Sandy Blind Mole Rat: A story of one species and the stories of people behind

Sandy blind mole rat (*Spalax arenarius*, Сліпак піщаний [Slipak pishany - literally "sandy blind"]) is an endemic rodent of Ukraine. This species has one of the **smallest distributions among mammals** - just about 200 km² on the right bank of Dnipro river. As a result of Kakhovka dam destruction, the sandy blind mole rat may become extinct. Below, we want to tell the story of this species along with the stories of the people who have discovered and protected it.



Slipak pishany is also called a "ground dog" by the locals as it's agressive when taken from under ground. Yes, it's truly blind!



Evdokiya Reshetnik (1903-1996)

In 1934, the first specimens of this species were found by a Ukrainian zoologist **Evdokia Reshetnik** in the sands of Dnipro bank in Southern Ukraine. Originally, the skulls of the slipak have been kept at the Black Sea Biosphere Reserve. However, after her colleague zoologist **Vsevolod Velikanov** was executed in a **Great Purge of 1937**, Evdokiya decided to move the skulls to Kyiv. In 1939, she published a paper describing her findings. In 1940 after re-evaluation, it became obvious that the skulls belong to the new species. The skulls thus became a **holotype** (**species-defining**).

In 1941, during the invasion of the Third Reich, Evodkia tried to evacuate to the East, but could not leave her son and husband behind and so she had returned to Kyiv. During the Nazi occupation, she volunteered with the Red Cross, distributing clothes and food to captured Red Army prisoners. On 10.02.1942, she was arrested by the **Gestapo** together with other Red Cross members. After eighteen days of imprisonment, her bail was paid by colleagues and Reshetnik was released. Near the end of the war, the Nazis began **moving the Zoological museum collections to Poznań and Berlin**. According to Reshetnik, she has saved the skulls of the sandy blind mole rat by keeping them in the boxes in the corridors of the institute.

When the Soviets were restored to power, a period of repression began in Ukraine. In 1948, Reshetnik's son was arrested for membership in the Organization of Ukrainian Nationalists and sent to **GULAG**. Soon after, her husband was also arrested and imprisoned. Both of them were required to serve eight-year sentences. She faced several fabricated charges. After serving the sentence, Evdokia returned to Kyiv, where she worked as a museum curator until her death in 1996. All those years, the skulls of the slipak were kept in Kyiv until they **suddenly disappeared**.

In the late 1980s, the skulls were requested by a biologist in Nizhyn (Ukraine) and were never returned back. For around 25 years, the status of the sandy blind mole rat as a species has been in question. In 2004, Kyiv zoologist **Igor Zagorodnyuk** moved from Kyiv to Luhansk to study the fauna of the steppe. Knowing Reshetnik and the story of the rat, he has figured out where the skulls should be. He has sent his **graduate student Sergey Zaika** to Nizhyn. Sergey has found the precious skulls neglected in the garage covered in dust. Just like that, the status of the slipak as a species has been saved.



Zagorodnyuk holding the skull of the sandy blind mole rat

In 2014 Russian forces **annexed the territory of Crimea** and established proxy pseudo-republics in **Donetsk and Luhansk**. As Zagorodnyuk recalls, evacuating from Luhansk has been very difficult. He has only managed to smuggle a hard drive inside his sock, and for a couple of months, a precious zoological collection and the skulls have been trapped in Luhansk. Only due to the heroic efforts of his colleagues, the skulls were returned to Kyiv months later.



The distribution of the sandy bilnd mole rat is one of the smallest in the world

Finally, on the 6th of June 2023, Russian occupation forces destroyed Kakhovka dam along Dnipro river. This has already had devastating effects on the lives of people and animals and will impact the nature of the region for decades. The area inhabited by the sandy mole rat is now submerged. The situation is made much worse by Russian occupational forces which are reportedly preventing evacuation of people from the areas affected. The discovery and protection of the sandy blind mole rat is tightly linked with a struggle for freedom of Ukraine. The story of people that have discovered and protected this species is tragic and inspiring. This story is still being written today.

After the Russian invasion in Feb 2022:

Igor Zagorodnyuk is now living in Kyiv. He is an editor of a zoological journal and is actively helping other Ukrainian zoologists across the country to find temporary homes. **Sergey Zaika** has reportedly been mobilized into the Luhansk militia and was recently killed in action.

As of today (15.06.2023), **no contact has been established** with zoologists on the right bank of Dnipro. It's quite possible many of those people have drowned.

You can help the animals of Ukraine by donating to UAnimals organisation.