

# THE ROMANOVs

Date: 1918

Location: Yekaterinburg, Russia

Significance: One of the twentieth century's greatest mysteries was finally solved by DNA typing.

History records that on July 17, 1918, Czar Nicholas II of Russia, his wife Alexandra, their five children, and four members of their entourage were executed in the cellar of a house in Yekaterinburg. Siberia, on orders of Lenin, the newly instituted leader of the Bolshevik revolution. Their death brought an end to the three-hundred-year reign of the Romanovs and touched off worldwide interest in their fate. Although for decades, Soviet governments forbade all mention of the deposed royal family, some were prepared to flout the law. The fateful house where they were executed became a shrine, with pilgrimages so commonplace that in 1977 it was bulldozed to the ground.

For one man, Gely Ryabov, finding the burial site of the Romanovs became an obsession. Using his privileged position as a filmmaker for the Interior Ministry, he delved into secret archives and in the late 1970s managed to track down the children of Yakov Yurovsky, the Bolshevik guard who had overseen the executions. Yurovsky's son provided Ryabov with a hitherto unknown note that described the disposal of the bodies in a swampy meadow near Yekaterinburg. With its help, Ryabov located the layer of logs shallowly covered with dirt that lay over the muddy spot where the remains were buried. A local historian helped him, along with a geologist who scaled a pine tree to spot traces of the old road traveled by the truck that carried the corpses.

Ryabov, aware that such activities would bring censure at best and probably much worse, carried out most of his work at night, but eventually he uncovered a pile of black and green bones that he felt sure were those of the former czar and his family. Also recovered from the burial site were scraps of expensive clothing that seemed to correspond roughly in gender, age, and size to the Romanov family and entourage.

As the communist stranglehold weakened in 1991, the work to establish the identity of the corpses began. Using computer superimposition software, Aleksandr Blokhin and other researchers first compared the battered skulls with photographs of the czar and czarina. Initial results suggested that these were indeed the Romanovs. But for a positive identification it was decided to turn to DNA typing.

## Advanced DNA

The problem was especially daunting because the scientists had only bone to work with. Unlike living tissue or vital fluids, bones contain very little

DNA, and these bones were in particularly bad condition. Some were so fragile that they turned to dust when touched. One of Russia's foremost DNA specialists, Pavel Ivanov, took the bones to Britain for further study by the Home Office Forensic Science Service. Conventional DNA analysis established that five of the nine skeletons were members of one family—a man, a woman, and three children. But because of their age and deteriorated condition, the bones did not provide scientists with all that they needed to know.

They turned instead to mitochondrial DNA, which is found in specific structures within the body's cells and is passed down intact through the maternal line. The forensic team asked for and received a blood sample of Queen Elizabeth's husband, Prince Philip, who is a direct descendant of Czarina Alexandra's sister. If the bones were genuine, the team said, then Prince Philip's DNA should match that of the woman and the three children in certain familial respects. The results enabled chief researcher Peter Gill to announce a "complete match"; the bones' provenance had been established "virtually beyond doubt." Gill declared himself and his team "more than 98.5 percent certain that the remains are those of the Romanovs."

However, one mystery endured. History records that eleven people were executed in the cellar, yet only nine corpses were recovered. Yurovsky's note tells of burning two other bodies but gives no reason why. Curiously enough, the two bodies not found were those of the Crown Prince Alexei and his sister Anastasia, both of whom were rumored to have survived the assassination. In 1920, a woman who became known as Anna Anderson surfaced in Berlin, claiming to be Anastasia. Over the years she convinced many people, including some distant members of the royal family, of her claims, but she was never officially regarded as the missing princess. Others regarded her as a fraud. She died in Charlottesville, Virginia, in 1964, still sticking to her story. Nothing found at the burial site appeared to refute her claim.

But in 1994, the truth became known. Before her death, Anna Anderson had undergone an operation. To provide legal cover in case of a possible compensation claim, the hospital had retained a sample of tissue. Supporters of Anderson commissioned Gill to test the sample and compare it with the Romanovs' DNA. In June 1994, Gill flew to the United States in secret to collect the sample. His findings, released the following October, exploded the myth. DNA typing proved that Anna Anderson was an impostor. She was not Princess Anastasia but a neurotic Polish peasant named Franzisca Schanzkowska, who had vanished in 1920. Later that same year, she was pulled from a canal in Berlin and began her long-standing deception. Members of the Schanzkowska family, who had long suspected that Anna Anderson was their missing relative, provided the samples that fixed her identity.