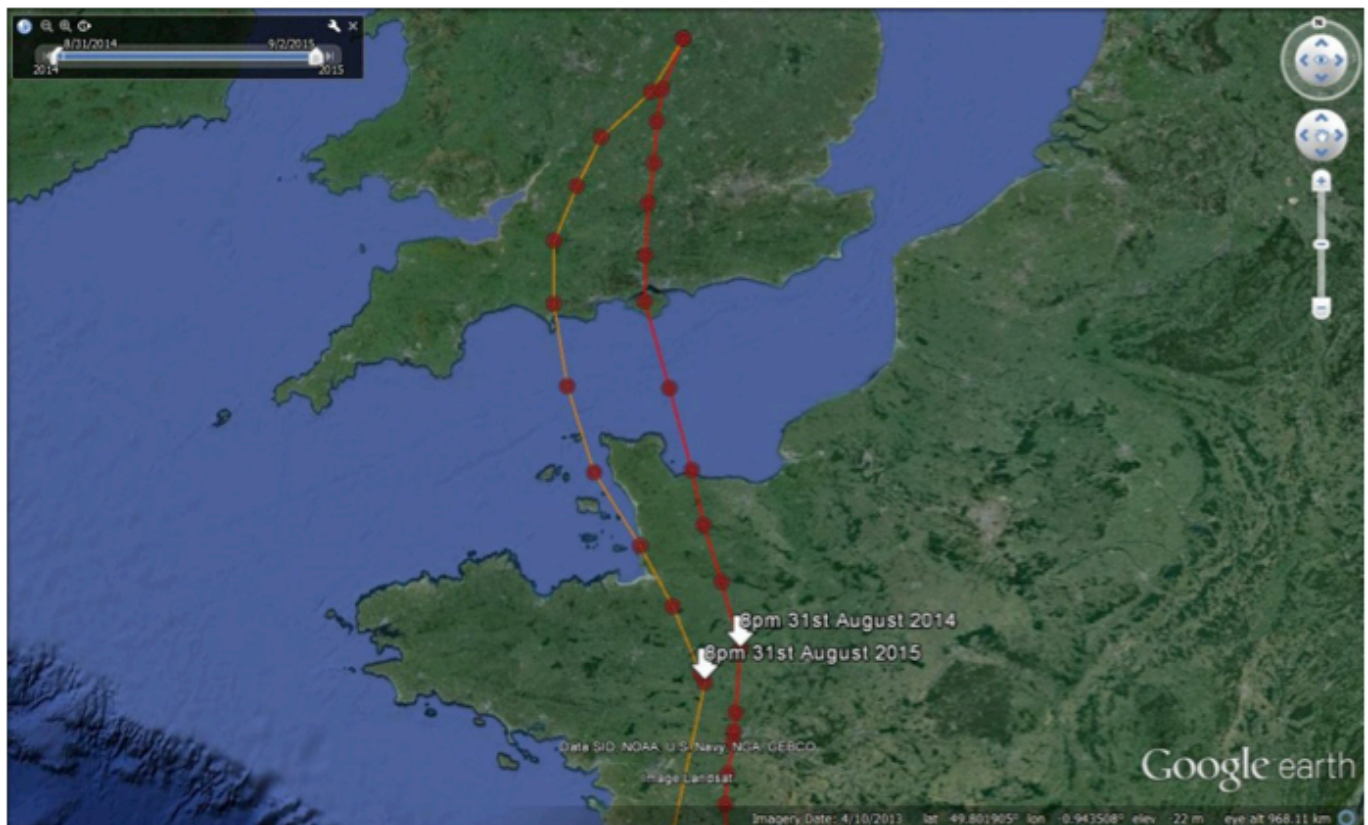


The Amazing Story of the Migration of “Osprey 30”

