

# Report on Twite ringing at Connah's Quay Nature Reserve, 2014 to 2016

## Introduction

This ringing started to discover more about the Twite wintering on the North Wales coast, but especially at Connah's Quay NR. This was to add information to the RSPB Cymru project to find out more about the small and declining breeding population of Twite in Snowdonia, around Nant Ffrancon. It was not known at the start if these birds breeding in North Wales were genetically isolated from other Twite, so were likely to continue to decline in numbers and the population would eventually become extinct. Also, it was not known where the birds breeding in Snowdonia spent the winter months and if they mixed with other Twite from elsewhere.



The photo above shows the head of a Twite and to the right is a 'MacTwite' being processed.



## Methods

From 2010 Twite have been captured for ringing and colour-ringing using whoosh-nets which are elastic powered nets that catch the birds on the ground, usually at locations pre-baited with nyjer seed. Since 2015, at Connah's Quay NR, a static trap has been used from about mid-February to the end of March.

After capture each bird is examined to try to age and sex each individual. This has proved to be difficult as the details in the main reference book 'Identification Guide to European Passerines', 4<sup>th</sup> ed. (1992) by Lars Svensson are scant with no further details in a later book 'Guide d'identification des oiseaux en main', (2013) by Laurent Demongin. I started to take some photographs of mainly the greater coverts in 2015 but from the inconsistent ageing resulting from those photos I took many more photos of more parts of the bird (primary coverts, primary tips, greater coverts, rump and tail feathers) to attempt to identify characters that would, consistently, identify birds of more than one-year-old, which would be expected to have completed one full moult cycle. Once these characters were clarified it might be possible to identify consistently birds that were less than one-year-old, or had been hatched in the preceding calendar year. After ringing, colour-ringing, ageing and sexing (from the colour of the rump feathers), birds had their wing lengths measured and were weighed. All the main details have been sent to the British Trust for Ornithology.

## Results

The numbers of birds captured or seen elsewhere (usually 'captured' by photographs and identified from the colour-rings) are as follows:

	Year		
	2014	2015	2016
No of capture sessions	2	7	6
Newly ringed	14	68	33
No of birds retrapped from previous year	0	0	21
Controls	1	6	3
Photo records from CQNR	0	0	6
Photo records from elsewhere	0	3	1

In 2014 we found that use of a whoosh-net was not ideal and did not work well, hence the low total of birds ringed. However, one bird ringed at Nant Ffrancon was controlled<sup>1</sup> at Connah's Quay NR. This showed that the Snowdonia breeding birds do move at least as far as Connah's Quay during the winter.

For catching in 2015 a static trap was used that stayed in place so that the birds got used to feeding in it. During capture sessions, drop doors were attached and a catching box was used to extract the birds. At first the doors were not heavy enough and birds were able to push the doors open and escape. This was cured by the addition of lead fishing weights to the bottoms of the doors (see photo, below).



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<sup>1</sup> 'Controlled' is the word used when a bird ringed by someone else is caught and processed.

One of the capture sessions in 2015 took place during a very high tide (the day of the solar eclipse) and about 12 Tufted Duck were disturbed from the lagoon. No other birds were disturbed, despite a report from another source. However, since that date no catching has taken place at high tide, stopping an hour before and not recommencing until an hour after the high tide.

There was a range of reasons that made the 2015 season very successful for us, especially in that there were up to 200 birds present for several weeks. Richard Beckett, who baited the trap, is working on a paper about that these reasons. There were good numbers of birds newly ringed and the six controls were very interesting as they included four birds from Machrihanish on the Mull of Kintyre (affectionately referred to as 'MacTwites'). None of the 2014 birds was retrapped or photographed and later in the year three birds were identified from photographs on the west coast of Scotland.

In 2016 I should have placed the trap early in February as that is when the largest numbers (c 130) of Twite were seen and after mid-February there were, generally, not more than about 50 birds seen at any one time. It became apparent that the 2015 breeding season in Scotland had not been good as there were very few young birds with only 33 birds newly ringed and not all of them were birds hatched the previous summer. We did catch 21 birds that had been ringed in 2015 and with 6 other birds photographed by Andy Davis in January that were not captured in the trap, and a MacTwite from 2015, some 38% of the birds caught in 2015 were retrapped. This seems to be a very high return rate for a small passerine and it will be interesting to see if that pattern is repeated in future years. The 2014 bird from Nant Ffrancon was retrapped but we do not know where it has been in the intervening period. Was it breeding in Snowdonia during the summers or had it been tempted north, to Scotland?

I now have a large bank of photographs which show that there seem to be no consistent characters for ageing Twite. This makes them unusual in that most finches do show consistent characters that make it relatively easy to separate first year birds from older ones.

