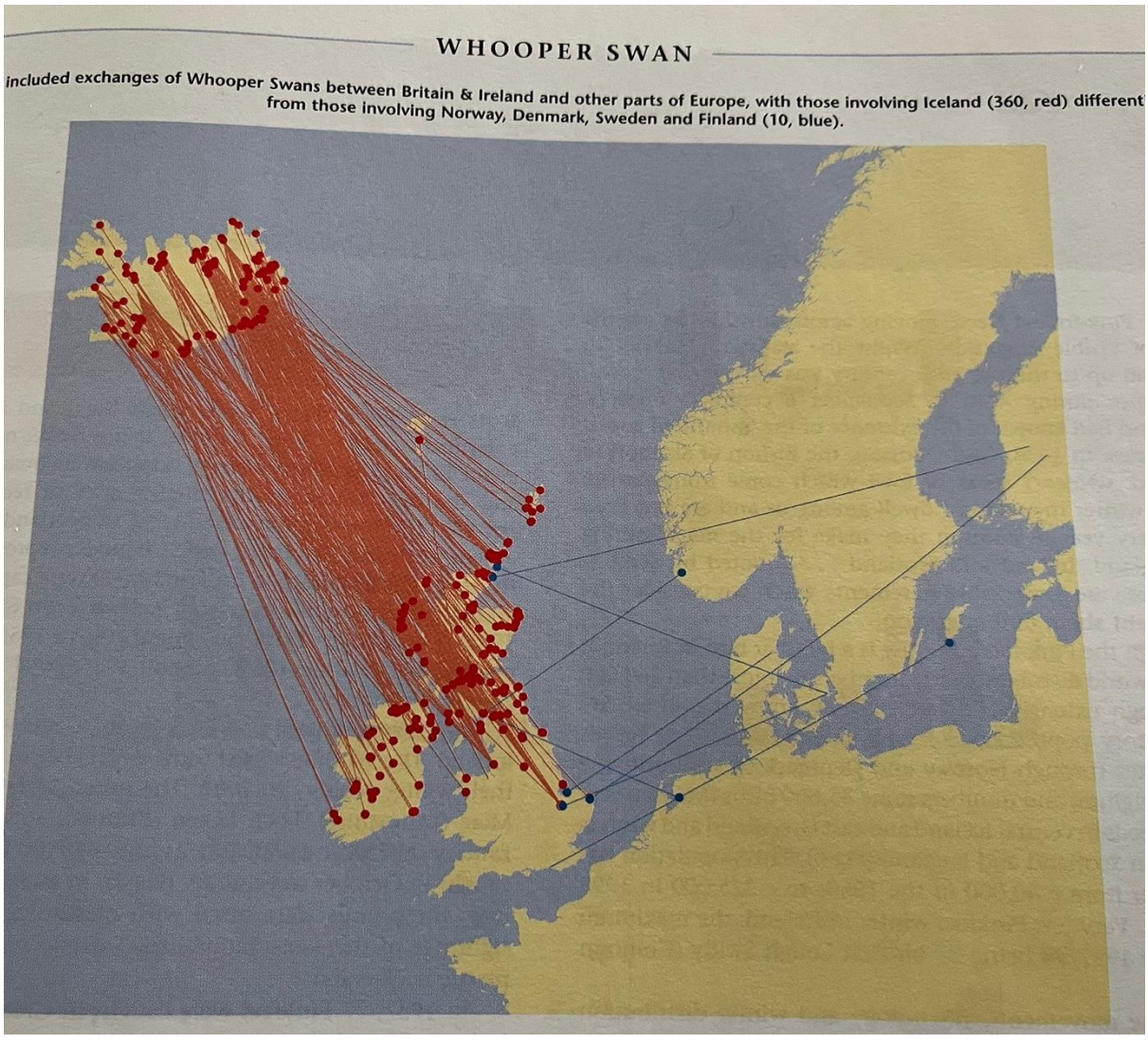
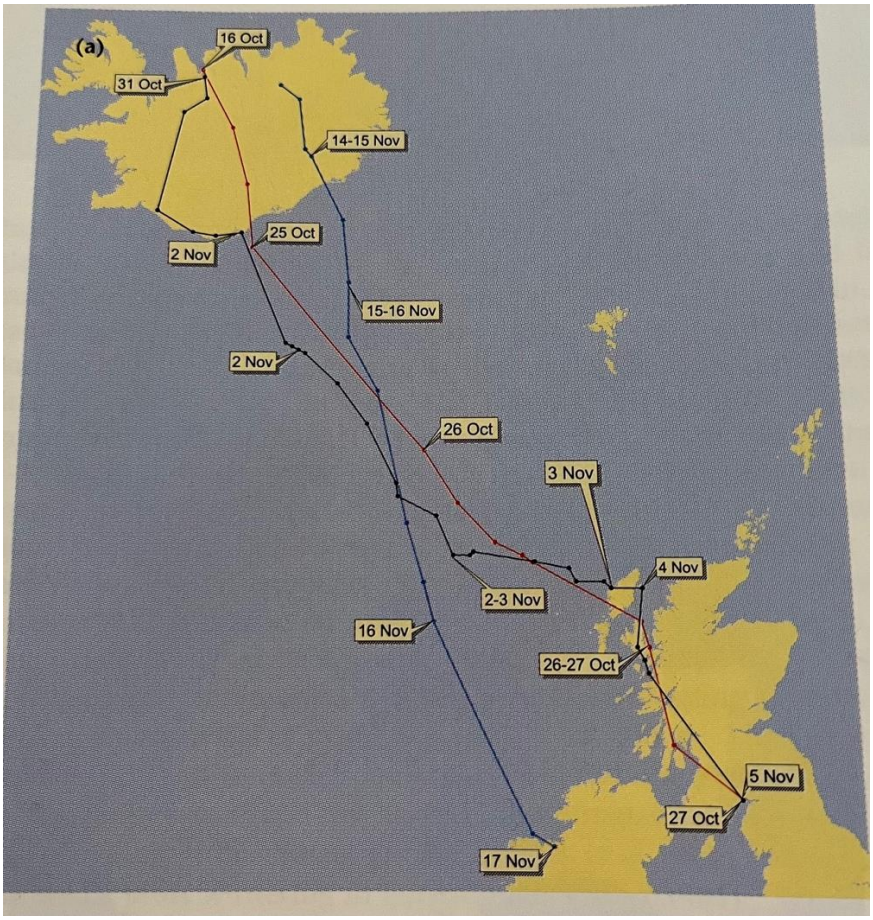
The Migration of Whooper Swans through Broadford Bay

