

Educational Software for the IBM PC and Compatibles

FRED'S BACKYARD

Age Range 9 to 14

FRED'S BACKYARD is an exciting educational adventure program suitable for use by a single child to full group use in the classroom.

The adventure starts in Fred's Backyard but where is Fred and what lies beyond the backyard doors ?...

With over 40 locations; text only screens to stimulate imagination, interrupted by full screen puzzles, games, animated text graphics and music and sound effects; this adventure will provide many hours of enjoyment and stimulate activity across the curriculum.

FEATURES

Comprehensive SAVE/RESTORE facilities to computer memory and disc (including position descriptions).

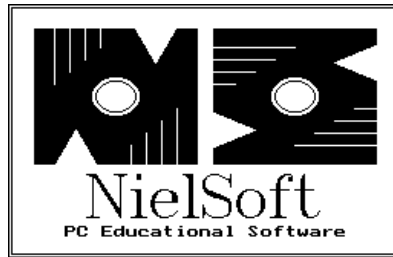
Detailed manual with many ideas for across the curriculum study work linked to experiences of the adventure.

Additional program included to allow use of all puzzles/games after completion of the adventure.

OPTIONS

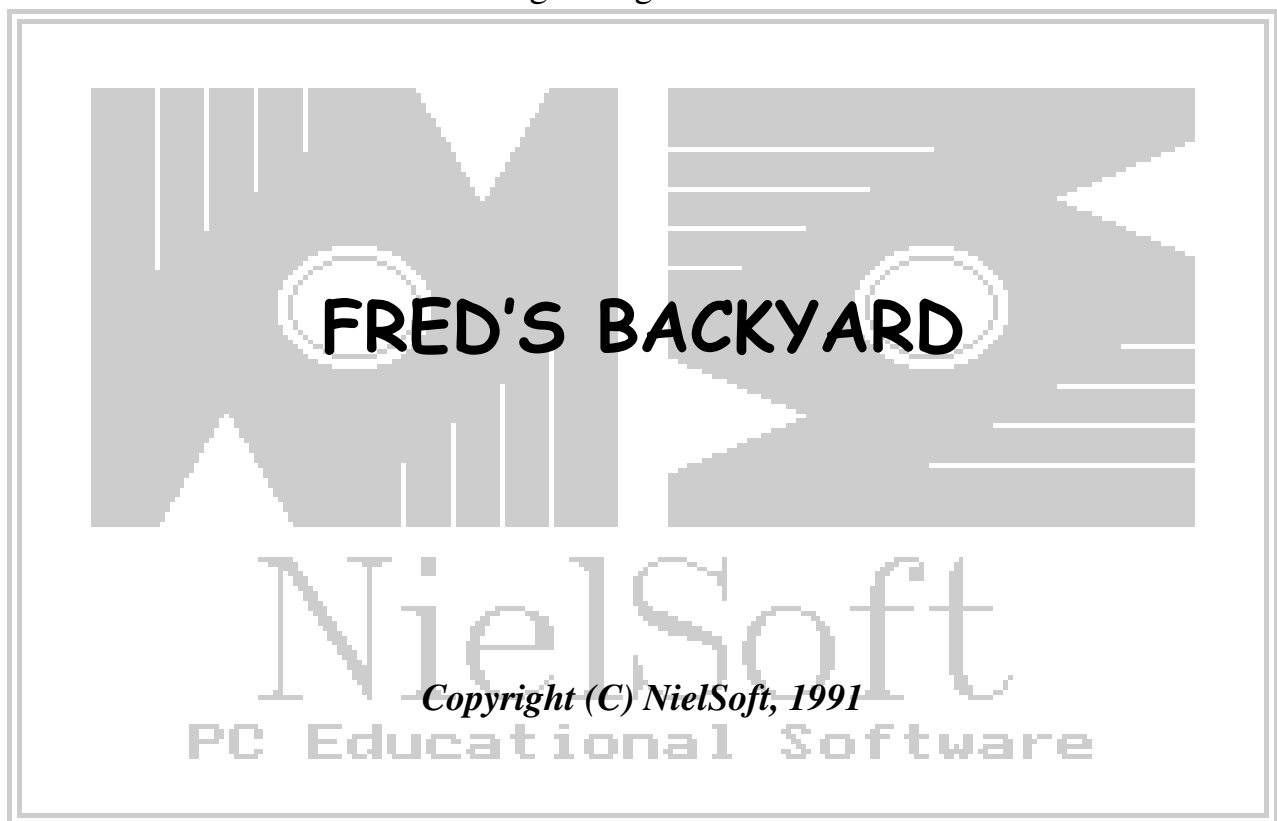
CGA/EGA/VGA (colour) or Hercules (monochrome) users have option to display full screen map of the adventure world. (Useful for children who have difficulty in map drawing).

