



Office of Chief Medical Examiner
State House, Station #37
30 Hospital Street
Augusta, ME 04333
(207) 624-7180

Investigative Report

CASE #: **15-02315 E**



DECEDENT	DECEDENT: Geraldine Largay		DOB: [REDACTED]	AGE: 69 Years	SEX: Female
	RESIDENCE: [REDACTED] Brentwood, TN				
CALL INFO	REPORTED BY Special Agent Erin Mi		DATE / TIME: 10/14/2015 2:36 PM		
	AGENCY: NCIS		TELEPHONE: [REDACTED]		
	POLICE INVESTIGATOR		AGENCY:		
DEATH	DATE / TIME DEATH: 10/14/2015 10:30 AM		HOW DETERMINED Found Date & Time		
	LOCATION DEATH: Other		ADDRESS: 2100' off Appalachian Trail Rangeley, ME		
MEDICAL EXAMINER	MEDICAL EXAMINER: Marcella Sorg, PhD		SCENE VISIT DATE / TIME:		
	ME INVESTIGATOR:		PLACE BODY EXAMINED: Office of Chief ME		
	IF EXAM IN FH, WHICH ONE?:			DATE / TIME:	
	AUTOPSY PERFORMED <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		DATE AUTOPSY:		PATHOLOGIST:
	CAUSE OF DEATH:	Inanition			
	DUE TO	Prolonged environmental exposure			
	OTHER SIGNIFICANT CONDITIONS:				
	MANNER: Accident		DATE / TIME INJURY: Found 10/14/2015 10:30 AM Found		AT WORK: <input type="checkbox"/>
PLACE INJURY: Woods					
LOCATION: 2100' off Applachian Trail, Rangeley, ME.					
HOW INJURY OCCURRED: Skeletonized remains recovered approximately two years after being lost while hiking.					
OFFICE REVIEW BY: Mark Flomenbaum, MD		TITLE Chief Medical Examiner			
SIGNATURE <i>Mark Flomenbaum</i>		DATE 01/08/16			

<u>MEDICAL INFORMATION</u>				
ATTENDING PHYSICIAN:				
PRIMARY ILLNESS:				
RISK FACTORS	DRUG ABUSE <input type="checkbox"/>	ALCOHOL ABUSE <input type="checkbox"/>	SMOKING <input type="checkbox"/>	PRIOR SUICIDE ATTEMPT <input type="checkbox"/>
	HYPERTENSION <input type="checkbox"/>	DIABETES <input type="checkbox"/>	SEIZURE DISORDER <input type="checkbox"/>	
MEDICAL HISTORY:				
<u>REPORTED CIRCUMSTANCES OF DEATH:</u> An NCIS Special Agent notifies OCME of the discovery of remains. It is reported that remains were discovered on federal land in Redington Township during a tree survey. The remains are located approximately two miles from the closest parking lot. Not much is known about the remains during the initial report except that a red jacket was identified at the scene. Dr. Flomenbaum is updated, and Maine State Police and the Maine Warden Service are contacted.				

FORENSIC ANTHROPOLOGY REPORT

SUMMARY

On 10/16/15 I performed a postmortem examination on remains identified by DNA as those of Geraldine Largay, described as a Caucasoid female 67 years of age [REDACTED] and approximately 5' 3" in stature. She was reportedly last contacted 7/22/13 while hiking the Appalachian Trail in Maine. The nearly complete, skeletal remains were recovered on 10/15/15 under my supervision from the decedent's campsite in a very remote and heavily wooded area northeast of the Trail. The biological profile of the remains is consistent with the description of the decedent, and the condition of the remains is consistent with her postmortem interval. Neither the radiographic studies nor the detailed macroscopic examination of the skeleton reveal any evidence of trauma.

