Lindow Man



The Verdict

Guidance Notes

The session aims to provide a Court inquiry established to find the cause of death of Lindow Man. It will involve the pupils using criminal investigative techniques of researching, selecting, organising and presenting evidence in a Court Session to a panel of Judges. The evidence provided in this resource include mocked-up reports to assist pupils in assessing the scientific circumstances regarding the death of Lindow Man. These can be supplemented with additional resources available if required.



Image courtesy of the Trustees of the British Museum.

The timetable allows for the class as a whole to be given a general introduction to the `Lindow Man Story'. However, this could be done in a previous class, in context with other bog bodies of contemporary times.

During the session the groups will present their cases, which would include cross-examination by the other group's representatives and the Judges. This would be controlled by the Judges. At the end the Judges would retire for a few minutes to decide on their decision and then return to the Court to inform the class.

The class is split into 4 groups, one group of 3 or 5 students and then 3 groups of equal numbers. The first group of students are to be the Judges; the 3 other groups have a Cause of Death case to present to the court:

- 1. Ritual Sacrifice
- 2. Murder
- 3. Accident

We recommend that:

- Each group has 2 representatives who present the evidence and cross examine the other groups' expert witnesses
- Judges should nominate who their HEAD Judge will be. If necessary, this could be the class teacher in order to ensure diplomacy.
- The VERDICT be determined by the quality of the evidence presented during the court case and NOT necessarily a pre-conceived judgement.

Session Notes



1. Go over the basic outline of the session – introduce Lindow Man and the background of excavation and the 'mystery' surrounding his death. Tell students that by the end of the session they will have determined a 'verdict' which will solve this mystery. Set the scene as a courtroom and establish the three legal teams and Judges' panel.

We recommend that each 'team' is permitted an area within the classroom as a 'legal office space', which will assist in creating an atmosphere.

- 2. Give each team their **case notes**, which details their given argument about how Lindow Man died.
- During the reading of case notes:
- Check that each legal team is clear on the activity and they understand the argument they will be presenting
- Ensure the Judges know it is their responsibility to deliver a FAIR verdict and not to pre-judge the evidence they have
- 3. After all teams have read and understood their **case notes** allow them to investigate their **file notes and photographic evidence** and begin examining the evidence documents to build their arguments.
- The Judges will examine the evidence in the same way, however they should be encouraged to explore ALL possibilities and not pre-judge the evidence
- Judges are required to nominate a HEAD Judge at this time. If required, this can be the teacher who can help assess the contributions made by the 3 teams.
- 4. After the allotted time, instruct the class that court will soon be in session and they will need to tidy up their 'offices'. This is a good opportunity to highlight the **court rules**.
- 5. Allow students time to choose their representatives and finalise their argument, then bring court into session. Encourage them to use the evidence presented in their **file notes** to justify their position.

Session Notes continued:

- 6. Once all teams are seated the HEAD Judge will bring court into session.
- Briefly outline the court rules about only 2 elected members of each team being able to speak.
- Go through order of events:
- Teams will present their arguments in turn (5mins max)
- After their argument there will be a one minute timeout for other teams to prepare questions
- The two other legal teams will be able to ask questions to the presenting team
- The Judges will be given time to ask final questions of the presenting legal representatives at the end of all presentations
- Once this process has been completed the Judges will convene to determine a verdict
- 7. During the court session the Judges must keep order within the court, which means monitoring the time allocation for arguments, questions and answers in addition to maintaining the court rules of elected speakers.
- 8. When all teams have presented the Judges must have time to deliberate in order to determine their verdict.
- 9. The Judges will then call court back into session to announce their verdict.

If there is time students can deliberate as to why the final verdict was chosen and compare their argument points.

Recommended Court Rules

Each legal team will be permitted an allotted time limit to examine their evidence and construct their case.

The court session will commence as soon as the Right Honourable 'HEAD Judge' calls order.

PRIOR TO THE COURT SESSION:

Legal teams will need to construct arguments to defend the case allocated.

- Use the evidence provided and information from the reports
- All legal teams will be given the same limited time to defend their case in front of the judging panel

2 representatives from your team will need to be identified to address the court.

•Remaining team members will NOT be permitted to speak when court is in session

DURING THE COURT SESSION

Court will be called into session by the Right Honourable 'HEAD Judge'.

