

How to Identify Birds

The beginning of separation of bird kinds into useful groups

Birds can be generally divided into two main groups; **Water birds** and **Land birds**.

Water birds maybe divided further into several groups:

1. **Swimmers**; the ducks and duck-like birds (waterfowl)
2. **Flyers**; Gulls and gull-like birds (shearwaters, storm petrels, pelicans, frigatebirds, gannets, tropicbirds, jaegers, skuas, gulls, and terns).
3. **Long-legged Waders**; Herons, Egrets, Night Herons, Bitterns, Storks, Cranes, Limpkins, Ibises, Spoonbills, and Flamingos, Rails, Oystercatchers, Avocets, and Stilts
4. **Smaller Waders**; Plovers, Sandpipers, Phalaropes,
5. **Fowl-like Birds**; Turkey, Grouse, Pheasants, Quail, and Partridges
6. **Birds of Prey**; Hawks, Eagles, Accipiters, Buteos, Osprey, Vultures, Caracaras, Falcons, Owls,

Land birds maybe divided into two groups:

1. **Nonpasserine** Land Birds; Parrots, Parakeets, Pigeons, Doves, Cuckoos, Nightjars, Hummingbirds, Kingfishers, Woodpeckers,
2. **Passerine** (Perching) Land Birds; Tyrant Flycatchers, Shrikes, Vireos, Jays, Crows, Larks, Swallows, Chickadees, Titmice, Nuthatches, Creepers, Wrens, Gnatcatchers, Kinglets, Thrushes, Mockingbirds, Thrashers, Starlings, Waxwings, Old World Sparrows, Pipits, Finches, Longspurs, Snow Buntings, Towhees, Sparrows, Yellow-Breasted Chats, Blackbirds, Wood-Warblers, Cardinals, Tanagers, Buntings.

Birding Field Guides

Field guides have to arrange a series of bird pictures so that an observer can find what they're looking for. One solution is to list the pictures in alphabetical order but alphabetical order is no help if you don't know the bird's name. Sorting by color doesn't help either, since male, female, and young of the same species may not show the same color and colors may change with the season. Arranging birds by their habitat preferences also disappoints for birds that don't always remain in the same landscape forever.

The proven and trustworthy method for arranging birds in a field guides is to order species in a *taxonomic sequence*, based on the birds' developmental or evolutionary account. In essence shared ancestry parallels a shared physical form. For example, woodpeckers, which all belong to one family, have two strong central tail feathers that brace the bird against a tree.

But, the taxonomic sequence or order is not static. The arrangement may change as science makes discoveries about the ancestry of birds. The use of DNA analysis of related bird groups has altered the landscape of our knowledge of a bird's evolutionary history and the field guide publishing industry. Bird groups change position, species are lumped or split as evidence is accumulated and field guides need updating.

The American Ornithologists' Union (AOU) was founded in 1883 out of concern for bird conservation and interest in developing the field of ornithology in North America. Early AOU efforts led to formation of the National Audubon Society and the Biological Survey (now known as the U.S. Fish and Wildlife Service).

The AOU was the largest ornithological society in the Western Hemisphere and one of the oldest organizations in the world devoted to the scientific study and conservation of birds. In October 2016 it merged with the Cooper Ornithological Society to form the American Ornithological Society (AOS).

The AOS's Committee on **Classification and Nomenclature** keeps abreast of and adds to the systematics, nomenclature, and distribution of North and Middle American birds. It publishes the Checklist of North and Middle American Birds, including supplements (online and print). This order of birds is what publishers strive to use for their birding field guides and pocket checklists. Currently there are 1,064 Nonpasserine species and

1,079 Passerine species for a total of 2,143 kinds of birds in the Western Hemisphere's North and Middle American birds.

