

The Mutualist(?) Relationship Between Rhino and Oxpecker

The project is titled Owen the Oxpecker; it is a short illustrated story of a strained relationship between two organisms. The relationship in question is one of the relationships we learned about over this semester. Owen the oxpecker and his best friend Rachel the Rhino shared a mutualist relationship, or so they thought.

The story briefly summarizes the oxpecker's habitat and the other animals it interacts with on a daily basis. The story also explains in illustrations more than in words, exactly what the oxpecker's role is in the relationships he has with other large grasslands mammals. That being he eats the ticks and other bugs that live in/on their hair, fur, or skin. The story begins as a friendly narrative but quickly turns dark as the oxpecker's true nature is revealed. Oxpeckers eat the ticks and bugs off of the mammals because the pests usually contain within their body the blood of the animal on which they resided. Oxpeckers have a blood thirst, and when an animal has a cut, sore, or scab on their skin the oxpecker will skip right past the bugs and peck and eat the flesh and blood of the actual animal.

This blood thirsty quality of the Oxpecker brings into question whether the relationship between it and the grassland mammals is exactly "mutualistic," this idea is what I hoped to illustrate in my short story. The mutualist relationship is intriguing throughout the animal kingdom, but the relationship between small birds and larger animals has always fascinated me. For instance, when crocodiles lie with their mouths wide open and small birds dart in between their teeth. When I found out that the relationship between the oxpecker and its mutualist partner was less than equal it stimulated my creativity and interest.

Annotated Bibliography:

Adams, Martha. "Rhinos & The Oxpecker Bird." . Demand Media, n.d. Web. 4 May 2014. <<http://animals.pawnation.com/rhinos-oxpecker-bird-4054.html>>.

This article describes the relationship between African rhinos and oxpeckers. The relationship was once thought to be commensal or mutualist but has recently be discovered to be unequal and favor the oxpecker over the rhino. This article also describes other animals that are in a symbiotic relationship with rhino such as cattle egrets. Where cattle egrets do not have more benefits from the relationship as the oxpeckers do.

Bucher, Douglas. The Biology of Mutualism. New York: Oxford University Press, 1988. eBook. <http://books.google.com/books?hl=en&lr=&id=dWuQS_3F2P0C&oi=fnd&pg=PR9&dq=mutualism&ots=tPuQUzi9U&sig=mtm1DapeS35DtPC0F5U1UCL9a0M>

The book describes in immense detail the ins and outs of what makes a mutualistic relationship. The interdependence of organisms in any given environment and there importance. The book also gives details on the history of mutualism and commensalism in science. It touches many topics of ecology, such as evolution, environmental stability, and the effect commensal or mutualist relationships have with third party organisms.

Connor, Richard C. "The benefits of mutualism: a conceptual framework." Biological Reviews 70.3 (1995): 427-457.

The title of this work is very self explanatory. It is an essay which describes not only the benefits of mutualist relationships but also clearly explains the characteristics of different mutualist relationships; such as how long they last and how many parties are involved. The essay focuses on harvey mutualists, pollination mutualists, seed dispersal mutualists, and even human to livestock relationships.

"Partners for Life." Nature. New York: 2002. <<http://www.pbs.org/wnet/nature/enemies/partners.html>>.

The is a description of a PBS television program called Nature. This specific show is called Intimate Enemies and it highlights the relationship between the oxpecker and buffalo. It describes the role of the oxpecker in the relationship, and how one might consider it to be commensal or mutualistic. It describes what the oxpecker eats on the buffalo. It also describes the oxpeckers aiding the buffalo by warning them if a predator is near.

Weeks, Paul. "Red billed oxpeckers: vampires or tickbirds?." Behavioral Ecology. 11.2 (2000): 154-160. Web. 14 Apr. 2014. <<http://beheco.oxfordjournals.org/content/11/2/154.full.pdf.html>>.

This scientific paper describes the effects oxpeckers have their mutual partner. The researches did research on the amount of ticks present when oxpeckers were and weren't present. The researches also did studies on the wounds and the effect the oxpeckers have on them. The results shown that oxpeckers may do slightly more harm than good to the animals.

