

CHAPTER SEVEN

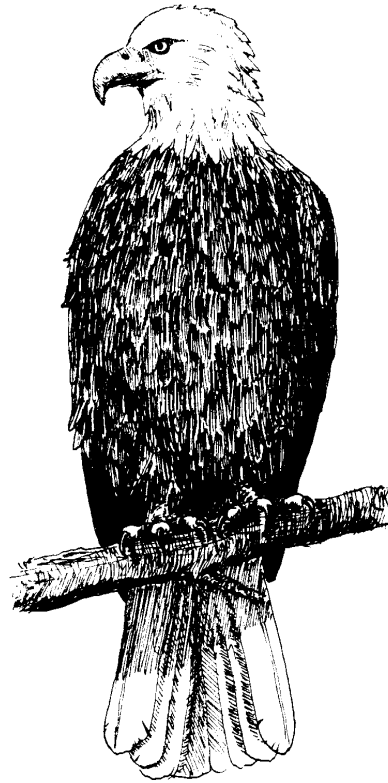


BIRDS

PART I



BIRDS



BIRDS AND THE HUMAN FAMILY

Do you ever wonder why we can co-exist with animals like cougars, bears, and coyotes and yet rarely lay eyes on them? Do bears, cougars, and coyotes know something we don't know? From my experience as a trained tracker, naturalist, and a practitioner of some "older" skills known to the native scouts and hunters, I have found that the answer to this question is that yes, these animals *do* know something that modern humans have forgotten. Through my nearly thirty years of study in this field, however, I have learned some important lessons which I can share. What you will need to do is the work, because I can tell you all of the secrets, but by no stretch of the imagination does that mean that these secrets will be accessible to you in any real way. It will only be through the combination of your dirt-time at your Secret Spot, the background studies that you are conducting here, and the perspectives that I am going to share with you here (as well as on tape six of the *Seeing Through Native Eyes* series) that you will be able to increase your success in awareness, stealth, and invisibility in the forest.

Now, there are plenty of birdwatchers out there, many of whom are quite good at identifying birds by their songs and identifying birds by sight. After thirty years of studying

birds, however, I am astounded at how little most birdwatchers know about the behavior of birds with respect to what scout awareness teaches. This has to do with the fact that little attention is paid to this perspective in the popular literature. You may have trouble convincing your bird watching friends that some of this is possible. It is simply unknown to our mass culture—even in environmental specialties!

There are very few people who will actually sit and watch one particular species for hours on end until they can understand the nuances of its behavior. This may also be due to the emphasis in modern field guides on the life list (which makes bird watching somewhat like a scavenger hunt—try to identify in your lifetime as many of the birds in the book as you can by sign recognition). While this has its benefits in appreciation of the beauty and diversity of the bird world, it also creates a pitfall: cover lots of ground quickly, and as soon as you see a bird and identify it, move on.

Bird language can only be learned from the process of studying slowly and patiently, observing *one* species at a time in *one* location. In fact, this process is maximized when you study *one* particular individual of *one* species. When you do this, you are not just studying a robin, but you are studying Bob or Nancy, the local robins who live northeast of the Anchor Point at your Secret Spot! In my opinion and the opinions of the instructors, this is the way to focus yourself. It puts the Secret Spot into a whole new light, too, doesn't it? You can see why the Secret Spot is so important to our program.

Though this takes some time in the field and some background study at home, the great thing about the study of bird language is that it takes very little effort. The same information that you learned from watching one species will usually apply to all in a general sense as well. In time, you will notice also that the study of the language of the birds is also a study in body language and understanding the dynamics of how birds interact with their surroundings in times of peace and danger alike.

I've given you some tips now on how to go about studying the birds to learn the “secrets” that they keep. As I said, however, in my thirty years of experience as a student of the birds (and nearly twenty additional years successfully mentoring others who seek to learn about the birds), there are some perspectives on this art that I know will help you greatly as you begin.



