

## Objective Lens size and Tube Diameter

Let's talk about objective lens sizes. 40 to 44mm is pretty standard on a medium variable rifle scope. It's trendy these days to have large objective lenses of 50, 56, or even 75mm and more in some cases. In most cases, these are unwarranted, and the largest ones are laughable.

Large objective lenses will only transmit more useable light than smaller ones if they are set at their highest power in the dimmest conditions. The detriment is comfort and ease of eye alignment. With a properly mounted scope, you should be able to close your eyes, shoulder your gun with a proper, repeatable stock weld (a stock weld is the firm but comfortable and repeatable position of your face on the gun stock), open your eyes, and look directly through the center of your scope every time.

Large objective lenses prevent this from happening because of the ring height required to keep such a large lens off your gun barrel. Some scopes require such high mounting that only your chin touches the stock. These scopes are also heavier, clumsier, unwieldy, unbalanced to carry, slower and less comfortable to shoot. Some of these scopes weigh up to an unbelievable 3.5 pounds! Kind of like towing a motorcycle trailer or taping a bowling ball to your head.

Leupold has their excellent VX-L line of scopes that combine a large objective lens with a contoured bottom that doesn't interfere with your gun barrel, and lets you mount up to a 56mm lens with *low* rings!

The larger 30mm main tubes on some tubes are most useful for allowing for a greater range of elevation adjustments, not greater light transmission, although resolution can improve. In fact, most 30mm scopes have the same size lenses that are in one inch tubes. Again, a larger tube does not mean more light.