NATURE SONGS

Lyrics and text by Hy Zaret
Music by Lou Singer

Josef MARAIS
& MIRANDA

Orchestrations by Josef Marais
Directed by Hecky Krasnow
Produced by Hy Zaret
Cover art & Design: Leo Lionni
Science Consultant: Hy Ruchlis

MOTIVATION RECORDS
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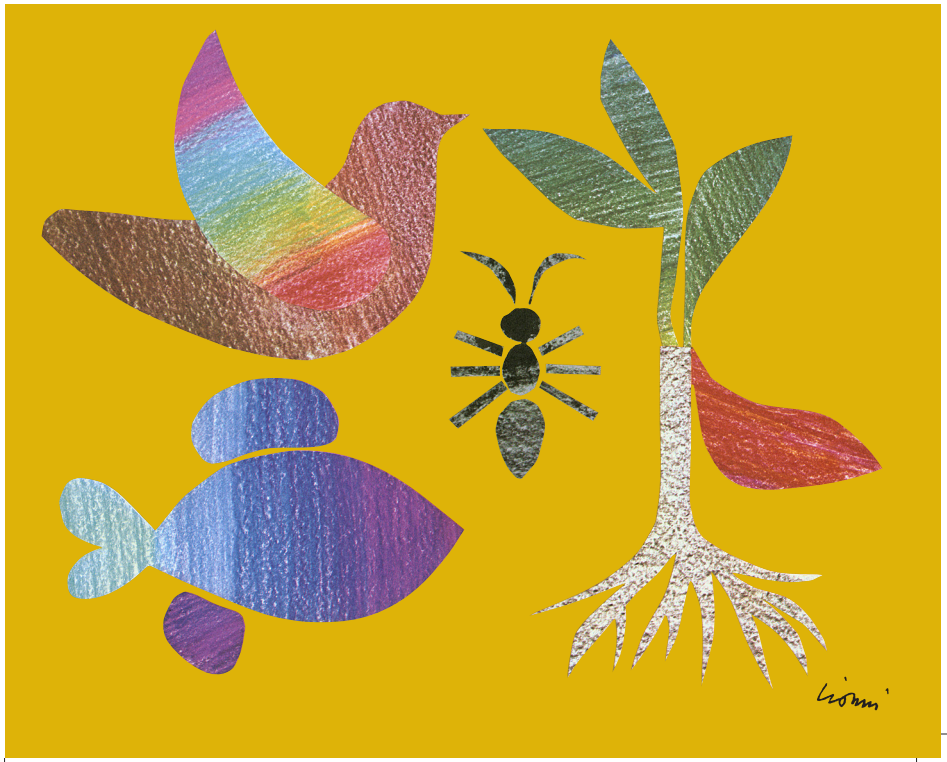
Marais & Miranda
Nature Songs

Motivation Records

from Ballads For The Age Of Science by Hy Zaret and Lou Singer



INTRODUCTION TO "NATURE STUDY"

Come along with me to a land of beauty
Where the skylark sings to an open sky
Where the stately oak and the sweet-smelling pine
Say, "rest awhile", to each passerby

Here we'll see "How the seeds of plants travel"
And learn the secret of "How a bird sings"
We'll find out "Why the leaves change their color"
How "Rocks" came too be and other such things

Soon we'll discover "What's in the ocean"
"How do fish swim" and "How silk is made"
We will uncover "What is an insect"
And "What is a mammal" will be on parade

Come along with me to a land of beauty.
While Nature delights the heart and the eye
We will unfold her innermost secrets
And we'll know forever her "how" and her "why"

WHY DO LEAVES CHANGE THEIR COLOR

Just like many people, many trees
Take a winter vacation
And in the Fall they shed their leaves
As part of the preparation.

But before the leaves leave the tree their colors change... please tell me...

THE BALANCE OF NATURE MUST NOT BE UNBALANCED
THE BALANCE OF NATURE SHOULD BE UNDERSTOOD
IF THE BALANCE OF NATURE IS EVER UNBALANCED
WHAT EVER WILL HAPPEN WILL NOT BE GOOD

If too many trees are chopped down, we have floods and soil erosion and a reduced water supply. If too many plants are destroyed, the animals may not have enough food and oxygen. If too many animals are killed, the minerals and carbon dioxide that animals supply to plants will be diminished.

