



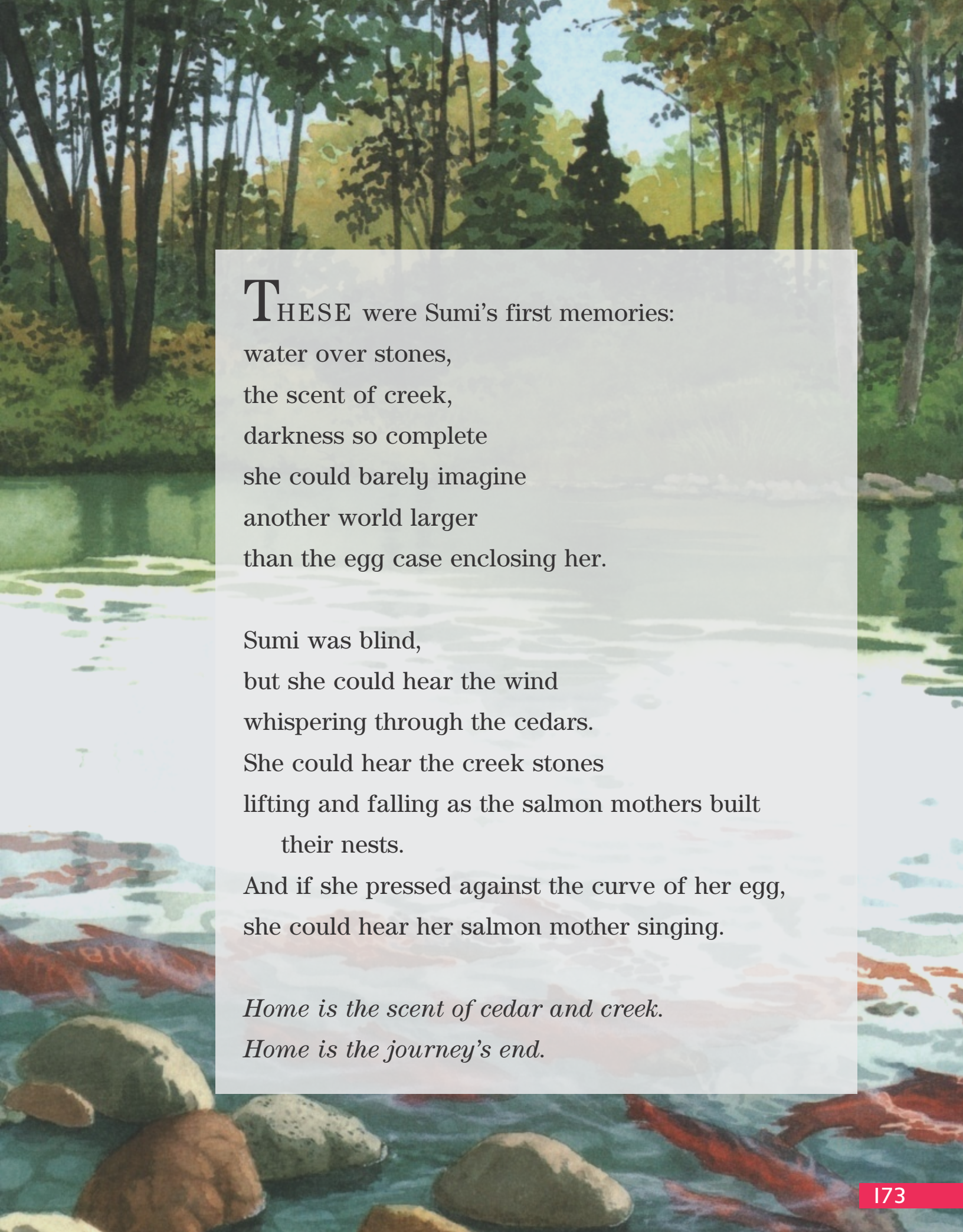
Genre Rhyming Narrative Nonfiction

Essential Question

What are some similarities that natural cycles share?

Annette LeBox
& Karen Reczuch

*Salmon
Creek*



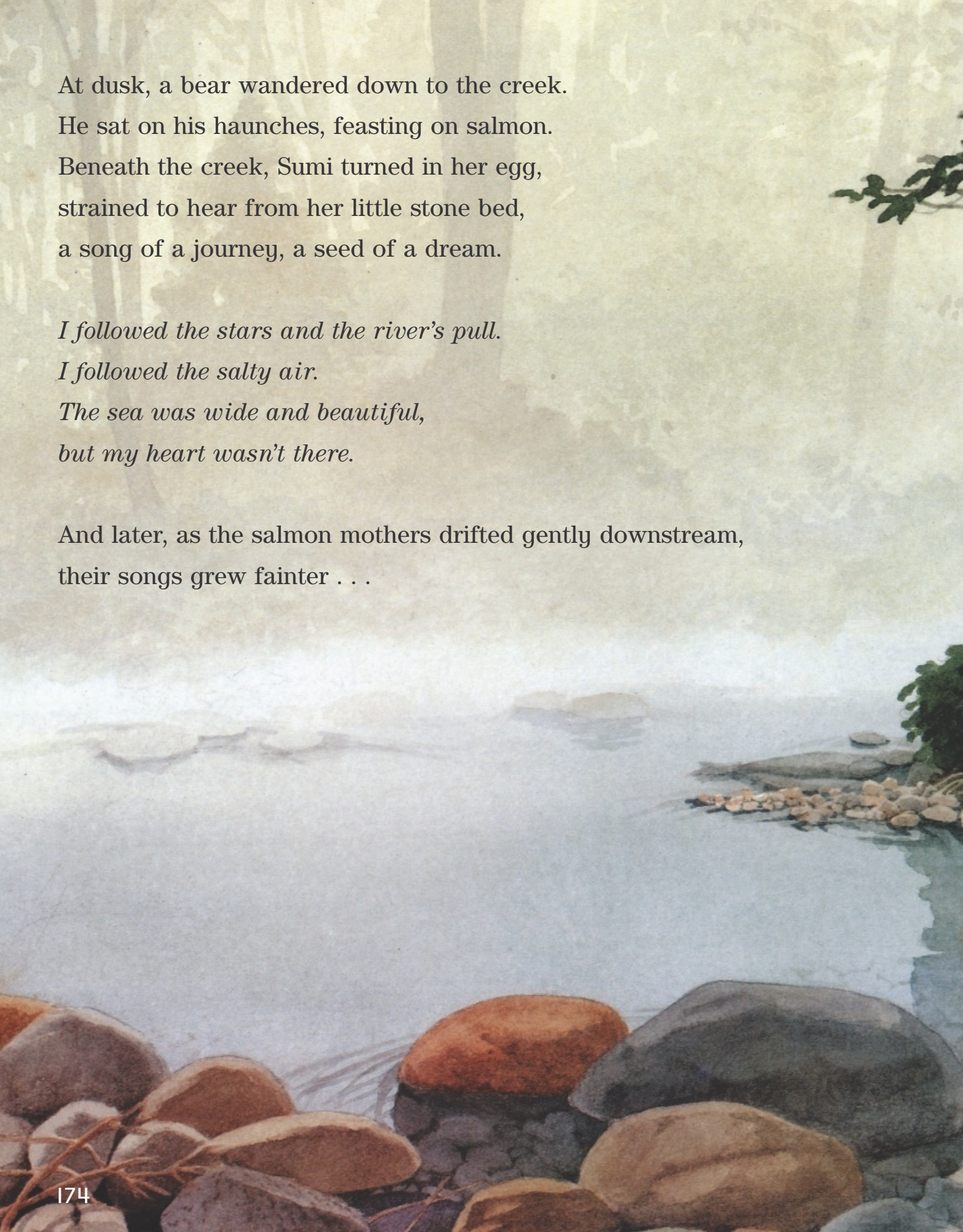
THESE were Sumi's first memories:
water over stones,
the scent of creek,
darkness so complete
she could barely imagine
another world larger
than the egg case enclosing her.