Whilst small numbers of Whooper Swans winter on Skye the majority of reports collated by www.skye-birds.com or submitted to Birdtrack relate to birds migrating through the island, both in spring and autumn. These birds are Icelandic and winter in both Ireland and the Solway Firth. This has been well documented in McMillan 'Skye Birds' (2005, 2009, 2019) which highlighted some of the largest counts known at that time, but which also suggested that "large numbers of birds fly over Skye but are undetected." Wernham et al (2002) used a map to illustrate all the known movements of marked birds between Iceland and the UK and Ireland as shown below:-

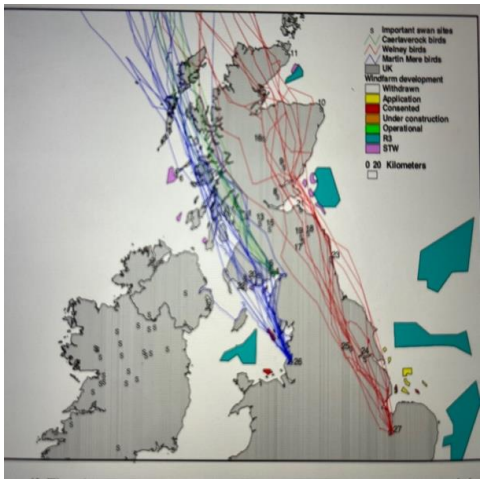


Movements of birds through the north-west Highlands clearly dominate the map above. More specifically, satellite tracking can show specific routes taken by individual birds, which will invariably be part of a larger group, during migration. The map below is another such example:-



The red line refers to satellite tagged Whooper (JSC) which commenced migration on 16 October, and passed through Broadford Bay on 26/27 October (indicating a stopover) before reaching its wintering grounds on the Solway (Pennycuick et al 1996).

