

The zoological notes by Johann Reinhold and George Forster included in Buffon's *Histoire Naturelle* (1782)

By L. C. ROOKMAAKER

Dokter Guepinlaan 23,
4032 NH Ommeren,
Holland.

ABSTRACT

Buffon added 14 notes contributed by one or both of the Forsters to the sixth supplement of the *Histoire Naturelle* published in Paris in 1782. All these additions deal with mammals, mainly South African: nine South African antelopes, the spring hare, tame sheep and three antelopes not found at the Cape of Good Hope. The descriptions are compared with the drawings by George Forster in the British Museum (Natural History) and with the *Descriptiones Animalium* written by J. R. Forster about 1775, but not published until 1844. Buffon included two plates engraved after drawings made by George Forster depicting the klipspringer and spring hare.

INTRODUCTION

Johann Reinhold Forster (1729-1798) and his son George (1754-1794) accompanied James Cook on his second voyage around the world as the official naturalist and artist. During this circumnavigation (1772-1775), they twice spent some time at the Cape of Good Hope: 30 October - 23 November 1772 and 22 March - 27 April 1775. The Forsters were very active while staying in the southern part of Africa and collected information about the local flora and fauna. J. R. Forster mentioned his intention 'to put my remarks on the Cape of Good Hope all together and will there describe the Country, Town, Government, Manners etc.' in his daily journal for 22 March 1775 (Hoare 1982, IV: 731). This is an intriguing promise, but unfortunately a manuscript or publication fitting Forster's intention has never been located.

However, we have some knowledge of the Forsters' researches at the Cape. There are several glimpses of their botanical and zoological activities in published and unpublished sources, which have been extensively discussed by Hoare (1976: 86, 128-129, 228-290; 1982, I: 101-104). Some remarks can be found, for instance, in George's *Reise um die Welt*¹, in Johann Reinhold's *Descriptiones Animalium*², in two small papers by J. R. Forster (1778, 1781), in George's drawings made during the journey (discussed below), in footnotes added to translations of travel journals by others³, and in some unpublished notes and letters. These various sources will be discussed elsewhere in the context of a larger study on the zoological exploration of the Cape of Good Hope between 1650 and 1800 and its significance for the progress of science in Europe. In this paper I want to draw attention to some notes published by Buffon in Paris in the sixth supplement to his *Histoire Naturelle*, which he attributed to one or both of the Forsters. They were briefly mentioned by Wheeler (1981: 783).

THE ZOOLOGICAL NOTES

The notes concerned all appeared in the sixth supplementary volume of the *Histoire Naturelle* edited by Buffon and published by the Imprimerie Royal in Paris in 1782. They are not found in other editions of this work (e.g. those produced in Holland), nor are there other notes in any of the subsequent volumes. I have located 14 articles in this volume, all dealing with mammals, mainly South African: one about the spring hare of South Africa, one about the domesticated sheep at the Cape, nine about South African antelopes and three about antelopes from other regions.

Buffon identified these contributions by the use of smaller print and by a short introductory remark about the nature of the communication and about the author(s). Nine notes are attributed to 'M. Forster', four to 'M.^{rs} Forster' and one to 'M.^{rs} Forster père et fils'. The identity of the single 'M. Forster' remains uncertain. Below, I identify the fourteen notes, indicating Buffon's introduction and summarizing the contents, together with a short review of other writings or drawings by one of the Forsters about the same species.

