

Reading Passage (215 words): The Hyena

Over the course of evolutionary time, the family Hyaenidae has contained roughly 100 different species, occupying a wide array of ecological niches. However, the vast majority of these species exist today only in the fossil record. Although most people think of hyenas as large, dog-like creatures with adaptations for cracking bones, this definition is inadequate because some extinct hyenas were much more like modern mongooses or civets than dogs, and many ancient forms had no special ability at all to crack bones. In fact, hyenas are more closely related to cats than to dogs. These animals which live in African and compete alongside the mighty lion for food have three very interesting traits.

Firstly, spotted hyenas are hermaphrodites meaning that they have both male and female sex organs. Secondly, it is not possible to distinguish a male from a female without dissecting them. Thirdly, Hyenas only eat carrion, which is the decaying flesh of dead animals, which is why Hyenas so often compete with the lion for food. The Lion uses its superior hunting skills to take down its prey, something that the Hyena would not be able to do. But once the prey is dead, then the hyena will aggressively work in a pack to take the dead carcass away from the lion.

Writing Prompt: How does the information in the lecture disagree with the points made in the reading passage?

Lecture (437 words): Three Myths about the Hyena

Despite what you may have read, Hyenas are often one of the most misunderstood animal species in Africa. In fact, the three claims that the author makes about hyenas are simply not true. I do not know how else to put it.

Hyenas are definitely not hermaphrodites. This myth undoubtedly arose when people noticed that hyenas with large pendulous udders (indicating they were obviously females) could suddenly develop impressive phallic erections such that they also looked like males. The female's clitoris is enormously elongated to form a fully erectile pseudopenis through which she urinates, copulates, and gives birth. Furthermore, her vaginal labia are folded over and filled with connective and fatty tissues to form structures that look very much like the male's scrotal sac. However, even though the female hyenas appear to have penises, they are actually vaginas. Therefore, the claim that they have both male and female sex organs is false.

Furthermore, it is in fact possible to distinguish male from female spotted hyenas when they are at least 3 months of age. Although it is virtually impossible to identify an individual's sex based on its body size, the sex of a spotted hyena can be distinguished based on the sexually dimorphic glans (tip) of the phallus when the phallus is erect: the glans of the female's phallus is blunt and rather barrel-shaped, whereas the male's is pointed and has a distinct constriction immediately above the glans. Adult spotted hyenas can also be sexed based on other morphological and behavioral cues. As adults, male spotted hyenas have distinct testes in their scrotal sacs which can be seen when a male flicks his tail, for example, to whisk away an insect. By comparison, the pseudo-scrotum of the female contains only fat and connective tissue, such that its lobes are very small in comparison to the male's testicles. From this explanation, we can see that hyenas do not have to be dissected in order to determine their sex.

In conclusion, brown and striped hyenas do eat a fair amount of carrion, but they supplement this with small vertebrate prey they catch themselves, as well as fruits and invertebrates. Aardwolves are diminutive, delicate hyenas that feed exclusively on ants and termites. Although most people imagine spotted hyenas to be skulking scavengers who feed on the scraps left by more glamorous predators like lions and leopards, they are in fact excellent hunters that feed mainly on large ungulates they kill themselves. The claim that hyenas only eat carrion and are not able to catch their prey is also inaccurate as my explanation about their eating and hunting habits so clearly demonstrate.