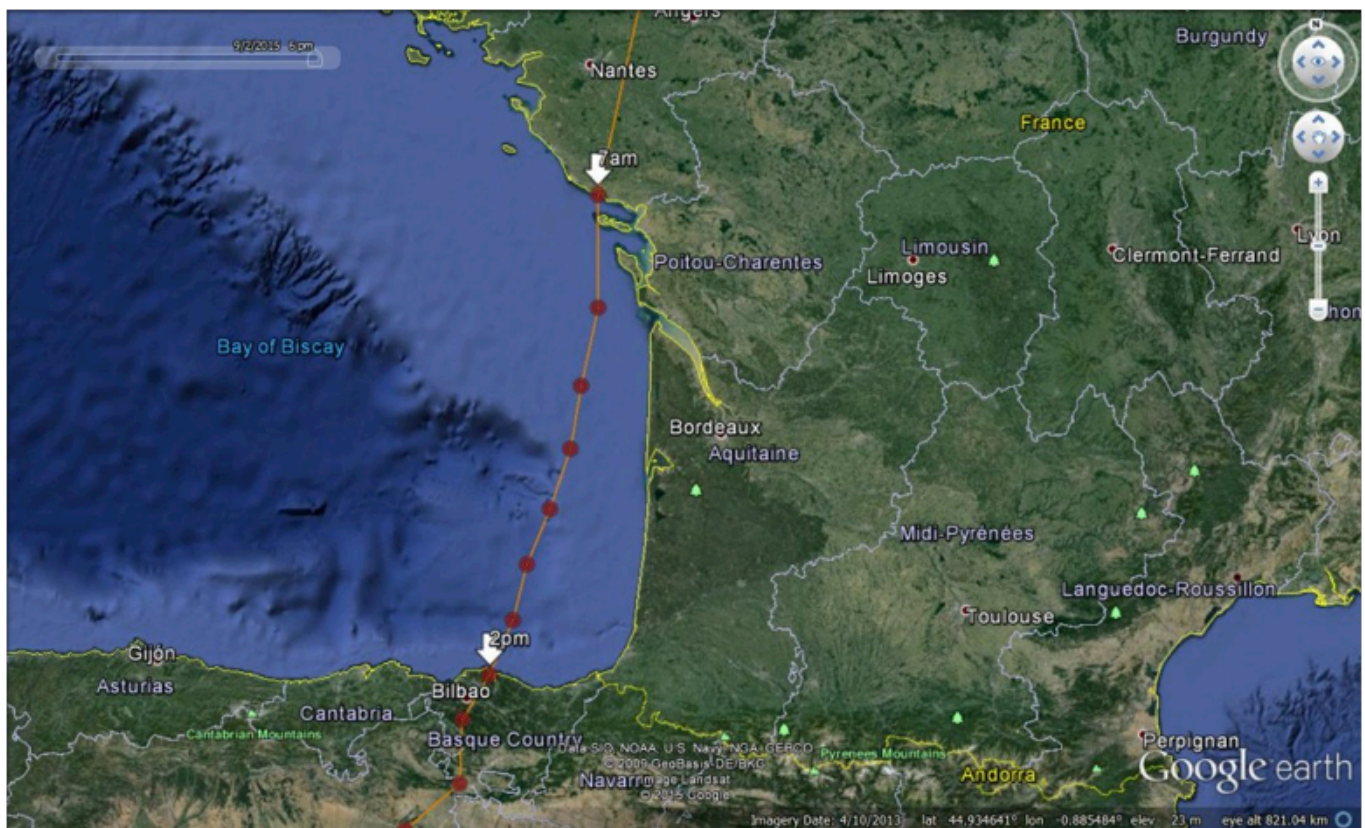
By Tim on September 4, 2015

Osprey 30(05) carries a miniature satellite tracker. With the first full batch of migration data now in, we know that 30 left her nest shortly after 9am on Monday morning (31st August). Remarkably this was exactly the same as autumn 2014; almost to the minute. The weather on Monday was poor for migration (rain and low cloud) but it did not stop this experienced navigator setting out on her tenth autumn migration. During the course of the morning 30 made steady progress south, and by 1pm she was already south of Bath. An easterly wind resulted in her drifting further to the west than autumn 2014, but by the time she set-off across the English Channel from Portland Bill she had begun to compensate for this westerly drift. At 3pm she was half way across the channel, 85 kilometres west of the corresponding position (at exactly the same time) on her 2014 journey. She skirted to the east of the Channel Islands and reached the Normandy coast at 5pm; three hours after passing Portland Bill. She continued flying until 8pm when she was perched close to a lake in the town of Craon in Pays de la Loire. She had flown just under 600km from Rutland Water and, although we do not know exactly where she roosted, she was now just 25km west of her 2014 flight path.



30's first day of migration was very similar to her flight on the same day in 2014

30 must have flown further south on the night of 31st August because by 7am next morning she was 170km further south-west, just to the north of La Rochelle. The weather must have been good for migration because she maintained the same south-westerly heading over Ile de Re and then out across the Bay of Biscay. Ospreys are powerful flyers and a flight across the open sea is not the barrier it is to other species – such as Honey Buzzards – which are far more reliant on thermals to aid their journey. By 2pm 30 had completed a 350km flight across the bay of Biscay at altitudes ranging between 200 and 500 metres. Excitingly, she made landfall over the Urdaibai Estuary, where Roy Dennis has translocated Scottish Ospreys for the past three summers. Our friends at the **Urdaibai Bird Center** in Northern Spain have also been closely involved in the Osprey Flyways Project and World Osprey Week, so it was exciting that 30 paid them a (brief) visit!



30 flew 350km across the Bay of Biscay before arriving at the Urdaibai estuary