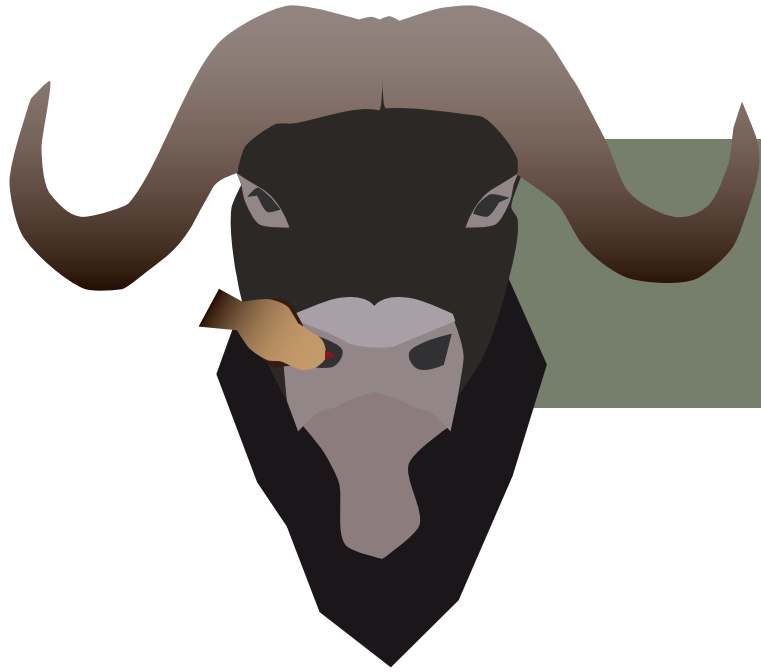
Owen the Oxpecker

A tale of friendship and awakening...



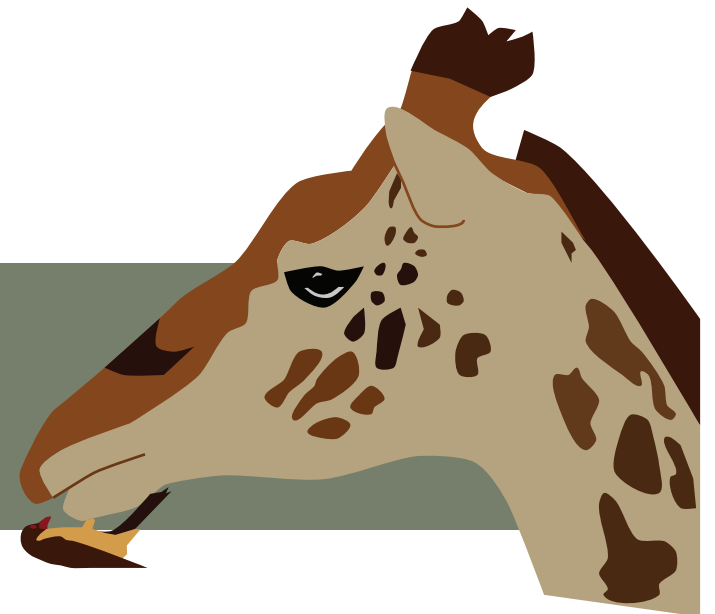
Owen the oxpecker was known for his quiet demeanor and non confrontational personality.

Despite his shy disposition Owen had many friends across the grasslands of all shapes and sizes.



