

# Riddle of the fibers

When, in the summer of 1979, bodies of strangled children were found in Atlanta, the city police did not suspect a serial killer. As the body count soared toward 30 in just 10 months, terrified parents demanded action. Then, on May 22, 1981, a stakeout trapped a man dumping something heavy into the Chattahoochee River.

Surveillance personnel flagged down Wayne Williams' car a little way from the James Jackson river bridge, and quizzed him. Where was he going at 2:00 A.M. on a Friday? The music promoter's reply was that he had been looking for the address of a young woman he was planning to promote. What had he thrown in the river? "Just trash," he said.

Police became more suspicious when he gave them a nonexistent address and telephone number for his promising young singing talent. However, a search of his car produced nothing incriminating, nor did dragging the river under the bridge. Still not entirely satisfied with his story, the police had Williams followed.

On Sunday, the body of Nathaniel Cater was washed up a mile downstream from the bridge. He had been reported missing a few days earlier. He had been asphyxiated, and he was naked, but in his hair was a single strand of nylon.

## A fiber thread

Some months earlier, trace experts at the Georgia State Crime Laboratory had begun to notice fiber evidence

linking the murders. The bodies of the earliest victims had been dumped fully dressed, and studies of their clothing revealed a similar thread stuck to virtually all of them. It was a coarse, yellowish-green fiber. Under the microscope it was clear that the fibers had a lobed cross-section characteristic of furnishing or carpet fabric. Initially, the discovery proved to be a blind alley because forensic experts could not identify the source of the fibers. But when this line of investigation was leaked to the press, the Atlanta killer changed his habits. He continued to strangle or smother his victims, but he began stripping them and dumping them in rivers to remove the telltale textile traces.

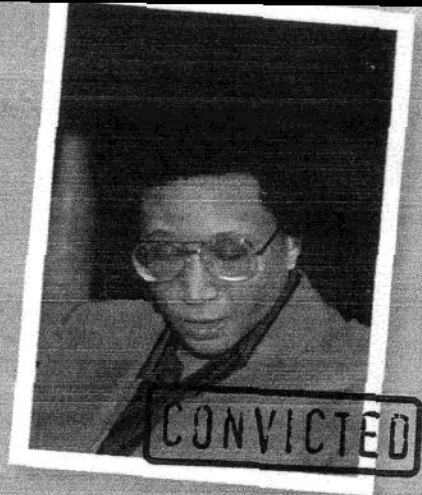
The nylon thread in Cater's hair was yellow-green, and had a lobed cross-section. The police got a search warrant.

## Finding a match

On June 3, they combed Williams' car and the house where he lived with his parents, and took away thousands of fiber samples. That night, detective Larry

## RIVER RECOVERY ▼

On March 30, 1981, Atlanta police pulled the body of 13-year-old Timothy Hill from the river. He was the last child victim of the killer, who then went on to target young men.

