

however, they do not seem to wear so well as the skins of cats and jackals, being liable to lose the longer whitish hairs which give the fur its silvery appearance.

"A Sand-Fox (*C. rüppelli*) lived in the London Zoo for nearly $6\frac{1}{2}$ years. An American Red Fox (*Vulpes fulva*) lived there for just over 12 years."—Flower.

BREEDING HABITS.—A female, which, judging by the enlarged mammae, was suckling cubs, was trapped at the entrance of a small burrow in open sandy country near Berseba on September 12th.

According to FitzSimons, a litter is usually produced at the side of or under a stunted shrub on the open veld; but I suspect that, like other foxes, *Vulpes chama* habitually breeds in burrows.

"Gestation period of Silver Fox (melanistic form of Common Red Fox) is 51-52 days."—A. P. Millard.

DESCRIPTIVE NOTES.—"No. 13 (Coll. No. 3053, from Otjitundua) is very remarkably redder than usual, with reddish leg-patches and a reddish tail; but it comes from the same locality as the ordinary greyer specimens, and is no doubt merely an individual aberration."—Thomas.

The African Hunting Dog

Lycaon

Lycaon Brookes, 1827, in Griffith's Cuvier's Anim. Kingd., V, p. 151; genotype *L. pictus* Temminck, 1820, Ann. Gen. Sci. Phys., III, p. 54. The African Wild Dog from Mozambique.

Cape Hunting Dog—Wildehond

Lycaon pictus Temminck

LYCAON PICTUS PICTUS.

Hyæna picta Temminck, 1820, Ann. Gen. Sci. Phys., III, p. 54.

Type (in the Leyden Museum?) from Mozambique.

LYCAON PICTUS VENATICUS.

Hyæna venatica Burchell, 1822, Travels, I, p. 456.

Type (not in existence) from the Cape.

LYCAON PICTUS ZULUENSIS.

Lycaon pictus Zuluensis Thomas, 1904, Ann. Mag. N.H. (7), XIV, p. 98.

Type (in the British Museum) from the Itala Mts., Zululand.

NATIVE NAMES:

PERSONALLY COLLECTED

Herero: *Ohakáni*. Ovambo: *Ombídi*.
 Bechuana: *Lethlálérwa*, *Letiáni*.
 Ovadirico, Ovacuangari, Mambakushu: *Mbindi*.
 Berg Damara, Nama Hottentot, Naron Bushman: *!Gaub*.
 Hei||kum Bushman: *!Na:rub*.
 ||K'au ||en & !Kung Bushmen: *!Gu*.

OTHER SOURCES

Herero: *Oha-kana* (Zukowsky); *Ombakana* (Zukowsky—Kaokoveld).
 Sikololo: *Liakanyane* (Lancaster).
 Mambakushu (Simbukushu): *Mbivi* or *Linibinde* (Balme).
 Chinkoya: *Mbindi* (Lancaster). Tonga: *Umpe* (Lancaster).
 Chila: *Musaka*, *Umpa* (Lancaster).
 Chilavale: *Kangunga* (Lancaster).
 Kaonde: *Mpumpi*, *Musaka* (Lancaster).
 Nama Hottentot: *!Goub*, or *†Hou-arib* (Krönlein).
 Naron Bushman: *Auko* (Bleek);¹ ||*Garu* (Schinz).
 ||K'au||en Bushman: *!Gwa* (Bleek).
 !Kung Bushman: *Ho* (Zukowsky).
 Sikwengo (Hukwe) Bushman: *Kauba* (Zukowsky). *K'aua* (Balme).
 !Nu||en Bushman: *†Khi:* (Bleek).¹
 Masarwa (Kakia) Bushman: *!Xai* (Bleek).¹
 !Auni Bushman: *!Hang* (Bleek).¹
 ||Ng!ke Bushman: ||*Xu ri* (Bleek).
 !Kam-kalke Bushman: *!Xeru* (Bleek).

DISTRIBUTION IN SOUTH-WEST AFRICA.—Wild Dog are widely distributed in South-West Africa, and hunting packs may be met with periodically almost everywhere except in the extreme south. They are of rather infrequent occurrence south of the Tropic of Capricorn, although sporadic visits have been recorded from around Berseba and elsewhere in Great Namaqualand.

Wild Dog are practically unknown to-day in the vicinity of the Orange River, nor could I obtain any evidence that they ever wander into the desert coastal belt.

