

The Emperor and his Animals

The Acquisition of Exotic Beasts for Imperial *Venationes*

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Where the dusty village of Smirat now sits hunched against the winds of the Tunisian desert, there once stood the country villa of the local magnate Mageirius. Prominently displayed in Mageirius' villa was a mosaic depicting a beast hunt in the arena. Strangely enough, the presumed stars of the show, four pairs of hunters and leopards, are relegated to the corners of the mosaic. Center stage is instead dominated by a messenger bearing a plate of money, a nearby block of text explaining that these are the funds (4,000 sesterces) with which Mageirius has generously offered to pay for the show.¹ But contrary to the original owner's expectations, the modern observer is not struck by Mageirius' munificence, but rather by his show's meanness when compared to those put on in Rome. The emperor Titus, for example, had 9,000 animals killed during the hundred-day long inauguration of the Flavian amphitheater. Mageirius' leopards, worthy of a mosaic in the provinces, would have provided about fifteen minutes worth of entertainment in the capital.²

The question then arises: how did the emperor achieve and maintain this gaping disparity between his own games and those provided by his subjects? Brute purchasing power surely played its part, but it is possible, indeed, even likely, that it did not constitute the whole of the emperor's advantage. In the matter of gladiatorial combats, for instance, the emperor augmented his considerable superiority in means with laws limiting the actions of others, and with a Mediterranean wide system of gladiatorial schools and managers which constantly funneled combatants into the arena at Rome.³ In other words, the emperor developed a system of control over the presentation of gladiators that ensured that he always was able to provide the largest and

¹ *AE* 1967.569. On the Smirat Mosaic see, Beschtaouch (1966), Dunbabin (1978) 67-9, and Bombgardener (2009)

² Cass. Dio, 66.25. Assuming that the *venatio* lasted six hours every morning of Titus' games, then an average of fifteen animals an hour, or one every four minutes, were killed.

³ ILS 1397, CIL 2.4519; ILS 1396, 1412, 9014, 1397. See also Ville (1981) 277-290, Auget (1972) 30-33, and Potter (1999) 321.

most spectacular shows. The beasts used for imperial games constituted a resource every bit as valuable as these gladiators. But while much attention has been paid to the means by which the emperor procured gladiators, charioteers, and other entertainers, comparatively little has been said about how he obtained his animals. This silence is due, in large part, to the paucity of evidence we have for the system which supplied imperial beast hunts (*venationes*). But by analyzing this system in light of other supply systems that we know much more about (those supplying corn to the city of Rome and gladiators and chariots to imperial games) it should be possible to get a more complete and balanced picture of the imperial beast-supply system, and in turn to gain both a clearer picture of the emperor's involvement in the entertainment industry, and the extent of his willingness to interfere with markets significant to his own interests.⁴

The city of Rome was clearly the nexus of the imperial beast system, and it is there that one should first look for evidence of it. Animals belonging to the emperor were funneled into a system of *vivaria*, or animal preserves, scattered around the capital. We know of one such preserve from Juvenal, who states that the emperors maintained a herd of elephants “fed in the Rutulian forest and the domains of Turnus.”⁵ In the mythological tradition, the capital of Turnus' Rutulian kingdom was at Arda, in a region later known as Laurentium. And sure enough, corroborating evidence for an elephant reserve here is given by the tomb of an imperial freedman, who claims that he was *procurator(i) Laurento ad elephantos*.⁶ Three other funerary inscriptions (all also belonging to imperial freedmen) provide further evidence for such *vivaria*.

⁴ This is not to say that work has not been done both on imperial *venationes* (Friedlander (1907) 2.64.74, Jennison (1937) 60-99, Ville (1981) 57-168) or on the beast trade generally (cf. Jennison (1937) 137-154, Bertrand (1987), Bomgardener (2000) 212-214, MacKinnon (2006)), but detailed examinations of the means through which imperial beasts were acquired are much less common, and tend to overemphasize the role of the military and taxation. No one has attempted to consider the entire imperial beast system in the broader context of other imperial supply systems.

⁵ Juv. 12.100-10.

⁶ *CIL* 6.8.583.

One of these belonged to the *praepositus* of herbivores (*herbriarum*), another to a man who had held the position of *adiutor ad feras*, and the last, and surely oddest, to a *praepositus camellorum*, whose tombstone was also engraved with a picture of two camels on either side of an elephant.⁷ A final literary witness to the imperial *vivaria* is found in Procopius, who mentions a large *vivarium* (probably near the Praenestine Gate) that was still in existence when Belisarius vied with the Goths for control of the city.⁸

On onomastic grounds, the tomb of the *procurator ad elephantos* seems to date from the end of the Julio-Claudian period.⁹ It is possible that it was established even earlier, since Claudius made use of elephants during his invasion of Britain, and before him Julius Caesar had used forty elephants in a torchlight procession to the Capitol.¹⁰ If Caesar's animals survived the tumultuous Civil Wars, they may very well have formed the foundation of the herd attended to by our *procurator*. The *praepositus camellorum* lived later, and probably served one of the Flavians.¹¹ Later still were the *praepositus herbiarum* and *adiutor ad feras*, whose inscriptions claim that each is *Augg.* (i.e., *Augustorum duorum*) *libertus*, suggesting that they lived in the period when Marcus Aurelius and Commodus ruled the empire jointly (177-80).¹² The *vivaria* of Procopius was almost certainly not in use by his day, and its origin is impossible to date with any certainty. It may very well have been one of the places under the charge of the freedmen mentioned above.

⁷ *CIL* 6.10.208; 6.10.209; *AE* 1955.181.

⁸ Procop. *Goth.* 5.23. On the location of this *vivarium*, see Jennison (1937) 175.

⁹ Sabbatini Tumolesi (1988) n. 8.

¹⁰ Claudius: Dio Cass. 50.21. Julius Caesar: Suet. *Iul.* 37, Dio Cass. 43.22. On the Roman use of elephants in the imperial period in general, see Scullard (1974) 199-207.

¹¹ Bertrand (1987) 231.

¹² Sabbatini Tumolesi (1988) nn. 9-10.

The broad temporal range of this evidence limits what can be definitively stated about the growth of this administration, and about the relationship between these various posts. It is impossible, for instance, to know whether the *praepositus camellorum* and the *praepositus herbiarum* were simultaneously existing offices, or if the latter is the Antonine replacement of the former. And while some of the titles seem almost absurdly specific (how many camels could the Flavians have possibly needed?) others, like that of the *adiutor ad feras*, are so vague as to admit practically any interpretation. The hierarchical system first proposed by Bertrand, in which the *procurators* were the ones actually in charge of the various animal parks, with the *praepositi* and *adiutores* holding subsidiary, more specialized, positions, is reasonable, but not amenable to verification.¹³ We should also bear in mind that the positions of which we are aware represent, in all likelihood, only a small portion of those that existed. If the organization of the imperial gladiatorial schools is any indication, the *procurators* and *praepositi* of the *vivaria* would have been aided by innumerable underlings in charge of everything from grounds maintenance to message delivery, underlings about whom we know nothing.¹⁴

This bureaucracy also need not have been as rigidly compartmentalized as its latter day counterparts. It has been pointed out, for example, that camels and elephants, the two types of animals which we know merited persons in specific supervisory roles, also had military importance.¹⁵ But this does not exclude the possibility of the *vivaria* holding a common stock of animals serving multiple functions. Indeed, neither elephants nor camels seem to have been

¹³ Bertrand (1987) 232.

¹⁴ Aubert (1994) 364.

¹⁵ Bertrand (1987) 232.

employed frequently enough in a martial capacity to have merited special military reserves, and if there were such reserves, they would not have been in Rome.¹⁶

One should also resist the urge to view the divisions of these *vivaria* too schematically. It is possible that the *praepositus camellorum* or *praefectus elephantas* never dealt with any animals outside of those suggested by their titles, and that the whole system was rigidly categorized for the sake of efficiency. But the tomb of the *praepositus camellorum*, with its anomalous elephant, suggests a more flexible alternative, in which the various officials of the *vivaria* might have had their duties dictated by the ever changing needs of the moment rather than by a static job description.¹⁷ In a similar fashion, the official in charge of Rome's corn supply, the *praefectus annonae*, was interested in olive oil and other supplies besides corn well before such goods were part of the established dole.¹⁸ The goal of the *annona* was to keep the city fed and sated, and this meant it was often, but not exclusively, concerned with corn. So too, the administrators of the *vivaria* had as their goal the facilitation of *venationes*, and this may have entailed a much wider degree of duties than their titles suggested. If this is the case, then it is even possible that some titles became more or less entirely unmoored from the actual duties incumbent upon their holders, and that the *praepositus camellorum* actually was responsible for a motley menagerie of beasts, much like the hereditary keeper of the peacock zoo of Athens came

¹⁶ Elephants: Scullard (1974) 199. Camels: Southern (2006) 123.

¹⁷ Cf. Meiggs (1973) 302. Alternatively, the elephant might, as Kolendo (1969) suggests, indicate an association between the *praepositus* and the elephant park at Laurentum (296). If this is the case, the presence of camels at an elephant preserve also testifies to the flexibility of the *vivaria* system.

