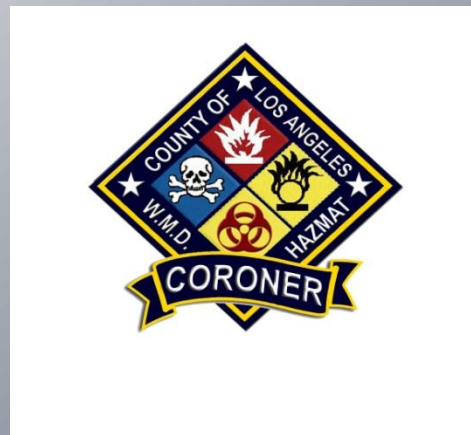
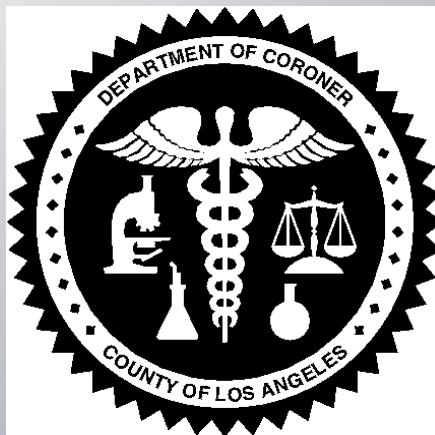


LOS ANGELES COUNTY DEPARTMENT OF MEDICAL EXAMINER-CORONER

LA BODY FARM



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Law and Science Serving the Community

CSI ≠ Coroner



≠





CORONER

DEPARTMENT OF MEDICAL EXAMINER



Chief Medical Examiner
Dr. Fajardo

What does the Coroner do?

- Homicide – death at the hands of another
- Suicide – self inflicted death
- Accident – unintentional death
- Natural – death due to natural causes with
UNUSUAL circumstances

LA COUNTY CORONER STATS

- Cover over 4000 square miles
- Work with 52 law-enforcement agencies, 115 hospitals and 200 mortuaries
- 60,000 deaths a year in LA County
- 20,000 Coroner Case deaths annually
- Over 300 John and Jane Does each year
- Conduct approximate 10,000 autopsies per year

Kern County

Ventura County

Los Angeles County

San Bernardino County

Orange County

Pacific Ocean

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0 2 4 6
Miles

Unincorporated Areas
City of Los Angeles





- The Coroner's office maintains a fleet of vehicles used for transportation of decedents from the place of death to the Coroner's Forensic Science Center.



34340



E-250

CORONER

CA EXEMPT
1091440



HOW AM I DRIVING?
Call 823-843-0838

Law and Science Services



L.A. COUNTY
CORONER

THERE'S NO EXCUSE
FOR DOMESTIC VIOLENCE

ATTENT ON
LAW ENFORCEMENT
PLEASE DRESS
& SIGN-IN

L.A. COUNTY
CORONER

TOILEDO



ATTENT ON
LAW ENFORCEMENT
PLEASE DRESS
& SIGN-IN.

L.A. COUNTY
CORONER

Cartridge

Cartridge

REPLACEMENT
FX















PANEL 802 OF 804



heart L 2
400 S 1.5
scores R 9.4
Lung L 750
Kidney R 250
L 200
L microphalar 2000
S 550
app + stomach
GB + small intestine
abd 2 in
distal

brain 1275



Fingerprinting

- Everyone over the age of 12 is fingerprinted
- Identity is confirmed on 50% of cases through fingerprint checks with local law enforcement agencies and the DOJ
- Except for special cases that include decomposition and dehydrated decedents.

