

Thomas Baines'

Contributions to the Zoology of Southern Africa

ANN DATTA



Plate 3.1
Hunting the wild elephant, W.C. Harris,
The Wild Sports of Southern Africa, London, 1839.

Almost everyone who has written about Thomas Baines has identified him as a man of many parts – artist, explorer, travel writer, naturalist – and there is no doubt he was a remarkable person who drove himself to accomplish so much.¹ This essay looks at the contributions he made to zoology (excluding ornithology) during his African explorations and examines some of his drawings and paintings of African wildlife.

Baines was a man of letters. He kept detailed diaries of his African explorations and incorporated many autobiographical insights into his published works from which we can glean much about his great interest in all branches of the natural world. We know Baines started drawing animals at the age of five, a sign that was to prophesy a future in which animals would continue to play an important part. The travelling menagerie of George Wombwell had stopped at Baines' home town of King's Lynn on the Norfolk coast of England at about that time.² Although country fairs with their motley assortment of dancing bears and ragged monkeys were occasional visitors to the town, they were nothing to compare with the variety of exotic beasts in Wombwell's horse-drawn caravans and, clearly,

they made a profound impression on the little boy.³ Added to this were the tales of dangerous wild animals of Africa recounted by Thomas's uncle, a seafarer who had visited southern Africa, and which were to be the subjects of his later sketchbooks.⁴

Despite this talent for drawing, there was no attempt to harness it by sending Thomas to art classes and his future studies of animals were entirely his own unaided efforts.⁵ Whether Baines saw any children's natural history books⁶ or gained inspiration from popular illustrated natural history works, for example Thomas Bewick's *Quadrupeds*, is not known. As a young man, his favourite book was *The Wild Sports of Southern Africa* by William Cornwallis Harris, published in London in 1839. This book contains lively, hand-coloured plates of game animals lithographed after Harris's original drawings (Plate 3.1).⁷

On his first visit to the Cape in 1842 Baines passed the time on the three-month sea voyage making sketches of interesting events like the landing of a shark and painting a gull and an albatross.⁸ But when he arrived in Cape Town it was not the quintessential African animals that caught his eye. Instead, his first impressions of the Cape were of the wide horizons and vast skies reminiscent of his birthplace in King's Lynn.⁹ Strangely different, however, was the intensely bright light of the South African day and the vibrant colours which Baines would valiantly try to capture in some of his more atmospheric paintings.¹⁰ For the first few days Baines stayed on the ship watching the traffic in Table Bay.¹¹ He saw seabirds skimming over the waves, a solitary penguin, a porpoise, and unusual fish – sharks, a swordfish – which landed on the shore.¹²

When Baines did set foot on the quay, he could not have failed to notice the teams of Cape trek oxen slowly pulling heavily laden carts of goods through the town. The oxwagon was the universal mode of travel in South Africa for those with stores or baggage; in England the draught animals would have been horses.¹³ Before long Baines would have become aware of the

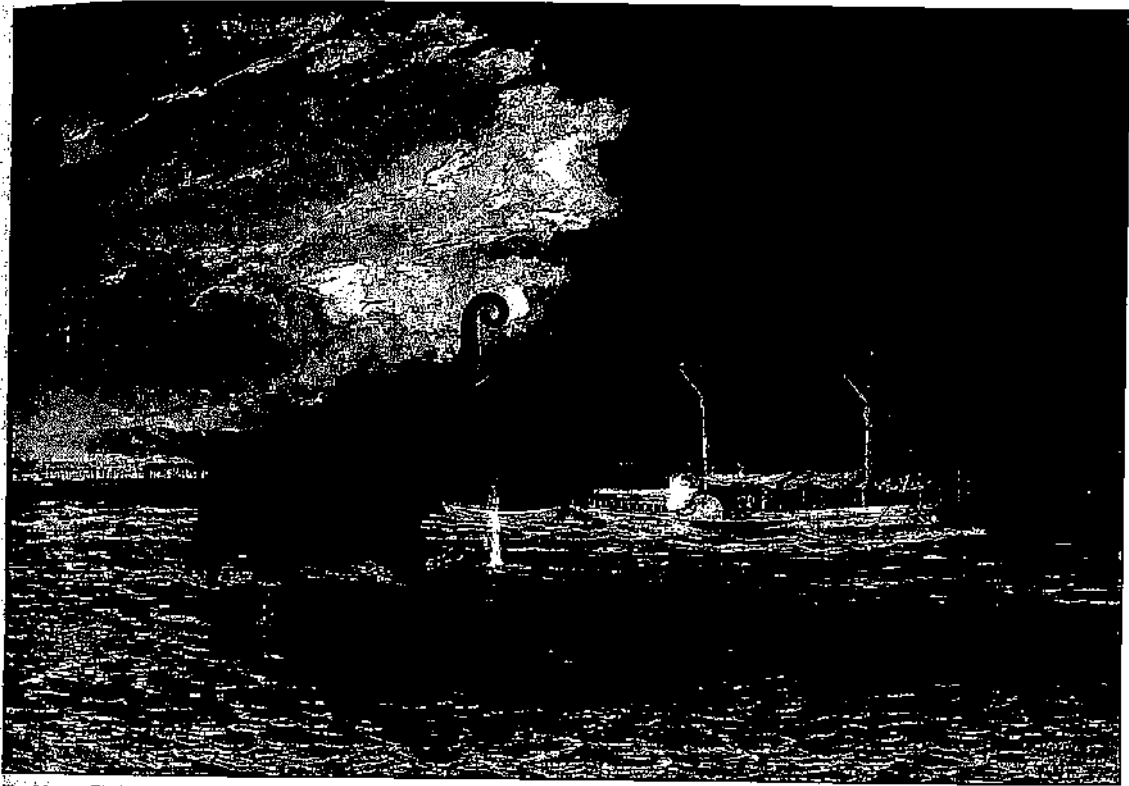


Plate 3.2 *The 'Ma Robert', and Elephant in the Shallows, Shire River, Lower Zambesi. T. Baines/Teite/April 6 1859. Inscribed verso: Elephant in the Shallows of the Shire River.../ T. Baines/Teite April 6 1859 (12), oil, RGS 29*

proximity of the big game animals which made Africa the sportsman's heaven – elephants, rhinoceros, giraffe, zebra, antelopes, Cape buffalo, lion. Not that he would have seen the animals themselves; rather the hunters' trophies, the preserved skins and heads, horns and ivory tusks, and the ostrich feathers brought to markets at the Cape for sale and export.¹⁴ Inside the Museum for Natural History of the South African Literary and Scientific Institution which, a decade before, had proudly displayed the magnificent collection of stuffed animals brought from the interior in 1836 by Andrew Smith, a much reduced collection was still on public display.¹⁵ The Cape also had a public library with a rich collection of scientific works on any subject.¹⁶ The botanical garden was home to many resident birds, but the famous Cape menagerie of African animals which the Dutch had maintained there at great expense had closed in 1832.¹⁷ However, the seedsman C.M. Villett carried out a business in bird skins, insects and other curiosities from his premises in Long Street, and maintained a menagerie with lions, ostriches and other animals at Green Point.¹⁸

The absence of any paintings of animals from localities close to the Cape in Baines' work is evidence that the game had long

been exterminated from the area by European hunters. The same can be said for the area around Grahamstown, from where he set off in 1848 with W.F. Liddle on his first African journey to the Orange River, and in 1850 with Joseph McCabe.¹⁹ It was not until 1862, when Baines accompanied James Chapman, the ivory trader, to the Victoria Falls, that he saw his first elephant, white rhinoceros and giraffe in the wild.²⁰ Only then did Baines comprehend the massive sizes of some African animals – many of which lived in huge herds – and some, as he was to discover, extremely dangerous. He described his first encounter at close quarters with the African elephant: 'Of course I have seen elephants, but it has always been at my home, and not in theirs, and neither picture nor well-groomed black-skinned showspecimen from India I had ever seen had quite prepared me to stand, for the first time, without a sensation of awe and wonder beside the mighty African, fallen in all his native grandeur in his domain.'²¹

Africa offered Baines travel, a livelihood as a painter and eventually the opportunity for some big-game hunting and to make natural history collections. Although his earliest childhood artistic efforts were of animals, there is no evidence

