

To choose the right binoculars, many things need to be considered. What are you observing? Where are you observing it? What will you be doing when you employ optics?

It's also important to consider a few things about yourself. Do you wear eyeglasses?

Do you have small or large hands? How old are you? Have you ever had trouble in the past fitting binoculars to your face so that the eyepieces were directly in front of your eyes, creating a single visual rather than two partial sight pictures?

## WHICH BINOCULARS ARE BEST FOR ME?

With all this in mind, we've put together a few product use profiles that will make choosing the right binoculars easier.

### GENERAL PURPOSE BINOCULARS

Let's face it – sometimes it's just nice to have a pair of binoculars on hand. It may not be for any specific purpose. It may simply ride in the vehicle glove box or sit on a home window sill. You can take it to the game or on that vacation in the mountains. Often in such cases, the primary users of the binoculars might not be "intensive" optic users, thus a lower magnification level could be preferable, allowing the users faster and easier object location through the optic. As the binoculars may not be used frequently, a modest purchase price for a straight-forward, easy-to-use product is typically best.

### WILL CHILDREN BE THE PRIMARY USERS OF THE BINOCULARS?

There are a few too seldom considered facts about selecting binoculars for use with children. First, while there are inexpensive toy binoculars on the market, they should not under any circumstance be used by children for any lengthy amount of time viewing anything; the strain placed upon the eyes is simply too great.

Second, children (and for that matter, many adults – both men and women) have an interpupillary distance (abbreviated IPD – the measurement between the pupil of one eye and the pupil of the other to which the two halves of the binoculars must be aligned by the hinge

if a single binocular image is to be seen through the optic) that is too small for compatibility with ordinary binoculars. While 60mm to 70mm is often the standard range, even 60mm is not reached by many young people until their teen years and others never reach it at all. Overall physical size is not a factor here – some six foot tall adult men do not have an IPD of more than 60mm.

Third, all beginners experience difficulty locating objects in the field through binoculars. Think about it – the optic is magnifying the image 8x or even 10x larger than it normally appears, with the subsequent limitation of field of view occurring at the same time. There are simply too few points of reference in the field for a beginner to quickly locate a reference point and move from it to the object desired to be in view. This is solved by lowering the magnification level and allowing the field of view to be wider.

Fourth, smaller hands require a smaller overall binocular body to allow the controls to be easily reached and manipulated. (This same smaller body is also very useful if gloves are being worn on an otherwise average-size hand.)

Finally, never, ever use compact binoculars with children. Even though it may seem like a good idea due to the smaller size of compacts, the magnification levels are too high and the objective diameters are too small, offering a smaller exit pupil, for children to use successfully.

### BINOCULARS FOR BIRDING

Birders are perhaps the most technically demanding of all binocular users. There are many features that must all be found in a single pair of binoculars to allow it to be considered a truly great birding binocular. While there may be a dispute among some, most birders agree that great birding binoculars must have a close focus distance of no more than 10 feet. It must also allow the perception of the image with no perceptible alteration of color. Resolution must be very sharp (sharp enough to distinguish the difference between the tail feathers of Allen's and Rufous Hummingbirds). Field of view is also important, as identification on the wing is often necessary. While 8x is generally considered the appropriate magnification, conditions and terrain can alter this rule – viewing off-shore from a sea cliff would certainly allow for use of more than 8x while close vegetation in a tropical jungle may render 8x too much.

### BINOCULARS FOR BUTTERFLY WATCHING

A crucial factor for selecting the right binoculars for butterfly watching is close focus distance. N.A.B.A. indicates a maximum close focus distance of 10 feet; other experts insist on no more than 5 feet. As butterfly watching is done during mid-day, large objective models are not required. Lower magnification and larger field of view allow for faster location of the butterfly while it is flying.

### BINOCULARS FOR HIKING AND CAMPING

Light in weight, small in size, and durable are the primary desirable features of binoculars well-suited for hiking and camping.

### BINOCULARS FOR PADDLE SPORTS

Even on still water, viewing from a kayak or canoe is still tricky because of the inability to completely stop all movement. Lower magnification and larger relative objective diameter will produce a larger exit pupil and allow more forgiveness for movement. Of course, conservation of size is also important, especially if trying to wear the binocular over a PFD.

### BINOCULARS FOR GENERAL MARITIME USE

Most powerboats ply active waters that produce a continuous bobbing and rolling. Because of the inability to completely stop all movement, lower magnification and larger relative objective diameter will produce a larger exit pupil and allow more forgiveness for movement.