THE LANGUAGE OF THE BIRDS

The Akamba, the Apache, and the other native hunters know of a language that I, too, have learned. Through working with my own two teachers from these cultures who share much in common, and from studying the native hunter-gatherers around the world, I have distilled “success” in invisibility down into two realms. The first is that there is a language being spoken by many wild creatures, and that there are many in the forest who listen to it attentively and use it to their advantage as an early warning system to alert them to coming danger. If the warning is detected early enough, the animals are provided with ample time to position themselves in a good hiding spot in the brush or thicket. A handy skill, wouldn't you say?

For the second aspect of bird language study, think back now on the cougar, the bear, and the coyote, whose tracks we see alongside the roads next to our homes, but whom we never actually see. I'd include the wolf in this group as well. Its keen senses of sight, smell, and hearing make it perhaps the most shadowy and elusive ghost that there is. In fact, it is said that the wolf is the one that taught the skills of invisibility to the Apache people, who were in turn perhaps the most shadowy and elusive people that have ever been.

All of these animals that I've just listed—the cougar, the bear, the coyote, and the wolf (There are others, too, but I don't want to take up too much space here. It will become obvious to you with time and experience who these other characters are.)—are residents of the forest. As such, knowledge of bird language is important to them, for it allows them to hide when danger approaches. Simultaneously, however, each of these animals are *themselves* danger, for they are all hunters. Now, that creates an interesting situation for them if they are ever to catch any food. These animals all have a trick up their sleeve. What these animals have in common is that they are each skilled at manipulating the alarm systems of the birds. Through careful observation and learned movements, these animals actually avoid disturbing the birds, in effect allowing the animals to move invisibly through the forest. This is the second aspect of learning bird language, and it is the art known to the native scout and hunter as well. Without it, neither the cougar, the bear, the coyote, the wolf, the hunter, or the scout would ever catch any food! If you wish to have the ability to see the many animals of the forest and your Secret Spot, this second art is one that you will, in time, need to learn as well.



How do we go about learning these arts? A good example to turn to for this is one that is often just a legend of the local forests: The rumored “ancient” bucks, the old mossy-backed great-gray ghosts who have so much wisdom that they elude even the most patient and dedicated hunter and actually choose their own means of death. I’ve found that the trend with bucks is that if they manage to survive the guns of hunters and the teeth of these predators past their first two years, then they will live to become very old. They become those rumored ghosts.

Without getting too far into it, I—as well as many of my instructors—feel that these experienced deer actually learn the same tricks of invisibility described above. There is so much pressure on them from the various predators of the forest that they *need* to learn these things if they are to survive. It is as if they gain the knowledge that the cougar possesses.

Among native people it is said that the deer can gain “medicine” or knowledge from the cougar’s ways. This is a good way to start thinking about the subject. You, too, can gain “cougar medicine.”

If you ever watch a wild cat move through its environment you will quickly notice that it moves as if it has honey in its veins. The slow, deliberate, and powerful movements are based on strong muscles, sure-footed accuracy, a lot of practice, and careful planning. They look ahead, head held still...then they look left, head again held still...they look right...then up...and often, they look behind them. At this point, they move again, ever so slowly and carefully, being sure to stay in the shadows. They always move along the edges, too, or in the thicket or under the cover of darkness.

What is this saying to us about how we should move in the forest? Of all the animals in the forest, the big cats are most like us in their dominant sense patterns. They use their eyes to the greatest effect, their ears a little less so, and their nose even less. Sound familiar? It should, because this is a lot like our own natural sensory patterns. The movements of the cats are slow, steady, and deliberate so that they are able to utilize their senses of sight and hearing to their fullest. Think of owls, too. Their most dominant senses are also sight and hearing, and they are famous for their habit of sitting still for hours on end, patiently watching and listening.