¹⁸ Aldrete and Mattingly (1999) 192. While there were specifically designated *procurators ad oleum* in the *annona*, other officials known to have been involved in that trade, such as an *adiutor praefecti annonae* sent to Spain to ensure timely shipments, did not give in their titles any indication of that involvement.

in time to be responsible for many other animals beyond the peacocks who were his initial charge.¹⁹

The presence of imperial freedmen in every important post in the *vivaria* system indicates a close tie between that system and the emperor who used it. This need not have been the only way in which this organization developed. It is possible, for instance, to envision a system much like the factions of the circus, in which entrepreneurial groups rented out animals to officials, including the emperor, who wished to present *venationes*.²⁰ A similar system does seem to have arisen by the time of Justinian, when the circus factions had added the maintenance and training of exotic animals to their expansive list of responsibilities.²¹ Nor does the system seem very much like that used for the hiring of actors, in which troupes of performers (*histriones*) led by a chief *actor* negotiated with the person wishing to put on a play.²²

What the system does seem to resemble is the one used by the emperor to acquire gladiators. Many magistrates charged with giving gladiatorial *munera* seemed to have hired bands of gladiators (*familiae*) who contracted on a per performance basis much like circus factions or theatrical *histriones*.²³ But the system employed by the emperor was quite different. From the very beginning, the emperors preferred to train and maintain their own gladiators rather than rely on others. The first sure attestation of an imperial *ludus* occurs during the reign of Caligula. Other emperors added more *ludi* to the system. Domitian, for instance, created the *Ludus Dacicus*, the *Ludus Gallicus*, and may have also been responsible for the imperial school

¹⁹ On the peacock zoo, see Jennison (1937) 15-17.

²⁰ Imperial control over the circus factions is a contentious issue. If such control ever existed, it is not evidenced until at least the third century. Cf. Cameron (1976) 5-13; Potter (1999) 292-301.

²¹ The Empress Theodora was, allegedly, the daughter of the bear trainer for the Greens (Procop. *Hist. Arc.* 9).

²² Potter (1999) 269.

²³ Dunkle (2008) 38.

for beast hunters, the *Ludus Matutinus*.²⁴ Like the *vivaria*, these *ludi* were administered by imperial *procuratores*, though in this instance the *procuratores* were equestrians, not imperial freedmen.²⁵ Over time the system expanded throughout the Mediterranean, with imperial *ludi* being founded in Spain, Egypt, and Asia Minor, and with special *procuratores familiae gladiatorum* being tasked with gladiatorial recruitment in the provinces.²⁶

This difference between the sort of systems used for gladiators and beasts and those used for chariot races and theatrical performances cannot be reduced to a simple difference in the relative importance of these forms of entertainment. By the fourth century, there were 177 official festival days every year, of which 101 were celebrated with plays, 66 with chariot races, and only 10 with *munera*. Furthermore, while the Coliseum could hold at maximum fifty thousand spectators, the Circus Maximus could hold 200,000, or one fifth of the city's maximum population.²⁷ Even taking into account the extraordinary *munera* occasionally given by the emperors, it would seem that the Roman plebs were much more likely to have the chance to attend chariot races. If this is the case, one might reasonably suppose that chariot races were just as, if not more, important than *munera* in maintaining the emperor's relations with the masses. And yet it was precisely this most important form of public spectacle that was the most privatized. Nor does the argument that the emperor maintained direct control over gladiators as a security measure seem a sufficient explanation. While hired bands of gladiators might have posed a serious threat to political order during the twilight of the Republic, the emperor could rely on the substantial military presence in and around the city to guard against such dangers.

²⁴ Wiedemann (1992) 22.

²⁵ Tac. *Ann.*, 11.35, 13.22.

²⁶ *Ludi*: Spain, *CIL* 2.4519; Alexandria, *ILS* 1397; Pergamum, *IGUR* 1060. *Procuratores*: Western provinces, *ILS* 1396; Italy, *ILS* 1412; Italy and the Danube, *ILS*, 9014; Egypt, *ILS*, 1397.

²⁷ Balsdon (1969) 57-60.

Nor does such an explanation explain why imperial *vivaria* should have developed along analogous lines since the presence of non-imperial leopards or elephants in the city presumably did not constitute a security threat.

It is more likely that the system by which the emperor gathered gladiators and beasts was not so much the result of a conscious choice as it was a natural growth of the way in which Republican members of the elite had put on games. While many of the senators who put on *munera* rented the gladiators they used, for those who were wealthy enough to afford it, it was equally viable to own the gladiators outright. Cicero's friend Atticus purchased a troupe of gladiators in which Cicero evinced interest in as a business venture.²⁸ Julius Caesar owned five thousand gladiators housed in a *ludus* in Capua, gladiators who were seized by Pompey at the beginning of the Civil War.²⁹ Similarly, it is clear from the letters of Caelius to Cicero that leopards and other arena animals were acquired by *editores* at the source in the provinces or beyond, rather than rented out to them in Rome itself. The presenters of many of the greatest beast shows of the Republic were apparently able to provide their magnificent spectacles only because they had provincial connections which allowed them to procure the animals they exhibited directly.³⁰ By contrast, senators were not even granted the right to contract to supply horses for chariot races until the reign of Augustus. The existence of such contracts suggests that *editores* of circus games relied principally upon such rented stock and that senators hitherto been excluded from this lucrative business in a way in which they were not excluded from the trade in gladiators and wild beasts.³¹

²⁸ Cic. *Att.* 4.4a.2.

²⁹ Cic. *Att.* 7.14.2.

³⁰ Deniaux (1998) 1300-1305.

³¹ Cass. Dio, 55.10. Cf. Cameron (1976) 6.

Consequently, it is most logical to think of the imperial *vivaria* as beginning much like the holding pens owned by any *editor* of a *venatio*. But while all *editores* felt the need to discharge their duties well, the emperor was under certain peculiar obligations, and it is worthwhile to consider what those were and how they might have affected the growth of the imperial *vivaria* system. Imperial beast hunts needed to outshine those put on by other men of rank and wealth, men who had both means to put on such expensive displays and the desire to gain the honor that could accrue from them. It is often assumed that the emperor preempted such competition, by assuming sole control over all public entertainment, beast hunts included. Yet, at least some of the *ludi* and *munera* given in Rome were still the responsibility of other magistrates. Augustus, for instance, made the *praetors* responsible for the official *ludi*, and allowed them to be responsible for two days of *munera*, while by the time of Claudius, the other official *munera* (which lasted for ten days every December) were the responsibility of the quaestors.³² *Munera* were also given by members of the senatorial class to celebrate special occurrences, such as the assumption of office. The late fourth-century senator Synmachus gave games to celebrate his son's ascension to the quaestorship in 393 and again when his son took the praetorship in 401 (his son, being ten when he first assumed office, was presumably too young to attend to such weighty matters himself).³³ The late antique commemorative ivory diptychs, given by the newly appointed consuls to their friends—many of which survive—are frequently ornamented with the bears and lions they presented in the arena as part of their celebratory games.³⁴

³² Cass. Dio 54.2; Suet. *Claud.* 24. Cf. Balsdon (1969) 261-264.

³³ Jennison (1937) 95.

³⁴ Delbruck (1929).

While it is customary to view the later imperial magistrate as a person attempting to *avoid* these expensive obligations, this need not always have been the case.³⁵ Particularly in Rome, the tradition of magnificent games compelled *editors* to continue to give games of sufficient splendor. Even in the fourth century, the proud patrician Symmachus was willing to spend two thousand pounds of gold to ensure that his son's games met this lofty standard.³⁶ And one should not be too quick to dismiss the games of such men because their resources paled in comparison to the imperial treasury. The imperial treasury was at times stretched quite thin, and in the pursuit of honor (or avoidance of shame) there is absolutely no guarantee that these men would behave like the rational actors of an economic textbook. Indeed, they probably shared much in common with Geertz' Balinese landlord, who stretched his resources to the limit to support his flock of fighting cocks.³⁷

The emperor did not just have to put on better shows than anyone else living, he also had to measure up to shows presented by all who had held the imperial dignity before him. This was a task just as, if not more, important than that of outperforming his peers. To fail in it was to risk exciting the ire of the mob, and gaining, like Vespasian, a reputation for stinginess and a correlating loss of honor and popularity among the plebs.³⁸ Alternatively, emperors who were highly successful in organizing entertainments could count on the favor of the masses even when the senatorial elite was arrayed against them. Nero was adored by the plebs for precisely this reason, and his shade was supplicated by the crowd while it was execrated by the nobility.³⁹

³⁵ Jones (1964) 537-540; Potter (1999) 317-321.

³⁶ Photius, *Bibliotheca* 80.

³⁷ Geertz (1973) 419.

³⁸ Suet. *Vesp.* 19.

³⁹ Tac. *Hist.* 2.95.

Thus, the emperor felt very keenly the weight of the past and was subject to it just as much as the rest of the empire was subject to him.