BACKGROUND AND CHAIN OF CUSTODY

On 10/14/15 I received a call from Maine State Police Detective Sgt Randy Keaton at about 10:30 PM requesting my involvement in the recovery of remains found just off of the Appalachian Trail on U.S. Navy land near Rangeley. The remains were thought to be those of AT hiker Geraldine Largay, missing since 7/22/13. The remains were discovered by two Prentice and Carlisle Company surveyors passing through a section of federal land *en route* from a job on private land. Representing the Maine Office of Chief Medical Examiner (OCME), I traveled with my assistant Jamie Wren to recover the remains on 10/15/15. Maine State Police Evidence Response Team Leader Scott Bryant transported the remains to the OCME later that day. My examination of the remains occurred 10/16/15.

SCENE INVESTIGATION

The search and recovery incident command was Lt Kevin Adam, Maine Warden Service (MWS). Personnel from the Maine Office of Chief Medical Examiner (OCME), MWS, Maine State Police (MSP), MSP Evidence Response Team (ERT), and Naval Criminal Investigative Service (NCIS) participated in the scene investigation, including recovery of artifacts and evidence. They performed shoulder-to-shoulder searches of the camp area. I supervised my assistant Mr. Jamie Wren via radio from the staging area in the recovery of the remains, due to safety concerns with the terrain.

Nearly all of the remains were in a rather concentrated area associated with the sleeping bag, which was located within about 19 - 20 feet from the zipped up tent. Decomposition stains were present within the tent and under the displaced sleeping bag. The tent had been torn by animals, and bones of the shoulders, arms, and patellae were missing. Mr. Wren placed the remains, including the sleeping bag, in a body bag, which was carried to the ERT Crime Van for transport to the OCME morgue; personal effects and artifacts were transported to the Crime Lab. In the days after the scene investigation, two law enforcement Human Remains Detector K-9 teams returned to the site to search for the missing bones, but nothing further was found.

EXAMINATION OF THE BODY

On 10/16/15 I traveled to the OCME morgue in Augusta to perform my examination, assisted by Mr. Wren. Besides OCME autopsy assistant Kyia Bryant, and Deputy Chief Medical Examiner Dr. Edward David, officials from all involved agencies were also present: ERT Detective John Flynn, MWS officer Josh Bubier, NCIS death investigators Erin Michaels and Nate Craig, and both Det. Scott Gosselin and Michele Fleury from the MSP Crime Lab.

Chief Medical Examiner Dr. Mark Flomenbaum had ordered initial photography and x-rays; the body bag was opened to begin this process just prior to our arrival. I examined the x-rays, performed an initial examination, and then supervised the cleaning of the skeletal remains. I selected three bone specimens for DNA testing (these were not cleaned). These specimens (midshaft right femur, right first metatarsal, and right talus) were packaged by Ms Bryant and sent to the Crime Lab. Mr. Wren and I did a complete inventory of bones and teeth, performed routine bone measurements, and I developed a biological profile, including a description of pathology. I examined each bone carefully to rule out trauma and document postmortem damage.

TAPHONOMIC ASSESSMENT

Remains present and condition. The skeletal remains are fairly complete. As is frequently seen in remains exposed in the Maine woods, bones of the shoulders, arms, hands, and patellae are missing bilaterally as a result of scavenger activity. All other bones and teeth are present and there is minimal scavenger damage to these. Major joints are still partially articulated with desiccated ligamentous tissue, and there is a small amount of adipocere. Small fly pupa cases are abundant in the sleeping bag. The sternal ends of some ribs and the lateral processes of some of the vertebrae have been damaged by canid scavengers.

Environmental context. The scene is a campsite in a small clearing within a heavily wooded area. The site is positioned on a knoll about midway up a southwest-facing slope, which rises fairly sharply away from a stream. The decedent had constructed a sleeping platform out of soil and pine needles.

The surrounding trees are mixed second growth hardwood and evergreen, with an estimated 75% canopy cover over the campsite. Visibility of the campsite from the surrounding woods or from the air above would be very limited. The soil is thin, moist, and matted with roots and rootlets. Although moist, the soil is well drained due to an abundance of pine needles and the site's position on the slope.

Reconstructed taphonomic history and estimated postmortem interval. The decedent apparently died during summer while in the sleeping bag, which was then within a closed tent. The body was well protected by the relatively moisture resistant fabric of the sleeping bag and tent in the early weeks after death, limiting the transmission of detectable scent through the air to the searching K-9s. The sleeping bag still containing the remains was later removed from the tent by scavengers. The condition of the remains is consistent with a postmortem period of about two years when compared to similar cases exposed in a Maine woods setting.

