

Plate 30. A tag fitted to a Lesser Black-backed Gull, Greenock, Clyde, May 2017. © Hayley Anne Douglas

Tag-n-Track - tracking technology used to change the public perception on the Lesser Black-backed Gull

H.A. DOUGLAS & H. RILEY

Tag-n-Track is a two year project funded by Heritage Lottery Fund, Greater Renfrewshire and Inverclyde LEADER and Clyde Muirshiel Regional Park. The project focuses on using the latest satellite tracking technology to track Lesser Black-backed Gulls. By using Global Satellite Monitoring (GSM) tags (fitted to the gulls with Teflon harnesses) that weigh 21 g (Plate 30), we can get information on the birds' locations between 10–15 times a day for the next two years at least. The gulls migrate to Europe and Africa in the winter from the local area, which we know through colour ringing recoveries by the Clyde Ringing Group. They are very misunderstood birds and people generally don't like them and see them as pests. Part of this project is to engage the public with our findings and try to change perceptions. This is done through talks with groups and schools, social media and weekend information events. The Tag-n-Track Project is run by two gull

enthusiasts: Hayley Douglas who is the Development Officer (Plate 31) and Hannah Riley who is the Project Ranger at Clyde Muirshiel Regional Park (Plate 32). Both are members of the Clyde Ringing Group.

How to catch a gull

One of our aims for this project is to determine whether there is a difference in foraging and migration behaviour between gulls that nest in urban areas and gulls that nest in the countryside. For our urban area, Greenock was chosen. There are many nesting gulls in the area and we got permission to access the roof of the Police Station. There we used trap door traps (Plate 33) to catch the birds and successfully caught two and fitted them with the tags. We were unable to catch any more than that because the birds started to recognise us and would not go near the traps.



Plate 31. Hayley with Lesser Black-backed Gull *Gully MacGullface*, the last gull to be tagged, Castle Semple Loch, Clyde, July 2017. © Hannah Riley



Plate 32. Hannah with Lesser Black-backed Gull *P.C. Bobby* during tag fitting, Greenock, Clyde, May 2017. © Hayley Anne Douglas

For the countryside area, an island on Loch Thom at Greenock Cut was chosen. There were Herring Gulls, Common Gulls, Great Black-backed Gulls and Lesser Black-backed gulls nesting on the island as well as Canada Geese and Oystercatcher. There were estimated to be over 400 eggs in total. Unlike the Police Station roof, we had to observe the island and put out markers to ensure the traps were put on the right nests. After a few days we gathered a team together to trap the birds. However, the water level at Loch Thom had been lowered making it possible to walk on to the island and all the eggs had been taken out of the nests, a huge devastation to the colony and to our project too. Unfortunately, nobody knows who took the eggs and it is unlikely that we will find out, however we will be keeping a closer eye on it for next year.

Due to a number of factors, we were unable to access another colony to catch birds at the nest. Therefore, we decided to hand catch birds at Castle Semple in Lochwinnoch, using food to attract them. This was easy at first, however, the birds again recognised us and would no longer come down. Various disguises were needed to catch the rest of them! We caught the remaining

birds at Hessilhead Wildlife Rescue where a whoosh net was used successfully with the help of the Clyde Ringing Group (Plate 34). In total it took seven weeks to catch the 12 gulls we needed for the project. Each gull has been named to encourage public engagement with some being named by schools and local businesses. These are *P.C. Bobby*, *Gary*, *Atty*, *Flyback*, *Stephen*, *Roger*, *Roland*, *Stuart*, *Clyde*, *Jonathan LC Gull*, *Archie* and *Gully MacGullface* who collectively make up 'Team Gull'. Team Gull consists of all males, which was not planned but during the tagging process any females we caught were too light to be fitted with the tags. However, they and any chicks were fitted with colour rings instead.