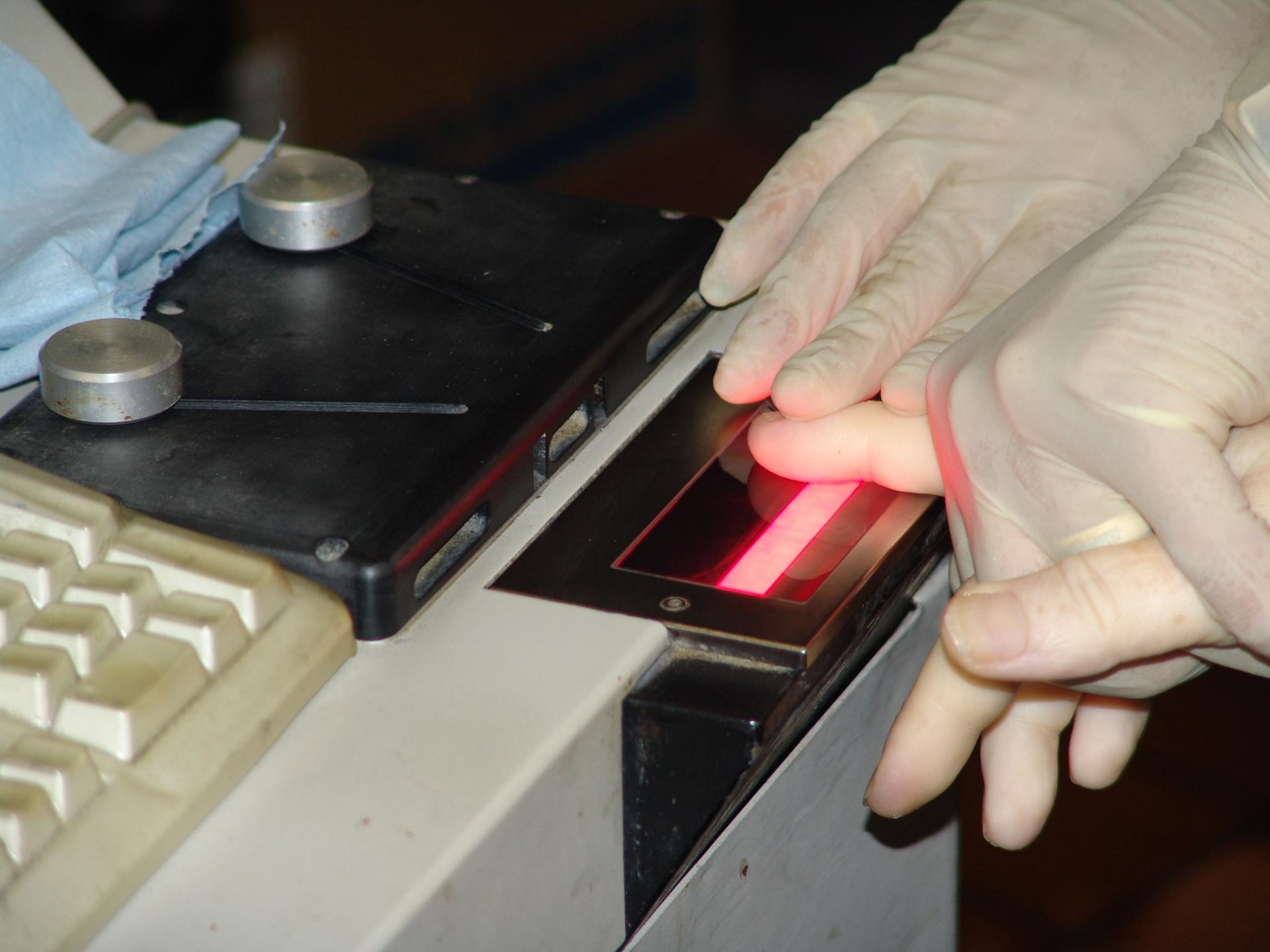




DBI

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BODY FARMS



What is a BODY FARM ?

A research facility where human decomposition can be studied in a variety of climates.

Purpose: to better understand the decomposition process development of new techniques for extracting information (such as the timing and circumstances of death) from human remains. Body farm research is particularly important within forensic anthropology and law enforcement.

