

Movements of Alma in 2007

16 July 2007

Thomas MacDonnell reports that chick is still in its nest and the estate has named her Alma.

03 August 2007: Alma has flown

Went to check if the eaglet had fledged. We were not getting signals from the radio because the sun could not shine on the eaglet or the radio as the nest was in an overhanging cliff. Young seen flying near eyrie, and landing in heather. Male also flying in area. May have flown about 28th July. Up to 3rd August, eaglet was close to nest



Alma above the nesting crags



Alma showing white wing patches

10 August 2007

Eaglet starting to move around the near home range of her parents; main area of use about 2.4 kilometres from the nest, and the 2nd week range was 3 kilometres by one kilometre; roosted close to nest on 9th.

17 August 2007

Eaglet spent the week very close to the eyrie, being within an area of one kilometre by 1 kilometre centred on the nest, with the exception of 15th August, when she was 1.4 kilometres away.

24 August 2007

She moved much further away and started to fly out over the tops of the surrounding hills, presumably following her parents to get food caught by them. Her range during the week was 3.67 kilometres by 2.7 kilometres, with night time roosts near the feeding sites.

31 August 2007

Her area of activity extended further into the hills and covered an area 5 kilometres long and 2.8 kilometres wide; most of her time was spent some distance from the old eyrie, but often, especially in the early afternoons, she perched within 200 metres of the eyrie.

07 September 2007

Alma moved to the southern part of the Glenfeshie estate and ranged within an area of 12 kilometres by 7.8 kilometres, although much of her activity was in an area of hill plateaux 7 by 3 kilometres. The photograph spans a distance of just under 1 kilometre by 1 kilometre, where much activity took place and might have been linked to the birds feeding on deer grallochs. The Google photograph is from late winter/spring and shows snow lying in gullies; there was no snow present in September. She must have been with her parents and remained in the area for feeding and roosting. The fixes are accurate GPS coordinates and taken hourly.



14 September 2007: Leaves home for first time

She ranged widely, 12 kilometres by 4 kilometres, in her home-range on 8th - 9th and on the latter date moved to a new area to the south-west, into another pair of eagles home-range. This pair also had a flying young in 2007. Her range here extended 12.2 kilometres by 6.5 kilometres. On 14th September she was back in her own home range and flew round much of it, as the distance between fixes that day totalled 27 kilometres. The picture shows her movements in the Gaick and Drumochter hills, viewed from NE looking towards the A9 trunk road.

