

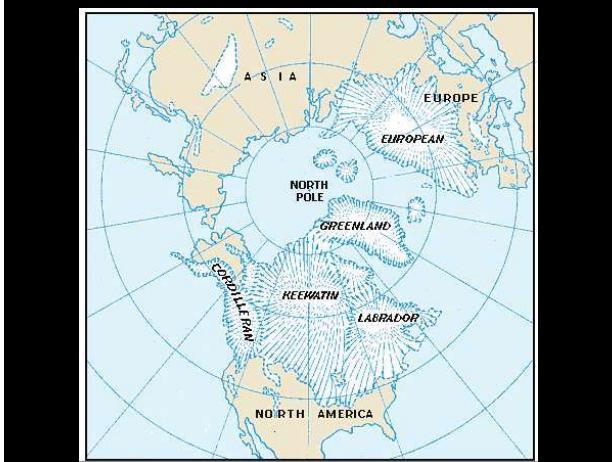
The Upper Palaeolithic

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Upsala Glacier, Argentina

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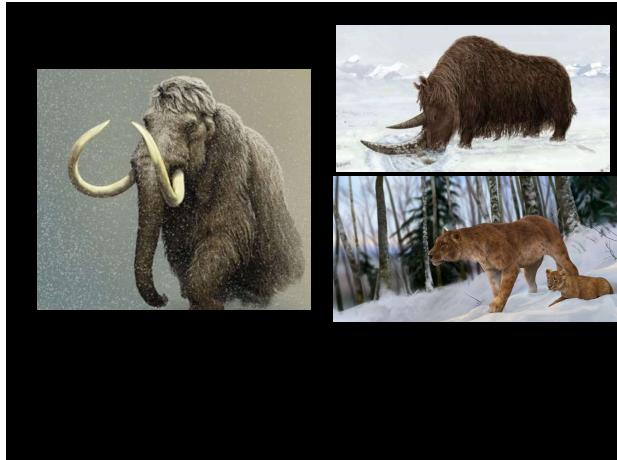
The Last Ice Age

- Glaciers covered much of Europe and North America
 - Plants and animals were adapted to extreme conditions
 - Pleistocene megafauna



The image depicts a late Pleistocene landscape in northern Spain with woolly mammoths (*Mammuthus primigenius*), equids, a woolly rhinoceros (*Coelodonta antiquitatis*), and European cave lions (*Panthera leo spelaea*) with a reindeer carcass.

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Bison and musk ox

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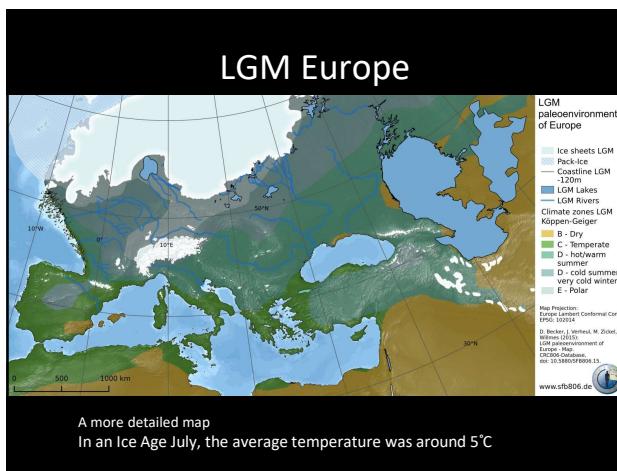
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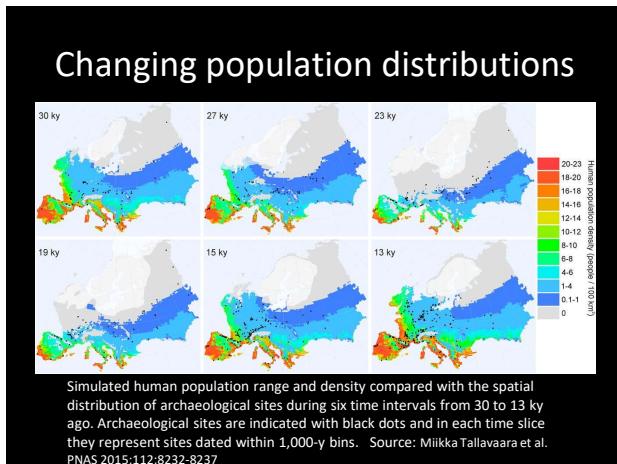
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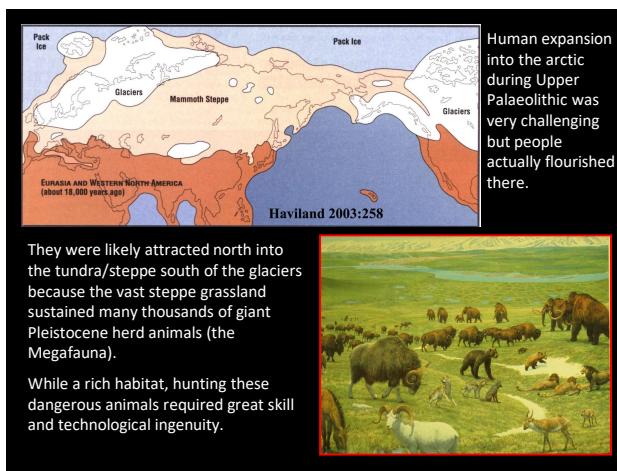
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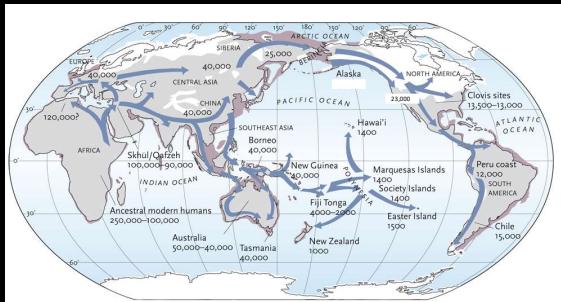


