ZOO HISTORY POTPOURRI

Ken Kawata

Our Yesterdays Revisited

For an institution or profession to recognize where it stands and formulate its future course, it is essential to examine, even briefly, where it has been. The same can be said about an individual person. Without this process a foundation for a worthwhile discussion becomes inherently anaemic and feeble. A recent example: "The Value of Zoos for Species and Society: The Need for a New Model" by Spoorer et al. (2023). The authors review a variety of topics from definition of a zoo, "reputation and trust", "The new model zoo's sphere of influence on species and society", "Public health and wellbeing", "Scientific research" to "conservation finance". Throughout, the authors' approach may be described as if a person would be manually probing a large earthen pot without ever reaching inside. To put it another way, it is comparable to a group of blind men feeling various body parts to figure out an elephant.

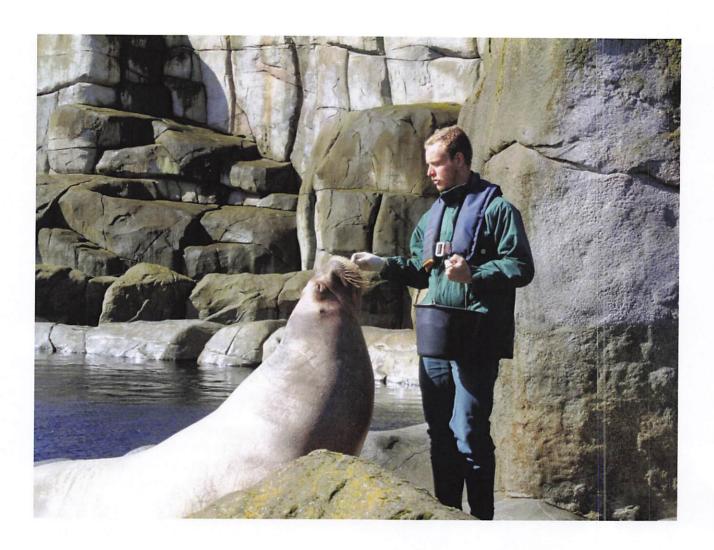
It reveals a remarkable lack of historical perspective. Then comes a quixotic point that for the traditional model for four pillars of zoos' collective role, conservation, education, research and recreation; "Evidence is needed such as systematic evaluations and meta-analyses to understand the extent zoos collectively meet these objectives." The review is one-dimensional and paper-thin, for they ignore our predecessors' accomplishments, accumulated over the decades (at least), in published accounts. It is here that the claim for "a new model" and "the evidence" for it becomes meaningless. How does this come about? One of the clues may be found in the Reference section.

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. To get to the heart of the matter, we need to know where we have been. And to examine the orbit which today's zoos have trodden, there is no need to trace back to ancient Mesopotamia. Rather, an early part of the last century would do and that raises a question or two for Spooner *et al.*

Firstly, where is Carl Hagenbeck? His zoo was opened in 1907. "Carl Hagenbeck was a visionary in zoo and exhibit design and has truly been called 'the father of modern zoos'." (Ehrlinger, 1989) Secondly, where is Heini Hediger, the zoo world's intellectual giant? He had already shown us the "model" in three of his books translated into English. My favourite: "Wild Animals in Captivity" (1964) whose original was published in German in 1942.

I once asked two German zoo professionals: "Has anybody else organized biological principles in zoos as Hediger did?" The answer: Nobody (Kawata, 1991). It might be noted that I am not the only one with a critical eye on Spooner *et al.* "Terrible. Real learning opportunities seem to have disappeared replaced by focus on biological conservation in isolation," said Sue Dale Tunnicliffe (email 18th February 2023). Gunther Nogge agrees: "The role of zoos has historically been categorised as fitting within the four pillars of conservation, education, research, and recreation. These 'pillars' no longer align with present day conservation zoos', mentioned the authors. Obviously the authors want to drop three of the four pillars. This is not my zoo understanding anymore." (Gunther Nogge, email 17th February 2023) "All authors were employees of Chester Zoo," the authors noted. Chester Zoo, dating back to 1930 with G. S. Mottershead's private zoo, is globally recognized. Hopefully, those authors will publish quality contributions in the years to come.

The Bartlett Society





Zoo History Potpourri

(above)
Unbeknownst to the public
what may appear to be "a fun
job" in close proximity with
animals is just a tiny part of a
keeper's work. With a walrus,
Tierpark Hagenbeck, 2017.

(left)
Animal care is a small part of zoo work. The grounds must be kept clean, too.
Schönbrunn Zoo, Vienna, 2019

Photos: by Ken Kawata

In Hot and Humid Houston, Texas

Sweltering and sizzling heat added by soaring humidity to match it characterize the summer in Houston, the largest city in Texas, U.S.A. It was September but the heat continued into early October. Unrelenting weather was evident as I watched a crowded swimming pool of the hotel from the comfort of the adjoining air-conditioned restaurant. It was during the 1973 annual conference of the American Association of Zoological Parks and Aquariums, or AAZPA. The exhibition hall and meeting rooms of the hotel were quite crowded. This year the conference offered an exceptionally innovative theme, science and zoos. Subjects at technical sessions included: "The Genetics of Inbreeding"; "Management of Breeding Programs in Zoos" and "Cell and Sperm Banks for the Zoological Parks". The texts of the program were published by the National Academy of Sciences in 1975. At sessions, speakers, including Sadleir and Snyder (as cited in the reference section), armed with new knowledge introduced to the zoo audience topics from the cutting edge of biology. At that moment one word, *genetics*, was predicted to stir everyone's pulse in zoos. It was a rare occasion that one word could change how you view the zoo world in the coming decades.

Advanced as the programs were, all the excitement should not have given the impression of a dawn of an unprecedented seismic era for American zoos. "Carrying on" is what zoos do well like a trusted friend, no matter our stage of life or age, today or yesterday. So we should not forget the work of our earlier generations, as noted above. We should recognize their long-overdue credit, for, they did their best with what they had just as we do. Failure to acknowledge their accomplishments would amount to generational chauvinism, the notion that the current generation is superior to all previous generations. That represents arrogance and ignorance. Our predecessors' footprint was quite evident, for instance, by a review of 1930s publications. Example: A 103-page document is divided into five parts such as organizations, construction, care and maintenance, aquariums-museums and statistical (Doolittle, 1932) thus building the foundation for us today. Our pioneering scientists during the 1930s through 1940s included William Mann (entomology) and Roger Conant (herpetology) and both served as AAZPA presidents.

