

WHY DON'T BIRDS GET ELECTROCUTED WHEN SITTING ON LIVE WIRES?



When a bird lands on a live wire, its body becomes charged. For that moment the bird is at the same voltage as the wire. Because the bird's body is a poor conductor of electricity compared to the copper wire, no current will flow through the bird's body.



Electric current is always trying to reach the ground. The ground is an area where the voltage is zero. The earth and any conductor touching the earth are called the ground.

If a conductor provides a path to the ground the electricity will follow it. Birds on a live wire aren't grounded because they don't touch the ground and therefore don't act as a conductor. However, when a bird accidentally touches an electrical ground while in contact with the high voltage wire, the bird completes the electrical circuit. The current will flow from the high voltage to the ground through the bird. Severe injury or death by electrocution is the result.

When a human touches a high voltage wire while touching the ground, the electric current will also flow through the person causing an electrical shock. It is important to remember that you don't have to stand on the ground to be electrocuted. If you stand on a ladder or a roof and touch a high voltage wire, you will receive an electrical shock.

Electrical workers who work on power lines are protected by insulated clothing and gloves, and use insulated tools to prevent shock.



When a car is involved in an accident where power lines end up touching the car, the passengers are warned to remain inside the car and not try to get out. If you touch the ground with your foot, you complete the circuit for the current to flow from the wires through the car and then through you to the ground, causing you to be electrocuted. When you are inside the car, the car is insulated from the ground by the rubber tyres.