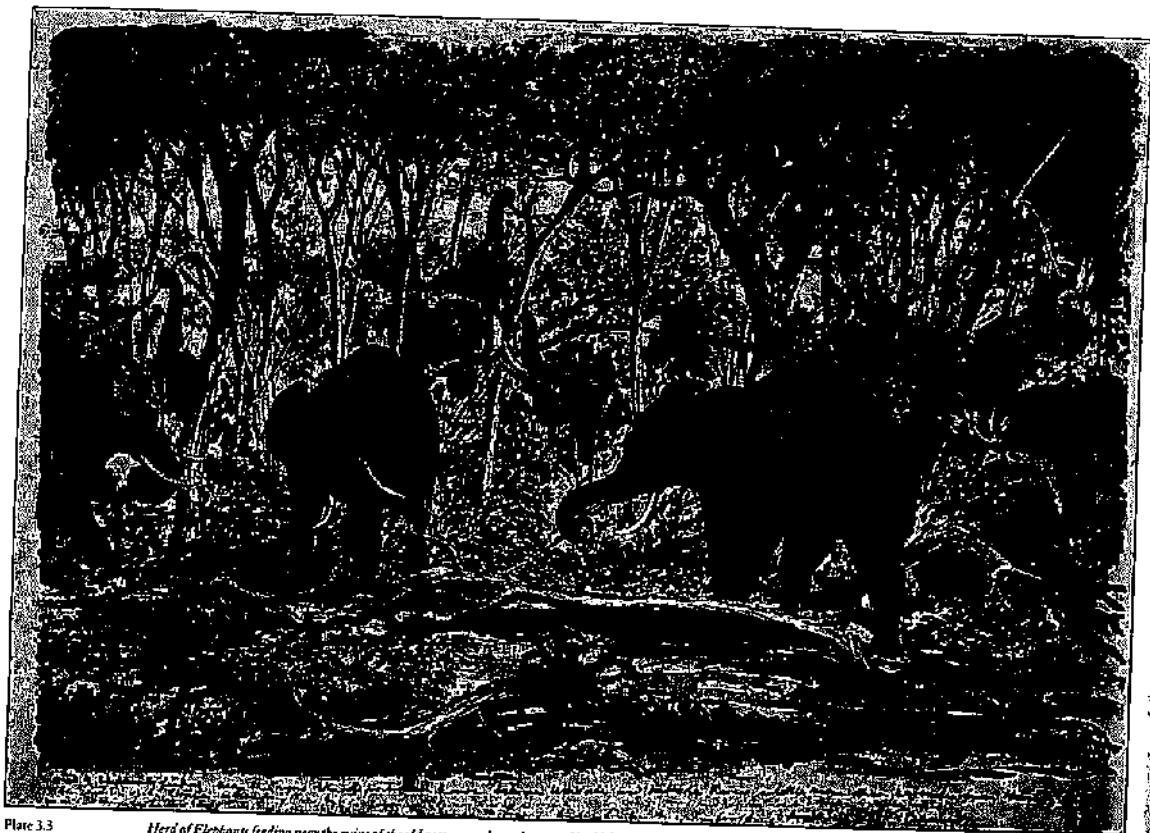


Plate 3.3 *Herd of Elephants feeding near the ruins of the old portuguese house between Um Yuh and Imbeela Rivers a little more than 20 miles from Hartley Hill / The action of the Elephant breaking trees by the leverage of his tusks is affirmed by Mr G. Wood and Gifford but denied by Mr Harley / in all other respects the sketch is made from the evidence afforded by the broken trees and footprints [August - crossed out] Sept 7. 1870 T. Baines II, wt in pencil, NHM 102*

that he was drawn to Africa to paint its wildlife. Yet, once he arrived, he began to paint whatever he saw that was novel and interesting, and many paintings of animals resulted.

When drawing animals from life the first thing an artist learns is that they move about and will not stay still in the same position long. This means that the artist must fix the scene in his memory and at the same time quickly get onto paper an accurate outline sketch.²² In view of these difficulties, it was no wonder that most professional zoological artists drew from preserved animal skins but only after they had spent many years observing the animals in life in the wild and in zoos. Close examination of museum specimens gave the artist the opportunity to emphasise the features specific to the species and pay close attention to the spatial relations of the external anatomy, the gradation of colour tones and intricate patterns while skilfully insinuating the underlying musculature and skeleton.²³ Artists like G.H. Ford, who accompanied Andrew Smith on his Cape of Good Hope Association for Exploring Central Africa Expedition from 1834

to 1836, made drawings 'from specimens either living or recently dead'. Ford had the benefit of Smith's zoological knowledge, but also the responsibility to produce the paintings commissioned by him. The result of the partnership can be seen in the exquisite hand-coloured lithographs in Smith's *Illustrations of the Zoology of South Africa*, published in London between 1838 and 1847 (Plate 3.6).²⁴

As Baines did not have any artistic training and was catapulted into painting animals without the benefit of scientific guidance, his zoological artwork is a mixture of styles. All of it, however, is characterised by an attempt to give an honest portrayal of whatever he saw. And this is exactly what David Livingstone needed when he engaged Baines to explore the Zambezi with him in 1858: 'As artist of the expedition you are required to make faithful representations of the general features of the country... You will also endeavour to make drawings of wild animals and birds copying as closely as you can the natural attitudes.'²⁵



Plate 3.4 Young male Quagga / Supposed new variety / Natives wondering / when they'll get / leave to cut it up / Saturday July 19. / 1862 / Nyati River / South of the / Victoria falls / Zambesi / supposed / new variety / between / E. Burchelli / and E. mannanus / in the / either or / profile / sketch of / this animal / the head / and ears / appear / smaller / in proportion / to the body / here they are / the narrowest / portions / to the eye / and / consequently / look larger / by perspective - / T Baines !!, wt & pencil, NHM Rothschild bequest 4



Plate 3.5 The Klip springer / Ruined Walls of former Mashona villages desolated by the Masabili on the Sarua River a Tributary of the Um Vuli - / This River is also called the Salagoxaan - because they killed an old woman post child bearing - / Aug 27 - 1869 / T Baines !!, wt, NHM 17

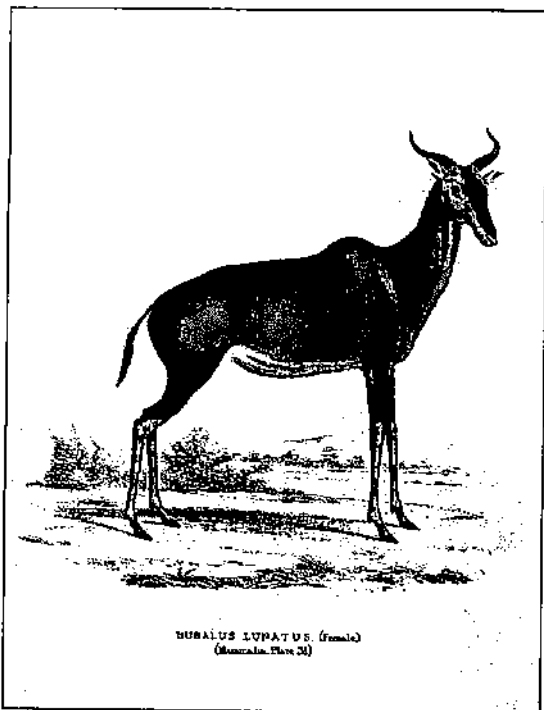


Plate 3.6 Antelope (Sassarbec), A. Smith, *Illustrations of the Zoology of South Africa*. London, 1838-47

Throughout Baines' *oeuvre* we can recognise a man who is unflinchingly attracted to dramatic situations. An example is his painting of a herd of elephants tearing down some trees as they forage for food near Hartley Hill in 1870 (Plate 3.3). Ten elephants are shown in the painting, yet Baines has given the impression of a greater number. Some of the paintings with the most drama and atmosphere are not always entirely zoologically correct. On Livingstone's expedition, Baines made an oil painting of an elephant standing on the banks of the Zambezi River being fired on by members of the expedition from the deck of the *Ma Robert* (Plate 3.2). The ears of the elephant appear to have an unnatural, fluted appearance.²⁶ In defence of Baines, however, he was not present at the time and he based his painting on another person's description. But the colours, drama and atmosphere taken together make this a very powerful picture and outweigh any zoological inaccuracies. There are other, equally dramatic, paintings in watercolour of risky situations when Baines was present. A lion's fatal attack on one of the trek oxen at Kumaala River in around 1870 must have been over very quickly. Baines could not possibly have painted this dangerous encounter at the time, but it is highly probable he sat down soon afterwards and rapidly sketched out his impressions (for a similar sketch see Plate 3.7).²⁷

One of the greatest difficulties artists faced, before the development of high-speed photography, was how to draw animals in motion.²⁸ Baines recorded the problem he encountered when sketching an elephant: 'I have been trying to obtain the action of the elephant and I find it will only look natural when the left legs are more advanced than the right. I think the right legs are only brought up level with the left, or at least are never advanced beyond the left ones, as the left are beyond them.'²⁹ It was not until 1887, when Eadweard Muybridge published his pictorial treatise on animal life in motion,³⁰ that the artist could study the synchronisation of the limbs. Without this advantage, Baines nevertheless succeeded in producing some stunning artwork, as evidenced by his evocative painting of a charging white-tailed gnu (black wildebeest) in 1869 (Plate 3.8). All the salient characteristics of the species are present – the raised shoulder hump, the mane, the white tail and the horns with the ends flipped up – even if they are slightly exaggerated, as in a cartoon character.

Sometimes Baines' work was less successful. In his attempt to paint a steenbok shot at Bembesi River in 1870, he tried to reconstruct the dead animal to show how he thought it would have looked in life (Plate 3.9). Unfortunately, the position of the left hind leg is weak and the leg would not have supported the rest of the body. In fact, Baines' own notes on the paper describe his frustration with it: 'I do not quite like this sketch but the specimen has stiffened awkwardly.'

