Saker Falcon *Falco cherrug* in Poland (2008–2009)

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**Saker in Europe**

Saker *Falco cherrug* is a species typical for open landscapes of southern Europe and Central Asia, especially in landscapes of deserts, semi–desserts, steppes, forest–steppes and mountains. It’s range covers China, Mongolia, Kazakhstan, Kirghizia, Turkmenia, Iraq, Iran, Afghanistan, Turkey and Middle East countries. Saker’s range in Europe has its western border in Austria, covers Slovakia, Czech Republic, Hungary, Bulgaria, Balkan countries, Romania, Moldova, Ukraine and southern Russia (Fergusson–Lees & Christie 2001).
Saker populations in Carpathian basin are growing over last 20 years (Bagyura et al. 2009).

**Saker in Poland – historical data**

Saker in Poland is known as a migratory bird, extremely rare as breeder. In 19th century Saker was recorded 6 times, in the first half of 20th century – 4 times. In the second half of 20th century there were total of 48 confirmed observations. Most of them in southern part of the country. Sakers were recorded mostly in autumn, with maximum in September and October, some higher numbers were also recorded in May (Stawarczyk & Tomiałojć 2003).

There is only one confirmed case of breeding in 1998 (Trommer in: Komisja Faunistyczna 2000). The nest was found in Sudety Mountains and is a part of the Saker population in Czech Republic. Czech population is growing and numbers c. 15 pairs (Beran et al. 2009). Sakers are recorded by Faunistic Commission almost every year, with maximum of 3 observations in 2004 and 1–2 in other years.

**Satellite tagging in Hungary and Slovakia**

In the frame of the Hungarian–Slovak Saker conservation LIFE project lead by Bükk National Park Directorate, 43 juvenile Sakers have been tagged with satellite transmitters (PTTs) in the two countries in 2007 – 2009. The aim of the action was to learn about dispersal and migration of juvenile Sakers and to explore their temporary settlement and wintering areas.

All birds but 5 were mounted by 22g GPS enabled solar powered PTTs manufactured by Microwave. In 2007, five birds received 20g PTTs by NorthStar, however those were without GPS units thus they were less accurate. Because of that we used only GPS enabled PTTs from 2008 on. The PTTs locate the birds several times a day and every third day they send the data through satellite connection to an online database. Researchers download the data from that database (Prommer et al. 2009).

The results have been far beyond expectations. Types of migratory behaviour (migratory, non–migratory, and ‘hesitant’) of juvenile Sakers, roaming and migration routes have been unveiled during the tracking. New countries have been added to the list of range countries, and colleagues all around Europe have become involved in the project in various ways and a lot of invaluable new information has been learnt about the species.

Most of the young Sakers stay in Carpathian Basin, some go south to Italy, mainly Sicily, or northern Africa (Egypt) for winter. Some birds show tendency for long trips. There are confirmed routes far east – to Russia and Kazakhstan, there is a bird travelling far west – to Spain, Portugal and Western Africa. Above said shows that even geographically distant Saker populations potentially
exchange genetic material. Further research is necessary to prove that with older breeding birds.

**Northern trips of Hungarian Sakers**

One of the results of satellite tracking was the discovery of northern roaming of juvenile Sakers in summer. Apparently 1–3 birds may visit northern locations between spring and autumn migrations including those birds that do not show any migratory behaviour. We had birds visiting Russia, Belarus and Poland.

Out of the large number of birds we have been tracking, only two have visited Poland.

**Barna (Brown)**

Barna is a male and was mounted with the PTT before his fledging in June 2007 near the town of Hegyeshalom, West–Hungary. Barna was born on a tree in a former (but very bad condition) Imperial Eagle *Aquila heliaca* nest that were built on a previous Common Buzzard *Buteo buteo* nest.

In his first summer, he was around in the Carpathian Basin and he spent the winter in Sicily. Then next spring (between 25/04/2008 – 04/05/2008) he made a ‘northern loop’ in Poland starting SW getting closer (but not crossing) the Polish–German border then turning to east and leaving Poland finally towards Belarus (where he presented the first confirmed occurrence of the species). He did not spend more than a day at any location. Barna flew over Gorlice, Dębica, Częstochowa, Krotoń, Gostyń, Gniezno, Inowroclaw, Płock, Płońsk, Pułtusk and left the country between Hajnówka and Siemiatycze.

