

Answer the question



**ASSIGN
BUSTER**

Q Palatable look-alikes of dangerous species are not protected from predators in places uninhabited by the dangerous species. Q. 2. A. Degrees Latitude on world map

Q. 2. B. Proportion of total attacks on ringed replicas

Q. 2. C. Proportion of total attacks on ringed replicas

Q. 2. D. Elevation of land from sea level

Q. 2. E. Proportion of total attacks on ringed replicas

Q. 3. A. Lower

Q. 3. B. Lower

Q. 4. The results in Figure 1a agree with the prediction 3a under the hypothesis. It can be seen in figure 1a that the proportion of total ringed species attacked increases with increasing latitude. Different previous studies have shown that coral snakes become increasingly rare as the latitude increases. Thus, it can be said that the increasing absence of coral snakes causes increasing attacks on replicas as predicted in 3a.

Q. 5. The results in Figure 1b agree with the prediction 3b under the hypothesis. It can be seen in figure 1a that the proportion of total ringed species attacked increases with increasing elevation. Different previous studies have shown that coral snakes become increasingly rare as the elevation increases. Thus, it can be said that the increasing absence of coral snakes causes increasing attacks on replicas as predicted in 3b.

Q. 6. Evolutions suggests " survival of the fittest". This means that every species will try to evolve to a form that is best suited to survival, or it will become extinct. From my knowledge of evolution, I can understand why the pigmentation pattern of kingsnakes evolved to that of coral snakes. The reason is that as kingsnakes are non-venomous and palatable, they would

have been extinct by now due to the ecology of predation. But they did not become extinct. This can be explained only by the fact that a certain population of the kingsnakes started replicating the pigmentation pattern of the venomous and non-palatable coral snakes, just through the primal instincts of evolution. Slowly as the rest of the pack started becoming extinct, the evolution took a faster pace. Also, it was continued in the shape of reproduction of the evolved species and continual changes to mimic the coral snakes in the best way possible.

Here, it is not suggested that a certain group of kingsnakes evolved suddenly to the color pattern that is observable now; rather this took place in continual steps of natural selection through which small but gradually observable changes kept taking place, leaving behind the no-mimics stage and evolving slowly to a near perfect mimicry.

It is a known fact that the pigmentation pattern on kingsnakes is not a perfect match of coral snakes, but who is to say that this will remain so? We might be present right now at a time when the evolution is still occurring, and a few centuries from now, the pigmentation pattern might evolve to perfect mimicry or take a new turn of its own.