



It's surprising what you might see in the fields at sunrise.

Photo: Pangborn Park, Hagerstown, MD.



“Birding” for a Captive Audience



By: Larry Zaleski

Delivered to the Hagerstown Torch Club
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2

Like most hobbyists, I tend to be passionate about my interests. Sadly, I am only occasionally able to expound on the virtues of birding, my favorite activity. But tonight is a real treat; you are about to experience 47 years of pent-up frustration unleashed in a single presentation. So let's dim the lights, lock the doors, and begin.

Photo: Northern Harrier – taken at Blackwater National Wildlife Refuge, MD.



Topics



1. Introduction
2. Birding basics
3. Where to look
4. Ways to participate



3

Tonight, we will cover these four topics:

1. Introduction,
2. Birding basics,
3. Where to look, and
4. Ways to participate.

(Photo: Yellow-billed Cuckoo taken at the Blair Valley Wetlands Preserve in Washington County MD)



1. Introduction – Why so popular?



Birding is the fastest growing recreational activity in the United States.

4

Birding is the fastest growing recreational activity in the United States. In 2017, there were an estimated 60 million birders in this country. In comparison, 24 million play basketball and 9 million play football. Birding, in contrast, is an activity that can be practiced at any age and at any level desired ranging from simply observing a back yard bird feeder to conducting far flung travel, or even full-blown research. There is even competitive birding, if you like. It's popularity is due to several factors:

- It's inexpensive (unless you feel compelled to buy an expensive cameras or telescope),
- It's convenient (you can watch almost anywhere)
- It's an outdoor activity
- It's interesting and challenging

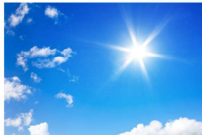
- It's relaxing, and finally
- It's social (there are many clubs and organizations devoted to birding and Ornithology)

In 2011, birding was popularized in the movie, "The Big Year" starring Black Jack, Owen Wilson, and Steve Martin.



1. Introduction – More reasons

You can find, see, and hear them



Active in the daytime



Fly



Sing and call

They have interesting behaviors



Migrate



Courtship and mating



Territorial defense



Nest building

5

Other reasons that birding is so popular have to do with birds, themselves. You can actually watch them.

- Unlike most animals, birds are diurnal, meaning they are active in the daytime like we are
- They fly, so they make themselves visible
- They sing, so you can find them even when out of sight

And birds have interesting behaviors, there's something to see...

- They migrate
- They have strange courtship behavior and mating rituals
- They procure and defend territories

- They build nests

With 993 species in North America and 10,000 worldwide, there's lots to see.



Topics

1. Introduction
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Yellow-billed
Cuckoo

6

So with that, let's move on to "Birding basics."



2. Birding Basics – Equipment

Field Guides



Binoculars



Spotting Scope
(Optional)



Camera (Optional)



Smart Phone
App (Optional)

Birding requires certain equipment. Absolutely essential are binoculars and a field guide. You can't identify what you can't see, so the number one birding tool is a good pair of binoculars.

Binoculars range in price from about \$30 to over \$3,000. Decent binoculars start at about \$90 and mid-price are around \$150 to \$350. Features to look for are multi-coating (which improves image brightness and color), anti-reflective coating, waterproofing, nitrogen filled (prevents internal fogging), and if you wear glasses, a minimum 14 mm eye relief. My binoculars (Eagle Optics - Denali), for example, have a massive 21 mm eye relief and cost about \$160. The best magnifications are 8x and 10x. I prefer 8x because it provides a wider field of view making it easier to locate the bird and has greater depth of field making it easier to focus.

Next, and also very important, is a quality field guide. Three of the best

are Peterson's, Kaufman's, and Sibley's. Some guides contain photographs, others paintings. A good guide also contains range maps and written descriptions of the bird, its song, behavior, and habitat.

Optional equipment includes a spotting scope, a camera, and an app for your smartphone. Apps, such as the free Audubon app, are nice because they include song recordings allowing you to learn bird songs. A camera should have image stabilization and a zoom lens ranging from 28 mm to at least 1000 mm or more (wide angle to 20x magnification). Several brands make 60x zooms for around \$450. Warning: Bird photography is time consuming.



