FAT-RUMPED SHEEP

BLACKHEAD PERSIAN

Synonyms. Black Head Persian; Black-headed Persian; Swartkoppersie (Afrikaans).
Origins. In spite of its name it is certain that the sheep has its origins in the Blackheaded Somali. The foundation of the breed is one ram and three ewes from a ship which landed in South Africa in about 1870. Further importations were made subsequently but do not appear to have had any great influence on the breed. Blackhead Persians were registered as purebreds in the first South African Stud Book in 1906. By 1930 there were 38 registered studs with 4000 animals.
Sub-types and races. Somali, Blackheaded Somali, Pecora somala a testa nera [Italian] (Somalia); Blackhead Ogaden (Ethiopia); and Toposa (Sudan) are similar but less improved types. East African Blackheaded is a fat-tailed rather than a fat-rumped sheep.
The Blackhead Persian has been used in crossbreeding on many "unimproved" types and has been crossed itself with "improved" types. Dorper (Dorset Horn x BHP), Wiltiper (Wiltshire Horn x BHP), Permer (BHP x German Mutton Merino), Nungua Blackhead (BHP x Djallonke (Ghana)), van Rooy ((Ronderib Africander x Rambouillet) x BHP) and Bezuidenhout Africander ((Arabi x BHP) x (Arabi x BHP)) are African examples. The BHP has also played a role in the development of Karakul sheep in southern Africa.
Distribution. Originally developed in the drier areas of South Africa the breed has spread to other parts of southern Africa and farther north, notably to Tanzania, Kenya, Ethiopia and even to Ghana. It has also been introduced for crossbreeding purposes to the West Indies, and to Central and South America.
There were an estimated 2 million Blackhead Persian sheep in South Africa in the early 1950s but numbers of purebreds have declined, mainly due to dilution by crossbreeding.
Ecological zones. Semi-arid and arid. The sheep has been introduced to many wetter areas where the comparative advantages it enjoys in dry areas are lost.
Management systems. Ranching and (mainly in the past) research stations. Flock sizes can be very large in ranching systems (e.g. 9000 on West Kilimanjaro ranch in northern Tanzania in the late 1960s (Figure 92)).

Figure 92: The Blackhead Persian ram flock at West Kilimanjaro ranch, Tanzania

In central Somalia rainfall varies from 100 mm to 250 mm per annum. Management practices are similar to those adopted for Boran goats in the same area (p.93) except that some breeding control is imposed as sheep are not milked. Flock sizes are much smaller than for goats, averaging 31 head, and are in a smaller proportionate range of 6-53 head. Flock structures are related mostly to meat production: females 76.1 per cent (breeding 55.9 per cent); males 23.9 (breeding rams 9.8 per cent, mature castrates 9.7 per cent).

Physical characteristics. Medium to large size. Weight: male up to 70 kg in South Africa; female 50 kg.

The following description is close to that of the official South African breed standard. Many sheep elsewhere leave much to be desired in relation to these norms. The outstanding characteristics are, of course, the black head and the fat rump Figure 93.

Head strong, with strong nose and mouth. Both sexes have poll and nose pads of fat, giving convex appearance to profile.

Horns should be absent (although scurs do occur). Ears moderately long, soft and held horizontally.

Neck thick and well set and in good proportion to body. Body broad, deep and reasonably long with broad withers and back. Back straight. Chest prominent, standing out vertically, broad and with well developed freely-hanging dewlap. Shoulders and buttocks well filled. Legs fairly short, straight and well placed. Tail comprises three parts: the first broad and firm close to the rump, not hanging down and not tapering; the second is curved upwards and rests against the centre of the first, tapers towards the apex, which should be level with the back, and shows a clean black skin area; the third hangs from the apex of the second, is 5-8 cm long and covered with short smooth hair. The tail must hang true.

