

Christian Liberty Nature Reader

Book Four

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Revised and Edited by
Edward J. Shewan

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Table of Contents

Preface	vii
Chapter One—Perching birds	1
The Quail	1
Review	5
The Brown Thrasher	6
Review	12
The Cardinal	12
Review	16
The Purple Martin	16
Review	20
The Kingbird	20
Review	22
The Crow	23
Review	26
Chapter Two—Birds of Prey	27
The Owl	27
The Barn Owl	37
The Great Horned Owl	39
The Barred Owl	42
The Screech Owl	43
The Saw-whet Owl	45
The Short-eared Owl	45
The Long-eared Owl	46
The Burrowing Owl	47
The Elf Owl	47
The Snowy Owl	48
Review	49
Chapter Three—Studying Birds	51
A Quiet Approach	51
Watching Hummingbirds	53

Look for Color 56
 Beaks, Wings, and Tails 57
 Rescuing Birds 59
 Review 62

Chapter Four—Insects 63

The Wasp 63
 Review 73
 The Bumblebee 73
 Review 78
 The Ladybug 78
 Review 82
 Aphids 82
 Review 85
 The Lacewing 86
 Review 88
 The Mosquito 89
 Review 93
 The Dragonfly and Damselfly 93
 Review 99

Chapter Five—Moths 101

The Tomato Hornworm 101
 Review 108
 The Cecropi Moth 109
 Review 115
 The Isabella Tiger Moth 116
 Review 119
 The Codling Moth 120
 Review 123

Chapter Six—Turtles and Snakes 125

Turtles 125
 The Wood Turtle 129
 The Box Turtle 130
 The Painted Turtle 131

The Snapping Turtle 132
The Soft-shelled Turtle 133
Sea Turtles 133
Review 135

Snakes 136

The Rattlesnake 141
The Copperhead 143
The Water Moccasin 143
The Coral Snake 145
The Water Snake 146
The King Snake 147
The Milk Snake 149
The Garter Snake 149
The Ribbon Snake 150
The Blacksnake 151
The Bull Snake 152
The Hognose Snake 153
The Green Snake 154
The Glass Snake 155
The Hair Snake 156
Review 157

Chapter Seven—Toad, Bat, & Beaver 159

The Toad 159
Review 167

The Bat 167
Review 171

The Beaver 172
Review 184

Words You Should Know 185

Preface

We are honored to bring you this classic textbook. This reader is designed not only to improve a student's reading skills and comprehension but also to increase the student's understanding of and interest in God's wonderful creation.

Not only is the method of teaching reading of vital importance but also the literary quality of the reading material. So much of what passes for "modern" readers in education today is nothing more than pabulum that stresses "social adjustment."

The Bible says we are to do "all for the glory of God" (1 Corinthians 10:31). Reading for God's glory necessitates reading material that draws attention to Him and His truth, reflects His majesty, and meets the standards of the Holy Scriptures. What this means is that we should hold any reading selection up to the standard of Philippians 4:8, asking these simple questions: "Is it true? Is it noble? Is it right? Is it pure? Is it lovely? Is it admirable? Is it excellent? Is it praiseworthy?"

The *Christian Liberty Nature Reader* series follows the pattern of a biblical standard that emphasizes God, morality, the wonders of creation, and respect for one's country. Believing that the student can gain an enhanced appreciation for God by studying His creation (Psalm 19:1, Romans 1:20), this textbook seeks to present the majestic splendor of His handiwork.

It is our prayer that this series will give to the reader the joy that is associated with "good reading" and that the knowledge imparted will help "make wise the simple" (Psalm 19:7).

Dr. Paul D. Lindstrom (1939–2002)

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Founder of the Christian Liberty Academy
Arlington Heights, Illinois*

Chapter One

Perching Birds

The Quail

Did you ever take a walk in the country and suddenly hear a **whirring**, or buzzing, sound? Do you remember how you stood still, too frightened to move, and then you saw a few brown birds sailing away? The noise you heard was made by some quails as they flew up quickly from the ground. They saw you first and lost no time in taking wing.



The quail is about as big as a **bantam** chicken. Its color is brownish like that of dried-up grass; its body is short and plump; and its bill is short and stout like that of a chicken. Its short, round wings help it to fly up quickly from the ground, and then it sails away, usually in a curved flight. The quail's wings always make a loud, whirring sound when it begins to fly, and this is what usually frightens people when they are walking along. By the time they recover from their fright, the quails are some distance away, for they can fly very fast.

