

Bonner zoologische Beiträge	Band 52 (2003)	Heft 3/4	Seiten 181–191	Bonn, November 2004
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A Python, *Python sebae* (Gmelin, 1789), for the King: The Third Century B. C. Herpetological Expedition to Aithiopia

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Abstract. The Greek historian DIODORUS OF SICILY (first century B. C.) provides an extensive account (*Library of History* 3.36–37) on the capture of an exceptional African rock python, *Python sebae* (Gmelin, 1789) intended for PTOLEMY II PHILADELPHUS's (reign 282–246 B. C.) collection of exotic or rare animals. Analyzed against its historical background, DIODORUS's narrative evidences the causes and purposes, ways and means, results and consequences of the earliest herpetological expedition recorded in the European tradition and sheds light on both the ancient knowledge about pythons and the human-snake relationship.

Key words. DIODORUS OF SICILY, AGATHARCHIDES OF CNIDUS, PTOLEMY II PHILADELPHUS, Upper Nile, ancient Greek herpetological expedition, history.

1. INTRODUCTION

Reference collections of reptiles and amphibians are a standard requirement of modern herpetology. They are based on principles and rules initiated in the eighteenth century under LINNAEUS's system of classification and implemented with new techniques of preservation that have come into use progressively since about the same time (COLE 1944: 445–450; RÁČEK & SCHÖBER-WALTER 1990: 68–88). Collecting reptiles and amphibians for scientific research, however, began well before the time of LINNAEUS; in earlier periods, people concerned with such collections were often frustrated in their efforts due to both the limitations of taxidermy and the lack of efficient preservatives.

The French naturalist Pierre BELON DU MANS (1517–1564) experienced these problems with the snakes he collected on his tour of the Eastern Mediterranean in 1547–49, as a member of the embassy sent by King Francis I to the Near East (BELON DU MANS 1588: 271, 296–297, 463). A few cases of preservation of natural or so-called natural creatures in salt or in honey (see for instance PLINY THE ELDER, *Natural History* 7.35) according to techniques derived from the Egyptian embalming and mummification methods are evidenced in the classical literature. A stuffed Ethiopian rhinoceros is reported by COSMAS INDICOPLEUSTES (first half of the sixth century A.D.) in his *Christian Topography* (11.2). Dried materials (bird shells, marine shells, antlers, skulls, skins, etc.) were on display in some ancient Greek and Roman sanctuaries (examples in Greece: BOESSNECK & VON DER DRIESCH 1981 and 1983; in Rome: PLINY THE ELDER, *Natural History* 8.37) and entered the 16th–17th century collections of natural curiosities (*mirabilia*) (FINDLEN 1994). Except for these kinds

of preservation, each with limitations of its own, wild animals of all species, including reptiles and amphibians, had to be taken alive for centuries and kept captive in specific facilities or devices for whatever purposes (BODSON, 1984).

In the remote past as nowadays, science was not the only or primary aim of confining animals (KÖHLSTEDT 1996; MULLAN & MARVIN 1999: 89–115; BARATAY & HARDOUIN-FUGIER 1998: 15–96; HANCOCKS 2001: 1–54). In ancient Egypt, the worshippers of Sobek were induced by religious purposes to keep tamed crocodiles within the precincts of this god's sanctuaries, and to 'naturalize' these sacred reptiles by mummification when they died (KÁKOSY 1980). The ancient Greeks learned by observing specimens kept at the drug-sellers' that venomous spiders and snakes could live for a long time without food (ARISTOTLE, *Historia animalium* 7[8].594a22–25). Grass-snakes were favourite pets in imperial Rome (TOYNBEE 1973: 224). These and other similar examples relate to indigenous species only, mostly captured in close proximity to their particular uses.

Egyptian and Asian reptiles were reported by Greek travellers from the sixth-fifth century B. C., but there is no evidence so far that specimens of these animals were ever brought alive to Greece in antiquity, unlike exotic birds such as cock, pheasant, peacock eventually domesticated and acclimatized in Europe and mammals such as cheetahs imported as fashionable pets praised by the Athenian youth for a few decades before and after 600 B. C. (BODSON 1998). As regards the Roman world, demonstrations of cobras, *Naja haje* (Linnaeus, 1758), took place in Rome early in the first century B. C. (AELIAN, *On Animals* 9.62) and a "trade" in this species,

to term it in LUCAN's (39–65 A. D.) own words (*Civil War* 9.706–707), developed between Egypt and Italy in his time. In 58 B. C., five crocodiles were presented by MARCUS SCAURUS (along with a hippopotamus) to the Romans (PLINY THE ELDER, *Historia naturalis* 8.96). Judging from the number of specimens taken to Rome until the fall of the Empire (TOYNBEE 1973: 224), crocodiles seem to have been much appreciated by the local audience. Yet there is little room for doubt that, on the whole, the exotic reptiles taken to the European continent in antiquity through either Greece or Italy were limited in both species and number. As for specimens of giant snakes of African or Indian origin, none is reported to have reached alive the northern shores of the Mediterranean Sea at that period of time.

