THIS, THAT AND THE OTHER THINGS IN ZOO HISTORY Ken Kawata

Every now and then during a lazy afternoon, some of you probably notice unrelated random thoughts passing through your minds. Recently this writer caught some of them on paper before they disappeared into the never-never land. So here goes.

Feathered Friends

On a rooftop of a two-storied building I lazily stood. The weather was good enough to skip zoo work. Staten Island, New York, had experienced population increase but much was still covered with lush vegetation. Many tree species must have been introduced by man. It occurred to me, then, that tree branches were unoccupied by pigeons, *Columba livia*, an introduced species which indicated of urbanization. They were from Europe and North Africa. From the same region there are other introduced species such as the European starling *Sturnus vulgaris*, and house sparrow *Passer domesticus*. The public, however, is likely unaware that these are foreign species.

Why pigeons do not perch on trees, a resource all around them? Their original environments consist of rock formations and cliffs, so alien to forests. That raises the question: Have the features of original habitat so permanently ingrained in them?

That was years ago. Now I live in Las Cruces in New Mexico in the Chihuahuan Desert. In the city centre where paved surfaces and taller buildings dominate, a very narrow strip of land, we occasionally notice the pigeon. In a suburban location they are replaced with the white-winged dove or *Zenaida asiatica*, a Southwestern native. Another introduced species, Mediterranean cypress *Cupressus sempervirens*, a columnar evergreen, gives a prominent impression. It has been cultivated world-wide and common in New Mexico; its canopy is inseparable from the community. At times a white-winged dove tries to make foothold in the tree with not much success. Perhaps it is looking for a nest site. Doesn't the bird realize there are other trees to explore? Maybe, this newcomer is still unfamiliar to native birds.

Back to domesticated stock. Zoos can utilize them although they aren't exciting or sexy, still, the effect of domestication from original forms can be displayed, for instance, at a children's zoo. The slim body of the wild turkey *Meleagris gallopavo* can be presented side by side with a domesticated form, such as the Bourbon Red, with its heavy breast. From the Old World, aforementioned *Columba livia* offers a variety of domesticated forms. That amazed Charles Darwin some years back. "The diversity of the breeds is something astonishing. Compare the English carrier and the short-faced tumbler, and see the wonderful difference in their beaks, entailing corresponding differences in their skulls" and its beak in outline appears almost like that of a finch. Or, "The Jacobin has the feathers so much reversed along the back of the neck that they form a hood, and it has, proportionally to its size, much elongated wing and tail feathers." <pp. 19-20> (Darwin, 1859)

Tulsa's Unsung Hero

At a nice restaurant in Indianapolis, Indiana, Johnny Banks treated me with dinner. It was in the mid-1970s where I held a curatorial position in the old zoo. Soon I was to assume a similar position in Tulsa Zoo, Oklahoma. Johnny, formerly with Houston Zoo, Texas, was then an animal dealer. It was the time zoo animals were mainly supplied by animal dealers and they were more knowledgeable than many in the municipal zoo staff. They were treated as colleagues. In his friendly Texas drawl he said: "In Tulsa, look for Hugh Davis. He was the zoo director but was kicked out by municipal politicians with no benefits, pension and all. He lives in Catoosa, a Tulsa suburb."

As a habit, when I took a new position, I looked for the history of the new workplace. In order to know where you stand, it is essential to know the zoo's past and to figure out the future. As I arrived at Tulsa I searched for its archive, which was non-existent. Then one of the colleagues told me about Hugh Davis. The municipal government gave the zoo very little support, and being so undiplomatic Hugh voiced his opinion. News media caught it, which displeased the powersthat-be at the municipality. The city hired a retired navy man, the story went, "a five-foot bulldog" with an assignment to get rid of that zoo man. That's what the bulldog did. Hugh had an enormous amount of old zoo material in his house, the story continued. That's something for me to explore. After building up enough courage I picked up the phone, identified myself. He said: Come on over.



Hugh Davis (bottom left), born in 1909; Marlin Perkins (top), born in 1905. From Zoological Parks and Aquariums Vol. 1, edited by Will O. Doolittle, American Association of Zoological Parks and Aquariums, 1932

Pulling up my Volkswagen Beetle at his Catoosa residence, I knocked on the door. Zelta, Hugh's wife, a friendly and attractive lady, made coffee for me. In the living room I sat down uncomfortably and awkwardly, fully aware that I represented the "new force" to renovate the zoo, his old home. To break the ice, I began:

"Mr. Davis, who built that zoo?"
"Will O. Doolittle. The father of the zoo."
"Doolittle? Really?"

A forgotten name in America's zoo kingdom, in 1926 Doolittle became city of Tulsa's Super-intendent of Parks under which the zoo was managed. Before the Tulsa assignment he worked in Minot, North Dakota. From what I gathered, back in Minot his old office was still there. One

day I drove to the park in Minot and met a man in charge, Don. He did not seem to keep detailed zoo animal records, such as, exact dates of animal births. Yet he planned to send data to the new international species inventory system. When asked about Will O. Doolittle he made a blank look at me. "Can I take a quick look at the office at the end of this building? That's Doolittle's old office."

"Sure."

It was getting late. Don probably believed I was just a smart aleck and I'd better leave. After thanking him I drove off, somewhat depressed by his lack of knowledge and interest in zoo history. Then and now, in the American zoo world, history is a lost cause. Aldo Leopold, in his environmental classic "A Sand County Almanac", noted (on page 246): "When the logic of history hungers for bread and we hand out a stone, we are at pains to explain how much the stone resembles bread." First published in 1949, my copy is from 1966. After hearing my story Hugh Davis warmed up a little. Sipping coffee which was already getting cool, I made another bold attempt. "I gather that you've got quite a historical collection of the zoo."

In those days, some old-timers had built bundles of materials from correspondence, newspaper clippings, photographs, zoo animal records and such, at home. If they didn't, most likely their successors would pitch all that cargo in the garbage dump, which would end up in landfill. Had it stayed in their houses, after a few years or decades, what would happen after their deaths? The families may have no interest in cardboard boxes of "stuff". (To change the geography and timeline, but decades later, I visited the home of Roger Conant, retired Philadelphia Zoo director, in Albuquerque, New Mexico. "I won't take you to the other room, it's packed with cardboard

boxes," Roger told me. It's the same old story, and I still wonder what happened to Roger's treasure trove.) Now back to Catoosa.

