

The Italian Job: key figures in Italian Zoological Gardens in the 20th century

„The Italian Job“: Hauptfiguren in italienischen Zoologischen Gärten im 20. Jahrhundert

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Abstract

In comparison to other European countries with comparable size and population (e.g. Germany, France, and United Kingdom) Italy presents a lower number of institutions and a low interest towards zoological gardens overall. This may lead to assumptions that the history of Italian zoological gardens is devoid of relevant figures who acted for the development and improvement of zoological gardens. However, as much as the history of Italian zoological gardens is overlooked both within and outside of Italy, it is not the case. Thus, we remember the contributions that seven individuals gave during the past century to the Italian zoo community, namely Oscar de Beaux, Alessandro Ghigi, Ermanno Bronzini, Alula Taibel, Menico Torchio, Giusto Benedetti, and Elisabetta Falchetti. It is hoped that these examples will be useful for zoological gardens both in Italy and other countries to improve their cultural messages.

Keywords: Zoo history, Italy, cultural role.

Introduction

Italy's tradition and history concerning zoological gardens has always been weaker in comparison to other large European countries such as Germany, the United Kingdom, or France. After the unification of Italy, the first two Italian zoological gardens were opened in Florence and Turin in 1863 and 1864 respectively on the initiative of King Vittorio Emanuele II (Finotello, 2004). Both institutions were closed in the 1880s and after their closure Italy was virtually

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devoid of zoological gardens until 1911 when the *Giardino Zoologico di Roma* was opened. Since then, a considerable number of often short-lived institutions were opened (cf. Finotello, 2004) with the current number of licensed institutions amounting to 38 as of October 2025, in a country with 60 million citizens (MASE, 2026). Zoological gardens in Italy have been under a negative spotlight for many years. On one side, the Italian education system has overlooked for many decades the role of natural sciences in favour of humanities, on strength of the 1922 so-called *Riforma Gentile* of the education system (Montalenti, 1980). Thus, the general public in Italy have often failed to acknowledge the cultural and educational role of zoos (Robovský et al., 2020), limiting it to leisure in the best case. Additionally, throughout the second half of the 20th Century, Italian zoos lacked substantial long-term investments, and this was somewhat detrimental in the development of more modern facilities for animals (Gippoliti, 2021). This long-term limitation provided substantial fuel when Italy experienced its first wave of animal-rights ideology: zoological gardens were one of the main targets of this ideological movement already in the 1970s with heavily biased documentaries such as 1974 *Lo Zoo Folle* (The Crazy Zoo) by Riccardo Fellini, brother of the better known Federico, followed a decade later by a law proposal which aimed to shut down all zoological gardens located in cities with more than 300.000 inhabitants (Gippoliti, 2010). Nonetheless, while the history of zoological gardens is not as celebrated in Italy as in other countries, some key figures, albeit unknown outside of Italy, played a key role in the development of Italian zoological gardens, both physically and philosophically, during the 20th century. The aim of this contribution is to provide information to an international audience on these overlooked figures and their contribution to the zoo world.

Oscar de Beaux

Oscar de Beaux (Firenze 1879 – Torre Pellice 1955) studied zoology at the University of Florence but trained himself between Italy and Germany (Dresden and Leipzig), often observing and depicting zoo animals such as gelada *Theropithecus gelada* (Rüppell, 1835) (de Beaux, 1906). Between 1911 and 1913 he worked as a scientific assistant at Carl Hagenbeck's Tierpark in Stellingen (Germany) opened in 1908. Subsequently he returned to Italy to work as curator for the *Museo di Storia Natural Giacomo Doria* in Genoa, where he would eventually become director. A well-known taxonomist (Tratz, 1954; Gippoliti, 2006), he was also the director of the Italian chapter of the Society for the Conservation of the European Bison *Bison bonasus* (Linnaeus, 1758), which was established with the aim of saving this species from extinction through captive breeding (de Beaux, 1929). In a small pamphlet on biological ethics de Beaux recognised the importance of zoological gardens and natural history museums in promoting a sympathetic attitude towards animals and plants (de Beaux, 1930); eventually this pamphlet was also translated to English and German (Pedrotti, 2012). A German translation of this pamphlet was also published on the monthly magazine of Tierpark Hellabrunn in Munich (Germany) in 1933 (de Beaux, 1933a).