Sumi was blind,
but she could hear the wind
whispering through the cedars.
She could hear the creek stones
lifting and falling as the salmon mothers built
their nests.

And if she pressed against the curve of her egg,
she could hear her salmon mother singing.

Home is the scent of cedar and creek.

Home is the journey's end.



At dusk, a bear wandered down to the creek.
He sat on his haunches, feasting on salmon.
Beneath the creek, Sumi turned in her egg,
strained to hear from her little stone bed,
a song of a journey, a seed of a dream.

I followed the stars and the river's pull.

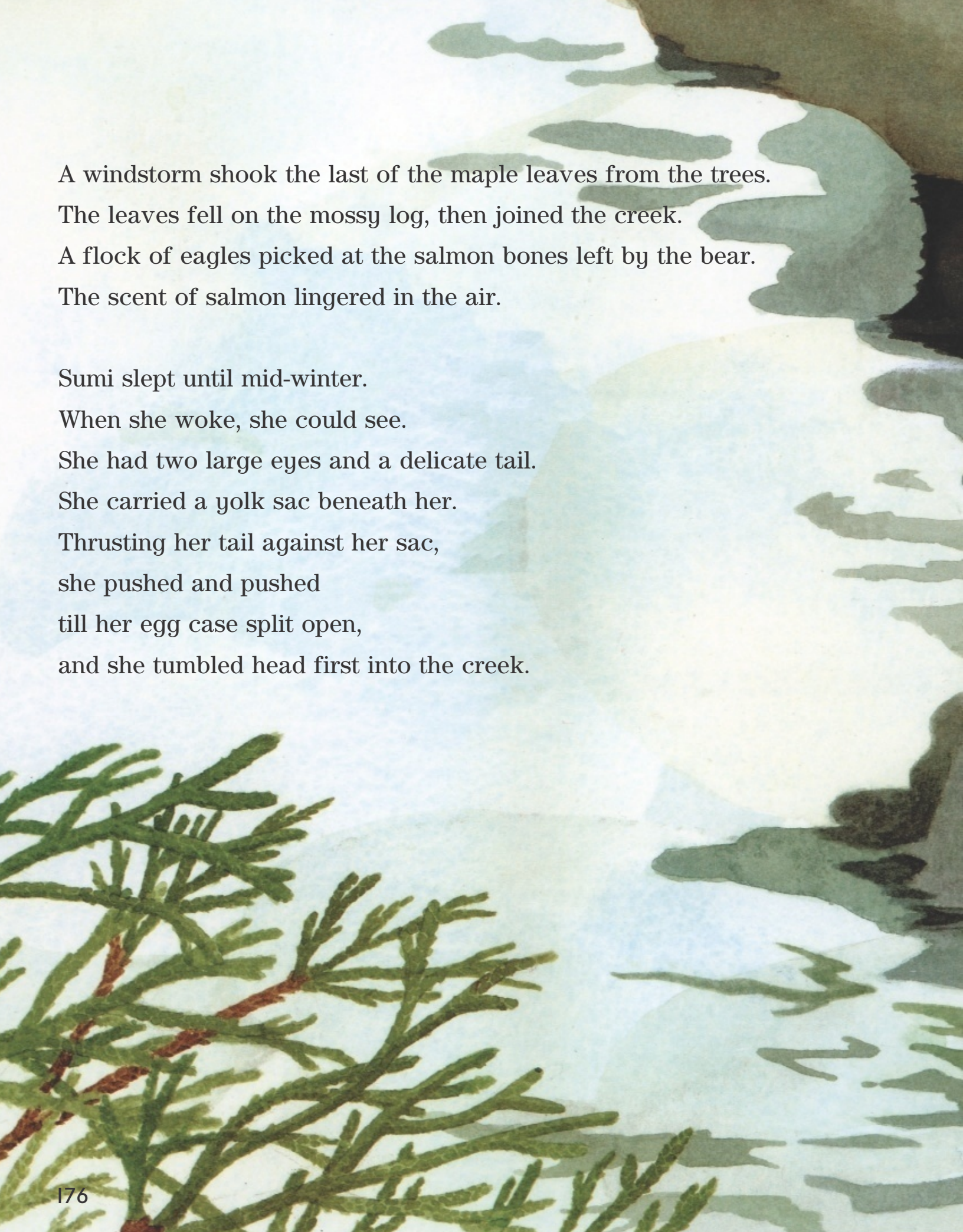
I followed the salty air.

The sea was wide and beautiful,

but my heart wasn't there.

And later, as the salmon mothers drifted gently downstream,
their songs grew fainter . . .





A windstorm shook the last of the maple leaves from the trees.
The leaves fell on the mossy log, then joined the creek.
A flock of eagles picked at the salmon bones left by the bear.
The scent of salmon lingered in the air.

Sumi slept until mid-winter.
When she woke, she could see.
She had two large eyes and a delicate tail.
She carried a yolk sac beneath her.
Thrusting her tail against her sac,
she pushed and pushed
till her egg case split open,
and she tumbled head first into the creek.



She was as small as a pine needle,
scared and alone.

She hid beneath the gravel
till her strength had grown.

When her egg sac was empty,
she swam upward,
followed a school of fry.

She widened her nostrils,
memorized each scent:
moss and fern and cedar,
maple and damp earth!
Her birth creek. Home.



As the days became warmer,
Algae grew on Salmon Creek.
Ducks dabbled in the bright green bloom.
Dragonflies and mayflies fed there,
and the fry fed on insects and larvae.

Sumi swam in quiet pools,
hunted among schools of silver fry,
hid from the heron's watchful eye.

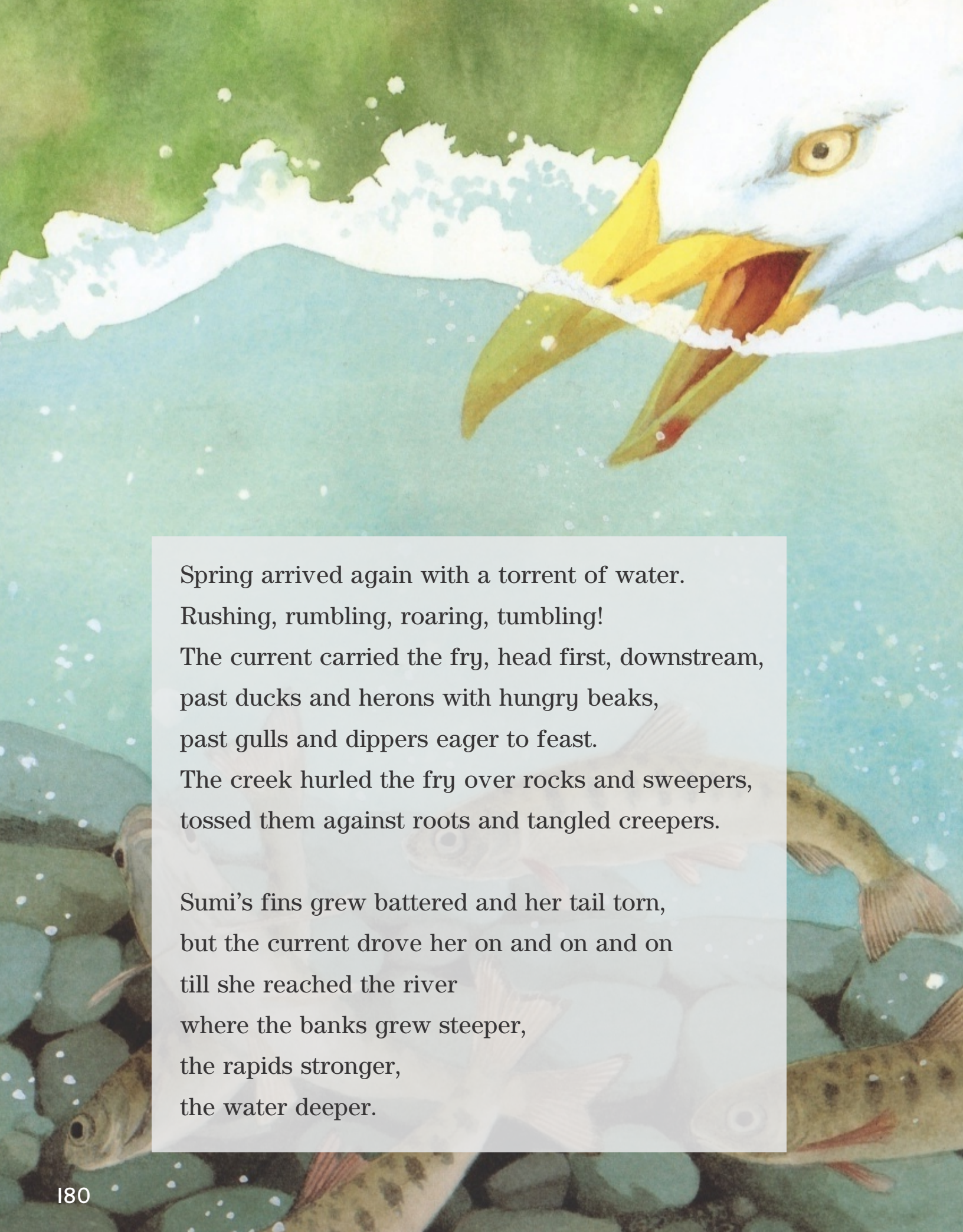
Summer turned to fall.

