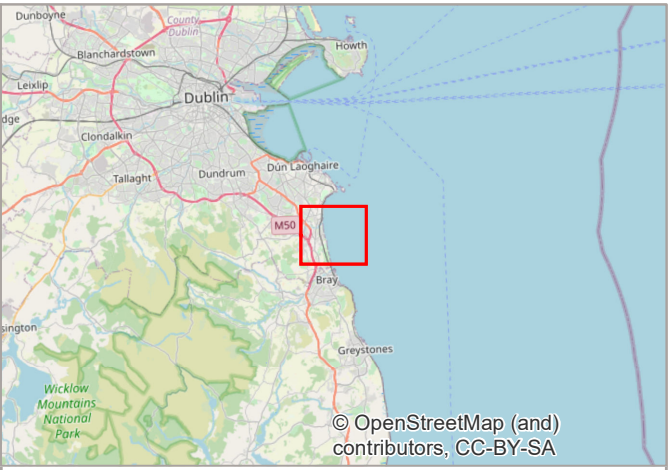
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Appendix A

Appendix A.1 - Figures



- LEGEND**
- Potential Landfall Location
 - Potential Subsea Cable Route Corridor
 - - - Study Area
 - ① Vantage Point

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PROJECT TITLE
***DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020***

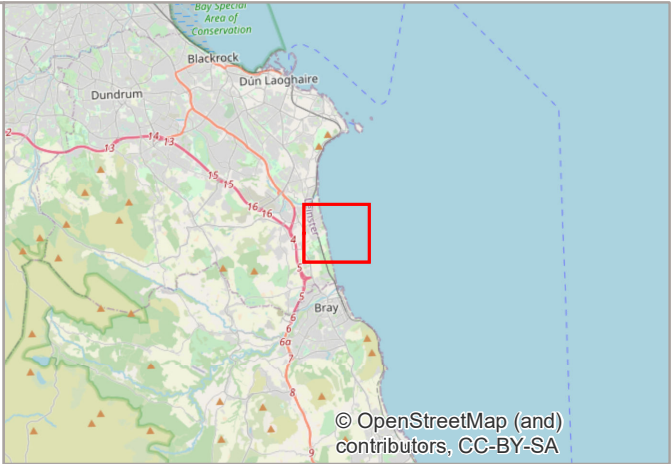
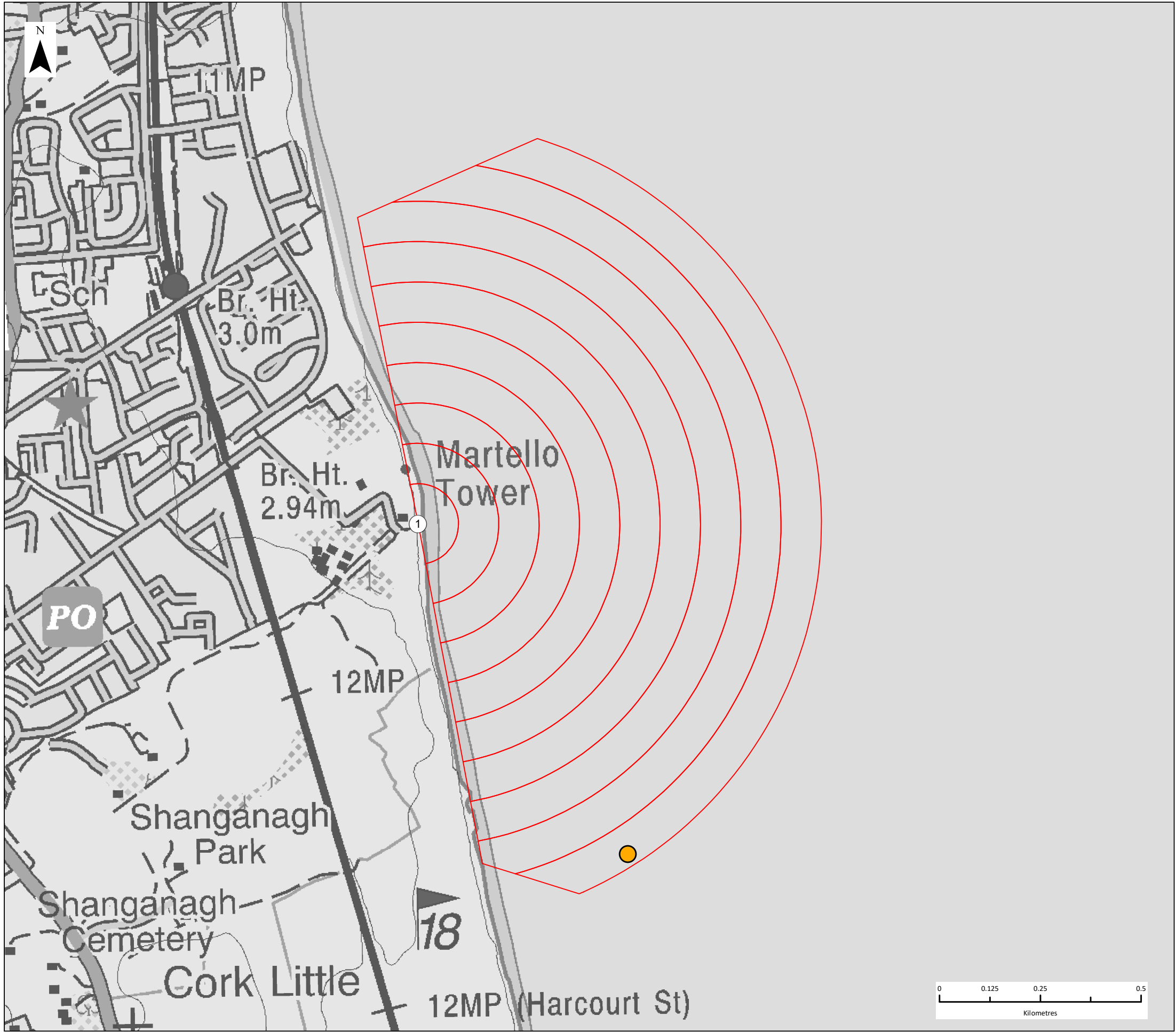
DRAWING TITLE
**Figure 1: Study Area Including Vantage Points, Potential
Subsea Cable Routes and Landfall Locations**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	RE	SI

DRAWING NUMBER:
02036.00590.27.3.0

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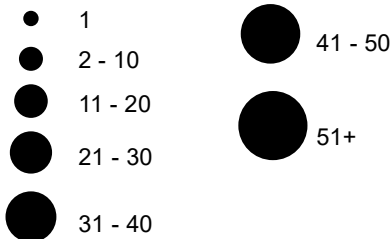


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
06/10/2020

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BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

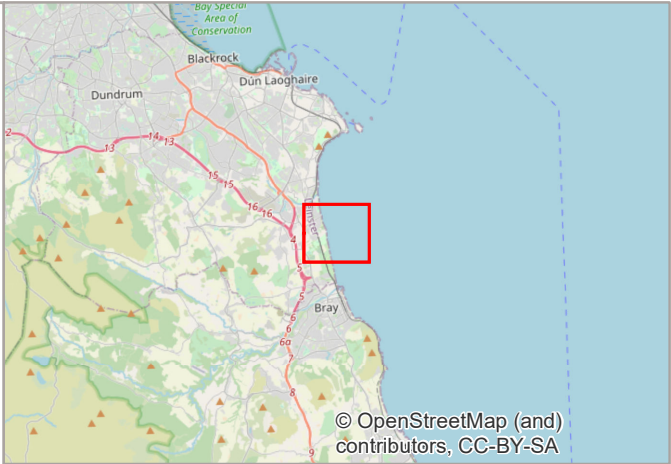
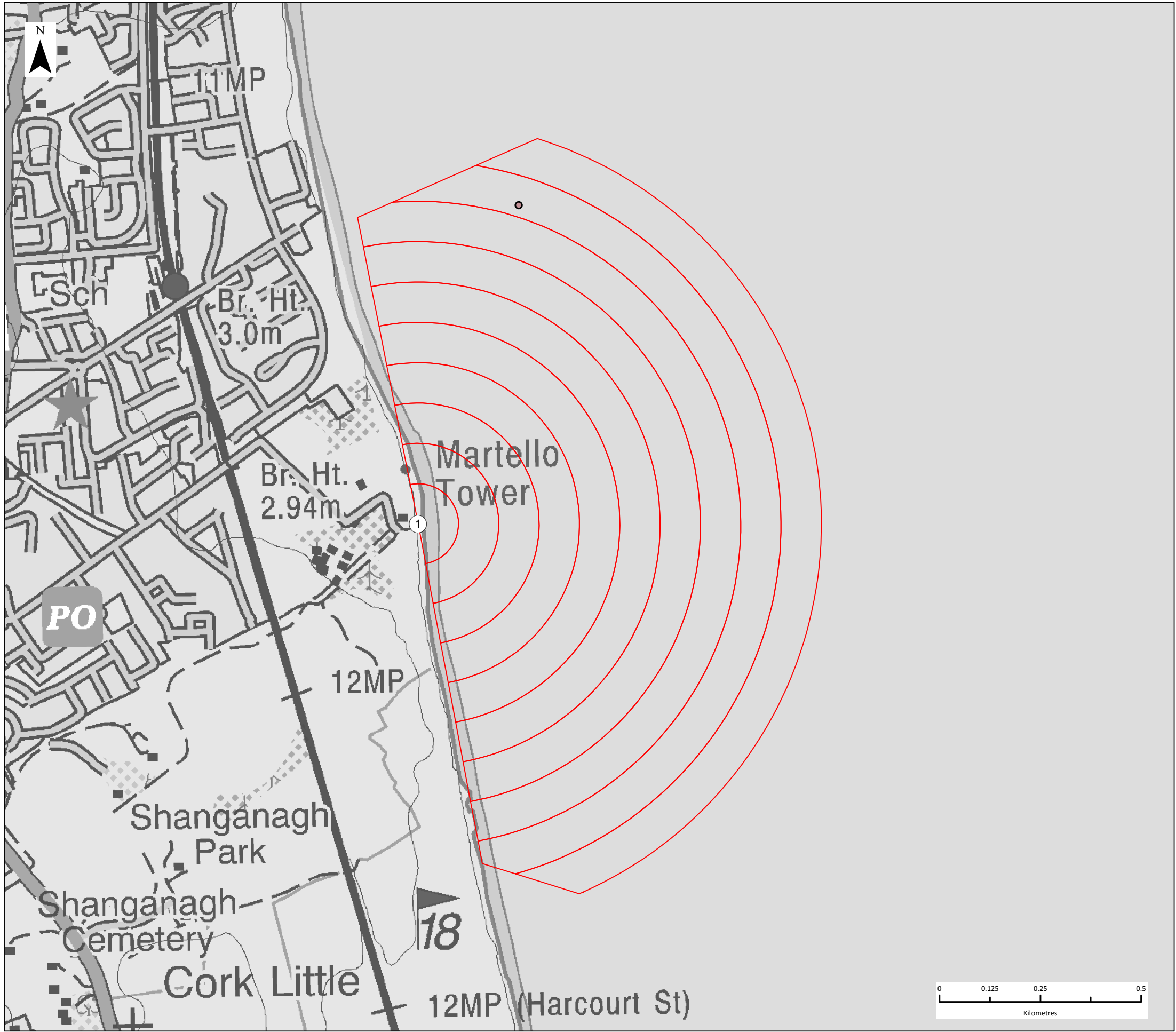
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**Figure 2.1: Relative Abundance and Distribution
of Mute Swan within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
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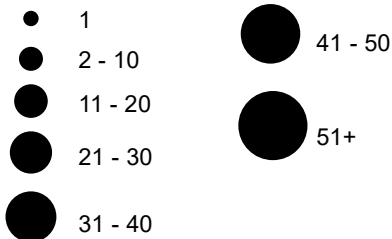


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
06/10/2020

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BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

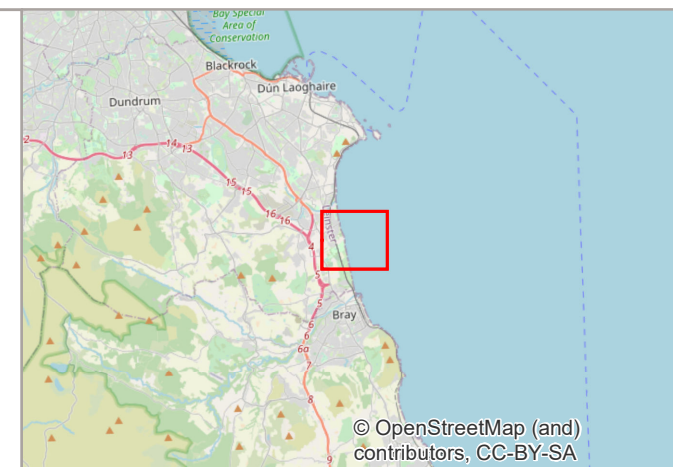
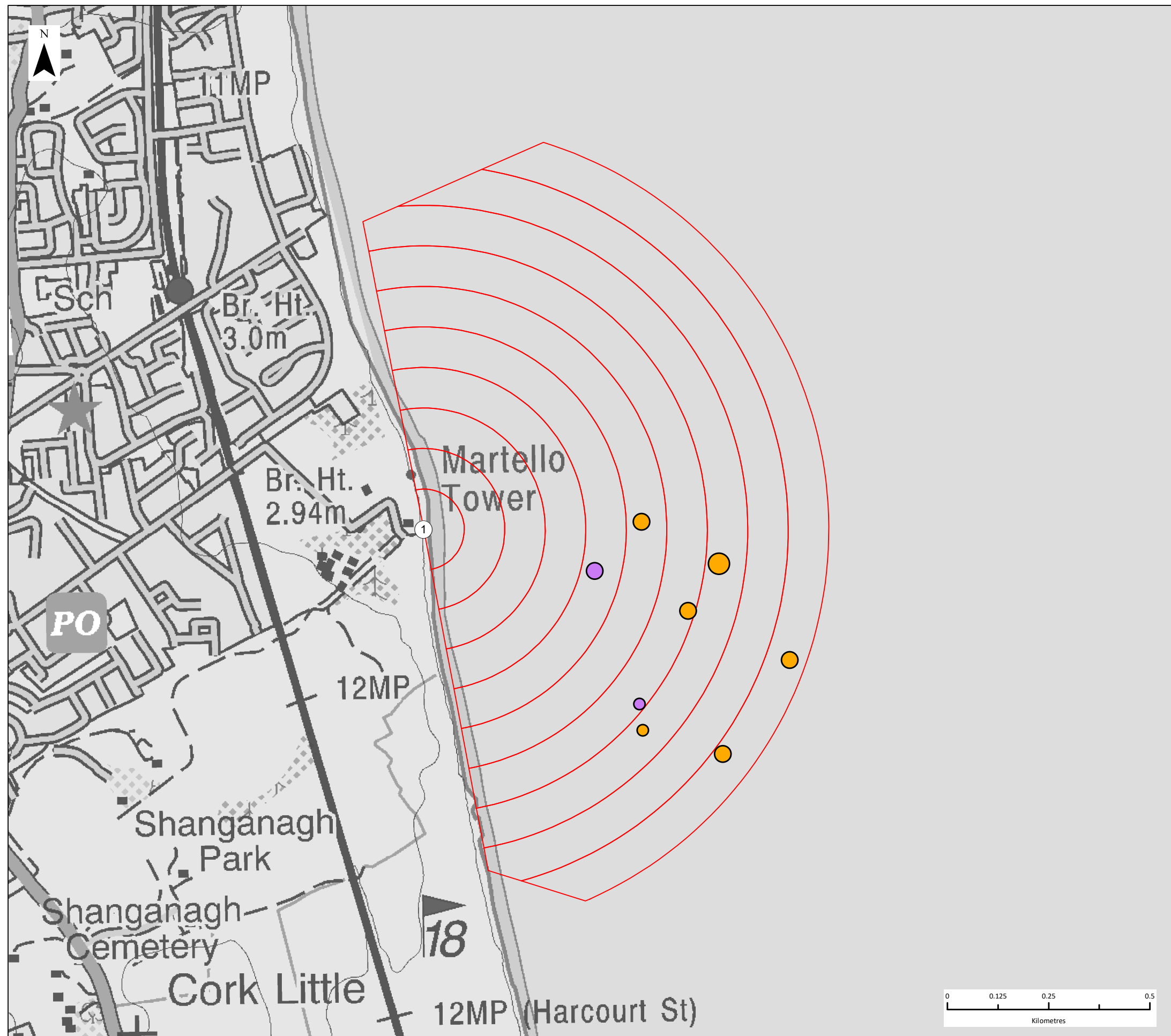
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**Figure 2.2: Relative Abundance and Distribution
of Brent Goose within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
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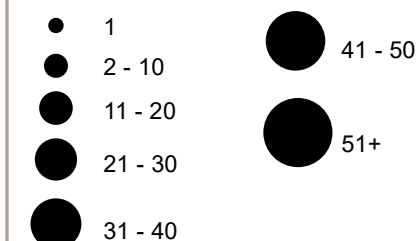


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

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10/12/2019
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22/01/2020
23/01/2020
18/03/2020
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**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

DRAWING TITLE
**Figure 2.3: Relative Abundance and Distribution
of Common Scoter within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

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1	26/05/2021	First Issue	AGB	JS

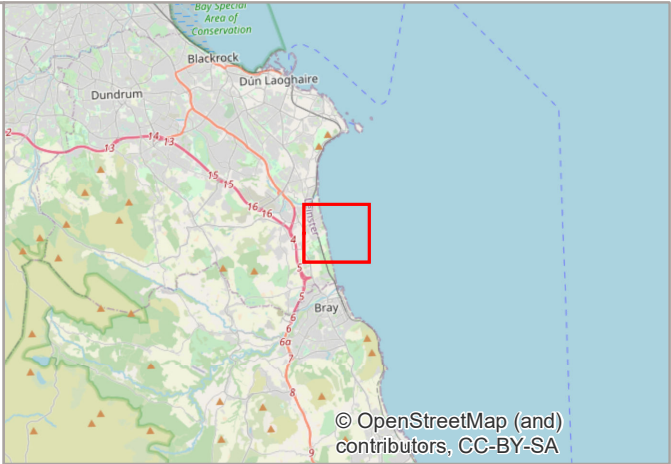
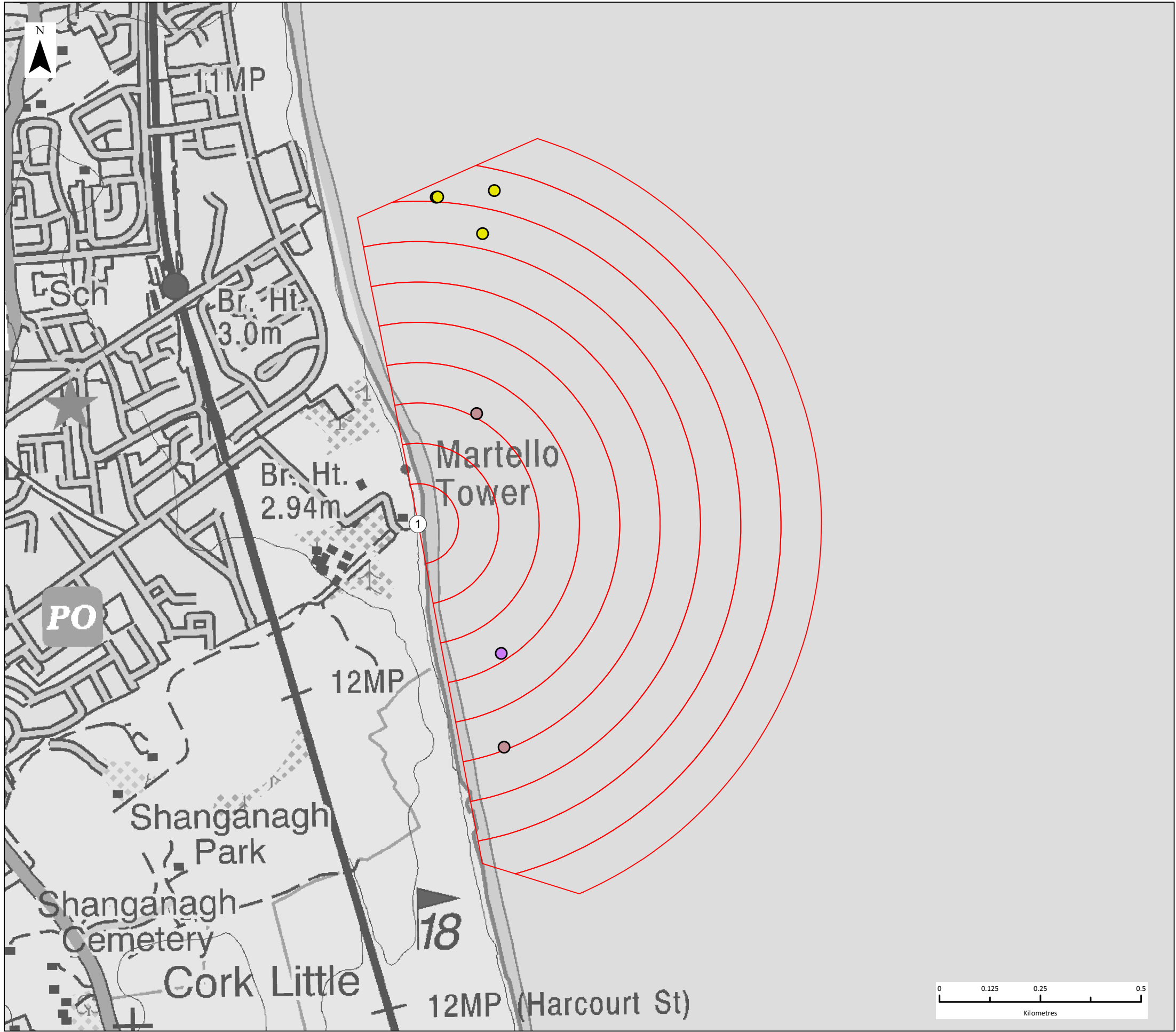
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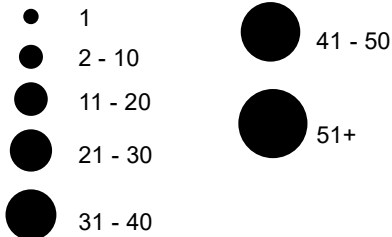


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

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10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
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BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

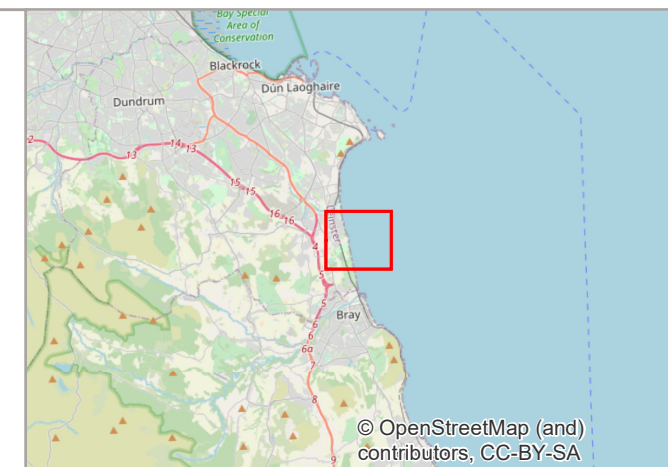
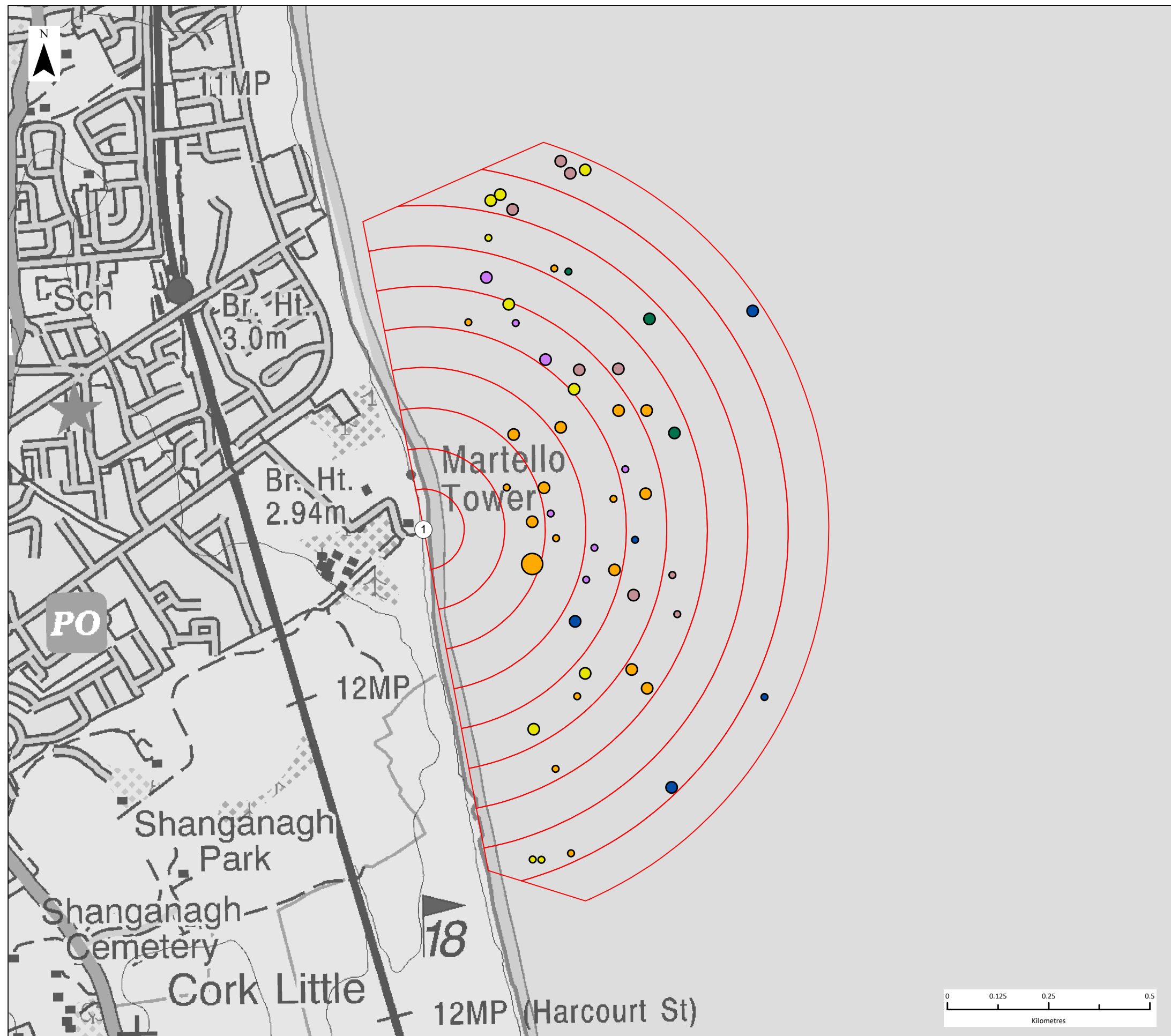
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**Figure 2.4: Relative Abundance and Distribution
of Red-breasted Merganser within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

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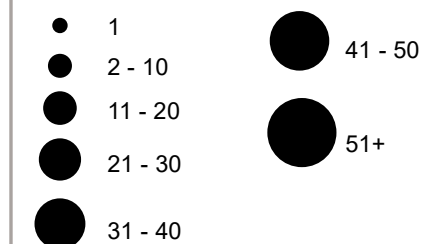


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
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**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
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DRAWING TITLE
**Figure 2.5: Relative Abundance and Distribution
of Red-throated Diver within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
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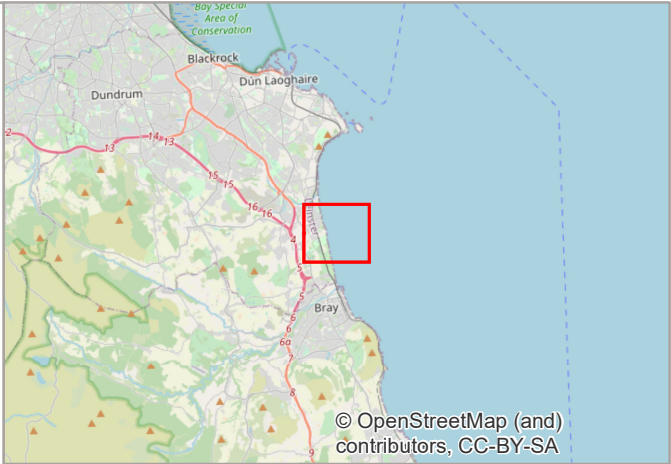
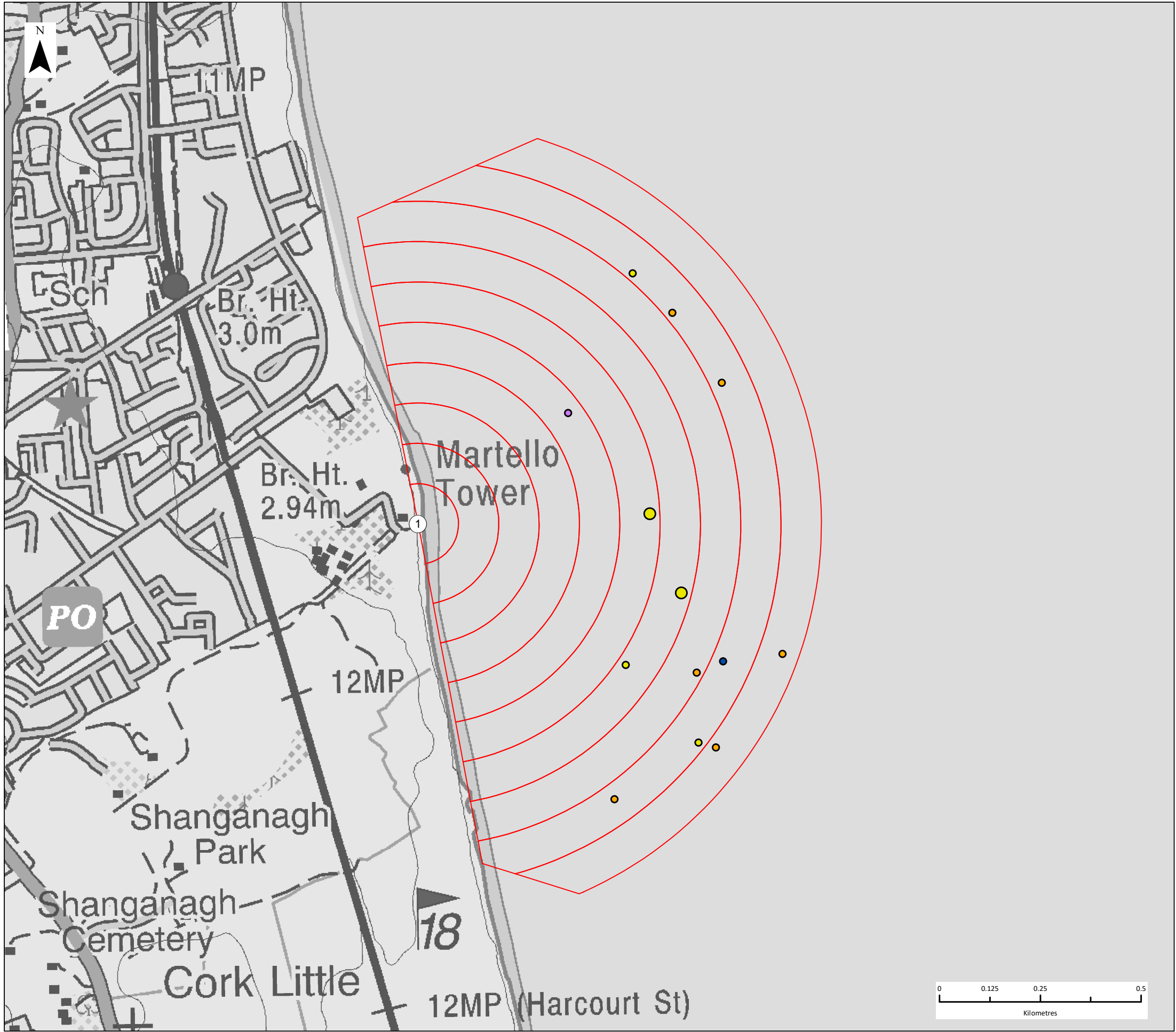
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SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N

dublinarray

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GoBe



LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)

● 1	● 41 - 50
● 2 - 10	● 51+
● 11 - 20	
● 21 - 30	
● 31 - 40	

Survey Date

28/11/2019	18/03/2020
10/12/2019	25/09/2020
11/12/2019	06/10/2020
22/01/2020	
23/01/2020	

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PROJECT TITLE
*DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020*

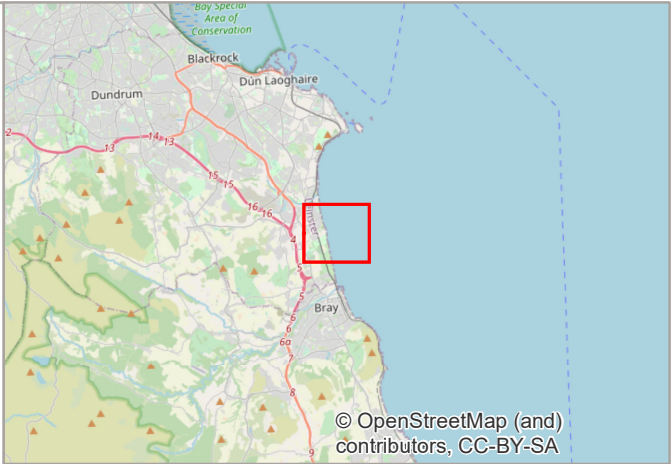
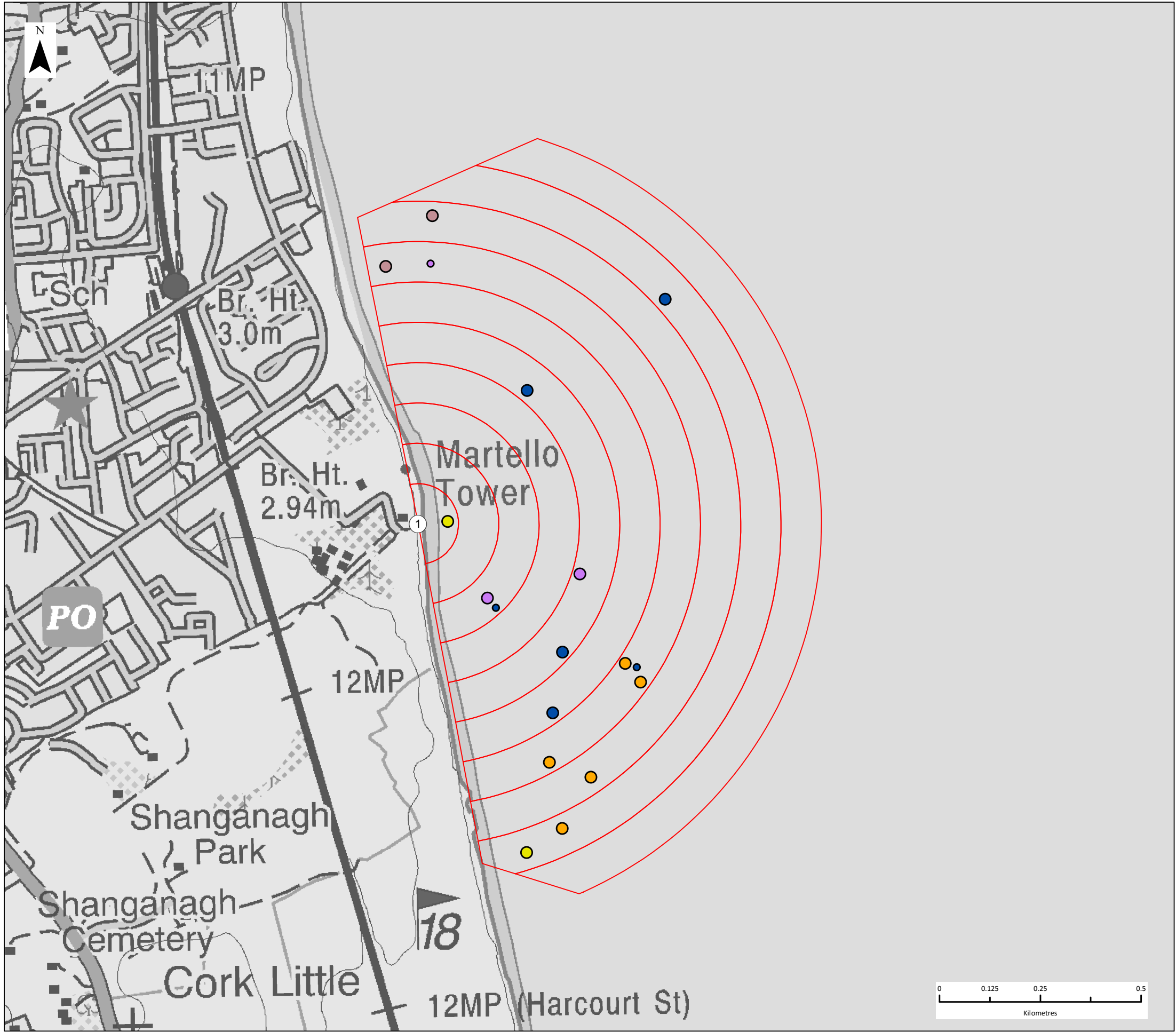
DRAWING TITLE
**Figure 2.6: Relative Abundance and Distribution
of Great Northern Diver within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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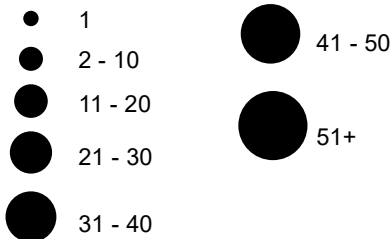


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
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PROJECT TITLE
*DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020*

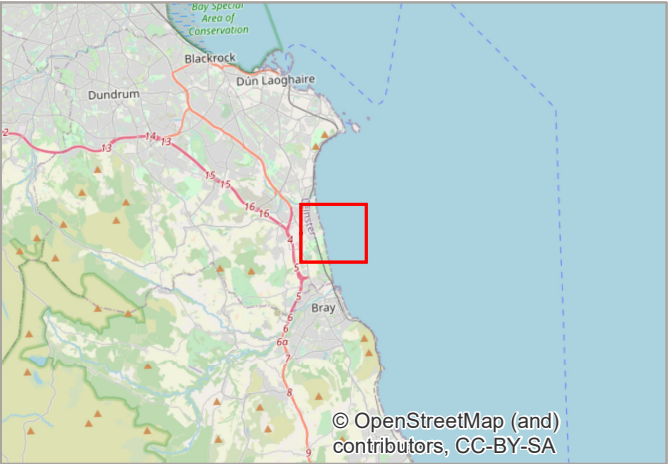
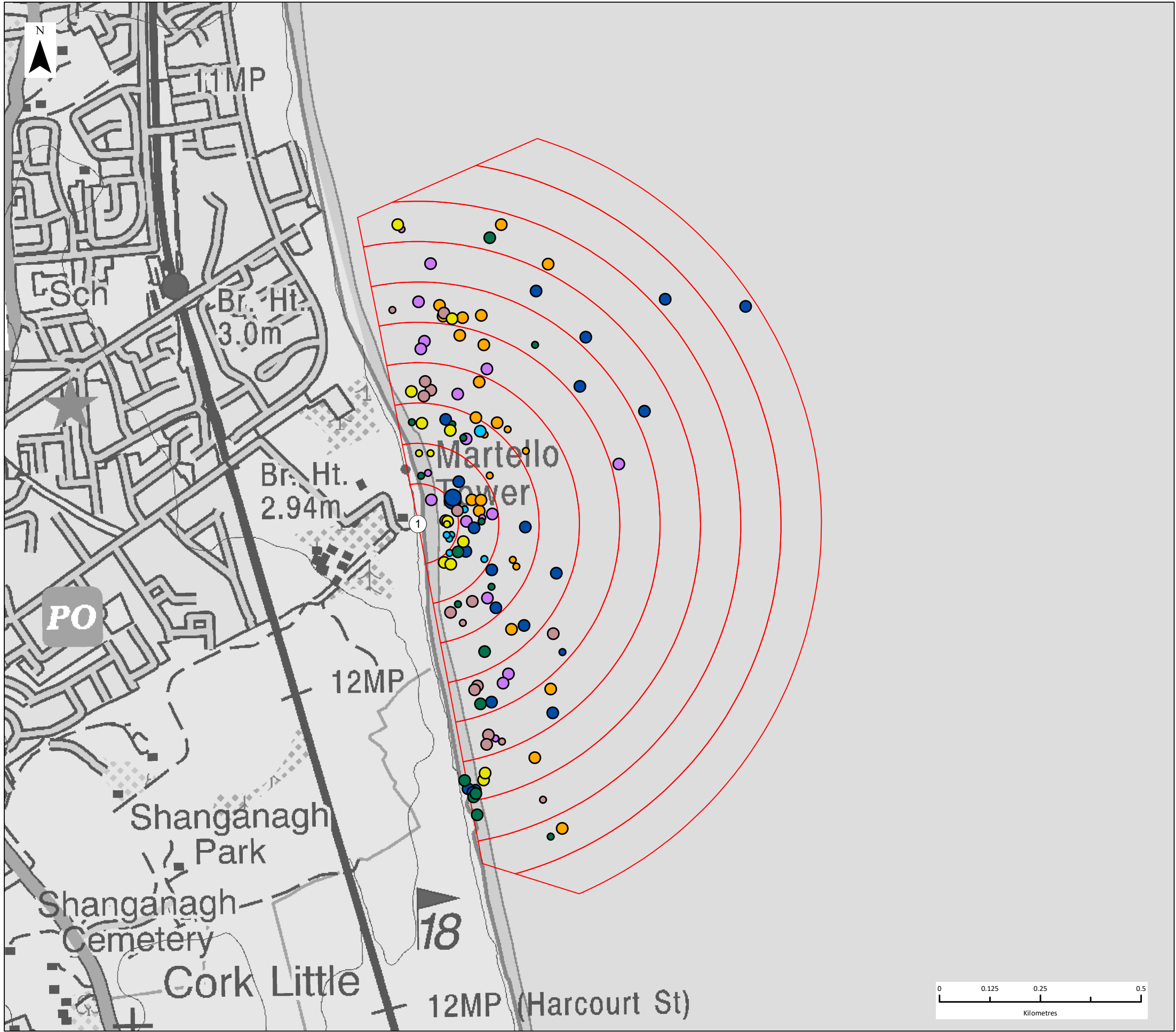
DRAWING TITLE
**Figure 2.7: Relative Abundance and Distribution
of Great Crested Grebe within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N





LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)

● 1	● 41 - 50
● 2 - 10	● 51+
● 11 - 20	
● 21 - 30	
● 31 - 40	

Survey Date

28/11/2019	18/03/2020
10/12/2019	25/09/2020
11/12/2019	06/10/2020
22/01/2020	
23/01/2020	

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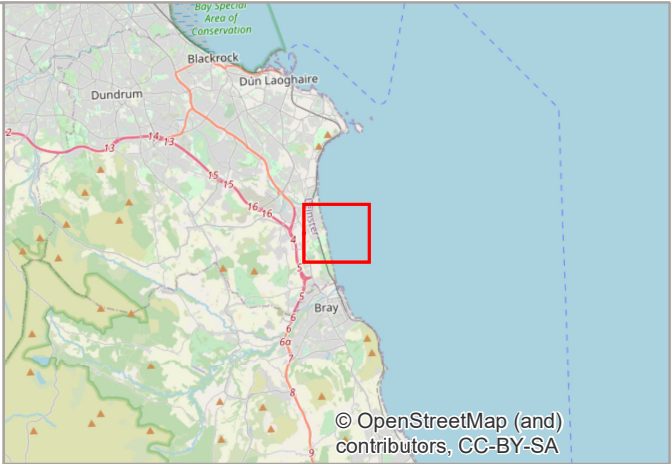
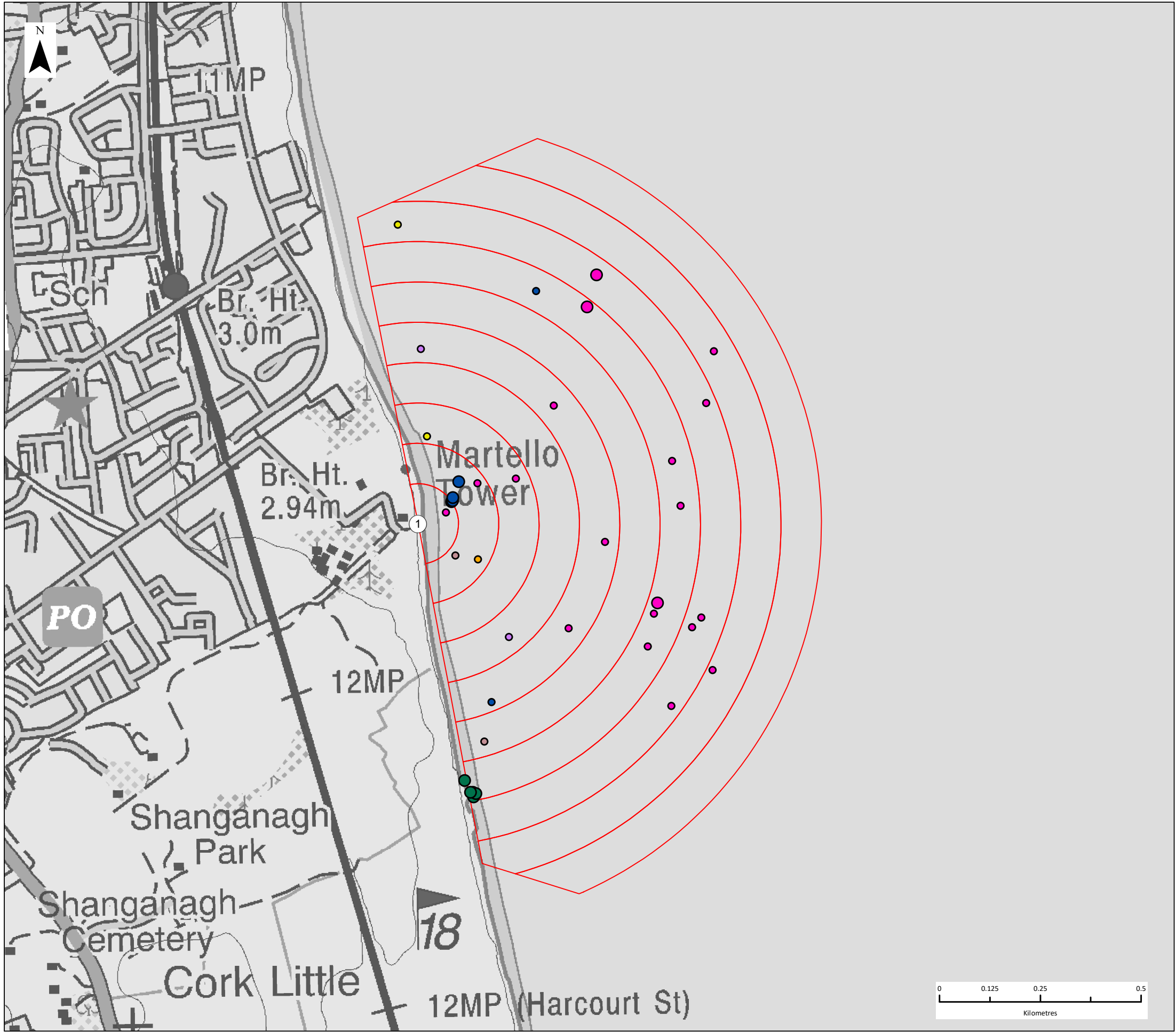
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**Figure 2.8: Relative Abundance and Distribution
of Shag within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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VP Distance Bands (100m)

1

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Flock Size (Colour Denotes Survey Date)

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 21 - 30

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 31 - 40

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 41 - 50

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 51+

28/11/2019

10/12/2019

11/12/2019

22/01/2020

23/01/2020

18/03/2020

25/09/2020

06/10/2020

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PROJECT TITLE

DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
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DRAWING TITLE

Figure 2.9: Relative Abundance and Distribution
of Cormorant within the Study
Area Recorded from Vantage Point 1 across the Survey Season

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:

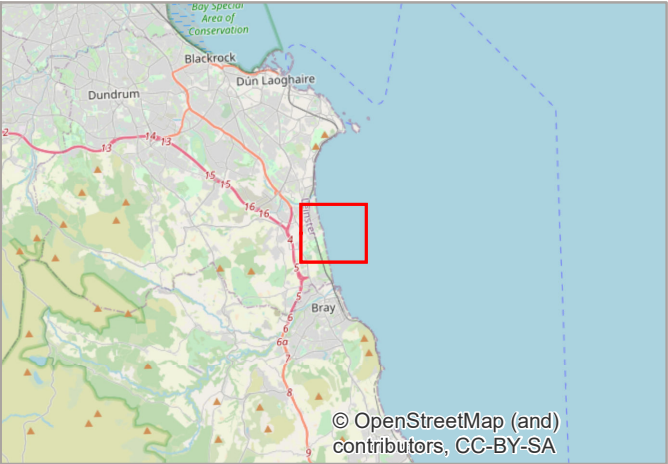
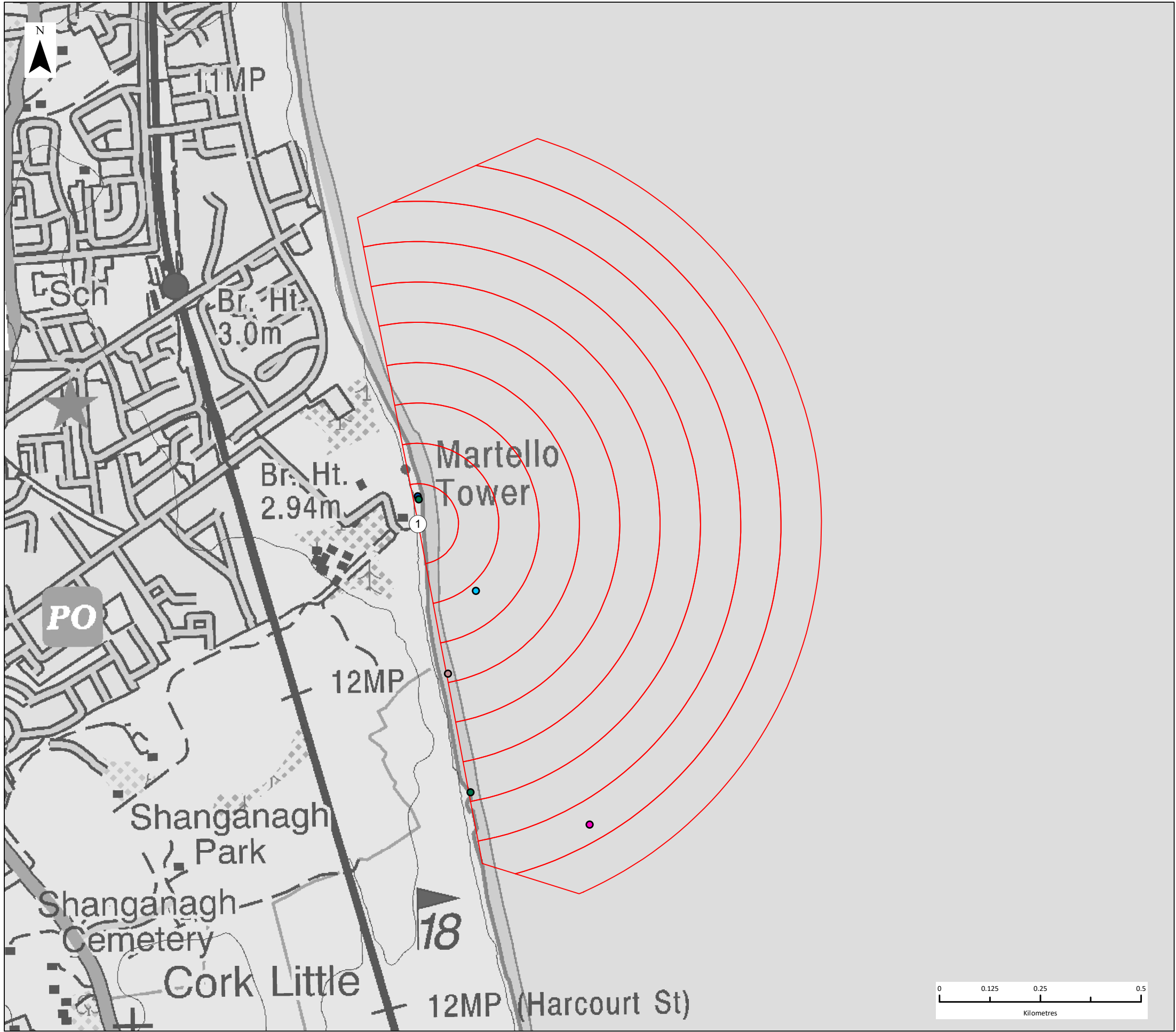
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SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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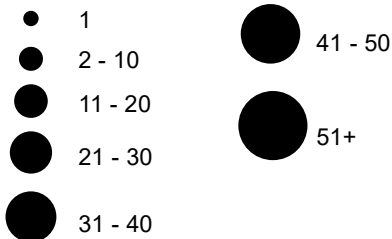


