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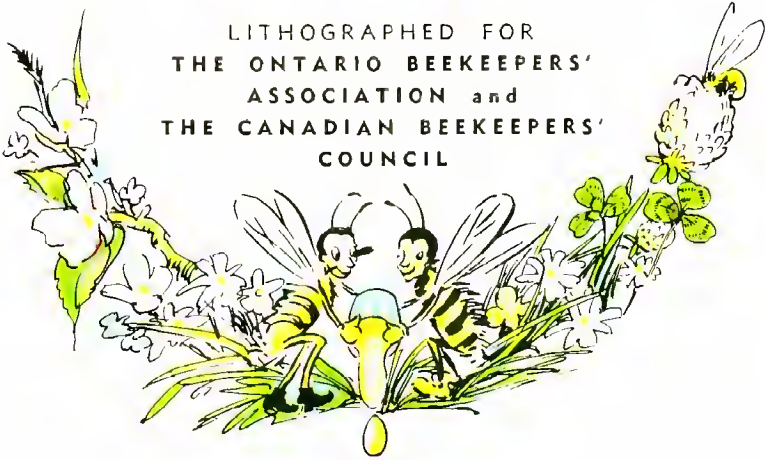


The Story of Honey

Written by Lloyd Dennis
Illustrated by Robert Kunz
Edited by T.H. Shield

The Story of Honey

LITHOGRAPHED FOR
THE ONTARIO BEEKEEPERS'
ASSOCIATION and
THE CANADIAN BEEKEEPERS'
COUNCIL



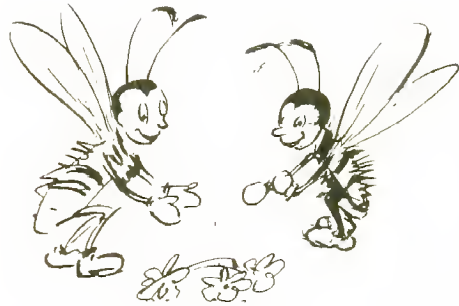
EDITOR'S NOTE:—

. . . It is a pleasure to be associated in the production of the "Story of Honey" with its beautiful illustrations, in natural colors, and wish every success in its distribution.

Sincerely,

General Manager,

ONTARIO HONEY PRODUCERS
CO-OPERATIVE LIMITED.



I N T R O D U C T I O N

This beautiful Booklet presents an interesting and educational story for children and adults about the world's oldest and best sweet. It informs you of the unceasing toil by the Bee which gives to man this delectable product "Honey" and through pollination has added much to the production of man's daily food.

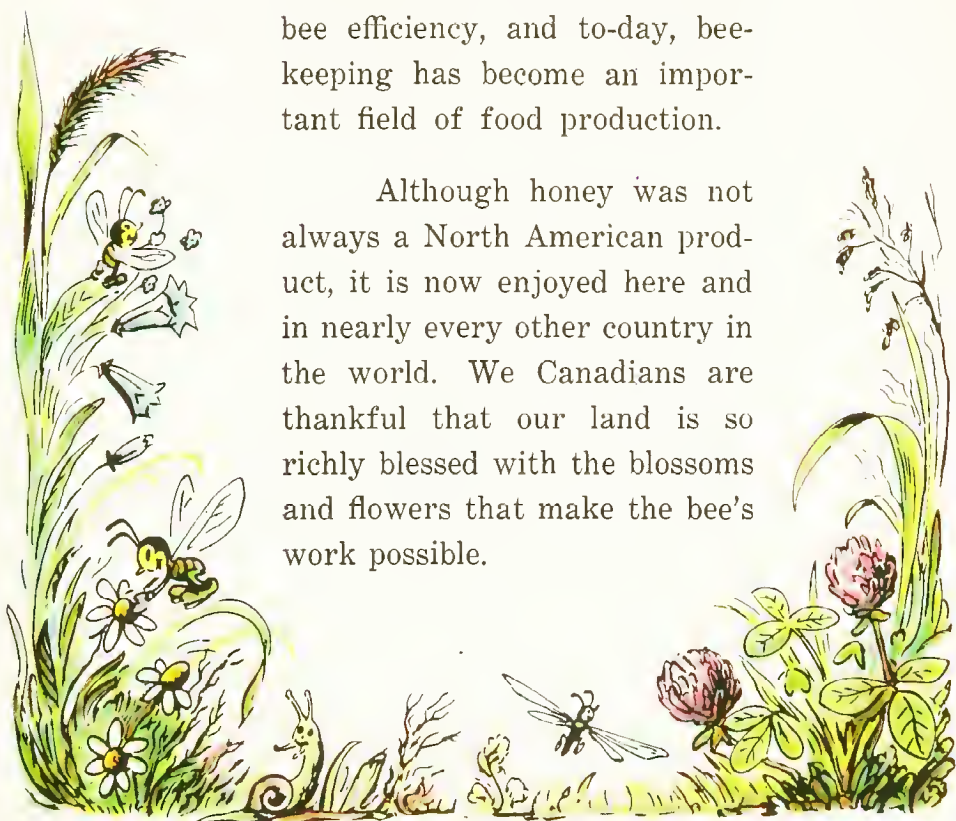
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HONEY THROUGH THE AGES

