landing the balloon at selected locations (marked with an X) where the balloonist receives some instructions. For example, one task is to 'help farmer rescue sheep' — the sheep are to be found in a field marked with an S. If the balloon runs out of fuel, it must land to take on extra gas cylinders.

After a few false starts, crashing into trees and so on, you soon learn how to control the balloon accurately, by using short bursts of the burner. Also, it is not long before you learn to watch the instruments so as to predict when to use the vent or burner. Perhaps the most important benefit is learning to control a system that incorporates a substantial 'time-lag'.

This program, as well as being a realistic simulation, is great fun to use and probably one of the few subjects that has appeal to girls as well as boys.

Car Journey

Available from Heinemann Educational Software for the Spectrum, this is a home education program in which the user takes on the role of owner of a small delivery service. Various decisions have to be made with regard to which delivery contract to accept, how fast to drive, and what type of vehicle to use. In doing this the user has to perform calculations involving money, distance, time and even petrol consumption. A map of Britain is displayed, showing 15 cities and the major motorways. A speedometer, milometer, fuel gauge and a clock are also shown.

The first task is to decide which city to start from, and then you have to choose a contract you think you can fulfil from a list of a dozen. For example, one contract is to pick up a consignment of diamonds from Bristol at 1200 hours and deliver it to Dover before 1800 hours on the same day. To do this, you must hire a car, drive it to Bristol, pick up the diamonds and drive down to Dover. If you're successful, you are paid £400, plus a £10 bonus if you are early, and can then choose another contract. Money has to be spent on overnight stops, vehicle

repairs, petrol and speeding fines, and if you do not fulfil a contract you incur a hefty £100 fine. If a heavy load is accepted, the car has to be swapped for a larger van, which costs more to hire, consumes more petrol and is slower.

As well as developing a knowledge of vehicles and roads, Car Journey also helps extend the more abstract skills of decision making and logical thought. It even teaches simple economic theory because, in weighing up the pros and cons of a certain contract, the user is performing cost/benefit analysis.
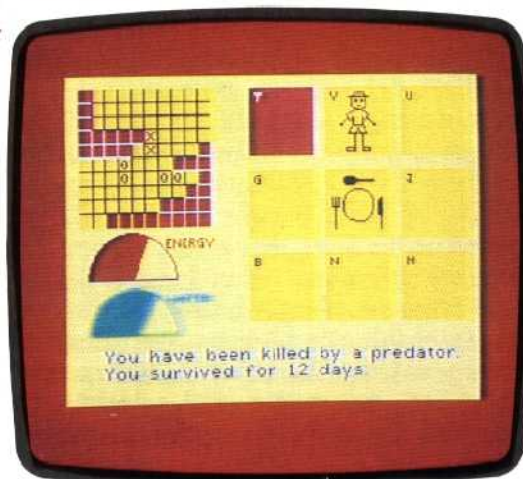
Survival

If you have ever wondered what it must be like to be a lion (or even a mouse) then Survival is for you. It enables you to play the part of one of six animals (hawk, robin, lion, mouse, fly or butterfly) and experience some of the problems of their day to day existence and the decisions they have to make to stay alive.

The world is represented by a grid of squares on the screen, and you move around this grid (your position being shown as the letter A) by pressing keys on the keyboard. Your main concerns are to find food (the squares marked by an 0) and to avoid predators (marked by an X). As you move nearer a marked square, a close-up grid on the right of the screen shows exactly what predator or food you have encountered. Also shown are two meters that indicate how much energy and water you have left. If your energy level gets low you quickly have to find some food, and if the water runs out you have to move next to a blue square (a river); if, however, you accidentally 'fall' into a blue square you will drown.

Some animals have a harder time than others: the butterfly's only source of food is flowers, and these can be difficult to find. The hawk, however, can survive on snails, flies and mice but can fall prey to a human hunter. Through using Survival, you can learn how various species fit into the food chain and appreciate some of the problems faced in surviving in the wild.