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
06/10/2020

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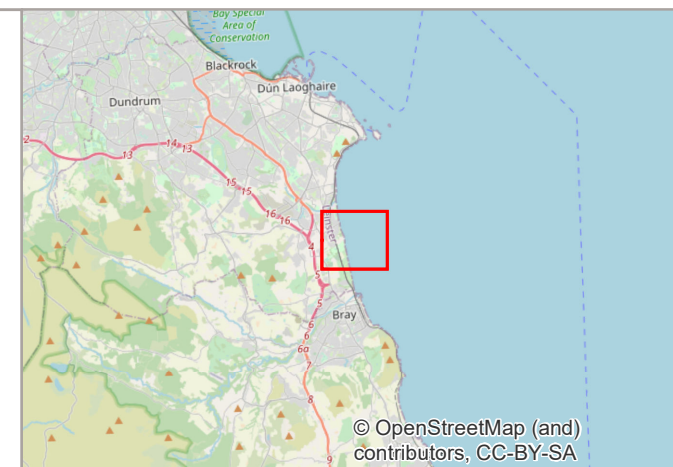
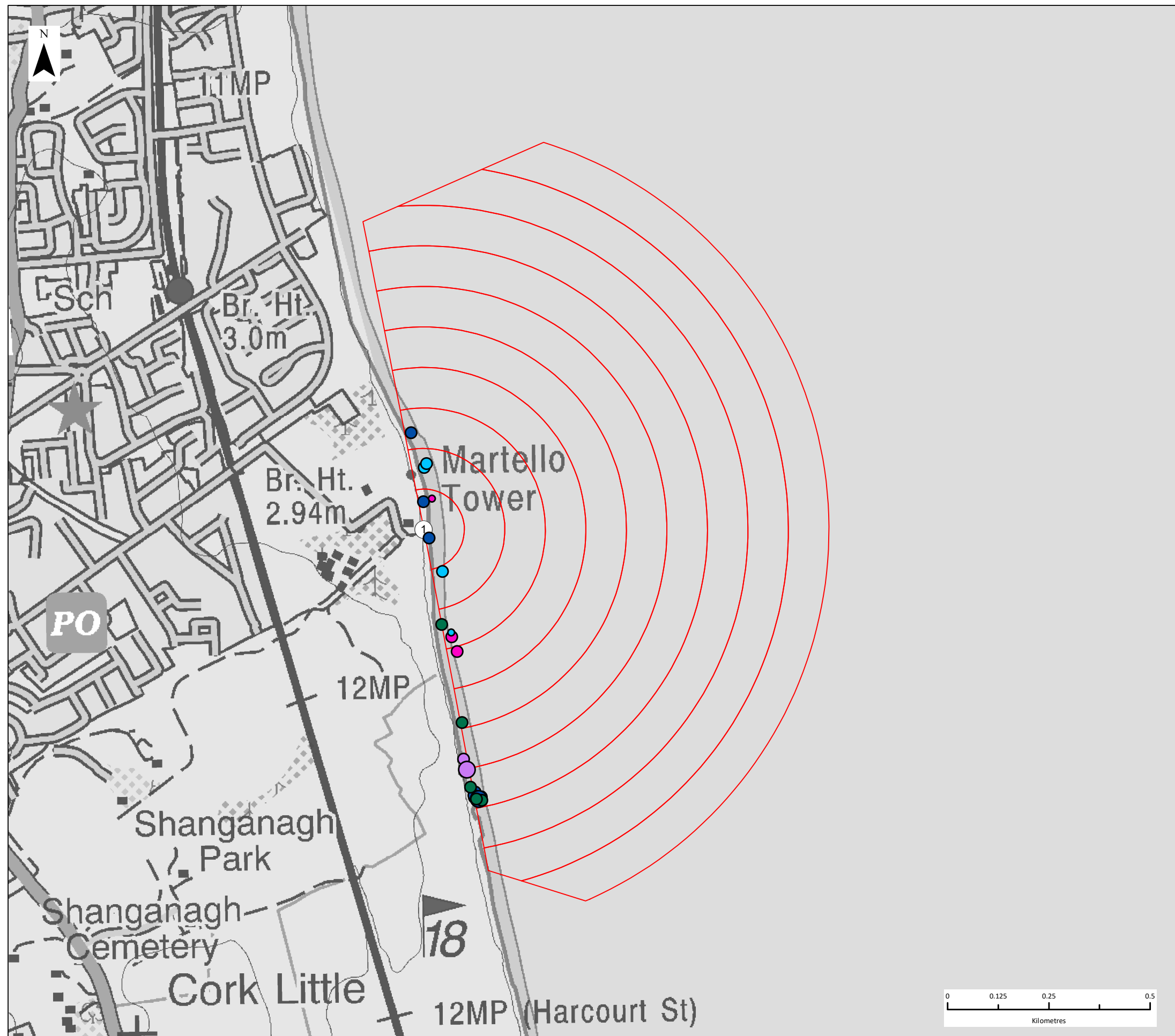
DRAWING TITLE
**Figure 2.10: Relative Abundance and Distribution
of Grey Heron within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



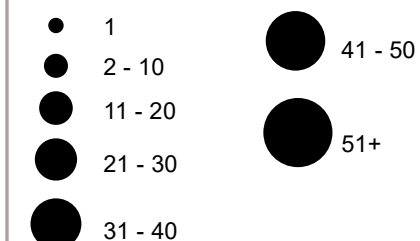


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

DRAWING TITLE
**Figure 2.11: Relative Abundance and Distribution
of Oystercatcher within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

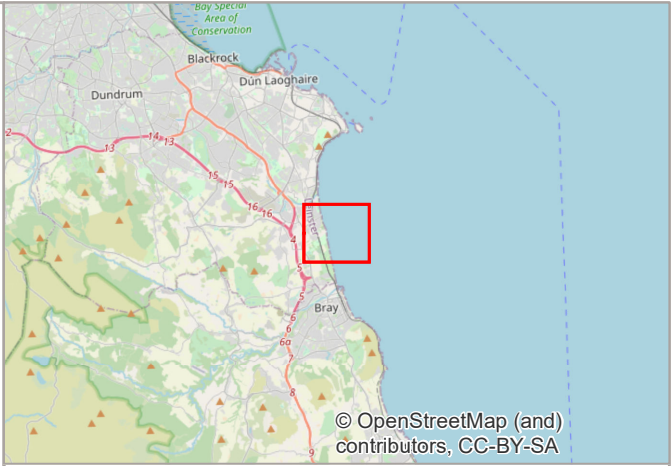
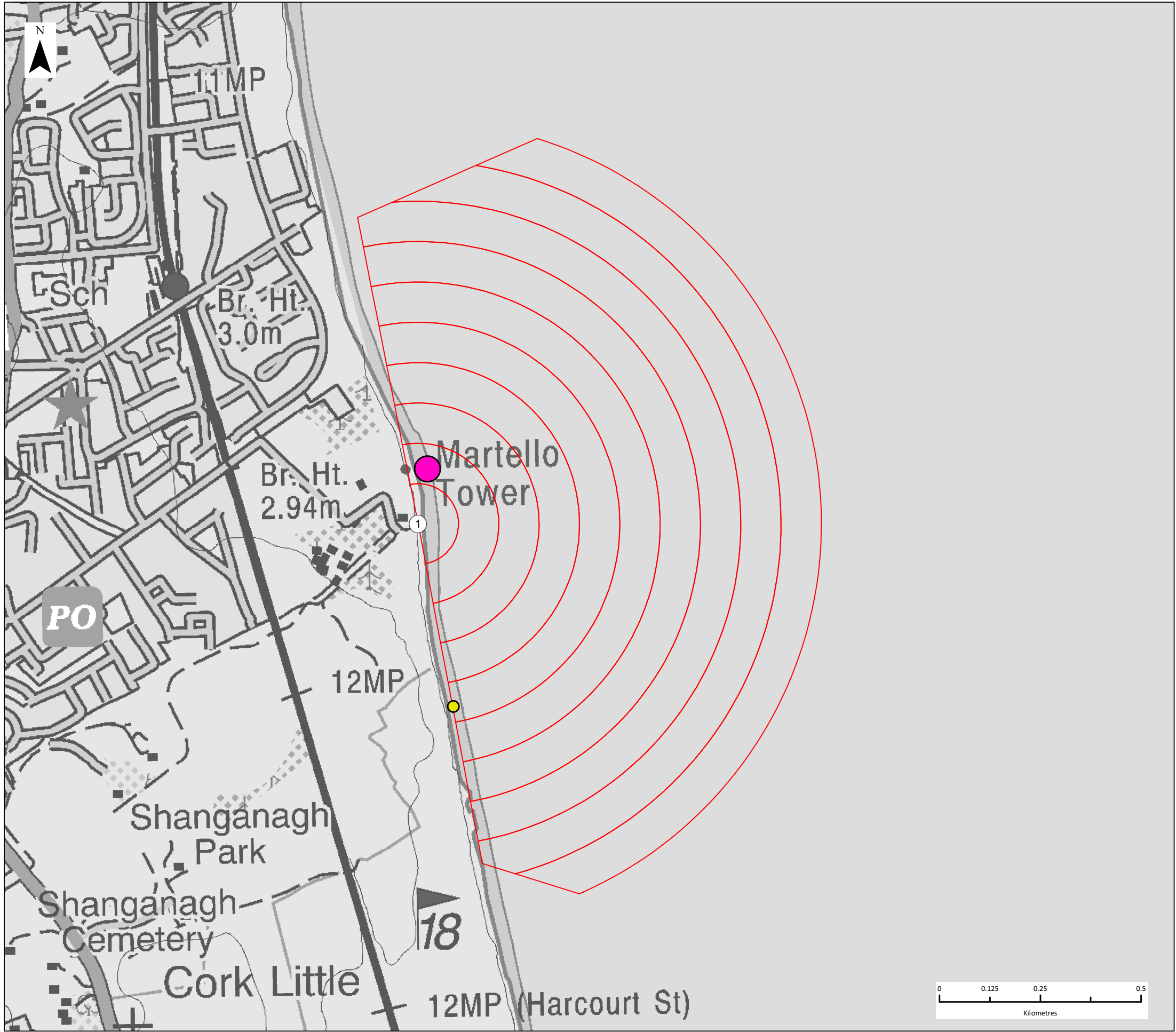
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SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N

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LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)

● 1	● 41 - 50
● 2 - 10	● 51+
● 11 - 20	
● 21 - 30	
● 31 - 40	

Survey Date

28/11/2019	18/03/2020
10/12/2019	25/09/2020
11/12/2019	06/10/2020
22/01/2020	
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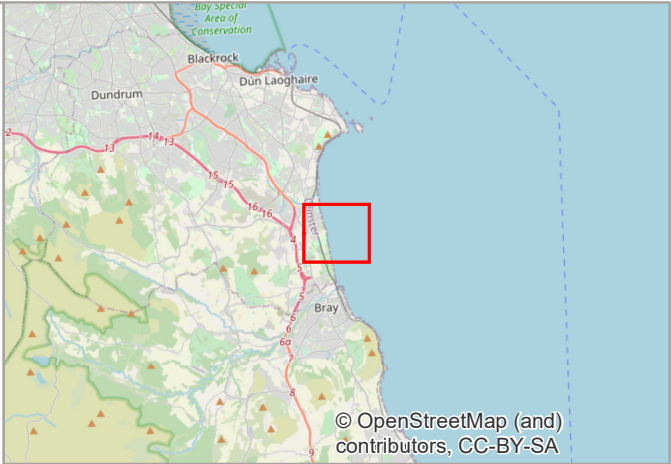
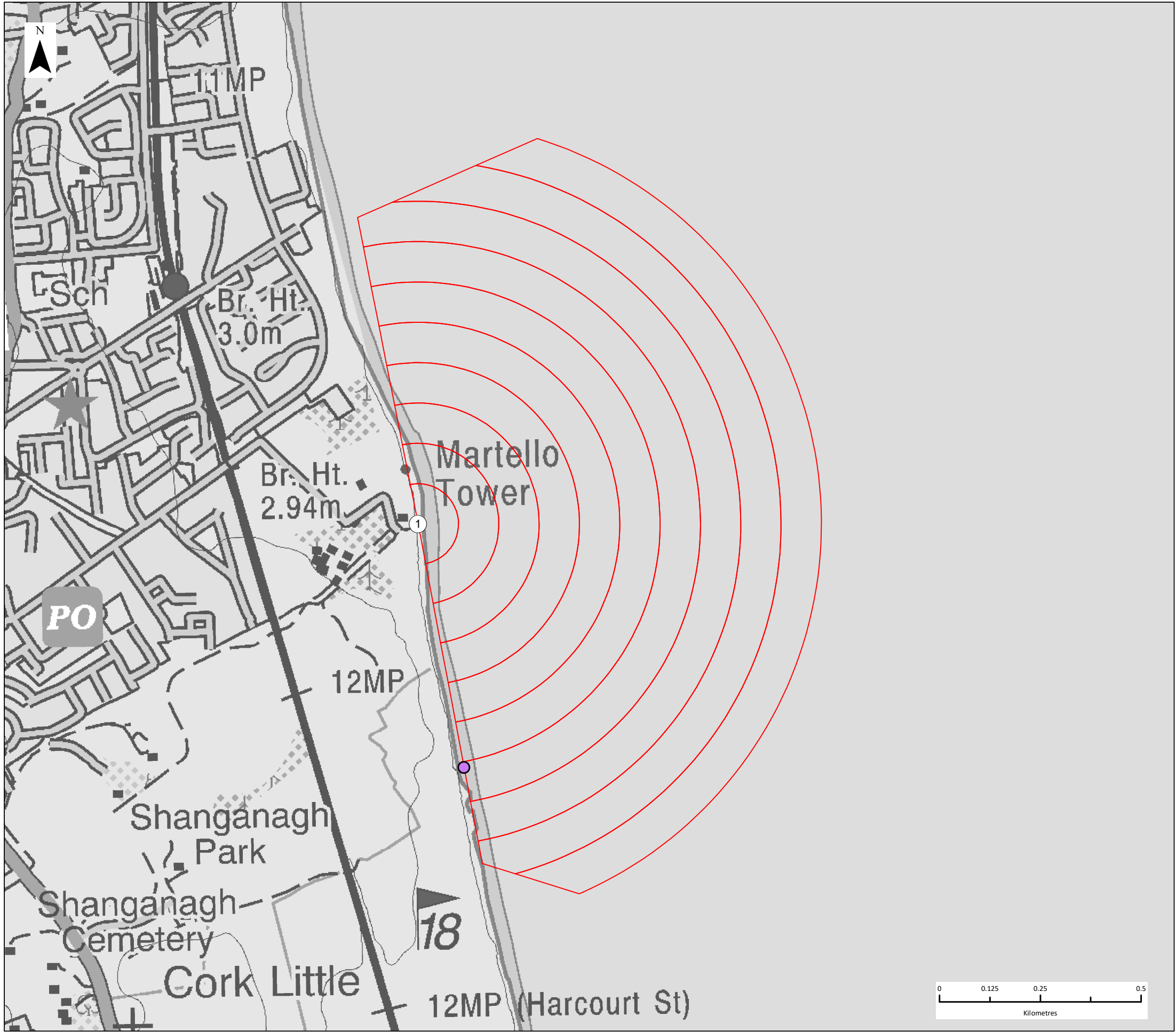
DRAWING TITLE
**Figure 2.12: Relative Abundance and Distribution
of Ringed Plover within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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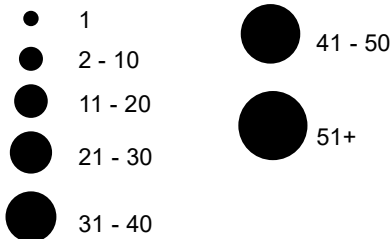


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
06/10/2020

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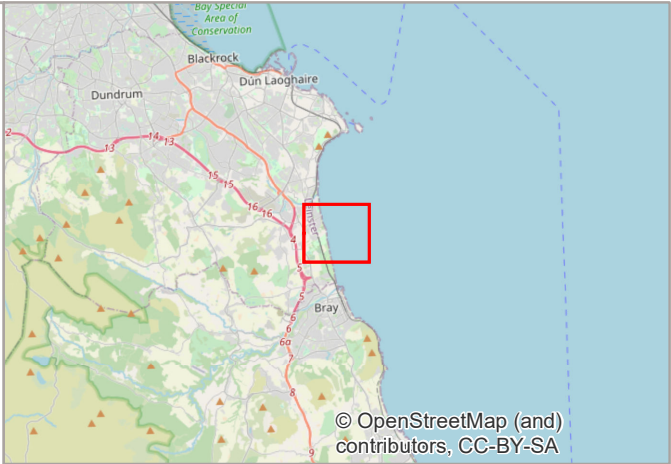
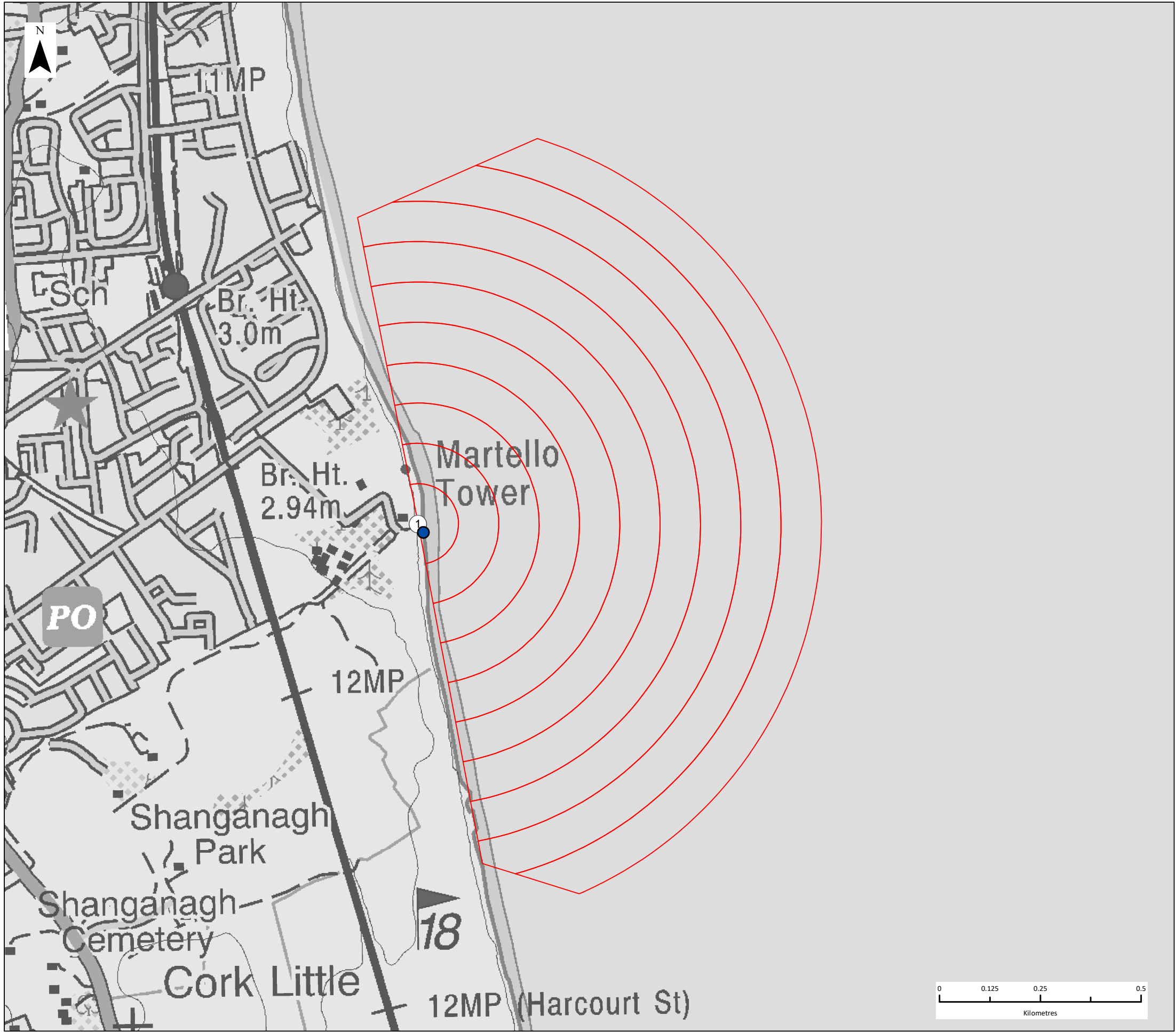
DRAWING TITLE
**Figure 2.13: Relative Abundance and Distribution
of Sanderling within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



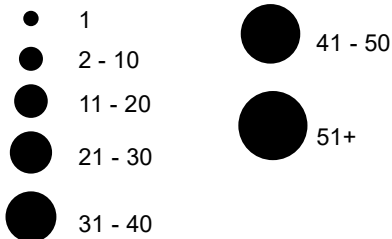


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
06/10/2020

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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
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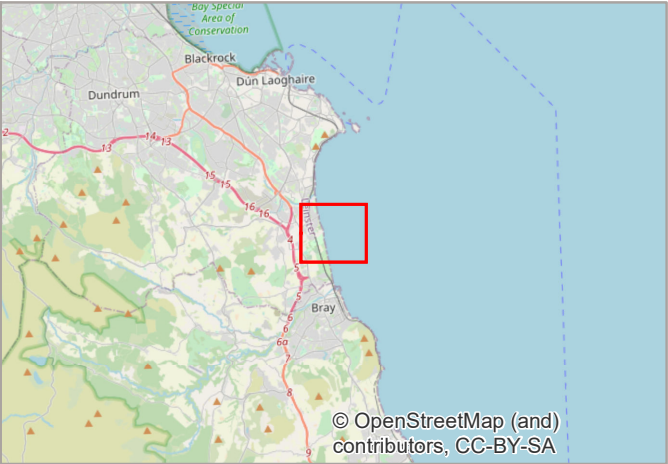
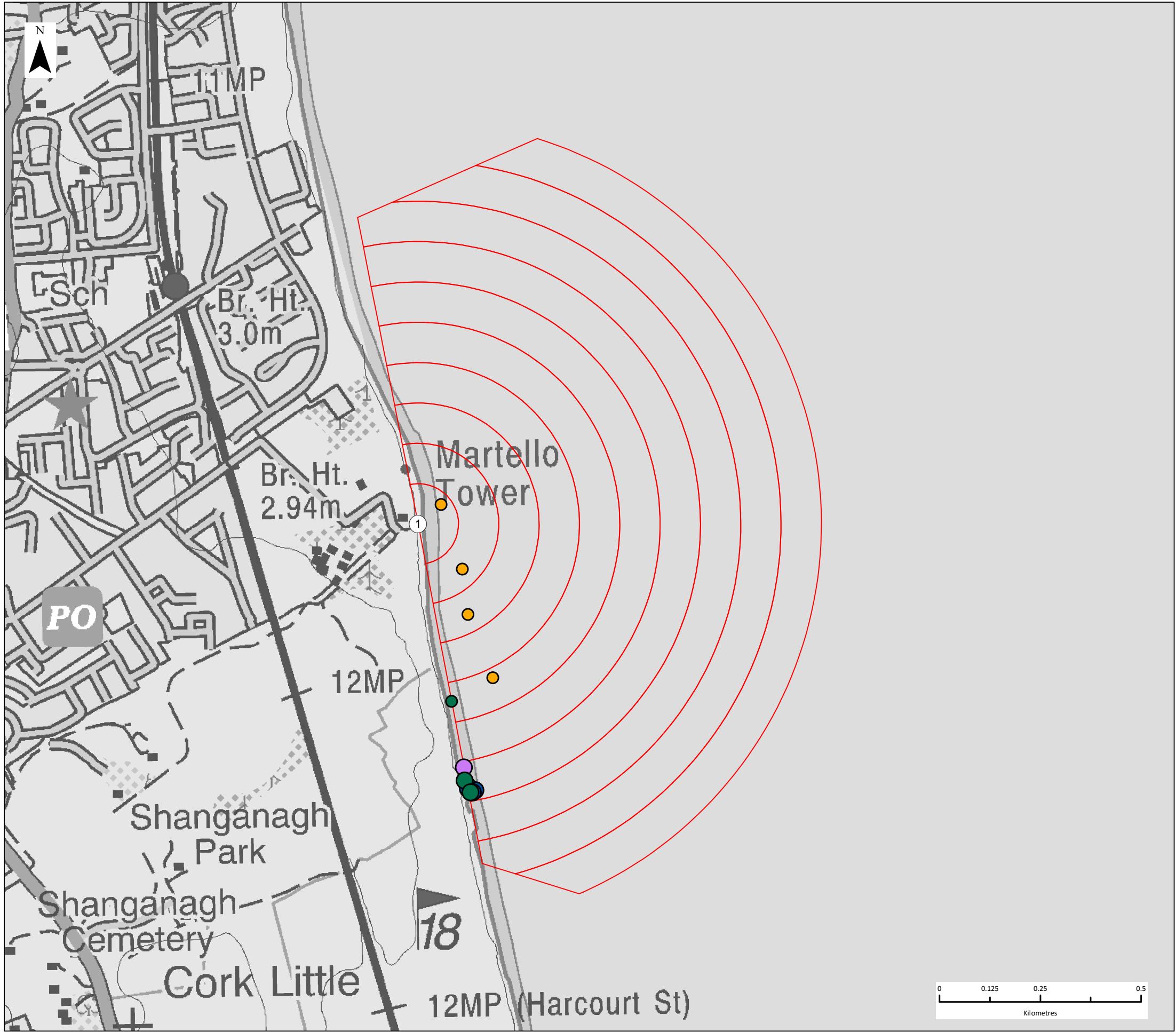
DRAWING TITLE
**Figure 2.14: Relative Abundance and Distribution
of Greenshank within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



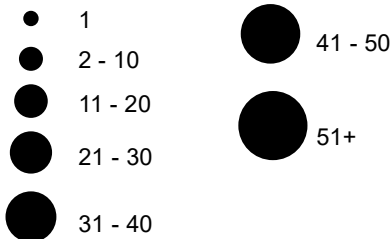


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
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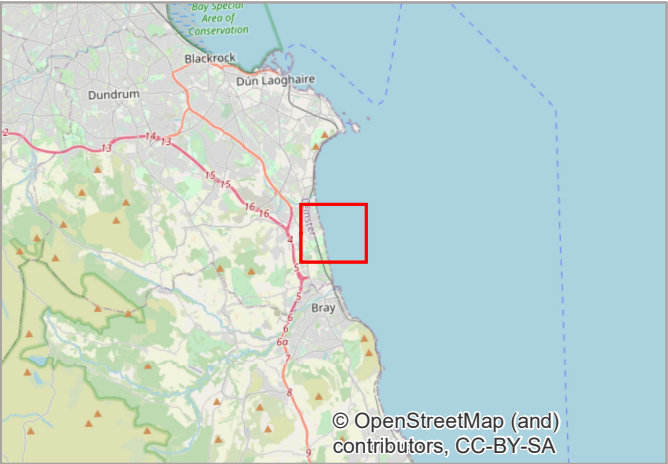
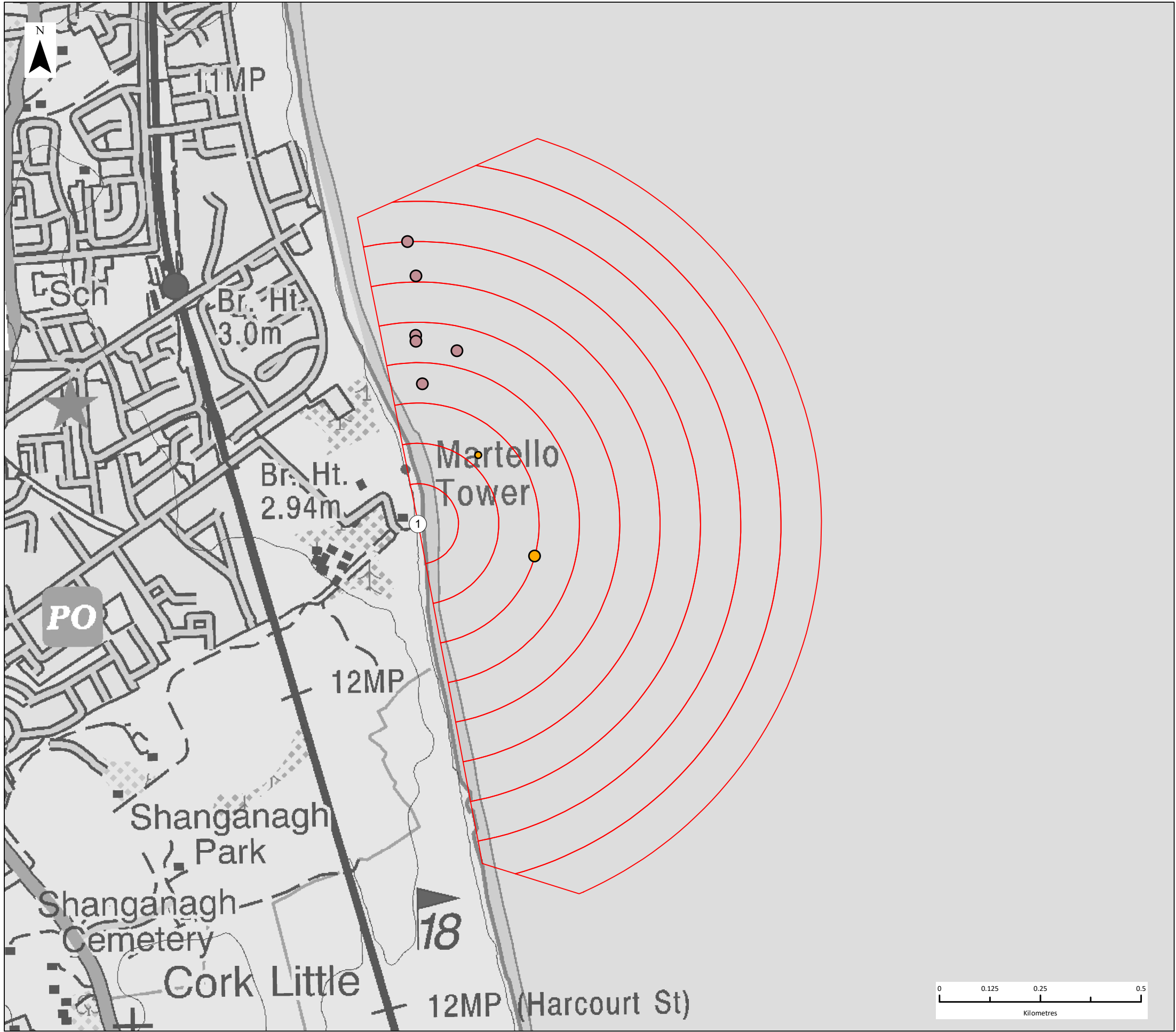
DRAWING TITLE
**Figure 2.15: Relative Abundance and Distribution
of Turnstone within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
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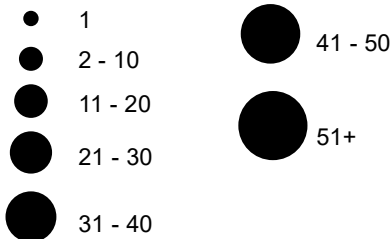


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
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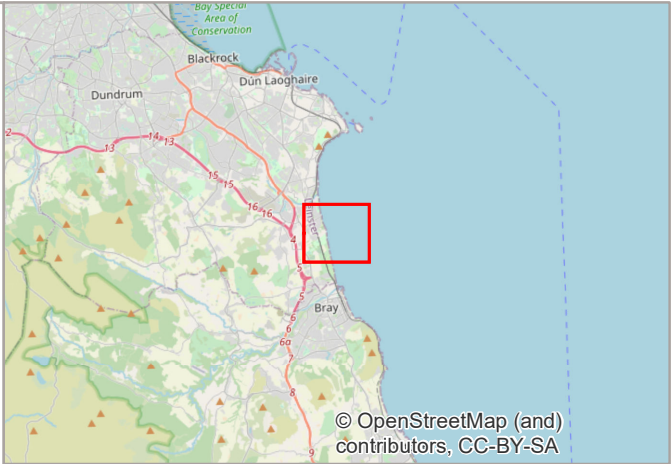
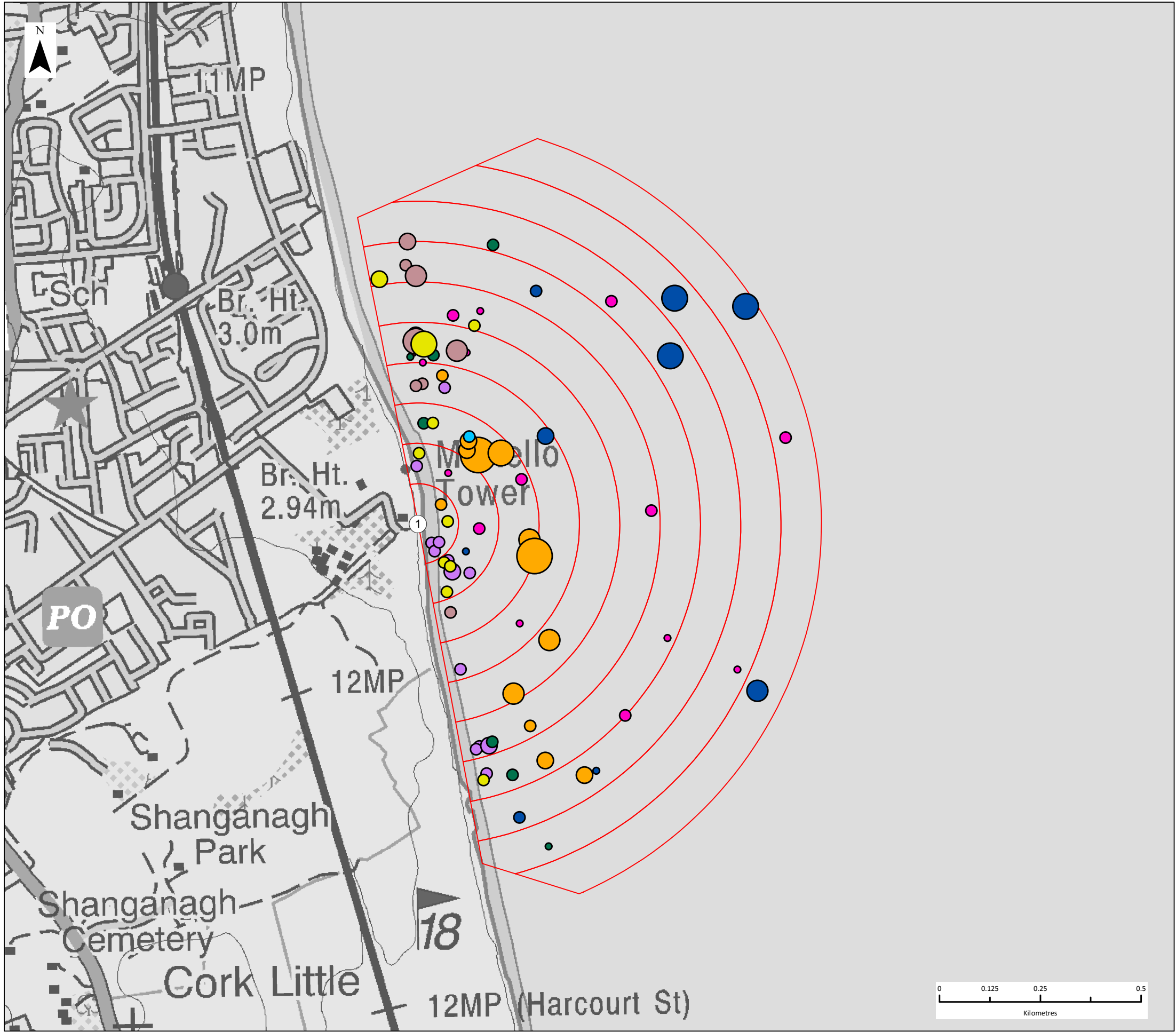
DRAWING TITLE
**Figure 2.16: Relative Abundance and Distribution
of Mediterranean Gull within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
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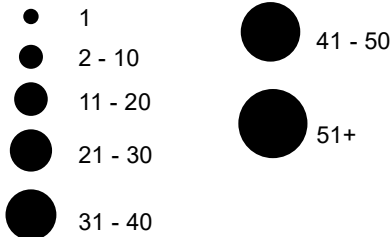


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
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18/03/2020
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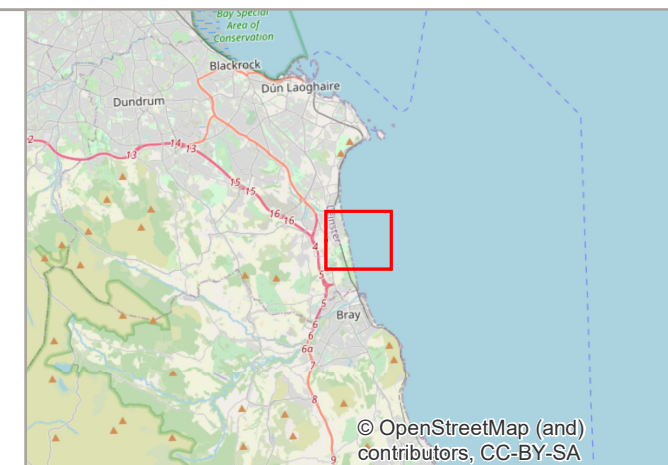
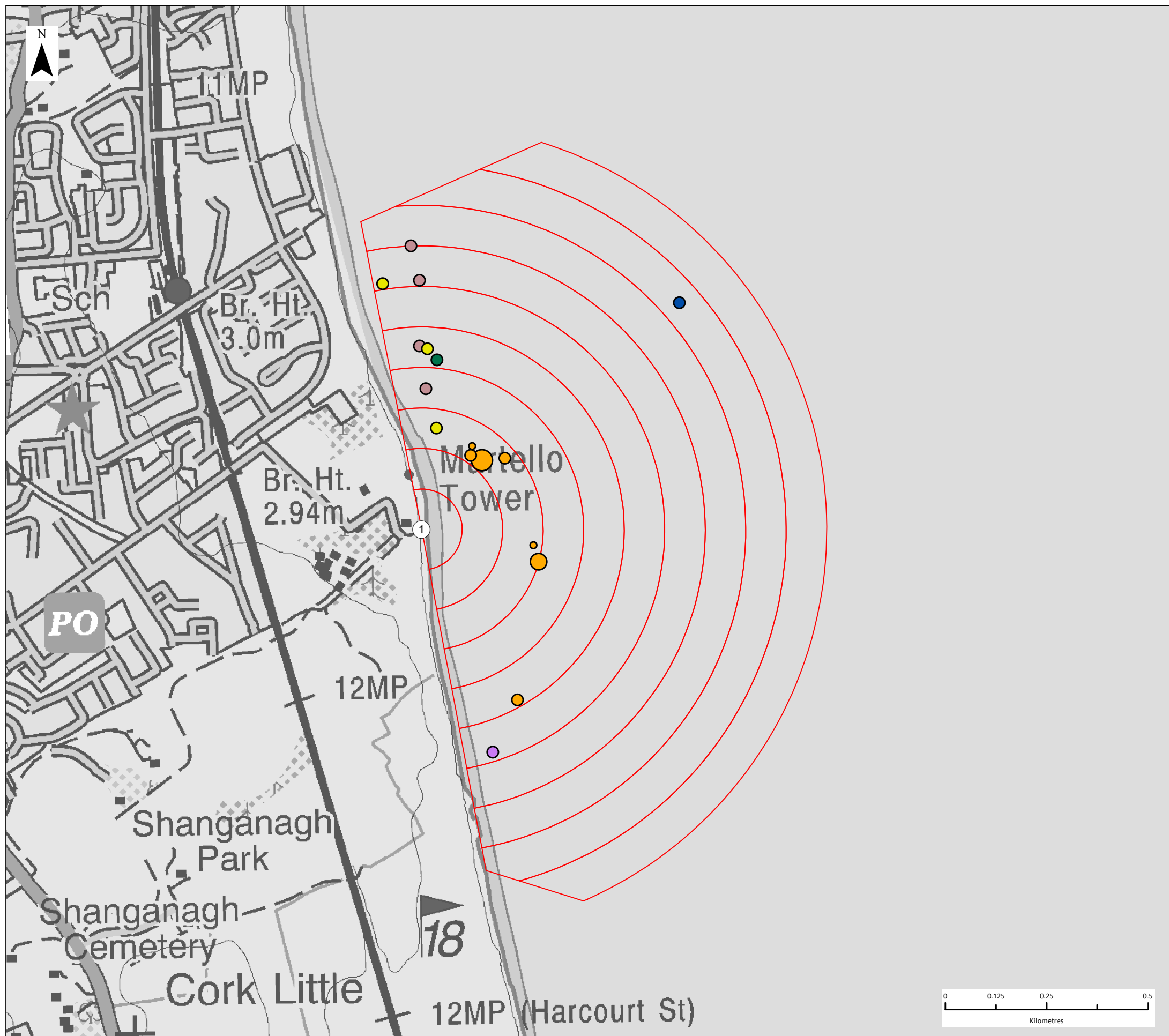
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**Figure 2.17: Relative Abundance and Distribution
of Black-headed Gull within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
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SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



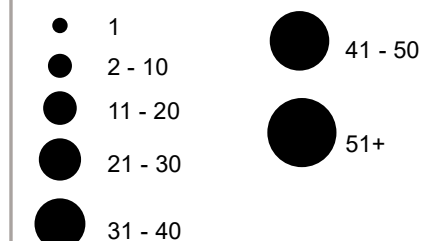


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

DRAWING TITLE
**Figure 2.18: Relative Abundance and Distribution
of Common Gull within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

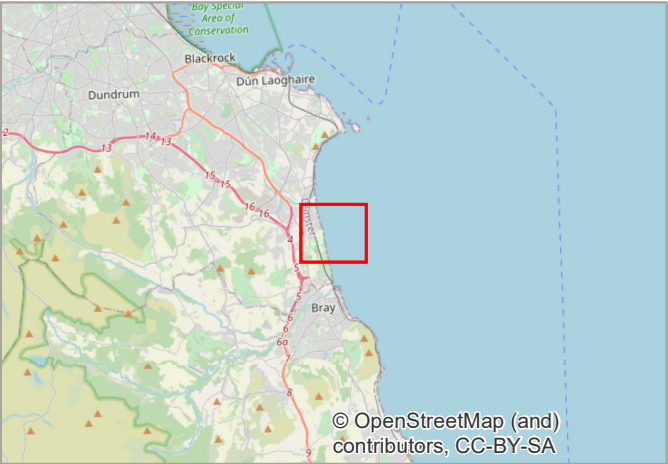
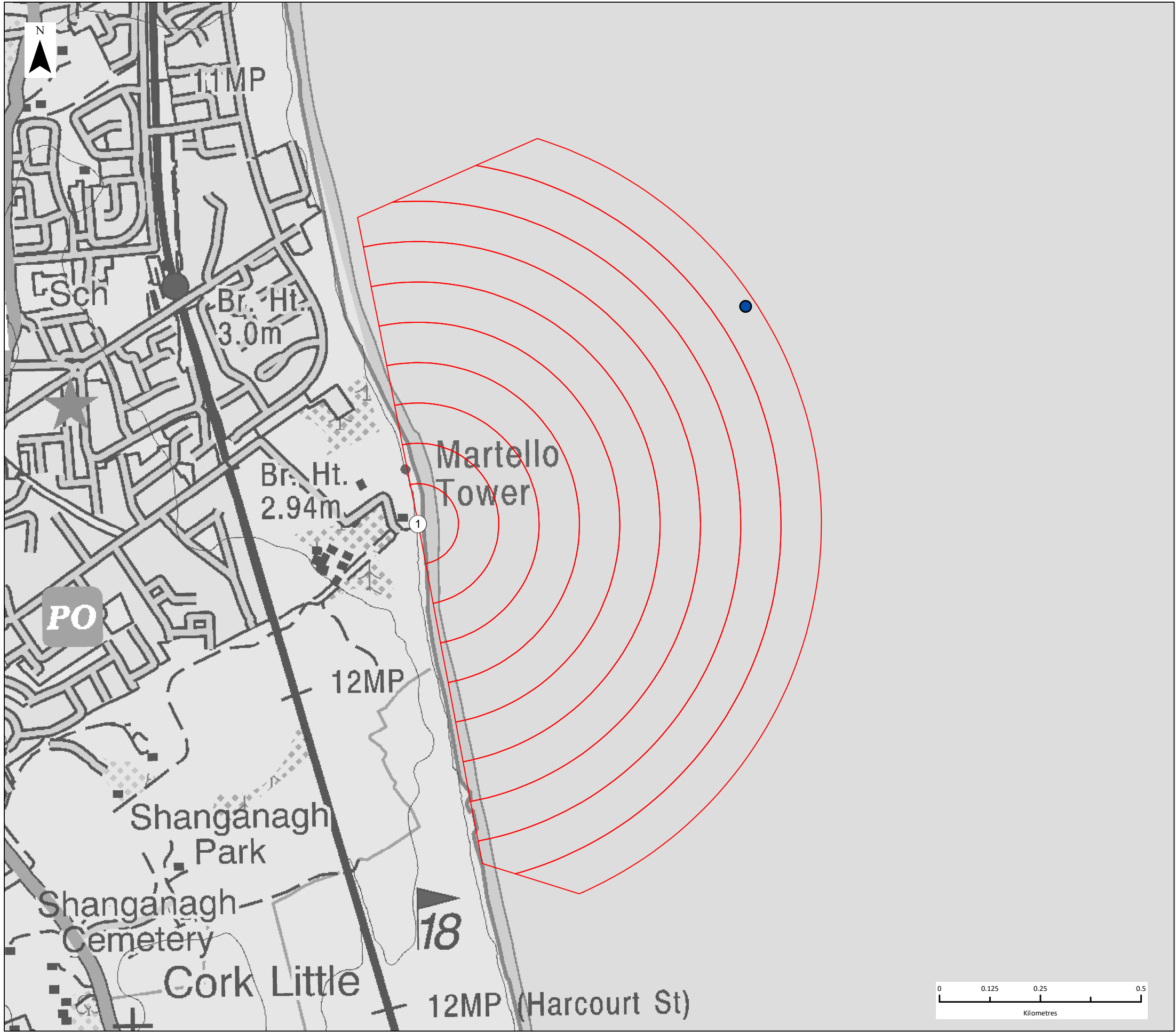
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SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N

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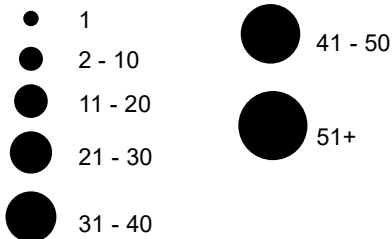


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
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22/01/2020
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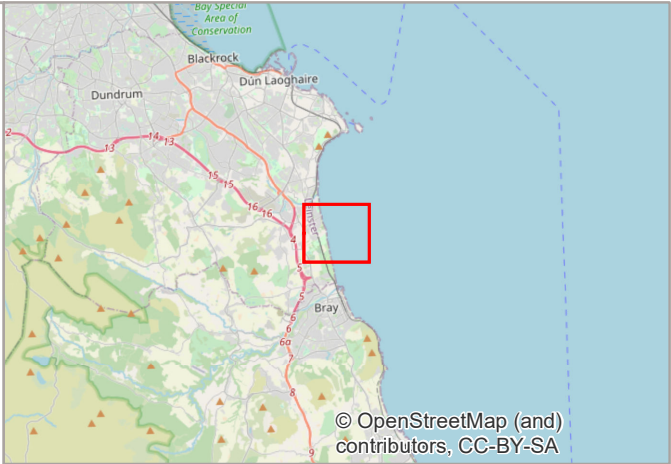
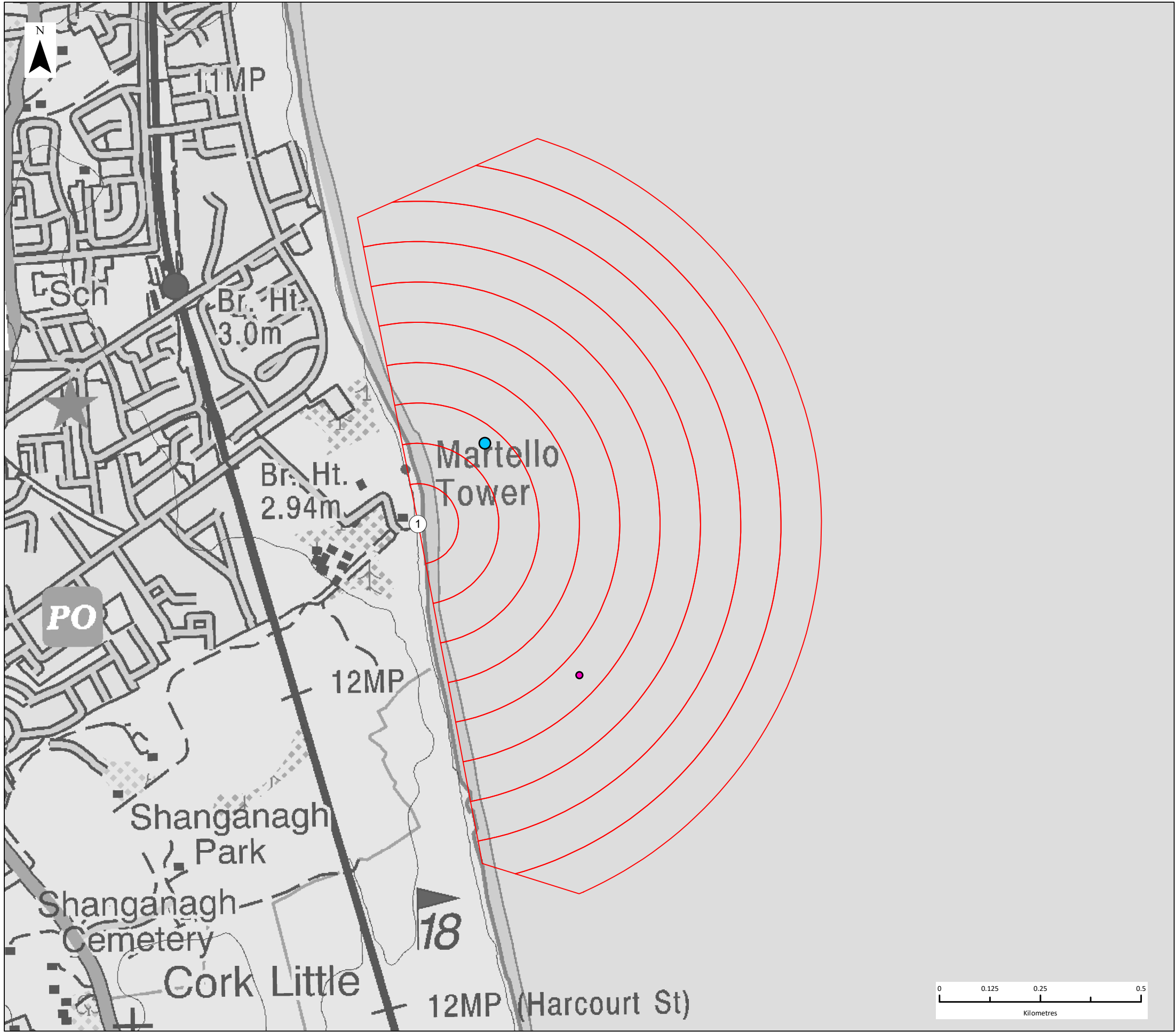
DRAWING TITLE
**Figure 2.19: Relative Abundance and Distribution
of Kittiwake within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
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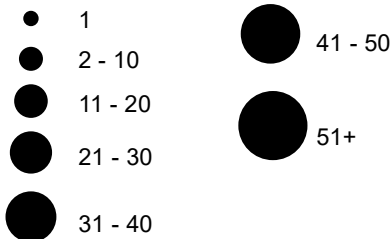


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

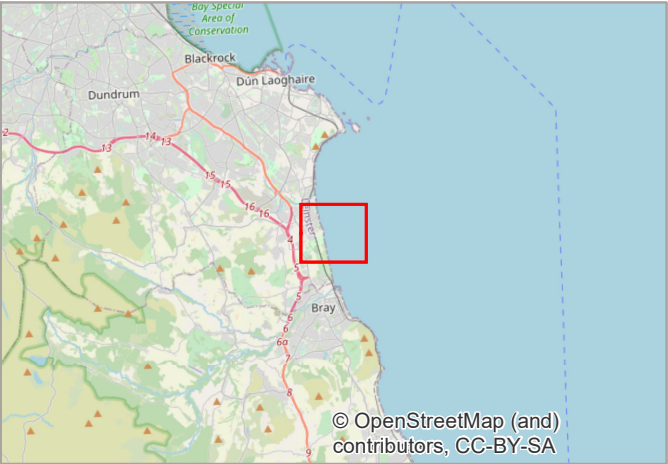
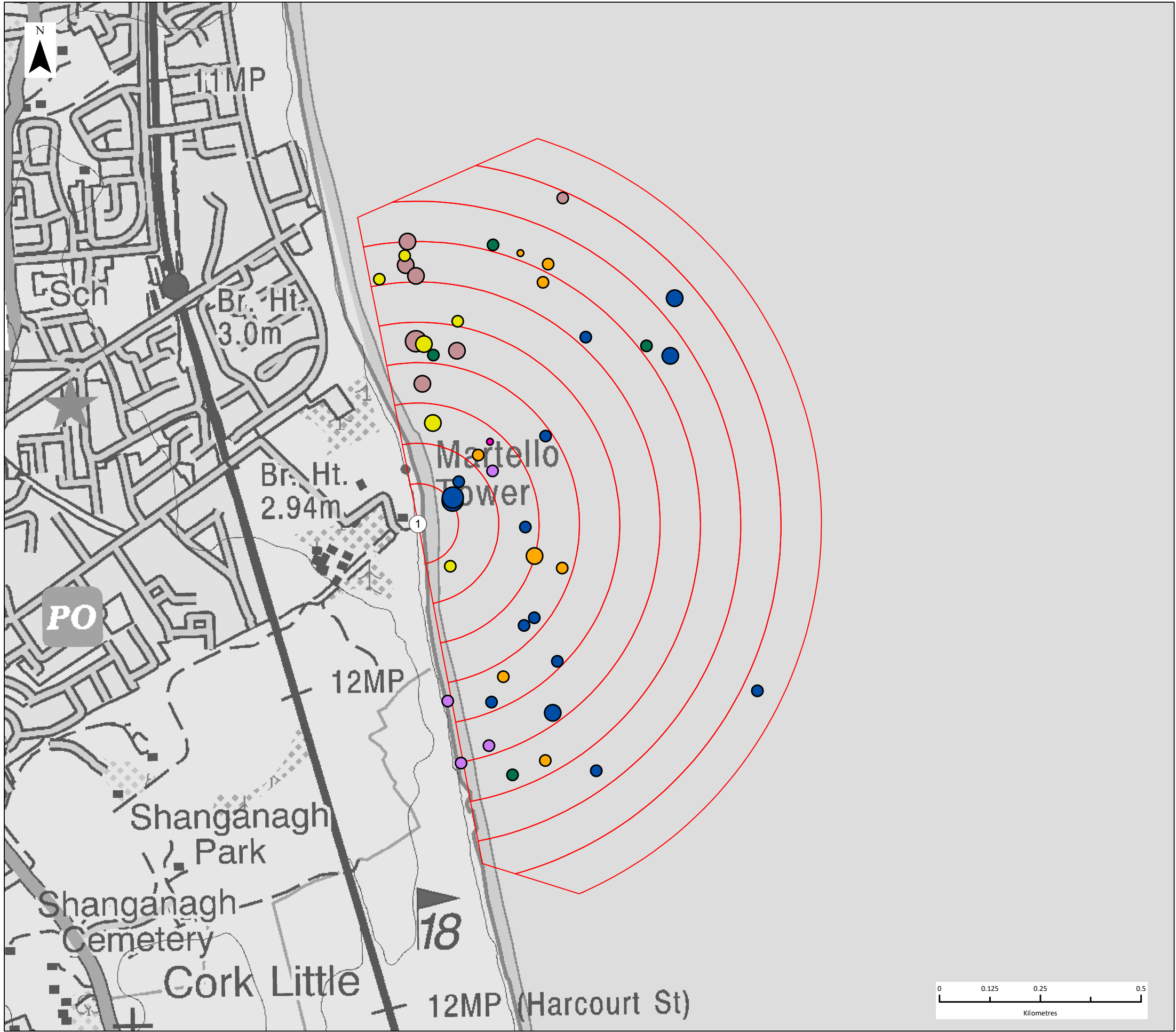
DRAWING TITLE
**Figure 2.20: Relative Abundance and Distribution
of Lesser Black-backed Gull within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



