

Ligers, Tigons, and...hybrids? Oh my!

By Rebecca Bracken

The thought of running into a liger in the wild might make you want to click your heels three times and go home, but meeting a liger might actually be an interesting experience. You'd be seeing an animal that never exists in the wild, but is a product of captive breeding. In fact, many hybrids are.

Hybrids are the result of two different species mating, which doesn't happen often in the wild. It's thought that around 10% of all living lifeforms are able to hybridize, but that doesn't mean it occurs. More often than not, when two different species mate, the resulting hybrid is sterile, meaning it cannot breed and create more hybrids. But there are some amazing wild animals that not only hybridize, but their offspring can successfully produce young as well!

One example of this in the birding realm is the Brewster's and Lawrence's Warblers. These warblers are hybrids of Golden-winged Warblers and Blue-winged Warblers. The interesting tidbit here is that even though the parent species are known, the offspring may fall into either Brewster's or Lawrence's, all based on the genetic makeup the offspring receives from the parents. Brewster's exhibit what are considered the dominant traits, while Lawrence's exhibit the recessive. Both hybrid species can breed, but generally mate with an individual of one of the original parent species, not another hybrid. The young of these hybrids can look like the original parent species or have a mix of characteristics that clearly distinguish them as a hybrid.

Since it is fall migration, and one of our favorite migrants is the Ruby-throated Hummingbird, here's a hummingbird hybrid example. I recently learned that when Ruby-throated Hummingbirds and Black-chinned Hummingbirds breed, the hybrid young they create often have pink gorget (throat) feathers! When I recently had the opportunity to band one (under federal and state permits), I didn't know what it was. The pink reminded me of a Calliope Hummingbird, but it was the size of Ruby-throated. I was very confused! There is an area through central and west Texas, where the Ruby-throated and Black-chinned ranges overlap, where hybrids are likely. I also learned that these hybrids can breed with either pure Ruby-throated or Black-chinned, but interestingly, they seem to mate more with Black-chinned.

Here's a non-bird example, for the other wildlife enthusiasts. Ever heard of a grolar or pizzly bear? A grolar bear is a hybrid created by a male grizzly bear and a female polar bear. A pizzly bear is a hybrid from a female grizzly bear and a male polar bear. We don't normally think of grizzlies and polar bears living in the same areas, but due to habitat changes they often do now. Pizzlies and grolars are capable of mating with grizzlies and polar bears, as well as other hybrids. Ligers and tigons are similar, in that ligers are created by a male lion and a female tiger, whereas a tigon is the offspring of a female lion and male tiger. Interestingly, in this case, a male liger is generally sterile while a female liger is able to mate and produce young.

All in all, hybrids are a really interesting subject for researchers. There are many questions about them, as only very similar species should be able to hybridize. Hybrids can be sterile or fertile, but when they are fertile they seem to have fairly rigid mate preferences. They may look incredibly different, or incredibly similar, to their parents. As we continue to develop research techniques using genetics, I think we will make some really interesting hybrid discoveries!

Photo by Rebekah Rylander. Caption: a hybrid of Ruby-throated and Black-chinned Hummingbirds.