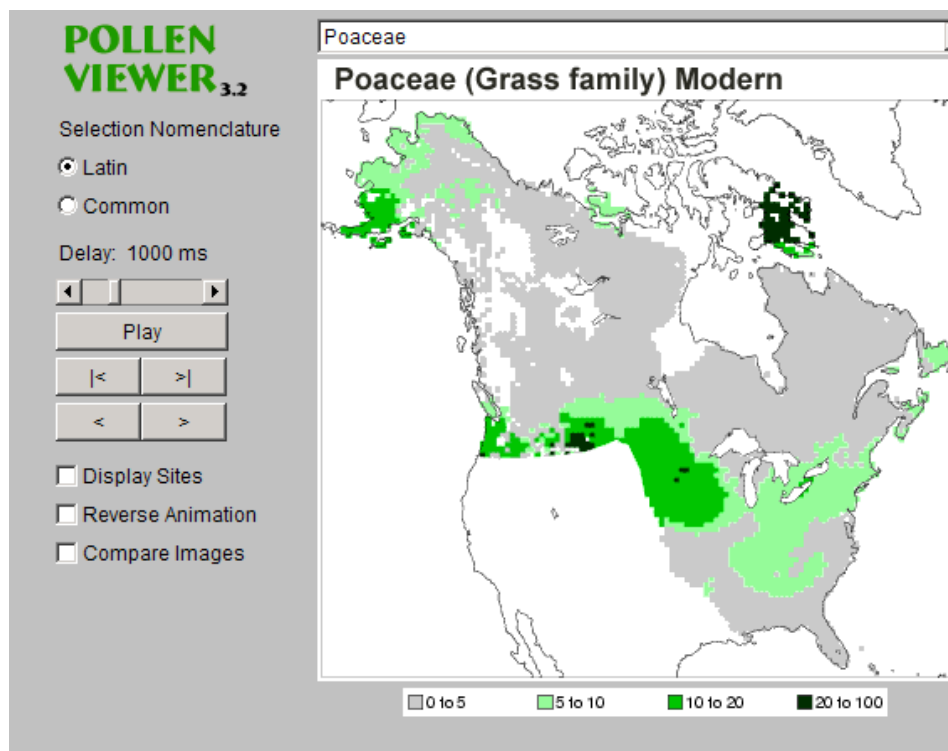


Identifying and Counting Pollen Examining the Past with *Pollen Viewer*

How could anyone make a map of plants from 15,000 years ago? Why are most scientists convinced of the accuracy of these maps? The answer is that spore and pollen specialists called palynologists use fossil pollen to reconstruct vegetation maps from the past. They sample the sediments at various depths over a large area and then identify and count the different kinds of pollen.

Here is a modern day view of grasses in North America. The darker the green, the more kinds of grasses are found.



Go to the *Pollen Viewer* simulation and select *Poaceae* (the grass family) and play the simulation. www.ncdc.noaa.gov/paleo/pollen/viewer/webviewer.html

1. How has the range of grasses changed over the past 15,000 years?

2. Has the diversity of grasses changed as well?

3. What factors might contribute to these changes?

4. Do you expect the range of grasses to change in the future? Explain.

5. How could you use the plant simulation *Pollen Viewer* to talk about global warming?