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The spread of *Homo sapiens*



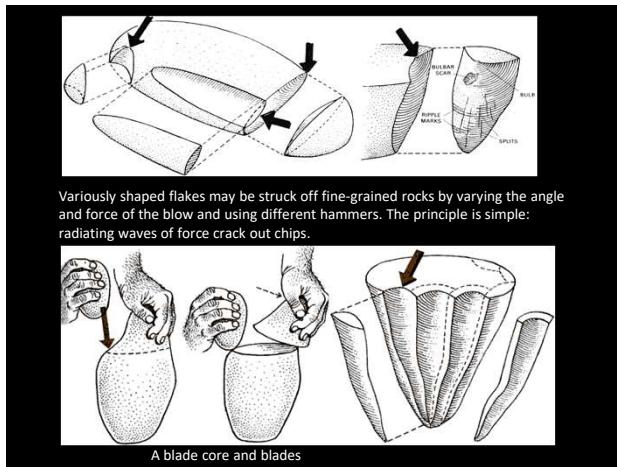
- The primary driving forces for the continued expansion of human settlement were:
(a) human population growth, and (b) hunter/gatherers' need for large hunting ranges once they specialized in the exploitation of a narrow prey range.

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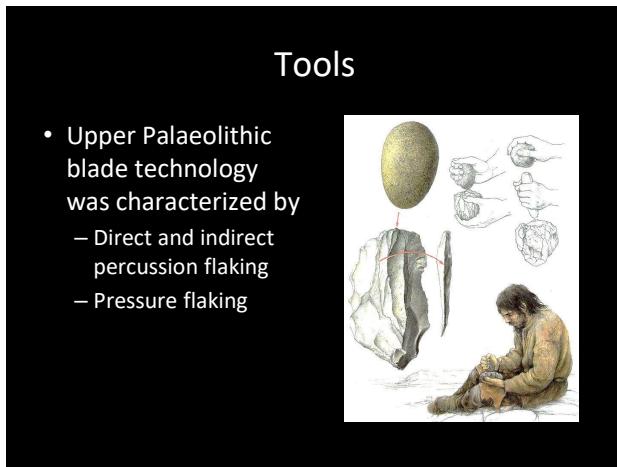
A more efficient technology



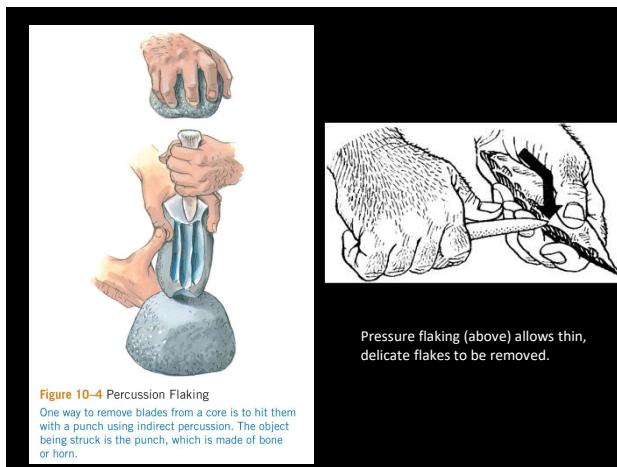
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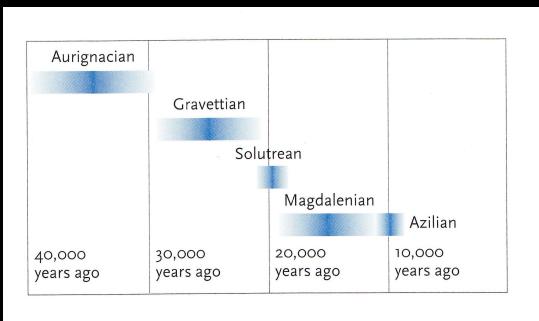
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From the Early Upper Palaeolithic: An Aurignacian blade resting on the core from which it was struck (L. 7.4 cm)

