

MAGGIE

my story





Hello

do you know what I am?

I am a Pearl Mussel

My name is Margaritifera but that name is too long and

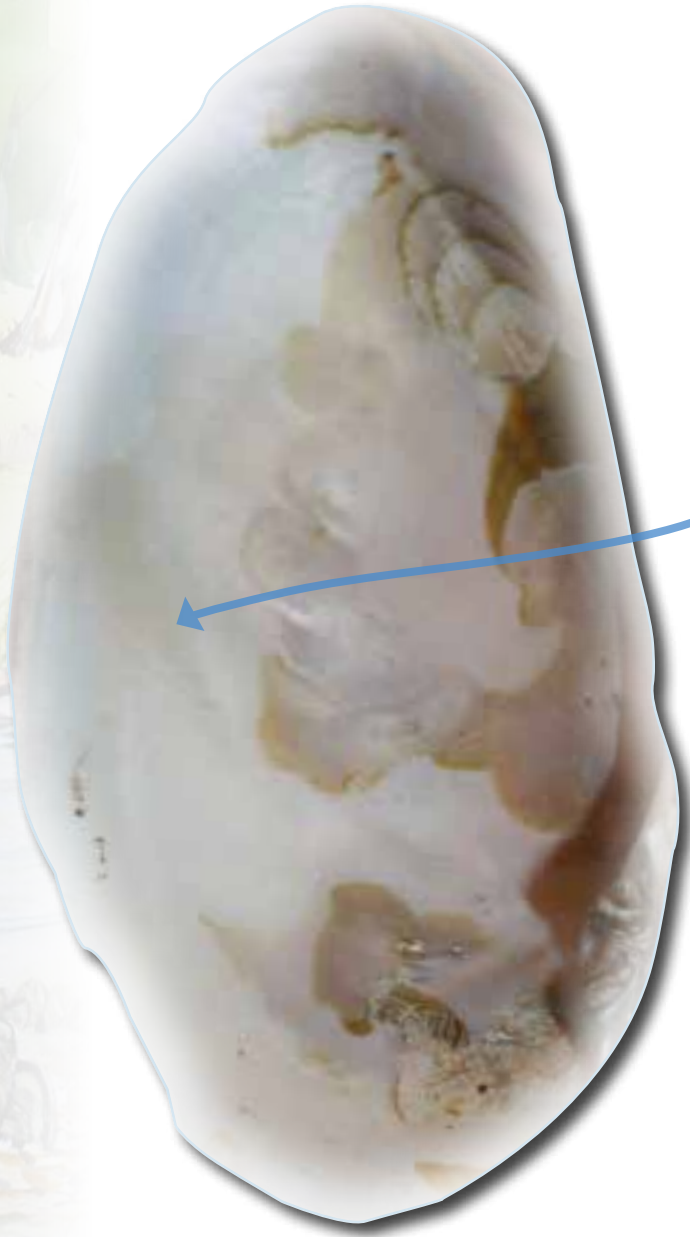
you can call me
MAGGIE

I live in the river.

I might look like the mussels you find on the sea shore, but you would never find me in the sea.

*Come on into
my shell and let
me show you
around...*





Do you see how shiny the inside of my shell is. This beautiful smooth shiny stuff is called mother of pearl.

