The winter food of the Pine Grosbeak is approximately 99.1 per cent vegetable material (Bent 1968a). Bent notes that wild grape seeds have been recorded as winter food by other observers. Literature reviewed by the author did not indicate previous instances of American bittersweet being consumed by the Pine Grosbeak.

Although good crops of highbush cranberry (Viburnum trilobum), common buckthorn (Rhamnus cathartica) and Manitoba maple (Acer negundo) fruits and seeds were available, I did not observe their consumption by any of the 15 bird species present on the study plot.

The author gratefully acknowledges that Tom Hilditch identified the plant specimens.

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Book Reviews

The Encyclopedia of Birds. Edited by C.M. Perrins and A.L.A. Middleton. Facts on File Publications, New York. 445 + xxxi pages, \$49.95.

Editors or authors of Bird Encyclopedias set themselves a rather daunting task; by its very nature an Encyclopedia must be authoritative and a ready reference to hand, but in today's competitive world of ornithological publications it must be visually attractive and entertaining. The editors of *The Encyclopedia of Birds* have, generally speaking, succeeded quite well in walking this tightrope between the twin pitfalls of excessive dryness and excessive popularisation.

Unlike (for example) Lands-

Snow on Manakins, C.H. Fry on Bee-eaters, M.P. Harris on Boobies, J.C. Barlow on Vireos, to name only a few.

The book starts with two essays by Perrins, on classification and under the title "What is a Bird?" Both are worthwhile introductions for the general audience, although expert bird-watchers will also find some useful information therein; both would also, incidentally, be more stylistically attractive without the excessive use of exclamation marks.

The format of the remainder of the Encyclopedia is taxonomically based. For each family, or in some cases, group of closely related families, there is an account, the style of which varies somewhat with the individual author. There is, in addition, for each family a small section giving a range map, borough Thompson's New Dictionary of Birds, the present work consists almost entirely of accounts of the 180 different families of birds; there are no articles on general topics, such as sexual dimorphism or display. Instead, a comprehensive index refers to such items where they occur within the family accounts. To write the accounts themselves, the editors have assembled some of the world's best-known ornithologists (the selection is heavily biased towards the British Commonwealth, indicating that both the editors and this reviewer share similar prejudices as to where the world's best ornithologists are to be found). Among the 90-odd contributors are many who are recognized as the authority on their specialty—D.W. the number of genera and species, a size indicator, brief generalised details of plumage, voice, nest, eggs and food, and finally the names of a number of species. The criteria for the selection of these appear to be somewhat capricious.

The actual accounts of the families are generally very informative, while at the same time making interesting and entertaining reading. As an example I would quote from G.T. Smith's essay on Lyrebirds: "The existence of lyrebirds became known to Europeans in Australia in 1797 through the reports of an exconvict who had lived for some years with, and fomented trouble among, aborigines in the bush. Surrendering to the authorities clad only in a kangaroo-skin apron, he told suspicious officials of the existence of "pheasants" near the Hawkesbury River". Smith then goes on to give an excellent and detailed account of the life history and biology of the Lyrebirds and Scrub-birds. This meld of popular and informative is typical of the writing in this book, and generally succeeds.

The Encyclopedia is lavishly illustrated throughout with photographs and paintings. The quality of the photographs varies from good to superb; the artwork is good, sometimes very good, but on occasion suffers from overflamboyance. The Flicker on page 296, for example, owes far more to the artist's imagination than to a careful examination of museum skins. Fortunately a photograph of the real thing is to be found a couple of pages further on.

Given the quality of the

contributors the number of errors in the book would be expected to be small, and indeed it is. The range of the Boat-billed Flycatcher (page 318) extends not from Panama but from north-central Mexico to Uruguay; the maps of cuckoos and turacos (page 230) have been interchanged; the "Black-eared" Bushtit (page 382) has been treated as a good species: and if we really want to be picky, my ancient drouthy crony Chris Mead does not have a Ph.D.—in fact he doesn't have a B.Sc. either. but the lack of these academic albatrosses around his neck has not prevented him from writing an excellent account of swifts. Most other errors are trivial.

One area which could be greatly improved is in the range maps. They are generally too small; further, for families with restricted ranges, the whole world is nevertheless illustrated. Thus, for example, the range of the Todies is so small as to be indecipherable, even with a hand-lens, while on the same map Greenland and Australia are quite uselessly included. It would have been better to have discarded a uniform approach and to have used a larger

map of the Caribbean for this family. No clear distinction is made on the maps between breeding range and wintering range; for example the map for loons includes all range, summer and winter, while that for sandpipers seems to refer to breeding range only. Many of the maps are inaccurate in minor detail—for example, Stone Curlews and Cotingas—and something very bizarre, I'm not sure precisely what, has happened to the Woodpecker map.