Copyright (C) NielSoft, 1991



*Educational Software for the IBM PC and Compatibles
with CGA, EGA, VGA, MDA or Hercules card*

Age Range 9 to 14



*IBM is a registered trademark of
International Business Machines Corporation
Hercules is a trademark of Hercules Computer Technology*

*Educational Software for the IBM PC and Compatibles
with CGA, EGA, VGA, or Hercules graphics card*

Age Range 9 to 14

FRED'S BACKYARD

INSTRUCTION MANUAL

	<i>Page</i>
<i>SYSTEM REQUIREMENTS</i>	
<i>COPY AND USE RESTRICTIONS</i>	<i>1</i>
<i>SUMMARY AND PROGRAM FEATURES</i>	<i>2</i>
<i>FILES PRESENT ON DISC</i>	<i>3</i>
<i>NOTES FOR HARD DISC USERS</i>	<i>3</i>
<i>RUNNING THE PROGRAM</i>	<i>3</i>
<i>COMMUNICATING WITH THE COMPUTER</i>	<i>4,5</i>
<i>ADVICE IN USING THE RIGHT WORDS</i>	<i>5</i>
<i>SAVING/RESTORING THE POSITION</i>	<i>6</i>
<i>PUZZLES AND GAMES LOADED FROM DISC</i>	<i>7</i>
<i>THE PROGRAM 'FREDPUZZ'</i>	<i>7,8</i>
<i>THE PROGRAM 'FREDMAP'</i>	<i>8</i>
<i>ADDITIONAL IDEAS FOR THE CHILDREN</i>	<i>8, 9, 10</i>

<i>SOLVING THE ADVENTURE OF FRED'S BACKYARD</i>	<i>10</i>
<i>FOOTNOTE</i>	<i>10</i>

Copyright (C) NielSoft, 1991

FRED'S BACKYARD

Educational Software for the IBM PC and 100% Compatibles

SYSTEM REQUIREMENTS

- **IBM PC, PC-XT, PC-AT** or fully compatible machines running **PC-DOS or MS-DOS Version 2.0** or greater.
- Recommended minimum of **384K** Random Access Memory (RAM).
- **CGA, EGA or VGA colour graphics** card or compatible with Colour monitor.
MDA (text only) or Hercules monochrome graphics card or compatible with monochrome monitor.
A graphics card is required for some displays but is not essential to run the adventure.

COPY AND USE RESTRICTIONS

- **All the software on the disc is copyright material of NielSoft, 1991. You are licensed for use on a single machine** and to make 2 copies of the master disc for backup purposes only to protect your investment. Use one of these to run the program, one for backup and keep the master safe for future use.
- The software is supplied in unprotected form for the benefit of hard disc users who may copy it to a hard disc directory. (Only 1 backup copy is allowed for hard disc users).
- It is NielSoft policy to provide software in unprotected form for Your convenience - please support this policy by respecting our copyright.
- **REMEMBER - UNAUTHORISED COPYING OF SOFTWARE IS ILLEGAL !!**
- We hope you enjoy your purchase and find the program both entertaining and educationally rewarding.

NielSoft
PC Educational Software

Copyright (C) Kevin Thomas, NielSoft, 1991.

Cardiff, Wales, UK.

IBM, XT, AT, PC-DOS are trademarks or registered trademarks of *International Business Machines Corporation*.

MS-DOS is a registered trademark of Microsoft Corporation.

Hercules is a trademark of Hercules Computer Technology.