DIODORUS OF SICILY's extensive account of a herpetological expedition organized in the third century B. C. is thus worth noting for several reasons. Indeed, this unparalleled narrative provided the earliest extant record in the European tradition of such an undertaking and differs in all respects (historical context, aims, results, types and contents of evidence) from the killing of a large snake near the Bagradas River (modern Medjerda River, now Ksar Baghai, south of Tunis) by the Roman army under ATILIUS REGULUS's command in 256/5 B. C., during the first Punic war (compare e.g. LIVIUS, *Roman History* 18, fragment 10, and SILIUS ITALICUS, *Punic War* 6.140–293). Second, the Greco-Egyptian expedition was directed to one of the African reptiles that gave “rise to so many fantastic tales of incredible power” (POPE 1961: VII). Just as modern (eighteenth-twentieth Century) stories of human-snake encounters shed light on the western attitude towards giant snakes in modern times (HEUVELMANS 1995: 520–581; MURPHY & HENDERSON 1997: 2–3, 117), the Greek report evidences how they were perceived and valued by ancient people depending on their cultural background. In systematically weighing the herpetological contents of the source material against current herpetology, this paper will focus on the historical circumstances, aims, organisation and results of the expedition with respect to its meaning for the history of early herpetology and of the human-snake relationship.

2. SOURCES

The story under review is documented by textual and iconographic evidence. Both raise questions regarding the history of literature and of art, which are outside the scope of this paper. Nevertheless, the origin and chronology of the main sources need to be briefly outlined for the sake of clarity.

2.1. Texts

First-hand reports by members of the expedition or by eyewitnesses of the resulting snake exhibition have not

been preserved (PEREMANS & VAN 'T DACK 1977: 449–450). The earliest identified author of an account of the hunt was AGATHARCHIDES OF CNIDUS (second century B. C.). He included it in his *On the Red Sea*, written more than a century after the facts (BURSTEIN 1989: 13–18) and now lost to us, except for fragments. One of them alludes to what were, in all likelihood, his own sources of information. These were both official records and private accounts dating back to the third century B. C., contemporary with, or close to, the events he reported, and give support to his general claim to truthfulness (BURSTEIN 1989: 29–33). AGATHARCHIDES's work could still be read in the first century B. C. when DIODORUS OF SICILY wrote his monumental *Library of History*. In the third book, mainly devoted to Africa, specifically Eastern Africa (known as Aithiopia in ancient Greek) and Northern Africa (known as Libya) minus Egypt (already described in his book 1), he included the account of the capture of a giant snake, recognized by modern scholarship as an excerpt from AGATHARCHIDES's *On the Red Sea* (PALM 1955: 26). AGATHARCHIDES-DIODORUS's narrative is thus the primary source and will be the only one thoroughly analysed here (quoted in OLDFATHER's translation with only few changes), since it proves to be much more detailed than STRABO's (64 B. C. – A. D. 19) allusion (16.4.16, C. 775) or PHOTIUS's (circa 820–891) excerpt (*Library* 250.78, 455 b). Nonetheless, their writings, scattered through time and space as they are, confirm the lasting interest in that specific snake and in giant snakes in general.

2.2. Iconography

The upper level of the famous Nile mosaic of Palestrina, dated “later part of the second century BC” (MEYBOOM 1995: 19), shows Aithiopian mammals, birds, and reptiles (MEYBOOM 1995: 21–27, 111–128), tracked by black hunters armed with bows and arrows. Although the model, meaning and degree of realism of this level have been much discussed, there is little room for doubt, if any, that it referred to hunting expeditions either conducted or inspired by the Ptolemies, particularly PTOLEMY II, in the upper Nile valley and adjacent regions (MEYBOOM 1995: 48–49). The ancient Greeks knew about the giant snakes in Aithiopia and regarded them as typical of the local fauna in quite the same way as they did about elephants, rhinoceros, baboons and other monkeys (DIODORUS OF SICILY 3.35). Two big snakes were represented on the mosaic. One is coiling around a rocky outcrop (MEYBOOM 1995: fig. 14), the other (Fig. 1), in ambush on the Nile bank, has just caught a bird in its mouth. BURSTEIN (1989: 125, n. 2) considered the latter as a “probable depiction” of the snake eventually presented to PTOLEMY II.