The quail has short, stout legs like the chicken; and, on each foot, it has three toes toward the front and a short one toward the back. This back toe is like a heel and helps the bird to walk. Its claws are short and strong; with them, it can scratch for bugs.

The quail's nest is on the ground among tall grasses and weeds, and is so cleverly hidden that one could pass by it a hundred times and not see it. The mother quail scratches a little **hollow**, or hole, in the ground and lines it with grass. She will lay as many as fifteen white eggs. They are round at one end and very pointed at the other; and her eggs are smaller than a hen's eggs.

The mother quail is so cautious that she never goes straight to her nest. First she enters a patch of weeds some distance from the nest and then

quietly sneaks along until she reaches it. Her color is so much like that of the grass and leaves about her that one cannot see her on the nest at all. God created her with brownish feathers to protect her from foxes, coyotes, and hawks; her protective color is called **camouflage**.

As soon as the cute baby quails hatch, they are able to run about in the grass. They look like little, fluffy chicks with downy **plumage**; they also have brown, striped backs. The mother quail trains her babies just as a mother hen trains her brood of chicks. She teaches them how to scratch for bugs and how to hide and keep quiet when she gives the alarm. Later, when the danger has past, she clucks to call them together again.

The father quail also helps take care of the babies. His call is a clear whistle, “Bob White! Bob White!” but his mate’s call sounds like, “Will you come? Will you come?” If you learn to imitate his mate’s call, he will answer you and even come to your hiding place.

If you are kind to the quails, the whole family may visit your gar-



den to eat bugs, and they will enjoy taking dust baths there, too. Some of them may even have their singing lessons there. How you will laugh to hear them! The father quail himself calls loud and clear, “Bob White! Bob White!” Then the little male quails try to call just as he did. He calls again and they try again, for they seem to have a hard time learning to whistle just right, but they do not get tired and quit. They keep on trying and trying.

Some quails were once heard having their singing lesson in a vegetable garden. The little “Bob” could be heard quite plainly. That did not seem so very hard to whistle, but such a time they had

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trying to whistle the “White!” They called, “Bob! Bob!” several times; then they whistled, “Bob Wh! Bob Wh!”; and finally a sharp, “Bob White!” Don’t you think they were proud and happy to get it exactly right?

Quails eat a great many insects that harm the farmers’ crops and also a great many weed seeds. If these seeds were allowed to grow, they would crowd out the little plants in the fields. The quails are really the farmers’ friends.

Quails do not fly south when winter comes but remain with us throughout the year. In the fall, they go about in flocks called **coveys** (kŭv’•ēs), and we can help them by putting out food where they can find it when the ground is covered with ice and snow.

Review

1. How can you recognize a quail when you see one?
2. How do quails resemble chickens?
3. How do they escape an enemy?
4. Why can we say that the quails are the farmers’ friends?
5. How can we help quails?

Some Things To Do

Watch quails during the fall and put out food for them in winter. Learn to imitate the quails' calls and see if you can **coax**, or gently persuade, them to come to you. Listen for their singing lessons in early summer.