Now, back to Houston. Zoos at that age lived through the turbulent 1960s. Circumstances that we may take for granted can change so quickly, and nearly forgotten details stand out. Among the events were the civil rights legislations which cast profound changes on minority groups and women. That was evidenced by women's liberation which promoted equal rights for them, as they emerged in the country's job market (zoos were essentially a men's world then). Another mark in history, the Vietnam War, caused a prolonged division over the society. Zoos are by no means isolated islands, and those changes shaped the foundation of zoos. Within zoos there was a wave of newcomers. The post-World War II economic prosperity allowed local communities to build 23 new zoos in the 1960s, the largest number during any previous decade. Following that,1970-1979 saw 24 new zoos open their gates. Both decades combined, the number added up to more than a quarter of zoos in the country (Kisling, 2001).

These statistics may have presented a bright future for the zoo world. Yet, it is essential that we maintain a critical and broader perspective on history. From an unlikely source, here follows a viewpoint from a famed novelist. "...for Hemingway every story had an inside and an outside". Charles Scribner, Jr. explains what he finally realized about Ernest Hemingway's work. The outside may be for a good yarn while the inside "could be the basis for a work of literature" (in the preface for one of his novels, Scribner, 1986). That principle applies to any field including zoos. It may help those of us who search for meaning in our daily work, to penetrate into zoos' inner dimensions. In actuality, we may be overlooking such meanings that are buried in big data sets. Examples abound. The Red Sea has not yet parted for all aspects for women. And for all of us, the struggle for excellence continues as traditions and challenges collide; labour disputes, financial difficulties and public relations turmoil appear inseparable from zoos' daily operation.

For a moment now, let us focus on the animal collection. In the New Age Zoo era there is an impression that the animal collection no longer claims to stay in the centre of zoo universe (Brown, 2016). However, the animal collection is the component that attracted many of us to zoos in the first place. Indeed, without an animal collection, zoos would not exist at all. A quote from a professor (Burghardt, 1985):

Let us retain an open-minded delight in animal abilities, a respect for what they may be experiencing, and a balance between scepticism and incredulity. And we must not forget, nor ignore, the use, or misuse, to which our findings will be put in the growing debate on the treatment of our fellow creatures.

To truly appreciate his words, however, one would require years of first-hand experience and knowledge about animals, individual as well as species. We can even get into the most fundamental issue about captivity itself. That, of course, belongs to *inside*.

What is "Captivity"?

Perception of our relationship with wild animals in captivity, be it elephants tethered in a circus or a gorilla in solitary confinement at a zoo, changes with time. The above examples, interested and even inspired us a generation or two ago, are now looked at with nostalgia, unease and even guilt. It's perceptional shift. We know not to romanticize the swashbuckling past - snatching infant gorillas by killing adults and bringing them into zoos in spite of high mortality rates at every step of the process. Exploration is on the other side of exploitation, the relentless drive to extract our subject for "conservation programs" from nature. Zoo animals, whether they are in "immersive habitat" or kept behind thick metal bars, are in captivity and for animals, such different accommodations make little difference. What counts for the occupants is the quality of the space, as per Hediger. The appearance of exhibits is more for people, visitors and staff, not for the occupants. Who are we fooling? Ourselves! "Naturalistic" appeal, a commercial product to satisfy customers, turns into hypocrisy. In the process animals have been pushed away from the scene and few seem to speak up for them. Somehow, we need a reality check and ask ourselves: What is captivity?

Boice noted that the most authoritative writers on captivity, such as Crandall and Hediger, did not *define* captivity. He then listed the four most distinguishing qualities of captivity as constraint, segregation, protection and taming (Boice, 1981). His view is from the ivory tower but that aside, when we face a critical subject, Hediger's words are helpful to organize our thoughts. For instance, he said: "One of the most widespread ideas concerning wild animals is that in nature they are fancy free and able to range at will over wide areas. Nothing could be further from the truth." (1964) Wild animals live in a tight time and space system. This way, Hediger clears up one of the glaring misconceptions on wildlife, a trap many would stumble into, to get our discussion underway.

(Not to get side-tracked, but the name Hediger reminds me of an episode back in the 1980s at a conference in California. There I met a professor who said he taught zoo biology. "Do you use Hediger's work?" I said, to which he responded "Isn't Hediger's work from the 1950s and outdated?" (Kawata, 1991). How *dumb* could this man ever be? Does passing of time chew out and erode important documents like termites? Hediger's wisdom is timeless. His 1964 volume, from which the above quote was taken, was originally published in German in 1942. Blessed are those who do not have to take this professor's classes.)

Life of captives has been discussed by various authors. Konrad Lorenz, for one, commended: "By keeping a living thing in the scientific sense we understand the attempt to let its whole life circle be performed before our eyes within the narrower or wider confines of captivity." (1962) Without specifically mentioning it he reminds us something we often overlook: At some point a creature (or its ancestry stock) got transferred from in-situ to ex-situ existences. That must have marked a major event in the animal's life. We cannot experience it first-hand, of course. But just to imagine the impact of such a transfer, here follows a fictitious case for a young human being thrown into an unusual situation. Mowgli is one of the characters in Rudyard

Kipling's The Jungle Book, a collection of stories published in 1894 (my copy is from 1987). A boy, raised by wolves, is captured, adopted by a woman and taken into a residence:

Mowgli was uneasy, because he had never been under a roof before; but as he looked at the thatch, he saw that he could tear it out any time if he wanted to get away, and that the window had no fastenings. ... There was a difficulty at bedtime, because Mowgli would not sleep under anything that looked so like a panther-trap as that hut, and when they shut the door, he went through the window. (Kipling, 1987)

To anthropomorphize a bit, I presume that when a wild animal, transformed from wilderness into a captive environment, it goes through a catastrophic experience something similar to Mowgli's journey. A wild animal is a soft round object in a metamorphic sense, but it is now forcibly pounded into a square opening of a metal container called the zoo. That raises a question: What does a captive environment, the cause of such a disruption, consist of? An explanation was presented by Sadleir who categorized four "environmental parameters" (mostly focusing on mammals). Firstly, he lists **photoperiod**, something that rarely attracts our attention. But he notes, "It is possible that a failure to recognize this phenomenon may have contributed to the relatively poor breeding records of some of the exotic mustelids." Second of all, **nutrition**, something we can relate to with ease. In this category he points up an interesting aspect: "It would be of great interest to seasonally alter the fat balance by manipulating the protein: calorie ratio of the diet to determine if this could improve breeding." Seasonality in insitu populations is a topic zoo people rarely pay attention to. That is also true with migration.