- When court is in session only the Judges and the legal representatives will be permitted to address the court
- Notes may be passed forward to the team representative if members would like to make the court aware of an issue

Legal teams will be given equal time to present their argument to the court by their 2 chosen representatives

Opposing teams will then be given a short time to cross examine

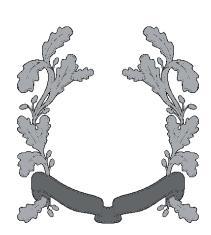
- Each legal team will be given the opportunity to confer to decide on questions they would like answering
- At this point all legal teams may confer with their representatives but remember that no-one except the representatives can address the court

At the close of all arguments Judges will be given the opportunity to ask one final question of each team if necessary

• Once all teams have presented their case to the court, the Judges will be given a few moments to discuss their votes

The Judges will then cast their votes

In the event of a hang vote the HEAD Judge will be given the authority to determine the verdict



Case Notes: Legal Beagles

Your team is called: THE LEGAL BEAGLES

Your case today is to prove beyond reasonable doubt that the body found on Lindow Moss in 1984, hereafter referred to as 'Lindow Man', died **ACCIDENTLY**.

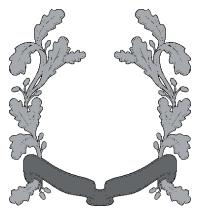
You have all the evidence required for the case provided in your file notes. Contents include: Incident reports, scientific reports, autopsy report, and crime scene photographs.

You must use this evidence to prove your case to the judging panel. The Judges' decision will be final.

Your case:

To assist you in arguing your case here are a few background 'facts':

- Evidence cannot rule out drowning as the lungs are not intact
- Lindow Man could have sustained his head injury through a fall prior to drowning in the bog
- Evidence from the body suggests strangulation did NOT take place
- The sinew could have been a necklace that tightened as the body swelled in the water
- The sinew could have been the remains of an attempt to rescue Lindow Man from the bog by other individuals
- The cut throat could have occurred post-mortem either by the peat digger or the investigation team



Find the evidence which proves these facts and this will strengthen your case.

- You will need to suggest reasons why the body was not clothed in order to defend your case
- Part of your case could consist of the lack of evidence for other theories: use the environmental conditions to suggest evidence for murder or sacrifice has not survived

Case Notes: Legal Seagulls

Your team is called: THE LEGAL SEAGULLS

Your case today is to prove beyond reasonable doubt that the body found on Lindow Moss in 1984, hereafter referred to as 'Lindow Man', was **MURDERED**.

You have all the evidence required for the case provided in your file notes. Contents include: Incident reports, scientific reports, autopsy report, and crime scene photographs.

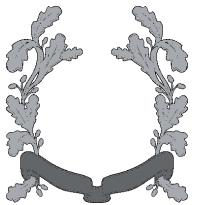
You must use this evidence to prove your case to the judging panel. The Judges' decision will be final.

Your case:

To assist you in arguing your case here are a few background 'facts':

- Lindow Man suffered a number of violent injuries: blunt force trauma to the head, strangulation and a cut throat
- Evidence suggests that Lindow Man was a wealthy individual for the time period
- Lindow Man was found stripped of his clothing
- Lindow Moss was likely an isolated place ideal for disposing of a victim of murder
- Mistletoe is a plant with poisonous properties

Find the evidence which proves these facts and this will strengthen your case.



• Part of your case could consist of the lack of evidence for other theories: use the environmental conditions to suggest evidence for accidental or sacrificial death has not survived

Case Notes: Legal Eagles

Your team is called: THE LEGAL EAGLES

Your case today is to prove beyond reasonable doubt that the body found on Lindow Moss in 1984, hereafter referred to as 'Lindow Man', was killed for the purpose of **RITUAL SACRIFICE**.

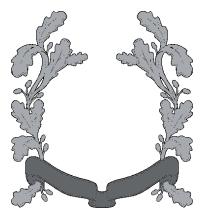
You have all the evidence required for the case provided in your file notes. Contents include: Incident reports, scientific reports, autopsy report, and crime scene photographs.

You must use this evidence to prove your case to the judging panel. The Judges' decision will be final.

Your case:

To assist you in arguing your case here are a few background 'facts':

- Lindow Man suffered a series of violent acts prior to death
- These acts of violence could be linked with a 'triple death' (bludgeoned, strangled, stabbed) associated with a trio of Celtic gods.
- Great change was happening during the time period of Lindow Man, and it is possible the ritual death was carried out to appease the gods
- He was likely a member of high society
- He was provided with a significant final meal of 'burnt' bread
- The bog (as a watery place) represented a special place to the Celts
- Mistletoe was used by the Druids frequently



Find the evidence which proves these facts and this will strengthen your case.