It was necessary, then, for the emperor not only to put on good shows, but also to consistently put on the best shows that had ever been seen. Hence we can observe a slow but steady increase in the number of animals used by each emperor. Augustus had about 3500 beasts killed in the arena over his long career: Trajan killed 11,000 in 123 days.⁴⁰ As the emperor's need for animals grew ever more insatiable, the system by which such animals were kept in the city would have grown ever more complex. If the ambiguity of the *vivaria* structure is not an accident of our evidence, it would seem that this growth occurred in a piecemeal fashion, with an emphasis on solving the needs of the day rather than on creating a coherent long term structure for the future. Indeed, since this cycle of ever-increasing consumption reached its height at the beginning of the second century, it would not be surprising to discover that most of the *vivaria* system had been in existence since that time, even though the bulk of our surviving evidence dates from the third century.⁴¹

Even if the emperor's *vivaria* began much like those of his peers, their size and incorporation into an overarching system quickly set them apart qualitatively. We do not know much about the facilities other magistrates had at their disposal for the stockpiling of exotic animals. But circumstantial evidence indicates that such facilities were quite primitive, with the result that it was not at all uncommon for animals to die while awaiting their turn in the arena. In Apuleius, the local magnate Demochares loses the substantial number of bears he had painstakingly gathered because of the rigors of heat, disease, and prolonged confinement. That

⁴⁰ *RGDA* 22; Cass. Dio. 68.15.

⁴¹ Jennison (1937) 60-82.

this was not a unique risk is demonstrated by a letter of Symmachus, whose shipment of fifty crocodiles perished because they refused to eat.⁴² Compounding this problem was the amount of time it took to gather the animals necessary for a *venatio*. Symmachus, for instance, began preparing for the games celebrating his son's ascent to the praetorship in 398, two years before he expected that his son would assume that office. Several hundred years earlier, M. Caelius Rufus began pestering Cicero (then governor of Cilicia) about procuring leopards for the games of his aedileship well before he had even been elected aedile.⁴³ The longer it took to stockpile the necessary supply of animals, the more likely it was that some of them would die. The massive *vivaria* system of the emperor overcame this problem for him not just by providing his animals with ample supplies and a large supervisory staff, but also by providing him with enough space to maintain a reserve ample enough to overcome this natural attrition. With such a system the emperor was able to put on games that absolutely dwarfed those of his less well equipped competitors. Indeed, so great is the disparity between the games put on by the emperor and the comparatively paltry exhibitions of others that one suspects that the true point of the *vivaria* system was not to allow the emperor to compete with contemporaries, but to vie with the ghosts of his predecessors.

The *vivaria* not only allowed the emperor to stockpile animals destined to die, but also gave him an unparalleled capacity to retain animals he wished to live. Although many of the animals who entered the arena did not exit it (it is telling that Augustus says that 10,000 gladiators “fought” in his shows, but that 3500 animals were “killed”) some animals appeared to have survived their time on the sand.⁴⁴ Thus we learn in the *Martyrdom of St. Polycarp* that the

⁴² Apul. *Met.* 4.13; Symmachus *Ep.* 6.43.

⁴³ Symmachus *Ep.* 6.35; Cic. *Fam.* 8.2.2, 8.4.5.

⁴⁴ *RGDA* 22.

magistrate had at his disposal a lion to set upon the good martyr *after* the conclusion of the games. In a poem to a tamed lion killed in the arena, Statius writes that “the city fathers, groaned at your fate, as if you were a famous gladiator” implying that certain animals entered the arena often enough to garner some degree of fame. On a more disturbing note, the fact that a lion during the reign of Claudius had become trained to be a man-eater certainly indicates that it had ample experience on the arena floor.⁴⁵

The emperor could not only gain favor for himself by displaying popular or trained animals, but could also use judicious loans of such beasts as a political tool. Thus for his games in AD 12, Augustus showed his favor toward Germanicus by lending him a troop of trained elephants from the imperial herd, the comedic antics of which won Germanicus immense approval with the crowds.⁴⁶ The tradition of lending animals from the imperial *vivaria* proved long lasting, for we also find Symmachus receiving a gift of leopards from Honorius some four centuries later.⁴⁷ Nor was the emperor alone in bestowing such gifts. Caelius attempted to shame Cicero into action by mentioning that another friend, Curio, has already given him twenty large cats for his upcoming games. Writing on gift giving, Seneca stated that “No one is so stupid as to need the warning that he should not send gladiators or wild beasts to a man who has just given a public spectacle.” Even some of the bears destined to die miserably in the cages of Demochares came from that petty magistrate’s friends.⁴⁸

⁴⁵ *Martyrdom of St. Polycarp*, 12; Stat., *Silv.* 2.5.25-26; Cass. Dio, 60.13. It is unclear to what extent the animals used to execute condemned criminals overlapped with those which were themselves killed in a *venatio*. The *Martyrdom of St. Polycarp* certainly shows that at least some animals were retained for the sake of executions (which makes sense, given the expense of crowd-favorites like the lion), but it is unclear whether the emperors kept a separate stock of animals for this purpose or not.

⁴⁶ Ael. *NA* 2.11.

⁴⁷ Symmachus *Ep.* 4.12.

⁴⁸ Cic. *Fam.* 8.9.3; Sen. *Ben.* 1.12; Apul., *Met.* 4.13.

Gladiators, too, might be used in this fashion. It was the custom of Domitian, for instance, to allow any two of the gladiators chosen by the people from the imperial schools to be shown at the games given by quaestors.⁴⁹ It has also been suggested that the imperial *ludi* sprinkled across the empire served not only to facilitate the transport of gladiators to Rome, but also to allow the emperor to honor certain provincial games in an analogous manner.⁵⁰ Although we have no direct evidence for it, it would hardly be surprising if the hunters (*venatores, bestiarii*) who constituted the human element of a beast show were lent out in a similar fashion. Such men could attain a degree of popularity that rivaled that of even the most famous gladiators, and the loan of such men from the imperial school at Rome would have constituted a worthy gift.⁵¹

It is unlikely that such gifts were any more the result of disinterested magnanimity than were the games in which they featured. Rather, they were a tool, a way of forming bonds of reciprocity that held the elite of the city together.⁵² For the emperor, they were also a way of surreptitiously deriving the favor of the plebs from the games of others. If the populace knows that it is the emperor's generosity that has provided a pair of famous gladiators or a troupe of dancing elephants, then their gratitude flows at least partially to the emperor. The emperor therefore stands to gain favor from both the mob and with the *editor* whom he has benefitted, and in a fashion which costs him very little. Animals were accordingly, above all, a political resource, and far from being mere holding pens, then, the imperial vivaria were actually one of the linchpins of the imperial court of that resource.

⁴⁹ Suet. *Dom.* 4.

⁵⁰ Millar (1977) 195.

⁵¹ Cf. Mart. *Spect.* 15. During the games of Titus, the audience petitioned to see two famous *venatores* Mart. *Spect.* 20.

⁵² For this wider process (and the role of the beast trade in it) in the Republican Period, see Denieux (1998) 1302-1304.

But before the animals arrived in imperial *vivaria* to be disposed with according to the emperor's will, they first had to be brought to Rome from the far edges of the empire. Exactly where they came from, and who was responsible for capturing and transporting them is something of a mystery. It is conceivable that some of them came from the imperial properties around the empire. The degree to which imperial estates paid their dues to the emperor in kind or in specie remains a matter of debate.⁵³ But it seems clear enough that some estates did pay in kind, even into the later days of the empire. Thus we find Constantine consigning over to the Church in Rome the duties of several Egyptian estates, payable in kind with products such as papyrus, linen, and incense.⁵⁴ As Millar points out, all of these goods were of the sort of which the Church could make direct use. Furthermore, some of the goods, like balsam and incense, were unlikely to have been directly produced on the estates.⁵⁵ What this might indicate is that part of the payment due from the estates was paid not in their actual produce, but rather in exotic goods easily acquirable in their location. One can envision something similar being required of imperial estates in North Africa and Egypt in the matter of exotic beasts; some portion of the estate's revenue could have been payable in locally caught animals.

The possibility of a tax payable in animals receives some support from a decree of Caracalla, who in 216 gave the province of Mauretania remission from back taxes in return for "celestial beasts" (*caelestium...animalium*).⁵⁶ What sort of animals these might have been is open to question, but lions or elephants seem like likely candidates, given their abundance in

⁵³ Cf. Millar (1977) 175-189, and, more recently, Lo Cascio (2007) 639-646.

⁵⁴ Duschene (1886) *Le Liber Pontificalis*, 178.

⁵⁵ Millar (1977) 187. Cf. Millar (1987) 175-189 on the large question concerning the nature of revenues from imperial properties.

⁵⁶ *AE* 1948.109. For a (comparatively) recent discussion of this inscription, see Corbier (1977).

