

Table 1: Crime Scene Data

Evidence/ Location	Blood Type	Hair Analysis	Fingerprint Analysis	Impression Analysis	Notes
Victim (Robert Burlington)					
Victim's Car			No print recovered.		
Cabin					
Tire Iron					
Tire Tracks					

Table 2: Evidence Summary

	Blood Type	Hair Type* (Crime Scene Match?)	Fingerprint Match?	Impression Match?	Alibi for Time of Death?	Notes
Chris Cunningham		Human				
Matthew Maloy		Animal				
Pam Preston		Human				
Timothy Taylor		Animal				
Vic Velto		Human				
Nicole Burlington		Animal				
Victim (Robert Burlington)			Estimated Days Since Death:			

\*Note: Investigators collected hair sample from the suspects' vehicles, and identified them as either human or animal hair.

## The Case of the Murdered Mayor

It is time to put your forensic skills to the test! You have been called to solve The Case of the Murdered Mayor. As part of a forensic investigation team, you will perform realistic simulations of forensic investigation techniques including fingerprint analysis, hair evidence analysis, blood typing, impression analysis, and entomological evidence analysis. To attempt to solve this crime, you must follow these important steps:

1. Read the Case Background and the descriptions of the suspects.
2. Carefully analyze and consider all of the collected evidence.
3. Determine which suspect (or suspects) had both motive and opportunity to commit the crime.
4. Submit a written report of your findings. Evaluate the evidence, name your primary suspect(s), and describe the most likely series of events leading up to and following the mayor's death.

The following information may help you in your investigations:

- You may have only a small amount of a substance to work with as evidence. Handle evidence carefully and make sure everything you work with is clearly labeled.
- As you work to find the truth, avoid jumping to conclusions. Carefully analyze the evidence and form your opinion based only upon the facts.
- Not all evidence is equally helpful in solving a crime.
- You may process evidence incorrectly or make a mistake, making the evidence inconclusive or unusable. Continue the investigation and revisit the evidence later, if possible.
- Once you have analyzed the evidence and you think you know who might have committed the crime, try to determine a motive as well.

### Case Background

At first, many residents of Allenville celebrated the election of Robert Burlington as mayor. Burlington had grown up in the rural, working-class town. He went off to college, married, and eventually returned to Allenville, becoming a partner in a struggling local investment firm. As a candidate, Burlington promised to make Allenville a great place to live and work. He ran against incumbent mayor Timothy Taylor, who tried to maintain the sleepy image of Allenville. Though a number of people spoke out against him during the campaign (including local environmentalist Pam Preston), Burlington won by a narrow margin.

Within a year, however, rumors began to circulate that Burlington was taking bribes from businessmen lobbying to build an industrial park in Allenville. The proposed industrial site was home to a few small businesses and a wilderness area called Lake Larson Park. Burlington did in fact support the industrial park, and he argued that a new road should be built to access it. If approved, the project would destroy much of the forested area surrounding Lake Larson Park as well as some adjacent farmland. The local newspaper published editorials accusing the mayor of destroying small businesses, the environment, and the tourist trade. Concerned citizens Matthew Maloy and Vic Velto started a petition to remove the mayor from office, but failed to get enough signatures. Shortly thereafter, the mayor was seen having a heated and very public argument with his wife, Nicole. The following day, observant citizens saw Nicole Burlington driving through town in a new car and wearing an expensive fur coat.

The last town council meeting held before Burlington's death was a nightmare for residents. A critical vote to annex the land for the industrial park and for approval of the connecting road was coming up in three days. Burlington had thus far bullied the town council into approving his plans, and many felt that Allenville would be forever changed by the results of the upcoming meeting. In front of the town council, the mayor dismissed his opponents' criticism as "small-town thinking" and stated that he was on a mission to make Allenville more prosperous. When residents objected, Burlington angrily replied that he was the mayor and that no one in town could stop him. At this point in the proceedings, councilman Chris Cunningham publicly accused the mayor of lying and taking bribes. The mayor abruptly ended the meeting and stormed out of the building as the town hall erupted into chaos.

