

This Week's Citation Classic®

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Gibb J. Feeding ecology of tits, with notes on treecreeper and goldcrest.

Ibis 96:513-43, 1954.

[Edward Grey Institute of Field Ornithology, Department of Zoological Field Studies, Oxford, England]

In this paper, the year-round feeding of tits (birds of the genus *Parus*) in an English woodland was quantified. The time members of each species spent feeding varied inversely with their body weight. The birds spent more of the time feeding in winter than in summer, except when feeding young, and interspecies segregation by feeding habit was more pronounced in winter. Species dominance was ranked by body weight; dominant species gained much food in winter by robbing submissives. [The *SCI*® indicates that this paper has been cited in over 120 publications since 1955.]

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This study was conceived in the late 1940s and became part of my DPhil project. Ordinarily, describing its conception so long ago might appeal more to the imagination than to the memory, but the circumstances were odd.

I had "read jurisprudence" at Oxford for a year before the war and had just (in both senses) passed Law Moderations, an event that my tutor judged "more a matter for gratification than congratulation." Accordingly, six years later and with no scientific qualifications, I jumped at

David Lack's offer of a field assistant's job at the Edward Grey Institute. I discovered by chance that my year's law entitled me to a War Degree, which in turn made me eligible on paper for taking a higher degree. Astonishingly, the work I began as a field assistant was accepted by Sir Alistair Hardy as suitable for a DPhil. Such flaunting of the spirit, if not of the word, of university regulations was possible in those euphoric postwar years.

Lack rarely told his staff or students exactly what to do, simply pointing them in the right direction. (Later, when I was embarking on a five-year program away from Oxford but under his direction, his sole instruction was to "let the habitat guide you.") At Oxford, it didn't take long to discover that Lack believed in the all-importance of food as a determinant of reproductive rates and the number of birds in an area.¹ It struck me that if this were true, food shortages should be reflected in the way birds spent the day. So, without telling anyone else, I began measuring how tits spent the day throughout the year: hence this paper.

I don't know why this work has been quoted often—except, perhaps, that it dealt with a popular group of birds and used repeated standard observations to quantify bird behaviour and to draw up a time budget; this has since proved a useful approach. The fieldwork impressed me with the insistent demands that feeding makes on small birds and with the nature both of intraspecific competition for food and of the mortality resulting directly or indirectly from it. This set the scene for further work on tits² and indeed for much later studies of rabbits in New Zealand, which dog my retirement.³

1. Lack D. *The natural regulation of animal numbers*. London: Oxford University Press, 1954. 343 p. (Cited 970 times since 1955.)

2. Gibb J A. Populations of tits and goldcrests and their food supply in pine plantations. *Ibis* 102:163-208, 1960. (Cited 120 times.)

3. Gibb J A, White A J & Ward C P. Population ecology of rabbits in the Wairarapa, New Zealand. *NZ J. Ecol.* 8:55-82, 1985.