

ANIMALS WORK, TOO

Unit Four
Second Reader

CURRICULUM

PE
1119
G245225
1940

G
A
T
E
S

M
C
C
L
E
N
A
G
H
A
N

I. Gates
Mary McClenaghan

DESIGN

and Illustrations

—by—

Cyrus LeRoy Baldrige
and

Charles B. Falls

David Hendrickson

Lucile Patterson Marsh

Herbert Stoops

Adolph Treidler

Grateful acknowledgment is hereby made to :

Harcourt, Brace and Company, Inc. and to Wilfrid Swancourt Bronson for "Harvester Ants," adapted from *The Wonder World of Ants* by Wilfrid S. Bronson, Copyright, 1937, by Harcourt, Brace and Company, Inc.

The Macmillan Company for "Mr. and Mrs. Swallow," adapted by permission from *Holiday Pond*, by Edith M. Patch.

COPYRIGHT, 1940,

BY THE MACMILLAN COMPANY

COPYRIGHT IN THE PHILIPPINE ISLANDS

All rights reserved — no part of this book may be reproduced in any form without permission in writing from the publisher, except by a reviewer who wishes to quote brief passages in connection with a review written for inclusion in magazine or newspaper.

Published February, 1940.

LIBRARY
UNIVERSITY OF ALBERTA

Animals Work, Too



2535619

Library Edmonton Normal School



Birds Are Fun

Birdhouses

Birds are fun to know. It is fun to know their names. It is fun to watch them and see how they live.

It is really not hard to learn about birds. You can have many of them come right to your school door. In that way you can get a close look at birds.

You can see what color the birds are and how big they are. You can watch birds make their nests.

In the spring one of the best ways to have birds come to your school is to put up a birdhouse. You can make a birdhouse if you want to.



In making a birdhouse, there are a few things you must think about.

A birdhouse should be made in such a way that it can be opened and cleaned after the birds are through with it. Then it can be used again the next year.

You will put a hole in the birdhouse to make a door. When you cut the hole in the birdhouse, place it high enough so that the birds will not be seen when they sit on the eggs.

Not all birds will use your birdhouse for their nests. Only those that would make nests in the holes of trees will come to your birdhouse.

When some birds come to live in your birdhouse, watch them every day. See what color they are. See how they make their nests. What do they use to make their nests?

If you watch with care, you will learn a lot about birds.

Making a Bird Chart

Don't you think it would be a very good thing to make a bird chart?

On the chart you may put the names of the birds that have come to live in your birdhouse.

Some of the children in the schoolroom may make pictures of the father bird and the mother bird next to their names.

The pictures should be colored, but you must be sure to use the right colors for each bird.

Next to the picture you may put the day the bird came to live in the birdhouse.

After you have watched the birds making their nest, you will have lots of things to put on the bird chart.