JOHN & JANE “DOE”

1. Fingerprint Rehydration
2. Odontology comparison
3. X-ray- full body comparison
4. Circumstantial identification (RARE)
5. DNA







BEFORE REHYDRATION

Special Fingerprint Processing



Fingertip Re-hydration



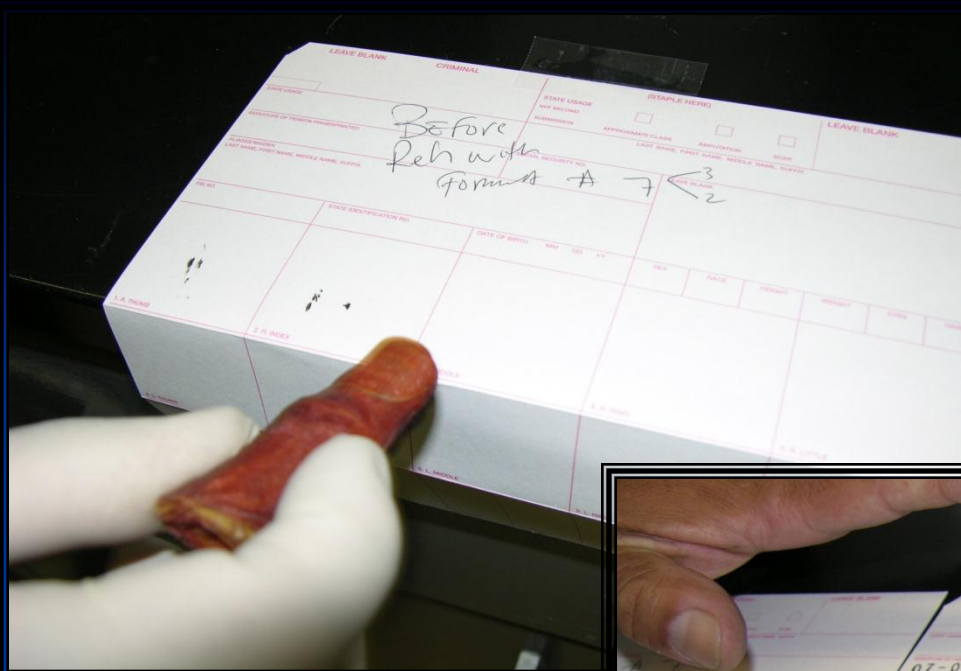
- Remove fingertips from hands
- Reconstitute by chemical injection
- Produce classifiable fingerprints
- Provide permanent photographic records for comparison and identification



AFTER REHYDRATION



BEFORE REHYDRATION



Decomposition

- ⦿ Degradation begins immediately after death
- ⦿ Arbitrary stages of decay:
 - Fresh
 - Bloat
 - Active decay [Putrefaction/Black Putrefaction]
 - Advanced (rancid) decay [Butyric Fermentation]
 - Dry (Skeletal/Mummified) decay

Speed of Decomposition

Affected by:

- Temperature
- Sepsis
- Trauma
- Body size /weight
- Clothing
- Water exposure
 - Rainfall
 - Submersion
- Burial and depth
 - Deeper = slower
- Access by insects
- Animal Scavengers
 - Carnivores
 - Rodents

Postmortem Interval

PMI: time since death

Gives the Police a timeframe to narrow down or possibly pinpoint the suspect.

Skin Slip

- Epidermis (outer skin) disassociates from underlying layers
 - Can form “blisters”
 - Hair, nails and skin “slip”
 - In heat can occur within hours
 - 4 – 6 days: “De-gloving/stocking”



