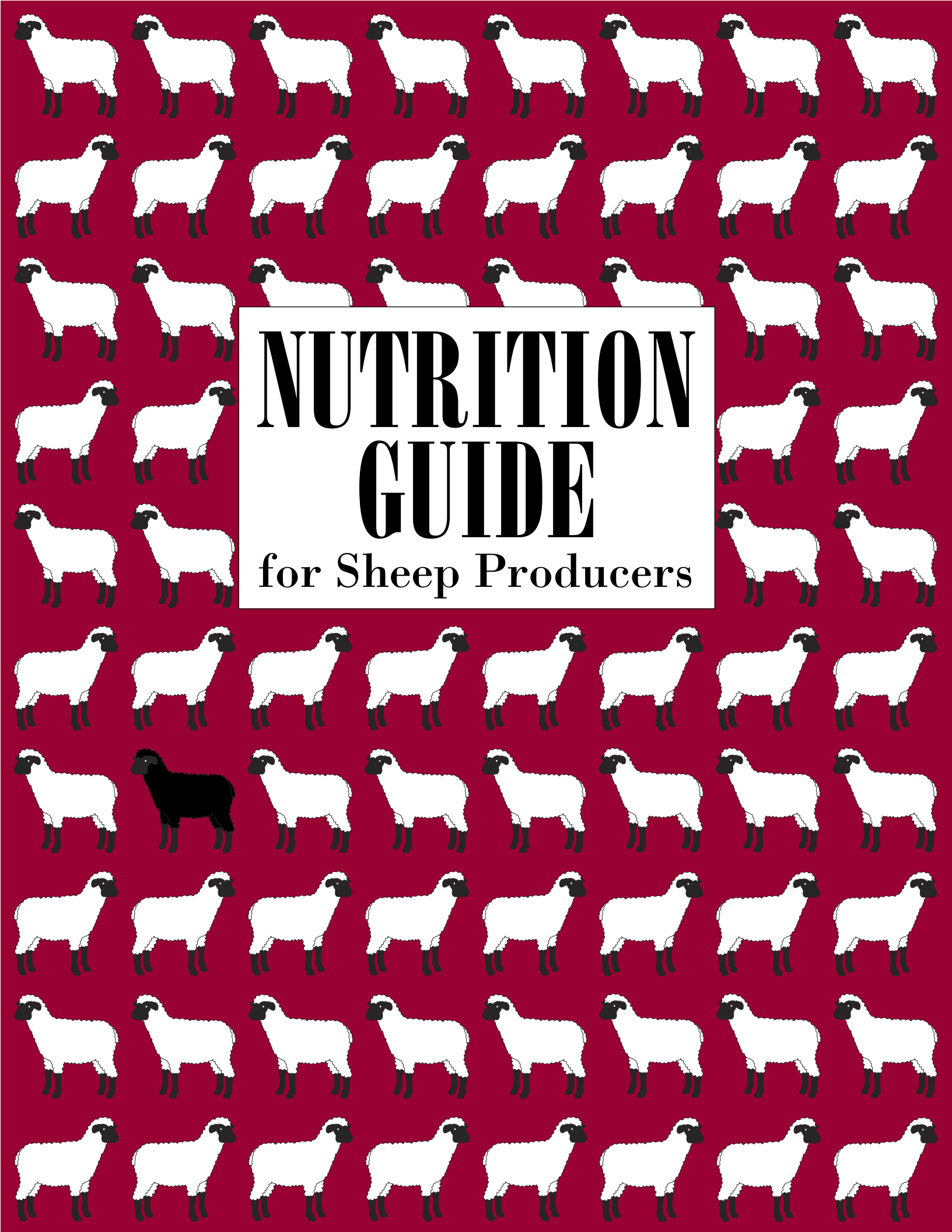

NUTRITION GUIDE

for Sheep Producers

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for B.C. Sheep Producers

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Introduction

The primary goal of any commercial sheep enterprise must be to achieve maximum production at minimum cost. It is the margin between the returns from marketable products and costs of production which determines profitability. Since feed costs usually constitute 60-80% of the total costs of production, it is imperative that feed resources are used to maximize advantage.

The economic realities of sheep production today demand a solid understanding of the principles of nutrition leading to the application of sound and profitable management practices. Knowledge of both the nutrient value of available feeds as well as the nutrient requirements of the livestock is essential in order to profitably allocate feed resources.

This guide attempts to put feeding management practices into the whole context of sheep nutrition. Section A deals with the characteristics of feeds and the criteria used to evaluate their feeding value. Section B is intended to provide a background of basic information on the way in which the sheep utilizes feed. Although some of these ideas may seem academic at first glace, they are intended to provide an understanding of the principles which dictate the success (or failure) of management practice. For example, creep feeding works because early consumption of solid feed promotes rumen development.

The nutrient requirements of sheep are discussed in Section C and tabulated in Appendix II. This information is based on a tremendous volume of ongoing research, recently summarized in the US National Research Council publication, “Nutrient Requirements of Sheep, sixth revised edition, 1985”.

Markets, economics and genetics all affect feeding practices. In the past decade, a market for sheep dairy products has been developed. This has lead to increased popularity of dairy breeds like the East Friesian which as, in turn, affected feeding practices and nutrient requirements. Likewise, the economics of lamb production demand larger lamb crops with the result that more research has been done on the nutrient requirements of ewes carrying and suckling multiple lambs.

Section D gives practical guidelines to sampling feeds for analysis, interpreting analysis results and formulating rations to meet production requirements. A simple technique like the Pearson Square can be used to formulate basic rations. Computer software, designed specifically for the formulation of sheep rations, is more appropriate for routine use.

Finally, Section E suggests profit-oriented management practices based on the information contained in previous sections. The adoption of such practices is recommended for most producers. It is mandatory if the sheep flock is expected to produce a reasonable return on investment, management and labour. Livestock production today involves marginal economics and unless one is dealing with a “full-deck” of sound practices, economic survival may be impossible.

In summary, this guide attempts to integrate the whole area of sheep nutrition into a practical package for the profit-oriented producer.