FATAL ATTRACTION

Electricity, whether natural or man-made, is no respecter of human life, says **ALASTAIR GOWANS**, who explains what steps fishers should take to protect themselves

ANGLING, GENERALLY perceived as the gentle art, gives the impression of a relaxing and undemanding sport. But this popular view serves only to add to the risks, catching anglers off guard and making them highly susceptible to accidents.

A good ducking can be laughed off later. A drowning can't. Hooking your jersey may pull a few threads, but being hooked in the skin is painful at best and involves a hospital trip a worst. A hook in the eye spells disaster.

Severe cold, falls, fences, sunstroke, getting lost, being attacked by animals, both two- and four-legged, and a good many other hazards are reasons enough to consider safety at literally every step during a day's fishing.

We venture into unfamiliar territory at all hours of the day and night and in all weathers, carrying all sorts of baggage and tackle, so it's not surprising that accidents happen.

And there are no prizes for guessing which two dangers are not on that list of perils — those of electricity and lightning.

Lightning is far more common in Britain than is generally realised and, although it occurs everywhere, the south and east of England suffer the greatest number of strikes. Lightning originates from thunder-clouds that usually contain positive electrical charges at the top and negative charges at the bottom. The result is a build-up of electrical fields between both individual clouds and between them and the earth.

The discharge normally comes from the cloud at a point of high electric stress, and in the majority of cases a negative charge from the cloud proceeds towards the ground in a series of jerks or "steps". This is the leader stroke. As it approaches the earth, high electric stresses develop above the ground and an upward streamer of positive charges develops from the ground, helped by any protruding conductors.

When the streamer meets the down-coming leader stroke, a conducting path is established between the thunder-cloud and the earth, producing the familiar heavy electrical discharge.

There is no completely safe amount of electricity a person can withstand as we all have different constitutions, but it is generally assumed that a value of less than 30 thousandths of an amp (0.030 amperes) is sufficient to kill, hence the protective devices fitted to the cables of lawnmowers and hedge-cutters are set to operate at less than that amount.

Lightning strokes can vary from a few thousand to maybe 150,000 amperes - small wonder, therefore, that such amazing damage can be done when lightning strikes.

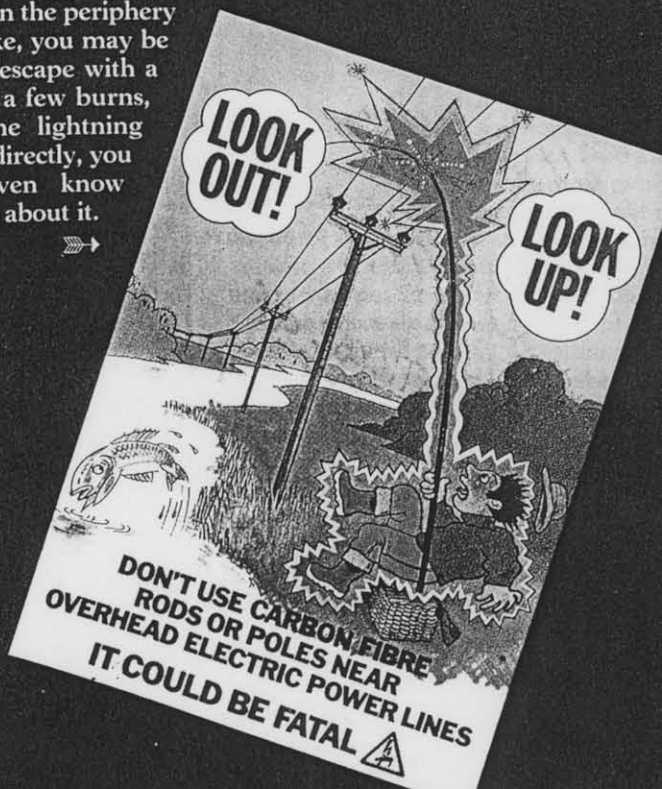
How can the angler avoid lightning? The human body is affected by electric fields which is why we feel a strangeness in the air as thunder approaches. Take heed, as this warning is part of your in-built survival system.

The most obvious precaution is to avoid being an attractive "blip" on the landscape, so, if thunder rumbles, stay low and keep your rod on the ground or in the bottom of the boat.

For goodness' sake don't prop your rod up beside you when you stop fishing — that's asking for trouble. Keep away from anything that projects skywards as it may well be the target of the next strike. Several people have been killed by lightning when they have taken shelter under solitary trees. Oaks, in particular, are often a common link with lightning fatalities.