Throughout the thousands of years of man's existence on earth honey has been a valuable and most desired food. Early cave men probably robbed the busy honey bees of this sweet delicacy; the ancient tribes of Europe and Asia built crude homes for them. Later men learned new ways of increasing bee efficiency, and to-day, bee-keeping has become an important field of food production.

Although honey was not always a North American product, it is now enjoyed here and in nearly every other country in the world. We Canadians are thankful that our land is so richly blessed with the blossoms and flowers that make the bee's work possible.



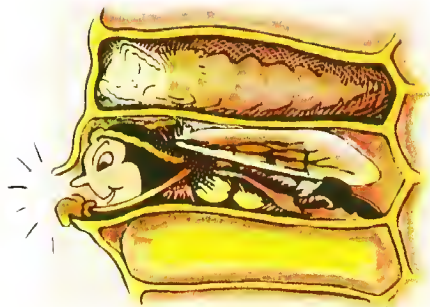
THE STORY OF BETTY THE BEE

It was a warm, sunny day in early summer and the sunbeams danced through Farmer Brown's apple orchard, gleefully throwing shadows from the leaves and blossoms to the rich green grass below. Johnny Grasshopper hopped about without a care in the world. Molly May Beetle sat busily eating her way through an apple leaf, while Millie Moth, high in the apple tree, searched for a good place to lay more eggs.



Not far away, in the shade of a healthy apple tree, sat a queer house. It was made of wood, and painted white. The house was spotlessly clean. Its doorway seemed to be filled with little insect people going in and out. They were Honey-bees. Inside the house - well, let's turn the page and see. —





Betty Bee woke up to find herself trapped! Yes, she certainly was — in a tiny bed that had walls on all sides. Betty decided to look for a way out. She thought and thought. There was only one thing to do — to chew her way through the bed!

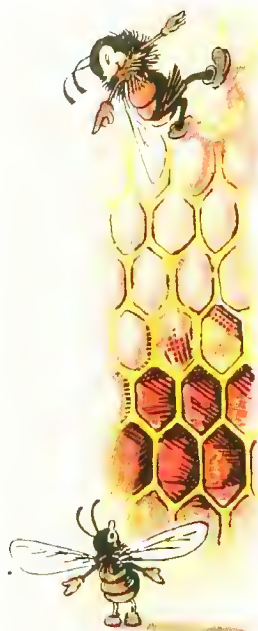
So Betty began to chew. She chewed and chewed and chewed. At last, just as her jaws got tired, her nose popped out. She wriggled and squirmed, wriggled and squirmed, until at last she fell right out on the wax floor!

As Betty sat there resting, she heard a voice say, “So there you are! It’s about time, too!”

Betty looked up and saw a large golden brown bee looking down at her through big hairy eyes.

“Where am I, and who are you, and what am I doing here?” asked Betty nervously.