He spent the summer in Russia, and he wintered in Sicily again. Next spring he did two shorter tours to Poland again (at 29/03/2009 and between 07/04/2009 – 10/04/2009). March visit was in Legnica region, in April Barna flew over Rybnik, Tarnów, Opole and Dzierżoniów.

After those journeys he settled at NE part of Austria for some time. In autumn he took north again, being in Poland few days in September (between 18/09/2009 – 24/09/2009). He flew over Opole, Kalisz, Gorzów Wielkopolski and took west to Berlin and then south–west to Weimar.
Figure 1. Barna with his solar PTT (photo J. Bagyura).

Rycina 1. Raróg “Barna” z nadajnikiem satelitarnym (fot. J. Bagyura)
Figure 2. Barna’s first route in Poland in 2008.
Rycina 2. Trasa wędrówki naroga “Barny” w Polsce w 2008 r.

Figure 3. Barna’s second year in Poland in 2009.
Rycina 3. Trasa wędrówki naroga “Barny” w Polsce w 2009 r.
Unfortunately, Farkas was not a lucky bird. He fledged near the village of Mezögyán, in SE Hungary in 2009 and he was the only chick from a late brood. Farkas hatched in an artificial nest platform (placed by the colleagues from Köröös–Maros National Park) on a tree.

After fledging he spent more than a month around the nest site, he started his route towards SE. He made a short visit to Romania, and then turning around he flew across Hungary and Slovakia to Poland.

He crossed the Polish border on 2nd August near the Polish–Slovak–Czech common border. On 2nd August he caused the first panic when he spent the night at Trynek. Since the site was an airfield it needed to be checked if it was not an accident and Farkas had collided to an airplane. It would not have been the first case. Fortunately, when the Polish colleague (Jan Mateja) checked the airfield he found only the remnants of a Common Gull Larus canus – the dinner of Farkas. There is a waste dump site nearby with a lot of gulls so apparently Farkas was looking for an easy prey.

After two days he stopped near Walenczów for two days then he continued his route. 11th of August was probably the last day of Farkas.

Since 11th of August the PTT of Farkas transmitted from the very same spot (this type of PTT has a few meter accuracy) suggesting that something goes
wrong. At the second attempt Jan Lontkowski finally found the body of Farkas. The signs suggested that a Goshawk *Accipiter gentilis* killed Farkas.

**Figure 5.** Farkas’s prey – Common Gull (photo J. Mateja).

**Figure 6.** All routes of Farkas.
Rycina 6. Trasy wędrówek raroga “Farkas”.
Saker in Austria

In eastern Austria Saker Falcon has its westernmost distribution limit. With 25–30 pairs this falcon is a rare breeding species in Lower Austria and northern Burgenland. In regions of high density, e.g. around the city of Vienna, nearest neighbour distances among occupied nest sites can be only around 2 km. As satellite–telemetry is an excellent tool to study dispersal and migration of open habitat raptors, two young Sakers (Eva, Lamonica) were tagged with satellite transmitters in the frame of the project “born to be wild”. They came from the raptor rehabilitation centre GVZ–Lobau, where between 2006 and 2008 11 captive bred Sakers were released using hacking technique. GVZ–Lobau inclusive hacking site are situated at the western border of the national park Donau–Auen. Both birds were females with 1040g and 1060g respectively. They received at 16 June 2009 22g solar /GPS–PTT–100 transmitters manufactured by Microwave Ltd. The weight of the transmitters was c. 2.1% of their body weight. The PPTs locate the Sakers during the summer months six times a day every third day.
Austrian satellite tagging first results

Saker Eva left the hacking site three weeks after tagging at 6 July afternoon. She was very mobile stopping only in SW Slowakia and W Ukraine for a short time. Within two days she covered a distance of >700 km. Another two days later, at 11 July, she was recorded already in S Poland around Suchedniów (c. 130 km SE Łódź), which was c. 500 km WNW of its easternmost localisation in Ukraine. During the following days she moved northwards (c. >700 km away from GVZ–Lobau). Signals were received between area W of Gdańsk up to the coast (Słowiński National Park) and even from a short trip across the open sea (Gdańsk Basin). Altogether, between 11 and 14 July 20 locations could be recorded. No data were available from the following time period due to bad weather conditions and storms in big parts of Poland. As no signals followed, Janusz Sielicki and Mateusz Matysiak (BirdWatching.pl) were contacted asking for support to find it. An information of Jaroslav Tekesz finally helped. He found the remains of Eva end of July in N Poland (near Recki), where she was killed by a car. Obviously she carried in this moment a captured bird (perhaps Blackbird *Turdus merula*).

