Best Binoculars of 2013: The Cornell Lab Review

In our Autumn 2013 issue we reviewed more than 100 pairs of binoculars, narrowing them down to a total of 28 top picks in five price ranges. But there’s no one perfect pair to recommend to everyone—so check out these six steps to decide what you like, then scroll down to browse our Top Picks:

Six Steps to Choosing Binoculars

1. **Decide on your price range.** Top-of-the-line binoculars give you a pristine image in a comfortable, durable package. Lower price ranges also offer some great options, thanks to technological advances in the last decade. See our chart of Performance vs. Quality Index to look for your best value. Note that we provide MSRP (from October 2013), but many retailers sell binoculars at below this price.

2. **Pick a magnification.** Deciding between 8x and 10x binoculars is a personal choice. In general 10x are better at distance viewing. But it usually also means a narrower field of view, a slightly darker image in low light, and more noticeable hand-shake. An 8x gives you a smaller image that’s wider, brighter, and easier for finding and following birds.

3. **Test a lot of models.** No two birders look through binoculars exactly the same way. Size of hands, shape of face, how you focus, how you carry the bins when you’re not using them—all matter. So pick up as many pairs as you can to get a feel for what suits you.

4. **Look for bright, crisp, true color.** Image quality has an overriding importance. How bright are the bins? How sharp? How true are the colors? How well do they resolve details in a backlit image? Most optics stores are better lit than your average forest—find somewhere dark to compare low-light performance. In our ratings, pay special attention to the Clarity/Crispness score to decide on image quality. Note that because of poor image quality, we don’t recommend any compact-style binoculars with objective lenses smaller than about 30 mm.

5. **Check the eye relief.** Most binoculars have eyecups that retract to accommodate eyeglass wearers or extend to provide shading for those

---

These interactive graphs will help you pinpoint the price range and attributes that are right or you.

**How Much Should You Spend?**

Click the image to compare binocular prices against our Quality Index for all 102 binoculars.
without. Look for durable, multi-adjustable eyecups. If you wear glasses, adjust the eyecups to their minimum position and make sure there’s enough eye relief—you shouldn’t see black rings around the image. Our Eyeglass Friendliness score helps indicate this.

6. **Review additional features and warranties.** Pay attention to field of view and close focus, two measures that affect how much you’ll see. See our report on field of view and close focus to understand how these factor into your choice. Also pay attention to durability, waterproofing, and warranty—many major optics companies now offer excellent warranties. Check our full review spreadsheet for these details.

**Explore Our Top Picks in Five Price Ranges**

The top end promises great performance—but some less expensive models deliver impressive results, too.

Click on a price range to see details of our Top Picks:

- **The Top of the Line: $2,000 to $3,000**

  **Zeiss Victory T*HT 8x42**
  
  Superb image. Birds pop out from the background. Great feel in the hand and good eye relief.
  
  Overall Feel: 4.7  
  Clarity/Crispness: 4.9  
  Eyeglass Friendliness: 4.7  
  **Quality Index: 4.8**  
  Price (MSRP): $2,444

  ![Zeiss Victory T*HT 8x42 binoculars](image1.png)

  **Zeiss Victory T*FL 8x32**
  
  A smaller, more comfortable binocular that’s not too small—with all the benefits of top-of-the-line glass and coatings. Gorgeous.
  
  Overall Feel: 4.6  
  Clarity/Crispness: 5.0  
  Eyeglass Friendliness: 4.9  
  **Quality Index: 4.8**  
  Price (MSRP): $2,055

  ![Zeiss Victory T*FL 8x32 binoculars](image2.png)

  **Swarovski Swarovision 10x42 EL**
  
  Really a fantastic binocular. The open bridge design makes it feel good in the hand and the image quality is excellent.
  
  Overall Feel: 4.6  
  Clarity/Crispness: 4.8  
  Eyeglass Friendliness: 4.7  
  **Quality Index: 4.7**  
  Price (MSRP): $2,777

  ![Swarovski Swarovision 10x42 EL binoculars](image3.png)

  **Swarovski Swarovision 8x32**
  
  A smaller binocular with excellent glass and coatings. A superb image sized for smaller hands and lighter carrying weight.
  
  Overall Feel: 4.8  
  Clarity/Crispness: 4.8  
  Eyeglass Friendliness: 4.7  
  **Quality Index: 4.7**  
  Price (MSRP): $2,399

  ![Swarovski Swarovision 8x32 binoculars](image4.png)

  **Leica Ultravid HD 8x42**
  
  Exceptionally durable, constructed with top-notch materials, and Leica’s legendary image quality. A great companion for long forays into the back of

  ![Leica Ultravid HD 8x42 binoculars](image5.png)

**Acknowledgments**

We’d like to thank the staff of **Wild Birds Unlimited at Sapsucker Woods** for their patience in generosity in allowing us to test and re-test many of their binoculars during this review: Barry and Sue Stevens, Walt Blodget, Elise Dentes, Ann Perna, and Ann Spinelli.

