So you think you want to try birding?

UW Retirement Association Birding Interest Group April 9, 2025



If you enjoy watching birds, Consider yourself a birder. The term is broad, diverse and inclusive.

No matter your style, the world of Birds has something for you.

Southern Wisconsin Bird Alliance

Ethics

Etta Cosey

Ethical Birding Guidance

I. BE KIND TO THE BIRDS

- Birds come first.
- Look for signs of agitation and back off: raised crest or posture;
 alarm calls
- Don't stare too long look away or down from time to time.
- Don't play recordings.
- · Don't pish or hoot.
- Don't call attention to nests.
- Try not to flush. Especially repeatedly.
- When photographing, don't use flash.
- Don't point laser pointers at birds.
- Be careful who you tell.

II. RESPECT OTHER PEOPLE

- Do not enter private property without permission.
- Do not enter restricted or posted areas.
- Know the rules of a particular place and follow them or get permission not to.
- Keep and display the proper permits.
- In your car, pull well off to the side to observe birds.
- Don't pull off in a blind spot (hill, curve).
- Park tightly if you're with other cars.
- Let loved ones know where you'll be (include car license & description; time of your return, etc.)
- Carry a cell phone if possible, but keep it silent.
- Wear bright, visible clothing in hunting season consider not being in the field then at all!

- If with a group, stick together (unless leader gives the okay to wander off).
- SMILE at the locals! Wave. Be friendly.
- Share your knowledge.
- Share the scope! Look briefly, then let others have a turn. Don't look twice until everyone else has had a chance.
- Don't block other birders or walk in front of someone who is using binoculars or a scope.
- Be openly grateful to locals; patronize local businesses if possible and tell them you're a birder.
- BE QUIET!
- Don't point your binoculars at people's houses without permission.
- Chip in to cover carpooling costs.
- Speak up, if possible, when you see others behaving badly but be kind!

III. TAKE CARE OF THE HABITAT

- Support groups protecting habitat.
- Carpool whenever possible.
- Consider birding via public transportation.
- Don't crush habitat in your search for birds. Don't break branches.
- Stay on established trails & roads, unless you have permission not to.
- Carry in/pack out.

Field Guides and Apps

Tom Tokarz

Introduction

Before consulting a guide or an app, observe the bird for as long as possible. Take note of the following:

Size of Bird: Use a standard reference with which you are familiar. For example, is it bigger or smaller than a Robin?

Shape of Bird: Again, use familiar birds as references – is it duck-like, robin-like, etc.?

Habitat (where is the bird): Woods, brush, grassland, water (salt or fresh), on the ground, in the air (soaring or flying constantly)?

What is it doing?: Walking, hopping, swimming, wading, "flitting" about in foliage, perched, climbing up or down a branch/trunk?

Markings: Stripes, streaks, rings around the eyes, tail spots or stripes?

Color: General color of the bird (white, brown, black, yellow, etc.). Take note of markings (red on head, white on tail, specific color features).

Beak/Bill: Note size and shape.

*****NOW YOU MAY LOOK AT YOUR REFERENCE! *****

Guidebooks

 There are many types of guidebooks available: covering all of North America, Western North America, individual States, Counties, specific regions, and those focused on different groups of birds.

- These books are great for browsing, but until you are familiar with the various families of birds, they can be quite time consuming and take an inordinate amount of time thumbing through to find your bird when in the field.
- There are many local guides that are geared towards beginners, having fewer illustrations and species listed. Some examples include
 - Birds of Puget Sound Region Coast to Cascades (Paulson, Morse, Aversa, Opperman)
 - Birds of the Pacific Northwest (Aversa, Canning, Opperman)
 - Birds of Seattle and Puget Sound (Fisher)
 - Birds of Washington Field Guide (Tekiela)
- There are also Guides for specific types of birds (hawks, gulls, waterfowl, warblers etc.)

