

THE BASICS



Introduction

According to archeological findings, cattle were domesticated about 10 000 years ago. In 1999 it was calculated that there were 1200 million head of cattle in the world and that number continues to grow. In many developed countries, including South Africa, the cattle industry is one of the largest farming enterprises in terms of financial returns. This shows how important the association between people and cattle is. Some historians have made the statement that it is doubtful whether mankind would have developed as rapidly as he did without cattle to provide meat, milk, hides, draught power and to serve as an article for barter and an indicator of wealth. It is disturbing to note that in many of the poorer countries of Africa, livestock numbers have declined drastically over the last decade.

For many people, meat and milk are common components of their daily diets. Unfortunately, to many others, these are luxuries rarely enjoyed. A common problem in many disadvantaged communities is a shortage of certain proteins in the diets of children, which leads to severe nutritional deficiencies which can cause mental retardation, often lasting into adult life. People may argue the desired level of protein required in human diets, but all know that proteins are necessary for a normal, healthy existence and meat and milk are rich in essential proteins.

Only 11% of the total surface area of South Africa is classified as arable, whereas 54% is classified as grazing land. In KwaZulu-Natal, rainfall varies from 550 to 2000 mm per annum over a landscape ranging in altitude from sea level to above 3500 m. Temperatures vary from the hot subtropical areas of north-eastern KwaZulu-Natal to the western parts where winter frost is a regular occurrence and snow is experienced from time to time.

Where cattle are kept for production, beef farming can be a primary or a secondary enterprise. In the latter instance, the farmer has more than one enterprise and the beef enterprise is the subordinate undertaking. Because beef farming can be a low input system in terms of costs, labour and time, it is a very useful enterprise to run as a

secondary enterprise. Thus cattle often are retained to keep grass down on marginal areas or to utilize excess roughage such as crop residues, and may also be kept for aesthetic and/or cultural reasons where people merely like to have animals or believe that cattle must be present for ceremonial reasons. Many historians believe that the ability of cattle to serve as draught animals was a major factor in the opening up of arable areas, especially in places with heavy soils, as is the case in many parts of Europe. For whatever reason livestock are kept, buying cattle is an investment, albeit a risky one because of disease and mortality. Characteristically, beef production is a long-term undertaking and profits are rarely made on the short term.

Ruminants, especially beef cattle, are eminently suited to converting low quality roughage to products of a higher economic value. When planning a farming enterprise, this ability of beef cattle should always be kept in mind. Dairy cows and sheep also have the ability to convert plant material to meat, milk and animal fibres, but usually require a diet of a higher quality than that needed by the average beef animal.

Where cattle are kept for reasons other than beef production, the basic principles do not change significantly *e.g.* factors such as water and nutrient requirements remain much the same, although the level of production required could necessitate an adjustment to the level of feeding.