2. Birding Basics – Naming the Bird



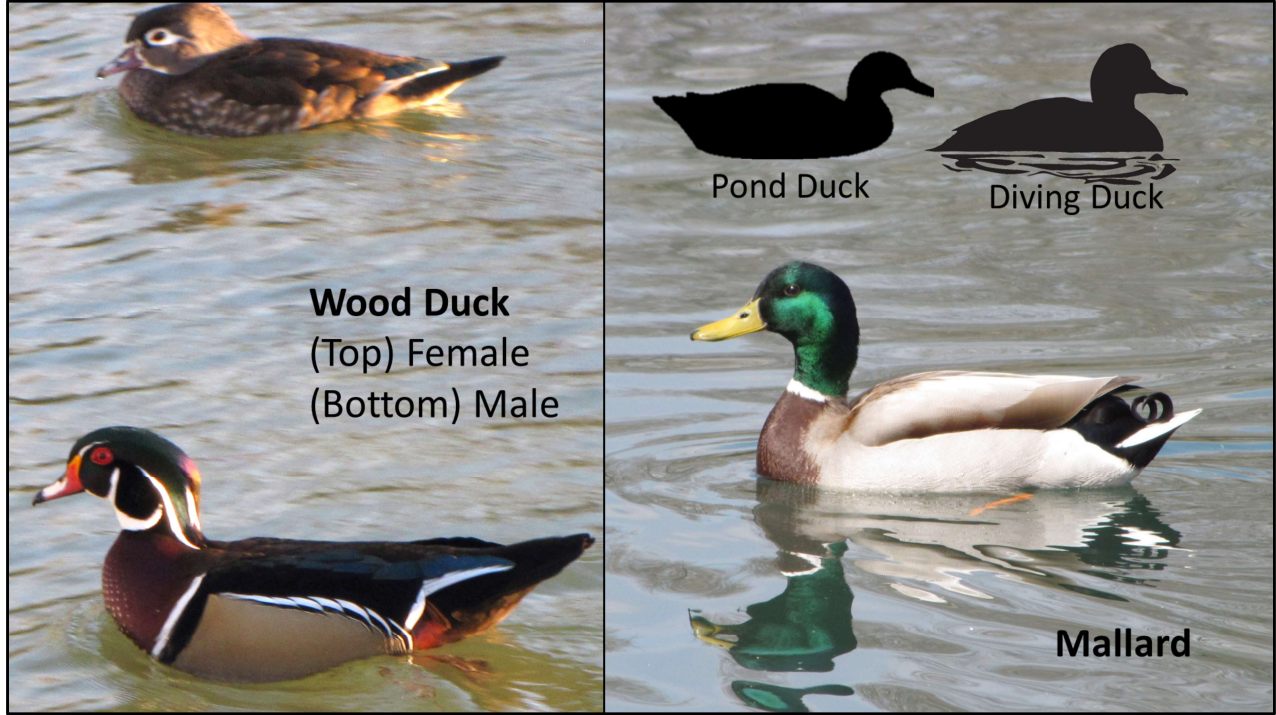
Learn to recognize families of birds

Ducks and Geese



For new birders, there seems to be a bewildering variety of birds, and their are. Consequently, both beginners and veterans need ways to narrow down the search. The most important method is to learn families, which are groupings of birds with similar characteristics. Such groupings allow you to narrow your search when looking in the field guide. One family that most of us recognize is ducks and geese. Within this group are further breakdowns, obviously ducks versus geese, but also diving ducks, pond ducks, and mergansers.

Gradually, you will learn to recognize these groupings speeding your identification. And, of course, learning field markings helps. The Canada goose, shown here, has a long black neck and head, with a white cheek.



Wood Duck
(Top) Female
(Bottom) Male

Pond Duck

Diving Duck

Mallard

Sometimes the difference between species is obvious, sometimes not. The Wood Duck and Mallard, both pond ducks, and are easily told apart. Fortunately, there are usually at least one characteristic that separate difficult species and groupings. For example, you can quickly separate pond ducks from diving by their silhouettes, shown at the upper right. Pond ducks keep their tails raised above the water, diving ducks do not.



2. Birding Basics – Naming the Bird



Example of a Diving Duck (Common Merganser)

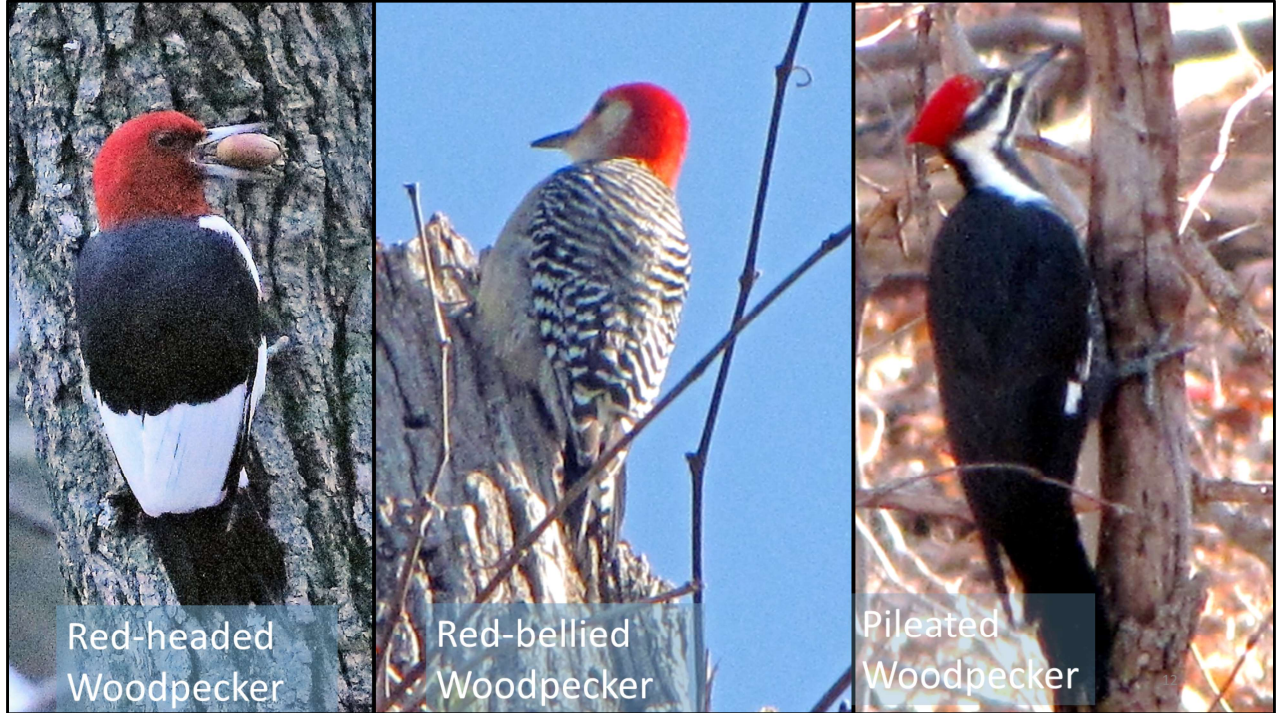
10

Here is a photo of a male and female 'Common Merganser.' Compare them to the silhouette. Notice how, like the silhouette, they do not hold their tails out of the water.



