Time has carried away those who could assist, but fortunately some light has been shed on the matter by Mr. S. M. Hart, a gentleman of some mature years who has farmed all his life at "Happy Valley" in the Cathcart district on the southern boundary of the Bontbok Flats and who has been a great hunter in his day. He states, in litt. 28.4.1949:

"My father hunted on the Bontebok Flats five or six years before he settled down here (at Cathcart) in 1865 or 1866. When I asked him about bonteboks in 1896 he said that there never were any bontebok here, but blesbok were here and you could get them beyond Queenstown when he first got here about 1864." In addition to the misuse of the word 'bontbok' in this area, even the word 'flats' is a misnomer because the country is anything but flat!

Nomenclatural Confusions:

Added to the confusion in the minds of the laymen there was no less confusion amongst early naturalists in their attempts at nomenclature.

The bontebok, the first of the two to be encountered, came to be known as the Antilope pygarga of Pallas in 1767, and as such it is widely and correctly quoted. This name has reference to the animal's distinctive white rump. But unfortunately Thunberg in 1788 used the same word pygargus when naming the springbok the Capra pygargus in recognition of the white "mirror" which this animal exhibits on its back on certain occasions. Consequently the reader of early works should be warned not to confuse these animals when faced with the systematic names.

Thunberg's unfortunate mis-naming was recognised by Burchell (1822:II: 335) in a footnote as follows:

"Late systematic writers have applied to the blesbok the name of *Pygarga* (Whiterump), which by earlier authors was intended for the springbok; and as this name becomes absurd and contradictory when thus used, I have taken the liberty of substituting in its place that of *albifrons*." He was writing when he was in Bechuanaland.

It was from Burchell that the specific name of albifrons — later applied to the blesbok — originated, but he did not publish a description of the blesbok at the time. Harper (1939:89) has indicated that Burchell did not intend to differentiate between bontbok and blesbok as species, but that he really meant to change the name of the bontbok in order to separate it from the springbok which had in error been given the same specific name of pygarga by Thunberg. Burchell does not make this strictly clear but Harper's interpretation is surely correct? Harris (1839:289) was the first to publish an adequate description of the blesbok and in so doing made no reference to

Burchell. The systematics have since undergone various changes but these do not concern us here.

As if the above were not confusing enough, it is found that both Lichtenstein and Sparrman refer to the bontbok as the Harnessed Antelope and both authors quote the systematic name then current, viz. Antelope scripta (another mis-naming by Thunberg who had misnamed the springbok Pygargus, as already mentioned) but because a northern form of the bushbuck is today sometimes called the "harnessed bushbuck" (Tragelaphus scriptus ornatus) the thought that Lichtenstein and Sparrman might have been referring to bushbuck comes to mind. However, Sparrman mentions that the "harnessed antilope", as known to him, was larger than the "boschbok".

The relative quotations are as follows: Lichtenstein (1812:1:203) writing of the 'Buffelsjagd-rivier': "We had seen a great deal of game this morning, amongst others a red deer (Cervus elephus) and ten harnessed antelopes (Antilope scripta). In a footnote he adds: "These animals generally go in large bodies; in Senegal they may sometimes be seen in flocks of 2,000. They derive their name from being a chestnut-brown colour, with white lines about the body, crossed in such directions as to have the appearance of a harness".

This description of the "harness" cannot, of course, be applied conscientiously to the bontbok. Much confusion reigns here probably because of Lichtenstein's mis-application of the name Antilope scripta (note the use of the word scripta again) which was the name applied, but in its form of scriptus, to the Harnessed Antelope or "bushbuck" of Senegal in West Africa by Pallas in 1766 (vide Sclater & Thomas, 1894/1900:IV:109). Thunberg named the bontbok the Capra scripta in 1796, apparently without adequate reference to prior literature.

The use of the name Cervus elaphus refers to the systematic name of the the Cape Hartebeest, Alcelaphus caama.

Sparrman (1786:1:129) writing of the "Bott River" in July 1775: "I now for the first time had the pleasure of seeing herds consisting of the two largest sorts of antelopes or gazels, which are called by the Dutch, hartebeest and bonteboks" and in referring to the later he says: "... the latter (name) which signifies painted, or rather pied goats, suits better with the last mentioned animals, their orange yellow or pale brown posteriors being marked with a considerable number of white spots and streaks." This last paragraph is one of inexplicable confusion of thought.

Then in his Volume 2, page 219, Sparrman says: "The bonte-bok (the pied or painted goat) called by Mr. Pennant the harnessed antilope and by Mr. Pallas Antilope scripta (see above for explanation of error) I have already mentioned in Volume I page 129, as being somewhat less than the hartebeest; and again on page 277 as being larger than the boschbok."

DISCUSSION

Enough has been said in the foregoing to show what considerable confusion has always surrounded these two animals. If we cast our minds back into the last half of the 18th Century and consider the vast country from the top of the Amatolas, through the Tarka to the back of the Sneeuberg Mountains and thence across the wide plains to the Orange River; and if we consider how lightly the country was populated as far as the Tarka by a virtually illiterate white man having inferior communication with his neighbours we can realise how long it would take for the common name of an animal to become stabilised throughout the whole area.