The colourful paintings that are full of atmosphere can be contrasted with Baines' meticulously detailed drawings of recently killed animals. In such cases the artist had the time to make an accurate drawing. The black rhinoceros killed on 12 October 1869 was drawn twice in two different positions, with great accuracy each time (Plates 3.19, 3.21). Further examples of Baines' closely observed artwork may be seen in his intricate drawings of zoological curiosities, as in his study and measurements of a deformed elephant tusk (Plate 3.10),³¹ in the painstaking delineation and measurements of the head of the Nile crocodile (Plate 3.11), and in the foetus of the white rhinoceros (Plate 3.12). Time for the artist was not unlimited, however, even when he was sketching a dead animal, because the heat of the day accelerated decomposition of the body.³² Moreover, the ever-present need to feed the exploring party left little time to spare. A typical situation arose after Baines had killed a bustard with a wingspan of 72 inches in April 1848: 'To sketch it was impossible for scarcely had I obtained these measurements when the Hottentots who had impatiently watched my proceedings fell upon their knees around the bird and burying their eager paws [*sic*] in its speckled plumage tore out the feathers by handfuls.'³³

Food, especially protein, was often in short supply and when a large mammal was shot there was cause for celebration all round. Traditionally, the Africans hunted small game in large



Plate 3.7 The End of poor old Plarberg / Jan Lieve to the rescue / (Kumuala?) river / Jewells Camp //, 1869 //, wc & pencil, NHM 87

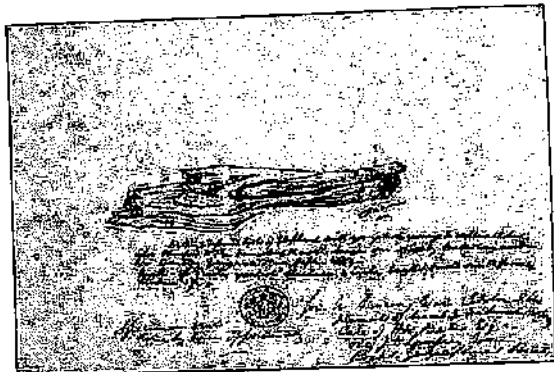


Plate 3.10 Broken & deformed tusk of Elephants with young tusk growing to replace it but I also sketched to the same length as the larger one - Shot by Mr Molony and / Wm Hartley Ganyana River Septr - 1869 - / length - 3 ft 6 inches greatest thickness 4 inches length of small one 10 1/4 inches / thickness 1 1/2 - / T Baines / Specimen sent / home by some opportunity / for - A Murray Esq - Editor of the / Journal of Travel & Natural History / Care of H W Bates Esqr / or of / H Lamprey Esq / Royal Geographical Society //, pencil, NHM 106

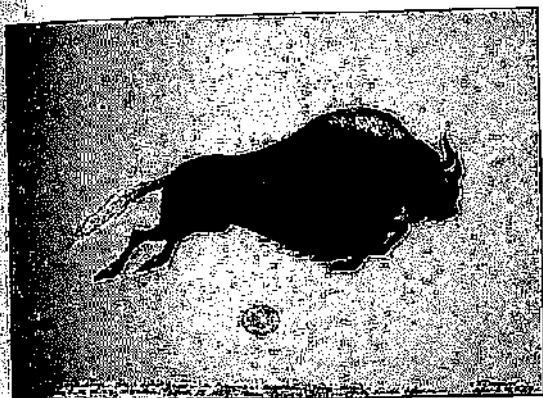


Plate 3.8 The Zwart Wildebeest - Black bodied Gnoo - or Puroomo - Catoblepas Gnoo / Baines - / Full grown bull shot by W Watson April 13 1869 - near Lerue Kap Free State South Africa - / T Baines / April 14 1869 //, wc & pencil, NHM 146

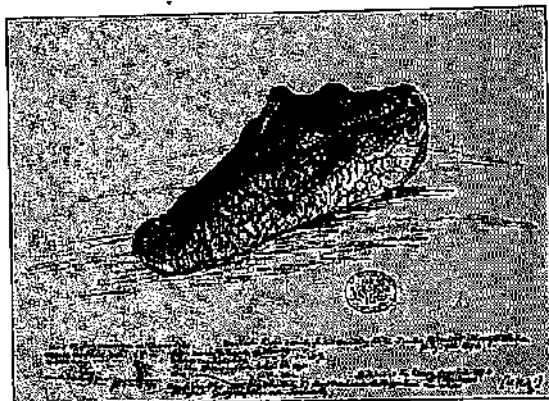


Plate 3.11 Head of Inguayima or crocodile. / Um Vohi River 1 mile from Hartley Hill Simba Riverlet Shot by W Watson / July 29th 1870 / Nose to nostril 0 ft 2 1/2 in / nostril to eye - 7 [in] / eye 1 1/4 [in] / ear 4 1/2 [in] / ear to back of jaw 5 [in] / (Total) ft 1 - 8 1/2 [in] / from nose to back of skull along central line 1 [ft] - 5 1/2 [in] / the line springing from behind the eye / thus ~ is the ear / Sketched at the house Aug 2 - 1870 / T Baines / Compare this with my sketch of Australian Alligator in the / Royal Geographical Society / [sup. 47] / B //, pencil & wc, NHM 150



Plate 3.9 Setai bok doe shot by J Mackenzie at Bembai River Octr 17 1870 / Matabilli Linyela or - Inceena / (Mouso) Pwoforo - / T Baines / It is not quite like this sketch but the specimen had stiffened awkwardly / Nose to front of eye - 2 1/2 / eye - 1 1/4 / base of ear - 1 / back of skull 1 / wither 1-8 / base of tail 1-9 / tail - 2 / height at withers - 1-9 1/2 / height at rump 1-10 / length of ear 5/8 / length of opening 4/4 / breadth of ear 2 1/2 //, wc & pencil, NHM 143

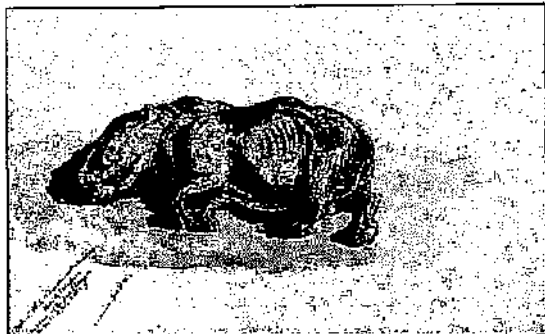


Plate 3.12 Focus of white Rhinoceros (natural size) killed by Chapman / at his schemas as the pool of Kangyon / on the night of June 1 1862. T. Baines June 3rd, wc, RGS X229/021996

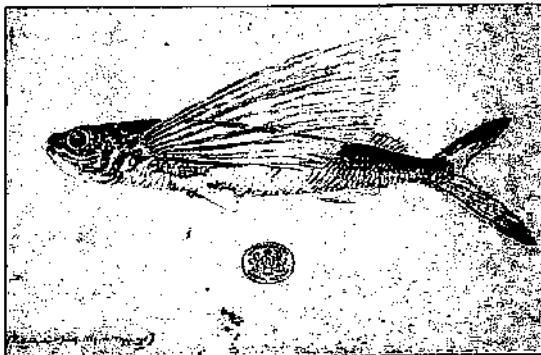


Plate 3.13 [Flying fish] [Probably about Jan 7, 1869, on voyage out],
wc & pencil, NHM152



Plate 3.15 [Ink inscription]. Measuring a shark Monday 22 Apr 1861,
wc, RGSX229/021919

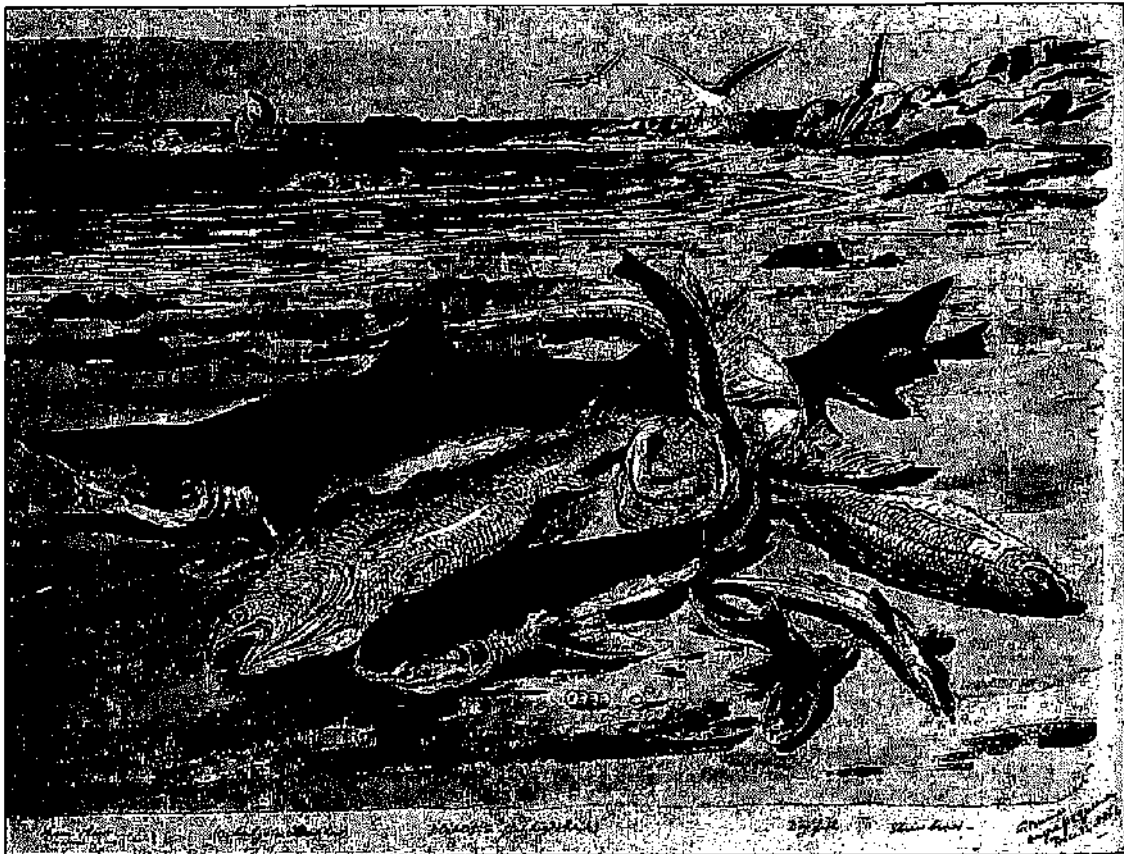


Plate 3.14 Spear Shark or common blue shark? Dog Fish and Stein Brass (rabeljo or couvalbon), plashop or flat head shark, Dog fish, Angra Pequena 12 Dec 1864,
wc, RG5X229/021055