Putrefaction

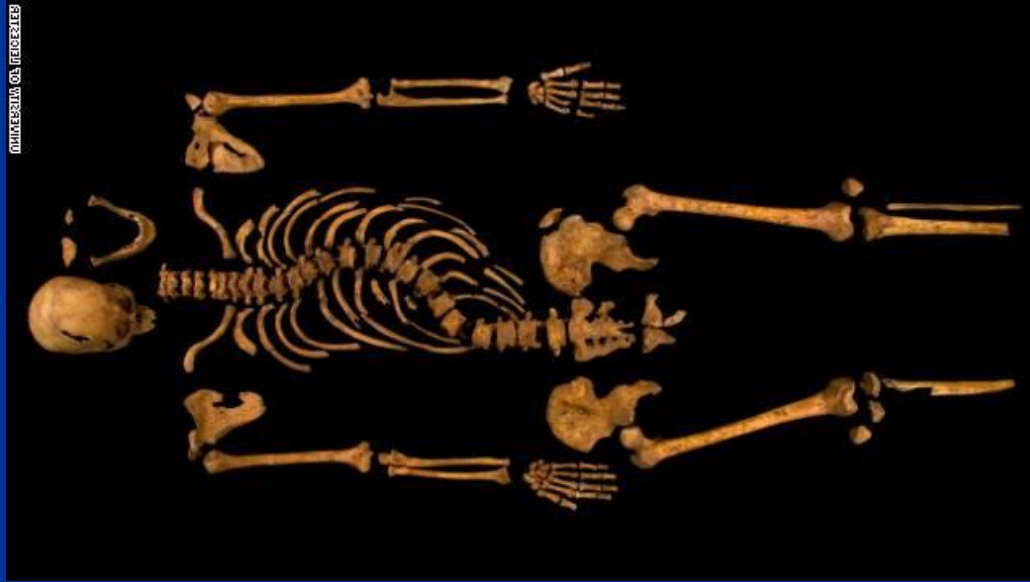
- Internal microorganisms break down tissues
 - Foul smelling
 - Gasses formed are trapped under the skin
 - Bloating predominant in abdomen and face



Skeletonization



- Completion of decomposition process



Mummification

- Hot, dry climate
 - Alternative to normal decomposition
- Skin becomes leathery
- Internal organs become putty-like