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Upper Palaeolithic chronological divisions



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Tools made from blades

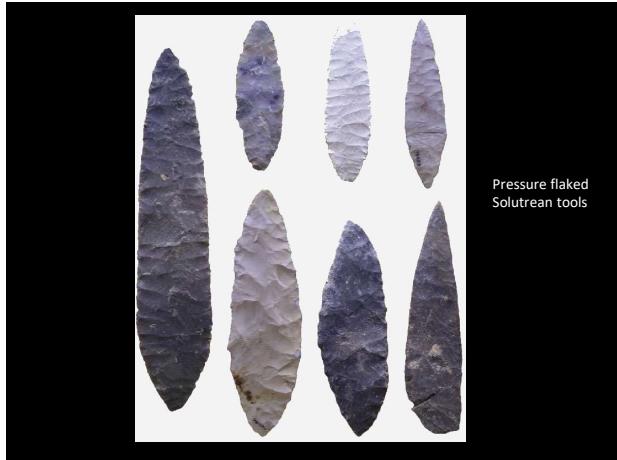


Projectile point (made on a blade) resting on the core from which it was struck



Aurignacian blade tools including utilized blades, 2 crested blades, end scrapers, side scrapers and burins. Most made from complete, broken or resharpened pieces of core blades.

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Pressure flaked
Solutrean tools

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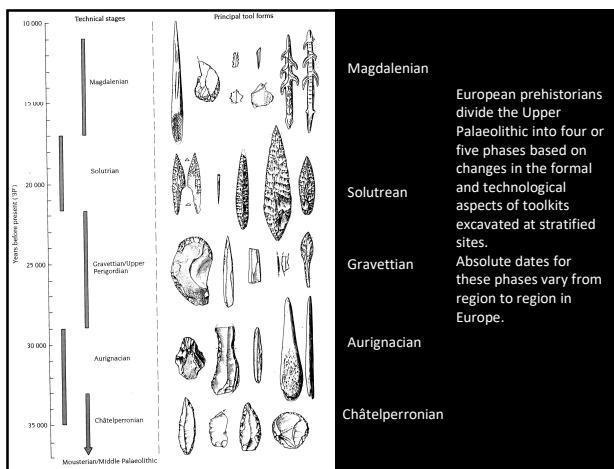


Solutrean laurel leaf point, produced by pressure-flaking

Left: Triple exposure of a Solutrean burin + side scraper. Produced by a combination of indirect percussion and retouch.

Borer

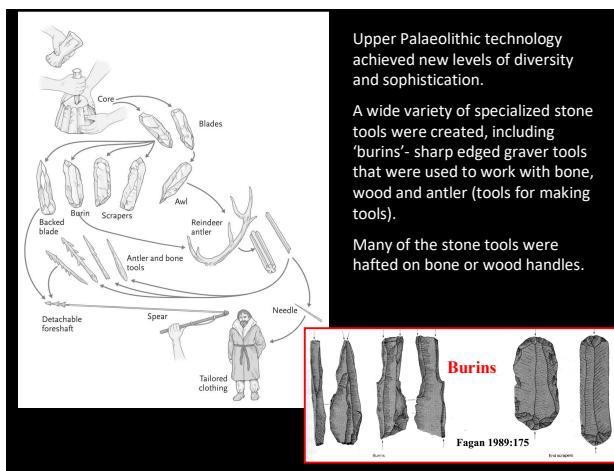
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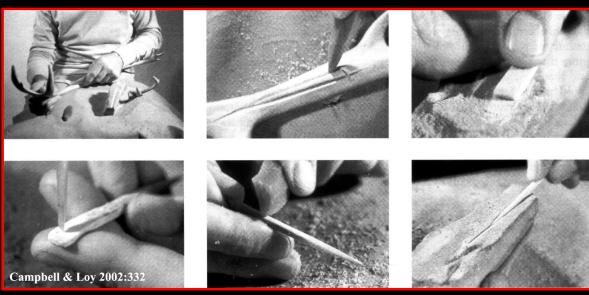