When winter came, snow fell on Salmon Creek.

A raccoon crept silently through the icy stream.

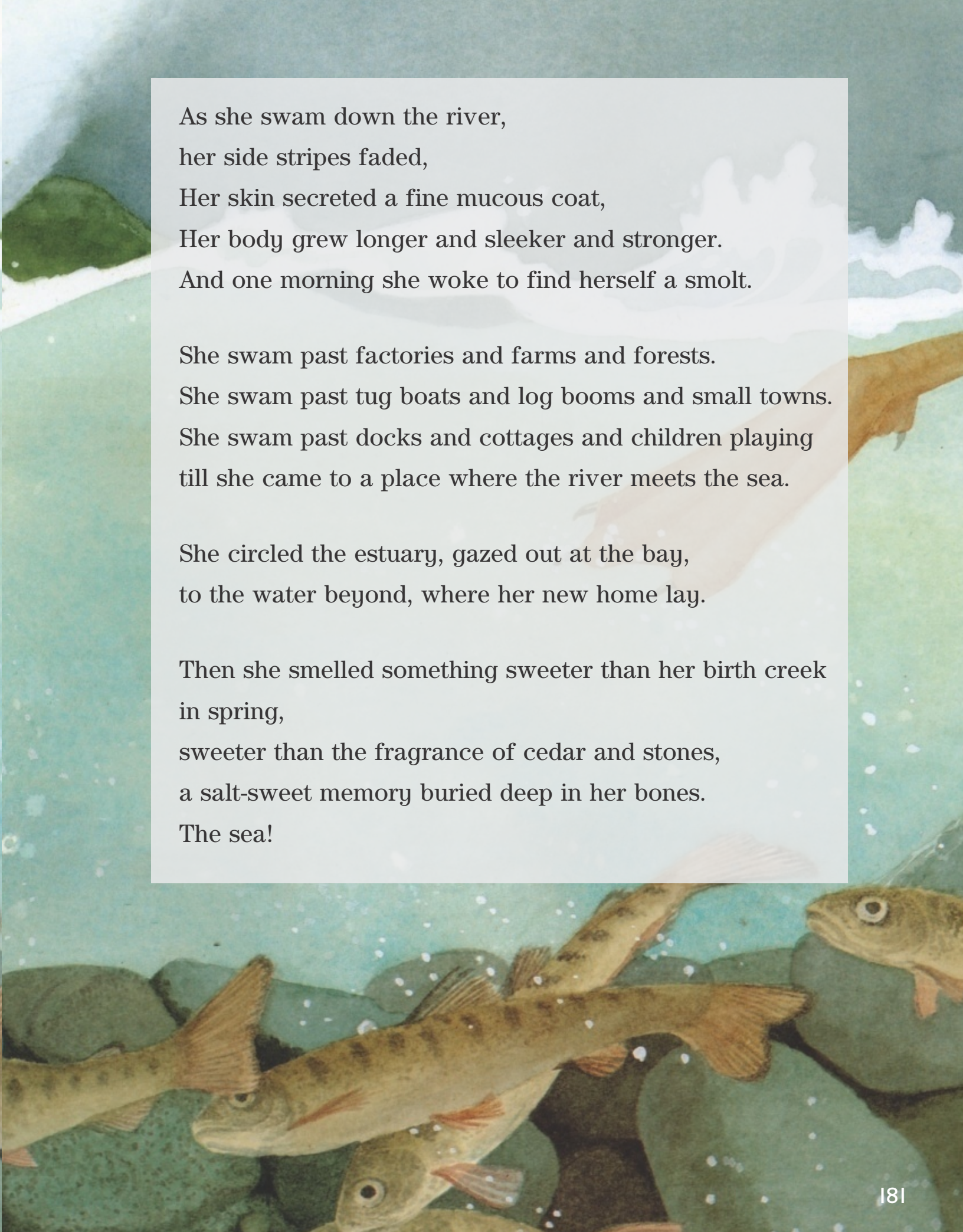
Beneath a root, Sumi woke and slept,
dreaming of spring.





Spring arrived again with a torrent of water.
Rushing, rumbling, roaring, tumbling!
The current carried the fry, head first, downstream,
past ducks and herons with hungry beaks,
past gulls and dippers eager to feast.
The creek hurled the fry over rocks and sweepers,
tossed them against roots and tangled creepers.

Sumi's fins grew battered and her tail torn,
but the current drove her on and on and on
till she reached the river
where the banks grew steeper,
the rapids stronger,
the water deeper.

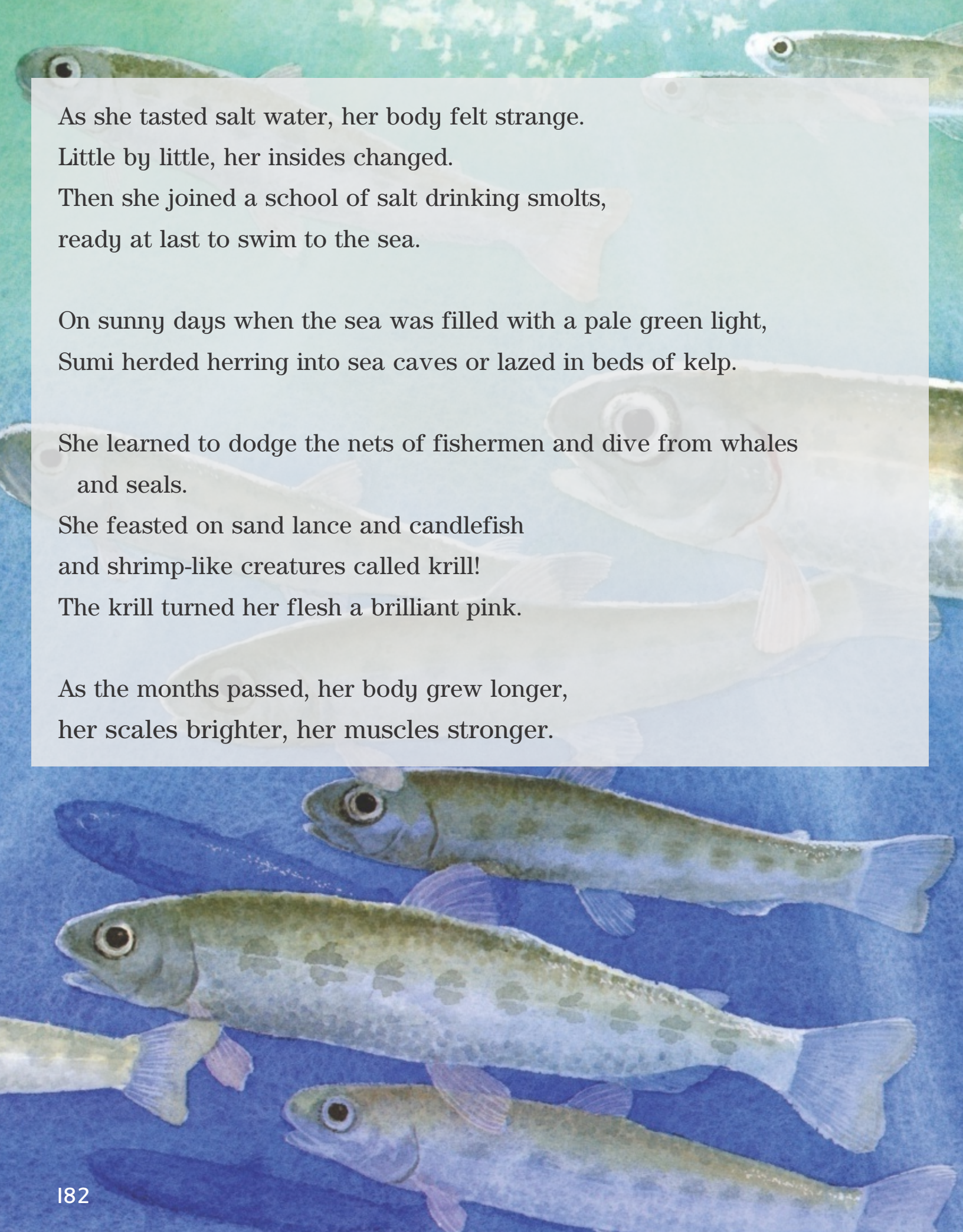
The background of the page is a watercolor-style illustration of a river scene. In the upper portion, a hand with a light skin tone points from the right side towards the center of the page. The water is depicted in various shades of green and blue, with white foam representing waves or rapids. In the lower portion, several brownish-gold fish are swimming over dark, rounded rocks. The overall style is soft and artistic.