Gull migration

Flyback was our first gull to migrate and he did so in July. He had been hand caught at Lochwinnoch on 9 June. From there he went to Little Cumbrae and then to a building in Linwood where we believe his nest was. He spent time around the area, foraging and roosting before heading off on his migration. On 22 July, he was recorded on the Ayrshire coast before heading south to Whithorn on the 23rd. He travelled from there to the Isle of Man on that same day in just one hour, and was

recorded going through the Menai Strait four hours later. By 05:00 hrs on the 24th he was just off the coast of mainland Wales west of Snowdonia National Park. He continued south over the Bristol Channel, through Devon, over the English Channel and in to Brittany by 15:00 hrs on 24 July. He stayed in France feeding off the Penmarch coast and inland at Quimper until 31 July, when he then travelled into Spain. By 1 August, he was making his way east over the northern coast of Spain and down into Portugal on 5 August. On 7 August, and then again on the 9th, he was photographed on a beach in Portugal called Costa da Caparica by Gilberto Pinelas. He stayed in the region until the 13th when he then flew to Morocco and settled in Casablanca, a total journey time of 25 days from leaving Linwood. For two and a half months he settled in to a routine of visiting a fish factory and a local dump before heading further south down the coast to Safi. We felt 25 days was an impressive time for *Flyback* to make this journey, but a month later it was bettered by one of our other gulls, Clyde, who travelled a similar route in 8 days and 21 hours.

Archie was our last gull to head off on migration. *Archie* was caught using a whoosh net on 7 July at Hesselhead Wildlife Hospital. After his tag was fitted, he regularly returned to his catching site to forage. It is believed that his nest site was on Kilmarnock train station along with another gull, *Jonathan LC Gull*. The joy of the tags is that we can work out where the birds are foraging and

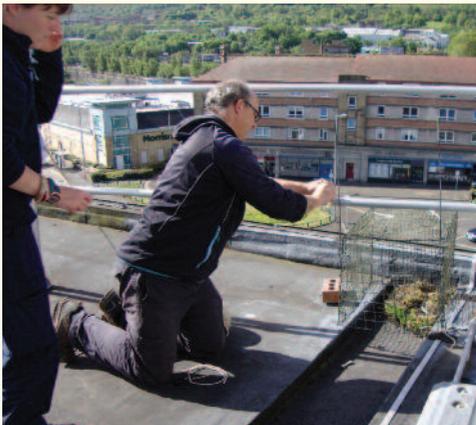


Plate 33. Setting up trap at a nest with Hayley Anne Douglas (left) and Ruedi Nager of the University of Glasgow, Greenock, Clyde, May 2017. © Hannah Riley



Plate 34. Clyde Ringing Group helping to catch and tag gulls, Hesselhead, Ayrshire, May 2017. © Hayley Anne Douglas

Archie seemed to settle into a routine of going from Kilmarnock train station to the Kilmaurs area via the local Asda (Figure 1). He did this until 1 December when the cold weather finally tempted him to move. He flew straight down to Cornwall and was there till the 9th when he decided to fly to France and is currently (as we write this) hanging out near Royan.

Unfortunately, not all of our gulls have survived this year. *Gully MacGullface* migrated to Spain but we noticed on 13 November that we had stopped getting downloads from his tag. After a bit of investigation, we discovered that *Gully* had died on 3/4 November. We had been told that the tag was going to sleep and would stop working as it was not able to charge but we then got a signal almost two weeks later, probably because the tag had been turned back over and was able to charge again using its solar panel.

After a discussion with members of the Clyde Ringing Group, one of its members, Iain Livingstone, managed to contact some local birders in Spain. José Manuel got in touch and armed with the last known coordinates, he headed out to the marsh where we believed *Gully* to be. He very quickly found *Gully's* coloured ring and then spent an hour going around in circles before he found the remains of *Gully* and his tag. Looking at our data and talking with José, we surmised that *Gully* died not long after arriving at the fish farm, potentially being caught in netting. After a few days he was removed and left nearby where he was then picked up and scavenged by a Marsh Harrier.