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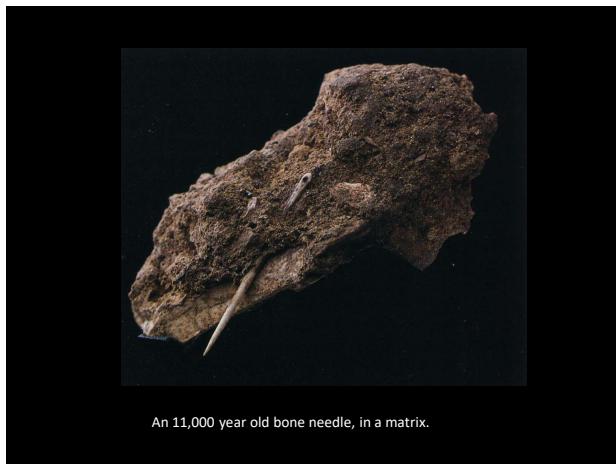
The production of tailored skin clothing with tight, wind-proof seams was important; it helped people survive Arctic/Subarctic environments.

Burins were particularly important in the manufacture of bone eyed needles: the oldest needles were produced in Europe ca. 32,000 BP.

The stages of bone needle production area illustrated below.

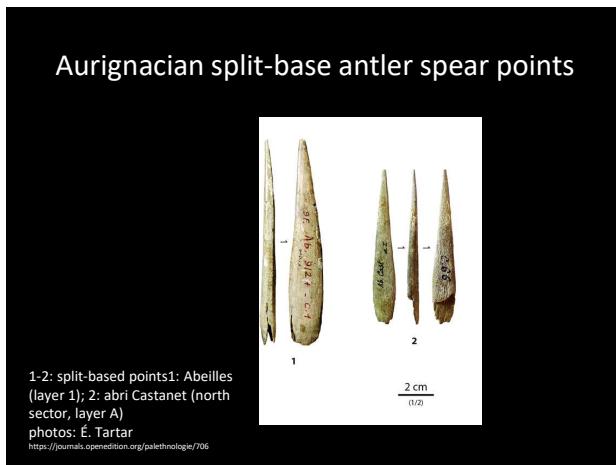


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An 11,000 year old bone needle, in a matrix.

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During this time the 'atlatl' (a spear thrower) was developed and diffused widely.

- Atlats have a hooked end where the butt end of the spear is placed.
 - The thrower grips the spear shaft and atlatl, and launches the spear with an overhand swinging motion.
 - This increases the reach of the thrower, and enabled a more effective launch.
 - Using this tool, a spear could be thrown with great force from a safer distance, an important consideration when hunting large dangerous animals.



Middle Paleolithic thrusting spears might have been very close-range weapons, while atlatls could provide a range of 18 to 27 metres.

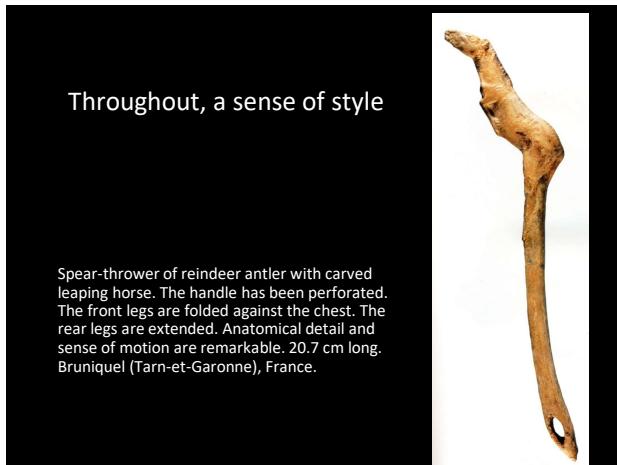
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Other technology included:

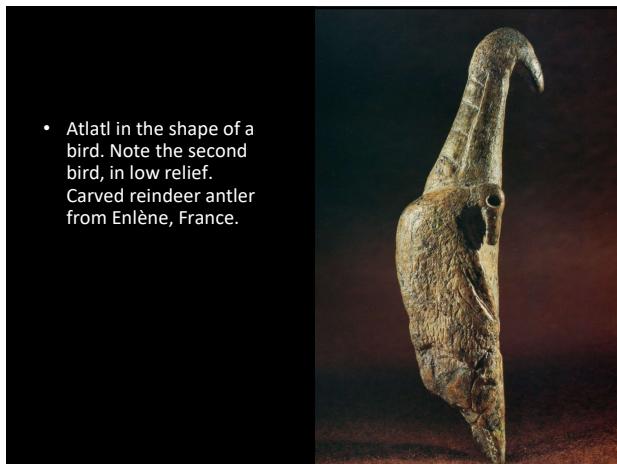
- barbed harpoons,
 - net hunting methods,
 - more effective fire-starting methods using iron pyrites.