For a good general reference, the following are recommended as they cover nearly all the birds one is likely to see in Canada or the western USA:

- Peterson's Guide to Birds of Western North America
 This is a classic guide for birding. It uses illustrations rather than photos and points out key features to look for on the bird. It also has a good introduction to the basics of birding. It is compact enough to carry easily.
- National Geographic Field Guide to the Birds of North America

Another classic guide. It also uses illustrations rather than photos. This book covers more species than Peterson's. It is rather large and therefore not quite as portable; it is an excellent reference.

Kaufman Field Guide to Birds of North America

This guide uses photos rather than illustrations – geared toward beginning/intermediate birders.

• Sibley Guide to the Birds of Western North America

This guide uses drawings. It is an excellent and detailed field guide with many illustrations. Compact enough to carry easily. Not the best guide for beginners as the level of detail can be daunting.

Apps

The trend is toward using apps rather than books. Apps do have the advantages of portability, ability to have multiple references in one device, sound ID, searching for specific birds step by step, and birds most likely to be seen at your location. For beginner birders, some suggestions are:

• AUDUBON (free)

This is a free app with many features: good summaries of each species, photos, descriptions, recordings of songs and calls, range maps, discussions, habitats, feeding, diet, nesting, eggs.

You can search for an unknown bird by starting with the U.S. state and month and then note up to eight features of the bird. (One caveat – skip features you are not sure of such as activity, voice, wing and tail shape; otherwise, it will eliminate most possibilities too quickly.)

Also, under "Explore" you can see locations in your area and what birds have been seen there. You can also use it as a standard field guide (listed by type of bird).

• MERLIN (free)

Many birders already use Merlin for sound ID, but it offers much more. You can search for a bird in two ways:

- Step by step: location, date, size, color, activity. The most likely is listed first – scroll down for other possibilities.
- Photo ID: if you can take a photo of the bird and load it.
 Identification is possible if there is enough detail in the photo.

Under "Explore", the app will give you a list of the most likely birds along with a bar chart showing frequency depending upon the month. If you click on the photo of the bird, there follows a description and several more photos, sound recordings, and a range map.

A caveat regarding the sound ID feature – it should not be used as proof of ID. The identification must be confirmed visually or through matching what you hear with sound recordings provided by Merlin. It is, however, a great screening tool to get an idea of what birds may be present.

• SIBLEY BIRDS (\$19.99)

This app has all the features of the book PLUS sound and the ability to compare species. It is probably more comprehensive than needed if you are just starting out!

- Organizations
- Local Parks
- Recurring Bird Walks
- Field Trips
- Birding Festivals
- Top Spots within 2 hours of Seattle

Ellen

Local Birding Organizations

Audubon Societies

- Birds Connect Seattle (formerly Seattle Audubon), birdsconnectsea.org
- Seward Park Audubon, sewardparkaudubon.org
- East Side Audubon (East King County), eastsideaudubon.org
- Vashon Birding Alliance (Vashon and Maury Islands), vashonaudubon.org
- Blackhills Audubon (Lewis, Mason, Thurston Counties), blackhillsaudubon.org
- Tahoma Bird Alliance (formerly Tahoma Audubon, Pierce County), tahomabirdalliance.org
- Pilchuck Audubon (Snohomish County/Camano Island), pilchuckaudubon.org
- Skagit Audubon (Skagit County), skagitaudubon.org
- North Central Washington Audubon (Chelan/Douglas/Okanogan Counties), ncwaudubon.org

Other Organizations

- Washington Ornithological Society (WOS), wos.org
- UWRA Birding Group, retirees.uw.edu/interest-groups
- Feminist Bird Club, Seattle Chapter, fbcseattle.wixsite.com/fbcseattle

Recommended Local Parks

- Center for Urban Horticulture/Yesler Swamp/ Union Bay Natural Area (also called Montlake Fill)
- Magnuson Park
- Meadowbrook Park
- Washington Park Arboretum

- Carkeek Park
- Seward Park
- Schmitz Park
- Lincoln Park
- Alki Point/Constellation Park/Jack Block Park
- Discovery Park
- Logboom Park
- Edmonds Waterfront and Marsh
- Your local park

