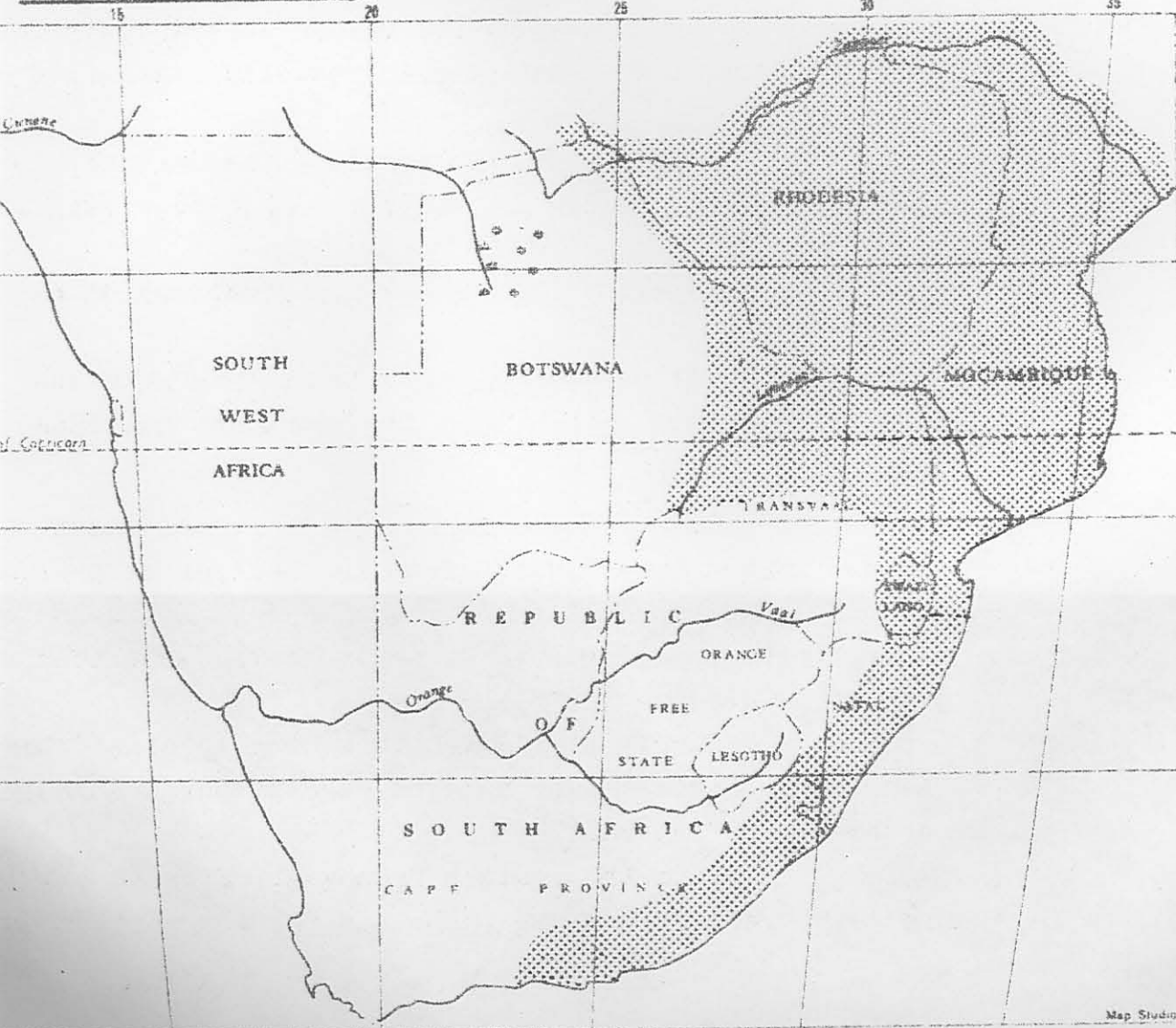




Past distribution:

*Potamochoerus porcus* (Bushpig)

Present distribution:



Potamochoerus porcus (Bushpig):Cape Province:

Cloete (1776), describing the journey of Swellengrebel in 1776, mentions "varkens" in the vicinity of the Little Fish river to the left of the Agter Sneeuberg, in the present-day Somerset East or Cradock divisions. He describes the area as being densely wooded with yellowwood trees, and taking account of his reference to large numbers of buffalo and bushbuck, these "varkens" could possibly have been bushpig.

The "riet vark" or wild hog that Pringle (1835) mentions from the confluence of the Baviaans and Fish rivers is also probably the bushpig, since he also mentions a "bosvark" (Sus aethiopicus), which according to Shortridge (1934), is the warthog.

Holub (1881) also mentions two kinds of wild pig in the brushwood between Port Elizabeth and Grahamstown, i.e. "blackvarks" and "bushvarks", one possibly the bushpig and the other the warthog.

Natal:

From Natal the first record of bushpig is probably that of Isaacs (Herrman, 1936) who, during his residence in Natal (1825-1832), mentions wild hogs that damaged his garden in the Durban Bay vicinity. He also mentions wild boars that are usually identified as warthog.

Drummond (1875) mentions the "Ingulubi" or bushpig as being common in Natal and also occurring in Zululand.

Brooks (1876) gives its distribution as the Natal bush.

Baldwin (1894) records it from near the Black Umfolozi river and also from northern Zululand.

Transvaal:

Trigardt (Le Roux, 1966): records both "wildswyn" and "wilde vark" from the Soutpansberg area in northern Transvaal in the years 1836-7. It is not clear, however, which species is indicated in either case since he does not elaborate.

Harris (1841) mentions both species from near the Crocodile river and the Magaliesberg range in northwestern Transvaal.

From the eastern Transvaal, Erskine (1869 and 1875) records bushpig from near the Sorgobiti river

and from near the Umbabat, a tributary of the Olifants river.

Van Oordt (1894 and 1895) includes it in the list of animals occurring in the old Pongola Game Reserve.

Stevenson-Hamilton (1914) records it from the Sabi and Shingwedzi Reserves and Stevenson-Hamilton (1934), from the Transvaal lowveld.

#### Mocambique:

Kirk (1864) mentions Potamochoerus africanus from the Zambezi delta.

Kirby (1899) finds P. choeropotamus nyasae numerous in the Shupanga and Cheringoma districts as well as in the Urema river vicinity.

Findlay (1903) records bushpig from the Mwardzi, a tributary of the Urema river, and also from the Gorongosa area.

#### Rhodesia:

Selous (1907): in the angle formed by the Gwai and Zambezi rivers; along the Umay river; along the Hanyane river; to the west of the Gwai river.

Oates (1889): from the vicinity of Panda ma Tenka to the Victoria Falls.

Selous (1908): the Pungwe river area.

#### Botswana:

Gillmore (1888): eastern Botswana.

Holub (1890): mentions both "wildschweinen" and "buschvaark" from near the confluence of the Marico and Limpopo rivers; "wildschweine" from the junction of the Notwani and Limpopo rivers; "buschvaark" and "Warzenschwein" from near the Zambezi and the Zambezi-Chobe confluence.

Selous (1907); the vicinity of the Chobe river.

#### South West Africa:

Shortridge (1934): the eastern Caprivi.

#### General:

According to a number of authors, the past distribution of the bushpig was limited to the region extending from the southeastern districts of the Cape, along the forested coastal tracts to the

Zambezi river (Bryden 1899, Sclater 1900, Lydekker 1908, FitzSimons 1920 and Haagner 1920). This view, as indicated by the records mentioned, was an erroneous one.

Present distribution:

Cape Province:

Ellerman et al. (1953): the Knysna forest and the Albany district.

Skead (1958): the Addo bush, Uitenhage.

Bigalke and Bateman (1962) list the following divisions: Adelaide, Albany, Alexandria, Bathurst, Bedford, Cathcart, Cradock, East London, Fort Beaufort, Graaff Reinet, Humansdorp, Jansenville, King William's Town, Komga, Pearston, Peddie, Port Elizabeth, Queenstown, Somerset East, Steytlerville, Stutterheim, Uitenhage, Uniondale and Victoria East, as well as a very dubious record from the Vryburg division.

Rand (1955) estimates the total population for the Cape at about 9,700.

De Graaff (in litt.): 7 in the Addo Park in 1962.

Natal:

Vincent (1962): widespread and general throughout the littoral lower than 1000-1500 feet, especially in sugar cane lands but also in some evergreen forests.

Bigalke (1965): the low country near the coast, being widespread in the districts of Inanda, Lower Tugela, Mtunzini, Eshowe and Ubombo, and very locally distributed in the Camperdown, New Hanover and Ngotshe districts.

