

Wedding

SALMON



Man: A Course of Study

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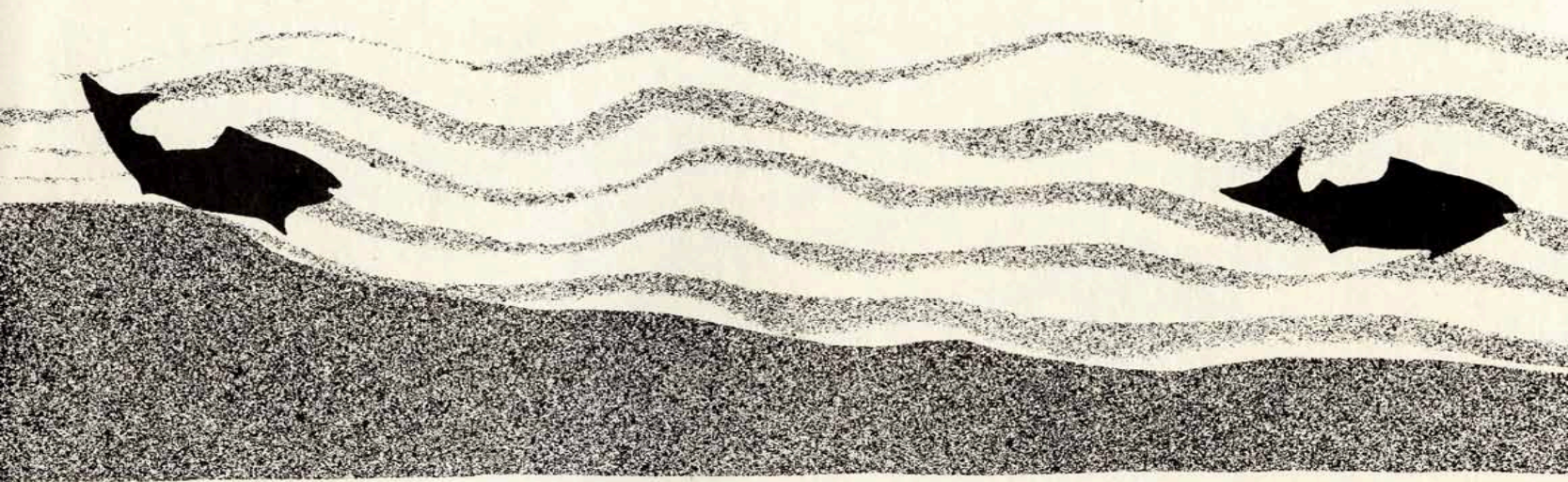
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SALMON

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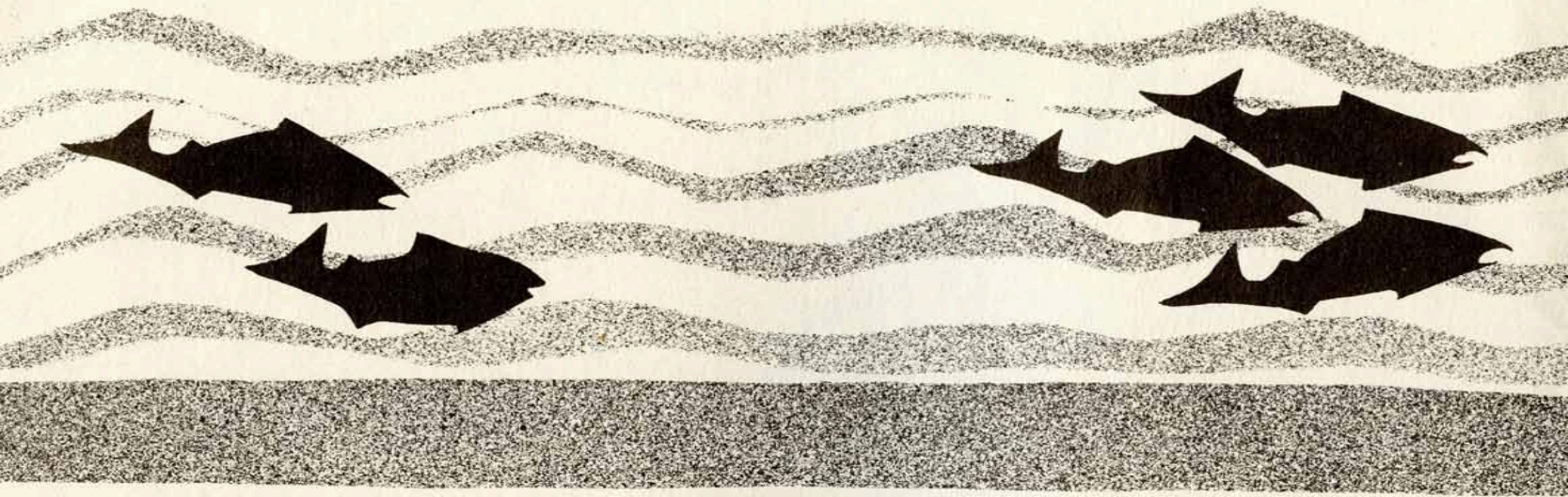