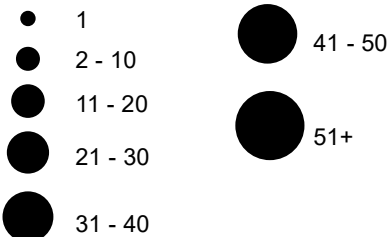


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

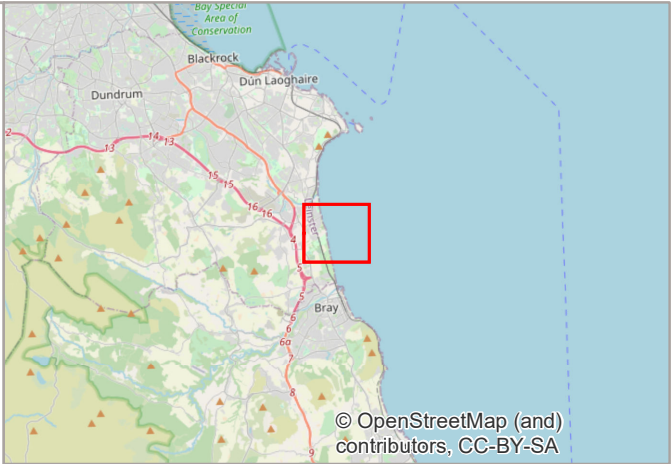
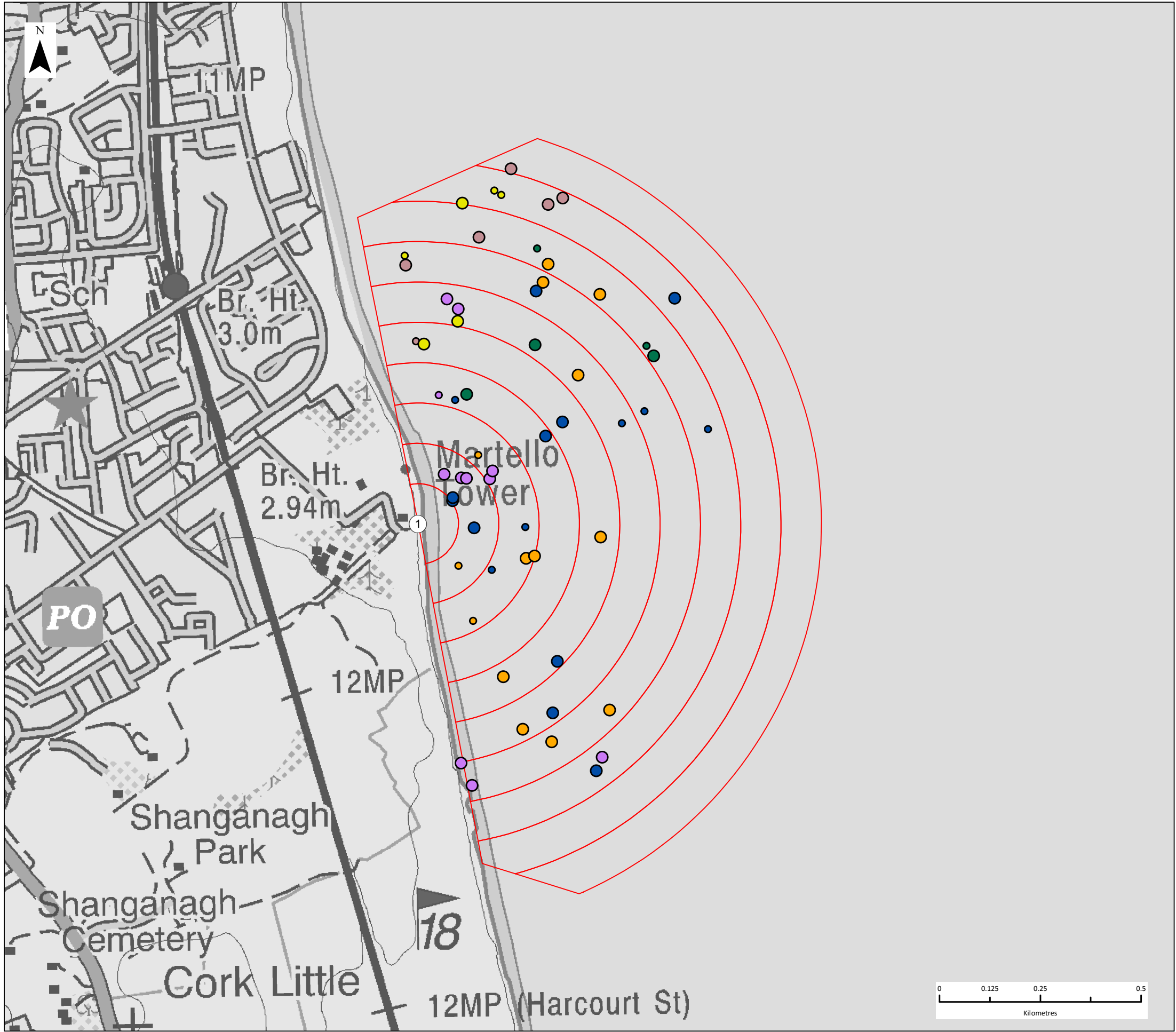
DRAWING TITLE
**Figure 2.21: Relative Abundance and Distribution
of Herring Gull within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



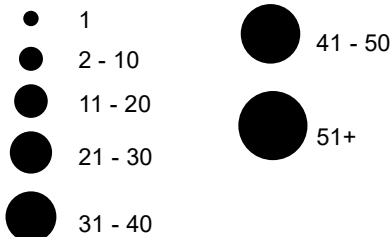


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

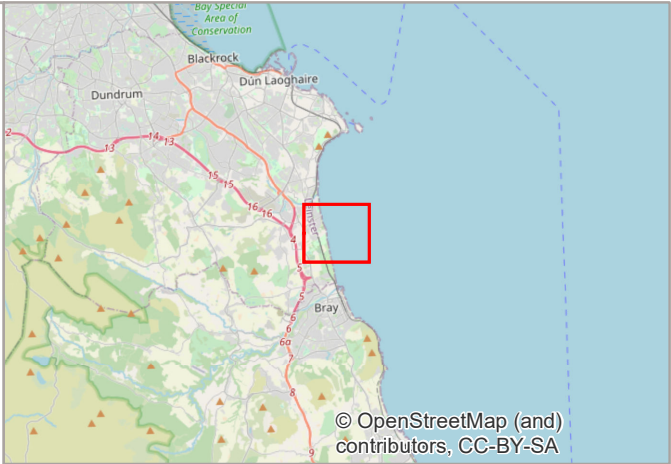
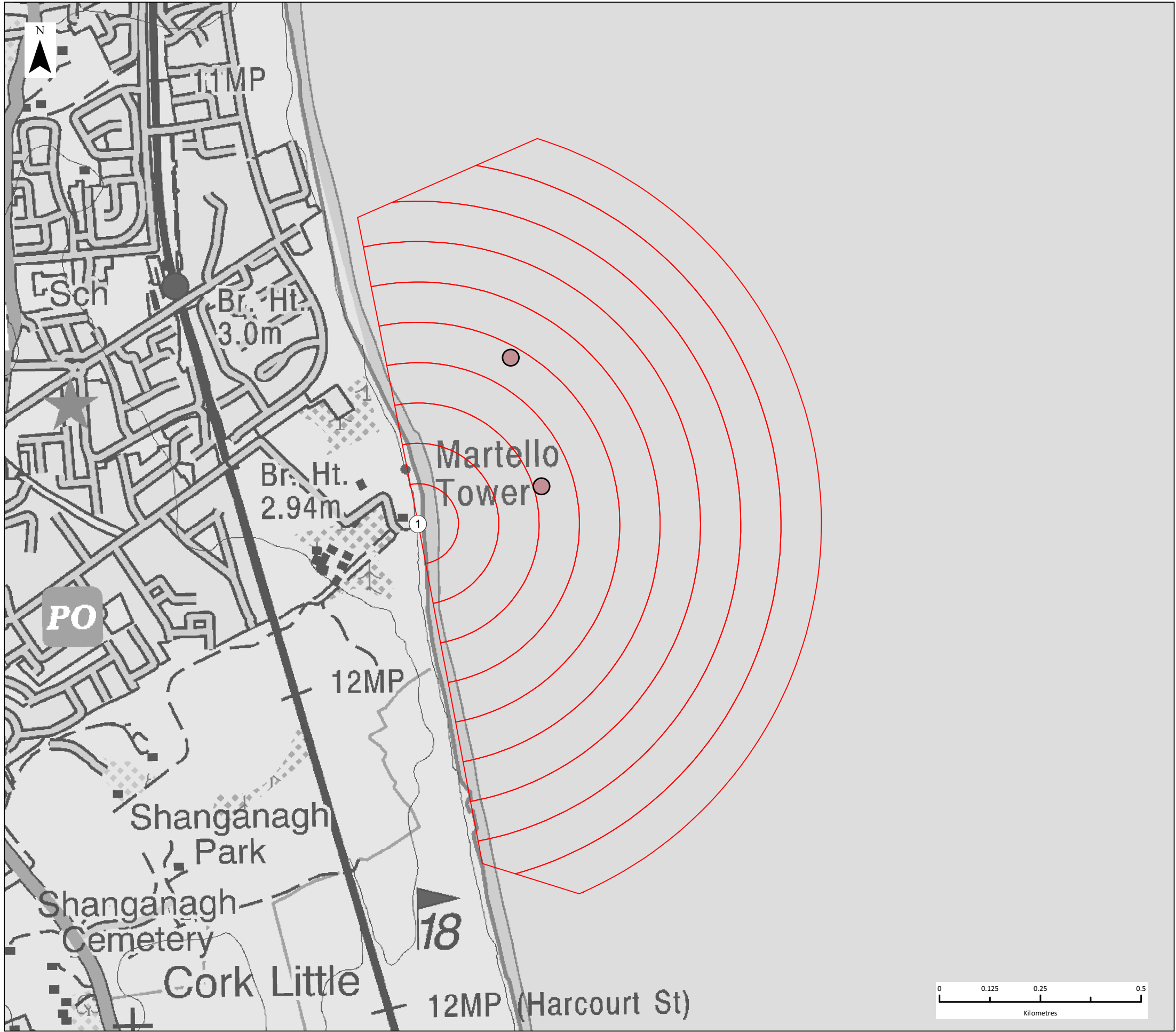
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**Figure 2.22: Relative Abundance and Distribution
of Great Black-backed Gull within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



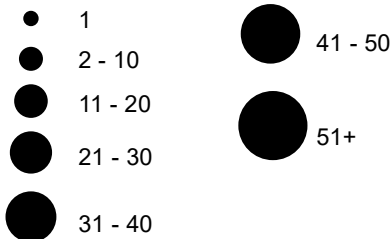


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
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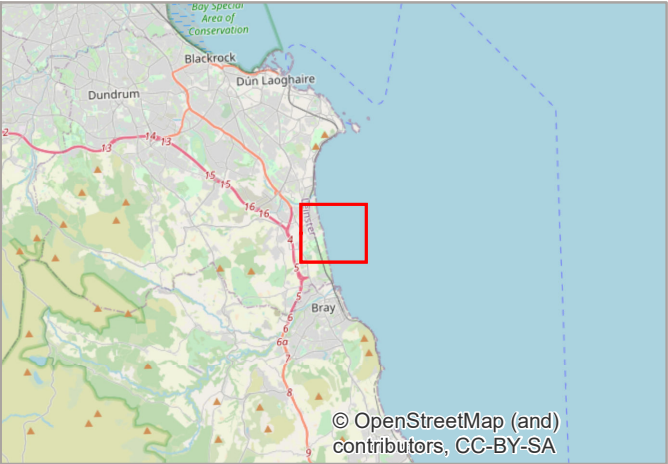
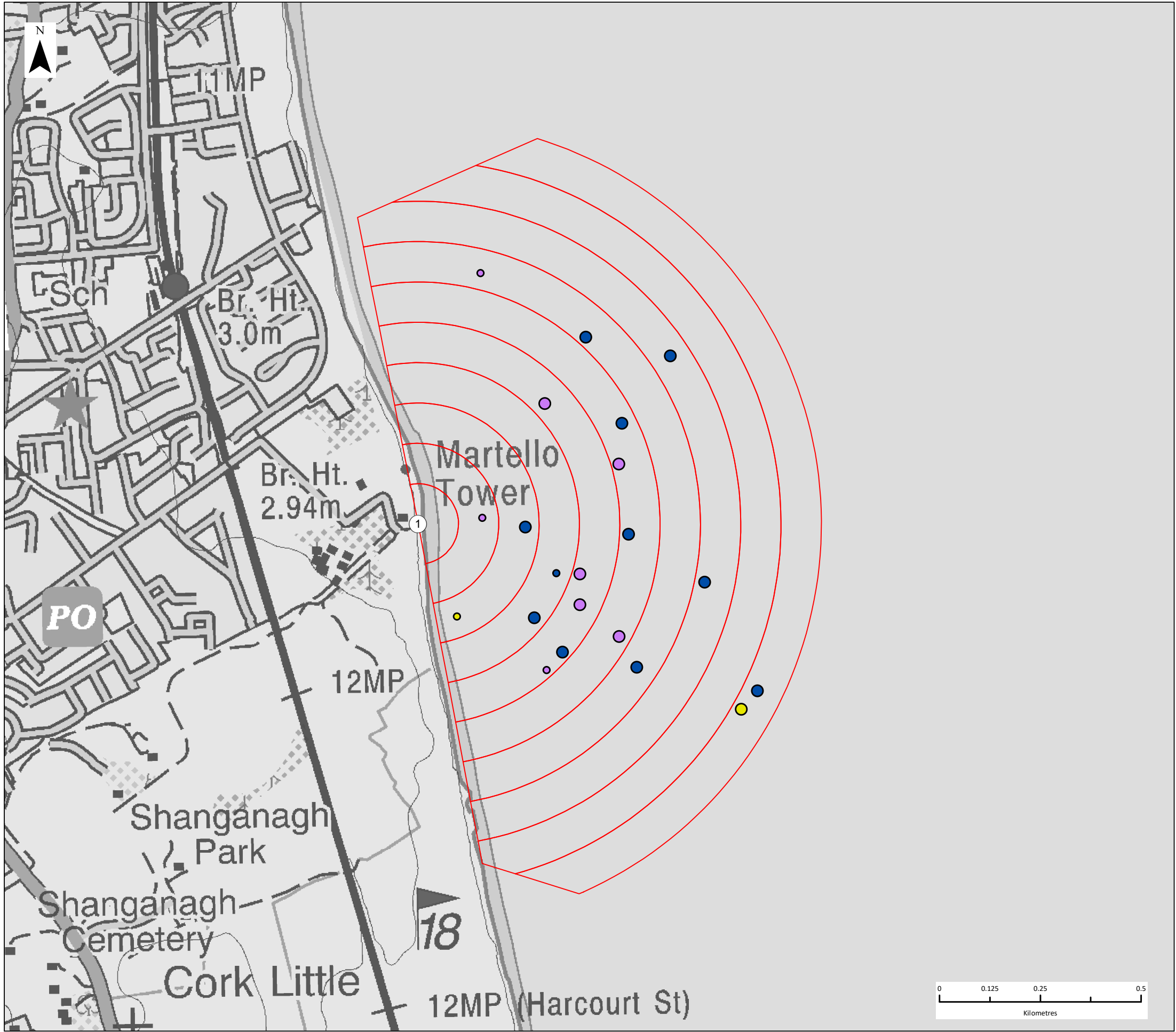
DRAWING TITLE
**Figure 2.23: Relative Abundance and Distribution
of Sandwich Tern within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
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SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



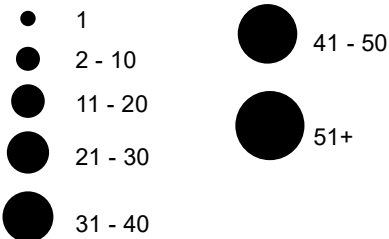


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
06/10/2020

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PROJECT TITLE
*DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020*

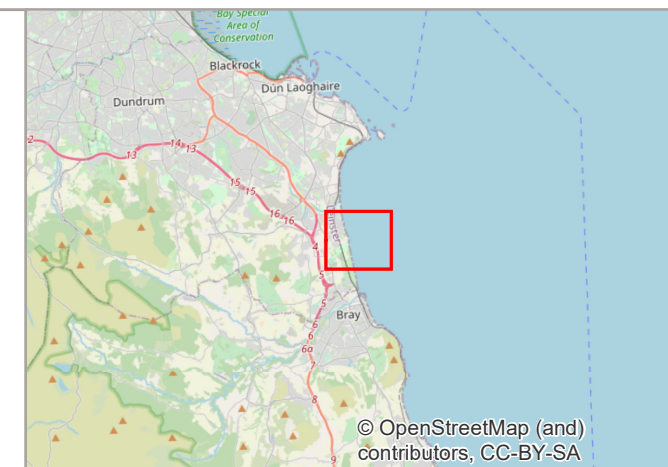
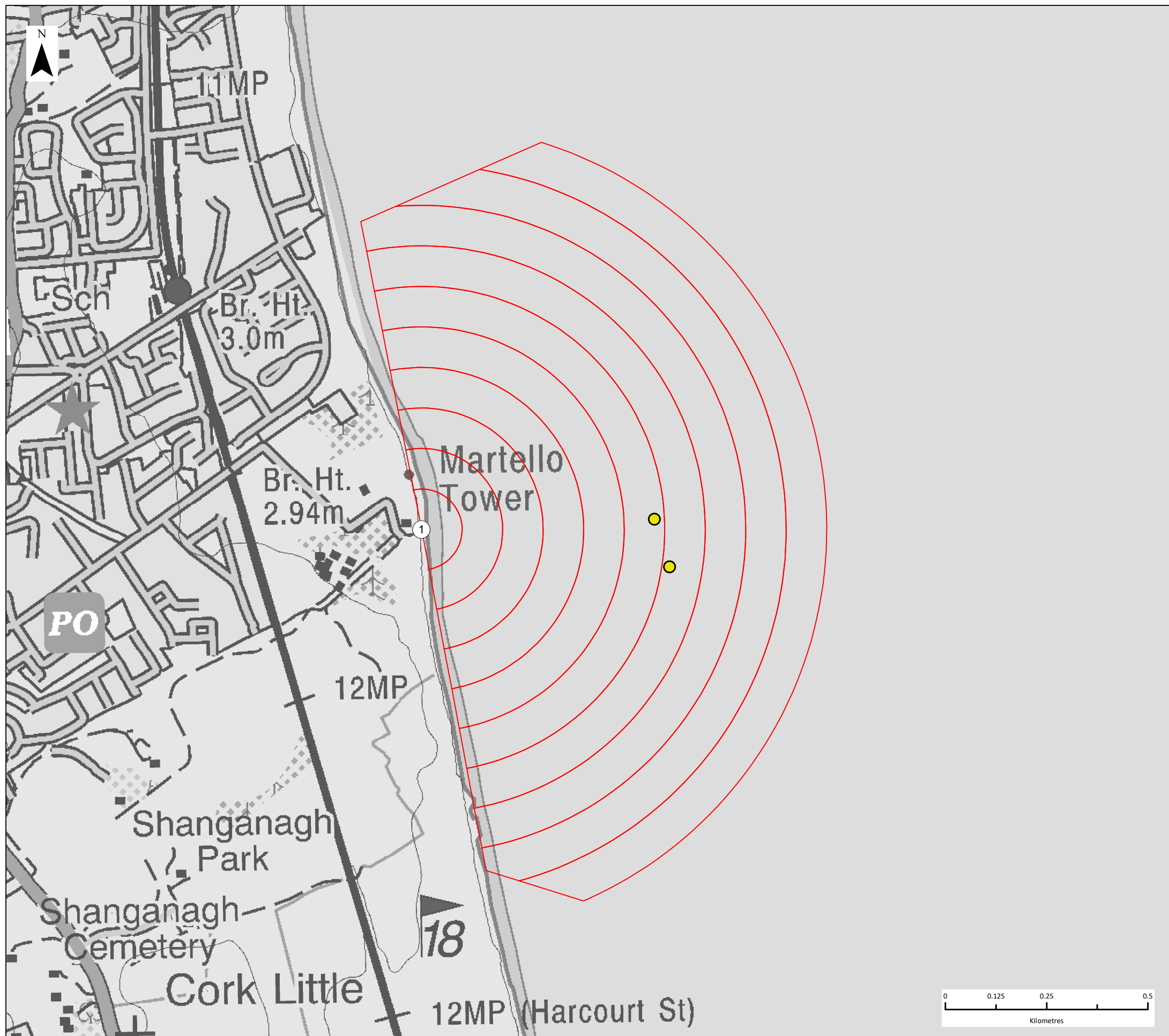
DRAWING TITLE
**Figure 2.24: Relative Abundance and Distribution
of Guillemot within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



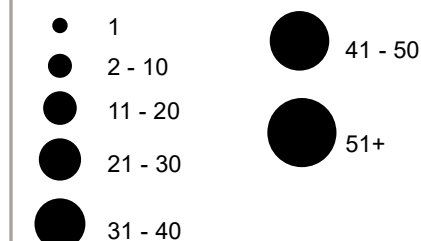


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

DRAWING TITLE
**Figure 2.25: Relative Abundance and Distribution
of Guillemot / Razorbill within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

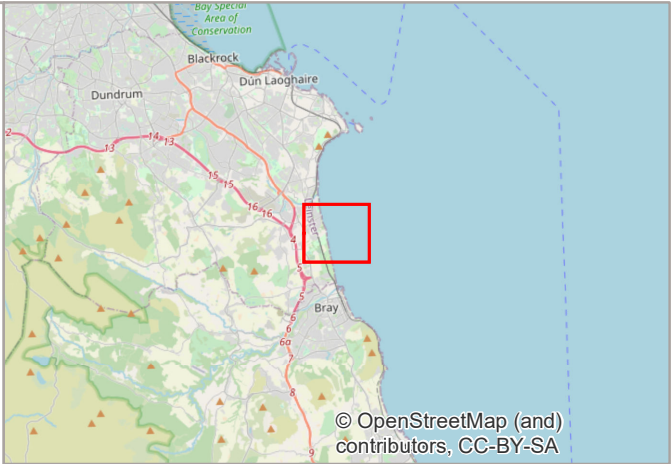
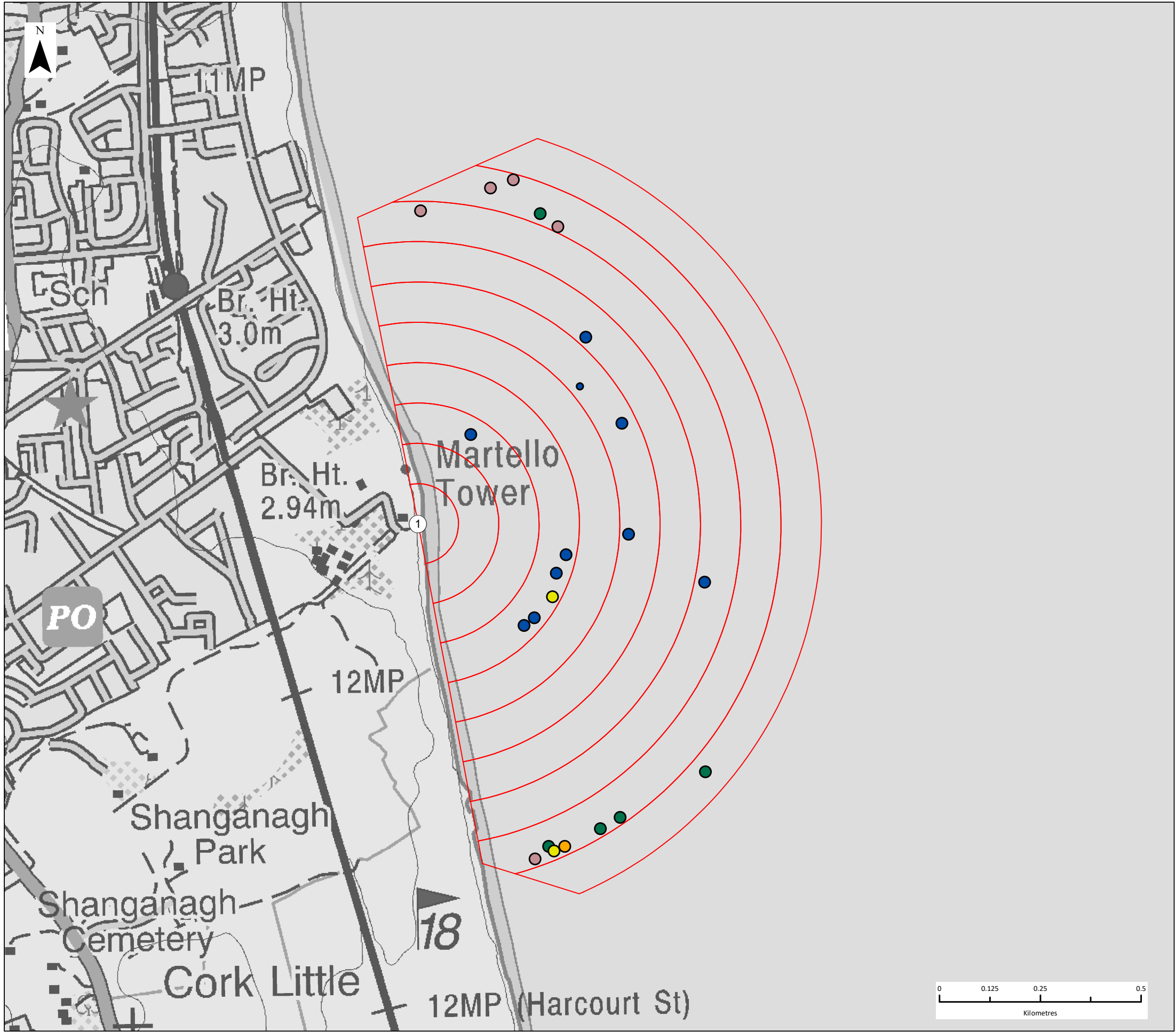
DRAWING NUMBER:
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SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N

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GoBe

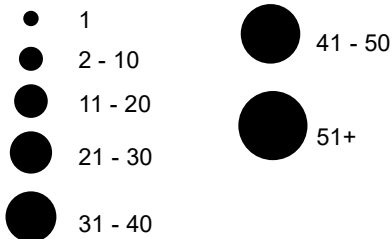


LEGEND

VP Distance Bands (100m)

① Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

28/11/2019
10/12/2019
11/12/2019
22/01/2020
23/01/2020
18/03/2020
25/09/2020
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PROJECT TITLE
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BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

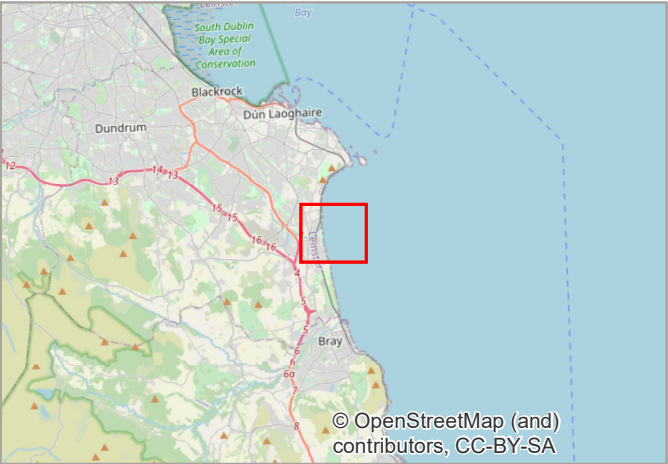
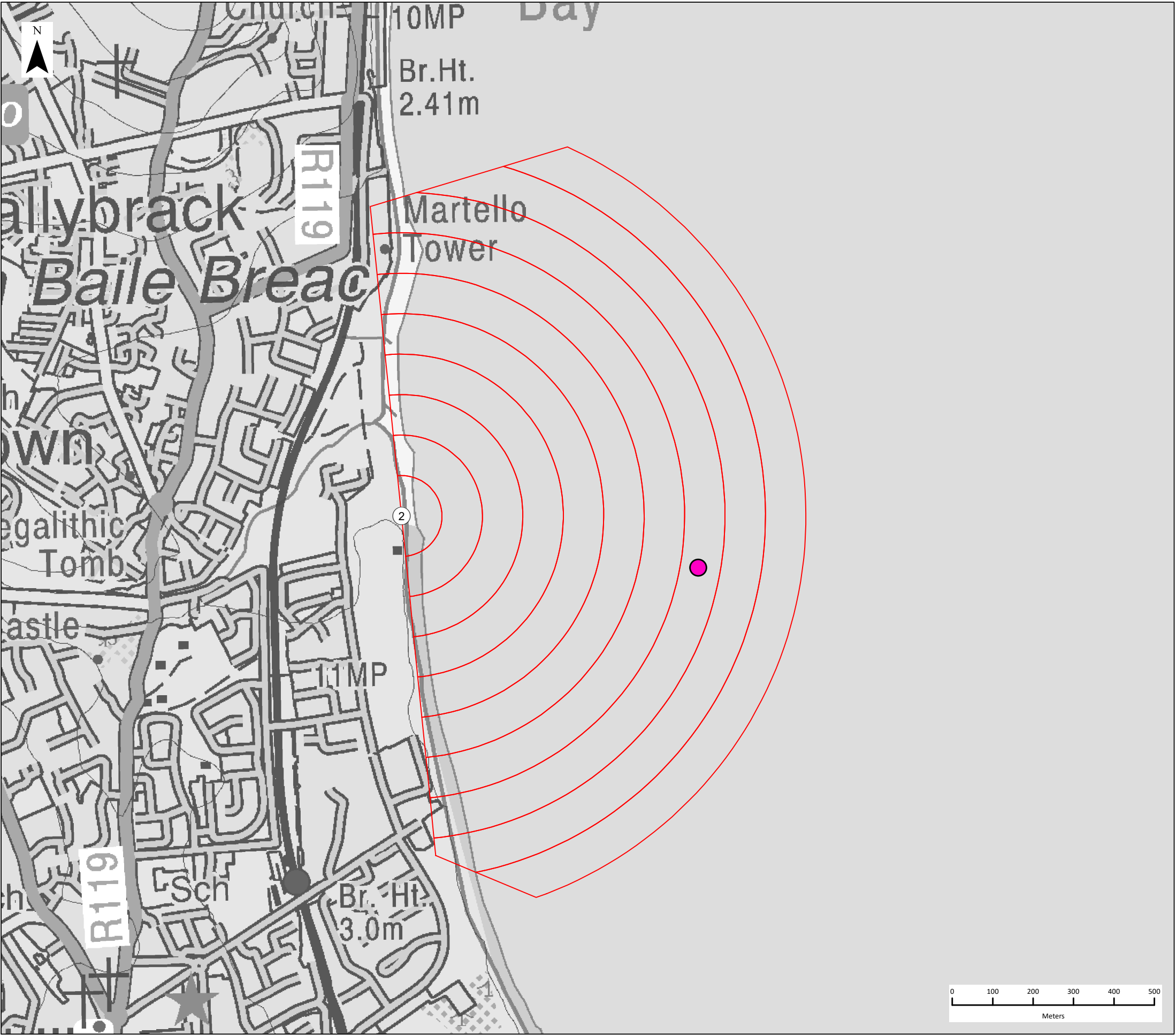
DRAWING TITLE
**Figure 2.26: Relative Abundance and Distribution
of Black Guillemot within the Study
Area Recorded from Vantage Point 1 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



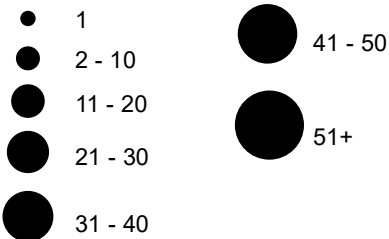


LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
12/03/2020
19/03/2020
16/09/2020
21/10/2020

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BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

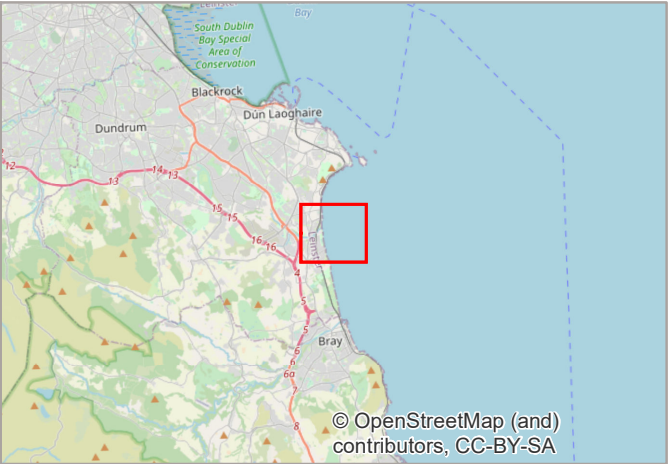
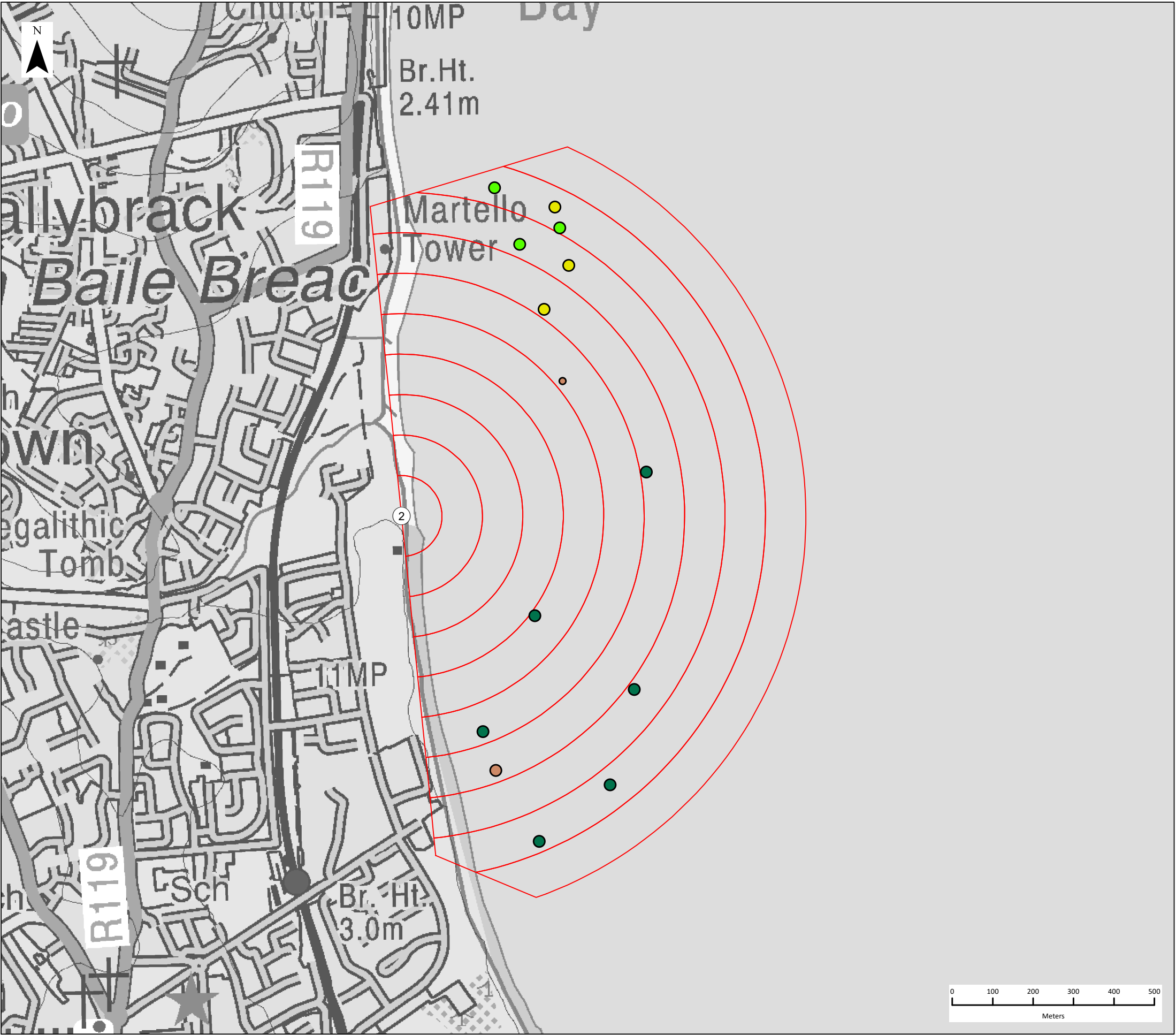
DRAWING TITLE
**Figure 3.1: Relative Abundance and Distribution
of Common Scoter within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



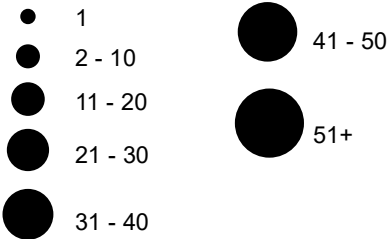


LEGEND

VP Distance Bands (100m)

② Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
12/03/2020
19/03/2020
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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

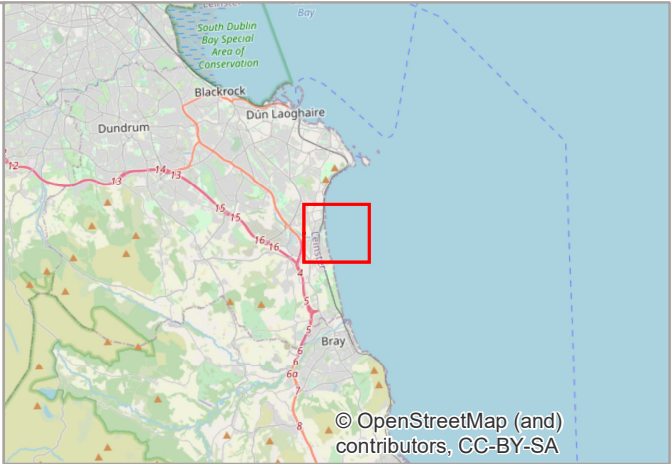
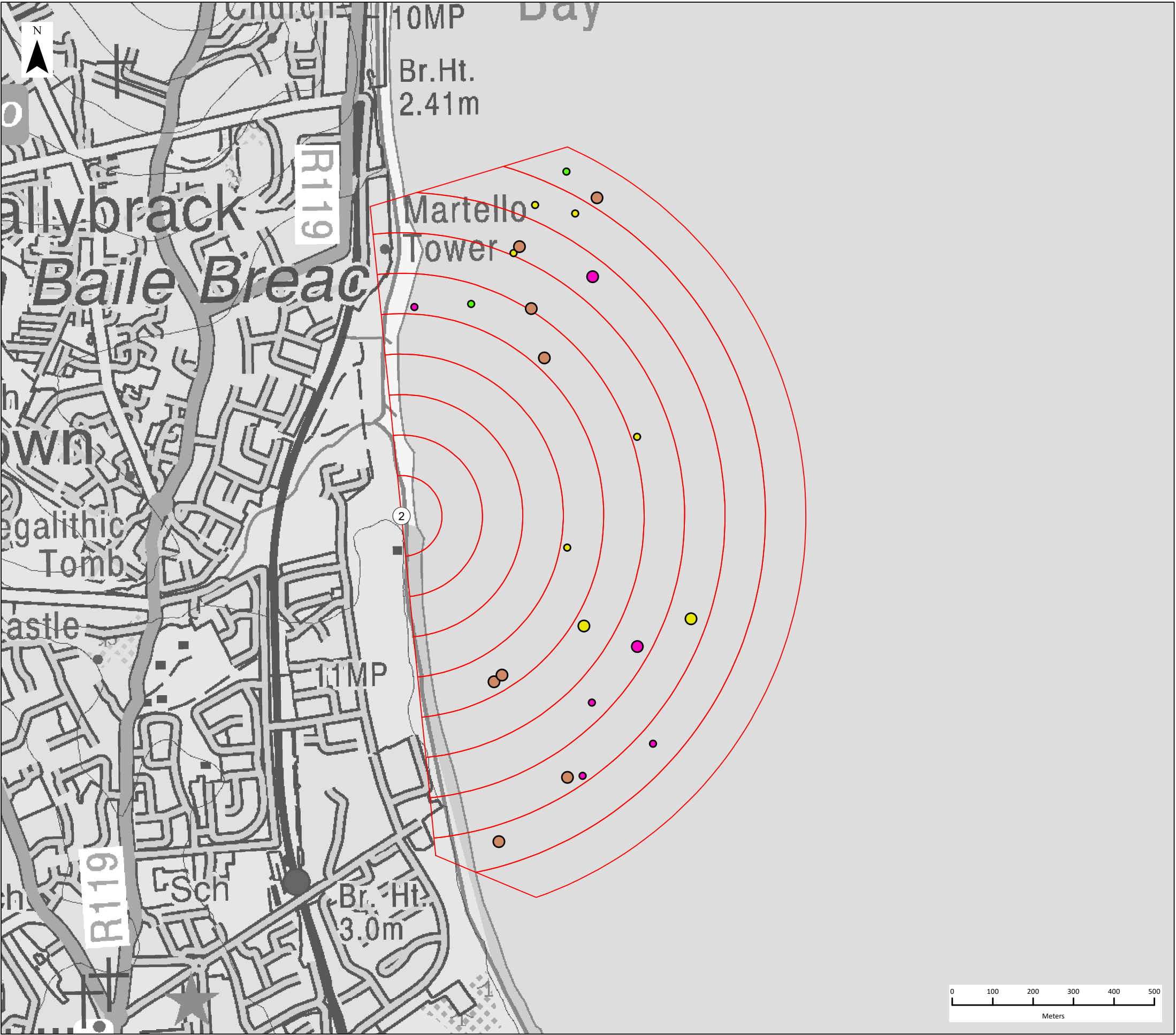
DRAWING TITLE
**Figure 3.2: Relative Abundance and Distribution
of Red-breasted Merganser within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



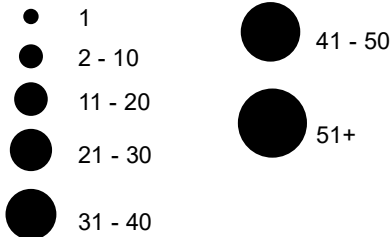


LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
12/03/2020
19/03/2020
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PROJECT TITLE
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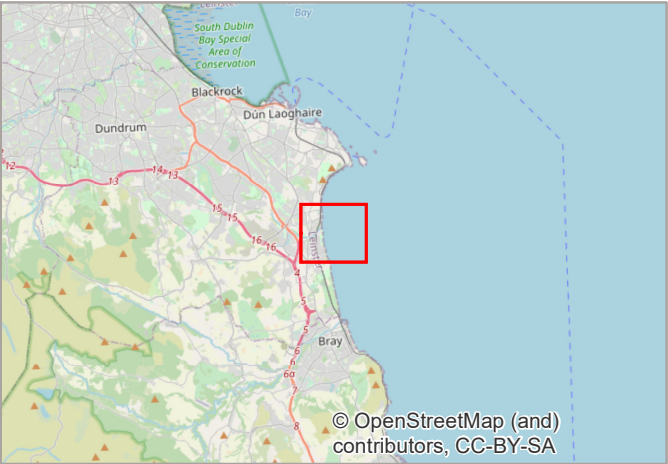
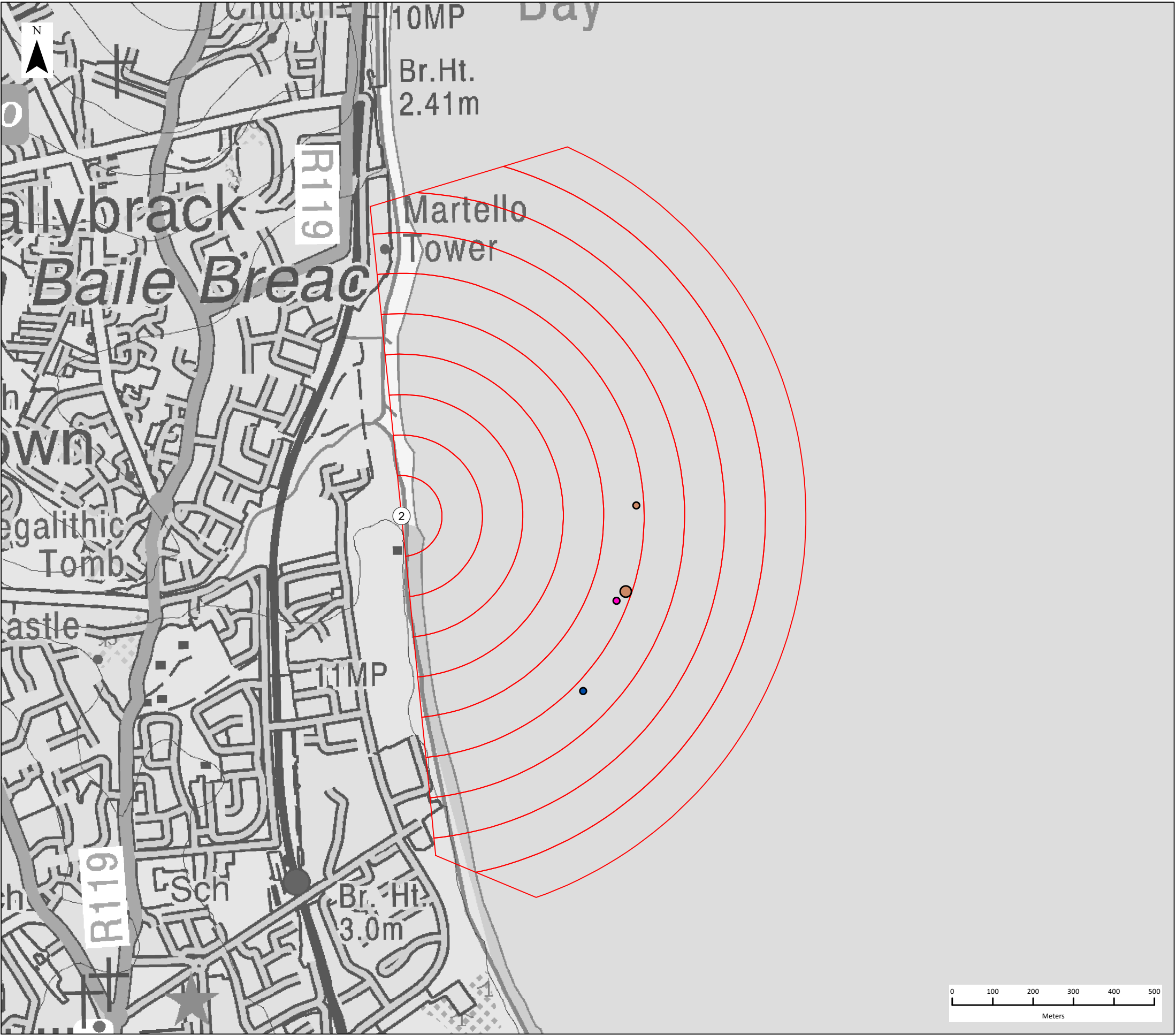
DRAWING TITLE
**Figure 3.3: Relative Abundance and Distribution
of Red-throated Diver within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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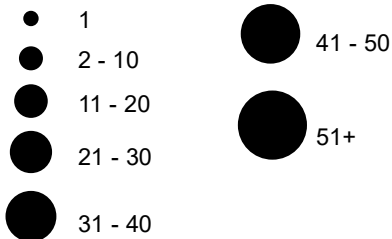


LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
12/03/2020
19/03/2020
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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
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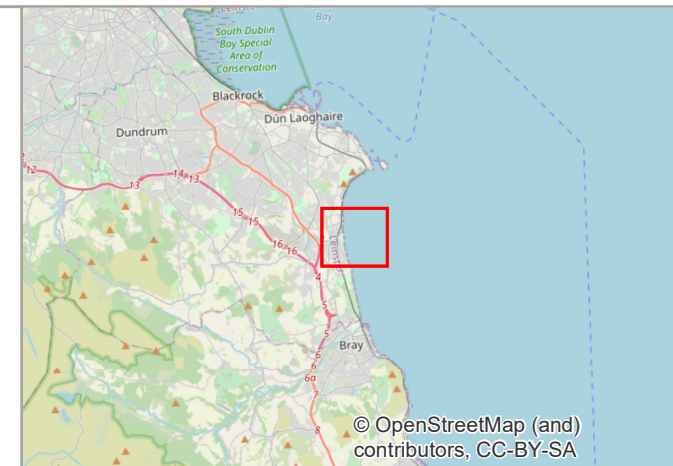
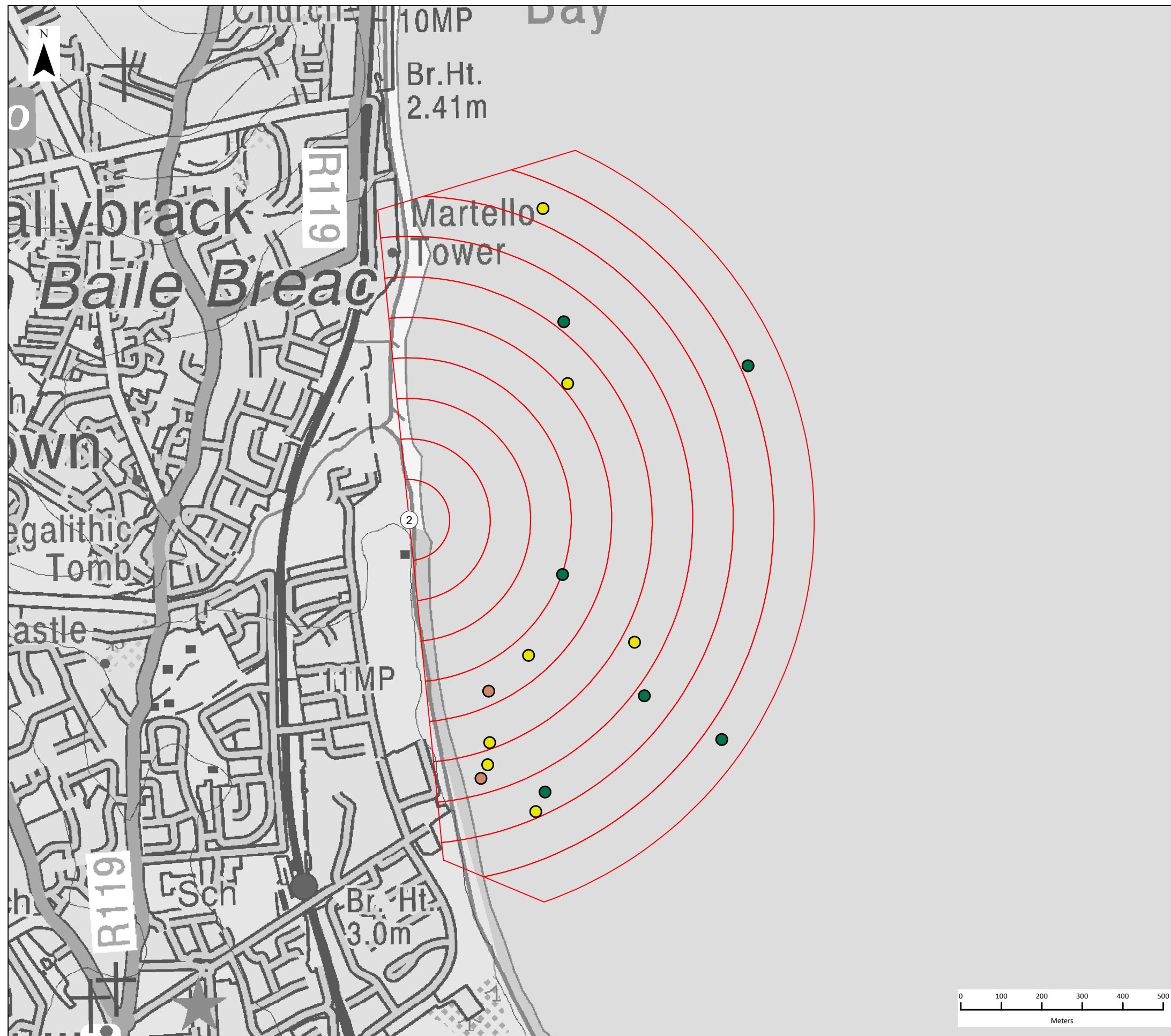
DRAWING TITLE
**Figure 3.4: Relative Abundance and Distribution
of Great Northern Diver within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



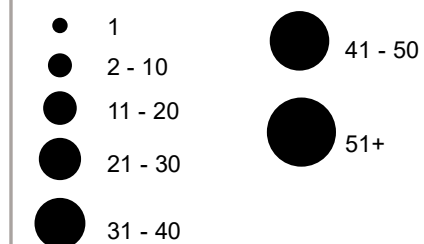


LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
12/03/2020
19/03/2020
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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

DRAWING TITLE
**Figure 3.5: Relative Abundance and Distribution
of Great Crested Grebe within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

