

Racing Pigeon Post

Which route do our pigeons really take from Barcelona?

This question has intrigued us avid marathon flyers for a long time now. For this international classic not only has a magical attraction for pigeon fanciers around the world, it is also surrounded by mystery and stories.

The pigeons immediately after they have rounded the shoulder of the Pyrenees fly to the North via the Rhone Valley, so at least some experts argue. It is in the Rhone Valley that the notorious mistral winds cause the characteristic hard flights and make it difficult for the Western European enthusiasts flying against a head wind. Others claim that the pigeons quickly deflect to the west of France, because they are accustomed to flying that route from liberations at Pau, Bordeaux and St. Vincent. The message provided by the PIPA radar gives a beautiful image of the timing pattern but is inconclusive about whether they have passed the Massif Central to their right or left. Unfortunately in the current state of the art it is still not possible to follow the exact GPS track of our pigeons but we did not let it sit there. Previously we had tried to use small GPS loggers to capture the pigeons route despite the weight (14 grams), the lightest little logger out there on the market today, but it was not a success. The pigeons refused to do their training flights with the group and went back much earlier than the others on to the roof or in the loft. If you are a fancier then you know this is wrong, especially if this is still the case after an adjustment period. Scientists have tried this, but it was with pigeons that only have fifty kilometres to fly home. At the beginning of this millennium the National Le Mans, Blois and Bourges pigeons in the Netherlands and Belgium were equipped with GPS loggers from Italy, but again they did not bring the dream answers. Other fanciers like Roland den Blanken and the organizer of the one loft race Derby

Arona on Tenerife sometimes had their pigeons equipped with a GPS logger, but it showed that it was not easy to gain something useful and really was distracting. The pigeons are affected by these heavy and clumsy devices and you dare not use them if you want them to have some chance of a top prize. GPS loggers are excellent in terms of accuracy but far too heavy due to the battery (10-20 grams) needed for the chip to work and register. So we had to find something else.



Through various contacts we finally came across geolocators, tiny data loggers that provide information about the daily position of the birds using the measured light intensity. These devices have already been used attached to the back of swallows that were caught and ringed by volunteer ringers of the Vogeltrekstation (The administrative centre for bird ringing in the Netherlands.) (See photo above of a swift). Even small songbirds have already been successful with these geolocators, as well as waders and other shorebirds. In weight and size this is an ideal device just over 1 gram, about as heavy as a chip ring. After some emails with the Englishman James Fox of the firm [Migrate Technology](#) we decided to take a chance. So 6 pieces were ordered and a device to read them. The accuracy of the geolocators is at most 50 square kilometres and it is an absolute requirement that at least two days data is collected. The sun's rise and fall are necessary to determine the correct latitude and longitude in the Northern Hemisphere so they are only suitable for flights where at least one night out is involved. At Barcelona, a distance of almost 1300 kilometres, this was virtually guaranteed so we took the gamble. The chip rings have holes and with a tie-wrap we could tie the geo's in the ring, see the picture below:



First test Ruffec.

Three pigeons with a geolocator were sent to Ruffec. Logger number F959 and F960 on pigeons of Ultsje Jellema and the third F869 on a pigeon of Wiebren van Stralen. They were attached to proven pigeons, as the loggers cost too much to lose on risky pigeons. The geolocators register the amount of light (in units of lux), and possibly also temperature and conductivity (to determine between wet and dry). As mentioned it is necessary that there is a night between liberation and the return home, this did not succeed at Ruffec unfortunately because the pigeons were liberated in the morning and all three were back home that evening. The information brought back by the pigeons offered us no information about the route, but we can derive some other things from the recorded data. It is a learning process, such a project, so everything is included. The sensitivity of the geolocators is very high; the lowest value which is set is slightly more than 1 lux in which a man cannot see a thing. Daylight, indirect sunlight 10000-20000 lux, well lit offices about 500 lux while quite a cloudy day 1000 lux and twilight is about 10 lux. We could from the data at least deduce when the pigeons flew or were pottering around the loft, when they were basketed, when they were in the dark truck and when the pigeons were conducted in the car etc. The liberation is quite perceptible in the data set, as well as the homecoming. At the same time after a first test case you can find things that can be better. The data from the two cocks that went was clearly different from that of the hen; she recorded significantly greater amounts of light. Feather Shade is the new word that we acquired, the loggers probably sit too much under the tail or the feathers on and around the upper part of the pigeon's leg.

Barcelona and Cahors

After proper co-ordination and collaboration with the NPO, Department Friesland'96, NIC Borne, NIC Noordwolde and Nic Balk, not to mention the ZLU preparations could be made for the Barcelona race. Jelle Jellema basketed three hens with a geolocator attached to the ring, the first nominated and two decent pigeons, so confidence was high. The markers at Borne were informed and when the pigeons were presented, as required by the ZLU for a control rubber and wing stamp they had a picture with a description of the geolocators printed in front of them, provided by ZLU Secretary Hub Wetzelaer. Everything went smoothly. The liberation took place as expected on Friday morning. At 9:30 the pigeons with geo F956, F957 and F958 departed from the beach of Barcelona for their epic journey home, the weather left nothing to the imagination, it would be very hard. On Saturday July 6 at 18:58 Jelle clocked the first nominated pigeon, with a geolocator! On Sunday morning they were all back home, mission accomplished. Ultsje, at the National Cahors sent two pigeons; the cock was trimmed around the top part of the leg, to try all ways as best as possible. Cahors was also about this time a night flight and one of the two pigeons brought the happy geolocator home on Saturday afternoon. The data was read out on Monday morning and is now being analysed. As soon as we know more we will report it, because it would be wonderful if we can reconstruct the route of these flights?

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Part 2.