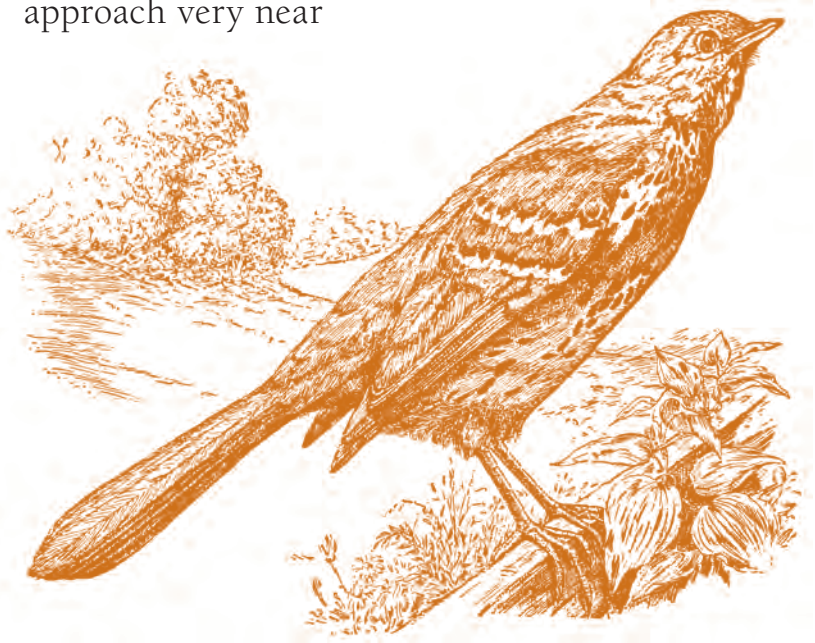
The Brown Thrasher

Listen to that beautiful song! It reminds one of the mockingbird, but it is the song of a brown thrasher. The brown thrasher is reddish-brown, while the mockingbird is gray. The thrasher is a little larger than a robin; and its back, wings, and tail are the color of cinnamon. Its white breast is streaked with brown, its eyes are yellow, and its bill is slightly curved. A thrasher is usually seen in bushes or thickets. Its long tail is the bird's "**rudder**" and helps it to dodge in and out among the twigs.

The brown thrasher makes its nest in a bush, vine, or **brush** pile. It makes a large foundation of twigs, which are laid crisscross, in and out, and are interwoven in a wonderful way. No person, aided by his two hands, could make it more firm, if he tried. It looks so much like the branches and twigs near it that many people never discover it. The "mattress" is composed of bits of leaves and soft rootlets.

A pair of thrashers were nesting in a rose vine, and both birds looked so much alike that one could not tell the male from the female. They worked on the “mattress” from six until nine o’clock for three mornings. One scratched and pecked at the soil near a bush until it found a piece of an old leaf that just suited it. Picking it up, the bird looked around to make sure nobody saw it, and then flew to its **nesting site**—the place where it was building its nest. It did not fly straight to its nest but entered the vine a little distance from it, and sneaked along through the branches. It did not want anyone to know its secret.

Later, there were five brown, speckled eggs in the nest. The mother bird allowed her friends to approach very near



while she was **brooding**—that is, while she was sitting on the eggs to hatch them; she carefully turned the eggs with her bill as a hen does when brooding. When it rained, she fluffed out her feathers over the edge of the nest so that the raindrops ran off her feathers and splashed outside the nest.

When the baby thrashers hatched, they were naked and helpless, and their mouths seemed so very large. Every time a branch near the nest was gently touched, up went the little heads with mouths wide open, for the baby birds were always hungry. One day the father bird brought a big grasshopper, which he tried to feed to them, but it was too large for the little birds to swallow. He flew down to the concrete walk and beat the grasshopper until it seemed that he would break his bill. When he had beaten it almost to a **pulp**, he returned to the nest and succeeded in feeding it to one hungry baby. Even then the little fellow had quite a mouthful; and, after gulping it down, he blinked his eyes and settled down in the nest. He had had enough for a while. Each baby was fed in its turn, and altogether they ate hundreds of bugs and grew fast. Soon they were ready to leave the nest.

One afternoon the thrashers were heard calling out on the lawn; the mother bird was giv-

ing a young one flying lessons. The little fellow was so timid that he was afraid to hop or try his wings. The mother bird came with a **wireworm** in her bill and flew down about three feet from him. Though he was so hungry that he begged and begged for it, she remained where she was and coaxed him to come. But she had to coax a while before he took courage to hop toward her. As he hopped, he had to open his wings to balance himself. When he reached her, she fed him the wireworm and then chirped to him. Don't you think that she must have praised and encouraged him? He remained there in the grass, blinking his bright eyes, while she flew away to get another bug. He opened and closed his wings, too, and this helped to strengthen them.

When the mother returned, she had a big, plump grasshopper, and she stayed about seven feet away from the young thrasher. She coaxed and coaxed until he hopped over to her, using his wings to balance himself; and then she fed it to him and chirped to him again. While she flew away to get another bug, he remained where he was, opening and closing his wings and blinking his eyes.

When his mother returned, he did not see her, for she perched on the lowest branch of a bush about five feet away. This branch was about five inches from the ground. She called until he discovered

where she was, and then how she had to coax him to come! He hopped over there but was afraid to hop up on the twig. Such a time they had! One would think she would lose her patience with him, but no! She just kept coaxing and coaxing. Finally, he hopped up beside her and she fed him. How good that worm must have tasted, for he had worked so hard for it! He remained there on the twig while she flew away again.

There was a plum tree in the poultry yard, and in the late afternoon the little thrasher was discovered perching on a branch about six feet from the ground, as quiet as a mouse. This tree was about a hundred feet away from the bush where he learned to hop up on a branch. Do you not think that he did well to reach the tree?

Thrashers eat thousands of insects, many of which would harm plants. They are friendly birds and like to nest in yards and gardens. They also like to perch high in a tree when they sing.