Mauretania and symbolic association with the emperor.⁵⁷ Indeed, as J. Guy observes, elephants would have been particularly needed by Caracalla, who not only used them in the arena, but also took a division of them with him on military campaigns in imitation of Alexander.⁵⁸ But if this is a request for elephants, then it is perfectly possible that Caracalla's attempt to gain the animals through tax cancellation is an individual solution to a problem unique to him (his use of elephants being a personal idiosyncrasy). In short, Caracalla's decree demonstrates that emperors could conceive of taking wild animals in lieu of other forms of taxation, but it does not demonstrate that they did so with any degree of consistency.

Among the sources of imperial animals which are actually attested, the Roman army is perhaps one of the most important. From every corner of the empire in which beasts worthy of the arena were to be found, some evidence exists of soldiers engaged in hunting them. This evidence is most abundant along the empire's northern border, where vast forests teeming with bears and boars provided the foundation for an active animal trade.⁵⁹ Scattered along the German border and throughout the Danube valley are legionary inscriptions referring to *venatores immunes*, soldiers who had been relieved of their normal duties for the sake of hunting. Their possible quarry is suggested by another inscription from the legionary fort at Xanten in Germany mentions a man with the title of *ursarius legionis*.⁶⁰ Corroborating evidence of bear hunts can be found at Cologne, where the Centurion Tarquitiu Restutus Pisauro was

⁵⁷ On the importance of both animals, see below, 33-55.

⁵⁸ In *AE* 1948.109. Cass. Dio 78.6-7.

⁵⁹ Indeed, in some parts of this region, the bear-goddess Artio was a figure of some importance, whose worship has left behind inscriptions and sculptures (Epplert (2001) 214; Toynbee (1973) 99).

⁶⁰ *AE* 1901.72. Cf. Wiedemann (1992) 45; Epplert (2001) 214.

honored by his legion with an inscription commemorating his impressive capture of fifty bears in six months.⁶¹

At the opposite end of the empire, soldiers stationed in Egypt were also involved in the hunting and capture of the native wildlife. In a letter to his superior, the first century auxiliary Antonius Proculus explains that his detachment has “been hunting all species of wild animals and birds for a year now under the orders of the prefects.”⁶² While it is perfectly possible that Proculus’ catch was destined for the mess hall and not the amphitheater, the lengthy extent of the hunt, its varied catch, and the fact that it merited mention in a letter at all, raise the likelihood that Proculus was after animals for the arena.⁶³ In the fourth century, the army officer Flavius Abinnaeus received a request from a village to borrow nets, with which the villagers hoped to capture a herd of gazelle that had taken to grazing in their fields.⁶⁴ The fact that that the villagers wished to use nets to accomplish this task might imply that they hoped to take the gazelles alive for use in a *venatio*.⁶⁵ But even if the nets were merely the most efficient way to get rid of the gazelles in one fell swoop, the fact that the soldiers had nets to lend in the first place suggests a preexisting interest in the capture of live animals. Such an interest is further evidenced by another letter written to Abinnaeus, in which a civilian associate asks him to “keep the hempen cords ready, for I shall bring the huntsmen when I come, so that we may make nets.”⁶⁶

⁶¹ *CIL*13.8174

⁶² Qtd. In Davies (1989) 193.

⁶³ So argues Epplert (2001) 211. Even exotic birds had their place in the arena. Titus, for instance, had a crane fight as one of the novelties celebrating the opening of the Coliseum (Cass. Dio, epitome, 66.25). A more substantial use would have been as part of the gifts (*sparsio, missilia*) which the emperor distributed to the audience. Such gifts could take the form of flamingos, pheasants, guinea fowl, and other live exotic birds which were released into the stands (Suet. *Ner.* 11; Stat. *Silv.* 1.6.75-80; Cf. Kyle (1995) 198-199).

⁶⁴ Bell et al. (1962) n.6.

⁶⁵ Bomgardner (1992) 163.

⁶⁶ Bell et al. (1962) n. 31

Soldiers in North Africa and Syria evinced an interest in hunting the large lion populations that prowled about in those regions. At Dura Europos, troop rosters occasionally have the notation *ad leones* added after the name of a soldier, a possible indication that such soldiers were assigned to hunt lions.⁶⁷ At Agueneb, once a legionary encampment in the Atlas Mountains, a fragmentary dedication mentions the successful undertaking of a mission involving “...*laeones [in] diebus XL f...*” If Mommsen is correct in restoring the last word as *f[erri]*, then this dedication celebrated a successful lion hunt carried out by Roman soldiers.⁶⁸ To this it might be added that Julius Africanus recommended lion hunting as an exercise beneficial to soldiers, which shows that the practice was at least not inconceivable.⁶⁹ Indeed, given the extreme popularity of lions in the arena, it would be surprising if soldiers did *not* hunt lions when they displayed such interest in capturing much more pedestrian arena animals in other parts of the empire.⁷⁰

Soldiers were concerned not only with the capturing of animals, but also with their maintenance in *vivaria* after their capture. One such *vivarium* at Cologne is testified to by a dedication to Diana set up by a centurion who “guarded the animals” (*vivarium saepsit*).⁷¹ Another inscription from Rome records two soldiers of the sixth praetorian cohort who were *venatores immunes cum custode vivari*.⁷² That soldiers far from where exotic animals were to be found possessed this title suggests that military *vivaria* were not just temporary holding places for animals captured in the vicinity, but could also receive animals from some distance away.

⁶⁷ Epplert (2001) 215.

⁶⁸ *CIL* 8.21567. Cf. Le Roux (1990) 210.

⁶⁹ Julius Africanus *Cestes* 14.

⁷⁰ On the popularity of lions, see below, page 32.

⁷¹ *ILS* 3265.

⁷² *CIL* 6.130; Cf. Epplert (2001) 212.

Finally, the fifth century historian Sozomen mentions that a soldier was in charge of the imperial lions, showing that, at least by the late empire, emperors were relying upon the military personnel to administer their animal reserves.⁷³

A second century inscription from Moesia Inferior links at least some of the animals caught by soldiers with the imperial games. The inscription, a dedication to Diana from the *tribunus cohortis* Tiberius Claudius Ulpianus, thanks the goddess for a successful hunt of bears and bison carried out on the order of the provincial governor for the sake of a “*venationem Caesarianam*.”⁷⁴ Unfortunately, it is impossible to determine what proportion of the animals caught by the military was requisitioned by the emperor. Other high ranking officials also seem to have been able to order soldiers to hunt for the arena. Acting either on his own cognizance or on the orders of Septimus Severus, the notorious praetorian prefect Plautianus commissioned soldiers to go far afield in order to capture zebras (“horses with tiger-like stripes, sacred to the Sun”) for the games.⁷⁵ Even at a much earlier date, it is possible that the “customary hunters” (*eos, qui venari solent*) whom Cicero reluctantly sent out to hunt leopards for Caelius might have been soldiers, accustomed even in this period to capture animals for whoever was then governor of the animal-rich province of Cilicia.⁷⁶

Another, no doubt substantial, portion of the animals ended their lives in the amphitheaters of the soldiers themselves. Military amphitheaters are a commonly attested feature of legionary forts.⁷⁷ While such amphitheaters may have seen auxiliary use as training grounds, their primary purpose was the same sorts of games performed in their civilian

⁷³ Soz. *Ecc. Hist.* 4.16.

⁷⁴ *CIL* 3.7449.

⁷⁵ Cass. Dio 76.14.

⁷⁶ Cic. *Fam.* 2.11, 2.

⁷⁷ Webster (1985) 207; Le Roux (1990).

counterparts. Indeed, since such games were often associated with the imperial cult or given as commemoration of some signal imperial successes, it was, if anything, even more important that soldiers celebrate them than civilians, since such celebrations helped maintain the bonds of reverence and fidelity which linked the army to the emperor.⁷⁸ It seems likely that these shows would have used at least some of the beasts captured by the soldiers. This would be in keeping with the same sort of desire for self-sufficiency which caused each fortress to have *fabricae* responsible for making bricks, weapons, and other goods. Any shortfalls in what the fort could produce on its own were often made up by sending small bands of soldiers out to procure the necessary goods. Although the item they pursued was more exotic than that sought by their brethren sent after corn or clothes, the *venatores immunes* fulfilled the same basic task of procuring local goods in the same basic way.⁷⁹

It is also not inconceivable that some of the animals were sold to private traders. The distinction between soldier and merchant could at times become quite thin. One inscription, for example, refers to a sailor in the *classis Germanicus* as a “beer trader” (*negotiator cervesarius*).⁸⁰ On land, soldiers may have farmed or leased the land belonging to a fort, the *prata*, with an eye towards profit. Y. Bohec senses such a motive in the decision of a garrison commander at Negrina in Numidia to purchase land near the fort for the cultivation of olives.⁸¹ When he reformed taxes, Nero allowed soldiers to retain their immunities, except on items they sold for profit, which indicates, of course, that there were soldiers who were doing so.⁸² One should also not forget that officers in the Roman army had a long tradition of turning military assignments

⁷⁸ Le Roux (1990) 207-209.

⁷⁹ Le Bohec (2000) 218; Monfort (2002) 76.

⁸⁰ *Bericht Rom-Ger. Komm.* 17, n. 41.