He enjoyed having tea with his friend Wilma the water buffalo

And shooting the breeze with Gerald the Giraffe

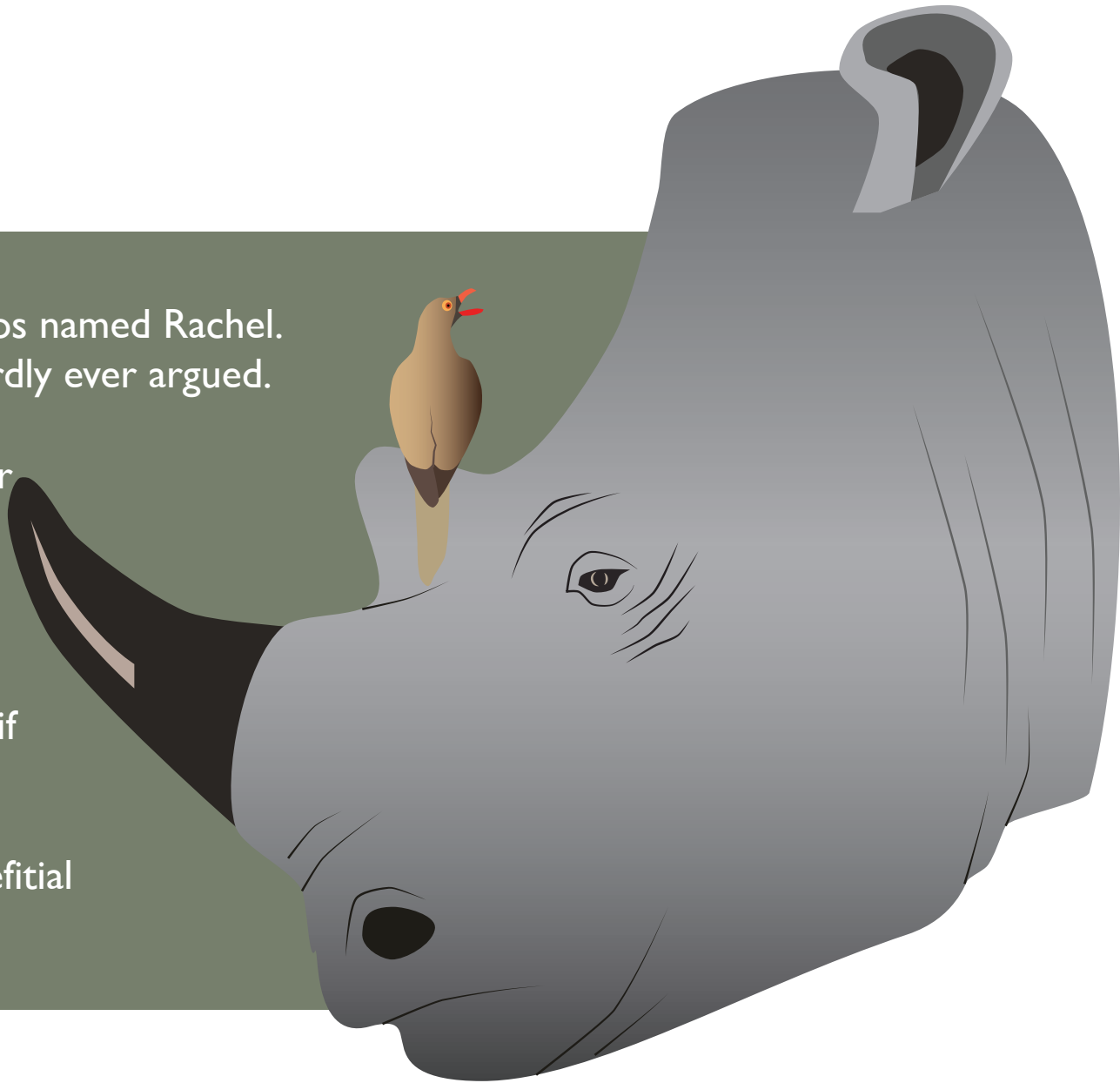


But Owen's best friend was a Rhinoceros named Rachel. They had been friends for years and hardly ever argued.

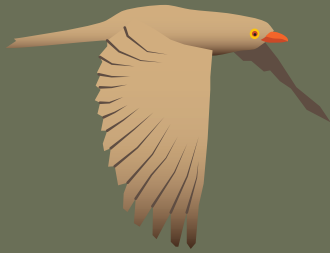
Owen likes to help Rachel with her rampant tick and mite problem, and in return Owen gets a free tasty meal

Rachel was very grateful to Owen for eating the nasty bugs. He warns Rachel if any hungry predators are approaching.

One could say they had a mutually beneficial relationship. That is until one day...