For comparison, its sibling Lamonica was seen the last time at its hacking site in the morning hours of 7 July. In opposite to Eva, this bird did not move very far. She flew only to SW Slovakia, where she still has its home range (core
area c. 90 km away from hacking site). Especially since mid August she makes short excursions to E Austria, N Hungary as well as to S and E Czech Republic.

A second Saker, a young male released in the GVZ–Lobau Project in 2008, was also recorded in Poland. In June 2009, in its second year of life, it was killed by a pigeon breeder in village Górą near Pszczyna, S Poland (Wiesław Chromik, pers. comm.).

More information about project are available at the website: http://born2bwild.nhm-wien.ac.at (in German and English).

Figure 9. Austrian Sakers in Poland in 2009.
Rycina 9. Trasa wędrówek rarogów pochodzących z Austrii w 2009 r.

**Saker photographed and observed in Poland in 2009**

In the region of Radłów (SE Poland) in autumn of 2009 a Saker was observed for a long time by numerous ornithologists. The bird was photographed many times and without any suspicion it is a Saker (Miroslaw Kata in litt.). Bird was present in the region from 17/08/2009 till 25/09/2009. Saker was observed in open agriculture area with wide range of different crops with single bushes.

The bird has no visible rings or transmitter. It was observed in a small area using regularly the same electric power line poles and places on the ground for
resting. This place is also occupied with high number of birds of prey. In the time of the observation other birds of prey were observed: 40 Common Buzzards, 5 Kestrels *Falco tinnunculus*, 5 Marsh Harriers *Circus aeruginosus*, Hen Harrier *Circus cyaneus*, Montagu’s Harrier *Circus pygargus* and Red–footed Falcon *Falco naumanni*. Most of the time Saker was observed during morning and evening hours while sitting on the electric power line pole construction. Bird was also observed while flying low over the ground. In the middle of the day bird was resting sitting on the ground.

Saker preferred robbing prey from Marsh Harrier (most often) and Common Buzzards. During couple of hours no successful hunt were observed. Successful robbing of prey was observed many times. The robbed prey were small rodents.

Saker preferred open agriculture areas not so often visited by ornithologists. Additionally bird sitting in the ground or flying low is very difficult to find. Saker in Radłów was not easy to see. Many ornithologist visiting the area for over one month could not find the bird present at this place.

![Figure 10. Saker observed in Radłów area.](image)

Rycina 10. Zdjęcie raroga obserwowanego w okolicach Radłowa.
Conclusions

In 2009 five Sakers were confirmed in Poland (plus one of them in 2008). That highly over numbers all previous observations in 19th, 20th and beginning of 21st centuries. That was possible mainly thanks to the new technique – satellite tagging. In 3 of those 5 cases young falcons died in Poland – due to persecution by man, accident with car (again a human factor) and by possible predation. One of the birds is known to visit Poland few times, and the last one is known by photographs and numerous observations.

Satellite tagging proven to be very effective way of collecting data on bird movements, much more effective than any traditional method, like ringing. For instance, Barna in Belarus in 2008 was the first ever confirmed Saker in this country.

High number of confirmed Saker visits to Poland suggests also that possibly there are many more Sakers, but they are not recorded any way.

Most ornithologists do not expect Saker to be seen in Poland. This species is not very different from young Peregrines and for inexperienced observer it is quite difficult to distinguish those two species. We know that none of our satellite tagged birds was recorded by field ornithologists during their life, only dead birds were found.

In Hungary and Slovakia a total of 10 juvenile Sakers were tagged in 2007, 20 juvenile and 3 adult in 2008 and 13 juvenile birds in 2009, while in the Austrian project 2 birds. A total of 48 birds got the satellite PTTs. Three of them were confirmed in Poland, which makes about 6%.

If we assume that in this regions ca. 200 pairs are existing and that in those 3 countries at least 300 offsprings were produced, the number of juvenile Sakers that could visit Poland every year could be estimated at some 20 birds. All above shows that probability to see Saker in Poland is much higher than expected before.

References