⁸¹ Bohec (2000) 225.

⁸² Tac. *Ann.* 13.51.

into money-making endeavors, and in light of this, it may be significant that the equipment with which Antonius Proculus hunted in Egypt actually belonged to his superior officer, and not the unit itself. If the animals were sold in such a fashion, the transaction was most likely done, like sales of slaves, in the camp, thereby foisting the risks and expenses of transport upon civilian buyers.

The impossibility of discovering how many animals the emperor gained from soldiers limits what can be said about how the military functioned within the imperial *venatio* system. Indeed, it is conceivable that the emperor never directly asked the military for animals at all, but rather like Caelius, Symmachus, and all other men in their place, merely asked provincial authorities of his acquaintance for aid. The difference, of course, is that while Cicero could studiously ignore the requests of Caelius, it would take a bold governor indeed to brush aside the expressed wishes of the emperor. Even so, it is not clear how often such requests would have been made, and it is, in fact, equally possible that governors of places like Moesia Inferior provided imperial animals on their own initiative, as gifts given in an attempt to curry favor. If so, then the supply of animals the emperor derived from this source could have varied greatly over time. In sum, although access to military hunters operating on every border would seem to give the emperor an unparalleled advantage in the quantity of animals he was able to procure, in fact it is rather unclear how many of these animals were actually destined for imperial games and therefore any advantage in quantity which the emperor stood to gain from this source must remain purely hypothetical.

It is interesting to note, however, that the two examples in which we know that the animals in question were specifically requisitioned for use by a higher authority outside of the province also involve animals that were truly exotic, even by the standards of the amphitheater.

Plautianus' capture of zebras is one of only two known instances where that animal was brought to Rome. Since the other instance was a zebra killed in the arena in the reign of Caracalla after Plautianus had been executed and his property confiscated, it is entirely possible that Plautianus' zebras were the *only* ones to have entered the Roman Empire.⁸³ While not quite as rare, the bison captured for Antonius Pius (the ones which were mentioned in the Moesia inscription) were, at that time, a novelty. Indeed, the Moesia inscription is the earliest known epigraphic appearance of the word "bison" (*vison*).⁸⁴

There were two principal ways to ensure that a *venatio* was truly successful. The first was to make the *venatio* big, to overawe the audience and outdo the competition through sheer size. As we have seen, this was one of the preferred methods of the early emperors, whose games continued on a truly massive scale the tradition of ever-enlarging spectacles that had begun during the Late Republic. The second was to provide a show with animals never before seen. Such games were considered worth remembering even centuries after they were over. Pliny fastidiously records the games in which each arena animal first appeared, and Livy makes mention of games with novel creatures as often as he comments upon games of unprecedented size.⁸⁵ As the shows of the emperor became ever larger, there came a time when the upward spiral of carnage was no longer sustainable, and it therefore became far easier for an emperor to compete in terms of novelty rather than in terms of size alone. Thus while the games celebrating Septimus Severus' return to Rome featured a (mere) 700 animals, they were enlivened by the presence of bison, a hyena (which Dio believes to be the first of its kind seen in Rome), and by the spectacle of a mock ship rigged to fall apart in the arena and release a large number of

⁸³ Cass. Dio, 77.6.

⁸⁴ Velkov and Alexandrov (1988) 275.

⁸⁵ Cf. Pliny, *NH* 8.6, 8.20, 8.26; Livy, 39.22.

animals in an instant. The games of his son Caracalla are notable not because of the number of animals slain, but because among that number were included an elephant, a rhinoceros, a tiger, and the aforementioned zebra.⁸⁶

Given this emphasis on novelty, it is possible that the true benefit of soldier-hunters was not so much that they could secure a great quantity of beasts, but rather that they could be sent out to acquire a few exceedingly rare ones. For private beast traders, there was a point at which certain animals were too far away to justify the expense of capturing them. The risk of the animals dying was simply too great, the potential return on their investment simply too small. But soldiers under orders need not have been as tightly bound by such economic restraints. It might have been more profitable to capture a couple of lions or a handful of bears, but if it was more useful to the one sending them out to capture a truly rare animal, then the soldiers would go after that rarer beast. Naturally there were limits to what the soldiers could do as well. It is difficult to envision soldiers being sent, say, into the hinterlands of the Parthian empire to hunt after tigers.⁸⁷ And, as the inscriptional evidence shows, hunts for particularly rare animals must have been greatly outnumbered by hunts for mundane bears and lions. Nonetheless, the potential for soldiers to defy economic law would have constituted a significant advantage for those fortunate enough to be able to employ them, and, although our direct evidence for the imperial use of the soldier is scanty, the great usefulness of the military in this regard makes it possible that the emperor did come to rely on soldiers for the acquisition of at least certain types of beasts.

⁸⁶ Cass. Dio 77.1; 78.6.

⁸⁷ Tigers lived on the Iranian Plateau into the twentieth century (Jennison (1937) 7). Some of the rarer South Asian exotic animals may have been diplomatic gifts. Augustus, for example, received tigers from an Indian embassy, and the rhinoceros and python which he publically displayed might have been from the same source (Cass. Dio 54.9; Suet. *Aug.* 43).

The next link in the chain between acquisition of animals and their display in Rome was their transportation to the capital. This was a task both difficult and costly. Since most of the animals captured would have needed to remain in bulky cages, any overland transport would have been done by wagon, a method which could cost up to 20 denarii per mile by the third century.⁸⁸ It would have therefore been much more economical to transport the animals by water wherever possible.⁸⁹ Fortunately for those in charge of the animals caught by the Roman military, most legionary headquarters were located alongside navigable rivers so that they could take advantage of the comparative cheapness of water transport.⁹⁰ After the animals were taken to the nearest such fort, one would expect that it would be the job of the fleets stationed on the major rivers, the *classis Germanica*, *classis Flavia Moesia*, etc., to take the animals to a convenient seaport for the next leg of the journey. This supposition is borne out by the Moesia inscription, which mentions that the expedition featured a contingent of the *classis Flavia Moesia*, whose presence is best explained if they were in charge of ferrying the captured animals. It has been suggested that other regional navies, such as the *classis Britannica*, were responsible for moving vital supplies from civilian centers to military installations in coastal areas, and it requires no great leap of imagination to envision the same process working in reverse.⁹¹

But it is also possible that private traders were included at points along this process. Private traders seem to have been responsible for supplying forts with at least some of the goods which they could not secure on a local level.⁹² By the same logic which allows naval contingents

⁸⁸ Diocletian, *Edict of Maximum Prices*, qtd. in Jones (1964) 842.

⁸⁹ Jones (1964) 842. Indeed, Epplett (2001) has argued that it would have been more cost effective to take animals caught in along the Danube border down to the Black Sea and from there by boat to Ostia than it would have been to take the much more direct route overland to the Adriatic (213).

⁹⁰ Monfort (2002) 76.

⁹¹ Allen and Fulford (1999) 181.

⁹² Whittaker (2002) 211.

ferrying in supplies to transport out beasts, it is easy enough to suppose that private traders involved in providing staples to the military might be interested in making their trip from the forts profitable as well. A fragmentary papyrus from Egypt may provide more direct evidence of such a hybrid approach being employed in the transport of beasts.

Μάρκος Ἰουλίῳ τῷ ἀδελφῷ χαίρειν. Καλῶς ποιήσεις ἰς τὴν αὐριον λαβεῖν μοι κομ[ι]ατον καταβαῆναι καὶ ταχέως ἀνηβᾶναι. Ἐπεμψά σοι καὶ διὰ τοῦ οὐεστιγατορος [sic]. ἀλλὰ ἐπίδες σήμερον τὸ πιτάκκιον ἰς τὴν αὐριον.

Mark to his brother Julius, greetings. You will do well to procure for me tomorrow supplies to go and quickly embark. I send to you from the *vestigiator* other items [?] today and the receipt tomorrow.⁹³

While there is no evidence that the two brothers are themselves in the military, their use of the transliterated term *vestigiator* (the Latin word for a tracker) for their business partner suggests that it is not a profession but rather a title (otherwise they would presumably have used the perfectly suitable Greek term, ἰχνηλάτης).⁹⁴ And this title at once indicates that the brothers are in business with the military and that they are dealing in animals. Furthermore, Marcus' interest in preparing for a voyage strongly suggests that the brothers are in charge of transporting whatever it is that the *vestigiator* has caught, either along the Nile or to somewhere outside of Egypt. Civilian involvement even at the earlier stages of the process is not impossible. It was a civilian, after all, who was responsible for bringing Abinnaeus hunters and preparing nets. The village which borrowed nets from Abinnaeus might also have disposed of the gazelle they caught through a network of animal trade administered in part by soldiers. Such close interactions at every step of production are not out of character for the army. In the porphyry and granite

⁹³ Keiβling, n. 9272. Cf. Eppllett (2001) 218.