Bourquin (1966): very common in the Ndumu Game Reserve; fairly common in the Sordwana Bay Nature Reserve; very common in the Mkuzi Game Reserve, False Bay Nature Reserve and the St. Lucia Game Reserve and Park; fairly common in the Hluhluwe Game Reserve, the Umfolozi Game Reserve and the Richards Bay Park.

Transvaal:

Ellerman et al. (1953): the Kruger National Park.

Kettlitz (1954): the slopes and ravines of the Drakensberg north of 26°S latitude, as well as the Soutpansberg range in the north, the Waterberg in the west and the Pongola area south of Swaziland.

Pienaar (1963): the Kruger National Park in the broken country along the southern border of the Levubu river, the Olifants Gorge area and parts of the southern district, with a total population of several hundred.

Hirst (1964): the Timbavati Private Nature Reserve.

Mocambique:

Ellerman et al.(1953), Spence (1963) and Meester et al.(1964): parts of Mocambique.

Rhodesia:

Ellerman et al.(1953) report bushpig only from the eastern part of Rhodesia. This is probably incorrect as it disagrees with the annual reports of the Federal National Parks of Rhodesia for the years 1959-63 which record it from the Victoria Falls National Park; with the findings of the Department of National Parks and Wild Life Management in their Game Ranch Survey, who report it, inter alia, from the Atherstone Ranch in the West Nicholson area in 1965; and with Child and Savory (1964) who find it widespread throughout Rhodesia, except the southwestern portion of the Wankie National Park.

Botswana:

Child (1968): along the Chobe river; occurrence along the Linyanti requires confirmation; probably does not occur in the Okavango swamps and not recorded in hunting returns from the tsetse fly control operation on the Maun Front.

Smithers (1968): absent from the central and southwest Kalahari; reported from the Tati Concession and the eastern extension of the Bamangwato Reserve on the Shashi and Limpopo rivers.

Campbell (1968): very small numbers in the northeastern corner of the Central Kalahari Game Reserve.

South West Africa:

Ellerman et al.(1953): the eastern Caprivi.  
 Bigalke (1958): the Okavango Native Territory, including the Caprivi.

Change in distribution:

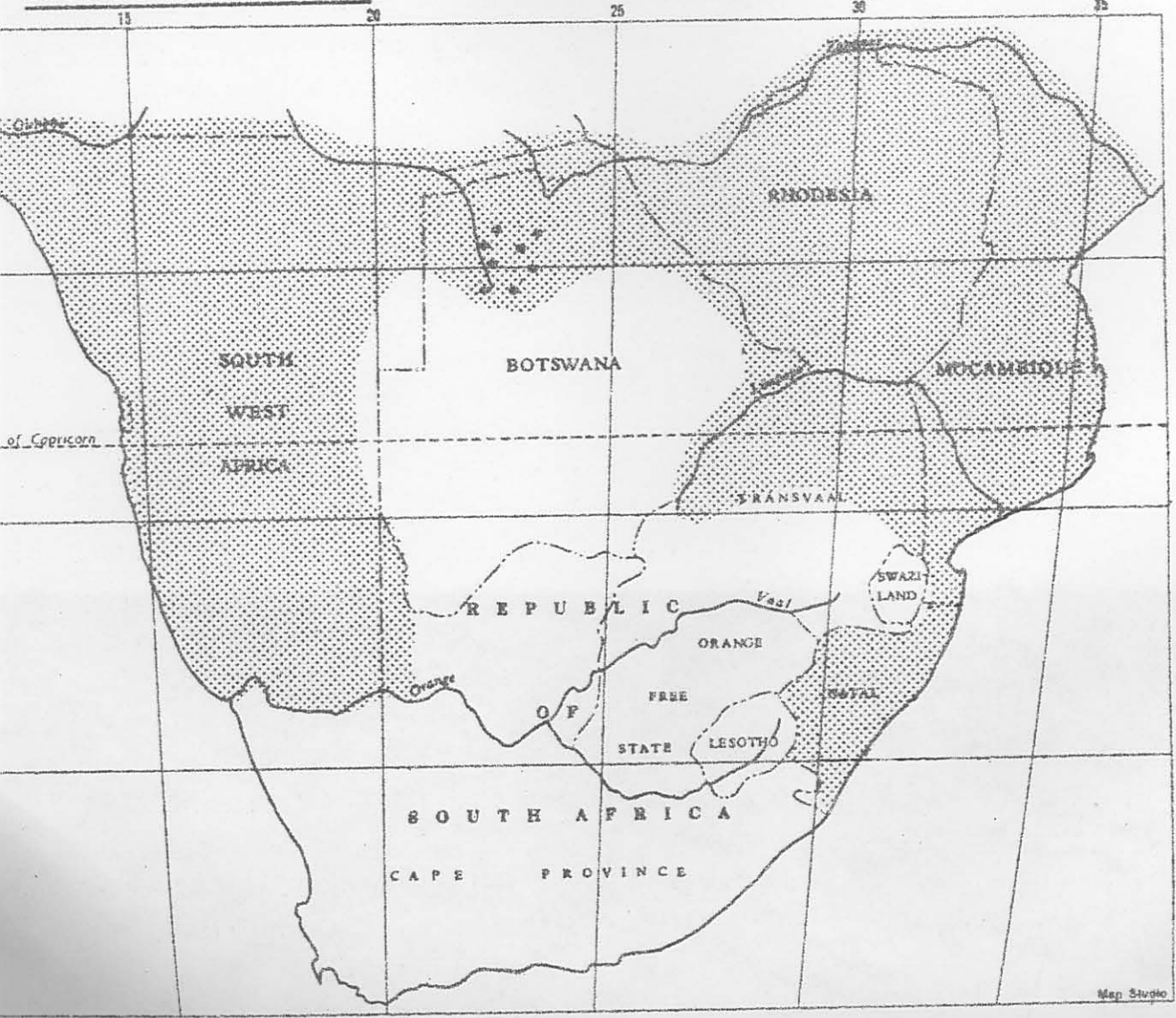
Owing to the secretive nature of the bush-pig, a very incomplete past distribution can be given. Thanks to the more complete records that have accumulated during recent times it therefore appears to be more widespread now than in the past. However, this probably reflects no more than our more complete present-day knowledge of its distribution.



Past distribution:

Phacochoerus aethiopicus (Warthog)

Present distribution:



Phacochoerus aethiopicus (warthog):Cape Province:

Sparrman (1789) mentions wood swine or wild swine (Aper aethiopicus) which can be identified as the warthog on both the species name as well as the fact that he describes them as holding their tails erect when running. He encountered them in the Sundays and Bushmans river areas.

Sus ethiopicus is recorded by Barrow (1801) from the foot of the Suurberge. His description of its long ivory fangs bending upwards, and the ".... fleshy bags hanging from each cheek like an additional pair of ears, ....." makes identification positive.

The "African hog" abounding in the woods of the Tsitsikamma, according to Daniell (1804), might have been the warthog, but the density of the bush is an argument in favour of its being the bushpig.

Lichtenstein (1812) mentions the "wild boar" (Sus aethiopicus) from the Tsitsikamma bush as well as from Towerfontein in the Seekoei-Orange river vicinities.

Pringle (1835), when mentioning the "riet vark" and the "bosvark", is a bit confusing, but he identifies the "bosvark" or "wood swine" as Sus aethiopicus, with teeth resembling those of an elephant. According to Shortridge (1934) these were warthog that Pringle encountered near the confluence of the Baviaans and Great Fish rivers in the eastern Cape.

Moodie (1835) describes "wild boars" with very large tusks near Grootvadersbos in the Swellendam district.

Holub (1881) records "blackvarks" and "bushvarks" from the low brushwood tracts between Port Elizabeth and Grahamstown, but positive identification is difficult.

According to Shortridge (1942) the warthog has been extinct in Little Namaqualand for many years.

Natal:

Isaacs (Herrman, 1936), during the years 1825-32, refers to both wild hogs and wild boars in Natal. He records wild boars from both Zululand and the Durban Bay vicinity.

Drummond (1875) writes as follows of the bushpig and warthog in Natal: "There are two kinds of



pig in South-Eastern Africa - one inhabiting the plains and the light thorn jungles; and the other frequenting heavy timber jungles, though also found, but more rarely, in the thickets in the thorns, and the dense reeds which line the rivers. The former, the "indhlovudawane" (the warthog, according to Roberts, 1951) is not to be met with south of the twenty-ninth degree of south latitude, and is not plentiful before the twenty-eighth degree, while the latter is common in the colony of Natal and far below it. The "ingulubi", (bushpig, according to Roberts, 1951) as it is called by the natives, does an immense amount of damage to their sweet potatoes and fields, and has in consequence been exterminated in many districts". Drummond also records warthog from the Bombo Flats and Tongaland.

