**APRIL 1984** 

### **NEW TECHNOLOGY FOR 1984**

At a glance ..... you can see that Bulletin 40 is different! After much debate your Executive Committee decided to purchase simple word-processing facilities so that camera-ready copy for the Bulletin could be prepared more quickly and efficiently. This decision was taken after much heart-searching - we do not spend your money easily! The Group's financial position is satisfactory, as indeed it should be immediately after a subscription rise, and future prospects look good. Providing inflation future prospects look good. Providing initiation does not rise it seems likely that the subscription can remain steady for some time. We can therefore afford to print slightly enlarged Bulletins from time to time, and to acquire the equipment described by Mike Pienkowski elsewhere in this Bulletin.

In taking this step into "new technology" we are sure we are doing the correct thing. One of the main aims of the Bulletin is to inform

members of <u>recent</u> activities, whether they be "news" or new work. This sense of immediacy encourages research and international co-operation. To achieve this aim we need the shortest possible time interval between producing "copy" and printing, and we also need to publish on time! The new system will enable us to work to tighter, shorter deadlines more easily, mainly by making checking and correcting procedures easier and by using a computer-driven printer to produce copy for the printer's camera.

We also think that the Bulletin looks better for its facelift — we commend No. 40 to members, with a toast to "New Technology"! Raise your glasses .... and send in your subscription!

G. H. GREEN Chairman

# TECHNOLOGY AND WSG BULLETIN - OR HOW WE GOT BACK ON SCHEDULE

## by M.W. Pienkowski

#### The story so far

I could afford to risk a title like this with our new production process for WSG Bulletin. I can change it if things do not work out quite as well as we hope. Members will have noticed that it has been difficult to produce issues of the Bulletin on time. There are all sorts of reasons for this, some of

- (a) the desire to include very topical items;(b) encouraging publication of results and early feedback to participants in cooperative projects;
- (c) maintaining a reasonably high standard of content and production;
- (d) depending on an unpaid labour force at various stages of editing and circulation; and
- (e) the fact that this Labour force scattered widely throughout Britain. (At a rough calculation, even an article from an author in Britain travels about 6000 km, in 15 stages, between receipt by the editor and posting as part of the Bulletin to members!)

Anyone with much experience of computers and word-processing will realise that the situation outlined above would benefit greatly from the introduction of such technology, and the benefits are likely to increase as time passes. Three main factors have previously prevented our adoption of such techniques:

- (a) cost;
- (b) the need for a complete back-up system in case of failure: an entire Bulletin consisting of inaccessible magnetized material is of limited value should computer or printer fail;
- (c) time to develop a suitable system.

Several processes are now in train which make the use of a word-processing system more feasible. First, microcomputers for home use have become widely available, offering high computing power at low cost. Second, several WSG members in Britain have each decided that a particular microcomputer and word-processing chip is well suited to their needs. Some of them also have obtained the same model of printer. Thus back-up facilities are available.
Third, several WSG members have gained considerable experience in the use of a wide variety of word-processing programs on a range of machines, from home microcomputers to large main-frames.

#### The plan

As a result of all this, Wader Study Group has decided to change its production method to take advantage of this new technology. Due to our limited resources, we are taking a risk and introducing the new system without running it parallel with the existing one for a trial. We hope that the experience of members outlined above will allow this to work. To make the transition in production methods easier, we are carrying out the changes in stages, where this is practicable. For example, certain discrete items such as large Tables will continue to be produced by typewriter for the moment. (We should explain here that the Bulletin 1s prepared as camera-ready copy from which printers prepare printing plates pho plates photographically. Incidentally to this, members may have noted that the highly appropriate name of Lake-Shore Graphics no longer appears on the cover: this firm now forms part of Minizen Ltd., but we are pleased to retain in this firm the services of Mr Reg Davis, who has helped maintain such high printing standards for some vears.)

The introduction of a word-processing system has many advantages which should benefit efficient and timely production of the Bulletin:

- (a) Corrections can be made easily and neatly, without retyping whole documents.
- (b) Because of this, items can be typed at a much earlier stage in the editing procedure. Subsequent changes and reformatting can be done without needing to retype the document. As a result of this, typing can be spread more evenly in time, avoiding a concentration of this (and consequent proof-checking) around

press dates.

- (c) The word-processor allows justification of line lengths. This enables us to introduce the much-requested two-column format in a neat manner.
- the much-requested two columns.

  (d) The progress made in quality dot-matrix printers allows us to use this style of printer to produce reasonable quality print. Dot-matrix printers make up each letter from an array of dots (in the present case, 7 vertically and 5 horizontally). This contrasts with a daisy-wheel printer which works more like a conventional typewriter, with each letter being a precast physical shape. (The name comes from the shape of the print head which resembles a flower head, each letter being on the end of one "petal", rather than on the "golf-ball" or the levers of older typewriters.) Although daisy-wheels give a crisper print, we think the print of the dot-matrix machine used here will be satisfactory. This also allows us to make use of the versatility of the dot-matrix machine to produce easily different styles of letters by using different styles of letters by using different combinations of dots. There are several ways in which we can exploit this:
  - (i) We shall normally be using a slightly larger print than previously used in the Bulletin.
  - (ii) Italics are readily available.
  - (iii) Super- and sub-scripts can also be used.