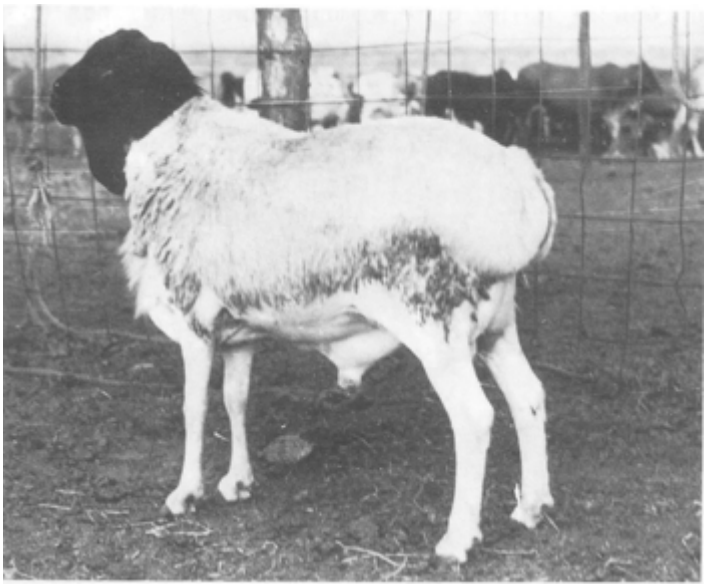

Figure 93: A Blackhead Persian ram imported from Rhodesia (Zimbabwe) to Kongwa in central Tanzania in 1963

Colour in the classic type comprises a black head and neck, with the black not extending farther back, and running evenly round the neck. Hooves are also black. The rest of the body is pure white. Coat is of kemp and up to 4 cm long on the body but shorter on face and head. There is an inner coat of fine wool fibre. Sub-types and races differ in colour from pure black to pure white.

Products. Meat; (fat); (skins).

Productivity.

REPRODUCTION. *First lambing:* 795 ± 220.4 (s.d.) days (n=1133) at West Kilimanjaro; 942 ± 159.5 (s.d.) days on station in Mozambique. *Lambing interval:* 351 ± 161.7 (s.d.) days (n=2886) at West Kilimanjaro; 342 ± 19.1 (s.d.) days (n=138) in Mozambique; 3 lambings in 2 years on station in Kenya; about 14 months in central Somalia but varying greatly with season. *Multiple births:* very uncommon; 93.6 per single (89.5 per cent of lambs), 6.3 per cent twin (10.3 per cent of lambs), 0.1 per cent triplet (0.2 per cent of lambs) (n=5951) at West Kilimanjaro. *Litter size:* 1.00 (n=172) in Mozambique; 1.06 at West Kilimanjaro (n=5951) in 1963-1988. *Fertility:* (ewes lambed/ewes mated): 70.6 per cent in Mozambique. *Lambing percentage* (=lambs born/ewes mated): generally low, 60-90 in Zimbabwe and Kenya. *Fecundity* (=lambs born/ewes present per year): 61 per cent in Somalia. *Lifetime production:* 4074 ewes averaged 3.16 parturitions, only 14 per cent having 5 or more parturitions, at West Kilimanjaro.

GROWTH. *Birth weight:* 2.4 ± 0.10 (s.e.) kg (n=209) in Mozambique; 2.7 kg (n=54) in Kenya. *Weight for age:* 90 days-12.4, 180-15.2, 365-32.0 kg in Mozambique; 6 months-15.0 kg in Somalia Table 50 .

MILK. *Yield:* 68 kg in 12 weeks on high and 38 kg on low plane nutrition in Trinidad; 98 000-130 000 tonnes, of which 20 000-26 000 tonnes offtake for human consumption, from Somali national flock in 1970-1984. *Composition:* averages of 9 ewes over 12 weeks were fat 5.9 per cent, protein 5.6 per cent, ash 1.0 per cent and lactose 4.8 per cent in Trinidad; total solids 20 per cent in Somalia.

