## **Choosing the Right Binocular**

Most binoculars are described using two numbers; for example, 7x35. The first numeral refers to the magnification, or "power". An object seen through the binocular will be magnified seven times the size when viewed by the naked eye. The second numeral refers to the diameter of the objective lens, which is the end of the binocular facing the object to be viewed. The larger the numeral, the greater the diameter of the lens, and thus the more daylight entering the barrel of the optic to illuminate the object. The higher this number, the more clear and clean the image will be.

Binoculars are also described by "field of view" as well. For example, a field of view of 499 feet at 1000 yards means that when you are viewing objects 1000 yards away, you will have almost 500 feet of horizon in your field of view. The wider the field of view, the better the binocular is for following fast moving subjects such as flying birds or butterflies. Higher power binoculars generally have reduced fields of view but may have higher magnification - a hawk perched on a telephone pole would be best viewed by such a binocular.

A "zoom" binocular allows you to change the magnification from lower to higher when you are searching for an object. It is recommended to begin at the lower magnification until you have spotted the object, then you can "zoom" in by changing the magnification to view details not visible with lower magnifications. Zoom binoculars thus allow you to follow a bird or butterfly to its perch and then zoom in on it. For example, a 7-21x21 binocular allows you to begin your search at magnification seven, then zoom in to magnification 21 to view finer details. Zoom binoculars will also have dual "field of visions", as one field of vision will describe the view at the lower magnification, and the other will describe the view at the higher magnification. (As described above, the higher magnification will have a smaller field of vision).

Many binoculars will also have a minimum viewing distance. This means that objects closer than this will appear blurred; you need to view objects further away than this minimum. We also offer optics for viewing objects close up as well as a wide variety of hand lenses.

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