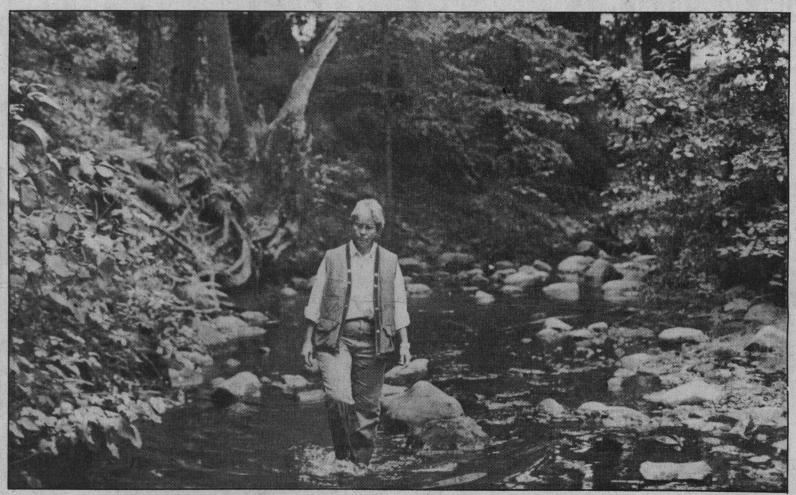
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Branciforte Creek is just one of hundreds in the county that have cooled Martha Jordan's heels.

Martha Jordan: Creek walker

Surveyor's job not just a stroll in the woods

By ADRIANA REYNERI

STAFF WRITER

Beating back attacking pit bulls was just part of the job facing Martha Jordan, a geologist hired to trek through Santa Cruz County creeks.

The hikes through the wilder parts of the county didn't faze Jordan, a martial arts expert who teaches selfdefense.

Surveying creeks and streams, she said, was one of the more enjoyable jobs she'll ever have. That's despite the two pit bulls that attacked while she was finishing a survey of Waddell Creek off the North Coast.

Warned by a none-too-coopthe dogs were loose and apt to charge, the 46-year-old Jordan, a fit, average-sized woman who wears wire-rim glasses, armed herself with a sturdy stick.

Sure enough, the dogs came after her. Jordan thunked the lead dog over the head, breaking the stick. The stunned dog walked away and, luckily, the second pit bull followed it.

Quieter episodes marked most of Jordan's explorations of the county's cool, mossy streams. The notes she gathered during her survey now guide Santa Cruz County planners. Her observations aid efforts to prevent erosion and flooding, and protect the fragile fisheries of oceangoing salmon and steelhead.

In all, Jordan said she covered about 500 miles of streams from the North Coast to the South County. Sometimes shaded by green tree canopies, sometimes sloshing

map, a camera and a compass. Of the last, she said, "I guess I carried it because I'm a geologist. I don't think I ever used it."

While strolling up the cob-

'People totally forget these (creeks) expand, contract in size. They have the ability to erode valleys. You really have to be aware of the power in the system."

Geologist Martha Jordan, creek surveyor

Jordan walked along, jotting down problems - most of them man-made - with the creeks.

Her notes include records of culverts too small to handle a creek raging after a winter storm; farm land tilled right to the stream bank, leaving bare, easily erodible soil; and cement slabs laid on creek bottoms, causing the water to flow in sheets too slick for spawning fish to swim up.

Her professional garb included hiking books and cotton slacks - denim jeans take too long to dry - a white cotton shirt and orange field jacket. She toted a pocket knife, a formidable dagger used for digging, a sack lunch, a notebook, pencils, a

Creek in late August, Jordan recounted some of her adventures. Much of the stream had dried, leaving smooth river rock embedded in patches of damp soil.

"This is a beautiful creek," Jordan said. "It's one of the treasures of the county."

But in the winter of 1986, the creek was anything but pleasant. Gorged by winter rains, it ravaged homes along Lower Highland Way homes that were originally summer cabins, built right in the creek's flood plain.

The devastation of the Eureka Canyon Road area that winter stemmed from man's lack of understanding of the county's creeks,

Jordan said.

"They're flashy," she said. "People totally forget these things expand, contract in size. They have the ability to erode valleys. You really have to be aware of the power in the system."

Though Jordan thoroughly enjoyed her job, it had sad and frustrating moments. She recalls the disgust she felt walking up Green Valley Creek, which she described as a "cesspool."

Frustrations stemmed from the realization that many problems - such as inadequate bridges and culverts, many dating back to the 1930s would take and earlier years and untold amounts of money to resolve.

Satisfaction came from knowing that other problems, such as log jams and obstacles to spawning fish, could be fixed with the elbow grease of California Youth Authority crews and simple techniques for providing ladders and jumping pools to help fish swim upstream.

And then there were the adventures with dogs. One involved a Doberman that was commanded to attack by its owner. Jordan fended off the dog by bellowing "no" as it charged. The startled dog skidded to a stop in a comical, cartoon-character way.

"I also had a problem with dogs being too friendly," Jordan said. "On one hand, it was charming. On the other hand, it was a pain in the neck."