Brooks (1876) mentions the warthog as occurring in the Natal bush and Baldwin (1894) refers to the wild boar in the vicinity of St. Lucia river.

#### Transvaal:

One of the earliest records of warthog in the Transvaal is that of Smith (Kirby, 1940) who, in 1835, encountered it along the Marico river and in the Rustenburg district. Smith mentions "....a species of wild hog with very long tusks and of a reddish brown colour,....."

Trigardt (Le Roux, 1966) in 1836-7 records shooting both the "wilde vark" and the "wildswyn", one of which is probably the warthog.

Harris (1841), mentions a large group with tails erect, in the Magaliesberg area.

Gillmore (1878) records warthog from the vicinity of Zeerust.

Van Oordt (1894-5) mentions it in his annual reports on the old Pongola Game Reserve.

Stevenson-Hamilton (1914) records the warthog from the Sabie and Shingwedzi Reserves, and Stevenson-Hamilton (1934) from the Transvaal lowveld.

Millais (1899), on his way to Rhodesia, records warthog from near Mara in the Soutpansberg area and around Mooifontein near the Limpopo river.

#### Mocambique:

The following areas in Mocambique were recorded as part of the past range of the warthog:

Kirby (1899): the vicinity of the Urema, Mwanza, Chiringoma and Madsambi rivers, in large numbers wherever suitable habitat occurred.

Elton (1873): the area from the confluence of the Nuanetsi and the Limpopo to the confluence of the Olifants and Limpopo rivers.

Findlay (1903): along the Pungwe river and between the Mwanza and Mwardzi rivers.

Vasse (1909): Guengeré on the Pungwe river.

#### Rhodesia:

Selous (1893): the vicinity of the Ma-ovi, a tributary of the Kadsi; Zumbo on the Zambezi and up along the Panhame to the vicinity of Salisbury.

Holub (1881): western Matabeleland.

Oates (1889): the area extending from the vicinity of Panda ma Tenka to the Victoria Falls in western Matabeleland.

Holub (1890): the confluence of the Chobe and Zambezi rivers as well as in the vicinity of Panda ma Tenka.

Millais (1899): between the Limpopo and Nuanetsi rivers.

Selous (1907): the angle formed between the confluence of the Gwai and Zambezi rivers; the vicinity of the Umfule and the Umsengaisi rivers.

Selous (1908): near the Pungwe river in eastern Rhodesia.

#### Botswana:

Botswana records include the following:

Methuen (1848): to the west of the Notwani and Limpopo rivers in southeastern Botswana.

Cumming (1850): Boatlaname.

Holub (1881): between the Notwani and Limpopo rivers.

Oates (1889): the Rhodesian-Botswana border along the Ramaquabane river; between Tamasanka and Gerufa.

Anderson (1888): the vicinity of the Zouga (= Botletle) river; Lake Ngami and the Makarikari area.

Holub (1890): the confluence of the Notwani and Limpopo rivers as well as the Klamaklenja waterholes; the vicinity of Panda ma Tenka.

Bryden (1893): the open plains and semi-bushy localities in Botswana, including Ngamiland and the Kalahari.

Hodson (1912): near the Mababe and Chobe rivers.

South West Africa:

The warthog probably occurred in southern South West Africa just north of the Orange river. According to Le Vaillant (1796) it occurred in Great Namaqualand. Meester (unpublished manuscript) agrees that the animal which Le Vaillant shot on the Fish river in Great Namaqualand and later illustrated (Plate 109, Le Vaillant Collection), is a warthog.

Shortridge (1934): the northern and central parts of South West where vleis and water occur, becoming more common north of the Tropic of Capricorn, especially to the east, ie. from Gobabis to the Okavango; in Great Namaqualand as far south as Maltahöhe district in the west and the acacia thickets along the Aueb and Nossob rivers in the east; the Kaokoveld where it migrates to the Cunene in dry seasons; Ovamboland near the Etosha Pan, Outjo, Otjiwarongo, Okahandja, Omaruru, Karibib, Windhoek, Gobabis, Rehoboth and Gibeon.

General:

A number of authors summarise the total distribution instead of listing local records. Of these, the following are important:

Ward (1896): throughout Africa in suitable localities.

Bryden (1899): not in the Cape any more at the time of writing, but in former times probably occurred in the eastern Cape and from there to Natal, Zululand and Mocambique; the Transvaal east of 31° longitude; Mashonaland and Matabeleland in Rhodesia; various parts of Botswana; common in Swaziland; never south of the Orange river in the Cape Province.

Sclater (1900): Transvaal, Mocambique, Rhodesia, Botswana and Damaraland.

Haagner (1920): Zululand; eastern and northern Transvaal; Mocambique; Rhodesia.

FitzSimons (1920): the eastern Cape in earlier times, but at the time of writing survived only in Zululand, Mocambique, Transvaal, Rhodesia, Damaraland and Botswana.

Liebenberg (1964) quotes Steytler (1932),

who mentions the warthog in the eastern Orange Free State in 1853.

Present distribution:

Cape Province:

Bigalke and Bateman (1962): possibly survives in the Vryburg division.

Ansell (1967): the northern Cape Province.

Natal:

Vincent (1962): restricted to a large extent to the Mkuzi, Hluhluwe and Umfolozi Game Reserves and the adjacent state-owned lands.

Bigalke (1965): very scarce in Natal outside the Game Reserves; reported only from one farm in each of the Ngotshe and Ubombo districts, the latter being a re-introduction.

Bourquin (1966): very rare in the Ndumu Game Reserve, only one seen in 1965; very rare in the False Bay Nature Reserve, three recorded in 1965; very common in the Hluhluwe Game Reserve and also large numbers in the Umfolozi Game Reserve.

Orange Free State:

De Graaff (in litt.): 6 in the Golden Gate Highlands National Park in 1969.

Ellerman et al. (1953): the Kruger National Park.

Kettlitz (1954): outside the Kruger National Park to the north of the Marico river in the west; the Rustenburg district north of the Crocodile river where a dense population exists; the Waterberg and Potgietersrust districts; the Soutpansberg district, where diminishing in numbers to the east; the Letaba district where scarce; the region between the Olifants and Sabie rivers, where increasing in numbers; the Pilgrims Rest district; scarce in the central Transvaal as well as in the Crocodile Valley in eastern Transvaal.

Pienaar (1963): very numerous in the central and southern districts of the Kruger National Park, but more restricted in the north. He estimates the number of warthog in the Kruger National Park at approximately 3,500 or more, of which about 2,000 are found in the central area.

De Graaff (in litt.): approximately 3800 in the Kruger National Park.

Mocambique:

Ellerman et al. (1953): Mocambique.

Fajardo (1953): Gorongosa National Park.

Ansell (1967) : quotes Dalquest (1965) who states that it is common in the Save river area.

Rhodesia:

Ellerman et al. (1953): Rhodesia.

Fraser (1958): well distributed, with large numbers in the Wankie district, the Zambezi valley and the southern lowveld; small groups elsewhere.

Child and Savory (1964): consider it absent only from the high plateau areas along the watershed but otherwise widespread; introduced into the Robert McIlwaine National Park.

Botswana:

Hill (1942): Kuke Pan; Kwaai; Mababe Flats; Tsotsoroga Pan and Kabulabula.

Ellerman et al. (1953): Ngamiland and northern Botswana.

Kay (1962): near the Tamalakane and Chobe rivers and on the Mababe Flats.

Kirsten (1966): the Moremi Game Reserve.

Tinley (1966): extremely abundant on the margins of the Kwaai and Mogogelo Flood Plains.

Child (1968): along the major rivers in northeastern Botswana, ie. the Chobe, Linyanti and Savuti; around the headwaters of the Ngwezumba; very numerous along the molapos in the Moremi Game Reserve; large numbers shot on the Maun Front tsetse advance; small numbers on the Makarikari and near Nyai Pan; numbers have declined along the Savuti since 1965.

Campbell (1968): considerable numbers in the woodlands of the Central Kalahari Game Reserve.

Smithers (1968): northern Botswana, including the northeastern Bushman Reserve; just north of Kaotwe Pan; between Kaotwe Pan and Ghanzi in the Okwa Depression; the southern Kalahari at Mabua Sefupi Pan and Sekhuma Pan; probably absent from the Palapye area southward in the eastern sector; may occur on farms in the southern Tuli Block; occurs widely in the eastern extension of the Bamangwato Reserve.