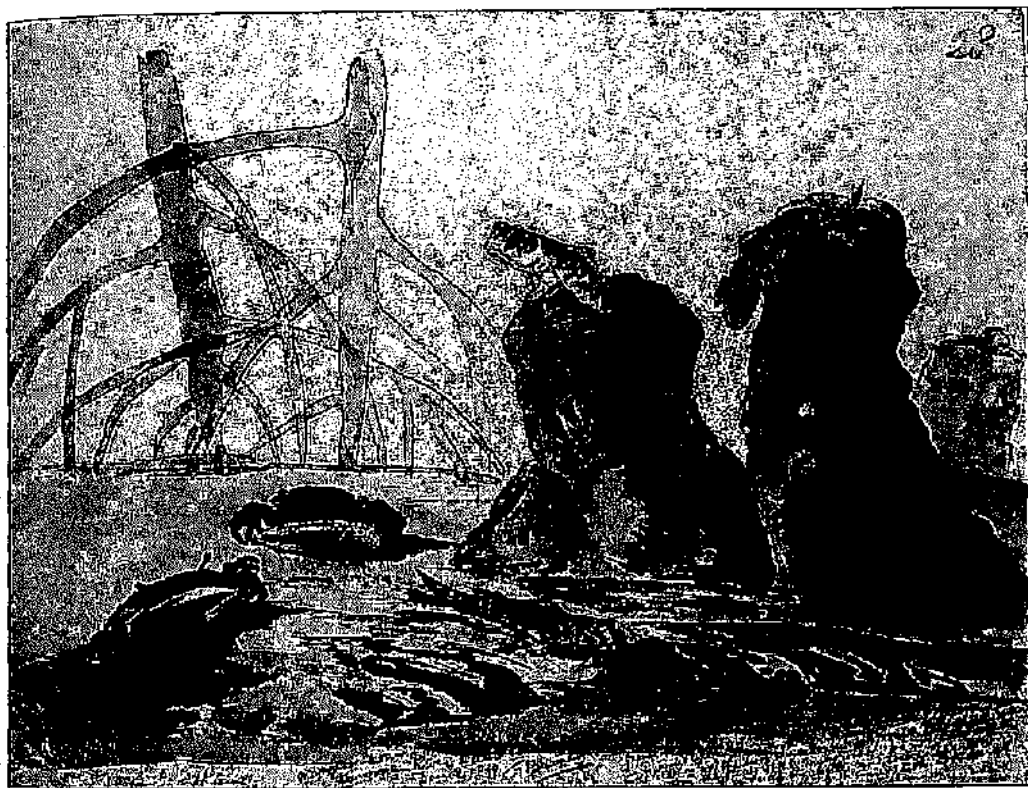


Plate 3.16 Mangrove swamp mouth of the Kongone River Zambesi Delta / Decr 2 1859 / T. Baines / Mangrove fish and crabs natural size. These fish are very active their pectoral / fin is jointed like an arm or a lizard's fore leg and by help of / his and / the elasticity of the body they make leaps of 2 or 3 feet on the mud / or on the stems of the Mangroves I do not know whether / they build the little mud towers but to dig / for the first time I noticed several / in them / Decr 2 1859 / vide - Tennant's Ceylon / + Angus. Australia - //, we & pencil, NHM 153
Baines has made a reasonably successful drawing of the crab, *Uca urvillei*, bringing out the subtleties of the colours. Mudskippers are unusual fish because they can come out of the water for several hours to escape from predators, for courtship or for territorial displays. By using their pectoral fins like legs the fishes "walk" over the rocks and mangrove roots.

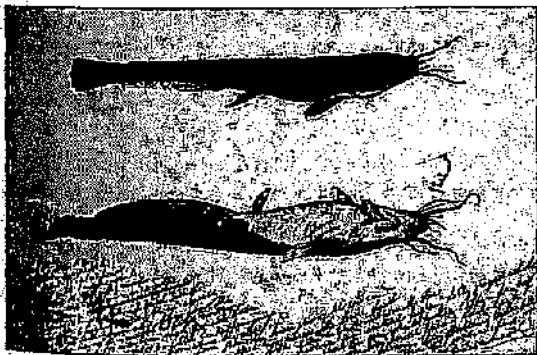


Plate 3.17 October 7 1858 / Barbel - caught in the Driflat Vhal River by a Dutch lad / length 2 feet 11 inches breadth across the gill 6 inches - skull flattened on the top and 9 inches in / length snout 4 inches wide and mouth nearly the same / projecting barb at each side of the mouth / 6 inches in length and equally attached to the lower and upper jaw the opening of the mouth to / feet dividing it / for nearly an inch from its base / two smaller barbs springing from above the nose / and from the lower jaw gills wide and / stretching across the lower part of the head not visible on / the side / pectoral and ventral fins and belly greyish white / anal fin somewhat darker - upper part of / the body dorsal fin and tail dark / brown - body flattened laterally from the ventral fins / tail vertical, / we over pencil, RGS X229/021833

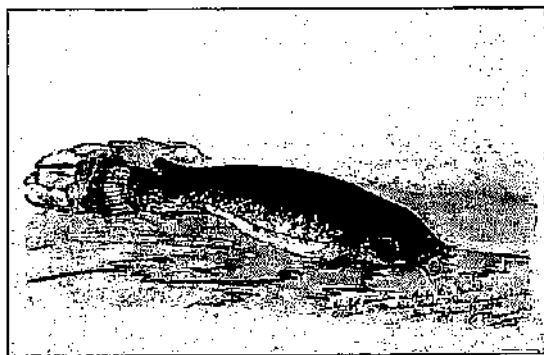


Plate 3.18 Electric fish from Zambesi Delta / by T. Baines, 13 June 1858, / we over pencil, RGSX343/022641

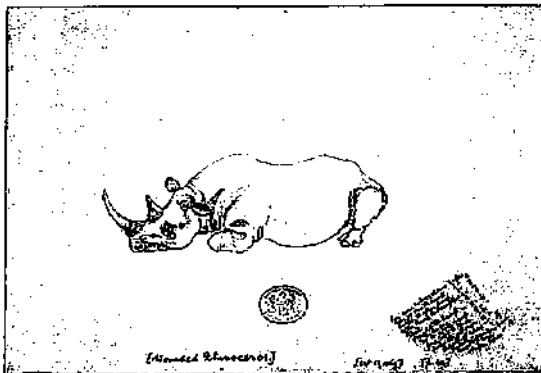


Plate 3.19 [Wounded Rhinoceros.] / [Oct 12, 1869] / [p. 60.] / from nose to base of ears 2 - / feet / base of ears to hump 2.6 / hump - to after hump 3.9 / after hump to base of tail 2 - / Tail 2.6 / height to hump - 1 as he lay / 3.4 / Do [in height] to after hump 3 - / fore foot to knee 1 - / knee to elbow 2 - / length of ears - 9 [in] / width of ears - 6 [in] / length of anterior / horn 2 - [ft] / [length] of after horn - 9 [in] / [ft], pencil, NHM 108



Plate 3.21 Black Rhinoceros (*Changani*) killed by John Faustin and myself / South of the Impembetsi River Oct 12 - 1869 / stripping the hide for Zamboko - / T Baines!! / pencil, NHM 109



Plate 3.20 Hare - north of Invinghazi River Wednesday Sept 21 - 1870 / (Matabili) *Imvoonilla* - [Measurements] / length of head - 0 - 4 [in] / length of neck - 2 1/2 [in] / length to rump - 1 [ft] / length of tail - 4 1/2 [in] / [total length] 1 [ft] - 11 [in] / [length of fore foot to shoulder - 10 [in] / length of hind foot to rump 1 [ft] - 1 [in] / length of Ear - 3 [in] / pencil & wc, NHM 97



Plate 3.22 The Honey Bee Nest in an ant hill Seba que River Thursday Oct 6 1870 / T Baines!! / pencil, NHM 53

Baines has incorrectly identified these insects as honey bees. They are probably "stingless bees" of the genus *Trigona*. There are many species of *Trigona* in Africa and several nest in termite mounds as shown here (it is not an ants nest as stated by Baines). *Trigona* are very small bees which may explain why none are shown on the drawing. The people would have greatly disturbed the nest by their activity and many hundreds of bees would be flying and biting (not stinging) the intruders. Such nests were exploited by the Africans who would eat the honey comb as a valuable and pleasant source of energy. To the right of the drawing people can be seen eating the comb.

groups of men armed with nets, spears and native dogs.³⁴ They supplemented their diet with various insects, including locusts, termites, grasshoppers and caterpillars, and snails and lizards.³⁵

A pencil drawing in the Natural History Museum (NHM) Collection shows some Africans hacking into a termite mound (Baines incorrectly identified it as an ant's nest) in search of honeycombs (Plate 3.22). He has also called this a honey bee's nest, but it is more likely to have been the nest of one of the stingless bees of the genus *Trigona*.³⁶ *Trigona* are very small bees, which may explain why none can be seen in the drawing. The Africans would have greatly disturbed the nest by their activity and many hundreds of bees would be flying and biting (not stinging) the intruders. Such nests were exploited by the

Africans, who would eat the honeycomb (as shown to the right of the drawing) as a valuable and pleasant-tasting source of energy.