J. R. Forster's *Descriptiones Animalium* (DA) has been described by Whitehead (1978: 26–27) and Hoare (1982, I: 91–93). The manuscript of this major work on the zoology studied during the journey round the world was 'substantially completed by August 1775' (Hoare 1982, I: 89–90). It remained unpublished, however, during Forster's lifetime; it was finally edited by M. H. K. Lichtenstein in 1844. The DA contains a revision of all antelope species whether encountered during the voyage or not. The entries are generally comparable with the notes published by Buffon, but not to the extent that the order or the words (in translation) would be similar. In some cases, J. R. Forster indicated in the DA the existence of a drawing of the animal, prepared by his son or by some other artists. These drawings are largely preserved as the *Forster Collection* in the British Museum (Natural History), London, having been described by Lysaght (1959: 280–310) and Whitehead (1978). In the following text the existence of a drawing of the species concerned is noted⁴:

1. *Connochaetes gnou* (Zimmermann, 1780) — 'gnou'

Buffon (1782: 91–93) wrote: 'voici ce que m'en a écrit M. Forster', followed by two and a quarter pages of description. The species occurred at some 180 or 200 miles from the Cape (a region never visited by either Forster). According to Forster, the Dutch twice tried to ship a living specimen to Holland, both times without success. In 1775, he saw a female gnou, presumably in the menagerie in Cape Town.⁵ This animal had been raised by a colonist living about 160 miles from the Cape, and later was donated, together with a male, to the governor, Joachim Annema Baron van Plettenberg (1739–1793). The animal is described in detail with some external measurements obtained with difficulty 'à cause de son indocilité'.

DA: J. R. Forster twice mentioned the species in the DA. First as '*Bos Poëphagus* F.' with a note that a drawing was made ('Fig. pict.') and that one of these rare animals had died on the way to Holland (Lichtenstein 1844: 40–41). Later (pp. 392–396), under '*Bos connochaetes* F.', a more extensive description of the female in the Cape menagerie is given. Here the drawing is attributed to George Forster ('Fig. pict. G.') and two animals are said to have died on the way to Holland.

Forster collection: This includes as many as 11 drawings of the gnou, probably all made after the specimen in the menagerie in Cape Town, except one (19a) which is stated to be copied from 'a drawing in the possession of the Governor at the Cape' (Whitehead 1978: 35–36).

Forster, it may be noted, included the gnou among the buffaloes, not among the antelopes, both in the DA and in the note printed by Buffon. He was badly informed about the specimens sent to Holland. One arrived, alive and well, in July 1774 and was exhibited in the collection of Stadhouder Willem V near The Hague (Pieters 1980), where it was drawn by Aert Schouwman (Tuyn & van der Feen 1969, fig. 14); a second specimen arrived in 1776.

2. *Boselaphus tragocamelus* (Pallas, 1766) — 'nil-ghau'

Buffon (1782: 115) wrote: 'M. Forster m'écrit au sujet du nil-ghau' a description of just 12 lines. Reference is made to earlier papers by Parsons (1745) and William Hunter (1772) after specimens seen alive in London. Hunter had grouped the animal as a 'nouveau genre', but Forster maintained that its appearance and habits compared well with those of the other antelopes.

DA: A similar short note under *Antelope Leucopus* F. (Lichtenstein 1844: 377).

3. *Taurotragus oryx* (Pallas, 1766) — 'canna'

Buffon (1782: 122–123) wrote: 'M. Forster m'écrit' followed by one page describing a female eland examined in 1772 in the menagerie at the Cape.

DA: Under *Antelope Oryx*, there is a similar note about the same specimen. Forster stated, 'feminam ipse vidi, examinavi, descripsi et delineavi' (Lichtenstein 1844: 379).

Forster collection: no. 30 shows this species (Whitehead 1978: 35, reproduced in Hoare 1982, IV: fig. 45). There is no indication of the artist on the drawing. J. R. Forster stated in the DA that he drew it himself (in the above quotation), but it seems hasty to accept this without substantiating evidence.

4. *Tragelaphus strepsiceros* (Pallas, 1766) — 'condoma ou coësdous'

Buffon (1782: 125–126) wrote: 'M.^{rs} Forsters qui ont vu cet animal vivant, m'ont communiqué les notices suivantes' followed by one page of description. The greater kudu was only found in the interior. The external appearance of the species is given. The Forsters here do not mention seeing a living specimen, but many *had been* kept earlier in the Cape menagerie.