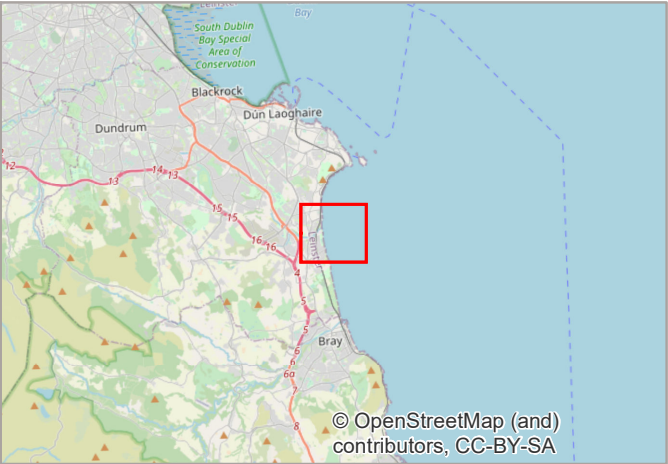
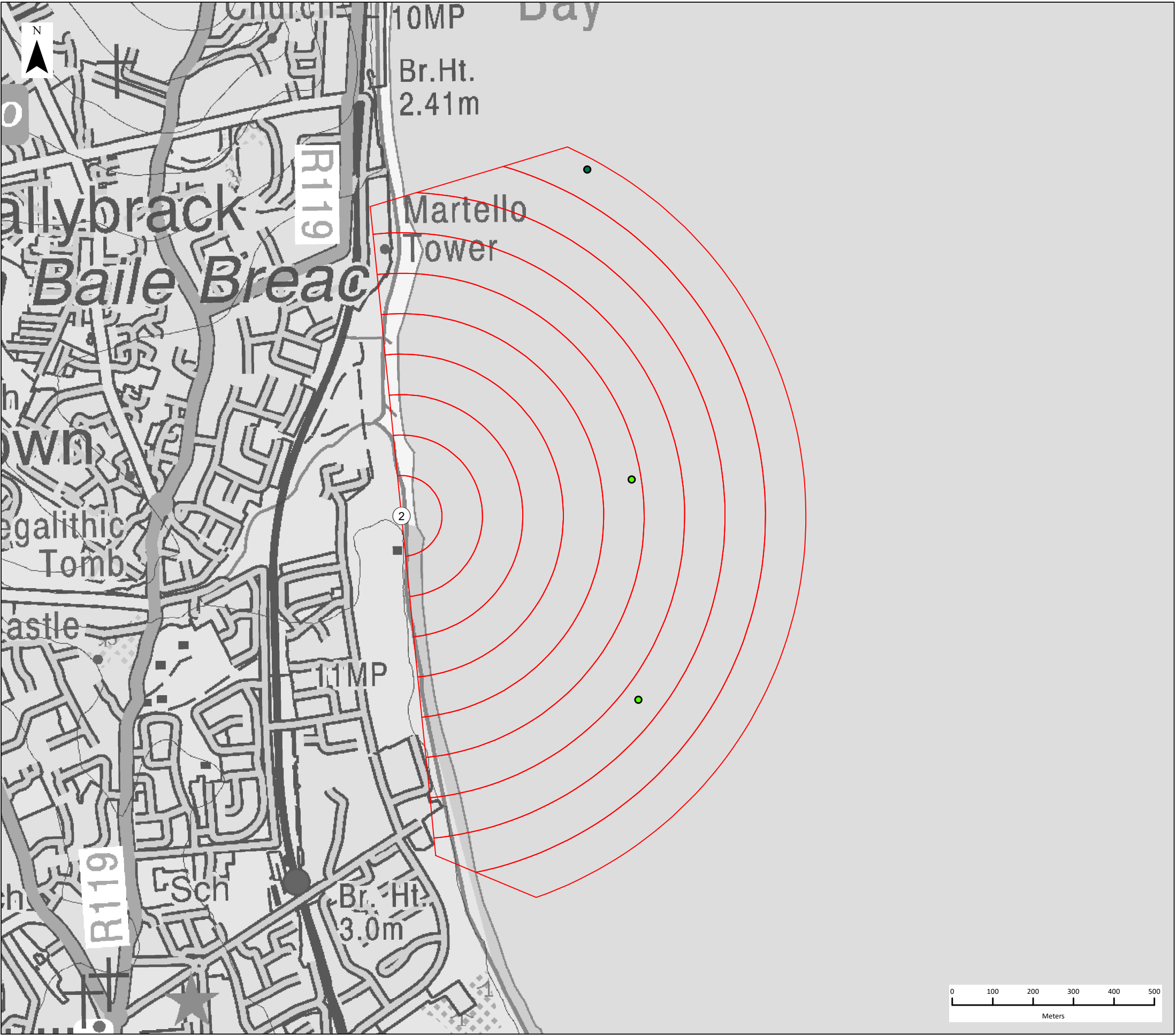
DRAWING NUMBER:
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SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
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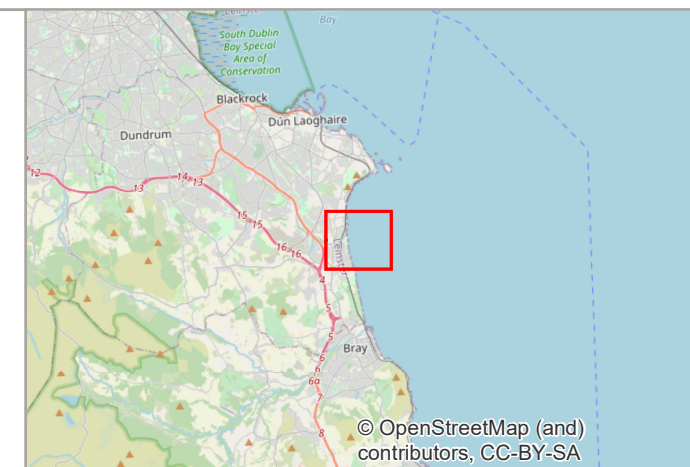
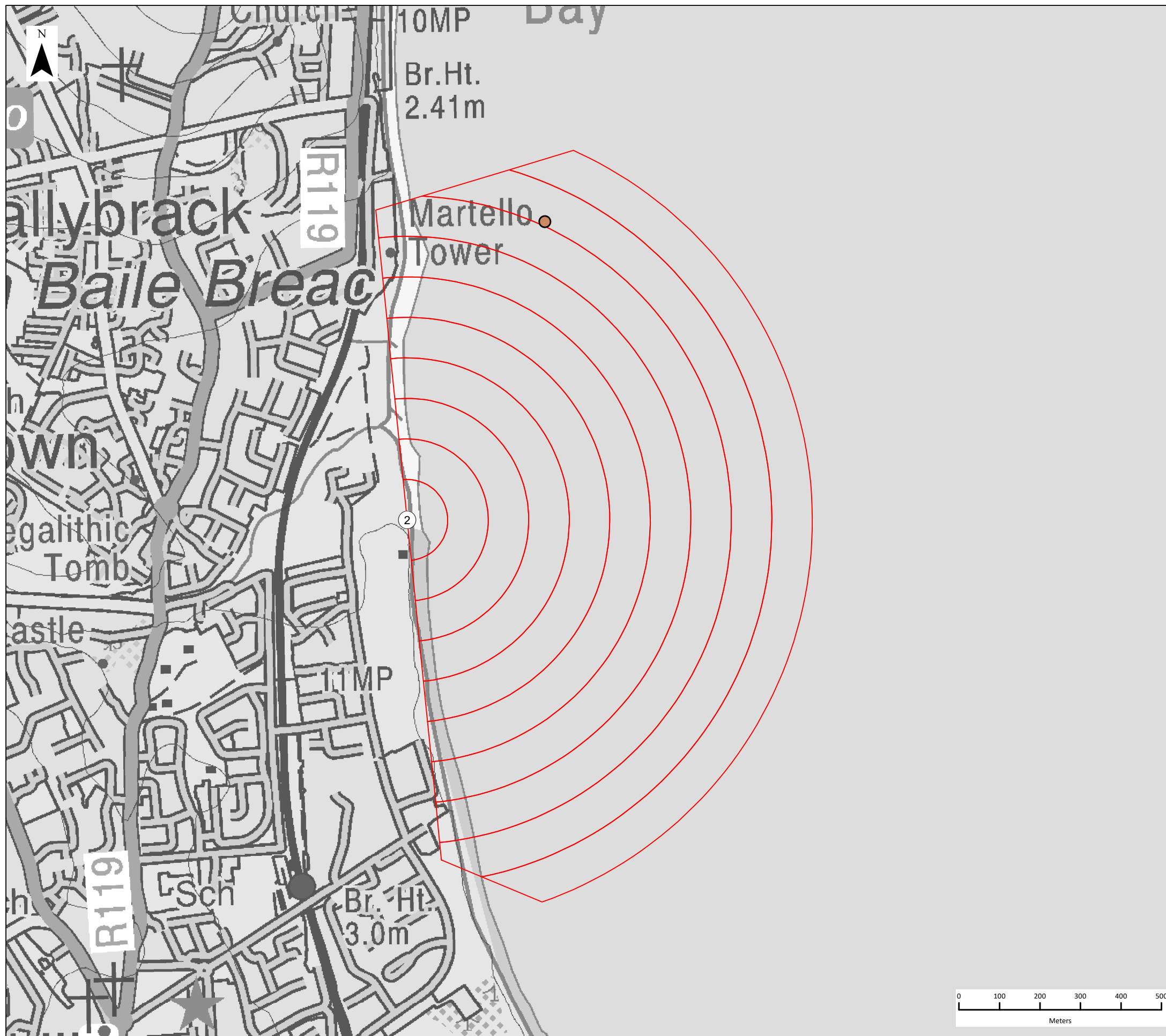
DRAWING TITLE
**Figure 3.6: Relative Abundance and Distribution
of Fulmar within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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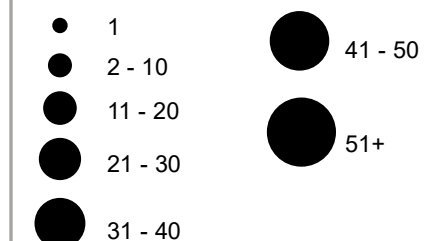


LEGEND

VP Distance Bands (100m)

② Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
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**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

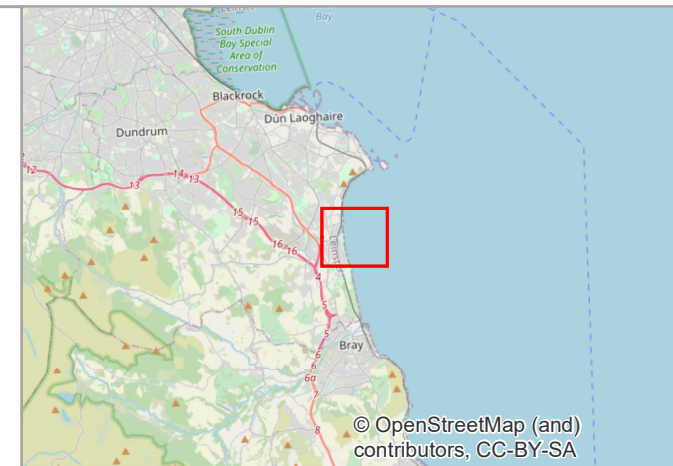
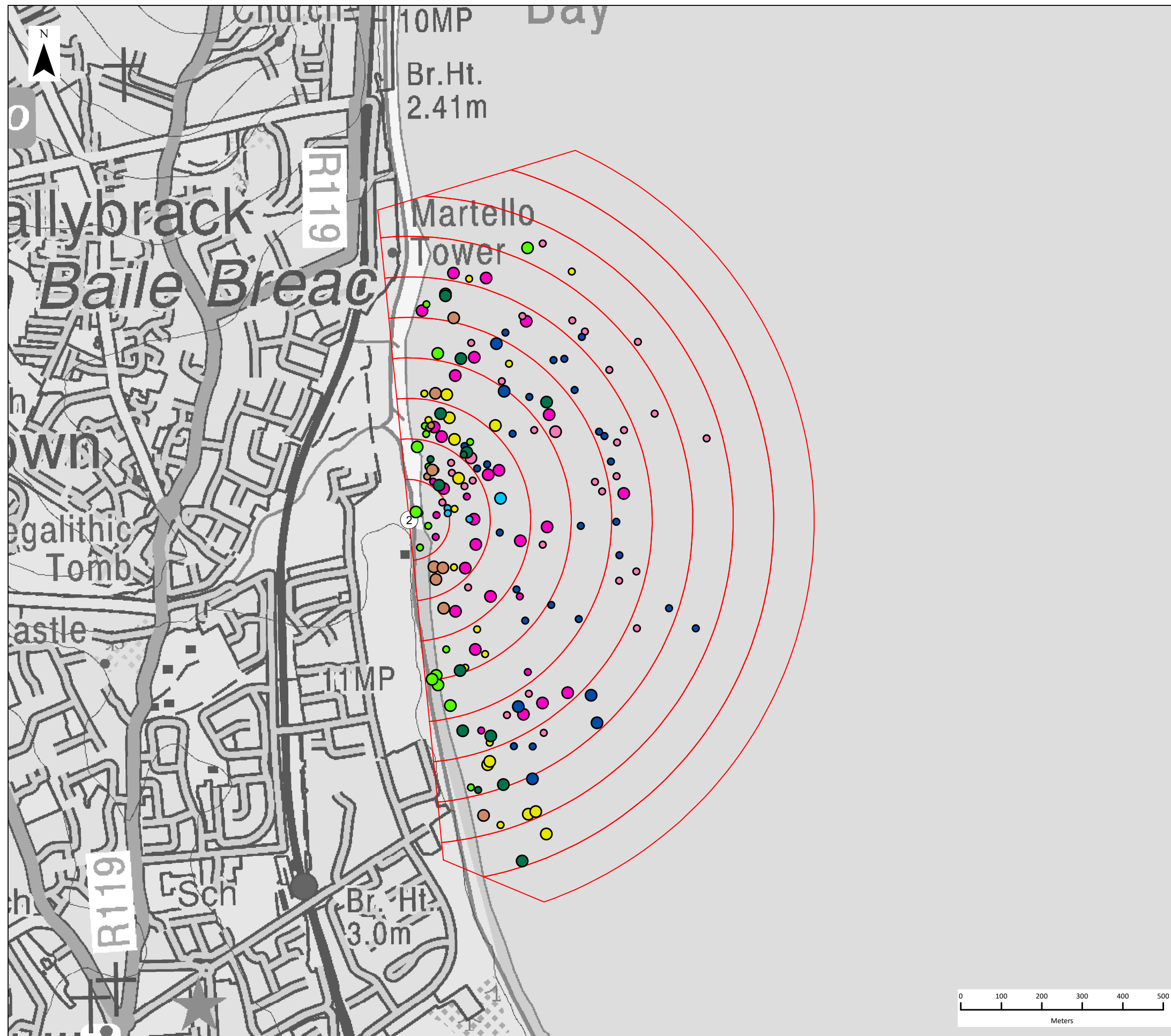
DRAWING TITLE
**Figure 3.7: Relative Abundance and Distribution
of Gannet within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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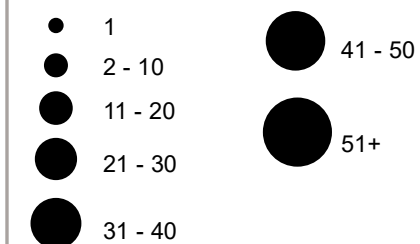


LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
12/03/2020
19/03/2020
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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

DRAWING TITLE
**Figure 3.8: Relative Abundance and Distribution
of Shag within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

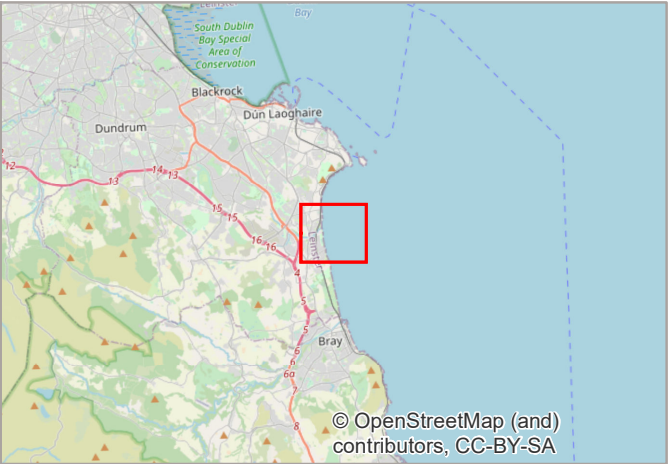
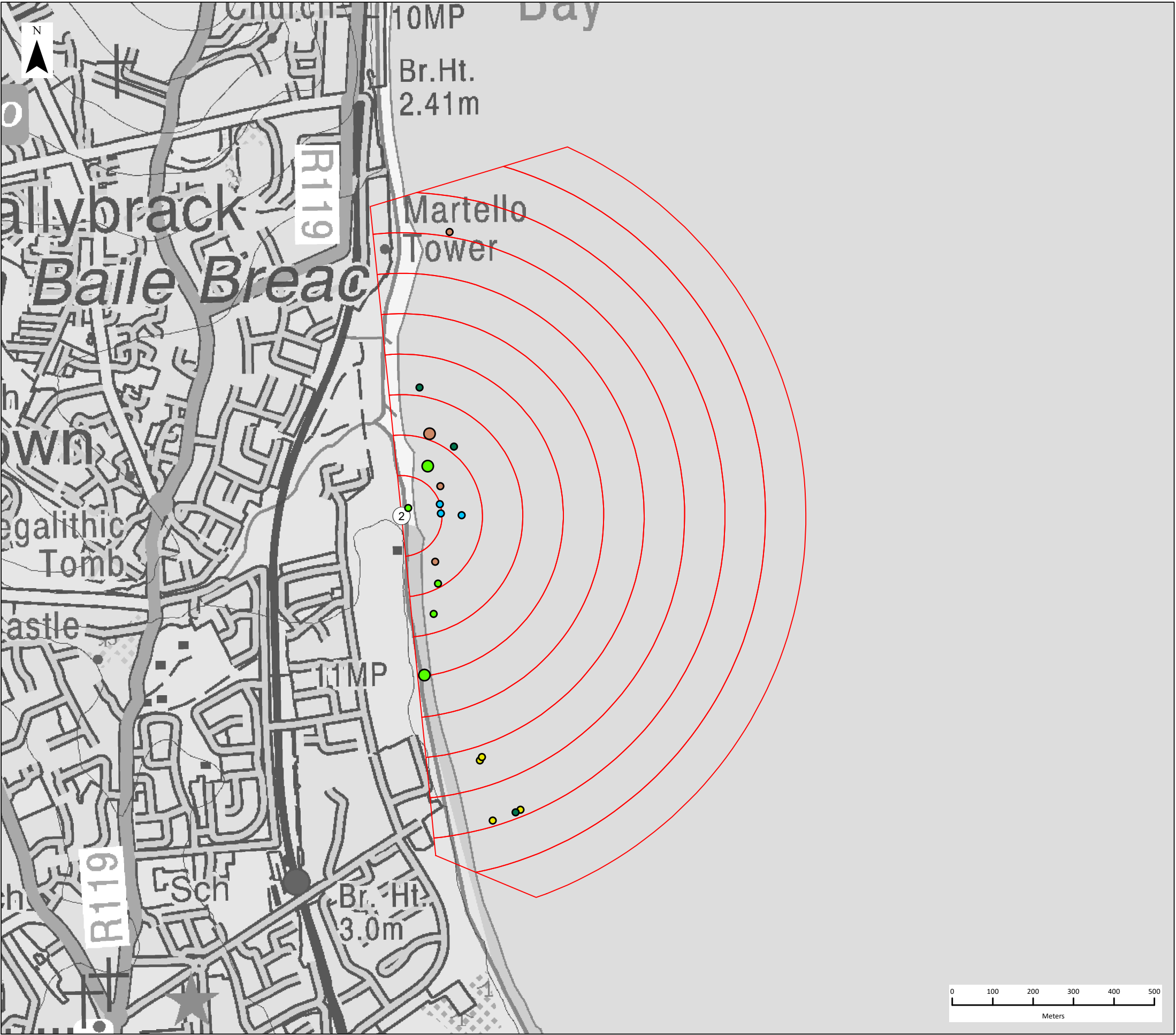
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SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

2 Vantage Point

Flock Size (Colour Denotes Survey Date)

● 1	● 41 - 50
● 2 - 10	● 51+
● 11 - 20	
● 21 - 30	
● 31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

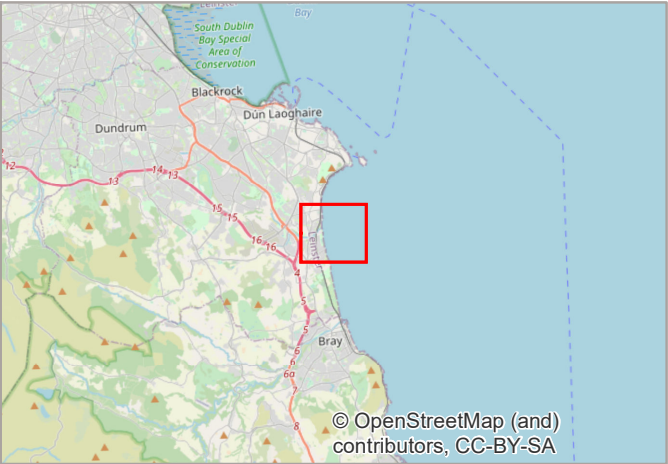
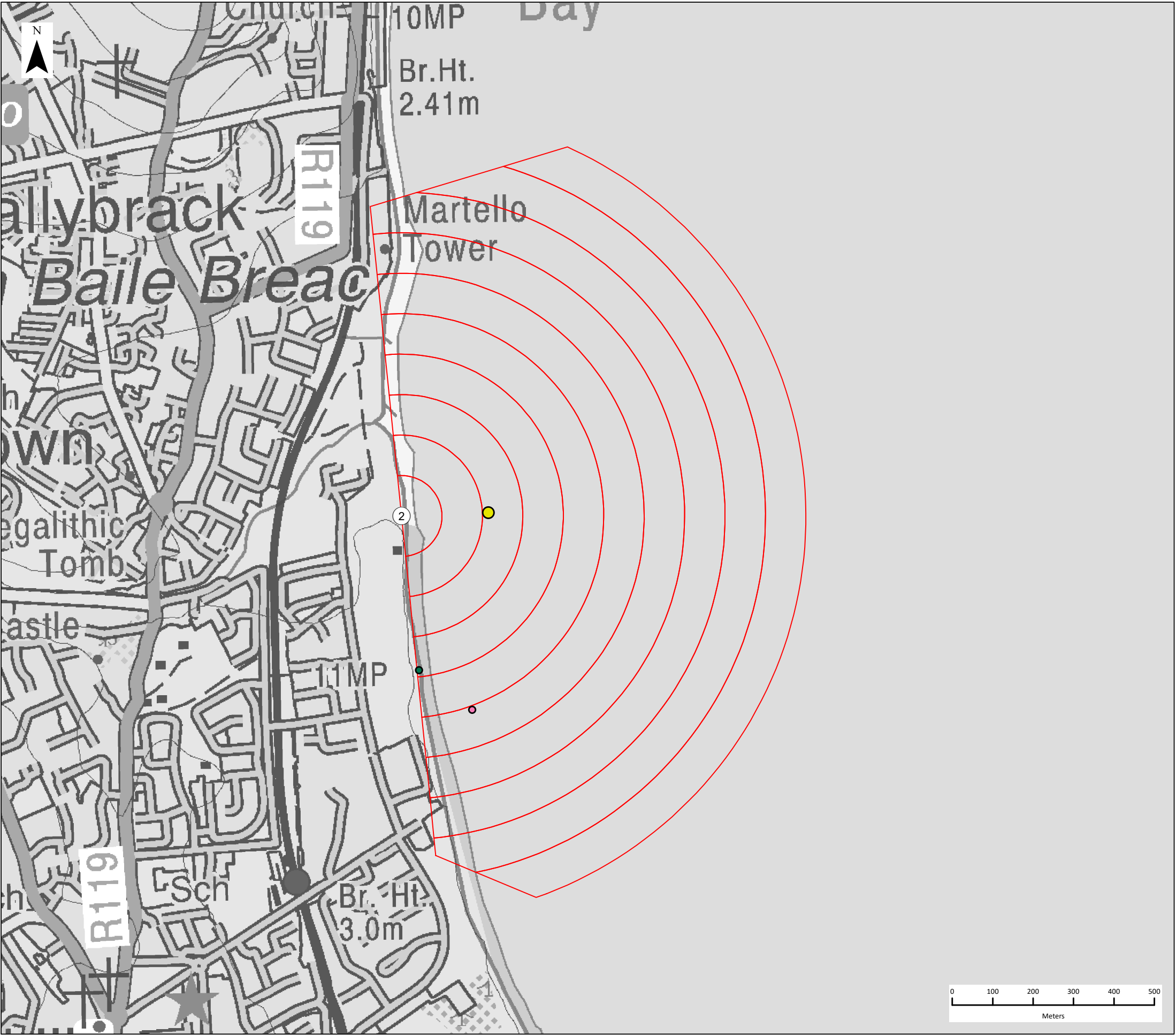
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**Figure 3.9: Relative Abundance and Distribution
of Cormorant within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

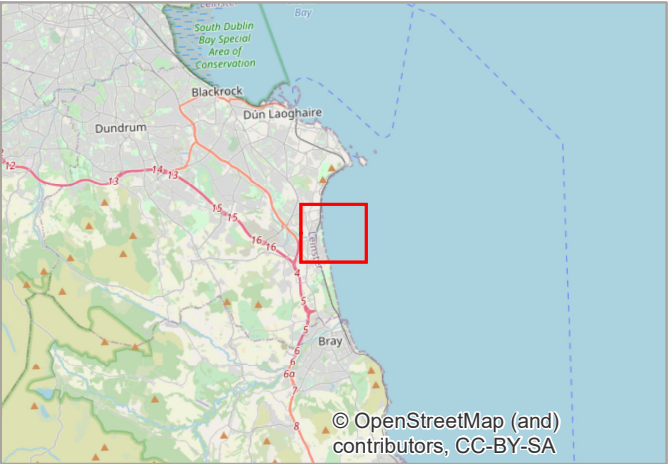
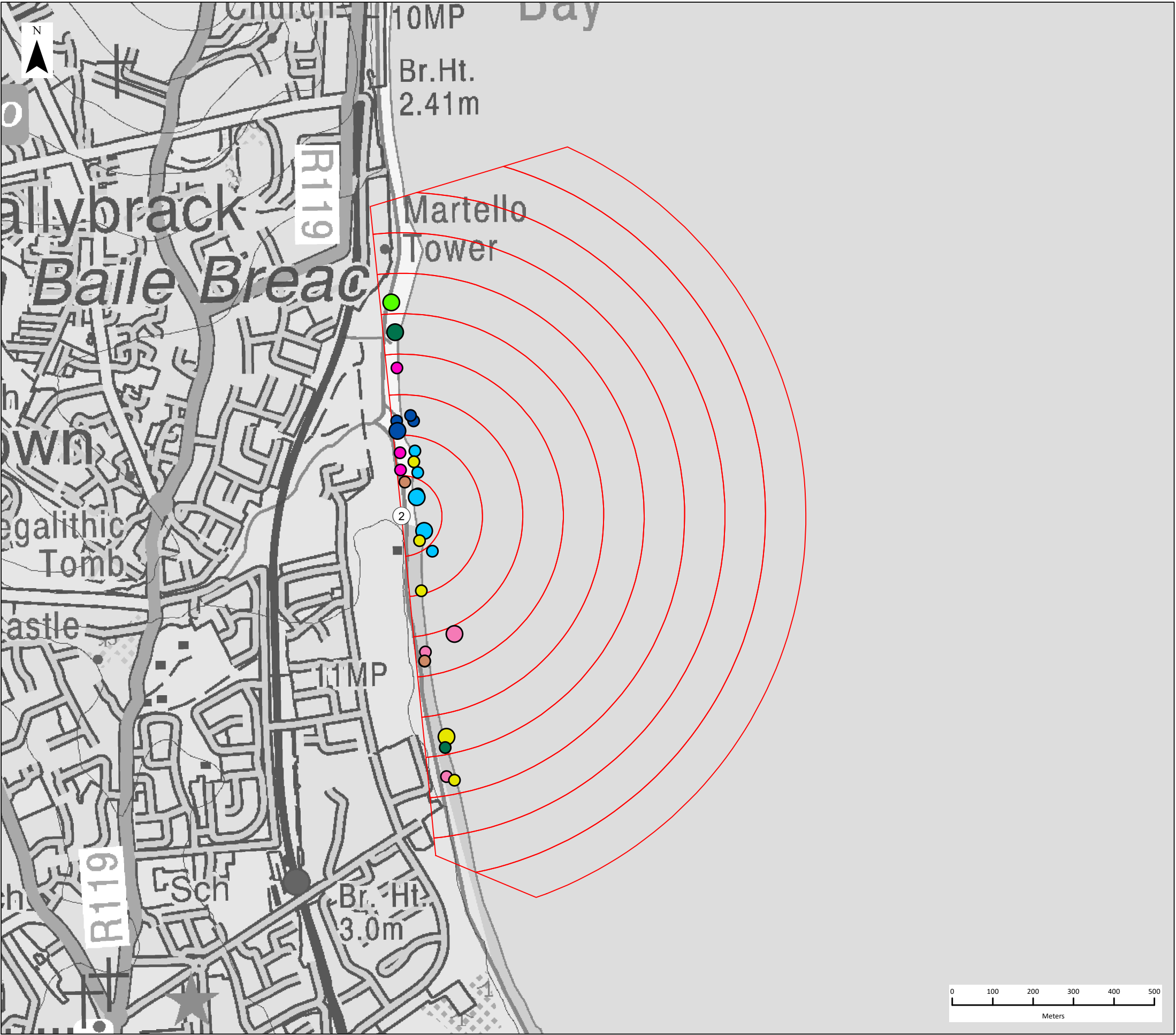
DRAWING TITLE
**Figure 3.10: Relative Abundance and Distribution
of Grey Heron within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

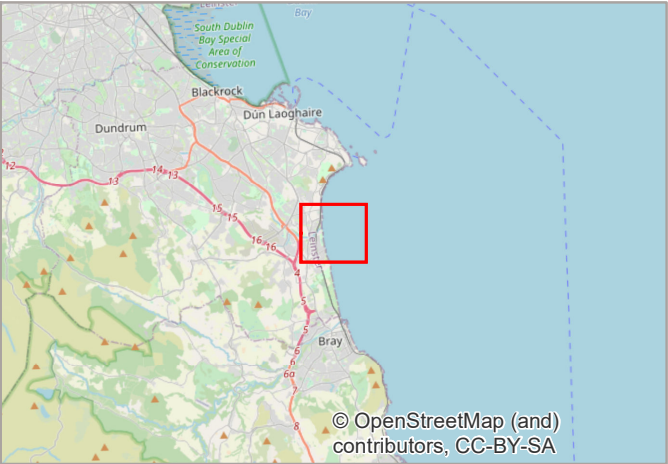
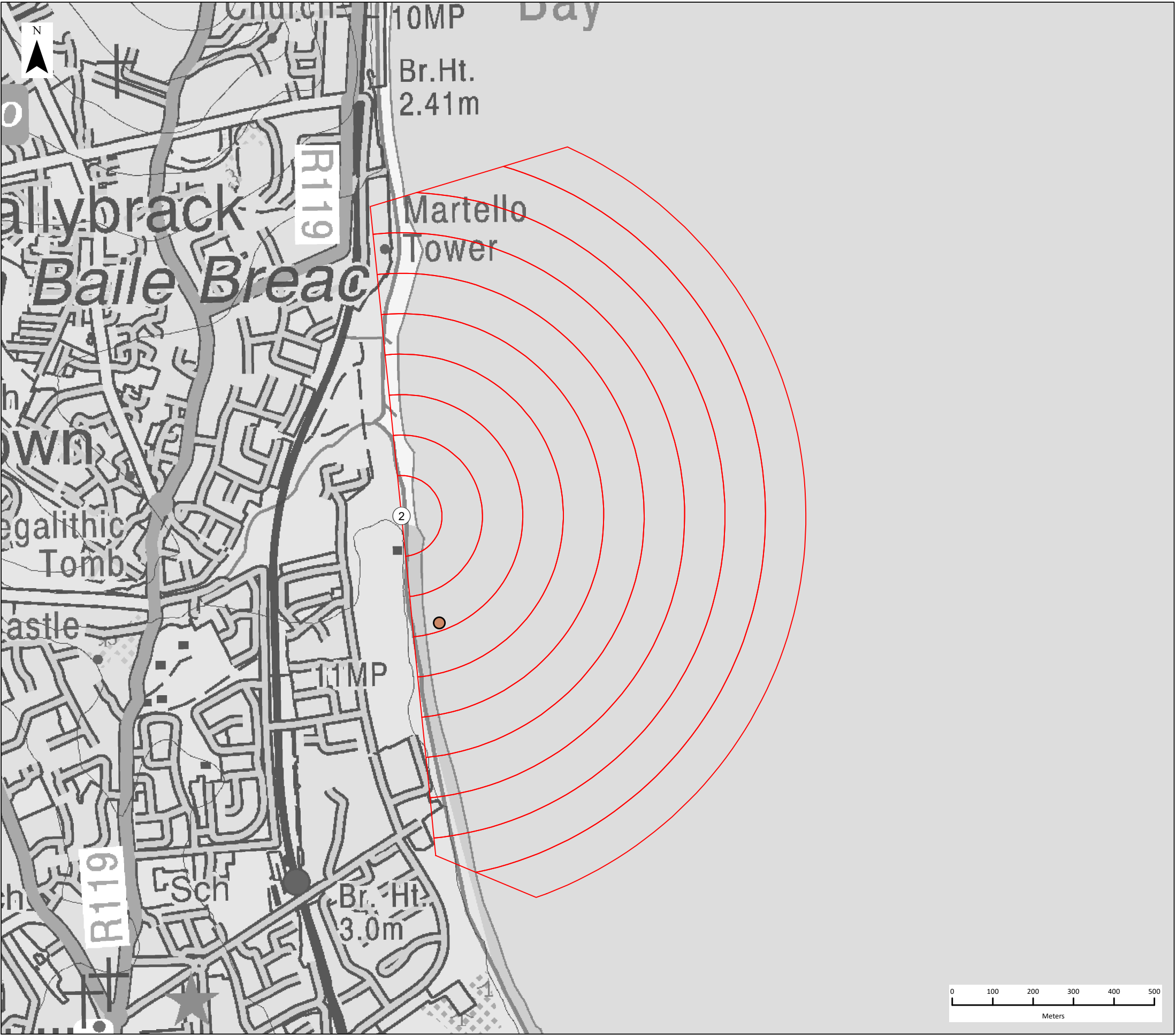
DRAWING TITLE
**Figure 3.11: Relative Abundance and Distribution
of Oystercatcher within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
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BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

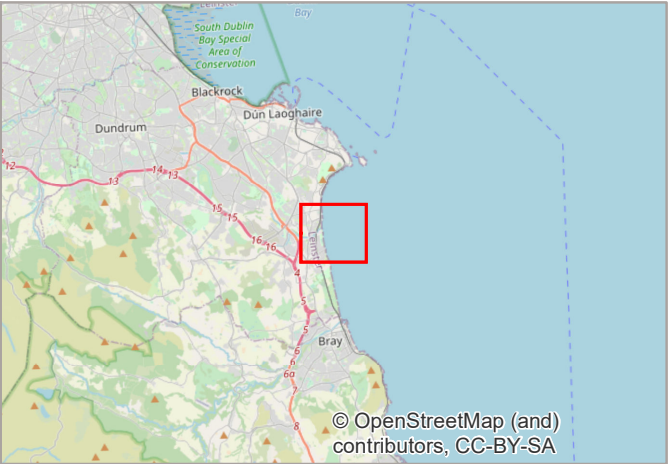
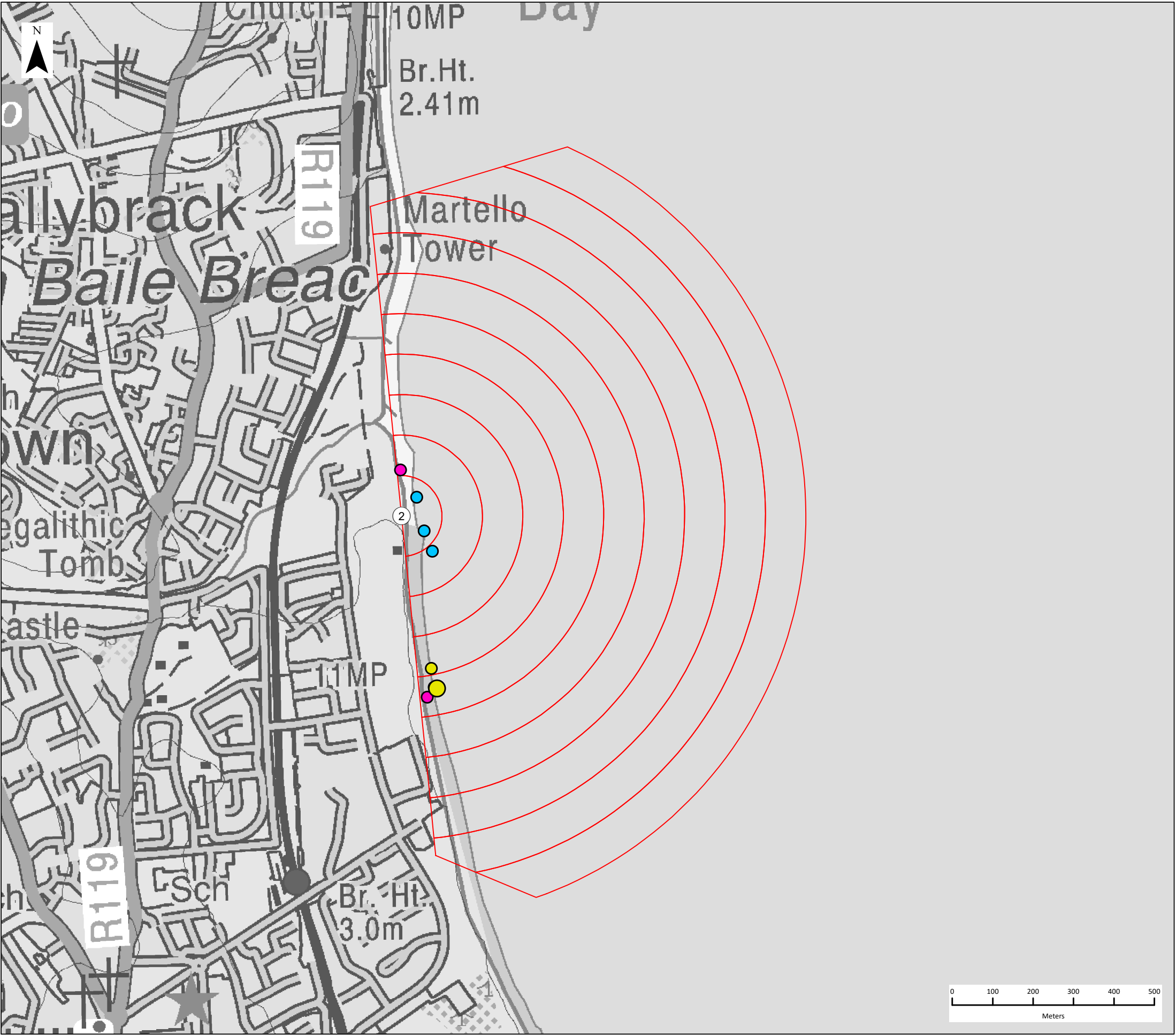
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**Figure 3.12: Relative Abundance and Distribution
of Bar-tailed Godwit within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
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BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

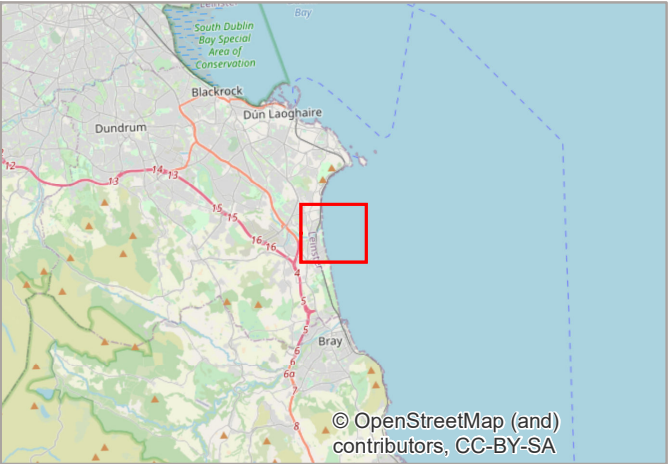
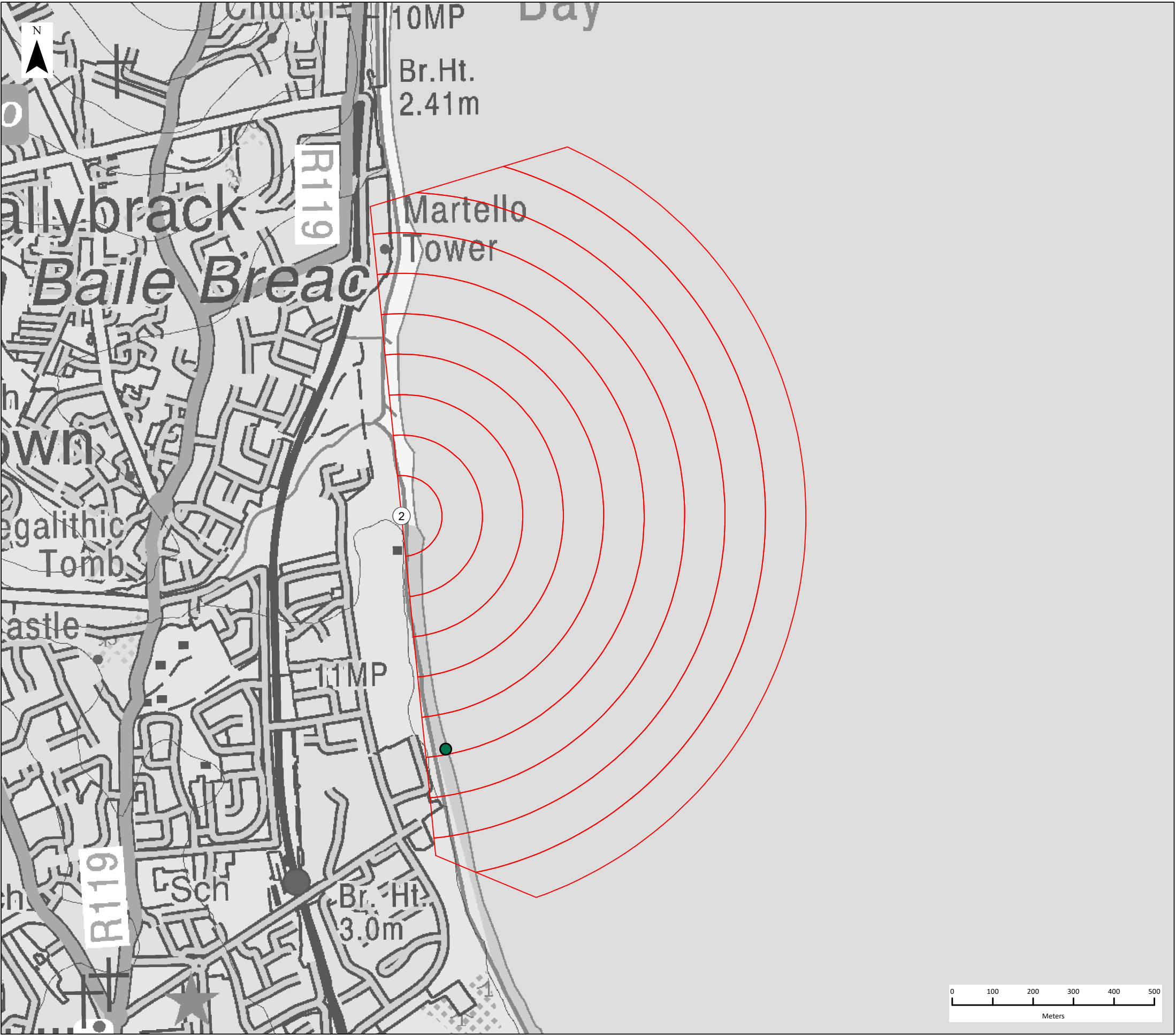
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**Figure 3.13: Relative Abundance and Distribution
of Ringed Plover within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
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BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

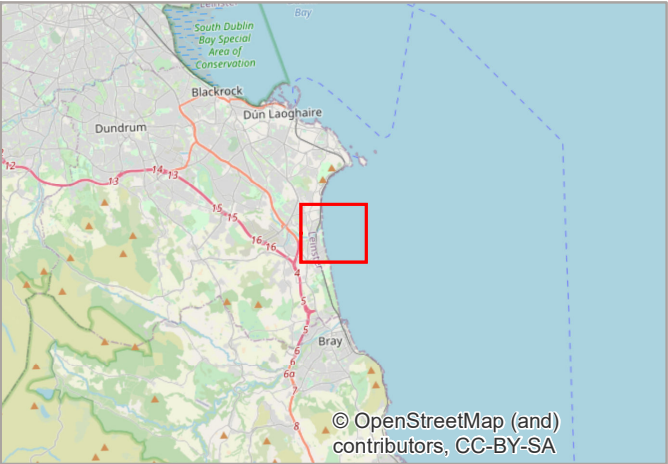
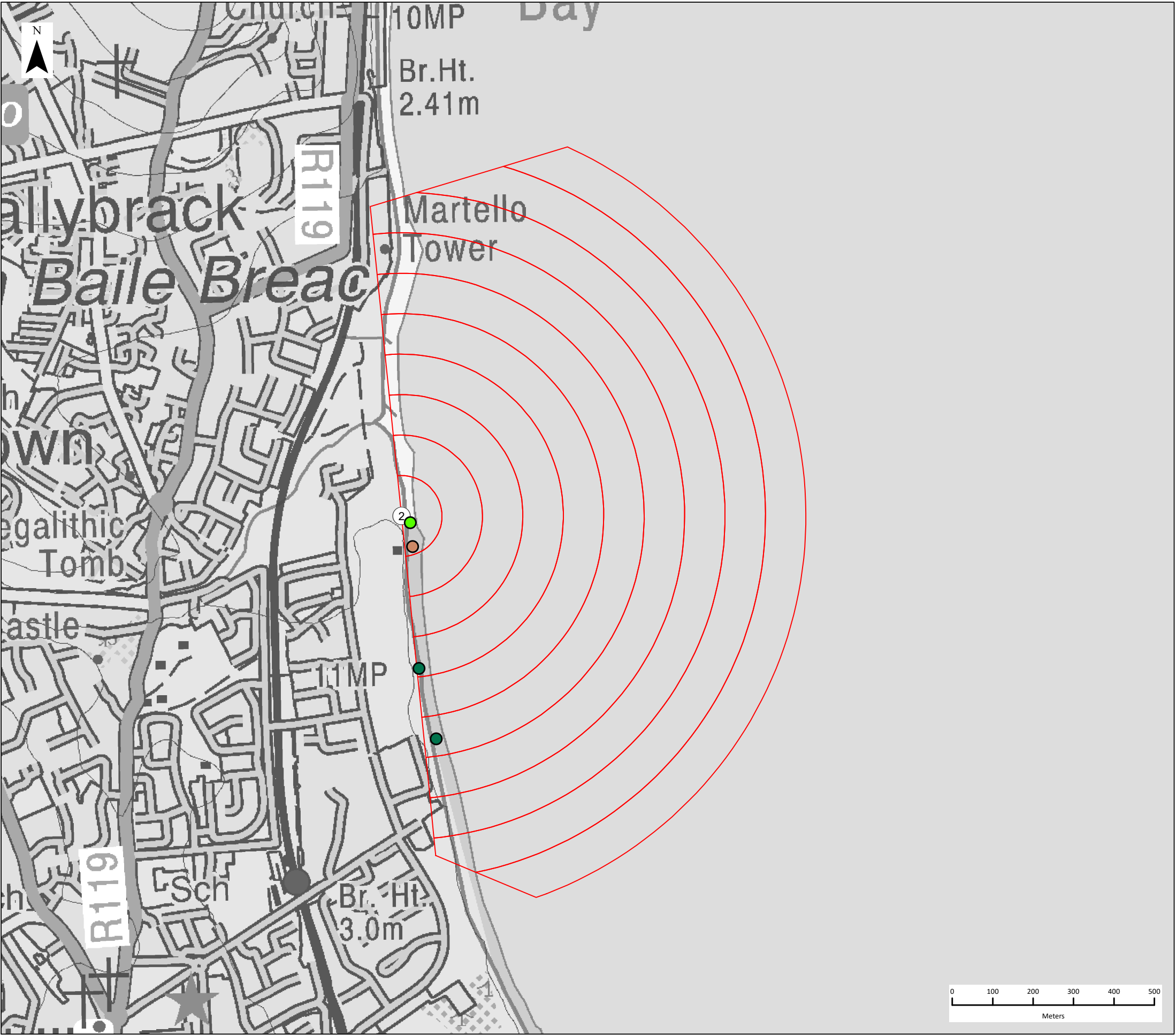
DRAWING TITLE
**Figure 3.14: Relative Abundance and Distribution
of Redshank within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
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BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

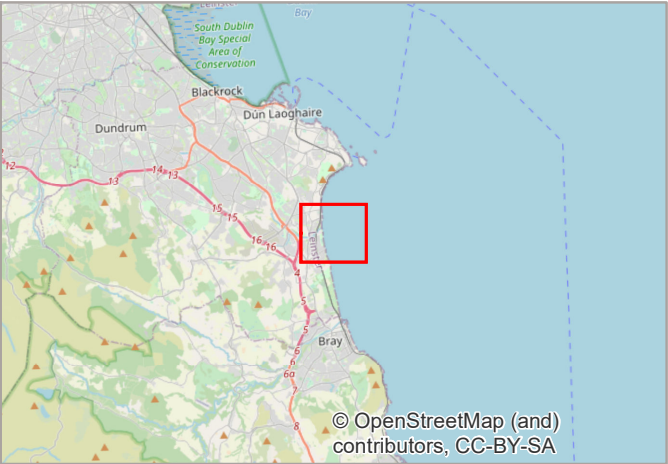
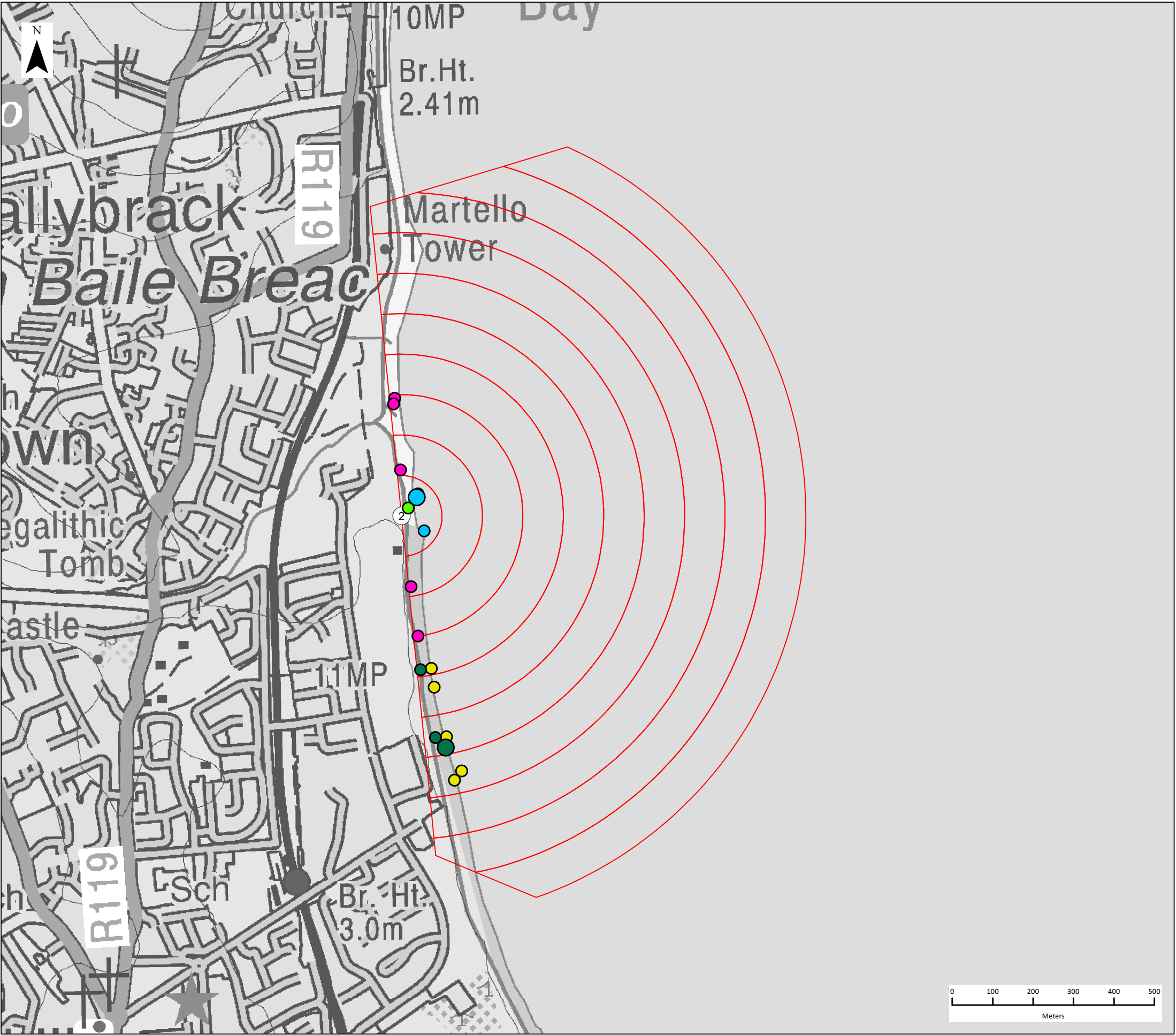
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**Figure 3.15: Relative Abundance and Distribution
of Greenshank within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