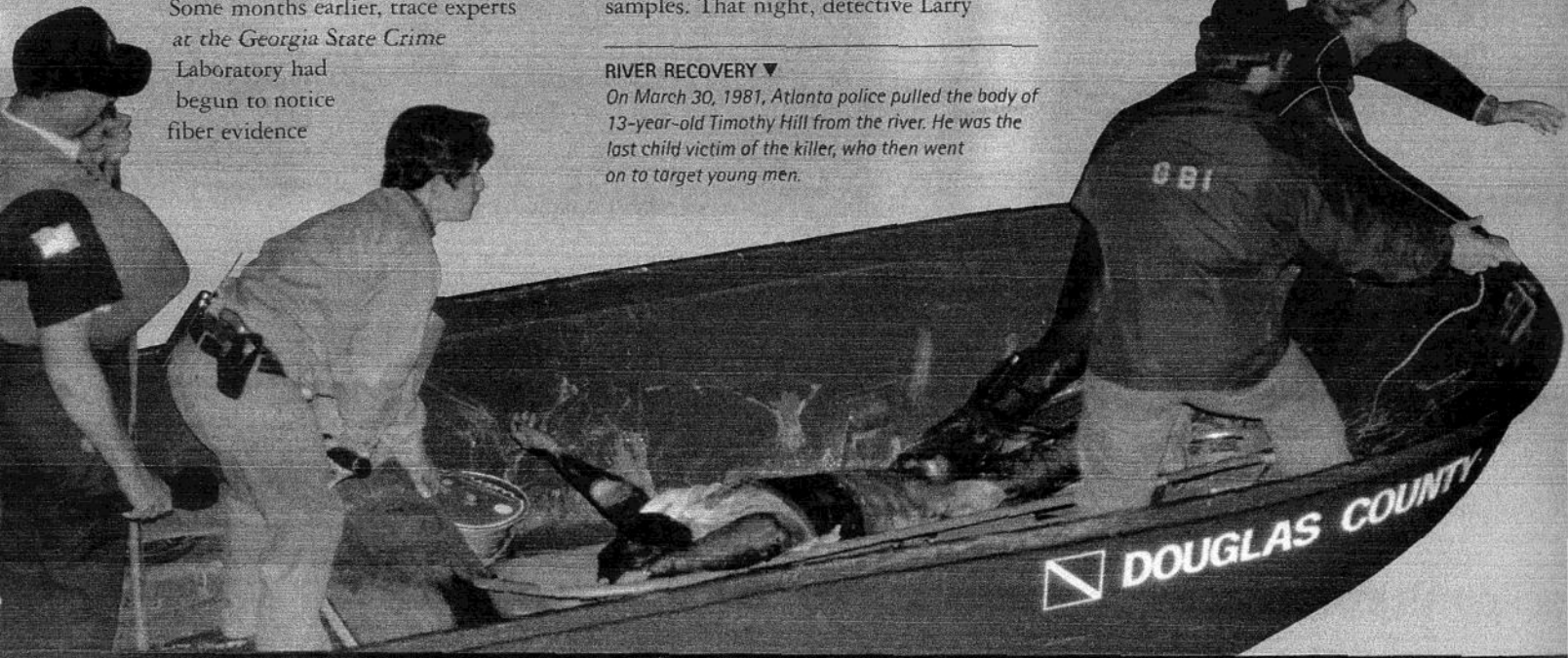


## CHILD KILLER ▲

Wayne Williams' indulgent parents bankrolled his career as a music promoter, but he had little ability for recognizing real talent, and he developed a reputation for promising more than he could deliver.

Peterson worked late at the crime lab, comparing fibers taken from victims with those collected in the search.

He made a remarkable discovery. Hairs found on some of the victims matched hairs taken from the Williams' German shepherd. Most of the victims also had fibers on their clothes that were identical to those taken from a bedspread in the house. And the yellowish-green fibers matched the olive-colored carpet that covered most of the floors. In the early hours of the morning, Larry phoned Hal Deadman, a detective from the FBI's Microscopic Analysis Unit, who was also working on the case:



"I've made some matches..." he said. "You'd better come over here."

Hal dressed and went over to the lab, and together the two men studied the fibers. "Larry and I were convinced that someone in the Williams environment was involved in the murders," he recalled later.

### Combining probabilities

They both knew that the significance of the match depended on how common the fibers were, so they traced the manufacturer: Wellman, Inc. The company had sold the nylon yarn, 181B, between 1967 and 1974. Several carpet manufacturers had bought it, but only one had dyed the fibers yellow-green. In 1970 and 1971 the West Point Pepperell Corporation had woven yellow-green 181B yarn into Luxaire English Olive carpet. They made only 16,397 sq yd (13,710 sq m)—enough to carpet roughly two-and-a-half football fields or about 52 tennis courts. From sales figures and average room sizes, Larry and Hal estimated that the chances of an Atlanta home chosen at random being carpeted with this brand and color were around 7,792 to 1.

But this was just one kind of fiber. Others told the same story. Rayon that matched the carpet in Williams' 1970 Chevrolet was found on the bodies of four victims. Only 680 cars in the Atlanta area had similar carpet. And the odds against a murdered child picking the fiber up by chance were 3,828 to 1. Combining the two probabilities made the case even more compelling: the odds against finding both fibers at random were 29 million to 1. Some of the bodies had 10 different fibers that all matched samples taken from different places in the Williams house. It was virtually impossible that such a match would occur by chance.

### Material witness

Wayne Williams, meanwhile, protested his innocence—with a high-profile press conference at his home.

This proved to be a mistake. In the frenzy of publicity that now engulfed the case, witnesses came forward to say they had seen Williams with some of the victims. Two recording studio staff recalled that they had seen deep scratches on his forearms—the kind strangling victims inflict as they fight for their last breath.

Atlanta prosecutors were hesitant about basing so much of their case on fiber evidence, which they felt was highly technical, and could confuse the jury. But under pressure to get a conviction, they went ahead. Wayne Williams was tried and found guilty of two of the murders. He was sentenced to two life terms.

### THE ARREST ▼

*Police had enough evidence to convict Williams, despite the fact that he and his father had cleaned up their house and cars and burned photographs in a backyard barbecue.*



### BANKS OF THE CHATTAHOOCHEE ▲

*At his trial, Wayne Williams' defense was that the river water had swept the fibers on to the bodies. But the same fibers were found on victims dumped in streets and woodland.*

