## European Zoo Potpourri

Ken Kawata

Tierpark Hagenbeck's oft-photographed elephant gate, now inside the zoo grounds due to redevelopment. Ken Kawata

ALL ALL

Western Europe, the birthplace of the modern zoo, still holds paramount representatives of zoos of the world. Pilgrimage to European zoos is a learning experience. This account represents highlights in addition to commentary and opinions from the trip my wife Jean and I made in the fall of 2019. Exceptionally the Hagenbeck visit took place two years earlier. The trip begins in Austria.

#### Classic of the Classics

For millennia man has kept collections of exotic animals in menageries, the precursors of zoos. The end of the 15th century saw advancement in global navigations and explorations,

enabling Europeans to bring in wild animals that they had never seen before from far-away lands. That in turn gave birth to the revivals of ancient menageries. According to James Fisher, Vienna's zoo is the oldest of the world's zoos to survive to this day: "Schönbrunn, opened in Vienna in 1752, was built by the Holy Roman Emperor Francis I for his wife Ma-

ria Theresa, Queen of Hungary and Arch-Duchess of Austria." "In 1765 Joseph II, the son and successor of Francis I, opened Schönbrunn to the public." (1966) *("Opened" meant for well*dressed people, but that was then.)

There is magical thrill at the gate to Tiergarten Schönbrunn, the first of today's zoos. A royal institution is something America, the richest and most powerful nation of the world, does not have. Once stepping inside, the octagonal pavilion (built in 1759) catches the visitor's attention. This is "where the Queen could breakfast and watch the camels, elephants, and zebras. They were kept in houses with long, treelined rides running between them like the spokes of a wheel, through gardens and aviaries. To this day the people of Vienna can see almost exactly the same thing, for the original architecture has been refurbished and modified with such care that an informed visitor can scarcely notice the changes." (Fisher, 1966) The pavilion is now a sit-down restaurant for all visitors.

More than half a century has passed since Fisher's account, yet the scene basically stays unchanged with "the spokes of a wheel". Strolling along the walkway I wondered if Empress Maria Theresa's daughter Marie Antoinette (born in 1755; later to become the last Queen of France) shared a moment to watch animals from the pavilion. Current occupants here are popular animals such as zebra, flamingo, medium-sized antelope, Nile hippo and the calling card, the giant panda.

Today's public appreciates animals just as the royal families did. The collection includes popular herbivores such as a breeding group of African elephants, Indian rhinoceroses, above-mentioned giraffes and Nile hippos. The next tier of animals includes large carnivores such as lions, tigers, polar bears, followed by a host of primates. More exhibits extend from the pavilion circle. Elephants are given a larger area at the edge of the circle. Turning to the left from the circle, more exhibit groups such as a South American area, aquatic animals including penguins, sea lions and polar bears greet visitors; a tropical building contains bats, birds and reptiles. Soon the topography gets steep, requiring a good hike. The elevation enables varying vantage points to view a herd of Indian rhinos. After an insect area, the route points back to the pavilion circle through a children's area that consists of domesticated stock.

Challenges are many for this regal institution. Located in a palace ground it has little chance for expansion. Moreover many historical buildings are designated landmarks, allowing only a limited range of renovation to meet the requirements of the current animal care standard. Efforts have been made, however, to modify the facilities in accordance with today's zoo principals. Examples include reduction of number of species

Carl Hagenbeck was a visionary in zoo and exhibit design ... 'the father of modern zoos'

to shed yesteryear's "postage stamp collection" image. Concurrently larger spaces are allocated to many species by combining adjacent cages or yards. Even with such modernizing measures, centuries after the opening, the aura of prestige lives on; the historic Pavilion circle blends in with newer structures seamlessly.

Exhibits from the former era show the remnants of noble but outdated style. An example: A row of uniformly built cages for large carnivores, now vacant, each one appearing quite tight in today's standard. In those days one (possibly two) specimen of each species, probably cat or bear, must have occupied each cage. With a bit of imagination you can see a parade of Viennese in period attire pass by, in awe, viewing ferocious beasts from far-away "uncivilized" lands. Wildlife film had yet to appear on the horizon and the television was beyond imagination. Zoos and traveling menageries, now the target by animal extremism, offered the only contact with many wild animals for ordinary people.

An interesting approach by this classic zoo: One of the cages has been retooled and opened to invite visitors inside. It is a solid structure with thick metal bars and a concrete floor, about 9 by 7 square meters in size. We saw a family group stepping in, to feel what it was like to be an animal, such as a lion. Speaking of lions, we heard a story about a letter sent to the zoo by a citizen around the turn of the last century.

The letter writer praised the lion's cage, we were told: "It is so wonderful with a swimming pool (a bathtub that a lion would never use) and a separate room"; in reality, it was a shift cage for safe servicing by keepers. The letter reflected the living conditions of citizens at that time. A family was cramped in a small apartment with no divisions such as living room and dining room. Perhaps, several families shared one house and a toilette, an outhouse. The letter also revealed the fact that the public's view on zoos changes with time. As citizens' living conditions have improved considerably, their perception of zoo animals shifted; any space given to zoo animals is criticized as too small and inadequate. Meanwhile, basic biological requirements for captive animals, such as lions, remain unchanged throughout the years.