Snow Geese differ from Canada Geese. Snow Geese are white with black feathers at the end of their wings. As a point of interest, this species has a black morph, two of which are seen in this photo. It is important to remember that birds have individual differences, they are not identical twins, so be prepared for some variation.

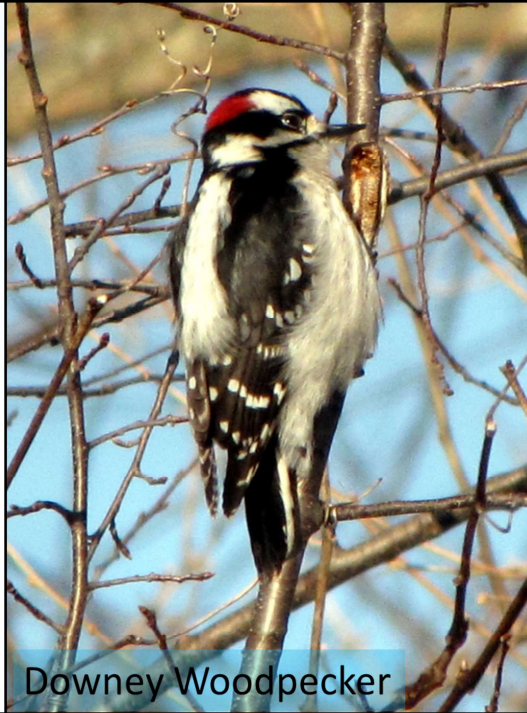
Interestingly, Snow Geese make so much noise honking that you can often hear a large flock coming as much as 25 minutes before you see them.



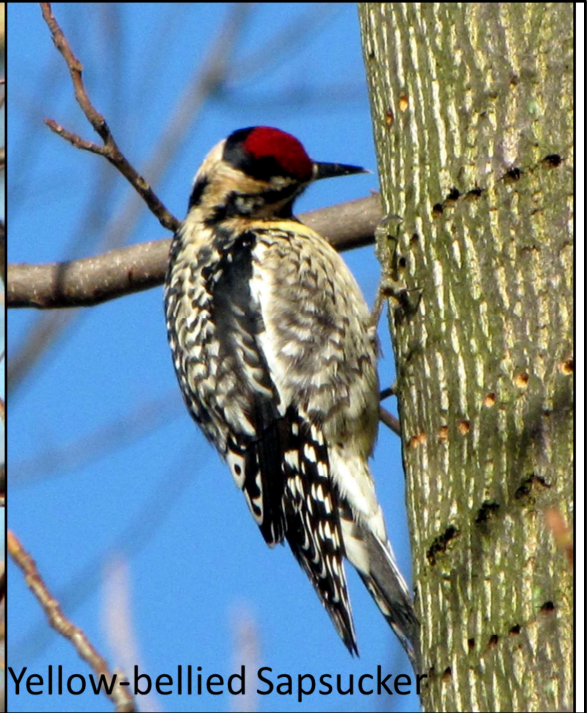
Another family familiar to most of us is the Woodpecker family. Most of us know that woodpeckers drill into trees eating the grubs and other insects that feed on trees. Also, woodpeckers drill holes for nesting. When looking-up woodpeckers, for example, you would not search in the section on Jays or finches. This makes identifying the bird much easier.

Woodpeckers have chisel-like beaks for drilling and stiff tails to prop themselves up. Also, they have the habit of drumming on trees, which can be heard at long distance.

The Pileated Woodpecker (far right) is called a “foundation species” because it plays a critical role in the ecosystem. It drills large nest holes in trees, which in future years are used by a number of other species, both birds and mammals, as homes. These “squatters,” like the Wood Duck, rely on the Pileated Woodpecker for their housing.



Downey Woodpecker

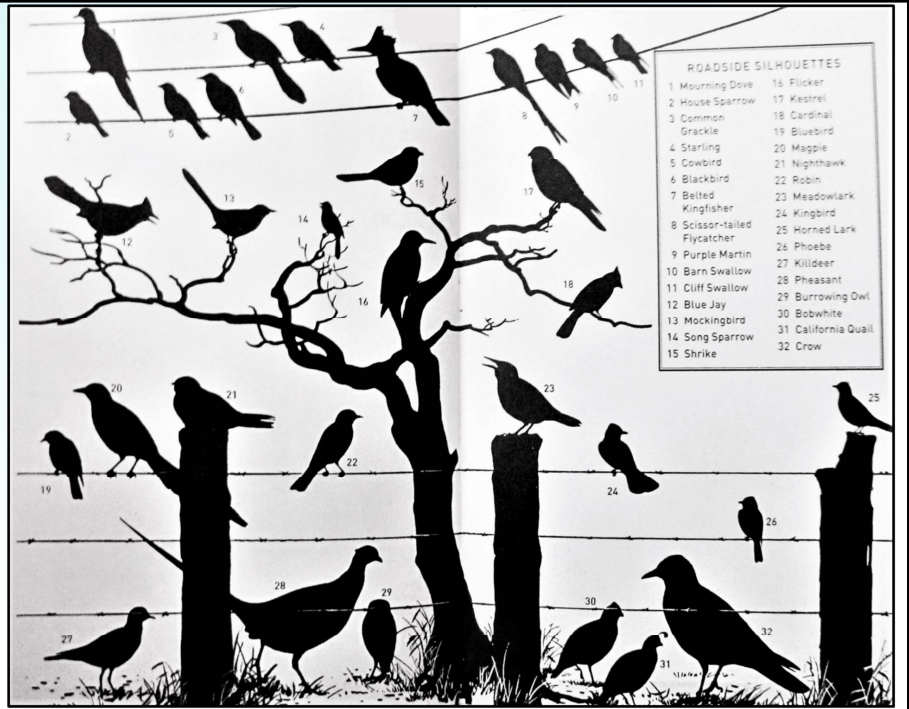


Yellow-bellied Sapsucker

Two other common species are the Downey Woodpecker and, in winter, the Yellow-bellied Sapsucker.