Maps of the movements of Twite to and from North Wales are shown at the end of this report. These include all movements of birds ringed by Kelvin Jones in North-West Wales and by me at Connah's Quay NR.

## **Discussion**

We adhered to the protocol for ringing that was agreed early in 2016 and no undue disturbance occurred to other birds. The majority of the birds in the lagoon became used to our forays to the trap and, at most, moved to the far end of the lagoon. We did not prejudice the well-being of any wader species and avoiding high tides meant that there was always much land available for birds.

We are not sure if the low total of new birds is because the returning, older birds were dominant and essentially kept young birds away from the seed in the trap. One way to try to get round that potential issue would be to place two traps and operate them together. It has also been suggested by Richard Beckett, that catching in the carpark earlier in the year would be better. However, there are several problems with that idea. The trap could not be used and for whoosh-netting it would be hard to bang the necessary pegs into the stony ground. Placing the trap(s) earlier, say from the end of January may be

a better solution, especially in a year when features of spring occurred so early because of the relatively mild weather. I hope that there will be more sightings of our colour-ringed birds elsewhere and that we hear about these birds and the locations.

In order to try to make more progress with ageing, a trip to Scotland, perhaps to Machrihanish, would be useful. It would be necessary during the period late August and early September, though there are some other commitments at that time.

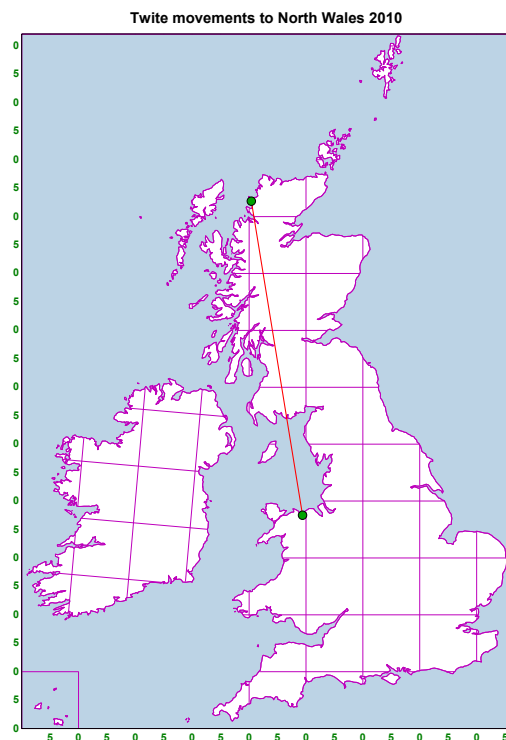
### Acknowledgements

First, I thank the crucial partners for allowing the project to continue – Uniper (Andy Black and Fenella Bellinger), Deeside Naturalists' Society (Phil Hotchkiss) and Natural Resources Wales (Neil Smith and Nick Thomas). I am very grateful to Richard Beckett for baiting the site and for the knowledge he has acquired of the habits of the birds. I thank Anne Brenchley, Jamie Dunning, Kelvin Jones, Giles Pepler and Dafydd Roberts for help with ringing sessions and Kelvin for his Twite recovery details. I am very grateful to Flintshire County Council for funding some nyjer seed and to the Welsh Ornithological Society for a grant to pay for colour-rings.

