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THE HORSE CATALYZED BIRTH OF MODERN VETERINARY MEDICINE IN 18th CENTURY FRANCE

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Bols PEJ¹, De porte HFM²

¹Laboratory For Veterinary Physiology and Biochemistry, Department of Veterinary
Sciences, University of Antwerp, Universiteitsplein 1, Gebouw U, B-2610, Wilrijk, Belgium,
10 peter.bols@uantwerpen.be

²Department of Farm Animal Health, Faculty of Veterinary Medicine, Utrecht University,
Yalelaan 7, 3584CL Utrecht, The Netherlands
h.f.m.deporte@uu.nl

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Abstract.

The central role and significant importance of the horse for the development of
western society has been described and outlined by several authors in the (recent) past.
20 Although it might seem logical that **this mythical animal** contributed to the establishment of
the veterinary profession, the reality is slightly more complicated. During the 16th to 18th
century, the role of the horse became increasingly prominent, not only as a draft animal and
important military ‘tool’ but certainly also as a recreational partner in the budding art of
equitation and hunting. Coexisting along with the horse for many hundreds of years was the
25 guild of blacksmiths, who traditionally took care of both horse shoeing and supplying general
first line care. However, a new more heterogeneous group of actors arose, consisting of
noblemen, physicians, lawyers ... who began to educate themselves in the art of equitation
and associated horse-related subjects in the broadest sense. This resulted in an unavoidable
clash occurring against the background of a much larger confrontation between ‘old and new’
30 that ultimately resulted in the French Revolution. This paper briefly describes the historical
background and actors of this era and how the horse finally catalyzed the political conviction^s
to establish formal veterinary training in 18th century France.

Introduction.

35 Summarizing the history of the veterinary profession is quite a challenge. Numerous
books have been written on this subject, making it virtually impossible to fit even the well
documented early history into one paragraph [1, 2]. However, to finally understand the
prevailing atmosphere during the critical period of 18th century France and the background
against which the first veterinary schools were founded, we do need to point out some of the
40 | main milestones and significant events of early veterinary practice [3].

As stated by Jared Diamond (2001) [4], animal domestication is an extremely
complicated process that evolved in different ways at distinct places around the world.
Following the dog, some farm animal species were domesticated approximately 10.000 years
ago, when a nomadic life style evolved into settlements where sheep and goats were kept to
45 | provide food, milk and wool. The first evidence of veterinary medicine goes far back to the
region that is now Egypt, an area at the time, very rich in cattle. A papyrus role found by
Flinders-Petrie in 1888 and dated back to 3.000-2.200 BC mentions organ failure, colic and
bloodletting therapies. This Eastern and Egyptian knowledge was inherited by the Greeks,
among whom Xenophon and Hippocrates were the most important protagonists (5th century
50 | BC) and they influenced medical thinking patterns until the 20th century [5]. The latter
developed the so-called ‘humoral-pathology’ principles based on the four elements ‘fire,
water, air and earth’ and their specific properties ‘heat, cold, drought and damp’. These
elements were connected to the four body fluids: blood, phlegm, black and yellow bile. It was
believed that good health could only exist when these four fluids were in perfect balance.
55 | Disease was considered to be the consequence of an imbalance and this caused ‘sharp fluids’
to materialize inside the body which in turn resulted in fever. These ‘caustic’ fluids needed to
be evacuated from the body, which is why numerous of abortive therapies were developed,
such as bloodletting and the use of diuretics, emetics, clysters and sweat inducing therapies.
The current basics of (veterinary) medicine such as anatomy and physiology were mainly
60 | absent and empiricism was the most important lead in diagnosis and therapy. A third
important Greek author was Aristotle (384-322 BC), who widely is considered to be the father
of comparative anatomy. Because the Greeks only dissected animal cadavers, their
subsequent extrapolations to humane anatomy often caused confusion. Although Aristotle had
a good understanding of the general body functions, he lacked insight in the functions of the
65 | different organ systems. He appreciated the role of the heart as a central organ, but had no
| idea on the function of the cardiovascular system.