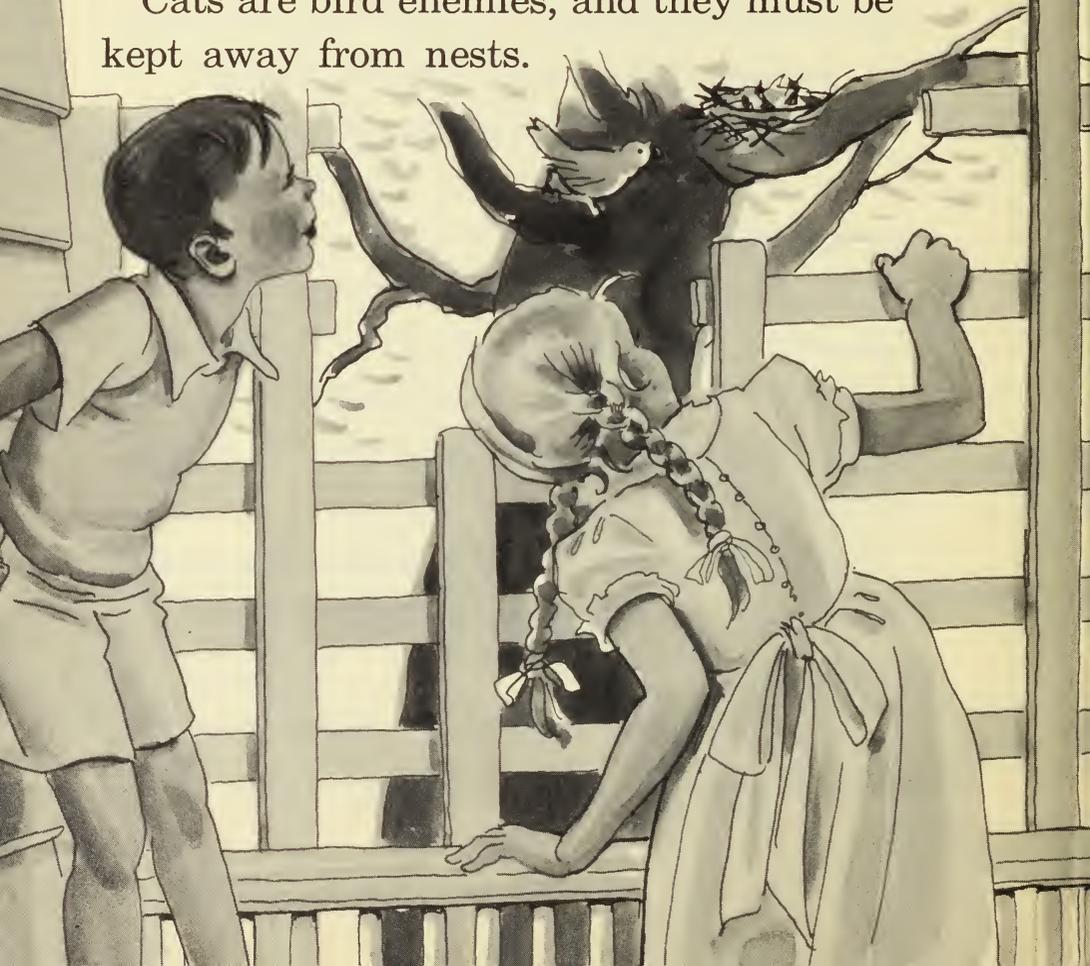
You will know how the birds make nests and you will know just what they use to make their nests.

On your bird chart try to tell about everything you see.

When you are watching a nest, do not get too close to it. You can watch it from a hiding place.

You see, the birds might see you and they might fly away from the nest. Some bird enemies might see you, and then they would soon find the nest.

Cats are bird enemies, and they must be kept away from nests.



When the birds are through making their nests, the mother bird will lay her eggs in it.

Find out how many eggs the mother bird put in the nest and find out what color they are. Be sure not to put your hands on the eggs or on the nest.

You may tell about the eggs on your bird chart.

After the mother bird lays the eggs, they have to be kept warm. How are the eggs kept warm?

You may tell on your bird chart how the eggs are kept warm.

After a time you will find baby birds in place of the eggs. How do they look?

Tell all about the baby birds on your bird chart.

It is fun to watch baby birds. They are always so hungry! Their mouths are always open! The more food they get, the more they want!



Now the mother bird and the father bird have to work very hard. They worked hard when they made their nest, but now they must work even harder.

The mother bird and the father bird must find food for their baby birds.

The baby birds are too small to look for their own food. They cannot fly. So their mother and father have to find food for them.

But before long the babies will learn to fly and to find their own food.

Then one day the birds will fly away, and they will not come back.

You will want to put on your bird chart everything you learn about the baby birds and how the mother bird and the father bird help them.

If you want to, you may put down the day the birds fly away. Then you will know how long the birds lived in your birdhouse.

Winter Birds

You can have just as much fun watching birds in the winter as in the spring. Not every bird goes to the South in the winter. Many of them stay where there is snow in the winter.

Birds have a hard time finding food in the winter. If you put out some food for the birds, many of them will come to eat it. Then you can get a very close look at winter birds.

The birds that live on insects in the spring and summer will eat meat fat in the winter.

Some birds like to eat seeds, and some like nuts. You can get seeds for birds at a bird store.

The meat fat can be tied to the branch of a tree that is close to your school. The seeds and nuts can be put in a box, and you can place the box right outside your school window.



Putting a box of seeds and nuts outside your school window is a very good way of getting birds to come to you. You can watch birds all winter if you keep food in the box.

While you are watching the birds, you are helping them by giving them food. They have such a hard time finding food in the winter! Can you tell why?