⁹⁴ For *vestigiatores* in the military, see Eppllett (2001) 218.

quarries of eastern Egypt, for instance, the army managed the mines and provided security, but all of the actual mining was done by well-paid civilian contractors.⁹⁵

This military system was therefore not separate from, but intricately intertwined with, the civilian animal market. Unfortunately we know very little about this private animal trade and the men who managed it. Beast traders are mentioned in passing by Symmachus and alluded to by Apuleius.⁹⁶ Two mosaics from the *Piazzale delle Corporazioni* in Ostia might have belonged to the offices of beast traders, but the elephants on them which suggest this possibility might just as easily denote ivory traders, or be symbols of African commerce more generally.⁹⁷ This constitutes a substantial portion of our direct evidence for such men. Yet much like God in a *philosophe*'s cosmology, such traders must exist not so much because there is direct evidence for them, but because they provide an explanation for otherwise inexplicable phenomena.

Thousands of magistrates needed vast quantities of animals to die in their shows. Indeed, it is often thought that the Roman games drove to extinction animals as varied as the Asiatic lion, the North African elephant, and the Egyptian hippopotamus.⁹⁸ Someone must have facilitated this slaughter. And so it is necessary to posit not only private beast traders, but a substantial number of them, responsible for supplying not only provincial magistrates with their beasts, but even providing the emperor himself with whatever animals he did not get from the military or from provincial governors.

One potential source of such animals may have been professional guilds of *venatores*. Prominent in provinces where *venationes* were especially popular, guilds of *venatores* seem to

⁹⁵ Jackson (2002) 48-49.

⁹⁶ Symmachus *Ep.* 5.62; Apul. *Met.* 4.13.

⁹⁷ Meiggs (1973) 287; Bertrand (1987) 227-228.

⁹⁸ Hughes (1994) 106.

have been contracted to supply both men and beasts. Magerius employed just such a guild, the *Telegenii*, to furnish both his four leopards and the hunters to kill them. Another North African mosaic shows representatives from several such hunting guilds on the eve of their fight with bulls, each of whom is branded with the symbols of the various guilds.⁹⁹ Such guilds also existed outside of North Africa. In the East, for example, a column from Mylasa might record the names of members of a similar association of hunters.¹⁰⁰ The emperors clearly did not make use of such guilds in the same way as Magerius and others like him, preferring instead to retain more direct control over both the hunter and the hunted in the form of the *Ludus Matutinus* and the imperial *vivaria*. But even if there is no evidence to indicate that such guilds contracted, like chariot factions, to provide individual shows, they still might have supplied the emperor with animals. After all, the larger North African hunting guilds seem to have been involved in a wide variety of business ventures, including trade with Italy (indeed, amphora bearing the seal of the *Telegenii* have been found at Ostia).¹⁰¹ This being the case, it is only natural to suppose that they might also have been engaged in the sale of wild beasts as well. Unfortunately, sure evidence for such transactions is lacking, and the role of hunting guilds in supplying imperial *venationes* is anything but certain.

In the face of this dearth of evidence for beast traders in Rome, it may be useful to examine the ways in which the emperors manipulated the corn trade, a trade which we know much more about and whose use of civilians to procure vital goods is reminiscent of what little we know of the beast trade. Although the supply of corn for Rome may have come, in part, from

⁹⁹ Dunbabin (1978) n. 69. For more on North African hunting guilds, see Beschtaouch (1977) and Beschtaouch (1985).

¹⁰⁰ Robert (1972) n. 175. This is the interpretation of Potter (1999) 311. But see Robert (1972) 330.

¹⁰¹ MacKinnon (2006) n. 18.

imperial estates, its transportation to Rome was carried out by private traders.¹⁰² Initially, at least, the emperors ensured that this happened not through demands and coercion, but rather by granting grain traders certain incentives for choosing Rome for their cargos. Claudius, for example, offered reimbursement for any ship lost in a storm while carrying corn bound for Rome. If a merchant brought at least 10,000 *modii* of grain to the city for six years, he was rewarded with citizenship if he was not already a citizen, and with tax breaks if he was.¹⁰³ Tacitus tells us that Nero made the trade of grain between Rome and the provinces less costly to the merchants involved, and made the boats of such merchants no longer taxable property. Second century emperors offered still more rewards, such as an exemption from public service for those involved in the grain trade.¹⁰⁴ The goal of all of these rewards was to make the transportation of corn to the capital so profitable an enterprise that traders would choose to do it voluntarily.

Evidence exists for similar benefits granted to beast traders who were bringing military animal stock to imperial games. In AD 417, the emperor issued a decree restating that those who were responsible for transporting animals at the behest of a military governor (*qui transductioni ferarum a Duciano officio deputantur*) were allowed to stay at any city for seven days, at that city's expense.¹⁰⁵ Like corn merchants, beast traders working with the government may also have been entitled to tax breaks. Certain animals, such as, for instance, lions and leopards, were subject from at least the time of Marcus Aurelius to the same sort of import duties placed upon other luxury goods.¹⁰⁶ Bear merchants (*ursorum negotiatores*) too were liable to a two-

¹⁰² Lo Cascio (2007) 639-641.

¹⁰³ Suet. *Claud.* 18-19.

¹⁰⁴ Tac. *Ann.* 13.51; *Dig.* 50.5.3.

¹⁰⁵ Cod. Theod. 15.11.2

¹⁰⁶ *Dig.* 39.4.16.7

percent tax on their ursine stock.¹⁰⁷ The receipt (*πιτάκκιον*) which the Egyptian traders Marcus and Julius received from the military might have entitled them to exemption from just such taxes, since a law in the *Digest* mentions that anyone buying or transporting taxable goods for the government could show a receipt to in order to avoid paying import duties.¹⁰⁸ Another instance of tax exemption is mentioned by Symmachus, who also complains that a relative of his was unfairly charged a tax on animals purchased for his quaestorian games.¹⁰⁹ It would therefore seem that the emperor might use tax remission as a privilege to honor other *editores*.

Such incentives would have had an obvious appeal to beast traders who faced significantly increased transportation costs because of the nature of their wares. Food for their stock alone must have been a sizable burden. A hippopotamus eats about 55kg of food a day, an elephant in excess of 100kg. Carnivores eat significantly less in quantity (about 2kg a day for a leopard, up to 7kg for a lion), but their food is accordingly much more expensive (and perishable).¹¹⁰ Other considerations also needed to be met in order to assure that the animals arrived at their destination in a fit state. When the Pasha of Egypt sent a hippopotamus to Queen Victoria as a gift, it was conveyed in a specially designed ship with a 400 gallon freshwater tank that was renewed daily.¹¹¹ It is highly unlikely that any arena animal received such privileged treatment, and yet, without it, many animals would have died in transport.¹¹² This means that beast merchants were trapped in a cruel conundrum. Move too fast, or carry too many animals, and the cargo, like the crocodiles of Symmachus, is likely to succumb to stress of the journey.

¹⁰⁷ Symmachus *Ep.* 5.62.

¹⁰⁸ Dig. 39.4.4.1.

¹⁰⁹ Symmachus *Ep.* 5.62.

¹¹⁰ Young (1973) 136-138.

¹¹¹ Friedlander (1907) v.2, 65.

¹¹² MacKinnon (2006) 11-12.

Move slowly, and the animals might survive, but the expense might drastically reduce the profit of the enterprise. Therefore, the ability to travel with expenses paid was a particularly ideal incentive for beast traders. Indeed, it must surely have been as desirable for them as tax breaks and property rights were for corn traders.

Unfortunately, the surviving evidence for these sorts of incentives is as scant as much of the rest of our evidence for the beast trade. There is, for example, no proof that the animals being carried at the behest of the military governor were destined for imperial games. The law simply says that it applies to beasts destined “*ad comitatum.*” Bomgardner takes this to mean the *comes domesticorum*, the head of the officer corps known as the *protectors* in Rome. But after Constantine created the office, *comites* sprung up in bewildering profusion, taking up a variety of civil, military, and even ecclesiastical posts.¹¹³ It is not at all certain that the *comes domesticorum* was the *comes* to whom these animals were being sent. Nor is it clear why this particular official would be the one in charge of the emperor’s animals in the first place. What does seem sure, however, is that it would be remarkably odd for the emperor to grant such privileges to the games of his inferiors and not retain them for his own use. It is also unclear whether the privileges granted to traders working with the military ever extended to traders carrying non-military stock. In regards to the corn trade, a substantial portion of the grain that was brought to Rome during the early years of the empire seems to have been produced on private farms, and sold to private dealers at Ostia.¹¹⁴ It was indeed, precisely these sorts of private transactions that imperial incentives were designed to encourage. Given the other

¹¹³ Bomgardner, 213. On the *comites* more generally, see Jones (1964) 105-107.

¹¹⁴ Casson (1984) 104-108.

similarities between the corn trade and the beast trade, one might expect similarity in this respect as well, even in the absence of direct evidence.