Looking to these examples that I’ve just given, it appears that slow and steady wins the race for sight-dominant creatures. Is that the way that we tend to move, though? Not really. While these are our



natural patterns, we as modern humans tend to mimic more the movement of the dog family. We move quickly and continuously, often looking at the ground as if we could “smell” its many hidden secrets like a dog who moves quickly across the ground with its nose to the ground. This seems most likely due to deadlines and a life lived according to schedules and the dictations of the clock. I’ve found that when we don’t have these pressures or destinations to push us along like this, people actually tend to fall back into a slower, more relaxed, and deliberate gait. Think of a tourist, who is simply out to see the sites. They have no place to be, and they’re always looking around at everything. It’s a natural way to be.

Through work on the Nature Awareness Trail in *Kamana Three*, we will go into greater depth with routines and ways of moving that will help you to reclaim your natural ways of movement. For now, though, use this pattern of moving like a cat while going to and from your Secret Spot. As we add new routines at higher levels, think of it simply as striving to be a “better cat.” After all, if you think about it, there are young inexperienced cats, and there are older, wiser, and more experienced cats who might just as well be spirits, for they go for many years completely unseen by human eyes. We only know of their existence when they leave tracks in the snow or when a pack of hounds manages to get one into the open to give us a fleeting glance.

I hope you understand now how moving like a cat will aid your ability to use your senses to the greatest potential. What does this have to do with learning the language of the birds, though? What does this have to do with invisibility? For one thing, cats are the masters of stealth, and for another, they know the secret to the “alarm system” of the forest. So, too, do the bear, coyote, the wolf, and the “old mossy-back.” It is simply because we are naturally most like cats ourselves that we study them now in this way.

There are certain birds—especially those of the thicket—that watch our approach and signal our arrival with their body language, flight patterns, and mostly, their voices. When we move like cats, we see these birds before we alarm *them—if we stand still longer than they do*, that is. Once the bird feels comfortable that you are not “pushing” its way, but that you are instead pausing, the bird will go back to its business. It is only at this point that you should proceed. Keep in mind, though, that as you proceed, *you must go around the bird*, or it will “complain” as it again becomes uncomfortable as you begin to move in on its “personal space.” If you don’t heed the birds wishes for you to keep a good

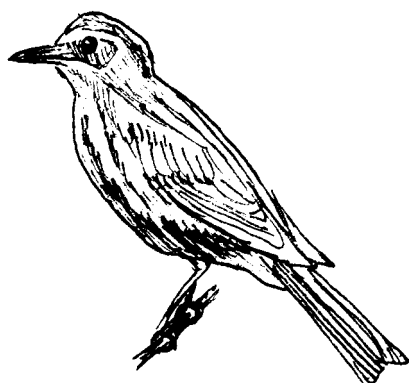


distance, it will fly off and send signals to the forest all around that you are there and up to no good. How much space each of these birds needs is something that you can only learn from experience. Similarly, the approach that you need to use to “honor” and not upset them can only be learned from experience as well. Learning these things is worth the time investment, however, because once a bird announces your arrival to the forest, there is no turning back. At that point, the coyote has already lifted her head, and the deer has paused his feeding. The cougar has climbed to a point of advantage to see far, and the bear is statue-still and testing the breeze for more information. It is too late.

For now, learn from the cougar, the bear, and the coyote. Stop and listen to the birds. Stop and watch for them. See what they tell you. Here is a little native lore that will help to get you on your way, too: “Never disturb a singing bird, for it is performing its Thanksgiving Song.” I will take it one step further: Learn to honor any bird that you see. Observe what it is doing, and avoid disturbing its routine if at all possible. That is the lesson from the cougar and the old buck. This perspective will bring real power to your studies.

Preparation for Study of the Birds

How do we tackle the subject of birds? Trees are easy because they tend not to go anywhere. Herbs are the same except we have seasonal concerns with herbs, and we have to get certain things done at certain times of the year before the herbs dry up and disappear. Mammals present their own challenges, but the tracks and signs that they leave behind give us a grounding point for our study of the ways of their lives.