Once you start putting out food for birds, keep it up all winter. Put out water for them, too.

Some people stop putting out food when the weather is very, very cold. And that is just when birds need their help.

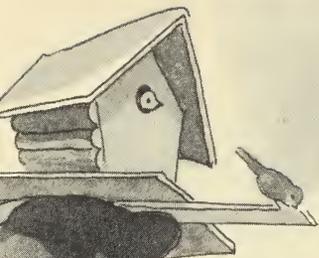
It would be a very good thing to start another bird chart for the winter birds that you see.

As you watch the birds all winter long, you may put on your bird chart the name of each one that comes to your school window.

You may put down, too, the day each bird first comes to your box.

Anything that you learn about the birds you watch may be put on the bird chart. If you want to, you may make pictures of the winter birds, too.

If you live in the South, your charts will not be like those made where there is snow in winter. Can you tell why?

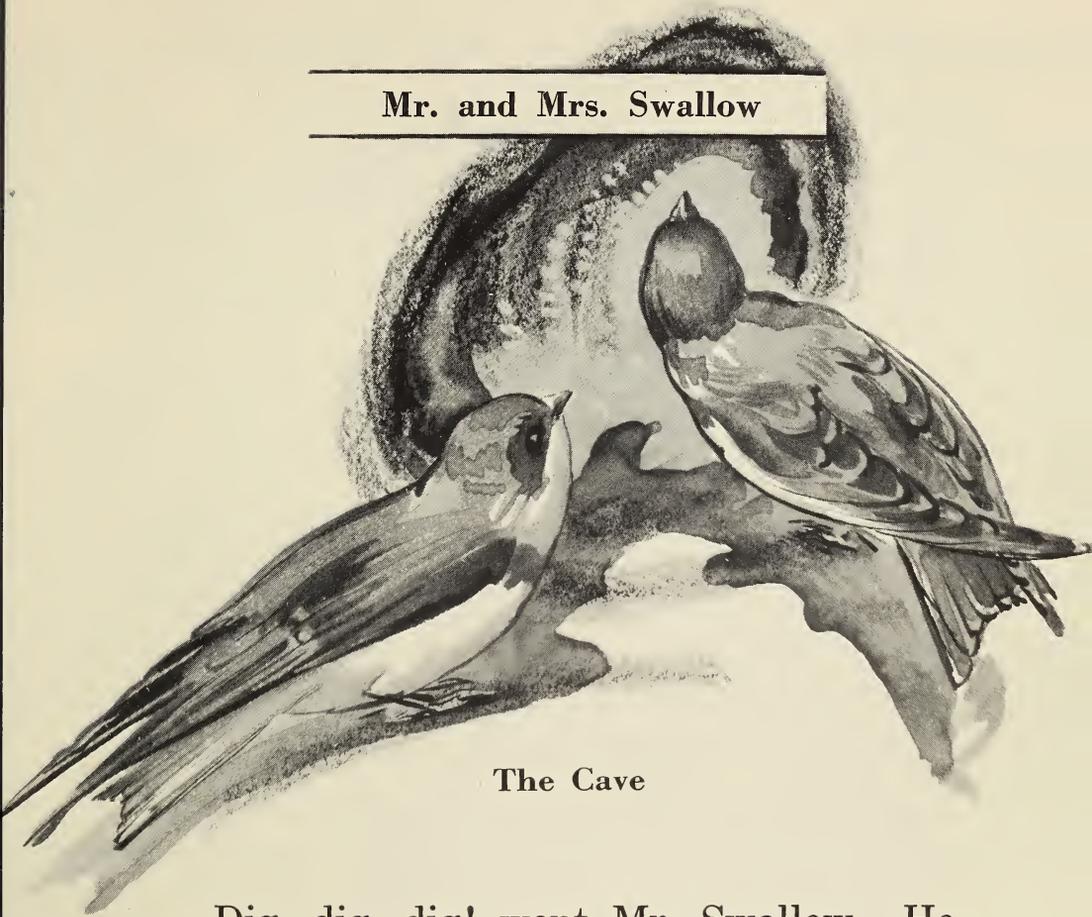


Don't you think that putting out food in the winter, putting up a birdhouse, and making bird charts are very good ways of watching birds?