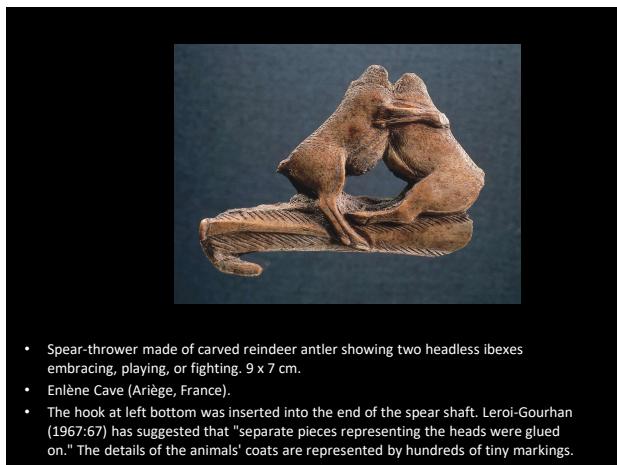
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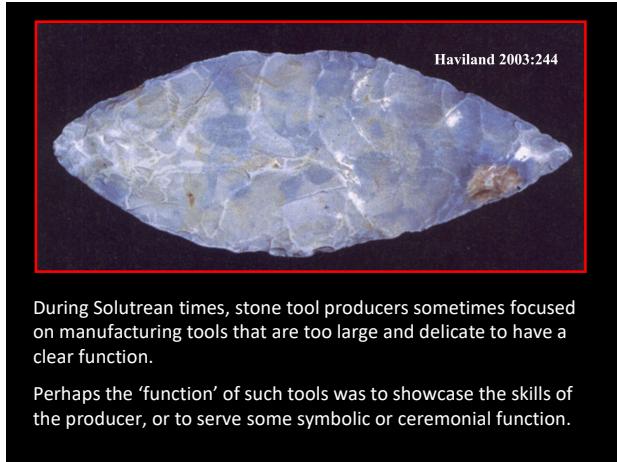
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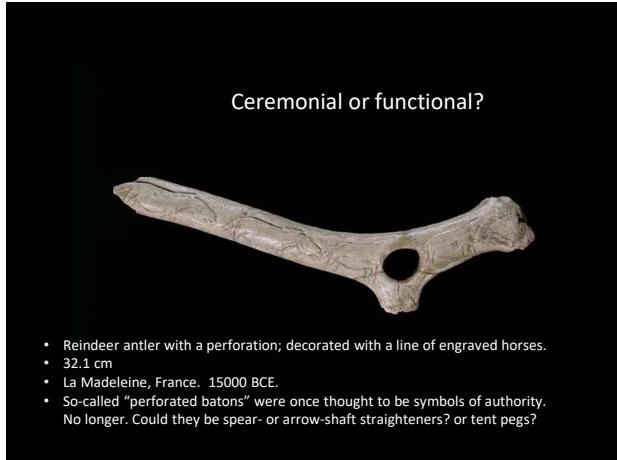
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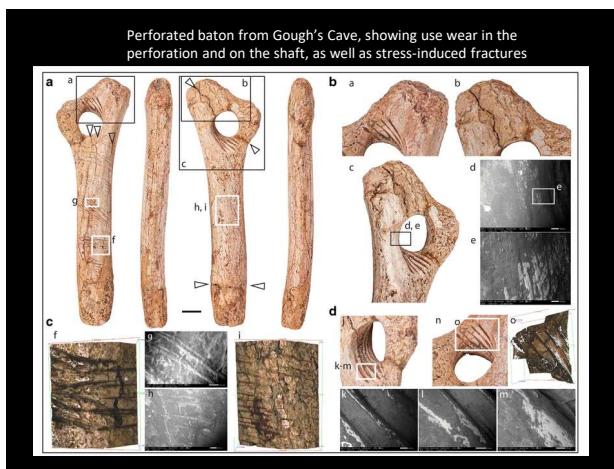
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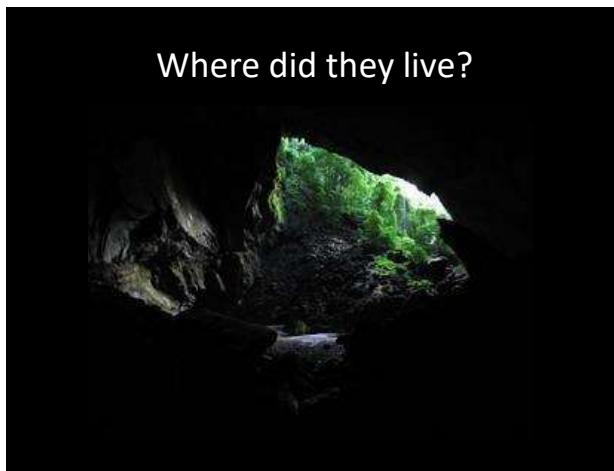
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Caves



