

This is largely an anthology, giving copious extracts from all periods of her writing, linked together by Paul Brooks's account of her quiet life and slow development from unpublished poet to international celebrity. Consequently it is only the last third of the book that deals with the controversial *Silent Spring*, on which she worked for four years. Not by temperament a crusader, she certainly never dreamed that a tract on pesticides would become a bestseller, but she felt impelled to challenge the indiscriminate use of synthetic poisons. Her target was not only the vested interests but also the general ignorance and complacency of the time.

*Silent Spring* made an explosive impact and aroused perhaps the greatest storm in conservation history. She was savagely criticised: *Time* reported that informed opinion considered her case 'unfair, one-sided and hysterically over-emphatic'; the trade journals were less polite. But her book brought a new awareness to millions of readers and infiltrated the minds of millions more who never read it or even knew her name. Some of her shots may have gone wide of the mark, but the ten years since its appearance have seen some remarkable changes in attitudes towards nature and our environment. David Brower summed up her effectiveness in a single sentence: 'She did her homework, she minded her English, and she cared'.

G.T. CORLEY SMITH

**Animal Aggression: Selected Readings**, edited by Charles H. Southwick. Van Nostrand Reinhold, £3.

**Animal Weapons**, by Philip Street. MacGibbon and Kee, £1.95.

In his preface Professor Southwick mentions two persistent controversies in the study of aggressive behaviour: firstly, whether animals have an instinct for aggression or whether it is always the product of external stimulation; and, secondly, whether we can, in fact, learn much about human behaviour by studying animals. The present wave of violence in our society makes both these subjects of more than academic interest and these writings by leading authorities in the study of aggressive behaviour provide a wealth of information, not readily available to non-specialists, for intelligent contemplation and discussion.

In addition to the classic studies of behaviourists such as Konrad Lorenz and Niko Tinbergen, the twenty contributions include recent papers in the fields of physiology, endocrinology, biochemistry and neurology. It becomes clear, after reading these, that the causes of aggressive behaviour even in animals are exceedingly complex and in man more so, particularly because it is more socially organised. We are left with the conclusion, apparently reached by Professor Southwick, that the relevance of animal studies to human problems are, to say the least, hard to define in our present state of knowledge.

Mr Street deals with the tools of aggression but also includes mention of structures that do not come within the strict definition of weapons, such as the protective cases of caddis larvae, and behaviour such as the burrowing activities of many creatures. Occasionally the author seems to get carried away by his enthusiasm into subjects right outside the scope of his title, including biological control, commensalism and life histories. The real weapons discussed in an entertaining way include horns, teeth and feet, shells, spines, suckers, projectiles including the incredible sling of the bolas spider, lures and traps, blood-sucking devices, stings and electric organs. There are numerous helpful line drawings by Megan di Girolamo.

JOHN CLEGG