At the start of the 1930s he was a pivotal figure in the establishment of the *Giardino Zoologico di Genova Nervi*. This zoological garden was managed by the local authorities and was located in Villa Serra, whose pre-existing landscape was not altered by the construction of the various facilities (Fig. 1). De Beaux chose to follow a biogeographical approach with the collection divided into different sections dedicated to Holarctic, South American, Afro-Asian, and Australasian realms (de Beaux, 1933b). While this zoogeographical exhibition criterion is now commonly used by zoos worldwide, at the time it was largely unused and had only been tried by the Tierpark Hellabrunn in Munich. Furthermore, thanks to his work at the Natural History Museum, he established a close collaboration with the aforementioned institution as all the animals which died at the zoo were donated to the museum in order to be conserved. Unfortunately, the *Giardino Zoologico* closed in 1940 with the outbreak of World War II (de Beaux, 1944).



Fig.1: Leopard facility at the Giardino Zoologico di Genova Nervi. Source: de Beaux, 1933a

Alessandro Ghigi

Alessandro Ghigi (Bologna 1875 – Bologna 1970) had a prominent and long-lasting role in the Italian scientific world. A famous breeder of pheasants, he never had a direct role within Italian zoological gardens but promoted their scientific and educative relevance and tried to introduce his protégée Alula Taibel in that sector. In 1904 he became professor of Zoology at the University of Ferrara where he would remain until 1922 when he moved to the University of Bologna where he worked until his retirement in 1950 (Vannini, 1970). Following his retirement, he founded and chaired the *Commissione Studio per la Conservazione della Natura e delle sue Risorse* within the National Research Council with the aim of promoting initiatives for the conservation of nature (Montalenti, 1980). This was the first step to re-evaluate sciences, mainly natural sciences, and to promote environmental education in the country. In this role he pushed for initiatives aimed at recognising the cultural mission of natural history museums, aquaria, zoos, and botanical gardens with the establishment of a sub-committee (Montalenti, 1980). Eventually this led to the establishment of the *Associazione Nazionale Musei Scientifici Orti Botanici, Giardini Zoologici, Acquari* (ANMS) in 1972 with the support of the *Accademia Nazionale dei Lincei*. Ghigi's commitment to zoological gardens also extended to the support of new small zoos, such as the zoo in Faenza, which opened in 1959, and he was also present at the inauguration of the *Giardino Zoologico di Torino* (Fig. 2; Maschietti et al., 1990). He also likely influenced the Molinar animal dealing firm to employ Alula Taibel as zoological assistant for the new zoological garden in Turin (1955). Ghigi also dealt with the issue of zoological gardens in Italy in a specific paper published on the journal of CNR (Ghigi, 1954) where he emphasised the potential educational relevance of urban zoos. Nonetheless he was unable to foresee the



Fig. 2: Professor Alessandro Ghigi giving a speech on the inauguration day of the Giardino Zoologico di Torino on 21st October 1955. Source: Maschietti et al., 1990.

criticism that small institutions such as the Zoo in Milan (i.e. just 2 ha) could produce in the public opinion.

Ermanno Bronzini

Ermanno Bronzini (La Spezia 1914 – Rome 2004) (Fig. 3) is probably the man who contributed the most to the community of Italian zoos after World War II (Gippoliti, 2014). After having studied biology at the University *La Normale* in Pisa, he was hired in 1937 as a biologist at the *Giardino Zoologico di Roma* eventually became its director from 1956 to 1978 (Gippoliti, 2010). At a time when Italy had no more than five zoological gardens (Ghigi, 1954), Bronzini fully recognised the scientific and educational role of these institutions, endorsing the mission envisioned by Oscar de Beaux for his institution in Genoa (Bronzini, 1953).