As she swam down the river,
her side stripes faded,
Her skin secreted a fine mucous coat,
Her body grew longer and sleeker and stronger.
And one morning she woke to find herself a smolt.

She swam past factories and farms and forests.
She swam past tug boats and log booms and small towns.
She swam past docks and cottages and children playing
till she came to a place where the river meets the sea.

She circled the estuary, gazed out at the bay,
to the water beyond, where her new home lay.

Then she smelled something sweeter than her birth creek
in spring,
sweeter than the fragrance of cedar and stones,
a salt-sweet memory buried deep in her bones.
The sea!

The background of the page is a detailed illustration of a school of fish. The fish are depicted in various shades of green, blue, and pink, swimming in a clear, light blue water. The fish are of different sizes and are arranged in a loose, natural-looking school. The overall style is soft and painterly, with visible brushstrokes and a gentle, ethereal atmosphere. The fish are shown from various angles, some swimming towards the viewer and others away from it, creating a sense of movement and depth.

As she tasted salt water, her body felt strange.

Little by little, her insides changed.

Then she joined a school of salt drinking smolts,
ready at last to swim to the sea.

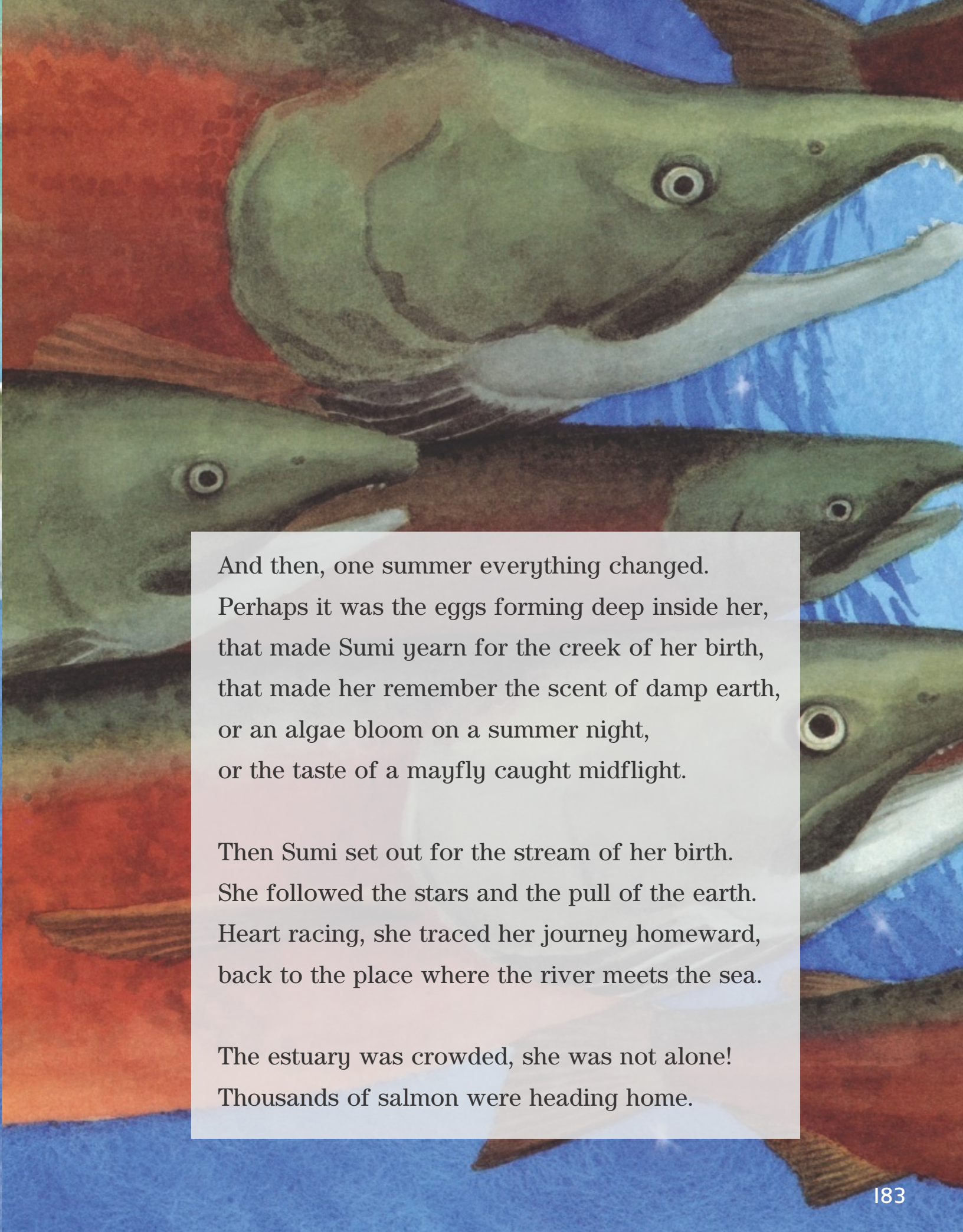
On sunny days when the sea was filled with a pale green light,
Sumi herded herring into sea caves or lazed in beds of kelp.

She learned to dodge the nets of fishermen and dive from whales
and seals.

She feasted on sand lance and candlefish
and shrimp-like creatures called krill!

The krill turned her flesh a brilliant pink.