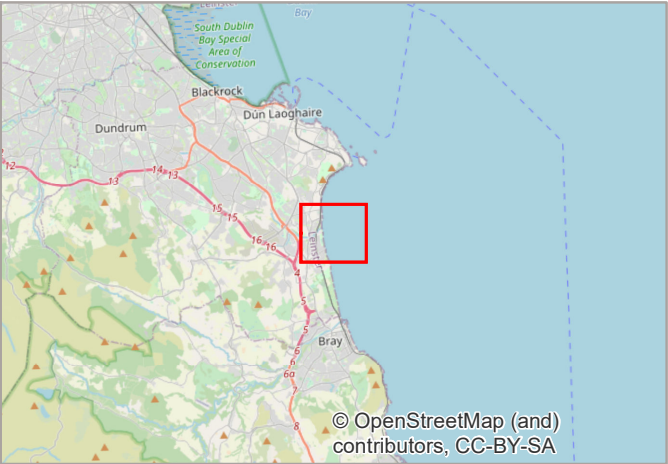
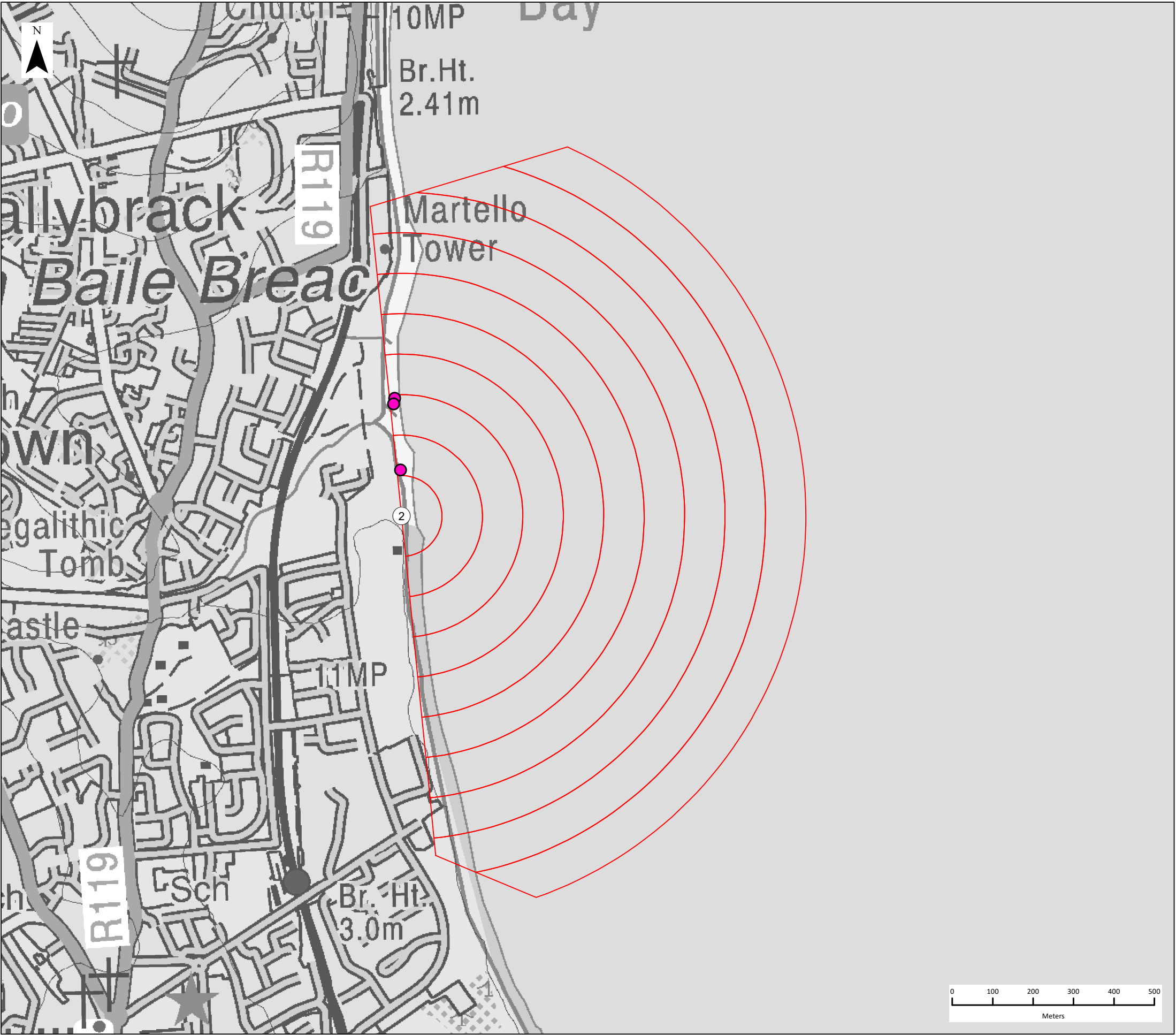
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**Figure 3.16: Relative Abundance and Distribution
of Turnstone within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
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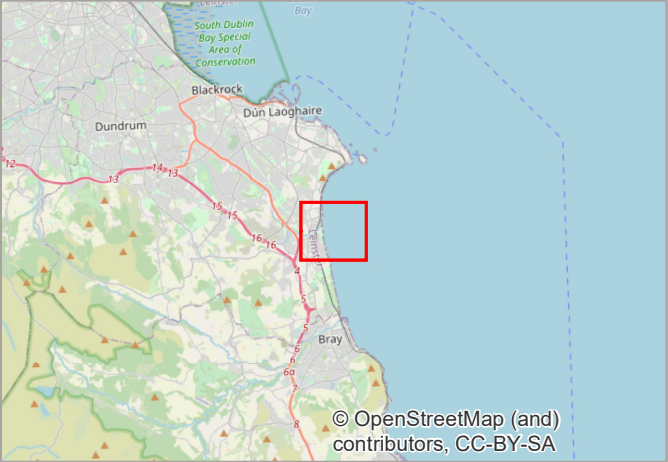
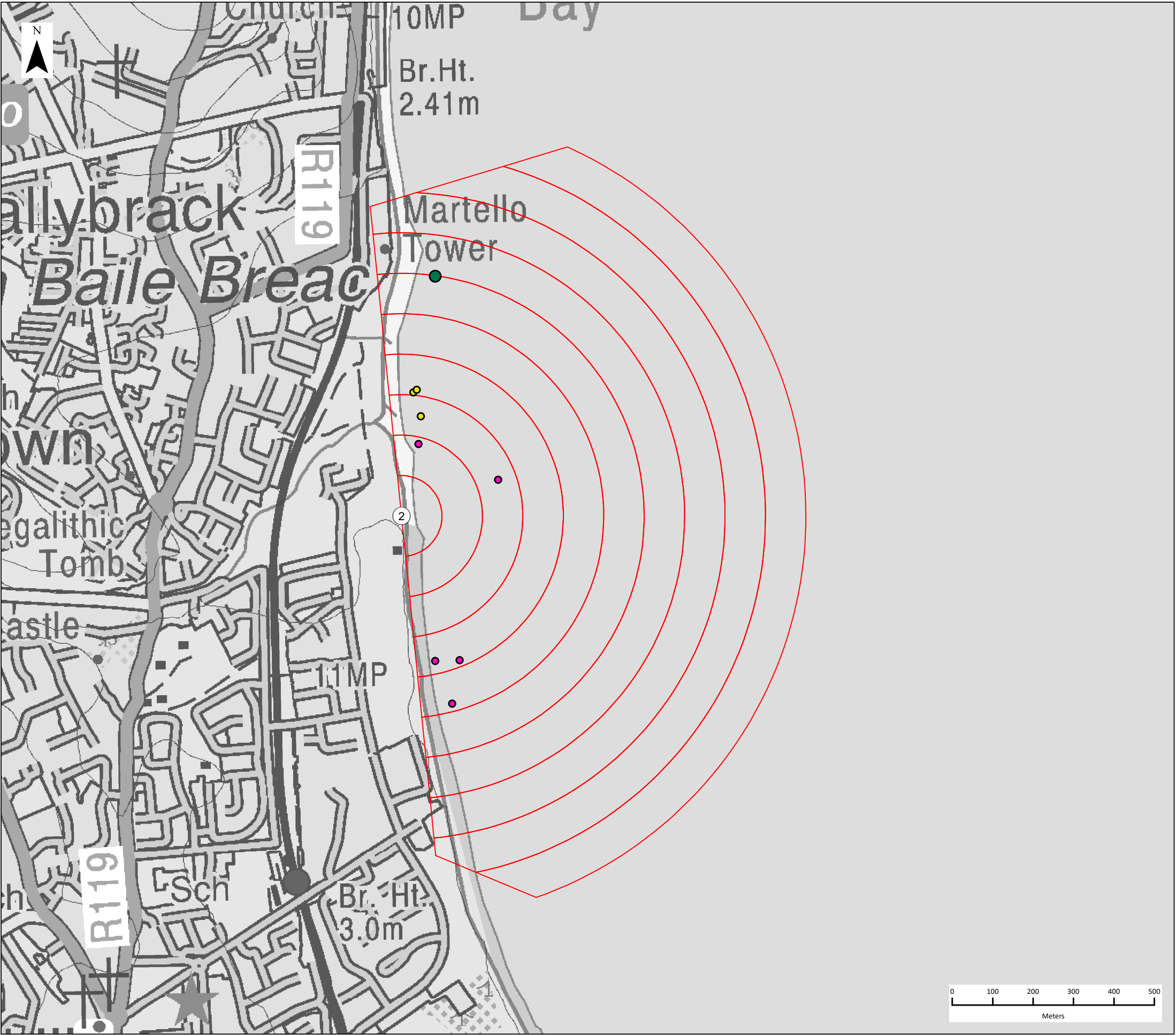
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**Figure 3.17: Relative Abundance and Distribution
of Knot within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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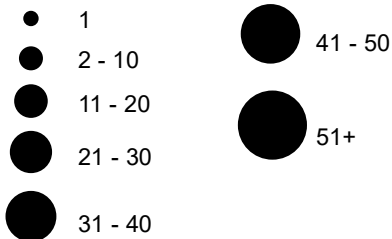


LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
12/03/2020
19/03/2020
16/09/2020
21/10/2020

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BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

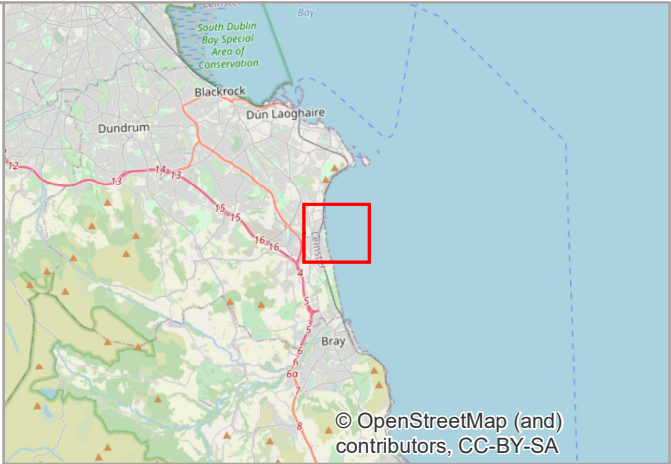
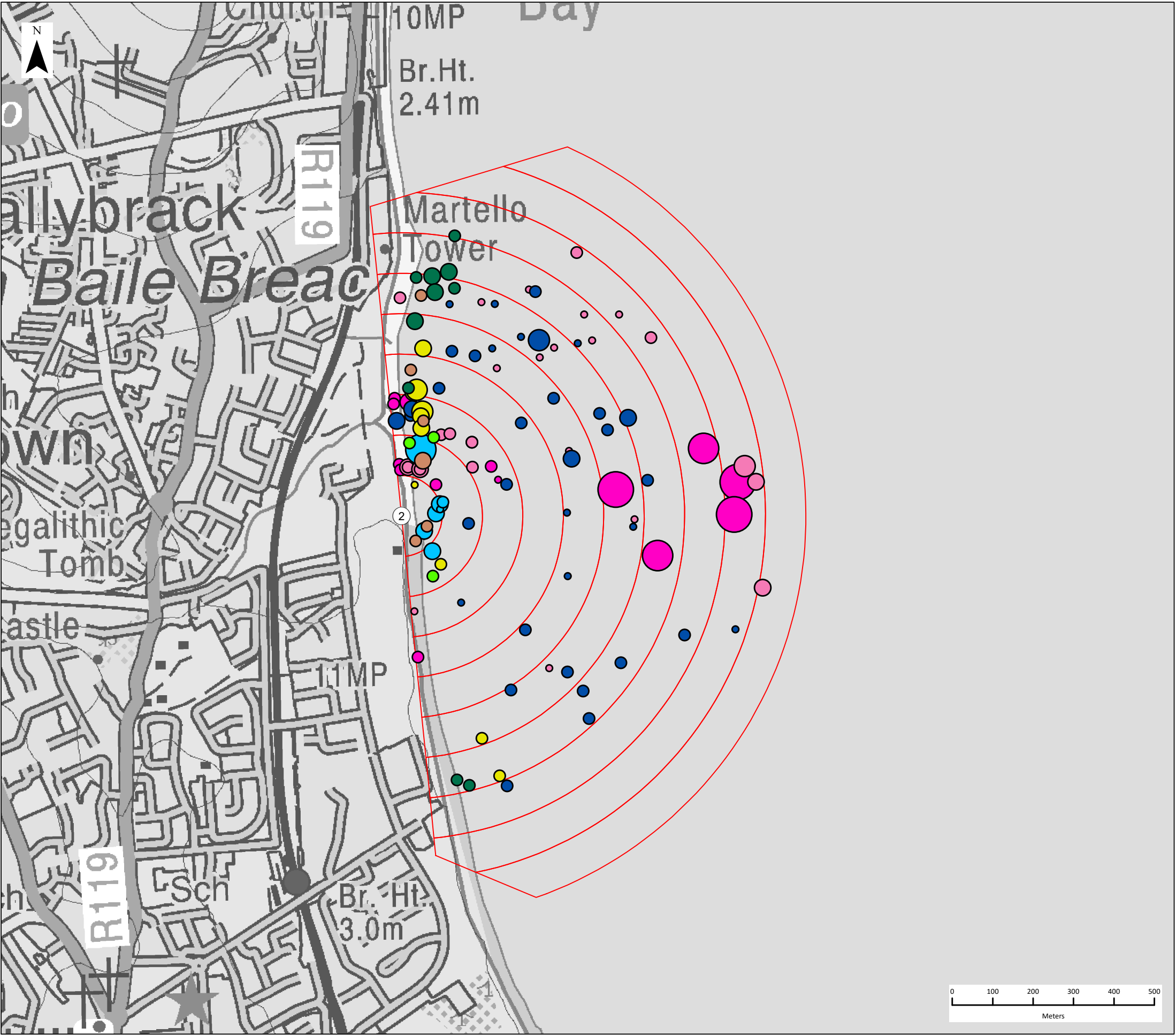
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**Figure 3.18: Relative Abundance and Distribution
of Mediterranean Gull within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N





LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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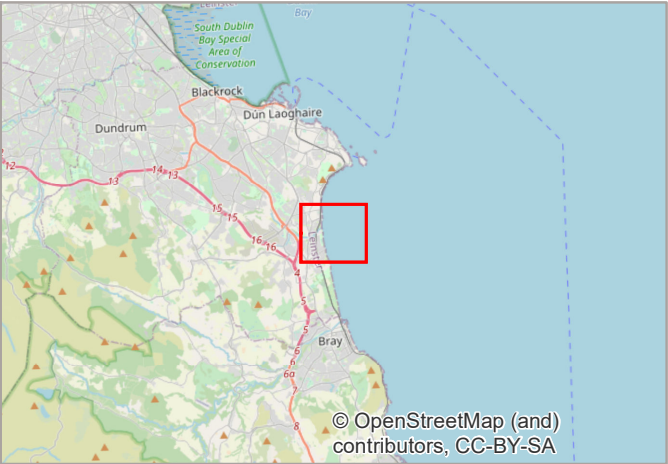
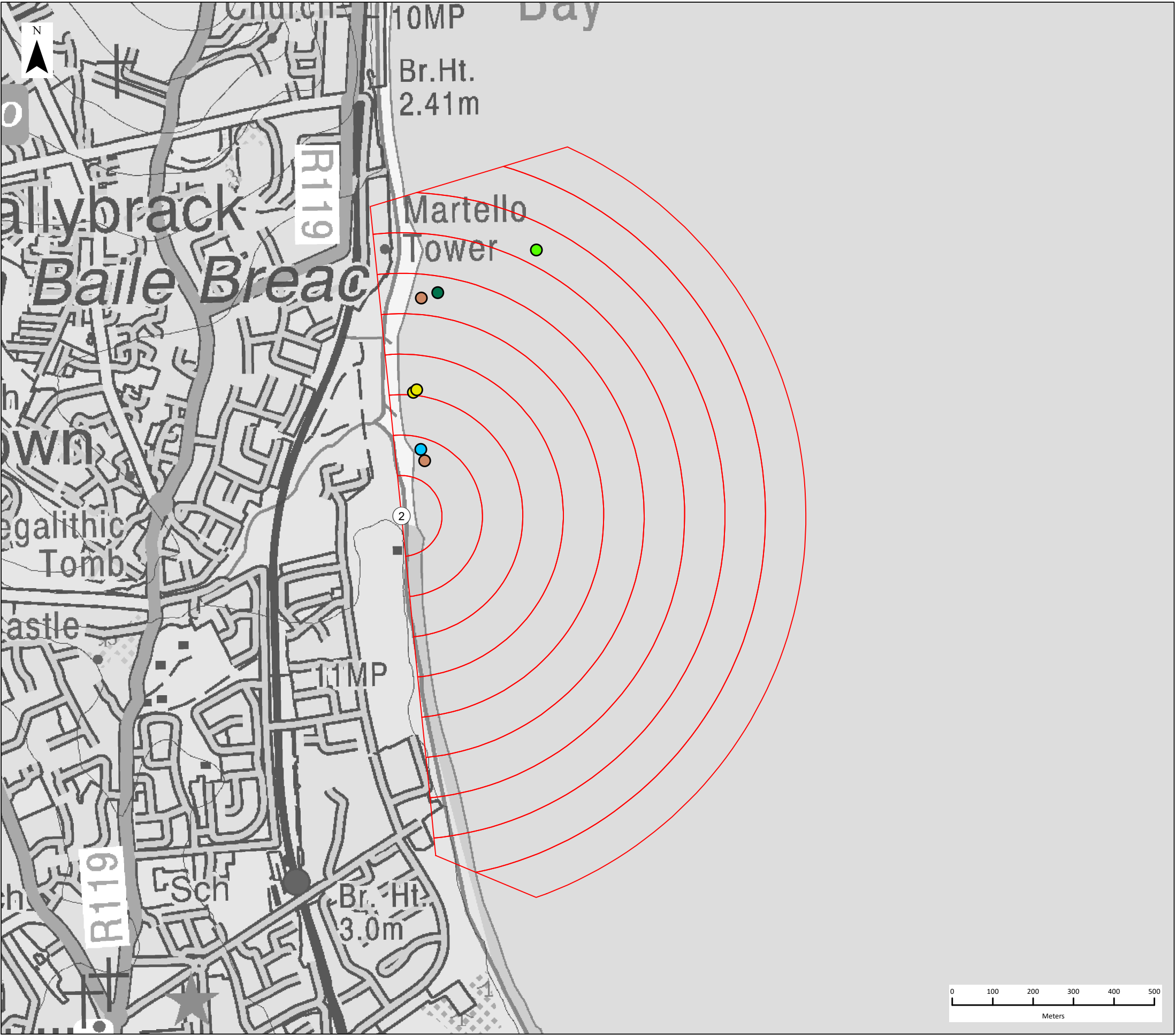
DRAWING TITLE
**Figure 3.19: Relative Abundance and Distribution
of Black-headed Gull within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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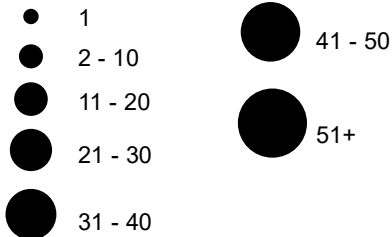


LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
12/03/2020
19/03/2020
16/09/2020
21/10/2020

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PROJECT TITLE
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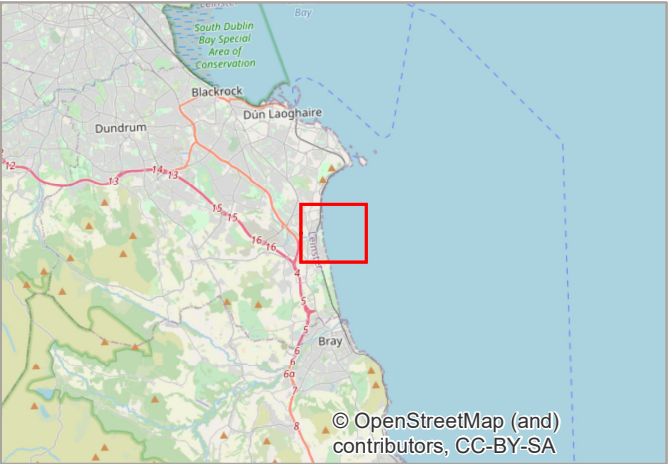
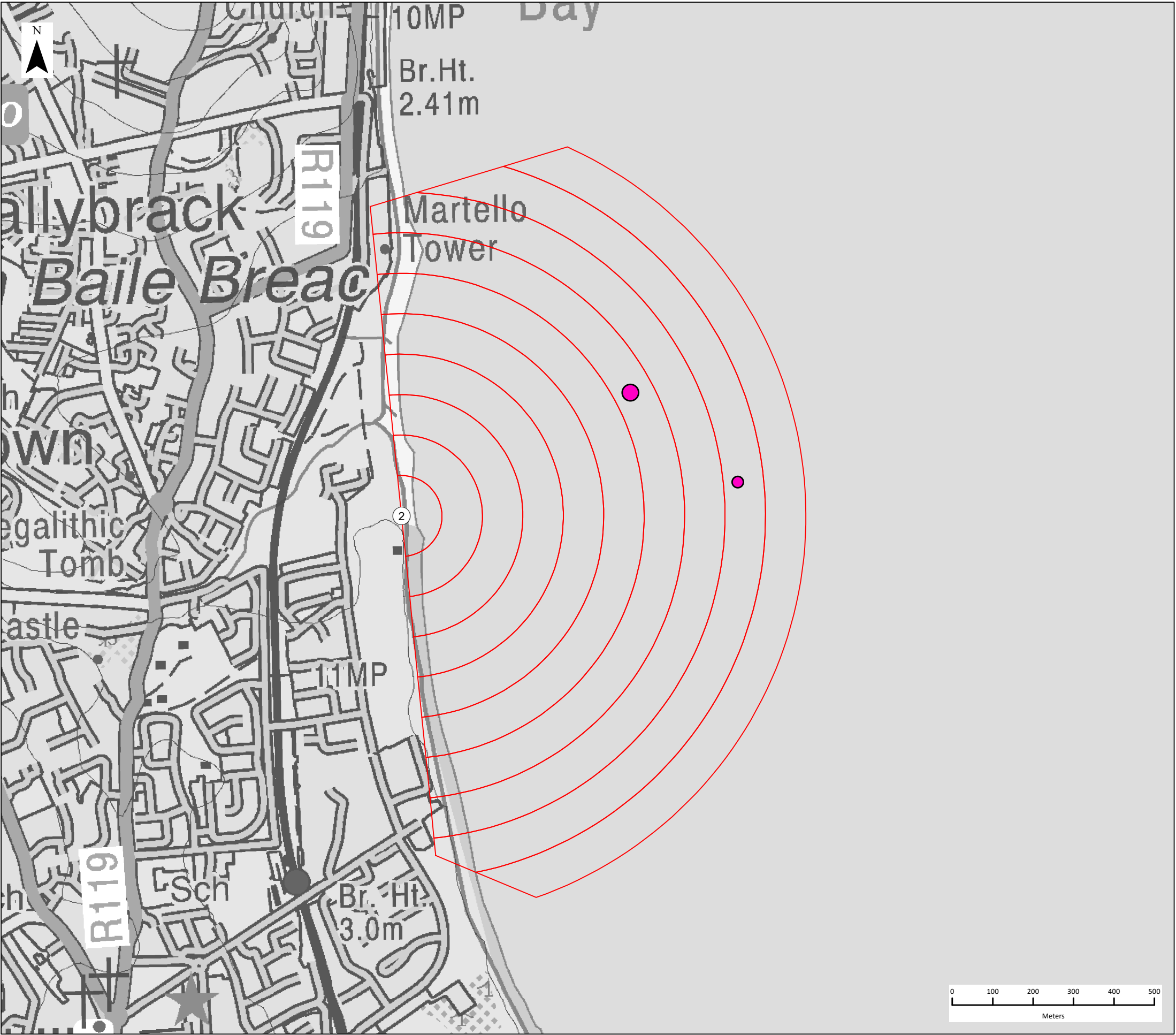
DRAWING TITLE
**Figure 3.20: Relative Abundance and Distribution
of Common Gull within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N





LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

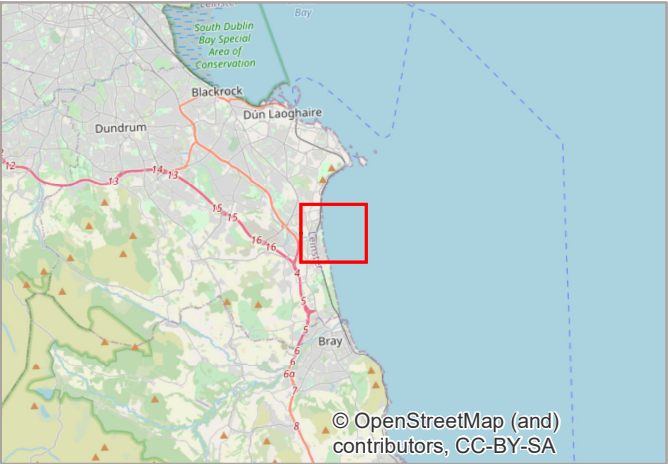
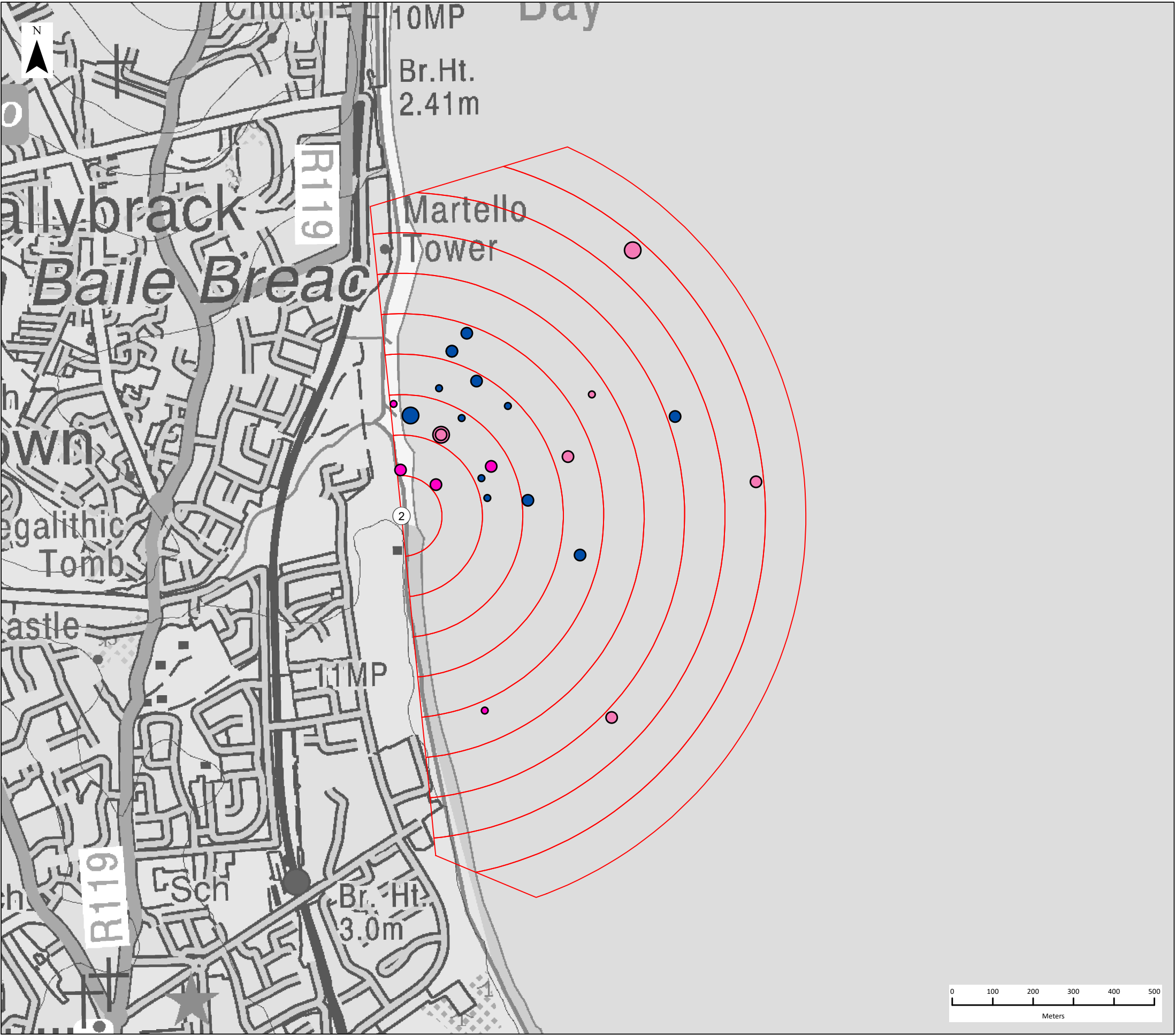
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**Figure 3.21: Relative Abundance and Distribution
of Kittiwake within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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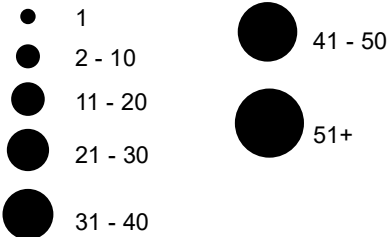


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VP Distance Bands (100m)

② Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
12/03/2020
19/03/2020
16/09/2020
21/10/2020

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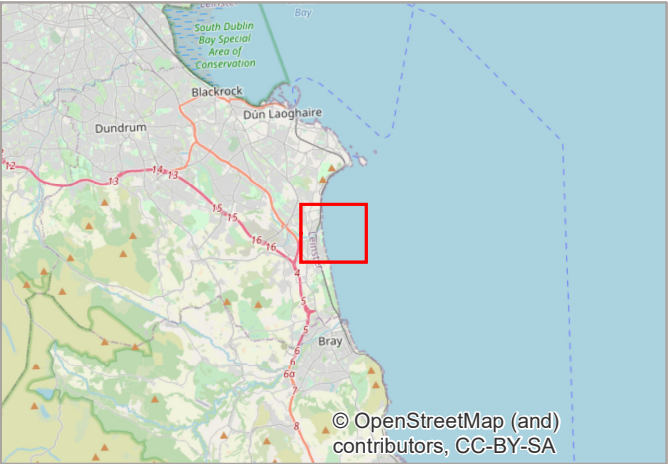
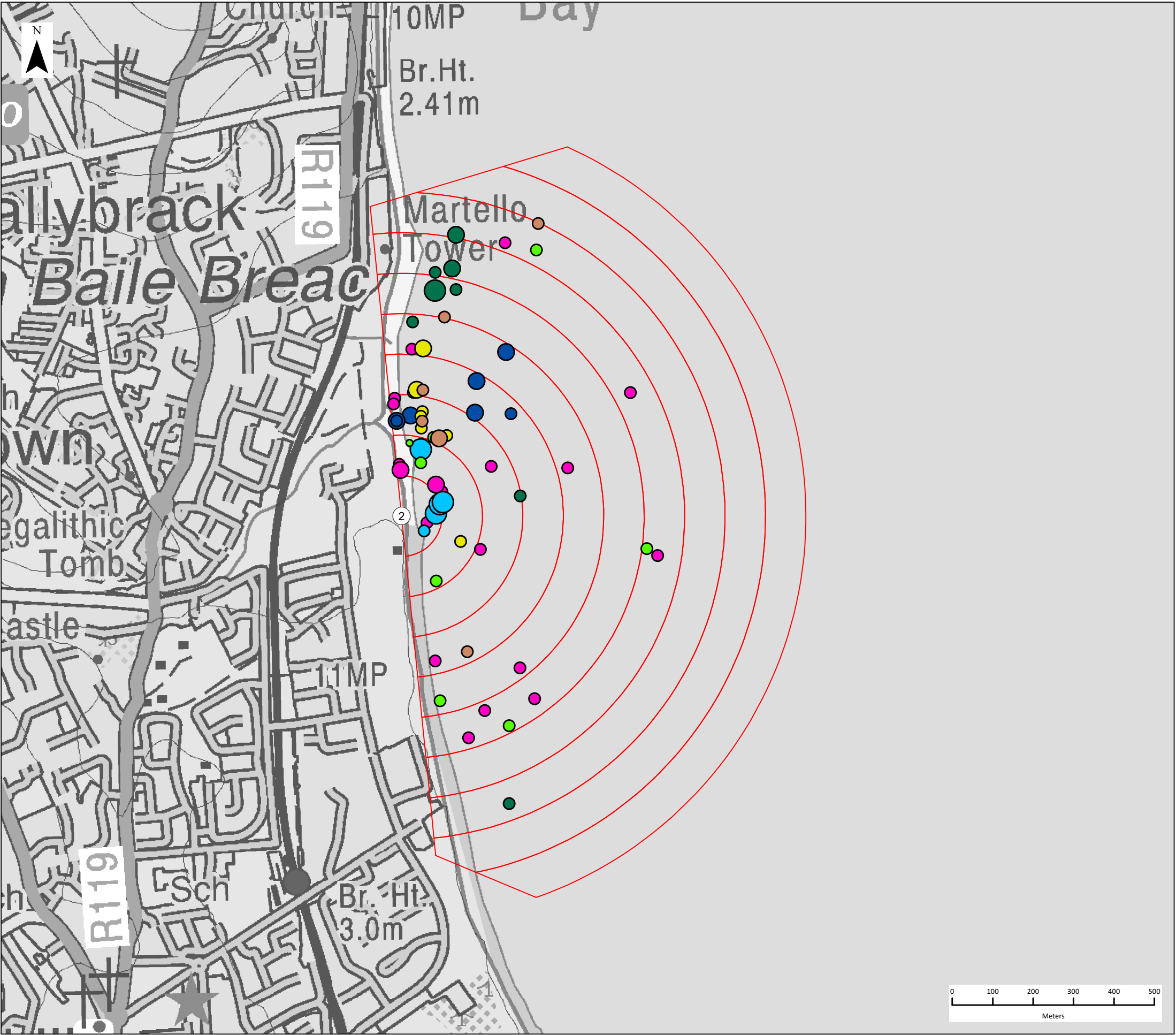
DRAWING TITLE
**Figure 3.22: Relative Abundance and Distribution
of Lesser Black-backed Gull within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N





LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

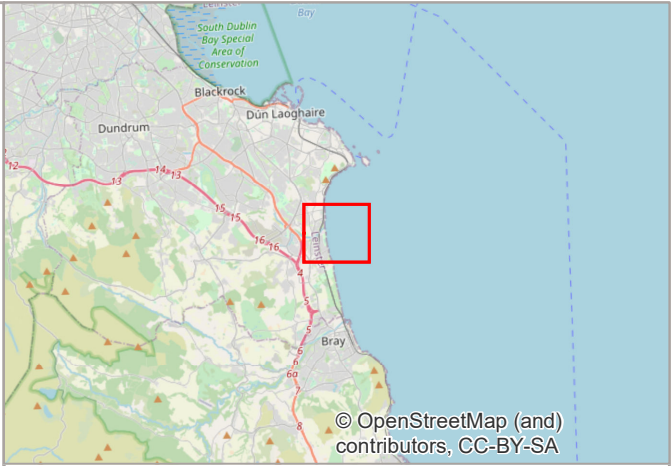
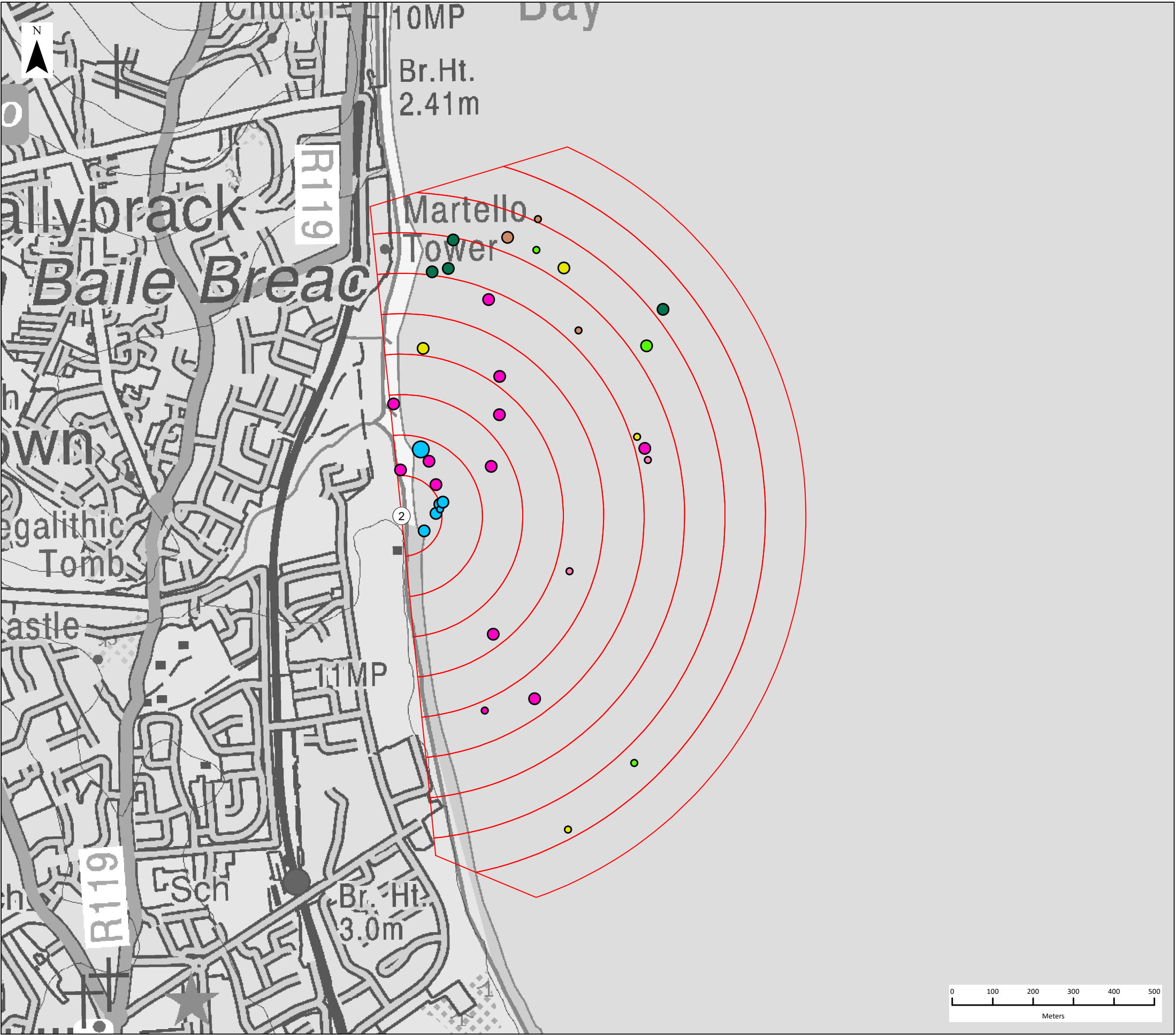
DRAWING TITLE
**Figure 3.23: Relative Abundance and Distribution
of Herring Gull within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

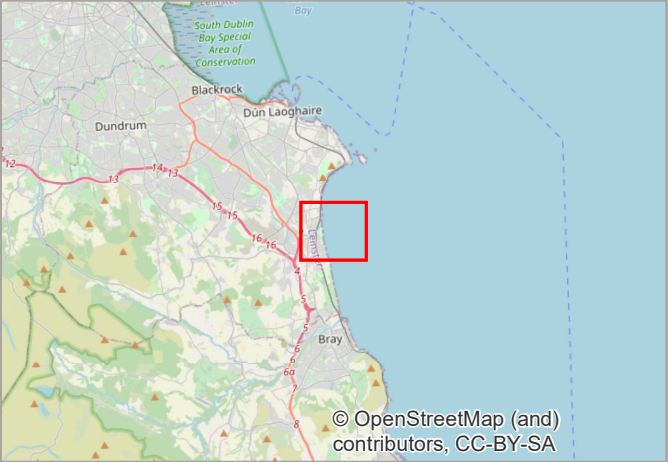
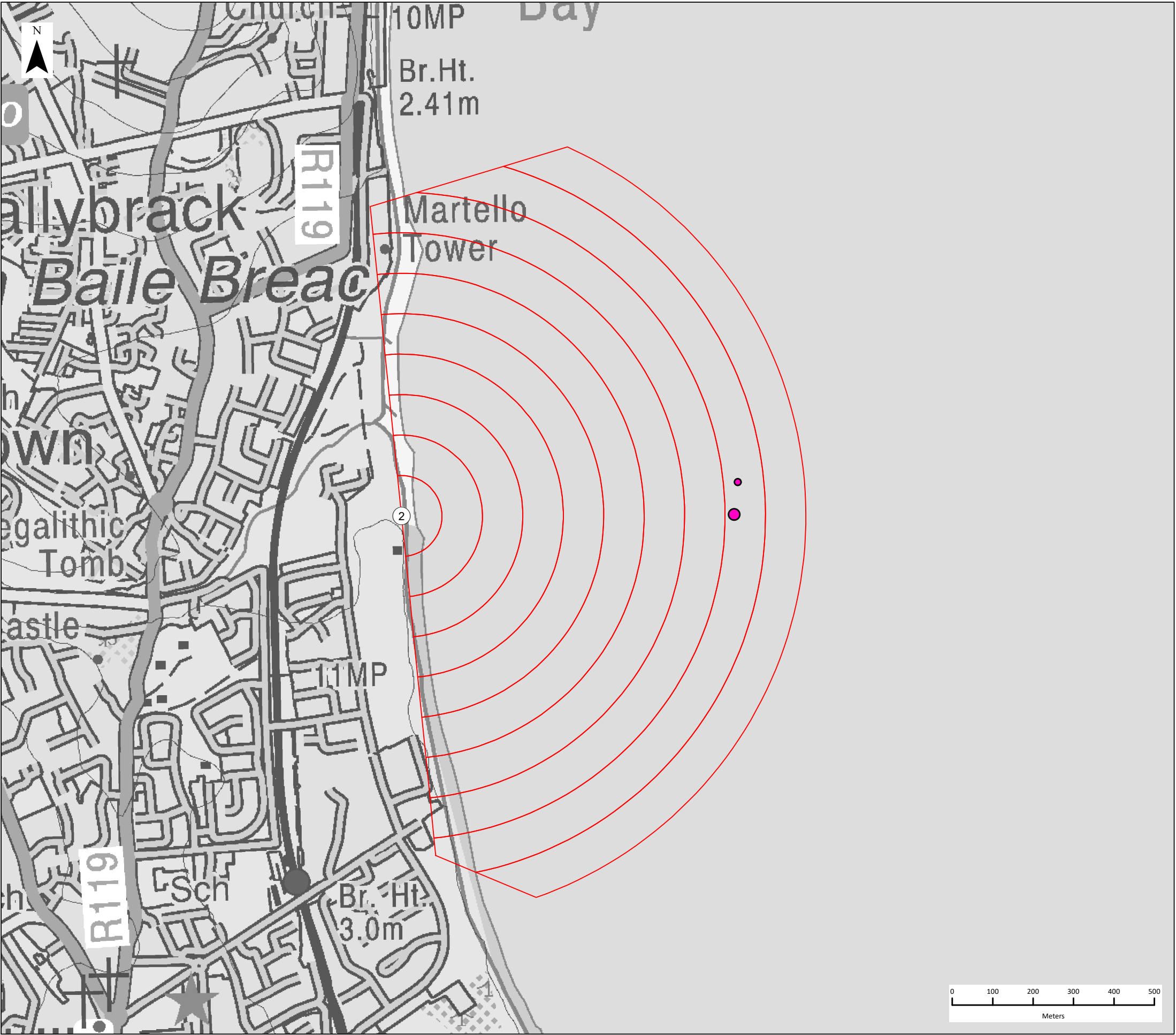
DRAWING TITLE
**Figure 3.24: Relative Abundance and Distribution
of Great Black-backed Gull within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

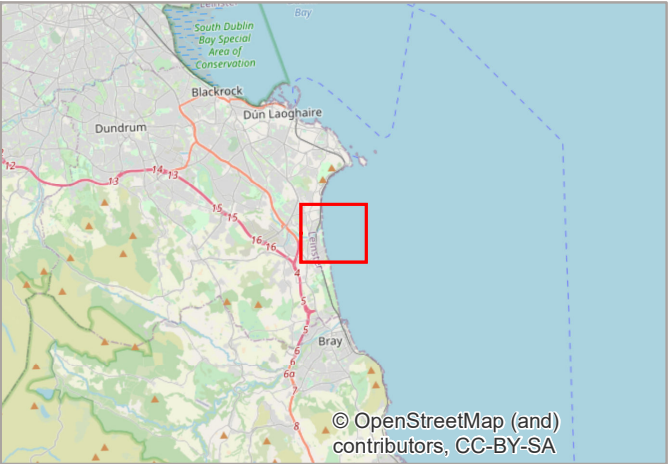
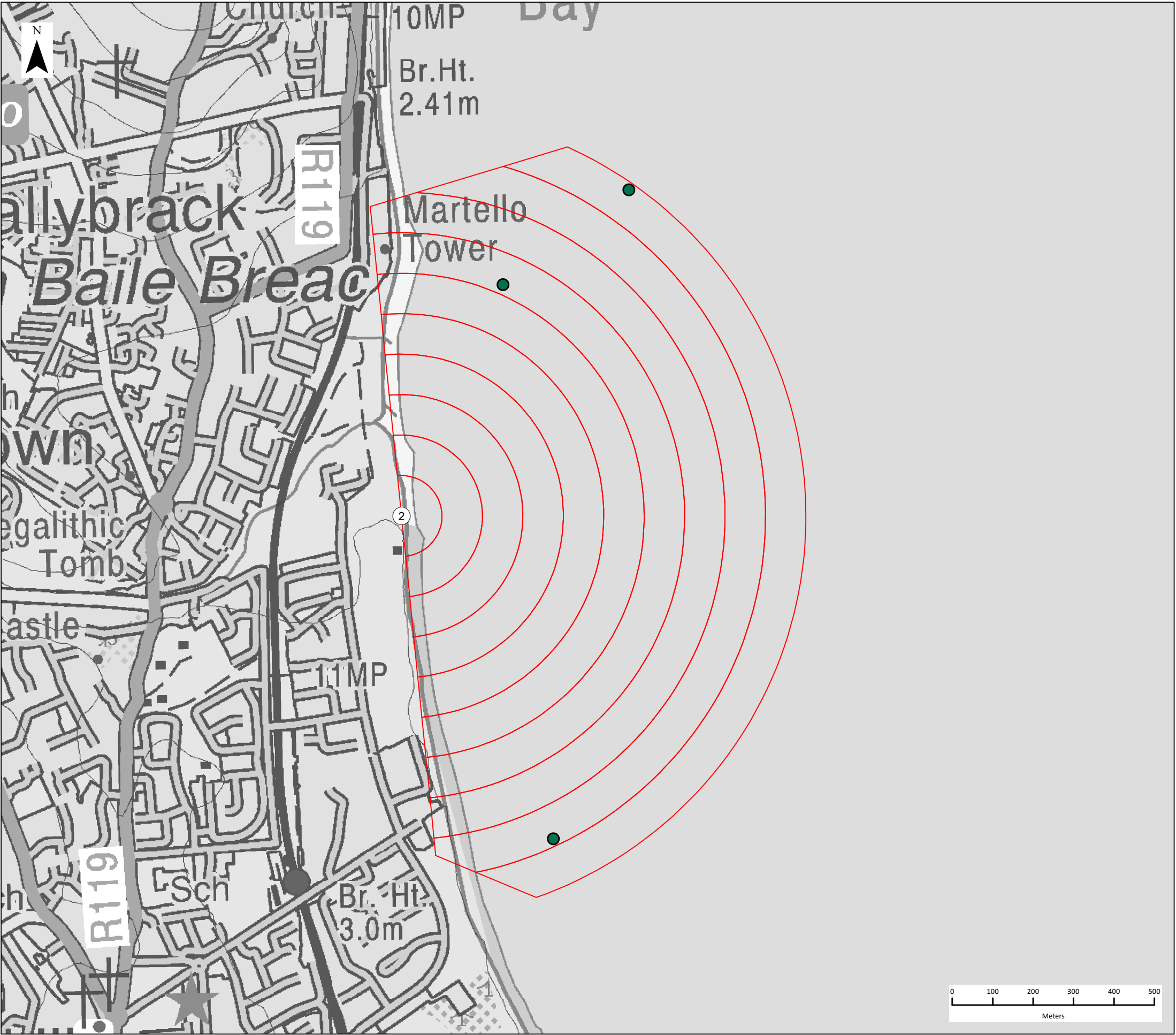
DRAWING TITLE
**Figure 3.25: Relative Abundance and Distribution
of Little Gull within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

2 Vantage Point

Flock Size (Colour Denotes Survey Date)

● 1	● 41 - 50
● 2 - 10	● 51+
● 11 - 20	
● 21 - 30	
● 31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

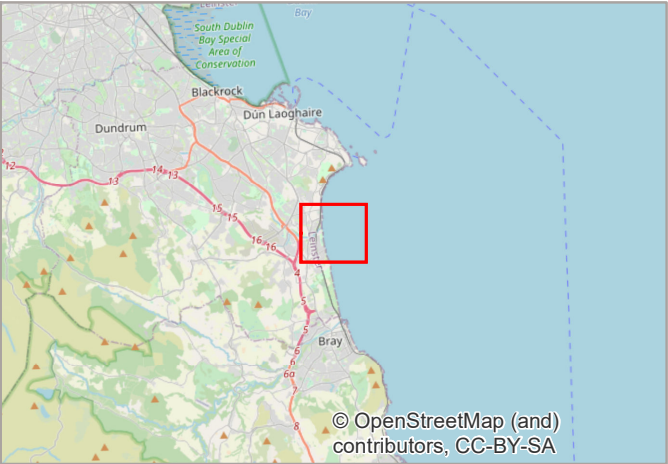
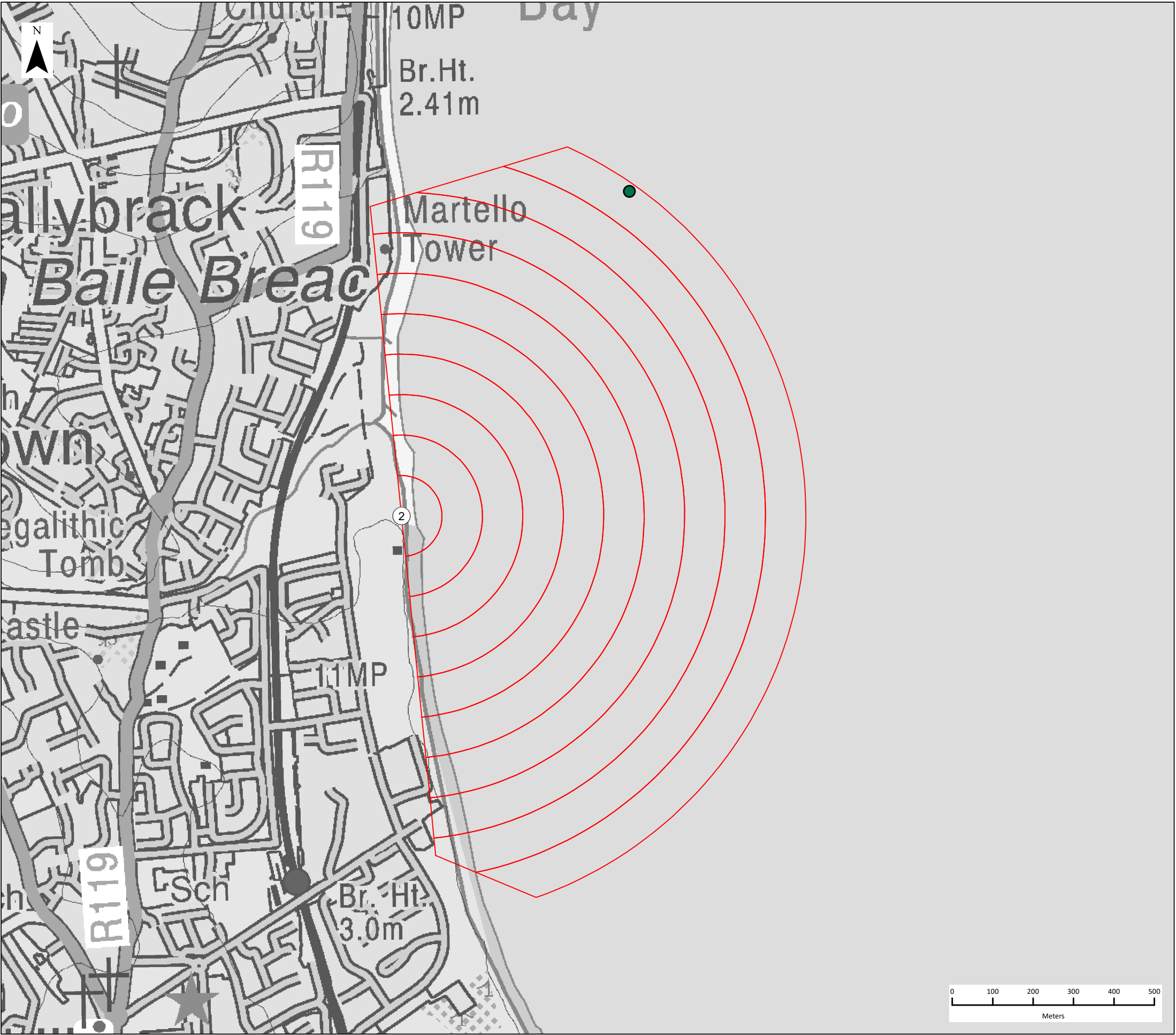
DRAWING TITLE
**Figure 3.26: Relative Abundance and Distribution
of Sandwich Tern within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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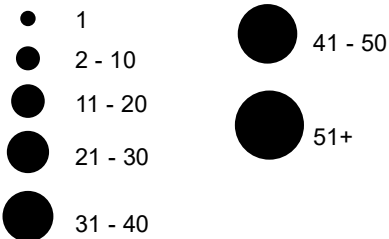


LEGEND

VP Distance Bands (100m)

2 Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
12/03/2020
19/03/2020
16/09/2020
21/10/2020

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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

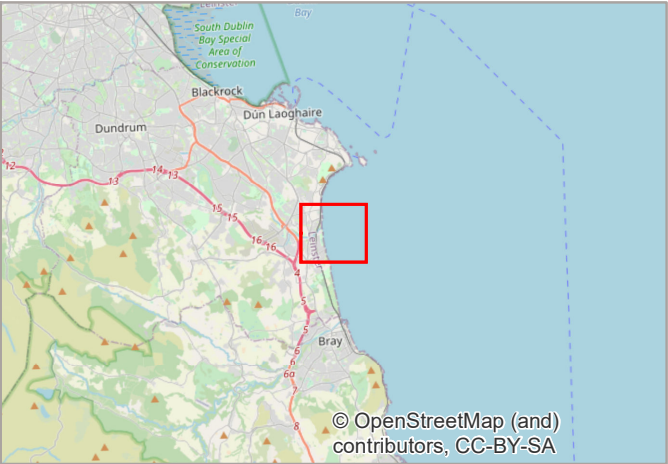
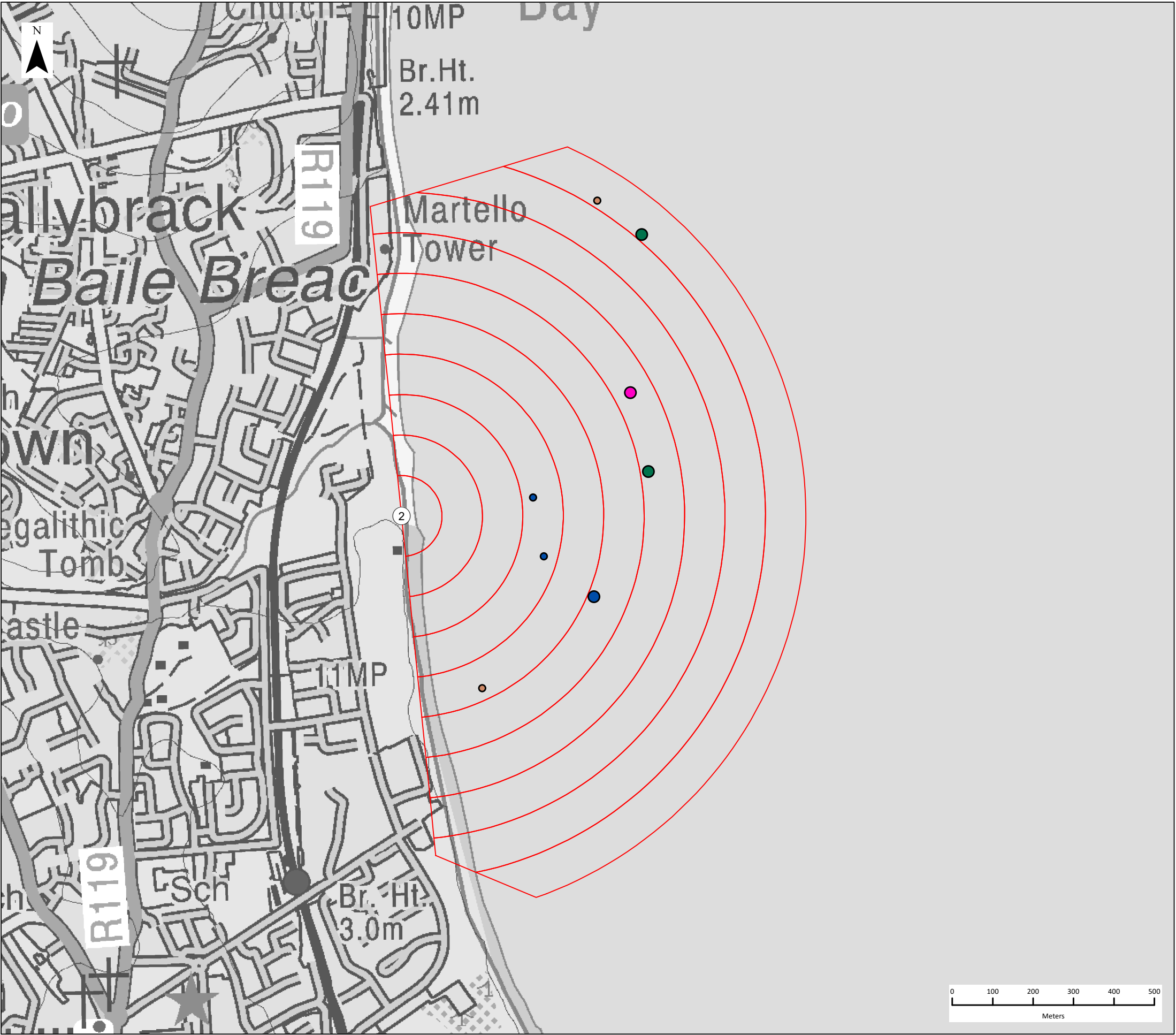
DRAWING TITLE
**Figure 3.27: Relative Abundance and Distribution
of Arctic / Common Tern within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE 1:10,000 PLOT SIZE A3 DATUM WGS84 PROJECTION UTM29N