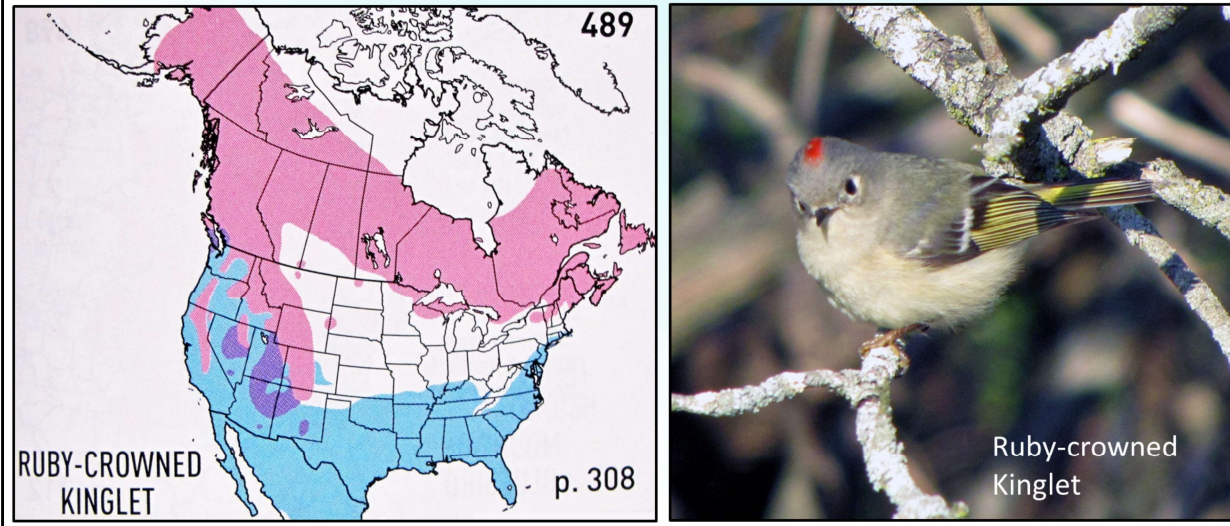
Learn the silhouettes of common roadside birds



Another way to reduce the clutter is to learn the silhouettes of common roadside birds. Most field guides have silhouettes that help you recognize birds at a glance, even when the sun angle is wrong for viewing or when speeding down the road in a car.



2. Birding Basics – Range maps



Often, species are similar in appearance. Frequently, you can separate similar species by referring to the range map in your field guide. The map indicates if the species is found in your geographic area and at what time of year. This simplifies identification because you can ignore species not found locally or not in season. The map for the Ruby-crowned Kinglet shows that it is found in Hagerstown Maryland, but only in the winter (blue area). Typically, range maps show the summer range in red, the winter range in blue, and the year round range in purple.

This slide shows the map for the Ruby-crowned Kinglet. Hagerstown, Maryland is on the edge of its winter range. And here is a picture I took of the Ruby-crowned Kinglet in Pangborn Park about 7 years ago, so the map appears to be accurate.



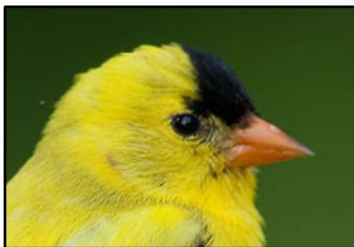
2. Birding Basics – Beak Shape



All purpose



Curved
(up or down;
probing)



Cone
(seed
cracking)



Dagger
(impaling prey,
chiseling)

16

Another important identification feature is beak shape. The most important function of a bird's beak is feeding. And the shape of its beak tells a lot about what the bird eats and how it finds its food. For our purpose, however, beak shape limits the number of possible options for identification.

- **All purpose beak** – The ‘Swiss army knife’ of bird beaks, “all purpose” beaks are used for acquiring a wide variety of foods including flying insects, soil invertebrates, leaf insects by gleaning, and seeds. They do it all. These birds are a “jack of all trades and a master of none.” Baltimore Orioles. Northern Robins, and various Black Birds have this type of beak.
- **Cone-shaped beak** – Used primarily to crack seeds. The example is an American Goldfinch.
- **Curved beak** –Used for probing in the mud, beneath bark, or in the soil for invertebrates. The Whimbrel, shown here, typifies

this kind of beak.

- **Dagger beak** – Used for spearing prey, including fish, crayfish, frogs, and other suitable prey. The Great Blue Heron is a good example. Another is the Woodpecker, who's bill ends in a wedge for chiseling wood.