FRED'S BACKYARD

SUMMARY AND PROGRAM FEATURES

- **FRED'S BACKYARD** is an exciting educational adventure program suitable for use by a single child (with interest and sympathy from mum and dad!) to full group use in the classroom.
- The adventure is designed to stimulate activity across the curriculum and ideas for further study work that may be linked to experiences of the adventure are given on pages 8, 9 and 10.
- For the main part the adventure uses no pictures of scenes so that children are encouraged to read and talk, write and paint and generally let their imaginations take over.
- However, the text only screens are interrupted by full screen puzzles, games, animated text graphics, music and sound effects to add to the excitement and develop skills of logical thinking, vocabulary, mathematical concepts and practice and just sheer plain fun !
- The puzzles start immediately in discovering how to pass the initial musical screen displays after which a congratulatory message is given and hints and clues as to the purpose of the adventure are given.
- The adventure starts in Fred's Backyard but where is Fred and what lies beyond the backyard doors ?...
- Part of the problem posed by an adventure program is to develop a map of all the locations visited. As some children may find map drawing difficult, a simple map of the adventure is included with the software and may also be shown on the screen during the adventure (see pages 5 and 8).
- One or two word commands may be given to the computer such as NORTH, TAKE CUP, LOOK WALL, SAVE GAME, PRESS BUTTON, MAP etc.
Some commands may be abbreviated e.g. N for NORTH, E for EAST, Q for QUIT.
- The function keys of the computer have been programmed for the most frequently used commands. You may find it useful to make a cardboard template for your PC keyboard to help you remember these keys.

F1	NORTH	F6	DROP
F2	SOUTH	F7	LOOK
F3	EAST	F8	SAVE GAME
F4	WEST	F9	RESTORE GAME
F5	TAKE	F10	INVENTORY (List of objects carried)

In addition the END key will reproduce the last entered command should you wish to make changes instead of typing in all over again.

FRED'S BACKYARD

FILES PRESENT ON THE DISC

For users of 5.25" discs the files are split across 2 discs and you will need to swap discs to use FREDMAP, FREDPUZZ and NSLOGO (see pages 7 and 8).

For users of 3.5" discs all files are contained on one disc. (Ignore references to disc 1 and disc 2).

Disc 1...

FRED.EXE	Fred's Backyard adventure main program.
FREDSG.0	Fred's Backyard example Save Game file 0 (see page 6).
FP?_???.EXE	Puzzles and games used during the adventure (9 files).
FREDMONS.EXE	You may be able to guess what this program is meant for.

Disc 2...

FREDPUZZ.EXE	Program to run the puzzles and games used in Fred's Backyard. (The end of adventure password is required - see page 7).
FREDSOLN.COD	Adventure solution coded by ENCRYPT1 (see page 10).
FREDSOLN.COM	Program containing adventure solution. (Password required).
* FREDMAP.EXE	Program to display the graphics map of the adventure.
* FREDMAP.C4	Graphics screen dump of the adventure map (CGA)
* FREDMAP.E16	Graphics screen dump of the adventure map (EGA/VGA)
* FREDMAP.H7	Graphics screen dump of the adventure map (Hercules)
* NSLOGO.EXE	Program to display the NielSoft logo (CGA/Hercules)

N.B. All files/programs marked with an asterisk () require a graphics card and monitor supported by this software as indicated on page 1 (SYSTEM REQUIREMENTS).*

NOTES FOR HARD DISC USERS

If you have a hard disc you may wish to create a directory on your hard disc called FRED and copy all the files to that directory. At the DOS prompt:

Type C: To select your hard disc.
Type CD\ To select the root directory of C:
Type MD fred To create the new directory C:\FRED.
Type CD fred To enter the new directory C:\FRED.

To copy discs 1 and 2 from your floppy drive to C:\fred:

Type COPY A:*.* (B:*.* if your floppy is drive B:)

and,

Type DIR To display a listing of the files for checking.

RUNNING THE PROGRAM

Always run the program from a copy of the master disc or from your hard disc.

Type FRED and press <Enter> to start the adventure.

FRED'S BACKYARD

COMMUNICATING WITH THE COMPUTER

In Fred's Backyard, as is common for almost all adventures of its type, we communicate with the computer by a series of COMMANDS in order to make it possible for the computer to understand what we wish to do.

Fred's Backyard uses the simplest form of one or two word commands. For most of the time the command will consist of two words. The first will normally be a VERB although there may be one or two exceptions to this. Having entered a VERB the second word will be a NOUN or object upon which the verb will operate.

A typical example of a command would be TAKE ROPE. The space between the verb and the noun is important to allow the computer to find the beginning of the second word.

Sometimes it may be frustrating to condense what you want to do into just a two-word command that the computer will recognise. Suppose, during the course of an adventure you find something that can be worn, for example a HAT. You may need to WEAR HAT to stop something hitting you on the head for example. What happens when you no longer want to wear the hat? It would be nice to be able to say TAKE OFF THE HAT. However, it is not possible to use four words as explained above. A little thought, however, may produce a similar command in two words - REMOVE HAT.

