

International Cooperation through Satellite Telemetry



Urmass Sellis

The Estonian Eagle Club was formed almost 20 years ago. Our goal has always been a better and brighter future for the eagles and black storks of Estonia.

In 2005, we began to use Solar Argos/GPS transmitters in our greater spotted eagle and black stork research to determine their home range and preferences for foraging areas, migration routes and wintering grounds.

Over a period of four years we have equipped 24 adult greater spotted eagles, ospreys and black storks with PTTs. This year we put backpacks on six juvenile birds (in 2006, we outfitted one young osprey). The death rate of young birds is high. Of the seven young birds with backpacks, six perished before reaching their wintering grounds. Only one young bird is still in migration! After consideration, we concluded that there are no visible signs the weight of the backpacks inhibit the stork's everyday life.

We have managed to locate all of our fallen young birds' transmitters. Two years ago we had to travel from Estonia to the Sudan in order to find our spotted eagle transmitter. We acquired valuable information about the migration route and our presence served to generate interest in the local communities. We also learned more about what actually caused the bird's death. But retrieving transmitters is not always so simple.

For example, this year we equipped young black storks with PTTs to find out whether the migration routes of the adult birds and their offspring were the same, and how the young birds live before they start to nest. Adult birds from one nest (the male Priidu and female Piia) carried PTTs from the prior year. A PTT was given to one of their three nestlings (Priidupoeg—"Son of Priidu").



Photo by Urmass Sellis

Priidupoeg (far right) with his siblings.

In early August, Piia migrated, but the transmission points of the male bird, Priidu, originated from a single place—he was entangled in twine from a hay bale. Without the transmitter's data he would have remained there! Since no one had brought the chicks anything to eat, they began their migrations.

Priidupoeg flew to Lithuania where he stayed three weeks, and found an excellent feeding place. He traveled south to the Bosphorus Strait and then in a southeastern direction toward the northeast corner of the Mediterranean.

On September 28th, Priidupoeg's path drifted too far east, about 300 km east of his fellow species members, before he found a southern direction. He made it to Saudi Arabia on the banks of the Red Sea and turned southeast along the shoreline. This wrong turn carried him into the desert. He weakened after 500 km and landed on October

6th in the village of Yanbu-al-Nakhali. We did not receive additional data transmissions, so we assumed he had perished. Traveling to Saudi Arabia was complicated—acquiring a visa and other formalities would consume too much time.

On the 8th of October, it became clear that all was not well concerning Priidupoeg. By the next day, Cathy at MTI had given us a contact in Saudi Arabia, Abdullah Alsuhaibany, who volunteered to look for Priidupoeg even though he was located 350 km away!



Dr. Shobrack examines Priidupoeg.

Photo by Abdullah Alsuhaibany

This is Abdullah's account: *On the evening of the 9th of October I found emails from people I have never heard of before asking if I know of anybody who can help find a Black Stork with PTT on its back. Dr. Urmass Sellis, from the Estonian Ornithological Society, mentioned that the bird didn't move from the last location since the 6th of October. I am*

an ornithologist and conservationist, I understand the importance of such a project for an endangered species.

I decided to go there ASAP. It is only 350 km from Jeddah where I live. From the satellite photos that Urmass sent me, it looked like smooth driving and was close to a village named Yanbu Al-Nakhal. I went to see my friend Dr. Mohammed Shobrak (well known ornithologist in our region). He was attending a relative's wedding. I informed him about the poor stork and he insisted on joining me. We left at 2:00am and arrived at the bird's last location about 5:40 (no time to camp or sleep). It was still dark, but soon the sun rose and we were able to search for the bird. Fortunately, Mohammed had a GPS with him but less than 20 meters from the location, the GPS went off due to low battery! Not long after, the farmer Jammal showed up and we asked him about a black bird with a transmitter on its back. He showed us the body on the sand and brought us the transmitter.

"The bird was very weak, and I caught it without any resistance on the 7th of October about 13:00", the farmer said. He added also, "I gave it water and food but it didn't eat or drink, it died that same day". Then he removed the transmitter and kept it with him. The PTT is now on its way to Urmass. I wished that we had found the poor young stork alive, so that we could help him to continue his journey south, but there is nothing we can do when nature interferes.



Photo by Abdullah Alsuhaibany

Jammal, the farmer, with recovered PTT.

I noticed how much time Urmass and his colleagues spent searching for someone who could help the bird. I wish that we could develop such contacts with scientists from all over the world to assist each other: "Science Without Borders".

This is an example of how it is possible to accomplish what may first appear impossible. The use of transmitters is clearly more productive if there are colleagues present along the migration route, who are ready to act when necessary.

Our sincere thanks to Jammal, Abdullah, and Mohammed!