Bronzini's commitment to scientific research shines through several initiatives carried out in the *Giardino Zoologico*, which were not quite common in zoos at the time. In 1950 he founded and directed a Centre for Parasitology, which had Professor Ettore Biocca, then director of the Institute of Parasitology in Rome University *La Sapienza*, as its consultant (Bronzini, 1954). Among the significant research carried out by the parasitological centre is a study on the alleged role of the red fox *Vulpes vulpes* (Linnaeus, 1758) in the transmission of *Echinococcus granulosus* (Batsch, 1786) (Bronzini & Bertolino, 1954). At the start of the 1960s Bronzini eagerly cooperated with the pioneering research of Professor Brunetto Chiarelli on primate chromosomes by providing biological samples collected from the animals of the zoos which were then used for the first description of the karyotype of orangutans *Pongo pygmaeus* (Linnaeus, 1758) and *P. abelii* Lesson, 1827 (Chiarelli, 1961) and a number of other primates (Chiarelli, 1963). The birth of several Asian elephant *Elephants maximus* Linnaeus, 1758 between the late 1940s and



Fig. 3: Ermanno Bronzini with a shoebill at the Giardino Zoologico di Roma in 1956. Source: Spartaco Gippoliti Archive.



Fig. 4: Front page of Bronzini's *La città degli animali* depicting the Grande Voliera, a large semi-spherical aviary built in 1935 by architect Raffaele de Vico with expansion of the Giardino Zoologico. Source: Bronzini 1975b.

the early 1950s led to the publication of a study on the composition of the milk of the species (Anselmi & Calò, 1947) and on the development and growth of newborns (Bronzini, 1975a) at a time when the publication of articles on zoo-related journals such as *Der Zoologische Garten* or *The International Zoo Yearbook* was rather uncommon in Italian zoos. Last but not least, the

technical staff of the *Giardino Zoologico* and the *Museo Civico di Zoologia* in Rome, which were managed jointly, took part in a scientific expedition in Amazonia organised by the CNR (Baschieri-Salvadori & Mangili, 1966).

In order to enhance the educational role of the zoo, Bronzini strongly advocated the publication of the *Il Giardino Zoologico*, which was published every two months between 1958 and 1963 (Gippoliti, 2021). Its main aim was to bring younger people and people with a poor naturalistic background closer to zoology and more broadly to the natural sciences, covering the biology of animals in the wild and the technical aspects of zoo biology. At the end of his tenure as director Bronzini also published the pamphlet *La città degli animali* (1975b) with the aim of explaining to the visitors the role of zoos and the basics of zoo biology (Fig. 4). During his tenure as director, he established a close collaboration with Franco Cuneo, director of the *Giardino Zoologico di Napoli*, promoting its accreditation in 1958 within the International Union of Directors of Zoological Gardens (now WAZA) (Finotello, 2004). As a zoo director, Bronzini was well aware of the structural limitations of the *Giardino Zoologico* in Rome and therefore advocated the creation of a larger zoological park in the Pineta di Castelfusano where ungulate species could be transferred, following the model established by the Zoological Society of London (United Kingdom) with Whipsnade (Bronzini, 1976).

However, Bronzini's greatest legacy lies in the establishment during the 1970s of two important Italian scientific associations. The first of such was the *Unione Italiana dei Direttori dei Giardini Zoologici* (now *Unione Italiana Zoo e Acquari*), established in 1972, which had among the principles to which its members should have complied: the recognition of zoological gardens as a scientific institution, an appropriate level of animal husbandry, the support of scientific research within zoos, and the recognition of their educational role. The other association which Bronzini contributed to establish was the already mentioned ANMS.