The storage in their modest house was an astonishing mound of nuggets. There were mounted wood carvings, for instance, one depicting a wood stork *Mycteria americana* in flight, ready to soar higher. Or hundreds of photographs, negatives and prints, including one trick photography of a giant bug facing a tiny human. Apparently there was no shortage of creative juice flowing in Hugh's life. Old AAZPA publications. Sepia-toned correspondence. Books. The list went on, a microcosm of U.S. Zoo history began to unfold in unexpected Catoosa, Oklahoma. Can I extract the meat of his records into a condensed format, to safeguard even a fraction of Hugh's lifework?



Hugh said that was okay, but all the material must stay here. Thus began my Catoosa commute. On my two off-days every week, at 8 a.m. I arrived and occupied the living room. Laptop was not yet on the horizon. On an old portable manual typewriter, I began to tap, tap, tap while one pile of Hugh's material sat on the side of the chair. Date of the material, source, the topic on the first line, and don't forget to put the page number. Tap, tap, tap continued until lunch break when Zelta, a great cook, fed me. After one hour, tap, tap, tap restarted. Some materials were fragile. As one pile was finished, the next pile waited. At about five p.m. I closed shop, packing up the day's "harvest" into the little orange German car. There was a time, however, Hugh or Zelta would say, take a break. I lit up a cigar, sipped coffee for small talk, not realizing I was becoming a kind of their family member.

My mind wandered out of the Davis residence into the early part of the twentieth century. Ford Model T, the most influential automobile of the century, was the king of the road. Tulsa found itself in the midst of the oil boom, its fortune lasting for decades. Yet the oil wealth ignored the little menagerie in Mohawk Park, as Hugh and his men maintained the animal collection with, to borrow folksy terminology, bubble gum and baling wire, throughout the Great Depression. In the big pile I found *Zoological Parks and Aquariums*, 1932, edited by Will O. Doolittle and dedicated to William T. Hornaday. The 103-page volume had segments: Organization-financing-publicity; Construction; Care and Maintenance; Aquariums-Museums; and Statistical. Hugh had an article in part II, "Outdoor Installations at Tulsa Zoological Garden". His photo is there, side by side with luminaries of the day such as Edward H. Bean (from America's zoo dynasty), Bill Mann, George Vierheller, Roger Conant and Marlin Perkins. Evidently Doolittle was the father figure for Hugh. Upon departure from Tulsa he sent a personal note to Hugh, so moving it brought tears to my eyes.

In those days, visiting Africa was equivalent to walking on the moon - hard to imagine for today's generation for whom an overseas trip is no big deal. They can buy a packaged escorted tour to the Antarctic, Africa or wherever, put it in a credit card and fly out from their hometown airport. But for Hugh the whole world was his stage. He accompanied Martin and Osa Johnson, then international celebrities, on their 1932-1933 African expedition (Johnson, 1940, p. 346). In 1935, on leave of absence from the city, he sailed from New York as a member of Fannestock (he was an investment banker) South Seas expedition and collected a large number of animals for the zoo.

In mid 1960s the city finally began to allocate a sizeable amount of funds for the zoo. In the construction project in the "new" area, the main features included three bear and two cat grottos, dedicated in May 1965. (Incidentally, years later I modified the off-show area for a polar bear breeding; see Kawata, 2019.) For a while it appeared it was going full throttle for him. Unfortunately the new era lasted all too briefly for Hugh, for, news media told citizens that he

resigned from the zoo in April 1966. In truth he got kicked out. In life, would things work out if you stuck to your principles? Not in Hugh's case. To use a worn-out cliché, that's another reminder that life is unfair.

Several months after my commute to Catoosa, tap, tap, tap came to an end. If Tulsa's story represented a microcosm of U.S. zoos, it was worth publishing, a book, booklet or any form. When I began to write a manuscript co-worker Carol Eames, watching my struggle, joined me as a co-author. The narrative had to be tight and crisp to save pages; from Hugh's large album a tiny sample was selected. But there was little support from the zoo board. As in so many zoos, board members are from influential families of the community. Nearly all have no comprehension of a zoo as a cultural institution. Then one day, Stan, an old gentleman, came to me. "They put me on the board but I haven't done anything. I'll help you. We'll have the book done." But he did not have any resource for that.

Stan drove around in town, and found a woman who could do typesetting. She was a house wife and would do it with a small fee, not free though.

"What would be on the front cover?" we asked Stan.

"Animal breeding is zoos' mission, isn't it?"

"Yeah, you're right."

"How about a mother baboon with an infant?" Stan said.

When and if it is published his name should be on it for his contribution, but he flatly refused it. I do not recall how the funds were raised and from where, but somehow "Tulsa Zoo: The first fifty years" was published in 1978. Our little publication caught an eye internationally, described as "This is a welcome addition to American zoo history" (Anon., 1979). At any rate the first copy was taken to Davis: "Hey, the book is done". So excited, he was blown away. "Give me more copies, I've got to give them to my family."

"Of course. And how about a lecture? I'm on the faculty of (nearby) Claremore College."

He agreed, and gave a talk for a classroom full of students. But there still was something left to do.

Of the roster of men in charge of city's park department tracing back from Doolittle, the present one was Hugh McKnight. The young Texan had no role on the disgraceful discharge of Hugh Davis. It seemed appropriate that reconciliation be made. At one public event, even for a few seconds I managed to introduce Old Hugh to Young Hugh.

In the meantime, the "gypsy bug" returned and bit me. Every year the itch from the bite got stronger, urging me to find a new horizon. It was sad to say good-bye to Hugh and Zelta. My belief: Only dreams are real, and beyond the faraway hills there must be a brand-new thrill. One day, in 1981, I took off in my Volkswagen, drove north for a little over 1,230 km (or 764 miles) to the upper Midwest, to Milwaukee, Wisconsin. There I found a general curator position at the local zoo. Nearly a decade passed, and a word reached me that Hugh Sterling Davis, born in Caldwell, Kansas on 19 June 1909, died on 11 January, 1990, in Catoosa. I took time off from work and flew to Oklahoma.