Continuing on the reality of the zoo world, nearing the end of our tour I overheard another story. The office receives some 300 keeper job applicants annually, mostly from young women with unrealistic expectations of playing with cute animals; cleaning up after animals fails to occur to them. Such an all-too-familiar tale brings back memories of managing a zoo for this retired administrator. A reminder of mundane topics tempted me to reminisce old days, slipping into the decadence of quietly sitting on a zoo bench. Nostalgia aside, it made me realize that, even with its glorious past, this zoo still shares not-so-fanciful operational issues with its newer cousins.

(A review of Vienna's zoo brings up an inevitable question: Which is the first modern zoo in the world? To define what is "modern", let me stretch conventional logic a bit; I find a coincidental parallel in a document, presented by the U.S. president Abraham Lincoln in 1863. It is known as the Gettysburg Address. He noted, in part: "Of the people, by the people and for the people". Its historic significance aside, his prose can be applied on the founding principle of a zoo as a public institution, i.e. a citizen's zoo in contrast to those established by the ruling class. Based on this assumption, the first modern zoo of the world appears to be La Menagerie du Jardin des Plantes de Paris, the menagerie in the Paris botanical garden, opened in November 1794; see Kawata, 2011).

#### Hidden Treasures

To be sure Hungary's capital Budapest, handsomely bisected by the River Danube, makes a clear appearance in the world atlas. Yet within the international zoo circle, Budapest's zoo is not as easily identifiable as its cousins in other major cities from Amsterdam to Zurich. At least that is the perception (more on that later). Little known, however, does not mean unimportant. Quite certainly, those who visit this country are in for a surprise. First, the zoo.

Located in the center of the city, this oldest zoo in Hungary opened in 1866. It could not escape the devastation by World War II, just as in many other European zoos. Buildings were heavily damaged by bombing; only 15 out of 2,000 animals survived the war. Moreover, from 1948 through 1989 the communist regime took the approach, "Erase the past permanently". This affected the zoo as buildings were altered or demolished (Budapest Zoo and Botanical Garden, 2013). In more recent years, with Hungary's economy in the upswing the zoo appears prosperous, keeping a pace of continuously adding new facilities. This municipal institution hosts more than a million visitors annually.

Published accounts about this zoo are still infrequent, at least in the English language in spite of its large animal collection similar in size held by European zoos with more name recognition. Exceptionally, nearly a decade ago a thorough review of this institution, seven pages long, was written by Tim Brown (2011). In my account I will attempt to avoid duplication of content. That being said, I agree with his general impression: "...there's something about the surroundings of buildings, roads, railways and the rest of the urban infrastructure which lends an enchanted, secretive feel to a new peaceful green acres for exotic animals (and animal houses) in the midst of all." Well put, Tim!

The zoo grounds, packed with exhibits, form an irregular L-shaped configuration. Major buildings utilize a unique renewable resource, geothermal heating. As the visitor steps into the zoo a towering man-made structure, the Magic Mountain or the Great Rock, catches his attention. To borrow from Tim again: "Second only to the Great Rocher at Vincennes in height. I have no figures but I find it difficult to concede that Budapest's Great Rock is inferior in any other aspect." (2011)

Enclosures surrounding the Rock exhibit: Bears, ungulates such as zebras, in addition to great apes. Inside the Great Rock is a variety of exhibits, to start: A museum-style approach such as a skeletal specimen of an elephant. Nearby stand terrariums which steer the zoo, at least temporarily, away from popular large mammals to show intricacy of invertebrates, emphasizing biodiversity. Examples include a 20-cm long jungle nymph, *Heteroteryx dilatata*, and a 40-cm long Asian stick insect, *Phobaecticus serratipes*, as well as a small and colorful parasitic wasp, emerald cockroach wasp, *Ampulex compressa*, a host-specific parasitic species. The visiting public seemed to take a keen interest in those "bugs".

On the outside, there is a variety of exhibit systems from geographical and taxonomic to specific theme approaches. A quick glance reveals: African savanna, Australia, monkey world, an aquarium called shark school, farm yard for domesticated stock and a children's section. A large body of water and moving waters, such as waterfalls and springs, are a welcome component in a zoo, giving visitors an eye break and enhancing the effect of exhibits. The answer by this zoo is a large pond called great lake, a home to cormorants, pelicans and large waders. Near the lake stands a rock garden and Little Rock, another structure around which polar bear and sea lions are on exhibit. ABC mammals are distributed throughout the landscape, including large carnivores, great apes and monkeys, mega-ungulates such as elephants, rhinos, giraffes and zebras.

In terms of support activities, from what I saw public attendance for education programs, such as lectures, appeared rather modest. Animals used for these programs included kinkajou, Harris hawk, kookaburra and eagle owl. Nearing the exit stands America Tropicana, a building featuring Neotropical flora and fauna filled with lush plants. A bit of surprise waited near the end of the tour: A cultural exhibit, a Japanese garden with a collection of bonsai, a traditional art form utilizing potted dwarf trees. For the future the zoo has an eighthectare expansion plan.

Tim Brown observes that this zoo is at ease with its history: "...it embraces its history and looks at its fantastic old buildings with the full realisation that they can still make wonderful animal houses. The best 'Ivy League' zoos do this – whilst a few others are afraid that their past might impinge upon their future. ...Budapest is my kind of zoo, embracing art and science for the public good in a spirit of community whilst maintaining a large and diverse collection." (2011) Interestingly, he never used zoos' divine buzzword, Conservation.

