

# GOSHAWK'S LAW

SYLFEST MULDAL, Kingston, ON

*Reprinted, with permission, from "Blue Bill," Journal of the Kingston Field Naturalists, Ontario.*

Let's suppose you're now at this game, and you're keen. Having seen those magnificent slow motion eagles on TV, and then those tiny birds flitting over your garden in such a hurry, you can't wait to learn bird identification. I think it's time for you to come on a field trip. You'll get quite an education from us experienced birders. Yes, I should explain; we are birders not birdwatchers. This is because we don't necessarily *watch* birds; we just "bird." But don't be shy. Even I was ignorant once. Still, the way birdwatching is done may be a little confusing to you at first. So let me walk you through the experience, and explain a little of the "behind the experience" as we go.

Soon after you leave the car park and head off along the trail, you'll likely notice something odd. The experienced birders in the group pay no attention whatsoever to all the obvious birds that you see around you. Crows, herons, and blackbirds fly constantly by, but no one says a word. The hike rambles on in silence. What's going on?

Well, it's a funny thing, but these are not actually real birds. Herons, for instance: everyone knows what a heron is, even non-birdwatchers. Herons go without saying. Then there's crows and blackbirds: they are more a kind of pest, not a kind of wildlife, if you see what I mean. It may be slowly dawning on you by now that none of the birds you have

come to know and admire in your garden are proper birds at all. They're ... garden birds. (Later, you will discover that garden birds become real for just one day each year. But you have never been on a Christmas Count, so you don't know that yet.)

Chickadees aren't quite pests, but they are, well, too obvious. Their calls are loud and foolish, and they are suspiciously tame around people. You should think of them as a kind of background diversion, to make the real birds harder to spot. Suppose you're searching for a bird among the leafy branches. If you can't see it, it might be anything. If you can see it, it's bound to be a chickadee.

Now, the rules of etiquette forbid birders from identifying common birds out loud. That would amount to an insult to the listener. So by remaining silent, your companions are merely showing respect.

Real birds will be announced from time to time during the walk. They have names like "Yellow-throated!" "Wilson's!" and "Least!" You will not find these names in your field guide, and you may indeed notice that no one else has brought a field guide, but whenever one is called, the experienced birders all point their binoculars in a certain direction and murmur, like members of a devout sect on a wilderness pilgrimage.

By now, you realize that bird identification is more complicated than you had thought. You refrain from

