

Prologue

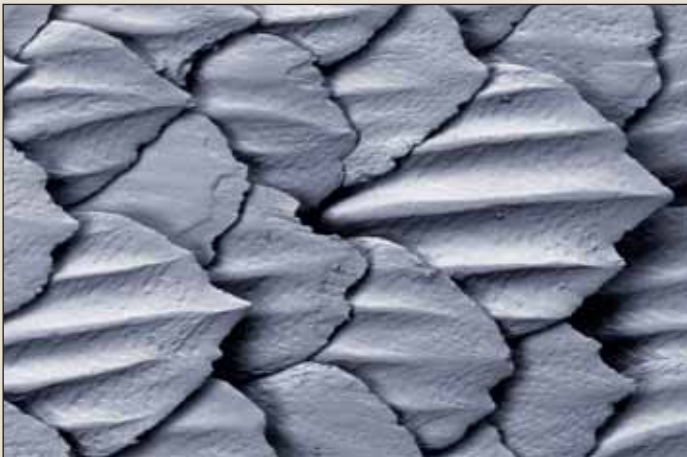
Angela Rawlett looked down at the limp little shark lying on a bed of newspapers and releasing the slight odor of formaldehyde. This was not the first time during vertebrate anatomy lab that the college freshman was thankful she had grown up on a farm. She had seen her share of gutted animals and had no hesitation dissecting worms or frogs. Nonetheless, she paused in wonder before this shark. There were no sharks in the Midwest. She'd never seen the ocean, much less a shark live or dead.

Her reverie was interrupted by the snort of her lab partner, Lenny.

"*Squalus acanthias*. Spiny dogfish. This guy is such a runt," he said. "I wish we could dissect a megalodon."

"What's a megalodon?" asked Angela. After six weeks of Lenny as a lab partner, she was used to his frequent displays of superficial knowledge.

"*Carcharodon megalodon*. Biggest shark that ever was," Lenny



Placoid scales.



Carcharodon megalodon tooth.

answered. “Big as a Greyhound bus! Only it died out more than a million years ago.”

Lenny’s discourse on megalodon was interrupted by the lab instructor’s voice. “Examine the skin of your specimen by running your fingers along its back gently, from posterior to anterior,” he said. Angela put her hand on the shark’s head.

“You’re going the wrong way, Rawlett,” said Lenny. “Start at the rump.”

“The roughness you feel is the placoid scales, also known as the dermal denticles or skin-teeth,” said the instructor. “If you look up here on my screen, you can see an enlarged image of these scales. Notice the similarity of shape with the shark’s teeth, which evolved from these denticles.”

Lenny pointed his pencil at the shark’s mouth. “Megalodon was much more impressive. He was known as the giant-toothed shark, you know.”

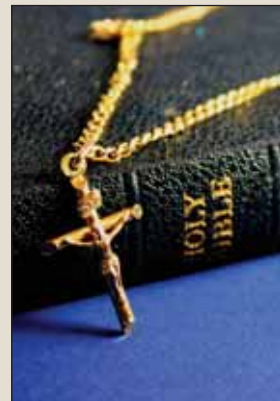
Over Lenny’s voice, Angela could hear the instructor continuing to speak. “Take your scalpel now and remove a small piece of skin,” he said. “Then examine this sample with your lens.”

The talkative Lenny suddenly became deferential. “You first,” he said. As in previous dissections, Lenny preferred to give the running commentary and let Angela do the actual work. She picked up the knife and neatly sliced a square of skin. Lenny studied it under the lens. “Rough as 40-grit sandpaper,” he said. “You know people do use shark skin as sandpaper. Say, why don’t you cut out a piece of your skin for comparison, Rawlett?”

“My turn, city boy,” Angela retorted as she grabbed the lens from her lab partner. As she leaned over to study the specimen of skin, her necklace pendant dangled down from her neck.

“Hey, what’s that?” said Lenny. He poked at the cross and grinned. Angela shoved him away and tucked the necklace back into her shirt. Then she stared back through the lens. But as she did so, she could hear him teasing her.

“You’re one of those capital ‘C’ Christians, huh?” he said, smirking. “You believe all that stuff about the



Garden of Eden and the six days of creation? I'll bet you think megalodon was washed away in Noah's Flood instead of going extinct."

Angela put down the lens, picked up the scalpel, flipped over the shark, and sliced it open between the pelvic and pectoral fins. That shut up Lenny. But after class, Angela could not get his comments out of her mind. There was a familiar ring to them, she realized. Her father gives her grief like that, but of a different sort.

During a recent visit home, Angela had happened to repeat some information that, ironically enough, she had picked up from Lenny. She had mentioned that the cow is a close relative of the whale, because whales are in a line of descent from a hoofed mammal that reentered the sea. "What nonsense you speak!" her father had replied. "Honestly, Angela, I don't know why you would believe that. We know where the whale came from. God put it there, in the water. It's written down for us, in Genesis. Is that college turning you away from God's word?"

Angela felt as though she were being pulled in two directions. "I love God and I think science is really neat," she thought to herself. "The creation story is meaningful to me, but what I've heard about evolution makes sense, too. Why do people expect me to take sides?"

Whales descend from a line of hoofed land mammals that returned to the sea.