Don't you think birds are fun?



Mr. and Mrs. Swallow



The Cave

Dig, dig, dig! went Mr. Swallow. He was working very hard.

Mr. Swallow was digging a cave, and that was very hard work.

There was so much dirt to dig out! The only way Mr. Swallow could dig was by using his bill, and his bill was small.

So you can see what hard work it was and how long it would take to dig a long cave.

But Mr. Swallow had always worked hard. He had been digging for a long time. He could dig very well, and the cave he was making was a fine one.

Mrs. Swallow worked hard, too. She could dig as well as Mr. Swallow. The cave was going to make a very good home for Mr. and Mrs. Swallow.

Mr. Swallow had been digging very hard that morning. So Mr. Swallow flew away for a while, and Mrs. Swallow went on with the digging.

Dig, dig! went Mrs. Swallow's small closed bill. Dig, dig, dig!

Little by little the cave got longer and longer.



Mr. and Mrs. Swallow were making their cave in a high sand bank close by a big farm.

Mr. Gray, the farmer, liked to have the swallows stay on his farm. He did not care if the birds used the sand bank to make their caves.

You see, the swallows really helped Mr. Gray. They would eat the insects that might hurt the vegetables and the trees that were on Mr. Gray's farm.

After a while Mr. Swallow went back to the sand bank.

There were many, many caves in the sand bank, for Mr. and Mrs. Swallow had a lot of friends who made their caves in the same place.

You would think that Mr. Swallow would have a hard time finding his cave, for there were so many of them in the sand bank. But Mr. Swallow knew just which cave was his!

When Mr. Swallow got to his cave, he talked with Mrs. Swallow for a while. Then Mrs. Swallow flew away, for she had been digging for a long time.

Mr. Swallow began to dig again. Dig, dig, dig! went Mr. Swallow's little bill. Dig, dig, dig!

Mr. Swallow was not the only one who was working hard. Other swallows were building homes, too. They were digging caves just as Mr. Swallow was.

The door holes of the caves all looked very much the same, but the insides of the caves were not the same. Some were longer than others.

Not all the caves in the sand bank were new ones. Many of the caves had been made many years before and had been used year after year.

The swallows that used the old caves sometimes made them a little longer, and they made new nests in the caves.

The swallows used straw and feathers to make the nests. Straw and feathers made very nice soft nests.

The swallows made their nests inside the caves. The caves were made in such a way that the rain could not get inside to the nests.





The Baby Swallows

After a while Mr. and Mrs. Swallow were through with their digging. Their home was all ready. Then they made their nest of straw and feathers.

Into that nest Mrs. Swallow put five little white eggs.



The little eggs had to be kept warm, and the soft nest of straw and feathers helped. Mr. and Mrs. Swallow helped to keep the eggs warm, too.

Inside the white eggs little baby birds were growing. Every day they got a little bigger.

At last the baby birds were big enough to go through the shell of the egg.



There were five baby swallows, keeping very close together!

It was time for Mr. and Mrs. Swallow to work again. They had to find food for their baby birds.



Those baby birds were hungry. They were very, very hungry! And they were much too small to find their own food.



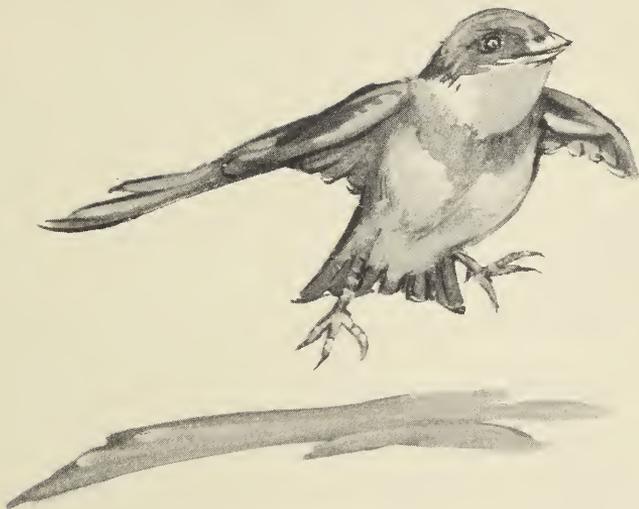
So Mr. and Mrs. Swallow flew around here and there getting insects for their hungry babies.