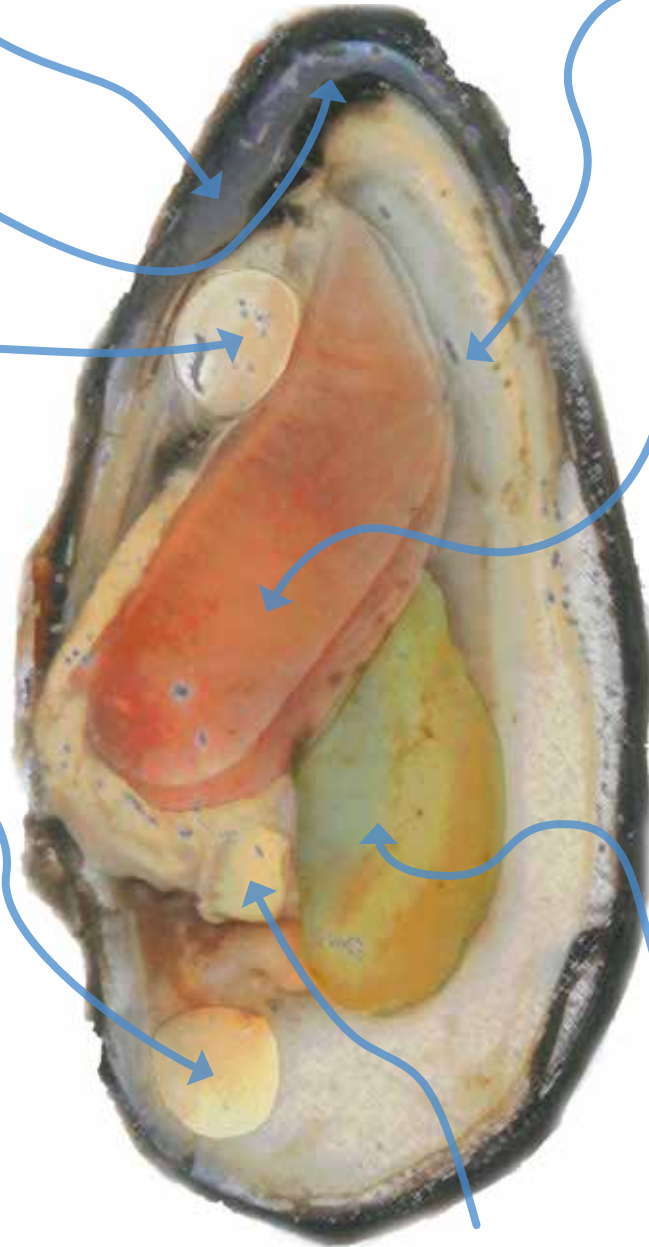
Indeed some mussels do occasionally make pearls from it.

The water comes in here...

...and when I have finished with it, it goes out here

I use these strong muscles to close my shells tightly to keep enemies or dirty water out

I cannot stay shut all the time and need to open my shells a little to breathe and get food



This soft flap lies inside my shell and covers my body. It keeps me cozy. It is called a **MANTLE**

Here are my gills. I use them to filter water from the river. In the water they find the oxygen I need to breathe and they pick out any small pieces of food that are floating along

This is my foot. I can push it down into the river bed and pull myself into the sand so that I am not washed away in the current

This is my mouth



*Now that you know
what I look like let
me tell you a little
about my life.*

It has been a long and interesting life
even if it is just the story of Maggie the
Mussel

I am an old mussel now, 123 years old to be exact. Do you know anyone else as old as that? Many of my neighbours here are much older. Some of them are almost 140 years old. I have lived all my years in this same pool in the river, never moving further than the big rock at the pools edge.

At the time I was born my mother was even older than I am now. I remember well the day we were all born. I say 'we' because there were very many of us. Like all pearl mussels, my mother had many thousands of babies each year. When it was time she released us all from the safety of her shells into the cold waters of the river. What a fright! We were such tiny mussels that you could hardly have seen us, and now we were at the mercy of the raging river.





Terrified, I began tumbling along in the fast water. I watched helplessly as many of my brothers and sisters spilled out of the pool and were lost down the river, never to be seen again. It seemed that I would follow, and that my first day would also be my last.

But suddenly, I saw a baby trout resting effortlessly in the current below me, his great mouth opening and closing as he breathed in the river water. As I tumbled towards him, the swirling waters of the river suddenly swept me into his dark gaping mouth