“One question at a time,” answered the voice. “First, you are in our honey-bee home. We call it a ‘hive’. I am Beatrice, one of your fifty thousand older sisters. We live here in Farmer Brown’s orchard with our Queen, Marjorie, and about three hundred brothers, called ‘Drones’.





"We are a big family, and there is much to do — gathering nectar and pollen, cleaning house, making honey, and nursing new brothers and sisters. Now you just make up your mind to work hard, and we shall get along fine. But remember — no loafing, or out you go!"

Betty trembled as she followed her older sister up the sloping wax floor. Everywhere were beds, beds, beds! Some were open, some were closed. There seemed lots of work to do. If only she would be strong enough! Well, she thought, I can try hard. That's all any bee would do — try hard.

They stopped beside a cluster of beds like the one Betty had just left.

"These are cells," explained Beatrice. "Inside each cell is a baby bee which looks like a little white larva. Your first job is to feed two hundred babies **ALL THE TIME** for one week."

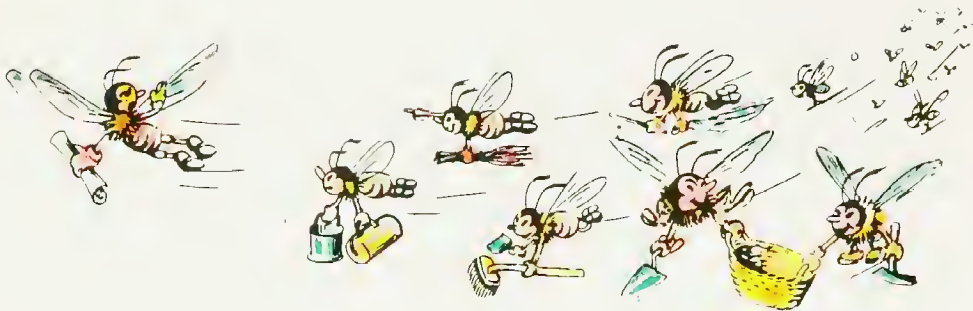
"Where shall I get the food?" asked Betty.

"Give them Royal Jelly for three days. It is a milky white juice, and you will find it in your head. Just drop it into each cell. For the rest of the week get some nectar and pollen from the field bees and feed them that. Now, get to work."



Betty didn't waste any time. Day and night she hurried from cell to cell, stuffing her brothers and sisters with food. Between times, she found other jobs to do, also. She had to clean cells, make wax, and help keep Queen Marjorie clean.

Betty thought that the Queen was the laziest bee she had ever seen. She didn't do ANYTHING! And her brothers! Those young scamps didn't do anything either! At least Queen Marjorie DID lay fifteen hundred eggs a day. Betty wondered if all insects toiled as hard as Bees.



One morning a dark old bee flew through the hive, saying, "Calling all young workers! Calling all young workers! Follow me!"

When Betty and her friends had all gathered, they were put into groups.

One group was told how to make wax by scraping it off their bodies and chewing it.

Another group was shown how to build strong six-sided cells for storing honey.

Still another group was shown how to fan the hive with their wings to drive the water out of the nectar and change it to honey and keep fresh pure air in the hive at all times.

Betty's group was led to the door of the hive.

"Your job is important. You must keep all strangers out. Kill them with your stinger if you must, but **KEEP THEM OUT!**"