As per the tradition of the region, Hugh was laid in state all by himself in the house with no one around. At the end of the journey he seemed so peaceful. Much later in his life I helped him with a tiny bit of credit he had deserved for so long, I told myself.

Voice from the Ivory Tower

A zoo means many things to many people. One of the popular images is to look at zoos through a rose-colored prism. In this utopia everybody loves each other and of course, animals. At the end of the spectrum stands a not-so-complimentary perception; there could be worst of stereotypes. One of the characters in Graham Greene's novel *Our Man in Havana* is taken by

police from a well-off neighborhood into a courtyard: "a gate closing behind them, and then the odour of a police station like the ammoniac smell of zoos all the world over." That book was first published in 1959 (my copy is from 2007). Meanwhile, zoos have changed since its publication.

"As the old nineteenth century became the new twentieth, America was changing, her industries and cities were growing, her power in the world was increasing," noted John F. Kennedy (originally published in 1955). Riding on the tide of the prosperous post-WWII economy, new zoos were being built across the country. From 1950 through 1979, a total of 64 zoos, aquariums and conservation centres were established, an unprecedented number in the U.S. history (Vernon N. Kisling, 2022). Zoos attempted to legitimize themselves, using "conservation" as a tool against the anti-zoo activism, hell-bent to discredit zoos. In actuality zoos provide a resource for cultural, scientific and political discussions. Therefore a new volume, A Wilder Kingdom appeared to be a welcome addition (Minteer, 2023). Of the twenty contributors for this volume, nine are university professors; three are graduate students or Ph.D. candidates, another group of three from institutions such as museums and the rest, five, independent authors. The book thusly represents thoughts and opinions from academia.

An impression after examining all 15 chapters of the volume: Some, but not all, contributors live in a different type of reality, a sum total of their genetic codes. An invisible film separates them from nitty-gritty daily life of zoos, dynamic, yet often chaotic. "The zoo is a weird, wonderful, exciting, frustrating, glorious, rewarding, disheartening, beautiful place to work," Theodore Reed, director of America's National Zoo, commented. "We who are privileged to be part of zoos, to associate with the animals and involve ourselves in the thrilling activities, explorations, and research of the Zoo, are indeed a special brand of people." (1979) Now onto A Wilder Kingdom.

To put it politely, the book represents a mixed bag. Whoever ventures out to tackle zoo issues must be aware, even vaguely, of running a zoo literally from the bottom. How about cleaning up after animals, some visceral connection to zoo life? A zoo cannot exist without the manual labor of shovel-and-broom. Or dealing with difficult employees, a hideous, mud-slinging process. Or mundane office politics. Or facing hostile members of the visiting public, although small in number. They affect workers' morale. A zoo is non-separable from those realities, so let's break the accepted mold. Anyway, a light-touch suggestion for readers: It could be a bumpy wide, so listen to Verdi's "Anvil Chorus" from II Trovatore as you flip pages. That might be enjoyable.

Let us take Chapter 9 from this volume, "Zoo Dogs" by Clive D. L. Wynne and Holly G. Molinaro. It is self-evident that the theme of zoos is wildlife but not the domesticated stock. Hence, Thou Shan't Be Here. Or how about Chapter 6, "Toward a Wilder Kin-Dom: Why Zoos Must Focus More on Ecological Interactions (with Our Children and Other Biota) Than on Isolated Species" by Gary Paul Nabhan. There is nothing wrong bringing up Peter the Great or Walt Disney. Yet the content of this chapter resembles a scene from baseball, a favorite American pastime. With a ball in his hand a pitcher on the mound casts a grand-standing, fatal blow at his opponent. But where IS his ball? Mr. Nabhan dropped the ball before the game began.

Or Chapter 8, "Evolution to the Rescue: Natural Selection Can Help Captive Populations Adapt to a Changing World" by Jonathan B. Losos. Mr. Losos is looking down at zoos from the top of Mt. Everest through layers of fog, losing the sight of zoos' reality. In carelessness, he created a Berlin Wall of information between the animal collection and us. Song and dance in the locker room does not always work and the result? He ignores decades of enormous efforts by world's zoos for wide-ranging conservation programs, such as EEP and SSP. Hopefully, his voice will fade off into inscrutable murmurs. Does history get old? For all their many flaws zoos need not be in the doghouse. They deserve credit for their accomplishments.

Back to early part, Chapter 2, "Between Worlds: A Conversation Among the Cranes" on the International Crane Foundation (ICF) in Baraboo, Wisconsin by Curt Meine. In approaching the subject he has fallen in a pitfall, into an intellectual cul-de-sac. Let us all be fact-finders and

sculpt the words with tonal richness. To begin it's recommendable to mention the number of extant crane species, something he ignores. How about ICF history? (Having started in the early 1970s ICF does not belong to biblical timeline.) It began with two students at Cornell University, the late Ron Sauey and George Archibald, sharing enthusiasm for ornithology (see Kawata, 2024). Later the duo became co-founders of ICF and with international recognition ICF grew rapidly. George still lives in that town and he and ICF staff are only a phone call away. Beginning with the genesis of ICF at Sauey family's horse barn would have helped this chapter. Even just a bit.

Onto Chapter 12, "A Home for the Wild: Architecture in the Zoo" by Natascha Meuser. "The construction tasks specific to zoological gardens and aquariums have long since developed into a distinct branch of architecture carried out by specialists and expert planners," she begins, "...In this context, zoo architecture can be understood as the visible examination of the relationship between humans and animals." Close but no cigar; her emphasis appears to be on style but a zoo is not a showplace of architectural style. What we do in zoos may all be make believe, yet how would you first visualize "The idea is to design the habitats in their greatest possible authenticity and to leave more room for nature and for wilderness"? Because there is no mention of animals' biological requirements, how would you make it come true? In a very limited space? Without that understanding animals could be on life support. An old saying, "Architect is the most dangerous animal" comes to mind. Artificial structures must be as invisible as possible. Another dimension, the auditory sense. Strolling on zoo grounds should remind you of Beethoven's Symphony No. 6, Pastoral, not of pounding by a jackhammer.