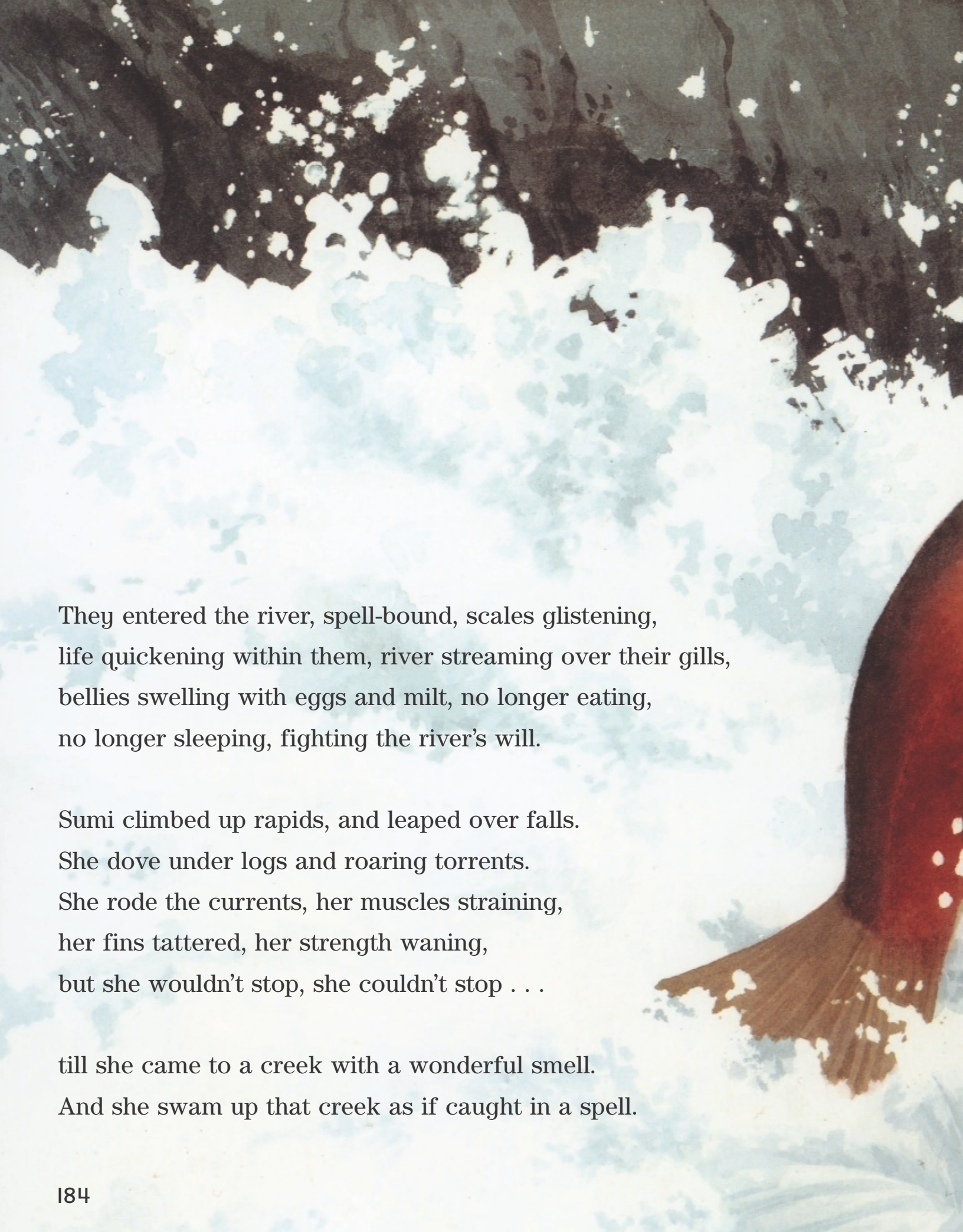
As the months passed, her body grew longer,
her scales brighter, her muscles stronger.

An illustration of several salmon swimming in water. The water is depicted with vibrant colors: a large red area on the left, a blue area on the right, and a brownish-red area at the bottom. The salmon are shown in various orientations, with their heads pointing towards the right. The largest salmon is in the upper center, with its mouth open, showing its teeth. Other salmon are visible below and to the sides, some with their mouths open as if feeding. The style is painterly and expressive.

And then, one summer everything changed.
Perhaps it was the eggs forming deep inside her,
that made Sumi yearn for the creek of her birth,
that made her remember the scent of damp earth,
or an algae bloom on a summer night,
or the taste of a mayfly caught midflight.

Then Sumi set out for the stream of her birth.
She followed the stars and the pull of the earth.
Heart racing, she traced her journey homeward,
back to the place where the river meets the sea.

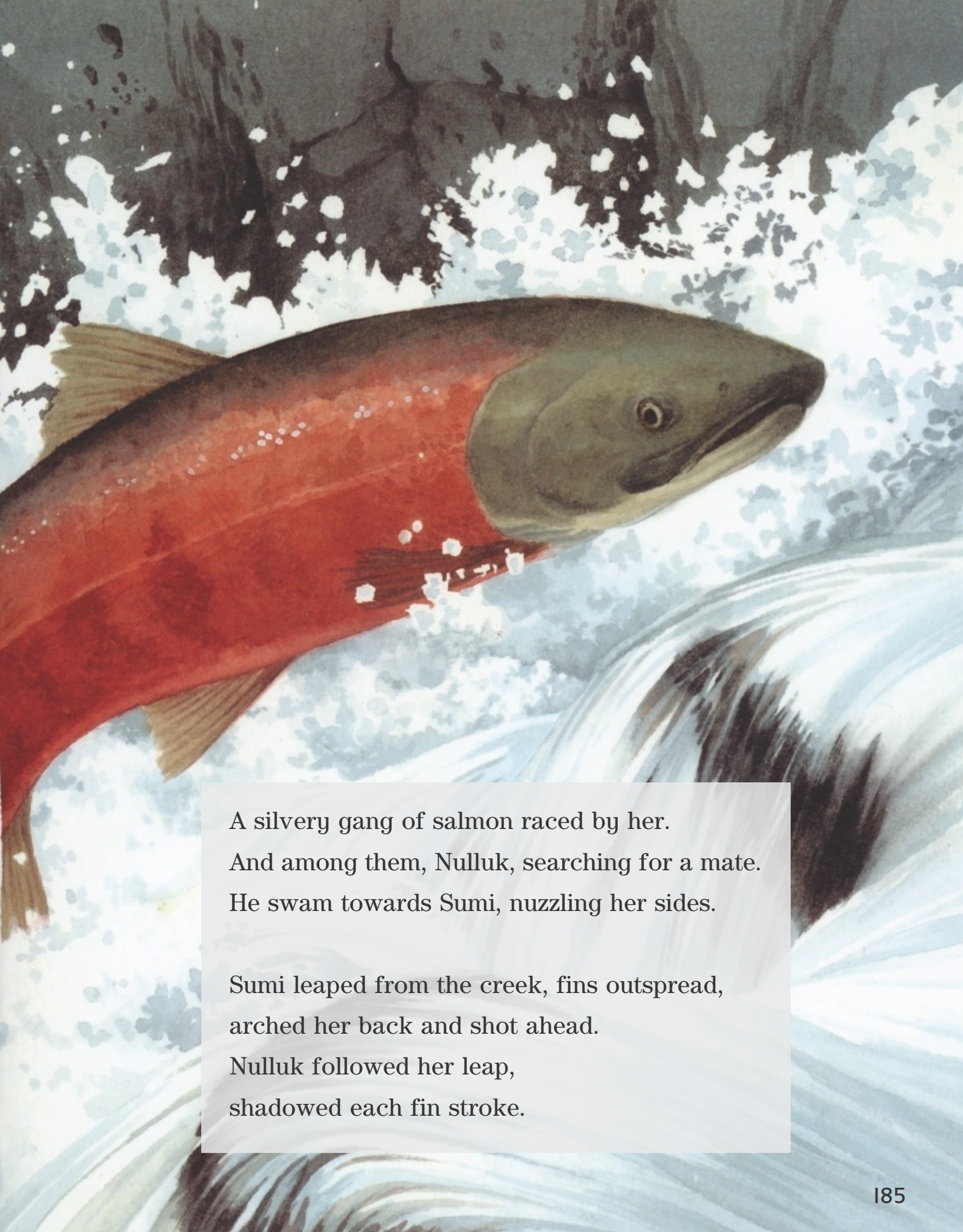
The estuary was crowded, she was not alone!
Thousands of salmon were heading home.