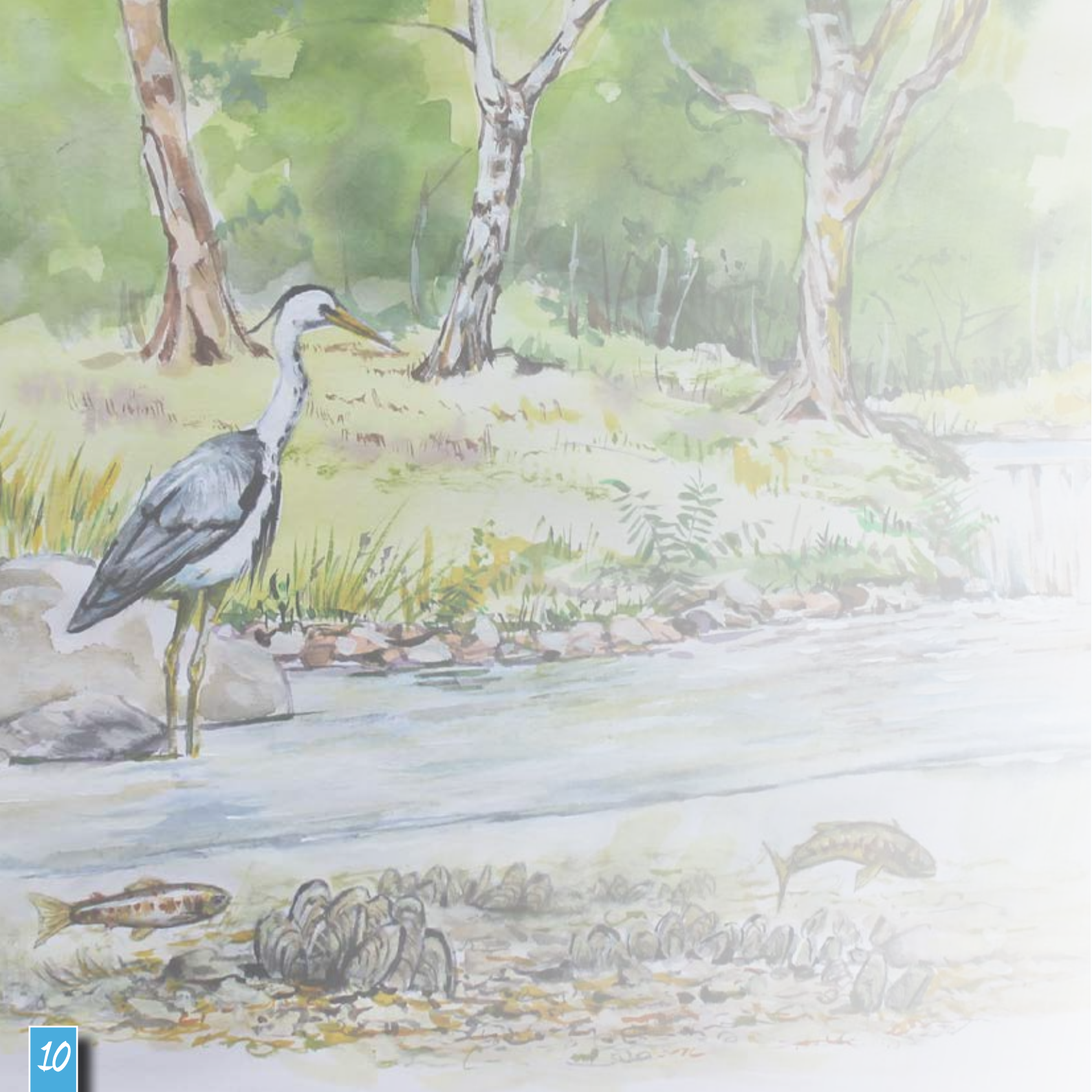
Ohhhhhhh, . . .

To my surprise, once inside his mouth it was almost like being back in my mother's shell. I flowed slowly along with the calm water inside the fish's mouth, passing over his tongue and then brushing against his bright red gills. I knew at once that this was my chance,



my only chance to survive. I snapped my shells tightly shut on to the gills and hung on for dear life.

The great cover over the fish's gills opened again and out went the water from his mouth, but I stayed secure in my anchorage. I was safe at last. Nobody could reach me in here and the currents could not carry me away thanks to my host, the trout. When I got my bearings and settled down I was pleased to find that some of my brothers and sisters had also made their way to the safety of the trout's gills.



We spent some happy months together, riding along with the trout as he swam about the pool. We looked out from our hiding place as his great gill covers opened and closed, and we could see the grown up mussels below us on the river bed. But as we grew our little home became very crowded and our fish was no longer happy to have to carry us. We knew we would soon have to leave the trout and take our chances out in the river once more.

One day when the trout was resting in a calm part of the pool with nice clean sand below, I decided my time had come to leave. Although I was very frightened, I slowly opened my shells and released my grip on the fish. I slid quietly into the water and drifted out into the bright sunshine of the pool. The current was still strong, but I was bigger and heavier now. I fell through the water like a leaf falling from a tree, swaying back and forth as I dropped to the bottom.