The third parameter is **social environment**. His thought: "There would seem to be a need for ethnologists to develop ethnographic models of the major zoo species that could describe the necessary and sufficient social components for breeding in captivity." This is followed by the fourth and last environmental parameter, **physical environment**. To sum up all four he makes a worthwhile suggestion for zoos. "...if 'spontaneous' or 'unsolicited' breeding successes are to be utilized as indicating the correct environment for breeding in a species, every attempt should be made to recognize the necessary and sufficient components operating at this time and to report them subsequently in the literature. ... it becomes very necessary when breeding successes are reported to give as full and exact a description as possible of the particular cage or enclosure and of the husbandry regime employed during conception, gestation, and lactation. As such reports accumulate in the literature, zoo biologists will be able to recognize with increasing certainty the necessary and sufficient environmental components for successful breeding." (Sadleir, 1975) His four parameters provide a tool for meaningful discussions.

Sooner or later, a discussion on zoo animals will lead to stress in captivity. "A number of factors related to behaviour are inherent features of the zoo and potentially capable of inducing stress reactions," observed Robert Snyder. Based on his research at Philadelphia Zoo he commented: "The available evidence suggests that well-nourished mammals acclimated to the zoo environment are resistant to these pathogenic agents [such as Shigella flexneri and Entamoeba histolytica]. Conditions leading to stress are believed to lower the host's defences sufficiently to allow these intestinal pathogens to invade the tissue." (Snyder, 1975) That would lead to the awareness of Adrenocorticotropic hormone or ACTH, often produced in response to biological stress. Stress, of course depends on how it is perceived by the animal. An approaching keeper may be recognized as a tyrannical monster that alerts his charge or a "friend", or perhaps, the keeper could be another casual environmental component.

All the above review has barely begun to scratch the surface of the topic of captivity which is an illusory subject to define. Here follows my interpretation of captivity:

Act of placing wild animals in human-built surroundings with restricted physical space and limited environmental components including social structure, reproduction, dispersal and nutritional access.

It is a reckless, maybe a quixotic, attempt on my part and I hope others will try their own.

"Then You Must Love animals"

The public's concept of "animals" seems to be conceived through household pets, mostly dogs. The dog is a family member and, in that sense, not really "an animal" per se. People maintain intense emotional attachment to individual dogs. They are thusly under the misguided impression: I love animals, so how can they harm me? In their mind "animals" are an extension of their dogs, yet it is inappropriate to expand that emotion to wild animals including those in captivity. It is doubtful, however, that the public takes potential dangers caused by animals seriously. Because they continue to be biologically illiterate, firmly wrapped in naïve perceptions on wildlife. I recall a lady who just drove by at a zoo service gate, a typical middle-class, middle-aged, suburban white. We were unloading supplies and it happened in Belle Isle, Detroit, back in the 1990s. She was curious as to what we were doing so I told her, "We work at the zoo."

"Oh, is that so? Then you must love animals." There was a moment of hesitation on my side. She did not miss that brief pause. "Don't you?" Don't you?" she continued to press. But how could I explain to her that I respect wild animals for what they are, but not what we want them to be? That we deal with wild animals in captivity, not in the comfort of the living room and hug and kiss them; that there exists a hard physical barrier between us? Misconceptions abound about zoos and zoo work by the public. Examples: Feeding animals and veterinary care are not the most expensive part of expenses. In actuality the largest chunk of zoos' budget is consumed by people, i.e. salaries and wages. "Zoo animals are tame" is another obvious one. Zoo issues should not be taken in a one-dimensional sense. But how can you explain that to this lady? Or any other lady, girls or boys or men.

The New Middle Class

She was in her thirties, dark-haired, medium-built, average-height with a nice chin, and comfortably dressed. She had a mild voice and spoke with a business-like tone, having no particular accent. Without previous zoo background Debbie came on board in charge of public relations in Milwaukee County Zoo. One day she wrote a press release, and I, the general curator, noticed that it stated penguins were from the Arctic. So I kindly reminded her that penguins are from the Southern Hemisphere and not from the Arctic. Her response: "So what?"

That quick note symbolized the wave of the new middle class in the American zoo world.

In the bygone days, a zoo director would march into the municipal headquarters office for a song and dance routine and received a chunk of funds to run the zoo. In the 1980s, however, the society's new waves rapidly swallowed up local governments in several ways including financial stability. Most mainstream zoos, run by local governments, could no longer rely entirely on the tax levy for institutional survival. The heyday of the "zoo animal man" saw a sunset as a director was now required to run the zoo in an efficient, self-supporting (even partially) entity "like a business". Making a long story short, that led to the arrival of new staff for public relations, marketing, special events and fund raising to increase revenue, hence the rise of the new middle class and Debbie epitomized this trend. To a traditionalist who cut his teeth in animal management, the new comers represented colonizers. Getting ever closer to the driver's seat of the zoo they were no longer the "support" staff.

Back to "So what?" by Debbie. As a zoo official she was spreading inaccurate information about animals. Also, at that moment, she symbolized the colonizer class and I, a tribesman who guarded the animal collection. The dawn of the era arrived when the animal collection no longer sat on Mount Olympus. The trend became common in other zoos such as Staten Island Zoo. Mary, in charge of development (translation: fund raising), worked in the administration building away from the smell and sound of animals. She did not know, nor did she care, that

the zoo was highly praised internationally. Just to cite two examples: The staff pioneered in building a large collection of rattlesnakes; the trailblazing achievements by a female veteranarian, an extremely rare example by a woman back in the 1940s.