Taking a reasonable assessment of the position it is safe to argue that had the bontbok been as plentiful in the Karoo as it was made out to be, some of its kind would have survived there into the late 19th Century as well as in the Orange Free State, Bechuanaland and the Transvaal, amongst the survivors of what today we know to be blesbok. Similarly, if there were so many bontboks among the blesboks, might there not have been blesboks among the bontboks? Sclater (1900:1:140) after stating that Harris was mistaken in his identifications and that his example was followed by others, continues: "It is a remarkable fact that no one has subsequently found the bontbok in the interior, either in the Orange Free State or in the eastern part of the Colony, while the blesbok still remains preserved on several farms throughout the Orange Free State and Transvaal."

There is little doubt that bontbok could have thrived in the Karoo. This is proved by the animals which were brought from the Bontbok National Park in 1940 by Mr. F. W. M. Bowker and released on his farms on the Fish River Rand between Grahamstown and Bedford, where the veld may be discribed as near-Karoo. The animals increased tremendously in numbers and thrived to such an extent that their condition was soon superior to the animals in their Bredasdorp home, a fact which has been commented on by many a competent authority.

Similarly, blesbok could have lived under the grassveld conditions of Bredasdorp. They do very well on the coastal sourveld in the Bathurst district of the east Cape, a few miles from the sea. So the grazing conditions are not a factor to be considered.

The taxonomic issue is not of direct concern in this paper but, because the question of whether the blesbok and bontbok occurred in mixed communities is of concern, the matter must receive attention.

That the blesbok is slightly paler and more sandy-coloured than the bontbok is consistent with what normally occurs in Nature, viz.: that animals in drier areas are paler than those in more humid parts, in this instance the Karoo as against the more damp South-west Cape.

The question as to whether the two antelopes should be classified as species or as geographical races, or subspecies, is still controversial. Superficially their classification into subspecies would seem to be tenable but as they undoubtedly have been separated for a very long period of time this problem could best be tested by controlled experiment under a qualified geneticist and preferably under open-air veld conditions in a reserve and not in a confined space.

FitzSimons (1920:III:14) remarks that "... the bontbok interbreeds freely with the blesbok and the progeny are fertile" but he gives no supporting data. There appear to be no other references to inter-breeding in the literature and enquiries from the Directors of the National Zoological Gardens, Pretoria and the Zoological Society of London have shown that no such experiments have ever been conducted at their Institutions. Reports by farmers on the interbreeding of these animals lack reliable provenance,

On the practical side in the field there appear to be no reliable references to indicate that animals at any one place ever exhibited any great degree of variability suggestive of interbreeding and giving rise to the inevitable resultant instability. If Cornwallis Harris's account is to be accepted then such might have been the case, but it is here submitted that his observations in the field were the outcome of his ignorance rather than the acuteness of his perception.

That there have been no unstable populations is a strong argument in favour of the two having been separated for a very long time and it must be obvious that if ever a single species did once exist over the whole country, but became divided geographically by force of circumstances, it is according to the natural order of things that such cannot have happened in recent times as some inferences would seem to suggest.

Another factor likely to increase confusion is that many travellers lacked regular opportunity of examining the buck closely. Although the animals undoubtedly occurred in large numbers, often in company with other types of game, the large herds were not seen every day. Harris, Burchell, Smith and many others would travel at times through what we know to have been excellent blesbok country without mentioning them, yet they referred to them when they eventually found them. And then, many reports refer to their being wild. Furthermore, the herds of game were constantly on the move depending on the quality of the grazing so that a journey could have been undertaken through blesbok country without the animals having been seen.

The evil of hearsay and the repetition of the previous errors of others played a very great part in complicating the issue. It seems most probable that the name "blesbok" originated in the Agter Sneeuberg country in the neighbourhood of the Seacow river and spread both north and east from there (and even south to Swellendam in error by later travellers!). It also seems probable that the name was bestowed on what was a new species of antelope to

those pioneers who did not know the bontbok, i.e. it was not merely a name used to differentiate the animal from the bontbok. If this were not the case it seems probable that, in line with other popular nomenclature of the time, the "blesbok" might well have become known as "baster-bontbok" in the way that "basterwaterbok", "bastergemsbok" and "baster-hartbees" came into use for the lechwe, the roan and the tsessebe respectively. It is not feasible to accept what Harris and others have said about bontbok occurring in the Orange Free State and elsewhere merely because their statements are to be found in print. These records have no factual status and must be interpreted in the light of probability. They were not scientific treatises as we know them today, based on all factors. Indeed the same may be said of all records of earliest times. They must be weighed up on a basis of probability taking the status of the author into account.

On these grounds, therefore, it must be said that the bontbok was not known outside the south-west Cape in historic times.

BLACK WILDEBEEST: Connochaetes gnou: Zimmerman.

Uitenhage: No records.

Cradock: It is obvious that no wildebeest were seen on the trek route from Algoa Bay to Graaff-Reinet until the region between the present towns of Somerset East and Bedford was reached because, as soon as the first gnu was seen, comment was directed towards its peculiar conformation with the superficial resemblance to both equines and bovines. Also, in several instances, the authors went to some pains to describe the animal in detail.

Sparrman (1786:II:131) writing of the open country between Cookhouse and Somerset East, says: "on the 24th (i.e. December 1775) I was induced to stay a little longer on this spot, by the hopes of shooting a gnu, which had been seen ranging by itself about this part of the country". After describing the animal in some detail and commenting on reports of its possible admixture between the horse and the ox he continues, while referring to the lone beast they had encountered ". . . these animals are almost always seen in large herds and as far as I can learn are in Africa to be found only in Camdedo and Agter Bruintjies-hoogte . . . consequently the gnu then wandering in these parts was probably an old buck which either did not care to keep company any longer with the herd it belonged to, or else had been accidentally separated from it."

