



PONTIFICIA
ACADEMIA
SCIENTIARVM

COMMENTARII

VOL. II

N. 36

SVEN OTTO HÖRSTADIUS

ALESSANDRO GHIGI
(1875-1970)

EX ARDIBVS ACADEMICIS IN CIVITATE VATICANA

ALESSANDRO GHIGI

(1875-1970)

SVEN OTTO HÖRSTADIUS

Pontifical Academician

SUMMARY — Agitur de publico praeconio quod Auctor — cum Sessio Plenaria Pontificiae Academiae Scientiarum haberetur — die 13 Aprilis 1972 recitavit.

Alessandro Ghigi passed away on Nov. 20, 1970, aged 96. He was born on Feb. 9, 1875 in Bologna, a city in which he resided during all his life. To the University of Bologna he gave most of his thoughts and deeds, as Assistant Professor first, then Professor of Zoology (1915-1945) and for many years (1930-1943) Rector of the University.

Ghigi was a strong personality and he was active up to the very last days of his life. In 1951 he had established the Committee on Nature Conservancy of the Consiglio Nazionale delle Ricerche, and he held its chairmanship until his death. So in his latest years, after retirement, he was able to continue his life-long service to natural science by devoting

Paper presented on April 13rd, 1972 during the Plenary Session of the Pontifical Academy of Sciences.

himself entirely to the defence of the natural environment, of the plants and animals, i.e. to those topics which were the main object of his study and pleasure during his whole lifespan.

Ghigi began his career as a naturalist as Assistant to Prof. Carlo Emery, who held the chair of Zoology at the University of Bologna, and whom he eventually succeeded.

His first scientific contributions were on morphological subjects: teeth of mammals and teleosteans (1896-1905), caruncles of birds (1902-1903), and on anomalies in the limb skeleton of fowls.

His main zoological interest, however, was represented by birds, especially pheasants, guinea fowls, pigeons. He studied their systematics, in the light of the new science of genetics, trying to determine the degree of affinity among species and among genera by the technique of hybridisation. The work on these subjects kept Ghigi busy from the early time of the rediscovery of Mendel's laws (his first contribution on hybridisation between guinea fowl and peacock is dated 1901) up to the end of his primary scientific activity in 1940. Some of his contributions in this field are quite significant for general biology, such as sex-limited sterility and intersexuality of interspecific hybrids.

Ghigi's interest in rearing and hybridizing pheasants and other gallinaceous birds was alive through all his life: up to his last days he was very fond of the pheasant farm he maintained in the park of his magnificent country-seat on a hill near Bologna.

But his zoological interests were wide: he contributed to the systematics and biology of some crustaceans, insects, mammals and representatives of some other groups, especially from a zoogeographical point of view. He was the leader of several zoological expeditions, namely in Lybia, Aegean Islands, Mexico and Morocco, during which a number of new species were discovered by himself or by other specialists. Up

to his last years, when his sight was gradually declining toward an almost complete blindness, Ghigi was very fond of travelling, in order to observe environments, faunas and floras, as well as human settlements, which were new to him. The most intimate motive for his interest in nature was undoubtedly an aesthetic sense of appreciation of beauty in nature.

From his analytical studies, Ghigi was lead to consider some problems of general biology, such as the species problem, and evolution, fecundity and sterility in hybridization and in inbreeding which he considered in the light of the knowledge available at the time. He was an easy writer: he published several text-books on Zoology and Biology which had a wide circulation in Italian Universities and several other books on such subjects as Life of Animals, monographs on Pheasants, on Guinea Fowls and Turkeys, on Hunting, on Fowl breeding, on Nature Protection, etc.

In fact Ghigi paid much attention and devoted a great deal of work also to problems of applied zoology. He was the founder of the Institute of Zooculture (i.e. the breeding of farmyard animals) at the University of Bologna, of the National Institute of Apiculture, of the National Laboratory of Zoology applied to Hunting, and of several other institutes and initiatives, which he then put in the hands of devoted and capable students. Especially the development of Poultry science in Italy owes much to Ghigi's stimulating activity.

To his inexhaustable drive and organizing ability the University of Bologna owes the building of an Institute of Zoological Sciences which was one of the best in Europe at the time it was built (1934), and many other achievements.

Ghigi was well known in the international scientific world: he attended most of the international Congresses in Zoology, Genetics and Poultry Science, he was foreign member of several learned Societies, corresponding member of the Accademia Nazionale dei Lincei since 1927, national member in 1936,

member of the Accademia delle Scienze di Bologna (1927), of the Pontificia Accademia delle Scienze Nuovi Lincei (1929), and then of the Pontificia Academia Scientiarum (1936), Honorary member of the Zoological Society, London (1939), one of the ten Honorary members of the British Ornithologist's Union, London (1945), doctor *honoris causa* of the Boston University (USA) and Coimbra (Portugal), President (1933), then Honorary President (1936) of the World's Poultry Association.

Pleasant and fluent in conversation, dignified and gentlemanly bearing, Alessandro Ghigi looked like one of the last representatives, in our time, of the XIXth Century naturalists: he was fond of nature in all its expressions, keen on its aesthetic manifestations, trying to avoid the narrowness of extreme specialization, and constantly striving to vindicate the importance of pure and applied natural science in the cultural and economic context of our society.