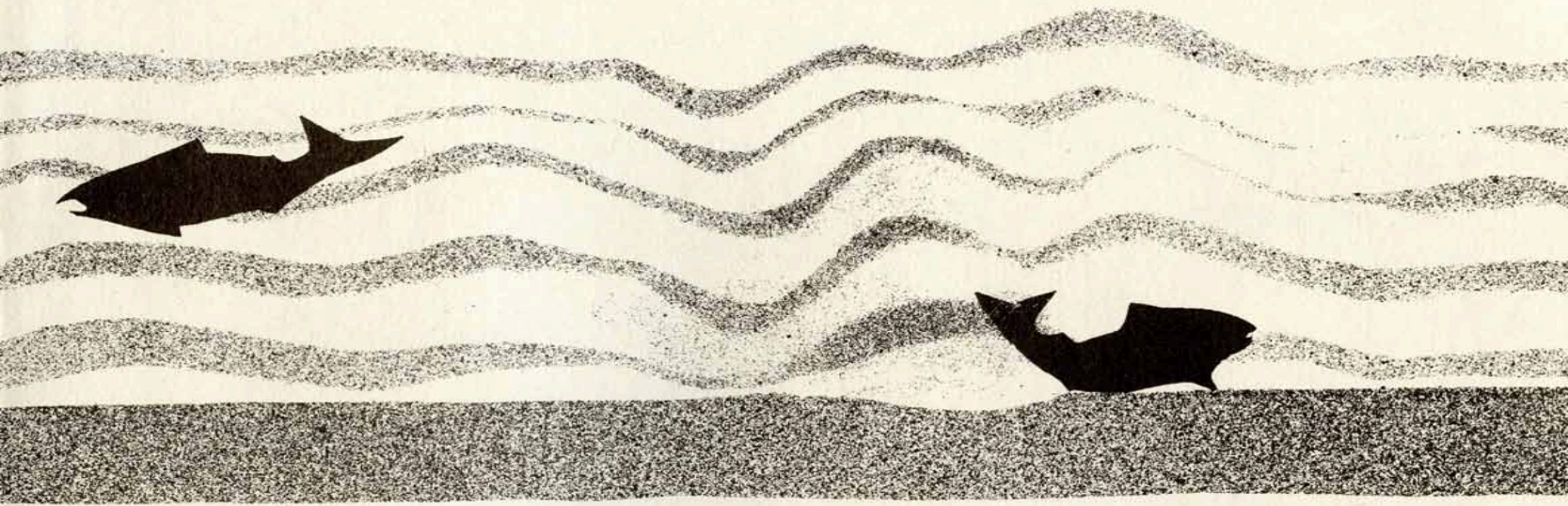
Salmon spend most of their lives in the ocean. But sometime in their sixth year, they suddenly begin a journey up one of the great rivers that empties into the ocean. They swim for weeks against strong currents. They leap waterfalls and fight their way through rapids. They struggle through shallow water, through sand and mud.