According to Michael and Diane Porter (birdwatching.com), *becoming familiar with the taxonomic sequence is an interesting, basic task of becoming a birder. All good field guides teach it. Without understanding taxonomic order, trying to look up a bird is like trying to find a word in the dictionary without knowing the alphabet.*

For convenient comparison, some guides, such as the *Peterson Eastern & Central N. America guide*, deviates slightly in order to place similar-looking birds together, such as swifts and swallows, even though they aren't closely related. Other books, trying to ease the beginner's way, make up their own arrangements. *New birders may find that the time they spend learning an unusual system won't necessarily transfer to another book.*

Pictures are the heart of a field guide and may be paintings, photographs, or digital blends of both. Most field guides employ painted illustrations. With control over pose, lighting, and background, the artist can emphasize the most significant information. A good guide shows the birds' *field marks*. Field marks may include a bird's size, bill shape, facial pattern, and even the manner of flight. These field marks may be illustrated with lines or arrows pointing to an important clue for identification and for separating one related form from another. For example, tail shape and breast color in swallows.

Good field guides include what amounts to a beginner's course in birdwatching, including how to recognize what group a bird belongs to, where and when to bird, suggestions for keeping records, and birding ethics. Time spent studying the fundamentals section will pay off handsomely when a birder goes out into the field.

The book should be of a size to fit in a big coat pocket or shoulder bag, have a soft cover, illustrate birds in your area, and be easy and quick to use. Write your name in it, make notes in it, mark pages with ID clues, date first sighting for your life list, know where it is at all times.

Enjoy the adventure. Go birding! Gone Birding!

Shapes

What is the General Body Shape?

Is the bird plump like a Rock Pigeon (1), slender like a Tree Swallow (2), small like a 'Least' flycatcher (3), tall like a Bittern (4)?



What are the Wings like?

Are they rounded like the Red-tailed Hawk (1), pointed like the Swift's (2) and the Cliff Swallow's (3), or long like the Golden Eagle's (4)?



What Shape is the Bill?

Is the bill fine and stout like the vireo's (1), down-curved like a creeper's (2), or hook-tipped like a cormorant's (3), broad and flat like the Northern Shoveler duck's (4), stout and short like a seed eating White-crowned Sparrow's (5), long like that of the Curlew's (6), or short and stout like a Kirtland's Warbler's (7)?



Tail Shape

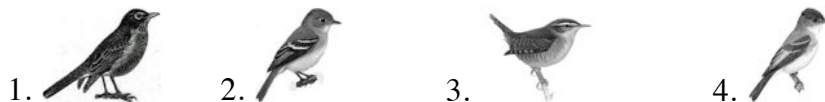
Is it forked like the Barn Swallow's (1), square-tip like the Cliff Swallow's (2), upright and square-tipped like the wren's (3), rounded like the cormorant's (4), notched like the Purple Martin's (5), or long and narrow like the Ring-necked Pheasant's (6)?



General Bird Behavior

Holding the body, tail placement and movement

Is the bird in an upright posture on the ground or when perched on a branch like a Robin (1) or 'Least' Flycatcher (2)? Is the tail upright most of the time as with the Wren (3). Does the bird pump the tail rhythmically as with the Eastern Phoebe (4)?



Does it climb trees

Does it start at the bottom of the trunk and jerks upward using the tail as support as with most woodpeckers {Red-headed Woodpecker (1)}? Does it move down the trunk searching for food as with the White-breasted Nuthatch (2)?



What is its flight path?

Does the bird continuously move up and down during flight like surface waves on the ocean? This bird undulates in flight like the Red-bellied Woodpecker (1). Does it fly straight and mostly level like a Robin (2)? Perhaps it hovers on occasion and dives for small fish like a Belted Kingfisher (3). Is it darting from flower to flower with forward and reverse flight combined with hovering flight like a Ruby-throated Hummingbird (4)?



Activity in water

Does it sit low in the water like a Common Loon (1) or perhaps high like a duck (2, 3). If it is a duck does it feed bottoms-up in shallow water and takes flight by 'jumping' straight up off the water like a Mallard (2) (known as a dabbling duck). If it is a duck does it feed by diving under water and takes flight by 'running' along the water to become airborne like a Scaup duck (3) (known as a diving duck).



Activity on shore lines and wet areas

Does the body bob, teeter, or slowly glide forward when it walks like the Spotted Sandpiper (1)? Does the bird wade in water on medium or long legs while feeding like the Great Blue Heron (2), Snowy Egret (3), or American Bittern (4)? Does it lunge with its bill and impale or grab small fish or frogs like the Great Blue Heron (5)?