I landed with a gentle thud. I was still very afraid and knew that I could not stay on top of the sand where I might be eaten or washed away in a flood. So I used my foot to pull myself deeper and deeper into the cool safe sand. Although I was buried, the rivers waters still trickled down between the coarse grains of sand and brought me the oxygen and pieces of food I

needed. This was a safe place, a place to grow big and become strong before risking life on the river bed above.

I spent a long time buried in the sand and gravel. We mussels grow slowly and five years passed before I was brave enough and big enough to climb back to the surface of the river bed to take my place amongst the other adult mussels. That was 118 years ago.

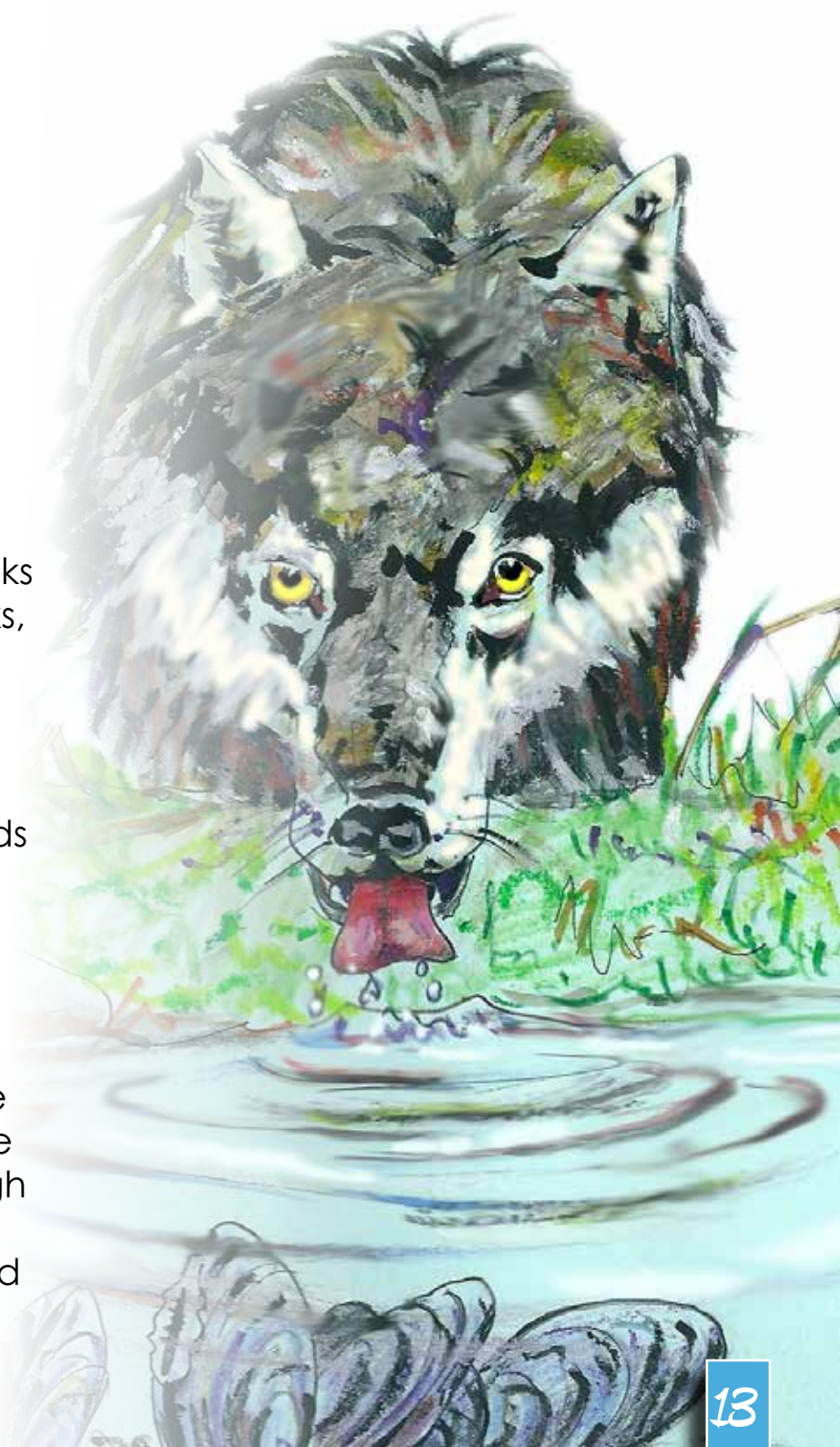


When I reached the river bed, I slowly made my way through the crowds of other mussels until I was near my own mother. She hardly knew me I had grown so much. You might be surprised that she knew me at all since she had so many children, but mothers always know! I was so curious about the pool and my new world on the river bed that I never stopped asking questions. Where does the water come from? Where do the fish go when they leave the river? What are the many strange shapes that come and disturb the surface of the water? Why do the colours change along the banks of the pool when the water turns cold in the autumn?

So many questions!

My mother was very patient. She told us stories of the river from long ago when she was a young mussel. She could remember when the river banks were lined with tall trees – oaks, birches, alders and willows. The autumn colours were so beautiful then.

