Studies were carried out at 3 large-scale farms of the Agricultural Development Corporation (ADC) in western Kenya and at 4 medium-scale and 3 small-scale farms in central Kenya (around Nairobi). Blood, and later milk, were taken on days 1 (oestrus), 15, 17, 21 and 24 to monitor progesterone and oestradiol. Modes of heat detection and insemination and returns to oestrus were recorded. Similarly, body scores, incidence of disease, abortions and cullings were recorded. On the large-scale farms, heat detection was made twice daily by herdsmen, while on medium-scale farms both herdsmen and bulls were used to detect heat. On small-scale farms, owners/herdsmen provided observations on heat. Service was by AI on large- and small-scale farms, and mixed AI and natural mating on medium-scale farms. AI was usually carried out within 6-12 h of heat being detected, although it could be delayed up to 16 h. At all farms, body scores were good (3-5), and no major diseases were found. Heat detection was satisfactory. However, the quality of AI was very variable. On large- and small-scale farms, 30% of the cattle conceived at 1st service, as opposed to 70% on medium-scale farms. The number of services per conception was high at large-scale (3.5) compared with medium-scale farms (1.7). Large-scale farms kept their cows for more parities than medium-scale farms (4-5 vs. 3-4). It is concluded that the current extensive grazing management system in the dairy industry in Kenya offers a cheap and effective method of husbandry, but that poor AI is a major constraint on reproduction.