The RSPB’s Hen Harrier LIFE project team have fitted satellite tags to over 100 juvenile hen harriers during the past five years. Hen harriers are a ground-nesting bird of prey. In the UK, they usually spend their summers on upland moors, nesting amongst the deep heather. They are one of our most treasured upland species, with spectacular displays of aerobatic skydancing and food passes during the breeding season. Sadly they are also one of our most endangered species, with the latest population survey estimating just 575 pairs remaining across the UK and Isle of Man, despite there being sufficient suitable upland habitat to support over 2,650 pairs.

Around 50% of our British upland moors are managed for grouse shooting, where landowners and managers maintain artificially high numbers of grouse which are then shot annually during the shooting season from 12th August onwards. These landowners employ legal methods to control predators such as foxes, crows, weasels and stoats, but in some cases they also illegally kill predators such as hen harriers, golden eagle, peregrine, red kite and goshawk. An overwhelming body of scientific evidence now shows that the main reason for the hen harrier population decline is the illegal killing of birds associated with management of moorland for grouse shooting. We wanted to fit satellite tags to follow the fates of British birds and to attempt to understand their movements and the scale of illegal persecution.

Monitoring satellite tagged hen harriers can be an exciting and interesting job – following an individual bird making its first flights away from the nest area, seeing it travel across the UK, and on occasions further including France and Spain. We can then also monitor its own nesting attempts and raising its own brood of young chicks but sadly, it has also brought into sharp focus the facts being met by many of our hen harriers. Thorough daily analysis of location and sensor data is vital and informs our decision on whether to go searching for potentially dead birds. GroundTrack (GT) and the goniometer have proved invaluable in our retrieval success and birds are immediately taken for post mortem.

Rannoch (female) was fitted with a 12g PTT solar tag in Scotland in July 2017. We watched her as she moved around Perthshire, then on 10 November 2018 she stopped moving in an area of moorland between Aberfeldy and Crieff. The tag battery drained before accurate location data could be gathered allowing her to be found, but after coming online again in May 2019 enough information was provided to locate her remains. We were shocked to discover she was caught in a spring trap. The post mortem report from SRUC veterinary laboratory said: “The bird was trapped by the left leg in a spring trap at time of death. Death will have been due to a combination of shock and blood loss if it died quickly or to exposure and dehydration/starvation if it died slowly. Either way the bird will have experienced significant unnecessary suffering.”

With the population so low, we are absolutely devastated whenever a bird is a victim of a crime. Satellite tagging has revealed the amazing journeys made by hen harriers but also uncovers how their journeys end. The project is nearing its 5-year conclusion and the data analysis is just beginning.