How do we handle birds? There are the same seasonal challenges with birds as there are with plants. Unlike plants, however, there is an added challenge arising from the fact that birds don't sit still. Since birds don't sit still, how do we observe them? Do we need expensive binoculars? Do we need expensive spotting scopes and all these kinds of things to tackle the bird situation? No, we don't. We simply need to practice moving like cats at our Secret Spots.



Something else to acknowledge as you undertake the study of birds is that depending on where you live there may be as many as three hundred species of birds in your area. The nice thing about our approach to birds in this program is that we are only going to look at a relatively few species because of certain characteristics that they share. Our goal within the study of birds in this course is simply to give you an appreciation of how birds can help you interpret things that are going on in the environment by understanding their voices and behavior patterns. As with learning about mammals and tracking, trees and survival, or any other studies that you've done along the Resource Trail, learning how to use resources effectively for learning about the birds is key to this process of becoming self-sufficient.

A Bird's Eye View: Seeing Through the Eyes of a Bird

When preparing to study a bird, the first thing that you will want to consider is what bothers them from their point of view. Knowing that humans represent a potential disturbance to wildlife—especially birds—is one of the first things that we need to pay attention to. Look at the species of birds that are most affected by our approach. That would be any bird that spends a considerable amount of its time on the ground, in the thickets, or in the low brush where we might disturb them.

Besides humans as a source of alarm or annoyance, all birds of the ground are also disturbed by cats, foxes, coyotes, cougars, bears, and other ground predators such as weasels and snakes. Many of the same species that are alarmed by humans are also disturbed by these predators. Pay attention, though, because some birds only keep quiet as we pass by, but in turn make great complaints at the arrival of a ground predator. An example of such a bird is the carolina wren, which may not really react much to our presence other than to ditch it into the thicket and remain quiet. When a cat or a fox moves through the thicket, however, that carolina wren becomes a great ally to your scout awareness as it begins scolding loudly.

Just as the birds of the ground are concerned with the many dangers that are present to them, you will notice that certain treetop species pay no attention to the approach of human beings and the ground predators. Ground animals represent no real threat to them. In fact, as a cat moves by far beneath them, they may even continue to sing! Birds like vireos and certain warblers, tanagers, and grosbeaks, which live way up high in the trees and rarely, if



“A Bird’s Eye View”

Non-native-trained human beings represent a great distraction and disturbance in the natural world. You will begin to see this as you develop your awareness at your Secret Spot and begin to study your fellow humans—especially in places such as parks and local forests where people and animals mix. Notice that wildlife will react to the approach of people by fleeing. Cases that break this rule often do so because they are either sick or they have something to gain. Such is the case with the pigeons and house sparrows in the park that come to you just in case you have food for them. Those ducks that follow you around at the local pond have been similarly trained to eat bread out of children’s hands. These are the rare cases where you’ll see wildlife coming to people instead of fleeing.

Most of the time, the alien energy of modern people, their behavior patterns, and their body language are repulsive to wildlife.

Unless we have trained ourselves otherwise, we see and grow accustomed to seeing the backs of birds

ever, come down below the canopy, would be included in this group. Generally speaking, except in certain cases that I will indicate, we need not pay too much attention to the treetop species.

So, we’ve covered disturbances to birds caused by ground predators and people. Another disturbance that birds may encounter is nest robbers: ravens, crows, jays, and even squirrels, to name a few. Their reactions are quite different from those reactions that we cause, and different again from those caused by the passing ground predators. If you can imagine the feeling that you would have if there were an immediate danger to you children, you can imagine that the nest robbers elicit quite an emotional and furious response. Every type of predator is different, however, and with experience using the knowledge that I am sharing with you here, you’ll find out that each predator actually triggers its own signature response.