Sometimes the computer will not recognise the verb you are using and you may get a response such as 'I don't know how to "JUMP"'. Or perhaps you may have used the command TAKE FLOWER and received the reply 'You can't take that'. The response from the computer will help you discover its vocabulary and decide what you can or cannot do.

In moving around the adventure world you will come across different locations and find objects.

The locations will be accompanied by a description that should give you some ideas what to do next. Perhaps you might wish to LOOK or EXAMINE some of the things around you. For example if the description mentions a road, why not examine the road to see if there may be any clues there. However, it should not be taken for granted that a word used in a description is necessarily one that the computer will recognise.

Commands to manipulate objects found during the adventure are frequently used. The verbs will be TAKE or DROP. For example, if you can see a rope then you will probably want to TAKE ROPE and at some point later in the adventure, when you have found out what the rope was needed for, you may want to DROP ROPE. What to do with the rope is something to discover. You may try THROW ROPE, EXAMINE ROPE or anything else that comes to your mind.

Sometimes you may get a response such as 'This is not the place to do that'. Clearly, you've hit on something. The response indicates that although your command is of no use where you are now, it may well be useful somewhere else!

With experience you may be able to guess what may be needed somewhere in the adventure. The description may say 'It is dark'. You may decide not to go any further until you can get some light on the matter!

FRED'S BACKYARD

COMMUNICATING WITH THE COMPUTER (contd)

Earlier, we mentioned that sometimes only one word may be needed. This is particularly true in moving around the adventure world. Fred's Backyard uses the common one-word commands NORTH, SOUTH, EAST, WEST to do this. These can be shortened to simply N,S,E,W.

Some other examples of one-word commands which you may wish to try are REST, TIME, UP, DOWN. You may, however, sometimes get a response 'Tell me how' to the commands UP and DOWN, in which case you will need to think of another appropriate command.

Some words have special meanings:

MAP	To show a map of the adventure world.
QUIT	To quit the game.
RAMSAVE	To save your position in the computer memory.
RAMRESTORE or RAMLOAD	To restore/load a position from the computer's memory.
SAVE	To save your position to disc.
RESTORE	To restore a saved position from disc.
LIST or INVENTORY	To get a list of the objects you are carrying.

Don't be frightened to try out any word or words that come to mind. As we have indicated, even if the computer does not understand a word or recognise the command at the time you use it, the response will usually be as important as the descriptions in deciding what to do next.

ADVICE IN USING THE RIGHT WORDS

When first using the program, children may be puzzled about the words to use. Writing a list of successful words and objects in a notebook will help. (The adventure itself contains a notebook which will help to reinforce the need to do this). During the adventure, they will come across puzzles and games to be solved. For example, finding out what to do with the rope, how to get rid of the sea monster etc.

Hints, tips and above all, sympathy and interest, should be made available as required. The adventure should be suitable for children in the age range 9 to 14 but, as children's abilities vary so much, achievement predictions are difficult to make. Some help may be required to get the child(ren) started.

Positive advice such as 'Perhaps try going NORTH?' or 'Would it help to LOOK at the branch?' can be helpful.

Direct help in the form of 'Why not READ SIGN?' should not continue for too long.

Of course, the adventure may also catch the imagination of the teacher, mum or dad. In this case, please avoid allowing the child(ren) to look over your shoulder!

FRED'S BACKYARD

SAVING/RESTORING A POSITION

It is advisable to save your position often in the adventure, before doing something dangerous for example. Also, as the adventure is unlikely to be completed in one session, the game can be saved to allow you to resume at a later time. Two methods of saving a position are included in Fred's Backyard.

SAVING/RESTORING TO OR FROM COMPUTER MEMORY

This is the simplest and quickest method. However, only 1 position can be saved in the computer's memory at a time.

Use the command **RAMSAVE** to save the position and the command **RAMRESTORE** (or **RAMLOAD**) to restore that position at a later time.

WARNING - A position saved in the computer's memory will be lost when you quit from the program or the computer is accidentally switched off. It is always advisable to save a position to disc occasionally as described below.

SAVING/RESTORING TO OR FROM DISC

The 'save to disc' facilities in Fred's Backyard are designed to be equally suitable for a single child or for groups of children. Up to 10 positions can be saved to disc.

The files created on the disc are named **FREDSG.0** to **FREDSG.9**. Although it is not necessary to remember these files, they should **NEVER** be renamed. Fred's Backyard will automatically look for these files on the disc each time the command **SAVE** or **RESTORE** is given and allocate them to **SLOTS**.