Fig. 1. Nile mosaic of Palestrina, end of second century B. C. (upper level, section 1). From MEYBOOM (1995): fig. 9. See 2.2.

3. HISTORICAL CONTEXT

3.1. The actors

3.1.1. PTOLEMY II. The history of hunting and capturing African animals in the third century B. C. was dominated by PTOLEMY II PHILADELPHUS (Fig. 2). As second king of Egypt (282–246 B. C.) after its conquest by ALEXANDER THE GREAT in 331, he walked in his father PTOLEMY I's steps to further develop Alexandria not only as a political and economical capital, but also as a centre of intellectual and artistic life (HÖLBL 1994). Two passions made him famous early in his lifetime: first, capturing elephants intended as war machines, since the Seleucid monopoly on the supply of Indian elephants forced him after the first Syrian war (274–272), if not before (DESANGES 1970; TÖRÖK 1997: 395), to rely upon Africa to maintain his contingent (SCULLARD 1974: 123–125); second, collecting both wild and domestic animals. The fragmentary nature of the evidence leaves undecided which of these activities, if either, was ever the most favoured by PTOLEMY himself. In BURSTEIN's opinion (1989: 4, 42, n. 2), AGATHARCHIDES "singled out PTOLEMY II's interest in the exotic rather than military considerations as the main factor motivating his activities in the Sudan and along the Red Sea."

The garden and outbuildings of the royal palaces (FRASER 1972: 14–15) housed the collection of animals in what may be identified as one of the earliest known 'menageries' (VELTRE 1996) and, by all accounts, the most celebrated of the ancient ones (HUBBELL 1935–1936; JENNISON, 1937: 29–40). Different in organization and aims from the Egyptian sacred enclosures (see above, 1) and from the Assyrian game parks (ANDERSON 1985), it was an archetype of later zoos (TRINQUIER

2002) in much the same way as the Ptolemies' library was for book collections (BARNES 2000). PTOLEMY II's animals were exhibited to the general public on special occasions such as the whole day procession of the second *Ptolemaieia* which took place at a date still open to discussion, some time between 280/79 and 271/70 (RICE 1983: 5; FOERTMEYER 1988; COARELLI 1990: 233, 246; KÖHLER 1996: 36), and also displayed to foreign visitors as an outward sign of power and prestige (DIO-DORUS OF SICILY 3.37.7).



Fig. 2. Ptolemy II (reign: 282–246 B. C.) and wife Arsinoë. From RICHTER (1965): fig. 1781. London. See 3.1.1.

3.1.2. The hunters. The identity of those who decided "to hazard their lives and to capture one of the huge snakes and bring it alive to PTOLEMY" is not disclosed in AGATHARCHIDES-DIODORUS's account (3.36.4). They were freelance professional hunters (RAÏOS-CHOULIARA 1980–1981: 50–52), most likely of both Greek and Egyptian origins, as were the royal teams of professional elephant hunters (PEREMANS & VAN 'T DACK 1977: 232–239). The cooperation of indigenous hunters, though theoretically possible (SNOWDEN 1970:128) is so far undocumented and thus, remains problematic. The party was made up of "a considerable number" (DIO-DORUS OF SICILY 3.36.4)¹ of horsemen,² archers,³ slingers, and trumpeters,⁴ in a military-like style yet nothing similar to the catapults and other war engines used by the

1 Possibly several hundred men. A company of elephant hunters comprised 231 men in 223 B. C. (EIDE et al. 1996: no. 121).

2 Compare with MEYBOOM, 1995: fig. 57 (painted frieze, Marissa, Israel, last quarter third cent. B. C.: "leopardess hunt").

3 Compare with MEYBOOM, 1995: fig. 9 (= here Fig. 1), 11, 12 (Nile mosaic of Palestrina).

4 Compare with MEYBOOM, 1995: fig. 57 (painted frieze, Marissa: "leopardess hunt". Date: see above, note 2).

Roman army to kill the snake at the Bagradas River (see above, 1). They had bold fighting hounds⁵ and were equipped with the standard hunting tackle including nooses and ropes (RAÏOS-CHOULIARA, 1980–1982: 55–57; CARANDINI et al. 1982: fig. 122, capture of a rhinoceros).