The wolf that lived in the woods would come and drink at the pool every day, his bright pink tongue and shiny black nose dipping into the water. He was no danger to us mussels, but sometimes as he came he frightened deer drinking at the pool. They would crash through the pool in a panic to escape and often injured or even killed some poor mussels with their





sharp hard hooves. There were so many of us in the river pools in those days that you could not cross the pool without stepping on mussels.

She remembered the soldiers in their red coats that came and camped by the river. They were such a noisy lot and all their marching made the soft banks of the river shake. Their big hob nailed boots frightened us when they came to fill their billy cans, but they did not stay long. At night we watched amazed as the red blaze of their campfires sparkled across the rippling water of the pool.

Just below our pool there was a shallow part of the river. My mother remembered the first time the mussels saw the white legs of a human cross there with their soft bubbly pink toes. All the pool mussels talked about it for days.



But as the months and years passed more and more humans crossed at that spot. Our parents told us it was called a ford. All young mussels were told never to go there or they would be crushed beneath the great weight of carts and horses and cattle that crashed through the water.

Trees started to slowly disappear from the river banks and were replaced by open green fields. We really missed the shade of the trees when the summer sun made our pool too warm. New animals began coming to the pool to drink. Where once deer had been the most common visitor, now sheep came in big flocks. They waded in to the water and were a constant danger to mussels that were unlucky to live in the shallow parts of the pool.