One day before the planned town council vote, Nicole Burlington reported her husband missing. She claims that he told her he was going to "a silly meeting," but he never returned. Five days after the town council meeting, Burlington's car was found on an unpaved, isolated road near Lake Larson. The mayor was not there, but his keys were in the ignition. Several drops of blood were found on the front seat. A tire iron, smudged with blood, was found in the woods near the car. A second set of tire tracks was found near the mayor's car. The tracks followed a muddy road to a deserted cabin deeper in the woods.

Entering the cabin, the investigators immediately knew they were looking at a crime scene. A glass window was shattered and the furniture in the cabin was scattered and broken, suggesting a struggle had taken place. Mayor Robert Burlington lay on his side, a single bullet hole in his chest. He also had a large wound on the back of his head. It was apparent that he had been dead for a while; the stench of decay was present and maggot activity was evident on the body.

The investigators gathered five different types of evidence for comparison and further analysis.

1. **Blood Evidence.** Investigators collected samples of blood from the victim, the victim's car, the cabin floor, and the tire iron. Later, they collected blood samples from the six suspects.
2. **Hair Evidence.** Investigators collected samples of hair from the victim's clothing, the victim's car, and the cabin floor. Later, they collected and analyzed hair samples from the six suspects' vehicles.
3. **Fingerprint Evidence.** Investigators obtained fingerprint samples from the victim, from a piece of broken glass in the cabin, from a bloodstained piece of wood in the cabin, and from the tire iron. Later, they collected fingerprint samples from the six suspects.
4. **Impression Evidence.** Investigators photographed the tire impression found at the cabin crime scene. Later, they photographed the tires of vehicles belonging to the six suspects.
5. **Entomological Evidence.** Investigators collected insect larvae (i.e., maggots) from the victim's head and chest wound sites.



# The Suspects



While the evidence was being collected and processed for analysis by your team, police detectives identified their primary suspects—those who had been most outspoken against the mayor, the mayor’s business associates, and the mayor’s wife. Detectives deemed the following information relevant.



**Suspect:** Chris Cunningham

**Investigator’s Notes:**

Cunningham is a senior partner in Burlington’s investing firm and a member of the Town Council. He recruited Burlington to the firm and encouraged him to run for mayor. He is known for being honest with his investing clients and has always been an outspoken critic of corruption in government. The police have been called on several occasions recently to break up heated arguments between Cunningham and Robert Burlington.



**Suspect:** Timothy Taylor

**Investigator’s Notes:**

Taylor, the former mayor of Allenville, was narrowly defeated by Robert Burlington. Taylor owns and operates a sheep farm, which has been in his family for three generations. If built, the proposed highway would cut across his grazing land, forcing him to abandon the farm. Taylor recently made a profitable deal with a clothing manufacturer, which he will lose if forced to sell the farm. Taylor clearly has more than one reason to dislike Burlington.



**Suspect:** Matthew Maloy

**Investigator’s Notes:**

Maloy is Allenville’s local veterinarian and a prominent animal-rights activist. His business would be displaced by the proposed industrial park. Maloy has worked for years, without success, to expand and protect the boundaries of Lake Larson Park. Still a bachelor, he has been actively courting Pam Preston, also without success.



**Suspect:** Vic Velto

**Investigator’s Notes:**

This outspoken businessman operates an outdoor recreation shop on the shore of Lake Larson. Two years ago, he borrowed a large sum of money to expand his business. He purchased five sailboats and added camping and hunting supplies, including guns and ammunition, to his list of goods for sale. He is deeply in debt while his business grows, and it is no secret that he does not want to see any changes to the Lake Larson area.



**Suspect:** Pam Preston

**Investigator’s Notes:**

Preston is an environmental scientist and a lifelong resident of Allenville. She has been conducting long-term research around Lake Larson for the last six years. She has told colleagues that she is on the verge of a major breakthrough, but needs more time to complete her studies. She had a rocky romantic relationship with Robert Burlington long before he was married, and she never misses an opportunity to oppose him.



**Suspect:** Nicole Burlington

**Investigator’s Notes:**

Nicole’s marriage to Robert Burlington is rumored to be an unhappy one. The ambitious daughter of a wealthy big-city businessman, Nicole admits that she does not enjoy the small-town life. She is disappointed with her husband’s lack of financial success, and she encouraged her husband to realize greater political ambitions and move away from Allenville. She has recently been taking sailing lessons from Vic Velto.