And there is reason to believe that the emperor would have been particularly interested in a scheme which gave such incentives to beast traders. For the one buying the animals, the beauty of these grants to the traders was that one of the substantial factors which made exotic animals expensive was paid for by others instead of being passed on to the purchaser. Lowering the cost of animals would, of course, have been just as desirable for the emperors as it would have been for any other consumer. And as time went on, this cost saving measure would have become less of a nicety and more of a necessity. At the beginning of the third century, Magerius paid 1,000 sesterces for each of his four leopards. At century's end, Diocletian declared the hefty sum of 600,000 *sesterces* as the top price for the best quality of lion, and 400,000 *sesterces* as the maximum price for lesser quality lionesses.

Even acknowledging the differences in location, time, and animal species, as well as the rampant inflation that had occurred by Diocletian's day, it still seems that there was a massive increase in the cost of animals after the tumultuous third century.¹¹⁵ If Aurelian's decision to give away 200 tamed beasts because they were too expensive to maintain is any indication, then this price increase came at a time when the imperial budget was particularly ill-equipped to afford it.¹¹⁶ Indeed, the fact that Diocletian included lions in his *Edict of Maximum Prices* at all seems to show that emperor's concern with the astronomical prices of animals in his day. It

¹¹⁵ Bomgardner (2000), 211. According to *Edict* 1.1, a *castrensis modius* of corn was 100 denarii (or 333 denarii per artabus), an increase of 4,062.5% from the third century price of 8 drachmas/artabus. Other products exhibit a roughly analogous rate of inflation. Lentils, for instance, increased in price by 3,230%, while the cost of a cavalry horse went up by 1,718%). The cost of a large cat, however, increased by 59,900%, a considerably steep increase (all prices taken from Ermatinger (1996), 113-141).

¹¹⁶ *HA, Aur.*, 33.

would therefore make sense for these later emperors to try to decrease the cost of animals for their shows by any means possible, among which the defraying of transportation costs would seem to rank as one of the most important, given that all parties involved (except the unfortunate cities) stood to benefit from such an arrangement.

Besides attempting to gain a positive advantage for himself, the other major way in which the emperor could regulate the beast market was through proscribing the actions of others. In some sense, this could have been achieved indirectly through the taxes placed upon exotic animals. The addition of two or so percent to the cost of an animal, however, hardly would cause someone in the market for such an expensive commodity to shy away from making a purchase. What is 12,000 sesterces to someone willing to pay 600,000? Furthermore, it seems clear that the emperor was willing to dispense with such taxes even on animals destined for non-imperial games in Rome itself. Symmachus, after all, complains when such a tax is levied upon animals destined for a relative's quaestorian games.¹¹⁷ Thus it appears that the emperor was more likely to use exemption from taxes as a mark of honor than he was to view such taxes as one of the means by which he curtailed the animal trade.

Limitation was instead probably achieved through more direct measures. Such measures are hinted at in the *Martyrdom of St. Polycarp*, in which Philip the Asiarch rejects the mob's request that Polycarp be thrown to the lions, because it was illegal for him to exhibit a lion after the wild beast shows were concluded.¹¹⁸ These would suggest that strict guidelines were established for at least the public showing (if not the ownership) of certain exotic animals, even in the provinces. More evidence of pertaining to wild beasts comes from the letters of

¹¹⁷ Symmachus, *Ep* 5.62.

¹¹⁸ *Martyrdom of Polycarp*, 12.

Symmachus. In one letter, Symmachus mentions that a court official named Patruinus had arranged it so that “the purchase of other sorts of Libyan beasts was guaranteed to me by imperial authority.” (*ut aliarum Lybicarum mihi emptio sacra auctoritate praestetur*).¹¹⁹ From this one can conclude that the purchase of “Libyan beasts” (a general term for large cats) was regulated by the imperial government, and that special exemption had to be applied for by those who wished to provide a *venatio* with such animals. In another letter, Symmachus somewhat cryptically tells the court official Decius that a man who provided him with leopards “at the same time handed over your desired paper.” (*desideratam tuam paginam insimul tradidit*).¹²⁰ The paper in question could easily have been a grant of this type to show the beasts, or perhaps a receipt preventing them from being taxed. Unfortunately Symmachus’ vagueness makes certainty impossible. Indeed, the “paper” in question might be merely another letter in the chain of correspondence between the two men, having nothing to do with beast regulation at all.¹²¹ More firm evidence for a final law can be found in one of Symmachus’ letters to Stilicho, in which he requests that the general arrange for the emperor to grant him the use of the Coliseum for his games.¹²²

Besides such laws limiting the extent, composition, and location of *venationes*, it is also possible that the emperor issued laws banning the use of certain animals entirely. The emperors Honorius and Theodosius, for example, rescinded a law that prevented provincials from killing lions.¹²³ The date of the original law is impossible to determine, although the fact that one Julius Alexander was executed in 189 for usurping the emperor’s privilege of killing a lion from

¹¹⁹ Symmachus, *Ep.* 7.122.

¹²⁰ Symmachus, *Ep.* 7.59.

¹²¹ Symmachus wrote at least twenty three other letters to the Decius.

¹²² Symmachus, *Ep.* 4.8.

¹²³ Cod. Theod. 15.11.1

horseback indicates that it may have been of some antiquity.¹²⁴ The law has been taken to show that lions were “royal animals” whose hunting and ownership were strictly monitored by the emperors.¹²⁵ However, there is a mass of iconographic evidence which strongly suggests that lions made at least occasional appearances in the arena outside Rome. Some half a dozen North African mosaics, for example, show lions being hunted, captured alive, or killed in the arena, and lions are one of the most popular subjects of both African Red Slip Ware and *venatio* imagery produced in Northern European¹²⁶ It is probable, given their expense, that lions appeared nowhere near as frequently in actual provincial arenas as they did in provincial art.¹²⁷ Nonetheless, the lion’s clear popularity indicates that he was viewable with perhaps some degree of frequency, and this in turn indicates that imperial restrictions on lion hunts and captures were not as strict as the *Codex* might initially lead one to believe.

Indeed, unless one wishes to think that the law against lion hunting had fallen into a state of salutary neglect, it is perhaps best to assume that the emperor issued licenses to certain groups or individuals for the purpose of hunting lions. It is worth noting that although the emperors grant their subjects leave to kill lions, they retain the right to monitor the hunting of these animals for sport or profit (*non venandi venundandique licentiam dederimus*). A similar sort of license was granted to anyone wishing to quarry marble from state quarries. This license was renewed in 363, had a tithe attached to it in 382, and was revoked by 393.¹²⁸ It is therefore possible that such licenses were granted on either an individual basis to magistrates preparing a

¹²⁴ Cass. Dio, 73.14.

¹²⁵ Jennison (1937), 93; Ville (1981), 351-352.

¹²⁶ Mosaics: Dunbabin (1978) ns. 24, 26, 29, 48, 55, 57. Pottery: Hayes (1972) 212. Northern European Art: Dubois (1999) 56.

¹²⁷ Dubois (1999) 56-57.

¹²⁸ Cod. Theod. 10.19.2, 10.19.10, 10.19.13. See also, Jones (1964) 837.

venatio or to groups of private traders procuring lions for the open market. Unfortunately, without knowing the extent to which such licenses were prevalent, it is impossible to gage how much the law against lion hunting actually affected the trade in these beasts. Perhaps, like the taxes on exotic animals, the licensing of lion hunts was a way of making money and of honoring those for whom the law was set aside rather than for controlling specific animal populations.¹²⁹

The elephant might also have been under imperial protection. When writing about the imperial elephant reserve at Laurentium, Juvenal claims “elephants are not for sale... The herd is Caesar's, and will serve no private master” (*hic non sunt nec venales elephantum... Caesaris armentum nulli servire paratum private*).¹³⁰ The *Historia Augusta* reports that when, as a private citizen, Aurelian received an elephant from the Sassanid King of Kings, he became the “only commoner of them all who ever owned one.” He later decided it was best to rid himself of this dangerous distinction by giving the elephant to the emperor.¹³¹ But while it is true that the iconographic evidence for elephants in the arena is much sparser, this paucity is due less to the laws of the emperor than to the nature of the beast itself. Elephants are cumbersome beasts, hard to transport, expensive to feed, and difficult to keep alive in colder climes. There also appears to have been a decrease in the population of elephants available. Julius Caesar could show forty elephants in his games, but by the time of Caracalla the appearance of one ranked in the mind of Dio as being as novel as the appearance of a tiger, a zebra, or a rhinoceros.¹³²

¹²⁹ One should also not take the prohibition against hunting lions for sport too strictly. Julius Alexander was, after all, slain by Commodus, and Dio clearly does not think his execution was just. Other non-emperors, like Hadrian's favorite Antinous, hunted lions with imperial approval (Anderson (1985) 104-105).

¹³⁰ Juv. 12.102-106.

¹³¹ *HA Aur.* 5.

¹³² Suet., *Div. Iul.* 39; Cass. Dio, 77.1, 78.6.