The slots provide a useful facility to allow you to give a short description to the saved game, which is then saved together with the current position and what objects were being carried etc.

For instance, for classroom use, each group could be given a slot from 0 to 9 in which to save their game with a description such as 'SLOT 0 - The happy gang'.

Alternatively, you may wish to describe one or more of the 10 slots in detail such as 'In the backyard with the key', 'On the seawall by the sign', etc.

Restoring is simply the reverse of saving a position using the command **RESTORE**.

The **SAVE GAME** or **RESTORE GAME** commands can be aborted at any time by using the **ESCAPE** key to return to the adventure where you left it. If a slot is restored then the description for that slot together with the location description and details of the objects carried is shown on the adventure screen.

FRED'S BACKYARD

PUZZLES AND GAMES LOADED FROM DISC

Some puzzles and games are loaded from disc at various points in the adventure and are recognised by the file names FP?_???.EXE and FREDMONS.EXE.

For example, once you have found the purpose of the adventure and have the backyard key you may try going south from the backyard. When this is done the DOOR PUZZLE will be loaded from disc by running the program FP0_DOOR.EXE. The puzzle must then be solved before progressing further with the adventure to reach (Well, we're not going to tell you, you'll have to find out for yourself !).

There are nine of these full screen puzzles in the adventure, each one providing an obstacle to progress or giving essential information and hints needed.

The puzzles and games are varied, most requiring either logical thinking or some mathematical type problem to be solved.

THE PROGRAM 'FREDPUZZ'

This program is provided with 2 purposes in mind:

- 1) To allow the teacher/parent to view some of the more complicated screens and puzzles that may require some initial assistance.
- 2) To allow you to run the full-screen puzzles and games in Fred's Backyard once the adventure has been completed and the password has been discovered.

In more detail:

- 1) Some of the rooms in the adventure are locked and can only be entered by using a number command to open the combination lock. The adventure will give an example of how this is done and the screens used to do this can be selected from within FREDPUZZ.

For example, three rooms are named after the different numbering systems used in computing (i.e. the BINARY, OCTAL and HEXADECIMAL rooms) and the problem is to convert from that numbering system to a DECIMAL number.

The exercises are intended to reinforce 'place values' (i.e. the importance of recognising that the position of a digit in a number is fundamental in determining the magnitude of that number). Starting with the knowledge of units, tens, hundreds etc., the child is now faced with units, eights, sixty-fours when looking at an OCTAL number for example and the multiplication practice involved in the conversion to DECIMAL.

Other rooms use TRIANGULAR and SQUARE numbers to reinforce the ability to recognise sequences of numbers.

FRED'S BACKYARD

THE PROGRAM 'FREDPUZZ' (contd)

- 2) A password is given when the adventure is completed. Use this to start the FREDPUZZ program and the puzzles may be used independently of the adventure at any time. Type FREDPUZZ <password>.

You may also run any of the puzzle files FP?_???.EXE by using the password.
e.g. Try FP0_DOOR <password>.

N.B. For users with a 2 disc set, FREDPUZZ is contained on disc 2. You should load FREDPUZZ from this disc and then insert disc 1 to allow FREDPUZZ to select the puzzle programs which are contained on disc 1.

THE PROGRAM 'FREDMAP'

It is particularly important for children to use a map to keep track of where they are in the adventure world. Wherever possible they should be encouraged to keep one themselves, but some assistance may be necessary. As some children may find map drawing difficult the program FREDMAP provides the facility to display a basic map of the adventure on the screen.

The program FREDMAP requires a graphics card and monitor capable of displaying graphics images (see page 1 for supported standards).

This program is loaded from disc each time the command MAP is used. You will be prompted to install the MAP disc (Disc 2).

(N.B. Hard disc and 3.5" disc users can ignore this message).

You can also run the program independently from the adventure:

Type FREDMAP and press <Enter>.

The program loads the screen dump file appropriate to your system:

EGA/VGA colour card	-	FREDMAP.E16
CGA Colour card	-	FREDMAP.C4
Hercules monochrome card/monitor	-	FREDMAP.H7

Users with EGA/VGA Colour can also view the CGA screen by adding CGA after the program name. (i.e. FREDMAP CGA). This can also be done during the adventure by using the command 'MAP CGA'.