Unai Egia, the music teacher at Montorre and Urretxindorra school, situated a few kilometres from Urdaibai, wrote a wonderful song about Osprey migration two years ago. The song seems very apt given 30's flight this year.

Urdaibai would have been an excellent place for 30 to rest for a few hours, but she was clearly determined to continue her migration. During the course of the afternoon and early evening she flew another 311km before eventually settling to roost in a forested area 45km south of Valladolid. During the course of her day's flight she had covered a staggering 831km.

By first light next morning 30 had moved into open field just over 1km from her roost site, and may even have caught a fish in nearby Lavajo Rabiosa. By 9am, though, she was already 20km south and, like the previous day, clearly determined to press on.



30 flew over 1700km on her first three days of migration. The red line is her 2014 flight for comparison.

By 2pm she had covered 148 kilometres at altitudes of up to 2700 metres. Conditions must have been good for migration because she flew another 149 kilometres in the next three hours; reaching northern Andalucia at 5pm, with the Sierra Morena mountains prominent on the horizon. This meant that, less than 60 hours after leaving her nest site, 30 had flown an amazing 1728km.

30's transmitter is on a three day cycle, so we should receive the next batch of data over the weekend. If the first three days of migration are anything to go by, she should be flying south through Morocco by now. Watch out for an update in the next few days.

Travelling on

By Kayleigh Brookes on September 5, 2015

The first batch of data from 30(05)'s transmitter, revealed by Tim yesterday, demonstrates just how far an Osprey can travel when she sets her mind to it! 30's autumn migration this season looks set to be a record. She is currently ahead of where she was last year by a day.

The last data we had was 30's roost site of 2nd September, in northern Andalucia. On 3rd September, she began her day's flight at 6am, and headed towards the southern coast of Spain. She crossed the Mediterranean to the east of the straits of Gibraltar in the afternoon, just as she did last year, and she made landfall at 3pm. She then travelled another 179km (111 miles) over the next five hours, to her roost site 48km (29 miles) north-east of Kenitra. That day, she migrated a total of 411km (255 miles).



The next morning (4th September) 30 set off at around 6am again, and travelled 572km (355miles) south-west through Morocco, on an almost straight trajectory, as you can see from the map below.