Next on the block: Chapter 14, "Seeing the Wild in Zoos by Seeing the Humans Too" by Amanda Stronza, another voice from academia's brick wall that cannot figure out how to communicate with the public, cannot get on the same wave length with them. One cannot even smell an elephant in her account - an approach to breathing and walking wild animals cannot be more basic than that. It helps to know, even a bit, how elephants live in the in-situ habitats. We should be aware: Zoos must provide facts and figures on wildlife for visitors, most of whom arrive with a basket of ignorance and naivetéé. She certainly would benefit from those who have studied zoo visitors across the world for decades. Let's be cognizant of zoos' potential to inspire them to develop unlimited interest in visitors. An example:

She saw her first giraffe when she was 3, during a family vacation to the Brookfield Zoo in Chicago. "It was very tall and I was very small," she told CTV News in 2021. "And remember thinking, 'This is beautiful. I think this is magnificent.' And it went on from there." Anne Innis Dagg's fascination for giraffes stayed with her. Her research in South Africa was presented to the Zoological Society of London in 1958, and in 1976 she published a book *The Giraffe: Its Biology, Behavior, and Ecology.* These established her as the world's leading expert on the species. (Clay Risen, 2024)

Enough said? Perhaps it's time to turn the table around to look at the other side of the moon, so to speak.

Just the Nature of Things

In chapter 5, "Wild" through an American Indian Historical Analysis by Kelsey Dayle John and Reva Marian Shiedchief offers a worldview of North America's indigenous peoples, commonly called American Indians. They "urge readers to remember there is a power dynamic inherent in one's ability to declare or claim wildness for our beings." (But) I never understood wild to be negative; it seemed to me that wild meant free," says Kelsey, a Navajo. In general, "The noble savage is the idea that Native persons are noble, reverent, romanticized. At the same time they are savage, despicable and backward." According to Kenn Kaufman indigenous cultures had "robust knowledge of birdlife, genuinely scientific in its own way, long before any Europeans set foot on their lands." (Benjamin P. Russell, 2024) How about zoos? "The positioning of a 'close

to nature' Native in a designated non-<u>wild</u> space gave direct access to imagery that reaffirmed the notion of Indians as wild, more natural, and more primitive."

What a refreshing viewpoint, away from our entrenched preoccupation based on Eurocentric perspective. At this point, let us turn the eye to an institution that broke traditional approach on wildlife presentation: The Arizona-Sonora Desert Museum (ASDM). It focuses on the specific regional features including botany and geology. ASDM stands out as the diverse beacon on a hill.

An indoor exhibit hall at the Arizona-Sonora

Desert Museum.

Photo: by Ken Kawata



Debra Colodner, Craig Ivanyi and Cassandra Lyon examined visitors: WHAT IS A ZOO? "When asked what they liked most about their experiences at the Desert Museum, respondents brought up the botanical collections, naturalistic enclosures, and the continuity between exhibits and the surrounding landscape. People focused on these features as much as the animals." ASDM has no ABC zoo stock, typically primates, large ungulates and elephants. Yet, of a certain visitor group "Fifty-seven percent…said they consider the Museum to be a zoo, 25 percent said they weren't sure, and 18 percent said they did not think it was a zoo." "The ninety-six people who responded to this survey expressed an impressive range of feelings about the wild. Their responses exhibited the complex and sometimes contradictory feelings about nature and wilderness in the dominant Western culture." (Words underlined by K. K. Also, see Kawata, 2023a.)

Enter Nigel Rothfels at this juncture. He brings in geography and history, Antwerp and 1899 respectively, to start ZOO TIME in chapter 10 (pp. 155-167). "One of the simplest techniques that zoos have used to make animals do things has been through feeding." Another contributor Irus Braverman gets into a horizon undeveloped by zoos. In chapter 11: "The Microbial Zoo: How Small Is Wild?" (pp. 169-182). Without love or pity, he switches gears to the universe unrecognizable with our naked eye. "The smaller the organisms are, the less wild they seem and, for that matter, also the less un-wild. ...Recent study suggests ...that Earth might be home to a staggering 1 trillion species." Into zoos, "to envision just how wild it would be for a zoo to focus precisely on such microscopic dimensions of life." Deal with such an issue there is a paradoxical relationship with authenticity. That notion may haunt zoo staff: What is nature? Zoo? Or conservation?

In chapter 13 (pp. 197-211), "Reconnecting Zoos to the Wild and Rethinking Dignity in Animal Conservation", Joseph R. Mendelson III points up: "...the strict preservationist ethos of nature-without-people simply is unrealistic". Upon the current trend he alerts: "Inasmuch as major zoos in the United States are becoming run by CEOs with backgrounds in business and banking rather than biology or conservation, it is not surprising that the biological, conservation, and research missions at many zoos are wandering in atmospheres prioritizing revenue-generating programs and exhibits." Conservation, a handy, catchall, sanitized, feel-good term is often used like a tool to renew a zoo citizenship. Moreover, "...I firmly believe ...that person-to-person storytelling is the best way to imbue appreciation for the plight of endangered species and habitats. If no one at the zoo has any personal familiarity with the in-situ programs, the connection with the public always will be tenuous."

Connection with the public? In some human endeavors such as sports, success is easily comprehended by the public. After enduring grueling hours of training and pushing through dust and sweat, a new record, raw and glorious, on a 100-metre dash is celebrated in an unquestionable fashion. That's not a common modus operandi in zoos. Nor does the zoo world create a matinee idol; rather, success proves itself in a quiet manner, with facts and figures. They can turn down the decibel level of anti-zoo forces and critics who frequently point out what's wrong with zoos. Yet, it seems that in zoos, there is no straight line between effort and success. One has to be an intrepid follower of the heart.