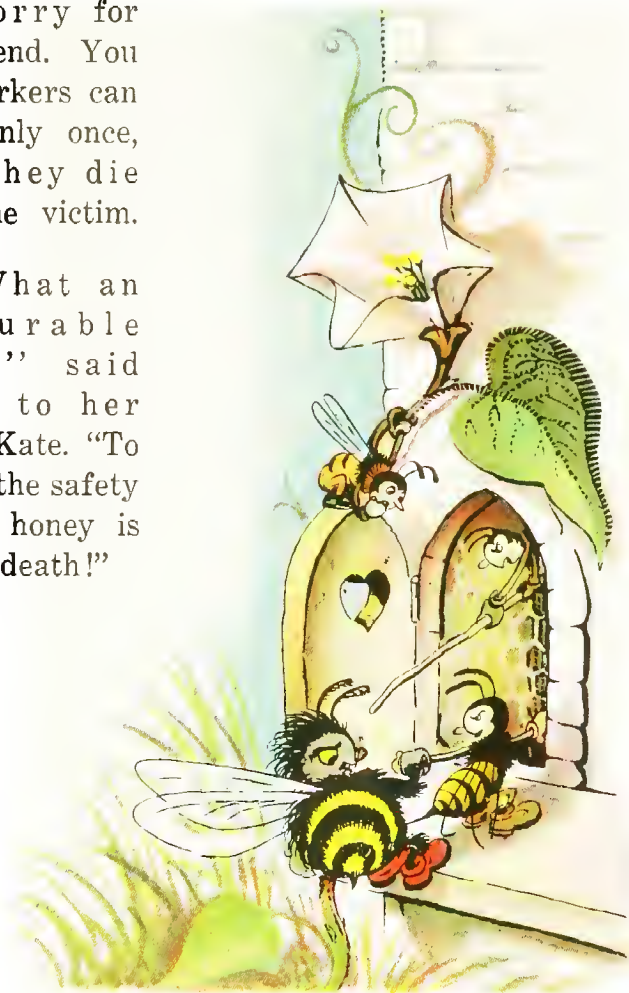
"How can we tell which is a strange bee?" asked Betty.

"Silly! Smell them! Smell them!" was the answer. Every hive has its own distinct odour.

Betty hadn't thought of that.

The next day a big old Bumblebee came to the door. One of the workers pounced on the stranger and stung him to death. Betty was very sorry for her friend. You see, workers can sting only once, then they die with the victim.

“What an honourable death,” said Betty to her friend, Kate. “To die for the safety of our honey is a good death!”



While Betty was a guard, she found that she was able to practice flying just outside the door. On one trip she even brought back some "bee glue", for repairing the hive. She found it in some tree buds.

She was just bursting to be a field bee, and gather food for the hive.

To-day was the big day. Betty was ready to fly to the fields — to find the flowers of clover and dandelion — and all the kinds she had heard other bees talk about.

Her companion was a bee named Dot, an experienced worker. Dot gave Betty lots of advice as they flew along.

"Start with one kind of flower and stick with it," advised Dot. "You will find the nectar deep in the centre of the flower. Suck it up. The pollen is on the end of the stamens, and you can scrape it into those sacks on your legs. Don't put too much in, or you will be too heavy to fly. Keep the nectar clean. Remember it will be changed to honey for us and Farmer Brown. Well, good luck, and don't pay any attention to those lazy grasshoppers and beetles. Oh yes, I forgot to tell you. Don't worry about the flowers. They like you to visit them. The pollen that will stick to your hairy body will brush off on different flowers and help them to bear seeds and fruit. Good luck!"





Betty first stopped at a lovely patch of new white clover. Down she bumped to the first flower, and held on tightly as it swayed in the wind. Deep in the centre of the blossom Betty sent her tiny tongue and sucked the sweet nectar into her "honey sack". Then she spent a few moments busily packing pollen into her two pollen baskets. This work was fun! She must visit as many flowers as she could before hurrying home!

At last poor Betty's body was so heavy from nectar and pollen that she could barely fly.

"Well," she said to herself, "I'd better start for home. Let me see. I must fly straight this way for almost a mile. I hope I get there safely."

On the way home, Betty flew over a bed of yellow dandelions.

"Come to us, come to us," they shouted. Betty glided down to the nearest flower and said, "Tell your sisters I will visit them tomorrow. To-day I must travel to all the clover blossoms I can find. Now don't you worry. I'll be back!" And with that, she flew safely home.





At the hive, Betty gave her nectar to 'porter' bees, who packed it tightly into the honey cells. Then she packed the pollen in the proper cells. Soon, nurse bees would come and carry it away to feed to the baby bees.

One day Betty Bee met a fat beetle in the dandelion patch.

"I can't understand you bees," croaked the beetle. "All summer you work your silly heads off, gathering stuff from flowers. Then you lie down and die with a smile on your face. I don't see any sense to it at all, at all."