The more insects the little ones got, the more they wanted to eat. They never had enough. They were always hungry.

At first the baby swallows could not walk, and their mother and father had to take the food right to the nest inside the cave.

But after a while the baby birds could walk to the door of the cave, and there they would wait for Mr. and Mrs. Swallow to bring them some good things to eat.





The Party

One fine morning Mr. and Mrs. Swallow had a very nice surprise. What do you think it was? Their five little swallows could fly!

And so could all the baby swallows in the sand bank.

The babies could fly! All the mother swallows and all the father swallows and all the baby swallows were going to have a party. The party was going to be out of doors.

It was a fine day for a party out of doors. The sun was shining, and the sky was a beautiful blue. Not even a white cloud could be seen!

So all the swallows — the mothers and the fathers and the children — started out for their party.

The baby birds flew very well, but they soon had to stop. As they had only just learned to fly, the baby swallows could not go very far if they did not stop for a while.

Just as soon as the baby birds stopped flying, they opened their mouths. That was their way of asking for food. They wanted to start the party right then and there!





There was only one thing to do, and the mother swallows and the father swallows did it. They went looking for insects for their babies.

They flew over the fields and soon came back with their mouths filled with good insects.

Even though there were so many baby swallows, every mother and father knew just which ones were his.

As soon as the babies were given the insects, they were ready to fly again. Food was what they needed to make them start again.



On flew all the baby swallows, with their mothers and fathers showing them the way.

The baby birds flew and stopped many times. At last the swallows reached the place where they were going to have the party.

As soon as they reached the place, the mother swallows and the father swallows started to look for insects.

Then the swallows had the party. It was a very nice party. There were so many good insects to eat!

The baby swallows spent the day eating. They had as many insects as they could eat, and more. So they had a good time and were very happy!

The mother and father swallows were happy, too. They had watched the babies fly from the caves in the sand bank to the party. That was a long way for baby birds to fly!



The day went by, and evening came. But the swallows did not go back to the caves in the sand bank, as you might think they would.

All the swallows stayed out of doors. The babies were big now, and they did not have to sleep in the caves.

Mr. and Mrs. Swallow and their five baby swallows stayed out of doors with all the other swallows.

The swallows stayed out of doors for many days, and all the baby swallows got older.

At last the baby birds were old enough to look around for their own food. Most of the day they flew wherever they wanted to, trying to find as many insects as they could eat.

Now the mother swallows and the father swallows did not have to work as hard as they had before. Their babies could find their own food now!

The days and the evenings went by, and soon the cold weather came.