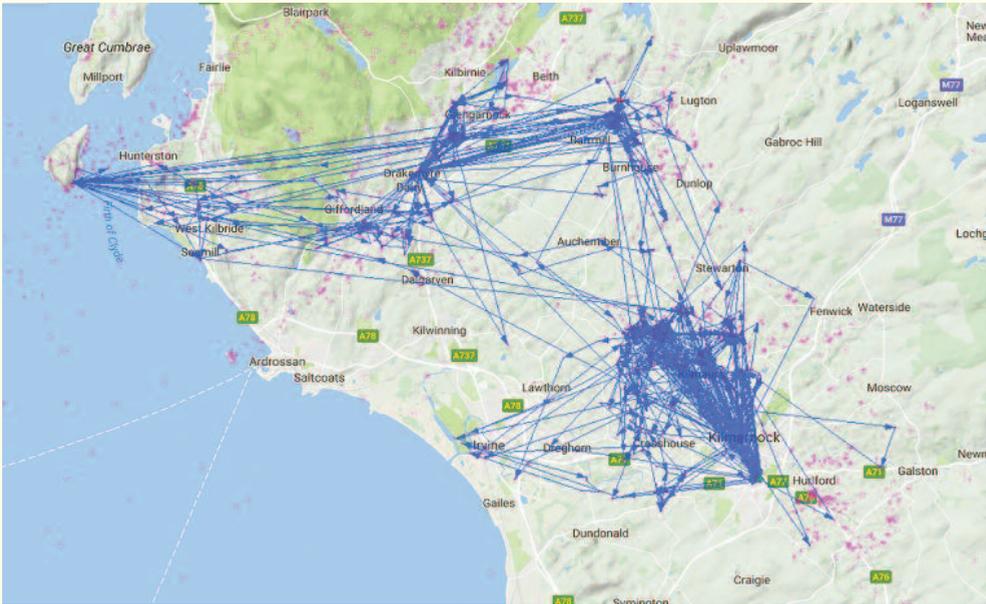


Figure 1. Local foraging pattern for Lesser Black-backed Gull Archie in Ayrshire from 7 July until 22 November 2017.

It's sad that this is the end of *Gully MacGullface* after making his migration from Lochwinnoch to Ireland and then to Portugal and Spain, but unfortunately there are many dangers that our gulls face. We are extremely grateful to José who recovered his tag and we were able to track its flight back to the UK! We should be able to redeploy the tag next year. *Gully MacGullface* was a popular gull with all the pupils we worked with and has provided a vast amount of data for us to analyse.

Engaging the public and schools

Our main aim of Tag-n-Track is to better the public perception of Lesser Black-backed Gulls and gulls in general. As we all know, gulls are probably one of our most disliked birds but they are also synonymous with memories of the seaside and admired for their beauty in flight. What we want to show with the tracking element of the project is that the gulls we see hanging about in car parks and school playgrounds don't always frequent these areas and that they migrate to a number of different countries. The team attended a number of local events such as the Gourock Highland Games and Lochwinnoch gala day to promote the project and talk to the public about their views on gulls. We also held a number of bird ringing

events and gull themed walks to encourage the public to get involved. These have all proven to be very successful with over 2,000 members of the public in the first year alone getting the opportunity to learn about gulls and other birds. Bird ringing in particular allows the public to really get up close and personal with the birds and we had many repeat visitors over the series of events. The team also deliver talks and workshops to a wide range of groups from natural history societies to SWRI groups and these too have been well attended with nearly 1,000 people participating.