In chapter 15, titled "The One and Future Rhino" (pp. 229-240) Michelle Nijhuis sails into uncharted waters while taking up a project on the southern white rhino. She reviews zoo history and focuses on reproductive technology, to illustrate a birth of a rhino developed from an egg fertilized in a lab. Nothing warm and fuzzy here. Technical complexity surrounding the epochmaking accomplishment is explained in plain language. So she represents a badge of honor of a professional. She also points out that a magazine for the popular audience, *People*, treated this scientific event in a *pet* section!

Changing the angle, let us look at the sources used by contributors. For clarity the sources are limited to published volumes only, excluding information gained from internet and personal interviews. Of the little over 230 references cited by 17 contributors (note: Alison Hawthorn Deming, who wrote the chapter "Animal Art and the Changing Meaning of the Wild", did not cite anything) four are from the 19th century, fewer than 5% were published prior to 1970; the majority, or 86%, have been published after 1991; 56% were within 12 years of the publication of this volume. Thus it is heavily biased in favor of recent accounts. A mental flat-tyre by contributors? Or generational chauvinism? In actuality this is a repeated pattern, déjà vu all over again, perhaps a trend by present authors. As yours truly noted previously:

Of the little over 100 pieces of literature cited by those authors the oldest is from 1969 followed by 1991 and 1993; in fact, 89.5% of references cited were published after 2010. And 37% were published within two years of their article. In short, the world prior to 1969 falls into a bottom-less abyss. There exists a strong impression that the authors assume that the dawn of zoos (and conservation movements) took place about the time they were born, hence the process of each generation reinventing the wheel. You might call it generational chauvinism. (Kawata, 2023b)

Reading a book is a chance encounter. The contents of this volume could have added a broader perspective had some of the authors been cognizant of the reality of managing zoos. A critical view has also been expressed by Tim Brown: "At the risk of sounding rather too dismissive of a number of clever authors the subject is often in danger of being tied up in ideological knots. A Wilder Kingdom is a pertinent and particular case in point." (2023/2024) Nevertheless, while writing this essay I've had a great pleasure to have your company. Curiously, the book's contributors used very few widely known zoo-related publications. The following volumes could have enriched the book by looking backward to move forward. From North America alone:

- Frank Buck, 1930. Little known today, in the bygone era wild animals were captured, transferred by boat and sold to zoos and circuses. Buck, the major provider, crossed the Pacific forty times.
- William Mann, 1930. With an unusual background as a Harvard-educated entomologist, he served as the director of the National Zoo in Washington, D.C. for 31 years. The zoo profited from his interest in nature and world-wide field trips. He was also an enthusiastic circus fan, unthinkable today for a zoo director.
- National Academy of Sciences, 1975. This volume compiled presentations by leading zoo biologists at a symposium. The subjects ranged from general aspects, analysis and control studies of animal behavior, the genetics of inbreeding, cell and sperm banks to computer usage for animal and endangered species inventory systems.

- Marlin Perkins, 1982. For older Americans he was known as the wildlife television program host. He was, however, a zoo-man, through and through, beginning as a grounds-man and relief keeper at Saint Louis Zoo, later serving as director of the Buffalo Zoo, Chicago's Lincoln Park Zoo and Saint Louis Zoo.
- Murray Newman, 1994. When he was appointed the head of Vancouver Aquarium in 1955 he had no management experience, no staff, no aquarium. When the aquarium opened the following year, it was a wild success. He provided wry insight into the qualities that made an effective aquarium director.
- Roger Conant, 1997. As the nation's senior herpetologist, his remarkable dual career in zoos and herpetology spanned seven decades and touched innumerable lives. His unrelentingly intense group of herpetologists added an in-depth interest to the zoo profession.

A suggestion for those with more than a passing interest. Mostly unbeknownst to Americans, Europe is the birthplace of the modern zoo. If you exercise even a normal amount of curiosity you'll learn so much in Europe. Do you look for *the* classic zoo? Berlin is knocking on your door. Try the older Zoo Berlin first, not the larger Tierpark. Also, two examples of newer, innovative zoos: Pairi Daiza in Belgium and Dvür Králové in Czechia (Czech Republic). The former is easier to reach. Take a hike from a small, rural train station and follow the crowd. The latter presents a challenge without a car (there is a hotel there, incidentally).

Ripples by Pygmy Hippo

Celebrity animals make news stories every now and then in the popular media, mostly about familiar species. London Zoo, initially opened in 1828 as members-only community, opened to the public in 1847 to earn enough money to stay afloat. The first hippo seen in Europe since the Roman Empire doubled annual attendance up to 10,000 visitors every day. Guy, a lowland gorilla, received hundreds of birthday cards every year. That was then. Today's society has gained a powerful communication tool, the electronics. As their nets widen almost daily, chances are that otherwise obscure animal species, by design or otherwise, can gain potent-ially explosive coverage. Chances are, also, that could give an opportunity to a species not very high on the popularity roster. In 2024 the rare turn came to the pygmy hippo in an obscure zoo, the Khao Kheow Open Zoo, not in a country known within the world's prominent zoo circle: Thailand.

On 10 July, a pygmy hippo was born there. At that time the zoo received only a couple of thousand visitors a day and the budget was stretched to its limit. In August the zoo posted a poll online, asking the public to help choose her name. The name Moo Deng, a Thai dish meaning "bouncy pork", was soon launched into a global phenomenon. She belongs to an endangered species and geographically, her home is West Africa. That doesn't seem to matter; cute-animal worship was unstoppable. The month that she was born the zoo had fewer than 85,000 visitors. In October, total attendance rose to 300,000. A visitor noted: "I've gone to the Great Wall, I've been to the Colosseum, I've been to Christ the Redeemer in Rio." But this was "by far the longest line I have ever waited in." Waiting time was about 30 to 40 minutes. The zoo implemented a five-minute limit for spectators after some were caught tossing water and shells to try to rouse her.

