

## **Forensics is a Necessary Part of Tracker Training "Tracking Signs After Death".**

**Del Morris and I have been communicating on the Guidelines for Trackers. I have stated that his matrix is incomplete and I "raised the ante".**

**My communiqués to Del stated that Forensics along with Crime Scene Preservation; Basic EMT training and other courses should be incorporated into his matrix as part of the Guideline Standards for Trackers.**

**Looking back on my training in Forensics, specifically Forensic Pathology, I decided to put together this BRIEF overview of one aspect of Forensics.**

**Like it or not, you may be faced with the discovery of a dead body. This can occur during several scenarios. The quarry has been missing for some time or it could be that you are hiking and you make this gruesome discovery. Obviously, make the required cell phone calls, start writing in your pad the facts and hopefully you will have a digital camera and can do some photo work, but do not disturb the scene and please do not touch any part of the body. HANDS OFF!!!**

**You should record the condition of the body, remembering not to disturb the scene and always assuming that it is a crime scene. You must also prepare yourself for some backtracking depending on your findings.**

**Your examination of the corpse relates much information since their death. The body goes through a set series of steps of decomposition and these are "Aging Signs". The body will reveal clues that will help you estimate the time of death. Depending on the environmental temperatures (e.g. 75° F.) the body will establish temperature equilibrium in approximately 12 hours. Obviously in hot weather this time will be longer and visa versa in cold weather. This condition is defined as Algor mortis and is defined as the reduction in body temperature following death. This is generally a steady decline until the body matches the ambient temperature of its surroundings.**

**Reference Reading: Saferstein, Richard (2004). *Criminalistics an Introduction to Forensic Science, 8th*, Pearson Prentice Hall. ISBN 0-13-113706-9.**

**Simultaneously another condition is occurring called Livor Mortis or postmortem lividity. This is another of the signs of death. It is defined as a settling of the blood in the lower (dependent) portion of the body, causing a purplish red discoloration of the skin.**

**This occurs when the heart is no longer agitating the blood, and heavy red blood cells have separated through the serum due to gravity. Trackers should be aware that this discoloration does not occur in the areas of the body that are in contact with the ground or another object, as the capillaries are compressed.**

**We use the presence or absence of livor mortis as a means of determining an approximate time of death. EMT people (yep, that is why I would suggest adding Basic EMT training to the trackers standards) know that the presence of livor mortis is an indication not to start CPR, or to stop it if it is in progress.**

**Livor Mortis also tells us whether or not a body has been moved (for instance, if the body is found lying face down but the pooling is present on its back, investigators can determine that the body was originally positioned face up). Wow, a clear indication of the fact that you have found a "crime scene". [But hold off on your backtracking until the authorities arrive. However, you can mark original SIGN.]**

**Livor mortis starts 20 minutes to 3 hours after death and is congealed in the capillaries in 4 to 5 hours. Maximum lividity occurs within 6-12 hours.**

**So Del, my question at this point "Is the movement of the body a SIGN and part of tracker standards?" Because if the body has been moved then the tracker has to mark the sign and start backtracking ..**

**Let's add another fact to lividity, the color of the blood. Loss of blood before death as well as poisoning (i.e., cyanide, carbon monoxide), hypothermia can cause the normally dark, deoxygenated blood pooling to appear bright red or pink. Yes, this is important to record in your tracker report. Also important is any evidence of animal attacks or mutilations caused by the "Wild" assuming the body was not discovered in a vehicle.**

**Let us all address Rigor Mortis, which is caused by a chemical change in the muscles after death. Rigor causes the limbs of the corpse to become stiff and difficult to move or manipulate.**

**Rigor Mortis starts at the head and moves down the body to the legs; feet last. Using Rigor Mortis to determine Aging of the Sign is not reliable. A jaw usually stiffens within an hour of death however complete Rigor can take anywhere from 12 hours or longer.**

**The most important fact to know is that there is always sufficient evidence in the body to reach a good estimate of "time of death" in the first 12 – 20 hours after death has occurred.**

**I am going to stop at this point and not address decomposition, mummification or skeletonization.**

**I am also not going to address how the various stages are effected in fresh and seawater. [Or a terrain, which is water, based like a swamp or wetlands.] But the tracker should know because they may find the quarry in water.**

**I am also not going to try to teach you Forensic Taphonomy which is the study of a decaying organism over time but trackers should be aware of this and it is a part of Forensics Training.**

**So in conclusion, my point is the SIGN in Man Hunting is not just the evidence of a movement of a human being but also includes the SIGN the human being is telling you after their death. How about we call this "Tracking Signs after Death".**