Recurring Bird Walks

- **Marymoor Park**, Redmond; Thursday, check Eastside Audubon for start time; Michael Hobbs, leader; All welcome
- **Billy J. Frank, Jr./Nisqually National Wildlife Refuge**, Olympia; Wednesday, 8 am start; Shep Thorn, leader; All welcome
- Joint Base Lewis McChord Eagle's Pride Golf Course Walk; Lakewood; 3rd Thursday of the month; 8 am start; Denis DeSilvis, leader; All welcome
- Seattle Parks and Recreation Friday Walks, Rec' N the Streets, 10 am start time. Email Kat for their monthly bird walks flier: KathrynWissman@seattle.gov. Location varies. All welcome
- **Tahoma Bird Alliance**, Fort Steilacoom Park, 1st Tuesday, 8 am. (See their website for other regular bird walks)
- Birds Connect Seattle, Visit their website for Neighborhood Bird Walks

Field Trips

• **UWRA Birding Group:** Third Tuesday of Month. Location and start time vary. Contact UWRA: retiremt@uw.edu

- Pilchuck Audubon, Tuesday Birding Trips: all day, destinations and times vary. Saturday or Sunday half-day field trips. See Pilchuck Audubon website for details. All welcome. Sign and submit release form prior to field trip.
- **Birds Connect Seattle Field Trips**, by lottery. Location and times vary.
- Visit **Local Birding Organization** websites above for more information on other available field trips.

Birding Festivals

- Snow Goose and Birding Festival, Stanwood (February)
- Wings Over Water NW Birding Festival, Blaine (Spring)
- Sandhill Crane Festival, Othello (March)
- Olympic Peninsula Birdfest, Port Townsend (April)
- **Gray's Harbor Shorebird Festival** (April or May)
- Wings Over Whidbey, Coupeville (May)
- Yakima River Canyon Birdfest, Ellensburg (May)
- Leavenworth Springfest (3rd week of May)
- Audubon Wenas Campout (May 30 -June 2, 2025)
- Puget Sound Birdfest, Edmonds (May 31 June 1, 2025)
- Wings Over Willapa, Long Beach Peninsula (September)
- WOS Annual Conference (site and dates vary)
- World Migratory Bird Day (May 11 and October 12 yearly)

Top Birding Spots within 2 Hours or so of Seattle

We've listed local parks elsewhere. Here are a few additional destinations. It would be best to go on a field trip or with birders who

know the areas listed. This is by no means comprehensive. We have a richness of birding destinations. Visit local birding chapter websites for possible field trips.

North:

- Everett: Spencer Island, Langus Waterfront Park,
- Skagit area/Fir Island north to Samish Island. Best in winter with swans, snow geese and raptors
- Blaine Marina/Semiahmoo
- Big 4/Ice Caves

East:

- Juanita Bay Park, best Oct Apr
- Snoqualmie Valley, including Three Forks, Stillwater Wildlife area
- Cle Elum area, especially Swauk Cemetery, Bullfrog Pond, riding along rural roads. Best April June

South:

- Des Moines Marina, Salt Water State Park, Dash Point State Park
- Hylebos Wetlands
- Fort Stillacoom Park, Billy Frank, Jr./Nisqually NWR

West:

- Whidbey Island
- Point-no-Point, Foulweather Bluff
- Dungeness Spit, Ediz Hook, Elwha River mouth
- Grays Harbor area: Best for shorebirds, year-round, but especially in April and October

Consult the **Birders Guide to Washington** by Hal Opperman for statewide suggested birding routes. Washington Ornithological Society provides an online version.

Online Resources

Etta Cosey

Internet Resources

Cornell Lab of Ornithology empower people to deepen their interest and passions for bird watching through conservation, and education.

Cornell Lab's All About Birds is a free education resource where information on the following topics is available: Bird ID skills, How to identify bird songs, It offers courses about birds and nature. Here's a few of the course titles: Feeder Birds: Identification and Behavior, Growing Wild: Gardening for Birds and Nature, How to Paint Birds, Joy of Birdwatching are just a few offered.

It created the bird app, Merlin, which is the world largest database of bird sightings, und and photos. Merlin can answer a few simple questions, upload photos, record a singing bird and explore birds in a region.

