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Get The Point?

My project considered two different types of hunting broad heads and various weights of arrows, testing velocity, penetration, and cutting diameter with each one. With this project, it can be determined which broad head is the better tip to hunt with. Of the two broad heads, I thought that the mechanical would have a higher velocity and a larger cutting diameter, but that the fixed tip would penetrate deeper. I also thought lighter arrows would go faster, but that heavier arrows would penetrate deeper. After testing the velocity using a chronograph, the mechanical tip and lighter arrows went faster, as I thought. Lighter arrows also penetrated deeper into newspapers packed into a box I built, but the fixed blade tip went up to 50% deeper than the mechanical in this test. This is not what I had predicted, and disproves the popular belief that heavier arrows penetrate deeper than lighter ones. I believe that this will help hunters understand the physics of these arrows with different traits, and will greatly aid them in the choosing of their hunting arrow's weight and which type of broad head to use. This may differ between the bow and the type of game being hunted, but it is something to work off of for them all. I have learned a lot from conducting this experiment, and I am also more knowledgeable about different kinds of hunting tips, therefore I will know which broad head and weight of arrow combination I will hunt with.