Subsequently, Greek slaves passed on a number of medical concepts to the Romans when their retired soldiers started a sedentary life as farmers. General attention for agricultural sciences increased considerably as evidenced by the work of Varro (*De Re Rustica*, 116 BC), Plinius (1st century) and Celsus. The most influential author from this era was Galen (130-201), who promoted his Galenic principles (largely based on Hippocrates) that would continue to influence medical thinking until the 19th century. He strongly promoted the so-called ‘poly-farmacy’ (Galenism, *Galenica*), prescribing the use of complicated recipes for the preparation of pharmaceuticals. During the first century AD, the Roman agronomist Columella published his ‘Re Rustica’ in which he mentioned ‘*la medicina veterinaria*’, veterinary medicine concerning ‘*bestia veterinaria*’, the beasts of burden like cattle and oxen. He also introduced the expression ‘*veterinarius*’ for the first time in history. Other Latin authors were Salonijs [6] and Vegetius, a Roman aristocrat, who published the most complete work on veterinary medicine in antiquity (4th century), in which he described the symptoms of laminitis and colic in the horse and advised the use of ‘*polypharmacy*’ in his ‘*Artis Veterinariae Sive Digestorium Mulomedicinae Libra IV*’. After the fall of the Roman Empire, many of the writings of the Greek hippiatrists were compiled into what is called the ‘Hippiatrica’, a handwritten codex that was found in a Hungarian monastery, probably after being abandoned there by the Turks. The first translation of the codex into Latin was published by the French physician Jean Ruelle (Ruellius) in 1530. However, at this time the center of gravity of veterinary medicine slowly moved to the East where the Arabs further developed medicine, pharmacy and chemistry and became the heirs of Greek veterinary knowledge.

Only a few publications are known from the Middle Ages, with authors such as Jordanus Ruffus (equerry or ‘*Marescallus*’ at the court of Frederic II, 1212-1250) and Laurentius Rusius (1228-1347), an Italian hippiatrist in Rome. His ‘*Hippiatria Sive Marescalia Laurentii Rusii*’ was the first ever-printed veterinary work (1531). The most important animal species deserving of medical attention during the Middle Ages were the horse, dog and ... falcon, all of which were strongly connected with hunting, as demonstrated by the ‘*Livre de Chasse*’ (book of hunting) of Gaston Phoebus (1389). The first printed book on equine veterinary medicine was published in Venice in 1472 from an unknown author.

As can be expected, most of the above cited writings or early printed books were only available at the local level because book printing had not yet been scaled-up to produce large quantities of a single work. Most of the books were concentrated in libraries at monasteries or in the hands of wealthy individuals. In addition, few people could actually read not to mention

that nearly all books were published in Latin. Thus, the dissemination of information and knowledge was slow. A beautiful bibliography was recently published by J. Dejager, based on his private collection covering approximately 365 publications from the 15th up to the 19th century [7].

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'Hippiatrics' and the Old Masters of the 16th up to the beginning of the 18th century.

The 16th century was characterized by both enormous scientific progress and great advances in the field of book printing, which broadly increased learning and allowed for faster propagation of new ideas. The Antwerpian Christoffel Plantijn scaled-up the art of book printing to a level that allowed for the mass production and replication of printed copies of important books. During that century, approximately 50 books from different scholars were published on veterinary medicine, however they mainly focused on the horse. Philologists, physicians, equerries, noblemen, and politically important men, everyone started publishing books on equine medicine. As far as the matter of the substance was concerned, the works were all very much alike with little new material being published. However, Andreas Vesalius caused a revolution in 1543 when he published his extraordinary tome known as '*De Humani Corporis Fabrica Libri Septem*' in Brussels. The work was not only a landmark study on human anatomy but also an artistic work of high aesthetic quality and would inspire many authors, the most famous of whom, Carlo Ruini (1530-1598), was one of the most noted horse anatomists of the 16th century. Ruini's '*Anatomia del Cavallo*' (1590) was the first book to focus exclusively on the structure of a species other than man and its splendid images were often plagiarized for years to come. In 1599, the French physician Jean Héroard, inspired by Vesalius and Ruini, wrote his '*Hippostologie*'. It was the same Héroard who introduced the term '*vétérinaire*' in France and was referred to as '*Médecin en l'art vétérinaire de la grande écurie du Roy*' [3].