Von Richter (1969): rare in the south-western Kalahari in the following areas: northern Ghanzi Block, Kalkfontein, Makunda, Nojane, Kuli, Ukwe, Tshane, Monong, Kang, Motokwe, Mabutshane, Sekhoma, Khakhea, Dutlwe, Takatokwane, Lethlakeng, Salajwe, Gakhibane, Khuis, Bogogobo, Kolongwaneng, Khisa, Malish, Makopong, Omawepeneno and Werda.

Child et al. (in press): shot in fairly large numbers on the Maun Front during tsetse control hunting.

South West Africa:

Ellerman et al. (1953): the central and northern parts of the territory.

Bigalke (1958): the districts of Tsumeb, Grootfontein, Outjo, Otjiwarongo, eastern Omaruru, Okahandja, Gobabis and Windhoek; scarce in the districts of Karibib, Rehoboth, Keetmanshoop, Warmbad and Gibeon; throughout the Kaokoveld in suitable habitat; Ovamboland; Game Reserve 2; the Okavango Territory; does not occur in the Namib or neighbouring districts of Bethanie, Maltahöhe, Luderitz or Swakopmund.

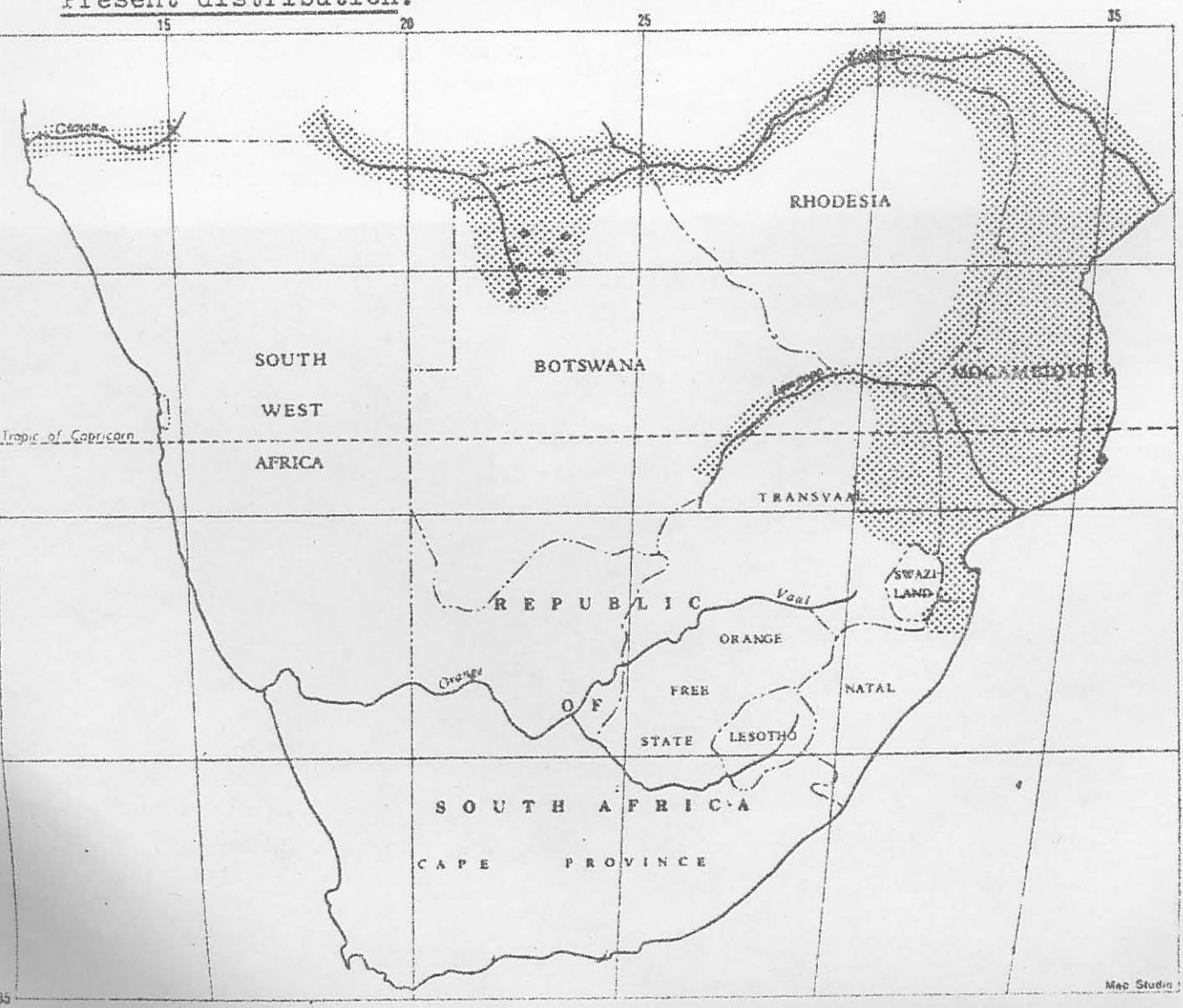
Meester et al. (1964): the Caprivi Strip.

Change in distribution:

With the possible exception of the Vryburg division, the warthog seems to be extinct in the Cape Province where it probably ranged about as far south as the present-day Knysna in earlier times. Otherwise it still seems to occupy the same broad territory as in the past, always taking into consideration local changes due to farming, industry, etc.



Past distribution: *Hippopotamus amphibius* (Hippopotamus)  
Present distribution:



Hippopotamus amphibius (Hippopotamus):

Previously the hippopotamus was so widespread throughout the river systems of southern Africa that a survey would entail hardly more than the listing of the perennial rivers together with the authors recording it from the various waters.

Cape Province:

In the Cape Province, Van Riebeeck (Bosman, 1951) and his party shot their first hippopotamus on the 23rd of April, 1652, on the beach near the present-day Cape Town. On later occasions they found more in the immediate vicinity.

According to Molsbergen (1916) the early Cape settlers encountered it in most of the rivers near the Fort. In the Little and Great Berg rivers it was recorded by Gabbema in 1657, by Van Haerwarden in 1658, by Cruythoff in 1662 and by Borghorst (Theale, 1964) in 1670. The Dutch East India Company's "Oude Wildschutte Boek" also mentions hippopotami in these rivers during the years 1687 - 1712 as does Lichtenstein (1812).

Croese (Molsbergen, 1916) in 1669, as well as the "Oude Wildschutte Boek", indicates the presence of the hippopotamus in the Sonderend river, and the latter reference also mentions the Breede river.

The Gourits river is mentioned by Paterson (1789), the Krom river by Mentzel in 1787 (Mandelbrote, 1944) and by Sparrman (1789).

Thunberg (1772), Sparrman (1789) and Paterson (1789) record hippopotami from the Gamtoos river, Paterson (1789) from the mouth of the Sundays river and Sparrman (1789) from the Seekoei river.

Hippopotami were numerous in the Fish river as recorded by Paterson (1789), Thunberg (1795) and Barrow (1801). Backhouse (1844) still encountered a few near the mouth of this river in 1839.

According to Barrow (1801) the hippopotamus occurred in the Keiskamma river.

Hippopotami were found in most of the rivers along the Transkei and Pondoland coasts. Van Reenen (Kirby, 1958), in his attempt to rescue survivors of the Grosvenor in 1790-1, encountered them in the Kei, Bashee, Umtata, Umtakaty, Umzimhlava, Mboty, Umzimvubu, Umdumbi and Xora rivers.



Lichtenstein (1812) also mentions the Kei river, Bain (Lister, 1949) the Kei, the Umgazi mouth and the Umzimvubu in 1829. Rose (1829), probably records the last hippopotami in the Kei river.

Further north in the Cape Province, the Orange river is frequently mentioned as harbouring numerous hippopotami in the past, from vicinities as far apart as Colesberg and Alexander Bay. The following records were found: Coetsé (Mossop, 1935) in 1760; Hop (Molsbergen, 1916) in 1761; Brink (Mossop, 1947) in 1761; Gordon (Barnard, 1950) in 1777-8; Wikar (Mossop, 1935) in 1778-9; Paterson (1789); Le Vaillant (1796); Barrow (1801); Van Reenen (Blommaert and Wiid, 1937) in 1803; Lichtenstein (1812); Campbell (1815); Thompson (1827), while Daniell (1804), Schultze (1907), Moffat (1856), Passarge (1908), Bryden (1909) and FitzSimons (1920) still mention a few survivors in the lower Orange river.

The Seekoei river, a tributary of the Orange, is mentioned by Van Plettenberg (Theal, 1964) in 1778, when in one day his party shot 20 hippopotami near the Plettenbergsbaken (present-day Colesberg area). Campbell (1822) also mentions the hippopotamus in this river.

According to Shortridge (1942), local traditions persist of the past occurrence of hippopotami along the lower Olifants river in the western Cape.