Once the cute-animal worship took off like a rocket the "It Girl" fame became a brand, causing a skyrocketing demand. The restaurants in the area filled up at lunch time, and on weekends, makeshift stalls sold snacks along the road. Her reputation caught the attention of Molly Swindall, an influencer who posts about baby animals and attends Taylor Swift concerts. She was so enchanted that she flew more than 18 hours to Thailand, stood at Moo Deng's enclosure for four hours, then returned to New York the next day. The influx of tourists boosted local incomes by 50 percent or more. About 70 companies paid the zoo for the right to print Moo Deng on products such as pajamas, pet food and squeezable condensed milk. A super-market chain launched its own Moo Deng-themed coconut juice after signing a contract; a Thai business newspaper reported that collaborations were expected to generate as much as \$4.3 million by March.

In her shadow, other pygmy hippos born in 2024 in Sydney, Berlin and Edinburgh draw little attention. Huanuan Zhang, a college lecturer at the University of Oxford who studies West African forest ecology, was surprised to see a sudden uptick in reference to his research. Zhang hopes that the world's love for Moo Deng will raise awareness of deforestation and endangered species.

This was reported by Stephanie Yang (2024). What stands out in the article is Zhang's words, "the world's love for Moo Deng will raise awareness of deforestation and endangered species". Those who are associated with zoos sincerely agree with him, yet those who have watched zoo visitors for decades, including this writer, are bound to turn a skeptical eye on the issue. Because the public's popularity has its own orbit. The effort by international organizations to save nature, such as tropical rainforests and frozen oceans, exists a light-year away from the crowd, admiring an individual specimen of pygmy hippo, or chimpanzee, or polar bear. Because in most cases the level of wildlife popularity is in inverse order of reality that surrounds the natural world. Suppose we ask a question to visitors several days after they viewed Moo Deng: Is her home Papua-New Guinea? Or Palau? Or Peru? It would not be surprising if half the visitors would answer "Yes".

At this juncture let me throw a statistic on the table, estimated average annual household incomes (in terms of US\$, for the convenience of discussion) of selected nations in 2023. In the homelands of the pygmy hippo, Liberia, \$855; Sierra Leone, \$305. Thailand, home of the zoo, \$3,756. (By comparison, it was \$80,610 in the United States.) In all this discussion, Moo Deng sits in the middle. If you place other pieces of surrounding information, they will form a concentric circle with the pygmy hippo in the dead centre. Prominent entities - IUCN, international zoo associations - may sit in the periphery of the circle. Distantly or not, they may begin to reveal how inter-connected they are. Let's think about it: What is the role of individual zoos in this? Zoos have done quite a bit in the world's conservation but there still remain huge tasks ahead.

The Shadow of Eurocentrism

Today's North America has been altered from its original state by European colonizers (concerning destruction of nature, refer also to Kawata, 2024). An aerial view reveals the tale of Lost Eden: Rivers have been rerouted and dammed, wetlands have been drained and ditched, trees of a climax forest, the last stage of succession, are no more. Mountains are groomed as if they have just been back from a barbershop. The scene reminds me of the lyrics (cited partly here) from a 1960 popular song *Greenfields* by The Brothers Four:

Once there were valleys where rivers used to run;
Once there was blue sky with white clouds high above;
Once they were part of an everlasting love.
We were the lovers who strolled through greenfields.
Greenfields are gone now, parched by the sun;
Gone from the valleys where rivers used to run;
Gone with the cold wind that swept into my heart;
Gone with the lovers who let their dreams depart.
Where are the greenfields that we used to roam?

Nostalgia aside, the land fell under the Eurocentric spell. We do not even notice the absence of a symbol, the American bison. Or the passenger pigeon. Once, an estimated population of three to five billion covered nearly the whole United States and darkened the sky with huge flocks, but even that number was no match for the onslaught. "In 1869, from the town of Hartford, Mich., three car loads of dead pigeons were shipped to market each day for forty days, making a total of 11,880,000 birds. It is recorded that another Michigan town marketed 15,840,000 in two years." (When this book was being published the last passenger pigeon known to man was still alive at Cincinnati Zoo.) Those pigeons "were destroyed so quickly, and so thoroughly en masse,

that the American people utterly failed to comprehend it, and for thirty years obstinately refused to believe that the species had been suddenly wiped off the map of North America." (Hornaday, 1913)

The passenger pigeon symbolizes the most prominent example. Almost disappeared but not completely was the target of fear and hatred, the gray wolf. Also, the fate of our fellow humans should never be forgotten. Conflicts caused by invaders in the West are portrayed by Hollywood, but it occurred everywhere. In today's New York City, "The Dutch were basically those who ran us out of our homeland and they were very violent toward our people," noted Brent Stonefish, a Native American spiritual leader. Trade continued between the Dutch and the Indigenous people, but Stonefish added: "in 1643, the New Netherlands governor Willem Kieft ordered the massacre of the Lenape and other tribes living in the colony". (Nina Siegal, 2024) In California the last grizzly bear was shot in 1922 but the official state flag uses the bear. Once these sources of threat were removed, Eurocentrism turned to romanticize them as noble in dime novels and cinema. The modern man enjoys the ferocious beasts from a safe distance in zoos. Charles Homans noted:

"The American zoos of the early and mid-20th century may not have been explicitly imperial in the manner of their Victorian predecessors, but they were not much less dependent on the colonial enterprise. heir most popular attractions were caught in the wild, mostly in Africa, and the traders from whom they bought the animals enjoyed cozy relationships with the colonial administrators. This became a problem in the 1950s and '60s, when Europe's greatest colonial powers battered and exhausted by World War II, began relinquishing their imperial holdings in Africa and Asia. The wave of independence that swept over their continents terrified zoo officials in the United States. Zoos required hundreds of new animals a year - now their suppliers were out of power, and the future of the game refuges from which the animals were taken was in doubt...'[Zoo] officials urged protection of the African wilds not as an ecosystem of inter connected species but as a warehouse of future zoo residents,' writes Jeffrey Hyson, a zoo historian and professor at Saint Joseph's University of Philadelphia."

Zoos began establishing 'survival centres' on vast acreages in Virginia's Blue Ridge Mountains, coastal North Carolina, and elsewhere, and stocking them with African fauna. Zoo officials were portrayed, by the media and in their own writing, as 20th-century Noahs, saving the world's great animals from a continent doomed to ruin under the rule of its native residents.

