THE ENDANGERED SPECIES ACT AT 50

Reflecting on the Past, Adapting for the Future

This year, 2023, marks the 50th Anniversary of the Endangered Species Act (ESA). Having spent the last seven years studying the ESA, I've come up with two observations—but first, let me set some context.

In the late 1950s and early '60s, Rachel Carson educated the public on the long-term effects of DDT and related pesticides, and others warned us about the effects of radioactive fallout from nuclear testing. We stood at the gates of Armageddon... and we are there again as our biodiversity shrinks around us due to man's destructive conduct with the earth and its diverse array of species.

Today, I am but a messenger to you of the dire consequences of species and habitat destruction through man's unharnessed actions. We all must realize that species loss and the destruction of their habitat is the major component of our diminishing biodiversity that, unchecked, will eventually lead to disruption and suffering of life as we've never known before—perhaps with apocalyptic consequences.

Seven years ago, I began to research the history of the Endangered Species Act with the goal of writing the definitive 50-year history of the Act by its 50th anniversary in 2023. A number of people wrote brief histories of the ESA on its 20th, 25th, 30th, and 40th anniversary. However, each was cursory and covered only one or two sections of the ESA. No one had done a definitive, in-depth, deep dive into the entire history of the ESA, and I soon discovered why. They were smarter than me, had far more foresight, and weren't as crazy! That's why it took me seven years of research and writing.

The result was two volumes released this year. They are titled, respectively, *The Codex of the Endangered Species Act, Volume I: The First Fifty Years* and *The Codex of the Endangered Species Act, Volume II: The Next Fifty Years*. Between the two, there is a total of 1,140 pages. I hope these become reference guides for serious students of history and policymakers who want to know the congressional intent behind the law, how the courts have interpreted it, and how the U.S. Fish and Wildlife Service (USFWS) applied it. Equally important, Volume II will become a guide for applying the ESA over the next 50 years to the unknowns that our country will face—just as the 1973 law had to address issues never anticipated, such as climate change and its disturbances and destruction of habitat, invasive species, changing migration patterns, zoonotic challenges, chronic wasting disease, property rights challenges, intrastate species at risk that fall outside of the interstate ESA jurisdiction, distinct population segments, scattered, valueless species without commercial use that get petitioned for listing—the list goes on. Who knows what the next 50 years will bring, and this is what Volume II addresses.

During my research, two conclusions surfaced that are relevant to understanding the ESA yesterday, today, and tomorrow.

First, when the ESA was enacted in 1973 after two years of hearings and redrafting, it was a very top-down law driven with absolute primacy vested in the federal government, notwithstanding the promise Section 6 offered state participation that was never fully realized. There were no loopholes or outs. As the Supreme Court later opined, all species were to be saved, regardless of the cost. To understand the law's absolute rigidity and federal primacy, one only needs to understand the context of the era within which it was written, and the men who drafted the law.

The 1960s to '70s was a continuance of the "command and control" mentality from Washington, D.C., following WWII and the Eisenhower Administration. All eight draftsmen who created the law were hardened WWII veterans, many of whom had seen combat, as were the successive presidents prior to the 1973 law. Presidents Dwight Eisenhower, John Kennedy, Lyndon Johnson, and Richard Nixon, the latter signed the ESA into law, was a naval officer, and President Eisenhower's vice president for eight years. Their entire mental focus was a product of the federal command and control mentality and discipline of that time. Hence, the absolute rigidity and primacy of the ESA language resulted from the mentality, context, and discipline of that era—all run and controlled from Washington.

However, after some 20 years of enforcement of the ESA—and the muscular pushback of the private sector—the federal government began to realize that for the ESA to work, it needed to be more flexible and evolve to meet the demands of changing times and balance economic development with