- **La Ferrassie** is a cave site in the Dordogne. It was occupied and reoccupied hundreds of times in the Middle Palaeolithic and in the Upper Palaeolithic.
- Note the thick layers of deposits, which date from 50,000 – 15,000 BP.

44

Rock shelters (*abris*)



- **Laugerie-Haute** is an immense rock shelter.
- 5,000 sq m of deposits lie at the base of the tree-covered cliff (right half of photo).
- The river Vézère is fordable here.

45



Engraved salmon on the ceiling of a Vézère rock shelter, 25000 BP.



Swimming reindeer at Lascaux



Artist's re-creation,
Laugerie-Haute.

46



- Not all rock shelters were big.
 - The little rock shelter of **La Maitairie** in the Dordogne was occupied in the Aurignacian period.
 - Rock shelters continue to serve their original purpose – even today.

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Rock shelter amenities



- The Magdalenian period site of La Truffière is at the base of the cliff, which features a natural spring.
 - Proximity to water was an important consideration.

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The view from the Magdalenian site of **Font-Brunel** extends over 10 km. From this vantage, people could monitor the movement of animals and other humans.

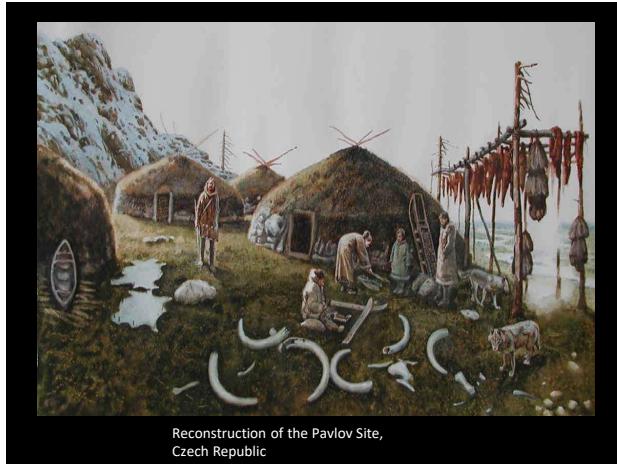
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Reconstruction of the Pavlov Site, Czech Republic

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Mammoth bone huts in the Ukraine.

Circular huts composed of a frame of mammoth bone & covered with skins and turf have been inferred from deposits of bone.

These massive structures are found throughout the Ukraine and into Siberia.

From sites where the bones have been studied closely, it seems the hunters killed mammoths rather than scavenging dead animals or picking up found bones.

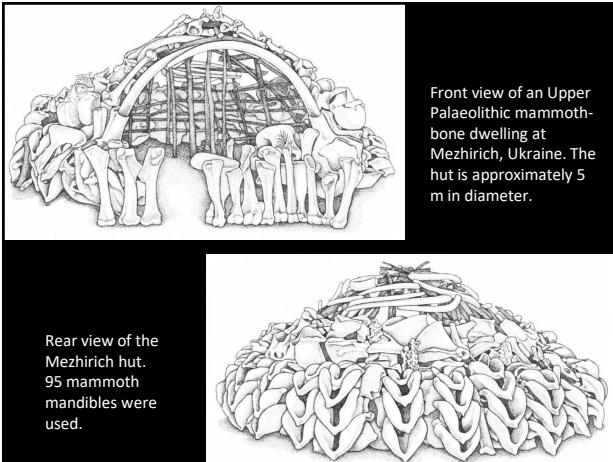
These huts were built upon the permafrost, with flagstone floors to provide a warm dry floor.

Hearths consisted of fire pits lined with stone slabs to collect and radiate heat. The efficiency of these hearths was further improved with side vents. This was necessary given that the primary fuel appears to be bone.

