

# FORENSIC ARCHAEOLOGY: SEARCH, EXCAVATION, AND RECOVERY

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# Archaeology

1. Prehistoric Archaeology
2. Historic Archaeology
3. Forensic Archaeology



# Forensic Archaeology Objectives

- Locate the forensic scene (search)
- Record, document forensic scene
- Verify forensic significance
- Minimum number of individuals
- Reconstruct perimortem events
- Reconstruct postmortem events



# Important Terms

- ▣ Stratigraphy
- ▣ Datum
- ▣ Context
- ▣ Plan
- ▣ Profile
- ▣ Taphonomy



## Phase I: Search, Reconnaissance



# Search Techniques

- ▣ Walkover Surveys
- ▣ Aerial (infrared photography)
- ▣ Geophysical Methods
- ▣ Cadaver Dogs

# Ground Search

GOOD VISIBILITY

POOR VISIBILITY



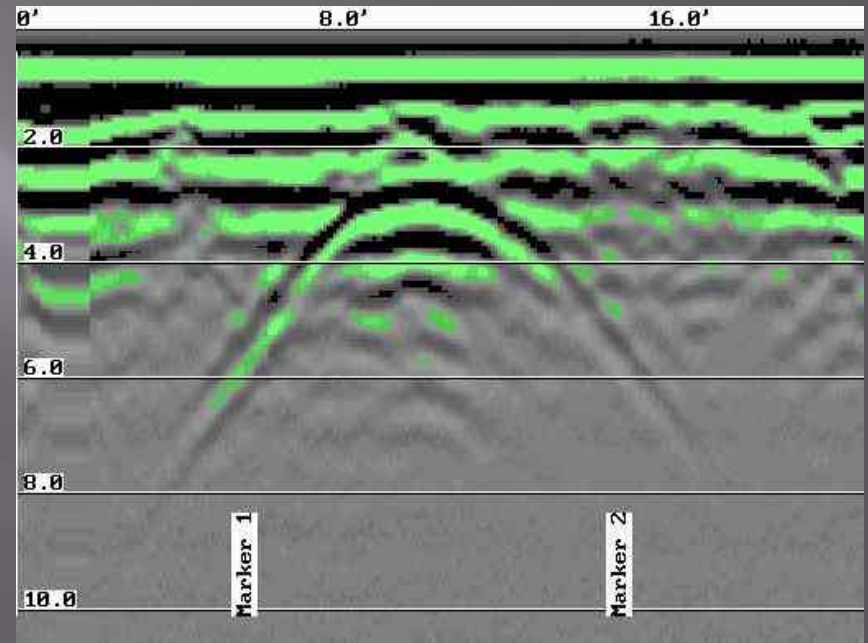


## AERIAL (INFRARED) PHOTOGRAPHY





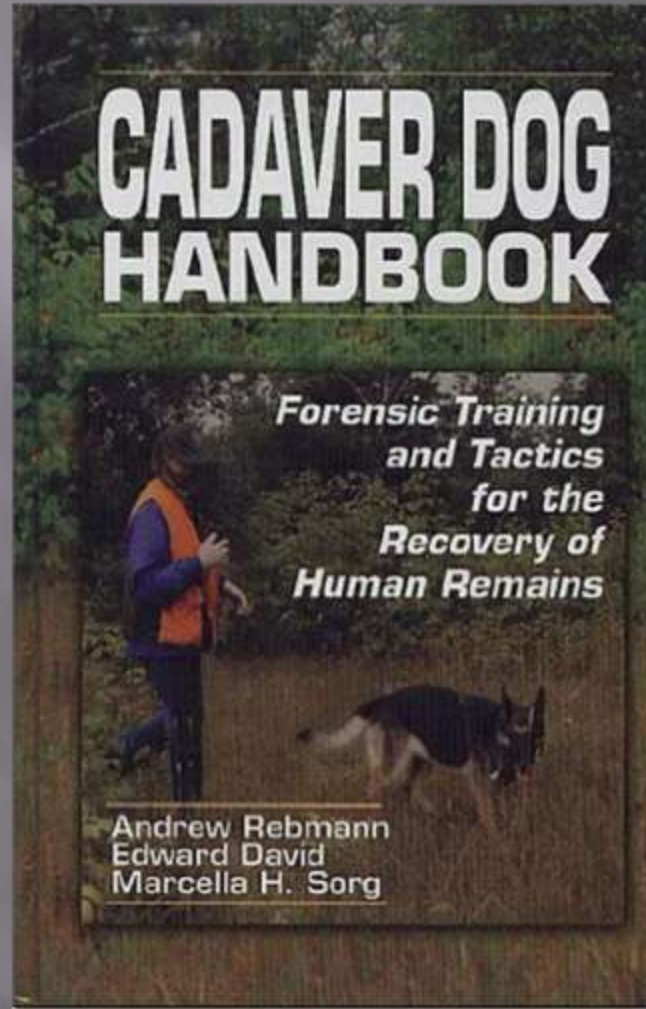
# GEOPHYSICAL METHODS: Ground Penetrating Radar



