

February 14, 2011

Dear Leslie,

This is Kermit. It's been a pleasure to chat with you and I'm very happy to move forward with this conversation.

As mentioned earlier I'm a lifetime student of evolutionary biology, wildlife conservation, and ethology. Natural history writing is my passion. I strive to make ecology and conservation accessible to segments within society that have little or no orientation to the sciences. The juncture where history, ecology and philosophy converge is often my canvas. The irreplaceable value of biodiversity within intact ecosystems is often lost on a large populace within our global community. The opportunity to articulate scientific information to diverse audiences presents many compelling challenges, some of which meld well with my particular skill set.

In 2004 I began writing a feature length documentary entitled 'CHICKEN,' originally envisioned as a basic academic piece about the evolution and natural history of *Gallus domesticus* and its wild progenitors. I set it aside to focus on other writing and research only to rediscover it late last year. In re-tooling this project I've integrated a renewed focus on presenting a broad expanse of information obtainable to a wide audience. In short, CHICKEN becomes a surprisingly reachable treasure trove of inherited knowledge from our collective cultural antiquity. We look at the crucial role this bird played in Neolithic revolutions of specific cultures, exploring its significance in successful migrations and expansions of human civilization throughout the world. Our story chronicles the world's most important livestock species from sacred icon, to ritual symbol, to medicine, to food, immunology and more. Our historic relationship with the domestic fowl provides but one thread of a colorful, comprehensive and fully entertaining tapestry woven by our narrative.

Because the chicken was domesticated by different cultures in different regions of Asia and Indonesia at different times in history and from different wild progenitors, unravelling the genetic code tied up in ancient feather art contributes one more thread in the anthropology of Polynesian history. In doing so we throw light on the rise and expansion of post-Neolithic civilization around the world. Utilizing molecular data from studies already being arranged, we will investigate the enigma of the blue egg laying, pre-Columbian chickens from Chile. Using tissue samples from ancient Polynesian artifacts adorned with rooster feathers, our nuclear and mtDNA data will provide evidence of the origins and migrations of early seafarers' ancestors and their possible route to the western coast of South America.

Another thread celebrates the history of food and culinary expression from the origins of ancient India's chicken Vindaloo to the remarkable achievement of the Hebrew's egg-ameliorated dough: the world's first baking renaissance. This ultimately resulted in the expansion of the Roman Empire, enabled by egg-enriched breads and pasta. India's *Asil* chicken is introduced as a major progenitor of meat breeds whilst Jerusalem's *Lakenvelder* as a primary founder of all egg production breeds. We celebrate the Chinese immigrant laborers' pivotal role building the American Railroad, reflecting on the significance of the chicken as the one portable livestock species sustaining them across the frontier. Generation after generation of Chinese labourers maintained a single lineage of *Langshan* chickens from Shanghai, the eggs of which ultimately culminate in a quintessentially American dish we know fondly as Egg Foo Yung. Similarly, we explore

the origins of racial stigma and stereotype associating Black Americans and fried chicken.

We explore the mutually beneficial human domestication of the chicken, concurrently revealing the natural history of five different species of junglefowl: the wild and highly threatened progenitors of domestic chickens. Exploring the daily routine of wild junglefowl species will provide astonishing visual footage, deeply investing the audience in these poorly known, endangered populaces. We will capture the prolonged flights of the strongly monogamous Green Junglefowl *Gallus varius* as it moves through brisk wind from island to island in the Flores Sea. Drawing closer than any nature documentary has before; we'll present arresting scenes of their every movement as they forage for starfish and crabs, digging for copepods and detritus along the shores in littoral pools exposed by the receding tide. Their unique vocalizations draw us to the discovery of special ceremonial breeds of chickens with astoundingly long tails, and elongated songs reminiscent of the wild male progenitor. These strange breeds are maintained as natural treasures to this day in countries like Japan, having been developed in ancient times. We will describe for the first time how this same wild species' nuclear DNA is present in the ancient chickens of Easter Island and Chile. This underscores the significance of respective cultures carrying different species of junglefowl to different parts of the globe where their unique history of domestication took place, often in complete isolation, resulting in highly distinctive breeds. We will visit *G. lafayetti*, the Sri Lanka Junglefowl to learn about its curious reproductive strategy, whereby three roosters act as guardians of a single nest, adopting chicks a few scant weeks after hatching, enabling the female to hatch another clutch. This year-round successive-nesting is a precursor to the development of the prolifically egg-laying breeds of chickens, but contrasts with the polygamous reproductive strategy of its cousin the Red Junglefowl, which is the *maternal* ancestor of all domestic chicken breeds. The Red Junglefowl only produces one or two clutches of eggs a year and the male has little to do with rearing the chicks. Interviews with leading molecular scientists responsible for the creation of the *Chicken Genome Mapping Project* educate us about hybrids between junglefowl species provided the genetic foundation of the domestic fowl and how this contrasts with Charles Darwin's theories on speciation and domestication.

CHICKEN culminates with advancements in poultry science meeting the ever-growing demands of a burgeoning global population and a call for action in the preservation of forest biomes from which the ancestors of all chickens derive. The print monograph and other media distributions to arise from this project will put this accessible science in living-rooms and class-rooms across the globe. While the subject matter of CHICKEN is obviously wrapped up in its title, our documentary is actually a celebration of a pivotal entity that more than ninety percent of the world's population depends upon as a primary source of protein— this creature to which we all owe our gratitude and respect.

For now, CHICKEN sets a certain tone and pace from which a future body of work on the entire *Gallomorphae* can be built. I bring my great passion and experience to the fore with this first feature project and hope that this will result in a greater comprehension and appreciation for this fascinating order of ancient birds, those most direct descendants of the dinosaurs.

All the best,

Kermit

p.s. here is a link to the website of Mercury Films who are directing and producing our feature: [Mercury Films](#)