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The publication of the early veterinary reference books ran parallel with the development of the art of equitation, beginning in Italy, where court life began to flourish and noblemen started to qualify in horseback riding. This is nicely illustrated by an engraving in Antoine de Pluvinels most famous work, '*L'instruction du Roy en l'exercice de monter à cheval*' published in 1629. During the following two centuries, horses became extremely popular among the upper class, not only as a riding and companion animal but also as an indispensable member of the foxhunt and as a draft-animal of the most prestigious carriages. Around this time, wealthy citizens and noblemen started to establish stud farms and riding schools, hence creating an unmistakable need for caregivers for their horses. These equerries,

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135 most of whom were self-educated in Germany, gave rise to a new literature genre, the so-called '*Traités Hippiatriques*'. In these comprehensive books one could find not only accurate descriptions on horse anatomy, including long lists of diseases and potential therapies and descriptions of the harnesses, but also instructions on how to breed, trade, handle and ride horses. Indeed, in most of the works an important pathology section was included in which
140 most of the attention was laid on external deviations of the normal structures. Etiologies, however, were often absent and the dynamics or pathogenesis of a certain disease was usually poorly or not at all understood.

Another, often competing, group of equine professionals was the so-called '*Maréchaux*' or blacksmiths. Although they were basically responsible for shoeing horses,
145 most of them offered first-line treatment as well. Often more practically minded than the equerries, they enjoyed the highest respect with the horse loving nobility. Needless to say, this often resulted in discord between the two groups, the equerries on one hand and the *Maréchaux* on the other hand, divided by a well-documented rivalry for many centuries.

The most influential hippiatrists bequeathed some interesting books listed in a few
150 excellent bibliographies. First of all, there is the '*Essai de bibliographie hippique*' [8], a must have among antique book lovers in the equine field. Thousands of books published in France before 1919, are summarized in this work, including biographies of the authors and exact bibliographical descriptions of the books. Less specific on horses, an earlier bibliography was composed by Musset-Pathay [9] though in a more broad agricultural perspective. One of the
155 first notable early equerries was Jacques de Solleysel (1617-1680), the son of a police officer, who received his academic training in Lyon, where he acquired his skills in equitation by taking courses with the best equerries of the time. At the age of 35, he left for Munster (Germany) where he received additional training, and studied contemporary equine diseases and their therapies. By the time he returned to France, he had already earned himself an
160 excellent reputation. With '*Le Parfait Maréchal*' (first edition 1664) [10] he published one of the very first French reference books on hippiatrics. It covers a wide variety of subjects, including topics related to the art of equitation and more veterinary subjects, such as lists of diseases, anatomical descriptions, ageing by dentition and dozens of so-called therapies. Although '*Le Parfait Maréchal*' was reprinted several times, its importance was even better
165 illustrated by the immense popularity of its successor, '*Le Nouveau Parfait Maréchal*' written by an icon among the early French hippiatrists, François Alexandre Pierre de Garsault (1692-1778, Figure 1). De Garsault was a French author, zoologist, botanist, designer and