DA: Under *Antelope Strepsiceros*, J. R. Forster described the species from second-hand sources: ego animal vivum non vidi (Lichtenstein 1844: 377–378).

5. *Alcelaphus buselaphus* (Pallas, 1766) — 'bubale'

Buffon (1782: 134–135) gave a note of one page by 'M. Forster' containing a description of the hartebeest. Forster suspected that the 'bubale' seen at the Cape was identical with the 'koba' mentioned in an earlier volume of Buffon (1764: 267–268, pl. XXXIII, fig. 1), as well as with the 'grande vache ou cerf du Cap', a skin of which Forster took to Europe.

DA: Under *Antelope Bubalis*, Forster discussed his suspicions about the similarity of this animal and the 'koba', without further description of its appearance (Lichtenstein 1844: 380).

6. *Ovis* sp. — 'brébis d'Afrique'

Buffon (1782: 144–147) wrote: 'M. Forster a observé les particularités suivantes' followed by three pages on the fat-tailed sheep kept by the Hottentots and the Dutch at the Cape, discussing their appearance and provenance. Forster says that he took a number of sheep aboard the *Resolution* in 1772 when leaving Cape Town, but that many died due to problems with food. Only three survived, which were presented to a chief in Tahiti (see J. R. Forster's journal in Hoare 1982: 191, 344).

7. *Saiga tatarica* (Linnaeus, 1766) — 'saïga'

Buffon (1782: 150–151) wrote: 'M. Forster m'a écrit' followed by two pages about the external appearance and habits of the saiga, an antelope found 'depuis la Moldavie & la Bessarabie, jusqu'à la rivière d'Irithish en Sibérie'.

DA: Under *Antelope tatarica*, Forster gave a diagnosis and an indication of the animal's distribution (as above) and its numbers; in troupes of 10,000 animals together! (Lichtenstein 1844: 390–391).

J. R. Forster (1768: 344) earlier mentioned '*Capra sayga*' from the lower course of the river Volga.

8. *Oryx gazella* Linnaeus, 1758 — 'gazelle-pasan'

Buffon (1782: 156) wrote: 'M.^{rs} Forster m'ont écrit' followed by one page about the gemsbok, then also known as 'chamois du Cap' or 'chèvre du Bésoard'. The horns are described and some measurements are given.

DA: Forster had been given a pair of horns of this *Antelope Gazella* in Cape Town by Baron van Plettenberg, the Governor. There is a long discussion about its different names and its possible identity with an earlier described species (Lichtenstein 1844: 380).

9. *Procapra gutturosa* (Pallas, 1777) — 'gazelle tzeïran'

Buffon (1782: 168–169) wrote: 'M.^{rs} Forster père et fils, m'ont donné sur cet animal les notices suivantes' followed by one page about the appearance and habits of this small antelope ('grandeur . . . du chevreuil', *Capreolus capreolus*). The species was not found in Africa (not claimed by Pallas either), but in 'Turquie, Perse, Sibérie, voisinage du lac Baikal, en Daourie & à la Chine'.

DA: Forster mentions the 'Tzeïran s.Dsheren' as a possible variety of *Antelope Dorcas*, adding that it is an Asiatic species, the size of a roe deer, but showing glands (Lichtenstein 1844: 387).

The nomenclature used by Forster in this instance is rather confusing. The name Tzeïran usually denotes the extinct blaubok *Hippotragus leucophaeus* (Pallas 1766), and was used in that sense by Allamand (1778) in the new edition of the *Histoire Naturelle* produced in Holland. Allamand's contribution was reprinted by Buffon just below and under the same heading as the note by the Forsters discussed here.

Forster's Tzeiran certainly did not indicate the blaubok, because that species was African and larger than a roe deer, and because it is listed separately as *Antelope glauca* in the DA (Lichtenstein 1844: 391).

