

THE IMPORTANCE AND ROLE OF BIRDS



American Kestrel

Pest Control



Birds consume rodents and insects, helping to reduce pest populations for humans and for the balance of the ecosystem. For example, some birds in salt marshes eat snails which ensures that the snail population doesn't become too large which would then reduce the plant population due to overconsumption. Birds also consume leaf-eating insects on trees in other habitats, such as riparian and oak woodland. Insect eating birds can eat hundreds of insects per day.

Nature's Clean-Up Crew



Some birds like Turkey Vultures are scavengers and eat decaying animal corpses, helping to break down the bodies at a much faster rate than if they were left to decompose with the help of only smaller organisms. Turkey Vultures prefer carrion that is less 24 hours old and they can smell it from over a mile away, meaning that they will swiftly clean up for us. Crows and Ravens also eat carrion along with garbage or food that humans have dropped. This fast clean up prevents diseases from forming and spreading, keeping other animals and humans healthy.

Environmental Health Indicators



Birds serve as indicators of the health of the environment. They are sensitive to environmental changes, so tracking their population helps us to understand whether an environment is healthy. Presence and/or nesting of endangered or threatened bird species like the California Gnatcatcher or the Light-footed Ridgway's Rail are often used as success criteria for habitat restoration projects. If an endangered bird is living in the habitat that was restored, the project owners know it was successfully established and is helping to increase the biodiversity of the area.

Seed Dispersers and Pollinators



Birds eat fruits and digest the seeds which are then dispersed when they deposit waste elsewhere. Some seeds even require moving through a digestive tract to break down the seed's exterior before they can germinate. Some birds are also nectar drinkers, and they help to pollinate plants in this way. In some places, they even eat fungi and help to spread their spores. Trees also benefit from this because they use mycelium networks to communicate with each other.

Fertilizers



Double Crested Cormorants



Pelagic Cormorants

Seabird guano (bird poop) is rich in nutrients because their diets consist of mainly fish; their droppings are rich in nitrogen and phosphorus, both highly effective fertilizers. The droppings from shore and pelagic birds get washed into the ocean, providing nutrients to ocean plants which then help coral reefs recover from bleaching events. Seabird guano has also historically been used as agricultural fertilizer.

Helpful Neighbors



Many organisms, including birds, in the environment are interdependent and when one species disappears, it can impact another species. For example, woodpecker cavities are often used by secondary nesters. If the woodpeckers are not there, the secondary cavity nesters will not have a place to nest. In some places, human-made nesting boxes are being used in place of secondary cavities due to a reduction in population of birds who build cavity nests.