A question: Why, then, this zoo, a quality operation in my opinion, remains lesser known in the outside world? It is said that Hungary's language Magyar came from Asia and totally differs from the dialects spoken by its neighbors. It is also one of the most challenging languages to learn. That may explain, I was told, why the zoo continues to be a terra incognita.

That being the case even for a large zoo, it is understandable that other institutions are even less recognizable outside of this country. An example is Tisza-Tavi Ökocentrum or Lake Tisza Ecocentre, merely 110 km, or 70 miles east of Budapest.

A tall, handsome building symbolizing a huge landing bird, draws the visitors' attention in rural Hungary. From its seventh floor Lake Tisza offers a panoramic view. It is hard to imagine that the largest freshwater aquarium in Europe lies underneath your feet, in the basement. Dozens of local fish such as perch pike, carp and catfish are on exhibit in tanks, totaling 735,000 liters. There is a multilingual signage on a video loop in Magar, German, Polish and English; a fair number of tourists come from Poland. (It reminds you that in clear contrast, even with a huge landmass the United States is essentially a monolingual country.) There also is a herpetology section consisting of 16 to 18 terraria to exhibit genera from the Holarctic region, such as *Elaphe, Rana, Bufo* and *Salamandra*.

Away from a large metropolitan area, the Ecocentre provides a relaxing, even healing atmosphere compared with large, urban zoos back in the United States; managing them could resemble a controlled (often an uncontrolled) chaos! The Centre has another surprise. It welcomes 230,000 visitors annually while the population of the nearest town is only 3,000. The Centre has a sizeable operation with 35 employees and intends to be tourism-oriented. It is such is an entrepreneur spirit and their ambition is rewarded with the large public attendance.

#### Of Aurochs and Tarpan

We now move on to Munich, the Bavarian capital, in Germany. Tierpark Hellabrunn is on the right bank of River Isar. The 40 hectare (99 acre) grounds are level, covered with what appears to be a climax deciduous forest. Add a stream that flows through it, the landscape reminds me of a comment I once heard: Arguably this is the most visibly pleasing zoo in Europe. Also Hellabrunn gives an impression so distinct from older, classic zoos such as those in Amsterdam, Antwerp and Berlin (not the younger Tierpark, but Zoo Berlin) where a series of exhibits stand in closer proximity.

Like other large zoos Hellabrunn keeps a generalized assembly of species. The member of the collection that caught my eye immediately was a mustached guenon, *Cercopithecus cephus cephus*, the first specimen of this primate I saw in years. It was a good start to the visit.

What characterizes the collection, however, are large herbivores including more common stock, Asian elephants (in the elephant house built in 1914 and renovated recently; one female is pregnant), reticulated giraffe, banteng, muntjac and moose to Hartmann's mountain zebra and Persian fallow deer. Primates, aside from the mustached guenon, include gorillas and chimpanzees in the jungle pavilion. Birds are housed mainly in the aviary building.

While strolling through the grounds, a large number of female keepers became noticeable. The curator, while we were comparing notes, said that about 65 percent of the keeper work force was now female. *(A non-scientific, quick survey would probably reveal half the keeper rank to be female in Europe, something almost unthinkable only a few decades ago.)* We then got off tangent and talked about names of zoos. "Is Hellabrunn a nickname of the zoo?" I asked. "Not really," was his comment; rather, it had something to do with an underground water supply. By comparison, Artis is the nickname of *Amsterdam's zoo* (Stichting Koninklijk Zoologisch Genootschap Natura Artis Magistra). Also in the Netherlands Blijdorp, a part of Rotterdam, indicates its zoo.

Onto zoo history and animal collections. It was once a trend to collect and exhibit as many species as possible. A

large collection with a diverse range was used as a measure of success, the pride of the zoo and therefore, a tool to rank zoos of the world. Typically Zoo Berlin (in the former West Germany) was well known for its huge collection, its shining accomplishment. In recent decades a new wave began to arrive. As zoos started to put emphasis on nature conservation, the larger-the-better collection theme slowly became anachronistic. That particular philosophy lost popularity and now regarded as "postage stamp collection". Geographically, the turn of the new millennium began to witness a newer trend. The emphasis on maintaining larger numbers of species moved from Germany, the center of gravity, toward east and central Europe, noticeably in Czech Republic and Poland.

Continuing on historical perspective and back to Munich, in Europe's long-established zoo community Hellabrunn is still young, opening its gate in 1911. For its age, however, this zoo has had quite a history. Inseparable from this institution were the Heck Brothers, Lutz and Heinz, zoo directors of Berlin and Munich, respectively (Barnaby, 2000; Reichenbach, 2003). Due to economic difficulty Hellabrunn closed its gate in 1922. "Reopened 22nd May, 1928, under Director Dr Heinz Heck, as the first geozoo (species grouped according to geographical location of their habitats)." (Kirchshofer, 1968) Thus the current practice of zoo design, assigning the exhibit groups as African, Tropical Asia and Australian, dates back to Munich.