CORNELL LAB PROGRAMS

The Cornell Lab of Ornithology is a world renowned institution dedicated to the study, conservation, and appreciation of birds and biodiversity. It is part of Cornell University and is known for its cutting edge research, citizen science projects, and educational outreach. Here are some key attributes:

1. Research & Science

- Conducts scientific studies on bird behavior, migration, and ecology.
- Uses bioacoustics and machine learning for bird identification and monitoring.
- Partners with global organizations to advance ornithological research.

2. Conservation Efforts

- Works to protect bird species and habitats worldwide.
- Develops strategies for mitigating environmental threats like climate change.
- Engages in policy advocacy to support conservation efforts.

3. Citizen Science Programs

- eBird: A massive global database where birders log sightings.
- Project Feeder Watch: A winter long birdwatching program.
- Nest Watch: Tracks breeding birds and their nesting habits.
- Great Backyard Bird Count: An annual event engaging birders worldwide.

4. Education & Outreach

- Provides online courses, workshops, and resources for bird enthusiasts.
- Operates the Macaulay Library, a vast multimedia archive of bird sounds and videos.
- Publishes the *Living Bird* magazine and other educational materials.

5. Technology & Innovation

- Develops AI powered tools like Merlin Bird ID, an app that identifies birds by photo or sound.
- Uses advanced recording and tracking technologies for wildlife monitoring.
- Integrates big data analytics to understand bird population trends.

6. Visitor Experience

- Located inIthaca, New York, with a 230 acre Sapsucker Woods Sanctuary featuring trails and birdwatching opportunities.
- Offers guided tours, events, and live bird cams for remote observation.

Cornell Lab Programs

Cornell Lab of Ornithology has a variety of programs that focus on bird research, conservation, and community engagement. Here's a deeper dive into each one:

- eBird is one of the most prominent global citizen science projects managed by the Cornell Lab. It allows birdwatchers around the world to log their bird sightings into a central database. This vast collection of data is used to track bird populations, migration patterns, and behavior, helping scientists analyze trends and better understand environmental changes. The data from eBird has become an essential tool for conservation efforts, as it helps to pinpoint areas that are critical for bird conservation.
- Merlin Bird ID is an innovative, AI-powered app that helps bird enthusiasts identify bird species by simply uploading a photo or providing details such as location and bird characteristics. This tool is designed for people of all skill levels and allows users to quickly and accurately identify birds. Merlin can identify thousands of bird species and is particularly helpful for beginners who might feel overwhelmed by the complexity of birdwatching. It also includes a feature that helps users recognize bird songs and calls, making it a comprehensive guide for bird identification.
- The Macaulay Library is one of the largest and most significant archives of natural history media in the world, focusing particularly on bird sounds and videos. It houses millions of recordings, including bird calls, songs, and video footage from across the globe. Researchers, educators, and bird enthusiasts

use this resource for studying bird behavior, learning about species, and appreciating the diversity of bird vocalizations. The library's expansive collection is also a key asset for scientific research on bird communication, migration, and environmental changes.

- Project Feeder Watch is a long-term citizen science program that invites people to observe birds at their feeders during the winter months. Participants count and report the bird species they see at their feeders, providing valuable data that helps researchers track the abundance and distribution of birds during the colder months. This program engages communities in birdwatching while also contributing important information for tracking bird populations and the effects of environmental changes on bird species.
- Nest Watch is another citizen science project that focuses on monitoring bird nests throughout the breeding season.
 Participants observe and document bird nesting activity, including the number of eggs laid, the growth of chicks, and when the nest is abandoned or successful. This data is used to understand bird reproductive success and how different species are affected by changes in habitat, climate, and human interaction. Nest Watch helps scientists track the health of bird populations by providing insights into the breeding habits of various species.
- The Great Backyard Bird Count is an annual event that invites birdwatchers from around the world to count the birds they see in their backyards, parks, or nature reserves. The event usually takes

place over a four-day period in February, and the data gathered during this time contributes to a global snapshot of bird populations. This citizen science event is designed to engage people of all ages in birdwatching while contributing valuable data to researchers studying bird species and their habitats.