2. Birding Basics – Beak Shape



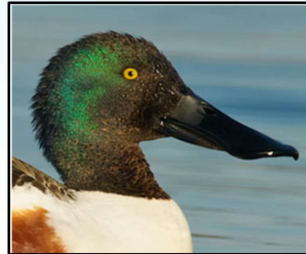
Hooked – raptor
(biting, tearing flesh)



Needle-like
(sipping Nectar from flowers)



Hooked -- Seabird
(fishing)



Spatulate
(straining plants, seeds, and small animals from mud)

17

Additional beak types are”

- **Hooked beaks (raptors)** – Here we see an Osprey, a fishing bird that dives vertically into the water, captures its prey with its claws and uses its beak for biting and tearing flesh. This beak is typical of birds that capture prey with clawed feet. Birds with these beaks include Eagles, Red-tailed Hawks, Coopers Hawks, Falcons, and Shrikes.
- **Hooked beak (seabird)** – This type of hooked beak is used by fishing birds that capture fish in their mouths and swallow the fish whole. This kind of beak is common on fishing birds with webbed feet such as Cormorants and Mergansers that do not have claws for grabbing and killing.
- **Needle-like beak** – These are the beaks of humming birds. They are specialized for sipping nectar from flowers. Hummingbirds insert their beak deep into the flower to the

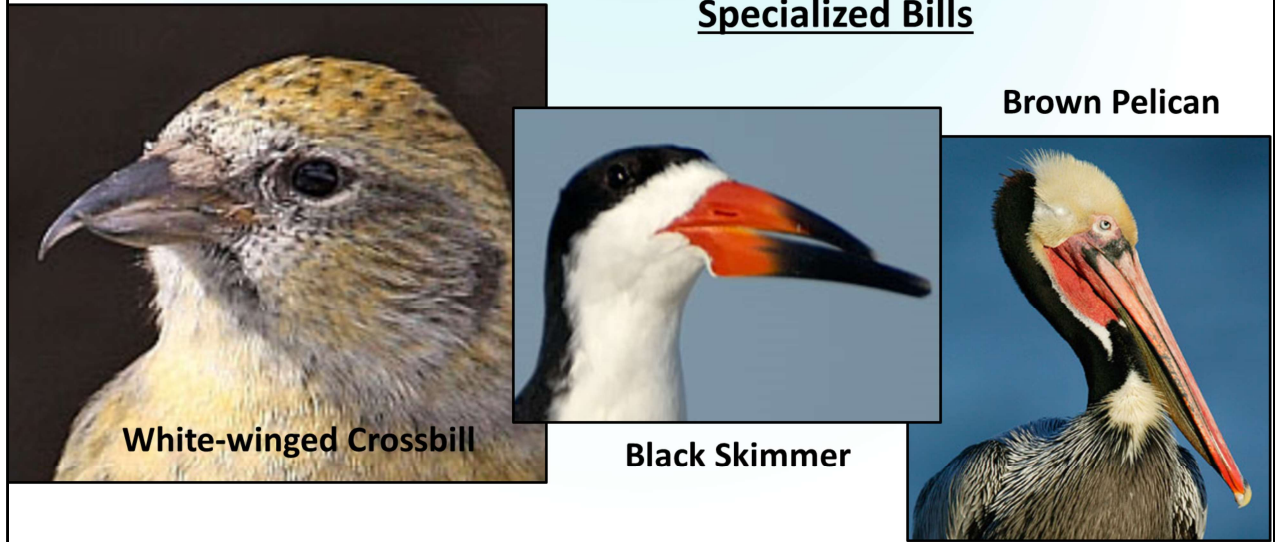
nectaries, which are glands in flowers that produce nectar. Interestingly, some flowers have a trumpet shape, making their nectaries accessible only to hummingbirds, who provide exclusive pollinating services.

- **Spatulate beaks** – Spatulate beaks, which are typical of ducks and geese, are used to strain plants, seeds, and small animals from mud. Birds with this type of beak have long necks allowing them to “dabble” (reach down tail up and sift through the mud). Diving ducks also have spatulate beaks.



2. Birding Basics – Beak Shape

Specialized Bills



Finally, there are “specialized” beaks. These tend to have unique shapes and are limited to one or a few species. Some appear almost deformed. Three examples are:

- **Crossbills** – There are two species of crossbills in North America. Crossbills use their beaks to pry seeds from trees having soft cones, and from other plants.
- **Extended lower mandible** – This beak is unique to the Black Skimmer, the largest Tern in North America. It flies skimming its lower beak in the water and snapping its mouth shut when it encounter a fish or shrimp.
- **Pouched Beak** – Found only in Pelicans, these birds dive into the water and scoop up fish in their pouch.



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- ➔ 3. Where to look
4. Ways to participate

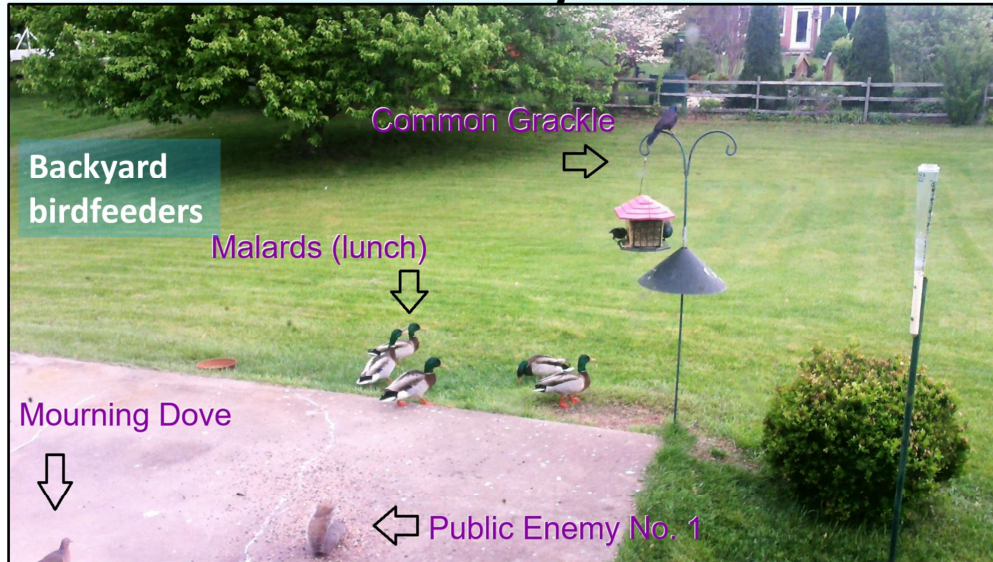


19

Now, we'll examine t where to look.



