

Book Reviews

Farmageddon: The True Cost of Cheap Meat

P Lymbery and I Oakeshott (2014). Published by Bloomsbury Publishing, 50 Bedford Square, London WC1B 3DP. 448 pages Paperback (ISBN 978-1-4088-4644-5). Price £12.99.

The United Nations predicts that world food supply must increase by 70–100% by 2050 to meet the needs of an expanding, more affluent society. This book sets out to convince us that intensive, large-scale livestock farming has no place in meeting that aim. It is well worth reading if the potential problems linked to industrialised livestock production interest you. For those who are uncertain, the following describes some of the book's strengths and weaknesses and may help you come to a decision.

It is an easy book to read. The chapters start with an account of the authors' exploits and adventures during their quest for material on the negative effects of large-scale farming on wildlife, human health, the landscape and the environment. The authors approach their mission as European ecotourists, and their accounts include some unfortunate, disparaging remarks about infrastructure and lifestyle in poorer communities. The book avoids technical language and explains complications in a simplified way. Occasionally, the flow is interrupted by episodes where it shouts at the reader with bombastic, exaggerated language meant to appeal to emotions rather than reasoning. This includes some almost puerile phraseology such as "in the dark, rank sheds where the animals are reared, the air is filled with toxic gases, faecal germs and bacteria". There are also some tedious condensing symbols; the soil is invariably 'tired', crops are 'chemical-soaked' and manure output of the individual livestock species is repeatedly compared with the output of faeces and urine of humans. If you can tolerate this type of satire then persevere because in other respects it is well written and the content is interesting. A major strength is the way it integrates arable farming with the livestock sector. The two are closely interdependent through the production and use of grains grown for livestock. In various countries the feedstuffs' sector has displaced small-scale farmers through the introduction of broad-acre farming, caused localised pollution next to feed-processing mills and spoilt the coastline where fishmeal is processed. The last two cases have also disrupted some poor urban communities and contributed to health problems. Another strength is the chapter on the folly of trying to introduce intensive livestock farming systems into poor communities. This discussion is based on socio-economic reasoning, which unfortunately is less well-developed elsewhere in the book. There is an interesting commentary on the depletion of the world's mineral oil reserves, and brief but excellent summaries on food wastage, seaweed as a source of protein, and the role of farming in contributing to declining aquifer reserves. A recurring theme is the effect of high animal population densities on pollution and disease risk for both

animals and humans. This is portrayed as bad, even wicked, rather than raising hazards that need to be managed.

Philip Lymbery is a keen birdwatcher and this enthusiasm comes across during some frequent engaging digressions which help lighten the book. He is well recognised for his ability to research and use scientific information in a skilful and effective way. He puts this experience to good use in sections on migratory patterns of wildlife, aquaculture, genetically modified rice, cloning, human health risks from antibiotic resistance, avian influenza and high fat diets in modern society. On the other hand, the arguments against using insecticides and herbicides are weak. They are claimed to cause many present day ecosystem problems, but the discussion is limited mainly to finger-pointing and the supporting evidence and reasoning are not always clear.

The animal welfare discussions focus on broiler chicken lameness, trout welfare and keeping layer hens in cages, dry sows in stalls, veal calves in crates, and salmon in cages. These topics are not given comprehensive coverage, but some of them are useful updates or historical accounts. The piece on large-scale dairy farming focuses on pollution rather than dairy cow welfare, and the chapter on animal care also skips over animal welfare concerns. Instead, it embarks on claims that veterinarians are servants of an industrialised farm machine, and UK abattoirs are staffed by drunkards and drug addicts.

The concluding messages are that agriculture should switch from monoculture to mixed farming systems; ruminants should be kept on pasture instead of being fed concentrates indoors; fishmeal should not be fed to livestock as it is a potentially usable food for people; the general public should avoid overeating meat; there should be investment in waste reduction and wasted food should be used as feeds for pigs and poultry.

Overall, this is an excellent book for those wishing to examine the protest movement's current way of thinking. It is ideal for school pupils doing projects on agriculture and the environment whilst looking for quips which criticise livestock farming for causing human health, environmental, landscape, wildlife and animal welfare problems. There are many statements which may end up as catchphrases in school pupils' essays: eg "there are thousands of listless cows with udders the size of beach balls standing in the mud, waiting to be fed, milked, or injected with drugs, and, pigs kept on slatted floors are like bacon already on a grill pan".

Giving scores out of ten, it gets 9 for readability, 8 for human interest, 5 for some updates on familiar topics, 4 for originality, and 1 for presenting balanced arguments. It does not rank as a scholarly socio-economic or ethical analysis of large-scale farming, and if this is your quest, then you might instead like to start with *Small is Beautiful* by EF Schumacher CBE.

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