ADDITIONAL IDEAS FOR THE CHILDREN

- Develop a map/plan showing how each location links to the others.
- Start a notebook with all the VERBS and NOUNS recognised by the computer.
- Make a list of all the objects, where they are found and what they are used for.

FRED'S BACKYARD

ADDITIONAL IDEAS FOR THE CHILDREN (contd)

- Paint or draw some of the locations. e.g. What would you see from the top of the tree? What would the cavern have looked like?
- The sea monster, the man and Fred were drawn on the computer screen by using small blocks. How many small blocks are there on the computer screen? (The title screen may help you with this question). Try to draw some of the objects by using a grid of small blocks and colouring them in.
- The computer tried to imitate some bird sounds. Make a list of common birds near your home and at the seaside. What sounds do they make?
- You know by now who FRED was. How many different types of FRED do you know and what type was FRED himself?
- A river crossing puzzle is contained in the adventure. Here's another one for you to try:
An army marching through a jungle came across a river which was full of crocodiles. On the other side they could see two boys with a canoe. The canoe could hold 1 man with his kit or 2 boys. How did the army cross the river?
- The adventure takes place by the seaside. Write a story of the adventures you have had when on holiday by the seaside. What things can you find at the seaside? Name the various types of shells that you have found on the beach.
- A problem in the adventure was to discover how to change the time from high water to low water. You may have used the expression 'The tide is in or out'; what is the tide and what causes it? The sign on the sea wall showed a 'tide table'. Try to get a copy of some tide tables. What do you notice about the time between high and low water, and the times between high and low waters on consecutive days?
If you wanted to visit the seaside, how would a tide table be useful in planning your day?
- If you were able to be MASTER OF TIME for a day, write a story of where you might travel into the past or the future and what you might find.
- Cracking the coded message was easy, wasn't it? Try reading the paper again while holding 1,2,3,4 or 5 objects. What do you notice about the coded message?
Try to devise a more difficult code to crack with your friends. (If you have MR.CHUNKY'S WORD GAME, use the program ENCRYPT1.EXE and try to discover the code it uses).
- "MacAdam would be pleased with the result". Who was MacAdam and what is he famous for? What equipment is used to lay a new road surface?
- Discuss and write stories about the unexplained mysteries of FRED'S BACKYARD:
 - Where did the sea monster come from and what became of him?
 - Who and what was the guardian of the cave?
 - Where did the tunnel lead to?
 - Where did all the cars and people go?
 - Why did the crystal have magic powers?

FRED'S BACKYARD

ADDITIONAL IDEAS FOR THE CHILDREN (contd)

- Read the adventure story MOONDIAL by Helen Cresswall.
- When you were a lot younger you may have helped yourself learn to count using your fingers. Pretend you are an alien from another planet with 12 fingers. What numbering system would they probably use? Count to 144 using this system.
- Ask your teacher, parents or grandparents about some older coins and measures. (e.g. How many old pennies were there in an old shilling? How many inches are there in one foot? How many loaves are baked to the dozen?) What do you notice about some of the answers?
- Mazes can be fun. Have you ever been in a real maze? If you're ever in South Wales take a visit to Margam Park and try and complete the maze garden there.

SOLVING THE ADVENTURE OF FRED'S BACKYARD

INTENDED FOR BUSY PARENTS/TEACHERS ONLY

An example solution to the adventure is provided in 2 forms by the files FREDSON.COD and FREDSON.COM.

- FREDSON.COD is a coded text file. Existing users of MR.CHUNKY'S WORD GAME can use the program ENCRYPT1.EXE included with that software to convert the FREDSON.COD file to its decoded form (e.g. FREDSON.DOC).
- FREDSON.COM is a program which contains the FREDSON.DOC document. This program requires the end of adventure password to unlock the document it contains. Should you wish to obtain the password in order to prepare and assist the child(ren) then send a Stamped-Addressed Envelope (SAE) to our address given on page 1.

IMPORTANT: You must enclose a copy of your receipt (proof of purchase) with details of where and when you purchased Fred's Backyard and quoting the version number (This can be found by viewing the FRED.EXE file time from a DIR listing - i.e. 1:00 means version 1.00).

- The solution document also contains details of the objects used, the traps to avoid and where the musical and sound effects will be found.

FOOTNOTE

NielSoft is a new venture to provide quality educational software for the PC market. Future educational titles are in preparation and any suggestions and comments from teachers, parents or children will be gratefully received and considered. Our address is given on page 1 of this documentation.