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The Role of Vision in Hunting and Shooting

- Hunter Orange:
Proving the Obvious
- I'm Sorry!! I Didn't Mean To.
I Didn't See You
- Solid Hunter Orange
Vs. Camouflage Hunter Orange

I'm sorry!! I didn't mean to. I didn't see you!

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This is the most common statement made when one hunter inadvertently injures another. Over half of Hunting Related Shooting Incidents (HRSIs) are the result of the intentional discharge of a firearm at, what the shooter believed, was a safe and valid target. These incidents usually fall into one of the following categories:

- 1- Victim moved into the line of fire.**
- 2- Victim covered by shooter swinging on game.**
- 3- Victim out of sight of shooter.**
- 4- Failed to identify target.**

All of these fall into the larger group of "hunter's judgment factors." Conservation Police agencies do a thorough investigation of all HRSIs to determine the cause. This information is then used to update the training to help us all learn how to avoid the problems in the future. The real problem in most of these cases is the question of visibility. By carefully documenting exactly where the shooter and victim were, we can then look for the important answers. What could the shooter really see when he fired that shot? What did he think he saw? What was clearly visible, but went unnoticed?

Many things can affect a person's visibility: time of day, vegetation or forest cover, rain, snow or fog, and the eyesight and attention of the shooter. We have all found ourselves staring intently at an object without ever seeing the person who walked right up to us. The same thing happens when we are hunting. A person can become "locked in" on a deer, or what he thinks and hopes is a deer, and never notice that the deer is now lined directly up with his partner's stand. People also can convince themselves that they can clearly identify an object, because they want it to be a turkey or a deer, when in fact it is not. Let's look at some actual incidents as a way of discussing the problem and highlighting the solutions.

INCIDENT #1: Victim moved into the line of fire.

Two friends were driving along a highway and saw a flock of turkeys on some bottomland near a creek and railroad tracks. They drove back along the railroad tracks, parked their truck and walked along the tracks in an attempt to intercept the flock. The shooter stepped off into the woods between the tracks and the creek. The victim continued a little more than 100 yards further along the tracks and, then, also stepped off into the woods between the tracks and the creek. The victim said he watched the flock fly across the creek and make their way up the bank to the railroad tracks. The shooter stepped up onto the tracks when he saw the flock as they were crossing the tracks. He fired one round from his 10-gauge loaded with number 4-6 shot and the flock scattered. He then fired two



INCIDENT #1: The strings in this image show the left and right sides of the pattern, and the orange device shows the victim's position, over 100 yards away.

more times as the birds flew. The victim, whose attention was diverted toward the sound of the shot, turned and looked down the railroad tracks and was struck in the right eye by a single pellet.

The investigators of this incident used a measurement-of-visibility device to determine what the shooter could have seen when he fired at the turkeys. They placed the two-foot-square hunter-orange device where the victim was; and standing where the shooter was and looking at the victim's position, they could clearly see most of the orange device. The victim was in full view of the shooter, but his friend certainly did not see him before he fired.

The problem in this incident was the shooter did not know where his partner was. Their plan was to surround the flock which would have them shooting towards each other if they found the birds. They were 100

are." If you don't know where they are, don't shoot!

INCIDENT # 2: Victim covered by shooter swinging on game.

The victim in this incident was hunting on a 20-acre parcel that had newly planted trees that were protected by orange plastic construction fencing. The victim, who was wearing hunter orange had shot at a whitetail buck and missed. A short while later, he saw another hunter across the clearing aiming a shotgun at him and firing twice. He felt a sharp pain in his ankle and called out that he had been hit. The shooter said that he was walking along the edge of the clearing that had several trees surrounded with orange fences. He saw two deer, a buck and doe, run across the opposite side and he fired twice. He then heard the victim call out for help.

The reconstruction showed that the victim was 92 yards away and

orange because there was orange everywhere. This was a very unusual incident because the victim's orange clothing resembled items surrounding him.

