

State Crime Lab

Case Description: Missy Hammond Case

Incident No: 000524-27A-2001



Oxford hair stylist Missy Hammond was found dead in her home. The victim's father, Jonah Dale, discovered the body when Missy's 7-year-old daughter, Liddie, answered the door. It appears that Liddie spent the night in her mother's bed, sleeping next to her mother's body. Initial observations indicate Missy was strangled and had been dead for some time before her body was found.

Directions

As Crime Scene Investigator, your job is to solve the murder of Missy Hammond. Here is what you need to do.

1) View the evidence at mommymurdered.com. The case documents are presented in chronological order in the Case Files section.

There are four types of case documents: Evidence, Interviews, Biographies, and Press. Click the relevant tag at the top of the Case Files page to filter by document type.

- 2) Perform forensic tests. Test the enclosed fabric samples for blood. Dust an enclosed evidence item for fingerprints and match it with a suspect print. Forensic tests and directions are included.
- 3) Name your suspect. Record your findings on the fact sheet.
- 4) Open the "Solution" envelope to get your password for access to the solution at **mommymurdered.com** and check your findings.

Requirements

- Forensic tests should be performed by adults wearing protective gear.
- mommymurdered.com requires an internet-capable device with a modern browser

Fingerprint Processing and Preservation

Fingerprint dusting is the application of finely ground, colored powder to a nonporous object to make latent prints visible. Powder clings to moisture, oil, and other residues.

Equipment

Fiberglass filament brush, camel-hair brush, or feather duster

Materials and Chemicals

Fingerprint powders (black, gray, or white) Adhesive fingerprint lifting tape Fingerprint card

Processing Procedure

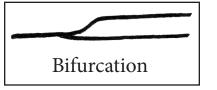
- 1. Pour needed amount of powder into a small pile.
- 2. Dip tips of bristles of brush into powder.
- 3. Apply a small amount of powder onto the surface and begin to brush.
- 4. Brush in the direction of any ridges that begin to appear.
- 5. Build powder onto ridges and stop when latent print reaches point of sufficient clarity.
- 6. Clean excess powder from between ridges using brush or cotton. (Optional)

Preservation Procedure

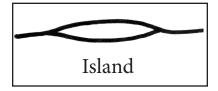
- 1. Collect and preserve the print by using fingerprint lifting tape.
- 2. Press the adhesive side of the tape over the latent print surface and rub it to make certain complete contact is made.
- 3. Carefully peel the tape from the latent surface.
- 4. Attach to the tape to the glossy side of a fingerprint card. Press carefully to remove bubbles.

Fingerprint Ridge Characteristics

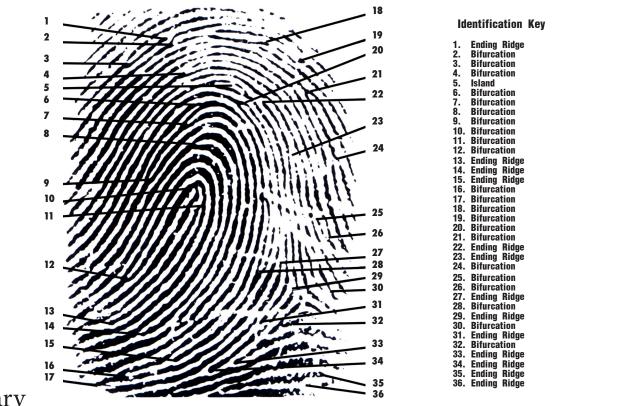
Ridges are essential to fingerprint pattern identification. Three basic ridge types form recognizable patterns and create a frame of reference when making comparisons.