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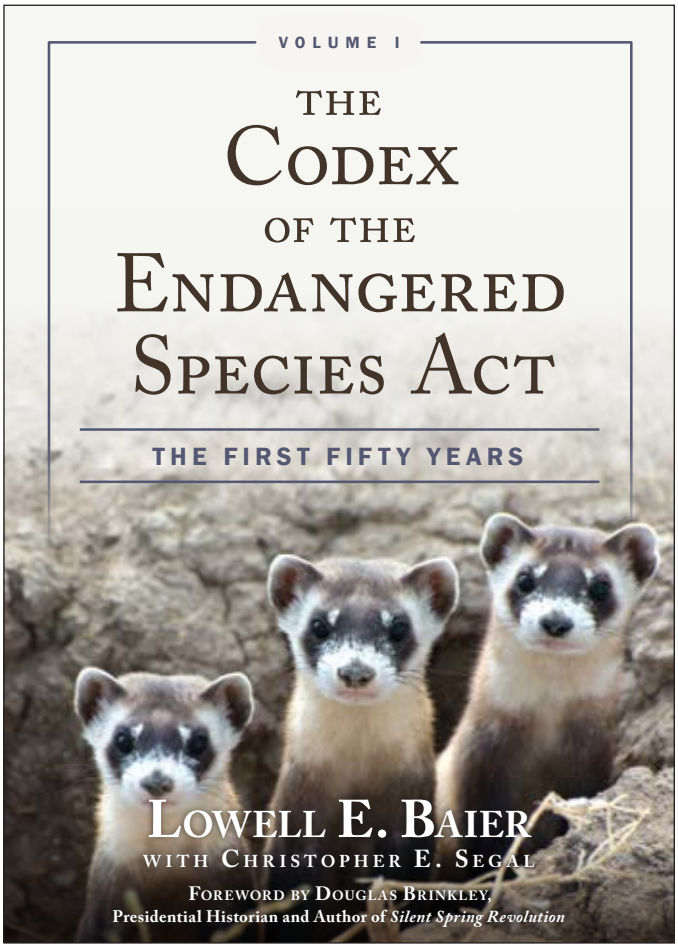

Order your copy of Lowell Baier's *The Codex of the Endangered Species Act, Volume I: The First Fifty Years* at Boone-Crockett.org.

resource and conservation needs. History teaches us that the critical link between the past and future to keep the ESA relevant and responsive to unforeseen circumstances is maintaining flexibility.

Flexibility! Adapt to survive or die! That was the first major big-picture conclusion I reached during my seven years of research.

The last major ESA amendment by Congress was in 1988. We've had congressional gridlock ever since. Following Secretary Bruce Babbitt's 10-point plan in 1993, over the last 30 years, a series of regulations have been created, including the "No Surprises" policy for Habitat Conservation Plans in 1994, Safe Harbor Agreements, Candidate Conservation Agreements, Candidate Conservation Agreements with Assurances, the PECE Policy (the Policy for Evaluation of Conservation Efforts when Making Listing Decisions), Multiple Species Habitat Conservation Plans in 2004, and Compensatory Mitigation. Currently, the USFWS has out for comment a new regulation to simplify securing ESA permits and increasing management flexibility. These policies and regulations were necessitated by the partisan stalemate of trying to get any actual changes to the law through Congress. Remember, the ESA's last major amendment was in 1988. The fallback to keep the ESA relevant since then was a regulatory solution. Hence, so long as we keep an open mind in solving the unknowns of the future—and look to a flexible agency approach to maintaining relevancy, rather than the Congress—that flexibility will keep the ESA a viable and relevant law going forward.

It's up to us, the united conservation community and the states, to work collaboratively with the Departments of Agriculture and Interior, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service, to find workable solutions to keep up with technology and scientific discoveries, and unbridled industry that keeps pace with our expanding population demands, which leads to more land fragmentation and habitat destruction.

Just look at the numbers. Since 1973, the U.S. population increased by 120 million, or 57 percent. It is projected to grow another 52 million (17 percent) by 2073. That's 20 million new households in the next 50 years. Those people will need homes, jobs, and shopping facilities. Where will the land come from to build new subdivisions, houses, apartments, factories, office buildings, warehouses, distribution centers, and shopping centers?

Over the last 50 years, 27.5 million acres of farmland were paved over—that's the size of Virginia! Another 11.9 million acres will be paved over in the next 50 years, which is the size of Vermont and New Hampshire combined. All total, in 100 years, that's 39.5 million acres—the size of three states—that is nature's habitat today!