THE BALANCE OF NATURE MUST NOT BE UNBALANCED
THE BALANCE OF NATURE SHOULD BE UNDERSTOOD
IF THE BALANCE OF NATURE IS EVER UNBALANCED
WHAT EVER WILL HAPPEN WILL NOT BE GOOD

SAILING, SAILING, ARE TINY SEEDS OF FRUITS
SOME HAVE WINGS AND SOME HAVE SAILS
AND SOME HAVE PARACHUTES

Squirrels bury nuts we know
And even little Ants
Will carry tiny seeds that grow
Into great big plants
When you walk the seeds of weeds
Will often will cling to you
And there are seeds that travel by
Plane and auto too

REPEAT REFRAIN

THE BALANCE OF NATURE

If it weren't for the birds, remember, my pet
The Balance of Nature would be upset
The insects of the world would surly double
And the people of the world would be in trouble

THE BALANCE OF NATURE MUST NOT BE UNBALANCED
THE BALANCE OF NATURE SHOULD BE UNDERSTOOD
IF THE BALANCE OF NATURE IS EVER UNBALANCED
WHAT EVER WILL HAPPEN WILL NOT BE GOOD

If it weren't for the snakes, mice would multiply
And with out the algae, the fish would die
The flowers and the fruits need pollination —
And the Balance of Nature, consideration

WHY DO LEAVES CHANGE THEIR COLOR
WHY DO LEAVES CHANGE THEIR COLOR
WHY DO LEAVES CHANGE THEIR COLOR
EARLY IN THE AUTUMN

All Spring and Summer chlorophyll
Makes the leaves a lovely green
But at the time of autumn's chill
The chlorophyll then leaves the scene

The leaves have other compounds too
That are till not now we couldn't see
Now these compounds come in view
And color the leaves upon the tree

THAT'S WHY LEAVES CHANGE THEIR COLOR
THAT'S WHY LEAVES CHANGE THEIR COLOR
THAT'S WHY LEAVES CHANGE THEIR COLOR
EARLY IN THE AUTUMN

Red and Gold and Orange too
Are the leaves upon the tree
Soon they'll say farewell to you
Then, how bare the tree will be

WHAT ARE THE PARTS OF A TREE

Trunk! Roots! Crown! Bark! Cambium!

A tree has roots, a trunk and a crown
The trunk grows up and the roots grow down
The roots grow down and spread all around
And hold the tree firmly in the ground

Hold the tree... hold the tree
Hold the tree... hold the tree
Hold the tree firmly in the ground

The roots also provide nourishment for the tree... How do they do that?

The root hairs absorb large amounts of water and minerals from the earth. This water travels through the roots, through the trunk, and through the branches to the leaves. The leaves use it in making food for the tree. The minerals are used by cells in other parts of the tree for new growth. The bark is the outer protective covering of the tree. Under the bark is the cambium from which new wood and bark grow.

Trunk! Roots! Crown! Bark! Cambium!

WHAT IS AN INSECT
(Cricket in a Thicket)

A cricket in a thicket
Said to a butterfly
"They say we both are insects.
Oh, can you tell me why?
Oh, can you tell me why?"

The butterfly looked puzzled
And scratched its tiny head

Sardine and tuna for the cannery

What's in the ocean, what's in the ocean
What's in the ocean? What else can there be?

Coral and sea plants, lobsters and walruses
Snails, whales, and turtles and other animals

What's in the water, salt and magnesium
Bromine and iodine and other minerals

What's in the ocean, what's in the ocean
What's in the ocean, that's enough for me... and me

HOW DO THE SEEDS OF PLANTS TRAVEL

A seed contains a tiny plant, a supply of food and a protective seed coat. The tiny plant is called an "embryo" and it the part of the seed that will grow into a plant.

