

The Spotted Owl

The shorter days and dark nights always make me think about owls. We've written about owls and their unique adaptations many times in our nature notes, and today I wanted to discuss one of the most interesting controversies in bird conservation.

The Spotted Owl (*Strix occidentalis*) is an important indicator species of the Pacific Northwest. This means that scientists can observe Spotted Owl populations to determine if the ecosystem is healthy or not. According to the National Park Service, Spotted Owls are "vital indicators of forest health, since their survival depends on the presence of diverse, robust evergreen forest ecosystems."

Spotted Owls require old-growth forest to survive. They are territorial of their habitats and are intolerant of disturbance. This means that if their habitat is disturbed or destroyed, they won't have anywhere to go and are not good adapters. They also have a very specialized diet that mainly includes small mammals. Many Spotted Owls live in the Pacific Northwest, where the logging industry is prevalent.

Spotted Owls have declined sharply, losing at least 65% of their population between 1995 and 2017. In the 1970s, forest managers realized that the Spotted Owl population was declining due to logging, but large-scale logging continued for years without intervention. It wasn't until 1990 when the Northern Spotted Owl became federally protected under the Endangered Species Act. Timber companies are now required to leave at least 40% of old-growth trees intact that are within a 1.3-mile radius of a Spotted Owl nest.

Surely everything will be fixed now that the timber companies are sparing a large chunk of old-growth trees, right? Well... not quite. Issues like this are usually highly complex, and this is no exception.

Barred Owls were considered the "eastern cousin" to Spotted Owls, but they started migrating Westward in the early 1900s due to changes in our landscape created by humans. They are now considered invasive to the western region of the US. In fact, barred Owls have now infiltrated Spotted Owl habitat, and are a huge threat to them and their survival.

Many conservationists now believe that Barred Owls are the biggest threat to Spotted Owls because they are more aggressive and out-compete Spotted Owls for many of the same resources. They have a generalized diet and can eat a variety of foods like small mammals, amphibians, reptiles, birds, and more.

US Fish and Wildlife has proposed that in order to conserve Spotted Owls, they should kill up to 470,000 Barred Owls over the next 30 years across the Pacific Northwest. This means they would be lethally removing 15,600 Barred Owls every year for 30 years.

As you can imagine, this sparked massive controversy and many people have taken issue with this proposal. Organizations are divided, and many animal welfare groups argue that killing a species to save another is unethical, and some have critiqued this method, stating that it will be ineffective at preserving Spotted Owl populations. Many conservation organizations think this is a necessary evil and that ecosystem health and biodiversity should be valued over all else.

So, what would you do? This story might be unfortunate, but I think its important to highlight because conservation is never easy. There is almost never a problem that can get fixed with one solution, many issues are multi-faceted that require difficult and sometimes barbaric solutions. Perhaps the story of the Spotted Owl can serve as an example of the domino effect that humans often cause and how we effect our ecosystems.

Photo: A Spotted Owl

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