The background is a watercolor illustration of a river. The top half is dominated by dark, swirling water with white foam and splashes. Below this, the water is a lighter, pale blue with soft, white foam. On the right side, the tail and fins of a large red fish are visible, swimming towards the bottom right. The overall style is soft and painterly.

They entered the river, spell-bound, scales glistening,
life quickening within them, river streaming over their gills,
bellies swelling with eggs and milt, no longer eating,
no longer sleeping, fighting the river's will.

Sumi climbed up rapids, and leaped over falls.
She dove under logs and roaring torrents.
She rode the currents, her muscles straining,
her fins tattered, her strength waning,
but she wouldn't stop, she couldn't stop . . .

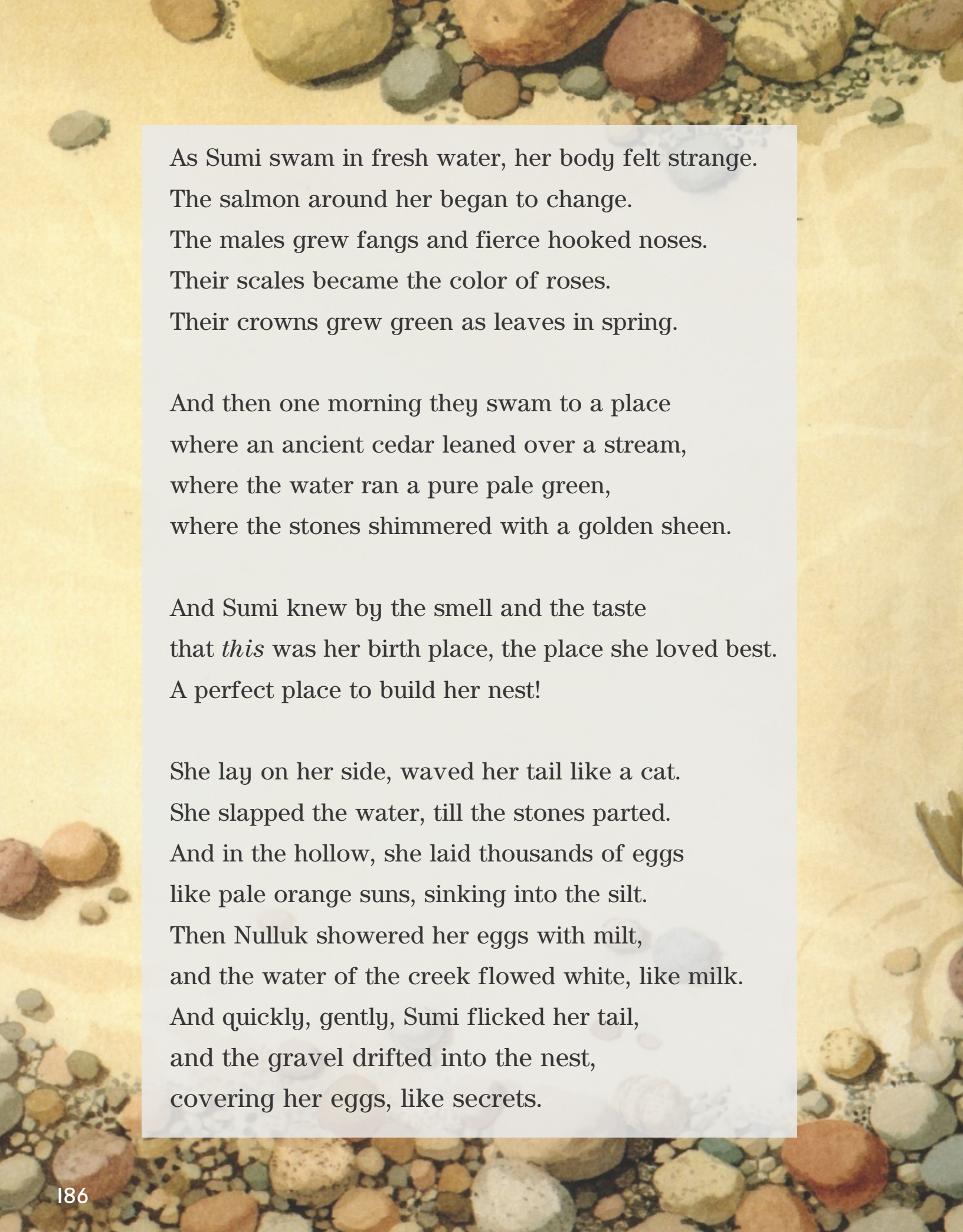
till she came to a creek with a wonderful smell.
And she swam up that creek as if caught in a spell.



A silvery gang of salmon raced by her.
And among them, Nulluk, searching for a mate.
He swam towards Sumi, nuzzling her sides.

Sumi leaped from the creek, fins outspread,
arched her back and shot ahead.

Nulluk followed her leap,
shadowed each fin stroke.

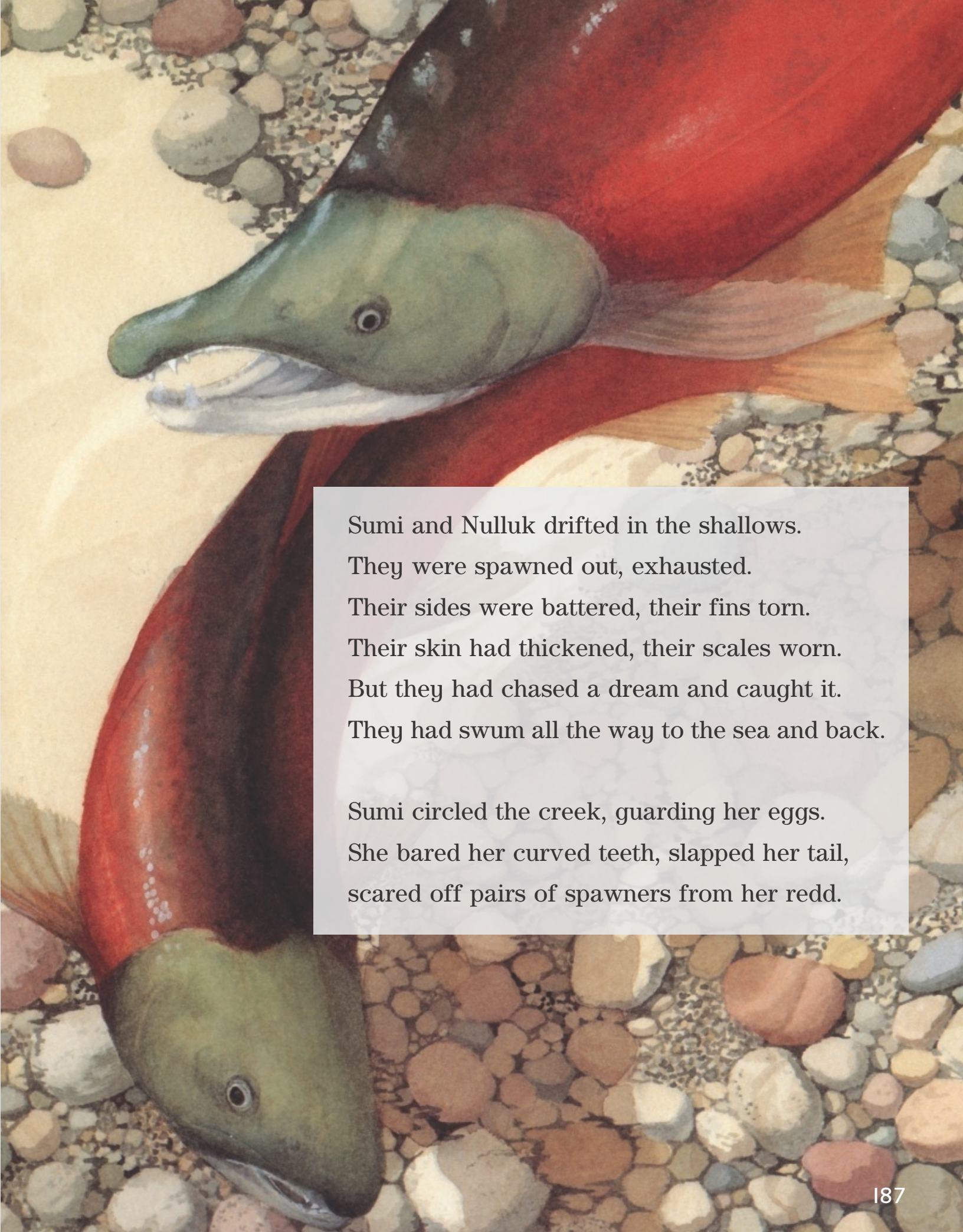


As Sumi swam in fresh water, her body felt strange.
The salmon around her began to change.
The males grew fangs and fierce hooked noses.
Their scales became the color of roses.
Their crowns grew green as leaves in spring.