Once a man won the confidence of a thrasher that nested in his garden, and every afternoon it perched in a tree near him to sing. He whistled a few notes softly while the bird cocked its head and listened. He whistled the tune several times, and then the thrasher tried to imitate him.

If one learns to recognize the thrasher's alarm call, he may be able to help. Whenever the bird discov-

ers a cat, snake, owl, or other enemy, it utters its alarm call. You can help it then by chasing its enemy away.

Late one afternoon, the thrasher's alarm was heard near a road.

Investigation proved the cause of the disturbance to be an owl sitting on a branch

in a sycamore tree about five feet away from the thrashers' nest. Both birds were making a dreadful fuss about it. The owl was driven from the tree, but it was some time before the birds became quiet again.

God made the North American brown thrasher to **migrate**. This means it flies south in the fall and returns north in the spring.



Review

1. What is the difference between a brown thrasher and a mockingbird?
2. How does the thrasher's long tail help it?
3. Why do few persons see thrashers' nests?
4. How do the young birds learn to fly?
5. Of what use are brown thrashers?

Some Things To Do

Watch a thrasher flying through bushes to see how it uses its tail as a rudder. Watch one singing in a tree to discover how it balances itself on the twig. Try to get a brown thrasher to answer your call.

The Cardinal

Here is one of the most interesting and attractive birds that God has created. The male has bright-red feathers and a thick, red bill. The color of his bill and feathers, and the size of his bill, give him the name cardinal (deep, rich red) grosbeak (large beak). Notice his beautiful topknot, or **crest**. He can raise and lower it. The cardinal grosbeak is about as big as a robin, but more plump, and is bright red all over except for his black throat. His



mate is not red but a beautiful pinkish-brown with a pink bill.

Early one morning, a male cardinal visited a yard and inspected all the bushes and vines. Two days later, he brought his mate to show her the places that he liked. Although he called and called her, she was very independent and pretended that she did not hear him. She would not come until he flew back to get her. He seemed to say something to her to coax her from bush to bush and vine to vine, but none of the places suited her. She had her own ideas about where to build. Soon they

flew away again, in search of a better place. When the cardinal's mate finds a place that she likes, he helps her with the work.

A pair of cardinals once built their nest in a cedar tree. They used bark, rootlets, and grasses. The male caught hold of the bark on a wild grape vine with his bill, held tight, and pulled on it as he **hovered** in the air—flapping his wings and fluttering in one place. He carried this long strip of fine bark to his mate, who was working on the nest. They both seemed quite happy over this particular piece, and he was so proud because he had pleased her that he began to sing. They lined the nest with fine rootlets and grasses to make a nice, soft “mattress.” Four pretty, reddish-brown eggs with white spots were laid in the nest.

At first the cardinal was very attentive to his mate, even feeding her seeds. Later, when she was brooding, he sometimes forgot about her and she had to call and call him. One afternoon she even had to go out after him and make him come home to help her.

Another pair of cardinals were found in a garden. He was hopping among the young plants, peering this way and that. Finally, he pecked a bug from one plant and ate it; then he found another and quickly hopped over to the grape **arbor**, calling loudly. Suddenly his mate flew down from the

farther end of the arbor, and he fed her the bug he had found.

The cardinal sings a pretty song that sounds like, “What cheer! What cheer!” As he sings, his crest begins to rise; and when he is in the middle of his song, it stands up straight. He perches on a branch near the top of a tree when he sings, usually on an outer branch where everybody can see and hear him. He is so proud and bold! Do you not think that his mate is anxious about him then? Some enemy might see his bright red color and hear his song.

Cardinals eat bugs, seeds, and wild berries, being especially fond of grapes and cedar berries. It seems that wherever many cedar trees are found in the woods, cardinals are sure to be seen.

When the ground is covered with snow, the cardinals cannot find much food. If you will feed them, they will come to your yard every day for crumbs and grain. You must not let a cat come into your yard if you feed the birds, for even a good cat will catch a bird when you are not watching. Cats are natural enemies of birds.

Review

1. How can you recognize a cardinal when you see one?
2. How do cardinals make their nests?
3. How can you help them in winter?

Some Things To Do

Feed cardinals grain and **suet**, or animal fat, during cold weather. Watch a cardinal sing. Notice how he balances himself while singing, and watch his crest rise and fall.

The Purple Martin

Did you ever watch a beautiful purple bird flying gracefully through the air? It climbs high on tireless wings, then coasts downward, dodges in and out, up and down. If it happens to fly near a pond, lake, or river, it takes a drink as it flies. This is the purple martin, North America's largest swallow.

