Fact Sheet

Raptor Conservation

Conservation

Conservation is defined as “the protection and wise use of natural resources in order to ensure their existence for future generations.” In other words, conservation includes actions that protect our natural world. Conservation can be done on a large scale or right in your own back yard. It begins with a desire to make things better and ends in action. An example of conservation can be declaring a large area of forest as a national park or it can be the simple act of not littering. There are many different actions we can take each day to help conserve the health of our planet.

There are many different reasons one can think of as to why we should work to conserve the natural resources and the wildlife that share this planet with us. Perhaps, the most compelling reason should simply be that all life, whether human or hippopotamus, dragonfly or deer, flower or fox, has a right to live in a safe, clean, healthy environment. We should practice conservation because for so long, we have been a part of the problem and now, as the saying goes, it is time for us to be a part of the solution. We only have to think of our own future and what kind of world we hope to live in 10, 20 even 50 years from now.

Like birds of prey, humans are an interacting component within the environment. Like all other organisms, we can’t live independently from nature. Plants produce the oxygen we need to breathe, and dense vegetation and coral reefs act as a sink to store carbon and reduce the greenhouse effect of global warming. Rainforests help maintain the water cycle and weather patterns to ensure we have fresh water to drink. Wetlands help purify and retain freshwater, while coral reefs and estuaries help with flood and storm control, and vegetation prevents wind and water erosion of the soil. In addition, all food and natural resources, such as wood and fuel, come from the environment.

All life is interconnected and a healthy planet is necessary for the survival of all plant and animal species, including humans. Despite this knowledge, humans continue to log forests, pollute rivers and streams, and burn fossil fuels at an alarming rate.

Habitat Loss

Perhaps the most considerable problem facing raptors and all wildlife is loss of habitat. Like us, these animals require basic resources including food, shelter, space, and water. Changes that humans have made in the environment have upset the balance and availability of these resources. While these alterations may affect species differently – there are a few animals that seem to do better in human-altered environments – it is safe to say that the majority of wildlife, thus, biodiversity as a whole, is negatively affected by these changes. Large predators, like raptors, can be particularly susceptible to habitat modification. Species that migrate, or that have a highly specialized diet, are also very sensitive to habitat change.

Poaching, trapping & wildlife collecting

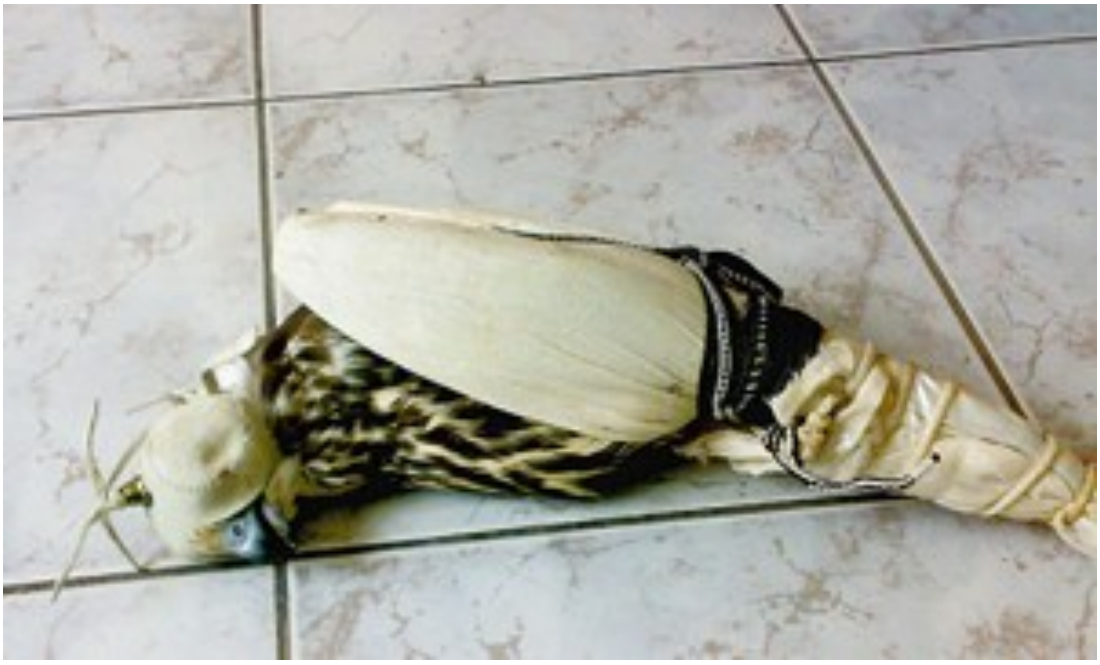
For as long as humans have existed, they have hunted other animals as food sources. Today, many humans must continue to hunt, just like other predators, in order to find enough food to feed themselves and their families. Those who hunt an animal in order to eat, often do so because they don't have the resources to get food in other ways (like from the grocery store). This is known as subsistence hunting and usually has a very minor impact on the populations of those animals being hunted.

However, some people kill or trap animals for sport or for profit and often remove more individuals from a population than that population can sustain. Over-hunting is one of the direct causes of extinction for many wildlife species, including raptors, on a world-wide scale. Killing elephants for their tusks, killing cats for their fur, trapping colourful birds for sale on the black market are all examples of activities that can cause a huge drop in the number wildlife species in an area and may even cause extinction in some cases. In addition, most of the wildlife that are captured is destined to spend their life inside a cage and often suffer from mistreatment, malnutrition and other serious health problems.