Alula Taibel

Alula Taibel (Copparo 1892 – Copparo 1984) was a natural scientist and veterinarian who had developed a strong interest in avifauna (Gippoliti, 2019). In 1924 he started working in the Experimental Poultry Station in Rovigo under the direction of Professor Ghigi from the University of Bologna. Between 1936 and 1937, he worked as a zoological consultant at the *Giardino Zoologico di Roma* but little is known of his tenure in that institution. Following the end of World War II, he resumed his work at the Experimental Poultry Station and started to collaborate with the Molinar animal dealing firm, which managed the zoological garden of Milan and the newly opened zoological garden in Turin. In 1955 he was appointed as scientific director of both institutions. From 1955 to 1958 he published the bulletin *Zoo - Bollettino dei Giardini Zoologici di Milano e Torino* which, in comparison to the subsequent bulletin in Rome, had a more technical tone. Among his works on the bulletin, we find contributions on the duties and roles of zoos (1955; 1958), on the breeding of certain birds (1957a) and coatis *Nasua nasua* (Linnaeus, 1766) (1957b). Another line of research concerned the hybridisation between different bird species (1964).

In his capacity of scientific director of the *Giardino Zoologico di Torino*, Taibel projected a series of aviaries in order to continue his research on hybridisation. Although his planned research station within the zoo was never built, he served as responsible of an Experimental Section until 1964 (Gippoliti, 2019). Nonetheless, during the 1960s Taibel also established a primatological centre directed by the anthropologist Brunetto Chiarelli from the University of Turin (Torchio, 1963). His scientific ability was also shown when he served as the scientific consultant for the construction of the Aquarium-Reptilium of the *Giardino Zoologico di Torino* designed by Enzo Venturelli and opened in 1960. The two-store facility also included five large

landscape-tanks, which Taibel described as biological chambers, which could be observed from both floors (Taibel, 1962). These exhibits replicated the landscape of five different aquatic biomes both exotic (i.e., River Congo, Amazonia, Indonesia) and local (Mediterranean Sea, and an Alpine River) so that visitors could see both the flora and the fauna of such localities (Fig. 5). This style of exhibition, which is now somewhat widespread, was uncommon for the time.



Fig. 5: One of the landscape aquariums at the Exotarium of the Giardino Zoologico di Torino. Source: Taibel, 1962.

Menico Torchio

Although aquariums are generally considered as specialised zoos, their history in Italy is largely separate from that of traditional zoos. The naturalist Menico Torchio (Turin 1932 – Urbe, Savona 2001) is however an exception to this. After having worked in Turin with Alula Taibel, he later moved to Milan in 1960 to reopen the *Acquario Civico*, which he would eventually manage from 1963 (Fig. 6). Torchio may be considered the first ‘modern’ zoo man in Italy as he was fully aware of the ecological crisis and of the need to use the educative potential of aquaria to increase the attention of the public opinion to the environment (Torchio, 1973). Other than the 50 tanks in the exhibition gallery of the aquarium, the aquarium managed by Torchio had also 30 tanks in the laboratories, 20 pools in the gardens, a library, a collection of vouchers of marine organisms, while he also established the journal *Quaderni della Civica Stazione Idrobiologica di Milano* (Torchio, 1973). In this fashion Torchio followed the advice of Enrico Tortonese (1911-1987) then director of the *Museo di Storia Naturale Giacomo Doria* in Genoa, according to whom natural history museums had both educational and scientific roles to which the role of applied research may be added if it is possible to study live animals in the wild or laboratory (Torchio, 1964). In a similar fashion to de Beaux, of which he apparently ignored the work on

biological ethics, Torchio also produced some contributions to the emerging field of bioethics (cf. Torchio, 1974).



Fig. 6: Menico Torchio (right) at the inauguration of the Acquario di Milano. Source: Spartaco Gippoliti Archive.

Giusto Benedetti

Giusto Benedetti (Trevignano 1943 – Turin 2011) was hired as a scientific assistant at *the Giardino Zoologico di Torino* in 1971 and became its scientific director until the closure of the institution in 1989 (Russini & Gippoliti, 2012). A polyhydic man, during his tenure at the *Giardino Zoologico di Torino*, he devoted his studies to primate behaviour leading him to publish the book *La Scimmia* (1979), where he described his studies on primates in a fashion similar to Desmond Morris's *The Naked Ape: A Zoologist's Study of the Human Animal* (1967). Additionally, at the time of its publication, Benedetti's book was among the few primatological books written by an Italian primatologist in his native language, while plenty of translations of texts written by British, French, German and American authors were available. Benedetti also chaired the Anthropology and Ethnography Association of Turin, worked as an author or consultant for several TV documentaries concerning natural sciences. He also published about 200 contributions on zoology in both peer-review and didactic journals and authored several natural science textbooks for both middle and high schools (Russini & Gippoliti, 2012). He was also a member of the Board of the ANMS.