Table 50: Weights (kg) at various ages of Blackhead sheep in a central Somalia traditional system

Age range (months)	Sex		
	Female	Male	Castrate
0-12	15.6	15.0	18.1
13-24	21.4	20.6	21.5
25-36	23.9	23.7	25.5
37-48	26.3	29.8	28.3
49-60	27.3	30.5	31.6
>60	29.2	26.5	36.0

MEAT. *Dressing percentage:* 45 at 18.6 kg live weight in South Africa; 43-48 at 29.9-42.2 kg on different planes of nutrition in Zimbabwe; 48.8 for 3 animals averaging 15.0 kg live weight in Angola. *Carcass proportions:* 51.3 per cent hindquarter in South Africa. *Carcass composition:* 54.6/38.8/6.6 per cent meat/bone/fat in Angola.

Blackhead Persian carcasses are characterized by heavy fat deposits on the rump, with relatively little fat elsewhere, and are thus not suited to all markets. First-cross carcasses also usually show poor conformation.

Somalia exported 350 000-793 000 head in 1970-1984 and slaughtered 1.08-2.06 million annually in the same period.

Research. Livestock Breeding Station, P.O West Kilimanjaro, Tanzania. Institute of Agricultural Research, P.O.Box 2003, Addis Ababa, Ethiopia.

References. Pepler & Hoffman, 1935; Labuschagne, 1948; Butterworth et al, 1968; Paiva, 1969; Racoczi, 1974b; Dahir Mumin, 1986; de Almeida & Pimental, 1986; Bourzat et al, 1989; Rocha, McKinnon & Wilson, 1990b; S.M. Das, pers.comm.

FAT-RUMPED SHEEP

Synonyms. Dorsian (Dorsie [Afrikaans]) for white variety.

Origins.This sheep was developed in the Grootfontein area of South Africa from 1942 onwards from crosses of Dorset Horn males on Black-head Persian females. A fixed type was developed through inter-se mating. A breed society was established in 1950 in the Republic of South Africa. The Dorsian (white variety) was affiliated to the Dorper in 1964.

Sub-types and races.Some specialization for different functions and markets is taking place. The Blackhead Persian is used in a variety of other crosses which have characteristics similar to the Dorper.

Distribution. Found over most of southern Africa including the Republic, Namibia, Zimbabwe and Angola, and Botswana in lesser numbers. Also in Kenya (Figure 94) and Tanzania with smaller numbers in some West African countries. The Dorper is the second most numerous sheep breed in the Republic of South Africa and accounts for 65 per cent of the "commercial" flock in Zimbabwe.

Ecological zones. Mainly semi-arid and arid areas.

Figure 94 Dorper ram, imported via Swaziland, on a commercial ranch in Laikipi a district, Kenya

Management systems. Principally ranching.

In Botswana 84 rams were provided to private owners under the subsidy scheme operated by the Animal Production Division.

Physical characteristics. One of the few breeds of small ruminants in Africa which has a full description. The following "standard of excellence" is adapted from judging notes by the Dorper Sheep Breeders' Society of South Africa.

Head strong and long with large eyes, widely spaced and protectively placed. Strong nose, forehead not dished. The head must be "dry" - i.e. no local fat deposits.

Small horns is the ideal but heavy horns are permissible. Ears in proportion to head.

Neck of medium length, well-fleshed, broad and well-coupled to the forequarters. Shoulders broad, firm and strong. Chest deep and wide.

Protruding brisket undesirable. Legs strong and straight. Well sprung ribs, broad and full loin, back long and straight with no "devil's grip" but a slight dip behind the shoulders is permissible. Croup (rump) long and wide: inner and outer twist well fleshed and deep. Udder well developed Figure 95 . Scrotum not too long but testicles equal-sized and not too small. Localization of fat on any part of the body is undesirable and even distribution over the carcass and between the muscle-fibres is the ideal.

