Dead weight

Question: My school class wants to know why corpses sunk in water eventually float to the surface.

Answer: Part of my work involves recovering bodies from the River Clyde and surrounding waterways. Over the years, I have recovered around a thousand bodies that have spent between a few days and two years in the water.

When a person drowns, water takes the place of air in the lungs. The body becomes heavier and sinks. It stays there until enough gas builds up inside the body from bacterial decomposition to make it buoyant and free it from the suction that silt and mud creates on the riverbed, so that it surfaces.

How long this takes depends on the depth and temperature of the water, the amount of sunlight the corpse receives, and whether it is lying under a ledge or a bridge. Whether the body is lying on the north or south side of a waterway can also affect the time it takes to rise, because heating of the water varies on each bank.

Obviously, the body can take longer to rise if it is underneath something like a tree, or is caught by an underwater obstruction. I once recovered a body that had risen to the surface with part of a brick wall tied to it by ropes around the chest-there were five bricks covered with mortar on each side of the body and still it floated. What's more, if a body is trapped by, say, its leg, the gases will keep forming until it is buoyant enough to detach itself from the trapped leg and rise up.

Bodies can also be washed into the side of a river and remain undiscovered, below an overhanging tree, for example. Debris piles up on top of the body and silt accumulates. If the body lies out of the Sun's rays, which cause much more rapid decomposition, it can remain there until a flood washes away the silt and debris.

Of course, if the water is cold enough, the dead body may be held in "deep freeze" and it might never rise.

George Parsonage

Glasgow Humane Society