But history has proved them at least partially right: Many species have fared badly over Africa's half-century of self-rule. Civil war, deforestation, and poaching have all but obliterated the gorilla population of the Congo Basin, for instance, and the U.N. Environment Program <u>predicts</u> the great ape may be extinct within 10 to 15 years." "The zoos' survival centres were also the first serious stab at the captive breeding efforts that now supply virtually all the animals on display in American zoos, and have enabled the reintroduction of species such as the California condor and the Asian wild horse." (Charles Homans, 2010)

Almost one century apart from each other, Hornaday and Homans made profound assessments. Revealing of "dirty laundry" in the closet may make some of us feel naked, embarr-assed and perhaps, guilty. That's a good start to dig into *our* history.

Politics: Alive and Kicking

The Great Depression years (1929 to 1941) marked the longest and deepest downturn in the United States history. For zoos and aquariums, it caused "budgets to be severely cut, making it difficult to pay employees and feeding animals." Relief programs such as Works Progress Administration (WPA) "offset these difficulties somewhat with funds and labor to build new or renovated zoo and aquarium exhibits and facilities." (Kisling, 2022, p. 158) Such relief funds, however, were by no means handed out evenly to the nation's institutions. For instance: "...Kansas was proud of its frontier independence and bitterly resentful of anything that

Washington did. The result was that they refused to take part in program after program offered by Franklin Roosevelt to carry through the readjustment period. Most of the relief programs were ignored." The second largest city in Kansas in the 1930s was Wichita, whose industrial basis was devastated by the Depression. At Riverside Park was a municipal zoo (the city now has the Sedgwick County Zoo, opened in 1971).

Among voices raised was from an influential official of the community, who considered the zoo "a colossal waste of time and money" (Goodrum, 1967), a shooting-from-the-hip, paper-thin observation. By the same token, some old-timers in zoos had an impression that a wheel fell off and it's still rolling, a point missed by the younger crowd. While this was going on, older leaders maintained zoos and a sense of history. After all old-school directors and curators are practicing biologists, compared with the ivory tower equivalent. Back to Kansas, it is a conservative state, committed to support the Republican Party, while above-mentioned President Franklyn Roosevelt was a Democrat. To get side-tracked a bit, decades ago some circus fans used elephants as an emblem "and it embarrasses them to be mistaken for Republicans." (From San Francisco Examiner, 6 August 1930, cited by Jan Biggerstaff, 2024.) Those in the U.S. are aware that political cartoons portray Democrats as donkeys and Republicans, elephants.

Changing the angle just a little bit, politics may be viewed parallel to religions. At times religions find their way into the zoo arena.

"Indian zoos have a long tradition of naming animals, particularly tigers and other great cats," reports Sameer Yasir. But in February 2024, "the authorities suspended a high-ranking forestry official" who "had overseen the animals for naming the lioness Sita, after a revered Hindu goddess, and her mate Akbar, after a medieval Muslim emperor. Amid heightened religious and political tensions between Hindus and Muslims the lions' names drew an outcry." An official of a far-right group linked to India's governing Bharatiya Janata Party said, "It is blasphemy...And an assault on religious beliefs of millions of Hindus." The case was initially brought before a judge, who expressed surprise and asked the petitioners' lawyer if he was talking about land. "No, your lordship, of lion, lion", the lawyer said. (Yasir, 2024)

A Pioneer Naturalist in Feudal Japan

Now changing the angle again, this topic has little to do with zoos. It, however, might spark interest for those into history.

The harness and chains of colonialism affected the world unevenly. Japan, for one, maintained independence from Western control because of feudal ruler Tokugawa's seclusion policy, or sakoku, closed the country's door. Since outsiders were barred entry from 1639 to 1868, Japan nurtured its own culture. One of the scholars during this period was Shunzan Takagi (?-1852), a herbalist. His first name could also be spelled Syunzan; another source gives the year of death as 1853. He was the author of the pioneering multi-volume monograph on Japan's nature. Although zoos did not yet exist then, his work extended into animal groups commonly seen in zoos today.

For generations his family served as roundsmen for a feudal lord in Edo (now Tokyo). Herbalism originated in ancient China and with time, the scope of study expanded, developing into natural history. Shunzan studied herbal medicine and painting. He realized the dire need for illustrated books about what was and was not available from Japan's nature. He assembled existing knowledge on plants, animals, minerals, humans and natural phenomena into the 195-volume monograph of herbalism. (This includes unfinished manuscripts and addenda.) A wide range of animals was included in fully colored illustrations and richly detailed texts from dragonfly, cicada, octopus, carp, monkey, rabbit, Steller's sealion to giraffe. The work not only reveals history of nature study, but also the view of nature in Edo era.

For this endeavor spanning over 20 years, he invested enormous private funds. Shimazu, an influential feudal lord, supported him but Takagi died before completing the project. Takagi was unknown during his lifetime until his work was introduced by Masatoshi Takagi, his grandson, in 1883. He described how Shunzan immersed himself in his work: "He climbed the highest of the mountain peaks, trailed down to the deepest of canyons, risked his life in hazardous oceans, reached solitary islands in the far-off seas, sailed into rivers, traversed wilderness while paying little attention to family members and their affairs, daring to ignore blames and slanders of life's busy throng, spending immense expense, enduring hardship, from dawn to dusk for twenty-some years, thus scaling a towering cliff that challenged him."

Yet his work has not yet been thoroughly examined. Today his work may be viewed via websites such as iwasebunko.jp (captions in Japanese), which was kindly provided by Mr. Katsunori Sotani of Tokyo. The illustrations are an eye opener.

What piques our curiosity is how vividly large mammals, little known at that time, were illustrated in Takagi's work. They include elephants, Asian in this case. Considering that a live specimen first arrived at Japan in 1408, followed by another in 1574, 1578 and so forth, Takagi must have had some idea about it. The giraffe painting presents a curious case; the first live specimens did not land on Japanese soil until 1907. During Takagi's time the country was closed from the outside world, yet Takagi must have had access to overseas literature. But how?