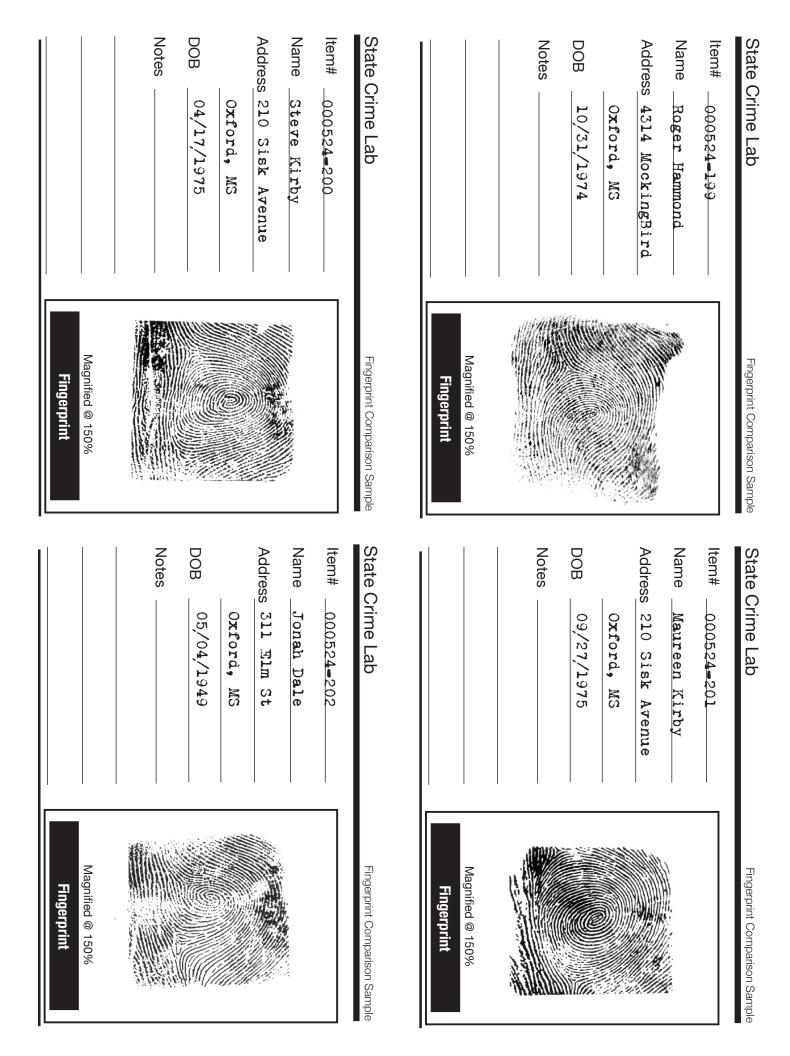
Ridge Identification



Summary

To compare the fingerprint you gathered against the four suspect samples, look for ridge pattern matches. To get a better look at the ridge detail, use a magnifying glass. A camera phone or photocopier may work well in place of a magnifying glass.

The classification and identification of fingerprints is a science covered in depth online and in many books. For more info about identifying fingerprints, visit **mommymurdered.com/resources**



Using Forenstix to Test for Blood

Evidence at the scene can immediately be field tested for the presence of blood by dropping a sample into a Forenstix reagent. A positive reaction will turn the mixture blue and presumptively identify blood on the test sample.

- 1. Obtain a sample of the suspected bloodstain by rubbing the stain with a clean cotton-tipped swab or by taking a small cutting a thread.
- 2. Remove the cap from the test vial, being cautious not to squeeze the plastic vial attached to the cap.
- 3. Drop the fabric cutting into the bottom of the vial and replace the cap.
- 4. Break the lower brown-colored vial by exerting pressure between the thumb and forefinger. Do not crush the broken glass.
- 5. Tap the swab or fabric sample to the bottom of the tube. Allow the swab or fabric sample to absorb the brown-colored liquid. Wait 10-20 seconds.
- 6. Break the clear-colored ampule attached to the cap, allowing the liquid to flow downwards and mix with the first liquid and evidence samples.
- 7. A blue color reaction is considered to be a positive reaction to presumptively identify blood.

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Solving the Case

Record your findings on the case before opening the solution envelope. In the Solution section you will find forensic test results, a suspect interrogation, and more. Use this information to check your results.

1. The Killer(s) Identity

- 2. Your Blood Evidence Test Results:
- 3. Your Fingerprint Evidence Test Results:

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