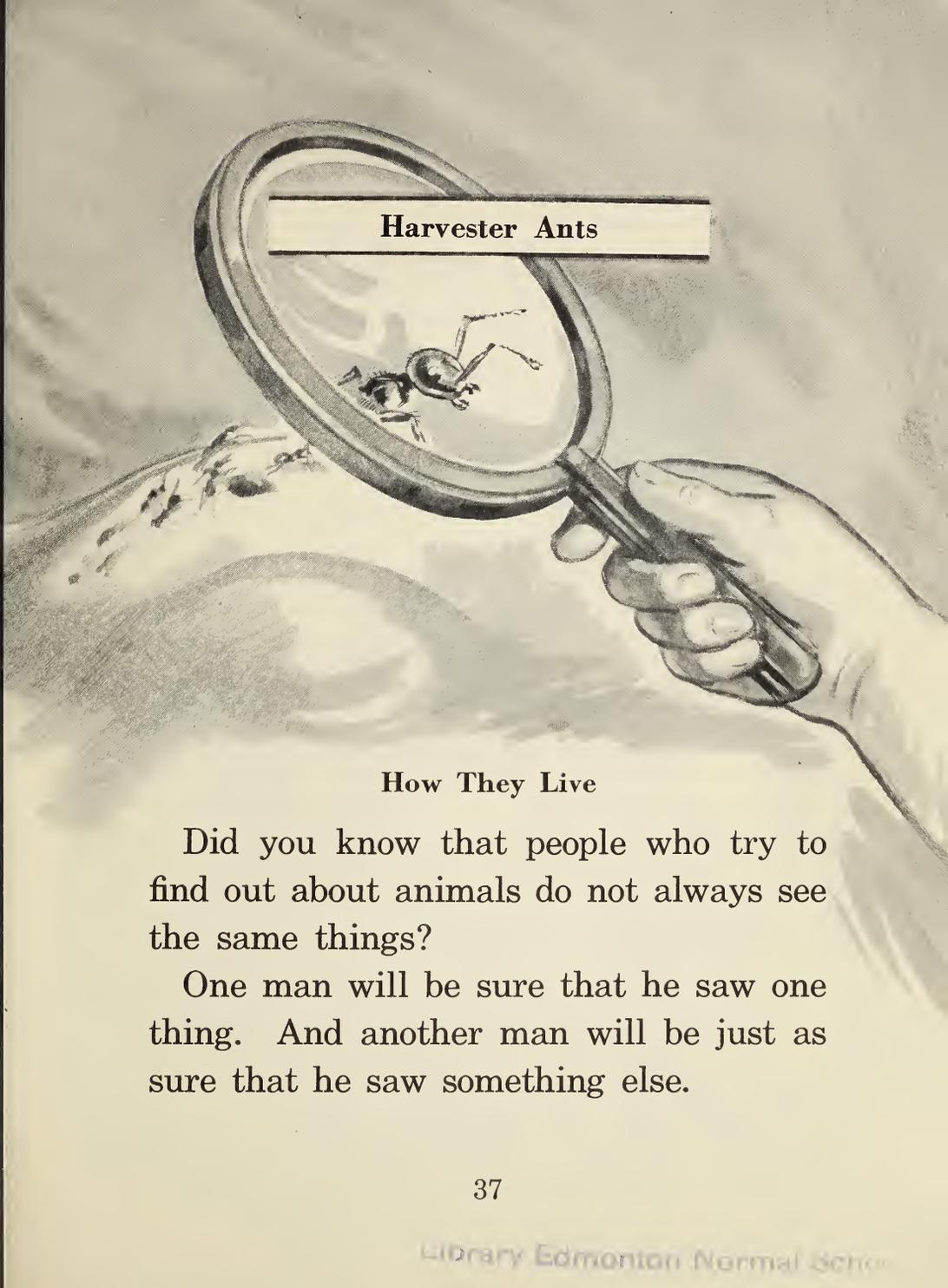
The swallows could not live in very cold places, and so they flew away. They flew far away to places where it was warm and where they could find many insects.



Mr. and Mrs. Swallow and their five children flew away, too.

It may be that some day the five baby swallows will come back to the sand bank and make caves of their own. They may bring up their baby swallows, too. Who can tell?





Harvester Ants

How They Live

Did you know that people who try to find out about animals do not always see the same things?

One man will be sure that he saw one thing. And another man will be just as sure that he saw something else.

There are many people who try to find out all they can about ants. They watch ants with care.

They want to know how ants live and where they live. They want to know what ants eat and how they get their food.

One kind of ant about which the people can never agree is the harvester ant.



The harvester ants live in places where the ground is sandy.

Many, many harvester ants live together in one very big city.

What big hills of dirt those harvester ants make when they are digging up the ground! They dig and dig to build their city under the ground.

The harvester ants eat seeds most of all. And that is a very good thing, for so many harvester ants live together in one big city.

It is much harder to get lots of meat than it is to get lots of vegetables, you know.

Think what it would be like if everyone in a big city did not eat anything but meat! There would soon be no meat left, because it takes a long time for animals to grow and to be used for food.

There would never be enough food, and people would be hungry.

But if people wanted only vegetables, they would always have enough food. They would never be hungry.