Tail behavior

Tail pumping aids in balance, enhances foraging, is a signal to territorial intruders, and is a signal to potential predators. Tail pumping or wagging is common in several species among them are the Eastern Phoebe (1), Ovenbird (2), Palm Warbler (3), Northern Waterthrush (4), Kirtland's Warbler (5), and Spotted Sandpiper (6).



Patterns of color

Eye ring

An eye ring is a specific set of hair-like feathers, usually white, that encircle the eye giving a distinct ring effect. Complete ring: 'Least' Flycatcher (1), Broken ring: Robin (2), Split ring: Kirtland's Warbler (3), Connected ring or Spectacles: Blue-headed Vireo (4).



Wing bars

When the bird is perched and the folded wing is viewed there maybe one, two, or no light lines (bars) of feathers in a horizontal plane, these are wing bar feathers. No bars: Eastern Kingbird, two bars each: faint on Eastern Phoebe (2), 'Least' Flycatcher (3), Blue-headed Vireo, no bars but a patch of white (hanky) on Black-throated Blue Warbler (5).



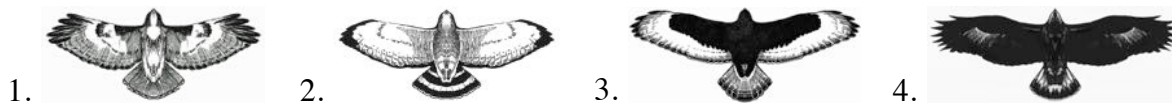
Breast or belly markings

The breast area may be marked with a series of dark bands like those of the Killdeer (1) or the single band or 'V' of the Eastern Meadowlark (2), or the spots of the Wood Thrush (3), or streaking of the Ovenbird (4), or the black and white patterned line of the Dark-eyed Junco.



Underwing markings

The Red-tailed Hawk (1) has diagnostic marking on the leading edge of the underwing near the body called the 'patagium' that is visible in all plumages. In the Broad-winged Hawk (2) adult the trailing wing edge is margined with a narrow dark line. The Turkey Vulture (3) has a two-toned underwings with silvery wing feathers and black lining feathers. Golden Eagle (4) immatures have white to buffy wing patches in the underwing.



