Maria Gregory Geography 100 World Regional Geography October 5, 2019

## Rich and Mysterious Ural Mountains

Informally known as a border between Europe and Asia, the Ural Mountains are rich in storages of minerals and precious stones. Although relatively narrow and having low seismic activity, the Urals have nevertheless gained popularity for their industrial significance, artistic stone-cutting works, unique cultural heritage, and, sadly, environmental pollution. Also, this region may have drawn attention of extraterrestrials since UFOs were repeatedly observed in the Ural sky, and the last "space guest" arrived as recently as 2013. Notable geographical location, natural riches, breathtaking history, local folklore, and unsolved mysteries will be examined.

The geographical location of the Urals is remarkable: its eastern part divides Russia in its European and Asian parts. Longitudinally, the mountains are stretched for more than 1,550 miles, from the Novaya Zemlya archipelago in the Arctic Ocean to the Aral Sea in Kazakhstan, and the climate varies from tundra to semidesert. Latitudinally, the Urals form the narrow area between the Eastern European and Western Siberian plains, and they are mostly up to 90 miles wide, except for their northern tip, Pay-Khoy ridge, where the mountains expand to 250 miles in width. (Figure 1) (Yastrebov, 2019)

The mountain range has five climatic regions: Polar, Subpolar, Northern, Middle, and Southern Urals, with its climate varying from tundra to semidesert. The tallest mountain is Narodnaya (6,217 feet, or 1895 meters). (Figure 2) Hundreds of small lakes and rivers irrigate the region, including the group of Chelyabinsk lakes in Southern Urals.



Mount Narodnaya
1895

RUSSIA

RUSSIA

KAZAKHSTAN

Figure 1. (Above) Ural Mountains on The Map. Source: Map courtesy of the CIA World Factbook

Figure 2. (Right) Climatic Regions of Urals and Mt. Narodnaya Source: http://www.freeworldmaps.net/russia/ural-mountains/ural-mountain-map.jpg

Today, most of the Ural population are Russians; however, at least 20% of the population are indigenous peoples. The Nenets, Komi, Khanty, and Mansi inhabit the northernmost parts of the Urals, where they have preserved their traditional ways of life, such as raising reindeer, hunting, and fishing. On the south, Bashkir and Kazakhs, known as excellent horse breeders, are largely represented. Most of population nowadays lives in cities, such as Yekaterinburg (formerly Sverdlovsk, in the Middle Ural), Perm (Northern Ural), Chelyabinsk, Magnitogorsk, and Ufa (Southern Ural), where a large choice of jobs is available.

Since 1700s, the Urals have been exploited as a mining and metallurgic base of the Russian Empire. The local mining industry gave start to a special socio-cultural community, called the "Ural mining civilization." (Rogers, 2015, p. 323) By the early 19th century, the region supplied nearly all the iron exported to European markets. The Statue of Liberty in New York and the roof on London's Houses of Parliament were made from copper and iron from the Ural Mountains. (LonelyPlanet) The industrial significance of the Urals gave rise to the patriotic motto "Stronghold of the Nation" by the Soviet writer Aleksandr Tvardovsky.

During the revolution of 1917 and the following civil war in Russia, red and white armies were fighting across the Ural Mountains. Yekaterinburg became the site of the brutal murder of Tsar Nicholas and his family, whose bodies were thrown in an abandoned mine. Today, this place, Ganina Yama, is a monastery commemorating the last Russian emperor, his wife, and five children. (LonelyPlanet)

During World War II, Ural factories were providing the Soviet army with heavy machinery and artillery, including Kalashnikov rifles, T-34 tanks, and rocket launchers "Katyusha". The heroic round-a-clock operation of the Ural factories during the four-year-long war is documented and exhibited in history books and local museums. (Evteeva, 1990) After the war, the country was working hard to rebuild its cities, and the Urals continued to be the large supplier of minerals, resources, and machinery. The following Cold War with the United States fueled the industrial competition between the two powerful countries.

Although metallurgic activity and rapid urban development brought prosperity to the Ural cities, at that time, not many people in the government and among engineers paid much attention to ecology, until the tragic nuclear event followed.