And then one morning they swam to a place
where an ancient cedar leaned over a stream,
where the water ran a pure pale green,
where the stones shimmered with a golden sheen.

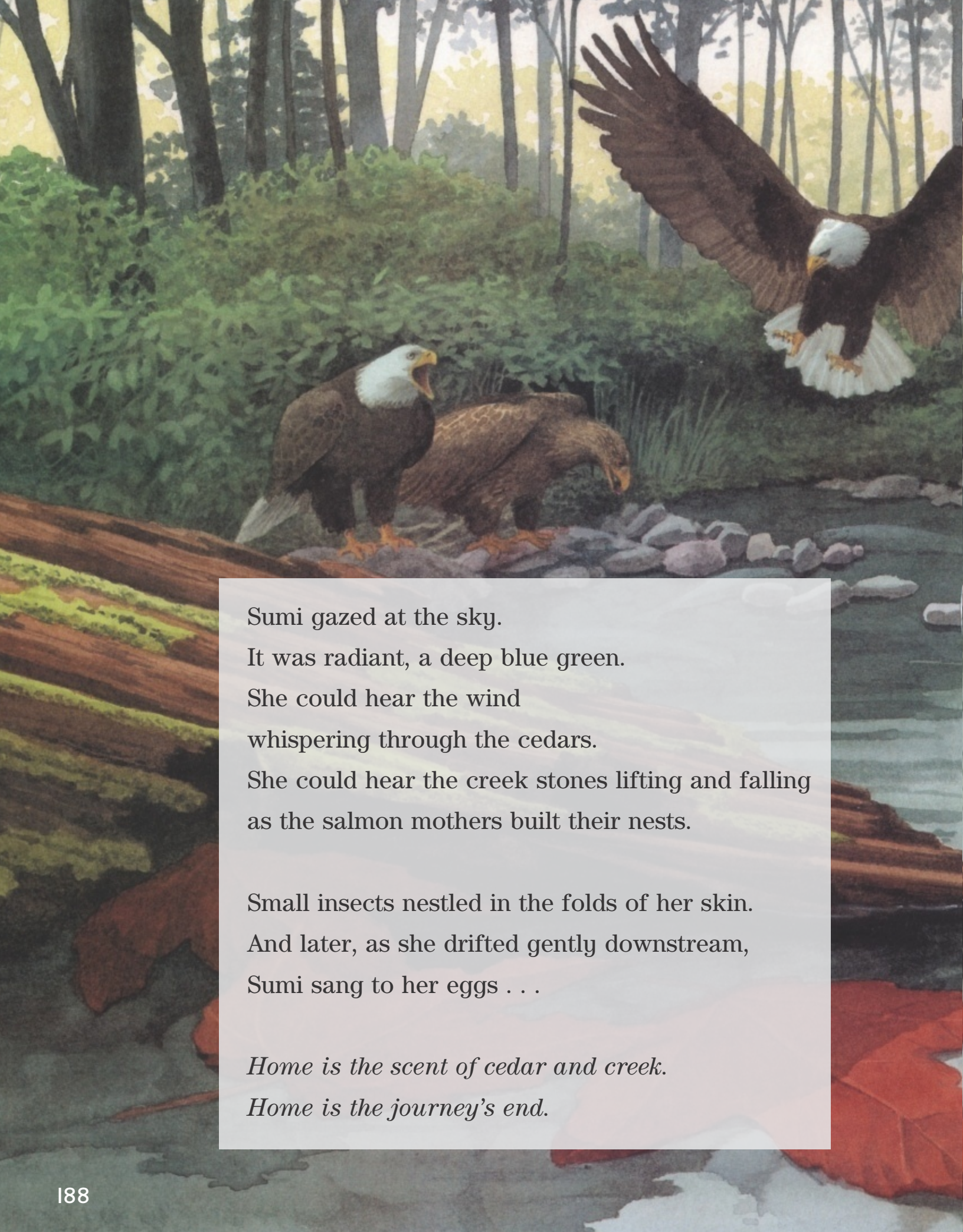
And Sumi knew by the smell and the taste
that *this* was her birth place, the place she loved best.
A perfect place to build her nest!

She lay on her side, waved her tail like a cat.
She slapped the water, till the stones parted.
And in the hollow, she laid thousands of eggs
like pale orange suns, sinking into the silt.
Then Nulluk showered her eggs with milt,
and the water of the creek flowed white, like milk.
And quickly, gently, Sumi flicked her tail,
and the gravel drifted into the nest,
covering her eggs, like secrets.

An illustration of two salmon in a shallow stream. The salmon in the foreground is facing left, with its mouth slightly open, showing small teeth. It has a greenish-brown head and a bright red body. The salmon in the background is facing right, also with its mouth slightly open. It has a similar coloration. The stream bed is composed of various sized, rounded stones in shades of brown, tan, and grey. The water is a pale yellowish-brown color, suggesting shallow, clear water. The overall style is that of a children's book illustration, with soft colors and a focus on naturalistic detail.

Sumi and Nulluk drifted in the shallows.
They were spawned out, exhausted.
Their sides were battered, their fins torn.
Their skin had thickened, their scales worn.
But they had chased a dream and caught it.
They had swum all the way to the sea and back.

Sumi circled the creek, guarding her eggs.
She bared her curved teeth, slapped her tail,
scared off pairs of spawners from her redd.