Yet several days after the salmon arrive they die of exhaustion, for on the long trip up from the ocean they have eaten nothing.

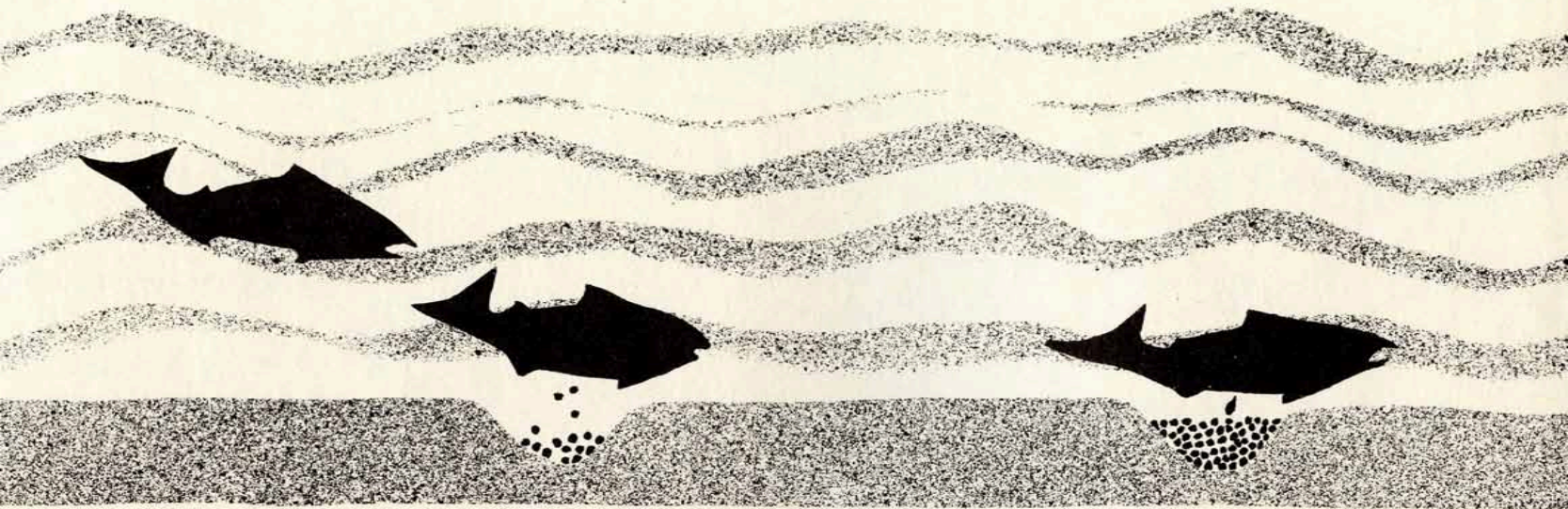
Why this frantic journey, which ends so soon in death?



When they arrive, the salmon pair off, a male with a female. By now the female, carrying eggs, is larger and plumper than the male, who has grown thin and savage-looking. His eyes have sunk into his head, and his upper jaw hooks over the lower one. He spends the next several days fighting off other males.