In September 1957, evaporation of the radioactive waste from a failed cooling tank in Mayak, a nuclear fuel reprocessing plant located near the town of Ozyorsk, just north of Chelyabinsk, resulted in one of the top 10 worst nuclear accident ever recorded on the International Nuclear Event Scale. (NEIS, Accessed 2019) The radioactive cloud affected residential areas hundreds of miles around, resulting in health problems. This area is usually referred to as the East-Ural Radioactive Trace (EURT). The Mayak disaster has also become known as Kyshtym nuclear disaster, by the name of another nearest town. (Rabl, 2012) Years later, Zhores Medvedev, a Soviet biochemist and human rights activist, compared the Mayak

disaster with the Chernobyl tragedy of 1986. The latter happened far away from the Urals, but nevertheless reflected the same attitudes toward science and engineering in the USSR of that time. (Gordin, 2019)

Neglect during the Soviet era has also led to degradation in the quality of land and water. The areas north of Chelyabinsk are still heavily contaminated with toxic metals, negatively affecting human health. Specifically, the town of Karabash is considered one of the most polluted places in the world. (Cherchintsev V.D., 2001) The trees used to grow there in

dense forests, died and gave a way to the anthropogenic desert. (Figure 3) Despite heavy industrialization of the region, earnings of most people are not enough to relocate, so many locals continue living in highly polluted areas.

Apart from its metallurgic fame, the Ural

Mountains also have a mythical reputation for its

UFO-active zones, making it "mecca for



Figure 3. Ecological catastrophe in Karabash, Russia. Photo by Andrey Shapran.
Source: https://ssl.c.photoshelter.com/img-get2/I0000kP2lzE8zjJM/fit=1000x750/AndreyShapran-Karabash-4.jpg

newcomers." For the last two centuries, the Uralic people have eye-witnessed strange objects in the night sky: pyramidal, spherical, or disk-shaped. For example, the Molybka Triangle is the area where flying objects were seen by local peasants as early as in 19th century. In 1996, the town of Kyshtym, near Chelyabinsk, made the headlines when the body of a dwarf creature was found in a cave. (Egorov, 2018) Occasionally, UFOs are seen in Taganay National Park. The objects resemble towers of lights, sound mirages, walking fog, ghosts, and in the wilderness, even Bigfoot. Several tourists reported loss of orientation and changes in the human psyche in certain places. Although these cases can be explained by electromagnetic radiation and methane

gases originating from tectonic faults, urban legends continue attracting UFO enthusiasts to these places. (Kezina, 2014)

Some people assume UFO involvement in the still unexplained tragedy, known as Dyatlov Pass Incident of February 1959, when the nine young people were found dead near their tents in strange circumstances. One had a fractured skull, two had damaged chests, and one was missing her tongue. This tragedy could have been explained as a wild animal attack, group panic caused by hypothermia, or a murder. However, most cannot rule out UFO involvement because other hikers from a large distance away that night described seeing suspicious large, orange-yellow spheres in the sky. (Hadjiyska, n.d.) Were those flying saucers the cause of the tragedy, these questions stayed unanswered.

Chelyabinsk Meteorite, on the other hand, is the most documented event, leaving thousands of witnesses (including myself) and material evidence. In February 15, 2013, I was home, when suddenly the strange bright light, much brighter than high beams, blinded me from the window. Wait, I thought, what car beams on the ninth floor! The light turned red, yellow, and ended up striking white. In a few seconds, the deafening sound burst out, and the Earth shivered; I heard some windows broke and the car alarms screamed altogether. Looking outside, I noticed a few thick white lines on the blue sky. People tried to call families, but mobile connection shut down temporarily. Luckily, the meteorite fell into the lake, and nobody was seriously injured. Since it happened just the next day after February 14, there is a joke: "Chelyabinsk romantics are tough: when they promise their sweethearts the moon and the stars for the Valentine's Day, they get it!"

Cultural heritage of the Urals is a unique mix of European, Slavic, and indigenous folklore.