Although entry by foreign nationals was prohibited, enforcement was not exactly air-tight; Chinese and Dutch traders were allowed access to a small island in Nagasaki. Through this little hole a trickle of Dutch literature found its way into Japanese hands. As a result, to Japanese whatever the Dutch provided meant a precious news source of Europe. For some intellectuals it was a tiny window for a glimpse of work by Dutch academia. Physicians were stunned by the advancement in medical science by the Dutch. Thus, one would assume that an image of a giraffe may have been available in a Dutch textbook.

Kimio Honda, formerly with the Wildlife Conservation Society, cast a wider net on this subject. In his library he found a book about the animal illustrations from Edo period. He notes, in part: "In this book appears a hanging scroll depicting a giraffe that is almost identical with the giraffe in Syunzan's publication. It seems reasonable to think that Syunzan's version was copied from this scroll because of the details, color gradation, etc. And it appears that the giraffe illustration goes back to "Historiae naturalis de quadrupedibus libri, cum aeneis figuris" by Johannes Jonstonus or John Jonston. The volume was translated into Japanese by the order of Shogun Tokugawa Yoshimune (1741). The series can be viewed online at the Biodiversity Heritage Library and this is the original engraving plate in Jonston's book:

https://www.biodiversitylibrary.org/item/127170#page/167/mode/1up" He also adds: "The engraving is similar to the scroll but substantially different, too, and the book doesn't provide any explicit connection between the two although the scroll is included in the section about Jonston's series." (Email, 3 April 2020)

The information searching process, glanced above, has been an exercise in an exciting foreign study. What kick-started this journey was a brief email on 27 March of 2020, sent by James Murphy, formerly with Dallas Zoo and Smithsonian's National Zoo. He asked who Shunzan Takagi was. Noticing an account on a Japanese toad by Takagi, Jim must have assumed that a Japanese native would have a clue about Takagi. Having absolutely no idea I began to ask friends, and that resulted in the above. It's all Jim's fault!

References and Literature Cited:

American Association of Zoological Parks and Aquariums (1932) Zoological Parks and Aquariums, Vol. 1. AAZPA.

Anon. (1979): Book Reviews. *International Zoo News*. 26/1, No. 157, p. 4-7.

Biggerstaff, Jan. (2024) Circus Fans Association History 1929-1930. White Tops 97/2, Spring, pp. 52-55.

Brown, Tim. (2023/2024) Book Reviews. Zoo Grapevine & International Zoo News. Issue 69 Winter, p. 43.
Buck, Frank, with Edward Anthony (1930) Bring 'Em Back Alive. Garden City Publishing Company, Inc.
Garden City.

Conant, Roger (1997) A Field Guide to the Life and Times of Roger Conant. Sponsored by Toledo Zoo. Selva. Provo, Utah.

Darwin, Charles (1859) The Origin of Species By Means of Natural Selection or The Preservation of Favoured Races in the Struggle for Life. Bantam Books. New York.

Goodrum, Charles A. (1967) I'll Trade You an Elk. Funk & Wagnalls. New York.

Greene, Graham. (2007): Our Man in Havana. Penguin Books, New York.

Homans, Charles. (2010) Zoopolitics: How caged animals became a tool of statecraft. https://foreignpolicy.com/2010/05/26/zoopolitics/

Hornaday, William T. (1913) Our Vanishing Wild Life. New York Zoological Society. New York.

Johnson, Osa. (1940): I Married Adventure. J. B. Lippincott Company, Philadelphia.

Kawata, Ken. (2019) Bats, Bears, and Lions: Zoo Dinosaur's Report Card. *ZAA Journal* 13/4, Winter, p. 11-17.

Kawata, Ken. (2023a) Zooing the Grand Canyon State, Part two. *Zoo Grapevine & International Zoo News.* Issue 68, Autumn, p. 17-21.

Kawata, Ken. (2023b) Zoo History Potpourri. The Bartlett Society Journal 31. p. 32-46

Kawata, Ken. (2024) Mammals, Birds and Humans: A Tale of Zoos. The Bartlett Society Journal 32. p. 39-

Kawata, Ken and **Eames, Carol**. (1978) *Tulsa Zoo: The first fifty years*. Tulsa Zoo Development, Inc. Tulsa, Oklahoma.

Kennedy, John F. (2006) Profiles in Courage. HarperCollins Publishers. New York.

Kisling, Vernon N. Jr. and **Barongi, Rick.** (2022) Zoological Gardens of the United States. In: *Zoo and Aquarium History: Ancient Animal Collections to Conservation Centers*, Second Edition. CRC Press, Boca Raton.

Leopold, Aldo. (1966) A Sand County Almanac. Ballantine Books, New York.

Mann, William M. (1930) Wild Animals In and Out of the Zoo. Volume six of the Smithsonian Scientific Series. New York.

Minteer, Ben A. and Harry W. Greene, Eds. (2023) A Wilder Kingdom; Rethinking Nature in Zoos, Wildlife Parks, and Beyond. Columbia University Press. New York.

National Academy of Sciences (1975) Research in Zoos and Aquariums. National Academy of Sciences. Washington, D.C.

Newman, Murray. (1994) *Life in a Fishbowl: Confession of an Aquarium Director*. Douglas & McIntyre. Vancouver.

Perkins, Marlin (1982) My Wild Kingdom. E. P. Dutton, Inc. New York.

Reed, Theodore (1979) *The Exotic Community.* In: *A Zoo for All Seasons*. New York: Smithsonian Exposition Book, distributed to the trade by W.W. Norton & Company.

Risen, Clay. (2024) Anne Innis Dagg, 91, Biologist Known As 'The Woman Who Loved Giraffes'. *The New York Times* 19 April.

Russell, Benjamin P. (2024) One Naturalist's Field Guide To the Country's Founding Birders. *The New York Times*. 14 May.

Siegal, Nina. (2024) New Amsterdam Seen Through Indigenous Eyes. The New York Times. 28 May.

Yang, Stephanie. (2024) Moo Deng's 15 minutes of fame. The Week. 24/1214.

Yasir, Sameer. (2024) Lion's Name Draws Anger From Hindus. The New York Times 28 February.

The above is an extract of the article published by The Bartlett Society in Journal 33, October 2025