Baines' paintings of mortally injured animals with fractured legs and bleeding gunshot wounds are all part of his honest record of what he saw and complement the daily recording in his journals. They represent not only what fascinated him, but also what he thought was important and would be interesting to other people. Shot animals gave Baines a chance to draw them still, in front of him, to study and to measure them. The measurements he made (as in NHM Collection 108, 138, 143) demonstrate his good powers of observation and indicate the size of the animal when no human or other recognisable yardstick is in the picture. Sometimes measurements are also

useful for identification purposes, when several species are very similar or when there is no specimen and the illustration is not drawn to scale. There are two drawings of hares in the NHM Collection (96 and 97) (Plate 3.20), one of which has accompanying manuscript measurements. In this instance, however, the measurements do not fit the depicted animals and it is therefore not possible to make an absolute identification. Sometimes Baines gave the comparative measurements for the male and female of a species (Plate 3.26). Measurements were also important for taxidermists to enable them to stuff and mount animals in lifelike positions. The shrinkage and distortion of skins were common problems faced by collectors, so accurate measurements were important to compensate for poor preservation. Towards the end of the nineteenth century Rowland Ward, the famous London taxidermist, published *Records of Big Game*, in which he gave the standard measurements for horns, antlers and other features of the big game species by which trophy hunters could compare their kills.³⁷ H.S. Gladstone did the same for small game in *Record Bags and Shooting Records*.³⁸ However, for Baines, measurements were more likely to have been all part of his desire to keep an accurate record.

The animal subjects in Baines' paintings are predominantly examples of the larger game animals. In the collections of The Natural History Museum, out of the total of 159 artworks, there are 27 mammal species, four kinds of birds (including a bird's nest and ostrich eggs), one reptile, two kinds of fish, two types of crab and a termite mound and a bees' nest. A somewhat larger number of animals is mentioned in his books – 'lorie',³⁹ 'lemur' (galago),⁴⁰ insects,⁴¹ chameleon,⁴² baboon,⁴³ – but illustrations of them are comparatively rare. We may conclude from this that Baines painted what caught his imagination and what he felt comfortable with, and made no attempt to make a more representative sample of the African fauna.

The beauty of Baines' work at its best lies in his skill for illustrating the essential distinguishing characteristics of the species and placing it in its natural surroundings at a time when most artists would not do this. Not only that, Baines had an advantage over other artists in that he travelled and was able to observe animals in their biological habitats. In this way he has created a vibrant record of what it felt like to be there at the time. In Baines' work this is more important than whether or not the painting is zoologically correct. Among those who liked his work was Guy Dawnay, who commissioned a number of paintings of animals,⁴⁴ and C.J. Andersson of Otjimbingue. Andersson paid Baines, whom he met returning from the Victoria Falls with Chapman, to illustrate bird specimens for his book on the birds of Damaraland. Because of the cost, the illustrations were not published when the book was issued posthumously (see Chapter 4).⁴⁵ The Livingstone brothers, David and Charles, published some of Baines' more evocative

paintings in *Narrative of an Expedition to the Zambesi* in 1865 but again, owing to the high cost of producing colour plates, they were reproduced in monochrome whereby much of the character of the African scene was lost. Only a minority of Baines' animal drawings were published and most of those in his own two books, *Explorations in South-West Africa* and *The Gold Regions of South Eastern Africa*.⁴⁶ The intensity of Baines' pictures is heightened by a real encounter with Africa enhanced by vibrant colour. The best paintings are intense and haunting images – somehow we know that Baines has observed them.⁴⁷

On several occasions Baines recorded his preference for sketching animals to killing them.⁴⁸ In May 1861 he recorded in his diary: 'I confess I can never quite get over the feeling that the wonderful products of nature are objects to be admired, rather than destroyed; and this, I am afraid, sometimes keeps me looking at a buck when I ought to be minding my hind sights.'⁴⁹ Although Baines was not attracted to Africa primarily to hunt animals, as were many Europeans in the nineteenth century – Cornwallis Harris for sport, James Chapman and Henry Hartley for trade in ivory and other animal products, and William Burchell and Andrew Smith to form natural history collections – it is clear from reading his diaries that he too enjoyed the thrill of the chase on numerous occasions.⁵⁰ In 1848 he wrote: 'I crossed the course of a single hartebeest, and, firing as he passed, saw him spring convulsively in the air as he received the ball and stand within a few hundred yards of me till I had nearly reloaded, when he started again with a speed my horse was unable to rival, and I returned...with the consolation of having hit something.'⁵¹ When eight elephants were killed during an elephant hunt near the Um Nyati River in October 1870 Baines, who did not participate because he did not have permission to hunt elephant, 'begged the tail [of one elephant] as a memento of the chase.'⁵² Baines' descriptive narrative of the hunt, the injuries inflicted and the animals' suffering complement his paintings of wounded animals. Together they form part of his scientific curiosity and quest to learn about nature.

In the nineteenth century animals still had a sporting chance of escaping from hunters with their lives. The precision and ease of handling of modern weapons cannot be compared to the heavy, cumbersome and slow-firing rifles and shotguns of the previous century. Baines was often short of money and under-equipped. On 29 June 1871 he wrote: 'The hunters went out... and killed several Roodeboks... I did not go, having neither horse nor gun fit for present service.'⁵³ On many occasions he was reduced to borrowing a gun, such as on 8 June 1871 when he wrote: 'Mr Van Zeller lent me one of his guns and I walked forward with him. I believe we wounded some blesboks.'⁵⁴ Time and again Baines makes reference to problems with his gun, repairing it, making cartridges for it⁵⁵ and the dangers of accidents. When one of the party fired at a 'red-breasted



Plate 3.23

Impictie on aard Wolf shot by W Watson with trap gun / evening of May 11th between the Inyati Mission and Ermampangene / T Baines / May 11 1870 //, we k pencil, NHM 92

butcher-bird' (Crimson-breasted Shrike (see Plate 4.3)) the gun exploded and injured Baines.⁶⁶ James Chapman, when teaching the Africans how to fire a gun, would tell them 'that they should not start backwards at the flash in the pan, nor pull [the] trigger until their hearts had done palpitating; also not to hold the butt at a distance from the shoulder, and so give it room to kick'.⁶⁷ Hunting was generally done from horseback and Baines had not learnt to ride before his arrival in Africa.⁶⁸ Shooting the prey took a great deal of skill, particularly with the muzzle-loading guns that were used until the middle of the nineteenth century. Incredible as it may seem, sportsmen could re-load these weapons with powder and shot while galloping, keeping one eye on the gun and the other on the quarry and the land ahead.⁶⁹ Baines recounts some of his lucky escapes when his horse was so terrified by a charging elephant that it froze on the spot.⁶⁸

Nevertheless the diminution of the herds of game animals in the nineteenth century is testimony to the power of the gun

over the Africans' traditional hunting methods, which had preserved the delicate balance of nature for centuries. The Europeans, and the Africans who soon acquired guns from them, hunted relentlessly, pushing the game animals further into the interior. Baines was able to comment on the great changes at first hand when he travelled in William Cornwallis Harris's footsteps to the Vaal River in 1850. Although he came only some fifteen years after Harris, Baines wrote: '...we were standing by the Vaal River, the classic ground of the late adventurous traveller, Captain Harris. Where now, alas, are the unbounded herds portrayed by his equally spirited pen and pencil? All, or nearly all, are now destroyed by the unsparing Boers; the stately eland no longer browses beneath the shady thorn, nor the tall giraffe crops its topmost foliage; the mighty rhinoceros is slain; the giant elephant destroyed.'⁶⁸ There was no effective legislation for the preservation of game animals in southern Africa until the twentieth century, although the foundation for such laws was laid in the Cape Colony by Lord Charles Somerset in the Game Law Proclamation of 1822. This

introduced a closed season and the need to take out a hunting licence. The Orange Free State and the South African Republic (Transvaal) introduced game legislation in 1858.⁶² In 1870 Chief Lobengula of the Matabele (Ndebele) attempted to put some limits on elephant hunting by the sale of hunting permits, and on several occasions Baines lamented that he could not join the hunters as he did not have the necessary permission.⁶³

Like the Africans, the Europeans also used a variety of animal traps to supplement what they could kill by shooting. The use of a gun trap baited with meat was an efficient way to destroy predators like hyaenas (Plate 3.23).⁶⁴ The Europeans also dug rifle pits called *scherms* close to the waterholes to which the game animals came to drink at night (Plate 3.24). They piled branches and earth over the hole for disguise, leaving both ends uncovered for the men to hide in.⁶⁵ The dead game provided a variety of items: food of course, horns and tusks for sale, and products made from the hides, such as sacks from quagga necks, whips, harnesses, reins and thongs.⁶⁶

Many explorers and travellers made natural history collections and a few, for example Burchell and Smith, travelled to South Africa specifically for that purpose. Some collected for pleasure, but others made a living from selling natural history specimens in Europe. A combination of favourable circumstances accounted for the great collecting mania of the nineteenth century: mechanisation of transport, increased exploration, the rise of museums, the growth of the middle classes, the fashion for having all kinds of stuffed animals in homes, participation in outdoor pursuits, and the emergence of local natural history societies. To satisfy demand, dealers and taxidermists set up businesses to handle the great mass of specimens pouring into English ports from abroad. A number of handbooks on collecting and preserving were published, including William Swainson's *The Naturalist's Guide for Collecting and Preserving Subjects of Natural History and Botany*. The Royal Geographical Society and the Admiralty issued semi-official guides: *Hints to Travellers Scientific and General* and *A Manual of Scientific Enquiry prepared for the use of Officers in Her Majesty's Navy, and Travellers in General*, respectively. Both these guides were written by experts, so anxious were the authorities to fill the country's national museums.