There are also other facilities which we hope to introduce in the future (see helow).

- (e) Transportation of materials around the country becomes easier, utilizing a "floppy-disc" - a thin package about 15cm square - rather than large A3 text pages. It is also possible to produce more than one "top copy" should this be needed.
- (f) As several members have similar equipment, it will be possible for them to prepare their articles in the same format and submit them on magnetic floppy-disc, thereby saving themselves and the editors work (and the group some money).

Before describing acceptable formats for submissions for people who wish to do this, it is desirable to describe the equipment used.

#### The set-up

We are using a British Broadcasting Corporation (BBC) Microcomputer Model B (designed and produced by Acorn Computers Ltd., Fulbourn Road, Cherry Hinton, Cambridge CB1 4JN, UK). This is fitted with a "Wordwise" word-processing chip (Computer Concepts, 16 Wayside, Chipperfield, Hertfordshire WD4 9JJ, UK). Text storage is on a 5.25 inch floppy disc system (we are using TEAC disc drives supplied from various sources) controlled by a Watford Electronics Disc Filing System chip (Watford Electronics, Cardiff Road, Watford, Hertfordshire, UK). Text is printed on an Epson FX-80 dot-matrix printer (Epson Shinshu Seiki Co., Ltd., 80 Hirooka, Shiojiri-city, Nagaon, 399-07 Japan; Epson UK Ltd, Dorland House, 388 High Road, Middlesex HA9 6UH, UK).

Our preferred format for documents submitted in machine-readable form involves the items underlined below. Alternatives with which we hope to cope (as well as those we cannot deal with) are also indicated:

- (1) 5 1/4 inch floppy disc. (We cannot handle 8 inch or 3 inch floppy discs. We are prepared to try to read tape cassettes, but these tend to have difficulties in transfer between different cassette machines and computers.)
- (ii) The discs should be written on one side only (ie in Drive 0 or 1, not 2 or 3, in a multiple drive system).

- (iii) The discs must be written at single density. (We should be able to read discs written by either the Watford Electronics DFS or the Acorn DFS, or any other which produces compatible formats.)
- (iv) 80-track disc format is preferred. We should be able to read 40-track also.
- (v) If you use an Epson printer, you can include "embedded commands" in the text to indicate italics, underlining, subscripts, etc. If you do not, include a printout of your article, marking these items by hand with a coloured pen. (It is, in any event, advisable to include a printed version of your article as well as the machine-readable form.)
- (vi) If you do not have "Wordwise" but do have a "BBC Microcomputer", it may still be worth submitting a machine-readable text, but please consult the editor first.

FINALLY, IN THIS SECTION, TO THOSE WITHOUT SUCH MACHINERY, A REMINDER THAT WE STILL EXPECT (AND WELCOME) MOST CONTRIBUTIONS TO ARRIVE TYPEWRITTEN ON PAPER!

#### The future

As we indicated above, we are not yet using the full potential of the system. Some of the further changes which we hope to incorporate and thereby provide a better Bulletin are indicated below:

- (a) Work is already in progress on an automated spelling checking system. This will take a little while to develop because few systems come with dictionaries including words such as "Calidris" and "wilster-netting". When implemented, it should ease the work of proof-checking, but John McMeeking's exceptional talents will still be required to check that the words strung together make sense (and the totals in tables equal the sum of the parts)!
- (b) We envisage eventual improvement in the line justification technique.
- (c) We hope to program additional letters into the printer to allow automated handling and printing of accents and letters not in English usage, special symbols, Greek letters, etc.
- (d) Even quicker methods of transmission of editorial materials around the country may eventually become economic.

We do <u>not</u>, however, envisage replacing the printed Bulletin by a string of electronic pulses transmitted to members by radio, telephone or underground cable!

#### The sting

This improvement is not obtained without cost - although this has been minimized by careful purchasing and by use of some equipment owned personally by WSG officers, rather than purchased by WSG. By miraculous accounting methods, the Group has managed to cover the cost from existing funds. Details will, of course, appear in the Treasurer's report.

#### The players

Thanks go to Treasurer Steve Sutcliffe for creative accounting, and to the following who helped with testing various aspects of the new system: Stephen Baillie, Nick and Sue Davidson, Reg Davis of Minizen Ltd., Harry Green & John McMeeking. Ann Pienkowski provided advice on a range of word-processing systems and Ann Perry bravely allowed curious boxes of electronics into her house.

Finally, we must thank the Dutch railway service, as the discussion at which many of the key ingredients were brought together occurred between Harry Green, Nick Davidson, Jim Wilson

and myself in a railway carriage between Amsterdam Airport and Middelburg, on our way to the 1983 WSG meeting.