The main legacy of Giusto Benedetti at the zoological garden of Turin, concerns the educational aspect of the institution. At the time, the educational role of the Italian zoological gardens was non-existent with many institutions lacking an education department, educational initia-

tives concerning visitors and even signage concerning the species held in the zoo (Benedetti, 1984). In this regard, Benedetti oversaw the development of a strong education section with adequate signage for visitors (Fig. 7), which was often aided by volunteering students who would give further information on the biology of animals to the public, a guided tour service for school visits, and he attempted to open an educational centre within the zoo (Benedetti and Terni, 1976). In the early 1980s he published the book *Animali dello zoo* (1981), in which he attempted to explain the general public the role and functioning of zoos, which was often overlooked in Italy (Benedetti, 1984; 1986).

By the mid-1980s the number of Italian zoos had soared to more than 60 institutions, many of which were sub-par in comparison to non-Italian institutions. This situation fuelled the birth of an Italian anti-zoo movement which went as far as proposing a law which would have closed down the institutions located in towns with less than 300.000 inhabitants. In this regard Benedetti co-authored a contribution (Benedetti and Florio, 1986) in which he criticised many Italian institutions due to the lack of appropriate training of staff (i.e. curators, vets, and keepers), the low levels of animal husbandry, and the lack of an appropriate education section. These negative points contributed to the low consideration of zoos by the Italian public, often leading to the generic and biased accusations made by environmentalist and animal-rights groups. He also argued that in order to better defend themselves against the anti-zoo movement, it was necessary to bring the various facilities up to standards similar to those in other European countries (Benedetti & Florio, 1986). Both Benedetti and Bronzini (1985) also argued that, in order to maintain appropriate zoological gardens, Italy would have needed a licensing system similar to the one established in the United Kingdom aimed at preventing the proliferation of inappropriate institutions, which would have drawn more to zoological gardens in Italy as a whole. Such a licensing system would eventually be approved in Italy only in 2005.



Fig. 7: An example of the signage developed by Giusto Benedetti at the Giardino Zoologico di Torino in the 1980s. Photo: Peter Döllinger.

Elisabetta Falchetti

Elisabetta Falchetti (Rome 1948 – Rome 2022) started working at the *Giardino Zoologico di Roma* as curator of herbivores in 1983 and at the end of the 1980s she was demoted to the education section of the zoo which at the time was virtually non-existent. She worked there until 1998 when the zoo management changed (Fig. 8). Since then, she worked as the head of education at the *Museo Civico di Zoologia* until her retirement in 2018. With Falchetti at the helm of the education department, learning theories entered into an Italian zoo for the first time. According to Falchetti (2013) zoos represented one of the few opportunities for direct contact between urban societies and wild animals. Falchetti illustrated her view of zoo education in a series of contributions (1990; 1993; 1995). She emphasised the importance of active learning based on concrete experiences through which learning feels like a personal discovery. From an operational point of view, Falchetti argued that a zoo's collection plan should be also developed in relation to the educational aims of the institution (i.e. “any cervid species can be representative of the morphological, physiological, and behavioural aspects associated with antlers”). In addition to acknowledging naturalistic design as an important tool for facilitating the understanding of the educational messages, Falchetti considered the exhibit as a theatre for education with the educational theme as the play, the enclosure as the stage and the scenery, the visitor area as the auditorium, and the animals as the actors.