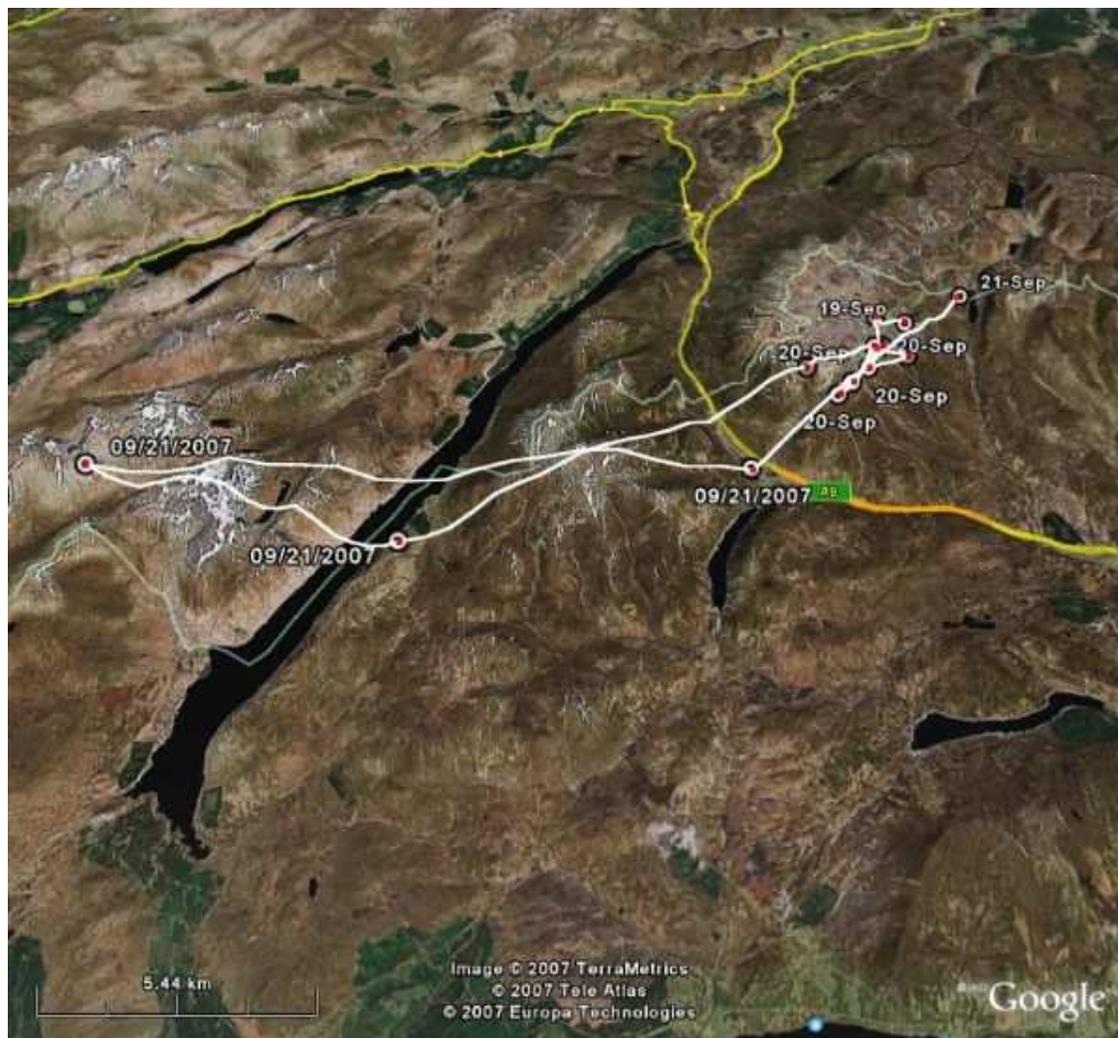


Gaick and A9 trunk road viewed from North

21 September 2007: First long flights

She spent the 15th in her own home range on Glenfeshie Estate, mainly in an area of 8.3 kilometres by 3 kilometres. I was on the Drumochter hills on 17th and it was snowing with a strong north wind. We got no more signals until 19th September, when she was on the Drumochter hills, east of the A9 road at Drumochter Pass. On 20th September, Alma was still in the eastern parts of the Drumochter Hills; at 1pm on 21st she was flying over the eastern side of Loch Ericht, south of Dalwhinnie, an

hour later she was circling the western slopes of Aonach Beag to the west of Ben Alder. These two mountains are both over 1100 metres in height. At this point she was about 30 kilometres from her nesting area. At 2pm she was flying east at 50 kph over a thousand feet above the main A9 road to the south of Drumochter Pass near Dalnaspidal. On the 22nd she was in the Gaick area. The map shows the shortest lines between the known co-ordinates.



Alma's tracks on 20th and 21st September - lines joining hourly fixes do not necessarily give the birds' actual track.