Wild Dog naturally concentrate most where game is plentiful, and, although by no means abundant, are well-known in the Kaokoveld, Ovamboland, the Etosha Pan Area, and the greater part of Damaraland—eastwards to Gobabis District. They are apparently most generally numerous in Grootfontein District and the Caprivi.

"Wild Dog occur everywhere in the Omaheke and the Kaukauveld in greater or lesser numbers."—Wilhelm.

Although Steinhardt notes that they occur in the Kaokoveld in troops

¹ Domestic Dog.

ranging up to 100 individuals, it is doubtful if the total number, inhabiting or visiting that region at any one time, amounts to many hundred.

"The Wild Dog is widely distributed but rare in Angola."—Statham.

GENERAL DISTRIBUTION OUTSIDE SOUTH-WEST AFRICA.—Wild Dog are widely distributed over the greater part of Ethiopian Africa from the Cape to about 15° north.

Except for exceedingly rare migrants, they are extinct to-day in the Cape Province, the Orange Free State, and Natal.

Elsewhere in Southern Africa wild dog may be met with in Northern and Central Bechuanaland, Ngamiland, Southern Rhodesia, parts of the Transvaal and Portuguese East Africa, and Zululand.

Beyond the Zambesi they range across the continent from Angola on the west—through Northern Rhodesia and Nyasaland—to Mozambique in the east, northwards—through Tanganyika Territory, the Eastern Congo, Kenya Colony, and Uganda—to the Sudan, Abyssinia, and Somliland in the east, and to at least as far as Lake Chad on the west.

HISTORICAL.—Less than a hundred years ago wild dog occurred in packs throughout the Cape Province to as far south as the neighbourhood of Cape Town.

The most recent record for the Cape Province appears to be that of two specimens—now in the Kaffrarian Museum—which were shot out of a small troop of four or five at Gray's Halt, Amabele, near Kei Road on July 16th, 1925, by Newey Bros. There seems to be no other record of wild dog in Kaffraria for the last 30 or 40 years.

"Plentiful in Addo Bush about 25 years ago. Now very rare in the Eastern Province, but recorded from Albany and Bedford Districts in February, 1925."—Hewitt (1931).¹

W. Sclater, writing in 1900, noted that wild dog were then still found in Cape Colony, especially in unsettled districts such as the Addo and Fish River Bush.

Masson (1776)—record of the occurrence of wild dog near Saldhana Bay.

Sparrman (1785)—from Caledon.

Paterson (1790)—from Uitenhage.

Cumming (1855)—from Griqualand West.

"Hunting Dogs were met with by some of the first explorers to enter the upper Nile Region. Heuglin reported them in 1869 from the White Nile, and a few years later Schweinfürth mentioned them from the upper waters of the Bahr-el-Ghazal and the Nile-Congo Watershed. Formerly they ranged beyond the limits of Africa through Europe to the British Isles, where fossil evidence of them has been obtained in the Pleistocene beds of Wales."—Roosevelt and Heller.

HABITS.—Wild Dog hunt impartially in bush or forest lands, more rarely on the open plains. Although seeming to favour the proximity of rivers, they

¹ It is more than probable that these records referred to the identical travelling troop out of which two were shot at Amabele later on in the same year.

occasionally make long treks through arid waterless regions, but probably seldom remain long away from permanent water of some kind.

Lion and Wild Dog are not infrequently found in fairly close association, well-stocked game country being doubtless a common attraction.

Wild Dog travel so swiftly through a district that it is seldom possible to shoot them in large numbers. From choice they do their own killing, and, being little attracted by carrion, are rarely trapped.

The ordinary loping pace of a pack of wild dogs does not give the impression of great speed; they seldom exert themselves unduly when pursued and, unless pressed, often retreat only a few hundred yards or so. When chased by domestic dogs they show little or no fear and are inclined to play around aggressively or even, on occasion, to reverse the chase. They are said also to pay little attention to a man on horseback.

Wild Dog hunt in the early morning, late afternoon, at dusk, sometimes on moonlight nights, and in cool weather throughout the day. They are essentially nomadic and can hardly be looked upon as resident in any one district, although individual troops probably have extensive beats, and favoured concentration grounds where game is plentiful. Although highly gregarious, small parties of three, five, or seven, up to a dozen seem to be more often together than really large packs in South-West Africa. Single individuals, apparently hunting alone, were occasionally observed.

"If a district is hunted through by wild dogs all game will leave and keep away for a time. As a rule they will not return to a kill. They will eat the carcasses of their own species: an individual out of a pack of eight was shot near Omaruru (S.W. Africa) and dragged to the opposite bank of an omuramba: next evening the remainder returned and were heard devouring their companion, practically nothing of which was left by the morning."—Wilhelm.