Alarms due to predatory birds such as soaring hawks sound yet different from all the others previously mentioned. Soaring hawks and eagles disturb any bird of open fields and meadows. Fast-flying predators that catch birds on the wing such as the falcons in open country and the accipiters in the forest will cause severe alarm amongst every bird around. Keep all of this in the back of your mind as you read and do the work in your journal pages on each bird.

The Ones to Watch

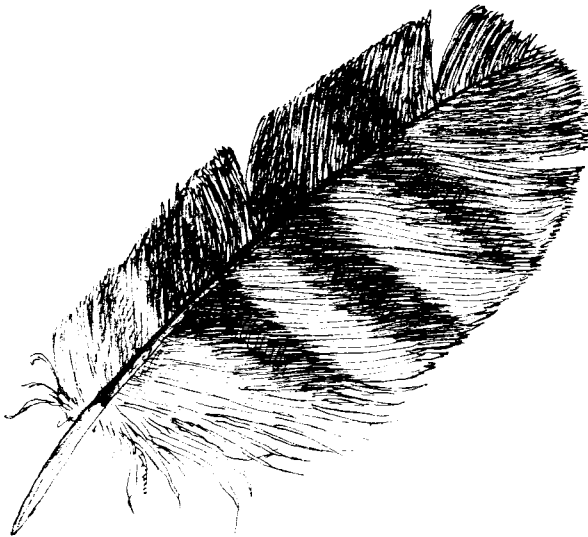
Like the birds of the thicket and the forest canopy that have their own unique concerns and view, there are some birds that we call the “sentinel species,” which often perch out in the open or high and above everything. These include birds like the mockingbird and certain blackbirds. These birds like to keep a perch that is high up and affords them a good view of what is happening around them. When danger approaches, they will “sound the alarm.” It is as though they have taken it upon themselves to watch out for everything as if they were sentinels. Like the ground birds, these sentinels are worth our attention. With time and regular experience you will learn to figure out who is who. Just be aware that there are certain “job descriptions” in the natural world of birds. This will cause you to ask the right questions as you go.

This is the basic information that will help you as you begin the process of studying the world of birds at both your Secret Spot and your desk. Ask yourself if this bird is going to respond to the approach of a human or ground predator. Because all birds do



respond similarly to the approach of predatory birds specializing in killing smaller birds, we can ignore those alarms for now. What we want to focus on are the birds of the thickets and the sentinel species. With this perspective in mind, it's now time for you to do your background studies.

Enjoy!



flying away in the distance and the tails of deer as they disappear over the hill or into the thicket. We know the tails of rabbit as they scoot under the brush, and that's the view many people have on wildlife. Sad to say, what I've just described is a common experience and even expectation of what wildlife is amongst most of the human population these days.

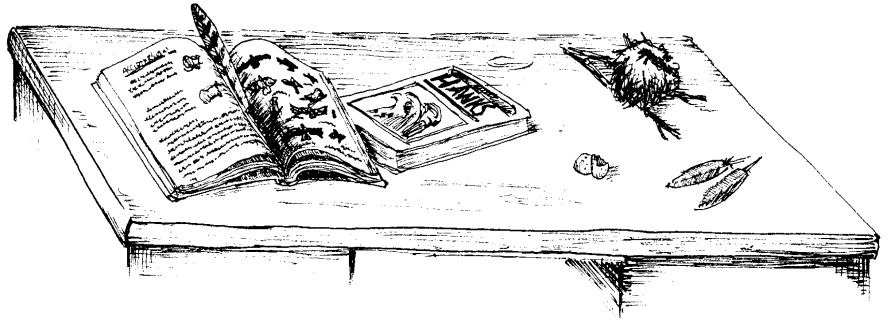
Well, if you decide to stick it out through the end, all of those things are going to change for you by the time you complete the Kamana program. They will change, though, only provided that you have practiced the fieldwork and routines faithfully at your Secret Spot along with these background studies from the Resource Trail. You're going to begin to see life in the natural world with a whole new eye. In fact, you'll see species that you didn't even know existed in your area once you've really practiced the Secret Spot and all the techniques that we teach along with it, so stick to!