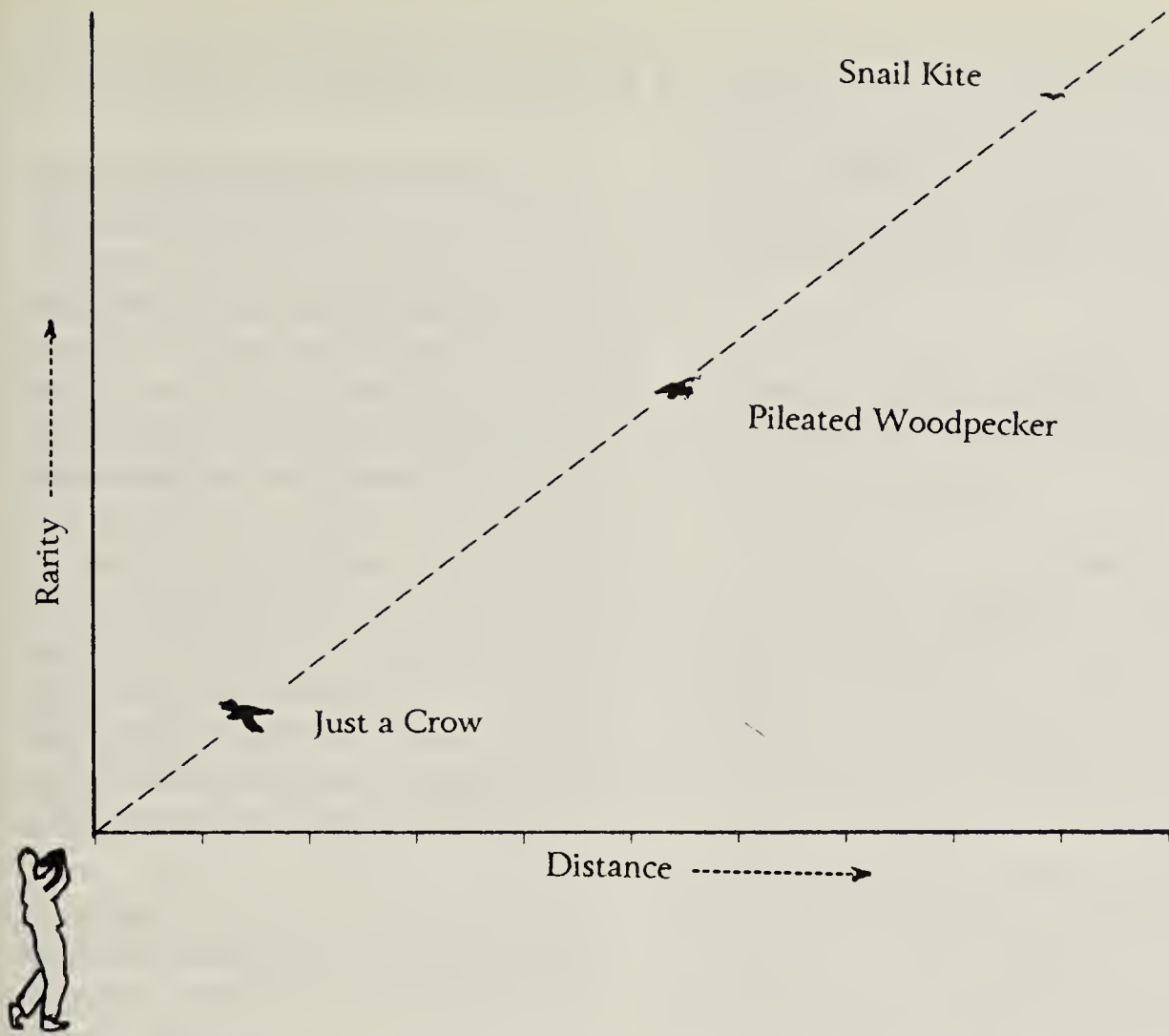


Figure 1. Illustration of Goshawk's Law. The species trajectory of an approaching bird is shown.

pointing out anything or asking for help, because you don't know if what you're looking at is even a real bird at all. So you take your cue from the experienced leader, who has stopped and is peering through binoculars w-a-y into the distance. You peer, and gradually, a speck becomes visible in the sky moving towards you. If only you could keep those binoculars steady ... as you struggle, the leader lowers his glasses, and continues down the trail without saying anything. But you persevere, and watch, as the steadily-flying bird passes overhead. It would seem to be a crow.

How can we explain what just happened? Why did the leader stare at the crow? Well, strange as it may sound, non-birds such as crows become real *at a distance*. And the further away they are, the more extraordinary they become. Scien-

tists in the field of quantum ornithology recognize this phenomenon as Goshawk's Law of Birding. The theoretical background is complex, but this is the gist of it: *the further away a bird is, the rarer it gets*.

As crows recede into the distance they become indistinguishable from, say, peregrines. Similarly, peregrines might as well be Kirtland's warblers provided they are sufficiently far away. Technically, they are said to acquire "rarity potential." If you think about it, this makes obvious sense, since rare birds are spread out more thinly, and so on average they are farther away from you.<sup>1</sup>

At extreme distances, there is simply no scientific way to distinguish bird X from, say, an Eskimo Curlew, and we are bound to include it in the "provisional set" of Eskimo Curlews. Some quantum ornithologists extend



the argument further, and claim — the speed of light being what it is, and so on — that if the distance is great enough, even extinct birds such as Great Auks should be glimpsed in flight by experienced observers.

Our field-trip leader stopped watching the distant bird because, in flying closer, it had become common. Now you will see his wisdom in keeping silent and *not* labelling the bird as any particular species. That would have been merely confusing, since the bird's identity was not fixed but changing. (See Figure 1) It had, in fact, as it came *very* close, become a non-bird. We'll return to the hike, where our leader pauses again, and thoughtfully cocks his head. He seems to be listening to a very small noise. Goshawk's law applies equally well to sounds, and also to bad viewing conditions, thick vegetation, and so on. A bird that can hardly be seen has high rarity potential; there is no scientific basis for not identifying it as something terrifically rare. "A bird in the hand is worth two in the bush" is simply not true in

quantum ornithology: any bird in your hand is *bound* to be a chickadee.

Quantum ornithology finds its purest application in the advanced discipline of "seawatching" (which most of the time, by the way, is precisely that). Seawatchers look for birds from the shores of seas and other large bodies of water. They identify birds far, far away; sometimes even in different countries. Furthermore, since pelagic seabirds fly closer to the lee shore in severe storms, seawatchers favour foul days and high seas. Under such poor viewing conditions, sometimes called "extreme birding," the rarity potential of any bird will be huge, and anything is possible.

So when you're on your first field trip, and you can't see what the others are seeing, and you don't know what's going on, don't despair. That mystery, you see, is the essence and the sport of it.

This truth is familiar to all mothers. When their children get too close, they say, "Make yourself scarce."



The Grey Fox has the unique habit of climbing trees. It was once common in southern Manitoba and has recently reappeared after an absence of 300 years.

The Grizzly Bear once ranged as far east as the Red River Valley, Manitoba.

The last Canadian record of a Black-footed Ferret is from Climax, Saskatchewan, on 7 December 1937.

In pioneer times a wedding present with birds on it was considered bad luck; it was thought the couple's happiness would fly away.