Of course, the safest place of all is indoors. Fortunately you won't miss much sport as fish don't like thunder and lightning, either, and tend to stay down until the storm has passed and the air clears again.

Apart from these few simple precautions, there is nothing you can do to avoid the danger of lightning. If you are on the periphery of a strike, you may be lucky to escape with a fright or a few burns, but if the lightning hits you directly, you won't even know anything about it.



FATAL ATTRACTION

continued

A gathering storm on a Hebridean loch. We all have an in-built survival system that warns us of storms, so do take heed and get off the water.

I have been asked whether rubber boots or gloves offer protection. Sadly, the answer is most definitely no. Nothing can protect you from lightning, so if you feel a thunderstorm brewing, get off the water as quickly as you can.

Part of the great joy of fishing is to travel to new places and fish new waters. If you normally fish for reservoir trout, it's nice to have a go at sea-trout or salmon, or to wander the banks of a remote stream away from the madding crowds.

It's also nice to return to your accommodation and switch on the kettle for a cup of tea. Electricity doesn't reach the remote places by magic: it gets there via overhead wires which, for the most part unnoticed, provide us with the comfort and facilities we expect from modern life. But those wires suspended from wooden poles carry electricity around the countryside at anything up to 132,000 volts and must be treated with the greatest respect.

The mention of a few accidents serves to concentrate the mind. The gillie electrocuted when his rod touched the wires; the anglers shocked and burned when their metal-cored fly lines came into contact with overhead cables; an angler electrocuted while crossing an electrified railway line.

All fishing rods can conduct electricity and, as materials have improved, they have become lighter and longer. Unfortunately these new materials, which help us cast further, are excellent conductors of electricity.

Should a rod touch an overhead line, the result is likely to be at worst fatal, or at best result in severe injury. In fact, you do not even have to make contact with the wire — just get too close with the rod tip and the current can arc across the gap with precisely the same disastrous results.

Fortunately, danger can be completely avoided by being observant, careful and adopting a few simple precautions. But remember, rubber boots offer no additional protection.

Wherever you fish, look out for overhead wires from the moment you get out of the car. Carrying a rod upright, or over your shoulder, is a very dangerous habit. It's far safer to carry the rod at the point of balance with the point either behind or in front of you.

Wires often follow fence lines to avoid crossing fields and inconveniencing farmers, so be especially careful crossing fences. Keep your rod low and don't prop it on the fence. Occasionally, the wires cross rivers and, if you are unsure whether you can cast safely below them, stay well clear. Before going night-fishing in unfamiliar surroundings, always make sure you know the location of any wires by checking the beat in daylight.

Lines can also conduct electricity. Some modern fly lines contain a significant amount of tungsten to make them sink and, of course, lead-core lines are also efficient conductors. However, it is not safe to risk contacting an overhead wire with any type of line, even monofilament.

If you are responsible for a stretch of fishing, the chances of an accident can be reduced by erecting notices, which most electricity companies will provide free, warning anglers of the presence of overhead wires.

Erecting "goal posts" at stiles over fences to ensure adequate clearances is another wise safety measure. Better still are stock-proof gates, which fishermen won't have to climb. Always remember, however, to examine the entire route from car-park to river — not just the waterside.

If you are unfortunate enough to ensnare a wire with a stray cast, what should you do? If you are lucky and your line does not conduct, break it free quickly. If any line or lures are left on the wires always report the incident immediately to the electricity company, since it could cut off someone's electricity supply or encourage youngsters to try to retrieve the goodies, with disastrous consequences.

Unlike lightning, the electric-wire hazard can be avoided with just a little thought and care. Remember the mottoes: "Look out — look up" and "Cast with care".

CLOSE SHAVE AT RUTLAND WATER

In April this year a Rutland Water angler was lucky to survive when lightning apparently struck the water, bounced and hit the back of his head.

Peter Weaver from Retford, near Nottingham, was fishing a Benson and Hedges match with partner Ernie Cowie when the strike welded his gold neck-chain together and blew his wristwatch apart.

"All I remember was amazing pain and lights flashing in my eyes. I thought I was having a heart attack," said Mr Weaver, aged 52, who spent the night recovering in nearby Grantham hospital.

"I was holding the tiller of the outboard motor and I think that saved my life. The main force of the blast must have shorted out through the motor. It wasn't a really stormy day. The water was a bit squally but I only heard a rumble of thunder before the lightning struck," he explained.