170 'Capitaine des Haras du Roy' covering the most diverse subjects in his work. In his role as head of the royal stud farm, he was often sent out to study horse breeding and was responsible for the practical organization of the French stud farm network, reporting to the government on this important branch of the national economy. Additionally, the breeding and training of horses for military purposes was also an extremely important concern during the 18th and beginning of the 19th century. His '*Nouveau Parfait Maréchal*' was first published in 1741 [11]. This publication '*in-4*' (20x26cm) summarizes all contemporary knowledge on horses in the broadest sense. Although some critics describe the book merely as a compilation, it is valued because of its logical structure based on the methodological and meticulous attitude of de Garsault. On top of the information already contained in the '*Parfait Maréchal*', de Garsault added 49 plates based on copper etchings, most of which he designed himself. He also included a dictionary with equitation terms and a set of remarkable drawings on botany with lists of available contemporary 'pharmaceuticals'. A very peculiar plate deals with the outer abnormalities that can possibly be detected on an individual horse. De Garsault assigned all of these possible defects to one and the same horse, creating a very original plate of a seriously deformed horse (Figure 2). Still, the book contains a balanced mixture of both veterinary and equitation topics. The importance of this work is illustrated by at least 10 re-185 editions with a final one being published in 1843. Based on this, the book is believed to have had an enormous impact on contemporary equine literature and certainly inspired many later authors. Additionally, to aid cavalrymen who were often on the road with their horses, de Garsault further cemented his reputation by publishing a pocket format booklet a few decennia later, the '*Guide du Cavalier*' (1770) [12] that was much easier to carry around and 190 contained the most important information on the care of horses.

While the number of books on horses steadily increased, the importance of the author was reflected by the luxury and grandeur of the published edition. Some authors invested a fortune on compiling a more prestigious publication with larger plates, often plagiarizing earlier works. It is also observed that more and more, there was a clearer distinction between 195 equitation and purely veterinary related works. A beautiful example is '*La Parfaite Connaissance des Chevaux*' [13], dedicated by Gaspard to his father Jean de Saunier (1663-1748). While the usual format of most of the books was shown in '*in-4*', the book from father and son de Saunier is a publication '*in-folio*' (26x40cm). Only one edition, published in 1734, was produced (The Hague). It was an impressive project that contains more than 60 large 200 plates although some of them were plagiarized from the work of Carlo Ruini. The

adventurous history of both men's lives illustrates that not all equerries were of irreproachable reputation. Although father de Saunier is generally considered as one of the best hippiatrists of his time, he and his son were both actively involved in dueling and had to leave France at a critical moment in their careers. Gaspard de Saunier finally ended up in Leiden where he
205 headed the riding school there for more than 30 years. A few years after his death, some of his students published a second *in-folio*, '*L'art de la cavalerie, ou la manière de devenir bon écuyer*' [14], which was entirely dedicated to the art of equitation. This brief inventory on some of the most beautiful equine books in 18th century France cannot be finished without mentioning the '*Ecole de cavalerie contenant la connoissance, l'instruction et la*
210 *conservation du cheval*' by François Robichon de la Guérinière, a masterpiece first published in 1733 [15]. Entirely devoted to the cavalry and military training of horses, it continues today as a reference work for classic school equitation.

The establishment of veterinary education during a century of change.

215 As illustrated above, the importance of the horse in both agricultural and military terms increased tremendously during the 17th and 18th century. However, the horse was still basically a luxury product or a military fighting machine, and more was needed to generate the final spark that would initiate the establishment of formal veterinary education in 18th century France. To understand the contemporary social context, a very brief description of the
220 political status of France at that time is necessary. The 18th century was characterized by growing discontent within a large section of the population, 80% of whom were dependent on agriculture. With the French State being virtually bankrupt [16], a chronic famine gripped the entire territory as the result of a defective agriculture policy. This was evidenced by a slowly growing opposition, which would finally manifest itself in the 1789 French Revolution.
225 Without going into detail, it should also be pointed out that regular outbreaks of rinderpest started to decimate cattle populations from 1714 onwards [17]. As a consequence of massive cattle mortality, milk production decreased enormously and also resulted in a chronic shortage of manure to fertilize the land, further negatively impacting crop production. Due to the lack of an organized cattle-breeding policy, the genetic selection of production animals, including
230 sheep, had completely stopped. As a result, wool, while still a very important commodity, was extremely bad in quality. Thus, a huge gap was created between the classes, with the high end of the population extremely interested in horses and a large group of poor farmers, the latter being frustrated because of the lack of a coherent political interest for agriculture and beasts

of burden. Fortunately, within the political establishment, there was a small group adhered to
235 an economic doctrine called ‘physiocracy’. This theory was based on the idea that the
prosperity of a nation would depend on the development of agriculture as a basis of
demographic growth. In other words, rebuilding the country would only be possible when a
sufficient number of healthy and well-fed laborers were available. Slowly, agricultural
development became a priority again, which in turn allowed the spark to create a formal
240 context for the establishment of veterinary education.