As opportunities presented themselves, Baines also made collections of zoological specimens. Judging by his diary entries he appears to have attempted to form a non-specialised zoological collection. In 1849, 'a middling-sized puff-adder brought in... I skinned the reptile',⁶⁷ and 'a green lorie [*sic*] with white crest was killed and packed up to be sent to Grahamstown'.⁶⁸ The Hottentots collected birds for Baines.⁶⁹ In 1861 he caught a small snake and put it in a bottle of spirits with some beetles.⁷⁰ He removed some parasites from a shark and put them in spirit;⁷¹ he skinned a flamingo;⁷² caught bugs

living on *Welwitschia mirabilis* to preserve them;⁷³ killed a zebra, skinned it and cleaned the skin and head.⁷⁴ But in December 1861, when Baines opened his box he found his skins⁷⁵ in a lamentable state. A small hairy grub and a black-and-white beetle, in spite of arsenical soap and pepper, were revelling in the destruction of meerkat, steenbok and several other skins. In May 1861 Baines and a Mr Hutchinson went out and caught among the mimosas brilliant-winged beetles and butterflies. Mr Layard believed one of the beetles to be new and he proposed calling it *Hutchinsonia* – it is emerald green with white stripes.⁷⁶

Some zoological materials are easy to take. Hard specimens like shells, bones and coral require no special care. For the rest, at the simplest level preservation in the field can be either by drying specimens or immersing them in a container of preservative fluid. Specimens preserved in liquid are known as spirit specimens. Essential equipment would consist, at the minimum, of storage jars and preservative fluid, knives and dissecting instruments like scissors and scalpels, arsenical soap, and sheets of paper for folding into envelopes to protect delicate specimens like butterflies. Guns, traps and insect nets were required for collecting, and Baines had access to a telescope on occasion for locating animals.⁷⁷ Often, however, he was poorly equipped and on occasion regretted that his materials for preserving skins were so meagre. Instead he had to be content with notes and sketches.⁷⁸ For practical purposes on land expeditions only small animals such as worms or small mammals and birds and aquatic species like fish could be preserved whole in a liquid preservative. For the rest – the majority, whether lizards, snakes, birds or mammals – the usual procedure adopted was to preserve just the skin by carefully removing it from the flesh without tearing or losing any part of it. The skins could easily be ruined by insect pests and, as a precaution, they were subjected to a painstaking cleaning process to remove all traces of flesh before being dried and



SOUTH AFRICAN "SCHERM" OR BLYL PIT.

Plate 3.24 W.B. Lott & T. Baines, *Shifts and Expedients of Camp Life...* London 1876, p.561



Plate 3.25

Sasua - Bastard Hartebeest - or Kuloosani (Matabili) - shot by Charlie (a Natal boy, one of our drivers) at Nyoma or Knife River / the western most Branch of the Gwato - our South Western boundary - Lat 19 - 27 - 46 - May 23. 1870 - / T. Baines - //, wt. & pencil, NHM 147

covered with preservatives. On many occasions Baines records his frustration when, despite all his precautions, insects spoil his collections. 'As the sun came out strong, we spread everything to dry, and found maggots of considerable size revelling in our bird-skins, arsenical soap and camphor, apparently, being rather a delicacy to these intruders. It seems utterly impossible in this weather to dry a large bird, however carefully it may be cleaned, before insects attack it; and with so many of us, with only one wagon to carry everything, it is impossible to keep anything in safety that is not packed up in the smallest possible compass.'⁷⁹

Only intact animals were worth keeping and specimens were carelessly spoilt on several occasions. In January 1862 Baines found a young elephant which he hoped to keep alive. When this became too difficult he killed it and removed the skin with great care. On going to find it again, to finish cleaning and drying it, he discovered that the trunk had been cut off and all his effort wasted. However, the teeth and budding tusks were saved for Richard Owen's study of elephantine dentition.⁸⁰ Specimens suitable for museum collections not only had to be perfect, but the collector had to record the name of the animal,

its sex and age, the place and date of collection, and the name of the person who killed it if not himself. Without a provenance, a zoological specimen is of less value to a scientific collection. Although there were a few practical manuals on collecting and



Plate 3.26 *Bleibok* - male & female / Shot by W Watson April 24th 1869 - plain north of Vaal River [Dimensions (of male & female follow)] wt. & pencil, NHM 145

preserving, Baines is more likely to have learnt the techniques from his travelling companions. Later, he put his extensive African experiences to good use when he wrote the natural history chapters in *Shifis and Expedients of Camp Life*, which he co-authored with W.B. Lord.

The zoological specimens collected by Baines show that he used both dry and wet methods of preservation. In The Natural History Museum, London, the only surviving South African specimen is the preserved skin of a bushbuck calf *Trogelaphus scriptus*, received in 1851 (Plate 3.30).⁴¹ It is recorded that Baines sent another skin, of a 'quagga' killed by James Chapman in 1862, to the British Museum believing it to be a new species. J.E Gray, Keeper of Zoology at the British Museum, described the condition of the skin on its arrival: 'The skin sent me by Mr. Baines arrived in bad condition, with scarcely any hair on it. It was that of a very young animal, and I could not see any difference, as far as I could judge in its very bad state, from that of a young Common Zebra.'⁴² The skin is not registered and, presumably because of its poor condition, was discarded.

Three South African specimens were registered in the collections of the Royal College of Surgeons where the conservator was Professor Richard Owen, with whom Baines had some correspondence.⁴³ Two of the specimens were skulls, a baboon's acquired in 1863 and an elephant's acquired in 1865, and the third was a foetal white rhinoceros acquired in 1865.⁴⁴ Once the flesh had been cleaned off the skulls, they would not have required any further attention before being sent to England. The foetus, however, must have been kept as a spirit specimen immersed in a liquid preservative. Unfortunately the Royal College of Surgeons specimens were destroyed in the Second World War.⁴⁵

The references to natural history collecting in Baines' diaries and books give no indication of the numbers of specimens he collected and deposited in museums or private collections. Chronologically, an increase in collecting can be discerned as he grew older. There was probably little scope for Baines to trade specimens in South Africa. The South African Scientific and Literary Institution at the Cape was already in decline at the time of Baines' first visit and it closed in 1858.⁴⁶ The South African Museum opened in 1855 but there is no evidence that Baines had any dealings with it.⁴⁷ As far as Africa was concerned, most zoological discoveries or collections made on the continent still had to be sent to Europe to zoologists who had both the knowledge and resources to publish on them in the specialised scientific periodicals.⁴⁸ In this respect Baines can be compared with another African explorer who made huge collections; W.J. Burchell travelled in South Africa between 1811 and 1815, and returned to England with 63,000 specimens, not all of which were zoological.⁴⁹

As so few of Baines' specimens can be traced today, and in the absence of any concrete evidence, it is appropriate to speculate on what happened to those specimens described in his books and diaries. Except when he led the Northern Goldfields expedition, Baines was not in a position to take and store much material on the long overland journeys back to the towns; that was the prerogative of the expedition leaders like Chapman and Livingstone. Livingstone and his assistant John Kirk both made collections on the Zambezi expedition and donated them to the British Museum. Kirk gave thirty mammals and 115 birds.⁵⁰ With the exception of the help provided by his mother, Baines had not assigned any natural history dealer or agent to handle the sale of his collections. Moreover, being under-equipped, he was unable to preserve his specimens adequately and they perished before reaching their intended destinations. With all these potential problems, it is easy to see how much could go wrong between killing an animal and delivering it intact to a museum thousands of miles away. For Baines, therefore, his sketches were at least as important as specimens. In 1849 he wrote: 'At Philiptown... I made up my sketches into a parcel with the lot [*sic*] and other curiosities... to be sent to Grahamstown.'⁵¹

On the basis of the available evidence, Baines' zoological collections may not have numbered more than a few hundred specimens.⁵² This surmise is based on the few specimens that can now be traced, and those of which we have evidence in the form of museum registers, scientific papers and other information, although the specimens themselves can no longer be found. For instance, we know that Mrs Baines organised an exhibition of her son's paintings and a 'collection of Natural History, Birds, Beasts, Insects and Vegetables' at King's Lynn in 1850.⁵³ In 1854 Baines supervised an African exhibit arranged at King's Lynn with the help of W.J. Burchell, and he presented a collection of natural history specimens to the town in January 1855. The inventory - preserved in the Lynn Museum - of specimens of plants, animals and ethnographical material runs to four sides and includes a pouch of leopard skin for bullets, horns and part of the skull of a steenbok, coral-encrusted seaweed from Algoa Bay, sponge also from Algoa Bay, pipe fish, horns of a springbok ewe, two 'ear shells', a piece of hippopotamus hide, a black cobra and a puffadder. There was also a case of African birds set up and another case of African birds not set up, and many other zoological items. This would obviously have been a wonderful collection for a provincial museum.⁵⁴ Three specimens have survived in the Lynn Museum - a tortoise shell from south of the Limpopo River collected in 1871 (plate 3.28) and two hippopotamus tusks from Tolo Island in the mouth of the Luisi Zambesi River collected in 1862. In January 1862 Baines killed a young elephant with the intention of sending half the skull, with teeth and tusk, to the Lynn Museum and the other half to Professor Owen.⁵⁵ It should also be borne in mind that a statement that there are no more specimens anywhere else must



Plate 3.27

My house Logies Hill with Wankie's village and corn fields across the Zambezi – a joyful occasion specially to the Dominica Jany 1863 day any day about the 24th. T. Baines sketched Jany 27 1863, w.c. MuseumAfrica

be treated with caution, in view of the absence of correspondence in scientific institutions in England and the reluctance of both his contemporary and modern curators to acknowledge Baines as a zoological collector.⁵⁶