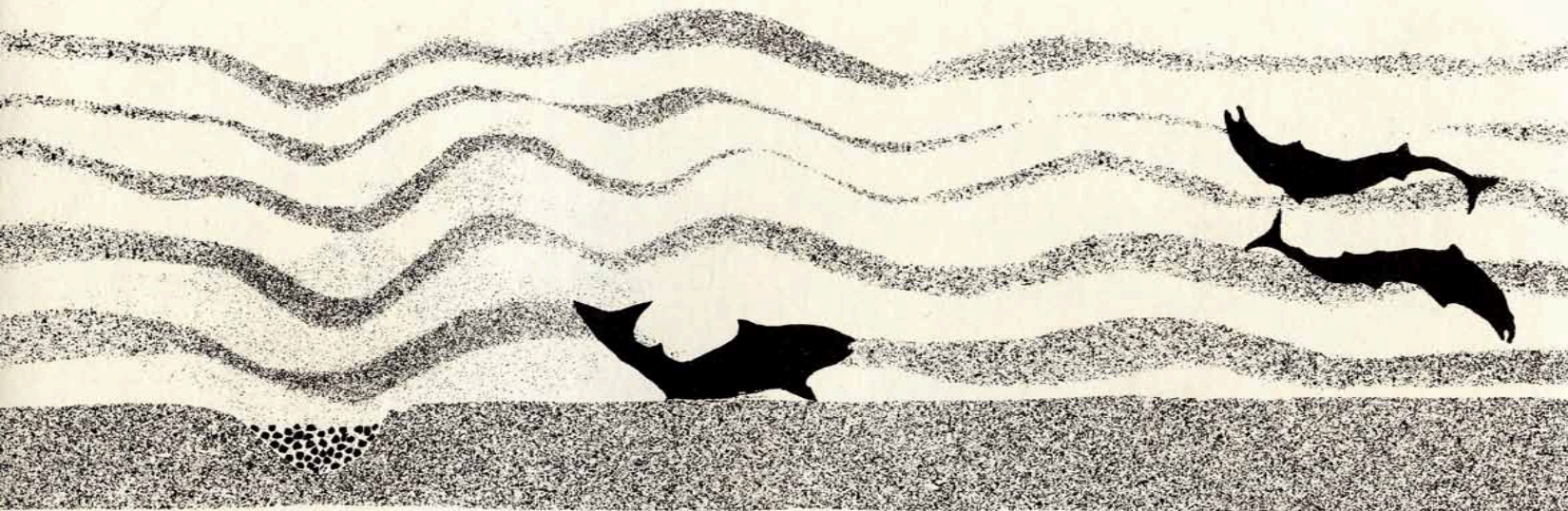


Soon the female goes to work digging a hole. She turns on her side and beats the river bed with powerful sweeps of her tail. Each sweep loosens dirt, which the current carries downstream. After a moment's rest she turns again to beat the river bed with her tail.