More to the point, some evidence of the trade in elephants does exist. One of the beasts is found trundling up a gangplank in the Piazza Armerina Great Hunt Mosaic, and another can be found in a similar mosaic portraying the capture of animals in Carthage.¹³³ An inscription at Lepcis records that a generous citizen gifted the town with four elephants, presumably for a *venatio*.¹³⁴ In short, there is no evidence outside of Juvenal and the *Historia Augusta* that suggests the elephant trade was controlled by anything other than market forces. Elephants might not have been for sale in Juvenal's day quite simply because there was no market for them, and while the fact that the author of the *Historia Augusta* *thinks* that elephants should be reserved for the emperor is certainly an indication of that such beasts were symbols of imperial authority, there need be no law which compelled Aurelian to make his tactful donation, any more than a law compelled Agrippa to humbly defer his triumphs many centuries prior.¹³⁵

The laws on the display of beasts that do seem to have existed fall neatly into a constellation of similar laws governing other forms of entertainment. In regards to gladiatorial combats, Augustus prohibited the praetors from giving *munera* without senatorial decree or more often than twice a year. Such games were to be limited to 120 gladiators, a ludicrously low number compared to the average of 1250 men who competed in the games sponsored by Augustus himself.¹³⁶ Tiberius also limited the size of gladiatorial combats, and in a money-making scheme Nero allowed all those who bought gladiators from him at inflated prices to ignore such regulations.¹³⁷ Not only in Rome were such shows circumscribed, as evidenced by Tacitus, who mentions the passing of a senatorial decree allowing Syracuse to exceed to the

¹³³ Dunbabin (1978) n. 28.

¹³⁴ Scullard (1974) 254.

¹³⁵ Cass. Dio 54.11, 54.24.

¹³⁶ Cass. Dio 54.2.

¹³⁷ Suet. *Tib.* 34; Cass. Dio 59.14.

prescribed number of gladiators for a show.¹³⁸ Chariot races also were governed by certain laws which favored the shows put on at Rome. Magistrates wishing to give a race in Campania, for instance, were required to give each of the four factions in Rome 2,000 *modii* of beans. Another law gave the factions in Rome ownership of any horses to win a race in the capital.¹³⁹

Given the lateness of our evidence, it is difficult to determine what sort of change over time, if any, laws regulating *venationes* might have undergone. The traditional view has it that as over time the emperors became increasingly more likely to resort to legal measures in order to assert their will. Hence the grain merchants of the *annona* were at first offered incentives for voluntarily fulfilling their task, but by the third century were legally obligated to do it as a hereditary liturgy.¹⁴⁰ But, contrary to expectations, some of the most restrictive laws dealing with games date from the Early Principate. Indeed, it appears that the tendency over time was to circumvent such laws, not add to them. Tacitus, after all, remarks that the remit granted to Syracuse was not extraordinary, and Symmachus argues that he should be able to use the Colosseum precisely because so many other lesser officials have been granted the same privilege. But while this makes it difficult to date the laws governing the *venatio*, it makes it easy to see why such laws were useful to the emperor. In one sense, these laws served as a wall for the emperor, preventing others from presenting games as great as his. But as time went on, and the preeminence of the imperial position became more secure, the same laws came to serve the emperor in another way, allowing him to distribute exemption from them as a mark of favor.

¹³⁸ Tac. *Ann.* 13.49.

¹³⁹ Cod. Theod. 15.10.2; 15.7.6.

¹⁴⁰ Lo Cascio (2007) 641.

By the time we hear of such laws from Symmachus, it is this latter function which has become the most important.

Despite the paucity of the evidence, a few key points about the nature of the imperial beast-supply system are now tolerably clear. First, for an empire which is estimated to have one upper level bureaucrat for every 300,000 citizens, the imperial beast system seems to be surprisingly bureaucratic.¹⁴¹ Granted, what we know directly of this bureaucracy is confined to the administration of the imperial *vivaria* in Rome, but this could easily be an accident of preservation. It is also possible that some of the provincial officials who we do know of (for example, the *procuratores* of the imperial gladiators) were responsible for overseeing the conveyance of beasts as well as men to the capital. But even if the bureaucracy associated with the emperor's animals ended at the *pomerium*, it would still set the emperor apart from his subjects, who, as we have seen, seem to have relied upon a remarkably different system of professional hunting guild to provide *venationes*.

But although bureaucratized, the system was by no means completely run by the government. Presumably many of the animals the emperor used came from private beast traders, and even those animals which the emperor received from his troops might very well have been transported to him by such men. This is an important point which is often overlooked by those describing the military's role in the animal trade.¹⁴² Acknowledgement of the role of civilians brings the imperial beast trade system more in line with our understanding of how other imperial resources, such as state-owned quarries and mines, were managed. The use of private traders and

¹⁴¹ Hopkins (1973) 186.

¹⁴² Bomgardner (2000) 213-214 assumes that the government is responsible for the animals *en route* to the capital. Epplett (2001) and Le Roux (1990) similarly do not give much attention to civilians as transporters, preferring to develop an intra-military transport system dependent upon the fleets and military *vivaria*.

the attempt to gain their help through incentives finds an analogue in the *annona* system. It is hardly surprising to discover that two systems which shared the same basic goals and creators should have developed along parallel lines, but it is nonetheless reassuring that the hybrid organization outlined above, so foreign to modern distinctions between public and private spheres, has a ready correspondent in a bureaucracy about which much more is known.

There is another point, equally important, point of similarity between the beast system and the *annona*. It has been pointed out that the *annona*, in all its byzantine complexity, is not the conscious attempt of any one person to systematically solve the problem of Rome's grain supply but an aggregate of temporary solutions, devised by many different minds to solve specific and immediate problems.¹⁴³ Claudius' promise of payment for ships sunk while carrying grain to Rome was an answer to the near famine caused by the lack ships willing to risk winter sailing. The decision to make grain shipments to Rome a liturgy may have been caused by the economic ravages of the Antonine Plague.¹⁴⁴ Many aspects of the beast system, such as the idiosyncratic nature of the *vivaria* administration, the unequal distribution of taxes and price caps on different kinds of animals, and the constant repeals or reiterations of old statues point to a similar sort of history. A similar situation seems to have prevailed in regards to the laws governing gladiatorial *munera*, which were reinforced or altered as the reigning emperor saw fit.¹⁴⁵

The system regulating the corn supply to Rome sprung up in this piecemeal fashion because the emperors were less interested in creating "administered markets" closely regulated

¹⁴³ Casson (1984) 96-117.

¹⁴⁴ Suet. *Claud.* 18; Lo Cascio (2007) 631.

¹⁴⁵ See, for example, Suet. *Tib.* 34.

by the government than they were in loosely regulating the free one.¹⁴⁶ Intervention occurred only when it seemed as if prices had been driven to unfair levels, as, say, when speculation caused the price of corn to skyrocket after a bad harvest.¹⁴⁷ Similarly, when the cost of gladiators had risen to ruinous heights towards the end of the second century, the emperors Marcus Aurelius and Commodus took action by limiting the maximum prices for various grades of gladiators.¹⁴⁸ In regards to the beast trade, one sees this unwillingness to impinge upon the market unless absolutely necessary in the use of incentives to encourage rather than coerce the funneling of animals towards Rome. It is only by the time of Diocletian when the prices of animals had increased significantly that we see the imposition of price limits, and even in that instance only on one animal. More such limitations might well have existed, but in general we have no reason to doubt that the private beast trade was allowed to operate more or less freely on the basis of market forces. But like a child tilting a pinball machine, the emperors ensured that the forces governing the playing field worked towards their benefit.

The imperial beast system therefore was bureaucratic, made heavy use of civilians, was built up over time, and was reluctant to interfere with the private market. In all of these respects, it bears notable similarity to the imperial gladiatorial system. This should hardly come as a surprise, as by the time of Augustus the *venatio* had come to be linked with gladiatorial combat as part of schedule of entertainment in a day of games. Furthermore, as we have seen, even as far back as the Late Republic, both gladiators and beasts were purchased outright by the richest senators, in a fashion that was notably different from the way in which chariot races or theatrical performances were managed. It therefore makes sense that the systems of supply for both

¹⁴⁶ Lo Cascio (2007) 627.

¹⁴⁷ Tac. *Ann.* 2.87.

¹⁴⁸ On which, see Oliver and Palmer (1955) 320-349.

gladiators and beasts should remain relatively similar, especially when one considers that gladiatorial shows and beast hunts could make use of much of the same infrastructure for everything from the training and equipping of the *venatores* to the making of the complex scenery which was part of the spectacle of the *venatio*.¹⁴⁹ Indeed, the similar origins of both systems as well as their ability to share certain resources no doubt explains why the emperors do not seem to have made use of contracted hunting guilds until the time of Justinian, when gladiatorial shows were no longer performed and it made sense for beast shows to fall under the ever-increasing purview of the circus factions. By analyzing the imperial beast supply within the larger context of the gladiatorial supply system and the *annonae*, we are not only able to form our disparate evidence on that supply into a coherent system in keeping with what we know of imperial administration, but we may also be able to shed some light onto why that system took the particular form that it did.

¹⁴⁹ *Praepositus a veste gladiatore/a veste venatoria: CIL 6.3756, CIL 6.8555. Praepositus vestis scaenicae: CIL, 6.8553. Cf. Aubert (1994) 364.*

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