There is no correspondence from Baines in The Natural History Museum, London.⁵⁷ Botanical enquiries were answered by Sir Joseph Hooker at Kew, so Baines probably had no reason to contact the Museum's botanists. There are a number of possible reasons for there being no record of correspondence with the Department of Zoology relating to the two Baines' specimens (one South African mammal and one Australian mammal). The specimens could have been taken to the Museum in person so there was no correspondence involved, or the Zoology Department was perhaps not interested in Baines' material as it already had specimens (it had already acquired some African mammals from Burchell in 1817⁵⁸ and had purchased African animals – 295 birds and 141 mammals, as well as fishes, reptiles and amphibians – from Andrew Smith⁵⁹). Alternatively, the curators whom Baines met may have been unhelpful.⁶⁰ Or it was simply that Baines collected very few animals because of all the practical

difficulties, although he does make reference to sending a new antelope shot by Chapman to the British Museum.⁶¹

Baines made hundreds of references to animals – such as chamaeleon,⁶² 'lemur' (galago),⁶³ snake⁶⁴ and frog⁶⁵ – in his books and diaries, and they form an integral part of his observations when combined with those on the landscapes, people, geological features and plants. When Baines is read chronologically it is possible to detect a continuous increase in the number and complexity of the zoological observations, from the sparse statements in *Journal of Residence* to the effusive descriptive writing that embellished *Exploration in South-West Africa* and, more particularly, *Northern Goldfields Diaries*. In the latter, his measurements and descriptions of a single incident involving the killing of an animal may extend over several pages. One can only assume that at the time that he wrote *Journal of Residence* Baines was just getting used to his new way of life and had to give his full attention to the commitments imposed by his employers. Once these obligations had been lifted, he was able to devote more time to filling his books with natural history observations. In Baines' earliest diaries references to animals are often restricted to the

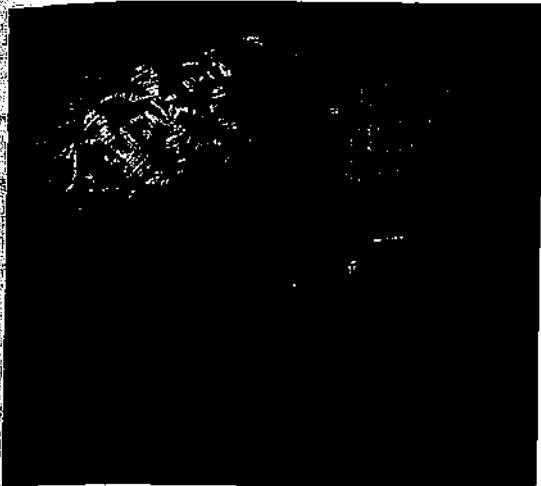


Plate 3.28 Tortoise shell collected near the Schimmel Paard pan, south of the Limpopo River in 1871, King's Lynn Museums

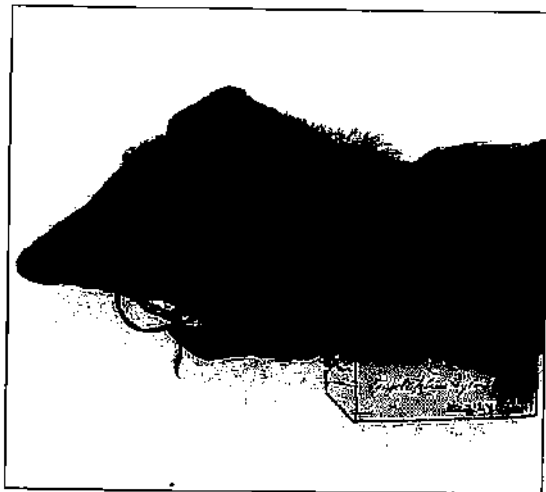


Plate 3.30 Bushbuck specimen *Tragelaphus scriptus*, collected by Baines [detail], Natural History Museum, London



Plate 3.29 *Dessin* of Rhinoceros Skulls / Lagier Hill / 27 Dec 1862 Zambesi / pencil, RGSX229/022029



Plate 3.31 *Skull of a Hippopotamus slightly larger than in the other sketch shot by Chapman, Zambesi River/Oct 1862 and sketched by myself 22 Jan 1863/ because we cannot bring away specimen. Lagier Hill. [measurements follow], wc, RGS X229/022031*

bare name and a few words about how it was obtained. By the time he was undertaking the Goldfields expeditions, Baines was writing about anatomy and behaviour. When he killed a porcupine he made careful notes about the structure of the quills and how they functioned.¹⁰⁶ On an earlier occasion he noted that the chameleon brought to him did not change colour as did the king chameleon at the Cape.¹⁰⁷ Elsewhere he inspected an elephant's skull with Chapman and commented on the cellular arrangement of the bones, which gives strength to the skull without increasing the weight that strains the muscles.¹⁰⁸ The Goldfields expeditions gave Baines more opportunity to study elephants and in this respect he felt confident in discussing how elephants help the young ones with their tusks.¹⁰⁹ Obviously, such are the topics engaging Baines and his companions. There are numerous delightful

sketches in his last diaries, quickly jotted down as a reminder or to emphasise the point he was making.

Baines' journals and diaries must be regarded as having been written to satisfy the curiosity of a Victorian reader eager to share vicariously the adventures of an explorer in far away and uncivilised places. In them are woven together a blend of travel arrangements, accidents, dangers, people and natural history. The books of Baines have a place beside those of many other nineteenth-century travellers, including C.J. Andersson, Charles Darwin, David Livingstone and H.W. Bates. Being travel-orientated, the books were too general to be important in scientific communities; nor can it be said that the one book of Baines' published in his lifetime made any impact in zoological circles.