10. *Sylvicapra grimmia* (Linnaeus, 1758) — 'grimme'

Buffon (1782: 174–175) wrote: 'Je dois ajouter . . . quelques remarques de M.^{rs} Forster' followed by one page stating that Grimm's duiker was described first by Grimm (1686) and later by Pallas (1767: 38–44, pl. III drawn by Aert Schouwman) and also by Vosmaer (1767).

DA: Under *Antelope Grimmia*, Forster discussed the appearance and the various names given to the South African 'duyker-bok' (Lichtenstein 1844: 384).

11. *Antidorcas marsupialis* (Zimmermann, 1780) — 'gazelle ou chèvre sautante du Cap de Bonne-Espérance'

Buffon (1782: 177–179, pl. XXI) wrote: 'Voici les observations que M. Forster a faites' followed by two and a half pages about the appearance and habits of the springbok, then newly discovered. The species lived in the Cape interior, far from colonized areas except in periods of drought. Troups of no less than 10,000–15,000 animals could be found. Forster took one such animal, three years old, on his ship to England in 1775. It became quite tame, took bread from his hand, and had a special fondness for tobacco.

DA: Forster discussed the appearance and habits of the springbok under *Antelope Dorcas*, varietas *Pygargus* (names now usually used for the bontebok and blesbok), adding that his son made a drawing: 'Fig. pict. G.' (Lichtenstein 1844: 388–390).

Forster collection: nos 18a and 18b show the springbok, but labelled '*Antilope Pygarga* S.N. XIII: 187/*Antilope Dorcas* . . . of Good Hope, tame' (Whitehead 1978: 35).

The specimen taken alive from the Cape by Forster, reached England safely (Hoare 1976: 290 note; 1982, I: 103 note). Hoare (1976: 290) stated that 'an engraving of George's original drawing' of this specimen was included by Forster in his German edition of Levaillant's travels (Forster 1796, plate facing p. 264). This plate, however, shows a klipspringer (see 12 below). In the same book Forster (1796: 331) included a note that this specimen was given to the Queen of England and lived in the menagerie at Richmond for almost two years, even producing a (wild-bred and still-born) calf the first winter after arrival.

12. *Oreotragus oreotragus* (Zimmermann, 1783) — 'klipspringer ou sauteur des rochers'

Buffon (1782: 183, pl. XXII) wrote: 'M^{rs}. Forster' said that this small antelope always occurred in inaccessible rocky places and therefore was rarely encountered (one page). Buffon added that 'M^{rs}. Forster ont bien voulu me donner le dessin, & que j'ai fait graver (planche XXII)', an engraving reproduced here (Figure 1).

DA: Under *Antelope Oreotragus*, Forster said that the species was never before noticed (Lichtenstein 1844: 382).

Forster collection: no. 29 '*Antilope Oreotragus* . . . from a dead animal' (Whitehead 1978: 35).

Tom. II.

Pl. XXII. pag. 184.



Dessiné par

LE KLIPPSPRINGER ou LE SAUTRUR DES ROCHERS .

d'après M. de Forster

Figure 1. Engraving of the South African klipspringer after a drawing by George Forster, published by Buffon in 1782 (pl. XXII).

13. *Raphicerus campestris* (Thunberg, 1811) and *Raphicerus melanotis* (Thunberg, 1811) — 'steenbock, grysbok, bleekbok'

Buffon (1782: 185–186) published notes about three different antelopes said to be allied to his 'nagor' and to each other (one and a half pages). 'M^{rs}. Forster' had presented 'le dessin de la tête d'une de ces variétés du nagor du cap de Bonne-

Zon. 17.

Pl. XLI. pag. 262.