The solution: Since the shooter did not know what was behind the running deer, he never should have shot. He could have avoided the incident if he were looking for a person in the line of fire, rather than depending on hunter orange to identify another person. Even where it is required, not every person wears hunter orange, and in this case, orange actually looked like part of the scene. In many cases where a person is in the line of fire, his or her clothing blends in with the environment. Thus hunters cannot always rely on conspicuous color alone to identify a person in the line of fire.

INCIDENT #3: Failed to Identify Target. Or sunrise, sunset: Is there really enough light to see?

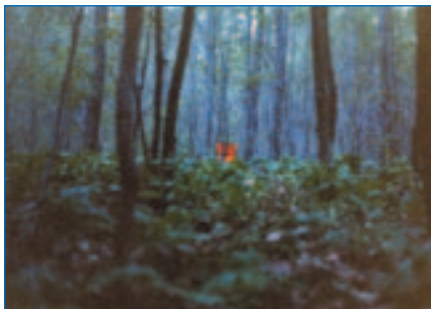
A turkey hunter had worked the same big tom for several mornings, trying to get between the tom and the hens before the gobbler flew down from his roost. The hunter knew that if the tom got with the hens he would not respond to the calls for the rest of the morning. As it had done on previous days, the big bird gobbled several times, then flew down to the hens and was quiet. The frustrated hunter turned to walk back to his truck, planning to try another spot down the road. He had only walked about 30 yards when he was struck full in the face by a load of #4 copper-plated shot. After checking on the victim, the shooter ran a short distance to his own truck and called 911 on his cell phone. The call came in at 5:55 a.m. and sunrise that day was 6:01 p.m. Legal shooting time was 5:31 a.m. It was clear that the shooter had heard the gobbles of the big tom, had seen a movement from that general direction, and fired at what he said was a "gray object appearing to be a turkey in display." While the shot was fired within legal shooting hours, in the woods on that foggy morning, there was not enough light to identify the target clearly before the shot was fired.

The legal shooting time for most



INCIDENT #2 (above): The victim, in orange, was standing at the orange flag in the center of the photo. The shooter did not notice him because of all the other orange in the vicinity.

INCIDENT #3 (below) - 5:30 a.m. (left). The visibility device, as seen from the shooter's position. The center of the device, and the victim's face, were over five feet above the ground. Looking uphill, it looks like it is at ground level. Note the difference 10 minutes makes in the visibility, 5:40 a.m. (right).



yards apart, and both dressed in full camo, so they could not see each other.

The solution is: Always identify a safe target and safe target backstop. A basic part of this rule is, "Always know where your hunting partners

beyond several of the orange fences. The amount of hunter orange he was wearing was easily visible to the shooter, but the orange fencing made it less noticeable.

The problem was, the shooter failed to notice the victim dressed in



INCIDENT #3A: At 5:55 a.m. it looks like a hunter walking through the woods. The day before, in thick fog, the shooter shot at "A gray object appearing to be a turkey on display."



INCIDENT #4: The orange in the center is the two-foot-square measurement-of-visibility device, as seen from 62 yards away. At this distance it is impossible to clearly identify your target as a bearded turkey.

game is either sunrise to sunset, or at most one-half hour before sunrise to one-half hour after sunset. The legal shooting hours are restricted because it is unsafe to shoot when you can't clearly see the target and what is beyond it. The investigators looking into this incident needed to know what the shooter could have seen at the time he shot. They returned to the scene very early the next day and set up the measurement-of-visibility device at the victim's location. Then they went to the shooter's location to record, by video and photograph, what could be seen in the pre-dawn light. They were surprised to note that the bright hunter orange device appeared brown 10 minutes before legal shooting time, and bright orange 10 minutes later.

The problem was that the shooter never identified a legal, bearded turkey as his target. He also had parked next to the victim's truck, so he knew there was another hunter in the same woods. Finally, it was very foggy that morning, making it hard to see clearly, even objects only 24 yards away.

The solution: At both sunrise and sunset the lighting changes very quickly. Even 10 minutes can make a big difference in your ability to identify your target properly. Wait until you have a clear view and have positively identified your target. On foggy days, or when it is raining or snowing, your visibility is reduced so you must be extra careful about properly identifying your target.