• Precedent cases to use as supporting evidence may include other bog bodies such as Worsley Man, Tollund Man and Graubelle Man.

Judges Brief

It is your duty to evaluate the validity of the three cases being put forward on the matter of the body found on Lindow Moss in 1984, hereafter referred to as 'Lindow Man', and determine the most likely verdict of death.

To prepare for this you have the same evidence to examine as all the legal teams, and below is an outline of each of the cases which will be put forward.

All of the evidence prepared for the case is provided in the file notes. Contents include: Incident reports, scientific reports, autopsy report, and crime scene photographs

The cases to be argued:

The **Legal Eagles** will be arguing that 'Lindow Man' was killed for the purpose of **RITUAL SACRIFICE**.

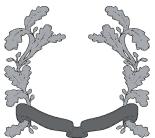
The Legal Beagles will be arguing that 'Lindow Man' died ACCIDENTLY.

The Legal Seagulls will be arguing that 'Lindow Man' was MURDERED.

All legal teams will be basing their arguments on the same evidence but will present this evidence in different formats to support their case.

The basic facts are:

- Lindow Man was found in 1984 without clothing in a boggy area wearing only a fox fur band on his left arm
- He appears to have injuries to his skull and throat
- The contents of his stomach consist of plant material suggesting foodstuffs
- There is a piece of sinew still in place around his neck
- Carbon dating suggest that Lindow Man lived c. 20-80AD



Incident Report

Date of report: A.D. 1984 Date of Incident: 20-100 A.D.

Location: Lindow Moss, 18km South of Manchester

Type of occurrence:

Discovery of partial human remains in bog during excavation of peat

Details of incident:

Date of discovery: Aug 1984

Person(s) reporting incident: Andy Mould & Stephen Dooley

Crime Scene

Location: Lindow Moss is a boggy area made up from layers of the absorbent plant Sphagnum Moss. This moss can hold up to twenty times its own weight in water and grows in areas with little nutrients.

History: Around the time of the deceased, Lindow Moss was a sodden mass of peat with open pools of water and areas of sphagnum moss creating soft ground which would have been difficult to walk on.

Soil Sample: Tests indicate soil is acidic, with little oxygen present. From a waterlogged area. Preservation of remains is consistent with this environment.

Victim Details

Name: UNKNOWN Age: mid 20's

Sex: male

Ethnic origin: white British

Height: 1.68m **Weight:** 60kg

Injuries: Skull fracture, ligature mark and incision right side of neck

Cause of death: Suspicious circumstances

Autopsy Report

NAME: 'Lindow Man'

SEX: Male

AGE: 25-35yrs

Ethnic Origin: White British

Height: 1.68m

Weight: 60kg

Type of Death:

Natural

Homicide

(Accidental)

Suicide

Condition of Body:

Clothed

Partially clothed

Unclothed

Eye colour: N/A

Hair Colour: Brown

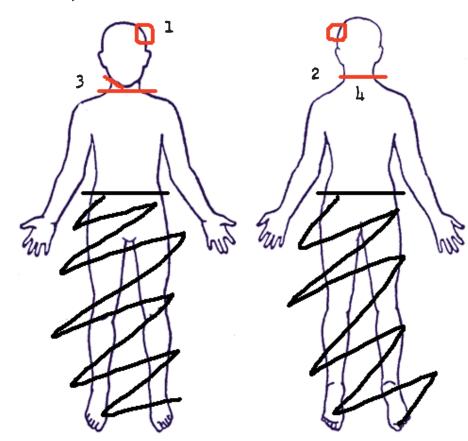
Facial Hair: Beard and moustache (trimmed)

Other notes: Nails in good condition, neat and smooth. Stomach contents suggest small meal prior to death.

Fox-fur armband, left arm.

Marks and Wounds:

- 1. Wound on crown of head
- 2. Sinew loop around neck with visible ligature mark
- 3. Apparent incision on right side of neck
- 4. Fractured neck vertebrae



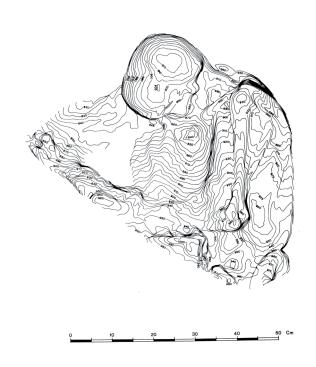
Clothing

Techniques Used:

Observation Samples taken from body and scientifically tested

Results:

- The deceased can be considered naked except for a fox-fur armband
- The armband is 13.5cm long, between 5 and 12mm wide and is twisted at the wider end to hold it together
- The deceased also showed traces of painted skin. Tests performed in 1987 suggested the use of a blue mineral dye
- More recent testing has suggested the blue skin is a chemical reaction to the condition of the bog



- He may not have been naked: cloths such as linen would have rotted away in the acidic soil
- All his clothes were stolen
- His clothes were removed so that he could not be identified
- He was deliberately left wearing only a fox-fur armband as part of a sacrificial ritual
- The Celts have been known to paint their bodies blue with woad a dye from a plant.