Then in 1934, Heck Brothers launched an experiment to "back-breed" two extinct ungulate species, one of them a bovid, aurochs *Bos primigenius* and the other, an equid, tarpan *Equus gmelini*. The former was last recorded in 1669 and the latter, in 1879. By "back-breeding" the Brothers "meant crossing what were considered primitive breeds of cattle and horses respectively to bring out specimens resembling their original ancestors, selecting after each generation those offspring for further breeding that came closest to the archetype." Trying to mix various horse breeds, within a decade the Heck Brothers came across what resembled the original tarpan. But they were not so successful in "back-breeding" the aurochs. (Reviewed by Reichenbach, 2003).

As Reichenbach points out in his review, "of course one couldn't and can't really speak of back-breeding 'species'; by definition animals belong to a common species if they can produce fertile offspring." In particular, more than two and a half centuries had already passed since the aurochs' extinction. The Brothers had had a grand vision and scheme, yet it is understandable that the experiment became somewhat controversial.

It was a pleasant day in Munich. Aurochs and tarpan were kept together in a large enclosure, quietly basking in the sun. Two groups apparently worked out amongst themselves to take up their own spaces. A herd of aurochs lied down in a distant hill; a bull suddenly decided to take a slow walk to the left. Tarpan chose to stay together much closer to the visitors. Both represent a living history from the Heck era, the blood lines that have been maintained through the difficult war years. For history buffs these two taxa are among the highlights of this zoo.

#### Carl Hagenbeck and his Legacy

"Does Hagenbeck mean anything to you?" "No", the young woman responded without a hint of hesi-

#### tation.

It was several years back in a medium-sized zoo in the American Midwest. With a four-year degree she was promoted to a supervisory position after several years of employment, and she was kind enough to give me a tour. What prompted my question was a lion with a large black mane reaching down to his belly, the type likely to have been advertised in the pre-World War II Hagenbeck catalog. Her answer was not at all uncommon. At issue is the global zoo heritage. Like any professional field, zoos benefit from, and stand on, the wealth of accomplishments from the past, the work by individuals and organizations dating back centuries. Yet most of us are unaware of the legacy left by predecessors.

Sadly, quite a few of their names have been buried in the sand of history. It would not be surprising, therefore, that many in the younger generation have not heard of the most prominent names. An example: The Zoological Society of London, an institution that has immensely influenced world's zoos. Its publication list has been enormous and includes the International Zoo Yearbook. When the inaugural issue arrived in 1959, even with a mere 160 pages it was sensational. We found not only an updated source of vital zoo statistics but also, an informational channel to connect zoos across the oceans. Print media were still the king, long before the era of computers, dot.com and internet.

Aside from the London organization, the leading international force was Carl Hagenbeck and his company in Germany, as reviewed by such authors as Ehrlinger (1989), Hahn (1967), Reichenbach (1998) and Strehlow (2001). For zoo administrators in any country, not knowing the Zoological Society of London and Hagenbeck is similar to ignoring the zoo family genealogy. Before introducing my impression on Hagenbeck's zoo, let me begin with the overview of the Hagenbeck family.

Six common seals, Phoca vitulina, got accidentally entangled in fishermen's nets and were brought to the fishmonger Carl Hagenbeck Sr. (1810-1887) in Hamburg. The year was 1848. Due to a contract with fishermen he had to buy them, and put them on exhibit at a local fairground and in Berlin, he sold them. Thus was born Hagenbeck's animal trade business. His operation outgrew the shop and in 1863, he purchased an "animal dealer's menagerie" nearby; in 1866 he passed on the business to his eldest son Carl Hagenbeck Jr. (1844-1913), who was soon recognized as the Carl Hagenbeck. By the 1870s Hagenbeck became the world's premier wild animal dealership. In 1874 Carl Jr. moved his enterprise to a nearby lot, less than a hectare in size, naming it Carl Hagenbeck's Animal Park. Then in 1907 he opened a new style zoo, Carl Hagenbecks Tierpark (Animal Park) in a northern suburb of Stellingen. (Reichenbach, 1998)

(Fast forward to August 2008 for a moment. While visiting Hamburg I asked Herman Reichenbach, zoo historian and a Hamburg native, if I could see the birthplace of Carl and he gladly obliged. The house in which Carl was born had recently been demolished, leaving a plaque commemorating the legend. Within a walking distance in a red-light district was a site for Carl's animal park (noted above) from 1874 through 1902. It is by no means a large area. Yet this was where animals were, and one can imagine all the smell and sounds from large mammals. Remarkably, all these were in a densely populated area, near the busy harbor where animal transportations took place.) Carl Hagenbeck made a number of contributions, "many of which we take for granted in zoos today." (Ehrlinger, 1989) He was a showman, and his name is inseparable from circuses. "On 4 April 1887, he opened his first circus in Heiligengeistfeld, Hamburg; Carl Hagenbeck's International Circus and Sinhalese Caravan," (Anon., 2017) which marked the beginning of his fame as a circus man.

Wait a second, an animal dealer and a circus operator? They are bound to open a can of ugly worms for today's wellmeaning but less-informed zoo professionals. But let us abandon traditional stereotypes and free ourselves from illusions, even for a moment. Let me first work on these politically-incorrect issues for a few minutes before circling back to Hagenbeck and to Europe. First, animal dealerships.