Betty was a little angry. "You lazy thing," she buzzed, "If you had any sense of decency, you wouldn't spend such an idle life, eating the farmer's plants, and sleeping under a dirty old leaf. You are as bad as Johnny Grasshopper and your other friends. Why don't you do some good, like the Bee Family?"

"Hah," snorted the beetle, "What good do you do?"

"Why, Bees are a friend to flowers and man. We carry pollen from flower to flower so that they can have seeds. We store good clean honey in our hive for ourselves and for Farmer Brown. He sells it to people who like good nourishing food to eat. What better life could there be?"

“And if we DO die when our work is done, we die happy. We know that there is a nice store of honey for the new bees to eat all winter. And we know that they will carry on the good work next year. Yes, sir, it is a short, happy, and profitable life we live. It’s the only life for us.”

With that, Betty flew away, leaving old Bill Beetle mumbling, “Don’t see any sense to it at all, at all!”

At last, Betty was so tired she could scarcely fly. Her wings were frayed, and the lovely brown fur was nearly all gone from her body. To-morrow, old Queen Marjorie and the old workers would find a new home. A newly born queen would live with the young bees in the old house, which by this time was filled with more than fifty pounds of delicious honey.

No wonder Betty Bee felt satisfied! She had worked hard, and was ready to die. If she were lucky, she might even go to the new home, and live most of the winter in warmth and rest.

And so Betty fell into a deep, deep sleep.



DO YOU KNOW?

- (1) That a normal average colony of Honey bees, contains only one **QUEEN**, who may lay 2000 eggs per day during her busy season. There may be 50,000 or more **WORKER BEES** (undeveloped females) who do all the work. There will also be several hundred **DRONES** (Male Bees).
- (2) That a worker bee gathers in its entire life .0288 of an ounce of honey. It requires about 556 worker bees to gather a full pound of honey. The Bees would fly approximately 35,584 miles or more than once around the World in doing this work.
- (3) The average life of a worker bee during the working season is about six weeks. Three weeks of this time is spent on work within the hive, and three weeks as a field bee gathering nectar and pollen.
- (4) That nectar, as gathered by the bee, contains about 70% water, honey about 17%. The excess moisture is removed by rapid fanning of the bees wings, over the open cells in the hive and carried out of the hive by the bees own system of ventilation or air conditioning.
- (5) That nectar or honey varies in color from White through Golden to Dark brown, and it is all of equal food value, although the darker the honey, the higher the mineral content of calcium, phosphorous, iron, etc.
- (6) That the value of honey bees in pollinating fruits, vegetables and legumes is many, many times the value of the Honey produced. Natural pollinating insects are disappearing rapidly and each year we will be more and more dependent on the Honey bee for many of our daily foods.
- (7) That Honey is one of the safest foods—Most harmful germs cannot live in Honey for any length of time.

A Few of Many Uses of HONEY

Honey is unique, in that it is the only natural unmanufactured sweet available in commercial quantities. Honey is an important, quick energy producing food, non-fattening, which is contrary to the belief of a great many people. Honey is largely composed of two simple sugars, dextrose and levulose, these sugars are absorbed quickly and easily without taxing the digestive system. Honey is Nature's OLDEST SWEET, it stands, SUPREME.

Try Honey On

SLICED PEACHES—drizzle liquid honey over fresh cut peaches. They will not darken as quickly and honey brings out the real peach flavour.

SWEETEN YOUR GRAPEFRUIT, THE SAME WAY. Honey is equally good on all fresh fruit.

STIR some Honey, either liquid or solid, in your porridge, or try liquid honey over breakfast cereal.

USE THE SOLID HONEY, as a spread on toast, muffins, tea biscuits or spread it on bread for "that after school hungry" boy or girl.

MIX HONEY AND BUTTER (1 cup honey— $\frac{1}{4}$ cup Butter) in mixing machine—keep in a cool place and you have an ideal spread. Add sufficient cinnamon to suit taste, if you desire, and the result is an ideal spread for cinnamon toast.

OVERCOME THAT PERSISTENT COUGH WITH HONEY—Add either liquid or solid to lemon juice, and you will find this of great benefit.