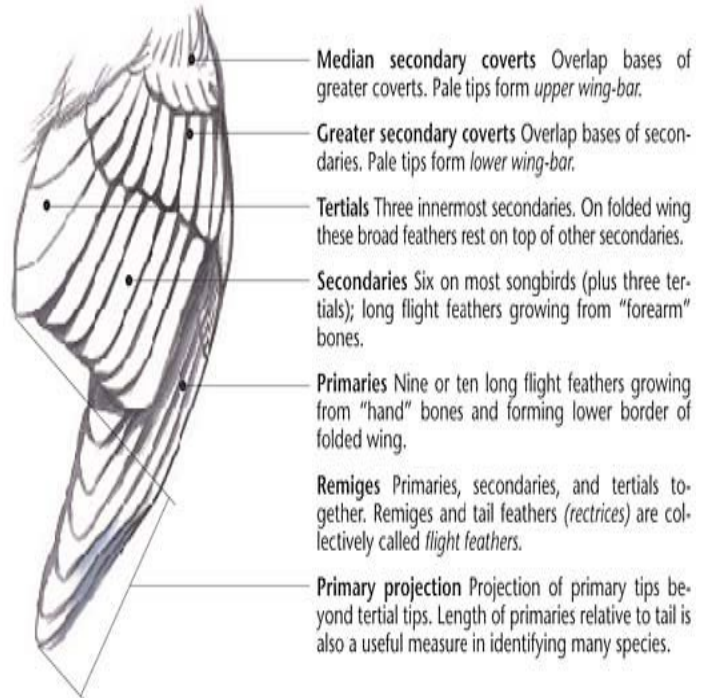
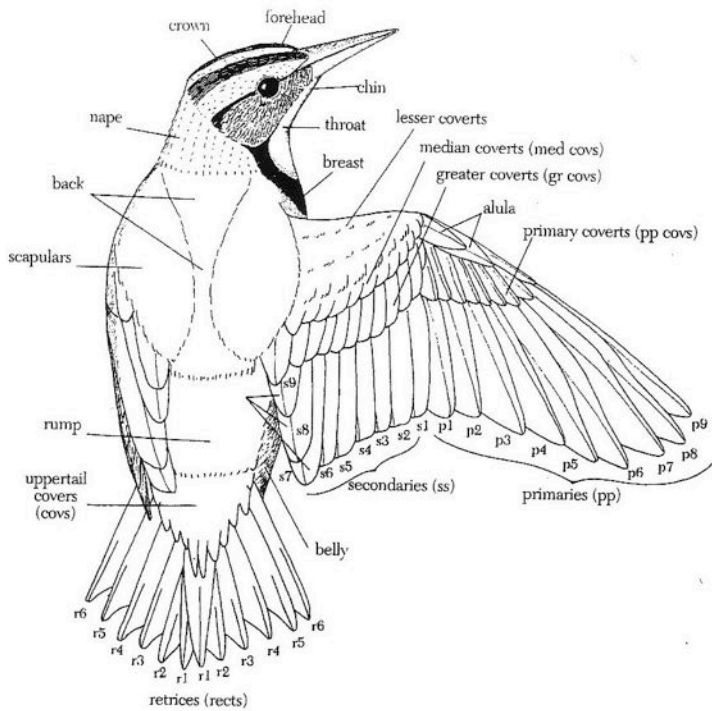
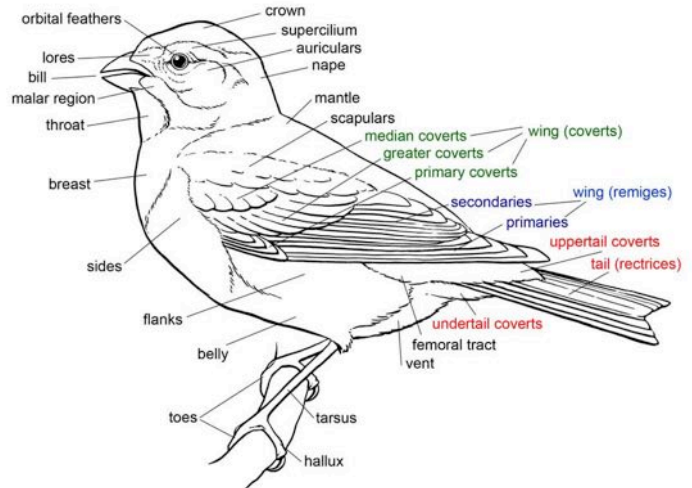
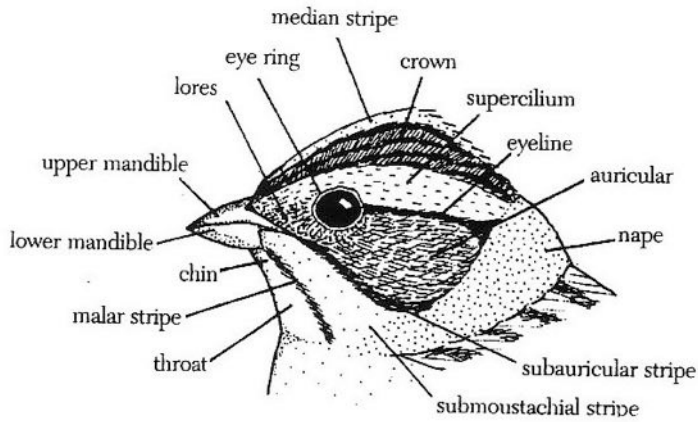
Tail markings

Eastern Kingbird (1) has a white-tipped tail. Red-headed Woodpecker (2) has white at the upper base of the tail that is visible in flight. The Cliff Swallow (3) has a buffy rump pattern at the base of the tail. Many hawks have banding in their tails like this Broad-winged Hawk (4).