 The conservation initiatives of the Cornell Lab focus on protecting bird species and their habitats around the world. These efforts are critical in combating the ongoing threats birds face, including habitat loss, climate change, and pollution. The lab works with global partners to promote policies and create conservation strategies that ensure the long-term survival of bird populations. This includes research on migratory routes, habitat restoration, and efforts to protect endangered species. Through both research and advocacy, the Cornell Lab plays an influential role in shaping bird conservation efforts worldwide.

Birding Blogs

Local Birding Blogs can provide valuable insights into birding hotspots, species identification, and community events in Washington State. Here are ten notable birding blogs and resources based in Washington:Birding Washington State A comprehensive guide covering the entire state, offering detailed site descriptions maps, recent eBird sightings, and information on birding trails.

- The Bird Blogger Washington birding in Washington State, providing resources, site descriptions, and maps to assist birders in exploring the state's diverse avian habitats.
- Birds Connect Seattle Go Birding Offers guides to birding sites throughout Washington State, along with neighborhood bird outings and educational resources.
- **Washington Ornithological Society** Birding Resources Provides a forum for birders across the state to share information on bird identification, biology, population status, and birding sites.
- **Blair Birding** A personal blog where the author shares pictures, stories, and reflections on birding adventures, highlighting great places, people, and birds encountered in Washington and beyond.
- **Bird Banter** Ed's Birding Notes Features personal birding notes, trip reports, and reflections from a seasoned birder, offering insights into birding experiences in Washington and other regions.
- **Washington Birder** Publishes excellent information about county-by-county birding, including checklists for each county.
- The Great Washington State Birding Trail Provides maps and descriptions of the best bird-watching sites along seven routes in Washington State.
- **BirdWeb** An online guide to the birds of Washington State, offering species accounts, birding sites, and conservation information.
- Birding in Seattle and King County Offers a checklist of 270 species of birds seen in Discovery Park and nearby waters, making it a valuable resource for local birders
- Larry Hubbell authors the **Union Bay Watch** blog, which focuses on promoting the appreciation of wildlife, particularly birds, in the Union Bay area of Seattle. His mission is to foster harmony between humanity and nature.
- These blogs and resources offer a wealth of information and personal experiences that can enhance your birding endeavors in Washington State.

DuPage Birding Club Website

The **DuPage Birding Club (DBC)** website serves as a comprehensive resource for birding enthusiasts in DuPage County, Illinois, and the greater Chicago land area. Established in 1985, the club has grown to over 400 members and is recognized as one of the largest and most active birding groups in Illinois.

The website offers detailed information about the club's mission to promote birding through field experiences and education. It provides insights into the club's history, leadership, and the benefits of membership.

Members and visitors can access a schedule of upcoming meetings, which are held eight times per year, typically on the second Thursday of select months. These meetings feature guest speakers and presentations on various birding topics.

The club organizes over 100 field trips annually to various birding hotspots in DuPage County and beyond. Details about these trips, including dates, locations, and registration requirements, are available on the website.

For those interested in exploring local birding sites independently, the website highlights numerous hotspots within DuPage County, such as the Morton Arboretum and Cantigny Park. Each listing includes habitat descriptions and bird species commonly observed at these locations.

The DBC also emphasizes education and community engagement. Resources for beginners, outreach programs, and tools for educators are provided to foster a deeper understanding of birding. The club maintains an active presence on social media platforms, including Facebook, where members can share experiences and stay updated on club activities.

Additionally, the website features a Member Photo Gallery showcasing bird photographs taken by club members, reflecting the community's passion and dedication to birding.

Overall, the DuPage Birding Club website is a valuable hub for both seasoned and novice birders, offering a wealth of information and opportunities to engage with the birding community.