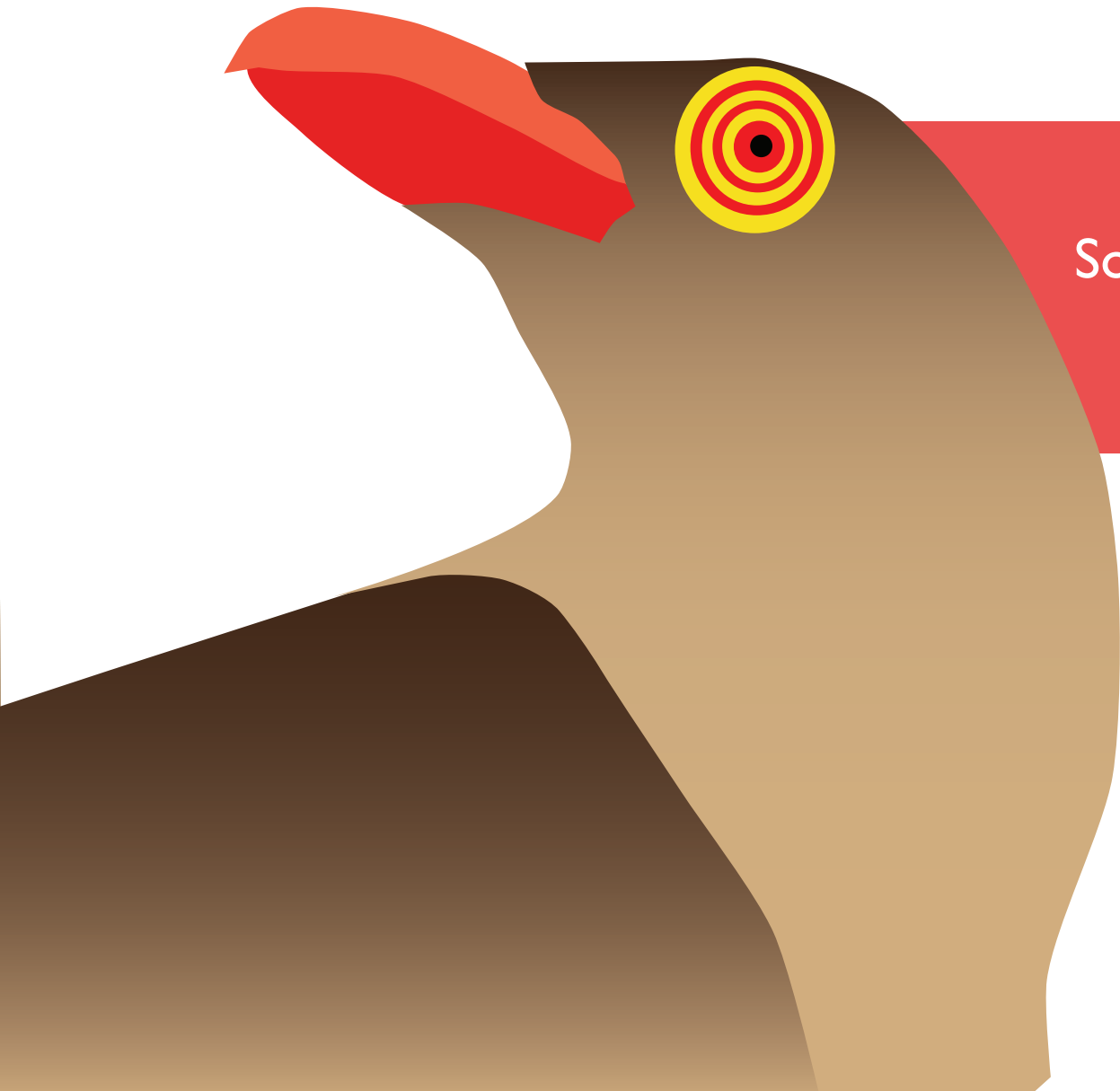


Owen realized something about Rachel was different as he flew closer to her watering hole. Rachel told Owen she had an altercation with another Rhino and was suffering from the some minor cuts and bruises.



Owen expressed his worries and sympathy to Rachel and began his daily routine of ridding Rachel's hide of pests. As Owen neared one of Rachel's wounds he smelled her fresh warm blood... when....





Something came over him!

Instead of pecking the ticks and other pests off Rachel he pecked Rachel's flesh and blood!



-Their relationship strained after the incident.
But Rachel still allows him to feast on her
pests as long as she is cut free...