From the above it seems obvious that he had seen no gnus on his trip through what is now Albany and up through Commadagga. La Vaillant (1790:11:236) is another who makes reference to the gnu immediately to the south of the Winterberg range. He had his headquarters at Koks-kraal which was on the Fish River to the east of Bruintjieshoogte. On modern maps there is a Kokskraal just north of the confluence of the Fish and Baviaans Rivers, which

would seem to be this place. Le Vaillant travelled from here on a northeasterly course until he came to an area where he describes stinkwood trees, yellowwood trees, and where he found bushbuck. This must have been in the lower Baviaans River. But while he was crossing the country from the thornveld of the Fish River to this wooded area he remarks: "Just as I reached my camp, one of my hunters had arrived there with a gnou he had killed." He then describes the animal correctly.

Again on page 247 when on trek after spending several days in this well-wooded part he writes: "Having advanced straight towards the east and traversed a canton all the grass of which had been a prey to flames . . . at every step we met whole flocks of springboks, gnous and ostriches."

Soon after this they turned back to the west and reached the Fish River after three days' march. They then had another three days' march up river until they returned to Kokskraal.

It seems that after leaving the Baviaans River they must have travelled eastwards, probably past the present farm of Longwood (Mr. F. C. M. Wienand) and then under the range until they emerged into more open country somewhere near the present town of Bedford.

It is known that wildebeest were on top of these mountains because Thomas Pringle mentions them in his diary (1835:65) in an entry dated 24th October 1820 as follows: "Mr. G. Rennie, who at my request had gone with a party of Hottentots to explore the country beyond the mountains towards Koonap River, returned with a very favourable report of it. Abundance of wood, water and rich pasturage. He saw a great deal of large game, and the recent traces of elephant. Shot a gnu and a hartebeest."

Mr. V. L. Pringle of the farm "Huntly Glen" has expanded on this in litt. as follows:

"Rennie rode over from Clifton, which was the first settlement and would have proceeded up the long valley in front of the present Lower Clifton house north-east from here, and on to what is now Hyndhope and probably over into the Mankazana." Once over this range, the Kagaberg, and also over the Bruintjies Hoogte to the west, gnus were seen with increasing frequency as the travellers moved north the more so in the Agter Sneeuberg towards the Orange River.

Backhouse (1839:336) when a little to the north of Cradock on his trip up from Bedford says: "Herds of thousands of springboks were browsing in every direction, intermixed with a few gnus."

Their habit of moving in the mixed company of other game helps to confirm that had wildebeest occurred south of the above-mentioned limits they would have been commented upon especially in regard to their unusual struture.

BLUE WILDEBEEST: Gorgon taurinus: Burchell.

Uitenhage and Cradock: No records.

Cumming (1909:97) writing of his experience a few days before reaching Beervlei when travelling from Colesberg across the Karoo in December, 1843: "I despatched one of my wagons to bring home the oryx, and it returned about 12 o'clock that night carrying the skin of my gemsbok and also a magnificent old blue wildebeest (the brindle gnoo) which the Hottentots had obtained in an extraordinary manner; he was found with one of his forelegs caught over his horn, so that he could not run, when they hamstrung him and cut his throat . . ." This was before he had got to know the blue wildebeest well.

Although he had mentioned wildebeest before in his story he had not stated which kind, except that on page 72 he mentions wanting "... to devote my attention more particularly to black wildebeests, of which I had not yet secured a specimen. I resolved to proceed to the plain beyond the Thebus mountain where the Boer informed me they abounded ... we held for Thebus mountain ... with springboks and wildebeests whistling and bellowing on every side of us." And on page 74 at Colesberg "... we rode forth together to look for a wildebeest I had wounded in the morning ... On reaching the ground we found 5 small herds of wildebeests charging about the plain." He does not say which kind but the inference is that they were blacks.

He crossed the Orange River (presumably somewhere near the present Prieska) and four days later he writes: "About midnight I peeped from my hole, and saw a herd of about 20 shaggy blue wildebeests, or brindled gnoos, preceded by a patriarchal old bull cautiously advancing to the water . . ."

The weight of evidence is strongly against the blue wildebeest having occurred south of the Orange River. If the animal referred to by Cumming was indeed a Blue Wildebeest it must have been a stray animal. Be it said that he wrote this on his first journey to the north and before he had reached the blue wildebeest country. He was later to know them well, so it is strange that, if the animal were not one of these, he did not alter the name in his text. But points like these are often overlooked in proof reading.

ELAND: Taurotragus oryx: Pallas.

Because eland had such widespread distribution throughout the Cape, their past occurrence at both Uitenhage and Cradock is certain.

GEMSBOK: Oryx gazella: Linnaeus.

Uitenhage: No evidence of its occurrence.

Cradock: No evidence of its occurrence. This striking animal, had it occurred

to any extent in the eastern Karoo districts, cannot have escaped the pens of the early diarists. It occurs frequently in references to areas further to the west. In 1790 Barrow (1801:II:357) speaking of Gemsbok "... on the Karoo plains close behind the Bokkeveld" remarked that "... their numbers are rapidly diminishing in consequence of the frequent excursions of the farmers on purpose to shoot them". Later, on page 373, when referring to "... the division of the Snowy Mountains, i.e. Voor, Middle and Agter Sneeuberg" he says that "... the gemsbok are also plentiful".

