

Essay on acid rain effects on monuments

[Linguistics](#), [English](#)



Acid rain is defined as a mixture of dry and wet deposition from the atmosphere that contains higher amounts of Sulphuric and nitric acids (Sen 2012). It has adverse effects on monuments due to its degradation effect. In fact, it highly degrades those stone monuments built out of marble or limestone. Therefore, marble or limestone rocks should be of most concern because they have close-formed matrix which is predominantly made of calcium carbonate which easily react with the acid rain (English Heritage). Consequently, pock marks are caused in marble structures.

Equally, weathering is basically a process of geological denudation. The degree or the amount of weathering and the rate at which it occurs can be evaluated by first considering the underlying geology of a given landscape. This is because the vulnerability of rock structures to weathering differs. Also, the amount of weathering can as well be evaluated by investigating climate of the region. Wetter regions provide most precipitation for rock breakdown while higher temperatures of tropical climates cause chemical weathering (English Heritage). Different signs of chemical weathering need to be identified as well. Such signs as rusting of rock faces through oxidation needs investigation. Lastly, any instance of exfoliation should be monitored. This is because it removes strips of material from rock masses which results concentric joints weathering. Basically, the composition of the stone, environmental condition and physical conditions will help in determining the rate of weathering.

Some of the interventions used to prevent negative impacts of acid rain on cemetery's monuments include covering the monument with an artificial coating that is protective in nature. Besides, the monument can be made of

the polymer which is weather resistant. Monuments can also be painted so that protection is provided to the underlying materials (English Heritage).

Work cited

English Heritage. Caring for Historic Graveyard and Cemetery Monuments. Web. 9 Sept. 2012.

Sen, D. The Effects of Acid Rain on Monuments. 2012. Web. 9 Sept. 2012.

Weathering. Web. 9 Sept. 2012. http://www.stonecaretechniques.com/8_m.htm