Condition of the Body

Techniques Used:

MRI Scan, Xeroradiography (special x-rays, used in the past to produce excellent images of mummies), Computer Aided Topography, Radiocarbon dating and examination of the bones, teeth and other remains

Results:

- Dated to 20-90AD. C.2000 years old
- Male
- Well built, healthy with strong musculature
- Mid 20's
- Approximately 1.68m tall
- Weight: 60kg
- Teeth were well formed and healthy
- Blood group 'O'
- Mild spinal arthritis
- Intestinal worms
- The lungs had not survived



- No natural cause of death: this appears to be the body of a healthy young man
- The mild arthritis in his spine suggests that he stressed this area when younger in some form of physical activity
- Worms in the intestines were common in humans until modern times
- Due to the absence of lungs drowning can not be confirmed
- Blood Group 'O' is most common in Celts

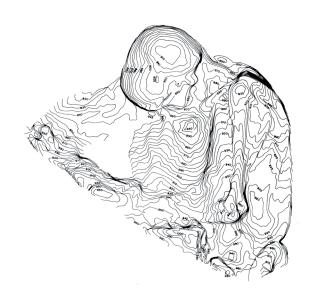
Environmental Analysis

Techniques Used:

Microscope, sieve, sections through peat soil

Results:

- Due to a lack of oxygen in the bog no insects were found that survive on decomposing flesh
- Types of pollen identified were consistent with plant life found close to standing water
- Over time the environment changed which caused the area to become much wetter with many more open pools of water



- The body was thrown directly into a pool or bog and remained beneath the water preventing decomposition. 2000 years ago the surface of the bog would allow people to walk on without sinking into it, but in others they would sink up to their knees
- The landscape of the area where the individual died was of an isolated wet area where people did not live
- The surrounding area was lived in and the population were cutting down trees and growing crops such as wheat and barley for some time prior to his death
- This watery area would have been a likely place to hold a Celtic religious sacrifice. It may
 have been a special place to the Celt as it was believed spirits lived in such environments.
 There are also other examples of the Celts making sacrifices in watery places including
 swords in rivers
- It could be an ideal place for a murder to occur as it is away from populated areas and the body would not be discovered easily

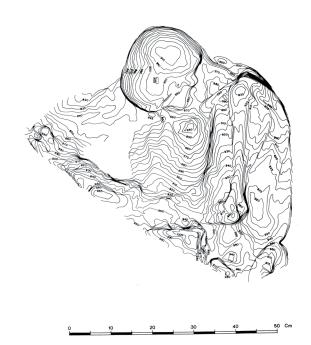
Hair and Nails

Techniques Used:

Scanning Electron Microscope – a powerful microscope

Results:

- Hair and beard were neat and short and had stepped ends which showed they had been trimmed with scissors or shears rather than a razor or knife 2-3 days before he died
- Nails were very smooth and well rounded with few scratches



- The smoothness and lack of damage to the nails suggests that the deceased was not involved in a job that used his hands for hard work such as digging and farming
- It is possible he may have lived a life of some luxury
- His nails and beard may have been specially cut as an aspect of preparation for a Celtic sacrifice
- Scissors only become common in Britain during Roman occupation and tend to be used by the wealthier population

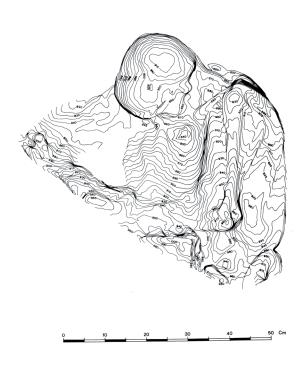
Injuries - fractured skull

Techniques Used:

Examination X-rays

Results:

- Fractures caused by blows to the top of the skull by instrument with a heavy, but narrow, blunt edged blade
- The skull was fractured twice, remains of broken bone inside the head
- The deceased was probably hit from behind whilst in a standing or kneeling position
- Swelling around the wound suggests that the trauma occurred prior to death
- The impact of the object alone could have caused death
- The impact would have at least caused unconsciousness



Theories:

The skull bone could have been fractured:

- By accident as people attempted to rescue him from the bog, such as throwing a branch or a plank to assist him
- Post-mortem by peat cutting machinery
- As one element of a Celtic 'triple death' sacrifice
- By accidentally falling on something blunt with a narrow edge

Injuries - throat wound (1)

Techniques Used:

Examination by eye and microscope. Small sample taken for laboratory analysis. X-ray of bones in neck area.