Dr M.W. Pienkowski, Department of Zoology, University of Durham, South Road, Durham DH1 3LE, UK. Postscript: the shut-down? Inevitably, as production of this issue of the Bulletin started, one of the key computers required in setting up the system broke down. We are extremely grateful to HCCS Associates (533 Durham Road, Low Fell, Gateshead, Tyne & Wear NE9 5EY, UK) for effecting a rapid repair.

# MINUTES OF THE ANNUAL GENERAL MEETING OF THE WADER STUDY GROUP, HELD AT HAAMSTEDE, THE NETHERLANDS, 19 NOVEMBER 1983

- behalf of the Dutch local organisers, Dr 1. On Gerard Boere welcomed the Group to Netherlands and, in view of the forthcoming presented celebrations. seasonal participants with traditional gingerbread-men. The Dutch hosts had obtained funds to assist participants from several distant countries to attend. Unfortunately, it had not proved possible to complete arrangements for Dr Pavel Tomkovitch of the USSR to attend but Dr Boere, who had spoken by telephone with Dr Tomkovitch the previous day, passed on the latter's apologies and best wishes to the Group and its meeting. Dr Tomkovitch also expressed the hope that exchange of reprints of publications would continue at a high level.
- 2. In opening the meeting, the Chairman, G.H. Green, thanked Dr Boere, Henk Baptist and his colleagues at the Deltadienst, the WSG Co-ordinator (Theunis Piersma) and all others involved in making arrangements for a meeting in such a pleasant situation, the excellent travel facilities, and the support for visitors from distant parts.
- 3. <u>Further apologies</u> for absence were received from the Treasurer (S.J. Sutcliffe) and Committee member Hector Galbraith.
- 4. The minutes of the previous Annual General Meeting held on 23 October 1982 were accepted as a true record.
- 5. In introducing the <u>Officers' Reports</u>, Mr Green pointed out that the full reports had been published in Bulletin 38, and that the officers would highlight and update particular points; members could, of course, query points from the full reports, or any other matters, if they so wished.

The Chairman mentioned the many projects now being organised by the Group and announced that a new international co-operative study of wader migration during the spring of 1985 seemed likely.

The Chairman drew members' attention to his published report of the new arrangements in Britain under which a charge had to be made by WSG for registration and service of colour marking schemes. The cost to a person using a colour marking scheme was likely to be of the order of £7.50 per species per annum. Registration of colour marking schemes was to become obligatory in Britain. WSG was to be the responsible body and charges had to be otherwise the Group could not afford to provide the service required. The Chairman appealed to wader researchers throughout Europe to co-operate with WSG by registering their schemes and by paying a fee. In recent years the Group had started to provide a much needed service. Control essential to avoi of colour marking to avoid researchers invalidating each other's work. The Chairman also appealed to all members in Europe to consult with WSG before embarking on a colour marking scheme.

- Dr R.D. Wassenaar asked if WSG would make its colour-marking register service available more formally to European ringing schemes. The Vice-Chairman, Dr M.W. Pienkowski, explained that the WSG Register had originally started as a service to WSG members but, because of its success, Euring (the European Committee for Bird Ringing) had asked WSG to operate this on their behalf also. Several European ringing schemes routinely consulted WSG over approval for new colour-marking projects and sightings of marked birds. However, WSG had not yet circulated a formal invitation to all European schemes to make use of this service. This was for the purely practical reason that WSG did not want to offer a service until it could adequately support this. introduction of charges for The current colour-marking registration would place the expenses of the Register on a sounder financial basis, although the work still falls on voluntary skilled labour. The introduction of these charges and other changes associated with the new Wildlife and Countryside Act in Great Britain had involved a great deal of work for WSG. However, as this work-load reduces, the Group plans eventually to contact other schemes more formally. This will be done gradually, however, as time resources allow.
- 6. The Secretaries, N.A. & J.A. Clark, that, by the time of the meeting, 404 members had paid their subscription for 1983. that this figure included an approximate annual turnover of 20% had provoked some discussion at the preceding Committee meeting and Officers would be investigating this further. One problem in analysing membership totals is that the Group is very tolerant in allowing late payment of subscriptions. Some revision is planned in the reporting of totals in order to arrange for final and comparable figures to be given for each year, although this will inevitably lead to some delay. The apparent fall in North American membership had also been the subject of concern in the Committee. However, this apparent decline represents the cumulative resignations over several years: due to problems noted in previous reports, whilst records of new members had been received regularly, those of resignations and lapses in membership had not.
- 7. The Treasurer's report was introduced by the Chairman. The formal report concerns the year ended 31 December 1982. For the current year, 1983, the Treasurer was able to report that the Group now had about £5000 on deposit at the bank. This sum includes numerous advance subscriptions and also funds which will be paid out for the production of Bulletin 39. The stable background reported should enable the subscription rate to be held steady for some time, if inflation does not increase.

The Chairman reported on discussions which had taken place at the preceding Committee meeting concerning subscriptions by libraries and comparable institutions. There were strong arguments for increasing the subscription to