The current cadre of zoo managers probably cannot comprehend collection management without SSP and EEP which have become the common currency of the zoo world. Yet the era of those centralized, cooperative programs began only in the 1980s. Every now and then, even for the sake of mental exercise it helps to take a critical view and ask questions about the firmly accepted practices. That includes the binary of the cooperative managerial scheme and long-term captive-born populations. Somehow, we long ago stopped asking such questions.

It seems that some zoo people regard an animal dealer as a villain, the exploiter who robs animals from Nature. Herein lies the naiveté of youth. Just a generation or two ago, zoos could not have existed without the continuous purchases of wild-caught stock from animal dealers. Multi-generation breeding was not the norm except for a few species, such as lions and a few ungulates including eland and sika deer. In those days animal dealers were zoo staff's colleagues. In the U.S. they attended zoo conferences, and in the evening they spent thousands of dollars in hard liquor at their hotel rooms called "watering holes". (*I for one poured a Scotch, enjoying shop talk there.*) Zoo people now wear the badge of conservationists. But wiping our mouths and call animal dealers villains? That's hypocrisy.

I doubt that anyone currently working in zoos has ever seen a tiger, wild-caught as adult, freshly imported for sale. The big animal was scared to death! Deeply frightened by approaching humans but unable to keep a good distance in a cage, the tiger's loud and animated reaction gave a misguided impression of a hostile, ferocious and savage beast. Today's zoo-born tigers, to me personally, are no real carnivore. Anyway, in the pre-CITES (the Convention on International Trade in Endangered Species of Wild Fauna and Flora) and pre-ESA (Endangered Species Act) era, a wide variety of animals, rare and endangered included, were available on the open market. Wild animals were a tradable commodity instead of a component of conservation.

From the animal dealership we will move onto circuses. It may be a bit difficult to comprehend today, but circuses were the major source of entertainment before television occupied the center arena in America's life. For cities and towns, large or small, the arrival of a circus was a big event. That era has faded in the rear-view mirror. Yet, "The circus makes us take pause to acknowledge the powerful and occasionally perilous relationship between people and animals. And in the end, the circus endures because it beckons us to contend with our fra-

#### gility and potential." (Davis, 2002)

Regarding zoo people, here follows my observation. All generalizations are dangerous, and I am taking a chance by making a general statement: Zoo people love to hate circuses, at least in this country.

"The zoo community's record of captive reproduction is dismal at best, and without a change in the nationwide elephant management plan, the Asian elephant is doomed in North America." "This may be a bitter pill for those factions within AZA openly hostile to Ringling Bros., other circuses, and to non-accredited zoos. The hostility, however, is counter-productive to everything that AZA professes to stand for, including the promotion of good husbandry, education, and conservation. Good animal care is good animal care wherever it occurs." "It is time for AZA to acknowledge its long-standing failure with regard to Asian elephant reproduction and reach out to those who have been successful and are more than willing to work cooperatively to ensure that this species does not perish." (Kirtland, 2003) (Although Ringling Brothers ceased to exist, the essence in his presentation remains firm.)

Along the same line, "Clearly circuses and zoos are cut from the same cloth, yet too often people fall into an 'us versus them' situation. ...People who want to eliminate all human-animal contact want to split the animal world and have us fighting with each other – it only makes their job easier. The same people who attack circus attack SeaWorld and then announce their intentions to end all zoos." (Conley, 2015) How true.

Also, unbeknownst to those who subscribe to the New Age Zoo thought processes, zoos and circuses were once cohesively and organically connected with the central theme: Exhibiting wild animals for the public. Remember, too, that William Mann, a Harvard Ph. D. entomologist who served as the director of National Zoo, Washington, D.C. from 1925 to 1956, was an enthusiastic circus fan (Donahue and Trump, 2010). Regarding zoo-circus relationship, refer to Kawata (2014; 2016).

We now circle back to Hagenbeck's pioneering contributions. In the use of wild animals in circuses such as the big cats, differences exist between American and European training styles. On this side of the pond it tends to be the "fighting style", a man's battle with his beasts with whip and gun, immortalized by Clyde Beatty. In clear contrast European trainers take the quiet or "class" act, whose emphasis is on a beautiful and artistic performance. Tracing the origin of such a style leads to Carl Hagenbeck. (Kawata, 2013; 2016)

In his time cruel animal training methods abounded in Europe, and Hagenbeck introduced a different approach. As he noted: "...no trainer is fit for his vocation who is unable to read the character of individual animals which he has to train. And so it came about that when I introduced the humane system of training, as I may call it, I not only substituted for the whip and red-hot iron a kindly method of educating the creatures (based upon an intelligent system of rewards and punishments) but I also instituted the practice of studying the character of each individual animal before including it in a troupe." (Hagenbeck, 1911)

#### Through Circus Acts and Into Zoo Management

Hagenbeck's influence over the zoo world included practical animal husbandry. Mammals and birds can adapt themselves to a wide range of environmental components, including climates. For healthy captive life it is best to let them acclimate to the local climate, the method practiced by Hagenbeck in northern Germany. The polar bear needs not to be in a meat locker confinement; the gorilla needs not to be in a sauna chamber. Such simple principle, however, was so alien to zoos, as tropical animals were confined in small cages in heated buildings all year, causing high mortality rates. Peter Chalmers Mitchell, who took the helm of the Zoological Society of London in 1903, was inspired by Hagenbeck (Mitchell, 1911). After much effort he was able to provide fresh air for animals at London Zoo, thus reducing mortality rates. (Reviewed by Kawata, 2014)