Tim mentioned how similar 30's current migration is to last year's, and you can see from the map below how this continues to be the case. The red line is last year's route, and the green one is this year's. On 4th September, her roost site was in a spot very close to where she roosted on 5th September last year!

Look how similar this year's path is to last year

red line = 2014

green line = 2015

Migration is truly mind-blowing, and it's amazing how Ospreys can remember the way they went and stick to the same route. They clearly have incredible memories, and aim to follow a similar path each year, using the same landmarks to guide them. Factors such as the weather, particularly strong winds, can of course push the birds off-course, but it's incredible the way they re-adjust and alter their flight path accordingly, as 30 did on the first leg of her journey.

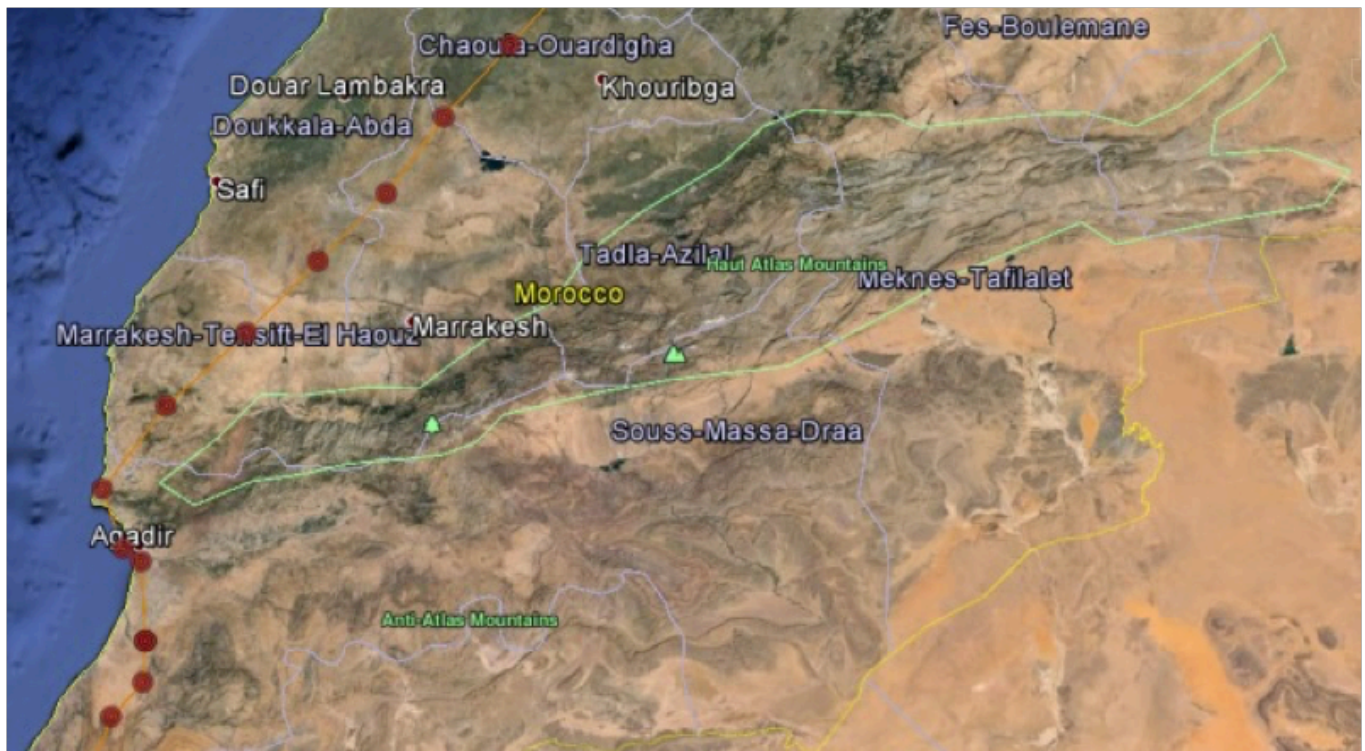


30 is now over halfway to her destination, and she only set off six days ago! So far, she has travelled a total of 2,711km, (1,684 miles) and she only has about another 1,810km (1,125 miles) to go. I wonder where she will be when the next batch of data comes through... Keep an eye on the website to find out!