We also thank the more than 60 Cornell Lab staff and local bird watchers who provided ratings for binoculars: Joanne Avila, Bernd Blossey, Nick Bruns, Shannon Buckley, Tilden Chao, Russ Charif, Miyoko Chu, Greg Delisle, Henk den Bakker, Marc Devokaitis, Martha Fischer, Tom Fredericks, J. Grenier, Emily Griffiths, Yiaing Guo, Kim Haines-Eitzen, Becky Hansen, Greg Heist, Wesley Hochachka, Marshall Illiff, Eduardo Iñigo Elías II, Sara Keen, Anne Klingensmith, Gary Kohlenberg, Stuart Krasnoff, Amanda Larracuente, Nicola Leckie, Tim Lenz, Pat Leonard, Alberto López, David McCartt, Kevin McGowan, Bill Michener, Charles Mollenhauer, Will Morris, Diane Morton, Mary P., Chris Pelkie, Ruth Pfeffer, Alicia Plotkin, Hugh Powell, Mike Powers, Ashik Rahaman, Syed Rehman, Anne Rosenberg, Jesse Ross, Tom Schulenberg, Sharon, Aisha Siebert, Laura Stenzler, Rob Stevenson, Jae Sullivan, Derrick T., Don Timmons, Benjamin Van Doren, Brad Walker, Peter Wiedmann, Andrea Wiggins, Chris Wood, Suan Yong, and Matt Young.
beyond.

Leica Ultravid HD 8x32
Amazing brightness and crispness, with an exceptionally small size.

Overall Feel: 4.3
Clarity/Crispness: 4.8
Eyeglass Friendliness: 4.3
Quality Index: 4.5
Price (MSRP): $1,899

The New Midrange: $700 to $1,999

Zeiss Conquest HD 8x32
Testers loved this brand-new line from Zeiss. Smaller size makes them ideal for carrying along with lots of other gear. Super sharp and bright.

Overall Feel: 4.8
Clarity/Crispness: 4.9
Eyeglass Friendliness: 4.6
Quality Index: 4.7
Price (MSRP): $999

Zeiss Conquest HD 8x42
A slightly larger version of the Conquest 32s, with larger objective lenses for better performance in low light. The image is bright, clear, and true to color.

Overall Feel: 4.7
Clarity/Crispness: 4.8
Eyeglass Friendliness: 4.6
Quality Index: 4.7
Price (MSRP): $1,077

Leica Trinovid 8x42
A reboot of the long-admired Trinovid line—fantastic image and durability priced for the midrange class.

Overall Feel: 4.2
Clarity/Crispness: 4.7
Eyeglass Friendliness: 4.8
Quality Index: 4.5
Price (MSRP): $1,449

Vortex Razor HD 8x42
Vortex is the high-end line from the trusted manufacturers at Eagle Optics. These binoculars have a good image and feel with great close focus.

Overall Feel: 4.3
Clarity/Crispness: 4.2
Eyeglass Friendliness: 4.6
Quality Index: 4.3
Price (MSRP): $1,279
Swarovski CL 8x30
Great for people who like small-form binoculars, with a very nice image that is just slightly less sharp than the top-of-the-line Swarovision 8x32.

Overall Feel: 4.3  
Clarity/Crispness: 4.3  
Eyeglass Friendliness: 4.0  
Quality Index: 4.3  
Price (MSRP): $1,054

Meopta Meostar 8x32
Reviewers noted good close focus and wide field of view. The image crisp, clear, and bright.

Overall Feel: 3.9  
Clarity/Crispness: 4.3  
Eyeglass Friendliness: 4.3  
Quality Index: 4.2  
Price (MSRP): $959

The $400 to $699 Club

Nikon Monarch 7 8x42
Fantastic binocular for the price category. Sharp image; a great feel in the hand. The Nikon Monarch has been a popular line for years, and this is their new top of the class.

Overall Feel: 4.3  
Clarity/Crispness: 4.5  
Eyeglass Friendliness: 4.7  
Quality Index: 4.5  
Price (MSRP): $530

Opticron Verano BGA HD 8x42
An all-around solid binocular from a brand well-known in the U.K. Good feel in the hand, popular open bridge design, and good close focus.

Overall Feel: 4.3  
Clarity/Crispness: 4.5  
Eyeglass Friendliness: 4.7  
Quality Index: 4.5  
Price (MSRP): $641

Celestron Granite ED 8x42
Sharp and crisp; great close focus and field of view; colors seem warmer than real life. Open bridge design for comfort in the hand.

Overall Feel: 4.0  
Clarity/Crispness: 4.3  
Eyeglass Friendliness: 4.5  
Quality Index: 4.3  
Price (MSRP): $440

Eagle Optics Golden Eagle HD 8x42
Features the tried-and-true design of the popular Eagle Optics Ranger but adds HD glass for a noticeably better image.