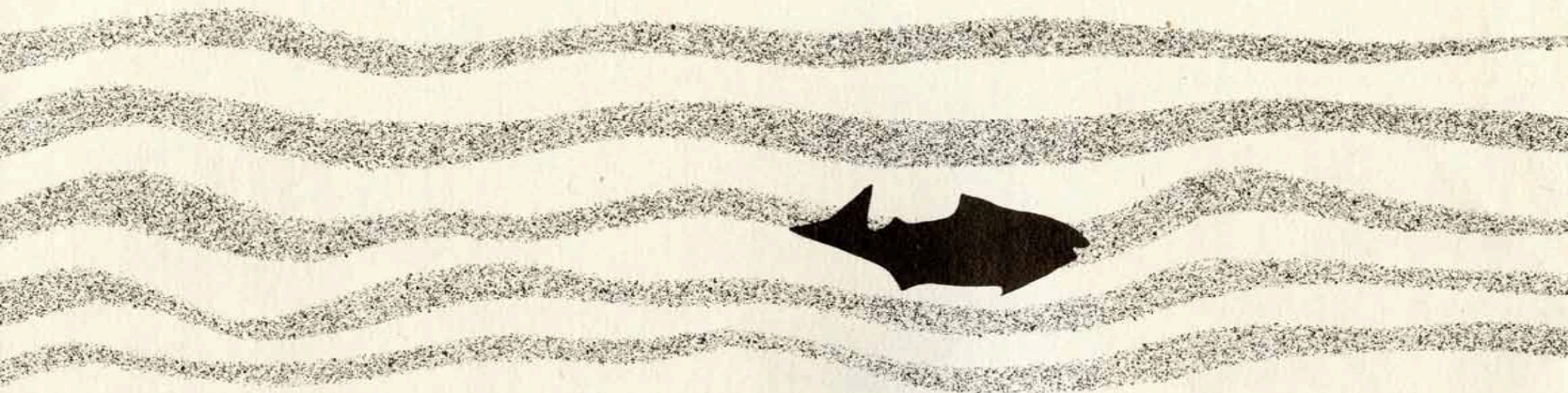


She works until she has dug a hole about a foot and a half deep. Then, with the male close behind, she swims over the hole and drops in hundreds of eggs. The male follows her and fertilizes the eggs with a milky substance containing sperm.

Immediately, the female begins digging a new hole a little farther upstream. Some of the dirt she scoops from the new hole is carried by the river into the first hole and covers the eggs. The female continues her work until she has laid all her eggs, as many as 6,000.



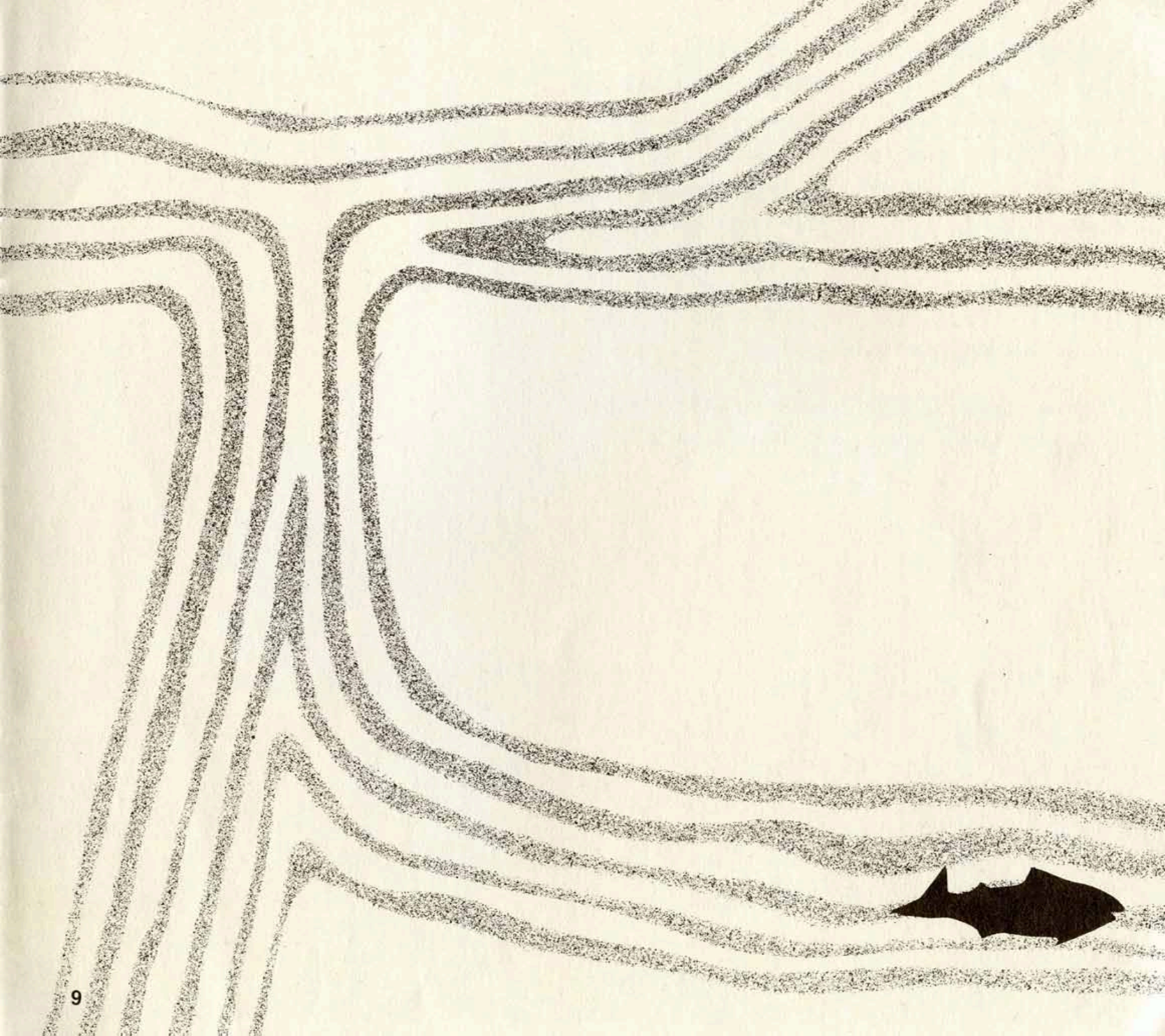
When the female salmon has laid all her eggs, she and the male begin to drift downstream. Both are now sickly white. Their scales are falling off, and they are losing their fins. They have not eaten in weeks, and their stomachs have shrunk to the size of the eggs they are leaving behind. Weakened by their weeks of work, they drift along with the current until they die.



