

"capital-intensive" (as opposed to traditional "labor-intensive") methods of rearing livestock in confinement. In doing so, they have put together a crushing indictment of the mass production of food animals that is replacing traditional open air animal husbandry at an ever-accelerating rate (e.g., by 1975, 97 percent of broilers and 40 percent of all eggs in the US were produced under intensive farming conditions).

The most carefully researched and up-to-date critical study of "factory farming" available, Mason and Singer's book thoroughly debunks the glowing self-portrait painted by agribusiness interest groups, lobbies and journals (one of which is called Confinement). According to the spokesmen for this industry, intensive livestock production has ushered in a new era of plenty and quality. In contrast, Mason and Singer carefully document the deleterious effects of this method on consumers' nutrition and health, the environment, energy conservation, the allocation of grain crops and land (both within the US and worldwide), small farmers, and last (but not least) the animals themselves. The authors provide a sordid, but unsensationalized close-up of confinement methods at work, from the discarding of male chicks in trash bins where they suffocate, to the shackling of pigs in dingy all-metal pens, to total genetic manipulation of animals (featherless chickens, "hamburger cattle", stressless pigs), to surgically de-penised bulls, to the senseless lacing of feed with hormones, carcinogenic chemicals, antibiotics, and fecal matter.

It is a sorry spectacle which we all support through tax-funded federal programs to assist agribusiness enterprises and through supermarket purchases. However, Mason and Singer indicate a number of avenues for redress to which individuals as well as independent, tradition-minded farmers--often denied tax breaks and subsidies given to huge corporations and in danger of being snuffed out--can resort. Though they avoid overt proselytizing in favor of vegetarianism, Mason and Singer do point out some of its advantages and in doing so reveal some of their biases fairly clearly. For example, they refer to the standard North American menu as comprising "heavy, meat-based meals," and contend (quite baselessly) that "A meatless diet offers much more variety than the restrictive rite of flesh eating" (p. 133). It must also be said that their position in the book is rather one-sided; only one case of constructive innovation within the context of confinement rearing is mentioned (pp. 139-140). Finally, the chapter entitled "Factory Ethics: The Moral Cost of Animal Factories," which is supposed to add some ethical substance to their argument, is both too brief and superficial, largely reiterating (non-moral) points made earlier and containing the contentious and ambiguous (and unsupported) observation that animals "have lives of their own to lead" (p. 122).

ANIMAL FACTORIES, JAMES MASON AND PETER SINGER. NEW YORK: CROWN PUBLISHERS, 1980. Pp. xviii-174. \$10.95.

It is no secret that in food production, as in virtually every other profitable industry, wealth and power tend to concentrate in fewer and fewer hands. So much so that monopolistic "agribusiness" has emerged during the past two decades as a towering corporate giant. In Animal Factories, Jim Mason and Peter Singer trace the history of this development and describe in detail today's high-technology and

Overall, Mason and Singer display a sense of realism, advocating a forced slowdown in agribusiness expansion and a gradual return to more traditional farming methods. Whether even this is realistic enough remains to be seen. But whatever the outcome, Animal Factories can scarcely fail to generate a lively and healthy debate.

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