North of the Orange river, Harris (1841) records hippopotami from the Molopo river near its source.

Livingstone (1857) mentions that places were shown to him at a point about 14 miles from Kuruman where hippopotami had earlier been found. He states that they were formerly abundant in the Molopo river as well as in the river flowing out of the Kuruman fountain.

No mention of hippopotami in the rest of the Cape rivers could be found since they were either too shallow or of an intermittent nature.

#### Natal:

Most of the rivers of Natal contained hippopotami in the past as substantiated by the following: Fynn (Stuart and Malcolm, 1950) found great

numbers in Durban harbour in 1824 as did Isaacs (Herrman, 1936) and Smith (1849) in 1834.

The Umgeni river is mentioned by Fynn (Stuart and Malcolm, 1950), Brooks (1876) and Anderson (1888).

The Tugela river is mentioned by Isaacs (Herrman, 1936) in the 1830's and in the same period by Champion (Booth, 1967) and Wahlberg (Gyldenstolpe, 1934).

The Umsinkulu and Umzinto rivers are mentioned by Smith (Kirby, 1955) in 1832; the Umkomaas by Gardiner (1836) and by Wahlberg in 1839; the Umvoti and Ummonoti by Angas (1849) and the Umzimba by Brooks (1876).

Baldwin (1894) records hippopotami from the following rivers and lakes: the Black Umfolozi; the St. Lucia river, St. Lucia Lake, the Matakoola, Inyesan, Umhlatuzi and Umkuzi rivers.

Findlay (1903) mentions hippo in the lower Umfolozi, the Umhlatuzi, the Hluhluwe, the Umkuzi and the St. Lucia rivers.

Ritter (1955) writes of the hippopotamus in Shaka's time as follows: "Hippopotami were not hunted by the Zulus in Shaka's days as they did not eat the meat; they likened it to pork, which they also eschewed. The exception was if these animals interfered with their fields, when they were destroyed but not eaten."

#### Orange Free State:

No records of hippopotami from Lesotho or the Orange Free State could be found, except in the rivers forming the boundaries of the latter, i.e. the Orange and Vaal rivers. Arbousset and Daumas (1846) mention hippopotami as occurring in the Caledon river before 1836.

#### Transvaal:

Broadbent (1865) writes of hippopotami in the Vaal river, seen in 1822, as follows: "The Vaal river flowing past, not far from the house, I went down to the bank, when I saw a female hippopotamus walking against the stream in the bottom of the river,....." Moffat (Wallis, 1945) in 1830 saw large numbers in the Crocodile river where the present-day Hartebeestpoort Dam is situated. Smith (Kirby, 1940) mentions the same vicinity as well as the Crocodile and Marico rivers and also the junction of the Notwani and Marico rivers in 1834. Bronkhorst (Chase, 1843) records hippo from the Vaal and the Olifants rivers in 1836.

Harris (1841) who visited more or less the same area as Moffat and Smith, also mentions the Crocodile river in the present-day Brits district, and also the Mooi river and the confluence of the Mooi and Vaal rivers, as supporting fair numbers of hippopotami in 1836.

Methuen (1848) encountered hippo in the Marico and Limpopo rivers. In the latter they were numerous, with herds of 10 to 30 in every pool.

Cumming (1850) states that they were still to be found in the Vaal river in 1840, but that they were more numerous in the Limpopo than in the Vaal.

Wangemann (Grosskopf, 1957), a missionary in the eastern Transvaal from 1866 to 1884, records hippopotami from the Komanzi river when he was on a journey from Lydenburg to Swaziland.

Other records in the Transvaal include those of:

Erskine (1869) and Elton (1873) : the Limpopo and Olifants rivers.

Erskine (1875) and Gillmore (1878): the Limpopo river.

Van Cordt (1894-5): the Pongola river.

Stevenson-Hamilton (1912): the Sabi, Crocodile, Letaba, Levubu, Olifants and Limpopo rivers; he estimates the number of hippopotami at that time in the Sabi Game Reserve as about 100 and records approximately the same number in the Shingwedzi Game Reserve.

Haagner (1920): the Komati and Sabi rivers.

#### Mocambique:

Fynn (Stuart and Malcolm, 1950) mentions the Maputo river as containing hundreds of hippopotami in 1824-36.

Erskine (1869) records hippo from the Olifants river, stating that he found them especially numerous too in the lower Limpopo towards its mouth.

Mauch (Petermann, 1870) found them scarce and shy in the eastern Transvaal and on the Portuguese border along the Olifants river.

Elton (1873) on his journey along the Limpopo, met with hippopotami between the confluences of the Nuanetsi and Olifants rivers with the Limpopo, as well as in the Inkomati river where it enters the sea in Mocambique.

Findlay (1903) encountered hippopotami in most of the rivers of Mocambique; he especially mentions their abundance at the junction of the Bijimiti and Pungwe rivers in the Chiringoma district as well as in both of these rivers and also in the Urema river.

Vasse (1909) records it in large numbers from Chinde upwards along the Zambezi to Sena.

Bryer (1915) mentions hippopotami from the Maputo river and Lago Mandhlene in southern Mocambique.

#### Rhodesia:

Baines (Wallis, 1941) mentions hippopotami in the Ganyana river near Hartley in 1867.

The Zambezi river is mentioned by the following: Baines (Wallis, 1941), near the Victoria Falls in 1820; Kirk (1864); Livingstone (Schapera, 1963); Elton (1873), below and above the Victoria Falls; Holub (1881 and 1890); Selous (1893); Ward (1896); Schultz and Hammar (1897); Kirby (1899); Bryden (1899); Selater (1900); Selous (1907); Passarge (1907); Passarge (1908); Bryden (1909); Maugham (1910); FitzSimons (1920); Haagner (1920) and Shortridge (1934).

Other rivers in which hippopotami have been recorded, include the Umfule and Umsweswe by Mauch (Petermann, 1870); the Umniati (Baines, 1877); the Manyame, Mazoe, Inyagui, the Ruenya - Mazoe confluence and the Revui (Selous, 1893), and the Umniati, Ingesi, Lunti and Umfule (Selous, 1907).

According to Sidney (1965), Nicolls and Eglinton (1892) mention stray herds in the extreme northern courses of the Gwai, Shangani, Umniati, Umfule and Hunyani rivers before their junctions with the Zambezi.

#### Botswana:

In Botswana, hippopotami frequented the Limpopo system in the east as well as the various rivers of the northern parts. Records of hippopotami in these rivers were chronicled by:

Andersson (Wallis, 1945) and Andersson (1856): large numbers in Lake Ngami.

Moffat (Wallis, 1945): the tributaries of the Botletle river in 1854.

Livingstone (1857): large numbers in the Chobe marshes in 1852.

Leyland (1866): numerous in the Ngami Lake.

McKiernan (Serton, 1954): Lake Ngami, the Botletle and Tamalakan rivers in the years 1877-8.

Holub (1881): the Notwani and Chobe rivers.

Bradshaw (1881): the Chobe river.

Anderson (1888): the Chobe, Quito, Cubango and Touga rivers.

Holub (1890): the Chobe river.

Bryden (1893): the Botletle, Tamalakan and Chobe rivers as well as Lake Ngami.

Ward (1896): the Chobe, Botletle and Lake Ngami.

Schultz and Hammar (1897): the confluence of the Chobe and Zambezi rivers.

Donat (1899): Lake Ngami.

Selous (1907): the Chobe river and marshes.

FitzSimons (1920): the Okavango swamps.

Shortridge (1934): the Okavango swamps.

#### South West Africa:

Owing to the shallow and intermittent nature of South West African rivers, hippopotami were limited to the Cunene river in the north and to the Okavango, Maschi and Zambezi rivers in the Caprivi, according to Green (Petermann, 1867), Ward (1896), Passarge (1908), Andersson (1861) and Shortridge (1934). It also occurred in the Orange river, the southern border of the territory, in the past as previously described.

#### Present distribution:

##### Cape Province:

According to Van der Merwe (1966), there were five hippopotami in the Addo National Park. This number has decreased to 2 in 1969 (De Graaff, in litt.)

##### Natal:

According to Vincent (1962), hippo are confined to a few rivers of the northeastern Zululand littoral, southwards from the Mocambique border to Richards Bay. Localities in the above area include the Ndumu Game Reserve and the adjacent Pongola river, the Pongola lakes, the Kosi Bay lakes, Lake Sibayi, the

St. Lucia lakes, the lower Umfolozi river and lakes Eteza and Umsingazi.

Bourquin (1966) gives their numbers as follows: Ndumu Game Reserve, about 400; St. Lucia Game Reserve, 388 and Richards Bay, approximately 17.