PART TWO



JOURNALING BIRDS



Required Resources:

The Birder's Handbook

Peterson's Field Guide to Birds
(*Eastern, Western, Texas, British Isles*)

Reader's Digest: North American Wildlife

This study of birds is a preparation for basic understanding of animal language and how this can aid your awareness. Much of this work can be done at home at your desk with the field guides and other resources required, but some of it will require a trip to the local nature center or natural history museum. Keep careful track of where you derived information, and write down the page numbers of the books you are using there.

This is the part that builds momentum and should move along quickly. You will be working with the same basic three books throughout this section: your *Peterson's Field Guide to Birds*, your *Birder's Handbook*, and your RDG. There are not a lot of things that you will have to write or draw. The important part is asking the right questions as you go. Remember to "fly" your way quickly through each of your journals and you will feel quite satisfied when you have finished.

Do not spend a lot of time drawing detail. You want to get the approximate shape correct and note the field marks. Attention to detail of feathers is not for this program. Feel free to add pages later and to tape in feathers and photographs at later times. For now, move quickly through this exercise.

There are three major aspects to this independent study work. As usual, the first is the text, and the second is the sketches that you will create. The text comes first because

it talks to your mind in such a way that it causes you to see more of the important features while you are sketching later! That is important. Also important is using your mind's eye while doing both of these, so don't forget! Try to picture things in your mind as you pause in your work, especially before and as you sketch. Don't look at the picture *while* you sketch; instead, look at the picture in the book then turn away from the book, *picture* it in your mind's eye and draw quickly from memory.

The third major aspect to your bird journals is the range map. Since many birds are migratory, it is important that this be well represented in your journals. Study the range maps in the back of your *Peterson's Field Guide to Birds* closely and use the mind's eye methods as you create your own range map and description.

Right from the start of your first journals here, try to finish each bird in about thirty minutes in total including text, map and sketches. After you build momentum, you will find yourself cooking along at a good pace and you could comfortably finish a bird every fifteen to twenty minutes. Try and build speed! Including your journals from the hazards, mammals, plants, indicators, and trees sections, you have sixty journals to complete here in *Kamana Two* and only a limited amount of time to do it, so don't waste that time. This is not art class!

Text

General Description: This should be written as a sentence, or a series of short fragments with simple bits of information describing the bird from the following categories. Remember while you are doing this to pause occasionally and picture in your mind what you are reading about. Let the list below act as a sort of quick checklist to review while you work on each bird.

- Field Marks: Important for all birds. In your text for this, you may actually want to write out "Field Marks:" and then follow with a quick, short list of them as is done in your Peterson's Field Guide to Birds.
- Weight: A concise bit of information is all that is needed here. Most important in large birds, not so much in songbirds.
- Length: A simple measurement in inches and fragments will do.
- Wingspan: Important for the larger birds.
- Size: Size is a function of height, weight and wingspan, but is most easily translated in relative terms using common



birds you know the size and weight of as in, “pigeon-sized bird with the build of a mockingbird.”