The purple martin is smaller than a robin, and its feathers are bluish-black and very glossy; but the female and the young birds are brownish with gray breasts. Its bill is short and opens very wide. Its strong wings are long and narrow, and the tail is somewhat forked. Its legs and feet are not very



strong, but it can perch. Each of its feet has three toes toward the front and one toward the back.

It is an expert flier, catching all of its food while on the wing. Its tail is like a rudder, helping it to dodge and turn quickly when flying. It eats nothing but bugs, and since it is so very active, it must eat thousands of them. It eats many mosquitoes and harmful beetles that destroy plants, and will attack a hawk or crow and chase it away.

If you build a birdhouse that has more than one room, purple martins may rent them. Some people put out **gourds** on a pole, with an entrance hole cut in each gourd. Purple martins like to live in birdhouses near people and near each other;

they are **sociable** birds and nest in groups. They keep up a cheerful twittering and **warble** short, sweet songs.

Put your birdhouse up early and try to prevent the sparrows from nesting in it. Often when the martins arrive from the South, they find the sparrows in their house and then there is a lively battle. Sometimes the sparrows are compelled to leave, but frequently they use one or two rooms while the martins take the others. Then one martin is always on duty guarding the entrances to their rooms, and one sparrow watches the doors to the sparrow apartments.



The martins' white eggs are laid on a "mattress" of fine straw, grass, and feathers. The young birds eat so many insects that they grow very rapidly, and then they have their flying lessons and learn how to catch bugs while flying.

One day in August, a **colony**, or group, of purple martins were holding a tournament. All were assembled on the roof and porches of a two-story, twelve-room birdhouse. Several adult birds bowed and twittered to each other beautifully as though they were discussing something important, but the others were quietly listening. Then

one moved over to a young bird and bowed and twittered to it. Immediately, the young one took wing, circled, climbed high in the air, coasted down, turned, dodged this way and that, and then landed gracefully on the porch. You should have heard the twittering then! They seemed to be proud of the young bird's skill. Each one was given a chance to show how well it could fly, and upon its return, there was much twittering and bowing. This continued all afternoon. Then, with much warbling and twittering, all flew away and did not return until the following spring. God in His wisdom designed purple martins to migrate in the fall so they can find plenty of food during winter.

If a purple martin sees a cat, it gives its alarm call and dives down until it seems that it will perch on the cat's back. It checks its flight when very near its enemy and climbs upward again, only to repeat the performance. This annoys the cat so much that it often jumps up and strikes at the bird with its paw. When the bird is just quick enough to escape the cat's blow each time, the cat finally gives up and runs away.

Since purple martins eat so many harmful bugs, they are one of the most helpful birds known to man; we should attract them to our yards by erecting colony birdhouses.

Review

1. Describe the purple martin.
2. Why is it such an expert flier?
3. Why do we say it is a sociable bird?
4. Of what use is it?
5. How can we attract purple martins?

Some Things To Do

Erect a colony birdhouse for purple martins early in spring. Observe how gracefully they fly, how they catch insects, and how they get a drink while flying.

The Kingbird

Have you ever seen some small birds attacking a crow or hawk and chasing it? They were kingbirds, but some people call them “bee-martins” because they like to raid **apiaries**—places in which colonies of bees are kept. North American kingbirds are a little smaller than robins. The Eastern kingbird’s head, back, wings, and tail are a dark bluish-gray; its underparts are white; and there is a white band across the bottom of its tail. The Western kingbird has light gray plumage and yellow underparts, with whitish edges on the tip of its tail feath-



ers. On the crown of both of these North American kingbirds is a hidden red crest that can be seen only when it raises the feathers on its head.

God gave the kingbird a strong bill that has a slight hook and opens very wide. At its base are some bristles that help it when it catches insects. Its strong wings help it to fly fast, and its tail is an excellent rudder to help it turn. Its legs are strong; and it has feet with three toes that point toward the front and one that points toward the back, allowing it to perch.

It perches on a wire, fence, or tree. When its sharp eyes spy an insect, it darts out after it, snaps it up, and returns to its perch to watch for another one. It is one of our flycatchers. Watch a kingbird catch an insect; see how quickly it darts out from

its perch, and how sharply it turns in the air after catching an insect. You can even hear its **mandibles**, the upper and lower parts of its bill, click as it snaps up the bug.