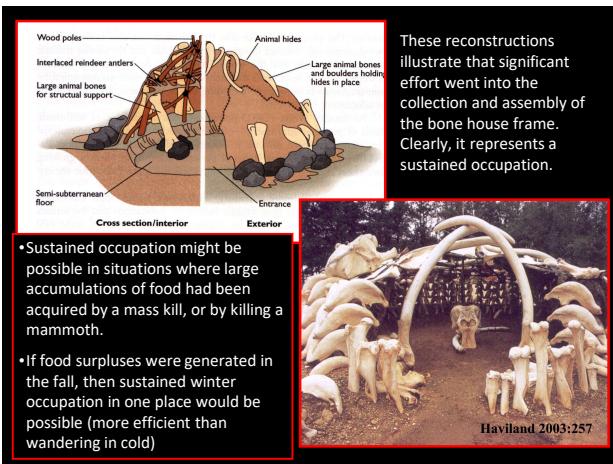
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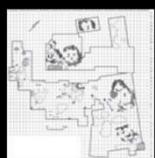
Newly discovered massive structure



- This enormous circular structure is composed of bones from 60 mammoths.
 - 25,000 BP
 - Kostenki 1, Russia.

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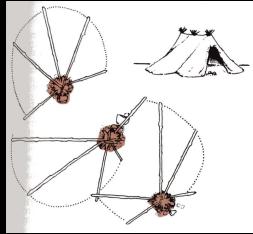
But were they all dwellings?

- At the Yudinovo site, bones of more than 100 mammoths and 60+ arctic foxes were heaped up in five “dwellings”.
 - They had been freshly butchered in late spring or early autumn.
 - The stacked body parts suggests a midden representing the remains of ritually deposited hunted game.
 - Most of the complete or partly preserved mammoth skulls were found in the central areas of the five “dwellings”, with the frontal bones facing the inner side of these circular constructions.
 - The amount of meat represented here could feed 100 people for three months!
- 

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Pincevent was an open air Upper Palaeolithic site in France excavated by André Leroi-Gourhan.

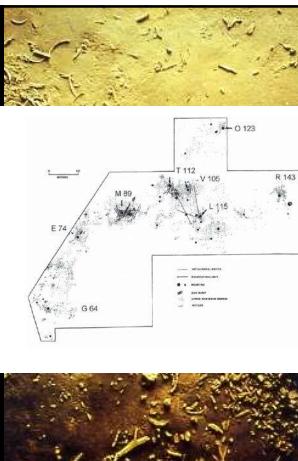
He interpreted the hearth remains (right) as evidence for a complex skin tent, reconstructed below.



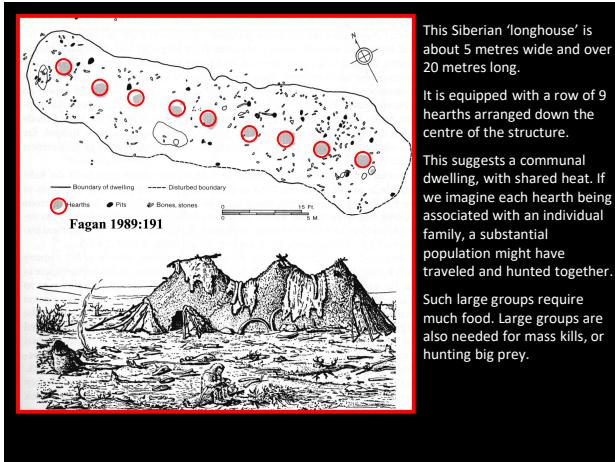
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Pincevent was an open air Upper Palaeolithic site in France excavated by André Leroi-Gourhan.

Broken animal bones from the site have been re-fitted. They show patterns of food sharing between the tents.



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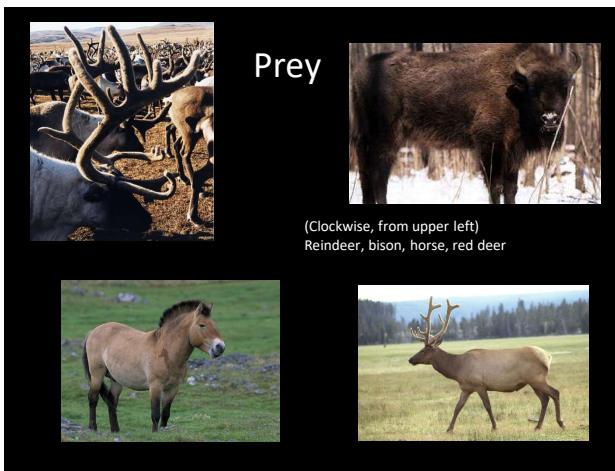
On the South Russian Plain, base camps of mammoth-bone huts were placed on bluffs overlooking broad, meandering river valleys.