3.2. Chronology

As seen above (3.1), the giant snake was captured under PTOLEMY II PHILADELPHUS, ruler of Egypt between 282 and 246 B. C. The exact date of the hunt is not stated in AGATHARCHIDES-DIODORUS's account. However, several clues suggest that the expedition was not launched at the opening of the reign nor even in its early years. Indeed the hunters were said to plan to bring one of the huge snakes alive to PTOLEMY in pondering "(his) princely generosity in the matter of the rewards he gave (... for) animals which had never before been seen and were objects of amazement" (DIODORUS OF SICILY 3.36.3–4).

Their motivation implies that PTOLEMY had already been involved in collecting animals for some time, so that the fame of his generosity towards purveyors had spread out enough to inspire the hunters with a new project. Moreover, by the time of the prestigious parade of the decade 280–270 B. C., the royal menagerie sheltered rare Aithiopian animals such as a giraffe and a rhinoceros besides elephants, big cats, camelids, and several thousands of other animals less unusual except for their amount (equids, cattle, hounds, birds) gathered from all over the known world. CALLIXENUS OF RHODES (third century B. C.) listed them in his report of the festivities (627 F 2 JACOBY) excerpted by ATHENAEUS around 200 A. D. (*Deipnosophists* 5.197C–203B). In addition to many offering- and tribute-bearers, he also mentioned women following the cart in which stood a statue of the god Dionysos, some of them "crowned with snakes", others "holding snakes" (CALLIXENUS OF RHODES 627 F 2.28 JACOBY, p. 169, quoted by ATHENAEUS 5.198E),⁶ but referred in no way to giant snakes of remarkable size. Should PTOLEMY's most famous reptile have been in Alexandria around 280, two reasons at least would have justified it to be enrolled in the procession: its naturalistic uniqueness and its symbolic value with respect to the dionysiac theme of the pageant. Notwithstanding the methodological limitations of the argument *e silentio*, one may provisionally, yet rather confidently, conclude that PTOLEMY's giant snake was brought to Alexandria after the celebration of the *Ptolemaieia*.

3.3. Geographical location of capture site

The starting point of the expedition was not specified by AGATHARCHIDES-DIODORUS nor any later author. It originated presumably in Alexandria, which was the final destination (DIODORUS OF SICILY 3.36.4) and the most favourable spot, in all likelihood, to witness PTOLEMY's "princely generosity" (DIODORUS OF SICILY 3.36.4). The capture took place in the land called by the ancient Greeks *Aithiopia* (literally "the land of the Burnt-face people"), a vast territory today broadly covered by most of Sudan and the northern part of modern Ethiopia (Fig. 3). At the time of the capture, the fauna now confined to tropical Africa still ranged to the so-called "island of Meroe" (Butana) and even further north up to the fifth cataract (PLINY THE ELDER, *Natural History* 6.180–186). Nor is the location of the capture ground stated in the narrative and it may not be identified otherwise than tentatively. But there are enough indications for disregarding the vague "marshes of the upper Nile valley" once admitted by JENNISON (1937: 29) and TOYNBEE (1973: 223). Indeed, in his description of the island of Meroe, DIODORUS (3.10.5) referred to "the country of the wild beasts where the serpents marvelous for their size and multitude attack the elephants at water-holes",⁷ an area also considered by STRABO (17.2.2, C. 822) who defined it as "a refuge for the animals fleeing from the hotter and more arid regions to those that are watery and marshy."

DIODORUS (3.10.6) furthermore added "the serpents of such great size avoid the level part of the country and continually make their homes at the foot of mountains in ravines which are suitable to their length and in deep caves" (compare MURPHY & HENDERSON 1997: 19). This, and his reference to the location of the Aithiopian tribes specialized in hunting elephants (DIODORUS OF SICILY 3.26–27), likely point to the Atbara valley or its tributaries (HURST 1952: 87–101). BURSTEIN (1989: 127, n. 1) thought of "the mountains of western Ethiopia". Be that as it may, *Python sebae* has always been ubiquitous in Africa, south of the arid region, at altitudes lower than 2,250 m (PITMAN 1974: 68). It was still "plentiful in Sudan, vicinity Blue Nile and White Nile and tributaries" in the 1970s (PITMAN 1974: 68; cf. LARGEN & RASMUSSEN 1993)⁸. As for the Nile mosaic of Palestrina, MEYBOOM (1995: 49–50) rightly observed that "the rocky landscape in the upper part resembles that of lower Nubia" instead of the savanna of upper Nubia where most of the species depicted lived. Nevertheless, whatever the artist's model, the landscapes shown in sections 1 and 9 fit DIODORUS's discus-

5 On the Aithiopian tribe of hound breeders: DIODORUS OF SICILY 3.31.1–3; AELIANUS, *On Animals* 16.31. Compare with MEYBOOM, 1995: fig. 12 (Nile mosaic of Palestrina); fig. 57 (painted frieze, Marissa: "leopardess hunt"; see above, note 2).