It might be noted, however, that Hagenbeck's most wellknown renovation is the liberation of zoo animals from "cages" into skillfully designed, barless outdoor enclosures incorporated into a panorama; species were represented by a group instead of one or two each. The park made a debut in 1907 in Stellingen, near Hamburg (now incorporated into Hamburg). This revolutionized zoo exhibit design, changing the flow of zoo history. Ehlinger stated that Carl, his sons and their firm "have collectively been the most historical influence in the development of modern zoo design" and "Carl Hagenbeck was a visionary in zoo and exhibit design and has truly been called 'the father of modern zoos'." (1989) Two panoramas, Africa and Arctic but particularly the former, illustrate his point. Once in a century (or two) a seismic shift takes place in zoos. As long as exhibit design is concerned, Hagenbeck did his share.

In 2017 I paid the second visit to Hagenbeck. The oftphotographed gate (which had escaped heavy damage by Allied bombing) was no longer the entrance for visitors, since it is now inside the zoo due to the reworking of the grounds. Of the exhibits the highlight was the African panorama, whose black-and-white photos made a lasting impression since childhood. Fortunately, it remained undamaged by the war. Trees had grown over the decades, partially screening the familiar rock work.

The panorama is an assemblage of double-moated seethrough exhibits with the depth and expanse as a whole. At the bottom level was a flock of flamingos in a shallow pond; a plane on the upper level represented by a herd of Chapman's zebra; for a predator-prey scene lions stayed on the next level above the zebra; on the rocky hills at the top, a herd of aoudad completed the panorama. As one stands at a distance, at each level barriers between animals and the public walkways were tactfully concealed. The effects of plants were exquisite. The designer's attention to the visitors' sight line is remarkable. Carl Hagenbeck gave credit to the Swiss sculptor Urs Eggenschwyler for designing the rocky cliffs (1911). I confirmed the oft-told story; after the opening of this park there was a rush to copy the panorama, yet none exceeded the original.

The flow of the river of world zoo history made sharp and deep turns after World War II, reflecting the society's changing attitude toward nature. Hagenbeck is the king of animal trade and circuses no more, and his descendants faced the test of time. Yet they have managed to thrive, continuing the tradition of a family-operated zoo, a rarity in itself. Thanks to Herman Reichenbach, in 2017 my wife and I had the privilege of meeting the sixth generation of the dynasty, young and friendly Friederike Hagenbeck. So, to respond to that young woman in the Midwestern zoo, that is Hagenbeck in the nutshell.

#### Inconspicuous Scars

"During the Nazi era,..." is the phrase often heard at the beginning, in the middle and at the end of the sentence during conversations in Europe. The arm of a world war reaches far and wide; even the British on the winning side suffered from the aerial bombardment. In the flow of history eight decades appear only as yesterday. Not surprisingly, within the European zoo circle war stories still abound: "...and a bomb was dropped down here, destroyed a manatee, blowing up the wall and..." a zoo director once told me. Such episodes are retold in an eerily realistic tone by men who were apparently born after the end of the last war.

Devastation by the war is not conspicuously recognizable any more, yet war years seem so deeply etched in the collective psyche of the losing side. Here follow excerpts from Harro Strehlow's account. Concerning World War I, "the Berlin Zoo showed 1,474 species/subspecies of mammals and birds in 1914. At the end of the war only about 700 species/subspecies survived." "The situation during World War II was much more difficult for European zoos." (Strehlow, 2001) As previously mentioned in the case of Hungary the effects by war were wide-spread, but written accounts often highlight the examples in Germany.

"In 1939, the Berlin Zoo was the most important in the world with a collection of about 4000 mammals and birds in some 1400 species. In addition, its famous Aquarium had a stock of 8300 reptiles, amphibians, fish, and invertebrates in more than 750 species. Within a few hours all the work of a hundred years was destroyed in World War II. The nights of November 22nd, 1943 and January 29th and 30th, 1944, with their heavy bombing raids, and the last days of April 1945, when the zoo became a battle-ground, saw the end of the old, famous Berlin Zoo. Only 91 animals survived the catastrophe." (Klös and Frädrich, 1984)

Also in Germany, Hamburg received heavy bombings by the Allies. Nearby Stellingen, home to Hagenbeck, was not spared.

"The sky above us was as bright as day," Lorenz Hagenbeck (1882-1956), Carl's younger son, recalled the nightmarish hours shared with family members. The experience "exceeded anything in the way of bombing that had previously been humanly conceivable", as "a tornado of fire broke out, against which one could make little headway. The air was saturated with the acrid stench of the burning city. A hail of incendiaries came down on the park grounds." "The heat became unbearable. Animals were crouching in terror in the corners of their cages. It was now clearly impossible to save them, and so, to save them from a horrible death by burning, Heinrich and Carl Heinrich steeled their hearts and decided to shoot them, and thus at our own hands lovely Siberian tigers, black panthers, jaguars, pumas, bears, hyenas and wolves, and all our lion pit, creatures we had assembled through long years and treated with much love, had to perish, an animal-lover's agony as the shots rang out, destroying stock it would take tens of years to build up again." (Hagenbeck, 1956)

If there should be the definitive divider that stands between American and European zoos, it is the war experience. That is, in the context of history within the last century. In clear contrast, so fortunate is the winning side across the Atlantic. Americans have no recollections of air-raid siren, ashes and ruins of what used to be houses and streets, invasion by foreign military forces or years of hardship following the ceasefire. Experience is a good teacher, they say, but when it comes to war the tuition is prohibitively costly.