#### Transvaal:

Outside the confines of the Kruger National Park, Kettlitz (1962) finds that there are a few left in the western Limpopo. They also occur along the Limpopo in the eastern Soutpansberg district as well as in the Mutali and Levubu rivers. Other districts in the rivers of which they occur are: the Letaba district, along the Klein Letaba, Great Letaba, Selati and Olifants rivers; the Pilgrims Rest district, along the Klaserie, Blyde, Sabie and lower Sand rivers; the Barberton district, along the Komati river; the Groblersdal and Lydenburg districts, along the Olifants river; occasionally they go up along the Steelpoort river in the Lydenburg district. Kettlitz estimates their number as approximately 200 in the above river

In the Kruger National Park, Pienaar (1962) gives their number as approximately 3200, of which 1,567 occur in the Olifants river, 643 in the Letaba, 417 in the Sabie, 364 in the Crocodile, 150 in the Levubu and 40 in the seasonal rivers and dams.

Van der Merwe (1966) estimates the number of hippopotami in the Kruger National Park as 2915. According to De Graaff (in litt.) this number has increased to 3200 in 1969.

#### Mocambique:

Sidney (1965) reports that in Mocambique, hippopotami are present in practically all the rivers, lagoons and lakes with permanent deep waters. The highest numbers occur in the northern and central districts, fewer being found in the south. In Gorongosa Park they are numerous in the various pools. They are plentiful in the Urema river and still occur in the Zambezi river.

Ansell (1967), quoting Dalquest, 1965, finds it still widespread in the Save river.

Tinley (in litt.) supplements the distribution given by Sidney (1965) by stating that hippo also occur in the Maputo river in the south as well as in the coastal lakes. He estimates the number in Gorongosa National Park as 3,000, mainly occurring in the Urema lake.

### Rhodesia:

According to Child and Savory (1964), resident populations of hippopotami occur in the Sabi/Lundi and Zambezi river systems whilst migrations occasionally occur up some of the other larger rivers.

Sidney (1965) reports hippopotami from the southeastern and eastern parts of Rhodesia, especially in the Lundi and Sabi rivers and along their tributaries. According to her, they are found in the Lundi, Sabi and Mtilikwe rivers and in the Zambezi system, e.g. in the Sinyati, Umniati, Umfule, Hunyane and Mazoe rivers.

### Botswana:

Kay (1962) records large numbers in the Okavango swamps and in the Boro, Kwaai and Thamalakane rivers, as well as in a pan on the Mababe Flats.

Sidney (1965) mentions the Okavango river, the Okavango swamps and the Chobe river, with a few at the junction of the Shashi and Limpopo rivers and also in the Limpopo itself.

Kirsten (1966) records hippo in the rivers of the Moremi Game Reserve, whilst Knobel (1967) mentions them along the Chobe river in the vicinity of Kasane, Chobe Game Reserve.

Tinley (1966) finds hippo fairly common in the Okavango swamps, especially in the Gomoti and Mogogelo lagoons and channels, and in the upper reaches of the Kwaai Flood Plain.

According to Child (1968), hippopotami occur in most of the permanent waters in northeastern Botswana. They are widespread in the Okavango swamp and occur along the Botletle river.

Smithers (1968) states that hippo occur throughout the Okavango delta as far south as Tsau in the west; on the Chobe and Botletle rivers - in the latter as far east towards Lake Dow as Kumaha; in the Limpopo river in the northern parts of the Tuli Block farms.

Winchester-Gould (1968) mentions hippo in the Okavango Delta.

### South West Africa:

A few survive in the Cunene and Okavango and in the Caprivi. In the Kwando and Zambezi rivers they are more plentiful (Sidney, 1965).

Change in distribution:

The hippopotamus has disappeared from the rivers of the Cape Province; from most of the rivers of Natal except those of northern Zululand; from the Orange, Vaal, Molopo, Marico and Notwani, from the tributaries of the Limpopo in Botswana; from the Crocodile river in northwestern Transvaal; from parts of the upper Limpopo and some of the smaller rivers in Rhodesia.

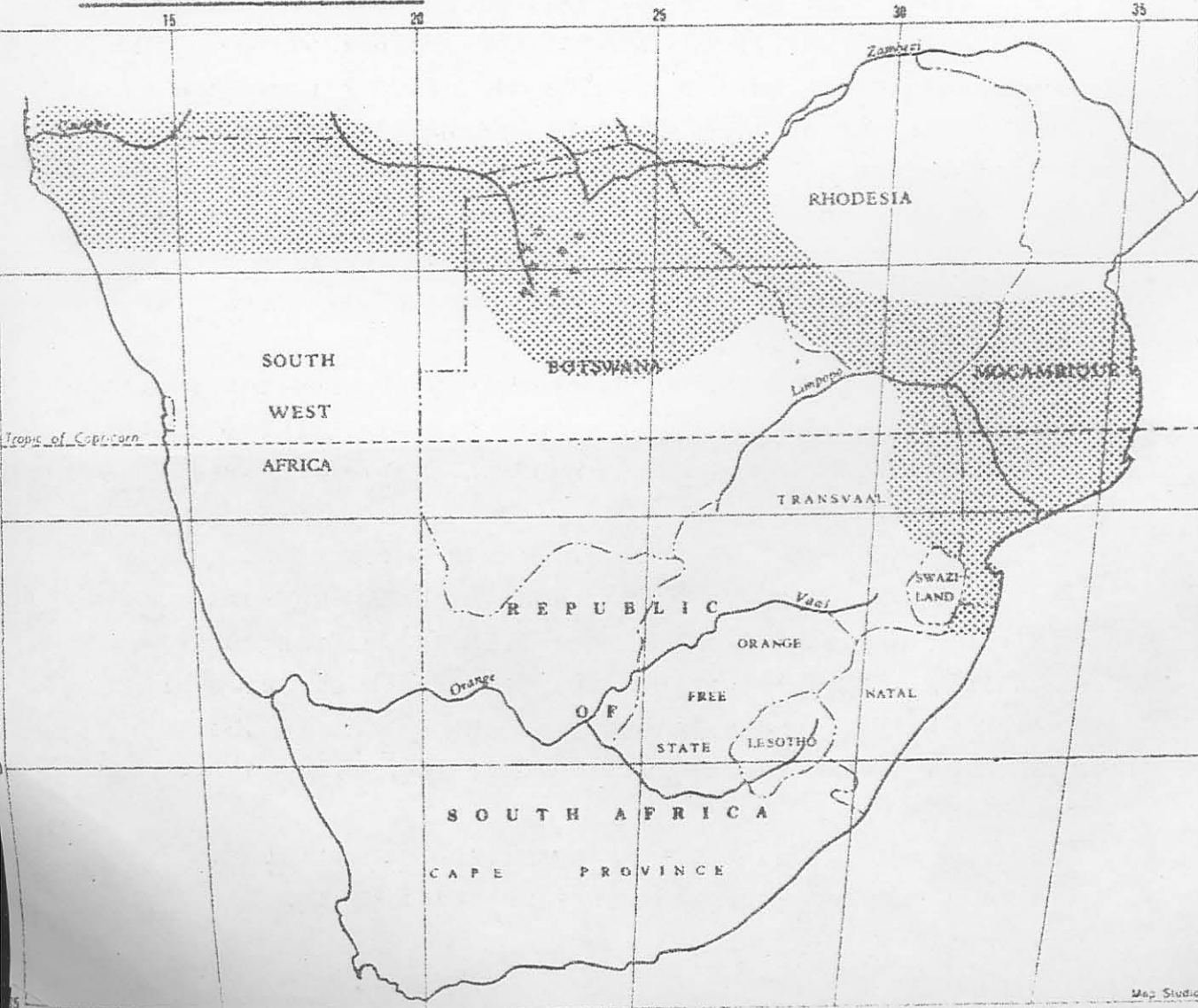




Past distribution:

Giraffa camelopardalus (Giraffe)

Present distribution:



Giraffa camelopardalis (Giraffe):

Cape Province:

The past distribution of the giraffe in the Cape Province included a portion of the northwestern Cape and the Cape Province north of the Orange river in what was earlier known as British Bechuanaland.

According to Molsbergen (1916) and Bigalke (1951), Jonas de la Guerre encountered the first giraffe during 1663 on the Cape west coast north of the Elephants river and near the Spoeg river, a distance of about 120 miles from the Orange river. De la Guerre writes : "...in 't marcheeren is van ons twee camelen gezien welcke beesten noyt voor desen is vernomen waer door wij presumeerden dat wij niet verre van de Revier Vigiti Magna waren, wandt ick had voordesen wel hooren seggen van de Namacquas als dat daer omtrent de revier sulcke beesten zich onthiel". Vigiti Magna was an old name for the Orange river.

