My grandfather's river

A stream of memories.

Brenda Cooper

I begin to make the river. The river. His river. The one my grandfather took me down the year I turned 10, and again when I was 16 and 25.

It takes days to dig through web archives for his data, to find old versions of the two-dimensional geographic information software he used 20 years ago. Success allows me to form the data into three dimensions, to show the banks shift and the water fall away, to chart the demise of trees and animals.

It is not enough. Sitting straight in my chair, feet on the ground, back arched, stretching my wrists, I am tempted to give up and send a historybot to make a simple album of grandpa's speeches. Except his own words are no gift back to him, especially as they didn't work. He spent six years fighting to save the river, and then ten more wandering up and down it, studying his failure.

On our last trip, when I was 25 and he was 70, we sat in his red canoe in the middle of the river. A dead fish floated past us. "Why do you stay?" I asked.

"I need to save it."

I eyed the white underbelly of the dead fish but held my silence.

He looked away from me, his voice breaking. "I'm mapping it for you. I can't save the real river, but I can save the record of it." He pointed at a cloud of tiny cameras he'd set to follow us. Bright sun sparkled on them like diamonds.

I have recreated the river from that trip.

But I need the river of my youth, the one from our first trip.

I find a programbot that takes the old photographs from his first *Natural Geography* article and take two more days off work to scan, register and rectify the thin bright photos to his old 2D and make sure the cattails are exactly the right number of inches across, and that some bunch up close, hugging, and others wave above the water like brown flags.

I tell the pixellated water to rise up a little, watching carefully as depressions in

the banks fill into tiny spangled wetlands.

Olfactory databots yield pond water and cedar and frogs and mix them all up on command. I add throaty frog conversations, hoping this sensory stew will drive my little-girl memories forward. I collapse on the couch, the river surrounding me, washing me.

I cause stars of water spiders to scoot on bright drops of surface tension, and feed them digital mayflies. Virtual water laps at a finger I hold a few inches in front of my face. The water spiders glide and dance around it.

Finally, I slip into my child self and the memory of his voice is clear and strong, as if the river washed away the 40 years between then and now. "They never look like they're walking. Walking would be too slow for them."

I recall his hand on my shoulder as I gaze up into his intense blue-green eyes. He surveys the current, keeping us away from white water frothing over rocks. This man who is always gentle with me digs his fingers into my shoulder. The sun beats on his thinning blond hair as he lets go and makes such a sweeping gesture the canoe under us rocks alarmingly. "Penny. This is your heritage. We're stealing it from you. Memorize it, Penny. Memorize the water flowing always downstream, the clean, rounded rocks, the water spiders." Even the memory of his voice drives up details.

I add them one by one. Three turtles balancing on a floating log.

The ghostly feel of a warm wind.

A heron pretending to be a cattail.

The monitoring nano in my blood screams sleep at me and I can't override it any more without a doctor's chit.

It's okay. I'm done.

I collapse, sleeping for two days and a night, dreaming of turtles and herons and dragonflies.

On the morning of my grandfather's birthday I bring the river in my top pocket. The relentless sun beats down on the dry brown grass on his bit of lawn. He waits for me in an old wooden Adirondack chair, his eyes bright blue pools in a river of wrinkles from temple to temple. He smiles and

stands and holds me, his arms shaking a little. I suddenly hate it that he is 100 today.

Glancing down, I note that his nanomonitor is yellow again this morning. At least it isn't blinking in alarm.

Inside, a big white fan cools the kitchen, and there is no evidence he's eaten breakfast. He flips a switch and sits down, sighing in pleasure as the scent of brewing coffee puffs into the air, a history of mornings.

I stand behind him, kneading his shoulders, my throat tight. I slide the glasses out of my

pocket and slip them over his head.

His voice belongs to an old man. "What's this?"

My own voice shakes. "Look."

The glasses sense him and spring to life. Even though I can't see it, I know the river surrounds him. It runs over his ankles. Cattails grace the corner by the refrigerator. He grips his knee and a breath rushes from him. VR glasses are for an old man. I turn my retinas to virt. Reality greys to background. My senses catch up with the river programming just in time to be with him as the three turtles come into view in the empty doorframe.

He squeezes my palm hard.

I return the real world to my eyes.

A tear is falling down his cheek. ■

Brenda Cooper's stories have appeared in *Analog* and *Asimov's*, both solo and with collaborator Larry Niven. Her novel *The Silver Ship and the Sea* will be published by Tor in March 2007.

www.brenda-cooper.com

JACEY