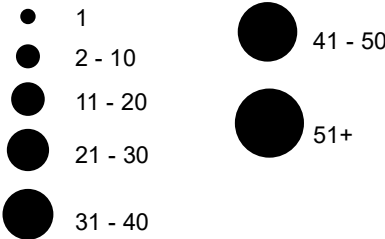


LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
12/03/2020
19/03/2020
16/09/2020
21/10/2020

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PROJECT TITLE
*DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020*

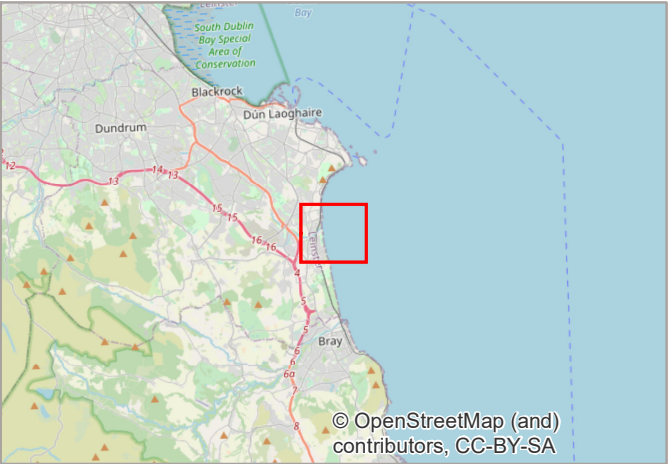
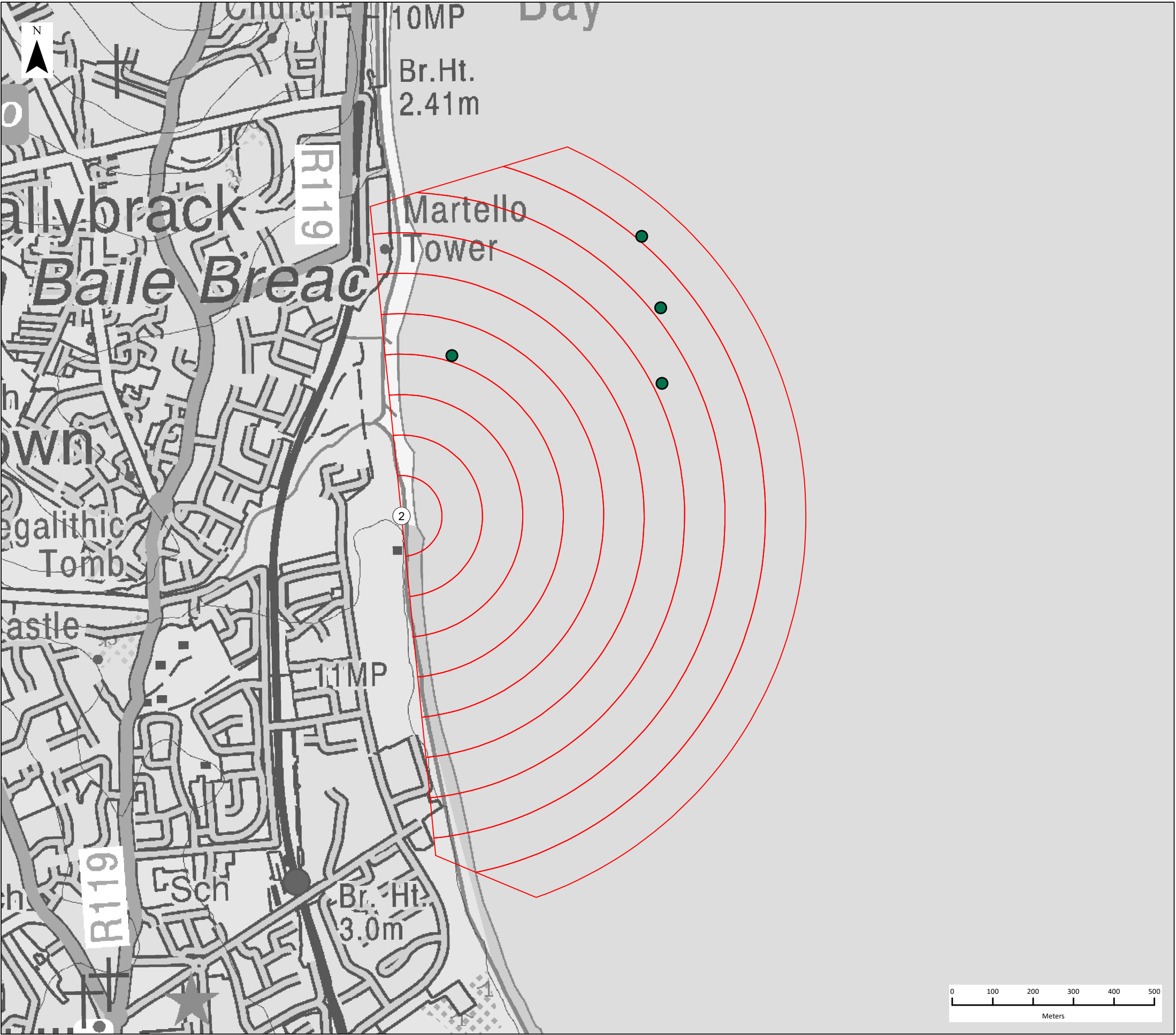
DRAWING TITLE
**Figure 3.28: Relative Abundance and Distribution
of Guillemot within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

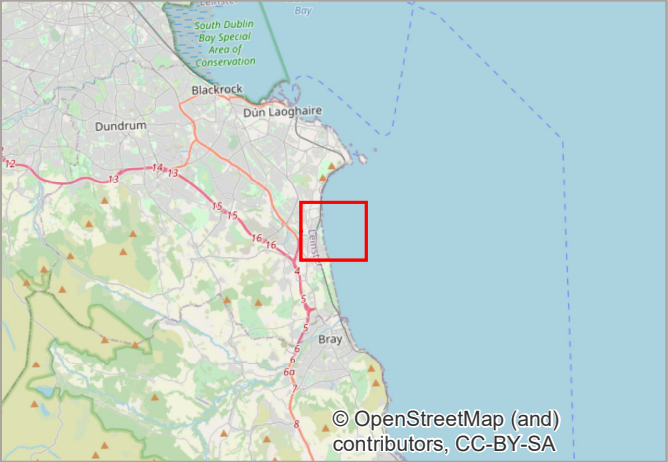
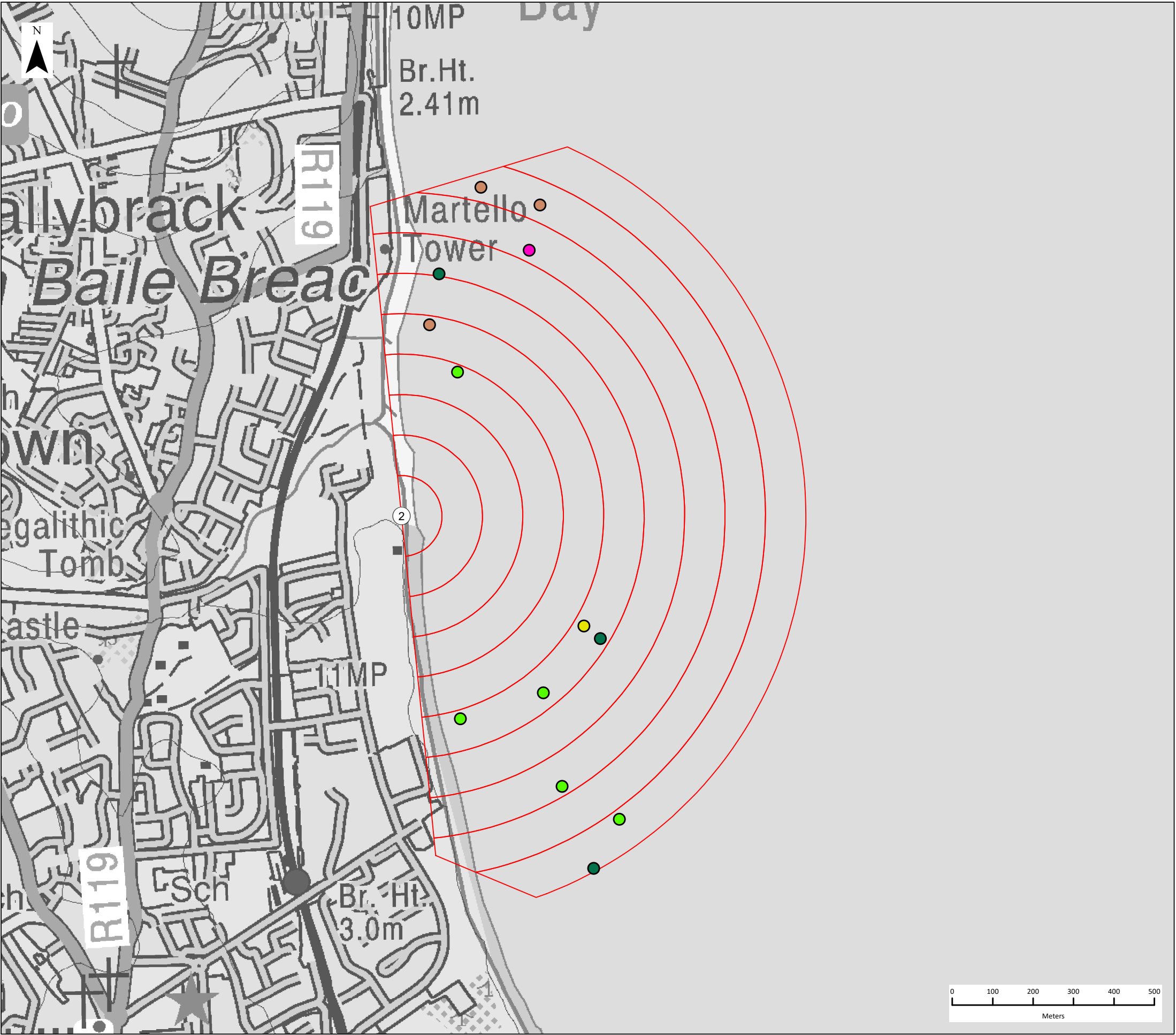
DRAWING TITLE
**Figure 3.29: Relative Abundance and Distribution
of Razorbill within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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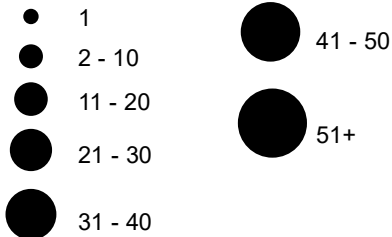


LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)



Survey Date

11/12/2019
12/12/2019
22/01/2020
23/01/2020
12/03/2020
19/03/2020
16/09/2020
21/10/2020

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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

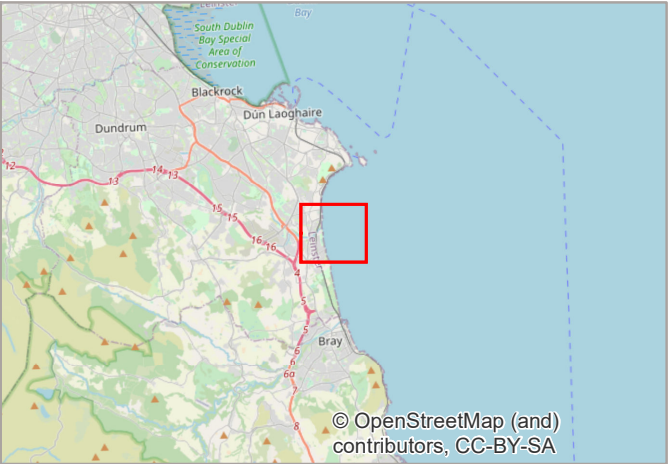
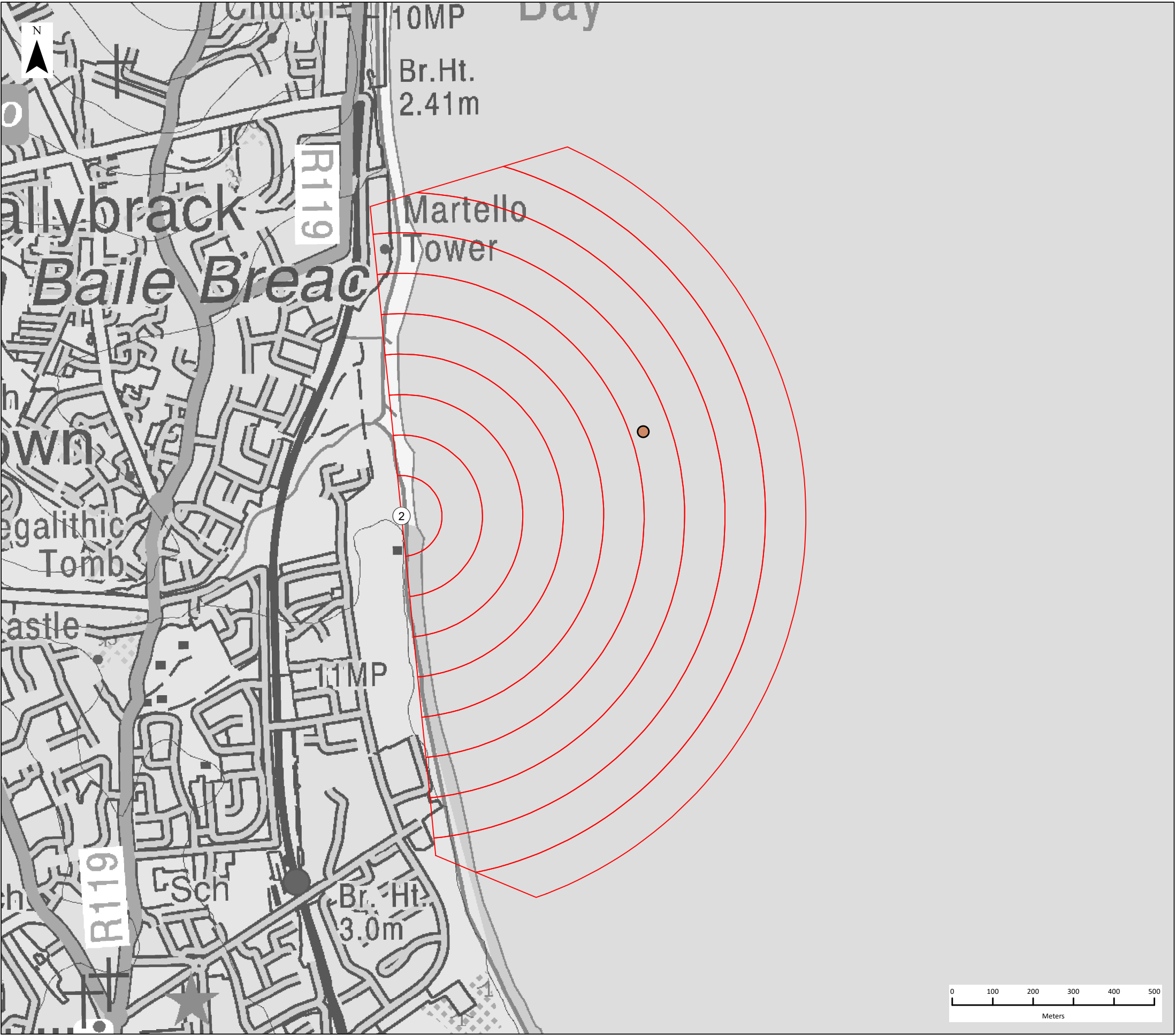
DRAWING TITLE
**Figure 3.30: Relative Abundance and Distribution
of Black Guillemot within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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LEGEND

VP Distance Bands (100m)

Vantage Point

Flock Size (Colour Denotes Survey Date)

1	41 - 50
2 - 10	51+
11 - 20	
21 - 30	
31 - 40	

Survey Date

11/12/2019	19/03/2020
12/12/2019	16/09/2020
22/01/2020	21/10/2020
23/01/2020	
12/03/2020	

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PROJECT TITLE
**DUBLIN ARRAY OFFSHORE WINDFARM INTERTIDAL
BIRD SURVEYS WINTER 2019/20 AND AUTUMN 2020**

DRAWING TITLE
**Figure 3.31: Relative Abundance and Distribution
of Guillemot / Razorbill within the Study
Area Recorded from Vantage Point 2 across the Survey Season**

VER	DATE	REMARKS	Drawn	Checked
1	26/05/2021	First Issue	AGB	JS

DRAWING NUMBER:
02036.00590.27.1.0

SCALE	1:10,000	PLOT SIZE	A3	DATUM	WGS84	PROJECTION	UTM29N
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Appendix A.2 – Illustrative Plates



Plate 1 - VP1 - View east immediately in front of VP



Plate 2 - VP1 - View north towards Killiney



Plate 3 - VP1 - View south towards Bray Head



Plate 4 - VP2 - View east immediately in front of VP



Plate 5 - VP2 - View north towards Killiney



Plate 6 - VP2 - View south along coast towards Bray Head

Appendix A.3 – Raw Field Data

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Ti	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	1	1	28/11/2019	N.V	08:30	08:46	1	TT	8	Foraging	<Null>	<Null>	<Null>
	1	1	28/11/2019	N.V	08:30	08:46	2	GB	1	Roosting	<Null>	<Null>	<Null>
	1	1	28/11/2019	N.V	08:30	08:46	3	BH	184	Roosting & Loafing	<Null>	<Null>	
	1	1	28/11/2019	N.V	08:30	08:46	3	CM	23	Roosting & Loafing	<Null>	<Null>	
	1	1	28/11/2019	N.V	08:30	08:46	3	GB	1	Roosting & Loafing	<Null>	<Null>	
	1	1	28/11/2019	N.V	08:30	08:46	3	HG	6	Roosting & Loafing	<Null>	<Null>	
	1	1	28/11/2019	N.V	08:30	08:46	3	MU	1	Roosting & Loafing	<Null>	<Null>	
	1	1	28/11/2019	N.V	08:30	08:46	4	CX	18	Foraging	<Null>	<Null>	<Null>
	1	1	28/11/2019	N.V	08:30	08:46	5	SA	1	Foraging	<Null>	<Null>	Adult
	1	1	28/11/2019	N.V	08:30	08:46	6	SA	2	Foraging	<Null>	<Null>	<Null>
	1	1	28/11/2019	N.V	08:30	08:46	7	RH	2	Foraging	<Null>	<Null>	<Null>
	1	1	28/11/2019	N.V	08:30	08:46	8	RH	1	Foraging	<Null>	<Null>	<Null>
	1	1	28/11/2019	N.V	08:30	08:46	9	GB	3	Roosting & Loafing	<Null>	<Null>	Adults
	1	1	28/11/2019	N.V	08:30	08:46	10	BH	5	Foraging	<Null>	<Null>	<Null>
	1	1	28/11/2019	N.V	08:30	08:46	11	CX	8	Foraging	<Null>	<Null>	<Null>
	1	1	28/11/2019	N.V	08:30	08:46	12	GG	5	Foraging	<Null>	<Null>	<Null>
	1	1	28/11/2019	N.V	08:30	08:46	13	SA	3	Foraging	<Null>	<Null>	<Null>
	1	1	28/11/2019	N.V	08:30	08:46	14	RH	2	Foraging	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	1	SA	1	Foraging	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	2	RH	2	Foraging	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	3	BH	11	Roosting & Loafing	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	3	CM	2	Roosting & Loafing	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	4	SA	2	Foraging	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	5	RH	2	Foraging	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	6	GB	1	Foraging	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	7	BH	23	Roosting & Loafing	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	7	CM	4	Roosting & Loafing	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	8	BH	37	Roosting & Loafing	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	8	CM	6	Roosting & Loafing	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	9	SA	1	Foraging	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	10	SA	2	Foraging	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	11	GB	2	Roosting	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	12	CX	18	Foraging	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	13	GG	4	Foraging	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	13	RH	2	Foraging	<Null>	<Null>	<Null>
	1	2	28/11/2019	N.V	09:00	09:16	14	GB	3	Roosting	<Null>	<Null>	Juv
	1	3	28/11/2019	N.V	09:30	09:47	1	BH	16	Roosting	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	1	CM	1	Roosting	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	2	RH	1	Foraging	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	3	CA	1	Foraging	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	4	SA	2	Foraging	<Null>	<Null>	1 Adult 1(NB/Juv)
	1	3	28/11/2019	N.V	09:30	09:47	5	SA	2	Foraging	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	6	SA	3	Foraging	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	7	TT	8	Foraging	<Null>	<Null>	ON(HTWM)
	1	3	28/11/2019	N.V	09:30	09:47	8	GB	3	Roosting & Loafing	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	8	HG	5	Roosting & Loafing	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	9	RH	2	Foraging	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	9	GG	3	Foraging	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	10	RH	1	Foraging	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	11	CX	22	Foraging	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	12	BH	9	Roosting	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	13	RH	1	Foraging	<Null>	<Null>	<Null>
	1	3	28/11/2019	N.V	09:30	09:47	13	TY	2	Foraging	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
1	1	3	28/11/2019 N.V		09:30	09:47	14	GB	3	Roosting	<Null>	<Null>	<Null>
1	1	3	28/11/2019 N.V		09:30	09:47	15	ND	1	Foraging	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	1	RH	2	Foraging	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	1	SA	1	Foraging	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	2	BH	24	Roosting & Loafing	<Null>	<Null>	Loafing at sea
1	1	4	28/11/2019 N.V		10:00	10:14	2	CM	1	Roosting & Loafing	<Null>	<Null>	Loafing at sea
1	1	4	28/11/2019 N.V		10:00	10:14	3	SA	2	Foraging	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	4	SA	3	Foraging	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	5	GB	3	Roosting & Loafing	<Null>	<Null>	1 Adult 2 Juv
1	1	4	28/11/2019 N.V		10:00	10:14	6	RH	2	Foraging	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	7	SA	2	Foraging	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	7	RH	1	Foraging	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	7	HG	3	Roosting	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	7	GB	4	Roosting	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	8	TT	5	Foraging	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	9	GG	3	Foraging	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	9	RH	1	Foraging	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	10	GB	2	Roosting & Loafing	<Null>	<Null>	Juv
1	1	4	28/11/2019 N.V		10:00	10:14	11	CX	16	Foraging	<Null>	<Null>	<Null>
1	1	4	28/11/2019 N.V		10:00	10:14	11	ND	1	Foraging	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	1	SA	3	Foraging	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	1	RH	1	Foraging	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	2	GB	2	Roosting & Loafing	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	2	HG	4	Roosting & Loafing	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	3	ND	1	Foraging	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	4	SA	2	Foraging	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	5	SA	1	Foraging	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	6	RH	1	Foraging	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	7	RH	2	Foraging	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	8	RH	21	Roosting & Loafing	<Null>	<Null>	Loafing on water
1	1	5	28/11/2019 N.V		10:30	10:46	8	GB	3	Roosting & Loafing	<Null>	<Null>	Loafing on water
1	1	5	28/11/2019 N.V		10:30	10:46	9	HG	3	Roosting & Loafing	<Null>	<Null>	Loafing on water
1	1	5	28/11/2019 N.V		10:30	10:46	10	MS	11	<Null>	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	11	ND	1	Foraging	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	12	HG	5	Roosting & Loafing	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	12	BH	12	Roosting	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	13	SA	2	Foraging	<Null>	<Null>	<Null>
1	1	5	28/11/2019 N.V		10:30	10:46	14	TT	9	Foraging	<Null>	<Null>	On beach foraging
1	1	5	28/11/2019 N.V		10:30	10:46	14	BH	7	Foraging	<Null>	<Null>	<Null>
1	1	6	28/11/2019 N.V		11:00	11:18	1	BH	149	Roosting & Loafing	<Null>	<Null>	Loafing on water
1	1	6	28/11/2019 N.V		11:00	11:18	1	CM	17	Roosting & Loafing	<Null>	<Null>	Loafing on water
1	1	6	28/11/2019 N.V		11:00	11:18	1	MU	3	Roosting & Loafing	<Null>	<Null>	Loafing on water
1	1	6	28/11/2019 N.V		11:00	11:18	1	HG	11	Roosting & Loafing	<Null>	<Null>	Loafing on water
1	1	6	28/11/2019 N.V		11:00	11:18	1	GB	5	Roosting & Loafing	<Null>	<Null>	Loafing on water
1	1	6	28/11/2019 N.V		11:00	11:18	2	BH	27	Roosting & Loafing	<Null>	<Null>	<Null>
1	1	6	28/11/2019 N.V		11:00	11:18	3	SA	2	Foraging	<Null>	<Null>	<Null>
1	1	6	28/11/2019 N.V		11:00	11:18	4	SA	4	Foraging	<Null>	<Null>	<Null>
1	1	6	28/11/2019 N.V		11:00	11:18	5	SA	2	Foraging	<Null>	<Null>	<Null>
1	1	6	28/11/2019 N.V		11:00	11:18	6	SA	3	Foraging	<Null>	<Null>	<Null>
1	1	6	28/11/2019 N.V		11:00	11:18	7	SA	1	Foraging	<Null>	<Null>	<Null>
1	1	6	28/11/2019 N.V		11:00	11:18	8	RH	2	Foraging	<Null>	<Null>	<Null>
1	1	6	28/11/2019 N.V		11:00	11:18	9	HG	1	Roosting & Loafing	<Null>	<Null>	<Null>
1	1	6	28/11/2019 N.V		11:00	11:18	10	BH	13	Roosting & Loafing	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	1	6	28/11/2019 N.V		11:00	11:18	11	SA	2	Foraging	<Null>	<Null>	<Null>
	1	6	28/11/2019 N.V		11:00	11:18	11	GG	3	Foraging	<Null>	<Null>	<Null>
	1	6	28/11/2019 N.V		11:00	11:18	12	ND	1	Foraging	<Null>	<Null>	<Null>
	1	6	28/11/2019 N.V		11:00	11:18	13	CX	11	Foraging	<Null>	<Null>	<Null>
	1	6	28/11/2019 N.V		11:00	11:18	13	ND	1	Foraging	<Null>	<Null>	<Null>
	1	1	10/12/2019 N.V		11:10	11:25	1	SA	2	Foraging	Walkers and Dogs	<Null>	<Null>
	1	1	10/12/2019 N.V		11:10	11:25	2	BH	7	Loafing	Walkers and Dogs	<Null>	<Null>
	1	1	10/12/2019 N.V		11:10	11:25	3	GB	2	Loafing	Walkers and Dogs	<Null>	Adults
	1	1	10/12/2019 N.V		11:10	11:25	4	BH	4	Foraging	Walkers and Dogs	<Null>	<Null>
	1	1	10/12/2019 N.V		11:10	11:25	5	SA	3	Foraging	Walkers and Dogs	<Null>	<Null>
	1	1	10/12/2019 N.V		11:10	11:25	6	SA	2	Foraging	Walkers and Dogs	<Null>	<Null>
	1	1	10/12/2019 N.V		11:10	11:25	6	RH	1	Foraging	Walkers and Dogs	<Null>	<Null>
	1	1	10/12/2019 N.V		11:10	11:25	6	GU	3	Foraging	Walkers and Dogs	<Null>	<Null>
	1	1	10/12/2019 N.V		11:10	11:25	7	GU	2	Foraging	Walkers and Dogs	<Null>	2xHO slow swim south
	1	1	10/12/2019 N.V		11:10	11:25	8	GB	2	Loafing	Walkers and Dogs	<Null>	<Null>
	1	2	10/12/2019 N.V		11:40	12:00	1	BH	4	Loafing	<Null>	<Null>	<Null>
	1	2	10/12/2019 N.V		11:40	12:00	2	SA	3	Foraging	<Null>	<Null>	<Null>
	1	2	10/12/2019 N.V		11:40	12:00	3	GB	2	Loafing	<Null>	<Null>	Adult
	1	2	10/12/2019 N.V		11:40	12:00	4	BH	6	Loafing	<Null>	<Null>	<Null>
	1	2	10/12/2019 N.V		11:40	12:00	5	CA	1	Foraging	<Null>	<Null>	<Null>
	1	2	10/12/2019 N.V		11:40	12:00	6	SA	2	Foraging	<Null>	<Null>	<Null>
	1	2	10/12/2019 N.V		11:40	12:00	7	GU	3	Foraging	<Null>	<Null>	<Null>
	1	2	10/12/2019 N.V		11:40	12:00	8	BH	7	Loafing	<Null>	<Null>	On seaweed at HWM
	1	2	10/12/2019 N.V		11:40	12:00	9	TT	7	Foraging	<Null>	<Null>	<Null>
	1	2	10/12/2019 N.V		11:40	12:00	10	ND	1	Foraging	<Null>	<Null>	<Null>
	1	2	10/12/2019 N.V		11:40	12:00	11	RH	2	Flying	<Null>	<Null>	2m AGL heading south
	1	3	10/12/2019 N.V		12:10	12:26	1	SA	2	Foraging	<Null>	<Null>	<Null>
	1	3	10/12/2019 N.V		12:10	12:26	2	GB	2	Loafing	<Null>	<Null>	Adults
	1	3	10/12/2019 N.V		12:10	12:26	3	BH	3	Loafing	<Null>	<Null>	<Null>
	1	3	10/12/2019 N.V		12:10	12:26	4	RM	2	Foraging	<Null>	<Null>	1 Male 1 Female
	1	3	10/12/2019 N.V		12:10	12:26	5	GU	1	Foraging	<Null>	<Null>	<Null>
	1	3	10/12/2019 N.V		12:10	12:26	6	BH	5	Loafing	<Null>	<Null>	<Null>
	1	3	10/12/2019 N.V		12:10	12:26	7	GB	3	Roosting	<Null>	<Null>	<Null>
	1	3	10/12/2019 N.V		12:10	12:26	9	GU	3	Foraging	<Null>	<Null>	<Null>
	1	3	10/12/2019 N.V		12:10	12:26	10	SA	3	Foraging	<Null>	<Null>	<Null>
	1	3	10/12/2019 N.V		12:10	12:26	11	GB	2	Loafing	<Null>	<Null>	<Null>
	1	4	10/12/2019 N.V		12:40	12:58	1	BH	5	Loafing	<Null>	<Null>	<Null>
	1	4	10/12/2019 N.V		12:40	12:58	2	SA	3	Foraging	<Null>	<Null>	<Null>
	1	4	10/12/2019 N.V		12:40	12:58	3	TT	11	Foraging	<Null>	<Null>	<Null>
	1	4	10/12/2019 N.V		12:40	12:58	4	GB	1	Loafing	<Null>	<Null>	Juv
	1	4	10/12/2019 N.V		12:40	12:58	5	GB	3	Loafing	<Null>	<Null>	Adults
	1	4	10/12/2019 N.V		12:40	12:58	6	SA	2	Foraging	<Null>	<Null>	<Null>
	1	4	10/12/2019 N.V		12:40	12:58	7	RH	1	Foraging	<Null>	<Null>	<Null>
	1	4	10/12/2019 N.V		12:40	12:58	8	GU	2	Foraging	<Null>	<Null>	<Null>
	1	4	10/12/2019 N.V		12:40	12:58	8	RH	1	Foraging	<Null>	<Null>	<Null>
	1	4	10/12/2019 N.V		12:40	12:58	8	GG	3	Foraging	<Null>	<Null>	<Null>
	1	4	10/12/2019 N.V		12:40	12:58	9	HG	2	Roosting	Walkers and Dogs	Moderate	Landed just offshore
	1	4	10/12/2019 N.V		12:40	12:58	10	OC	2	Foraging	Walkers and Dogs	High	Flushed south
	1	4	10/12/2019 N.V		12:40	12:58	11	RH	1	Foraging	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33	1	SA	2	Foraging	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33	1	GG	1	Foraging	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33	2	GB	2	Loafing	<Null>	<Null>	Adults
	1	5	10/12/2019 N.V		13:10	13:33	3	SA	4	Foraging	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	1	5	10/12/2019 N.V		13:10	13:33		3 CA	1	Foraging	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33		4 BH	5	Foraging	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33		5 RH	2	Foraging	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33		6 SA	1	Foraging	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33		6 GU	1	Loafing	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33		7 BH	12	Loafing	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33		8 BH	6	Loafing	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33		9 SA	2	Foraging	<Null>	<Null>	1 x Grey Seal beside SA male.
	1	5	10/12/2019 N.V		13:10	13:33		10 TT	14	Foraging	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33		10 SS	9	Foraging	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33		11 OC	4	Roosting	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33		12 BH	16	Loafing	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33		12 CM	2	Loafing	<Null>	<Null>	<Null>
	1	5	10/12/2019 N.V		13:10	13:33		12 HG	6	Loafing	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		1 SA	1	Foraging	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		2 SA	2	Foraging	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		3 RH	2	Foraging	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		3 GU	1	Loafing	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		4 SA	2	Foraging	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		5 SA	1	Foraging	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		6 HG	2	Loafing	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		6 GB	3	Loafing	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		7 RH	1	Foraging	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		8 BH	6	Loafing	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		9 SA	3	Foraging	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		9 GG	2	Foraging	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		10 CX	13	Foraging	<Null>	<Null>	8 Male 5 Female
	1	6	10/12/2019 N.V		13:40	14:03		11 GB	2	Roosting	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		11 HG	6	Roosting	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		11 OC	11	Roosting	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		12 SA	1	Foraging	<Null>	<Null>	<Null>
	1	6	10/12/2019 N.V		13:40	14:03		13 CX	8	Foraging	<Null>	<Null>	<Null>
	1	1	11/12/2019 S.I		11:50	12:10		1 BH	1	Loafing	Powered Boats	Moderate	On water
	1	1	11/12/2019 S.I		11:50	12:10		2 CA	1	Foraging	<Null>	<Null>	On water
	1	1	11/12/2019 S.I		11:50	12:10		3 LB	1	Flying	<Null>	<Null>	In air - N
	1	1	11/12/2019 S.I		11:50	12:10		4 CA	1	Foraging	<Null>	<Null>	On water
	1	1	11/12/2019 S.I		11:50	12:10		5 CA	1	Foraging	<Null>	<Null>	<Null>
	1	2	11/12/2019 S.I		12:20	12:40		6 BH	5	Loafing	<Null>	<Null>	<Null>
	1	2	11/12/2019 S.I		12:20	12:40		7 BH	3	Foraging	Other	Moderate	Just moved 200m
	1	2	11/12/2019 S.I		12:20	12:40		8 CA	3	Foraging	<Null>	<Null>	<Null>
	1	2	11/12/2019 S.I		12:20	12:40		9 CA	1	Foraging	<Null>	<Null>	<Null>
	1	2	11/12/2019 S.I		12:20	12:40		10 CA	1	Foraging	<Null>	<Null>	<Null>
	1	2	11/12/2019 S.I		12:20	12:40		11 CA	1	Foraging	<Null>	<Null>	<Null>
	1	2	11/12/2019 S.I		12:20	12:40		12 BH	8	Flying & Loafing	<Null>	<Null>	<Null>
	1	2	11/12/2019 S.I		12:20	12:40		13 CA	2	Foraging	<Null>	<Null>	<Null>
	1	2	11/12/2019 S.I		12:20	12:40		14 BH	1	Loafing	<Null>	<Null>	<Null>
	1	2	11/12/2019 S.I		12:20	12:40		15 LB	1	Loafing	<Null>	<Null>	<Null>
	1	2	11/12/2019 S.I		12:20	12:40		16 H	1	Foraging	<Null>	<Null>	<Null>
	1	3	11/12/2019 S.I		12:50	13:00		17 BH	1	Loafing	<Null>	<Null>	<Null>
	1	3	11/12/2019 S.I		12:50	13:00		18 GUL	50	Foraging	<Null>	<Null>	Unidentified mixed gull flock
	1	3	11/12/2019 S.I		12:50	13:00		19 CA	3	Foraging	<Null>	<Null>	<Null>
	1	3	11/12/2019 S.I		12:50	13:00		20 CA	1	Foraging	<Null>	<Null>	<Null>
	1	3	11/12/2019 S.I		12:50	13:00		21 CA	1	Foraging	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	1	3	11/12/2019 S.I		12:50	13:00	22	CA	1	Foraging	<Null>	<Null>	<Null>
	1	4	11/12/2019 S.I		13:20	13:35	23	BH	1	Loafing	<Null>	<Null>	<Null>
	1	4	11/12/2019 S.I		13:20	13:35	24	GUL	50	Foraging	<Null>	<Null>	Unidentified mixed gull flock
	1	4	11/12/2019 S.I		13:20	13:35	25	BH	7	Foraging	<Null>	<Null>	<Null>
	1	4	11/12/2019 S.I		13:20	13:35	27	BH	2	Loafing	<Null>	<Null>	<Null>
	1	4	11/12/2019 S.I		13:20	13:35	28	CA	1	Foraging	<Null>	<Null>	<Null>
	1	4	11/12/2019 S.I		13:20	13:35	29	BH	5	Loafing	<Null>	<Null>	<Null>
	1	4	11/12/2019 S.I		13:20	13:35	30	BH	1	Loafing	<Null>	<Null>	<Null>
	1	4	11/12/2019 S.I		13:20	13:35	31	CA	1	Foraging	<Null>	<Null>	<Null>
	1	4	11/12/2019 S.I		13:20	13:35	32	H	2	Flying	<Null>	<Null>	Heading south along coastline
	1	4	11/12/2019 S.I		13:20	13:35	33	SA	40	Flying	<Null>	<Null>	Heading east over water
	1	5	11/12/2019 S.I		13:50	14:02	34	BH	1	Loafing	<Null>	<Null>	Duration flock present 120 mi
	1	5	11/12/2019 S.I		13:50	14:02	35	GUL	80	Foraging	<Null>	<Null>	Some flock still foraging - sus
	1	5	11/12/2019 S.I		13:50	14:02	36	CA	1	Foraging	<Null>	<Null>	Flew south
	1	5	11/12/2019 S.I		13:50	14:02	37	BH	2	Loafing	<Null>	<Null>	<Null>
	1	5	11/12/2019 S.I		13:50	14:02	38	LB	1	Flying	<Null>	<Null>	<Null>
	1	5	11/12/2019 S.I		13:50	14:02	39	CA	1	Foraging	<Null>	<Null>	<Null>
	1	5	11/12/2019 S.I		13:50	14:02	40	BH	1	Loafing	<Null>	<Null>	<Null>
	1	5	11/12/2019 S.I		13:50	14:02	41	CA	1	Foraging	<Null>	<Null>	<Null>
	1	5	11/12/2019 S.I		13:50	14:02	42	CA	1	Foraging	<Null>	<Null>	<Null>
	1	5	11/12/2019 S.I		13:50	14:02	43	BH	2	Loafing	<Null>	<Null>	<Null>
	1	6	11/12/2019 S.I		14:20	14:40	44	OC	6	Foraging & Flying	<Null>	<Null>	Flew in from south along coas
	1	6	11/12/2019 S.I		14:20	14:40	45	RP	33	Foraging	<Null>	<Null>	<Null>
	1	6	11/12/2019 S.I		14:20	14:40	46	OC	1	Loafing	<Null>	<Null>	<Null>
	1	6	11/12/2019 S.I		14:20	14:40	47	BH	1	<Null>	<Null>	<Null>	<Null>
	1	6	11/12/2019 S.I		14:20	14:40	50	HG	1	<Null>	<Null>	<Null>	Heading south
	1	6	11/12/2019 S.I		14:20	14:40	51	GUL	80	Foraging & Loafing	<Null>	<Null>	Some more L now.Duration fli
	1	6	11/12/2019 S.I		14:20	14:40	52	CA	1	Foraging	<Null>	<Null>	<Null>
	1	6	11/12/2019 S.I		14:20	14:40	53	OC	2	Loafing	<Null>	<Null>	Joined 44
	1	6	11/12/2019 S.I		14:20	14:40	54	CU	4	Flying	<Null>	<Null>	Flying north
	2	1	11/12/2019 N.V		11:50	12:10	1	SA	1	Maintenance	<Null>	<Null>	Perched on post
	2	1	11/12/2019 N.V		11:50	12:10	2	HG	9	Loafing	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	3	GB	2	Loafing	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	4	SA	2	Foraging	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	5	SA	2	Foraging	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	6	BH	1	Loafing	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	6	MU	1	Loafing	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	8	BH	47	Foraging	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	9	SA	1	Foraging	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	10	HG	3	Loafing	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	11	SA	1	Maintenance	<Null>	<Null>	Bathing
	2	1	11/12/2019 N.V		11:50	12:10	12	SA	3	Foraging	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	13	GB	1	Loafing	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	13	HG	4	Loafing	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	13	LB	1	Loafing	<Null>	<Null>	<Null>
	2	1	11/12/2019 N.V		11:50	12:10	14	RH	1	Foraging	<Null>	<Null>	<Null>
	2	2	11/12/2019 N.V		12:20	12:37	1	SA	2	Foraging	<Null>	<Null>	<Null>
	2	2	11/12/2019 N.V		12:20	12:37	2	HG	18	Loafing	Other	Moderate	Disturbed by paddle board an
	2	2	11/12/2019 N.V		12:20	12:37	2	GB	3	Loafing	Other	Moderate	Disturbed by paddle board an
	2	2	11/12/2019 N.V		12:20	12:37	2	LB	5	Loafing	Other	Moderate	Disturbed by paddle board an
	2	2	11/12/2019 N.V		12:20	12:37	2	BH	4	Loafing	Other	Moderate	Disturbed by paddle board an
	2	2	11/12/2019 N.V		12:20	12:37	2	SA	2	Foraging	Other	Weak	Disturbed by paddle board an
	2	2	11/12/2019 N.V		12:20	12:37	3	HG	2	Loafing	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	2	11/12/2019 N.V		12:20	12:37	4	SA	2	Foraging	<Null>	<Null>	<Null>
	2	2	11/12/2019 N.V		12:20	12:37	5	SA	3	Foraging	<Null>	<Null>	<Null>
	2	2	11/12/2019 N.V		12:20	12:37	6	GB	2	Loafing	<Null>	<Null>	Adults
	2	2	11/12/2019 N.V		12:20	12:37	7	HG	4	Loafing	<Null>	<Null>	Adults
	2	2	11/12/2019 N.V		12:20	12:37	7	GU	2	Foraging	<Null>	<Null>	<Null>
	2	2	11/12/2019 N.V		12:20	12:37	7	KI	11	Loafing	<Null>	<Null>	<Null>
	2	2	11/12/2019 N.V		12:20	12:37	8	KN	22	Flying	<Null>	<Null>	<Null>
	2	2	11/12/2019 N.V		12:20	12:37	9	SA	2	Foraging	<Null>	<Null>	<Null>
	2	2	11/12/2019 N.V		12:20	12:37	10	HG	2	Loafing	<Null>	<Null>	<Null>
	2	2	11/12/2019 N.V		12:20	12:37	10	SA	1	Maintenance	<Null>	<Null>	<Null>
	2	2	11/12/2019 N.V		12:20	12:37	11	MU	1	Loafing	<Null>	<Null>	<Null>
	2	2	11/12/2019 N.V		12:20	12:37	12	HG	3	Loafing	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	1	SA	3	Foraging	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	2	HG	4	Loafing	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	3	SA	4	Foraging	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	4	HG	6	Loafing	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	4	LB	3	Loafing	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	4	GB	4	Loafing	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	4	BH	2	Loafing	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	4	SA	5	Foraging	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	5	GB	2	Loafing	<Null>	<Null>	Adults
	2	3	11/12/2019 N.V		12:50	13:07	6	BH	55	Foraging	<Null>	<Null>	and Male Grey Seal
	2	3	11/12/2019 N.V		12:50	13:07	6	KI	4	Foraging	<Null>	<Null>	and Male Grey Seal
	2	3	11/12/2019 N.V		12:50	13:07	6	LU	1	Foraging	<Null>	<Null>	and Male Grey Seal
	2	3	11/12/2019 N.V		12:50	13:07	7	SA	2	Foraging	<Null>	<Null>	1 Adult 1 Juv
	2	3	11/12/2019 N.V		12:50	13:07	8	SA	3	Foraging	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	8	HG	2	Loafing	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	8	GB	2	Loafing	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	9	RH	1	Foraging	<Null>	<Null>	<Null>
	2	3	11/12/2019 N.V		12:50	13:07	10	MU	1	Loafing	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	1	HG	2	Foraging	Dogs	High	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	1	BH	3	Foraging	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	2	MU	1	Loafing	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	2	BH	3	Loafing	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	3	SA	2	Foraging	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	4	SA	1	Foraging	Other	Weak	Disturbed by paddle boarder
	2	4	11/12/2019 N.V		13:20	13:45	5	HG	4	Loafing	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	6	SA	9	Foraging	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	7	BH	50	Foraging	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	7	HG	10	Foraging	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	8	CX	14	Foraging	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	9	SA	4	Foraging	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	10	RH	1	Foraging	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	11	HG	3	Loafing	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	11	MU	1	Loafing	<Null>	<Null>	<Null>
	2	4	11/12/2019 N.V		13:20	13:45	12	KN	2	Foraging & Maintenance	Walkers and Dogs	Moderate	3 dogs. Landed at fresh water
	2	4	11/12/2019 N.V		13:20	13:45	12	TT	4	Foraging & Maintenance	Walkers and Dogs	Moderate	3 dogs. Landed at fresh water
	2	4	11/12/2019 N.V		13:20	13:45	12	BH	6	Maintenance	Walkers and Dogs	Moderate	3 dogs. Landed at fresh water
	2	4	11/12/2019 N.V		13:20	13:45	12	HG	3	Maintenance	Walkers and Dogs	Moderate	3 dogs. Landed at fresh water
	2	5	11/12/2019 N.V		13:50	14:11	1	BH	8	Roosting & Maintenance	<Null>	<Null>	Roosts on beach near fresh w
	2	5	11/12/2019 N.V		13:50	14:11	1	HG	9	Roosting & Maintenance	<Null>	<Null>	Roosts on beach near fresh w
	2	5	11/12/2019 N.V		13:50	14:11	1	GB	2	Roosting & Maintenance	<Null>	<Null>	Roosts on beach near fresh w
	2	5	11/12/2019 N.V		13:50	14:11	1	LB	1	Roosting & Maintenance	<Null>	<Null>	Roosts on beach near fresh w

