

Focus on Binoculars



Binoculars help to bring birds closer and really are a must for every birdwatcher. But don't take my word for it—borrow a pair from a friend and use them for a week to observe the behavior of the birds at your feeder. You will be able to see things that previously went unnoticed. For example, watch the Tufted Titmouse pick up and drop several peanut pieces before it finds just the right one. Watch the male Northern Cardinal court the female by gently placing food in her mouth. Notice the changing colors of American Goldfinch as they begin to molt from summer to winter plumage. Later this summer, watch several species bring their babies to your feeder to teach them to feed. Not convinced? Come to our monthly First Friday Bird Walks and test a pair.

Choosing the right binoculars

The power of binoculars is not a measure of quality. Rather, it is only one of several factors to consider. Following is a brief overview of some of those factors.

What do the numbers mean?

Binoculars are labeled 7X35, 8X40, 10X50, etc. The first number gives magnification. For example, an object 80 yards away will appear 1/8th of that distance, or only 10 yards away with 8X40 glasses. The second number, 40, is the diameter of the objective lenses (the larger lenses on the front of the binoculars) in millimeters. These two numbers combined give the light generating power of the binoculars—how bright an image appears through the glasses. Have you ever noticed that images viewed through binoculars are brighter than with your naked eye?

By dividing the objective lens size (second number) by the magnification (first number), you determine exit pupil (EP). The larger the exit pupil, the more light is getting through to your eyes and the brighter the image.

Field of View (FV)

This measures the diameter (measured in feet at a distance of 1,000 feet away) of the area

seen through the glasses. For example, 375 means that you can see an area 375 feet wide through the glasses when standing 1,000 feet away.

Eye Relief (ER)

If you wear eyeglasses, using binoculars should not seem like you're looking through a tunnel which restricts the field of view. Since your eyeglasses cause your eyes to be further from the lenses, this "tunnel vision" effect will occur with improperly fitted binoculars. Eye Relief is the distance (in millimeters) that your eyes can be from the lenses and still see the full field of view.

So what does all of this mean to me?

Magnification: 7X and 8X binoculars are most often recommended for watching birds, especially for beginners. This is because with a higher power (like 10X) you may be so zoomed in that the bird is hopping around right outside your field of view. If you are new to using binoculars, keep in mind that it is a skill to be developed and it takes a while to get the hang of lifting and pointing the binoculars to just the right spot to locate the bird. Also remember that any shaking of your hand will be magnified when looking through the binocular, so if this is a concern you should consider the lower power binoculars.

Objective Lens and Exit Pupil: Basically, the wider the objective lens, the more light it lets in and the brighter the image. This is most important at dawn and dusk (the best birding times) and on very overcast days.

<u>Field of View</u>: In general, the wider the field of view the better because you are seeing a larger area through the lenses and will have better luck spotting the bird.

Eye Relief: If you wear glasses, have the eye relief down so the pupil of your eye is as close to the lens as possible. If you don't wear glasses, extend the eye reliefs so that they recess into your eye socket, also bringing the lens closer to your pupil.

What else? Some other points to consider:

<u>Waterproof and Durability</u>- Many binoculars have rubberized housings that make them more durable. Some are also water resistant and others waterproof.

Binocular Shape- You will notice some binocular lenses are straight and some are crooked. The straight shot lenses tend to be more compact and lighter weight and result in a brighter image. The advantage of the "crooked" lenses

is they tend to have a wider field of view. In addition, there are varying sizes of compact models that can even be folded up. These might be better for hiking as they are lighter weight, or buy an extra pair that you can stash in the alove box so you have a pair handy for that random bird sighting. Want to go super compact? Get a monocular that is like a mini-telescope.





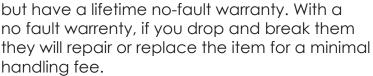
Shape of Your Face- Everybody's face is shaped differently, for example the space between your eyes. So come to the store to test drive different ones to see which are more comfortable and provide the best fit for your face.

Diopter- The right lens has a dial that can be adjusted called the diopter. For many people one eye is dominant, like being right or left-handed, so both eyes may not focus equally. To adjust it do the following. Look through your left eye and adjust the focus ring to a sharp focus. Then look through your right eye and adjust the diopter ring on that lens until you get a sharp focus. Note the spot on the diopter ring in case the ring gets bumped and moved so you can reset it to the sweet spot. Once adjusted it will provide a sharp focus for both eyes. Adjusting the diopter can also help compensate for lenses that are out of alignment.

Warranty- This is an important variable. Sooner or later you are likely to drop or bump your optics and the lenses may get out of alignment. They still work but the images don't line up as well.

Your eyes can adjust to it, but it can be annoying. The cost to fix this problem is not worth it, you might as well buy a new binocular.

As an example, our Vortex lines cost more



<u>Accessories</u>- Many binoculars come with case, lens caps, neck strap and lens cloth. Additional accessories include lens cleaning kits and lens

pens for better cleaning. Also check out the binocular harness. It spreads the weight across your shoulders for less strain on your neck, and also does a better job than the neck strap at holding the



binoculars closer to your chest so they don't bounce around as much while walking or hiking.

In closing, keep in mind that all of the binoculars we sell are quality products that Birdman Mel uses on bird walks! They all work great so try not to over think all of the variables to the point of frustration. There are likely many options that will work for you, so being without binoculars when you see that way cool bird in the yard should be your biggest concern.



2010 Chapel Plaza Court Suite C Columbia, MO 65203 573.446.5941 www.songbirdstation.com