Results:

- The sinew was 32cm long and 1.5mm in diameter
- Made from twisted animal material
- Animal could not be specifically identified
- The sinew had been knotted 3 times and was found around the neck
- Two of the deceased's neck bones were found to have been broken
- Neck cartilage on the remains show no signs of damage due to strangulation
- Marks on the skin show swelling and scarring around the neck suggesting the sinew was pulled very tight



- The sinew may have been used for strangulation by a stick inserted into a loop formed by the 3 knots. This would have broken the neck in the manner seen in X-rays
- The short ends and small diameter of the sinew does not suggest a cord suitable for strangulation
- The sinew may have been a simple necklace and the body swelled in the water resulting the sinew tightening around the neck
- The knots found on garrottes on modern murder victims often show similarities to those on the deceased
- The sinew could have been used as a safety loop in an attempt to rescue him after he accidentally fell in the water
- The garrotting could have been one element of the Celtic 'triple death' sacrifice

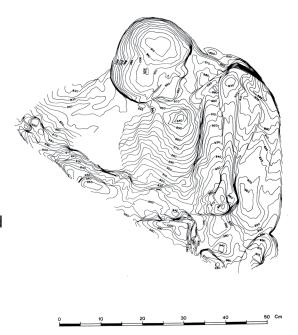
Injuries - Throat Wound (2)

Techniques Used:

Examination of the body by forensic scientists Microscope X-rays

Results:

- Incised (cut) wound on the right hand side of his neck above the wound created by the animal sinew
- Clean cut would suggest use of a weapon such as a sword or knife



- The wound was cleanly cut suggesting a thin, sharply edged weapon
- If the wound was made during life the jugular vein would have been cut and the resulting blood loss could have caused death
- The wound could have been:
 - o Caused by accident during a rescue attempt
 - o One aspect of his 'triple death' as a Celtic sacrifice
 - o Accidentally cut during the excavation of the peat by a spade or similar cutting tool

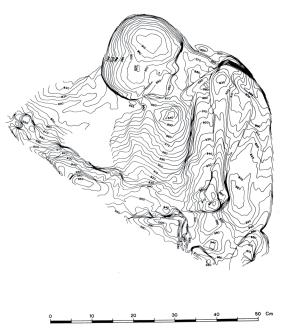
Stomach and Intestine Contents

Techniques Used:

The stomach contents survived as a brown mud. This was carefully examined using microscopes and analysed for identifiable elements

Results:

- Only a small amount (20g) of partially digested food was discovered in the stomach
- Identifiable elements included grains of barley and 2 types of wheat – spelt and emmer. These grains had been ground very finely and baked on a griddle over a open fire
- The barley was used to make a flat bread cake which had been partially burned
- Contents also included traces of heather and sphagnum moss
- A small amount of Mistletoe pollen was detected; this is a plant that does not occur naturally in the North West of England today
- Remains of other food might have broken down and dis solved in the stomach during the 2000 years the deceased



- The bread could have been accidentally burned at the edges during preparation
- The bread may have been deliberately burned to feed to an individual who was to be sacrificed
- Traces of heather could have been the result of the bread being cooked over this plant
- The sphagnum moss particles may have been swallowed with water or may have entered through the open throat wound
- Mistletoe has a long history as a sacred plant to the Celts and their religious leaders the Druids. It is believed to have been used as both a medicinal drug and as part of religious ceremonies most especially sacrifices
- The mistletoe pollen could have blown in and been accidentally mixed with the food
- Food such as meat, cheese and milk would have disappeared leaving no trace. This gives us an incomplete idea of the food the deceased consumed before death