Racing through the desert

By Kayleigh Brookes on September 7, 2015

Our satellite-tagged Osprey, 30(05), has been making superb progress on her autumn migration this season. She left Rutland on 31st August, and just five days later she was roosting near Agadir in Morocco, at the western tip of the Haut Atlas Mountains. You can see from the picture below how she deliberately skirted the edge of the mountains and went around them, then came back eastwards and picked up the same bearing again the next day.



30 jinked around the Atlas mountains

30 set off on 5th September at 6am, and headed onwards through the desert. This is the hardest part of an Osprey's migration. There is little to no chance of finding anywhere to stop and fish during the crossing of the desert, which, along with the heat and heat haze, makes life difficult for Ospreys. Sahara translates in Arabic as "the Greatest Desert", and it is indeed the largest hot desert in the world. 30, and other Ospreys, must fly over roughly 1,000 miles of it (1,600km).

The amazing rock formations in the desert, where 30 roosted



On that day, 30 travelled 418 km (260 miles), over the Guelmim-Es Semara region and into the Western Sahara. After flying for 14 hours, she roosted in the middle of a very impressive landscape of dried up, probably ancient river beds, with fossilised remnants of what lay before, many years ago.

The next day, at 7am, 30 was off again, and she covered a total distance of 305 km (189 miles), flying at an average altitude of 784m. She stopped to roost at 7pm, smack in the middle of the Western Sahara.



30's journey, 5th and 6th September

30 certainly is a very experienced migrator, and knows exactly what she's doing and where she's going. She's almost there, too – there is only 1,100km (700 miles) left to go! We should have more data in the next couple of days – it will be very interesting to find out how much further she has gone!

Almost home - back to Africa

By Tim on September 10, 2015

She's made it, well, almost! The latest batch of satellite data shows that at 11am this morning, 30 was in northern Senegal, just 60km from her wintering site on the coast.

As Kayleigh reported earlier in the week, the previous batch of data had shown that 30 roosted in the wilds of Western Sahara on Sunday evening. Next morning she made a slow start to her day's flight; by 10am she was just 10km south of her overnight roost and an hour later, she had only flown another 9km. At that point, however, she changed to a more south-westely heading, and made consistent progress for the rest of the day; flying 230km over the course of the next seven hours. As she headed south-west 30 would have been using thermals created by the searing heat, to aid her migration; soaring to gain height on the thermals and then gliding onwards. By using the airflows in this way, 30 and other migrating Ospreys are able to save valuable energy during their crossing of the desert. By 6pm 30 settled to roost for the night in the Province of Oed Ed-Dehab Lagouira in the south of Western Sahara.

By 7am the next morning – her fourth in the desert – 30 had moved 1.8km south from her overnight roost. She set-off again at around 9:30am and headed purposefully south-west, passing into Mauritanian airspace between 1pm and 2pm. By the time she settled to roost at 5:30pm, she had flown a total of 365km across the desert.

Next morning 30 set-off just after 9am, initially heading south-south-east. At 11am she changed course to a south-south-westerly heading, and made steady progress across the desert during the afternoon. By early evening she was approaching the Senegal border and must have sensed she was close to home, because she continued flying until 7pm; settling to roost shortly after she had crossed the iconic Senegal River, after a day's flight of 408km. For the first time in five nights she settled to roost in a cultivated area, having successfully crossed the vast and desolate Sahara once again.