6 The Greek term *ophis* used in both occurrences means "snake, serpent" in the general sense and does not allow further identification at any taxonomic level (BODSON 1981).

7 Literally: "where the waters concentrate". Compare with HURST 1952 (on Blue Nile).

8 Compare the reports collected by HEUVELMANS (1995: 535–539) on giant snakes or pythons (the natives' so-called lau) in the Addar swamps of the Upper Nile.



Fig. 3. The Nile Valley. From HOCHFELD & RIEFSTAHL (1978): Map 1. See 3.3.

sion of the giant snakes' habitat to some extent, though superficially.

The python was found while lying in ambush near a pool or water hole (compare with 3.10.5, quoted above 3.3), used by wild animals as a watering spot and suited to the snake's specific needs (see below 3.4.1). "Here it maintained for most of the time its coiled body motionless, but at the appearance of an animal which came down to the spot to quench its thirst it would suddenly uncoil itself, seize the animal in its jaws, and so entwine in its coil the body of the creature which had come into view that it could in no wise escape its doom" (DIO-DORUS OF SICILY 3.36.5).

3.4. The giant python and its capture

3.4.1. Python size. Occurring in the Atbara basin or similar environment of Aithiopia, spending much time in or close to water, feeding upon mammals and birds that were suffocated by constriction, "long, slender and sluggish in nature"; all these characters identify the snake unmistakably as an African rock python (*Python sebae*), indeed the largest of the African snakes (POPE 1961: 157–158; PITMAN, 1974: 68–70; MURPHY & HENDERSON 1997: 18, 50–54, 71–72). A puzzling feature of AGATHARCHIDES-DIODORUS's otherwise accurate description concerns the size of the snake said to be "thirty cubits long" (c. 45 feet or some 13.2 metres). Overestimating the length of snakes is a well-known phenomenon in the herpetological literature, whatever the species considered, but especially for giant snakes. It makes many of the nineteenth and early twentieth Century records useless for scientific herpetology, since they relied upon rough approximations, unverified hearsay or even obviously intended exaggerations (PITMAN 1938: 11; MURPHY & HENDERSON 1997: 23–56). The maximum length of *P. sebae* recorded by POPE (1961: 158) and PITMAN (1974: 69) did not exceed 32 feet (9.81 m). Later authors kept to lower figures (between 3 and 7.5 m) (DOWLING 1986: 119; MATTISON 2002: 195 [pythons in general]; MATTISON 1995: 20 [*Python sebae*]).

Yet the ancient record is not to be dismissed. First, the reported size is compatible with biological possibilities. "Though I know of no snake alive or dead that has at all approached it, one cannot say that this (size) is impossible", stated JENNISON (1937: 36), director of the Manchester Zoological Garden in the 1930s. Second, DIO-DORUS's criticism (3.36.1; 37.9) of the sizes up to 100 cubits (about 45 m) alleged by boastful writers demonstrates his attention to the matter of snake length, already much discussed in antiquity, and further supports the validity of his data on this particular point (compare PITMAN 1938: 11). Third, other specimens of rock pythons were brought to Alexandria. Of those that arrived in this town under PTOLEMY II, two were re-

spectively 13 and 14 cubits long, that is 19.5 feet (c. 5.85 m) and 21 feet (c. 6.3 m) (AELIANUS, *On Animals* 16.39). If the snake intended for the king had been of similar size, it would have neither come up to the hunters' expectations nor ultimately become the main attraction it proved to be in the royal 'zoo'. Even by ancient standards, a 13.2 m long rock python was a rare capture. Unlike the modern hunters' rifles and other devices, the ancient techniques of hunting made it possible for an African rock python living in a place with few predators and plenty of food resources "(to) survive long enough to attain" (DOWLING 1986: 116) the reported dimensions. Although unparalleled in modern and contemporary literature, AGATHARCHIDES-DIODORUS's figure is to be taken at face-value and registered as the earliest reliable record of maximum size for *Python sebae*.