#### Acknowledgements

Sincere appreciation and gratitude are due to Messrs. Cord A. Crasselt and Klaus Gille of Tierpark Hagenbeck for providing historic photos. Thanks go to Dr. Martina Heiderer (Schönbrunn), Messrs. Zoltán Hanga (Budapest), Kiss János (Lake Tisza Ecocentre), Carsten Zehrer (Hellabrunn) and Herman Reichenbach (Hamburg) for their hospitality and assistance.

#### Literature Cited

Anon. Hagenbeck, The wild side of Hamburg, unpublished data received in 2017.

Barnaby, David. (2000): The Brothers Grimm and the Brothers Heck. International Zoo News 47/4: 234-239.

Brown, Tim. (2011): Zoo Culture in Hungary. Zoo Grapevine Winter: 11-21.

Budapest Zoo and Botanical Garden. (2013): The Heritage of Budapest Zoo. Budapest.

Conley, Sarah. (2015): Preserving Animals in the Circus. The White Tops 88/2: March/April: 17

Davis, Janet M. (2002): The Circus Age: Culture & Society Under the American Big Top. The University of North Carolina Press, Chapel Hill.

Donahue, Jesse C. and Trump, Erik K. (2010): American Zoos During the Depression: A New Deal for Animals. McFarland & Company, Inc. Jefferson, NC.

Ehrlinger, David. (1989): The Hagenbeck Legacy. Text presented at the 1989 Association of Zoological Horticulture conference, Paignton, England.

Fisher, James. (1966): Zoos of the World. Aldus Books, London.

Hagenbeck, Carl. (1911): Beasts and Men. Longmans, Green, and Co. London.

Hagenbeck, Lorenz. (1956): Animals Are My Life. Translated by Alec Brown. The Bodly Head, London.

Hahn, Emily. (1967): Animal Gardens. Doubleday & Company, Inc. Garden City, NY.

Kawata, Ken. (2011): Making a pilgrimage to Paris. International Zoo News 58/6: 384-388.

Kawata, Ken. (2013): Gazing in the Big Cage, Part I: Lions, Tigers and Trainers. Bandwagon Sept/Oct, 57/5 & 6: 64-83.

Kawata, Ken. (2014): Journey from Wilderness: Facing Dilemmas of Wild Animal Exhibits. Der Zoologische Garten N.F. 83: 42-56.

Kawata, Ken. (2016): Wild Animal Training: A Glance at Circuses and Hediger's Viewpoint. Der Zoologische Garten N.F. 85: 261-279.

Kirchshofer, Rosl. (1968): The Zoological Gardens of the World. In The World of Zoos, Kirchshofer, Rosl (ed.), The Viking Press, New York, 295.

Kirtland, John. (2003): Dreams and False Promises: Asian Elephant Reproduction in North America. In AZA Annual Conference Proceedings, 49-54.

Klös, Heinz-Georg (ed.) and Frädrich, Hans (trans) (1984): Guide Book to the Zoological Gardens of Berlin mit Aquarium, English Edition 7th revised edition. Zoologischer Garten Berlin.

Mitchell, P. Chalmers. (1911): Introduction to Beasts and Men, by Carl Hagenbeck (1911): Longmans, Green, and Co. London.

Reichenbach, Herman. (1998): Hagenbeck at 150. International Zoo News: 45/8 468-475.

Reichenbach, Herman. (2003): Book Reviews. International Zoo News 50/6: 352-354.

Strehlow, Harro. (2001): Zoological Gardens of Western Europe. In Zoo and Aquarium History: Ancient Animal Collections to Zoological Gardens, Kisling, Vernon N. Jr. (ed.), 75-116. CRC Press, Boca Raton.

## Schönbrunn Zoo, Austria



Top: An octagonal pavilion called Kaiserpavilion built in 1759, now a restaurant, Schönbrunn Zoo.

Above: Signage with historical data about the Kaiserpavilion, Schönbrunn Zoo.

Right: A retooled old lion cage invites visitors inside, Schönbrunn Zoo.

Photos by Ken Kawata

ZAA Journal 16

## Budapest Zoo and Botanical Gardens, Hungary







Top to Bottom: Informational signage at Budapest Zoo. Ring-tailed lemurs mingling with visitors---almost. Budapest Zoo. Main entrance, Budapest Zoo. Photos by Ken Kawata







Top to Bottom: Exhibits such as Grant's zebra surround the Magic Mountain, Budapest Zoo. Museum-style approach inside the Magic Mountain, Budapest Zoo. Bilingual directional sign at Budapest Zoo. Photos by Ken Kawata

## Lake Tisza Ecocentre, Hungary





*Top left: A "landing bird" building of the Lake Tisza Ecocentre.* 

Top right: Entrance gate to Lake Tisza Ecocentre.

Middle: Glass-floor map of the area includes a circular view into the exhibits, Lake Tisza Ecocentre.