Elm and Birch and Maple trees
Milkweed and Dandelion
Have seeds that travel with the breeze
Travel, rain or shine

Birds and other animals
Pick fruit right off the trees
And when they finish with the fruit
Drop and scatter seeds

SAILING, SAILING, WHERE EVER THE BREEZES BLOW
THE SEEDS OF PLANTS KEEP PLANTING SEEDS
EVERYWHERE THEY GO

One day when they are kind of big and through with “eating like a pig”
They look around to find a twig to fasten their cocoons to
The farmer knows just what it means; he rushes racks upon the scene —
No worm will lack a bit of rack to fasten its cocoon to

Now they begin to spin cocoons and here is how they do it
From the upper lip there comes a “gluey-gooey” fluid
As the fluid hits the air to silken thread it hardens
They spin and wind the silk they spin round and round their bodies

This is the way cocoons are spun and after the cocoons are done
The processing is then begun to make them into raw silk

The cocoons are sorted for color and soaked in water to soften the gum that holds them together. Then the cocoons are unwound and strands of several *of them are joined together to form a thread. These threads are processed and combined to make stronger threads that may be woven into a variety of silk products such as satin, crepe, velvet and brocade.*

This is the way that silk is made, silk or satin or brocade

This is the way that silk is made by the little silkworm

WHAT’S IN THE OCEAN

What’s in the ocean, what’s in the ocean
What’s in the ocean, what is there to see?

Mud on the bottom, waves on the surface
Fish in the middle swimming rapidly

Kingfish and codfish, sailfish and swordfish
Small fish and large fish moving restlessly
Herring for breakfast, flounder for dinner

“Because we are six legged?”
“That’s right”, the cricket said
“That’s right”, the cricket said

The cricket in the thicket
Then asked the butterfly
“What else makes you an insect?”
And it got this reply:
And it got this reply:

“For ladybugs and crickets,
For bees and butterflies,
For every adult insect
This little rule applies:
This little rule applies:”

“All insects have antennae,
And special kinds of eyes,
Their bodies all have three parts,
Regardless of their size.
Regardless of their size.”

Just then they spied a spider
Beside the butterfly
“That spider is not an insect!”,
They heard the cricket cry.
They heard the cricket cry.

"The spider's not six-legged
As anyone can see
And it has no antennae
It's not like you and me!
It's not like you and me!"

"Farewell, my little cricket."
"So long, sweet butterfly."
"We've had a lovely meeting,
Farewell, so long, goodbye.
Farewell, so long, goodbye."

WHAT IS A MAMMAL

Mammals are warm-blooded and their body temperatures always remain about the same, in hot or cold weather. Cold-blooded creatures like snakes and frogs and insects and fish get sluggish when it's cold and many of them cannot stand the heat. The warm blooded mammals have a great advantage in adjusting to different kinds of weather and climate.

Q: What is a mammal?

Why, anyone can tell you what a mammal is
Anyone who understands —
They're warm blooded, have hair on their bodies
And suckle their young from mammary glands

A camel is a mammal and so is a cat
A dog, a lion, a rabbit and a bat
And a whale might seen like a fish to you
But a whale is really a mammal too
And then, of course, there's the chimpanzee

A streamlined body that's built for flight
With hollow bones that are strong and light
And here and there little sacs of air
Attached to its lungs give it air to spare

What does a bird have that I have not?
A special kind of foot!... that's what!
Some of them have webbed feet
To help them when they swim
Some have feet that'll help them hop
Or perch out on a limb

What does a bird have that I have not?
Feathers! Oil gland! Beak! Tail! Hollow Bones! Air Sacs and Wings and a few other things! ... That's what!
That what a bird has that I have not!

HOW SILK IS MADE

This is the way that silk is made, silk is made, silk is made
This is the way that silk is made by the little silk worm
A lady moth will lay her eggs, the farmer takes away her eggs
The farmer takes away her eggs and puts them into storage

The farmer takes away her eggs and puts them into storage
In the Spring the eggs are hatched in an incubator
Now the eggs are tiny worms, the worms are hearty eaters
They munch a bunch mulberry leaves and need a lot of feeding

This is the time when all they do is eat and grow the whole day through
Munch and crunch and while they chew, they keep a-growing bigger

HOW DOES A BIRD SING

The song of a bird is a very pretty thing. But how in the world does a little birdie sing?