Ian M Spence

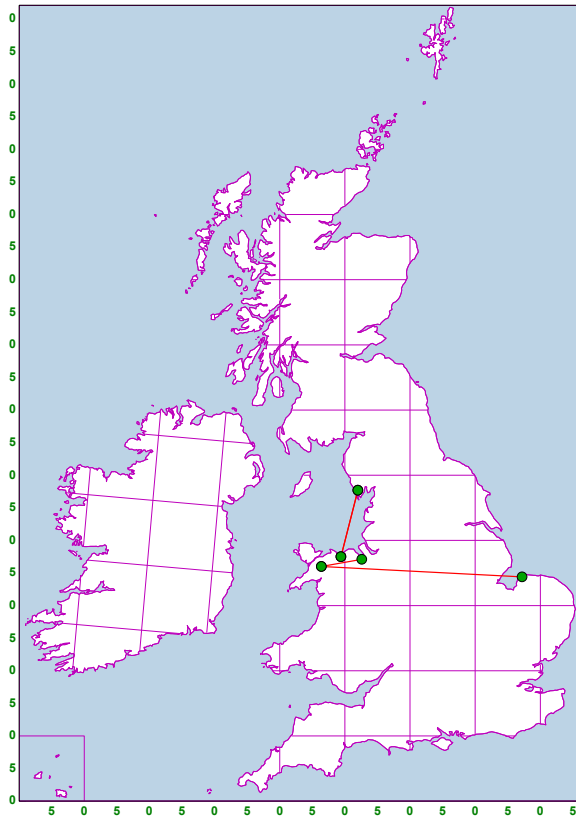
3 April 2016

### Addendum – Twite movements to and from North Wales



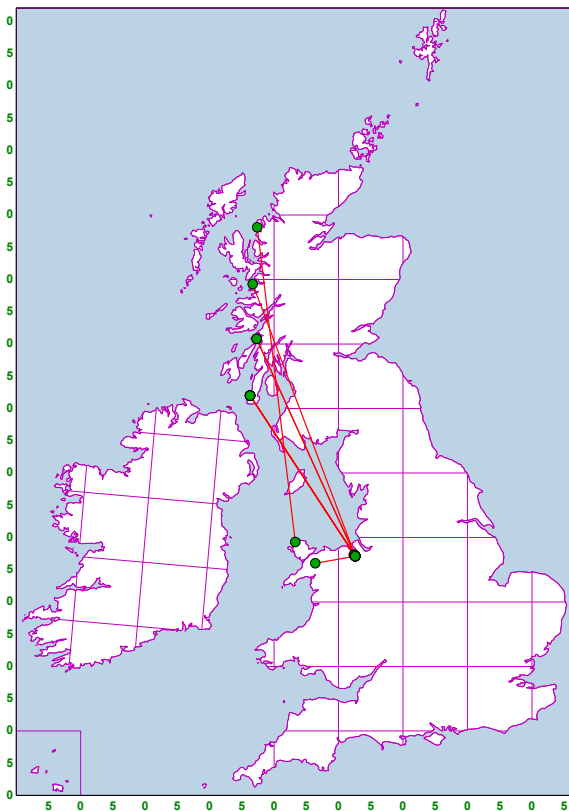
In March 2010 Kelvin and I went to Pensarn to catch 8 Twite that had been seen on the beach. We caught all of them and one was already ringed. It had been ringed at Lochinver. This was the first indication that there was a Scottish link to our wintering Twite.

Twite movements to and from North Wales 2014



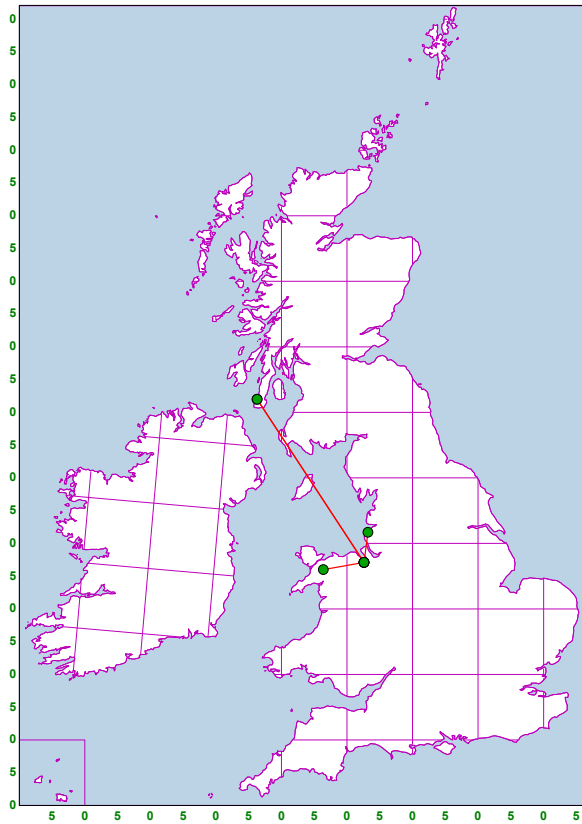
There were no other movements recorded until 2014 when a bird from Nant Ffrancon was controlled at Connah's Quay NR and another bird from Nant Ffrancon was seen wintering near Thornham, Norfolk. To date, that is the only movement we have from North Wales to the wintering area of birds that breed on the Pennines. As yet, we have had no direct movements to or from the Pennine breeding population.

Twite movements to and from North Wales 2015



The results of ringing at Connah's Quay NR in 2015 provided more evidence of the importance of North Wales for wintering Twite from Scotland, with several birds at CQNR and a bird from Gairloch controlled by Kelvin at Cemlyn Bay. There was another movement from Nant Ffrancon to Connah's Quay NR and a local movement of a bird ringed at Flint Castle in 2013.

Twite movements to and from North Wales 2016



We caught fewer birds ringed elsewhere in 2016 but this map shows the movements from Machrihanish and Nant Ffrancon. The other is a bird ringed at Connah's Quay NR in 2015 that was photographed at Southport. That bird was not seen or retrapped at Connah's Quay NR in 2016.