Why did the salmon head upstream in the first place? Did they know they were going to lay eggs? And did they know that the trip would cost them their lives?

Salmon probably do not know what awaits them upstream. They do not think about what they will do, or why they will do it. When salmon are five years old and have stored up extra fat, a change takes place in their bodies that forces them to swim upstream.

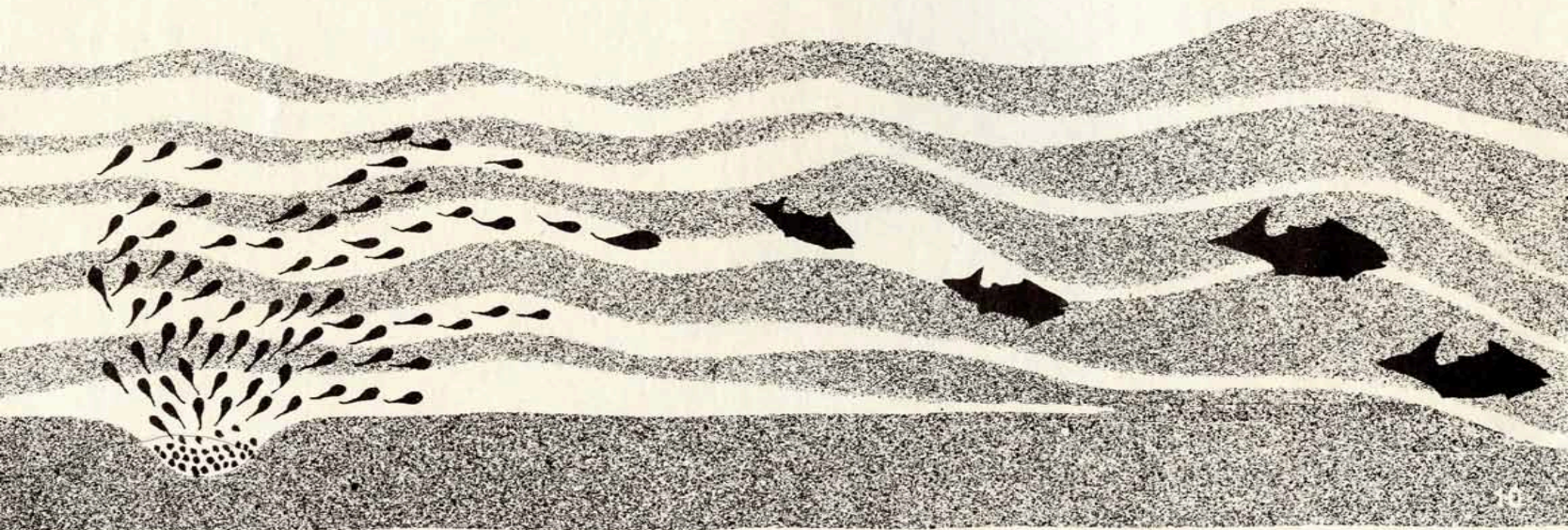
Each salmon finds its way back to the same stream it was born in five years earlier. It does this by smelling chemicals in the water. Every stream has a different smell, and each salmon remembers the smell of the stream where it spent its first year. As it travels upstream, the salmon traces the odor of its stream past all the other tributaries of the river until it comes to the right one. Back in the streams where they started, salmon lay and fertilize their eggs.