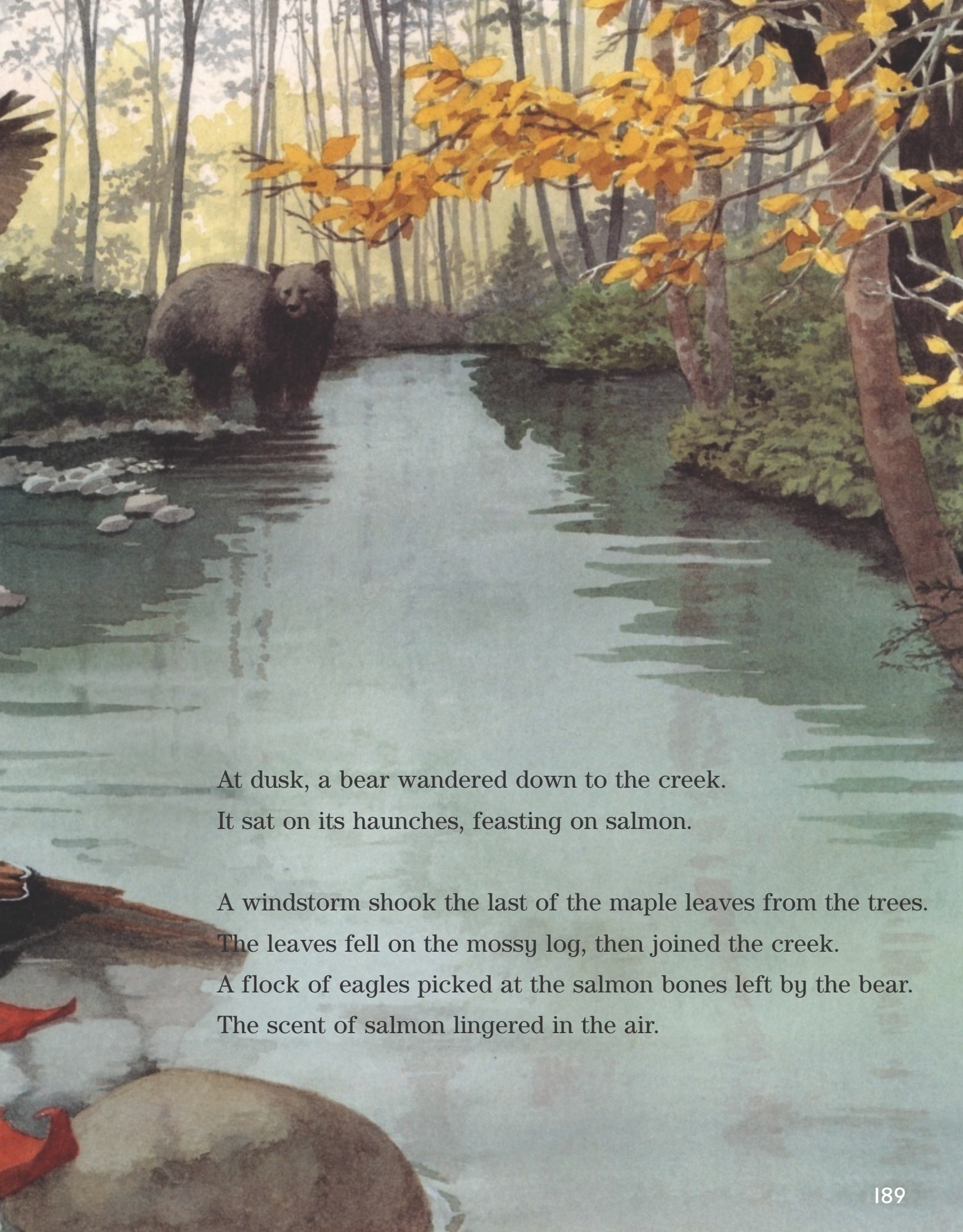


Sumi gazed at the sky.
It was radiant, a deep blue green.
She could hear the wind
whispering through the cedars.
She could hear the creek stones lifting and falling
as the salmon mothers built their nests.

Small insects nestled in the folds of her skin.
And later, as she drifted gently downstream,
Sumi sang to her eggs . . .

Home is the scent of cedar and creek.

Home is the journey's end.



At dusk, a bear wandered down to the creek.
It sat on its haunches, feasting on salmon.

A windstorm shook the last of the maple leaves from the trees.
The leaves fell on the mossy log, then joined the creek.
A flock of eagles picked at the salmon bones left by the bear.
The scent of salmon lingered in the air.

The Life Cycle of the Coho Salmon

THERE ARE FIVE different species of salmon that begin their lives in the waters of the Pacific Northwest — sockeye, chinook, pink, chum and coho. Each species has a unique appearance as well as different spawning habits and life cycles. This timeline shows the life cycle of the coho salmon.



1. In the late fall, usually November, the female coho lays eggs in the gravel of her freshwater birth creek. The male coho fertilizes the eggs with a white substance called milt. Eleven or twelve days later, the male and female salmon die.

2. In December or January, the eggs hatch. The tiny salmon, called alevins, remain in the gravel, living on food from their yolk sacs.



3. By March or April, the young salmon lose their yolk sacs. They are now known as fry. The fry swim into the open water of the creek to hunt for food. They have dark stripes on their sides called parr marks which help to camouflage them from predators.



4. In late April or May after spending a year in the creek, the young, now called smolts, begin to migrate down the river. The dark parr marks slowly fade and a silver coating develops on their scales. This process of adapting to sea water is called smoltification.



November
December
January
February
March
April
May
June
July
August
September
October
November
December
January
February
March
April



5. The smolts' journey to the estuary, where the river meets the sea, may take days, weeks, or even months depending on how far away their birth creek is. There is plenty of food in the estuary, and as they pass through, the smolts eat as much as they can, growing larger and stronger before swimming out to the sea. By late June, when smolts enter the sea, they have developed dark blue-black backs with silvery sides and bellies. Most of their parr marks have disappeared. The smolts' new appearance allows them to blend in with the ocean environment.



6. The young coho spend sixteen to eighteen months in the sea, eating and growing. Early the next summer, the fully grown coho begin their homeward migration. It may take them up to six months to reach fresh water.



7. As the coho enter fresh water, they stop eating and live on the fat stored in their bodies. Their skin becomes thick and leathery. The male coho develops a hooked snout. The female's body swells with ripening eggs.

8. By the time the coho reach their birth creek in November, they have developed dark red sides and dark green backs and heads. The female coho lays her eggs in the gravel of the creek and the cycle begins again.

May

June

July

August

September

October

November

December

January

February

March

April

May

June

July

August

September

October

November

You will answer the comprehension questions on these pages as a class.

Did You Know?

Most salmon are anadromous fish, which means they are born in freshwater, travel to saltwater, and then return to freshwater in order to spawn. A few types of salmon never leave freshwater for the ocean, but these types still migrate between rivers and lakes.

Text Connections

1. What predators do salmon face?
2. In what season do salmon eggs hatch? How do you know?
3. According to the life cycle section at the end of "Salmon Creek," why do coho salmon have different colors and patterns at different life stages?
4. What elements of "Salmon Creek" are like a poem?
5. Based on "Critters Crossing!" and "Salmon Creek," what type of human-made crossing might be useful for spawning salmon?
6. What advantage might there be for animals that instinctively return to their birthplace before giving birth to their young?



Write

Write a description of another cycle in nature. Include a detail that shows the cycle will repeat.

Look Closer

Keys to Comprehension

1. How do salmon mothers care for their eggs? Quote details from the text to support your answer.
2. What are two main ideas of "Salmon Creek," and what text details support them?
3. Describe two events that are repeated in "Salmon Creek." Explain how these events are related.

Writer's Craft

4. Define the words *fry* and *smolt*. Use the context in which they appear to support your answer.
5. Compare and contrast how both "Salmon Creek" and "Ookpik" cover the topic of animal instincts.



Concept Development

6. How does the author use evidence to support the idea that spawning is hard on salmon?



Read this Science Connection. You will answer the questions as a class.

Text Feature

Authors sometimes **boldface** important terms in informational text.

Important at Every Level

Salmon are a central part of food webs in the Pacific Northwest stream ecosystems. A **food web** shows all the paths that nutrients can take between organisms in an ecosystem. When you think of a food web, you might think of a very simple web that begins with a plant making its own food from sunlight. A rabbit or a groundhog eats the plant. Then, a bear or a fox eats the rabbit or groundhog.

Something interesting to know about salmon, however, is that they contribute nutrients at many different levels of their food webs. Without salmon, many rivers and streams would not have many nutrients at all.

Spawning salmon release various types of nutrients directly into streams. Some scientists think these nutrients may help all organisms in the ecosystem. When a salmon dies, parts of it may linger in the stream and become food for insects and fungi. Algae benefit from the salmon nutrients. A bear may carry a salmon into the woods to eat it and drop parts there. Because of this, there is evidence that salmon then give their nutrients to shrubs and trees far from the torrents of streams.

Different species of salmon also support each other in surprising ways. For example, young coho salmon often eat the pink and chum salmon eggs. What is interesting, however, is that young coho also eat flies that ate leftover parts of dead pink and chum salmon. Coho eat stream insects that eat algae. These algae draw energy from sunlight but also draw some nutrients out of the water—nutrients put there by pink or chum salmon. These kinds of relationships form very complex food webs. These webs circle around in many directions.

For all of these reasons, people now realize how important it is to protect salmon populations. By saving salmon, they also save many other species at the same time.



Salmon are an important source of nutrients for bears and other wild animals.

1. What does a food web show?
2. Why are food webs involving salmon complex?
3. Create part of a food web to model some of the ecosystem relationships from the Science Connection. Make sure that the web includes the sun.



Go Digital

Research more about the life cycles and food of pink or chum salmon. How are they similar to or different from those of coho salmon?