3.4.2. Capture of the python. "Since the beast was long and slender and sluggish in nature, hoping that they could master it with nooses and ropes, they approached it with confidence the first time, having ready to hand everything which they might need" (DIO-DORUS OF SICILY 3.36.5).

Little is known about the ancient methods of snake hunting, even regarding those of the Lybian Psylli and of the Italian Marsi praised for their skills in catching venomous snake species. Whatever the hunters' former experience in python capture, they soon understood that this one would not be successfully conducted through a standard approach (DIO-DORUS OF SICILY 3.37.1). The role of nooses and ropes, which were the usual devices of mammal hunts in antiquity,⁹ is confirmed by traditional techniques reported as often used until recently to capture giant snakes in Africa (Kivu, early 1970s: P.-P. GOSSIAUX, pers. comm. 2000; Uganda: PITMAN 1938: 57¹⁰), India (POPE 1961: 223–225) and South America (MURPHY & HENDERSON 1997: dust cover). In particular, ropes fixed to the tail prevent lashing. This was apparently the ancient hunters' aim since they "casted the nooses about its tail", unless they had been too frightened to first turn to the head, as they should have been better advised to do (PITMAN 1938: 50; LANGE 1997: 114).

"The beast, the moment the rope touched its body, whirled about with so mighty a hissing as to frighten them (= the hunters) out of their wits, and raising itself into the air above the head of the foremost man it seized him in its mouth and ate his flesh while he still lived, and the

9 For instances, see DUNBABIN, 1978: pl. XIV, fig. 29 (Hunt mosaic, Hippo Regius, early 4th cent. AD?: onager hunt); pl. XVIII, fig. 40 (Mosaic of Months, Bordj-Djedid, 5th cent. AD?: deer hunt); CARANDINI et al. 1982: fig. 122.

10 Compare bare-handed hunting pythons up to 20 feet long (for meat and skin) in Cameroon (LANGE 1997).

second it caught from a distance with a coil as he fled, drew him to itself, and winding itself about him began squeezing his belly with its tightening bond" (DIODORUS OF SICILY 3.36.7).

Verified records, even though in limited number, confirm the African rock python's ability to kill and prey upon human beings (PITMAN 1974: 69; BRANCH & HAACKE 1980; FLANAGAN 2002). The smaller the human victim's size, the greater the snake's chance of handling him or her (MURPHY & HENDERSON 1997: 164). Admittedly "a python in excess of five metres could probably engulf a human being" (BRANCH & HAACKE 1980). What then of a python in excess of ten metres? The exceptional dimensions of PTOLEMY's python substantiate AGATHARCHIDES-DIODORUS's account of the reptile's defensive response (POPE 1961: 179; PITMAN 1974: 46), apart from the assault against the foremost man. A snake's reaction to intended attack or accidental threat by humans is not to be confused with feeding. In the former case, the python "usually endeavours to escape" (PITMAN 1938: 18). When it does not, it often inflicts fierce and damaging bites (PITMAN 1938: 18 and 1974: 70; POPE 1961: 182; KINGSLEY in MURPHY & HENDERSON 1997: 133; ROOT *ibid.*: 138; BRANCH *ibid.*: 151; WALLS 1998: 169). In the latter case, provided that the prey is a human being, the python will incidentally knock him or her out with a blow as strong as "a sledge-hammer" (LOVERIDGE in PITMAN 1938: 59, 1974: 48; BRANCH in MURPHY & HENDERSON 1997: 151) and start swallowing at once, without wrapping coils around its prey (DEDET 1984: 319). There is room for doubt that the reported python, assailed as it was, would have set about feeding, all the more so since the prey was quite unusual. Conversely, in relation to the snake's size and weight, violent bites were most likely. These bites could easily be mistaken by the surviving hunters for a grip prior to ingestion, given that they, "stricken with terror, sought their safety in flight" without waiting for more. The survivors' understandable misinterpretation of the two different behaviours added further dramatization to the oral and the ensuing written narratives.

However, the hunters "did not give up their attempt to capture the beast, the favour expected of the king and his reward outweighing the dangers which they had come to know full well as the result of their experiment" (DIODORUS OF SICILY 3.37.1). The snake's unusual size, weight (possibly up to 200 kg or even more; BAUER, pers. comm. 2003; compare PITMAN 1974: 68), height of coils (DIODORUS OF SICILY 3.36.6) and violent reactions (compare WALLS 1998: 168–170) drove the hunters to specific tactics.

