



Arizona's Raptor Experience, LLC

March 2019

~Newsletter~

Greetings from Chino Valley!

We hope you are well and enjoying the first signs of spring. The snow has melted, the songbirds are singing and all the moisture we've had this winter brings promise of a flower filled landscape this year.

Hopefully this spring will also be filled with lots of bees, baby quail and bunnies. The Bald Eagles that nest a few miles from us appear to have young that they are tending in the nest!

We recently went to the nest site to see if the young were visible yet (they are not) and had a conversation with our neighbors about threats to the young – years ago one young eagle was electrocuted at this site. Thankfully, the powerlines now have non-conductors over them for the eagles. This got me thinking about threats to birds of prey...hope you enjoy this issue.



Burrowing Owl

P. Schnell photo

Who Preys on the Predators?

Birds of prey are called apex predators. They occupy the top of the food pyramid. One would think that being in that position would make them safe from predators. It does not. Birds of prey are vulnerable not only to terrestrial carnivores and omnivores, but to other birds of prey as well.

Raptors are likely to be at the greatest risk of predation when they are in the nest or just after leaving the nest. Typically, a female raptor will stay and defend her nest while the male hunts to provide food for her and eventually for the young. Even so, egg predators like raccoons, snakes, squirrels, rats and corvids (jays, crows, ravens) can sometimes steal eggs from nests, typically from smaller raptors.



Burrowing Owl owlets stay near burrow entrances to escape predation. P. Schnell photo

Raptors that nest on the ground or in burrows may be at increased risk of egg predation. However, there are strategies to protect the nest. Snowy Owls, for example nest on mounds in the tundra that are visible for miles around, but also provide a good vantage point to see who is approaching. Still, these large white birds might seem like a beacon for predators, but they are formidable opponents and only the boldest of predators would do battle with them over eggs or young. Even so, arctic fox, arctic wolves and Skua (large seabirds) are known nest predators of Snowy Owls.

Northern Harriers also nest on the ground among the tall grasses in marshy areas.

Unlike the Snowy Owl, part of the Harrier's strategy in protecting its nest is hiding its location. This is accomplished during incubation, and when the chicks are very young, by food exchange away from the nest. When the male Harrier has captured prey, he flies over the general nesting area and calls to the female. She will walk on the ground away from the nest before she communicates to him for the food exchange, thus avoiding exposure of the nest location.

Once the eggs hatch, chicks of some species are lost to siblicide. The competition for food begins immediately, and larger chicks will kill and eat their younger siblings. Asynchronous hatching produces young of different ages, and those hatching first have a little bit greater size advantage. Also, if food is scarce males in the nest are sometimes killed by their larger sisters.

Interesting Fact

Siblicide is also known as Cain and Abel Syndrome. American Kestrels and Golden Eagles can exhibit this behavior, even without a shortage of food. The larger chick prevents the smaller from getting food delivered by the parents and will peck the younger chick and even force it to the edge of the nest where it is then pushed out. The parents make no effort to interfere with this behavior.

Young can also be taken off the nest by aerial predators. Eurasian Eagle Owls have been filmed on trail cameras taking large buzzard chicks (buzzards are a group of buteonine hawks in Europe) off the nest at night.

Upon fledging, young raptors face a whole new set of challenges. Although no longer confined to a nest, their first landing is sometimes on the ground. Young owls are very good climbers and get back into the tree quickly, but in developed areas they are often caught and killed by domestic cats as are kestrels. **Keep your cats indoors!!**

Even as adults raptors face predation - especially small raptors. American Kestrels are caught and killed by bird hunters like Cooper's Hawks. Small owls are killed by larger owls. Eagle Owls prey on other owls and hawks. Golden Eagles prey on smaller raptors. Many falconers have lost falconry birds to Golden Eagles who kill their trained bird to steal its prey captured during the hunt. Terrestrial predators like fox, coyote, wolves, mountain lions, bobcat, etc. can all be a threat to birds of prey on the ground.

Keeping Owls Safe During an Owl Prowl

Owl prowls are a great activity that let you experience the sound, and if you're lucky, the sight of an owl in their habitat at night. Many guides will play the calls of small owls to get them to call back, which they often do. But be careful, with each response they are advertising their position. Larger owls will use that information to find a meal. Also, for a successful prowl, don't begin with the calls of larger owls...after that small owls will choose not to answer.



Like any other prey species, raptors have evolved some defenses against predation. Once seen, a predator is less likely to be successful capturing it's prey. Small raptors like American Kestrels (seen here), Pygmy Owls and others have ocelli, or "eye spots" on the

backs of their heads which may aid in deterring predators. Another use of coloration on feathers is of course, camouflage. Blending in to the background not only keeps predators from being seen by prey, but it can also help them to evade their own predators.

Sadly, the biggest threats to birds of prey come from things they cannot adapt to quickly. Humans develop what was once natural habitat and erect windmills they cannot avoid in important migratory paths. Raptors are killed by cars, windows, powerlines, cell towers, lead and so many other human-made things...

So, what can *you* do to help? Put up a Kestrel nesting box! Leave dead trees standing to provide nesting cavities. Move your bird feeders a little further from the windows to decrease collisions. Reduce the use of chemicals in your yard. Keep your cats indoors. Educate yourself about developments, windmills, cell towers, etc. that may be coming to your area and fight to keep them out of sensitive bird areas.



Sleeping with one eye open probably doesn't deter predators...☺

But a threat display might!!