"Wild Dogs are partly nocturnal in habits but usually do their hunting in the evening or early morning: I have, however, heard them catching impala at midnight. They usually drink after sunrise, again at midday, and in the evening. At midday, when the members of a pack have finished drinking, I have often seen them taking a sun-bath in the sand. Wild Dogs are both bold and inquisitive and, when disturbed, trot away in front of the intruder, frequently standing and barking at him. The greatest animosity exists between domestic and wild dogs; I have never seen a domestic dog able to cope single-handed with these powerful-jawed creatures. They hunt in packs, two, three, or sometimes only one doing the running, these being relieved at intervals by others."—Vaughan-Kirby.

"Wild Dogs are mainly diurnal animals, the greater part of their hunting taking place between early dawn and about an hour after sunrise, and again from about an hour before sunset until dark. When the moon is good, however, they often hunt far into the night, while they will do so all day in cloudy or cool weather. There is no predatory animal in Africa responsible for so much disturbance of game as the Hunting Dog, and, in proportion to his numbers, there is none which deals out more wholesale destruction. A pack descending suddenly upon a district will scatter the game far and wide, and the disturbance which

their presence causes is so intense that the area quickly ceases to supply them with food, and they are consequently obliged to move on elsewhere. Wild Dogs are gregarious, going about in bands, the size of which is largely dependent on the food-supply of the district. Because they are at times seen associated in large troops, on occasion up to as many as sixty or seventy in number (in the early days Gordon Cumming and others have recorded bands of several hundred), and may appear in two widely-separated localities within a surprisingly short space of time, they are often believed to be far more numerous than is actually the case. Troops of hunting dogs often show great indifference to man's presence, although, after having been systematically hunted and shot at for a time, there is no animal which seeks safety more quickly. Although expert swimmers, they more often than not decline to cross deep water—this unwillingness being no doubt due to fear of crocodiles. Pursued antelopes seem to be aware of this and take advantage of it.”—Stevenson-Hamilton.

“Wild Dog run in troops varying from 14 to 16 to as many as 40 or 50.”—Bryden.

“Wild Dogs travel rapidly and are migratory, moving about both by day and night at a long untiring gallop. They hunt like well-trained hounds. If pursued, wild dogs make off into the bush and do not take to earth.”—Sclater.

Whilst preying preferably on medium-sized game—steinbok and duiker, up to impala, reedbuck, and the hornless cows of all antelopes—there are numerous records of their running down and overcoming the largest species—kudu, waterbuck, gemsbok, wildebeest, sable, and even eland and cow buffalo. In South-West Africa, according to natives, young giraffe are liable to be attacked by wild dog; although—as when chased by domestic dogs—the cow giraffe will doubtless turn and endeavour to trample on the assailants.

“Hunting Dogs master all the smaller and the young of all the larger antelopes, and there is reason to believe that at times, though rarely, they kill even the biggest antelope and half-grown buffalo also. Yet we saw zebras feeding near them without heeding them, and also rushing at them and driving them off if they came too close. They will menace man, though we have no authentic instance of their actually attacking him.”—Roosevelt and Heller.¹

“They are said seldom to attack full-grown wart-hog or bush-pig, although preying on the females and immature animals.”—S. Hamilton.

Wild Dog ultimately retreat before close settlement. When outlying farming districts are visited by packs of wild dog they make most destructive raids on sheep and other stock—up to the size of donkeys and half-grown (occasionally full-grown) cattle. In Gobabis District these visits, although infrequent, are estimated to result in more loss of stock than that caused by leopard and all other carnivora combined—principally due to their wasteful custom of killing many more than they consume.

“I have seen a pack of wild dogs sweep through a herd of goats, tearing and mangling the whole flock in an incredibly short space of time.”—Kirby.

Donkeys become extremely nervous when wild dogs are close at hand,

¹ Lyell quotes an account in ‘The Field’ of a native herd boy who was killed and eaten by a pack of Wild Dogs.

stampeding and squealing frantically at sight of them. On one occasion at Fockshof (Grootfontein District) two wild dogs ran in amongst the wagon donkeys whilst out grazing, causing them to bolt and cover a distance of over fifteen miles before finally pulling up.

Hunting Dogs are fairly noisy animals and may frequently be heard during the night—the usual call being a soft but far-reaching ‘hoo-hoo,’ not unlike the hoot of a large owl.