A key protagonist Claude Bourgelat, born in Lyon in 1712, was the son of a
prosperous merchant [18]. Following a problematic childhood, he went to Toulouse to study
law. After a brief career as a lawyer, he joined the ‘Musketeers’, where he was trained in the
art of equitation by the best equerries in France. In 1740, at the age of 28, he was appointed
245 ‘*Ecuyer du Roi tenant L’Academie d’équitation de Lyon*’ and published his first book on
hippiatrics ‘*Le Nouveau Newcastle*’ (1744). However, he only forced his major breakthrough
by his next publication the ‘*Elemens d’Hippiatrique*’ published in 1750, 51 and 53
respectively [19]. This triptych is generally considered as the first ‘modern style’ veterinary
reference handbook and certainly was innovative for several reasons. First of all, it is written
250 in an interview style, as a discussion between a master and his apprentice. By answering
question by question, Bourgelat describes the anatomy of the horse in profound detail. The
exterior of the horse, the so-called ‘*hippometrie*’ (Figure 3), would turn out to be one of his
obsessions. In addition, a good deal of attention is given to the correct conformation of
horses’ legs including any possible defects. Secondly, Bourgelat openly criticized age-old
255 therapies such as bloodletting, describing them as dangerous and ineffective thus advocating
new approaches to veterinary care. And finally, the format of the book is very modest (Figure
4) both in dimensions (*in-12*, 10x16cm) and due to the absence of illustrations (except for 2
allegoric frontispieces and one small folding plate, Figure 4), a trend break in an era when
luxury books had started to be the golden standard. These innovations can certainly be
260 considered as signs of educational engagement and pedagogical skills and indicated a true
intention of making scientific knowledge more accessible to a broader public. The ‘*Elemens
d’Hippiatrique*’ assured Bourgelat of major respect among his fellow hippiatrists and resulted
in his appointment as a member of the Academy of Sciences in Paris, an important step in his
national recognition. Later on, he wrote important contributions to the famous encyclopedia
265 from Diderot and D’Alembert and published numerous other books, all of which had the
horse as unique subject.

Although Bourgelat is not considered as the best hippiatrist of his time, he was the first to realize that an institutionalization of veterinary education was necessary and urgent. Most of the contemporary knowledge at that time was based on empiricism and superstition. His first mission was to eradicate old '*pratiques de maréchallerie*' most of which he considered as being inefficient and backward as stated above. Clearly, it didn't make him popular with ~~other~~ hippiatrists originating from the guild of the blacksmiths, of which Philippe Etienne Lafosse (1738-1820) was his most important opponent. Both adversaries started a polemic discussion at the level of the Encyclopedia with contributions in favor and against centennial old practices in equine veterinary care. The immediate consequence of this was a broad societal tension between the equerries and blacksmiths over the right to control the veterinary care of the horse. Bourgelat initially founded an institute for the training of blacksmiths in Lyon (1760) because the only species that concerned him was the horse. The final decision on the foundation of a real '*école vétérinaire*' (veterinary school) came from another important actor of the time, Henri-Léonard Bertin. This political heavyweight was a member of Bourgelat's circle of friends in Lyon and had a much broader view on the needs of the developing agricultural society. He recognized the societal divisions of the time and was convinced that a school that would only train veterinarians in the care for horses would never be accepted on a broader scale because the horse was, after all, primarily a luxury animal. [This way](#), Bertin offered Bourgelat yet another (economical!) reason for the foundation of the world's first veterinary school as a guarantee for a broad support on the 'physiocratic' side. The decree of the Council of State of August 4, 1761 officially authorized Bourgelat to establish a school '*qui eut pour objet la connaissance et le traitement des maladies des boeufs, chevaux etc ...*' (a school to generate the knowledge and treatments of diseases of cattle, horses etc...). The same Decree depicted Bourgelat as somebody who '*s'était occupé depuis vingt ans de l'étude des maladies des bestiaux de toutes espèces*' (had studied diseases of animals of all sorts for more than 20 years). Clearly, this was far from the truth because Bourgelat apparently was never interested in anything but horses, however, it provided necessary leverage. Thus the very first veterinary school in the world, located in a suburb of Lyon, opened its doors on the first of January 1762. Bertin and Bourgelat deliberately chose to use the word '*vétérinaire*' instead of '*hippiatrie*' to clearly mark the difference with '*maréchallerie*'.