Although a full-grown salmon is more than three feet long and weighs more than twenty pounds, salmon eggs are only one fourth of an inch across. After several months, the young fish hatch from the eggs. Without parents to care for them, the young fish are independent from the start. They swim and find food on their own. They avoid predators.

Some things the young fish do without learning. Other things they must learn by themselves.

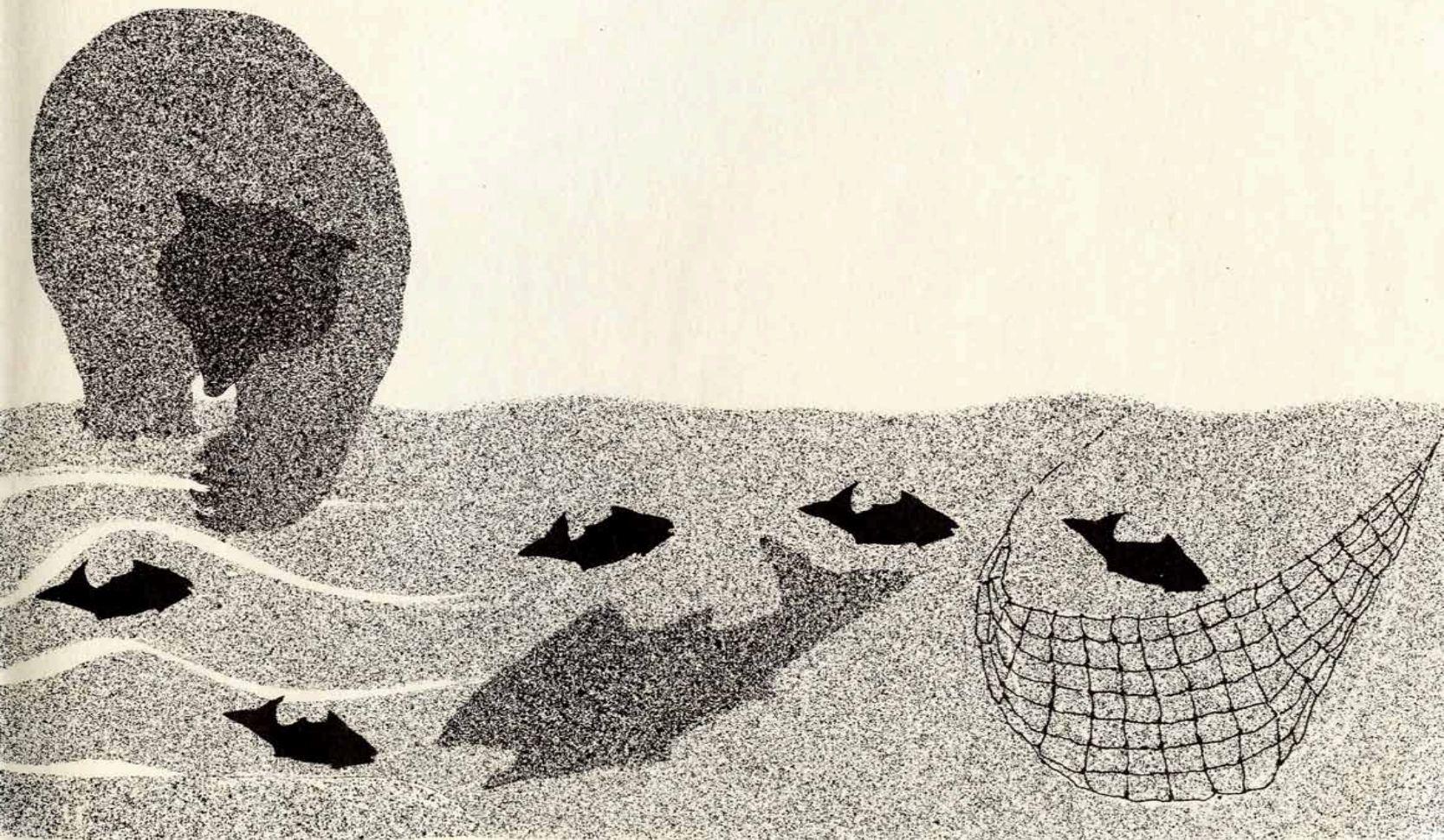
The young live a year in the river and grow to five inches in length before they head out into the ocean.