Wikaar according to Mossop (1935) and Forbes (1965), also found giraffe south of the lower Orange river near Coboopfontein in 1778, but it was probably Gordon who recorded the last sighting of giraffe south of the Orange. Forbes (1965) mentions that Gordon shot one or two bull giraffes about twelve miles east of Garies in Namaqualand. Forbes states: "The news that he had shot a giraffe must have reached the Cape by letter or word of mouth before 23 October 1779, when the fact was included in a letter written at Cape Town to Sir Joseph Banks. It was probably this giraffe whose killing by Gordon was recorded by Sparrman at a date that must have been several years after the latter had returned to Sweden".

According to Meester (unpublished manuscript), Le Vaillant (1796) probably didn't see the giraffe south of the Orange river, but north of this river in Great Namaqualand.

Bryden (1899) mentions a Hottentot tradition that giraffe were found in the Queenstown division in the past. He also refers to Bushman rock paintings of giraffe in a cave near Graaff Reinet, whilst Barrow (1801) found a painting of the animal in the mountains of the Tarka division near the origin of the Riet river.

North of the Orange river but still in the Cape Province, giraffe were recorded by the following:

Lichtenstein (1803-6): Stompiesfontein and Koossi.

Campbell (1815): near the confluence of the Harts and Vaal rivers and near Griqua Town.

Campbell (1822): in the Mashowing - Lattakoo vicinity.

Burchell (1822): near Klaarwater and Koossi fountain.

Moffat (1829): the Great Chooi vicinity; near the origin of the Setlagoli river; between the Setlagoli and Mareetsane rivers and along the latter.

Smith (Kirby, 1939): the Kuruman area; between the Langeberge and Korannaberge; the present-day Stella vicinity and along the Mareetsane river in 1834.

Methuen (1846): in earlier times near Campbells Town, but at the time of writing only the tracks of giraffe seen near Little Chooi.

Bain (Lister, 1949): a large number of tracks between the Mashowing and Kuruman rivers in the years 1816-29; giraffe recorded from Honingvlei (Chooi Lake), from between Honingvlei and Kunkwe and near the junction of the Mareetsane and Kuruman rivers; the Taung vicinity in 1834.

#### Natal:

The occurrence of giraffe in Natal (excluding Zululand) has never been conclusively proved.

Ritter (1955) describes a great hunt organised by Shaka in August 1819 near the confluence of the White and Black Umfolozi rivers, in which, according to tradition, two giraffe were killed, one in a game pit and one by spears. They were scarce even at that time and known by the Zulu name of "Indlulamiti" or "those who exceed the trees."

Isaacs (Herrman, 1936) writes as follows about Natal in the years 1825-32: "To the eastward of Natal, there are to be found in addition to the above, - the Rhinoceros, Lion, Camelleopard, Zebra or Quagga,...." Unfortunately he does not state how far to the east, but since the Tugela river was the boundary between Natal and Zululand at that time (Stockenstrom, 1929), he probably meant Zululand. Reference to their distribution in Zululand is also found in Sclater (1900).

The rather dubious record of Russel (1911) reads as follows: "Persons now living have hunted in Natal the elephant, the lion, the buffalo, the quagga (probably the zebra is meant), the gnu or wildebeest, the blesbok, the gemsbok, and the ostrich. Their fathers have probably seen, in addition to these, the rhinoceros, and the giraffe".

Vincent (1962) finds no tangible evidence of the occurrence of the giraffe in Natal, he adds: "It has not been possible conclusively to determine whether giraffes did in fact once occur in Zululand, but the habitat was so obviously suitable for them that giraffes were introduced in 1947 and 1950 into the Hluhluwe Game Reserve, where a small party now breeds and thrives".

#### Transvaal:

The earliest written records of the occurrence of giraffe in Transvaal are those of Smith (Kirby, 1940) who in 1834 encountered giraffe along the Crocodile river in the present-day Brits district and also near Saulspoort in the present-day Rustenburg district.

Harris (1841) mentions finding the giraffe along the Marico, Tolaan (=Toelani) and Crocodile rivers in northwestern Transvaal.

Other records of its occurrence in eastern, northern and northwestern Transvaal are the following:

Mauch (Petermann, 1870): along the Olifants river in eastern Transvaal in 1868.

Erskine (1869): near the Elands river in the Lydenburg vicinity.

Glynn (1926): the lowveld of eastern Transvaal where acacia trees were found, eg. near Pretorius Kop in 1873.

Erskine (1875): along the Limpopo river.

Gillmore (1888): along the lower Crocodile river in northwestern Transvaal.

Stevenson-Hamilton (1911): near the Olifants and Imbete rivers; between the Sabie and Crocodile rivers.

Haagner (1920): the Sabie Game Reserve.

#### Mocambique:

Livingstone (Schapera, 1963), after crossing

the Zambezi to the right bank in 1856, when on his way from the Victoria Falls to Tete.

Elton (1873): from the confluence of the Nuanetsi and the Limpopo to the confluence of the Olifants and the lower Limpopo.

Glynn (1926) mentions giraffe in Gazaland in the years after 1873.

#### Rhodesia:

The distribution of the giraffe in Rhodesia in the past is partly covered by the following:

Baines (Wallis, 1941): near Tati in 1876.

Baines (1877): near the junction of the Mangwe and Semukwe rivers.

Elton (1873): between the Ramaquabane and Santshokwe rivers.

Holub (1881): on the Botswana-Rhodesian border in the Panda ma Tenka vicinity and near Henry's (=Hendriks ) Pan.

Oates (1889): the Gokwe river vicinity; between the Ingwezi and Sakasusi rivers; near Tamasanka; along the Maitengwe river; between the Nata and Tamasanka rivers; between Panda ma Tenka and the Victoria Falls.

Holub (1890): near Hornsvlei.

Selous (1907): near the Gwai river; parts of Matabeleland but seldom east of the river Gwelo; very numerous in the sand belts westwards of the Gwelo river; a few extending their range eastwards and a few on the upper Gwenia and in the vicinity of Jomani in 1880; along the Ramaquabane river and between the Gwai and Zambezi rivers.

Selous (1908): the Dett Valley and western Matabeleland.

Bryden (1891): fair numbers in Matabeleland but scarce in Mashonaland and practically never found east of the Gwelo river.

Sidney (1965): the Nuanetsi and Gwanda areas as well as southern and eastern Mashonaland and Matabeleland at the beginning of the present century.

#### Botswana:

In Botswana, giraffe were plentiful in the eastern, northern, central and northeastern parts wherever suitable habitat was to be found. The following authors at the places stated, confirm this:

Moffat (Wallis, 1945): between Kanye and Lithubaruba; along the Shashi river and along the Mahalapye river in 1829.

Methuen (1846): in the country of the Bakgatla between the Notwani and Marico rivers as well as along the Marico; near Molepolole.

Cumming (1850): on the southeastern border of the Kalahari; at Massouey Fountain on the way to the Bamangwato; Lesausau; near Letlochee Fountain; the hilly parts northwest of the Limpopo; the junction of the Marico and Limpopo rivers; between the Marico and Notwani rivers.

Livingstone (1851): large numbers to the north of the Chobe marshes.

Price (Long, 1950): about 20 miles south of Shoshong; near Kanye; Molepolole, all during the years 1854-83.

Holden (1855): Lake Ngami.

Livingstone (1857): in the vicinity of the fountains at Kolobeng and the wells at Boatlaname.

Baines (Wallis, 1941): near Lake Ngami in 1861.

Baines (1864): between Kobisfontein and Ghanzi.

Leyland (1866): between the Boatlaname Wells and Lopepe.

Baines (1877): the Macloutsi river.

Gillmore (1878): Serule Vlei near the source of the Macloutsi and also near the Shashi river.

Holub (1881): between Molepolole and Shoshong; on the Mababe Flats; the Macloutsi river; at the junction of the Mahalapswa and the Limpopo.

Holub (1890): Hornsvlei in northern Botswana and at the confluence of the Chobe and Zambezi rivers.

Bryden (1893): states that a few years prior to his writing, giraffe were to be found near Khama's old headquarters (Shoshong), but by 1890 they were only encountered in the bush on the far side of Kanne (= Kanye) on the way from Shoshong to Lake Ngami. They were still to be found in most parts of Khama's country and also north to the Victoria Falls, west to the Chobe and Mababe rivers and beyond these to Lake Ngami. The most frequented habitat was the waterless

stretch south of the Botletle. They were also known from the Botletle southward in the Kalahari. In 1890 a few found their way as far south as the Molopo river, but this was rare.

Bryden (1893): numerous along the south bank of the Chobe river.