The veterinary profession was built on rivalry.

300 The conditions to be admitted as a veterinary student were not very stringent in the beginning. There was no real minimal age limit and the youngest students were only 11 years old. The only real requirement was being able to read and write. The tuition fees were paid by the French departments that urgently needed trained veterinarians or later on, by the military, which had a huge need for caretakers for the thousands of cavalry horses. On rare occasions, 305 some students paid the fees with private means. Following a question of Bertin, Bourgelat founded the second veterinary school a few years later in Alfort, close to Paris, in 1765 [20]. Certainly, other actors were involved in the discussion on the foundation of the veterinary profession. Next to Turgot, who initially was permitted to establish a school in Limoges - a school that was not supported by Bourgelat and was closed down a few years later [21] - there 310 was Philippe Etienne Lafosse. This heir, out of an old and well-respected family of Parisian Maréchaux, was born in Montataire (1738) and was the son of the famous hippiatrist Etienne Guillaume Lafosse (Lafosse père). Shortly after the opening of the school in Lyon, Philippe Etienne Lafosse asked the Duke of Choiseul for permission to establish an '*école militaire d'hippiatrie pour les maréchaux des regiments de cavalerie*' for military purposes. However, 315 Bourgelat didn't hesitate to hasten the opening of the second veterinary school in Alfort, thereby scattering the dream of Lafosse to have his own school near Paris. Thus, a well-documented deep rivalry between the two icons in hippiatry was born, with Bourgelat representing the upper class group of equerries versus Lafosse as an exponent of the much larger group originating from the guild of blacksmiths.

320 Although Lafosse is generally considered as being the better hippiatrist of the pair, he lacked both political support and the conviction to install a veterinary training program that would consider other species in addition to the horse. On December 27, 1766, Louis XV created the '*Brevet de privilégié en l'art vétérinaire*' (the official veterinary certificate) for students who had gone through the 4-year training program at the veterinary schools in Lyon 325 or Alfort. In this way, the veterinary profession was officially born and thus was decided the outcome of the competition in favor of Bourgelat and the equerries. However, the rivalry between both groups would continue deep into the 20th century. Bourgelat and Lafosse could have decided on a mutually beneficial collaboration to strengthen the position of the veterinary profession, but their rivalry and backgrounds prevented this. ~~But~~ Bourgelat never 330 allowed Lafosse to teach in his schools, forcing him at one point to organize private classes with only interested individuals. Fortunately, this conflict also resulted in at least one positive outcome that would dominate veterinary history forever. As discussed earlier, the dimensions of Bourgelat's publication '*Elemens d'Hippiatrie*' were very modest with an *in-12* triptych