Dessiné par G. Forster

LA GRANDE GERBOISE ou *Lévre-sauteur du Cap*

Gravé par J. B. Smeillon

Figure 2. Springhare engraved after a drawing made by George Forster at the Cape of Good Hope, published by Buffon in 1782 (pl. XLI).

espérance' (not figured by him). Three types are described, differing in colour, as 'steenbok or bouquetin', 'grysbok ou chèvre gris' and 'b[leek]bok ou chèvre pâle' in this note contributed by the Forsters. Buffon remarked at the end that to him the bleekbok seemed merely a variety of the steenbok, different from the grysbok.

DA: Forster first mentioned the steenbok only '*Antelope Tragulus* F.', with a short description and 'Fig. pict. F.' (Lichtenstein 1844: 36). Later (pp. 374–376) he discussed this group of animals in more detail, distinguishing three varieties of *A. Tragulus* by name of *melanotidis* (grysbok), *rupestris* (steenbok) and *pallida* (bleekbok).

Forster collection: no. 17 '*Antelope Tragulus & Melanotes*' (Whitehead 1978: 35).

14. *Pedetes capensis* (Forster, 1778) — 'grande gerboise'

Buffon (1782: 260–261, pl. XLI) wrote: 'M. Forster nous a communiqué un dessin . . . que nous donnons ici (planche XLI). Ce dessin étoit accompagné de la notice suivante' followed by a half page on the appearance and size of this spring hare. The plate is given here (Figure 2).

DA: Under *Yerbua capensis*, Forster described the species, stating that George drew the picture (Lichtenstein 1844: 365).

Forster collection: no. 13 made near Stellenbosch (Whitehead 1978: 37). This drawing is reproduced by Hoare (1982, IV: fig. 46).

George Forster's drawing in the British Museum (Natural History) is much like two published engravings, but both are reversed in comparison with the drawing. The first is the plate in Buffon (1782, pl. XLI — see Figure 2), the other accompanied the first description of the species by J. R. Forster (1778, pl. III) where two additional figures are added to the plate.

DISCUSSION

The Buffon notes discussed here do not present any information not known today from other sources. Their authorship (J. R. or George Forster or both) is not quite clear. J. R. Forster's participation may be inferred from the subject matter, which lay much more in his immediate sphere of interest than in George's, as far as is known from their writings. The fact that in many cases both father and son are acknowledged by Buffon might mean that George Forster was responsible for the correspondence with Buffon, or that Buffon merely wanted to indicate their teamwork.

It is also unknown how and why and when these notes were given or (more likely) sent to Buffon in Paris. J. R. Forster visited Paris in August and September 1776, where he met Buffon and he seems to have continued corresponding with some people in that city (Hoare 1976: 164–165). George Forster was in Paris late in 1777, with the set of completed drawings now preserved in Gotha in his luggage (Steiner & Baege 1971: 62). The receipt by Buffon of these communications clearly must date sometime between 1776 and 1782, but cannot at present be further detailed. The originals of the drawings or the letters do not seem to be preserved in Paris or elsewhere as far as is known.⁶

NOTES

¹ G. Forster's *Reise* was published in 1784. I have consulted a recent reprint (G. Forster 1965).

² The *Descriptiones Animalium* was edited by Lichtenstein in 1844, and discussed below.

³ J. R. Forster translated and edited several travel journals, for instance those by Anders Sparrman and François Levaillant, in his series *Magazin von merkwürdigen neuen Reisebeschreibungen* (see Hoare 1976: 361–370). He interpolated some of his own information, generally in the footnotes.

⁴ The first line of each entry states the present scientific name of the species described in that paper, and the French name used by Buffon. The second line starts with the pages in Buffon (1782) on which that contribution can be found, and continues with a summary of the contents of the note.

⁵ A menagerie was maintained at the Company's gardens in Cape Town for over a century. Its history is described by Rudner (1982).

⁶ An earlier version of this paper was read and commented upon by Dr P. J. P. Whitehead and Dr M. E. Hoare, whose interest and assistance are gratefully acknowledged.

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