At the bottom of its wind pipe
A Syrinx is located
The Syrinx is a voice box
And muscles regulate it
When air goes through the syrinx
Its membranes are vibrated
And then the air is merry with
The music it created

WHAT DOES A BIRD HAVE THAT I HAVE NOT

What does a bird have that I have not?
Feathers! That's what!
Contour feathers for flying
And downy for warmth
Colored feathers to attract a mate
And to help them propagate

What does a bird have that I have not?
An oil gland at the base of its tail feathers — that's what!
When their feathers are ruffled
To get them tidy and cleaned
They comb their feathers with oil until
They're water-proofed and preened.

And furthermore, among other things
A bird has a beak, a tail and wings

Well, he's a mammal like you and me

A cow is a mammal and so is a horse
A deer and an elephant? well, of course
A sheep and a goat and a kangaroo
And many other we see at the zoo
It seems to me I've named quite a few
How would you like to name some too

Go ahead... name some...

Now, anyone can tell you what a mammal is
Anyone who understands —
They're warm blooded, have hair on their bodies
And suckle their young from mammary glands

HOW DO THE FISH SWIM

Where do the fish swim, fish swim? In the water nat'rally
Where do the fish swim? Fish swim in the river and the sea

How do the fish swim, fish swim, with no motors and no sails
How do the fish swim? Fish swim with the movement of their tails

Fish have tails to push with
And fish have fins to steer with
And fish have nostrils, eyes and ears to smell and see and hear with

How do the fish breathe, fish breathe, on the move or standing still?
How do the fish breathe? Fish breathe through the action of their gills

Fish don't really breathe the way we do. A fish gets its oxygen from the air dissolved in the water. It gulps in water and pushes it out past the gills. There, oxygen passes through thin walls of tiny blood vessels into the body. At the same time waste carbon dioxide is picked up from the blood vessels in the gills and goes out with the water.

REPEAT LAST VERSE

SONG OF THE ROCKS

We are all solid members of the Rock Family
We're Metamorphic, Igneous, or Sedimentary
I'm Granite, I'm Agate, I'm Sandstone, I'm Soapstone
We're Flint, Gneiss and Gypsum and Quartzite
I'm Limestone.... I'm Pumice... and I am Mica Schist
We're Porphyry, Obsidian, and Marble
We are all different branches of the same fam'ly tree
But we're all solid members of the Rock Family

Hey don't forget us... I'm quartz... I'm slate... I'm shale... I'm hornblende. We're cinnabar... hematite... talc.

Metamorphic, Igneous, or Sedimentary
We are all solid members of the Rock Family

Q: Which of you are the metamorphic rocks?

A: We are... I'm slate... I'm gneiss... I'm schist... I'm quartzite... We were formed when other rocks were squeezed and changed by heat and pressure in the earth.

Q: Which of you are the igneous rocks?

A: We are... I'm granite... I'm basalt... We're two of the igneous rocks... We were formed when molten rock solidified.

Q: And how about the sedimentary rocks...

A: We are sedimentary rocks... limestone... sandstone... shale... We were formed when rocks were broken down by "weathering" and deposited in layers in the rivers, lakes and oceans.

We are all solid members of the Rock Family
We're Metamorphic, Igneous, or Sedimentary
I'm Granite, I'm Agate, I'm Sandstone, I'm Soapstone
We're Flint, Gneiss and Gypsum and Quartzite
I'm Limestone, I'm Pumice... and I am Mica Schist
We're Porphyry, Obsidian, and Marble
We are all different branches of the same fam'ly tree
But we're all solid members of the Rock Family

Metamorphic, Igneous, or Sedimentary
We are all solid members of the Rock Family

THE BIRDS HAVE A LANGUAGE

The birds have a language that is their very own
A bird uses music to make its feelings known
A Robin will sing out when he calls his mate
A baby "peeps" when the mother bird is late
When blue jays are angry, you hear them far and near
And mocking birds will mimic 'most any sound they hear
The birds have a language, a language of their own
A bird uses music to make its feelings known