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	5	11/12/2019 N.V		13:50	14:11		1 KN	2	Foraging & Maintenance	<Null>	<Null>	Roosts on beach near fresh w
	2	5	11/12/2019 N.V		13:50	14:11		1 TT	3	Foraging & Maintenance	<Null>	<Null>	Roosts on beach near fresh w
	2	5	11/12/2019 N.V		13:50	14:11		2 BH	11	Loafing	<Null>	<Null>	<Null>
	2	5	11/12/2019 N.V		13:50	14:11		3 SA	2	Foraging	<Null>	<Null>	<Null>
	2	5	11/12/2019 N.V		13:50	14:11		3 RH	1	Foraging	<Null>	<Null>	<Null>
	2	5	11/12/2019 N.V		13:50	14:11		4 SA	1	Maintenance	<Null>	<Null>	On post. Wing drying
	2	5	11/12/2019 N.V		13:50	14:11		5 GB	2	Loafing	<Null>	<Null>	Adults
	2	5	11/12/2019 N.V		13:50	14:11		6 RH	2	Foraging	<Null>	<Null>	<Null>
	2	5	11/12/2019 N.V		13:50	14:11		7 SA	3	Foraging	<Null>	<Null>	Adults
	2	5	11/12/2019 N.V		13:50	14:11		8 BH	80	Foraging	<Null>	<Null>	<Null>
	2	5	11/12/2019 N.V		13:50	14:11		8 LU	2	Foraging	<Null>	<Null>	<Null>
	2	5	11/12/2019 N.V		13:50	14:11		9 SA	4	Foraging & Maintenance	<Null>	<Null>	Feeding and wing drying on st
	2	5	11/12/2019 N.V		13:50	14:11		10 BH	3	Loafing	<Null>	<Null>	<Null>
	2	5	11/12/2019 N.V		13:50	14:11		11 TT	6	Foraging	<Null>	<Null>	<Null>
	2	5	11/12/2019 N.V		13:50	14:11		12 OC	7	Roosting	Walkers and Dogs	High	Roost onshore. Flushed by 3 c
	2	6	11/12/2019 N.V		14:20	14:43		1 RP	9	Roosting	Walkers and Dogs	High	Duration flock present 140 se
	2	6	11/12/2019 N.V		14:20	14:43		1 HG	11	Roosting	Walkers and Dogs	Weak	Duration flock present 10 min
	2	6	11/12/2019 N.V		14:20	14:43		1 BH	6	Roosting	Walkers and Dogs	Weak	Duration flock present 10 min
	2	6	11/12/2019 N.V		14:20	14:43		1 KN	3	Roosting	Walkers and Dogs	High	Duration flock present 10 min
	2	6	11/12/2019 N.V		14:20	14:43		1 TT	6	Foraging	Walkers and Dogs	High	Duration flock present 10 min
	2	6	11/12/2019 N.V		14:20	14:43		1 GB	2	Roosting & Other	Walkers and Dogs	Weak	Duration flock present 10 min
	2	6	11/12/2019 N.V		14:20	14:43		1 LB	4	Roosting & Other	Walkers and Dogs	Weak	Duration flock present 10 min
	2	6	11/12/2019 N.V		14:20	14:43		1 OC	2	Roosting & Other	Walkers and Dogs	High	Duation flock present 280 sec
	2	6	11/12/2019 N.V		14:20	14:43		2 SA	3	Foraging	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		3 HG	4	Loafing & Other	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		4 BH	16	Loafing	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		5 GB	2	Loafing	<Null>	<Null>	Adult
	2	6	11/12/2019 N.V		14:20	14:43		6 SA	3	Foraging	<Null>	<Null>	
	2	6	11/12/2019 N.V		14:20	14:43		7 TY	2	Foraging	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		8 SA	2	Foraging	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		9 BH	100	Foraging	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		9 SA	5	Foraging	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		10 ND	1	Foraging	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		11 TT	9	Foraging	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		12 SA	2	Foraging	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		13 GB	2	Loafing	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		14 RP	9	Roosting	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		15 SA	1	Foraging	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		16 RH	2	Foraging	<Null>	<Null>	<Null>
	2	6	11/12/2019 N.V		14:20	14:43		17 OC	7	Roosting	Walkers and Dogs	Moderate	Flushed 200m south
	2	1	12/12/2019 S.I		12:30	12:50		1 LB	12	Roosting	<Null>	<Null>	Juv
	2	1	12/12/2019 S.I		12:30	12:50		1 LB	5	Roosting	<Null>	<Null>	Adult
	2	1	12/12/2019 S.I		12:30	12:50		1 BH	3	Roosting	<Null>	<Null>	Adult
	2	1	12/12/2019 S.I		12:30	12:50		3 SA	1	Foraging	<Null>	<Null>	<Null>
	2	1	12/12/2019 S.I		12:30	12:50		4 SA	1	Roosting & Maintenance	<Null>	<Null>	Roosting on post
	2	1	12/12/2019 S.I		12:30	12:50		5 LB	1	Roosting	<Null>	<Null>	<Null>
	2	1	12/12/2019 S.I		12:30	12:50		6 SA	1	Foraging	<Null>	<Null>	<Null>
	2	1	12/12/2019 S.I		12:30	12:50		7 BH	20	Foraging	<Null>	<Null>	Mix of aduklt and juv feeding
	2	1	12/12/2019 S.I		12:30	12:50		7 LB	10	Foraging	<Null>	<Null>	Mix of aduklt and juv feeding
	2	1	12/12/2019 S.I		12:30	12:50		8 SA	1	Flying	<Null>	<Null>	Flew north
	2	1	12/12/2019 S.I		12:30	12:50		9 SA	1	Flying	<Null>	<Null>	Flew north
	2	2	12/12/2019 S.I		13:00	13:22		2 BH	1	Loafing	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:50		2 SA	1	Foraging	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	2	12/12/2019 S.I		13:00	13:22	3	SA	1	Foraging	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:50	3	BH	5	Maintenance	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:50	3	BH	2	Maintenance	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:22	4	BH	1	Loafing	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:50	4	SA	1	Roosting	<Null>	<Null>	Still roosting on post
	2	2	12/12/2019 S.I		13:00	13:22	5	SA	1	Flying	<Null>	<Null>	Flew towards shore
	2	2	12/12/2019 S.I		13:00	13:50	5	SA	2	Foraging	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:22	6	SA	1	Flying	<Null>	<Null>	Flew towards shore
	2	2	12/12/2019 S.I		13:00	13:50	6	BH	1	Loafing	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:22	7	SA	1	Maintenance	<Null>	<Null>	Still on post
	2	2	12/12/2019 S.I		13:00	13:50	7	SA	1	Foraging	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:22	8	LB	8	Loafing	<Null>	<Null>	Juv
	2	2	12/12/2019 S.I		13:00	13:50	8	BH	1	Foraging	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:22	9	BH	30	Foraging	<Null>	<Null>	Flock decreased in size from post
	2	2	12/12/2019 S.I		13:00	13:50	9	GB	1	Loafing	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:22	10	SA	1	Flying	<Null>	<Null>	Flew north
	2	2	12/12/2019 S.I		13:00	13:50	10	SA	1	Foraging	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:22	11	OC	6	Flying	<Null>	<Null>	Flew north
	2	2	12/12/2019 S.I		13:00	13:22	12	BH	1	Loafing	<Null>	<Null>	
	2	2	12/12/2019 S.I		13:00	13:22	13	SA	1	Foraging	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:50	13	GB	1	Flying	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:50	13	BH	5	Flying	<Null>	<Null>	Follow fishing boat
	2	2	12/12/2019 S.I		13:00	13:50	13	BH	3	Flying	<Null>	<Null>	Follow fishing boat
	2	2	12/12/2019 S.I		13:00	13:22	14	SA	1	Foraging	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:22	15	SA	1	Foraging	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:50	15	OC	4	Roosting	<Null>	<Null>	Follow fishing boat
	2	2	12/12/2019 S.I		13:00	13:22	16	OC	2	Roosting	<Null>	<Null>	<Null>
	2	2	12/12/2019 S.I		13:00	13:50	16	BH	1	Roosting	<Null>	<Null>	On shore
	2	2	12/12/2019 S.I		13:00	13:50	17	SH	1	Flying	<Null>	<Null>	On shore
	2	4	12/12/2019 S.I		14:00	14:22	2	BH	6	Roosting	<Null>	<Null>	<Null>
	2	4	12/12/2019 S.I		14:00	14:22	3	BH	2	Loafing	<Null>	<Null>	On water
	2	4	12/12/2019 S.I		14:00	14:22	4	SA	1	Roosting & Maintenance	<Null>	<Null>	Still on post
	2	4	12/12/2019 S.I		14:00	14:22	5	SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	12/12/2019 S.I		14:00	14:22	6	SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	12/12/2019 S.I		14:00	14:22	7	BH	1	Loafing	<Null>	<Null>	<Null>
	2	4	12/12/2019 S.I		14:00	14:22	8	LB	12	Foraging	<Null>	<Null>	Follow fishing boat
	2	4	12/12/2019 S.I		14:00	14:22	9	BH	2	Loafing	<Null>	<Null>	Juv
	2	4	12/12/2019 S.I		14:00	14:22	10	SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	12/12/2019 S.I		14:00	14:22	11	SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	12/12/2019 S.I		14:00	14:22	12	SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	12/12/2019 S.I		14:00	14:22	14	BH	20	Foraging & Flying	<Null>	<Null>	<Null>
	2	4	12/12/2019 S.I		14:00	14:22	15	GB	1	Roosting	<Null>	<Null>	On water
	2	4	12/12/2019 S.I		14:00	14:22	16	SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	12/12/2019 S.I		14:00	14:22	17	SA	1	Foraging	<Null>	<Null>	<Null>
	2	5	12/12/2019 S.I		14:30	14:55	2	BH	1	Loafing	<Null>	<Null>	<Null>
	2	5	12/12/2019 S.I		14:30	14:55	3	SA	1	Roosting	<Null>	<Null>	<Null>
	2	5	12/12/2019 S.I		14:30	14:55	4	BH	2	Loafing	<Null>	<Null>	Juv
	2	5	12/12/2019 S.I		14:30	14:55	5	SH	1	Roosting	<Null>	<Null>	Still on post
	2	5	12/12/2019 S.I		14:30	14:55	6	BH	1	Loafing	<Null>	<Null>	<Null>
	2	5	12/12/2019 S.I		14:30	14:55	7	BH	1	Loafing	<Null>	<Null>	<Null>
	2	5	12/12/2019 S.I		14:30	14:55	8	BH	1	Loafing	<Null>	<Null>	<Null>
	2	5	12/12/2019 S.I		14:30	14:55	9	BH	1	Loafing	<Null>	<Null>	<Null>
	2	5	12/12/2019 S.I		14:30	14:55	10	LB	5	Flying	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Ti	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	5	12/12/2019 S.I		14:30	14:55	10	GB	8	Flying	<Null>	<Null>	Following boat
	2	5	12/12/2019 S.I		14:30	14:55	10	BH	3	Flying	<Null>	<Null>	<Null>
	2	5	12/12/2019 S.I		14:30	14:55	11	SA	1	Foraging	<Null>	<Null>	<Null>
	2	5	12/12/2019 S.I		14:30	14:55	13	SA	1	Foraging	<Null>	<Null>	<Null>
	2	5	12/12/2019 S.I		14:30	14:55	14	SA	1	Foraging	<Null>	<Null>	<Null>
	2	5	12/12/2019 S.I		14:30	14:55	16	GUL	10	Foraging & Roosting	<Null>	<Null>	Unidentifiable in light
	2	6	12/12/2019 S.I		15:00	15:30	1	BH	18	Roosting & Maintenance	<Null>	<Null>	Juv. On shore
	2	6	12/12/2019 S.I		15:00	15:30	1	BH	8	Roosting & Maintenance	<Null>	<Null>	Adult. On shore
	2	6	12/12/2019 S.I		15:00	15:30	2	BH	17	Roosting & Maintenance	<Null>	<Null>	Juv. On water
	2	6	12/12/2019 S.I		15:00	15:30	2	BH	3	Roosting & Maintenance	<Null>	<Null>	Adult. On water
	2	6	12/12/2019 S.I		15:00	15:30	3	SA	2	Roosting	<Null>	<Null>	On exposed rocks
	2	6	12/12/2019 S.I		15:00	15:30	4	BH	2	Loafing	<Null>	<Null>	<Null>
	2	6	12/12/2019 S.I		15:00	15:30	5	SA	1	Roosting	<Null>	<Null>	Still on post
	2	6	12/12/2019 S.I		15:00	15:30	6	SA	1	Foraging	<Null>	<Null>	<Null>
	2	6	12/12/2019 S.I		15:00	15:30	7	SA	1	Foraging	<Null>	<Null>	<Null>
	2	6	12/12/2019 S.I		15:00	15:30	9	SA	1	Foraging	<Null>	<Null>	<Null>
	2	6	12/12/2019 S.I		15:00	15:30	10	SA	1	Foraging	<Null>	<Null>	<Null>
	2	6	12/12/2019 S.I		15:00	15:30	11	LB	5	Roosting	<Null>	<Null>	<Null>
	2	6	12/12/2019 S.I		15:00	15:30	12	H	1	Foraging & Roosting	<Null>	<Null>	On exposed rocks
	2	6	12/12/2019 S.I		15:00	15:30	13	OC	5	Roosting	<Null>	<Null>	<Null>
	2	6	12/12/2019 S.I		15:00	15:30	14	OC	13	Roosting & Flying	<Null>	<Null>	Joined flock 13
	1	1	22/01/2020 N.V		11:25	11:46	1	SA	2	Foraging	Walkers and Dogs	<Null>	6 walkers 8 dogs
	1	1	22/01/2020 N.V		11:25	11:46	1	GB	3	Loafing	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	2	SA	6	Foraging	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	2	HG	2	Loafing	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	2	TY	2	Foraging	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	3	TY	2	Foraging	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	4	SA	5	Foraging	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	4	CA	1	Foraging	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	4	HG	2	Loafing	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	5	GB	3	Loafing	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	5	HG	4	Loafing	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	5	BH	11	Loafing	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	6	RH	2	Foraging	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	7	SA	3	Foraging	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	8	SA	6	Foraging	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	8	RH	4	Foraging	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	8	BH	37	Foraging	<Null>	<Null>	Dip feeding
	1	1	22/01/2020 N.V		11:25	11:46	8	KI	4	Foraging	<Null>	<Null>	Dip feeding
	1	1	22/01/2020 N.V		11:25	11:46	9	ND	1	Foraging	<Null>	<Null>	<Null>
	1	1	22/01/2020 N.V		11:25	11:46	10	RH	2	Foraging	<Null>	<Null>	<Null>
	1	2	22/01/2020 N.V		11:55	12:14	1	SA	4	Foraging	<Null>	<Null>	Br plumage
	1	2	22/01/2020 N.V		11:55	12:14	1	TY	2	Foraging	<Null>	<Null>	Winter plumage
	1	2	22/01/2020 N.V		11:55	12:14	1	GU	1	Foraging	<Null>	<Null>	Summer plumage
	1	2	22/01/2020 N.V		11:55	12:14	2	GU	3	Foraging	<Null>	<Null>	Summer plumage
	1	2	22/01/2020 N.V		11:55	12:14	2	TY	2	Foraging	<Null>	<Null>	Winter plumage
	1	2	22/01/2020 N.V		11:55	12:14	2	GB	1	Loafing	<Null>	<Null>	I3
	1	2	22/01/2020 N.V		11:55	12:14	3	SA	4	Foraging	<Null>	<Null>	Br plumage
	1	2	22/01/2020 N.V		11:55	12:14	3	TY	1	Foraging	<Null>	<Null>	Winter plumage
	1	2	22/01/2020 N.V		11:55	12:14	4	GB	3	Loafing	<Null>	<Null>	<Null>
	1	2	22/01/2020 N.V		11:55	12:14	4	HG	2	Loafing	<Null>	<Null>	<Null>
	1	2	22/01/2020 N.V		11:55	12:14	5	SA	4	Foraging	<Null>	<Null>	Br plumage
	1	2	22/01/2020 N.V		11:55	12:14	5	GG	2	Foraging	<Null>	<Null>	Winter plumage

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Ti	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
1	1	2	22/01/2020 N.V		11:55	12:14	6	HG	8	Loafing	<Null>	<Null>	<Null>
1	1	2	22/01/2020 N.V		11:55	12:14	6	GB	3	Loafing	<Null>	<Null>	<Null>
1	1	2	22/01/2020 N.V		11:55	12:14	6	BH	1	Loafing	<Null>	<Null>	<Null>
1	1	2	22/01/2020 N.V		11:55	12:14	7	TY	2	Foraging	<Null>	<Null>	Winter plumage
1	1	2	22/01/2020 N.V		11:55	12:14	8	GU	5	Foraging	<Null>	<Null>	Summer plumage
1	1	2	22/01/2020 N.V		11:55	12:14	8	TY	2	Foraging	<Null>	<Null>	Winter plumage
1	1	3	22/01/2020 N.V		12:25	12:47	1	SA	4	Foraging	<Null>	<Null>	Br plumage
1	1	3	22/01/2020 N.V		12:25	12:47	1	GG	1	Foraging	<Null>	<Null>	Winter plumage
1	1	3	22/01/2020 N.V		12:25	12:47	2	OC	2	Roosting	Dogs	Moderate	Flushed - flew north up beach
1	1	3	22/01/2020 N.V		12:25	12:47	3	SA	5	Foraging	<Null>	<Null>	Br plumage
1	1	3	22/01/2020 N.V		12:25	12:47	3	GB	1	Loafing	<Null>	<Null>	I2
1	1	3	22/01/2020 N.V		12:25	12:47	4	HG	9	Loafing	<Null>	<Null>	I
1	1	3	22/01/2020 N.V		12:25	12:47	4	GB	1	Loafing	<Null>	<Null>	Adult
1	1	3	22/01/2020 N.V		12:25	12:47	4	SA	7	Foraging	<Null>	<Null>	Br plumage
1	1	3	22/01/2020 N.V		12:25	12:47	4	GU	2	Foraging	<Null>	<Null>	Summer plumage
1	1	3	22/01/2020 N.V		12:25	12:47	5	BH	1	Foraging	<Null>	<Null>	Dip feeding
1	1	3	22/01/2020 N.V		12:25	12:47	5	SA	2	Foraging	<Null>	<Null>	1 Br Plumage, 1 NB,I
1	1	3	22/01/2020 N.V		12:25	12:47	6	GU	2	Foraging	<Null>	<Null>	Summer plumage
1	1	3	22/01/2020 N.V		12:25	12:47	6	TY	2	Foraging	<Null>	<Null>	Winter plumage
1	1	3	22/01/2020 N.V		12:25	12:47	6	SA	4	Foraging	<Null>	<Null>	Br plumage
1	1	3	22/01/2020 N.V		12:25	12:47	6	HG	3	Loafing	<Null>	<Null>	I3
1	1	3	22/01/2020 N.V		12:25	12:47	7	GB	5	Loafing	<Null>	<Null>	<Null>
1	1	3	22/01/2020 N.V		12:25	12:47	7	HG	11	Loafing	<Null>	<Null>	<Null>
1	1	3	22/01/2020 N.V		12:25	12:47	7	SA	3	Foraging	<Null>	<Null>	<Null>
1	1	3	22/01/2020 N.V		12:25	12:47	7	GG	2	Foraging	<Null>	<Null>	Winter plumage
1	1	4	22/01/2020 N.V		12:55	13:16	1	SA	3	Foraging	<Null>	<Null>	<Null>
1	1	4	22/01/2020 N.V		12:55	13:16	1	CA	2	Foraging	<Null>	<Null>	<Null>
1	1	4	22/01/2020 N.V		12:55	13:16	1	HG	7	Loafing	<Null>	<Null>	<Null>
1	1	4	22/01/2020 N.V		12:55	13:16	2	SA	4	Maintenance	<Null>	<Null>	Wing drying
1	1	4	22/01/2020 N.V		12:55	13:16	2	OC	3	Roosting	<Null>	<Null>	<Null>
1	1	4	22/01/2020 N.V		12:55	13:16	2	TT	11	Foraging	<Null>	<Null>	In rocks
1	1	4	22/01/2020 N.V		12:55	13:16	3	SA	4	Maintenance	<Null>	<Null>	Wing drying
1	1	4	22/01/2020 N.V		12:55	13:16	3	CA	2	Maintenance	<Null>	<Null>	Wing drying
1	1	4	22/01/2020 N.V		12:55	13:16	3	HG	11	Loafing	<Null>	<Null>	I
1	1	4	22/01/2020 N.V		12:55	13:16	4	GG	2	Foraging	<Null>	<Null>	<Null>
1	1	4	22/01/2020 N.V		12:55	13:16	5	GB	2	Loafing	<Null>	<Null>	<Null>
1	1	4	22/01/2020 N.V		12:55	13:16	5	SA	3	Foraging	<Null>	<Null>	2 Br plumage 1 NB
1	1	4	22/01/2020 N.V		12:55	13:16	5	BH	6	Loafing	<Null>	<Null>	<Null>
1	1	4	22/01/2020 N.V		12:55	13:16	5	CA	1	Foraging	<Null>	<Null>	<Null>
1	1	4	22/01/2020 N.V		12:55	13:16	6	OC	3	<Null>	Walkers and Dogs	Moderate	Flushed south
1	1	4	22/01/2020 N.V		12:55	13:16	7	GU	2	Foraging	<Null>	<Null>	Summer plumage
1	1	4	22/01/2020 N.V		12:55	13:16	7	TY	2	Foraging	<Null>	<Null>	Winter plumage
1	1	4	22/01/2020 N.V		12:55	13:16	7	HG	3	Loafing	<Null>	<Null>	<Null>
1	1	5	22/01/2020 N.V		13:25	13:45	1	HG	24	Roosting	<Null>	<Null>	On exposed rocks
1	1	5	22/01/2020 N.V		13:25	13:45	1	GB	4	Roosting	<Null>	<Null>	On exposed rocks
1	1	5	22/01/2020 N.V		13:25	13:45	1	CA	3	Maintenance	<Null>	<Null>	On exposed rocks
1	1	5	22/01/2020 N.V		13:25	13:45	1	SA	11	Maintenance	<Null>	<Null>	On exposed rocks
1	1	5	22/01/2020 N.V		13:25	13:45	2	OC	6	Roosting	<Null>	<Null>	Rocks
1	1	5	22/01/2020 N.V		13:25	13:45	2	SA	7	Maintenance	<Null>	<Null>	On rocks wing drying
1	1	5	22/01/2020 N.V		13:25	13:45	2	TT	16	Foraging	<Null>	<Null>	On shore
1	1	5	22/01/2020 N.V		13:25	13:45	3	GU	4	Foraging	<Null>	<Null>	Summer plumage
1	1	5	22/01/2020 N.V		13:25	13:45	3	GG	2	Foraging	<Null>	<Null>	<Null>
1	1	5	22/01/2020 N.V		13:25	13:45	3	SA	1	Foraging	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	1	5	22/01/2020 N.V		13:25	13:45		4 GB	3	Loafing	<Null>	<Null>	Adults
	1	5	22/01/2020 N.V		13:25	13:45		5 BH	38	Loafing	<Null>	<Null>	<Null>
	1	5	22/01/2020 N.V		13:25	13:45		5 HG	14	Loafing	<Null>	<Null>	<Null>
	1	5	22/01/2020 N.V		13:25	13:45		5 GB	6	Loafing	<Null>	<Null>	<Null>
	1	5	22/01/2020 N.V		13:25	13:45		5 CM	2	Loafing	<Null>	<Null>	
	1	5	22/01/2020 N.V		13:25	13:45		6 GU	8	Foraging	<Null>	<Null>	Summer plumage
	1	5	22/01/2020 N.V		13:25	13:45		6 TY	2	Foraging	<Null>	<Null>	Winter plumage
	1	5	22/01/2020 N.V		13:25	13:45		6 RH	1	Foraging	<Null>	<Null>	Winter plumage
	1	5	22/01/2020 N.V		13:25	13:45		7 GB	1	Loafing	<Null>	<Null>	Adult
	1	5	22/01/2020 N.V		13:25	13:45		8 BH	7	Loafing	<Null>	<Null>	<Null>
	1	5	22/01/2020 N.V		13:25	13:45		9 BH	27	Loafing	<Null>	<Null>	<Null>
	1	5	22/01/2020 N.V		13:25	13:45		9 HG	10	Loafing	<Null>	<Null>	<Null>
	1	5	22/01/2020 N.V		13:25	13:45		9 GU	7	Foraging	<Null>	<Null>	<Null>
	1	5	22/01/2020 N.V		13:25	13:45		9 RH	1	Foraging	<Null>	<Null>	<Null>
	1	5	22/01/2020 N.V		13:25	13:45		10 GB	1	Loafing	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		1 CA	5	Roosting & Maintenance	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		1 HG	29	Roosting	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		1 SA	14	Roosting & Maintenance	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		1 GB	8	Roosting	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		2 OC	6	Foraging & Maintenance	Walkers and Dogs	Moderate	Flushed south
	1	6	22/01/2020 N.V		13:55	14:15		2 H	1	Foraging	Walkers and Dogs	Moderate	Flushed south
	1	6	22/01/2020 N.V		13:55	14:15		3 GK	2	Foraging	<Null>	<Null>	Flushed from north of VP lanc
	1	6	22/01/2020 N.V		13:55	14:15		3 OC	4	Foraging	<Null>	<Null>	Flushed from north of VP lanc
	1	6	22/01/2020 N.V		13:55	14:15		4 SA	2	Foraging	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		4 GB	1	Loafing	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		5 GU	6	Foraging	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		5 HG	11	Loafing	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		5 BH	38	Loafing	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		6 CA	2	Maintenance	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		6 SA	5	Maintenance	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		6 OC	17	Roosting	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		6 TT	12	Foraging	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		7 GG	1	Foraging	<Null>	<Null>	<Null>
	1	6	22/01/2020 N.V		13:55	14:15		7 GU	2	Foraging	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		1 BH	1	Roosting	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		2 BH	1	Roosting	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		3 BH	25	Roosting	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		5 SA	1	Roosting	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		6 SA	1	Roosting	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		7 SA	1	Roosting	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		8 LB	2	Roosting	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		9 BH	3	Flying	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		11 LB	1	Roosting	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		12 SA	1	Roosting	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		13 GU	1	Flying	<Null>	<Null>	GU/RA flying north
	2	1	22/01/2020 S.I		11:25	11:45		14 BH	2	Roosting	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		15 BH	4	Foraging	<Null>	<Null>	<Null>
	2	1	22/01/2020 S.I		11:25	11:45		16 BH	3	Foraging	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15		1 SA	1	Foraging	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15		2 GUL	3	Roosting	<Null>	<Null>	Unidentified gull flock
	2	2	22/01/2020 S.I		11:55	12:15		3 SA	1	Flying	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15		4 SA	1	Roosting	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15		5 GU	2	Roosting	<Null>	<Null>	On water

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	2	22/01/2020 S.I		11:55	12:15	6	LB	2	Roosting	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15	7	BH	1	Flying	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15	8	BH	1	Roosting	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15	9	LB	2	Roosting	<Null>	<Null>	On water
	2	2	22/01/2020 S.I		11:55	12:15	10	LB	1	Flying	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15	11	SA	1	Flying	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15	12	SA	1	Roosting	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15	13	SA	1	Roosting	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15	14	LB	1	Roosting	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15	15	BH	3	Roosting	<Null>	<Null>	<Null>
	2	2	22/01/2020 S.I		11:55	12:15	16	BH	10	Maintenance	<Null>	<Null>	Bathing and presenting in stre
	2	2	22/01/2020 S.I		11:55	12:15	16	LB	5	Maintenance	<Null>	<Null>	Adult. Bathing and presenting
	2	2	22/01/2020 S.I		11:55	12:15	16	LB	7	Maintenance	<Null>	<Null>	Juv. Bathing and presenting in
	2	2	22/01/2020 S.I		11:55	12:15	17	OC	2	Foraging	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	1	OC	2	Maintenance	<Null>	<Null>	Bathing/presenting
	2	3	22/01/2020 S.I		12:25	12:45	1	BH	5	Maintenance	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	1	LB	6	Maintenance	<Null>	<Null>	Adult
	2	3	22/01/2020 S.I		12:25	12:45	1	LB	12	Maintenance	<Null>	<Null>	Juv
	2	3	22/01/2020 S.I		12:25	12:45	1	HG	11	Maintenance	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	2	BH	1	Roosting	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	3	BH	1	Roosting	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	4	BH	1	Roosting	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	5	SA	1	Roosting	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	6	SA	1	Roosting	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	7	BH	5	Roosting	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	8	BH	4	Foraging & Loafing	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	9	BH	4	Roosting	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	10	SA	1	Roosting	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	11	SA	1	Flying	<Null>	<Null>	<Null>
	2	3	22/01/2020 S.I		12:25	12:45	12	GUL	17	Roosting	<Null>	<Null>	Unidentified gull flock
	2	4	22/01/2020 S.I		12:55	13:15	1	SA	1	Roosting	<Null>	<Null>	On water
	2	4	22/01/2020 S.I		12:55	13:15	2	BH	2	Roosting	<Null>	<Null>	On water
	2	4	22/01/2020 S.I		12:55	13:15	3	SA	4	Roosting	<Null>	<Null>	On exposed rocks
	2	4	22/01/2020 S.I		12:55	13:15	4	SA	7	Foraging	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	4	ND	1	Foraging	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	4	BH	3	Roosting	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	5	SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	6	SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	7	SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	8	OC	4	Flying	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	9	BH	1	Maintenance	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	10	GU	1	Roosting	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	11	BH	2	Roosting	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	12	SA	1	Roosting	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	13	LB	1	Roosting	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	14	BH	17	Foraging	<Null>	<Null>	<Null>
	2	4	22/01/2020 S.I		12:55	13:15	15	HG	12	Roosting	<Null>	<Null>	5 Adult 7 Juv
	2	4	22/01/2020 S.I		12:55	13:15	16	SA	1	Roosting	<Null>	<Null>	On exposed rocks
	2	4	22/01/2020 S.I		12:55	13:15	17	BH	2	Roosting	<Null>	<Null>	<Null>
	2	5	22/01/2020 S.I		13:25	13:43	1	OC	5	Foraging	Walkers	Moderate	Flew south
	2	5	22/01/2020 S.I		13:25	13:43	1	BH	11	Foraging	<Null>	<Null>	<Null>
	2	5	22/01/2020 S.I		13:25	13:43	1	HG	16	Foraging	<Null>	<Null>	Juv
	2	5	22/01/2020 S.I		13:25	13:43	1	HG	2	Foraging	<Null>	<Null>	Adult

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	5	22/01/2020 S.I		13:25	13:43		2 BH	3	Maintenance	<Null>	<Null>	<Null>
	2	5	22/01/2020 S.I		13:25	13:43		3 BH	4	Roosting	<Null>	<Null>	<Null>
	2	5	22/01/2020 S.I		13:25	13:43		3 LB	1	Roosting	<Null>	<Null>	<Null>
	2	5	22/01/2020 S.I		13:25	13:43		4 HG	14	Roosting	<Null>	<Null>	Juv
	2	5	22/01/2020 S.I		13:25	13:43		4 LB	2	Roosting	<Null>	<Null>	Adult
	2	5	22/01/2020 S.I		13:25	13:43		5 SA	3	Roosting	<Null>	<Null>	On exposed rocks
	2	5	22/01/2020 S.I		13:25	13:43		6 HG	10	Roosting	<Null>	<Null>	Juv
	2	5	22/01/2020 S.I		13:25	13:43		7 BH	3	Roosting	<Null>	<Null>	<Null>
	2	5	22/01/2020 S.I		13:25	13:43		8 SA	1	Foraging	<Null>	<Null>	<Null>
	2	5	22/01/2020 S.I		13:25	13:43		9 SA	1	Foraging	<Null>	<Null>	<Null>
	2	5	22/01/2020 S.I		13:25	13:43		10 GUL	15	Foraging	<Null>	<Null>	Unidentified feeding flock
	2	5	22/01/2020 S.I		13:25	13:43		11 GU	1	Roosting	<Null>	<Null>	<Null>
	2	5	22/01/2020 S.I		13:25	13:43		12 BH	2	Roosting	<Null>	<Null>	<Null>
	2	5	22/01/2020 S.I		13:25	13:43		13 SA	4	Roosting	<Null>	<Null>	On exposed rocks
	2	5	22/01/2020 S.I		13:25	13:43		14 BH	4	Roosting	<Null>	<Null>	On exposed rocks
	2	6	22/01/2020 S.I		13:55	14:15		1 BH	1	Roosting	<Null>	<Null>	<Null>
	2	6	22/01/2020 S.I		13:55	14:15		2 SA	3	Roosting	<Null>	<Null>	On exposed rocks
	2	6	22/01/2020 S.I		13:55	14:15		2 BH	5	Roosting	<Null>	<Null>	On exposed rocks
	2	6	22/01/2020 S.I		13:55	14:15		3 SA	1	Roosting	<Null>	<Null>	<Null>
	2	6	22/01/2020 S.I		13:55	14:15		4 BH	1	Roosting	<Null>	<Null>	<Null>
	2	6	22/01/2020 S.I		13:55	14:15		5 SA	1	Roosting	<Null>	<Null>	<Null>
	2	6	22/01/2020 S.I		13:55	14:15		6 SA	1	Roosting	<Null>	<Null>	<Null>
	2	6	22/01/2020 S.I		13:55	14:15		7 BH	1	Roosting	<Null>	<Null>	<Null>
	2	6	22/01/2020 S.I		13:55	14:15		8 BH	11	Roosting	<Null>	<Null>	<Null>
	2	6	22/01/2020 S.I		13:55	14:15		9 BH	4	Roosting	<Null>	<Null>	<Null>
	2	6	22/01/2020 S.I		13:55	14:15		10 SA	1	Foraging	<Null>	<Null>	<Null>
	2	6	22/01/2020 S.I		13:55	14:15		11 BH	4	Roosting	<Null>	<Null>	<Null>
	2	6	22/01/2020 S.I		13:55	14:15		12 SA	1	Roosting	<Null>	<Null>	<Null>
	2	6	22/01/2020 S.I		13:55	14:15		13 SA	1	Roosting	<Null>	<Null>	<Null>
	2	6	22/01/2020 S.I		13:55	14:15		14 LB	1	Roosting	<Null>	<Null>	On pole
	2	6	22/01/2020 S.I		13:55	14:15		15 HG	14	Roosting	<Null>	<Null>	Juv. On water
	2	6	22/01/2020 S.I		13:55	14:15		16 SA	5	Roosting	<Null>	<Null>	On rocks
	2	6	22/01/2020 S.I		13:55	14:15		17 LB	2	Roosting	<Null>	<Null>	On rocks
	2	6	22/01/2020 S.I		13:55	14:15		18 OC	11	Roosting	Dogs	Moderate	Flew south
	2	6	22/01/2020 S.I		13:55	14:15		19 BH	20	Foraging & Roosting	<Null>	<Null>	<Null>
	1	1	23/01/2020 S.I		12:15	12:45		1 BH	1	Flying	<Null>	<Null>	Flew south to north
	1	1	23/01/2020 S.I		12:15	12:45		2 BG	15	Flying	<Null>	<Null>	Flew south to north
	1	1	23/01/2020 S.I		12:15	12:45		3 BG	5	Flying	<Null>	<Null>	Flew south to north
	1	1	23/01/2020 S.I		12:15	12:45		4 BG	2	Flying	<Null>	<Null>	Flew south to north
	1	1	23/01/2020 S.I		12:15	12:45		5 BG	2	Flying	<Null>	<Null>	Flew south to north
	1	2	23/01/2020 S.I		12:45	13:10		1 BH	5	Flying	<Null>	<Null>	<Null>
	1	2	23/01/2020 S.I		12:45	13:10		2 HG	3	Flying	<Null>	<Null>	1 Adult 2 Juv
	1	2	23/01/2020 S.I		12:45	13:10		3 TT	2	Flying	<Null>	<Null>	<Null>
	1	2	23/01/2020 S.I		12:45	13:10		4 SA	1	Foraging	<Null>	<Null>	<Null>
	1	2	23/01/2020 S.I		12:45	13:10		5 BH	4	Flying	<Null>	<Null>	<Null>
	1	2	23/01/2020 S.I		12:45	13:10		6 BH	2	Flying	<Null>	<Null>	<Null>
	1	3	23/01/2020 S.I		13:15	13:40		1 BH	1	Flying	<Null>	<Null>	<Null>
	1	3	23/01/2020 S.I		13:15	13:40		2 HG	1	Flying	<Null>	<Null>	<Null>
	1	3	23/01/2020 S.I		13:15	13:40		3 HG	1	Flying	<Null>	<Null>	<Null>
	1	3	23/01/2020 S.I		13:15	13:40		4 BH	4	Flying	<Null>	<Null>	<Null>
	1	3	23/01/2020 S.I		13:15	13:40		5 LB	1	Flying	<Null>	<Null>	<Null>
	1	3	23/01/2020 S.I		13:15	13:40		6 BH	1	Flying	<Null>	<Null>	<Null>
	1	3	23/01/2020 S.I		13:15	13:40		7 HG	1	Flying	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
1	1	3	23/01/2020 S.I		13:15	13:40	8	SA	1	Roosting	<Null>	<Null>	On exposed rocks
1	1	3	23/01/2020 S.I		13:15	13:40	9	HG	1	Flying	<Null>	<Null>	<Null>
1	1	4	23/01/2020 S.I		13:45	14:15	1	BH	6	Flying	<Null>	<Null>	<Null>
1	1	4	23/01/2020 S.I		13:45	14:15	2	SA	1	Roosting	<Null>	<Null>	On rocks
1	1	4	23/01/2020 S.I		13:45	14:15	3	SA	1	Roosting	<Null>	<Null>	<Null>
1	1	4	23/01/2020 S.I		13:45	14:15	4	HG	2	Flying	<Null>	<Null>	<Null>
1	1	4	23/01/2020 S.I		13:45	14:15	5	BH	4	Flying	<Null>	<Null>	Disturbed from VP
1	1	4	23/01/2020 S.I		13:45	14:15	6	OC	10	Flying	<Null>	<Null>	<Null>
1	1	4	23/01/2020 S.I		13:45	14:15	7	OC	7	Flying	<Null>	<Null>	<Null>
1	1	4	23/01/2020 S.I		13:45	14:15	8	BH	3	Flying	<Null>	<Null>	<Null>
1	1	4	23/01/2020 S.I		13:45	14:15	9	OC	1	Flying	<Null>	<Null>	<Null>
1	1	5	23/01/2020 S.I		14:15	14:40	1	HG	2	Flying	<Null>	<Null>	<Null>
1	1	5	23/01/2020 S.I		14:15	14:40	2	BH	1	Flying	<Null>	<Null>	<Null>
1	1	5	23/01/2020 S.I		14:15	14:40	3	SA	1	Roosting	<Null>	<Null>	On rocks
1	1	5	23/01/2020 S.I		14:15	14:40	4	HG	3	Flying	<Null>	<Null>	<Null>
1	1	5	23/01/2020 S.I		14:15	14:40	5	LB	7	Flying	<Null>	<Null>	<Null>
1	1	5	23/01/2020 S.I		14:15	14:40	6	BH	4	Flying	<Null>	<Null>	<Null>
1	1	5	23/01/2020 S.I		14:15	14:40	7	HG	1	Flying	<Null>	<Null>	<Null>
1	1	5	23/01/2020 S.I		14:15	14:40	8	OC	3	Flying	<Null>	<Null>	<Null>
1	1	5	23/01/2020 S.I		14:15	14:40	9	LB	1	Flying	<Null>	<Null>	<Null>
1	1	5	23/01/2020 S.I		14:15	14:40	10	OC	2	Foraging	Dogs	Moderate	<Null>
1	1	5	23/01/2020 S.I		14:15	14:40	11	HG	1	Flying	<Null>	<Null>	Juv
1	1	5	23/01/2020 S.I		14:15	14:40	12	CU	3	Flying	<Null>	<Null>	<Null>
1	1	6	23/01/2020 S.I		14:45	15:15	1	OC	2	Flying	<Null>	<Null>	<Null>
1	1	6	23/01/2020 S.I		14:45	15:15	2	HG	4	Flying	<Null>	<Null>	<Null>
1	1	6	23/01/2020 S.I		14:45	15:15	3	LB	1	Flying	<Null>	<Null>	<Null>
1	1	6	23/01/2020 S.I		14:45	15:15	4	CU	9	Flying	<Null>	<Null>	<Null>
1	1	6	23/01/2020 S.I		14:45	15:15	5	OC	3	Foraging	<Null>	<Null>	<Null>
1	1	6	23/01/2020 S.I		14:45	15:15	7	SA	3	Roosting	<Null>	<Null>	<Null>
1	1	6	23/01/2020 S.I		14:45	15:15	8	HG	3	Flying	<Null>	<Null>	On exposed rocks
1	1	6	23/01/2020 S.I		14:45	15:15	9	LB	4	Roosting	<Null>	<Null>	<Null>
1	1	6	23/01/2020 S.I		14:45	15:15	10	BH	7	Roosting	<Null>	<Null>	On exposed rocks
1	1	6	23/01/2020 S.I		14:45	15:15	11	SA	1	Roosting	<Null>	<Null>	On exposed rocks
1	1	6	23/01/2020 S.I		14:45	15:15	12	OC	2	Flying	<Null>	<Null>	<Null>
1	1	6	23/01/2020 S.I		14:45	15:15	13	H	1	Foraging	Walkers	Moderate	Moved north to place on beach
1	1	6	23/01/2020 S.I		14:45	15:15	14	OC	1	Foraging	<Null>	<Null>	<Null>
1	1	6	23/01/2020 S.I		14:45	15:15	15	OC	2	Foraging	<Null>	<Null>	<Null>
2	2	1	23/01/2020 N.V		12:15	12:30	1	HG	23	Loafing	<Null>	<Null>	<Null>
2	2	1	23/01/2020 N.V		12:15	12:30	1	GB	8	Loafing	<Null>	<Null>	<Null>
2	2	1	23/01/2020 N.V		12:15	12:30	1	BH	16	Loafing	<Null>	<Null>	<Null>
2	2	1	23/01/2020 N.V		12:15	12:30	2	OC	6	Roosting & Maintenance	Walkers and Dogs	Moderate	Flushed south past VP
2	2	2	23/01/2020 N.V		12:45	13:00	1	HG	26	Loafing	<Null>	<Null>	<Null>
2	2	2	23/01/2020 N.V		12:45	13:00	1	BH	18	Loafing	<Null>	<Null>	<Null>
2	2	2	23/01/2020 N.V		12:45	13:00	1	CA	1	Foraging	<Null>	<Null>	<Null>
2	2	2	23/01/2020 N.V		12:45	13:00	1	GB	6	Loafing	<Null>	<Null>	<Null>
2	2	2	23/01/2020 N.V		12:45	13:00	1	SA	1	Foraging	<Null>	<Null>	<Null>
2	2	3	23/01/2020 N.V		13:15	13:30	1	HG	1	<Null>	<Null>	<Null>	<Null>
2	2	3	23/01/2020 N.V		13:15	13:30	1	GB	1	<Null>	<Null>	<Null>	<Null>
2	2	3	23/01/2020 N.V		13:15	13:30	1	BH	1	<Null>	<Null>	<Null>	<Null>
2	2	3	23/01/2020 N.V		13:15	13:30	1	SA	1	<Null>	<Null>	<Null>	<Null>
2	2	3	23/01/2020 N.V		13:15	13:30	2	OC	1	Flying	Walkers and Dogs	Moderate	Flushed by dog
2	2	4	23/01/2020 N.V		13:45	14:14	1	OC	7	Roosting & Maintenance	Walkers and Dogs	Moderate	On shore flushed
2	2	4	23/01/2020 N.V		13:45	14:14	2	TT	4	Flying	Walkers and Dogs	Moderate	Flushed by dog

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	4	23/01/2020 N.V		13:45	14:14		3 OC	10	Flying	Walkers and Dogs	Moderate	Flushed by dog
	2	4	23/01/2020 N.V		13:45	14:14		3 TT	2	Flying	Walkers and Dogs	Moderate	Flushed by dog
	2	4	23/01/2020 N.V		13:45	14:14		4 CA	1	Foraging	<Null>	<Null>	<Null>
	2	4	23/01/2020 N.V		13:45	14:14		5 OC	9	Flying	Walkers and Dogs	Moderate	Flushed and flew south
	2	4	23/01/2020 N.V		13:45	14:14		6 OC	17	Flying	Walkers and Dogs	Moderate	Flushed and flew south
	2	4	23/01/2020 N.V		13:45	14:14		7 OC	3	Flying	Walkers and Dogs	Moderate	Flushed and flew south
	2	5	23/01/2020 N.V		14:15	14:44		1 OC	11	Flying	Walkers and Dogs	Moderate	Flushed from beach
	2	5	23/01/2020 N.V		14:15	14:44		2 HG	26	Loafing	<Null>	<Null>	<Null>
	2	5	23/01/2020 N.V		14:15	14:44		2 GB	10	Loafing	<Null>	<Null>	<Null>
	2	5	23/01/2020 N.V		14:15	14:44		2 BH	6	Loafing	<Null>	<Null>	<Null>
	2	5	23/01/2020 N.V		14:15	14:44		3 OC	4	Flying	Walkers and Dogs	Moderate	Flushed from beach
	2	5	23/01/2020 N.V		14:15	14:44		3 RP	2	Flying	Walkers and Dogs	Moderate	Flushed from beach
	2	5	23/01/2020 N.V		14:15	14:44		4 OC	4	Foraging	<Null>	<Null>	On exposed rocks
	2	5	23/01/2020 N.V		14:15	14:44		4 BH	11	Roosting	<Null>	<Null>	On exposed rocks
	2	5	23/01/2020 N.V		14:15	14:44		4 RP	3	Roosting	<Null>	<Null>	On exposed rocks
	2	5	23/01/2020 N.V		14:15	14:44		5 OC	9	Roosting & Maintenance	<Null>	<Null>	<Null>
	2	5	23/01/2020 N.V		14:15	14:44		5 TT	4	Foraging	<Null>	<Null>	<Null>
	2	5	23/01/2020 N.V		14:15	14:44		6 CU	3	Flying	<Null>	<Null>	<Null>
	2	5	23/01/2020 N.V		14:15	14:44		6 CU	9	Flying	<Null>	<Null>	<Null>
	2	5	23/01/2020 N.V		14:15	14:44		6 OC	6	Flying	<Null>	<Null>	<Null>
	2	6	23/01/2020 N.V		14:45	15:15		1 HG	8	Roosting	<Null>	<Null>	On exposed rocks
	2	6	23/01/2020 N.V		14:45	15:15		1 BH	16	Roosting	<Null>	<Null>	On exposed rocks
	2	6	23/01/2020 N.V		14:45	15:15		1 GB	3	Roosting	<Null>	<Null>	On exposed rocks
	2	6	23/01/2020 N.V		14:45	15:15		1 OC	12	Roosting	<Null>	<Null>	On exposed rocks
	2	6	23/01/2020 N.V		14:45	15:15		1 TT	9	Foraging	<Null>	<Null>	On exposed rocks
	2	6	23/01/2020 N.V		14:45	15:15		1 RP	5	Foraging	<Null>	<Null>	On exposed rocks
	2	6	23/01/2020 N.V		14:45	15:15		2 CA	1	Foraging	<Null>	<Null>	<Null>
	2	6	23/01/2020 N.V		14:45	15:15		2 SA	1	Foraging	<Null>	<Null>	<Null>
	2	6	23/01/2020 N.V		14:45	15:15		3 OC	19	Roosting	<Null>	<Null>	<Null>
	2	6	23/01/2020 N.V		14:45	15:15		3 TT	14	Foraging	<Null>	<Null>	Rocks right in front of VP
	2	6	23/01/2020 N.V		14:45	15:15		3 RP	6	Foraging	<Null>	<Null>	Rocks right in front of VP
	2	6	23/01/2020 N.V		14:45	15:15		4 HG	27	Roosting	<Null>	<Null>	Onshore roost
	2	6	23/01/2020 N.V		14:45	15:15		4 GB	11	Roosting	<Null>	<Null>	Onshore roost
	2	6	23/01/2020 N.V		14:45	15:15		4 BH	42	Roosting	<Null>	<Null>	Onshore roost
	2	6	23/01/2020 N.V		14:45	15:15		4 CM	6	Roosting	<Null>	<Null>	Onshore roost
	2	6	23/01/2020 N.V		14:45	15:15		5 SA	2	Foraging	<Null>	<Null>	<Null>
	2	1	12/02/2020 N.V		09:50	10:06		1 OC	7	Roosting & Maintenance	Dogs	Weak	Flushed south 100m
	2	1	12/02/2020 N.V		09:50	10:06		2 SA	2	Foraging	<Null>	<Null>	Adults Bp
	2	1	12/02/2020 N.V		09:50	10:06		3 RM	2	Foraging	<Null>	<Null>	1 Male 1 Female
	2	1	12/02/2020 N.V		09:50	10:06		4 HG	11	Loafing	<Null>	<Null>	5 Adult 6I
	2	1	12/02/2020 N.V		09:50	10:06		4 BH	18	Loafing	<Null>	<Null>	<Null>
	2	1	12/02/2020 N.V		09:50	10:06		4 GB	2	Loafing	<Null>	<Null>	I2
	2	1	12/02/2020 N.V		09:50	10:06		5 RP	7	Foraging & Roosting	<Null>	<Null>	<Null>
	2	1	12/02/2020 N.V		09:50	10:06		5 TT	6	Foraging	<Null>	<Null>	<Null>
	2	1	12/02/2020 N.V		09:50	10:06		6 SA	1	Foraging	<Null>	<Null>	<Null>
	2	1	12/02/2020 N.V		09:50	10:06		6 GG	2	Foraging	<Null>	<Null>	<Null>
	2	1	12/02/2020 N.V		09:50	10:06		6 BH	3	Loafing	<Null>	<Null>	<Null>
	2	1	12/02/2020 N.V		09:50	10:06		7 SA	3	Foraging	<Null>	<Null>	<Null>
	2	1	12/02/2020 N.V		09:50	10:06		8 PB	7	Flying	<Null>	<Null>	Flew past VP north. PB?
	2	1	12/02/2020 N.V		09:50	10:06		9 RH	2	Foraging & Maintenance	<Null>	<Null>	Transition plumage
	2	2	12/02/2020 N.V		10:20	10:36		1 OC	7	Roosting	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		2 HG	2	Loafing	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		3 SA	1	Foraging	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	2	12/02/2020 N.V		10:20	10:36		4 SA	2	Foraging	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		5 HG	9	Loafing	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		5 BH	23	Loafing	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		6 RH	2	Foraging & Maintenance	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		6 TY	2	Foraging	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		7 RP	10	Roosting	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		7 TT	8	Foraging	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		8 SA	1	Foraging	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		8 GB	2	Loafing	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		9 BH	5	Loafing	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		10 SA	2	Foraging	<Null>	<Null>	<Null>
	2	2	12/02/2020 N.V		10:20	10:36		10 CA	1	Foraging	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		1 CA	1	Foraging	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		1 SA	2	Foraging	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		1 GG	2	Foraging	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		2 OC	11	Foraging & Roosting	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		2 TT	6	Foraging	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		3 RP	12	Roosting	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		4 CU	2	Flying	<Null>	<Null>	2 CU flew north
	2	3	12/02/2020 N.V		10:50	11:05		5 SA	1	Foraging	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		6 SA	2	Foraging	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		6 HG	3	Loafing	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		7 HG	5	Loafing	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		7 BH	17	Loafing	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		7 MU	1	Loafing	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		7 CM	2	Loafing	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		8 SA	1	Foraging	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		9 GG	2	Foraging	<Null>	<Null>	<Null>
	2	3	12/02/2020 N.V		10:50	11:05		10 OC	5	Flying	<Null>	<Null>	5 OC flew north
	2	4	12/02/2020 N.V		11:20	11:32		1 SA	1	Foraging	<Null>	<Null>	Br plumage
	2	4	12/02/2020 N.V		11:20	11:32		2 H	2	Foraging	<Null>	<Null>	<Null>
	2	4	12/02/2020 N.V		11:20	11:32		3 BH	1	Foraging	Dogs	High	Flushed off site
	2	4	12/02/2020 N.V		11:20	11:32		4 BH	27	Loafing	<Null>	<Null>	<Null>
	2	4	12/02/2020 N.V		11:20	11:32		4 HG	12	Loafing	<Null>	<Null>	<Null>
	2	4	12/02/2020 N.V		11:20	11:32		4 MU	1	Loafing	<Null>	<Null>	<Null>
	2	4	12/02/2020 N.V		11:20	11:32		4 CM	3	Loafing	<Null>	<Null>	<Null>
	2	4	12/02/2020 N.V		11:20	11:32		4 SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	12/02/2020 N.V		11:20	11:32		5 RH	1	Foraging	<Null>	<Null>	Transition plumage
	2	4	12/02/2020 N.V		11:20	11:32		6 SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	12/02/2020 N.V		11:20	11:32		6 CA	1	Foraging	<Null>	<Null>	<Null>
	2	4	12/02/2020 N.V		11:20	11:32		7 OC	5	Flying	<Null>	<Null>	Possible flushed from shore flew
	2	4	12/02/2020 N.V		11:20	11:32		7 TT	8	Flying	<Null>	<Null>	<Null>
	2	4	12/02/2020 N.V		11:20	11:32		8 GB	1	Loafing	<Null>	<Null>	<Null>
	2	5	12/02/2020 N.V		11:50	12:08		1 RH	1	Foraging	<Null>	<Null>	<Null>
	2	5	12/02/2020 N.V		11:50	12:08		2 RM	2	Foraging	<Null>	<Null>	1 Male 1 Female
	2	5	12/02/2020 N.V		11:50	12:08		3 SA	2	Foraging	<Null>	<Null>	<Null>
	2	5	12/02/2020 N.V		11:50	12:08		4 BH	12	Loafing	<Null>	<Null>	<Null>
	2	5	12/02/2020 N.V		11:50	12:08		4 HG	8	Loafing	<Null>	<Null>	<Null>
	2	5	12/02/2020 N.V		11:50	12:08		4 MU	1	Loafing	<Null>	<Null>	<Null>
	2	5	12/02/2020 N.V		11:50	12:08		4 SA	1	Foraging	<Null>	<Null>	<Null>
	2	5	12/02/2020 N.V		11:50	12:08		5 OC	4	Roosting	Dogs	Moderate	Flushed south
	2	5	12/02/2020 N.V		11:50	12:08		6 SA	1	Foraging	<Null>	<Null>	<Null>
	2	5	12/02/2020 N.V		11:50	12:08		7 SA	2	Foraging	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	5	12/02/2020 N.V		11:50	12:08	7	GG	2	Foraging	<Null>	<Null>	<Null>
	2	5	12/02/2020 N.V		11:50	12:08	8	GG	2	Foraging	<Null>	<Null>	<Null>
	2	5	12/02/2020 N.V		11:50	12:08	9	RP	10	Flying	Unknown	High	Probably flushed from shore
	2	5	12/02/2020 N.V		11:50	12:08	10	TT	10	Foraging	<Null>	<Null>	
	2	5	12/02/2020 N.V		11:50	12:08	11	GB	1	Loafing	<Null>	<Null>	Adult
	2	5	12/02/2020 N.V		11:50	12:08	11	RH	1	Foraging	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	1	TT	10	Foraging	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	1	OC	5	Foraging & Maintenance	<Null>	<Null>	Roosting. Flew in from south
	2	6	12/02/2020 N.V		12:20	12:36	2	SA	2	Foraging	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	2	CA	1	Foraging	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	3	SA	1	Foraging	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	4	GG	2	Foraging	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	5	RH	1	Foraging	<Null>	<Null>	Transition plumage
	2	6	12/02/2020 N.V		12:20	12:36	6	BH	2	Loafing	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	7	BH	14	Loafing	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	7	HG	3	Loafing	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	8	SA	2	Foraging	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	9	RM	2	Foraging	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	10	RH	1	Foraging	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	10	GG	2	Foraging	<Null>	<Null>	<Null>
	2	6	12/02/2020 N.V		12:20	12:36	11	OC	3	Flying	<Null>	<Null>	Flew south past VP
	2	6	12/02/2020 N.V		12:20	12:36	12	SA	1	Foraging	<Null>	<Null>	<Null>
	1	1	18/03/2020 N.V		08:50	09:05	1	SA	2	Foraging	<Null>	<Null>	Adult Br
	1	1	18/03/2020 N.V		08:50	09:05	2	HG	3	Loafing	<Null>	<Null>	<Null>
	1	1	18/03/2020 N.V		08:50	09:05	2	BH	6	Loafing	<Null>	<Null>	<Null>
	1	1	18/03/2020 N.V		08:50	09:05	3	SA	4	Roosting & Maintenance	<Null>	<Null>	Wing drying on rocks
	1	1	18/03/2020 N.V		08:50	09:05	4	SA	1	Foraging	<Null>	<Null>	Adult Br
	1	1	18/03/2020 N.V		08:50	09:05	5	SA	1	Foraging	<Null>	<Null>	I Non breedingg
	1	1	18/03/2020 N.V		08:50	09:05	6	RH	2	Foraging	<Null>	<Null>	Transition plumage
	1	1	18/03/2020 N.V		08:50	09:05	7	OC	4	Flying	Walkers and Dogs	High	Left area south
	1	1	18/03/2020 N.V		08:50	09:05	8	GB	1	Loafing	<Null>	<Null>	Adult
	1	2	18/03/2020 N.V		09:20	09:35	1	PB	12	Flying	<Null>	<Null>	Duration flock present 35 sec
	1	2	18/03/2020 N.V		09:20	09:35	2	BH	2	Loafing	<Null>	<Null>	<Null>
	1	2	18/03/2020 N.V		09:20	09:35	3	SA	4	Roosting & Maintenance	<Null>	<Null>	Wing drying on rocks
	1	2	18/03/2020 N.V		09:20	09:35	3	CA	2	Roosting & Maintenance	<Null>	<Null>	Wing drying on rocks
	1	2	18/03/2020 N.V		09:20	09:35	4	SA	1	Foraging	<Null>	<Null>	Adult
	1	2	18/03/2020 N.V		09:20	09:35	5	RH	2	Foraging	<Null>	<Null>	Transition plumage
	1	2	18/03/2020 N.V		09:20	09:35	6	HG	3	Loafing	<Null>	<Null>	I 2/3
	1	2	18/03/2020 N.V		09:20	09:35	6	BH	2	Loafing	<Null>	<Null>	Adult
	1	2	18/03/2020 N.V		09:20	09:35	7	TY	2	Foraging	<Null>	<Null>	Summer plumage
	1	3	18/03/2020 N.V		09:50	10:02	1	SA	1	Foraging	<Null>	<Null>	Adult summer plumage
	1	3	18/03/2020 N.V		09:50	10:02	2	SA	3	Roosting & Maintenance	<Null>	<Null>	On exposed rocks
	1	3	18/03/2020 N.V		09:50	10:02	2	CA	4	Roosting & Maintenance	<Null>	<Null>	On exposed rocks
	1	3	18/03/2020 N.V		09:50	10:02	2	OC	6	Roosting	<Null>	<Null>	On exposed rocks
	1	3	18/03/2020 N.V		09:50	10:02	3	PB	7	Flying	<Null>	<Null>	PB?
	1	3	18/03/2020 N.V		09:50	10:02	4	GB	2	Loafing	<Null>	<Null>	<Null>
	1	3	18/03/2020 N.V		09:50	10:02	5	SA	3	Foraging	<Null>	<Null>	<Null>
	1	3	18/03/2020 N.V		09:50	10:02	6	BH	1	Loafing	<Null>	<Null>	<Null>
	1	3	18/03/2020 N.V		09:50	10:02	7	OC	5	Flying	Walkers and Dogs	Moderate	Assumed flushed from beach
	1	3	18/03/2020 N.V		09:50	10:02	8	TY	2	Foraging	<Null>	<Null>	<Null>
	1	4	18/03/2020 N.V		10:20	10:35	1	TY	2	Foraging	<Null>	<Null>	<Null>
	1	4	18/03/2020 N.V		10:20	10:35	1	BH	1	Loafing	<Null>	<Null>	<Null>
	1	4	18/03/2020 N.V		10:20	10:35	2	RH	2	Flying	<Null>	<Null>	2 RH heading north

