



The campus of Glasgow Caledonian University is based in Glasgow city centre, but is home to a number of bird species. This summary reports the birds visiting, breeding, and ringed in 2019 and 2021, the restricted access to campus during 2020 meant that monitoring could not take place.

Placing a uniquely numbered ring onto the legs of birds greatly enhances the ability to monitor the populations of birds. The bird becomes individual, which allows you to know if the bird visiting your feeder is the same one during the day or 10 different individuals. In a wider context, it also enables the geographical tracking of birds and informs our understanding of birds' habitats and migratory movements. The information gathered is submitted to the British Trust for Ornithology along with details about other ringing carried out by the members of the Clyde Ringing Group around the city ⁽¹⁾.

The array and life stage of the birds ringed on campus is shown in Table 1. This included 12 different species, and a total of 39 individuals were caught and ringed. In addition to having the metal ring fitted, birds had their weight and wing length recorded.



Year	Species	Adult	Juvenile	Chick	Total
2021	Blackbird	2			
	Blue Tit	4		8	
	Coal Tit		2		
	Dunnock	1			
	Goldfinch	6			
	Great Tit		2		
	Greenfinch	4			
	Lesser Black-backed Gull	2			
	Magpie	1			
	Robin		1		
	Woodpigeon	2			
2019	Starling	2			
	Lesser Black-backed Gull	2			
Total		26	5	8	39

Table 1. Birds ringed on GCU campus 2019-21

The birds observed on campus are not unusual for Glasgow but their presence in the city centre is of interest. These birds are resident species and are likely to live on campus; continued ringing on campus will confirm this. Pictures of these birds in the hand are shown below in Figs 1, 2 and 3. The photographs taken during the ringing sessions allow plumage detail of these well-known birds to more fully appreciated.



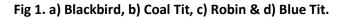




Fig 1 a) Blackbird, b) Coal Tit, c) Robin & d) Blue Tit. These 4 resident species are often seen on campus. The numbers of Blackbird and Robins may increase during the winter as individuals from Scandinavia arrive to shelter from the cold continental winter.

Fig 2 a) Dunnock, b) Magpie, c) Female Greenfinch & d) Woodpigeon.



Fig 2 a) Dunnock, b) Magpie, c) young Female Greenfinch & d) Woodpigeon. The frequently over looked Dunnock is often seen on the ground looking for insects and seeds. The Magpie for most of the year eats invertebrates, fruits and scraps. The greenfinch is a female hatched in 2021. The large woodpigeon has what appears to be am oval pupil but it is in fact round with a black pigment in the iris.

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Fig 3 Great Tit



Fig 3 Female Great Tit hatched 2021.

This bird can be identified as a young bird by the lack of blue on the edges of the feathers in the wing (insert Fig 3). The bird can be sexed by the amount of black feathers on the belly and between the legs (not shown), birds with lots of black feathers present are male, and conversely little are female.

Fig 4 Woodcock



Fig 4 Woodcock seen on campus October 2021.

In addition to the ringed birds a Woodcock (Fig 4) was disturbed while roosting on campus on the 4th November 2021. This is the second time this migrant bird has been seen on campus, and it may have flown in from as far away as Russia at this time of year. It highlights the importance of GCU green campus in providing a safe sanctuary for migrating bird to rest in an urban environment.



Darvic Ringed Lesser Black-backed Gulls

The largest birds visiting the campus are the Lesser Black-backed Gulls which despite looking quite large generally weigh between 500-1000g. These birds are migratory and at time of writing (Nov 21) very few remain in Scotland. The birds caught on campus were fitted with a metal British Trust for Ornithology ring in addition to a white with red text plastic (Darvic) ring (Fig 5). These plastic rings greatly increase the chance that a bird will be resighted. Before Darvic rings were fitted to this species only 4% of ringed birds were ever resighted over the lifespan of the birds, which is up to 30 years. This was usually when the bird was found dead. In contrast, fitting the Darvic rings resulted in 16% of birds being resighted in the first year. We now know that Glasgow's Lesser Black-backed gulls' population is also that of Spain and Portugal.

Fig 5 Darvic Rings



Fig 5. These white Darvic rings are suitable for Lesser Black-backed Gulls and greatly increase the chance the bird will be resighted on migration

Four adult Lesser Black-backed gulls have been ringed and the numbers of the rings fitted are shown in Table 2.

Table 2 Lesser Black-backed Gulls ringed on GCU Campus.

Date Ringed	Species	Age	Metal Ring Number	Darvic Ring Number
06-May-19	Lesser Black-backed Gull	Adult	GV54053	9N2:C
06-May-19	Lesser Black-backed Gull	Adult	GV54054	9N3:C
16-Apr-21	Lesser Black-backed Gull	Adult	FJ32371	41Z:C
16-Apr-21	Lesser Black-backed Gull	Adult	FJ32372	44Z:C

In October 2021 the first report of a sighting was received. The bird observed was 41Z:C (FJ32371) and can be seen on the day it was ringed in Fig 6a and the day of sighting in Fig 4b. 41Z:C was spotted at the beach of the Portuguese city of Matosinhos, 1667km from Glasgow. The location is shown in Fig 6c. It is likely this individual will continue south along the coast to southern Spain, and may continue on to Africa for the winter. Lesser Black-backed gulls are site-faithful at both summer and winter locations so one can expect that the gull will return to Glasgow in the spring of 2022.