The Saga of Chimney Boy



Acc / Homi







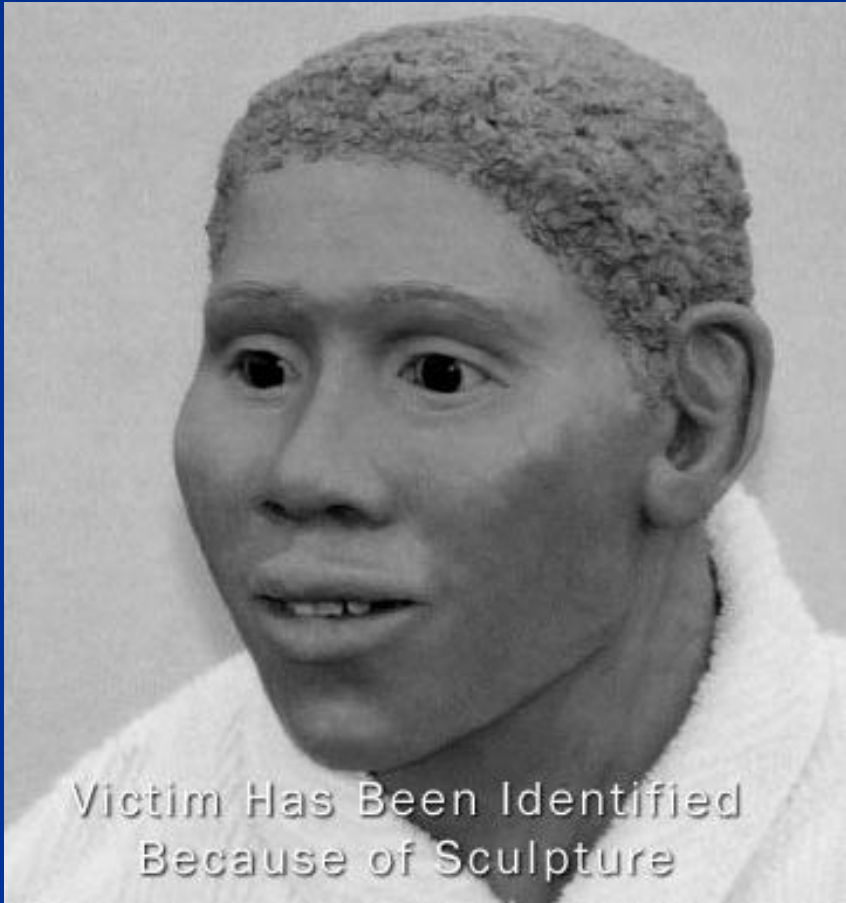






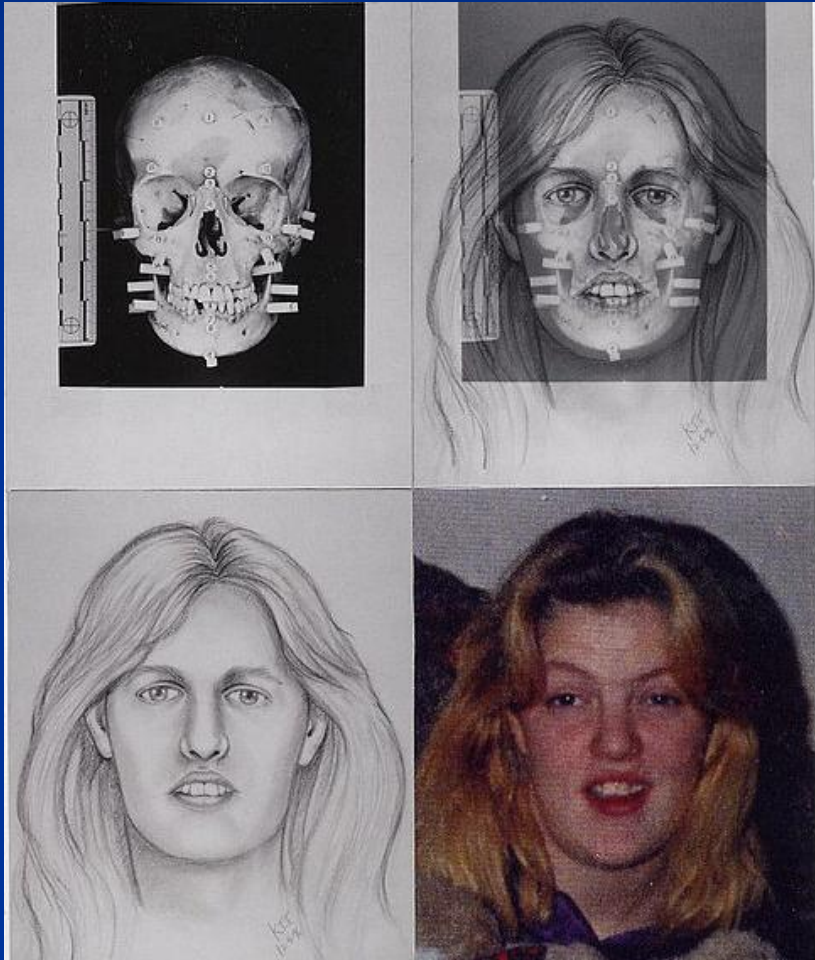


Facial Reconstruction



- Performed by
 - Forensic Artists
 - Forensic Anthropologists
- Presentation to the public
 - Crucial
 - Aging
 - Eye color
 - Hair Color

2-Dimensional Facial Reconstruction



- Manual
- Computerized

3-Dimensional Facial Reconstruction

■ Manual

- Facial sculpture
 - On skull or replica
- Facial musculature sculpted or tissue depth markers applied

■ Computerized

- Automated systems apply templates to skeletal morphology
- Modeling systems mimic manual methods



5 Body Farms in US

1. University of Tennessee (oldest)
 2. Texas State University (largest-7 acres)
-
3. Western Carolina University (Cullowhee, Ncarolina)
 4. Sam Houston State (SE Texas)
 5. Southern Illinois University

Why does LA need a Body Farm?