In August, we began the delivery of a busy school programme that ran through until December (Plate 35). Primary 7 and S1 pupils (1,738 pupils in total) across the three council areas of Renfrewshire, Inverclyde and North Ayrshire took part in a series of three workshops. Many topics were covered which included discussions about gulls and the pupils' opinions of them, how we track them, learning how to use mapping tools and the tracking website, as well as learning about how they can use technology to learn about wildlife in their local area. Overall it has been a great success and at the end of the workshops the pupils certainly showed a better understanding of our wildlife

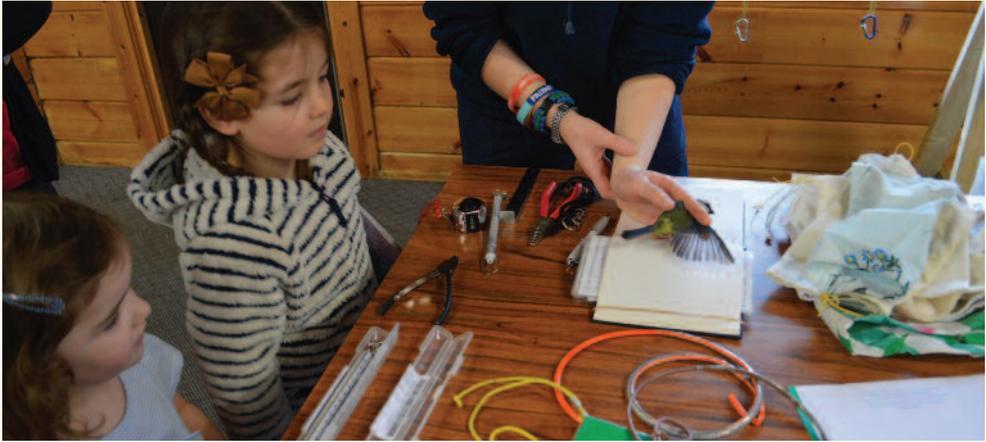


Plate 35. School children examining feathers, Muirshiel Country Park, Clyde, February 2017. © Natalie McAlindon

and gulls in particular. We were known as the 'seagull ladies' (and yes we did teach them that seagull isn't the best term to use but we didn't want to curb their enthusiasm) and the teachers commented on how excited the pupils were each week when they knew we were coming in. This even applied to the pupils in the secondary schools, much to our surprise, as they can be hard to work with as they find their way in a new school and with new classmates. We used tablets with the pupils to help them develop an understanding of using scientific keys. These also proved very popular with the teachers who often find this quite a dry subject as they can only give the pupils paper keys to work with. As the wildlife keys are easy to access, the teachers are now looking at using tablets more to engage pupils in wildlife as well as fulfilling their commitments to science and technology in the Curriculum for Excellence. Many schools have chosen to adopt their own gull and teachers are using the mapping website and gull movements to further pupils understanding of science, history, technology and culture. Hannah Riley, one half of Tag-n-Track, says "It's great to see kids engaging not just with TnT but with nature in general. There were always loads of questions and the kids really enjoyed the interactive elements of the project particularly because they could use the tracking website on their own and share it with their families. They would come back in the following week and tell us what the gulls had been up to as well as downloading apps to their phones that they were keen to show us."

The TnT team will be working with schools again in 2018 after the next round of tagging. Social media such as Facebook and the Clyde Muirshiel Tag-n-Track web pages have also played a massive part in getting the project across to the wider public. Updates are regularly posted of the gulls' movements and each gull has its own dedicated webpage. There is also the opportunity to support the project by sponsoring one of the gulls. Each sponsor receives a certificate, factsheet, monthly email updates, their name on their gull's webpage and a fluffy gull to call their own. To find out more, check out the "adopt a gull" part of the TnT webpages at clydemuirshiel.co.uk/event/tag-n-track-gull-adoption or follow us on Facebook at www.facebook.com/TagnTrack.

2018 will see us back out in the field with a plan to tag a further 13 Lesser Black-backed Gulls as well as continuing to follow the fortunes of our remaining members of Team Gull. Fingers crossed for another good field season.

Hayley would like to acknowledge the SOC who provided a research grant that allowed the purchase of the darvic rings which the tagged gulls as well as untagged gulls were fitted with during the project.

Hayley Anne Douglas
Email: tnt@clydemuirshiel.co.uk

Hannah Riley
Email: tntwo@clydemuirshiel.co.uk