Do check any gulls as you walk about campus next year! If you see any ringed birds you can report them to the BTO at <u>www.bto.org/how-you-can-help/report-something</u>. Gavin Baptie has written an interesting summary of the colour ringed gulls that have visited Greater Glasgow form other parts of the UK and Europe⁽²⁾.

Fig 6 The Travels of Lesser Black-backed Gull 41Z:C



6a Lesser Black-backed Gull 41Z:C on the day of ringing, on GCU campus, Glasgow (16th April 2021), 6b on the day of sighting in Matosinhos Beach, Portugal (2nd October 2021), 6c map showing the locations on a map a direct distance of 1667km.

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Campus Nest Boxes.

To encourage the biodiversity on campus nest boxes of 3 designs were erected. These included 15 Woodcrete boxes shown in Fig 7a which are suitable for Blue and Great Tits, 2 open-fronted wooden boxes suitable for Robins and a larger wooden box for starlings. Two of the Woodcrete boxes were occupied and both clutches of Blue Tits successfully fledged. One of these clutches of 8 chicks was ringed (Fig 7b).



Fig 7a. A woodcrete nest box in situ on GCU campus Spring 2021, Fig 7b Blue Tit chicks April 2021.

As the boxes were put up a little late this spring the occupation during the 2021 was low. Birds often use nest boxes to sleep in on cold winter nights so when spring arrives they know which box they prefer. Bird boxes provide much needed shelter during the winter and increase the birds' survival rates through the cold months. These boxes are in place on campus and will remain available over the winter so the next breeding season should produce significantly more chicks.

Future

The birds reported here and who make GCU their home during the spring and summer will be joined by migratory birds from the continent during the autumn and winter months. The author will report on any that are observed or ringed in the new year.

The author will continue to work with the University to increase the number and range of nest boxes on campus during the winter to encourage other species to breed on camps. Coal tits use boxes and by making the hole 25mm rather than 28mm it will exclude Great tits. They also prefer the boxes to be below 1m above the ground. The author



also hopes to attract Nuthatch who prefer a 32mm entry hole and a box at least 3m above the ground, and Wrens who require an open box similar in design to boxes designed for Robins.

A current study carried out by the University of Glasgow is monitoring birds breeding using nest boxes during spring and the data collected will be used to investigate the impact light pollution has on wildlife⁽³⁾. The nest boxes on the GCU campus are of interest to the researchers. They now form one end of their Rural-Urban Gradient. The gradient includes over 500 nest boxes from Glasgow to the foothills of Ben Lomond⁽⁴⁾.

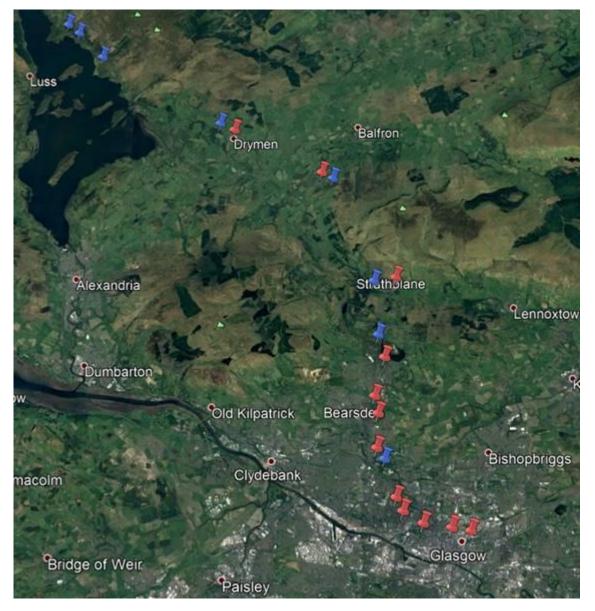


Fig. 8. Location and extent of bird boxes in the University of Glasgow research investigating the impact of light pollution on wildlife.

It is worth noting that making GCU into a haven for wildlife directly aligns with and support the Glasgow's, 'City Centre Strategic Development Framework⁽⁵⁾ that promotes the enhancement of the green spaces in the city for biodiversity, leading wider improvements in health, wellbeing and quality of place.



References

- 1 <u>https://clyderinginggroup.com/contact-us/</u>
- 2 Baptie, G. (2021) Ringed Black-headed Gulls in the Greater Glasgow area. Scottish Birds. 41:1 pp72-75
- 3 https://www.gla.ac.uk/news/archiveofnews/2018/december/headline_626280_en.html
- 4 <u>https://www.gla.ac.uk/researchinstitutes/bahcm/research/about/researchstudysystems/urban-ruralgradientsystem/</u>
- 5 Glasgow's City Centre Strategic Development Framework⁽⁵⁾ https://www.glasgow.gov.uk/CHttpHandler.ashx?id=47396&p=0