Birding Washington

Top ten birding destinations in Washington State

- **1. Skagit Wildlife Area** A mix of open water, tidal mudflats, and marshes, home to Short-eared Owls, Red-tailed Hawks, and Snow Geese.
- **2. Discovery Park** Seattle's largest park, offering diverse habitats with sightings of Harlequin Ducks, Bald Eagles, and seabirds.
- **3. Olympic National Park** Features rainforests and alpine areas where Sooty Grouse and Varied Thrush can be spotted.
- **4. Mount Rainier National Park** Known for its subalpine meadows and forests, attracting Gray Jays, Mountain Bluebirds, and Clark's Nutcrackers.
- **5. Dungeness National Wildlife Refuge** Home to one of the world's longest natural sand spits, with abundant shorebirds and waterfowl.
- **6. Nisqually National Wildlife Refuge** Protects the Nisqually River delta, offering diverse bird habitats, including freshwater marshes and tidal flats.
- **7. Cape Flattery** The northwestern most point of the contiguous U.S., where Tufted Puffins and Common Murres can be seen.
- **8. Grays Harbor National Wildlife Refuge** A vital stopover for migrating shorebirds, especially in spring and fall.
- **9. Protection Island National Wildlife Refuge** Supports nesting colonies of Rhinoceros Auklets and Glaucous-winged Gulls.
- **10. Billy Frank Jr. Nisqually National Wildlife Refuge** Mixed habitats supporting both land and waterfowl.

Each location offers a unique birding experience, making Washington State a prime destination for bird enthusiasts!

Birding Festivals and Conferences

Washington State hosts a variety of birding festivals and conferences that cater to enthusiasts throughout the year. Here are ten notable events:

- 1. **La Conner Birding Festival:** Held annually in January in La Conner, this festival celebrates the return of migratory birds to the Skagit Valley, offering guided tours, workshops, and family-friendly activities.
- 2. **Upper Skagit Bald Eagle Festival**: Taking place in February in Concrete, this event focuses on bald eagle viewing opportunities along the Skagit River, featuring educational programs and guided tours.
- 3. **Wings Over Water Northwest Birding Festival:** Scheduled for March in Blaine, this festival offers guided tours, seminars, and activities centered around migratory birds in the Pacific Northwest.
- 4. **Grays Harbor Shorebird Festival**: Also in April, this festival in Hoquiam celebrates the migratory shorebirds passing through the region, providing field trips, workshops, and educational exhibits.
- 5. **Leavenworth Spring Bird Fest**: Taking place in May in Leavenworth, this event promotes conservation through educational and recreational activities related to birds and their habitats.
- 6. **Yakima River Canyon Bird Fest**: Held in May near Ellensburg, this festival offers guided birding excursions and educational programs along the Yakima River Canyon.
- 7. **Puget Sound Bird Fest**: Occurring in September in Edmonds, this festival celebrates birds and nature with activities such as guided walks, talks, and a photo contest.
- 8. **Wings Over Willapa Festival:** Also in September, this event in South Bend focuses on the diverse birdlife of the Willapa Bay region, featuring field trips and educational programs.
- 9. **BirdFest & Bluegrass at Ridgefield National Wildlife Area**: Taking place in October, this festival combines birding excursions with bluegrass music performances, celebrating the area's natural and cultural heritage.
- 10. **Leavenworth Oktoberfest:** While primarily a cultural event, it often includes birding-related activities and seminars, attracting enthusiasts in October.

These festivals provide excellent opportunities to engage with the birding community, learn from experts, and experience Washington's diverse bird habitats.

INTERNET RESOURCES SUPPLEMENT

The following video sites provide educational training for birders on bird identification and identification quizzes. Many of these videos are less than 30 minutes long.

1. Absorbed in Nature

Bird songs (11)

Birds in the west (15)

Bird quizzes (19)

How to ID birds (15)

Feeder bird Friday (16)

How to watch birds (27) - (Improve your bird watching skills)

Bird life history facts (33)

2. Dupage Birding Club tutorials

Basic birding ID by species Bird Topography The beaks of the birds Binoculars by the numbers Plumages and molts

3. Birding Your Best Life

Bird Migration (1) Become a Better Birder (4) Gulls (5) Seabirds (2) Raptors (1) Shorebirds (2) Bird Identification (16)

4. Other notable sites

Los Angles Audubon BritHikes Ontario Lyco Birds Sparky Stensaas, photo journalist of wildlife Los Angeles Birders