## Geophysical Methods: Electrical Resistivity



## CADAVER DOGS





## Phase II: Determination of Significance





## Contemporaneity of Human Remains



# Context and Association



## Phase III: Excavation, Removal



## Surface Remains



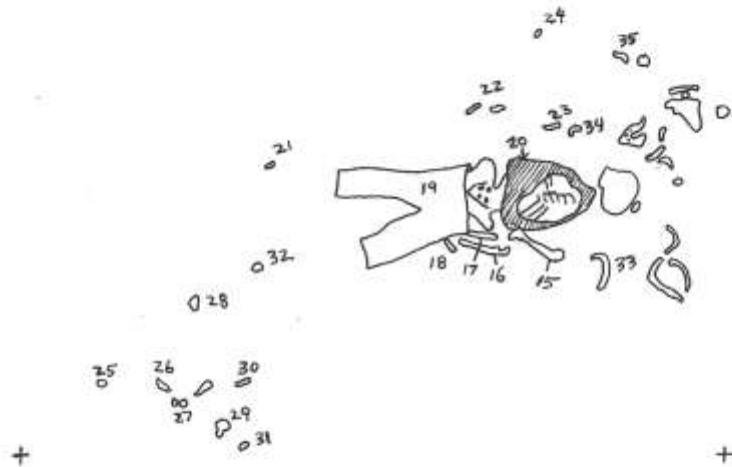


50 cm

+

+

MN



**KEY:**

- |   |  |
|---|--|
| 15. Right humerus                         | 26. Right metatarsal                     |
| 16. Right ulna                            | 27. Right foot cuneiforms,<br>metatarsal |
| 17. Right radius                          | 28. Right foot phalanx                   |
| 18. Right hand (except for one carpal)    | 29. Right talus                          |
| 19. Jeans (femora inside)                 | 30. Right metatarsal                     |
| 20. Top (with ribs, thoracic vertebrae)   | 31. Right navicular (tarsal foot bone)   |
| 21. Right distal first metatarsal phalanx | 32. Right cuneiform                      |
| 22. Left hand phalanges                   | 33. Right rib                            |
| 23. Left hand phalanx                     | 34. Hyoid                                |
| 24. left carpal (pisiform)                | 35. Left hand phalanx                    |
| 25. Foot phalanx                          |  |

# Covert Burials

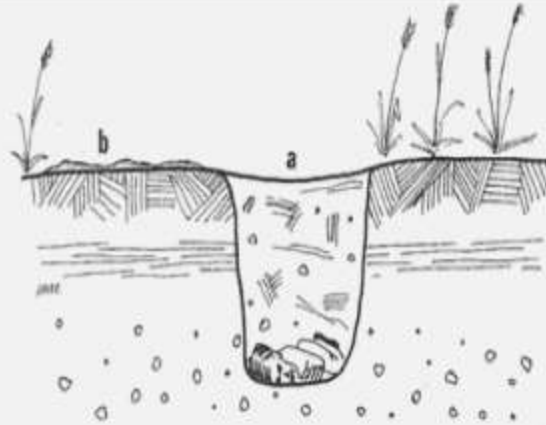


Figure 3.8. The completed grave leaves two areas of plant damage: the grave area itself (a) and the adjacent ground where the fill was piled up (b). (Adapted from McLaughlin, 1974.)

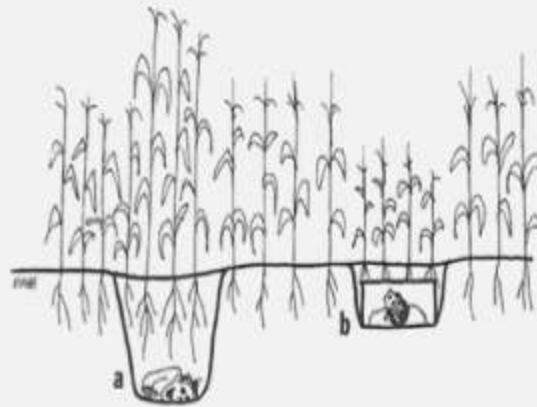


Figure 3.9. The totality of circumstances determine whether a grave will ultimately favor (a) or retard (b) plant growth. (Adapted from Wilson, 1982.)