BIOLOGICAL PROFILE AND INDIVIDUAL PATHOLOGY

The biological profile of the remains is consistent with the description of the decedent as a Caucasian female, age 67, and about 5'3" in stature. The skeletal remains exhibit a minor amount of arthritis, as well as a unilaterally collapsed lumbar vertebra (L4), consistent with her medical history.

INDIVIDUATION AND IDENTIFICATION

The remains were positively identified with nuclear DNA as those of Geraldine Largay, matching DNA from bone samples with a sample of her DNA from a personal artifact.

TRAUMA

I examined each bone carefully, and found no evidence of perimortem trauma or injury. All of the damage to the bones is clearly postmortem, due to animal scavengers.

A handwritten signature in black ink, appearing to read "Marcella H. Sorg". The signature is fluid and cursive, with the first name "Marcella" written in a larger, more prominent script than the last name "Sorg".

(Electronic signature)
Marcella H. Sorg, Ph.D., D-ABFA
Forensic Anthropologist
December 22, 2014



Paul R. LePage
Governor

STATE OF MAINE
Maine State Police Crime Laboratory
26 Hospital Street
133 State House Station
Augusta, Maine
04333-0133
(207) 624-7100

A Nationally Accredited Laboratory



Lt. William S. Harwood
Director

TO: Warden Joshua Bubier
Maine Warden Service - Greenville
PO Box 551
Greenville, ME 04441

DATE: October 23, 2015
LAB CASE #: L13-000587
AGENCY CASE #: WS13017786
CITY/TOWN: Wyman Twp
OFFENSE: Missing Person

MSP ERT: No

Involved Parties:

Missing: Geraldine Largay

TYPE OF EXAMINATION REQUESTED: General Forensic DNA Analysis

Respectfully submitted,

Jennifer L. Sabean
Forensic DNA Analyst

EVIDENCE RECEIVED:

The evidence listed below was received by the Maine State Police Crime Laboratory on July 30, 2013 from Warden Joshua Bubier of the Maine Warden Service - Greenville:

Item # 004: One manila envelope labeled "personal items of Geraldine Largay"

The evidence listed below was received by the Maine State Police Crime Laboratory on October 16, 2015 from Medical Examiner Assistant Kyia Bryant of the Office of the Chief Medical Examiner:

Item # 007: Paper bag: human remains, right femur

Item # 008: Paper bag: human remains, talus

Item # 009: Paper bag: human remains, right metatarsal

The evidence listed below was received by the Maine State Police Crime Laboratory on October 22, 2015 from Captain Richard Hickey of the Brentwood Police Department:

Item # 010: Swab box, not taped sealed: Kerry Bauchiero

Item # 011: Swab box, not taped sealed: Kerry Bauchiero

EVIDENCE ITEM INVENTORY:

The following evidence was inventoried during the course of analysis and is reported as:

Sub-item # 004E: swab of lip balms

Sub-item # 007A: Portion of the femur from the remains

RESULTS:

Please see Forensic DNA Analysis report for Lab Case #L13-587 dated September 12, 2013, August 9, 2013 and August 5, 2013 for previous DNA test results.

A portion of the extract from Item 7A was analyzed using the Profiler Plus and COfiler STR kits.

The ten locus female DNA profile obtained from the femur section (Item 7A) matches the DNA profile previously obtained from the lip balm said to be from Geraldine Largay (Item 4E) at the overlapping loci. The estimated probability of randomly selecting an unrelated individual from the FBI Caucasian population database having a DNA profile matching Geraldine Largay's ten locus DNA profile is 1 in 95.7 billion.

Items 8, 9, 10 and 11 were not tested at this time.

CONCLUSIONS:

Geraldine Largay is INCLUDED as a potential donor for the DNA profile obtained from the femur (Item 7A).

COMMENTS:

Item 7A has been consumed. Items 7, 8, 9, 10 and 11 will be returned. The remaining DNA extracts will be retained.

**** END REPORT ****