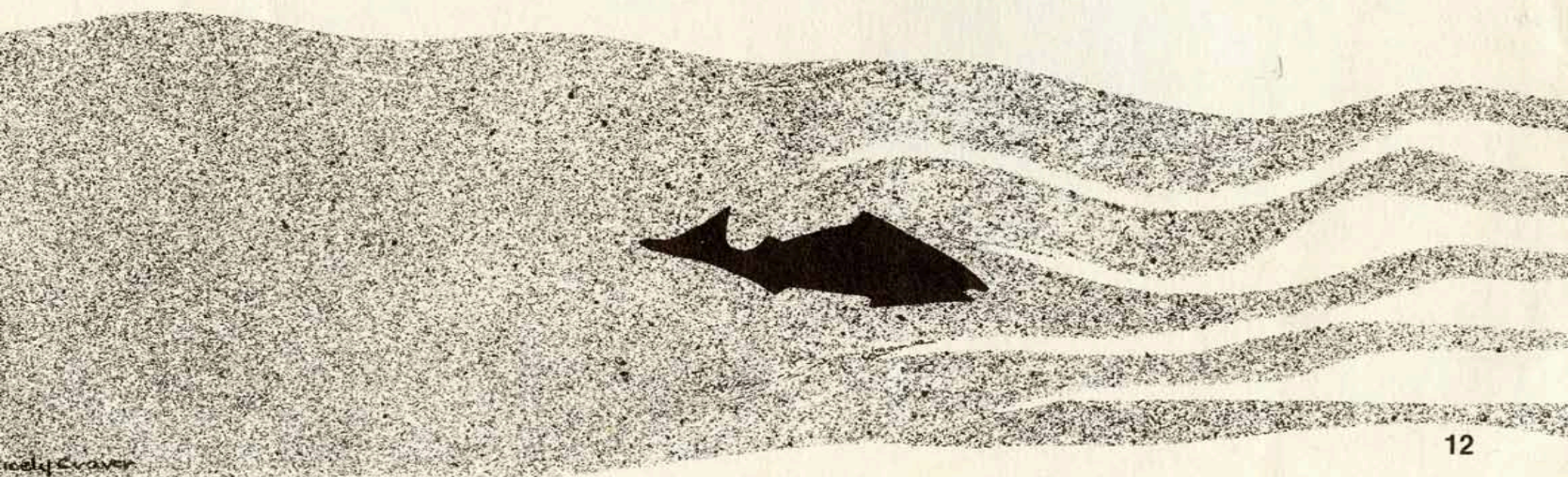
For about four years, salmon live in the ocean, traveling thousands of miles before they return to their river.

But not all return.

Some are eaten by larger fish. Others are captured by predators from the land. Still others do not survive the journey upstream.



In the end, only two fish out of the 6,000 eggs return to their birthplace to spawn.





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