Cushy Job?

A pile of paperwork awaits in a medical office before a patient gets to see the physician. One day I sat down in a doctor's office and began to fill all the pages, mostly consisting of personal questions. One of them asked about my job so I answered "zoo curator". A young, well-dressed, attractive receptionist with pleasant eyes and a nice smile noted it and casually commented: "Cushy job, huh?" I just smiled. "Cushy" of course refers to undemanding or easy. She would not comprehend that zoo work is mostly people work, that we deal with fellow humans more than with animals. It appeared, however, that she *knew* that I played with animals all day and still got paid (and that is an *outside* view). In reality a zoo is another (although quite unique) workplace, mired in mundane people problems. Once you step into a higher position the pressure from daily work, most of which is hideous, increases.

Proportionately the chasm between you and animals becomes wider. Part of being an administrator is being able to compromise, but also knowing what you cannot compromise upon. Regardless the work puts a burden on middle management positions between screaming keepers and upper level's eyes. When taking such a position in a new workplace you find yourself in a maze of new personalities. You may even find yourself in a minefield. It may take just one smiling, manipulating keeper to orchestrate it; he can backstab you and twist the knife. Also, problems may come from the top.

Zoo history is peppered with casualties, not caused by animals. Behind a brief official statement that so-and-so "No longer works at this institution" lies a drama, a soap opera in an "animal paradise". A point to make: People often lose their positions not due to incompetency, but because they are capable. For capability, enthusiasm and ambition could present a threat to insecurity and mediocracy of the higher echelon. At times managers have been selected because they keep their mouths shut and never step out of their prescribed work boundary. Most likely they stay there into ripe old age to collect retirement benefits. They probably hire subordinates who may easily be manipulated, a safe bet, thus the cycle goes on. The result? Productivity may take a slow downhill curve, so does the workplace morale.

Yet some people cannot keep their mouths shut. They tend to point up what's wrong with the workplace and consequently, the first to receive a one-way ticket off to the street. Some others, not that vocal but carry out duties in a quiet but competent manner, may also become a target. One day suddenly they find themselves newly unemployed. Some lucky ones survive on the government's unemployment benefit, spouse's help or personal savings. Fortunate ones may find a job after months of searching. It may be a lower position with less pay and prestige, but they are thankful that they can stay in the chosen field, that they can meet up with friends again at zoo conferences. Unfortunate ones keep trying unsuccessfully, and finally give up. Here follows a case of a friend in Florida, whose initials are S.C. So mild-mannered he had an excellent reputation, having a combination of an admirable personality and technical skill and knowledge. His fate:

"The new zoo director fired me on her first official day on the job. Said '...your position has been eliminated so this will be your last day at Zoo.' I had about 3 hours to pack up my stuff. That's what 19 years of stellar service will get you around here." (Email, 28 July 2015)

After I relayed the news to a select number of colleagues responses began to arrive, including the following from Europe:

"Dear Ken,

Thank you for the really terrible sad news. I am really shocked to read this. Not only because the zoo is one of the best zoos I have ever seen and one of the main reasons for being so good was the excellent work of a great general curator, but also personally. [S.C.] was one of the first American colleagues I ever met, and he was always so nice and cooperative. We met for the first time on a Tomistoma conference in Thailand and then I visited him twice in Miami, and we always had a good time. Also he introduced me to so many colleagues working in AZA [Association of Zoos and Aquariums] zoos - I am really grateful to him, and I am really shocked to read this. But as you say it is not the first time an excellent curator needs to leave because of the insecurity and ignorance of a new director... a real shame for Miami!

I have written to him, and his email neither bounced back nor did I get an automatic reply. Still I suppose after reading your message he won't be able to read it. Unfortunately, I do not have a private email address of him. Can you send me one? Or if he doesn't want his email address to be distributed, can you forward this message to him? I am really shocked, and I don't understand such a decision from a new director, and although it certainly does not help directly, he may get a tiny little bit morale consolation, when he knows his colleagues worldwide are with him in their thoughts.

Best regards." (Email, 29th July 2015)

As a follow up, S.C. told me that at that zoo, "the Mammal Curator has gone to Toledo. The curator titles have been changed to Animal Manager. The remaining Bird and Ectotherm Curators can reapply for these positions. A thinly veiled excuse to get rid of them. My job is advertised as Chief-Animal Science. I intend to apply. Duties are the same. Incredibly callous behaviour...." (Email, 31st July 2015)

S.C. did not get his old job back. Nor was he able to find zoo employment again.

Personally, I can relate to the case of S.C. During my zoo career spanning for decades, I was fired twice and pushed out once. Most devastating of all, I was kicked out of the position of the general curator at the Milwaukee County Zoo in 1987, which started a long period of emotional and financial decline from which I never fully recovered. At that time we lived in an apartment complex and many residents knew I worked at the local zoo. Some must have thought it was funny to work at a zoo. One day, an old man whom I met on the staircase smiled and shouted, "ZOO!!!"

I smiled; there was no sense explaining to him zoo politics. He must have assumed, as other members of the public would, that I had a good time with animals at work. Unknowingly he rubbed in a boxful of salt into a fresh wound, as I was trying to push it away and to figure out what to do; how to apply for unemployment benefit and to look for a new job in a hurry. I have not been back to Milwaukee's Zoo since then.

So much for the "cushy job". I wish to put such a "case report" in the minds of dreamy-eyed zoo job applicants, fresh off college campus who want to be a zoo curator. Of course, extensive experience and vast knowledge on animal management are a necessity for a curator. But that is only half the battle; you are still in confinement of a mundane human sphere.

Out of the Cocoon into the Worldview

Circling back to the nitty-gritty in the inner zoo circle. Animal keepers, those at the entry level in the work hierarchy, usually stay in their own cocoon. Some of them manage to climb up the ladder, often into middle-level managerial group. A selected few reach the top position. The degree of success in their career depends on the individual and luck among other factors. Some may achieve a much higher position, growing professionally while expanding their worldview. Even a smaller number reaches the summit of the zoo world. During my zoo career I was fortunate enough to be acquainted with some of them.

