

Optics



[glacier glasses]

1. Julbo Bivouak

These glacier glasses deliver full protection from reflected sunlight—without the bug-eyed look that's typical of snow specs. The stylish looks come courtesy of magnetic side shields that snap away for off-snow hiking, but reattach instantly to block the UV burn that will wear your eyes out during long days on snowy or glaciated peaks. Two air vents cut into the top corner of each lens and an anti-fog coating kept the Bivouaks from steaming up during a warm June climb of Mt. Rainier, and flexible earpieces let you customize the glasses for a secure, comfortable fit. The polarized Camel lens has a filter that blocks a higher level of reflected UV, which eliminated glare and reduced eye strain on snowfields in Colorado's Zirkel Wilderness. And because the lenses are also photochromic (they darken in response to intense, high-altitude sunlight), testers rarely had to squint, even at 14,000 feet. \$190; 1.6 oz.; julbousa.com

[bargain]

2. Carson Raven RV-826 Binocular

If you want to ogle wildlife on the cheap, get the Raven. This 8x26 binocular let our tester study the velvety antlers of a moose she spotted in Maine from a distance that kept her from spooking the animal. The waterproof housing also proved its worth in that rainy climate; she sailed through a soaking rainstorm without the Ravens showing a hint of a leak. And its light weight and petite size (4.5 x 4.25 inches) make these binocs worth packing, even for hikers who only reach for them occasionally. Bonus: The Raven comes with a useful microfiber lens cloth. \$79; 10 oz.; carsonoptical.com

[green gear]

3. Nikon Ecobins

Most optical glass contains lead and arsenic, but not Nikon's Eco-Glass, which the company developed to reduce its impact. The Ecobins also come with a non-chloride rubber body free of inks and dyes, and a strap made from fast-growing eucalyptus wood. But do they perform? Thumbs up, say our testers: These 10x25 binocs deliver impressive clarity for their trim size and weight. "Great for spotting raptors high in the pines," said an editor who used them throughout a summer and fall in the Rockies. Their waterproof construction kept them from fogging, and the compact dimensions (3.5 x 4 inches) make them comfortable to wear around the neck and easy to stow in a lid pocket. Nitpick: The green color may be good for marketing, but try to find them in a meadow. \$200; 13 oz.; nikon.com



[goggles]

4. Smith I/OS

The problem: No one lens suits all light conditions, and buying multiple goggles for overcast and bluebird days demands a mountain of coin. The solution: The I/OS, which comes with two easily interchangeable lenses (the Sensor Mirror for flat light and the Ignitor for bright sun). The rimless design simplifies the swap: Just flip up the two plastic clips on top and pop out the double lens. The double-lens construction is another plus: it foils fog-ups with two layers of optics sealed with silicone and a pin-size porthole near the strap that vents moisture that might accumulate between the layers. The system let our tester wear the I/OS during moderate uphill hikes that would've steamed up most goggles, and both lens options provided sharp definition in all conditions. Best for small- to medium-size faces. \$180; 4 oz.; smithoptics.com

[winter-ready]

5. Tifosi Tyrant

The sun is weaker in fall and winter, producing more dim days and low-light hours that don't match up well with very dark sunglass tints. But even in flat light, you still need eye protection from the bouncing UV rays, and our testers appreciated the balance struck by Tifosi's Light Night Fototec lenses. The photochromic technology adjusts from 25 to 75 percent light transmission, depending on the day's brightness: The lens darkened to smoke-gray during a sunny morning hike in Maine's Mahoosuc Mountains, but faded to almost clear at dusk. "I could wear them from sunrise to sunset," says our tester, who notes that their minimalist weight also made them unobtrusive after hours of wear. More kudos: The vented lenses kept our crew from fogging during climbs, and the sticky nose and earpieces held the Tyrants in place during fast-moving activities. \$60; 9 oz.; tifosioptics.com