"By ingenuity and craft they did subdue that which was by force well-nigh invincible, devising a kind of con-

trivance like the following: – They fashioned a circular thing woven of rush closely set together, in general shape resembling a fisherman's creel and in size and capacity capable of holding the bulk of the beast" (DIODORUS OF SICILY 3.37.1). The circular device was woven not of reeds (Greek: *kalamos*) as translated by OLDFATHER (1935:189) and BURSTEIN (1989: 129), but of rush (Greek: *schoinos*). The material, though it may not be identified to the species, belonged in all likelihood to the modern genus *Scirpus* or *Schoenoplectus* (Cyperaceae) or to the genus *Juncus* (Juncaceae), both found in Egypt (TÄCKHOLM & DRAR 1941), Sudan (ANDREWS 1956) and Ethiopia (LYE 1997). Plants of these genera were used in the Nile valley for basket traps and fish creels since the earliest times (BREWER & FRIEDMAN 1989: 32–37).

They also "reconnoitred its hole and observed the time when it went forth to feed and returned again, so soon as it had set out to prey upon the other animals as was its custom" (DIODORUS OF SICILY 3.37.2). The period devoted to this preliminary field work, although its duration cannot be determined, must have lasted for some time, depending on the snake's success in hunting and its metabolic rate.

From then, operations went on as follows: "they stopped the opening of its old hole with large stones and earth, and digging an underground cavity near its lair they set the woven net in it and placed the mouth of the net opposite the opening, so that it was in this way all ready for the beast to enter. Against the return of the animal they had made ready archers and slingers and many horsemen, as well as trumpeters and all the other apparatus needed, and as the beast drew near it raised its neck in air higher than the horsemen.

Now the company of men who had assembled for the hunt did not dare to draw near it, being warned by the mishaps which had befallen them on the former occasion, but shooting at it from afar, and with many hands aiming at a single target, and a large one at that, they kept hitting it, and when the horsemen appeared and the multitude of bold fighting-dogs, and then again when the trumpets blared, they got the animal terrified.

Consequently, when it retreated to its accustomed lair, they closed in upon it, but only so far as not to arouse it still more. And when it came near the opening which had been stopped up, the whole throng, acting together, raised a mighty din with their arms and thus increased its confusion and fear because of the crowds which put in their appearance and of the trumpets. But the beast could not find the opening and so, terrified at the advance of the hunters, fled for refuge into the mouth of the net which had been prepared near by.

And when the woven net began to be filled up as the snake uncoiled itself, some of the hunters anticipated its movements by leaping forward, and before the snake could turn about to face the entrance, they closed and fastened with ropes the mouth, which was long and had been shrewdly devised with such swiftness of operation in mind; then they hauled out the woven net and putting rollers under it drew it up into the air.

But the beast, enclosed as it was in a confined place, kept sending forth an unnatural and terrible hissing and tried to pull down with its teeth the rush which enveloped it, and by twisting itself in every direction created the expectation in the minds of the men who were carrying it that it would leap out of the contrivance which enveloped it. Consequently, in terror, they set the snake down on the ground, and by jabbing it about the tail they diverted the attention of the beast from its work of tearing with its teeth to its sensation of pain in the parts which hurt" (DIODORUS OF SICILY 3.37.2–6).

To the best of my knowledge, the effects produced on giant snakes by trumpet blaring are still to be verified. Quite likely, they increased the python's disturbance due to its sensitivity to air vibration (HARTLINE 1971). Once trapped, the snake tried, the report said, "to pull down with its teeth the rush which enveloped it". Snake teeth are not shaped to perform such movements as canids or felids would. But, as seen above, biting is a usual part of the giant snakes' self-defence behaviour. In the end, the forceful bites and efforts of the 13.2 m long python might well get the better of the trap. By all means, they justified the hunters' anxiety, notwithstanding the inappropriate wording of the sentence.

3.5. The python in captivity

As announced by DIODORUS (3.36.2), the narrative comes rapidly to the end, after the "detailed description of the capture". The journey to Alexandria went off in all probability partly overland, partly by boat (DESANGES 1971), over a distance that was fairly long, though impossible to calculate (as the crow flies, some 2,000 km separate the modern Khartoum and Alexandria).

"When they had brought the snake to Alexandria, they presented it to the king, an astonishing sight which those cannot credit who have merely heard the tale. And by depriving the beast of its food, they wore down its spirit and little by little tamed it, so that the tameness of it became a thing of wonder. As for PTOLEMY, he distributed among the hunters the merited rewards, and kept and fed the snake, which had now been tamed and afforded the greatest and most astonishing sight for the strangers who visited his kingdom" (DIODORUS OF SICILY 3.37.7–8).