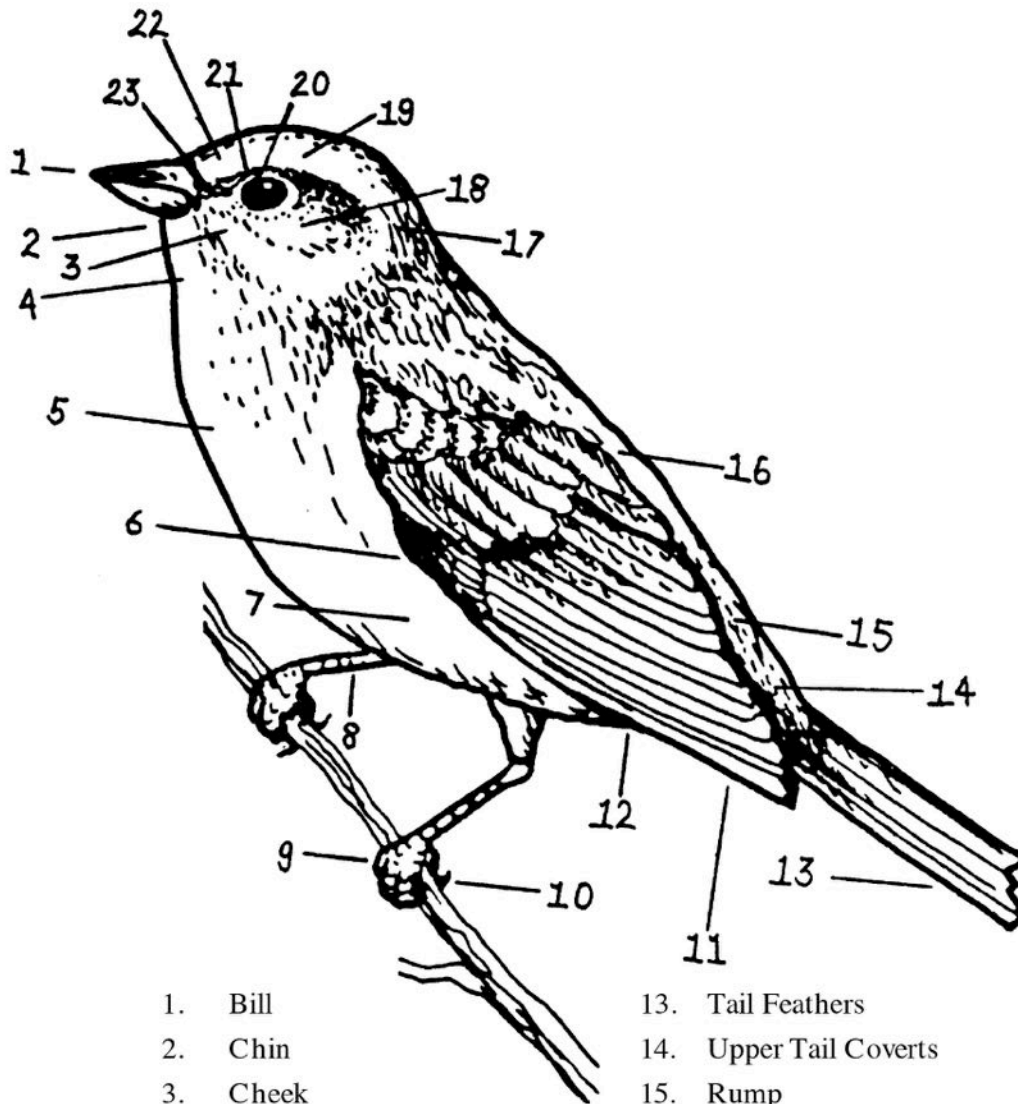


Detailed Bird Topography

Late Night Reading

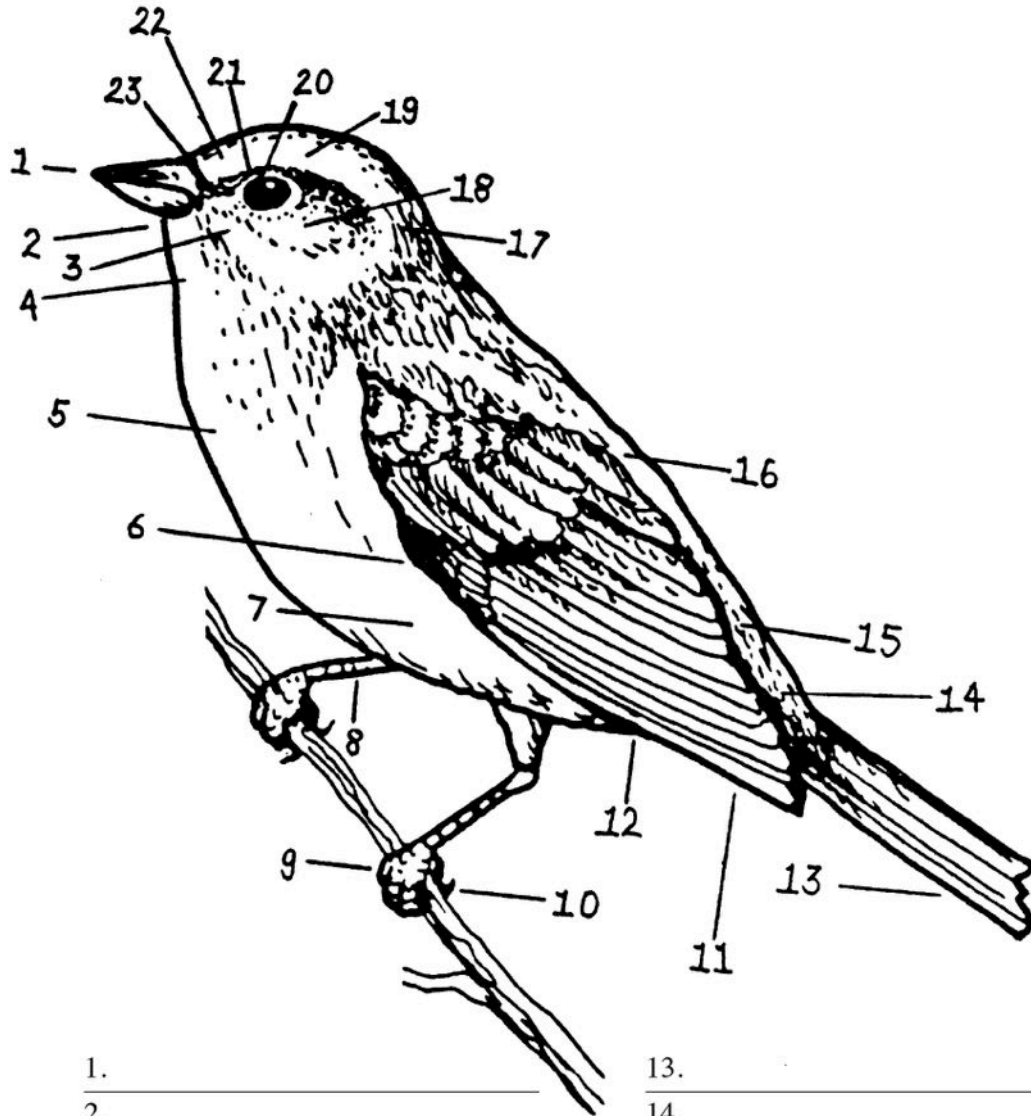


Bird Topography Identification Sheet



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|----------------------------|---|
| 1. Bill | 13. Tail Feathers |
| 2. Chin | 14. Upper Tail Coverts |
| 3. Cheek | 15. Rump |
| 4. Throat | 16. Back |
| 5. Breast | 17. Nape |
| 6. Flank | 18. Ear Patch or Auricular |
| 7. Belly | 19. Crown |
| 8. Tarsus | 20. Eye |
| 9. Foot | 21. Eye Line, Eye Stripe, or Superciliary |
| 10. Talon | 22. Forehead |
| 11. Wing, Primary Feathers | 23. Lore |
| 12. Under Tail Coverts | |

Bird Topography Worksheet



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