Selous (1893): on the Mababe Flats near the Mababe river; Hornsvlei; near the Chobe river.

Baldwin (1894): Sichele's Kraal; the wells of Boatlaname; large numbers near Sicomo; Machin; near the Notwani and Botletle rivers; Massouey (= Shua) salt pan; Lopepe; Kanye; the vicinity of the Shua and Chobe rivers.

Schultz and Hammar (1897): the vicinity of the Chobe; along the Okavango and near Lake Ngami.

Passarge(1908): the Kalahari.

Selous (1907): near the confluence of the Chobe and Zambezi rivers; the dry sandy parts between the land inhabited by the Bamangwato and Lake Ngami and from there to the Mababe, Chobe and Zambezi rivers; along parts of the Botletle river; the waterless but forest-clad sand belts on the southern banks of the Chobe in large numbers.

Selous (1908): the greatest part of Khama's country; the northern Kalahari; near the Ramaquabane and Botletle rivers.

Hodson (1912): between Gat-garra and the Chobe river; Metsibotloko; Matomabi; large numbers at Thamaseti; small numbers at Gerufa.

Haagner (1920): the northern Kalahari.

#### South West Africa:

According to Mossop (1947), Brink was probably the first white person to encounter giraffe north of the Orange river, near the Leeu river and also at Grundorn on Braus in 1724.

Coetsé (Mossop, 1947) was the next explorer who in 1760 recorded encounters with giraffe along the Houm river in Great Namaqualand to roughly north of the present-day Warmbad.

Paterson (1777-9) together with Gordon, saw the giraffe near the Orange river mouth just to the north of the river, whilst Van Reenen (Mossop, 1935) mentions its occurrence near the Leber river in 1791.

Le Vaillant (1783): north of the Orange river near the Leeu river.

Andersson (Wallis, 1936): the confluence of the Swakop and Tjobis rivers; between the Olifants and Nossob rivers; southwards along the Nossob, all between the years 1827-1867.

Alexander (1838): Hoakosams Pool in the Chounp river.

Tindall (Tindall, 1959): near the Black Nossob river in the years 1839-55.

Galton (1853): the Tjobis river; the Otjimbingue vicinity; Omanbonde Pan; Eikhams.

Andersson (1856 and 1861): the Otjimbingue vicinity (including Tjobis Fountain, Richtersveld Mission and Onanis); Schmelens Hope in the vicinity of the Swakop river near Okahandja; Omanbonde Pan; the Ondonga vicinity; along the Omaruru river about 70 miles from Otjimbingue; Elephant Kloof near Sandfontein; a large number of bleached giraffe bones south of Rehoboth indicating an earlier abundance there.

Hahn (Petermann, 1859): along the Omarumba Omatako in 1857.

Green (Petermann, 1867): near the Cunene river.

McKiernan (Serton, 1954): between the years 1874-79 on his way to Ovamboland at Okaukuejo in the present-day Etosha Game Reserve as well as to the west of this area.

Anderson (1888): Ovamboland near the Ovambo river.

Bryden (1893): already killed off by the Namaquas to the west of Tunobis towards Damaraland, but fair numbers still occurring in parts of Ovamboland towards the Okavango river.

Matschie (1895): at the time of writing the southern boundary coincided with the tropic of Capricorn.

Schultz and Hammar (1897): the vicinity of the Okavango river.

Haagner (1920): northern South West Africa.

Jaeger (1921): a few left in the Karstfeld near Etosha.

Shortridge (1934): southern Damaraland and Great Namaqualand in the past; at the time of writing extinct as far south as Gobabis district, but



still occurring in the Kaokoveld in the northwest, Grootfontein district in the northeast and the Caprivi east of the Okavango.

Present distribution:

Natal:

Bourquin (1966) : five were introduced into the Umfolozi Game Reserve in 1965; rare in the Hluhluwe Game Reserve.

Transvaal:

According to Kettlitz (1955) giraffe are still fairly plentiful in the lowveld of Pilgrims Rest. They are found along the south bank of the Olifants river with the highest density approximately 30 miles south, and in the Klaserie Valley. To the south they occur as far as the Sand river, but seldom south of the Sabie. The giraffe also occurs in the Letaba district, but very sparsely, and is found as far north as the Selati river, very rarely north of this river and never north of the Letaba river. The boundaries of the distribution of the giraffe in Transvaal outside of the Kruger National Park are therefor the Letaba river in the north, the Sabie river in the south, the Drakensberg range in the west and the Kruger National Park boundary in the east.

Kettlitz (1962) states that giraffe are only found in the Letaba and Pilgrims Rest districts (outside the Kruger National Park). They show a tendency to move southwards and have become quite numerous between the Sand and Sabie rivers. He estimates the numbers of giraffe outside the Kruger National Park as 400 plus.

Pienaar (1963), discussing the large mammals of the Kruger National Park, finds the area between the Olifants and the Sabie rivers to be the centre of highest density, whilst the area to the north of the Olifants river, as a result of a scarcity of fodder trees, shows very little population growth. Pienaar estimates their numbers as approximately 2850 in the Park. Van der Merwe (1966) for the same area puts the figure at 2900, whilst De Graaff (in litt.) gives a figure of approximately 3,000 for 1969.

Mocambique:

Fajardo (1953): rare in the Gorongosa Reserve.

Sidney (1965): a limited, arid or semi-arid region between the Sabi and Limpopo rivers, and only in small numbers.

Tinley (in litt) agrees with the distribution as given by Sidney (1965). He adds that giraffe have apparently never occurred in Gorongosa although the rift valley plains carry the dry zone elements including acacia and mopane veld through the wet savanna zone.

Rhodesia:

Child and Savory (1964): restricted to the southern lowveld and the northwestern corner of Rhodesia; introduced into the Matopos National Park and the Robert McIlwaine National Park.

Sidney (1965): restricted to the Nuanetsi and Gwanda Native districts in the south and in the Wankie, Nyamandhlovu and Bulalima-Wangwe Native districts in the west; do not occur north of the Lundi river and no records found of their appearance west of the Umzingwane river in the Gwanda district; plentiful in Wankie National Park.

Botswana:

The Vernay-Lang Kalahari expedition (Hill, 1942) encountered giraffe near Kwaai on the Okavango delta, on the Mababe Flats and at Tsotsorogo Pan in the same vicinity.

Kay (1962): fairly large numbers in the vicinity of Nyie (= Nyai) Pan near Kanye as well as from near the Thamalakane and the Kwaai rivers; Tsotsoroga pan on the Mababe Flats; from between Kanye and Panda ma Tenka.

Sidney (1965): fairly common in Ngamiland and in the vicinity of the Chobe river; a few occasionally appearing in the western and eastern parts of the Bamangwato territory to the south of the Makarikari pan and south of the Shashi river.

Kirsten (1966): the Moremi Game Reserve.

Tinley (1966): common in the Moremi Reserve.

Smithers (1968): occurs as far south as approximately 23° S in northern Botswana; widely distributed in northern parts but uncommon to the east and does not occur as far east as the Serowe Lothlekane areas; absent from central western areas.

Child (1968): widespread in most of north-eastern Botswana but infrequently found on the Chobe flats east of Kachikau.

Von Richter (1969): scarce in the Salajwe area, southwestern Kalahari.

#### South West Africa:

The Carp expedition (Lundholm, 1951) found an increase in the numbers of giraffe in the Kaokoveld since the publication of Shortridge's (1934) survey.

Bigalke (1958) records it from farms in the Tsumeb, Grootfontein, Outjo and eastern Gobabis districts. He states that it is widespread and numerous throughout the Kaokoveld except in the coastal desert and Game Reserve 2.

Sidney (1965) states that giraffe are found in South West Africa north of the 19th degree of latitude, but are not very common.

#### Change in distribution:

The past distribution of the giraffe included the following areas: the northern Cape Province both south and north of the Orange river; probably in Zululand; the northwestern, northern and eastern Transvaal; parts of Mocambique; the southern and south-eastern parts of Rhodesia, Matabeleland but seldom east of the Gwelo river in Mashonaland; practically the whole of Botswana and South West Africa from the Orange river in the south to the Cunene in the north in suitable habitat as well as in parts of the Caprivi.

At present the giraffe still occurs in the eastern Transvaal; a limited part of Mocambique; Rhodesia in the southern lowveld and northwestern corner; northern, northeast and parts of central Botswana; the Caprivi and northern South West Africa.

Areas from which it has disappeared include: the Cape Province, the northwestern and northern Transvaal, Botswana south of 23° S and in South West Africa from the Orange river up to about the 19th degree of South latitude.

The giraffe has been introduced into the Willem Pretorius Game Reserve in the Orange Free State, where 7 occurred according to the 1968 census-figures.