[&]quot;Find Three Men from Kansas"

"Are you from Kansas?" a policeman asked me.

"Yes, I live in Kansas."

It was at the National Zoo in Washington, D.C. on a sunny Sunday in early September 1970. The Zoo had its own police force. We entered the gate at 10:30 a.m. and lunch time was approaching. At a zoo with no admission charge, the grounds were packed with visitors. We were a group of three from Topeka Zoo, Kansas, Gary Clarke, director, Paul Linger, general curator and I, a keeper. Having a poor sense of direction, somehow I was separated from the two inside the zoo restaurant.

"Do you know Dr. Reed?" the policeman continued. Theodore Reed was the director then.

"Yes sir, I know Dr. Reed."

"He is waiting for you. Over there." A surprise!

We were on a whirlwind zoo trip across the eastern half of the country. As a professional courtesy Gary dropped a line, telling Ted Reed that we would visit the zoo. But it was Sunday, and we would never have expected Ted, a family man, to meet us. Unbeknownst to us, Ted Reed wanted to give us a tour of his zoo himself, and issued a directive to the police force to find three men from Kansas. In a sea of people, he was so glad to see us. With enthusiasm he took us into the Komodo dragon yard where two monstrous monitor lizards were sunning. A memorable episode during the tour: We came to the row of bear enclosures and Ted wanted to introduce us to a specific individual. It may have been Smokey the Bear, a national celebrity, a symbol of forest fire prevention, or an unusual hybrid bear, but I do not recall which one. Anyway, not surprisingly, in the middle of the day the bear was sound asleep way back in the enclosure. Against the rule the director jumped the guardrail, picked up junk food left by visitors, talked to the bear to entice it to wake up, in vain. (Little did we know then that Ted would be pushed out of the directorship even before his retirement age by the upper-level management. Years later when I visited the National Zoo, I said, "I'll see you in your office." "You know my office, Ken? It's in the maintenance shop", he said. I felt so bad and did not bother to look for the maintenance shop.)

Also unexpectedly, Ted took us to his residence where we stayed until 7:30 p.m. We sat down in Ted's large library and he discussed zoo issues; he commented on books by Desmond Morris, how his focus began to switch toward sensationalism. As the top administrator of a large branch of the Federal Government, the National Zoo, Ted Reed was exceptionally personable and he and I continued to be friends. One day he picked me up at the Washington, D.C. airport. Unlike the previous times he was clean-shaven, and for a moment I did not recognize him. "Hey, it's me, Ted Reed!" he shouted from a distance. I was a bottom-level employee of a small zoo, but that did not matter; what counted was comradery. He once noted, "The Zoo' is a weird, wonderful, exciting, frustrating, glorious, rewarding, disheartening, beautiful place to work. 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)

But that was then. Time was changing rapidly. Business executive Jack Jones attended his first AAZPA Annual Conference in 1969. "There were about 150 attendees. ... The people there were 'animal people', ...the conference program was mainly about animals. ... Almost immediately, however, the zoo world began to change... The great tax-payer revolt of the 70's and 80's began, forcing budget reductions on most public zoos. This in turn precipitated a greater dependence on earned income and donations. The ecology movement gained strength. Animal rights organizations began to proliferate and to target zoos for change. ... The changing focus of zoos has precipitated a dramatic change in management philosophy and structure within most zoos. Now we have the rise of the zoo managers. Over the last two

decades more and more zoo directors have come from public, private, or military management backgrounds." (Jones, 1994).

Another voice, this time from a college professor. "I've been thinking about the fate of modern zoos specifically their declining 'status' in the media. I know you partly link the decline to the replacement of 'animal men' with Ph.D. and MBA zoo leaders, and I've come to share your sentiment. It seems though that there is another dimension: there are few strong and distinctive personalities among today's zoo leaders (or, at least, their personalities are kept in check by PR consultant). Zoos have become somewhat 'faceless' institutions. (Who directs the San Diego Zoo? The National Zoo? The Bronx?) What reptile curator today has the star quality of Raymond Ditmars? The cable network Animal Planet is saturated with the kind of shows that 50 years ago would have been hosted by zoo personalities like Perkins. Thus, paradoxically, as the zoo world has become increasingly professionalized it may have lost some of its public authority. All of the excellent science and conservation work cannot 'speak' eloquently and passionately when a city council threatens budget cuts or PETA protests at the gates of zoos need figures like Perkins and Mann to make the case for zoos through the drama of their own lives, not through the recitation of facts, figures, and arguments." (Erik Trump, email, 25th April 2011)

At this point, let us step out of the zoo field and turn the clock back for a moment. Some of our predecessors cut their teeth in immersing themselves into nature itself (certainly not into Internet) at an early part of their lives. Ernest Thompson Seton, a world-renowned naturalist and author, is still remembered and adored in Europe and Asia but mostly forgotten now by the younger generations in this country. A quote from him: "We have desolated our heritage, absolutely devastated these wonderful wilds. We have robbed our children. We have robbed our country." (From speech to Canadian Club at Chateau Laurier in Ottawa, 1924; the episode was told by Julie Seton, his granddaughter who lives in Las Cruces, New Mexico.) A century later his insight and foresight about our future have remained timeless.

Now back to those at the helm of zoos today. Gone are the days when I used to stop by the director's office to say hello, sometimes unannounced. Some of them, such as George Rabb of Brookfield or Ed Maruska of Cincinnati, would spend a couple of minutes no matter how busy they might appear, giving me a recent reprint of his paper, or take a quick walk in a segment of the zoo for shoptalk. They were biologists or veterinarians by training, and we had the pleasure of spending a few moments for sharing common interest.