More recent work by Griffin et al (2010) emphasised these movements as are shown below for both spring (below left) and autumn migration (below right):-



It is emphasised that the above work by Griffin et al was commissioned in regards to potential conflict/collisions with offshore windfarms. However, it reinforces the proposition that Broadford Bay is an important route and staging post for migrating Icelandic Whooper Swans (shown in green lines). It also appears that these migrating birds are principally from the Solway or Caerlaverock wintering population, and that most use an identical route on return spring migration. The migratory funnel narrows as birds are constricted by the presence of mountain ranges such as the Cuillins and the 'Kylerhea Hills' and therefore birds travel through low lying areas such as the Kinloch Gap, an excellent example of a migratory corridor. Whilst migrations take place during daylight hours it also takes place during hours of darkness. The large size of Whooper Swans makes them less manoeuvrable than other smaller species and flying accidents such as collisions with overhead lines, are known to be a major cause of death for these birds (Brown et al 1992). There is a recognised risk, that these migrating birds will collide with turbines and associated infrastructure such as power lines.

As there was no consultation by Lomond Energy prior to environmental survey work commencing, it is reasonable to assume that they had no knowledge of the importance of this migration route for wildfowl and waders as no attempt was made to contact local experts despite being advised by NatureScot. Given that survey work on behalf of Lomond Energy commenced at the Upper Breakish windfarm site in autumn 2021 it is reasonable to assume that VPW (Vantage Point Watches) would have detected Whooper Swan migration. However, it has to be emphasised that VPW work is merely a snapshot and may not capture such movements even though the birds are highly visible and extremely vocal.

For the last 20 years counts for spring and autumn migration through the area have been recorded on www.skye-birds.com and on the annually published Highland Bird Report. The largest count recorded in Spring was 160 heading north through Strath Mor, near Torrin on 8.4.2004. In autumn there was a count of 123 at Breakish Obbe on 25.10.15. It will be noted below that this peak count at Breakish Obbe was exceeded in 2022. However, it's the cumulative counts which are important, and it must be emphasised that these are not systematic and organised, but simply random counts submitted by different casual observers. However, it is suspected that during the course of autumn and spring migration, cumulatively, it will involve many hundreds of birds on passage.

During October 2021, passage through Broadford Bay was first noted on October 3 and was then recorded on 10 dates throughout the month. The peak day for movement was October 15 with 101 counted in 7 skeins from several different observers. All these birds were moving south. As is normal, visible migration continues into November, a trend which probably reflects global warming. Many of these birds stopover in Broadford Bay/Breakish Obbe before flying south through the Kinloch Gap towards the Sound of Sleat. In my experience these birds are flying low, below 200 feet. Although this might seem low, altitude statistics from the Griffin et al research above, suggests most migratory swans fly below 100 metres.

During autumn 2022, the first reports of migrating birds south were on the 25th September. The first report from Broadford Bay was 1st October and herds were noted flying south on 6th, 7th, 8th, 10th and 11th. Counts included 34 on October 6th and 46 on October 7th. On 11th October herds of 14 and 30 flew through Breakish Obbe south – the herd of 14 is pictured below flying low past the pylons near the Market Stance over the Breakish Common Grazings.

Further movements south were noted on 18th and 25th October. However, the largest movement of the year was on 1st November. Herds of 14, 19(2), and 25 were observed flying south from Broadford Bay. A large group was reported

resting on Breakish Obbe and this is pictured above. The group was estimated at 85+ by RMcM. A huge group was seen flying south later that afternoon and estimated at 150+ by John Phillips, thought to include the original 85. The previous evening birds had been heard overflying Broadford in darkness. It was clearly impossible to count all the birds moving through but at least 230 birds were involved, in all probability significantly more. All these birds flew south on the migratory corridor towards the 'Kinloch Gap'.

Reports continued through November but of smaller numbers. In the latter part of the month there was a period of sustained westerly winds and rain. It is thought this prevented birds from leaving Iceland. High pressure was established at the end of the month and, as a consequence, herds of Whoopers were noted flying south from November 28 to December 1. This included a herd of 27 noted flying south at Ashaig on November 28. This illustrates the protracted period of passage for this species along the migration corridor, observations that are unlikely to be made during monthly VPW studies.

The details for the 2022 movements are clearly displayed on the website www.skye-birds.com. There are multiple observers and this includes Ron Davison, John Phillips, Nick Ferguson, Paula Olde-Walbers, Martin Benson, Neil Hinchliff, Neil Bennett and Bob McMillan. Whilst some survey workers at proposed windfarm sites submit records to local and regional websites for

inclusion in annual bird reports, or use national recording systems such as Birdtrack or EBird, I am not aware of any such records submitted by the surveyors on the Upper Breakish site.

Bob McMillan

1st December, 2022

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