Raptors have a particularly difficult time as they may be killed for parts, or because some believe that they are competing directly with humans for food sources, or out of fear, but they are also often trapped and sold as pets

Raptor species that are particularly vulnerable to poaching and trapping include the African Fish Eagle and Madagascar Fish Eagle (whose feet are used in black magic and are believed to be a source of power for those who possess them.).

Saker falcons, gyr falcons and peregrines are trapped and illegally sold for falconry.



What can we do to conserve raptors?

The majority of the problems that raptors face are caused by human actions, and the solutions are not easy. We need wildlife, we need our forests and deserts, savannahs and streams. We need coral reefs, healthy soil and clean air. Finding a balance between human needs and species preservation is one of the biggest challenges of our times.

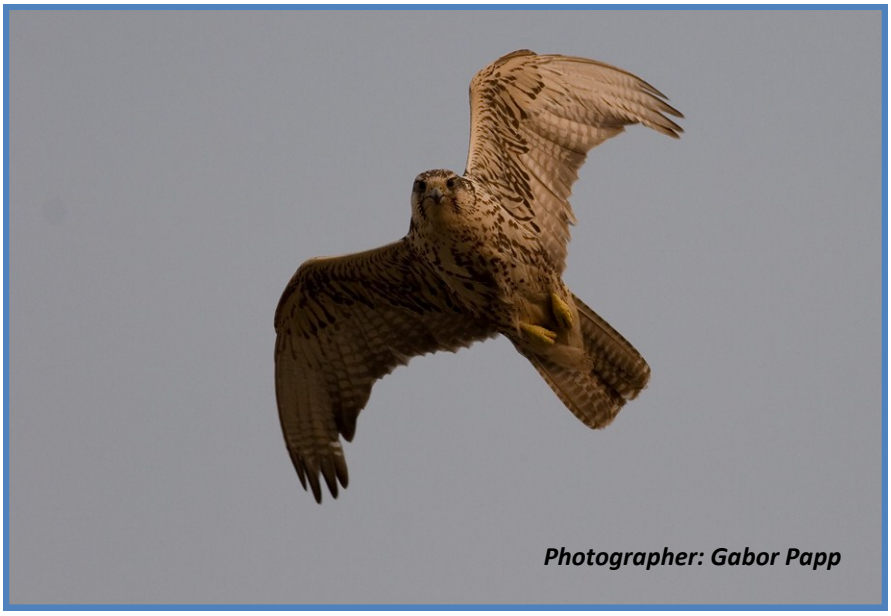
Environmental education can be a key component in the conservation of birds of prey and other wildlife. When people begin to understand the importance of raptors and the role they play in nature, they may work harder to protect them. Every human being, independent of where you live or work, no matter how old or young you are, has an important role to play and can contribute greatly to the conservation of birds of prey and other wildlife.

Pollution

Contamination occurs when microorganisms, chemicals, toxic substances or trash are introduced into the air, water or soil, in concentrations large enough to affect the functionality of these resources. Contamination can cause the extinction of many animals. When a substance is harmful to a bird of prey, chances are it is harmful to humans, as well. Chemical run-off from large farms, oil spills in the ocean, industrial waste are all detrimental to our natural world.

Depending on their diet and their habitat, some raptors also serve as indicators of the quality of an ecosystem. Birds of prey depend on other animals for their survival, and if there are other factors affecting those animals, this will eventually also affect the health and population of the raptors in the area. As top predators, raptors will sometimes absorb chemicals or other contaminants that are found in prey animals.

A clear example of this is the case of the Peregrine Falcon. Peregrine Falcons are found on almost every continent in a wide variety of habitats. They hunt on the wing and feed mainly on other birds. In the 1940's in the U.S. and other countries, a pesticide called DDT was used to control insects. It was sprayed mainly in agricultural fields. The insects absorbed the chemicals and were later eaten by small birds. After eating several contaminated insects, the insecticide began to accumulate in high concentrations in these birds. When the small birds were then eaten by the Peregrine Falcons, the accumulative chemicals were absorbed by the falcons. The chemical grew in higher and higher concentrations as it moved up the food chain so that when it was ingested by the falcons it was in concentrations high enough to cause very harmful effects to their reproduction. Namely, the accumulation of DDT impeded the calcification (hardening) of the eggs and the egg shells were very thin. When the females tried to sit on the eggs to incubate them, the eggs cracked. As a result, very few offspring survived to hatching, so there were no new generations being created – no new falcons to replace the old birds that were dying. So, the Peregrine Falcon population began to decline dramatically and the species began to quickly disappear from many areas within the United Status. In less than twenty years, this species disappeared from areas east of the Mississippi River. Other raptor species were also very negatively affected. When scientists began investigating the reasons for these declines, they discovered the connection to DDT. Its use was banned in the United States and scientists realized that raptors can serve as indicators as to the health of the ecosystems in which they are found. This is beneficial, because it can warn us when certain problems might also be dangerous for humans, as we, too, are part of the food chain and depend on our natural resources for survival.



Photographer: Gabor Papp

Acknowledgments

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http://en.wikipedia.org/wiki/Falconry

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