Shifting Profiles of Zoo Directors

It may be an interesting mental exercise to turn the clock back several decades to the pre-SSP, pre-Species360 days and view the zoo world through history's tunnel, even just for a moment. For the current generation of zoo professionals, it must sound like a time of Old Testament, but in actuality it is not that long ago. Most top positions in zoos carried a simpler title then: director. By comparison, today's top positions seem from a different planet: CEO, President, or Deputy Chief Executive. Not to get side-tracked too much but I wonder. Does all the alteration in nomenclature reflect the improved qualification or quality of their work? Or just the old wine in a new bag? On the entry level positions, we see "animal care staff" instead of zookeepers. That also extends to zoo visitors who are often termed "guests" and as someone pointed out, we make our "guest" (which could mean, in zoological terms, a commensal organism such as an insect that lives in the nest or borrow of another species) pay an admission charge? Who are they fooling? Now let me get off the soap box, and let's wander out of the zoo sphere a bit.

"The left these days gets a bad rap for policing language. It can be irritating to feel like you have to watch how you say things or keep up with the latest lingo when the old lingo still seems perfectly fine," noted John McWhorter. Instead of "pregnant women", for some it is now "people who are pregnant" or "birthing people". There also exists the impulse to refer to

"enslaved people" rather than "slaves". "Change how people say things and you change how they think about things, and then the world changes. That's not how it works, though. Good intentions frequently don't translate into efficacy. So, the question is, how much does changing terminology really accomplish?" (McWhorter, 2022)

Back to zoos of yore and directors specifically, their work differed considerably from today. Among their hoped-for requirements: To establish the best possible animal collection to their liking. In those days zoo animals were commodities measured by the almighty US\$\$\$, something unimaginable to today's zoo workers. Many directors were collectors of live animals and selected species themselves. If so-and-so got an okapi, a prestigious animal, then I will too, don't miss the bus. Animals were costly of course, but some directors spent money like a drunken oil-lease capitalist in Texas. How did they do it? By using their political skills for song-and-dance routine at "downtown" (municipal government headquarters) or talk to rich donors. To be a competitive business administrator was not always on their priority list. Viewed as a group, directors presented a different mosaic of personalities. To put it in another way, it was often an assembly of singular and idiosyncratic men. Occasionally you'd find a formidable man with the mind of a scholar and the instincts of a public celebrity; aforementioned Bill Mann and Roger Conant come to mind. Nearly all directors were male. Even as late as 1982, out of 141 zoos 133 were led by male directors, five by females, leaving three "unknown". There were six aquariums and all had male directors (Boyd, 1982).

So we often saw a parade of memorable figures. To illustrate in a bit folksy fashion there were: A prima donna, a Machiavelli, a Pope in addition to a boozy (a heavy drinker), an alleged pariah and a laissez-faire, country club manager type (translation: doing as little work as possible). Their rise and fall, cherished triumphs and crushing downfalls often resembled a Russian novel, or at times, grade-B cowboy film.

The character of a zoo itself was driven by the personality of the man at the helm. It was nowhere in their rule book to create a politically-correct image or a nationally homogenous, standardized profile of a zoo. A tour of a zoo under a capable director resembled attending a concert of a symphony orchestra. Some zoos reminded you of the authoritative style of Arturo Toscanini, while others, a cheerful baton of Sir Simon Rattle. There was rich diversity in the animal collections, personifying his own emphasis. Species were chosen on the basis of rarity that would impress colleagues. The exhibit design resembled an experimental lab with ongoing trials and errors. Also, specialization of animal collection was enjoyable to watch. Walkthrough tours of, for example, Grzimek House in Frankfurt Zoo or Dallas Zoo reptile house provided a worthwhile experience. In a sense it was reminiscent of a chamber music ensemble. For old timers it was an innocent era. By the time the new millennium rolled in, the league of old-school directors had vanished like a castle of sand on the beach, soon to be replaced with a castle of a new breed.

Today's zoos no longer appear to be piloted by the individual directors' drive and determination. A glance at a 2014 document, based on self-reported personal survey (156 valid responses were received out of 245 solicited), gives a profile of the American zoo director. Of these 72% were male, 28% female; racially 97% were white (in terms of hiring and promotional practices American zoos are far from colour-blind; one quarter of the population represents none-white, hence zoos are basically a white territory). Average tenure in the current position was 10 years; average years in the profession, 26 years. In terms of formal education 43% held master's degree, JD (Doctor of Laws) 1%, Ph.D./D.Ed. (Doctor of Education) 9%, while DVM (Doctor of Veterinary Medicine), 5%. (Respondents were asked to include all degrees they have earned; some may have only included their highest degree. It appears that bachelor's, or four-year degree, is a prerequisite.)

Also, investigators of the survey made recommendations including: Consider training/development opportunities for accelerating fundraising and board management skills in

directors; anticipate and promote recruitment of female directors from within and outside the profession; consider systems and processes to rapidly orient directors hired from outside our profession. (AZA, 2014) Nowhere in the recommendations can one find any hint of importance of conservation of nature or biological science. That aside, within the directors' rank itself the turnover rate may be higher than generally assumed: "At last year's Director Retreat a zoo consultant announced in a talk that 25% of the current directors would be retired, fired or otherwise gone in the next 5 years for probably the biggest turnover ever. My calculations are greater, maybe close to 35%. Will be interesting and unfortunately, I do believe a lot will be replaced with non-animal folks." (Mark Reed, email, 29th December 2011)

The above indicates how requirements and desirable character for the position have shifted over time. However, it is meaningless to look back at an imagined and romanticized, pure and more wholesome past as we are facing a tsunami of new changes. When a zoo director's position has been filled, for instance, by a retired United States Airforce colonel, a soft-drink bottling company executive or a hotel manager, we should not hastily make a judgment in a good or bad, right or wrong context. After all Belle Benchley, the famed director of San Diego Zoo during its early period, began as the founder's secretary and grew into an able administerator. Freeman Shelly, Philadelphia Zoo director for years, knew little about animals (Roger Conant, 1997) yet he served as the president of the prestigious International Union of Directors on Zoological Gardens, or IUDZG, from 1959 to 1961, and became its honorary member in 1966 (Van den Bergh, W. K., 1973).

