Amphibians of west africa

Science, Biology

2015 rainfall

2015 minimum rainfall is in June with 49mm

2015 Maximum rainfall is in February with 308mm

Average rainfall =

(279+308+274+247+238+49+65+76+88+102+204+221) /12

= 176. 25mm

1965 rainfall

Minimum rainfall is in June with 51mm

Maximum rainfall is in February with 310 mm

Average rainfall is =

(281+310+276+249+240+51+67+78+90+104+206+223) /12

= 181. 25 mm

Minimum rainfall is in June with -1 mm

Maximum rainfall is in February with 258 mm

Average rainfall is = (229+258+224+197+188+-

1+15+26+38+52+154+171) /12

= 129. 25 mm

The trends clearly show that there is a a continuous and consistent decrease of rainfall as the years goes by, this is shown by the averages above with the highest rainfall being received in 1965, there is a decrease in 2015 and also a decrease in 2065. When the minimum and maximum of each year are analyzed, still 1965 had the highest mount of rainfall compared to 2015 and 2065. On the other hand 2065 had the lowest maximum and minimum.

The declining of the rainfall and climate change in general has tremendous

effects on the arbitrament of the amphibians and therefore may lead to decrease in the general population of the amphibians. Moreover, climate change and specifically the decrease in the amount of rainfall may lead to extinction of some of the specie of the amphibians.

Red rock conyon toads retrieved from http://upload. wikimedia. org/wikipedia/commons/9/9b/Red_rock_canyon_toads. jpg

Hibernating frog.

Retrieved from http://www. google. com/imgres? imgurl= http://gb. fotolibra. com/images/previews/41690-hibernating-frog-illustration. jpeg&imgrefurl= http://www. fotolibra. com/gallery/collection/6742/zmkal09-reptiles-and-amphibians/&h= 410&w= 624&tbnid= DyJollNii6mfM:&zoom= 1&docid= MaihHE0FlQdJtM&ei= ov4TVbGBILPY7Abv6oGwCA&tbm= isch&ved= 0CB4QMygBMAE

Summary

Climate change and specifically the rainfall shortage has led to decline in biodiversity of population of different organisms, including the amphibians in different parts of the world including West Africa (Andrew R, et al., 2010). Rainfall decrease or shortage leads may affect survival and growth of the amphibians by altering the availability of food, or changing the preditor – prey relationships which may lead to decrease in amphibians population or extinction of a species that is poorly adapted to adverse environments (Bielby, Cooper, Cunningham, Garner, & Purvis, 2008). During the high rainfall season, amphibians in the west Africa normally mate, with the decreasing rainfall season, the mating season of the amphibians may be

altered or even lost if the rain is inadequate and this leads to poor reproduction, which in turn leads to decreased population and my eventually lead to extinction of some species of the amphibians in the region (Parker, 1936).

The majority of amphibians in west Africa are typical forest specialists, however, some of them can tolerate disturbed forest situation. Only very few amphibians in this region have a preference for savannah and farm bush habitats. Rainfall pattern change, therefore changes the natural habitat of the amphibians in the West Africa and more specifically the majority which inhabit the forest. Destruction of the forest due to lack of rainfall will lead to the death of the amphibians and migration of them to a different location where the habitat can be found (Annika & Mark-Olive, 2007).

Climate change can also alter pathogen-host dynamics and greatly influence how diseases are manifested. Changes in climate can interact with other stressors such as UV-B radiation and contaminants (Rödel & Agyei, 2003). The interactions among all these factors are complex and are probably driving some amphibian population declines and extinctions.

Reference list

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