335 containing hardly any figures or plates. As a reaction to the turmoil, and out of pure
frustration because of the outcome of their many confrontations, Lafosse published the most
prestigious work in the early history of veterinary medicine, the '*Cours D'Hippiatrique*', a
unique edition issued in 1772 (Figure 4). This 402-page '*large in-folio*' publication
(33x52cm) contains about 56 plates (many of which were folding) printed from original
340 copper etchings on the anatomy of the horse in all its splendor and unique dimensions ('great
margins', Figure 5). The book is generally considered to be the most complete and correct
contemporary description on all aspects of horse anatomy and is divided into several chapters
dealing with the **locomotion**, nervous, digestive, reproductive etc. ... systems [8]. Lafosse
spent his personal fortune on this project and he also took the opportunity to point out his
opinion on certain specific aspects. In the numerous footnotes, he criticizes the work of
345 Bourgelat, repeatedly comparing both publications. Only one edition of this masterpiece was
published and some copies are colored, pushing up their actual value even more **at the
specialized antiquarian bookshop**. The title of the book was probably carefully chosen,
avoiding the word '*vétérinaire*'. It was not the only publication of Lafosse. A few years
before, he had published his '*Guide de Maréchal*' [22], as a more practical format (*in-8*), but
350 again from a unique quality level and containing 10 magnificent plates with special attention
to the skeleton, nerves, blood vessels, abdominal organs and hooves of the horse. The work
has been re-edited many times and again is considered as being very accurate from a technical
point of view. From this point on, a steady increase in the number of veterinary publications
occurred. One final name that should be mentioned in this context is Louis Vitet (1736-1809).
355 A physician and former mayor of the city of Lyon (1790-92), he decided to study veterinary
medicine later on in life and published a 1.700 page triptych entitled '*Médecine Vétérinaire*'
(1783) [23]. Again it is a very modest publication without plates, but then who could ever do
better than Lafosse? It is a very complete coverage of many different species and contains a
very valuable bibliography on all former publications (mainly in French) concerning
360 veterinary medicine.

Concluding remarks.

Due to its place in society at the time, the horse undoubtedly played a prominent role
in the development and establishment of the veterinary profession. However, one should not
365 underestimate the societal context that allowed this evolution to take place. Stakeholders in
veterinary care fought out a bitter rivalry to take control. Blacksmiths, educated by experience

and long family traditions, collided with a heterogeneous group of diverse and usually highly internationally educated noblemen, with the latter leaning on sufficient political support to be able to establish modern veterinary education. However, the highly specialized hippiatrists planned to take only the horse into consideration and would have postponed the creation of a more general animal care provider if able. The societal context in need for change and an overall deterioration of the agricultural sector inspired the so-called believers in physiocracy and urged politicians into a bigger more comprehensive plan. Fortunately, opinion-leader, hippiatrist Claude Bourgelat could be convinced of the necessity to install the first two veterinary schools to provide training in veterinary care for a broader range of species than only 'horses'. This sparked the rivalry with his principal opponent Philippe Etienne Lafosse and although this finally resulted in the fortunate publication of the most prestigious veterinary publication ever, the '*Cours d'Hippiatrique*', the competition would go on for many decades to come.

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Figure Legends.

440 Figure 1. François Alexandre Pierre de Garsault was a French author, zoologist, botanist, designer and ‘*Capitaine des Haras du Roy*’ who published the famous ‘*Le Nouveau Parfait Maréchal*’.

Figure 2. Deformed horse in ‘*Le Nouveau Parfait Maréchal*’, loaded with many external malformations and diseases.

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Figure 3. ‘*Hippometrie*’ in the first part of the triptych ‘*Elemens d’Hippiatrique*’ published by Claude Bourgelat (1750, 51, 53).

450 Figure 4. Contrast between the ‘*Cours d’Hippiatrique*’ published by Philippe Etienne Lafosse (1772) and generally considered as the most prestigious veterinary publication ever on the left hand side, alongside the triptych ‘*Elemens d’Hippiatrique*’ by Claude Bourgelat, the very modest first ‘modern time’ veterinary handbook (1750,51,53).

455 Figure 5. Plate based on a copper etching from the ‘*Cours d’Hippiatrique*’ published in a prestigious ‘*large folio with large margins*’ by Philippe Etienne Lafosse.

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