3. Where to Look – Backyards



The very best place to look for birds is your back yard. Keeping a birdfeeder will draw-in many species, which vary with the time of day and over the seasons. If placed close to a window, you will have a birding experience every day.



3. Where to Look -- Backyards



White-winged Crossbill (male)



(female)

21

Occasionally, you will spot a rare species in your backyard. These White-winged Crossbills are usually found in northern boreal forests, but flocks wander as far south as the Carolinas. A small flock landed in my backyard and stayed for three days.



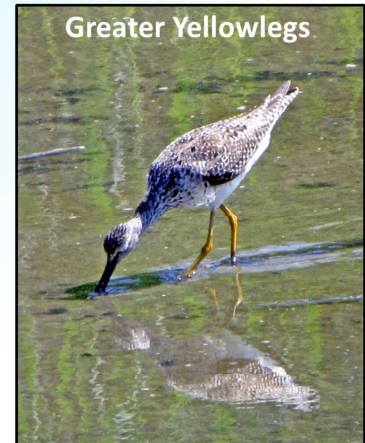
3. Where to Look – Parks and Nature Preserves



Also among the best places to look are National, State, and City Parks. Here are a few photos I've taken at Antietam National Battlefield. Oh wait, birds aren't the only wildlife you will see. A common and harmless snake you might encounter is the Black Rat Snake. If you see one, just leave it alone.



3. Where to Look – Saltwater Marsh/Seaside



Salt marshes, particularly in national wildlife refuges, such as Bombay Hook in Delaware, Blackwater in Maryland, and Forsyth in New Jersey are outstanding locations. National Wildlife Management Refuges have elevated driving roads, and many hiking trails providing views and access. Again, birds are not the only wildlife you will see. The Northern Diamondback Terrapin, for example, is the symbol for the University of Maryland. Sadly, I had to go to New Jersey to see one.



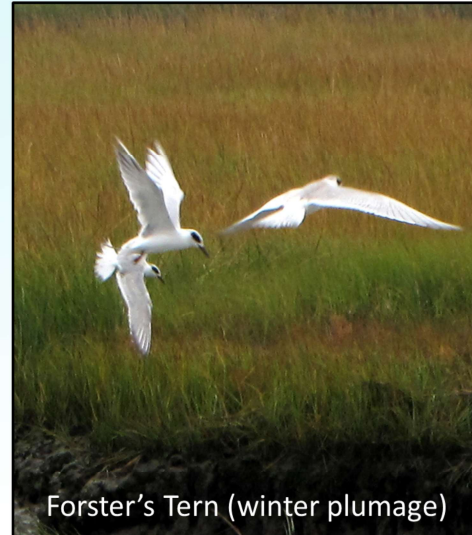
The Chesapeake bay has the largest Osprey breeding population in the world. But the Osprey is in decline again this time apparently from owl and crow egg predation. In a effort to bolster the Osprey population wildlife refuges and parks build nesting platforms for them. Oddly, this may be exacerbating the problem by making the eggs and chicks easy picking for owls and crows. Here is an Osprey nesting platform in Forsyth National Wildlife Refuge in New Jersey. You can see Atlantic City in the background about five mile away.



3. Where to Look – Saltwater Marsh/Seaside

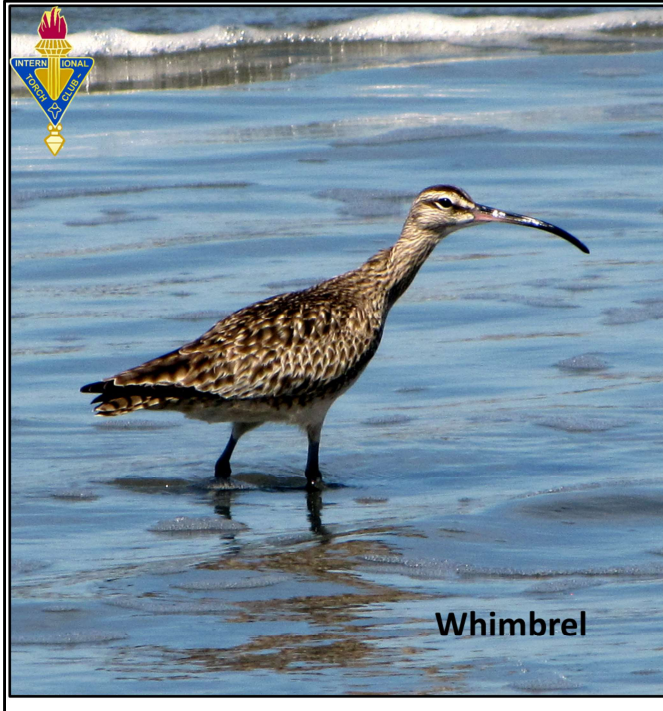


Forster's Tern
(breeding plumage)