Exhibit A: Mistletoe



Exhibit B: Iron Age Shears



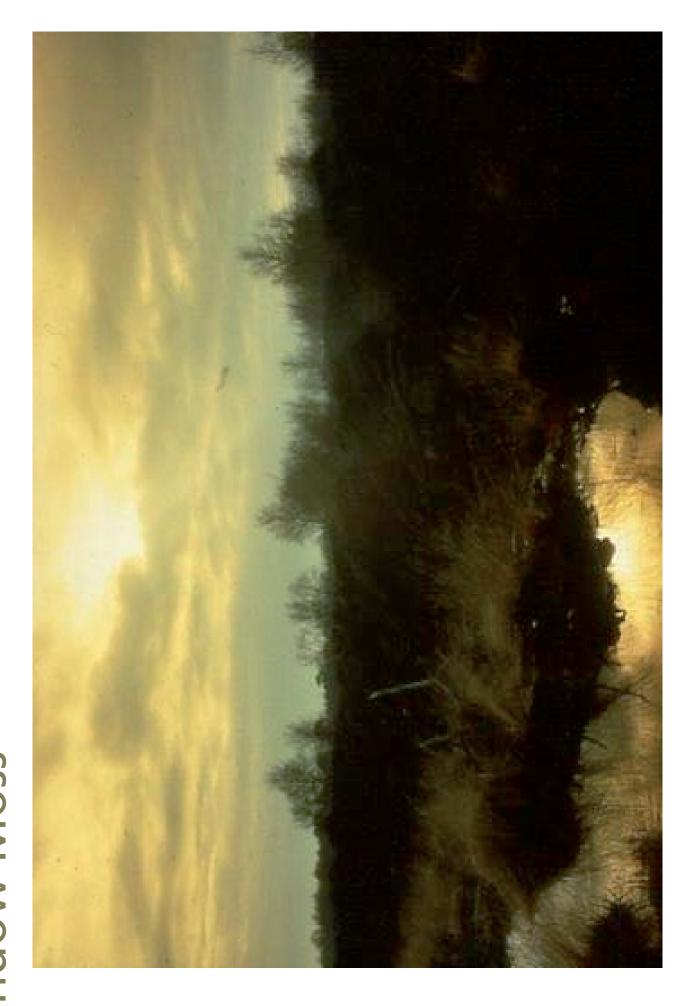
Exhibit C: Replica of cord around neck



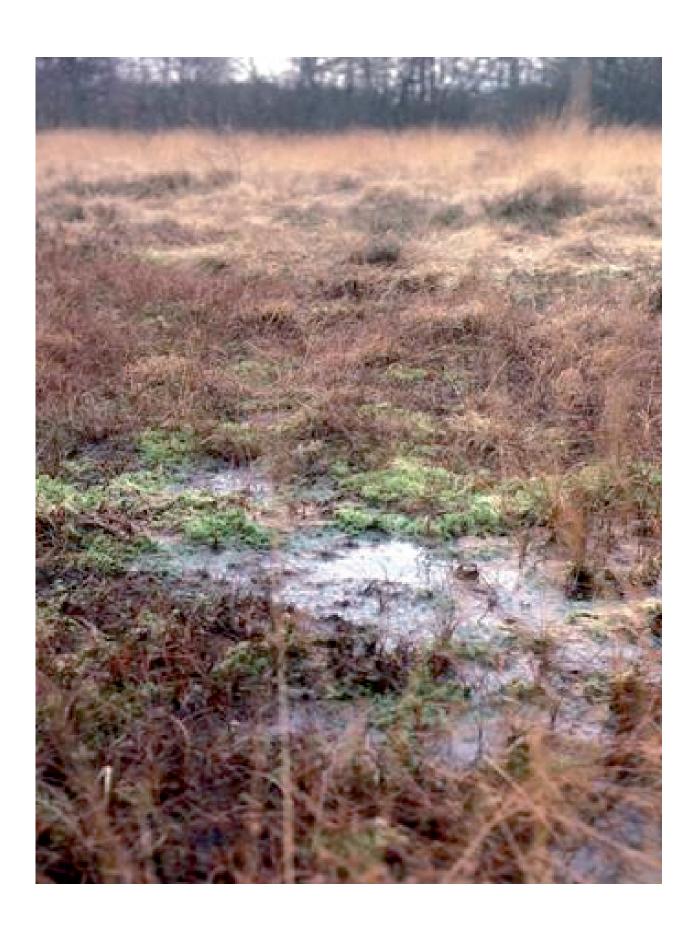
Exhibit D: Replica of Iron Age sword



Crime Scene Photograph: Lindow Moss



Crime Scene Photograph: Lindow Moss



Facial Reconstruction: Lindow Man