Our world moves too fast for a partisan-bound Congress to keep current with the tools that agencies need to respond to changing conditions. It's up to us as a community and the collective states to work collaboratively with the agencies to maintain a flexible ESA to meet the challenges that are forever changing. And it's up to the agencies to hire the best and brightest to develop new policies and regulations for the ESA to remain relevant and meet tomorrow's challenges—people like Michael Bean and Robert Bonnie, who came from the Environmental Defense Fund and helped Secretary Babbitt realize his 10-point plan through the series of regulations outlined earlier.

Seems simple enough, but that's what history tells us: Flexibility through regulations and policies is the secret to keeping the ESA viable and relevant. That's history's lesson number one.

The second major recognition that surfaced during seven years of research on the ESA was its link to the impending biodiversity crisis. Just so we're on the same

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wavelength, let me define "biodiversity" to make this link clear. Biodiversity is the natural world around us, and the variety of all the different kinds of organisms—the plants, animals, insects, reptiles, crustaceans, amphibians, fish and aquatic species, and microorganisms—that live on our planet, including man. Every one of these species lives and works together in a diversity of ecosystems to maintain and support life on earth, and all exist in a delicate balance. From biodiversity, man draws food, shelter, medicine, and clothing. That was the stated purpose of the ESA—to protect the species and the habitat they live on.

That is the core of the biodiversity crisis—species at risk of extinction. Those are the very species the ESA is designed to protect. They are one and the same. One could say the ESA is the emergency room of the biodiversity crisis.

Why is it a crisis? In the last 50 years, more species have gone extinct than all the species that have gone extinct since man began recording them. And it intensifies as the population expands and habitat becomes more fragmented and destroyed. Let me give you just three statistics.

Since 1970, we've lost three billion breeding adult birds in the United States and Canada. That's 25 percent of our bird population from 12 bird families alone. That's three billion fewer birds than we had in 1970, all from pesticides, habitat loss, and degradation.

The eastern monarch butterfly population has decreased by 90 percent and the western population by 99 percent. In one year, between 2020-21, beekeepers lost 46 percent of the managed honeybee population, and 25 percent of the wild bee population is at risk of extinction.

These are the canaries in the proverbial mine shaft.

Those three species—birds, bees, and butterflies—are the pollinators of our food, and one-half of pollination alone comes from bees. Corn and wheat are pollinated by the wind, but all the rest are at risk. Hence, the security of our food supply is at risk because our pollinators are dying. Moreover, 50 percent of all critical medicines are derived from plants and animals. With our food supply and critical medicines at risk within this biodiversity crisis, mankind is put in a vulnerable position. That's why I call it the biodiversity crisis. The World Wildlife Fund reports that between 1970 and 2016, the planet suffered a 68 percent decrease in the population sizes of all mammals, birds, amphibians, reptiles, and fish.

Lastly, climate change is the third component of the triad. The connection between the ESA and the biodiversity crisis that climate change adds is species and habitat loss. What species can live through catastrophic wildfires, 100-plus year floods, extreme droughts, etc? Habitat takes ages to repair, but in the meantime, species at risk go extinct—gone forever.

Consider the climate change statistics. Just in the last 100 years, as the population has increased and industry and greenhouse gas emissions have grown exponentially, the earth's Fahrenheit has increased by one percent, more than the previous 6,000 years. As the population increases and industrialization expands to keep up with this growth while emitting carbon dioxide, by 2050, the temperature is projected to increase by another 2.7 degrees Fahrenheit. By 2100, it is expected to rise another 3-12 degrees depending on which model is used for forecasting. By 2050, the sea level will rise 10-12 feet, putting 10 million people in the United States at risk from coastal storms and flooding. Droughts will become more pronounced as water dries up.

Let me emphasize: Climate change, the ESA, and biodiversity are all tied together. We all need to work together to find solutions that work.

Species conservation is just as important, if not more critical, today as it was when the Endangered Species Act first became law 50 years ago. Today, we all must work together to find ways to ensure that the ESA has the flexibility to adapt to the many varying needs of endangered wildlife. Throughout the Boone and Crockett Club's 136-year history, we have never shied away from the challenges facing North America's wildlife and wild places, and this case will be no different. ■

It's up to us, the united conservation community and the states, to work collaboratively with the Departments of Agriculture and Interior, the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service, to find workable solutions to keep up with technology and scientific discoveries, and unbridled industry that keeps pace with our expanding population demands, which leads to more land fragmentation and habitat destruction.

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