## CLIMATE CHANGE

# SIBERIA: POLAR BEARS SUSPECTED TO HAVE CONTRACTED A VIRUS FROM THE PERMAFROST

Wednesday 10th of January, three inhabitants of Khatanga, a little town of the extreme north of Siberia in Russia, have caught sight of a couple of polar bears. It may seem trivial, but this unusual event might be the first sign of a great catastroph.

#### Dangerous polar bears

While they were peacefully taking a walk on a cold afternoon, Sacha Vassilievki and his two friends Dmitri Bolkonski and Anastassia Bagirova had no idea of the macabre discovery they were going to make. At barely four kilometers of Khatanga, two polar bears were going in circles, and often stopped themselves to furiously scratch the frozen ground or to hurl themselves at each other to bite their throat.

Sacha Vassilievki, zoologist who studied in Moscow, immediatly saw that there was something wrong. « I am not a polar bear's specialist, but that behaviour was not normal. Polar bears never come near to cities, and those two were really close to Khatanga, even if they were searching food, » he said. Besides, polar bears are solitary animals, and their reproduction period is in summer, not in mid-January. « We knew it was dangerous, but we came closer. We had to know what was going on, » explained Anastassia Bagirova.

The three friends decided to discreetly approach the bears and saw something that scientists identified as a unknown infection's symptom: red teeth and skin falling to bits.

### The melting of permafrost

The extreme north of Siberia is known for its temperatures: an average of -40°C all the year, the permafrost is part of the landscapes. But with climate changes, the permafrost is thawing, releasing biological and chemical materials that come from ancient ages. « Zombie viruses » is the name of those microscopic viruses, which were sequestred in the ice for hundreds of thousands of years.



If bacterias are already suspected to have been released, with the tragic and unexpected Bacillus anthracis epidemic, that killed a baby and made hospitalized tens of persons in Siberia in 2016 ; viruses were until now not considered as a true threat. Indeed, the ones that have been found and studied. such Pandoravirus talik, Cedratvirus duvanny or Pithovirus mammoth, the « giant viruses », are normally not able to infect mammals and so are not an immediate threat for men. But there are many others that have not been discovered yet.

« The problem is that nobody take it seriously, » say Amanda Smethner, virologist and professor in Oxford. « When we talk about viruses that date back to almost 48,000 years, people and politicians think that it is impossible that viruses that old could still be effective. But experiences proved that yes, some of them can still be dangerous, even if they are in an « asleep » state. ».

With winters less and less cold, the polar animals will be the firsts to contract those viruses because of the permafrost's of The case Khatanga's polar bears is still studied in laboratories worldwide, the shreds of skin they left behind analysed with precaution. Even if the animals disappeared after their strange appearance, inhabitants Kathanga and all the region's cities have been told to pay attention and stay home during the next few weeks. Those polar bears have not be confirmed to carry an antique virus, but it is one of the main hypothesis of the scientific community. If it is confirmed, it could be extremely dangerous, because if mammals can contract that virus, human being is not safe from it neither.

#### FREJAFON Lise, 1b Projet Détox l'info, paragraphe en français

Pour réaliser ma « fake news », j'ai procédé en deux étapes : la première étant la recherche de bases et faits réels sur lesquels m'appuyer ; la seconde étant la rédaction sous forme d'article de presse. En effet, je n'ai pas eu besoin de beaucoup de temps pour chercher mon sujet : je suis partie du sujet de la fonte du permafrost, à cause d'un article que j'avais lu peu de temps auparavant par hasard, puis l'histoire un peu effrayante des virus et les prétendus ours polaires sont venus ensuite. Même si mon article se base sur des éléments concrets, tels que les localisations, les informations sur les ours polaires ou les différentes recherches sur les « virus géants » ainsi que l'épidémie qui s'est déroulée en 2016 ; beaucoup d'autres sont de la pure fantaisie. Tous les intervenants sont inventés, et le récit en lui-même l'est évidemment aussi. J'ai personnellement apprécié faire ce travail ; faire un faux article d'apparence véridique car correspondant à l'actualité est une bonne expérience.