Thomas Bancroft (local) has online courses on birding by ear, raptors of the Pacific NW

Washington Ornithological Society

5. Facebook: join a group and share experiences.

- Pacific NW Birders
- Inland NW Birders
- Tahoma Bird Alliance
- Puget Sound Estuaries
- **6. WA Dashboard** (birddash.net/us/wa) app displays recent eBird sightings in an easy-to-use format organized by WA counties.
- **7. Bird Photo Galleries** (a few of my favorites)
 - Denny Granstrand granstrand.net/gallery
 - Wayne Weber flickr.com/people/wcweber
 - Jeff Poklen Photo Galleries pbase.com/jpkln
 - Mike Danzenbaker's Nature Photography avesphoto.com
 - Joseph V. Higbee's Photo Galleries pbase.com/jvhigbee
 - Khanh Tran Photo Galleries pbase.com/spruce_grouse

Binoculars

Mark Johnson



Good binoculars will enable you to see birds more clearly and to discern details of the birds you are looking at. Following is information on terms used when describing binoculars.

Basics

Magnification

- Most birding binoculars come in 8x and 10x magnification.
- Personal preferences vary, but many find 8x binocular are in a sweet spot, providing good magnification with a wide field of view.
- The largest drawback of higher power is that along with magnifying the object, it also magnifies the movement of your hands and body, which causes the image you see to shake or appear jumpy.
- A second drawback is that higher power models generally have a smaller field of view, causing difficulty in finding or following objects.

Objective Lens

- A larger objective lens will gather more light and usually deliver a sharper, brighter image.
- The downside of a larger objective lens is that as the size of the lens increases, so does both the weight and the size of the binoculars.

Field of View

- Magnification power also has a direct effect on your field of view.
- Lower magnification expands it.
- Higher magnification narrows or reduces it

Adjusting the Binoculars

Set eyepiece spacing

• Grasp barrels firmly. Move them closer together or move them farther apart until the image you see forms a single circular field.

Adjusting your Diopter

- 1. If our diopter is located on the right barrel, then we begin by looking through the left barrel with our right eye close. Start by adjusting the center focus knob/diopter until the image is as crisp as we can get it.
- 2. When we're ready to adjust the right eye, we'll go ahead and close our left eye, and adjust the diopter on the right barrel until our image is as, again, as crisp as we can get it. Once we are happy, we can use the diopter lock to lock it in place.
- 3. Finally, we'll go ahead and open both our eyes and using the center focus knob, fine-tune the image that we see until it is perfect.

Adjustable eye cup

- Cup up for normal vision
- Cup down for glasses

Focus knob

Fine tunes the image so that it is clear and crisp

Neck strap

Always wear your binoculars. This will prevent them from accidental dropping.

Two kinds:

- 1. Around the neck
- 2. Harness strap

Shopping for binoculars

- #1 tip is to try as many binoculars as you can before you buy
- Birds Connect Seattle and Glaziers have good selections and service

Things to consider:

- How are the weight and balance?
- Do they feel comfortable?
- Are they easy to adjust and use?
- How does the focus wheel feel?
- Do the binoculars immerse you in this scene you're viewing?
- Does the cost fit your budget?

Websites for Binoculars

- **All About Birds** https://www.allaboutbirds.org/news/six-steps-to-choosing-a-pair-of-binoculars-youll-love/
- Wikipedia https://en.wikipedia.org/wiki/Binoculars
- Audubon Guide https://www.audubon.org/gear/binocular-guide
- **Simpli Essential Guide** https://www.simpli.com/lifestyle/essential-guide-understanding-binoculars-parts
- REI How to Choose Binoculars www.rei.com/learn/expertadvice/binoculars.html
- Birdwatching HQ https://birdwatchinghq.com/how-to-choosebinoculars/
- WikiHow https://www.wikihow.com/Choose-Binoculars
- GearLab https://www.outdoorgearlab.com/topics/camping-and-hiking/best-binoculars/buying-advice
- Crutchfield Binoculars Buying Guide https://www.crutchfield.com/S-reJyGGLCOOZ/learn/binoculars-buying-guide.html