It would thus seem that shooting was not yet affecting their numbers to any extent in the east, yet the early travellers who had to travel immediately to the west of Cradock, i.e. from Bruintjies Hoogte, over the plains of Pearston to Graaff-Reinet which was one of the main halts on the road to the Sea-Cow and Orange Rivers, make no mention of them in country which would seem to be admirably suited to them.

Lichtenstein (1812:II:29) found them to the north of the Compassberg in what is presumably Colesberg. He also found them at Aberdeen about 30 miles west of Graaff-Reinet, and Barrow (1801:I:104) described them from near the present site of Willowmore.

In view of the absence of any mention of this antelope in the eastern areas, the report by Damberger (1801) rather upsets the applecart. Writing of the country east of Bruintjies Hoogte and of his trip into "Caffreland" in 1784, he says (page 72): "Four other Caffres joined us, one of whom understood a little Dutch, which he had learned at the Cape; he desired me to shoot at a gems-buck; I replied that we should probably meet with some more valuable game; but if the mampa wished to make a trial with my gun it was at his service. He accepted my offer with pleasure and shot, out of a herd of twenty, an old and a young buck . . ."

Damberger's reliability is strongly suspect. He was a deserter from a ship at Cape Town and he consistently contradicts statements by Le Vaillant and even states that Le Vaillant's chronicle was so absurd that he could not possibly have visited some of the places he describes, whereas it is now considered that the boot is on the other foot. Competent authorities now discard him.

In an attempt to assess the worth of Damberger his description of an event at the place where the gemsbok was met is interesting. Speaking of his Native host he says: "At length two of his friends, who dwelt in the same hut with him, brought an umripat . .." which he describes as " . . . a kind of antelope having a spotted skin like a tiger." Allowing for his permissable error in using the word "tiger" to describe the leopard, there is no known East Cape antelope having a skin spotted like a "tiger". Examining the hottentot language the nearest word to "umripat" is the word "A-Harip" for a steenbok

which bears no spots. The only antelope with spots is the bushbuck but its spots are in no way akin to those of the leopard.

Tracing Damberger's route is impossible. He uses the most unheard of terms for both people and places, his map is useless and his spelling of proper names is atrocious. He seems to be describing a journey from Bruintjies Hoogte, across the Great Fish River and thence up into the mountains above Bedford, where he met the "Caffres" who were neighbours of the Tamboekies, but all this could well be fabricated from the stories of other travellers.

He gives no description of the gemsbok he is supposed to have killed so, taken by and large, this record should be disregarded.

Speight (1956:34) discussing this author says: "Christian Frederich Damberger in his 500-page book, originally written in German and later translated into English and French, describes a supposed trip from the Cape to the Sahara. Yet it is doubtful whether he went more than a few miles beyond the boundaries of the Cape Peninsula. Speight then goes on to quote the opinion expressed in Mendelssohn's African Bibliography that the book was "... One of the cleverest volumes of fabricated travels ever produced" and "... a well-contrived literary deception. These travels were supposed to have lasted from 1781 to 1797 and the book when published, was accepted as genuine by many who ought to have known better".

It should be said that the district of Cradock was not much traversed in the early days. A few expeditions went to the Tarka and descended towards the Great Fish River in the vicinity of the present town of Cradock but they left few records.

It is not outside possibility that gemsbok occurred in the northern sector of the Cradock area at some time prior to the advent of the white-man.

RED HARTEBEEST: Alcelaphus busephalus caama: G. Cuvier.

Only the Rooi Hartebeest has been mentioned. Its occurrence was so widespread throughout the Cape Province that only passing reference need here be made to it. Indeed, Sparrman (1786:II:199) writing in the year 1776, says "The hartebeest . . . is the most common of all the larger gazels which are to be met with in Agter Bruintjies Hoogte, or indeed in the whole colony, and in all probability in any part of Africa". Yet this hartebeest is now precariously poised on the verge of extinction!

VAAL RIBBOK: Pelea capreolus: Forster.

Uitenhage: Mr. C. J. Gowar, in litt. 11.9.1956 reports that this species still occurs on the Zuurberg above Coerney but that numbers are now very low. Within recent years they have been known along the coastal belt almost down to the sea.

Cradock: Still occurs in the mountains.

MOUNTAIN REEDBUCK: Redunca f. fulvorufula: Afzelius.

Uitenhage: There are no specific records of its occurrence but that it did occur, and may still do so, is without doubt. It is found to-day on the Suurberg Mountains not far from the Addo National Park, though not as plentiful as formerly. In other districts, e.g. Bathurst, this antelope occurs nearer the coast than is generally supposed, where conditions permit. Lt. Col. Basil Gardner, in litt. 9.9.1956, has seen this species, and also the Vaal Ribbok, at Charlgrove, about six miles from the sea near the Kariega River mouth, and Mr. T. Guard Webb of Tharfield further to the east has had them on his farm until recently.

Shortridge's comment (1934:II:516) that the southerly range of the Moun-

tain Reedbuck and the Vaal Ribbok coincide very closely is sound.

Unfortunately, early writers so often referred to "reeboks" that their statements, in the absence of more detail, have had to be discarded. Lichtenstein consistently referred to the "Mountain Antelope" but he made it clear both in his descriptions and in his use of the scientific name, that he meant the springbok.

Cradock: Occurs in the Karoo to this day sometimes in quite encouraging numbers but is on the whole fairly scarce.

REEDBUCK: Redunca a. arundinum: Bodd.