However, the legacy of Elisabetta Falchetti is not limited to education. In this regard, it is worth mentioning her work on the husbandry and social behaviour of the Nile lechwe *Kobus megaceros* (Fitzinger, 1855) in European and American zoos (Falchetti & Mostacci, 1993, 1995). At the time, the species was kept in less than ten European institutions and Rome had a large herd of them. These studies laid the foundation for the establishment of a studbook or a Species Survival Plan at a time when this threatened species (now managed as an EEP by Bioparco di Roma) was not actively managed in European Zoos. Thus, it could be argued that Falchetti's works contributed to laying the foundations for the establishment of the EEP for a



Fig. 8: Elisabetta Falchetti with a group of pupils in a special exhibition set up in the old monkey house of the Giardino Zoologico di Roma. Source: Spartaco Gippoliti.

species that is intrinsically linked to the institution where she worked. In fact, it is no surprise that she chose a drawing of a male Nile lechwe as the logo of the education section of the Giardino Zoologico where she later moved on. A further recognition of her work was to serve as co-author of the chapter on this species for *Mammals of Africa* together with Jonathan Kingdon, chief editor of the opera and well-known artist (2013).

Conclusions

The aforementioned stories show that, despite the financial and situational constraints, a small number of men and women working in Italian institutions tried to make a difference by elevating their respective institutions and attempting to give a cultural-scientific role to zoological gardens in the Italian society. Some of their concepts are still relevant to these days such as the socio-educational relevance of urban zoos (Heidiger, 1965; Conway, 1969; Gippoliti, 2011) and the critical importance of taxonomic knowledge for both in-situ and ex-situ conservation (Gippoliti & Ziegler, 2024) which were both central to de Beaux's vision. While sometimes the legacy of these figures is fully acknowledged, as it is the case with the role of Ermanno Bronzini in the establishment of the UIDGZ (UIZA, 2026), some of these people are barely remembered and their efforts overlooked, even in Italy. An example of this is Giusto Benedetti, whose efforts in improving the quality of the educational mission of zoological gardens are scarcely remembered to this day. In general, it seems that there is little interest in the history of zoological gardens in Italy, with some due exceptions, albeit from the authors of this paper (Gippoliti, 2021, Gippoliti & Frascchetti, 2025). This lack of historical knowledge coupled with the reduced number of contributes written in English can also reduce potential benefits to conservation and welfare research opportunities. For example, in a recent contribution on circular aviaries in zoos (Brereton et al., 2025), the authors did not mention the semi-spherical large aviary (35 m diameter) in Rome which was built by architect Raffaele de Vico in 1935 and which was probably the first of this kind and which has since held a wide array of species (Gippoliti, 2010). Zoos' history, while sometimes inconvenient if seen within today's perspective, can nonetheless be helpful, albeit in a trial-and-error fashion by not repeating the past mistakes (Kawata, 2013). Thus, it is rather likely the great aviary in Rome with its 90 years of history could provide additional data about the pros and cons of such facilities for different avian species. In light of this approach, we argue that providing a glimpse of the past figures from Italian zoological gardens can be not only helpful to Italian zoos in order to better improve their cultural message, but also for a large part of the international zoo community that may experience the same socio-cultural milieu.

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Zusammenfassung

Im Vergleich zu anderen europäischen Ländern mit vergleichbarer Größe und Einwohnerzahl (z. B. Deutschland, Frankreich und Großbritannien) weist Italien ein geringes Interesse an zoologischen Gärten und eine geringere Anzahl von Einrichtungen insgesamt auf. Dies könnte zu der Annahme führen, dass die Geschichte der italienischen Zoos keine relevanten Persönlichkeiten hervorgebracht hat, die sich für die Entwicklung und Verbesserung von Zoos eingesetzt haben. So sehr die Geschich-

te der italienischen Zoos jedoch sowohl innerhalb als auch außerhalb Italiens übersehen wird, so ist dies nicht der Fall. Daher erinnern wir an die Beiträge, die sieben Personen im vergangenen Jahrhundert für die italienische Zoogemeinschaft geleistet haben, nämlich Oscar de Beaux, Alessandro Ghigi, Ermanno Bronzini, Alula Taibel, Menico Torchio, Giusto Benedetti und Elisabetta Falchetti. Es ist zu hoffen, dass diese Beispiele sowohl für Zoologische Gärten in Italien als auch in anderen Ländern nützlich sein könnten, um ihre kulturellen Botschaften zu verbessern.

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