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
1	1	4	18/03/2020 N.V		10:20	10:35	3	TT	11	Foraging	<Null>	<Null>	On exposed rocks
1	1	4	18/03/2020 N.V		10:20	10:35	3	OC	7	Foraging & Roosting	<Null>	<Null>	On exposed rocks
1	1	4	18/03/2020 N.V		10:20	10:35	3	SA	3	Roosting & Maintenance	<Null>	<Null>	On exposed rocks wing drying
1	1	4	18/03/2020 N.V		10:20	10:35	3	CA	2	Roosting & Maintenance	<Null>	<Null>	On exposed rocks
1	1	4	18/03/2020 N.V		10:20	10:35	4	SA	2	Foraging	<Null>	<Null>	Adult Br plumage
1	1	4	18/03/2020 N.V		10:20	10:35	5	OC	4	Roosting	Walkers and Dogs	Moderate	<Null>
1	1	4	18/03/2020 N.V		10:20	10:35	6	SA	1	Foraging	<Null>	<Null>	<Null>
1	1	4	18/03/2020 N.V		10:20	10:35	8	GB	2	Loafing	<Null>	<Null>	Adults
1	1	4	18/03/2020 N.V		10:20	10:35	9	RP	5	Flying	<Null>	<Null>	<Null>
1	1	4	18/03/2020 N.V		10:20	10:35	10	RH	1	Foraging	<Null>	<Null>	Transition plumage
1	1	5	18/03/2020 N.V		10:50	11:05	1	OC	4	Roosting	Walkers	High	Flew north out of viewshed
1	1	5	18/03/2020 N.V		10:50	11:05	2	SA	2	Foraging	<Null>	<Null>	<Null>
1	1	5	18/03/2020 N.V		10:50	11:05	3	H	1	Foraging	Dogs	Moderate	Landed south of VP1
1	1	5	18/03/2020 N.V		10:50	11:05	4	GB	2	Loafing	<Null>	<Null>	<Null>
1	1	5	18/03/2020 N.V		10:50	11:05	4	SA	1	Foraging	<Null>	<Null>	<Null>
1	1	5	18/03/2020 N.V		10:50	11:05	5	HG	6	Loafing	<Null>	<Null>	<Null>
1	1	5	18/03/2020 N.V		10:50	11:05	5	BH	3	Loafing	<Null>	<Null>	<Null>
1	1	5	18/03/2020 N.V		10:50	11:05	5	CM	2	Loafing	<Null>	<Null>	<Null>
1	1	5	18/03/2020 N.V		10:50	11:05	6	RM	2	Flying	<Null>	<Null>	Pair
1	1	5	18/03/2020 N.V		10:50	11:05	7	PB	11	Flying	<Null>	<Null>	PB?
1	1	6	18/03/2020 N.V		11:20	11:38	1	OC	7	Roosting	<Null>	<Null>	On exposed rocky shore
1	1	6	18/03/2020 N.V		11:20	11:38	1	TT	15	Foraging & Roosting	<Null>	<Null>	On exposed rocky shore
1	1	6	18/03/2020 N.V		11:20	11:38	1	CA	3	Roosting & Maintenance	<Null>	<Null>	On exposed rocky shore
1	1	6	18/03/2020 N.V		11:20	11:38	1	H	1	Foraging	<Null>	<Null>	On exposed rocky shore
1	1	6	18/03/2020 N.V		11:20	11:38	2	SA	1	Foraging	<Null>	<Null>	<Null>
1	1	6	18/03/2020 N.V		11:20	11:38	3	SA	1	Foraging	<Null>	<Null>	<Null>
1	1	6	18/03/2020 N.V		11:20	11:38	4	SA	1	<Null>	<Null>	<Null>	<Null>
1	1	6	18/03/2020 N.V		11:20	11:38	5	BH	3	Loafing	<Null>	<Null>	<Null>
1	1	6	18/03/2020 N.V		11:20	11:38	6	HG	6	Loafing	<Null>	<Null>	<Null>
1	1	6	18/03/2020 N.V		11:20	11:38	6	GB	1	Loafing	<Null>	<Null>	<Null>
1	1	6	18/03/2020 N.V		11:20	11:38	7	OC	4	Flying	<Null>	<Null>	Flew north
1	1	6	18/03/2020 N.V		11:20	11:38	8	TY	4	Foraging	<Null>	<Null>	Summer plumage
1	1	6	18/03/2020 N.V		11:20	11:38	9	TT	8	Foraging	<Null>	<Null>	<Null>
1	1	6	18/03/2020 N.V		11:20	11:38	10	TY	2	Foraging	<Null>	<Null>	<Null>
2	2	1	19/03/2020 N.V		10:00	10:15	1	SA	2	Foraging	<Null>	<Null>	<Null>
2	2	1	19/03/2020 N.V		10:00	10:15	2	SA	1	Foraging	<Null>	<Null>	<Null>
2	2	1	19/03/2020 N.V		10:00	10:15	3	BH	2	Loafing	<Null>	<Null>	<Null>
2	2	1	19/03/2020 N.V		10:00	10:15	4	PB	7	Flying	Walkers and Dogs	High	Flew north PB?
2	2	1	19/03/2020 N.V		10:00	10:15	5	TY	2	Foraging	<Null>	<Null>	<Null>
2	2	1	19/03/2020 N.V		10:00	10:15	6	F	1	Loafing	<Null>	<Null>	<Null>
2	2	1	19/03/2020 N.V		10:00	10:15	7	HG	3	Loafing	<Null>	<Null>	<Null>
2	2	1	19/03/2020 N.V		10:00	10:15	8	SA	1	Foraging	<Null>	<Null>	<Null>
2	2	2	19/03/2020 N.V		10:30	10:45	1	SA	1	Foraging	<Null>	<Null>	Adult Br plumage
2	2	2	19/03/2020 N.V		10:30	10:45	1	HG	2	Loafing	<Null>	<Null>	<Null>
2	2	2	19/03/2020 N.V		10:30	10:45	2	HG	4	Loafing	<Null>	<Null>	<Null>
2	2	2	19/03/2020 N.V		10:30	10:45	2	BH	2	Loafing	<Null>	<Null>	<Null>
2	2	2	19/03/2020 N.V		10:30	10:45	3	SA	1	Foraging	<Null>	<Null>	Adult
2	2	2	19/03/2020 N.V		10:30	10:45	4	OC	2	Flying	Dogs	Moderate	Duration flock present 30 seconds
2	2	2	19/03/2020 N.V		10:30	10:45	4	TT	5	Flying	Dogs	Moderate	Duration flock present 30 seconds
2	2	2	19/03/2020 N.V		10:30	10:45	5	CA	1	Foraging	<Null>	<Null>	<Null>
2	2	2	19/03/2020 N.V		10:30	10:45	6	F	1	Loafing	<Null>	<Null>	LL
2	2	2	19/03/2020 N.V		10:30	10:45	7	PB	12	Flying	<Null>	<Null>	12 PB? flew south
2	2	2	19/03/2020 N.V		10:30	10:45	8	RH	1	Foraging	<Null>	<Null>	Summer plumage

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	2	19/03/2020	N.V	10:30	10:45	9	TY	2	Foraging	<Null>	<Null>	<Null>
	2	3	19/03/2020	N.V	11:00	11:15	1	SA	1	Foraging	<Null>	<Null>	<Null>
	2	3	19/03/2020	N.V	11:00	11:15	2	OC	6	Flying	Walkers and Dogs	Moderate	Flock duration 120 seconds
	2	3	19/03/2020	N.V	11:00	11:15	3	CA	1	Foraging	<Null>	<Null>	<Null>
	2	3	19/03/2020	N.V	11:00	11:15	4	GB	2	Loafing	<Null>	<Null>	<Null>
	2	3	19/03/2020	N.V	11:00	11:15	5	SA	2	Foraging	<Null>	<Null>	<Null>
	2	3	19/03/2020	N.V	11:00	11:15	6	RH	2	Flying	<Null>	<Null>	2 Adult. Summer plumage
	2	3	19/03/2020	N.V	11:00	11:15	7	SA	1	<Null>	<Null>	<Null>	<Null>
	2	3	19/03/2020	N.V	11:00	11:15	8	GK	2	Flying	Dogs	Moderate	Flock duration 240 seconds. L
	2	3	19/03/2020	N.V	11:00	11:15	9	RM	2	Foraging	<Null>	<Null>	1 Male 1 Female
	2	3	19/03/2020	N.V	11:00	11:15	10	HG	1	Foraging	<Null>	<Null>	<Null>
	2	4	19/03/2020	N.V	11:30	11:45	1	RM	2	Foraging	<Null>	<Null>	1 Male 1 Female
	2	4	19/03/2020	N.V	11:30	11:45	2	SA	2	Foraging	<Null>	<Null>	<Null>
	2	4	19/03/2020	N.V	11:30	11:45	3	OC	11	Roosting	Walkers and Dogs	High	Duration flock present 6 mins
	2	4	19/03/2020	N.V	11:30	11:45	4	SA	2	Foraging	<Null>	<Null>	<Null>
	2	4	19/03/2020	N.V	11:30	11:45	4	HG	1	Loafing	<Null>	<Null>	<Null>
	2	4	19/03/2020	N.V	11:30	11:45	4	BH	3	Loafing	<Null>	<Null>	<Null>
	2	4	19/03/2020	N.V	11:30	11:45	5	SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	19/03/2020	N.V	11:30	11:45	6	GK	2	Foraging & Flying	Walkers	Moderate	Duration flock present 10 min
	2	4	19/03/2020	N.V	11:30	11:45	7	PB	5	Flying	<Null>	<Null>	Family group. PB?
	2	4	19/03/2020	N.V	11:30	11:45	8	RH	2	Flying	<Null>	<Null>	<Null>
	2	4	19/03/2020	N.V	11:30	11:45	9	ND	1	Flying	<Null>	<Null>	<Null>
	2	4	19/03/2020	N.V	11:30	11:45	10	SA	2	Roosting	<Null>	<Null>	<Null>
	2	4	19/03/2020	N.V	11:30	11:45	11	HG	3	Loafing	<Null>	<Null>	<Null>
	2	4	19/03/2020	N.V	11:30	11:45	12	TY	2	Foraging	<Null>	<Null>	<Null>
	2	5	19/03/2020	N.V	12:00	12:15	1	SA	1	Foraging	<Null>	<Null>	<Null>
	2	5	19/03/2020	N.V	12:00	12:15	1	CA	2	Foraging	<Null>	<Null>	<Null>
	2	5	19/03/2020	N.V	12:00	12:15	2	SA	1	Foraging	<Null>	<Null>	<Null>
	2	5	19/03/2020	N.V	12:00	12:15	3	TT	7	Flying	Walkers and Dogs	Moderate	Landed 500m down
	2	5	19/03/2020	N.V	12:00	12:15	4	HG	2	Loafing	<Null>	<Null>	I/3
	2	5	19/03/2020	N.V	12:00	12:15	5	SA	2	Foraging	<Null>	<Null>	<Null>
	2	5	19/03/2020	N.V	12:00	12:15	6	TY	2	Foraging	<Null>	<Null>	Summer plumage
	2	5	19/03/2020	N.V	12:00	12:15	7	ND	1	Flying	<Null>	<Null>	Transition plumage
	2	5	19/03/2020	N.V	12:00	12:15	8	TY	2	Foraging	<Null>	<Null>	Summer plumage
	2	5	19/03/2020	N.V	12:00	12:15	9	GB	1	Loafing	<Null>	<Null>	<Null>
	2	5	19/03/2020	N.V	12:00	12:15	9	HG	3	Loafing	<Null>	<Null>	<Null>
	2	5	19/03/2020	N.V	12:00	12:15	9	CM	2	Loafing	<Null>	<Null>	<Null>
	2	6	19/03/2020	N.V	12:30	12:45	1	PB	7	Flying	<Null>	<Null>	PB?
	2	6	19/03/2020	N.V	12:30	12:45	2	PB	11	Flying	<Null>	<Null>	PB?
	2	6	19/03/2020	N.V	12:30	12:45	3	SA	3	Roosting & Maintenance	<Null>	<Null>	On exposed rocks wing drying
	2	6	19/03/2020	N.V	12:30	12:45	3	CA	1	Roosting & Maintenance	<Null>	<Null>	<Null>
	2	6	19/03/2020	N.V	12:30	12:45	3	TT	4	Foraging	<Null>	<Null>	On rocks in front of VP
	2	6	19/03/2020	N.V	12:30	12:45	4	SA	1	Foraging	<Null>	<Null>	<Null>
	2	6	19/03/2020	N.V	12:30	12:45	5	OC	8	Flying	Walkers	Moderate	Moved 300m south of VP
	2	6	19/03/2020	N.V	12:30	12:45	6	SA	1	Foraging	<Null>	<Null>	<Null>
	2	6	19/03/2020	N.V	12:30	12:45	7	CA	3	Roosting & Maintenance	<Null>	<Null>	On exposed rocks wing drying
	2	6	19/03/2020	N.V	12:30	12:45	7	SA	2	Roosting & Maintenance	<Null>	<Null>	<Null>
	2	6	19/03/2020	N.V	12:30	12:45	8	HG	3	Loafing	<Null>	<Null>	<Null>
	2	6	19/03/2020	N.V	12:30	12:45	9	GB	1	Loafing	<Null>	<Null>	Adult
	2	6	19/03/2020	N.V	12:30	12:45	10	RM	2	Foraging	<Null>	<Null>	<Null>
	2	6	19/03/2020	N.V	12:30	12:45	10	SA	2	Foraging	<Null>	<Null>	<Null>
	2	6	19/03/2020	N.V	12:30	12:45	11	RH	1	Foraging	<Null>	<Null>	Summer plumage
	2	1	16/09/2020	NV	07:39	07:55	1	BH	8	Foraging	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	1	16/09/2020 NV		07:39	07:55	1	BH	8	Foraging	<Null>	<Null>	<Null>
	2	1	16/09/2020 NV		07:39	07:55	2	SA	3	Foraging	<Null>	<Null>	<Null>
	2	1	16/09/2020 NV		07:39	07:55	2	CA	1	Foraging	<Null>	<Null>	<Null>
	2	1	16/09/2020 NV		07:39	07:55	3	TY	2	Foraging	<Null>	<Null>	WP
	2	1	16/09/2020 NV		07:39	07:55	4	HG	11	Loafing	<Null>	<Null>	<Null>
	2	1	16/09/2020 NV		07:39	07:55	4	GB	2	Loafing	<Null>	<Null>	<Null>
	2	1	16/09/2020 NV		07:39	07:55	4	BH	18	Loafing	<Null>	<Null>	<Null>
	2	1	16/09/2020 NV		07:39	07:55	5	SA	2	Foraging	<Null>	<Null>	<Null>
	2	1	16/09/2020 NV		07:39	07:55	5	RM	2	Foraging	<Null>	<Null>	<Null>
	2	1	16/09/2020 NV		07:39	07:55	7	GG	4	Foraging + M	<Null>	<Null>	Transition plumage
	2	2	16/09/2020 NV		08:09	08:24	1	SA	3	Foraging	<Null>	<Null>	<Null>
	2	2	16/09/2020 NV		08:09	08:24	1	RA	2	Foraging	<Null>	<Null>	<Null>
	2	2	16/09/2020 NV		08:09	08:24	2	H	1	Flying	<Null>	<Null>	<Null>
	2	2	16/09/2020 NV		08:09	08:24	3	HG	14	Loafing	<Null>	<Null>	Landed 200m south of VP
	2	2	16/09/2020 NV		08:09	08:24	3	BH	8	Loafing	<Null>	<Null>	<Null>
	2	2	16/09/2020 NV		08:09	08:24	3	GB	2	Loafing	<Null>	<Null>	<Null>
	2	2	16/09/2020 NV		08:09	08:24	4	TY	2	Foraging	<Null>	<Null>	<Null>
	2	2	16/09/2020 NV		08:09	08:24	5	OC	8	Flying	<Null>	<Null>	<Null>
	2	2	16/09/2020 NV		08:09	08:24	5	CU	2	Flying	<Null>	<Null>	Flew north, landed on Killiney
	2	2	16/09/2020 NV		08:09	08:24	6	GG	4	Foraging	<Null>	<Null>	<Null>
	2	2	16/09/2020 NV		08:09	08:24	7	RM	2	Foraging	<Null>	<Null>	Male and Female
	2	2	16/09/2020 NV		08:09	08:24	8	SA	3	Foraging	<Null>	<Null>	1 Adult 2 Juv
	2	2	16/09/2020 NV		08:09	08:24	9	TE	5	Foraging + Flying	<Null>	<Null>	2 Adult 3 Juv (plunge feeding)
	2	2	16/09/2020 NV		08:09	08:24	10	RK	2	Flying	<Null>	<Null>	<Null>
	2	3	16/09/2020 NV		08:39	08:54	1	GK	2	Foraging	<Null>	<Null>	On exposed rocks
	2	3	16/09/2020 NV		08:39	08:54	1	H	1	Foraging	<Null>	<Null>	On exposed rocks
	2	3	16/09/2020 NV		08:39	08:54	1	TT	6	Foraging	<Null>	<Null>	On exposed rocks
	2	3	16/09/2020 NV		08:39	08:54	2	SA	3	Foraging	<Null>	<Null>	<Null>
	2	3	16/09/2020 NV		08:39	08:54	3	HG	4	Loafing	<Null>	<Null>	<Null>
	2	3	16/09/2020 NV		08:39	08:54	4	SA	2	Foraging	<Null>	<Null>	<Null>
	2	3	16/09/2020 NV		08:39	08:54	5	RM	2	Foraging	<Null>	<Null>	<Null>
	2	3	16/09/2020 NV		08:39	08:54	5	GG	4	Foraging	<Null>	<Null>	<Null>
	2	3	16/09/2020 NV		08:39	08:54	6	TY	2	Foraging	<Null>	<Null>	<Null>
	2	3	16/09/2020 NV		08:39	08:54	7	SA	1	Foraging	<Null>	<Null>	Adult
	2	3	16/09/2020 NV		08:39	08:54	8	HG	9	Loafing	<Null>	<Null>	<Null>
	2	3	16/09/2020 NV		08:39	08:54	8	BH	6	Loafing	<Null>	<Null>	<Null>
	2	3	16/09/2020 NV		08:39	08:54	9	OC	5	Flying	<Null>	<Null>	<Null>
	2	3	16/09/2020 NV		08:39	08:54	10	GB	3	Loafing	<Null>	<Null>	<Null>
	2	3	16/09/2020 NV		08:39	08:54	10	RA	3	Foraging	<Null>	<Null>	<Null>
	2	4	16/09/2020 NV		09:09	09:24	1	GK	2	Foraging	<Null>	<Null>	<Null>
	2	4	16/09/2020 NV		09:09	09:24	1	TT	6	Foraging	<Null>	<Null>	<Null>
	2	4	16/09/2020 NV		09:09	09:24	2	SA	3	Foraging	<Null>	<Null>	<Null>
	2	4	16/09/2020 NV		09:09	09:24	3	SA	2	Foraging	<Null>	<Null>	<Null>
	2	4	16/09/2020 NV		09:09	09:24	4	RM	2	Foraging	<Null>	<Null>	Male and female
	2	4	16/09/2020 NV		09:09	09:24	5	GB	2	Loafing	<Null>	<Null>	<Null>
	2	4	16/09/2020 NV		09:09	09:24	5	HG	6	Loafing	<Null>	<Null>	<Null>
	2	4	16/09/2020 NV		09:09	09:24	5	BH	12	Loafing	<Null>	<Null>	<Null>
	2	4	16/09/2020 NV		09:09	09:24	5	MU	2	Loafing	<Null>	<Null>	<Null>
	2	4	16/09/2020 NV		09:09	09:24	6	CA	1	Foraging	<Null>	<Null>	<Null>
	2	4	16/09/2020 NV		09:09	09:24	7	OC	12	Flying	<Null>	<Null>	<Null>
	2	4	16/09/2020 NV		09:09	09:24	8	GP	47	Flying	<Null>	<Null>	Heading south at 40m ASL
	2	4	16/09/2020 NV		09:09	09:24	9	TY	<Null>	Foraging	<Null>	<Null>	<Null>
	2	4	16/09/2020 NV		09:09	09:24	10	TE	4	Foraging + Flying + Plunge feeding	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	4	16/09/2020 NV		09:09	09:24	11	BH	7	Foraging	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	1	OC	12	Roosting	Dogs	High	Landed 250m north of VP, flu:
	2	5	16/09/2020 NV		09:39	09:54	2	HG	7	Loafing	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	2	BH	13	Loafing	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	3	SA	4	Foraging	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	4	SA	2	Foraging	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	5	GG	7	Foraging + Maintenance	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	6	RA	2	Foraging	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	6	GU	6	Foraging + Maintenance	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	7	HG	2	Loafing	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	8	F	1	Loafing	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	9	TE	6	Flying and plunge feeding	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	9	AE / CN	3	Flying and plunge feeding	<Null>	<Null>	Recorded as AE/CN
	2	5	16/09/2020 NV		09:39	09:54	10	CA	1	Foraging	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	11	BW	18	Flying	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	12	SA	1	Foraging	<Null>	<Null>	<Null>
	2	5	16/09/2020 NV		09:39	09:54	12	BH	6	Foraging	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	1	RA	3	Foraging	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	2	RM	2	Foraging	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	2	GU	3	Foraging	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	3	HG	26	Loafing	<Null>	<Null>	Raft roost
	2	6	16/09/2020 NV		10:09	10:24	3	BH	19	Loafing	<Null>	<Null>	Raft roost
	2	6	16/09/2020 NV		10:09	10:24	3	CM	2	Loafing	<Null>	<Null>	Raft roost
	2	6	16/09/2020 NV		10:09	10:24	3	SA	2	Foraging	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	4	SA	1	Foraging	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	5	SA	<Null>	<Null>	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	6	OC	9	Flying	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	6	CU	2	Flying	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	7	OC	5	Foraging	<Null>	<Null>	Last of the exposed rooks alle
	2	6	16/09/2020 NV		10:09	10:24	7	TT	11	Foraging	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	7	RK	3	Foraging	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	8	RM	2	Foraging	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	9	GG	4	Foraging	<Null>	<Null>	<Null>
	2	6	16/09/2020 NV		10:09	10:24	10	GG	4	Foraging	<Null>	<Null>	<Null>
	1	1	25/09/2020 N.V		15:22	15:37	1	MU	5	Loafing	<Null>	<Null>	<Null>
	1	1	25/09/2020 N.V		15:22	15:37	1	BH	11	Loafing	<Null>	<Null>	<Null>
	1	1	25/09/2020 N.V		15:22	15:37	2	SA	1	Foraging	<Null>	<Null>	<Null>
	1	1	25/09/2020 N.V		15:22	15:37	3	CA	1	Foraging	<Null>	<Null>	<Null>
	1	1	25/09/2020 N.V		15:22	15:37	4	HG	11	Loafing	<Null>	<Null>	<Null>
	1	1	25/09/2020 N.V		15:22	15:37	4	BH	7	Loafing	<Null>	<Null>	<Null>
	1	1	25/09/2020 N.V		15:22	15:37	4	GB	2	Loafing	<Null>	<Null>	<Null>
	1	1	25/09/2020 N.V		15:22	15:37	5	TY	2	Foraging	<Null>	<Null>	Winter Plummage
	1	1	25/09/2020 N.V		15:22	15:37	6	RH	2	Foraging	<Null>	<Null>	Transition plumage
	1	1	25/09/2020 N.V		15:22	15:37	7	GB	4	Loafing	<Null>	<Null>	I1
	1	1	25/09/2020 N.V		15:22	15:37	8	GG	3	Foraging	<Null>	<Null>	Transition plumage
	1	2	25/09/2020 N.V		15:52	16:07	1	SA	2	Foraging	<Null>	<Null>	<Null>
	1	2	25/09/2020 N.V		15:52	16:07	2	RM	4	Foraging	<Null>	<Null>	<Null>
	1	2	25/09/2020 N.V		15:52	16:07	4	SA	1	Foraging	<Null>	<Null>	<Null>
	1	2	25/09/2020 N.V		15:52	16:07	5	RH	2	Foraging	<Null>	<Null>	Transition plumage
	1	2	25/09/2020 N.V		15:52	16:07	6	HG	13	Loafing	<Null>	<Null>	<Null>
	1	2	25/09/2020 N.V		15:52	16:07	6	BH	10	Loafing	<Null>	<Null>	<Null>
	1	2	25/09/2020 N.V		15:52	16:07	6	MU	5	Loafing	<Null>	<Null>	<Null>
	1	2	25/09/2020 N.V		15:52	16:07	6	CM	2	Loafing	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
1	1	2	25/09/2020	N.V	15:52	16:07	7	OC	8	Flying	<Null>	<Null>	Flew north, landed past white
1	1	2	25/09/2020	N.V	15:52	16:07	7	TT	5	Flying	<Null>	<Null>	Flew north, landed past white
1	1	2	25/09/2020	N.V	15:52	16:07	8	TE	12	Foraging & Flying	<Null>	<Null>	Dip feeding
1	1	2	25/09/2020	N.V	15:52	16:07	9	RK	2	Flying	<Null>	<Null>	<Null>
1	1	2	25/09/2020	N.V	15:52	16:07	10	HG	4	Loafing	<Null>	<Null>	<Null>
1	1	2	25/09/2020	N.V	15:52	16:07	10	GB	2	Loafing	<Null>	<Null>	<Null>
1	1	3	25/09/2020	N.V	16:22	16:37	1	GG	4	Foraging	<Null>	<Null>	<Null>
1	1	3	25/09/2020	N.V	16:22	16:37	2	SA	3	Foraging	<Null>	<Null>	<Null>
1	1	3	25/09/2020	N.V	16:22	16:37	3	SA	2	Foraging	<Null>	<Null>	<Null>
1	1	3	25/09/2020	N.V	16:22	16:37	4	HG	16	Loafing	<Null>	<Null>	<Null>
1	1	3	25/09/2020	N.V	16:22	16:37	4	MU	5	Loafing	<Null>	<Null>	<Null>
1	1	3	25/09/2020	N.V	16:22	16:37	4	BH	22	Loafing	<Null>	<Null>	<Null>
1	1	3	25/09/2020	N.V	16:22	16:37	5	TY	2	Foraging	<Null>	<Null>	<Null>
1	1	3	25/09/2020	N.V	16:22	16:37	6	TE	18	Foraging & Flying	<Null>	<Null>	Flying south
1	1	3	25/09/2020	N.V	16:22	16:37	7	GK	2	Flying	Walkers and Dogs	High	Flushed just south of VP
1	1	3	25/09/2020	N.V	16:22	16:37	8	SA	3	Foraging	<Null>	<Null>	<Null>
1	1	3	25/09/2020	N.V	16:22	16:37	9	GB	2	Loafing	<Null>	<Null>	<Null>
1	1	3	25/09/2020	N.V	16:22	16:37	10	SA	1	Foraging	<Null>	<Null>	<Null>
1	1	3	25/09/2020	N.V	16:22	16:37	11	BG	7	Flying	<Null>	<Null>	L-b Brent - marked as PB on d
1	1	3	25/09/2020	N.V	16:22	16:37	12	RH	2	Flying	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	1	BH	7	Loafing	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	2	SA	1	Foraging	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	3	RM	4	Foraging	<Null>	<Null>	2 Male 2 Females
1	1	4	25/09/2020	N.V	16:52	17:07	4	HG	16	Loafing	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	4	BH	12	Loafing	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	4	MU	4	Loafing	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	4	CM	2	Loafing	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	5	CA	1	Foraging	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	6	SA	2	Foraging	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	7	GP	19	Flying	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	8	GB	2	Loafing	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	9	TY	2	Foraging	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	10	RH	2	Foraging	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	11	SA	3	Foraging	<Null>	<Null>	<Null>
1	1	4	25/09/2020	N.V	16:52	17:07	12	TT	8	Flying	<Null>	<Null>	Flew south, no sign of disturb
1	1	4	25/09/2020	N.V	16:52	17:07	13	RH	1	Foraging	<Null>	<Null>	<Null>
1	1	5	25/09/2020	N.V	17:22	17:37	1	SA	2	Foraging	<Null>	<Null>	<Null>
1	1	5	25/09/2020	N.V	17:22	17:37	2	RH	2	Foraging	<Null>	<Null>	Summer plummage
1	1	5	25/09/2020	N.V	17:22	17:37	3	SA	4	Foraging & Maintenance	<Null>	<Null>	Also wing drying on surface
1	1	5	25/09/2020	N.V	17:22	17:37	4	TY	2	Foraging	<Null>	<Null>	<Null>
1	1	5	25/09/2020	N.V	17:22	17:37	5	BG	1	Loafing	<Null>	<Null>	<Null>
1	1	5	25/09/2020	N.V	17:22	17:37	6	RH	2	Foraging	<Null>	<Null>	<Null>
1	1	5	25/09/2020	N.V	17:22	17:37	7	BA	19	Flying	<Null>	<Null>	<Null>
1	1	5	25/09/2020	N.V	17:22	17:37	8	BH	3	Foraging	<Null>	<Null>	<Null>
1	1	5	25/09/2020	N.V	17:22	17:37	8	SA	2	Foraging	<Null>	<Null>	<Null>
1	1	5	25/09/2020	N.V	17:22	17:37	9	TE	11	Flying	<Null>	<Null>	Loosely associated, heading s
1	1	5	25/09/2020	N.V	17:22	17:37	9	CN	4	Flying	<Null>	<Null>	CN/AE Loosely associated, he
1	1	5	25/09/2020	N.V	17:22	17:37	10	HG	12	Loafing	<Null>	<Null>	<Null>
1	1	5	25/09/2020	N.V	17:22	17:37	10	BH	23	Loafing	<Null>	<Null>	<Null>
1	1	5	25/09/2020	N.V	17:22	17:37	10	CM	2	Loafing	<Null>	<Null>	<Null>
1	1	5	25/09/2020	N.V	17:22	17:37	10	MU	4	Loafing	<Null>	<Null>	<Null>
1	1	6	25/09/2020	N.V	17:52	18:07	1	BG	25	Flying	<Null>	<Null>	BG L-b Brent PB
1	1	6	25/09/2020	N.V	17:52	18:07	2	SA	2	Foraging	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	1	6	25/09/2020	N.V	17:52	18:07	3	RM	4	Foraging	<Null>	<Null>	<Null>
	1	6	25/09/2020	N.V	17:52	18:07	4	SA	2	<Null>	<Null>	<Null>	<Null>
	1	6	25/09/2020	N.V	17:52	18:07	5	HG	24	Loafing	<Null>	<Null>	<Null>
	1	6	25/09/2020	N.V	17:52	18:07	5	CM	8	Loafing	<Null>	<Null>	<Null>
	1	6	25/09/2020	N.V	17:52	18:07	5	BH	32	Loafing	<Null>	<Null>	<Null>
	1	6	25/09/2020	N.V	17:52	18:07	5	MU	5	Loafing	<Null>	<Null>	<Null>
	1	6	25/09/2020	N.V	17:52	18:07	5	GB	1	Loafing	<Null>	<Null>	<Null>
	1	6	25/09/2020	N.V	17:52	18:07	6	TY	4	Foraging	<Null>	<Null>	<Null>
	1	6	25/09/2020	N.V	17:52	18:07	7	RH	2	Foraging	<Null>	<Null>	Summer plummage
	1	6	25/09/2020	N.V	17:52	18:07	9	OC	16	Flying	<Null>	<Null>	<Null>
	1	6	25/09/2020	N.V	17:52	18:07	10	H	1	Foraging	<Null>	<Null>	<Null>
	1	6	25/09/2020	N.V	17:52	18:07	11	RP	12	Flying	<Null>	<Null>	<Null>
	1	6	25/09/2020	N.V	17:52	18:07	12	SA	2	Foraging	<Null>	<Null>	<Null>
	1	6	25/09/2020	N.V	17:52	18:07	13	RH	1	Foraging	<Null>	<Null>	<Null>
	1	1	06/10/2020	N.V	10:55	11:10	1	SA	1	Foraging	<Null>	<Null>	<Null>
	1	1	06/10/2020	N.V	10:55	11:10	1	BH	6	Foraging & Loafing	<Null>	<Null>	<Null>
	1	1	06/10/2020	N.V	10:55	11:10	2	SA	2	Foraging	<Null>	<Null>	<Null>
	1	1	06/10/2020	N.V	10:55	11:10	3	BH	3	Foraging	<Null>	<Null>	<Null>
	1	1	06/10/2020	N.V	10:55	11:10	5	RH	2	Foraging	<Null>	<Null>	<Null>
	1	1	06/10/2020	N.V	10:55	11:10	6	RH	2	Foraging	<Null>	<Null>	<Null>
	1	1	06/10/2020	N.V	10:55	11:10	7	BH	4	Foraging	<Null>	<Null>	<Null>
	1	1	06/10/2020	N.V	10:55	11:10	7	SA	2	Foraging	<Null>	<Null>	<Null>
	1	1	06/10/2020	N.V	10:55	11:10	8	HG	9	Loafing	<Null>	<Null>	<Null>
	1	1	06/10/2020	N.V	10:55	11:10	8	GB	1	Loafing	<Null>	<Null>	<Null>
	1	2	06/10/2020	N.V	11:25	11:40	1	BH	6	Loafing	<Null>	<Null>	<Null>
	1	2	06/10/2020	N.V	11:25	11:40	2	SA	3	Foraging	<Null>	<Null>	<Null>
	1	2	06/10/2020	N.V	11:25	11:40	2	BH	2	Foraging	<Null>	<Null>	<Null>
	1	2	06/10/2020	N.V	11:25	11:40	2	GG	2	Foraging	<Null>	<Null>	<Null>
	1	2	06/10/2020	N.V	11:25	11:40	3	SA	1	Foraging	<Null>	<Null>	<Null>
	1	2	06/10/2020	N.V	11:25	11:40	5	RH	2	Foraging	<Null>	<Null>	<Null>
	1	2	06/10/2020	N.V	11:25	11:40	6	GB	3	Loafing	<Null>	<Null>	Adults
	1	2	06/10/2020	N.V	11:25	11:40	7	BW	16	Flying	<Null>	<Null>	Flying Southing
	1	2	06/10/2020	N.V	11:25	11:40	7	BA	12	Flying	<Null>	<Null>	Flying Southing
	1	2	06/10/2020	N.V	11:25	11:40	7	KN	28	Flying	<Null>	<Null>	Flying Southing
	1	2	06/10/2020	N.V	11:25	11:40	8	RH	1	Foraging	<Null>	<Null>	<Null>
	1	2	06/10/2020	N.V	11:25	11:40	8	ND	1	Foraging	<Null>	<Null>	<Null>
	1	3	06/10/2020	N.V	11:55	12:10	1	SA	2	Foraging	<Null>	<Null>	<Null>
	1	3	06/10/2020	N.V	11:55	12:10	1	BH	4	Foraging	<Null>	<Null>	<Null>
	1	3	06/10/2020	N.V	11:55	12:10	2	GU	1	Loafing	<Null>	<Null>	<Null>
	1	3	06/10/2020	N.V	11:55	12:10	3	TY	2	Foraging	<Null>	<Null>	<Null>
	1	3	06/10/2020	N.V	11:55	12:10	4	SA	3	Foraging	<Null>	<Null>	<Null>
	1	3	06/10/2020	N.V	11:55	12:10	5	GB	1	Loafing	<Null>	<Null>	Adult
	1	3	06/10/2020	N.V	11:55	12:10	6	RH	2	Foraging	<Null>	<Null>	Winter plumage
	1	3	06/10/2020	N.V	11:55	12:10	7	TT	7	Flying	<Null>	<Null>	Flew north towards Killiney ar
	1	3	06/10/2020	N.V	11:55	12:10	8	GU	2	Loafing	<Null>	<Null>	<Null>
	1	4	06/10/2020	N.V	12:25	12:40	1	ND	1	Foraging	<Null>	<Null>	<Null>
	1	4	06/10/2020	N.V	12:25	12:40	2	SA	2	Foraging	<Null>	<Null>	<Null>
	1	4	06/10/2020	N.V	12:25	12:40	3	OC	6	Flying	<Null>	<Null>	<Null>
	1	4	06/10/2020	N.V	12:25	12:40	4	HG	11	Loafing	<Null>	<Null>	<Null>
	1	4	06/10/2020	N.V	12:25	12:40	4	BH	8	Loafing	<Null>	<Null>	<Null>
	1	4	06/10/2020	N.V	12:25	12:40	4	CM	3	Loafing	<Null>	<Null>	<Null>
	1	4	06/10/2020	N.V	12:25	12:40	5	SA	2	Foraging	<Null>	<Null>	<Null>
	1	4	06/10/2020	N.V	12:25	12:40	6	RH	1	Foraging	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	1	4	06/10/2020 N.V		12:25	12:40	6	RM	2	Foraging	<Null>	<Null>	1 female, 1 male
	1	4	06/10/2020 N.V		12:25	12:40	7	GK	2	Flying	Dogs	<Null>	Flew north
	1	4	06/10/2020 N.V		12:25	12:40	8	ND	1	Foraging	<Null>	<Null>	<Null>
	1	4	06/10/2020 N.V		12:25	12:40	9	SA	2	Foraging	<Null>	<Null>	<Null>
	1	4	06/10/2020 N.V		12:25	12:40	9	CA	1	Foraging	<Null>	<Null>	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	1	PB	8	Flying	<Null>	<Null>	Family Group. Recorded as PB
	1	5	06/10/2020 N.V		12:55	13:10	2	SA	2	Foraging	<Null>	<Null>	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	3	SA	2	Foraging	<Null>	<Null>	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	4	RM	2	Foraging	<Null>	<Null>	1 male, 1 female
	1	5	06/10/2020 N.V		12:55	13:10	5	RH	2	Foraging	<Null>	<Null>	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	6	GB	3	Loafing	<Null>	<Null>	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	6	HG	6	Loafing	<Null>	<Null>	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	7	BH	18	Loafing	<Null>	<Null>	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	7	CM	4	Loafing	<Null>	<Null>	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	7	HG	9	Loafing	<Null>	<Null>	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	8	TT	5	Flying	Dogs	High	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	8	GK	1	Flying	Dogs	High	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	9	CA	1	Foraging	<Null>	<Null>	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	10	GG	2	Foraging	<Null>	<Null>	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	10	RH	1	Foraging	<Null>	<Null>	<Null>
	1	5	06/10/2020 N.V		12:55	13:10	11	GU / RA	4	Loafing	<Null>	<Null>	Recorded as GU / RA
	1	5	06/10/2020 N.V		12:55	13:10	12	ND	2	Foraging	<Null>	<Null>	<Null>
	1	6	06/10/2020 N.V		13:25	13:40	1	BH	4	Foraging & Loafing	<Null>	<Null>	<Null>
	1	6	06/10/2020 N.V		13:25	13:40	1	HG	3	Loafing	<Null>	<Null>	<Null>
	1	6	06/10/2020 N.V		13:25	13:40	2	SA	1	Foraging	<Null>	<Null>	<Null>
	1	6	06/10/2020 N.V		13:25	13:40	3	SA	2	Foraging	<Null>	<Null>	<Null>
	1	6	06/10/2020 N.V		13:25	13:40	4	RM	2	Foraging	<Null>	<Null>	<Null>
	1	6	06/10/2020 N.V		13:25	13:40	4	RH	2	Foraging	<Null>	<Null>	<Null>
	1	6	06/10/2020 N.V		13:25	13:40	4	GB	1	Loafing	<Null>	<Null>	<Null>
	1	6	06/10/2020 N.V		13:25	13:40	5	OC	6	Flying	Dogs	High	Flew South
	1	6	06/10/2020 N.V		13:25	13:40	6	ND	2	Foraging	<Null>	<Null>	<Null>
	1	6	06/10/2020 N.V		13:25	13:40	6	GU / RA	4	Loafing	<Null>	<Null>	Recorded as GU / RA
	1	6	06/10/2020 N.V		13:25	13:40	7	RH	2	Foraging	<Null>	<Null>	<Null>
	1	6	06/10/2020 N.V		13:25	13:40	8	TY	2	Foraging	<Null>	<Null>	<Null>
	1	6	06/10/2020 N.V		13:25	13:40	9	GB	2	Loafing	<Null>	<Null>	Sea Roost
	1	6	06/10/2020 N.V		13:25	13:40	9	HG	11	Loafing	<Null>	<Null>	Sea Roost
	1	6	06/10/2020 N.V		13:25	13:40	9	BH	32	Loafing	<Null>	<Null>	Sea Roost
	1	6	06/10/2020 N.V		13:25	13:40	9	CM	6	Loafing	<Null>	<Null>	Sea Roost
	1	6	06/10/2020 N.V		13:25	13:40	10	RP	10	Roosting	Walkers and Dogs	Weak	On beach observed through s
	2	1	21/10/2020 NV		11:34	11:39	1	BH	4	Foraging	<Null>	<Null>	Dip feeding
	2	1	21/10/2020 NV		11:34	11:39	2	SA	1	Foraging	<Null>	<Null>	<Null>
	2	1	21/10/2020 NV		11:34	11:39	3	GK	2	Foraging	<Null>	<Null>	<Null>
	2	1	21/10/2020 NV		11:34	11:39	4	BA	7	Loafing	<Null>	<Null>	<Null>
	2	1	21/10/2020 NV		11:34	11:39	5	RH	2	Foraging	<Null>	<Null>	<Null>
	2	1	21/10/2020 NV		11:34	11:39	6	GB	1	Loafing	<Null>	<Null>	Adult
	2	1	21/10/2020 NV		11:34	11:39	7	ND	1	Foraging	<Null>	<Null>	<Null>
	2	1	21/10/2020 NV		11:34	11:39	8	GU / RA	6	Foraging	<Null>	<Null>	Recorded as GU/RA
	2	1	21/10/2020 NV		11:34	11:39	9	DN	14	Flying	<Null>	<Null>	<Null>
	2	1	21/10/2020 NV		11:34	11:39	10	RH	2	Foraging	<Null>	<Null>	<Null>
	2	2	21/10/2020 NV		12:04	12:19	1	SA	2	Foraging	<Null>	<Null>	<Null>
	2	2	21/10/2020 NV		12:04	12:19	2	CA	1	Foraging	<Null>	<Null>	<Null>
	2	2	21/10/2020 NV		12:04	12:19	3	SA	3	Foraging	<Null>	<Null>	<Null>
	2	2	21/10/2020 NV		12:04	12:19	4	RH	2	Foraging	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	2	21/10/2020 NV		12:04	12:19	5	TY	2	Foraging	<Null>	<Null>	<Null>
	2	2	21/10/2020 NV		12:04	12:19	6	ND	1	Flying	<Null>	<Null>	<Null>
	2	2	21/10/2020 NV		12:04	12:19	7	BW	14	Flying	<Null>	<Null>	<Null>
	2	2	21/10/2020 NV		12:04	12:19	8	HG	4	Loafing	<Null>	<Null>	<Null>
	2	2	21/10/2020 NV		12:04	12:19	9	BH	9	Loafing	<Null>	<Null>	<Null>
	2	2	21/10/2020 NV		12:04	12:19	9	CM	2	Loafing	<Null>	<Null>	<Null>
	2	2	21/10/2020 NV		12:04	12:19	10	OC	7	Flying	<Null>	<Null>	Landed south of VP2
	2	2	21/10/2020 NV		12:04	12:19	11	GG	2	Foraging	<Null>	<Null>	<Null>
	2	3	21/10/2020 NV		12:34	12:49	1	SA	5	Foraging	<Null>	<Null>	<Null>
	2	3	21/10/2020 NV		12:34	12:49	2	BH	11	Loafing	<Null>	<Null>	<Null>
	2	3	21/10/2020 NV		12:34	12:49	2	CM	2	Loafing	<Null>	<Null>	<Null>
	2	3	21/10/2020 NV		12:34	12:49	3	HG	18	Loafing	<Null>	<Null>	<Null>
	2	3	21/10/2020 NV		12:34	12:49	4	RH	2	Foraging	<Null>	<Null>	<Null>
	2	3	21/10/2020 NV		12:34	12:49	5	PB	12	Flying	<Null>	<Null>	Recorded as PB
	2	3	21/10/2020 NV		12:34	12:49	6	GB	2	Loafing	<Null>	<Null>	<Null>
	2	3	21/10/2020 NV		12:34	12:49	7	CA	1	Foraging	<Null>	<Null>	<Null>
	2	3	21/10/2020 NV		12:34	12:49	8	TY	2	Foraging	<Null>	<Null>	<Null>
	2	3	21/10/2020 NV		12:34	12:49	9	ND	1	Flying	<Null>	<Null>	<Null>
	2	3	21/10/2020 NV		12:34	12:49	10	SS	16	Flying	Dog + Walker	High	<Null>
	2	3	21/10/2020 NV		12:34	12:49	11	SA	2	Foraging	<Null>	<Null>	<Null>
	2	4	21/10/2020 NV		13:04	13:19	1	SA	1	Foraging	<Null>	<Null>	<Null>
	2	4	21/10/2020 NV		13:04	13:19	2	BH	3	Foraging	<Null>	<Null>	Dipping
	2	4	21/10/2020 NV		13:04	13:19	3	RM	2	Foraging	<Null>	<Null>	1 male, 1 female
	2	4	21/10/2020 NV		13:04	13:19	4	RM	1	Foraging	<Null>	<Null>	<Null>
	2	4	21/10/2020 NV		13:04	13:19	5	BH	8	Loafing	<Null>	<Null>	<Null>
	2	4	21/10/2020 NV		13:04	13:19	6	PB	4	Flying	<Null>	<Null>	Recorded as PB
	2	4	21/10/2020 NV		13:04	13:19	7	PB	7	Flying	<Null>	<Null>	Recorded as PB
	2	4	21/10/2020 NV		13:04	13:19	8	DN	32	Flying	<Null>	<Null>	<Null>
	2	4	21/10/2020 NV		13:04	13:19	9	SA	2	Foraging	<Null>	<Null>	<Null>
	2	4	21/10/2020 NV		13:04	13:19	9	HG	3	Loafing	<Null>	<Null>	<Null>
	2	4	21/10/2020 NV		13:04	13:19	10	RH	2	Foraging	<Null>	<Null>	<Null>
	2	5	21/10/2020 NV		13:34	13:49	1	CA	2	Foraging	<Null>	<Null>	<Null>
	2	5	21/10/2020 NV		13:34	13:49	2	HG	7	Loafing	<Null>	<Null>	<Null>
	2	5	21/10/2020 NV		13:34	13:49	3	SA	2	Foraging	<Null>	<Null>	<Null>
	2	5	21/10/2020 NV		13:34	13:49	4	OC	3	Foraging	Dog	Moderate	<Null>
	2	5	21/10/2020 NV		13:34	13:49	5	ND	2	Foraging	<Null>	<Null>	<Null>
	2	5	21/10/2020 NV		13:34	13:49	6	GB	1	Loafing	<Null>	<Null>	<Null>
	2	5	21/10/2020 NV		13:34	13:49	6	GX	2	Foraging	<Null>	<Null>	Plunge diving
	2	5	21/10/2020 NV		13:34	13:49	6	HG	5	Loafing	<Null>	<Null>	<Null>
	2	5	21/10/2020 NV		13:34	13:49	7	RH	2	Foraging	<Null>	<Null>	<Null>
	2	5	21/10/2020 NV		13:34	13:49	7	GU	1	Foraging	<Null>	<Null>	<Null>
	2	5	21/10/2020 NV		13:34	13:49	8	GP	24	Flying	<Null>	<Null>	<Null>
	2	5	21/10/2020 NV		13:34	13:49	9	OC	3	Foraging	Dog	Moderate	<Null>
	2	6	21/10/2020 NV		14:04	14:19	1	CA	1	Foraging	<Null>	<Null>	<Null>
	2	6	21/10/2020 NV		14:04	14:19	1	SA	2	Foraging	<Null>	<Null>	<Null>
	2	6	21/10/2020 NV		14:04	14:19	2	SA	3	Foraging	<Null>	<Null>	<Null>
	2	6	21/10/2020 NV		14:04	14:19	3	HG	8	Loafing	<Null>	<Null>	<Null>
	2	6	21/10/2020 NV		14:04	14:19	3	BH	4	Foraging	<Null>	<Null>	<Null>
	2	6	21/10/2020 NV		14:04	14:19	3	SA	1	Foraging	<Null>	<Null>	<Null>
	2	6	21/10/2020 NV		14:04	14:19	4	TY	2	Foraging	<Null>	<Null>	<Null>
	2	6	21/10/2020 NV		14:04	14:19	5	RH	2	Foraging	<Null>	<Null>	<Null>
	2	6	21/10/2020 NV		14:04	14:19	6	GG	2	Foraging	<Null>	<Null>	<Null>
	2	6	21/10/2020 NV		14:04	14:19	6	GU	1	Foraging	<Null>	<Null>	<Null>

Vantage Point	Survey_Period	Date	Surveyor	Count	Start Time	Count_End_Time	Flock No.	Species	Flock Size	Flock Behaviour	Disturbance	Disturbance Response	Notes
	2	6	21/10/2020 NV		14:04	14:19	7	RH	2	Foraging	<Null>	<Null>	<Null>
	2	6	21/10/2020 NV		14:04	14:19	9	TT	3	Flying	?	High	3 TT heading north

Appendix A.4 – BTO Species Codes

Species Code	Species	Species Code	Species	Species Code	Species	Species Code	Species
MS	Mute Swan <i>Cygnus olor</i>	H.	Grey Heron <i>Ardea cinerea</i>	CN	Common Tern <i>Sterna hirundo</i>	RX	Red-necked Grebe <i>Podiceps grisegena</i>
BS	Bewick's Swan <i>Cygnus columbianus</i>	WA	Water Rail <i>Rallus aquaticus</i>	AE	Arctic Tern <i>Sterna paradisaea</i>	SZ	Slavonian Grebe <i>Podiceps auritus</i>
WS	Whooper Swan <i>Cygnus cygnus</i>	MH	Moorhen <i>Gallinula chloropus</i>	AF	Little Tern <i>Sterna albifrons</i>	BN	Black-necked Grebe <i>Podiceps nigricollis</i>
NW	Greenland White-fronted Goose <i>Anser albifrons flavirostris</i>	CO	Coot <i>Fulica atra</i>	KF	Kingfisher <i>Alcedo atthis</i>	SA	Shag <i>Phalacrocorax aristotelis</i>
GJ	Greylag Goose <i>Anser anser</i>	OC	Oystercatcher <i>Haematopus ostralegus</i>	UL	Unident. diver <i>Gavia</i> sp.	BI	Bittern <i>Botaurus stellaris</i>
CG	Canada Goose <i>Branta canadensis</i>	RP	Ringed Plover <i>Charadrius hiaticula</i>	UV	Unident. grebe <i>Podiceps</i> sp.	EC	Cattle Egret <i>Bubulcus ibis</i>
BY	Barnacle Goose <i>Branta leucopsis</i>	GP	Golden Plover <i>Pluvialis apricaria</i>	XU	Unident. Cormorant/Shag <i>Phalacrocorax</i> sp.	HW	HW Great White Egret <i>Ardea alba</i>
PB	Brent Goose (light-bellied) <i>Branta bernicla hrota</i>	GV	Grey Plover <i>Pluvialis squatarola</i>	UF	Unident. yellow-billed swan <i>Cygnus</i> sp.	NB	Spoonbill <i>Platalea leucorodia</i>
SU	Shelduck <i>Tadorna tadorna</i>	L.	Lapwing <i>Vanellus vanellus</i>	UO	Unident. <i>Anser</i> sp.	AV	Avocet <i>Recurvirostra avosetta</i>

Species Code	Species	Species Code	Species	Species Code	Species	Species Code	Species
WN	Wigeon <i>Anas penelope</i>	KN	Knot <i>Calidris canutus</i>	ZF	Feral/hybrid Mallard type	LP	Little Ringed Plover <i>Charadrius dubius</i>
GA	Gadwall <i>Anas strepera</i>	SS	Sanderling <i>Calidris alba</i>	ZD	Tufted/Pochard hybrid <i>Aythya sp.</i>	ID	American Golden Plover <i>Pluvialis dominica</i>
T.	Teal <i>Anas crecca</i>	PS	Purple Sandpiper <i>Calidris maritima</i>	UX	Unident. scoter sp. <i>Melanitta sp.</i>	LX	Little Stint <i>Calidris minuta</i>
MA	Mallard <i>Anas platyrhynchos</i>	DN	Dunlin <i>Calidris alpina</i>	UM	Unident. duck <i>Anas sp.</i>	PP	Pectoral Sandpiper <i>Calidris melanotos</i>
PT	Pintail <i>Anas acuta</i>	RU	Ruff <i>Philomachus pugnax</i>	U.	Unident. wader sp.	CV	Curlew Sandpiper <i>Calidris ferruginea</i>
SV	Shoveler <i>Anas clypeata</i>	JS	Jack Snipe <i>Lymnocyptes minimus</i>	ZU	Hybrid Glaucous/Herring Gull	BQ	Buff-breasted Sandpiper <i>Tryngites subruficollis</i>
PO	Pochard <i>Aythya ferina</i>	SN	Snipe <i>Gallinago gallinago</i>	UU	Unident. gull <i>Larus sp.</i>	LD	Long-billed Dowitcher <i>Limnodromus scolopaceus</i>
TU	Tufted Duck <i>Aythya fuligula</i>	WK	Woodcock <i>Scolopax rusticola</i>	UT	Unident. tern <i>Sterna sp.</i>	CS	Common Sandpiper <i>Actitis hypoleucos</i>

Species Code	Species	Species Code	Species	Species Code	Species	Species Code	Species
SP	Scaup <i>Aythya marila</i>	BW	Black-tailed Godwit <i>Limosa limosa</i>	ZL	Feral/hybrid goose <i>Anser</i> sp	GE	Green Sandpiper <i>Tringa ochropus</i>
LN	Long-tailed Duck <i>Clangula hyemalis</i>	BA	Bar-tailed Godwit <i>Limosa lapponica</i>	AS	Black Swan <i>Cygnus atratus</i>	DR	Spotted Redshank <i>Tringa erythropus</i>
E.	Eider <i>Somateria mollissima</i>	WM	Whimbrel <i>Numenius phaeopus</i>	BE	Bean Goose <i>Anser fabalis</i>	OD	Wood Sandpiper <i>Tringa glareola</i>
CX	Common Scoter <i>Melanitta nigra</i>	CU	Curlew <i>Numenius arquata</i>	PG	Pink-footed Goose <i>Anser brachyrhynchus</i>	PL	Grey Phalarope <i>Phalaropus fulicarius</i>
GN	Goldeneye <i>Bucephala clangula</i>	GK	Greenshank <i>Tringa nebularia</i>	EW	European White-fronted Goose <i>Anser a. albifrons</i>	NX	Great Skua <i>Catharacta skua</i>
SY	Smew <i>Mergellus albellus</i>	RK	Redshank <i>Tringa totanus</i>	SJ	Snow Goose <i>Anser caerulescens</i>	LU	Little Gull <i>Hydrocoloeus minutus</i>
RM	Red-breasted Merganser <i>Mergus serrator</i>	TT	Turnstone <i>Arenaria interpres</i>	DB	Brent Goose (dark-bellied) <i>Branta bernicla bernicla</i>	AB	Sabine's Gull <i>Larus sabini</i>
RH	Red-throated Diver <i>Gavia stellata</i>	BH	Black-headed Gull <i>Chroicocephalus ridibundus</i>	BB	Black Brant <i>Branta bernicla nigricans</i>	IN	Ring-billed Gull <i>Larus delawarensis</i>
BV	Black-throated Diver <i>Gavia arctica</i>	MU	Mediterranean Gull <i>Larus melanocephalus</i>	AW	American Wigeon <i>Anas americana</i>	YG	Yellow-legged Gull <i>Larus michahellis</i>
ND	Great Northern Diver <i>Gavia immer</i>	CM	Common Gull <i>Larus canus</i>	TA	Green-winged Teal <i>Anas carolinensis</i>	IG	Iceland Gull <i>Larus glaucoideus</i>

Species Code	Species	Species Code	Species	Species Code	Species	Species Code	Species
LG	Little Grebe <i>Tachybaptus ruficollis</i>	LB	Lesser Black-backed Gull <i>Larus fuscus</i>	NG	Ring-necked Duck <i>Aythya collaris</i>	GZ	Glaucous Gull <i>Larus hyperboreus</i>
GG	Great Crested Grebe <i>Podiceps cristatus</i>	HG	Herring Gull <i>Larus argentatus</i>	FS	Surf Scoter <i>Melanitta perspicillata</i>	FO	Forster's Tern <i>Sterna forsteri</i>
CA	Cormorant <i>Phalacrocorax carbo</i>	GB	Great Black-backed Gull <i>Larus marinus</i>	VS	Velvet Scoter <i>Melanitta fusca</i>	BJ	Black Tern <i>Chlidonias niger</i>
SA	Shag <i>Phalacrocorax aristotelis</i>	TE	Sandwich Tern <i>Sterna sandvicensis</i>	GD	Goosander <i>Mergus merganser</i>	WJ	White-winged Black Tern <i>Chlidonias leucopterus</i>
ET	Little Egret <i>Egretta garzetta</i>	RS	Roseate Tern <i>Sterna dougallii</i>	RY	Ruddy Duck <i>Oxyura jamaicensis</i>		



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