Uitenhage: This antelope received very little attention in early literature probably because of its retiring nature. Barrow (1801:1:138) refers to it and describes it in the Swartkops River Valley. It was probably more at home in the grassveld area of the coastal strip but Sparrman (1786:11:221) mentions a "riet (or reed) ree-bok" which he once saw near Bruintjieshoogte. He mentions that it lives in the marshes which, if he is to be accepted, seems to identify the species for the Somerset East district as its most northern range in this part of the Cape.

Cradock: There are no references. The Bruintjies Hoogte record is the furthest north the reedbuck has been recorded.

MOUNTAIN ZEBRA: Equus z. zebra: Linnaeus.

Uitenhage: No firm record has been found. Bryden (1899:101) mentions the Winterhoek Mountains with which Uitenhage is immediately associated in the mind, but he adds: "Quite recently a troop was running on the slopes of the Cockscomb, the highest peak (7000 ft in height) of the Winterhoek." In view of their occurrence there it is pertinent to wonder whether they were not on the mountains to the east, i.e. on the Suurberg Range, which is an easterly extension of the Klein Winterhoek and through and over which the early travellers frequently passed, but no mention has been made of the

mountain zebra there. Barrow's reference (1:303) to zebra "... at the feet of the Zuurberg" refers to the range called Zuurberg which is near the present town of Steynsburg in the Cape Midlands.

Campbell (1815), on arrival at Sandflats, deviated from the main trekroute to the north and went up into the Suurberg mountains in search of a mission station, but he makes no mention of zebras, in fact he remarks that although he expected wild beasts he neither saw nor heard them. Then again, many of the travellers had to pass through the Suurberg range when they travelled from the Bushman's River to Bruintjies Hoogte via Commadagga on the regular trek-route. But they too are silent.

Thunberg (II:83) enters the picture in 1773/75 with a disturbing illustration. He records, after leaving van Staden's River which enters the sea some 25 miles west of Port Elizabeth. "The country in which we now were was called Krakkakamma and abounded with grass and woods as well as wild beasts of every kind . . . striped horses and asses (Zebra Quagga) . . ." Two days later his journal records for the same locality: ". . . In the plains there were striped horses and asses (Equus zebra and quagga) . . ."

The Kraggakamma area, still so called, is one of mixed grass and bush-veld. Adjoining it are some 7 or 8 miles of poor quality sourveld plains reaching to the Witteklip mountains which form the end of the Groot Winterhoek range at that point. Whereas both types of country would be suitable to quaggas they are totally unsuited to the zebra. Had Thunberg stated more specifically that he saw the zebras at the foot of the Witteklip mountain and had there been any other records to substantiate their occurrence in that particular part of the mountains his record might be accepted but as matters now stand it must be rejected. Even supposing that the zebras had come down off the mountain to the level ground, it is highly improbable that they would have gone so far from their normal habitat. It is against the nature of any animal to venture too far from its accustomed zone of safety.

Thunberg showed by his later references to the Mountain Zebra at Swellendam and Paarl on his return from the Eastern Cape that he knew the zebra, but his reference to its occurrence at Kraggakamma is indeed suspect. It is considered that although reliable in most things Thunberg had a tendency towards credulousness.

Nevertheless there seems no reason why this zebra did not inhabit the eastern escarpment of the Winterhoek range at some time in the past. Cradock: Comment is superfluous in view of the animals in the Mountain Zebra National Park and neighbouring farms in the district. Mountain Zebra were known on the ranges of the Sneeuberg and towards Steynsburg in the Tandjiesberge of Graaff-Reinet and no doubt in many others. Apart from the reference by Sclater (1900:1:286) to its occurrence at Cathcart no other reference so far to the east, on the grassveld, has been found.

Lundholm (1952:26) describes the fossil skull of an equine from van Wyk's Fontein near Norval's Pont in the Colesberg district and near the Orange River and names it as a new subspecies, greatheadi. He mentions that there are no mountain ranges near Norval's Pont and suggests ". . . that the Mountain Zebra once had a wider distribution and that it was not adapted only to mountain areas. It is possible that the Mountain Zebra was once, as were the other zebras, an animal of the plains, but that it was forced up in the mountains by competition from other zebra forms, i.e. the true quagga. It is also possible that the smaller size of E. z. zebra is a diminution caused rather recently as a result of the isolation into smaller populations."

This latter is pure speculation. It is difficult to see why competition should have been so acute. There were vast spaces into which the animals could have moved without fear of being crowded and in any event the mountains are not so inaccessible that quaggas could not have followed and lived there too.

BURCHELL'S ZEBRA: Equus burchelli: Gray.

There is no evidence of its occurrence south of the Orange River. However, because Barrow (1801:1:318) refers to several reports of unusual zebra-like animals in the Karoo his evidence must be examined. Be it said that he was ever keen to find a unicorn and it is not improbable that the inhabitants of the country regaled him with fanciful tales based on their own ignorance and on their lack of critical perception. Such a condition is not unknown even to-day. It is of course vaguely possible that a vagrant Burchell's Zebra had made its way across the Orange River in the way that hippopotami and buffaloes roam occasionally nowadays. (vide the hippopotami (a) Huberta (Chilvers 1931) which travelled from St. Lucia to Kingwilliamstown in 1929/31, and (b) Haroldina which appeared near Pretoria in 1956; and the young buffalo cow which was shot near Grahamstown in 1951 having come up from the vicinity of Addo (Grocott's Daily Mail, Grahamstown, 2/2/1951).