"The python makes an interesting and intelligent pet and soon becomes quite tame" (PITMAN 1938: 58), without

being starved. Yet deprivation of food, commonly used in antiquity to break in wild and domestic mammals, was extended to the captive snake. Relying on his experience as zoo director, JENNISON (1937: 36) supposed that "perhaps the effects of weakness were mistaken for tameness." The ancient peoples' know-how to condition animals to captivity and the Egyptians' and Greeks' long experience in keeping tame snakes, refute rather than support his opinion. The python's natural adaptability was likely stimulated by the deprivation of food. Contrasting with its initial aggressiveness in the field and possibly again during its first public presentations (PITMAN 1938: 59), its tameness insistently reported by AGATHARCHIDES-DIODORUS accounted for the fact that it became "a thing of wonder", "the greatest and most astonishing sight" as much as, if not more than, its exceptional size.

Judging from the impressive number of animal species gathered by PTOLEMY II, modern scholars once favoured the idea that he had launched a programme of zoological research (PITT 1986: 1422) paralleling his programme in literature (FRASER 1972). This hypothesis, attractive as it sounds, remains unconfirmed. Nevertheless, the king's interest in collecting rare and exotic animals undoubtedly fostered empirical observations and enlarged both information and interest in zoological matters. Capturing animals required a practical knowledge of their way of life. Maintaining them in long-lasting captivity was made possible only by their keepers' wide expertise (JENNISON 1937: 41). Finally, the presentation of rare animals such as the python to the general public and to private guests did not only confer further prestige on PTOLEMY II or provide his visitors with entertainment. It also had an educational function clearly perceived and underlined by the ancient historians (AGATHARCHIDES, fragment 80a; DIODORUS OF SICILY 3.36.3).¹¹

4. CONCLUSION

The third century B. C. expedition to Aithiopia was first and foremost inspired by personal profit. Yet despite its lack of scientific purpose, it generated meaningful empirical information. Besides its princely and transient benefits, the capture of a giant rock python resulted in detailed natural history data on *Python sebae* in the field and in captivity. They concern its size and general morphology, feeding habits, ecology, distribution, defensive behaviour, tameness, and longevity, and correspond with striking accuracy to the basic knowledge currently admitted on *P. sebae*. Questionable statements, such as the supposed ingestion of the foremost hunter or the attempted pulling down of the rush contrivance, resulted from inappropriate extrapolation or clumsy wording

¹¹ Compare MURPHY & HENDERSON 1997: 177–184.

rather than from deliberate exaggeration or fiction. When compared with the “many fantastic tales” reported about giant snakes in both ancient and recent times, AGATHARCHIDES-DIODORUS’s account sounds remarkably self-restrained and reliable. Obviously derived from the hunters’ and keepers’ firsthand experiences, it further confirms AGATHARCHIDES’s declaration of reliability (see above, 2.1) and provides insight into the perceptions of *Python sebae* in the early European tradition.

Acknowledgements. Parts of this paper were read on August 3, 1997, at the invited symposium “Herpetological Expeditions and Voyages”, co-organized by Kraig Adler and myself, as part of the programme of the 3rd World Congress of Herpetology held in Prague (August 2–10, 1997), and on December 2, 1998, at the invitation of the Department of Classics of the University of Neuchâtel. I am grateful to all in both audiences who offered their useful queries and comments in the ensuing discussions. The manuscript was accepted in May 2000 for publication in the proceedings of the symposium. Due to the unexpected delay of the project, some up-dating of references has been made for the present publication generously reactivated by Prof. Aaron Bauer (Villanova University, Pennsylvania) to whom I want to express my warm thanks for his initiative as a whole and, in particular, for his useful remarks and for the reference to Lange’s paper. I also wish to thank Prof. Kraig Adler (Cornell University, Ithaca) for the reference to Largen and Rasmussen’s paper and Linda Evans (Macquarie University, Sydney) for the reference to Flanagan’s article, Prof. Pol-Pierre Gossiaux (University of Liège, Department of Anthropology) and Prof. Jacques Lambinon (University of Liège, Department of Botany) for their first-hand information on the traditional techniques of snake hunting in the Kivu area and on the reeds of the Nile Valley respectively, Mrs. Véronique Maes-Hustinx (University of Liège, Museum of Natural History) for the drawings of figures 1 and 2, and, last but not least, my reviewers Adrienne Mayor and Don Broadley for their helpful comments and suggestions.

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