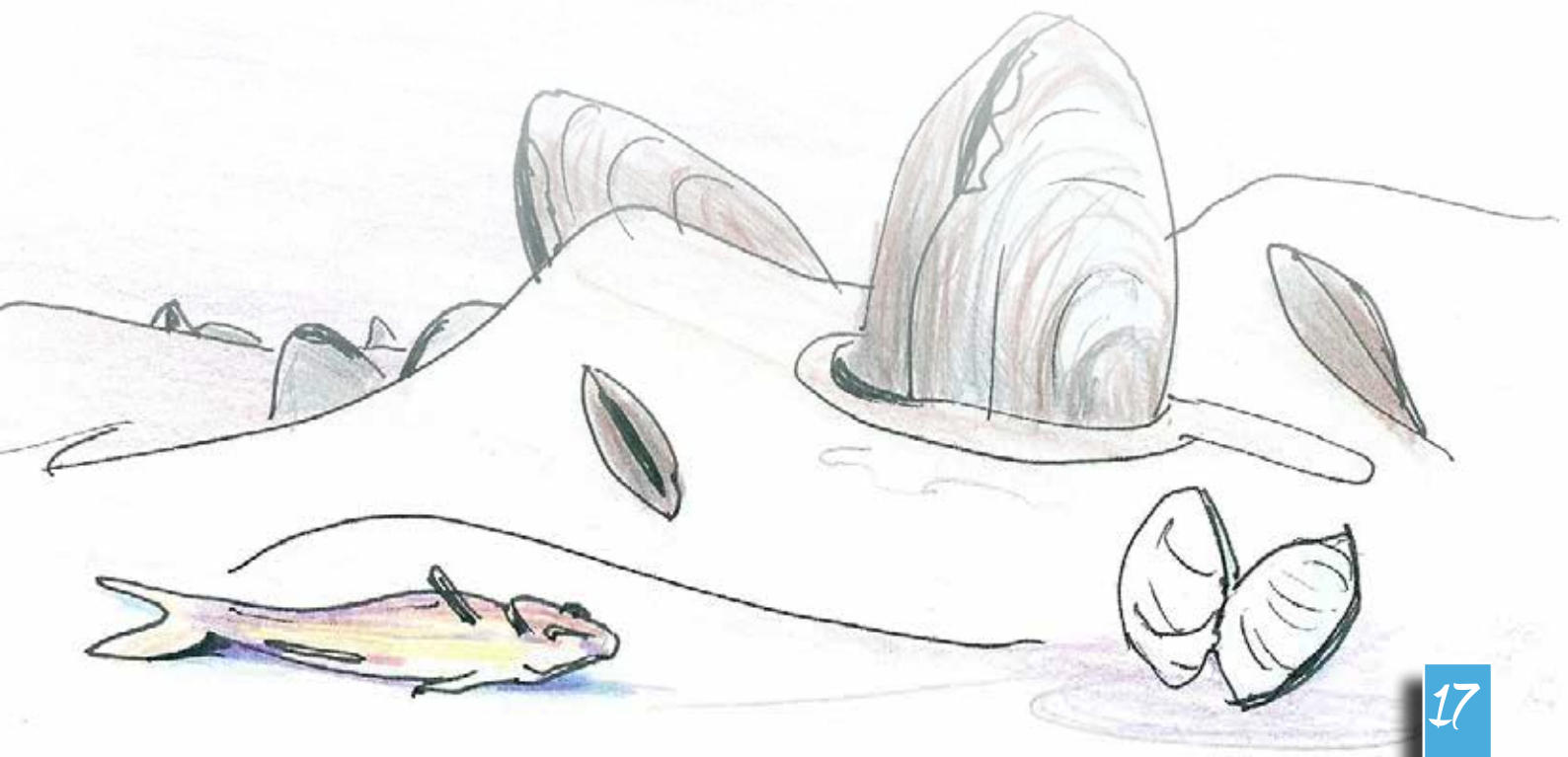
One day a strange mussel arrived. He came tumbling down the riffle that leads into our pool in a cloud of bubbles and landed amongst the residents with a thud. It was easy for him to find space in the pool because the number of mussels had been getting smaller in recent years. When he settled in he told stories of men and great machines working along the river upstream. They straightened the river and deepened the channel, destroying all the best mussel pools. Many many mussels died, but he was one of the few lucky ones to escape in the fast current.