Overall Feel: 4.3  
Clarity/Crispness: 3.9  
Eyeglass Friendliness: 5.0  
Quality Index: 4.3  
Price (MSRP): $600

Vortex Viper HD 8x42
Compact and comfortable. Firm focus wheel that is easy to dial in. The close focus is excellent.
<table>
<thead>
<tr>
<th><strong>Overall Feel</strong></th>
<th><strong>Clarity/Crispness</strong></th>
<th><strong>Eyeglass Friendliness</strong></th>
<th><strong>Quality Index</strong></th>
<th><strong>Price (MSRP)</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall Feel: 4.1</td>
<td>Clarity/Crispness: 4.3</td>
<td>Eyeglass Friendliness: 4.2</td>
<td>Quality Index: 4.2</td>
<td>Price (MSRP): $655</td>
</tr>
</tbody>
</table>

### Nikon Monarch 5 8x42
*Lightweight, well balanced, and comfortable in the hand. This and the Zeiss Terra ED are the only binoculars in this category to feature the clarity of ED glass.*

Overall Feel: 4.5  
Clarity/Crispness: 4.2  
Eyeglass Friendliness: 4.5  
Quality Index: 4.3  
Price (MSRP): $309

### Zeiss Terra ED 8x42
*This is one of the lowest priced binoculars in our review to feature ED glass—a clear step up in terms of materials and image.*

Overall Feel: 4.4  
Clarity/Crispness: 4.0  
Eyeglass Friendliness: 4.8  
Quality Index: 4.3  
Price (MSRP): $385

### Opticron Trailfinder 3 WP 8x42
*A fairly crisp image with a nice feel in the hand and a sensitive focus wheel that is quick to focus.*

Overall Feel: 3.8  
Clarity/Crispness: 3.7  
Eyeglass Friendliness: 4.3  
Quality Index: 4.0  
Price (MSRP): $219

### Eagle Optics Ranger 8x42
*A longtime favorite that has served thousands of birders well. Not quite as sharp or bright as the Best in Class, but still an excellent value for the category.*

Overall Feel: 3.7  
Clarity/Crispness: 4.1  
Eyeglass Friendliness: 4.3  
Quality Index: 4.0  
Price (MSRP): $333

### Vixen New Foresta HR WP 8x42
*Not quite as crisp or bright as Best in Class, but very close. Open bridge design is a plus. Smooth focus wheel. Easy to dial into focus.*

Overall Feel: 3.9  
Clarity/Crispness: 3.7  
Eyeglass Friendliness: 4.3  
Quality Index: 3.9  
Price (MSRP): $399
### Budget Binoculars: Under $200

**Celestron Nature DX 8x42**

*Nice feel in the hand. Lightweight. Reviewers were surprised at the excellent image these binoculars provide at a low price.*

- Overall Feel: 4.4
- Clarity/Crispness: 4.0
- Eyeglass Friendliness: 4.5
- **Quality Index:** 4.2
- Price (MSRP): $185

---

**Atlas Optics Sky King 8x42**

*These binoculars offer a nice, crisp image for this price category, although the somewhat heavy and stiff feel may not be for everyone.*

- Overall Feel: 3.7
- Clarity/Crispness: 4.0
- Eyeglass Friendliness: 4.5
- **Quality Index:** 4.0
- Price (MSRP): $199

---

**Opticron Oregon LE WP 8x32**

*Excellent value. Small size, ideal for smaller hands. Best of the lower-priced "small-sized" binoculars. Great for kids!*

- Overall Feel: 3.8
- Clarity/Crispness: 4.0
- Eyeglass Friendliness: 4.2
- **Quality Index:** 4.0
- Price (MSRP): $155

---

**Optics Planet OPMOD 8x42**

*A sturdy, slightly heavy binocular that offers a good image for the price.*

- Overall Feel: 3.8
- Clarity/Crispness: 4.0
- Eyeglass Friendliness: 4.5
- **Quality Index:** 4.0
- Price (MSRP): $195

---

**Eagle Optics Denali PC 8x42**

*A lightweight binocular with a smooth focus wheel and a nice image.*

- Overall Feel: 4.3
- Clarity/Crispness: 3.8
- Eyeglass Friendliness: 3.7
- **Quality Index:** 3.9
- Price (MSRP): $199

---

**Leupold BX-1 Yosemite 8x30**

*These are especially good for kids, with a nice image and feel, low price, and several fun colors.*

- Overall Feel: 3.7
- Clarity/Crispness: 3.0
- Eyeglass Friendliness: 4.0
- **Quality Index:** 3.5
- Price (MSRP): $129

---

Notes: Our **Quality Index** is a grand average of all of the reviewers’ ratings. **Overall Feel** is our reviewers’ assessment of weight, balance, construction and fit—bear in mind that it includes a lot of personal preference. **Clarity/Crispness** and **Eyeglass Friendliness** are described in the section above. Our full review spreadsheet (see sidebar) contains more details of our review methods.

Full disclosure: ZEISS and Optics Planet are sponsors of the Cornell Lab of Ornithology.