

# Does human activity affect snow quality?

Montiel V., Berlöf- Bustamante M., Ebeling, M., Bayarnemekh N., Larsson T., Dahlqvist V., Olsson J., Zanzi L., Lindeman E., Dalman I., Klaar E., Tukler K., Wennberg- Thelin S., Olofsson L., Gudfasson, P.,  
Nannaskolan Uppsala, Sweden.

## **Abstract**

It is known that human activities affect both water and air quality in a negative way. Sweden is well-known for its nature and green, renounced areas, but there are as well more concentrated cities like Uppsala, where we live. Our aim was to analyze the effect of this population on air and snow quality. For this we tested the pH and conductivity in new fallen snow, to get an idea of the amount of CO<sub>2</sub> and amount of salt in our Swedish precipitation.

To test this, we waited for it to snow so all samples were collected at the same conditions, and the same kind of snow. Using sterile containers, we collected 28 samples from throughout Uppsala city. Then once the snow had melted, we measure both the conductivity and pH.

Our result shows that, compared with sterile water and tap water, the snow was relatively acid but has a low concentration of salt. But we did not find significant differences between the samples depending on the area where they were taken. We can conclude that the effect of population affects in a similar way the air quality in the city and the surroundings.