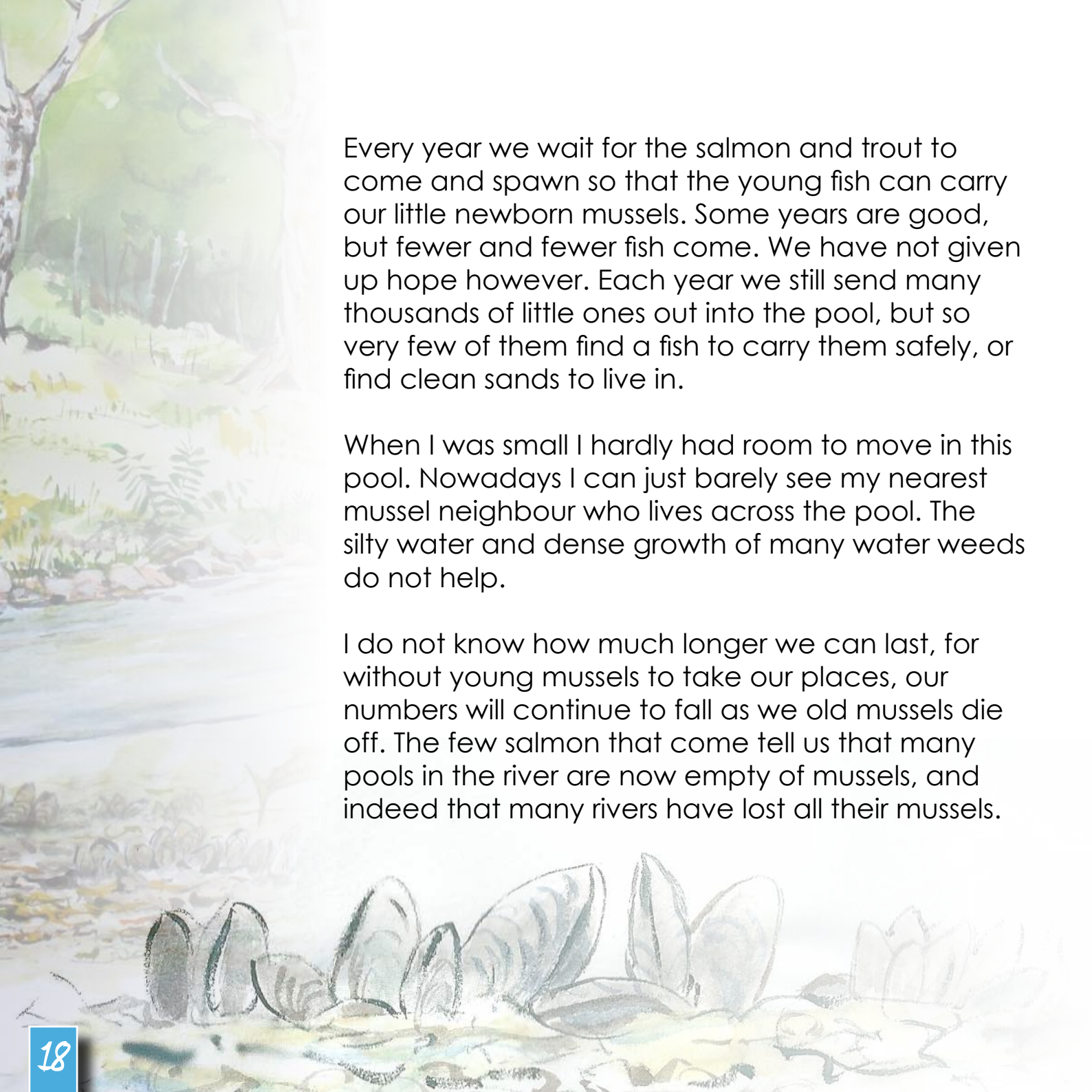


Not long after that the taste and smell of the water changed. The waters were often coloured and our world became a hazier, duller place. No longer could we see the stars sparkling in the night skies. This was the time of the great silt storms, a time of great sorrow and hardship for mussels. When the water became brown and thick we had no choice but to clam our shells tight for many hours and wait for the silt storm to pass.



But when we opened again our world was a dirtier place. Soft mud lay everywhere, covering the river bed. We bigger mussels could struggle on, moving to small spots in the pool with less mud. But the little ones were too small, and lived too deep in the river bed. They were all lost, smothered by the blanket of mud above.



A watercolor illustration of a riverbank. On the left, a tree trunk is visible. The background shows a dense forest of green trees. A path leads from the foreground towards a pool of water. The water is light blue and green, with some rocks visible at the edge. The overall style is soft and painterly.

Every year we wait for the salmon and trout to come and spawn so that the young fish can carry our little newborn mussels. Some years are good, but fewer and fewer fish come. We have not given up hope however. Each year we still send many thousands of little ones out into the pool, but so very few of them find a fish to carry them safely, or find clean sands to live in.


When I was small I hardly had room to move in this pool. Nowadays I can just barely see my nearest mussel neighbour who lives across the pool. The silty water and dense growth of many water weeds do not help.

I do not know how much longer we can last, for without young mussels to take our places, our numbers will continue to fall as we old mussels die off. The few salmon that come tell us that many pools in the river are now empty of mussels, and indeed that many rivers have lost all their mussels.

But now is also a time of great hope. The salmon tell us stories of people working to fix the damage that has been done to our rivers. The people continue to work along our river banks. Farmers, foresters and people in their homes still go about their daily jobs. They grow their crops and raise their cattle; they do their washing and build their roads. But now they know that we are here, that we need their help and that they need to be careful not to hurt us while they go about their own lives.

I believe that the worst is past and that people have learned that we have a right to share in the river, that some space must be left for us. We can do much good by filtering the river water, and can warn





you if damage is being done or dangerous pollution is happening. We help to protect salmon, trout, otters, kingfishers and many others who depend on the river, including you humans. Rivers that are good for us are also good for you.

We will do our best to help you and make the river world a better place. I hope that you can help too. Think of us when you do something that could harm our home. Caring for one another makes the world a nicer place to share.

The Beginning



Notes





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