However, having pointed out some relatively minor problems in the book, this reviewer would like to state clearly his opinion that The Encyclopedia of Birds is a very successful effort which will prove both useful and entertaining for the fanatical birdwatcher and the armchair ornithologist alike. There will, I am sure, be criticisms that with a less opulent style of publication more information could have been included for the same price, but I feel that these critics will not be taking into account the realities of the market. Given the lavish production, the price (\$49.95), while steep, is not excessive by today's standards.

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A Field Guide to Personal Computers for Bird Watchers and Other Naturalists. 1985. Edward M. Mair. Prentice-Hall, New Jersey. xv + 207 pp. \$13.95 (paper).

In this so-called computer age, it is perhaps not surprising that high computer technology should now embrace the world of birders and birding. This little book, which is far more than a field guide, is a succinct and well-written volume appearing appropriately at a time when personal computers are becoming familiar and accessible tools, and thereby allowing easier and quicker organization and analysis of observational data. Mair's style of writing is enthusiastic and easy to follow, and the sections on computer technology are readily understandable. Computer language jargon is kept to a minimum, and when such terms are used (for example, "bauds", "megabytes" and "CPUs"), they are carefully and clearly explained.

The book falls into two distinct parts. The first part is a general introduction to computers and computer languages, and is organized in a clever and innovative way along the lines of classical ornithological topics. For example, the construction and various parts of the computer are compared with the anatomy of birds, the changes in size and efficiency of computers are compared with the evolution of birds from Archaeopteryx, operating systems and computer languages are compared with bird behaviour, and so on. At times the comparisons seem forced and contrived, but overall the approach makes for entertaining and informative reading. There is also a handy section on the pros and cons of the various computers available today. Mair compares Apples with IBMs, Commodores, and others, points out the basic abilities of each system, and gives a rough guide to costs—certainly a starting point for someone entering the market for a personal computer today.

Part II concentrates on software—programs on floppy

discs, in effect. In this section, Chapter 6 on data base management is particularly useful. The organization of one's observations is always a bit of a dilemma. Should one organize one's sightings by date, by location, or by species? Each has its advantages and uses. Organizing sightings by species (as I do) is fine if one wishes to quickly determine how many Hooded Warblers, for example, one has seen this year, in comparison perhaps with previous years, but such a system is awkward when one needs records for a given time period (for submission to American Birds, for example) or for a given location (the Wainfleet Bog, as a recent example). Loading and storing records on a computer means one can have all three; merely giving a simple instruction to the computer results in a list by species or date or location or whatever one wishesvery handy.

Other chapters in Part II go beyond the level of listing sightings. They introduce methods by which data can be analyzed graphically, and once again Mair shows how simply such analyses can be mastered. Some graphics, pie charts for example, would be beyond the needs of most birders. but others might certainly prove useful, histograms or graphs showing annual numerical trends being a case in point. The book ends with a couple of Appendices discussing the actual set-up of data files, and how such files can be sorted, changed and/or rearranged to serve one's own personal needs.

I am not sure that I agree with

the claim of Phalarope Books that "the personal computer is the best new tool for birders since the invention of binoculars." Not everyone owns or has the money to run out and buy a personal

computer. However, for those who do have access to a personal computer, this book is a worthy and useful introduction to computers for birders.

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OFO Announcements

New and Used Bird Book Sale/1986 OFO Annual General Meeting

Do Annual General Meetings bore you? Here's one with a new twist! The 1986 OFO Annual General Meeting will be held on Saturday, October 25, 1986 at the Scarborough Civic Centre. It will feature the usual business meeting, talks, evening social and A SALE OF NEW AND USED BIRD BOOKS. We invite all OFO members to go through your libraries and select new or used bird books or journals that you no longer need or want and offer them for sale at the 1986 Annual General Meeting. There are no OFO commissions or booth fees; you set the price that you think your books are worth and you take home the proceeds. Of course, donations to OFO will be accepted. Field trips to local birding hot spots will be held on Sunday, October 26th. For more details contact book sale organizer Rob Nisbet (416-683-4852) or AGM Co-ordinator Reid Wilson (416-831-1745).

Ontario Birds: Northern Ontario Issue

Just a reminder that the December 1986 issue of Ontario Birds (Vol. 4, No. 3) will be a special issue devoted to Northern Ontario—roughly that area of Ontario north of a line from Sault Ste. Marie to Sudbury to the Ontario—Quebec border. Several manuscripts have already been received, but additional material is needed. Anyone with bird data suitable for publishing from that area is encouraged to write it up and submit it before 1 November 1986. We also invite Ontario artists, who work in pen and ink or pencil to submit ideas now for a cover illustration and/or inside illustrations consistent with this theme (include sample copies of your work).

This will be OFO's first special issue. Let's make it a good one with a full complement of articles, notes and illustrations on the birds of northern Ontario. Send all material to the Editor, Box 1204, Station B, Burlington, Ontario, L7P 3S9.