INCIDENT #4: Failed to Identify Target. Or, too little orange looks red in the deep, dark woods.

A spring turkey hunter was set up behind some beech brush, next to a big tree. He was dressed in full camo and calling occasionally. Eventually, he saw another hunter walking towards him through the woods. Not wanting to scare away any turkeys in the area, he decided to signal the other hunter with the hunter orange lining of his hat. He took off his hat and waved the orange at the oncoming hunter who stopped and looked back at him with his binoculars.

At that point, the hunter raised his shotgun and fired at the man waving the hat, striking him with multiple pellets.

The investigation showed that the little bit of orange on the inside of the hat did not show through the branches very well. As a matter of fact, the shooter explained that as he was walking through the woods he was attracted to some movement. When he looked through his binoculars he thought he saw a turkey, and then a flash of red and what he thought was a beard. The next time the tom stuck his head out, he fired!

To document this incident, the investigators placed the visibility device inside the blind where the victim was sitting. From the shooter's position 62 yards away, they could see very little of the hunter orange device, only about 35 percent. They also noticed that what they could see appeared red, and not orange.

There were several problems that led up to this incident.

Problem #1: The shooter noticed a movement, thought he saw a turkey, thought he saw something red, thought he saw a beard, and so he shot at what he was sure was a tom turkey. In other words, he jumped to conclusions based on what he hoped to see.

Problem #2: The victim should not have moved at all when he saw another hunter, and should have called out to the hunter walking towards him. Only humans talk, there is no mistaking it. Any turkeys in the area were already scared off by someone walking through the area.

Problem #3: A little bit of hunter orange, seen through some branches, in the darkness of mature woods, looks red, not orange.

Problem #4: Even if there was a turkey, it was out of range. Successfully harvesting a turkey at 62 yards is very difficult, if not impossible. Even more important in this case is the fact that it is harder to positively identify a safe target when it is out of range.

The solutions: 1) Clearly identify your target, first assuming any noise or movement to be a human until you can positively identify the entire animal. Realize that ANYONE, even you, can jump to conclusions and imagine that a shape, color or motion must be what you are looking for. This phenomenon is so common it has a name: premature closure. 2) Speak out

when you see another hunter, and do not wave, move, or make any other sounds. 3) Never rely totally on hunter orange or movement to identify you as a human. 4) Never shoot at game that is out of range.

One other unique fact should be noted about spring turkey hunting. In this incident the shooter may have been attempting to stalk the calls of the victim. If he was, it was a classic turkey hunting mistake. In most cases, stalking spooks the birds, but more importantly, it sets the stage for trouble. In over half of the cases where a hunter is mistaken for a turkey, one of the hunters was attempting to stalk the other's call. About half the victims are stalkers and the other half are being stalked. Because of this, a turkey hunting lesson is catching on—“Stalking Stinks.”

The thorough investigation of each of these incidents has taught us that visibility can be a very relative thing. In each case, a day of hunting

Studying the mistakes of others can provide valuable lessons in hunting safety, and there is much to learn to ensure your own safety or the safety of others. All hunters share some responsibility for their own safety and the safety of those around them. Ultimately, however, the person with his or her finger on the trigger must take responsibility for each shot. Virtually all hunting-related shooting incidents, both shooting mistakes and unintentional discharges, can be prevented by following the four basic rules of firearms safety taught at every hunter education course:

- 1. Assume every gun to be loaded.**
- 2. Control the muzzle – point guns in a safe direction.**
- 3. Trigger Finger – keep your finger off the trigger until ready to fire.**
- 4. Target – be sure of your target and beyond.**

ended tragically because someone failed to follow the basic rules of hunting safety. They failed to have a safe plan and to keep track of their hunting partners. They failed to be sure they had a safe backstop and they jumped to conclusions when they thought they saw game animals they were looking for. You must be sure that you can clearly see your target. Thinking something looks like the target is never enough. ✚

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