Beginner’s Guide to Binoculars & Gear
Gear for beginning birders | It doesn’t take much to get started looking at birds—millions of individuals do it every day using just their eyes and a kitchen window. But for new birders who want to get serious about their hobby, a decent pair of binoculars and some good field guides are indispensable. Alabama Audubon wants to make sure you have all the information you need to get that first birding trip off to a great start.

Pricing binoculars | You don’t have to invest a thousand dollars in top-of-the-line binoculars to see birds—many of us have been using affordable optics for years, and we see just as many warblers as the big spenders! In fact, if you’re a new birder, it’s usually best to start small, with an affordable, entry-level pair. If you have between $75 and $150 to spend, you should be able to grab some great starter binoculars that won’t disappoint you in the field. Excellent quality glass starts about $300 and top quality is $1,200+.

“Bins” by the numbers | Now that you know how much to spend, how do you sort through the bewildering variety of sizes and configurations available in today’s binocular market? Let’s start with the only two numbers that really matter for beginners: magnification and objective diameter. These are usually presented as two numbers, separated by an X. In the case of “8X42s,” 8 is the magnification, and 42 is the objective diameter.

While you might think higher magnifications would equal better binoculars, this isn’t really the case—most birders prefer a magnification of 7X to 8X, as higher numbers lead to shaky images, a narrower field of view and hard-to-locate birds. When it comes to the objective diameter, somewhere between 32 and 42 usually provides the right blend of lightweight build and good optics. We prefer 8X42s, but other people swear by 8X32s. Try both in the store and go with what feels right to you. Check Bass Pro Shop, REI, or your local hunting/sporting goods store for their selection. Online retailers are also an option.

Other factors to consider are eye relief (distance, in mm, from objective lens to your eye, in which the entire field of view is visible—this is important to eye glass wearers), exit pupil (also in mm, is the objective lens diameter divided by the magnification—an exit pupil greater than 4 is desirable, 5 is even better and brighter), close focusing distance, waterproofness (generally cost more), and roof vs. porro prism design (roof prisms are lighter, more slender and easier to hold but generally cost more).
Eye relief | If you wear eyeglasses and are worried about selecting binoculars, you’ll find relief in knowing that many birders successfully bird while keeping their specs on. Eye relief is defined as the distance between your eye and the eyepiece of the binocular. Ideally, the longer the eye-relief, the better! It’s recommended that those with eye-wear should avoid binoculars with an eye relief of 16mm or less. Try out different binoculars while wearing your eyeglasses when in the store, and then decide which pair best allows you to see the entire field of view.

A quick guide to field guides | While new field guides and birding apps arrive each year, most of us depend on a short shelf of classics. Among the most popular are The Peterson Field Guide to Birds of North America, The Sibley Guide to Birds, and the National Geographic Field Guide to the Birds of North America. All three feature clear illustrations of important identification marks and are available in smaller, more field-friendly editions covering only the eastern half of North America for the Peterson and Sibley guides. For an even more portable solution, you can download mobile apps for your smartphone (we like Sibley and iBird Pro). Free apps are also available from the Cornell Lab of Ornithology (Merlin) and National Audubon.
While some birders like to use field guides with actual photographs, most of us find these difficult to use, as the play of light and shape can obscure key identification features. Two possible exceptions, however, are the Kaufman Field Guide to the Birds of North America and The Crossley ID Guide: Eastern Birds.

Need more help? For more advice on how to get started birding, check out further resources on Alabama Audubon’s website (www.alaudubon.org) or email us (info@alaudubon.org).

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