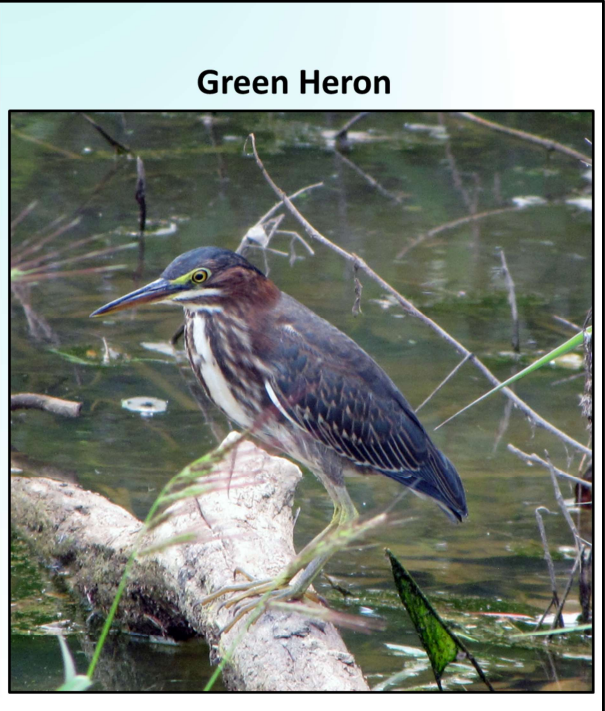


Forster's Tern (winter plumage)

Many birds, especially gulls and terns have seasonal plumage. The two pictures at right are both of Forsters Terns, the middle picture shows breeding plumage, while the picture on the right shows winter plumage. It's all just more to see.



Whimbrel



Green Heron

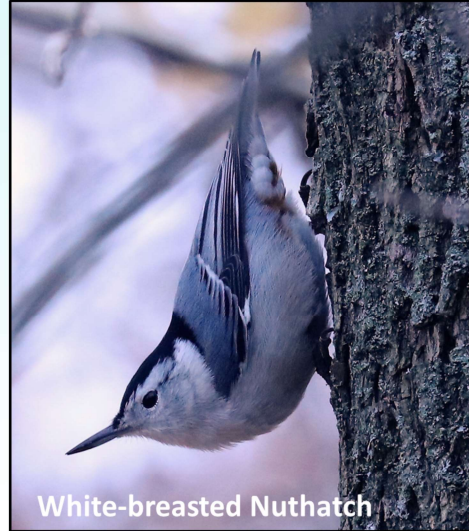
Two species you can watch either on the coast or locally are the Whimbrel and the Green Heron.



3. Where to Look – Anywhere



Rufous Hummingbird (female)



White-breasted Nuthatch

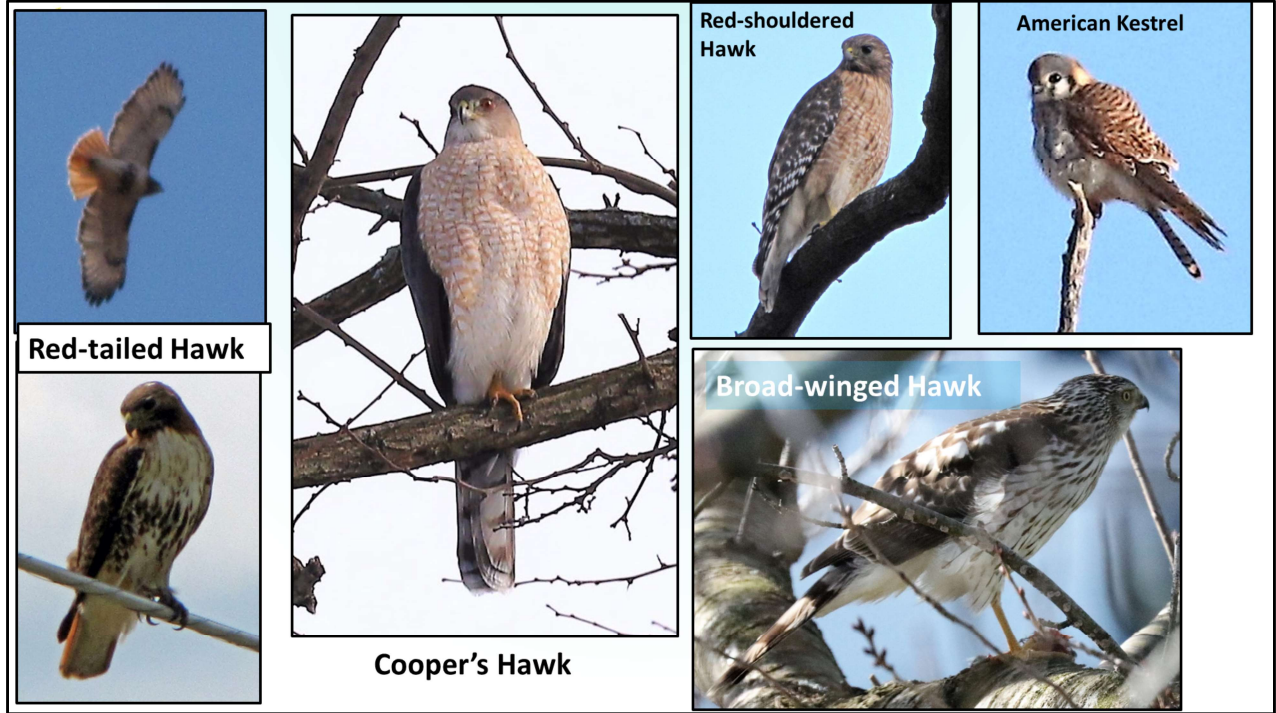
Of course, many birds can be viewed almost anywhere. Two of these are hummingbirds and nuthatches.



Great Blue Heron (Greenbrier State Park)



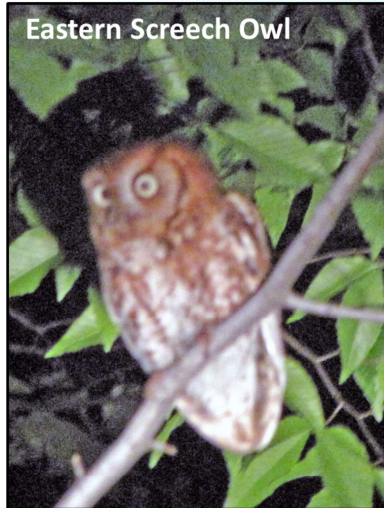
Locally, on almost any stream, river, or pond you can often see Great Blue Herons. Here is one wading near the beach at Greenbrier State Park.