30 has flown 1022km across the Sahara in the past three days



Last night 30 roosted south of the Senegal River, just north of the vast Lac de Guiers



The Senegal River would have been a welcome sight for 30 after her five-day crossing of the Sahara *(photo by John Wright)*



An adult female Osprey perched beside the Senegal River – just the kind of spot that 30 is likely to have roosted in last night *(photo by John Wright)*



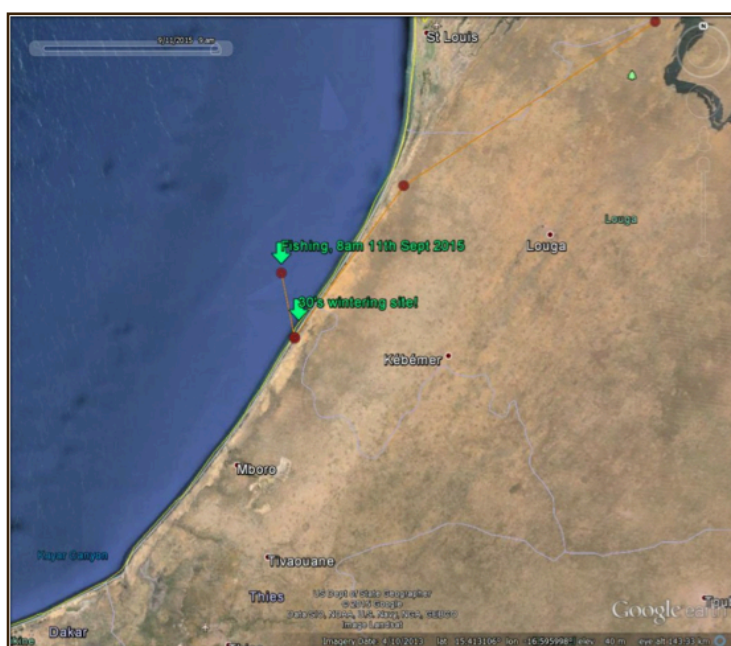
So, just 10 days after leaving Rutland, 30 is almost certain to arrive at her wintering site today. Even for an experienced adult Osprey, this is an incredibly fast migration.

This morning's data shows that she was still at her overnight roosting spot at 7am, but by 9am she was heading south-west over Lac du Guiers; appearing to pass up the opportunity of breakfast, in favour of an early return to the coast. By 11am she was to the east of St Louis, and heading straight for her winter home. By now (4pm) she is almost certain to have made it, but check back tomorrow to be sure!

A personal best for 30

By Kayleigh Brookes on September 12, 2015

We finally have some more data from 30(05)'s satellite-transmitter, detailing the final part of her migration! On Thursday, Tim reported that she was almost there – she only had 112km (70 miles) left to go. We are happy to report that she made it safely to her wintering grounds on the evening of 10th September. She travelled a total of 162km (101 miles) on her final day of migrating. The next morning (11th September), 30's position indicated she was sitting on her favourite perch! Then an hour later, she had flown 16km (10 miles) out to sea to go fishing!