When discussing the existence of a unicorn, Barrow says: "Adrian van Yarsveld of Camdeboo in Graff Reynet, shot an animal a few years ago at the point of the Bambosberg, that was entirely unknown to any of the colonists. The description he gave me of it in writing, taken as he said, from a memorandum made at the time, was as follows:

'The figure came nearest to that of a quacha, but of a much larger size, being 5 feet high and 8 feet long; the ground colour yellowish with black stripes; of these were four curved ones on each side of the head, eleven of the same kind between neck and shoulder, and three broad waved lines running longitudinally from the shoulder to the thigh, mane short and erect; ears six inches long, and striped across, tail like a quacha; on the centre of the forehead was the excresence of a hard

boney substance, covered with hair, and resembling the rudiments of a horn, the length of this with the hair was ten inches."

A critical comparison of the above report with the specimens of Burchell's and Mountain Zebras in the Kaffrarian Museum, and with illustrations, gives rise to the following table:

Comparison between Barrow's Account and mounted zebras in Kaffrarian Museum

ex Barrow:	Mountain Zebra:	Burchell's Zebra:
5' high	3' 9" at withers	4' at withers
8' long	5' 9" (tail to nose)	6' 6" (same)
4 curved stripes on face	4 curved stripes on face	no true curves
11 stripes (neck to shoulder)	10 stripes (same area)	7 stripes (same area)
3 broad waved lines longitudinally from shoulder to thigh	8 of same but not very waved	4 of same but not very waved
Mane short and erect	Same	Same
Ears 6" long	7"	7"
Ears striped across	Same	Not truly striped
Tail like quagga	Same	Same

It is obvious that no deduction of real worth can be drawn from the above vague descriptions but the evidence leans towards the animal being a Mountain Zebra. The fact that it was shot "... at the point of the Bambosberg" lends confirmation to this. In order to pursue the standard of accuracy of this account the remarks on "... the excresence of a hard boney substance, covered with hair and resembling the rudiments of a horn; the length of this was ten inches", were submitted to the Director of Veterinary Services, Onderstepoort, for comment as to whether any growths in equines conform to this description, allowing of course for the very improbable length of 10 inches. His reply in litt. 1.10.1956, lists a series of possibilities but is naturally not a diagnosis, and his remark: "I have no doubt, however, that an excresence in question represents some type of pathological growth" goes to show that the original author may well have been a man of some observation, if not of exceptional descriptive powers.

Barrow continues: "About the same time, Tjardt van der Walt, of Olifant's River in Zwellendam, in company with his brother saw, near the same place,

an animal exactly of the shape of a horse and somewhat larger than the quacha, that had longitudinal black stripes on a light ground; it was grazing among a herd of elands. The two brothers . . . neglected the striped animal, intending afterwards to give it chase; but its speed was so wonderfully swift, that, bounding towards the mountains, he was presently out of sight." Here again the evidence favours the Mountain Zebra. The fact that it was grazing among elands means nothing, because elands are as at home in mountains as they are on plains.

And Barrow's final reference which follows, put the whole matter into its true perspective and suggests that the Mountain Zebra was in fact the animal in question. Light can, indeed, play queer tricks in the veld.

"Marthinus Prinsloo of Bruyntjies Hoogte, when on a hunting excursion, saw behind the same mountain several wild horses, entirely different from either the quacha or zebra, but they were so shy they never could approach them sufficiently near to make minute distinctions; they appeared to be of light cinereous color without stripes. This, however, might be a deception of sight arising from distance, as dark stripes upon a light ground cannot be distinguished very far; they form a shade between the two colors and the lighter tint is predominant; as the primitive colors disposed in concentric circles on a card, and put in motion, will appear white. The black and buff zebra, even when very near it, and especially if in motion, appears of a dull bluish ash color, like the common ass. It is, therefore, probable that the animals described by the three different persons, were of the same species. Vaillant also, who may generally be depended upon when he speaks of animals, mentions having chased beyond the Namaquaas, day after day in vain, an Isabella coloured zebra. This also, in all probability, was the same kind as the others."

BUFFALO: Syncerus c. caffer: Sparrman.

Uitenhage: Still occurs in the Addo Bush but formerly ranged throughout the district.

Cradock: No records have been found for the Karoo midlands. The last buffaloes seen by travellers to the north were usually in the vicinity of the Baviaans River, and near Cookhouse and Bruintjieshoogte in the Somerset East district. Sparrman shot one at Cookhouse in 1775. Barrow, after travelling through the Karoo, returned from Graaff-Reinet via what is now Jansenville and made no reference to buffalo until he had passed through a poort in the Klein Winterhoek Mountains where he met buffaloes at Wolwefontein in the north-west corner of the Uitenhage district. He comments here on the excellence of the bush wherein the animals were found.

It is not clear why buffalo did not make their way up the Fish River into Cradock. If elephants could exist there, buffalo could surely have done so,

and it is reasonable to suppose that they occurred there at some time prior to the white man.

Mr. J. U. Sargent, (in litt.) has pointed out that there are several place names in the Cape Midlands which are preceded by the word Buffels- or Buffalo- even in the Cradock district. Indeed, the farm of the celebrated South African authoress, Olive Schreiner, was named "Buffelshoek" but it does not follow that buffalo had been there during the time of the original occupation of these farms.

KUDU: Strepsiceros s. strepsiceros: Pallas.

Uitenhage: Well-known in the district to-day but not to any extent in the lower areas of the Addo Bush. However it occurred there in the past because Sparrman (1786:II:309) saw one between the Sundays and Coega Rivers in 1775 and Le Vaillant (1790:II:294) killed several on the Sunday's River near Addo in 1780. In view of the fact that this animal has been on the increase in the Cape during the past few years the fact that it has not returned to its lower haunts is not without interest.

