Dealing with survival situations in the wild

Over the last few years, there has been an increase in the number of television programmes that show experts explaining how to survive in the wild. They use their experience to create fires, build shelters, find water and decide which plants are safe to eat and which might kill you. Q1: While these programmes are no doubt highly entertaining, what is less certain is how successful they are at really educating viewers at home. Last year, over 2,300 hikers were reported lost in the wild in the USA. While most of them were eventually rescued, not all were so lucky. Some of the survivors told their rescuers that they had seen these kinds of television programmes, and had believed they had learnt some useful skills. It turned out, however, that building a fire from wet wood and finding a source of clean water was a lot harder than they had imagined.

The human body is approximately 75% water – and this water has several important functions, including keeping the body at the right temperature. If a person doesn't drink water, it will take only two or three days for them to become dehydrated, and their body temperature may either drop or rise to dangerous levels. Q2: Often it is the case that hikers or campers who are lost in the wild don't start thinking about how they can find a new source of water until they run out of it, by which time it may be too late. They haven't thought about the consequences of dehydration, and neither do they recognise the warning signs. An ache in the kidneys, a headache, general confusion – all of these can tell someone that they are in need of water. The average person loses 2–3 litres of water every day just through normal activities such as breathing. Q3: It's impossible to avoid losing water from the body, but there are ways to slow it down. For example, when it may be necessary to build a shelter in the wild to sleep in, this should be carried out in the shade rather than in full sun. This reduces the amount of sweat which is produced when body temperature rises, which is, of course, water leaving the body. Some people may find it surprising that eating may increase chances of dehydration, but digestion does require water, so eating should be avoided if water is short. Hiking at night when the temperature drops is also an option, but only if hikers have a good torch or there is a full moon.

A solar still

In situations when people are unable to locate a stream or river, there are certain ways they can get water which are less difficult than others. Building a simple structure called a solar still is one of these methods, but it will be most effective in regions which have dramatic temperature change. This is because, in very hot environments, lots of

Q1:

water is taken up into the air and turns into gas, a process called evaporation. At night time, however, when it is far cooler, the air releases the water again – the process of condensation.

So how does a solar still work? A deep hole is dug into the ground and a narrow container is placed at the bottom of it. Q2: The hole is then covered with a plastic sheet, as this kind of material will trap rising water as it evaporates. Once the gas cools and turns back into water, it can fall into the container below. Q3: To ensure that the maximum amount of water possible is collected, a heavy object such as a small rock should be placed in a central position above the container so that the water drops can fall directly into it. If people are near an ocean, water from here can be added to a second, larger container, and placed beneath the narrow one. Q4: Even though the salt content in this kind of water is great, the processes of evaporation and condensation will remove it, and then the water can be drunk.

Using the solar-still method will not produce enough water for people to collect and travel with, but it can ensure survival while people are waiting for rescue.