30's favourite perch, a few metres inland from the coast

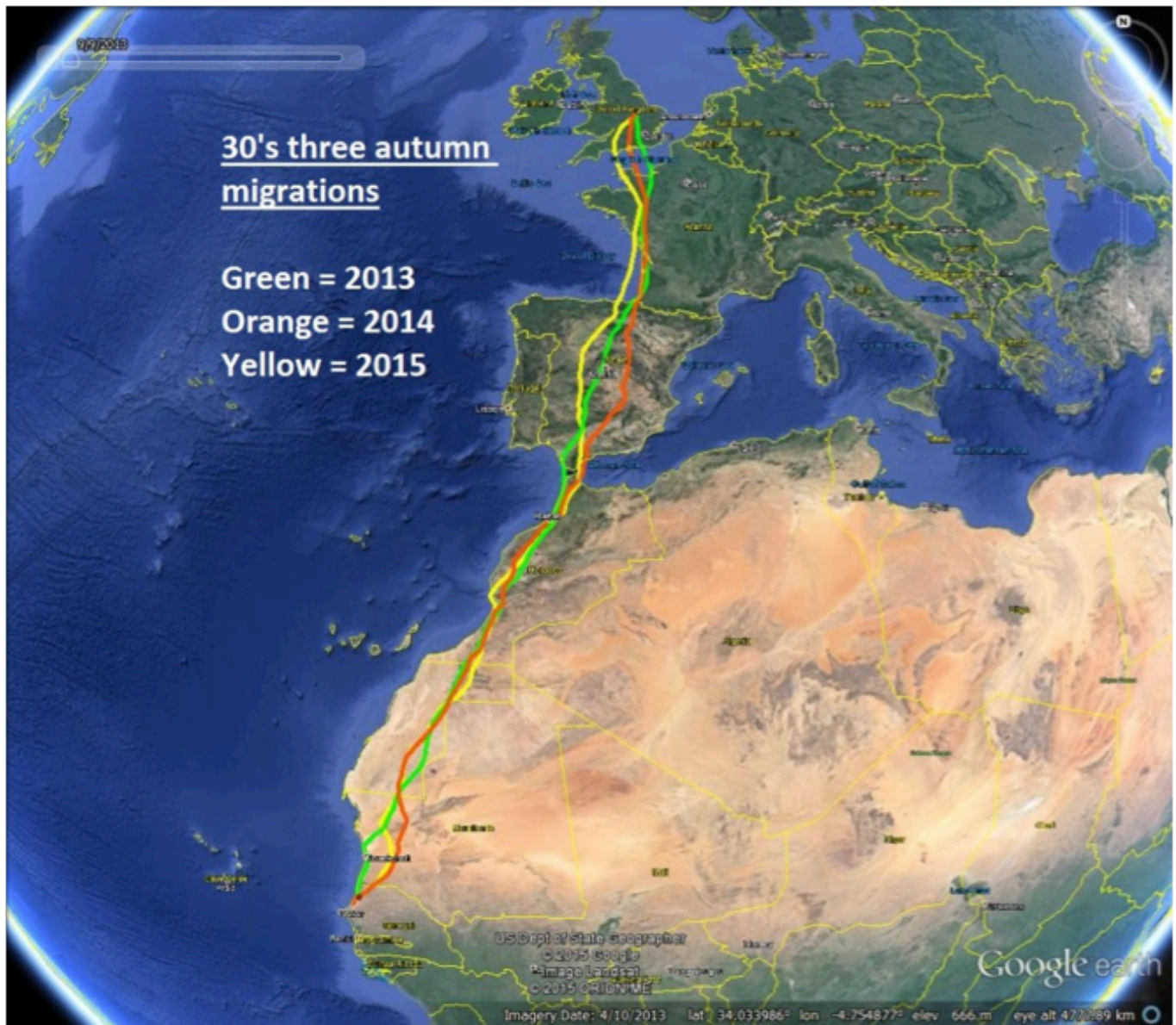
30 settled quickly on her wintering site

This autumn, 30 has indeed set a record. Her 2015 autumn migration took her a total of 264 hours – 3 hours quicker than last year (and the year before)!

She spent 137 of her 264 hours actually flying, which works out as almost 52% of her time! She migrated a total of 4412km (2928 miles), averaging 401km (266 miles) per day.



A comparison of 30's three autumn migrations – look how similar they are!



We have mentioned before how we're amazed by the ability of Ospreys to find their way to their wintering grounds, then remember the way they went and follow a similar route every year. Here is a map which serves to perfectly demonstrate this – it shows the route 30 took on each of her three autumn migrations. It's remarkable how similar they are!

Ospreys are incredible, and continue to amaze and astound us. We look forward to seeing what 30 gets up to over her winter months, and to following her spring migration home again next March!