The kingbird builds high in a tree and uses rootlets and grasses to make a firm, neat nest. The eggs are light with brown spots. The baby birds are always hungry and are fed hundreds of insects. The kingbird does much good because it eats many harmful beetles and other insects. It also eats **robber flies** which destroy our honey bees. Though it eats bees, too, the bees it eats are mostly **drones**. Whenever it spies a crow or hawk, it attacks and drives it out of the neighborhood.

Even though the kingbird does not sing and its call is harsh, we should protect it because it is so brave and so helpful to man. It flies to Central or South America for the winter but returns to North America in the spring.

Review

1. How can you recognize a kingbird when you see one?
2. Why is it called a flycatcher?
3. Of what use is it to man?

Some Things To Do

Watch a kingbird pursuing a crow or hawk. Can you tell why the crow or hawk does not turn and try to attack the kingbird?

The Crow

“Caw! Caw! Caw!” Just listen to those crows! Did you ever hear birds make such a racket? The crow is larger than a pigeon, has glossy black feathers, and is quite pretty in the sunlight. Its bill is thick, pointed, and very strong. The crow can use it to dig a hole, to carry a fish or a little chicken, to catch big grasshoppers, and to tear bark from vines. It even fights with its bill.

The crow constantly flaps its large, strong wings when flying. Since its flight seems slow and



clumsy, we say that it is **lumbering** through the air. Its legs are very strong, and the long toes have strong claws. Three toes point toward the front and one toward the back. Its long back toe helps it to perch in a tree. It can walk as well as hop; and, as it walks along, it is always busy looking for food. It eats almost anything, alive or dead.

The crow's large nest is high up in a tree and is made of sticks, twigs, grasses, and bark from vines, with a "mattress" of grass and soft bark. In the nest are four bluish-green eggs with brown spots. When the babies hatch, they are not covered with **down**, like little chickens and turkeys, but are naked and helpless like the baby robins and bluebirds. The adult crows catch many insects for them and also steal baby birds and little chickens to feed them. We are sorry that they do this, because they do so much good the rest of the year. They eat hundreds of grasshoppers, beetles, caterpillars, and other insects, and they even eat mice.

Crows like corn, too. When the farmer's corn is sprouting, they pull it up and have a feast. While the flock of crows is feeding in the field, a few of them act as **sentinels**, or guards, and are perched high up in trees. When some have eaten, they exchange places with the sentinels, so that all may get food. Every crow in the flock takes its

turn on guard duty.
 If the sentinels
 see a man
 or boy with
 a gun, they
 caw loudly;
 and then away
 they all fly
 after their
 sentinels.



Often they will
 not fly if the person does not have a gun, for they
 seem to know whether he has a gun or not.

Sometimes a farmer puts a scarecrow in his field. He puts old clothes on big sticks out in the middle of the field, and hopes to frighten the crows away by making them believe it is a man. They do stay away for a while, but later they all fly down and eat more than ever. If, instead, the farmer coats his seed corn with coal tar, they are not so likely to pull it up when it is sprouting, and the corn will not be injured.

Crows do not migrate. In winter, hundreds of them gather in a forest. Every morning they fly far away to get food, and every evening they return. We say that such a forest is a “crows’ roost.” In spring, they separate again, flying in all direc-

tions; and the next winter, when housekeeping cares are over, they again are found at the roost.

Crows help one another. They always work together and seem to obey orders, too. They are very wise. A young crow makes an interesting pet and will follow its owner everywhere. It is sure to get into mischief and may even get others into trouble because of its pranks.

Review

1. Which is larger, a crow or a pigeon?
2. How does a crow fly?
3. What do crows eat?
4. How do they help one another?
5. What is a crows' roost?

Some Things To Do

Watch crows in a field to see how they work together. Notice how alert the sentinels are and how much confidence the whole flock has in them.

Words You Should Know

A

Abdomen—that part of an insect’s body behind the thorax

Absorb—take in or assimilate

Alight—land or come to rest, as a bird on a perch

Amphibian—a cold-blooded creature that lives the early part of its life in the water (aquatic) using gills and then on land after developing lungs

Apiary—place in which a colony of bees is kept; the word “apiary” comes from the Latin word *apiarium*, which means “beehive”



Aquatic—living in the water

Arbor—a latticework shelter covered with vines

Arthropod—creature with an exoskeleton (no backbone), segmented body, and jointed limbs; arthropods include insects, arachnids (spiders, etc.), crustaceans (crabs, shrimp, wood lice, etc.) and myriapods (centipedes and millipedes)

B

Bantam—very small chicken; *-adj.* tiny, feisty