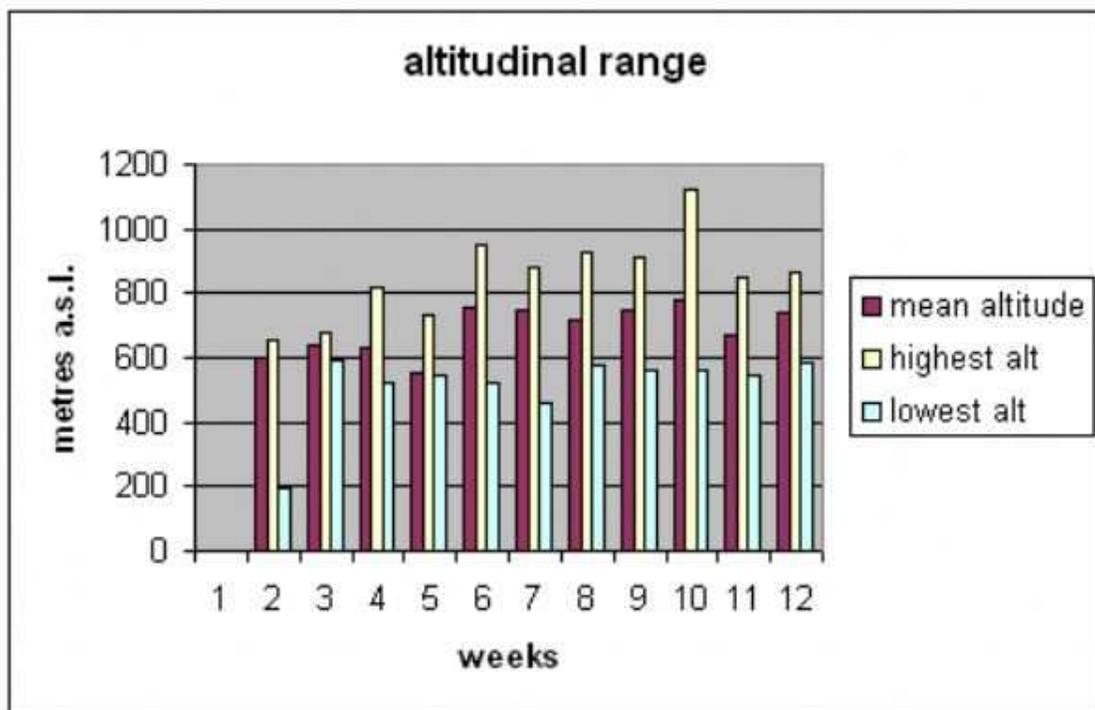
29 September 2007

Alma moved around a lot this week. She started in the Dalnaspidal - Drumochter hills area, north east to Gaick and east to Dalnamein Forest in north Perthshire; a range of 10 kilometres by 5 kilometres. On 24th and 25th she was back on Glenfeshie estate, and at 6 pm on 24th she was visiting the cliffs holding her nest site. After very strong NW winds and cold rain showers, I did not get more signals until 28th, when she was roosting at the end of the day on a hill between Glen Tromie and Loch Cuaich, to the west of Glenfeshie.

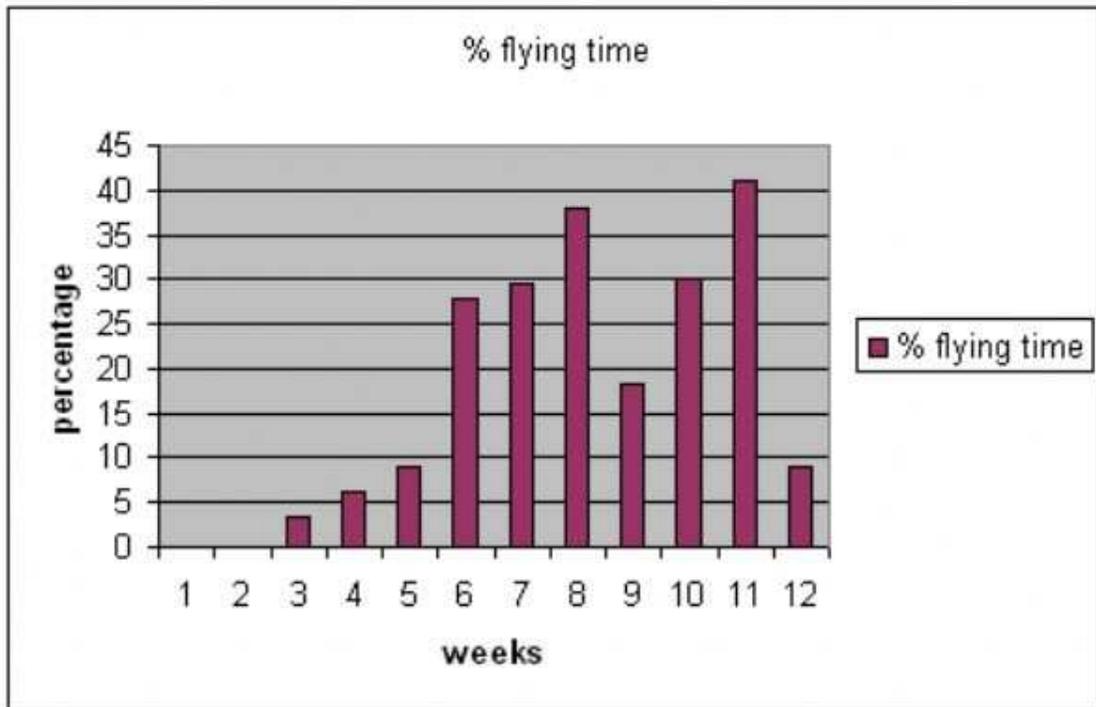
06 October 2007

Returned to Glenfeshie home range on 30th September, and on 1st October flew a big circuit of the mountains. Visited the Great Moss and Monadh Mor, looking down into Deeside. Next day moved back down into Perthshire and went as far south as Glen Tilt, nearly 30 kilometres south and just 12 kilometres from Blair Atholl. Flew from Perthshire back to Glenfeshie on 4th October. Movements on 2nd -4th October in Glen Tilt and the hills to the north.

For interest, I have analysed all the available GPS hourly reading for each week following fledging; the first figure shows the altitude (mean, highest and lowest altitudes in metres asl) of the eaglet's position. As expected, altitudinal range increased and then levelled out over the time period as the bird moved further into the higher hills; there was only one occasion below 200 metres (week 2) showing that the bird avoided being in the lowest parts of the glens, and there were no very high flights above the mountains. The second figure shows the percentage of the hourly readings when Alma was flying rather than perched. This shows that she became more active as time progressed to week 8 and spent more time in flight, whereas in the early weeks she perched and waited for her parents to bring food to her.