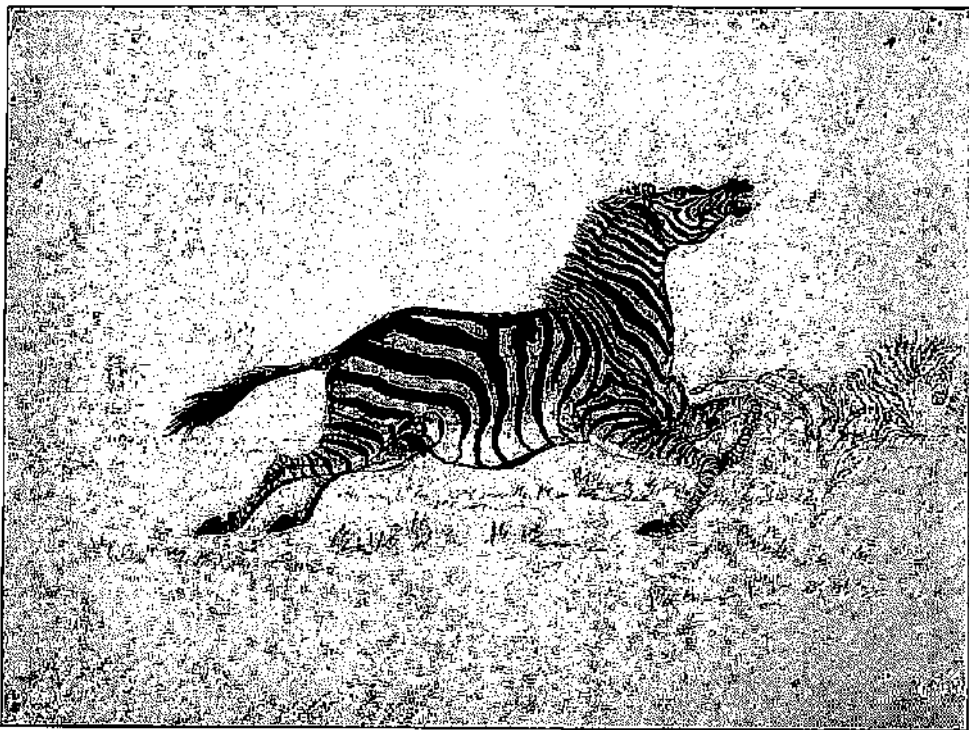


Plate 3.32

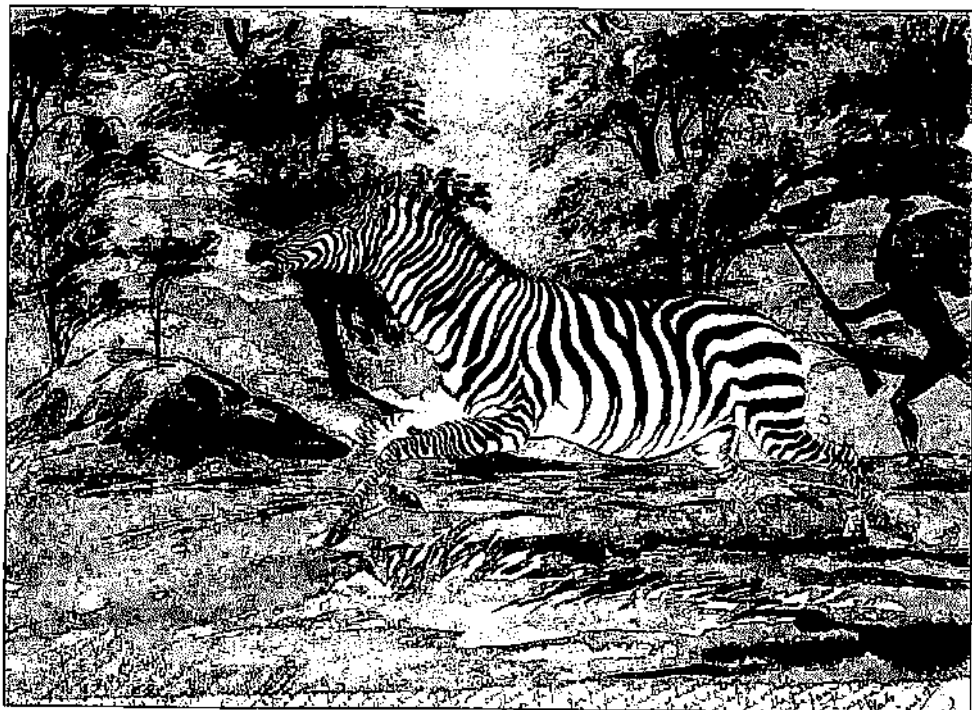


Plate 3.33

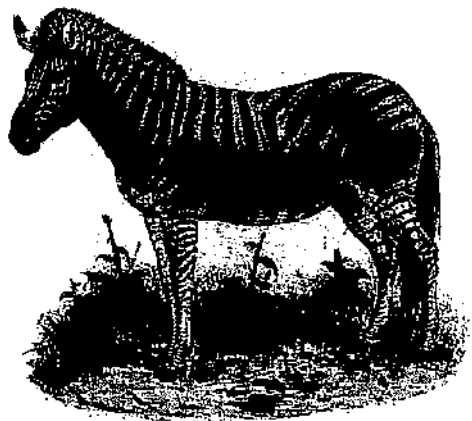
The nineteenth century was the great age for the discovery of new species of animals. By the time Baines arrived in South Africa, most of the large and conspicuous vertebrates had already been discovered by earlier visitors, including J.R. Forster who stopped at the Cape with Captain Cook in 1771, François Le Vaillant, and the English explorers W.J. Burchell and Andrew Smith.¹¹⁶ Yet it was the showy mammals and colourful birds, the occasional lizard, snake or frog that Baines came across on his route which attracted his attention. Had he been better informed zoologically, or commissioned to make collections, or financially independent, as an amateur he might still have made a name for himself by specialising in the collection of the less obvious animals – insects or shells for example – which were still unknown in Europe. He would also have enhanced his reputation by the occasional use of the Latin scientific names. Instead, he more often gave the African name, such as *Ingwainya* for crocodile,¹¹⁷ and sometimes the old-fashioned English term, such as wolf for hyaena.¹¹⁸ Baines informs us that he had access to Samuel Maunders' book, *The Treasury of Natural History*, the third edition of which was published in 1852, and one of Georges Cuvier's works, probably *The Animal Kingdom*. But for practical purposes they would have been too general to be very useful.¹¹⁹ On another occasion he wrote, after discovering *Wéluitschia mirabilis*: "Whether it was new to science I could not tell; a vagrant artist can neither afford nor carry the necessary books of reference."¹²⁰ Help of a far more practical kind would have come from fellow travellers and residents in South Africa knowledgeable about natural history – men like Dr William Atherstone and Grahamstown whom Baines met in February 1850,¹²¹ and Tom Ayres at Potchefstroom whom he met in 1869. Ayres' cottage was called 'The Ark' and was crowded with his collections of minerals and preserved birds and insects. Baines remarked it looked like a museum.¹²²

One way in which some authors added scientific importance to general travel books was by providing appendices that listed all the natural history specimens collected, using both scientific and common names and arranged in an accepted scientific classification. James Chapman did this himself in his book, *Travels in the Interior in South Africa*, published in 1868, but some authors commissioned professional zoologists for the purpose.

objct: Full striped Quagga mare / so far as we know an unde / scrib'd variety – shot by / Chapman north of / Matatie River / 20 or so miles South / of the Zambezi / Thursday July 17 / 1862 – The other / sketch of / this showing / the marking / of the back / was sent / home with / the skin / of a filly / shot in / 1863 / T. Baines / July 27 – / 1862 /, w.c. pencil, NHM Rothschild bequest 2

obj: Zebra a full striped Quagga / shot by myself and knocked / down after a long chase by / Malakole with a stone / after he had failed to kill / her with his musket / East of the Lagier River / Sunday Dec 7th / 1862 / T. Baines / wears or callusities / on the fore arms only / probably new / variety / between E. Burchelli / & E. montanus – / Petrus says / the Quagga of / Mamaratand / has / spots / nearly white / from the / hocks & knees / there are very / faint stripes / but not visible / till / the game / close, there are / warts on the fore / legs only / the wilde paard / is darker the / stripes / darker / the head is larger / and the ears also / they stand up / so far as to be visible / above the mane / the wilde paard / goes in the hills / the Quagga on / the flats / March 1864 /, w.c. pencil, NHM Rothschild bequest 2

P. 25 1866 EX 11



EQUUS BURCHELLI.

Plate 334 Zebra by J Wolf in *Proceedings of the Zoological Society of London*, 1865

W.L. Distant, who wrote *A Naturalist in the Transvaal* in 1892, had up to ten collaborators, and Frank Oates, the author of *Matabele Land and the Victoria Falls* in 1889, included five scientific appendices. C.J. Andersson, who wrote the general travel book *Lake Ngami*, acquired a reputation as an ornithologist because he collected all his bird observations into a separate book, *The Birds of Damara Land*. Such advantages were not, however, available to many, and certainly not to Baines.

Although Baines was on the fringe of scientific circles, when he returned to England he made use of all the opportunities that presented themselves. He was a speaker at the meetings of the British Association for the Advancement of Science,¹²³ and kept in touch with officials at the Royal Geographical Society (RGS), even though he would have been lucky to meet there one who was in a position to promote his efforts. Few appreciated Baines' tenacity more than Henry Walter Bates, assistant-secretary of the RGS.¹²⁴ A traveller of great experience in South America, the author of the highly acclaimed *The Naturalist on the River Amazons*, published in 1863, and a respected entomologist, Bates knew better than anyone the difficulties collectors faced in the

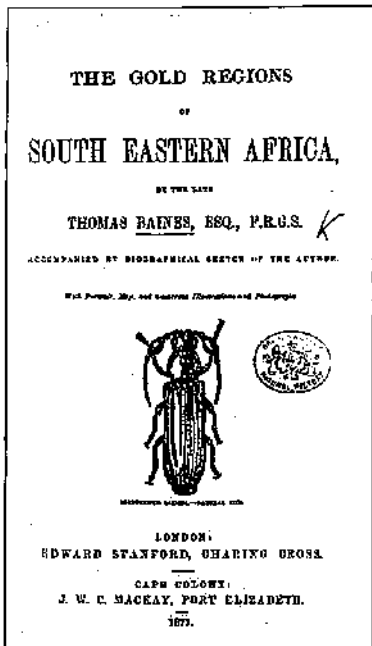


Plate 3.35 *Bolbotritus bainesi* [beetle] 1877

field. Among insects that Baines sent to Bates for identification was a beetle specimen that he had collected in Matabeleland (now Zimbabwe) at Mungwe River.¹¹⁹ Bates identified this as a new species of a new genus of cerambycid beetle and, in Baines' honour, he named it *Bolbotritus bainesi* (Plate 3.35).¹²⁰ Baines also contributed a great deal to our knowledge of the tsetse fly problem.¹²¹

Another Baines supporter may have been Edgar Leopold Layard, best known for his ornithological work in South Africa and, from 1855, the first curator of the South African Museum.¹²² Layard sent the skin of a 'quagga' to J.E. Gray at the British Museum with an accompanying letter from Baines and his drawings. The skin was identified as belonging to a new subspecies of zebra which was named Chapman's zebra *Equus burchellii chapmani*, after James Chapman who killed the animal in 1862 between the Zambezi and Botletle rivers. The discovery was described in the

Proceedings of the Zoological Society of London, in which Baines' letter was published.¹²³ The illustration of the zebra accompanying the paper was commissioned from Joseph Wolf (Plate 3.34), the famous animal painter and the illustrator of the lively plates in Andersson's *Lake Ngami*. Wolf based his illustration partly on the skin Baines had supplied and partly on an animal living at the London Zoo. In doing so, he became confused and drew the distinctive stripe pattern of the subspecies incorrectly. Baines' painting, preserved in The Natural History Museum (Rothschild Bequest 1) (Plate 3.32), is thus important as the only accurate surviving scientific record of the original specimen. In the absence of the specimen, this drawing is designated an iconotype (the skin of the animal in the zoo was not preserved after its death).¹²⁴ It is fitting to compare the two paintings of Chapman's zebra by Wolf and Baines: the one by Wolf is a conventional commissioned piece of zoological artwork, whereas Baines' is unrestrained by convention or a patron's commission.

The value of Baines' books, published diaries and paintings today is that they represent an accurate historical record of a fauna and way of life in southern Africa 150 years ago. The inter-relationships between the human and animal life are skilfully intertwined in his writing, the one dependent on the other, as seen by an honest, meticulous recorder and artist. Baines' zoological observations, the specimens he collected for museums and his part in the discovery of new animal species must be seen as his contributions to our knowledge of the zoology of southern Africa.



Plate 3.36 *Black Rhinoceros (Blue variety)* - cows ridden to a stand and preparing to charge (She who hesitates is lost) - Sept 1st. 1870 - J. T. Baines - II, pencil, NHM 116



The burning Veldt - South West side of Impresseri River - Oct 9th 1869 - Beginning of the Rainy Season /
No. 1. Wagon of the South African Goldfields Exploring expedition - T. Baines II, w.c. & pencil, NHM 31

Plate 3.37

The burning Veldt - South West side of Impresseri River - Oct 9th 1869 - Beginning of the Rainy Season /
No. 1. Wagon of the South African Goldfields Exploring expedition - T. Baines II, w.c. & pencil, NHM 31

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