The one of the most prominent authors is Pavel Bazhov, who had written over forty tales on themes of everyday life mingled with fantasy. His collection of tales "Malachite Casket" was

translated into English. The 1946 movie adaptation of his "The Stone Flower" story is available for watching on YouTube with English subtitles. (Ptushko, 1946)

Movie industry in the Urals is represented by Sverdlovsk Film Studio. Based in Yekaterinburg, the company was founded in 1943 by evacuated during the WWII filmmakers. During the decades of operation, the studio has produced hundreds of movies, documentaries, and educational films. The special value of the studio is its newsreel "Soviet Ural," a unique chronicle describing everyday life of that region over many decades. (Bloomberg, 2019) (NetFilm, 2019)

The Ural music bands DDT, Nautilus Pompilius, and Chaif were very popular during 80s and 90s and still perform today. In their songs, they often demonstrated attitudes and hopes of the young people of the post-Soviet times. The top Ural singers Yury Shevchuk and Oleg Mityaev are loved by public for creating warm and lyrical atmosphere with their songs.

The Ural Mountains is naturally rich place with many stories to tell. The region can boast inspiring nature, mineral reserves, breathtaking art, and talented people. Located in both Europe and Asia, the Urals provided a ground for blending these two world cultures uniquely and seamlessly. Locals and visitors can enjoy hiking trails, discovering caves, and swimming in cool rivers and lakes, telling UFO stories around the campfire, while enjoying a company of interesting and open-minded people. The Urals are significant and exciting place worth visiting and learning more about.

## References

- Bloomberg. (2019, April 11). *Company Overview of Sverdlovsk Film Studio Open Joint Stock Company*. Retrieved from https://www.bloomberg.com/research/stocks/private/snapshot.asp?privcapid=226564647
- Cherchintsev V.D., F. M. (2001). Biomonitoring Air Pollution in Chelyabinsk Region (Ural Mountains, Russia) through Trace-Elements And Radionuclides: Temporal And Spatial Trends. Magnitogorsk: Magnitogorsk State Academy of Mining and Metallurgy. Retrieved from https://inis.iaea.org/collection/NCLCollectionStore/\_Public/32/053/32053354.pdf
- Egorov, B. (2018, April 2). Top 10 places in Russia to see a UFO. *Russia Beyond*. Retrieved from https://www.rbth.com/lifestyle/327955-top-places-in-russia-ufo
- Evteeva, L. S. (1990). *Rear to Front: recollections, documents, letters*. Chelyabinsk: Yuzhnyi Ural. Retrieved from https://coollib.com/b/222110/read#t3
- Gordin, M. D. (2019, February 6). Zhores Medvedev and the battle for truth in Soviet science. (S. Haselby, Ed.) *Aeon*. Retrieved from https://aeon.co/ideas/zhores-medvedev-and-the-battle-for-truth-in-soviet-science
- Hadjiyska, T. *Dyatlov Pass Theories*. Retrieved from Dyatlov Pass: https://dyatlovpass.com/theories#ufo
- Kezina, D. (2014, July 19). *The Ural Mountaints: A Mecca for UFO enthusiasts*. Retrieved from Russia Beyond: https://www.rbth.com/travel/2014/17/07/the\_ural\_mountains\_a\_mecca\_for\_ufo\_enthusia sts
- LonelyPlanet. *The Urals in Details: History*. Retrieved from https://www.lonelyplanet.com/russia/the-urals/background/history/a/nar/b7cb7817-f24a-4ae6-b6b4-8c4299ca3d4b/1331692
- NEIS, Nuclear Energy Information Service (Accessed 2019). *Top 10 Worst Nuclear Disasters to Date*. Retrieved from https://neis.org/nuclear-accidents/
- Ptushko, A. (Director). (1946). *The Stone Flower* [Motion Picture]. USSR. Retrieved from https://www.youtube.com/watch?v=tSiBr3ZbfoA
- Rabl, T. (2012). The Nuclear Disaster of Kyshtym 1957 and the Politics of the Cold War. *Environment & Society Portal*. doi:https://doi.org/10.5282/rcc/4967
- Rogers, D. (2015). *The Depths of Russia: Oil, Power, and Culture After Socialism.* Cornell University Press.
- Soviet Ural Mountains 1944-2003 NewsReel. (2019, April 11). Retrieved from Net-Film: https://www.net-film.ru/en/studio-sverdlovskaya-page-1/?search=yasc

UralMines.ru. (2019). Mines of The Urals. Retrieved from https://uralmines.ru/

Yastrebov, Y. V. (2019, March 14). Ural Mountains. *Encyclopedia Britannica, Inc.* Retrieved from https://www.britannica.com/place/Ural-Mountains