“The call of the Hunting Dog is a sharp ‘hu-hu-hu’—almost a whistle—which is repeated a couple of times.”—Wilhelm.

“They have three cries, a sharp angry bark of surprise, a chattering noise somewhat like that of monkeys (chiefly heard at night), and thirdly and most commonly a soft ‘ho-ho.’”—Gordon-Cumming.

“There are three very distinct sounds: (1) A short bark when one comes suddenly upon them in the bush, or some strange object attracts their attention. (2) A voluble chattering—frequently harshly guttural—made by a troop when excited or after they have run down their prey. (3) A clear single call note, beautifully musical, and often heard at sunrise when scattered members of a troop call to their comrades.”—Vaughan-Kirby.

“The Hunting Dog possesses three calls; the best-known is the peculiar and rather plaintive howl usually heard after nightfall and in the early morning, and is repeated eight to a dozen times in quick succession; this is the rallying cry used to collect the individuals of a pack. When suddenly disturbed or alarmed, they utter hoarse barks, much more resembling those of baboons or bushbuck than of domestic dogs. When at a kill, and also I believe at mating times, they give vent to a curious whining chatter. I have known individuals when wounded yelp much like domestic dogs, but as a rule they maintain silence. Small cubs whine and yelp much like ordinary puppies.”—Stevenson-Hamilton.

The spoor is rather small for the size of the animals, and is rather difficult to distinguish from that of medium-sized domestic dogs.

“They have a strong and most unpleasant odour.”—Bryden.

“The odour which emanates from these animals is most offensive and very powerful, so much so that long after they have left any spot the fact that they have been there is immediately perceptible.”—Kirby.

“A pair of African Wild Dogs lived in the Dublin Zoo for just over 9 and 10 years respectively. (Domestic Dogs very rarely live to 20 years of age. An instance of 34 years has been recorded.)”—Flower.

BREEDING HABITS.—“The young—in S.E. Africa—appear to be born from March onwards to September, but the favourite month seems to be April. A female once killed in December contained two fœtuses nearly ready to be born. A number of adjacent ant-bear holes—preferably surrounded by thick bush and near water—are chosen; these are further excavated and improved until quite a chamber has been hollowed out, and grass is brought inside to form bedding. The mothers undoubtedly regurgitate for the benefit of their offspring.

“The number of young are, as a rule, from two to six—the last number being probably rather the exception.

"The large number of cubs often found associated in one earth (Smuts records as many as ten and twelve) is due to the fact that several females are, on occasion, accustomed to use a single burrow as a common nursery. Infant mortality is considerable."—Stevenson-Hamilton.

"I have taken pups from the breeding burrows—these are frequently enlarged, though never excavated, by the Hunting Dogs—in March (when they were a fortnight old), and in June, July, and September—when from one to two months old. This would point to March–May being the breeding months, but I am of opinion that they have no regular season. I have twice seen a litter of four, once of six, and once of eight; in the latter case the natives assured me that the hole was occupied by two bitches."—Vaughan-Kirby.

"Several litters of four, one of six, and one of seven have been brought to the Pretoria Zoo. A pair in the Zoo had two litters—on each occasion of four."—Haagner.

"Period of gestation, 60–63 days."—Wilhelm.

DESCRIPTIVE NOTES.—The black, yellowish, and white colour-patches of wild dog are unsystematically arranged, and never exactly identical in any two animals. There is a tendency in some regions for one, or two, of these colours to predominate, although there is a general consistency in the pattern.

The black, erect, rounded ears are particularly conspicuous in life. Iris, yellowish-brown (Mearns).

"Aged specimens often show very little hair, being at times quite hairless and slaty-black like Mexican Hairless Dogs. Puppies and immature specimens are quite blackish, with little or no yellow or whitish except on the terminal tuft."—Roosevelt and Heller.

WEIGHT.—60 lb.—of large specimens probably up to 70 or 80 lb. (S. Hamilton).

75 lb. approx. (Lyell).

SHOULDER HEIGHT.—(♂) 2 ft. 5 in., (♀) 2 ft. (Kirby).

2—2 ft. 6 in. (S. Hamilton); 23—24 in. (Lydekker); 70—75 cm. (Wilhelm).

DIMENSIONS.—Vaughan-Kirby records the length of an exceptionally large male to be 4 ft. 10 in.—over all (4 ft. 6 in.—straight, of which the tail measured 1 ft. 2 in.); and of an average-sized female 3 ft. 10 in.—over all.