- Identification Tips: These are sometimes included in the text of guides and they are often particularly helpful. It may include a description from any of these categories that are outstanding such as “a robin-sized bird with a crest that sits on prominent perches frequently wagging its tail.”
- Breeding vs. Winter Plumage: Birds tend to be duller in the winter, except with starlings. Make a rough note of the difference between the two plumages. The spring plumage is usually striking in the male especially.
- Male, Female and Juvenile: Often among birds the sexes are very different from one another. The juvenile birds often resemble the female more than the male. Sometimes the sexes and the juveniles are all quite similar. Just note that simply and concisely.
- Similar Species: This is a handy piece that is included in your *Peterson's Field Guide to Birds*. Generally speaking, you do not have to go into as much detail as they do, but if there are some *really* similar species, then I want you to list them in a way similar to the guide. Pay close attention to when you deal with females of similar-looking birds! This can become very difficult.
- Posture: This is one point that is *very* important for you to take careful notice of. Posture can communicate body language, so you need to be familiar with the bird's average or “baseline” posture. Your *Peterson's Field Guide to Birds* will be your best friend for this information. The nice thing about the illustrations of the entire Peterson's Field Guide series is that the series' creator, Roger Tory Peterson, always puts the subjects in their favorite and most natural posture. In your study of birds here, I want you to briefly describe in words what this baseline posture looks like. This is most important. You will also notice that the family information at the start of the section that your bird is covered under is usually where postural information can be found written.
- Song: As described in your *Peterson's Field Guide to Birds*. Words are usually used to describe a song, such as “witchity-witchity-witchity-witchity” for the common yellowthroat. Don't try to make up new words for this stuff. Use what they have already got!
- Call: Though calls have different purposes than the song, describe the quality as done in your *Peterson's Field Guide to Birds*.



Behavior and Habits: This is a key to identification. When I see a bird, there are many times that all I get is a shadowy silhouette to look at and I can see no details of color or markings. Using my knowledge of bird behavior and habits in combination with flight pattern and choice of cover, however, that is all I need. Learn to study birds based on *what* they are doing and *how* they are doing it. Fast, jerky motions or slow, deliberate progress through the branches? Quick darting flights off a perch and back or constant soaring, with little wing-flapping? Note the behavior descriptions from your books here.

Flight Pattern: This is also a key identification feature. Woodpeckers are very easy to identify by their flight, as are goldfinches, mourning doves, merlins, turkey vultures, and ospreys among many, many others! This is important information if you can find it. Look in the family information text for the bird you are studying. Also, there are times when the books will show you little “flight plans” for the bird. If you have access to a book with these in it, use it!

Habitat: This is another key identification feature and is very important to know for many reasons. Pay special attention to what height layer the bird prefers. Compare it to their coloration and their adaptations of behavior and beaks. This, of course, lists places like “meadows,” “grasslands,” or “pine forests” among others. Pay *close attention* to this. Remember to always be using your mind’s eye and picture the bird you are studying in those places that are described.

Cover Preference: Another key bit of information, but sometimes you have to guess from coloration and inferences about diet, habitat and behavior. An example might be as follows: “a bird which prefers to stay in or near heavy cover and in the thicket along the edges.”

Diet: Good information on this is in your *Birder’s Handbook*, and sometimes in your field guide text on the species and the family that it belongs to. In these resources, make a quick list of what the birds eat. You will be happy you have exposed yourself to this information!

Seasonal Differences in Behavior: Robins in winter and robins in summer act like two completely different species! Note seasonal differences in behavior and be ready to realize that the bird you saw all summer and assumed had left for the winter may only have climbed into the treetops to feed differently. That is not



uncommon. By the reverse, kinglets are tree-toppers in summer and low feeders in the winter. Sometimes this information is written, sometimes it is not. Don't worry if you cannot find it. More than anything, I just want you to be aware that this possibility exists.

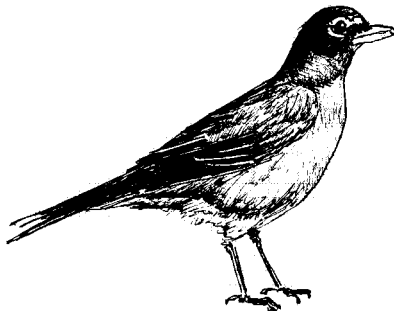
Nesting Behavior: Available from the information in your *Birder's Handbook*. Just note when, where, how big, what it's made of and how many eggs it lays. You don't have to get too detailed, unless *you* are really interested in the spots on the eggs or the shape of the egg (which you will rarely get to see anyway!). Knowing general placement, shape, size, and materials of the nest is what is more important. If you are coming and going from your Secret Spot many different ways as I have suggested to you, you will find many nests over time.

