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The Reintroduction of Wolves in Yellowstone National Park
By: Arya Bharti

Wolves were an essential key in balancing the local ecosystem in Yellowstone National Park. However, like many other species throughout the world, they were killed off and hunted out of the region during the 1930s . With the wolves gone, their prey benefited immensely, in particular the Yellowstone Elk. Although the Elk were preyed on by other species such as bears, cougars and coyotes, a large amount of predatory pressure was taken off the Elk by the absence of the wolves. This allowed them to flourish and rapidly expand their population. Because of this expansion,. The Elk started to act as grazing cattle which caused some of the unique vegetation to become scarce, impacting the local flora and fauna as well as the ecosystem. The solution to the problem was to simply bring the wolves back, which is exactly what happened in January of 1995 as the wolves entered Yellowstone national park for the first time in 70 years. The wolves' presence immediately began to show promising effects as the elk started to avoid certain areas of the park which allowed vegetation in that area to regrow. But the reintroduction of the wolves didnt just affect the Elk, it changed the whole ecosystem. With the Elk out of some valleys and hills the vegetation in the area started to regrow which also led to the return/ increased population of animals such as birds, otters, beavers, bears, etc. But the wolves also had an extraordinary unintended effect, they managed to positively change the physical geographical land, more specifically they helped strengthen the rivers. As the plants began to regenerate the soil became more firm which decreased erosion and made

rivers more sturdy. Scientists and conservationists were given the chance to witness the rehabilitation of an entire ecosystem as the wolves had a positive ripple effect throughout the environment. However, before they were introduced many ranchers in the area opposed the addition of the wolves as they believed that the wolves would leave the park boundaries and kill off their livestock. But in the end the wolves managed to stay within the park and had an extraordinary ripple effect on the environment and food chain which allowed for the benefit of different species of plants and animals but also for scientists to get a look at how reintroducing a key part of the ecosystem affects it rather than taking it out.

What Crime Scene Investigation Method is The Most Reliable?

Sruthi Anne

To help solve crimes, forensic scientists use different methods when processing evidence. The most frequently used CSI methods include, fingerprint analysis, DNA analysis, ballistics, blood spatter analysis, hair analysis, and foot and tire track analysis. In the past, fingerprints have been considered infallible and 100% accurate; however, this may not actually be true. The purpose of this research is to figure out which method, if any, is the most reliable when solving a crime.

After some research I found that the most reliable CSI method is DNA analysis. Fingerprint analysis, which in the past has been thought to be the most reliable is actually not. According to a 2009 National Academy of Science (NAS) study, no peer-reviewed study has ever been done to prove that no two fingerprints are the same, therefore it can never be 100% certain that a fingerprint left at a crime scene is the only match to a suspect's fingerprint. The second most reliable CSI method is forensic toxicology. Bite marks, ballistic, tire/foot tracks, and blood spatter analysis are not as reliable as DNA and toxicology.

DNA analysis is the most reliable CSI method because it was created for science and medicine. Other methods of CSI, such as fingerprints, and hair analysis were created by law enforcement, for the purpose of solving crimes, making them not as reliable. Many people have been wrongfully convicted of crimes they did not commit because investigations relied on unreliable methods rather than science.

https://www.pbs.org/wgbh/frontline/article/forensic-tools-whats-reliable-and-whats-not-so-scientific/#:~:text=DNA%20Analysis%20is%20the%20Gold%20Standard&text=Since%20his%20%E2%80%9Ceureka%20moment%2C%E2%80%9D,all%20of%20the%20forensic%20tools.
https://www.ncjrs.gov/pdffiles1/nij/178280.pdf

Historical Reflection: 1812 Burning of Moscow
By Aaryan Kumar

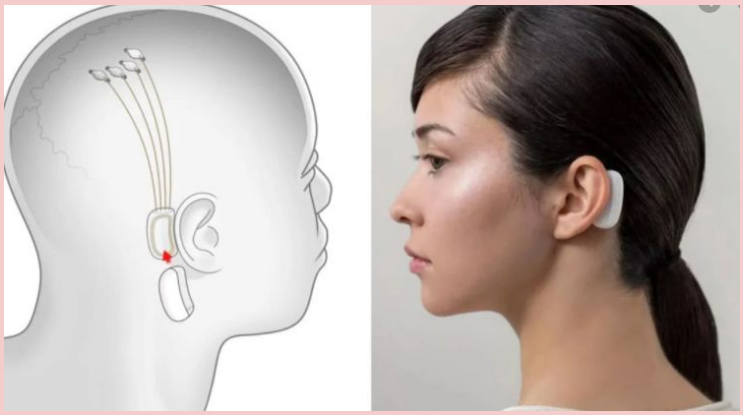
There are events in our history that come to define the identity of a nation and the resilience of its people. For Russia, the burning of Moscow is one of them, and it was immortalized in history. In June of 1812, Napoleon invaded Russia with what was, at the time, the largest army the world had ever seen at around 685,000 men. The "Grand Armee" as it was called, won battle after battle in Russia, culminating in a deathly and desperate struggle all through Russia. Before Napoleon could march on Moscow, he had to fight in The Battle of Borodino, the bloodiest battle in all of his wars. This battle is also considered the most brutal battle with it being described as "a walk into Hell". What followed was one of the most memorable moments in Russian History. Rather than be humiliated and give Napoleon a base where he could resupply his army, Emperor Alexander I ordered the city burned to the ground and to burn any food supplies that could not be taken with it. It is a testament to the will of a nation that it was willing to burn its own capitol (St Petersburg was the Russian Capital at the time but many regarded Moscow as it's spiritual and true capital). The burning of the capitol marked Napoleon's infamous retreat and the first decisive campaign that had been a victory for Napoleon's enemies. This event would forever change the spirit of Russia as it was willing to fight bloody battles, witness it's country burn and to give up enough lives all so that a foreign invader could be expelled from it's territory.

Elon Musk's Neuralink: How far away is it from becoming a reality

By: Harvik Kolla

Elon suggests everyone to get a brain implant — the brain-machine interface created by his company, Neuralink. He claims it will be able to solve any number of medical conditions — including paralysis, anxiety, and addiction.

Machines that connect to the brain have been around for a long time, specifically 2006. Elon's Nueralink builds on this technology by having thin wires that 'insert' into the brain to translate these electrical impulses into a language that computers can interpret. Elon does not want to stop here, though. He wants to go all the way : to make way for telepathy and even interactions between brains and artificial intelligence.



Elon did live stream an event where he presented a pig as a demo. This event demonstrated how the prototype of neurolink would work. Immediately after this event went live, Elon received much hate and controversial statements. Many people started to question the ethics behind this stride in technology as it does seem a bit intrusive to allow machines to read and maybe even treat our brains.

At our present time, these goals are very ambitious. They are out of reach and don't seem to happen anytime soon. Scientists need to learn far more about the brain and how it works for any of those ideas to become a solid innovation. The brain is still very ambiguous, and the neurological causes of things like anxiety and addiction are still unclear.

Even though this may not be possible in a closed time frame, there are still many technological strides being innovated which strive to better the lives of humanity, so keep a look out for those as they have the ability to transform the world as we know it!