

## **Chasing Extinction: Hawaiian Avifauna Among Tropical Culture, Politics, and Law**

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The historic study of birds provides an excellent framework within the natural sciences for studying issues that meet at the resonant intersections of history, culture, and biology. Informed by these elements, I am working on a book about the actual and impending extinctions—and in some cases, the survivals—of five species of Hawaiian birds.

The Hawaiian Islands—the world’s most isolated archipelago—hold more endangered species per square mile than any other region of the world. Furthermore, some 30 percent of the world’s known recently extinct bird taxa were from Hawaii. To put it in a more localized context, of the 136 bird species known to have been in Hawaii before humans arrived, 101 have gone extinct, virtually all at the hands of humans. The histories of those already extinct hold important keys to the survival of those still living, and the histories of those still living are vital to understanding their future. The obstacles to their survival, however, are confounding. These impediments are not primarily scientific, but rather cultural, political, economic, and social.

This project will focus on the myriad of factors that have influenced extinction and survival among the Hawaiian avifauna between the last third of the nineteenth century and the present. A variety of elements have come into strong relief in the course of this project: cultural aspects related to Hawaiian birds, especially the use of their feathers; the impacts of changing land use on the survival of Hawaiian forest birds; the role of introduced bird species, which have both hindered and—surprisingly—at times assisted existing endemic populations; and the introduction of other non-avian elements which have dramatically transformed the viability of endemic avian life. A key question I will address is: When is an “invader” not an invader, and what has that meant for our sympathies, our antipathies, and our science?

I want to tell this story via five species of birds, because each epitomizes a specific aspect of extinction, ranging from deep historic time up to the present. The first bird is one known only from the fossil record: *Ptaiochen pau*, also known as the “Stumbling Moa-Nalo.” The second is an extinct endemic species, *Moho braccatus*, the Kaua’i O’o, best known by native Hawaiians for their feathers. The third is an endangered endemic, *Loxioides bailleui*, the Palila, the subject of extensive conservation efforts; the fourth is an introduced species, *Zosterops japonicus*, or the Japanese White-eye, introduced in the 1920s and now found in every corner of the state. The fifth is the ‘apapane (*Himatione sanguinea*), a thriving endemic species.

The environmental issues that strike through this topic are complex and often run counter to each other, but to call them “polarizing” is reductionist. My work addresses a modern environmental topic—the survival of one of the world’s most endangered avifauna—but does so through the long lens of history, stretching in fact from the present day back to prehistoric times, and ultimately returning to the present. By untangling the issues at hand, I hope to accomplish what Patricia Limerick has called for environmental historians to do: to provide a measure of relief to the stalemate and paralysis that polarization has produced in some spheres of modern environmental and ecological study.