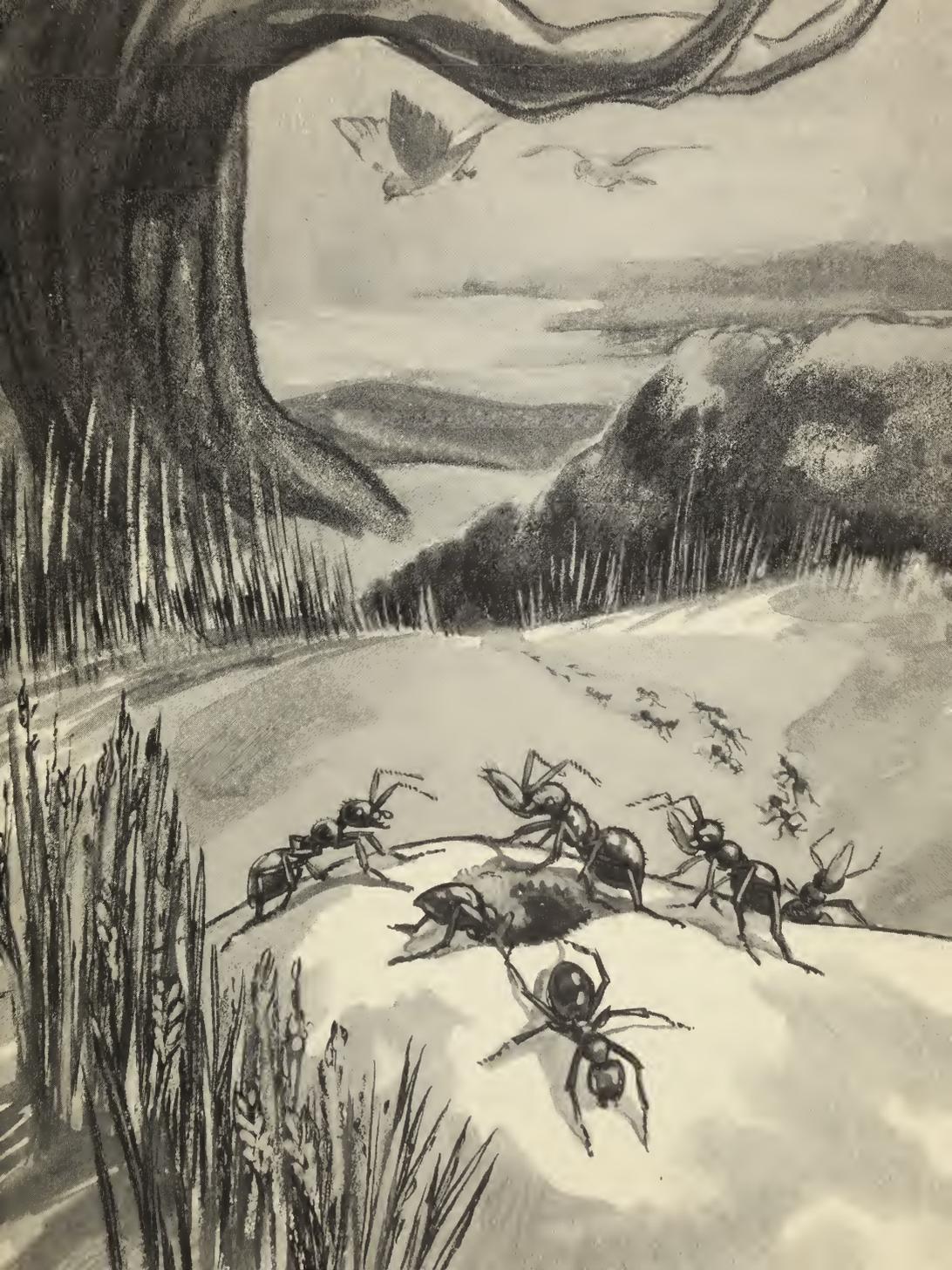
It is not hard to grow vegetables. Most of them can grow in just about one year. There are vegetables year after year for people.

So it is in the big city of harvester ants.

The harvester ants like grass seeds very much. When the seeds are ready to be taken from the grass, the harvester ants cut them and store many of them for "hard times."

The harvester ants like the seeds of one kind of grass very, very much. They like this kind of grass so much that they bring the seeds to their city from far, far away.

Sometimes the harvester ants have a small ant-field of this grass growing right by their city.



Now, the people who watch ants agree that the harvester ants plant the tiny fields of grass.

But what people cannot agree about is this — do the ants plant the tiny fields of grass on purpose or by accident?

The “on purpose” people think *they* are right, and the “by accident” people think *they* are right.

The “on purpose” people say that the harvester ants know a lot about seeds that start to sprout.

The ants let the sprouts grow a little. Then the ants bite off the sprouts and put the seeds in the sun. The seeds stay in the sun until they have dried.

Letting the seeds sprout a little and putting them in the sun makes them much sweeter.