Migration Patterns: This is the written description of the range map that you studied with your mind's eye and will draw in the sketches section. The migration habits of the birds are shown in the blue and pink areas on the range maps. Describe those in words here.

The Sketches

Wrapper Sketch: This will be your overall sketch of the bird. Include in it the following:

- Shape of Silhouette: To help speed the sketching process, look at overall shape first and try to capture that quickly. Is the bird short and stocky with no neck? Is it long and lanky? What is the posture, the angle of the bird on its perch? Check out the front few pages of your *Peterson's Field Guide to Birds* for some good material.
- Length of Tail: An important thing to note and to include in the sketch. Train your eyes to see that. Think in terms of comparisons—short like a starling, or long like a mockingbird, or flipped up over its back like a wren, or hanging straight down.
- Shape and Size of Bill: This is also a key identification feature. The size and shape of bill is a key bit of information that relates much about a bird's diet and habits.



- Posture: Once again, birds have baseline postures and you should sketch them accordingly. Do not sketch them in feeding positions or other types of postures as the primary sketch. Make sure that the first sketch is of a baseline posture, *just* as in your *Peterson's Field Guide to Birds*.
- General Coloration: Color pencils make this really effective. You can do basic line drawings to capture all the key features listed above in the sketch portion of this chapter. Then do basic color patterns. No need to get really detailed.

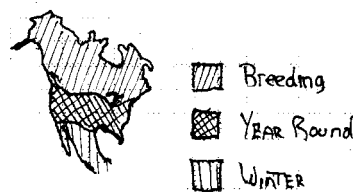
Behavior: If there are any behaviors, such as those of the robin, which runs along the ground, stops, and cocks its ear to the ground before pulling up invertebrates, draw these separately. You won't usually find behaviors like these drawn up for you in your guides, so you'll have to really picture them in your mind's eye and draw them from that; but you're doing that anyway, right? If you don't find any information like this, however, don't worry about it. Just move on to the next sketch.

Flight Pattern: If you find this illustrated, use it.

Nest: This can be fun to sketch if you have an opportunity to see such a nest, or use a book that has good pictures of the nest. There are entire field guides from the Peterson's Field Guide series dedicated solely to bird nests. Use this if you'd like and if it is available to you, but your Birder's Handbook has simplified nest patterns that will do just fine.

Range Map

The range maps for birds are the most complex of any subject due to their migratory habits. I want you to draw a large version of the range map for each bird that you journal. Include this on the sketch page. The reason that I have separated it here is simply to emphasize its importance. I recommend you use colored pencils for this if you have some available to you. Stick to the conventions already started by using blue and red. Be sure your maps are accurate, too—especially for your area. Do not spend too much time on the details of the coastlines or lakes, but instead just generalize the continent when drawing. Be sure details around your area are accurate, that is all. Move quickly.



Final Synthesis

Write a sentence or two that brings together all of what you have learned about the bird's anatomy, camouflage, and lifestyle with your insights into its potential enemies, strategies for survival, importance to "scout awareness" (as alarm birds or sentinels), and what other species will associate with them. As with other journals that you have created for mammals, indicators, and so on, this is your place to be creative and have fun. Include a short poem or sketch that captures these elements, too, if you are so drawn to do.

Birds

Listed below are the ten species of birds for your background studies for *Kamana Two*. You will see why these birds were chosen for you to learn first as you progress through the course.

- 1) Canada Goose
- 2) Red-Tail Hawk
- 3) A Local Jay
- 4) American Crow
- 5) American Robin
- 6) Common Yellowthroat
- 7) Redwing Blackbird
- 8) Rufous-Sided Towhee
- 9) Song Sparrow
- 10) Junco