Cradock: No records. Sparrman (1786:11) records seeing one in 1776 at Agter Bruintjies Hoogte and they occur there to-day, in fact well up into the Graaff-Reinet district, but are not mentioned further east. Parts of the district would be suitable for kudu.

STEENBOK: Raphicerus campestris: Thunberg.

Uitenhage: Still occurs. Backhouse (1839:164), when between the Couga and Sundays Rivers, writes: "Here and there a species of antelope called a steenbok darted from among the bushes at our approach". He distinguished this from the grysbok which he later describes correctly on page 171, for Addo drift.

Cradock: Still occurs.

GRYSBOK: Raphicerus melanotis: Thunberg.

Uitenhage: Backhouse (1839:171); At Addo drift: "A few grysboks of the antelope family and twice the size of a hare darted from among the bushes at our approach". He called it *Tragulus melanotis* and gives a good description of it, mentioning the white hairs in the dark fur.

Cradock: Does not occur. Country unsuitable.

ORIBI: Ourebia o. orebi: Zimmerman.

Uitenhage: Occurred in past times but most probably extinct now, although it is possible that a few may exist in the Uitenhage mountains because the

Kaffrarian Museum received a reliable report in 1953 that three were seen in mountainous country, called Causenkei, in the Humansdorp district to the west of Uitenhage. At the same time a few were still known to exist in Alexandria district to the south-east. Barrow (1801:1:138) writing of the country near Swartkops says: "Another species of antelope was here very plentiful, known by the Hottentot name of orabie . . ."

Cradock: Did not occur.

WARTHOG: Phacochoerus ae. aethiopicus: Pallas.

Uitenhage: Must have occurred but records are confusing because of lack of adequate descriptions. Hewitt (1931:52) considers that Sparrman's record (1775) at the Sunday's River drift and at Visch River were more probably this species than bushpig.

Cradock: Occurred but records are very scanty. Further north, behind the Compassberg, Lichtenstein (1812:II:40) writes: ". . . we saw not far from us a wild boar, sus aethiopicus, who appeared . . to come in quest of water."

BUSH PIG: Potamochoerus porcus koiropotamus: Desmoul.

Uitenhage: Well known in Addo Bush and often commented upon in past journals.

Cradock: Does not occur to-day and the country would seem to be unsuitable for them. But Dr. J. Hewitt, Director of the Albany Museum Grahamstown, considers that they were once in the district. N.B. References to wild pigs in some journals are too vague for identification and have to be discarded. It is astonishing that there are so few references, specially of warthog, whose facial features and amusing tail erection might be thought to have been worthy of comment.

SPRINGBOK: Antidorcas m. marsupialis: Zimmerman.

Uitenhage: Occurred on the Quaggasvlakte between Sandflats and the Bushman River in large numbers. The area Quaggasvlakte, was renowned both as an overnight outspan (part is used as an outspan to this day) and for the vast herds of springbok, hartebeest and quagga which were found there. No records to the south at this point have been found but on the sourveld of Albany and Bathurst to the east springbok were found around Salem and Round Hill respectively.

Cradock: Of regular and common occurrence in the Karoo midlands.

ELEPHANT: Loxodonta a. africana: Blumenbach.

Uitenhage: Comment is superfluous in view of the herd in the Addo Park

Cradock: Mention of elephants in these parts is rare. Shortridge (1934:1:362) quotes Barrow as recording elephants "... northwards to Graaff-Reinet" and mentions that molars and other remains are in the Albany Museum collection from Doornhoek (between Cradock and Molteno), Conway, Tarkastad, etc. Mr. H. James of Cradock reports (per Mr. G. E. D. Briscoe in litt.) the finding of an elephant tusk along the Fish River at Halesowen.

THE CARNIVORA:

It is natural in a developing country that the more destructive beasts of prey should be destroyed. Of the 24 species of the Carnivora which have occurred in the Cradock district within recent times and of the 26 in the Uitenhage district, five are to-day extinct in those regions, viz.: the brown and spotted hyaenas, the cheetah, the lion and the wild dog.

Of the smaller carnivores, i.e. the Viverrids and the Mustelids, attention

need only be directed to the check-list.

BROWN HYAENA: Hyaena brunnea: Thunberg. SPOTTED HYAENA: Crocuta crocuta: Erxleben.

Uitenhage: Both species occurred. There are frequent references to the troublesomeness of these animals at outspans near the Addo bush. Lichtenstein (1812:1:390) mentions the shooting of a spotted hyaena whilst it was

eating a sheep carcase hanging on one of his waggons.

Cradock: Both species occurred. N.B. Although hyaenas have been exterminated from the Cape Province, south of the Orange River, there are occasional visitations to the Karoo districts by odd vagrants which have probably wandered down from the Kalahari. Recent records of Brown Hyaenas are from Willowmore and Colesberg in 1956, and from Queenstown in 1947.

MAANHAARJAKKALS: Proteles cristatus: Sparrman.

Uitenhage:

Cradock:

Still occurs at both places.

GREY CAT: Felis libyca: Desmarest.

BLACK FOOTED CAT: Felis nigripes: Burchell.

Uitenhage:

Cradock:

Still occurs at both places.

SERVAL: Leptailurus s. serval: Schreber.