So you can see why the “on purpose” people think that the harvester ants know a lot about seeds that start to sprout.



The “on purpose” people say that any ant that knows so much about seeds knows when the seeds have sprouted too much to eat.

And they say that ants which know so much about seeds, know enough to plant the seeds that have sprouted too much to eat. So they think that ants plant the grass seeds on purpose.

The "by accident" people say that any ant knows when something is not good to eat, whatever it is.

And the "by accident" people say that the harvester ants always throw things they do not want on the ant-city trash hill.

The ant-field of grass grows on the trash hill.

The "by accident" people say that the ants threw the seeds away and some of them just began to grow. So they think that the ants planted the grass seeds only by accident.

It may be that the "on purpose" people are right. And it may be that the "by accident" people are right. Who knows which ones are right?

What do you think? Do you think that ants plant the grass seeds on purpose or do you think that they plant the grass seeds by accident?

Ants at Work

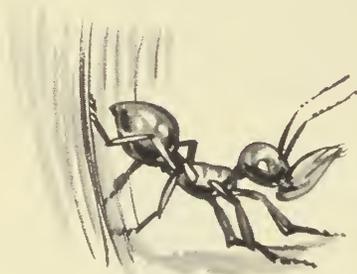
There is a big place all around the city for harvester ants, which the ants always keep very, very clean. It is right by this big clean place that the harvester ants put their trash.



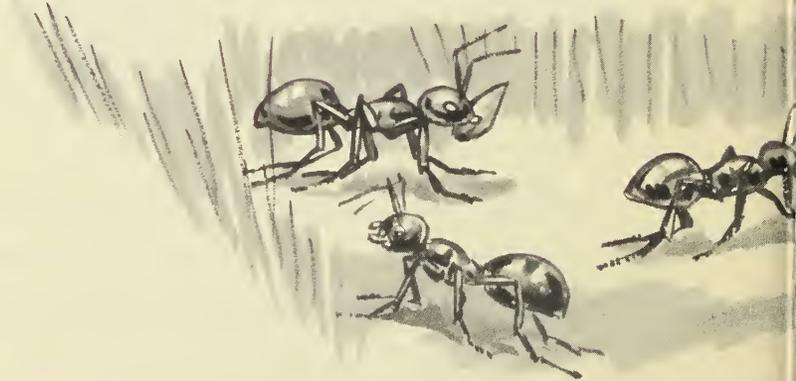
Good ant roads run through this clean place from the ant city to the fields. The harvester ants never let grass grow on the roads.

The harvester ants bring the seeds into the city over fine roads.

The harvester ants have a lot of work to do, and each one does just what it should.



Some ants work in the fields. They climb up on the grass and cut off the seeds.



Then other ants take the seeds from the fields to the ant city.

Still other ants wait at the ends of the roads to the city. They take the seeds and clean them. Then they give the seeds to the little ants.

The little ants take them down to the rooms where they will be stored.



There are other ants who make a kind of flour from the seeds. They have big heads and mouths. The big mouths help the ants very much in making the flour.

With the big mouths the ants chew the seeds. The ants chew and chew. They chew the seeds into a kind of flour, and other harvester ants even make bread out of the flour.

The ants chew some of the flour. Then they make little balls of it. They put the balls in the hot sun.

After the balls of flour have stayed in the sun for some time, the ants store them. They store the little flour balls for "hard times."

So all the "on purpose" people and all the "by accident" people have to agree that the harvester ants are really very fine ants!



39257275 CURR HIST



000003710332

If *Animals Work, Too* is read subsequent to the reading of Unit Four of the Second Reader, *We Grow Up*, all words in *Animals Work, Too* will be familiar, with the exception of fifteen new words which are contained in the following list.

The new words are grouped here under the pages on which they first occur.

1	10	19	29	39
2	insects	20	30	40
3	11	straw	31	41
color	12	21	32	42
4	13	22	33	accident
5	14	23	34	purpose
chart	15	five	35	sprout
picture	cave	24	36	43
6	swallow	25	37	44
7	16	26	38	trash
8	17	27	agree	45
9	18	28		46
	bank			47
				48



A
N
I
M
A
L
S

W
O
R
K
T
O
O

M
A
C
M
I
L
L