7 UNIQUE microclimates

- **Coastal**
- **Inland Coastal**
- **Valley**
- **Scrub Forest**
- **Mountain**
- **High Desert**
- **Low Desert**

UNSTUDIED-soil content, terrain, temperature

BODY FARM

- Perform research projects giving reliable data that aides LE
- Research new Identification processes
- Research wound patterns and tool mark analysis

Provide State Certified Training in:

- Grave location
- Grave excavation
- Skeletal recovery of human remains

NEED TO START:

- Secure land location owned by the County
- Body Donation Program
- Start up supplies
- Staff
- Research Projects

SUPPORT

- UCLA
- Cal State LA
- CA State Coroners Association
- ABMDI (American Board of Medicolegal Death Investigators)
- N.A.M.E
- DOJ via CAL-OES
- NIH

University of Tennessee's Body Farm -Knoxville

- Began in 1981 by Anthropologist, Dr. William Bass
- Consists of a 2.5-acre wooded plot surrounded by a razor wire fence.



- At any one time there will be 20 bodies placed in different settings left to decompose. Detailed observations and records of the decomposition process are kept, including the sequence and speed of decomposition and the effects of [insect](#) activity.
- Over 100 bodies are donated to the facility every year. Over 1300 people have chosen to pre-register themselves ([Grover Krantz](#))
- The University of Tennessee Body Farm is used in the training of law enforcement officers in scene-of-crime skills and techniques.







FAYETTEVILLE
POLICE

Detection of Graves



Clandestine Graves

- Clandestine – characterized by, done in, or executed with secrecy or concealment, especially for purposes of subversion or deception; private or surreptitious
- Grave - an excavation made in the earth in which to bury a dead body.

Detection of Graves

Informants

- Suspect
- Grave Digger
- Eyewitness
- Someone with Knowledge



Detection of Graves

Visual Techniques

- Bones/Evidence Protruding
- Surface Disturbances
- Soil Characteristics
- Vegetation Anomalies
- Animal Activity
- Other

Detection of Graves

Visual Techniques

Bones / Evidence Protruding



Detection of Graves

Visual Techniques

Bones / Evidence Protruding



Detection of Graves

Bones / Evidence Protruding

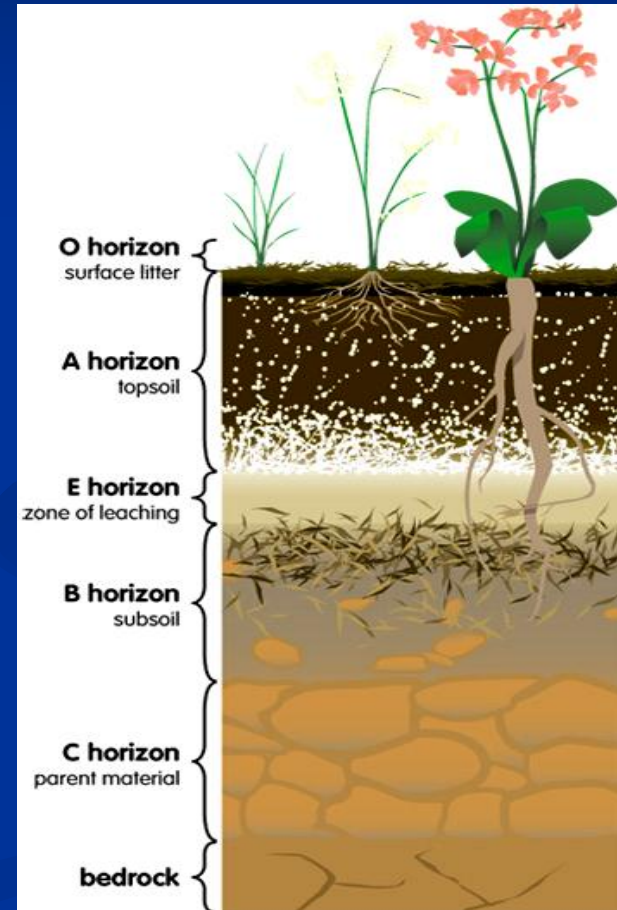


Detection of Graves

Visual Techniques

Soil Characteristics

Stratification



Grave Excavation



- Pedestalling: An excavation technique in which objects are left in place on columns of soil until the entire unit has been excavated



Cadaver Dog Program



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