Another group of birds that you can see almost anywhere are raptors. Here are five species common locally. The Red-tailed hawk, one of the most common, is readily identified by its “belly band,” which can be seen both when perching and flying. The Cooper’s Hawk, also common, has red cross-hatching on its breast, is slender and has a rounded tail. Each species has field marks that help identify it. Study and experience helps.



3. Where to Look – Anywhere



Eastern Screech Owl



Green Jay (South TX)



Blue Jay

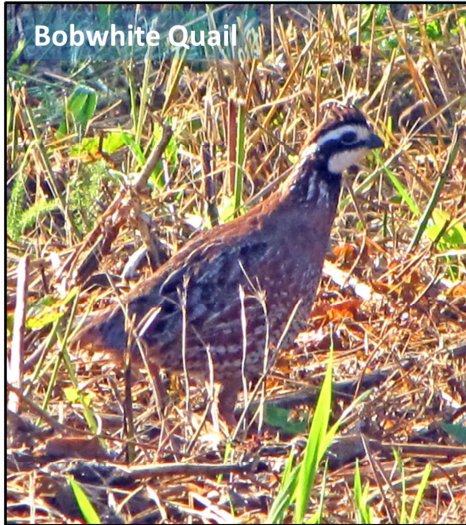


Common Yellowthroat

Owls can be seen in many locations, but their distribution tends to be spotty. The Green Jay is an example of a species **not** found in Maryland, but common in its range. To see it, you would have to travel to the Rio Grand or Southeast Arizona. The Blue Jay and the Common Yellowthroat Warbler are common in Maryland.



3. Where to Look – Nowhere



Ring-neck Pheasant

31

Some species are in serious decline. Two of the most prominent are the Bobwhite Quail and the Ring-necked Pheasant. I took the picture of the Bobwhite, shown here, in 2012 at Indian Spring Wildlife Management Area near Clear Spring, MD. I have not seen or heard a Bobwhite since. And I have not seen a Pheasant since the early 1990's. The decline of these formerly abundant species is nation-wide.

The biggest problem seems to be farming practices. More intense farming resulting in multiple harvests per year, the switch to corn and soybean (replacing wheat and sorghum), increased use of pesticides and herbicides, and increased field size resulting in the fragmentation of natural grasslands all contribute to habitat loss. Additionally, in the south, the

introduction of Fire Ants have severely reduced the survival rate of hatchling Bob White.



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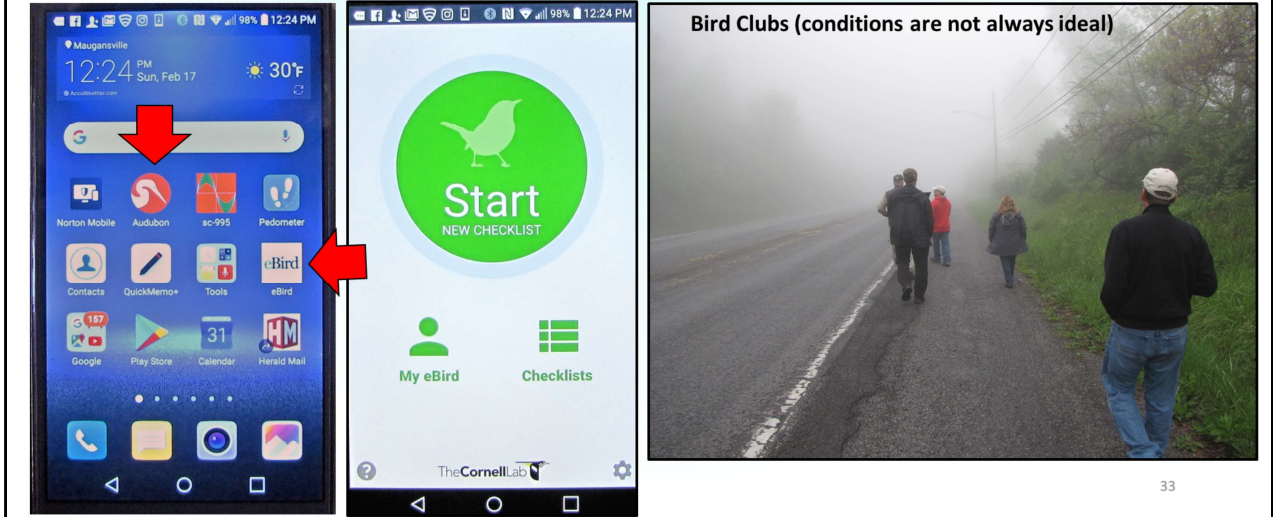


32

Finally, ways to participate.



4. Ways to Participate -- There's an App for that



You can participate in several ways. The easiest is to join a bird club. The Washington County Bird Club, for example, has regular bird walks and participates in national birding events like the annual Christmas Count, the Fall Count, Spring count, and the Backyard Bird Count. And, of course, this being the computer age, there's an App for that. Audubon offers a free birding app and there are several apps that you may purchase, as well.

But if you truly want to participate, download the free Cornell Labs birding app, called eBird. eBird allow you to enter sightings live. It tabulates sightings in a central database as part of an international effort to track birds worldwide. You can either enter sightings directly into the app or record them on paper and enter them later on you computer. In this way, your observations are used in ongoing bird research. Since downloading eBird, it has become my sole recording method.



An ominous sign, some sightings are less welcome than others. With that, it appears that we have come to 'the end.'