Critical questions still remain. The mastery by directors, their skilfulness, knowledge, tenacity and professionalism, must reveal itself when the zoo world faces a crisis, and that applies to the local, regional, national or global basis. A historic test took place in the early 1970s for zoos in America and Canada. As expertly documented by two young professors, zoos were locked in a segment of a national park organization, and that limited zoos' professional development. At this time zoos and aquariums had to meet the challenges of time, to face the new requirements such as the conservation of nature and more efficient education programs. Their need was urgent to cut off the umbilical cord from the park organization, and form an independent group. Yet zoos lacked necessary resources to do so. At this juncture a group of dynamic leaders emerged, as the preamble to the series of events states:

"We examine the modern history of the zoo community as a political player in battles to protect captive and wild animals. Ours is a story about how dynamic individuals created an organization - the AAZPA - to represent zoos. We examine how these people reacted to newly energized animal welfare and animal rights activists from the 1960s forward. We trace the political development of the AAZPA as zoo directors Robert Wager, Theodore Reed, Ronald Reuther, William Braker, William Conway, and Gary Clarke, among others, remade it from a relatively small and powerless interest group into an organization that quite effectively represented zoos' interest. We examine what these leaders said and did *privately* to ensure that zoos could continue to collect and exhibit wild animals." (Jesse Donahue and Erik Trump, 2006)

While the events were unfolding in the early 1970s, I was an animal keeper under Gary Clarke at Topeka Zoo, Kansas, where I gained first-hand knowledge of the behind-the-scenes battles for the new day for zoos. In fact, I personally knew the above six men quite well. Only one of them had a professional degree (Doctor of Veterinary Medicine) while another held a master's degree; two did not have a four-year degree. (If I may be on a tangent and a bit immodest, let me say to those who are new in zoos with a four-year degree in America, looking at the world through rose-coloured glasses who think all their education is now completed: Don't cast a stone at non-degreed but well-experienced coworkers as incompetent.) Three of them began in zoos as animal keepers, an entry level position. Their battles took place half a century ago, but a nagging question lingers today: Are today's class of zoo directors, or even other senior staff, ready to take up such a challenge? Not an easy question to entertain.

Yesterday as well as today, the role of directors should reflect an amalgam of vivid characters at the helm of organizations, large and small. Also, zoos as public institutions are at once cosmopolitan and provincial. That adds more dimensions for us to review and study them. However, a number of potentially interesting and memorable personalities are rapidly dissipating (Kawata, 2022). History consists of what we *choose* to see in the past. Our understanding of the past frequently relies on myth-making, selective memory, inaccuracy or combination of the above. Concerning inaccuracy, Tim Brown cites an example in a book about an AZA-accredited zoo in Pennsylvania: "the book appears to have largely thrown chronologically out of the window...the reader has no idea where they stand." Worse, when a park's Marketing Director was brought in to help with the photo captions, "we find a Giant Anteater confused with an Aardvark, 'gibbons' described as being a species, and other species being under-identified, e.g., 'fruit bat', 'howler monkey', etc. This element has been a constant factor within American zoo books..." (Brown, 2016) Some may say, well, the readership is just the public. Not so. Because it is for the general public and not for the professionals, one must be more cautious about accuracy.

It is disturbing that history simply does not seem to exist for much of the current generation of zoo professionals. "We own the day", they appear to be convinced; the other side of this belief is that past is all inferior. Or is it? There are different zoos to different people, of course, depending on the person's perspective, wider and narrower, of a zoo. More recently, some old-timers' concept of a zoo seems to have evaporated into nowhere but there must be a limit as to how much we can reframe zoos. Diverse views are fine. Zoos are such a dynamic entity; you never know the moment a zoo's spark will make itself known to you. How would you make it happen? You'd never know. Anyway, it is unfortunate that younger folks do not know what they are missing, particularly information on our predecessors who have built the foundations upon which we stand today. For some of us in the older crowd, memories of a small number of zoo directors from past decades, who inspired us in our earlier years, still remain vividly. Test of time may be merciless, but here follows a snapshot of men of considerable wisdom from the last century. They represent three major regions of the world. The first example is Charles Schroeder from San Diego, California.

Three Wise Men across the Oceans

"As director, he ran a tight ship. He was famous or notorious (depending on one's point of view) for his memos and for his little black book. On his daily walks through the Zoo, every dripping faucet, each bit of chipped paint was duly noted in the black book. Back in his office, his Dictaphone recorded all items that needed attention, and the next day a flurry of memos reached all those charged with correcting the problems. If, after a few days, the faucet still dripped or fresh paint hadn't been applied or there had been no response to the memo, a follow-up copy went out with a handwritten note signed CRS that simply asked, 'What happened?' Few waited to receive a third memo. The little black book and the oft-cursed memos kept the Zoo shipshape." Schroeder's background was veterinary medicine. Before becoming a zoo director, for over a decade he was engaged in biomedical research, authoring numerous scientific papers. (Shaw, 1991) As a person, he continued to be personable and cordial. Once at an exhibit hall at a zoo conference, he was standing near a commercial booth. A young woman, apparently new in the business, mistook him for a salesman (I happened to be nearby). She asked him about some product. Schroeder flashed a broad smile, and helped her as much as he could.

We now move from California to Berlin. Like other German zoos, Zoo Berlin had staff apartments and guest rooms (which are unheard of in America). In 1985 Marvin Jones, Mark Reed, my wife Jean and I were fortunate enough to be invited to stay there as guests. Word reached us that we were allowed to accompany the zoo director's morning round. Excited, we reported to an area where a crowd of staff was gathering at 8 a.m. Soon Heinz-Georg Klös, the zoo director, appeared in casual clothes. He clapped his hands and picked several key members

from the crowd including the assistant director and division heads. One of them was young Bernhard Blaszkiewitz. The group began to move.

When he stops everybody stops. When he speaks everybody falls silent. He steps in a building, be it a bird house or a primate house, shakes hands with a responsible person, receives a written report, examines animal food and asks questions. Then he leads the group to another location. On the way he notices something on the public walkway and signals to the maintenance head. It is a hole in the pavement; facing a torrent of questions the maintenance man stares at his clipboard, mumbles a word or two. While we are watching this Hans Frädrich, the assistant director, quietly tells us: "The director makes rounds on weekends on his own, and is now asking why such and such animals were not on exhibit last weekend." Soon we realize why animals appear healthy, none are mislabelled or unlabelled, zoo grounds are meticulously manicured and not one loose wire is sticking out of the fence.