Bottom: Europe's largest freshwater aquarium is found at Lake Tisza Ecocentre.

Photos by Ken Kawata



## Tierpark Hellabrunn, Germany









Clockwise from top left: "Flamingo gate" to Munich's proud zoo, Tierpark Hellabrunn. Tierpark Hellabrunn is located in a beautiful forest. Aurochs symbolizes "backbreeding" of an extinct bovine at Tierpark Hellabrunn. (cover photo) Tarpan, a "backbred" equine at Tierpark Hellabrunn. Mustached guenon, Tierpark Hellabrunn

Photos by Ken Kawata



## Tierpark Hagenbeck, Germany



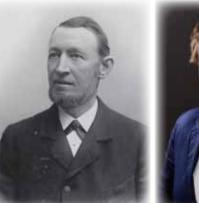
Clockwise from top left:

Renovated Arctic panorama with walruses and keepers; a polar bear on the far left. Ken Kawata

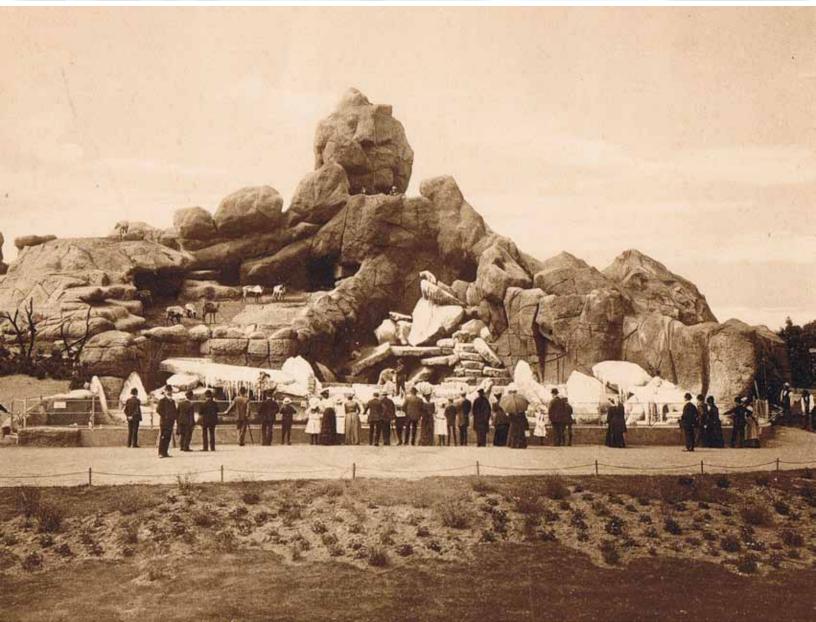
Carl Hagenbeck (1844-1913) revolutionized modern zoos of the world. Archiv Carl Hagenbeck GmbH

Friederike Hagenbeck represents the sixth generation of the family. Archiv Carl Hagenbeck GmbH

Early days of the Arctic panorama. Archiv Carl Hagenbeck GmbH





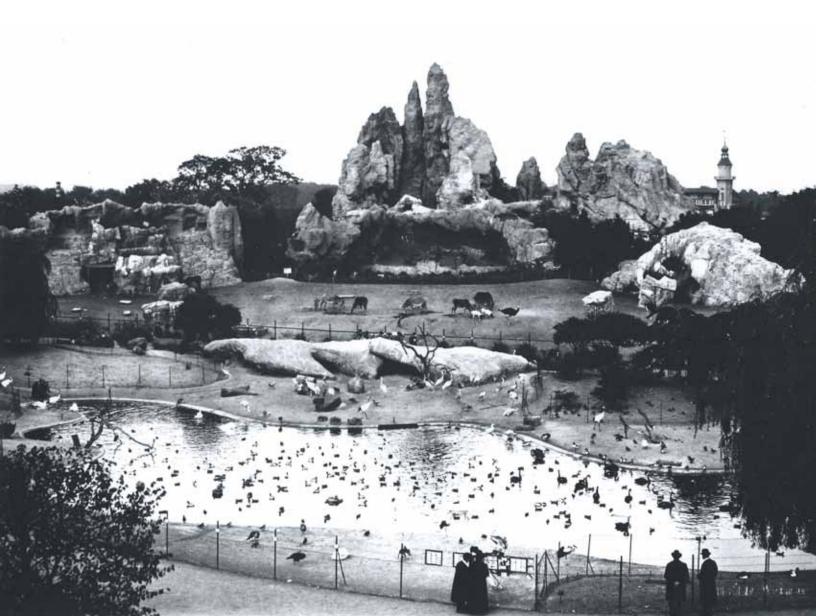


## Tierpark Hagenbeck, Germany



Clockwise from top left: Asian elephant family group. Ken Kawata Trees have grown over the decades, African panorama. Ken Kawata The famed African panorama in early years. Archiv Carl Hagenbeck GmbH





ZAA JOUITIAI Summer 2020 Volume 14 Issue 2

Zoological Association of America

# EVEN THE TOUGHEST CRITICS AGREE.

### Mazuri<sup>®</sup> knows nutrition.

For 30 years, Mazuri<sup>®</sup> has been committed to leading the way in providing research-based diets as diverse as the animal kingdom.



www.mazuri.com 1-833-4MAZURI