Figure 95: Dorper ewe and lamb at Lobo farm, Middlepits, south-west Botswana

Colour should be white with black confined to head and neck. Limited black spots on body and legs permitted. There is a white colour variant. Too much wool or hair is undesirable; the ideal is a short, loose light covering with wool predominating on the forequarter and a natural clean kemp underline. A mane is grounds for disqualification.

Products. Meat.

Productivity.

REPRODUCTION. *Multiple births:* fairly common; 77.2 and 22.8 per cent single and twin (n=123) at Henderson in Zimbabwe; 24.4 per cent (n=603) at 01 Magogo in Kenya. *Litter size:* 1.09 (n=563) on Botswana station; 1.29 (n=232) at Grasslands in Zimbabwe, 1.23 (n=123) at Henderson. *Fertility* (=percentage of ewes lambing): 68 per cent of exposed ewes (n=830) lambed over 8 years (1976-1983) on Botswana station; 90 for 258 ewes exposed at Grasslands; 86 for 704 exposures over 5 years at 01 Magogo. *Lifetime production:* 4.7 breeding seasons at Grasslands.

GROWTH. *Birth weight:* 3.9 kg (n=616) on Botswana station; 4.2 kg (n=299) at Grasslands, 4.5 kg + 0.09 (s.e.) kg (n=151) at Henderson; 3.5 kg (n=750) at 01 Magogo. *Weight for age:* 4 months-20.7, 12-30.8, 18-38.2 kg in Botswana; 140 days (weaning)-16.3 kg at Grasslands; at 01 Magogo males were 45 and 53 kg at 1 and 2 years and 55 kg at 3 years and older, females 36, 43 and 45 kg at same ages; 100 day weight of performance tested sheep figure 96: in the Republic of South Africa increased by more than 30 per cent from 1964 to 1981. *Average daily gain:* birth-140 days - 243 g at

Henderson when creep fed *ad libitum;* birth-weaning(105 days) - 171 ± 48 g at 01 Magogo. *Age at 40 kg:* 146 days at Henderson.

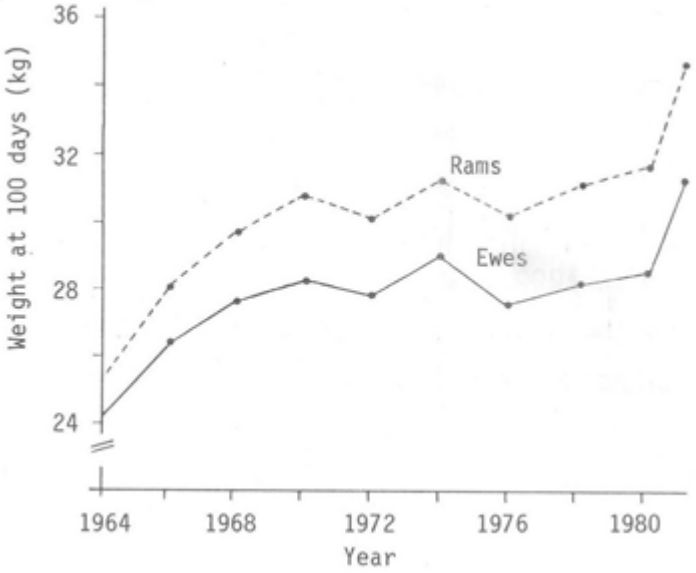

Figure 96: Changes in 100 day weight of registered Dorper sheep in South Africa

MEAT. *Dressing percentage:* 44.8 at live weight of 18.7 kg, 47.6 at 30.0, 51.2 at 40, 59.1 at 50.0, 52.3 at 60 kg following high energy diet at Matopos (Zimbabwe). *Carcass composition:* fat increased from 12.4 per cent at 18.7 kg to 35.8 at 60.0 kg at Matopos and back fat thickness from 1.35 to 11.10 mm.

Research. Department of Research and Specialist Services, P.O.Box 8100, Causeway, Harare, Zimbabwe.

References. Chemitei et al, 1975; Manyuchi et al, 1987; McLeod, 1988; H.P.R. Tawonezvi, pers.comm.