We are also told that the secretary has been instructed that the zoo director is not available before 10 a.m. The four of us get up to the director's office at that hour as we have been told, and note that Klös is in suit and tie. After talking to staff members he turns to the four of us standing in a corner, the first time he makes an eye contact with us. The message is brief: "Meet me at the zoo restaurant. At eleven-thirty."

Klös inherited a long-held tradition. Max Schmidt was a veterinarian and became the Frankfurt Zoo's second director beginning in 1859, after which he took directorship of Zoo Berlin in 1885. Schmidt first introduced the zoo director's daily morning round, and also started a periodical, *Der Zoologische Garten*. (Kirchshofer, 1968) In 2008 I returned to Berlin, and at the newer and larger Tierpark Berlin I was given the opportunity to accompany the morning round by the new director, Bernhard Blaszkiewitz. He had a more relaxed style, yet the practice was very similar. The group visited one animal exhibit after the other on foot, examining the animals and the general overall conditions. Director's daily round is certainly not limited to Germany. There is a variation in the zoo directors' rounds, aforementioned Charles Schroeder's being one of them. Here follows another, by Tadamichi Koga, director of Ueno Zoo, Tokyo from 1932 through 1962. William Conway's recollection on Koga: "Among my fondest memories of him dates from the Antwerp IUDZG meeting where he was induced (it wasn't hard) to play his violin. What a delightful man!" (Email, 26th April 2016)

A small wooden house stood on a hilly side of the off-exhibit area. In the 1950s, even the internationally-recognized director endured a modest living there, barracks to be exact. At 6:30 a.m. the door opened, Mrs. Koga handed him pieces of bread, and with a camera hanging from his neck his daily ritual began. He walked alone from one exhibit to the other checking animals, and if he noticed anything unusual, he would toss a piece of bread to see the reaction. (Nearby was a small apartment house for single employees. A young veterinarian who lived there tried to accompany Koga's morning round; it lasted only a few weeks.) At about 9 a.m. when he arrived at his office in suit and tie, he already had a firm grip on the status of the grounds and the animal collection. At that time Ueno had emperor penguins, and moulting is a critical time for penguins. They were cared for by an excellent bird keeper whose name was Takashi Matsumoto. At one animal management meeting, Koga knew the moulting status of each individual emperor penguin, a vital aspect Matsumoto did not know or remember.

One day at his residence, I borrowed a book from his enormous library, written by his friend Heini Hediger. Opening the book, I noted that the margin of every page was jam-packed with pencilled-in comments in tiny letters, indicating Koga, already a successful zoo director, had digested the essence of the volume, cover to cover. It was a powerful inspiration from my mentor. He was peerless in his land, a man of unparalleled passion and self-discipline.

References

- AZA. (2014) AZA Director Demographics Study
- Boice, Robert (1981) Captivity and Feralization. Psychological Bulletin 89/1, 407-421
- Boyd, Linda (1982, Ed.) Zoological Parks and Aquariums in the Americas. American Association of Zoological Parks and Aquariums 1982-1983.
- Brown, Tim (2016) Book reviews. In: Zoo Grapevine, summer, 24-27.
- **Burghardt, Gordon M.** (1985) Current Perceptions and Historical Perspective. American Psychologist, August, 905-919.
- **Conant, Roger** (1997. *A Field Guide to the Life and Times of Roger Conant*. Toledo, Ohio: Toledo Zoological Society.
- **Donahue, Jesse, & Erik Trump** (2006) *The Politics of Zoos: Exotic Animals and their Protectors*. DeKalb, Illinois: Northern Illinois University Press.
- **Doolittle, Will O.** (1932) *Zoological Parks and Aquariums*. Rockford, Illinois: American Association of Zoological Parks and Aquariums.
- **Ehrlinger, David** (1989) *The Hagenbeck Legacy.* Text presented at the 1989 Association of Zoological Horticulture conference, Paignton, England.
- Hediger, Heini (1964) Wild Animals in Captivity. Dover Publications, Inc., New York.
- Jones, Jack (1994) Reactive Past-Responsive Future. ZOOTRENDS, 5/4, 2-3.
- Kawata, Ken (2022) Bits and Pieces from a Zoo Dinosaur. The Bartlett Society Journal 30, 36-52.
- Kawata, Ken (1991) Hediger Who? A Plea for Historical Perspective. International Zoo News No. 229, 5-10.
- Kipling, Rudyard (1987) The Jungle Book. Oxford. Oxford University Press.
- **Kirchshofer, Rosl** (1968, Ed.). *The World of Zoos: A Survey and Gazetteer*. New York: The Viking Press.
- **Kisling, V. N. Jr.** (2001, Ed.) Zoological Gardens of the United States. In: Zoos and Aquarium History: Ancient Animal Collections to Zoological Gardens. Boca Raton, Florida: CRC Press.
- Lorenz, Konrad Z. (1962) King Solomon's Ring. New York: Time Incorporated.
- McWhorter, John (2022). Changing Language Won't Solve Our Problems. The New York Times. 29 May.
- National Academy of Sciences. (1975). Research in Zoos and Aquariums. Washington, D.C.: National Academy of Sciences.
- 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.
- Sadleir, R.M.F.S. (1975) Role of the Environment in the Reproduction of Mammals in Zoos. In: National Academy of Sciences. Research in Zoos and Aquariums. Washington, D.C.: National Academy of Sciences.
- **Scribner, Charles** (1986) Preface in: *The Garden of Eden. Ernest Hemingway*. Scribner. New York.
- Shaw, Marjorie Betts (1991) Charles Robbins Schroeder: A Life Celebrated. ZOONOOZ, LXIV. 5. 16-19.
- Snyder, Robert L. (1975) Behavioral Stress in Captive Animals. In: National Academy of Sciences. Research in Zoos and Aquariums. Washington, D.C.: National Academy of Sciences.
- Spooner, Sarah L., Walker, Susan L., Dowell, Simon & Moss, Andrew (2023). The Value of Zoos for Species and Society: The Need for a New Model. Biological Conservation 279 109025, 1-9.
- Van den Bergh, Walter Karel (1973). IUDZG internal document.