Altitudinal range up to 12 weeks



Percentage of hourly fix times spent flying



13 October 2007

On 7th and 9th she was in Glen Feshie, and then ranging west into Glen Tromie, and continued west to spend time again in the east Drumochter hills on 11th and 12th October. The map below shows her positions in Glen Feshie to Glen Tromie on 8th October.



Alma in Glenfeshie

13 October 2007

Poor weather with much cloud, as well as the fact that the sun is now low on the horizon, which makes it difficult to charge the solar panel on the radio except in the best conditions, means that signals are fewer. Sometimes we are relying on traditional non-GPS fixes, which are much less accurate. Mainly in the east Drumochter hills and Gaick, in a range of 12 kilometres by 7 kilometres, as far down as Dalnaspidal, and once on 23rd October was 10 kilometres SW of Dalnaspidal on the west side of the A9 road towards Loch Ericht.

18 November 2007

Alma was still in the usual east Drumochter hills area at the end of October and first days of November; on 2nd and 4th November she ranged down into the Perthshire hills between the A9 road, Loch Ericht and Loch Rannoch. On 9th and 10th she crossed the A9 and returned to the hills around Glen Tilt, where she visited in week nine. On 16th and 18th November, she was near Carn Bhac and An Socach west,

mountains to the west of Glenshee. Her furthest east to date. The following map shows the extent of her wanderings to date. The yellow A9 road runs north to join the road system in Badenoch and Strathspey. The white-topped mountains are the Cairngorms.



Extent of range July – November

24 November 2007: Moved to the Ladder Hills

Yesterday was the first sunny day for a while - good for charging the solar battery. This morning we received an accurate fix from close to the Lecht Ski Centre, on the Aberdeen/Moray border. Alma had moved 38 kilometres NNE from her previous positions near Glenshee. At 0744GMT she was in the hills just east of the road from Tomintoul to Cockbridge, presumably close to an overnight roosting site. This a new area for her in the eastern side of the Cairngorms National Park. Although adult eagles stay in or close to their home ranges in Scotland, young eagles wander and explore new areas. This bird is showing us this period of exploration, which can last several years; will she stay in the Ladder Hills or will she fly back home for a visit?

26 November 2007

Midday today she was in Glenlivet on heather hills just 500 metres high, interspersed with conifer plantations and surrounded by cattle and sheep rearing farmlands. The area is just north of Tomintoul; 11.6 kilometres NNW of Saturday's position. Top left hand hills and conifer woods in Saturday's map above.

04 December 2007

Because of very poor weather conditions I received no signals on 28th and 30th, and just a poor quality one on 2nd; but after a sunny day on Sunday, today the battery was charged and 7 positions were received between 1230 and 1400 hours, but none were highest quality. It is clear that today, a rather wild day, she was back in the Ladder Hills between Aberdeenshire and Moray. Alma was between the Scors of Blackwater and Monadh Slochd Chaimbel, east of the Lecht road, with a centre of activity in the hilltops northwest of Glenbuchat Lodge. The map shows three good fixes and the red cross is the best position in the early afternoon of Tuesday 4th December.



14 December 2007: Still in the Ladder Hills

She is still in the same area on the 10th, but a little further northeast towards Glen Fiddich. Four different signals during the middle of the day suggesting she was ranging the tops during the first sunny day for some time.

18 December 2007

At 6.30am she was roosting in a corrie south of Carn Sawvie, about 2.5 kilometres east of Loch Builg in Aberdeenshire. The location was north of Corndavon Lodge and is about 20 kilometres SW of her previous positions. Weather is hard frost, but clear and sunny in the mountains.



The eaglet's locations during the last month - yellow lines join the positions but do not represent the bird's actual flight tracks, as the fixes were intermittent.

26 December 2007

Accurate signal came in at 6.30pm to show that Alma was back in the Ladder Hills. Her roost site was on the west side of Moss Hill just to the north of Strathdon in Aberdeenshire. There has been a week of very cold weather, down to -10C, in the mountains but during the day it has been sunny with little or no wind.

At midday, Alma was 7 kms NNW of her position 4 days earlier. She was back on the Crown Estate of Glenlivet.

30 December 2007

Midday signals on the 28th came in from the main ridge of the Ladder Hills, some 4 kilometres south of the last position, but these movements are all within a normal day's ranging by an eagle searching for food. No signals came in on the 30th, but received an email from a person who knows the Ladder Hills very well, saying that "Alma is picking the hills with the best numbers of mountain hares, especially Carn Liath, Cairn Sawvie and Moss Hill."