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Editorial - Beastly teachers

Teachers, they say, are a necessary evil; beastly people, teachers; pedantic, dogmatic, intolerant. If this is the nature of the beast, should we not take Wordsworth's advice and 'let nature be our teacher'? There could be no better field than entomology in which to put this into practice; at least we should run no risk of a shortage of teachers.

It is difficult to arrive at a reasonable estimate of the world population of entomologists, because they are difficult people to define and still more difficult to regiment (praises be!). If one supposed that for every one attending an International Congress, ten stay at home - or more likely go out collecting - there must be around 20,000. If Canada has as many per head of population as any country, as has been claimed, the figure may be 50,000. Let us average these two figures; if we have 35,000 entomologists, this would allow 22 described species of insect per entomologist, or if we accept C. B. Williams' estimate of the world population of insects at 10^{18} , about 3×10^{13} insects per entomologist; a rather unusual staff/student ratio.

Insects are certainly pedantic, dogmatic, and intolerant, and should therefore make good teachers. And as teachers of entomology they must surely be immune to the fashionable accusation directed at school teachers - that they are good teachers but have nothing to teach, if not to the reciprocal retort often aimed at university teachers. Perhaps this is the proper role of human teachers of entomology - to help the insect teach the student, or to help the student to learn from the insect. Certainly if one had to choose between insects, books, and entomologists, from which to learn, the choice would be in the order given. Perhaps more than any other science, biology in general and entomology in particular must be taught from the organisms they are concerned with, in the field and in the laboratory. Many of us get into the bad habit of reaching for a text when in doubt about some point of insect structure, when we could just as

easily reach for an insect - a much less fallible adviser. The habitual referencé of questions back to the insect might even help us in our difficulties in keeping up with the literature; it would certainly give us a surer foundation of knowledge from which to judge whether, in any particular paper, we need to read on. In addition to the rather negative qualities we started out with, insects are ubiquitous, lively, versatile, unobtrusive, fertile, and unequivocal. There is little more one could ask of a teacher.

One of the interesting advantages of an insect teacher of entomology as compared with a human teacher, is that he can fulfil many of his functions even after death, especially if well preserved. Indeed it is in large part the readiness with which they may be acquired in the first place and preserved in the last place, that makes insects so much more valuable than many other groups of organisms in the teaching of other branches of biology. Their only limitation lies in their inability to teach the structural detail of other groups - unfashionable stuff these days anyhow.

There is a tradition of great teachers of entomology extending back to the early years of the science itself. Surely a place in this roster has been earned at least by two species of cockroach, by a fruit fly, and by mealworms and flour beetles.

Brian Hocking