Uitenhage: May still occur in the Addo Bush but appears to have dis-

appeared from the rest of the Eastern Cape. Bryden (1889) refers to one at Bluecliff, north of Uitenhage.

Cradock: No records. Of doubtful occurrence.

CHEETAH: Acinonyx jubatus jubatus: Schreber.

Uitenhage: Occurred in this district.

Cradock: This animal had a wide range. The following reference seems to establish its identity beyond doubt.

Barrow (1801:1:266) writing of the country in the vicinity of the Sea Cow River in the northern Cape describes what can only be a cheetah. "The colour is cinereous, with small black spots; the neck and temples covered with long crisp hair like that of a mane of a lion; tail two feet, flat vertical, spotted half-way from the root, and the other half annulated; a thick black line from the interior angle of the eye extends to the opening of the mouth."

LEOPARD: Panthera pardus pardus: Linnaeus.

Uitenhage:

Cradock: Occurred at both places.

N.B. In the annual vermin schedules published in the Cape Provincial Gazette, no rewards are shown for leopards for the years 1950/55 but one reward was paid in Uitenhage in 1950 (P.A.N. 157/1951).

Press reports have recorded killings of leopards in the districts contiguous to Uitenhage, viz.: Somerset East in 1948, Willowmore in 1954 and Jansenville in 1955.

LION: Leo leo: Linnaeus.

Uitenhage:

Cradock: Occurred commonly at both places. There are many references for both the coastal and inland regions. The last lion south of the Orange River was probably shot between 1865/70.

HUNTING DOG: Lycaon pictus: Temm.

Uitenhage: Occurred, but there are surprisingly few records when the nature of this animal is considered. It may be that the loose term "wolf", which is often used, was meant to apply to this animal at times, but because "wolf" was also used for the hyaena, the true intention of the writer is sometimes obscure.

Cradock: No record has been found and its occurrence in the past is assumed although its normal habitat is in the bush country. Barrow (1:266) writes "... and the cadaverous crocuta, the wild dog has lately been domesti-

cated in the Sneeuberg where it is now considered as one of the best hunters after game and as faithfully diligent as any of the common sort of domestic dogs." His mention of the name crocuta introduces confusion because this is both the generic and specific name for the Spotted Hyaena which occurred in the area. Reference to the literature reveals no suggestion that the name crocuta was ever used for the hunting dog, so the record is unreliable. Stevenson-Hamilton (1947:224) writing of the African Hunting Dog says: "Although the limbs are long and powerful, and the forehead massive, nevertheless the animal falls away behind, a circumstance which taken in conjunction with its habit of carrying the head and tail depressed when moving at its ease, gives it rather a hyaena-like appearance, and is responsible for the term "hyaena-dog" formerly applied to it . . ."

On page 236 Stevenson-Hamilton says: "Hunting dogs, when caught young, become quite tame and friendly with their masters, but never quite lose their wild instincts and when grown up are not very reliable in temper." Of the Spotted Hyaena, the same author, page 217, says: "if caught young, Crocuta crocuta becomes very tame. I kept one at Sabi Bridge which knew its name perfectly well and displayed considerable docility and affection." These two statements rather cancel out Barrow's statement, which must remain undetermined but with the evidence in favour of the wild dog.

Le Vaillant (1790:1:335) when camped at the foot of the Sneeuberg Mountains, on their southern flank, mentions finding a colony of Hottentots who "... had to defend themselves also against ferocious animals, particularly wild dogs which occasioned great ravage amongst the flocks." He does not enlarge further and the animals might well have been jackals or hyaenas.

Mr. J. U. Sargent, who has made a study of the place names and their connections with the distribution of the fauna (1954) has pointed out (in litt.) that the place-names "Wildehondenek" and "Wildehondekop" are to be found north of Cradock. This leaves the door open to the occurrence of the Hunting Dog in the Cradock district.

BLACK BACKED JACKAL: Thos mesomelas:

SILVER FOX: Vulpes chama:

BAKOORJAKKALS: Otocyon megalotis:

Uitenhage:

Cradock:

All still occur in both districts.

SUNDRY

GIRAFFE: Giraffa camelopardalis: Linn.

No records from either locality. Reference is here made to the giraffe

because queries are often cropping up as to its occurrence, based usually on its portraits in cave-dwellings, but no substance has yet been found for its existence in this area.

Barrow (1801:1:307) mentions the painting of a giraffe in a cave near Bamboesberg in the Tarka area and says: "The representation of this animal proved the assertion to be true that the people who made these drawings were from dwellings on the northern side of the Orange River because of the southern side, the camelopardalis has never been met with. It is an animal entirely unknown to the inhabitants of Graaff-Reinet."

Another source which gives rise to conjecture is the representation of a giraffe on the Coat-of-Arms of the City of Grahamstown. The Town Clerk of Grahamstown, in litt. states that the origin of the giraffe on the Coat-of-Arms is not known, but that it was incorporated into the original Arms about 100 years ago together with a tiger. The crest was re-designed in 1950 to accord with heraldic standards whereupon the tiger was replaced by a leopard but the giraffe was retained. It is presumed that the original crest was drawn in England where the nuances of zoological distribution were of no importance to the artist concerned.

OSTRICHES: Struthio camelus.

Because doubt has sometimes been expressed as to the occurrence of the ostrich in the Uitenhage district it can be said that this bird is frequently mentioned in the Swartkops River Valley near Port Elizabeth, at Quaggas-vlakte near Sandflats, from the top of the Suurberg to Somerset East and thence throughout the Karoo.

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