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66

Hunting herds

- In some parts of Europe the Early Upper Palaeolithic was a time of climatic stress.
 - The diversity of mammals declined.
 - It is argued that this led to a reliance on reindeer in western Europe.
 - For humans, this also meant lower population densities.
 - Can you hypothesize why this might be so?



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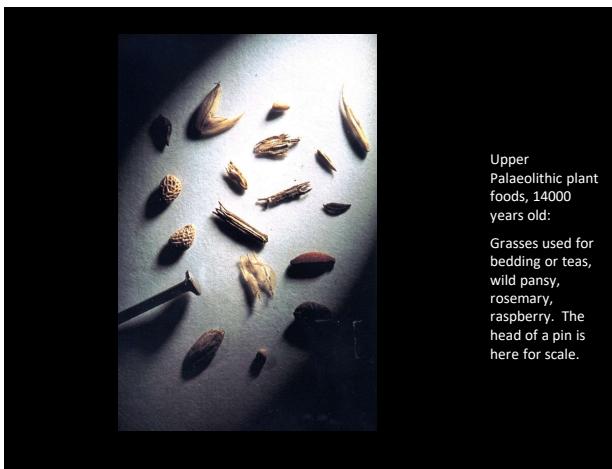
Reindeer herds were the preferred prey in western Europe.

But herds of horses were preferred
in eastern Europe.

The difference likely reflects relative abundances of the two animals in geographically quite different regions



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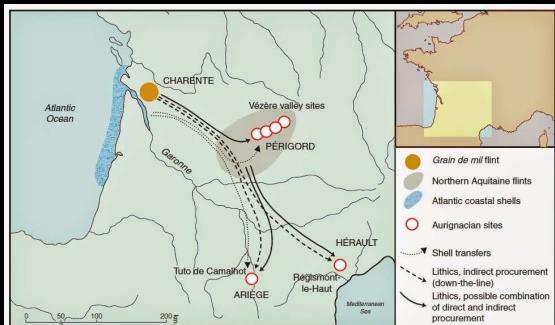


Upper Palaeolithic plant foods, 14000 years old:

Grasses used for bedding or teas, wild pansy, rosemary, raspberry. The head of a pin is here for scale.

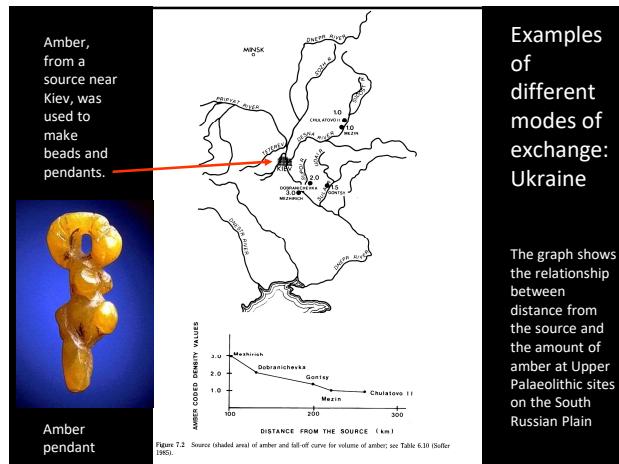
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Exchange

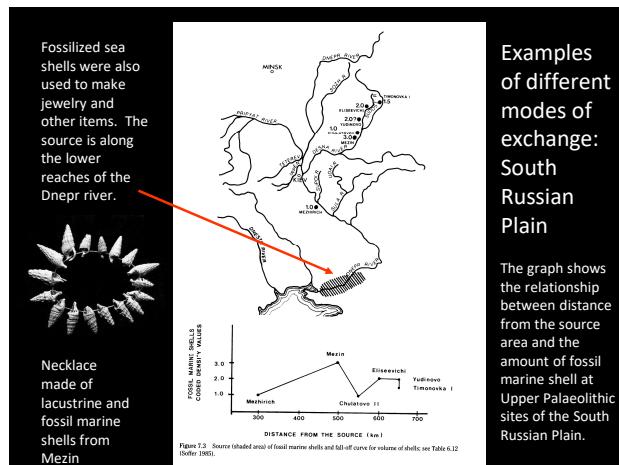


The apparent movement of raw materials reflects the presence of long-distance exchange networks in the Upper Palaeolithic. This is an example from SW France.

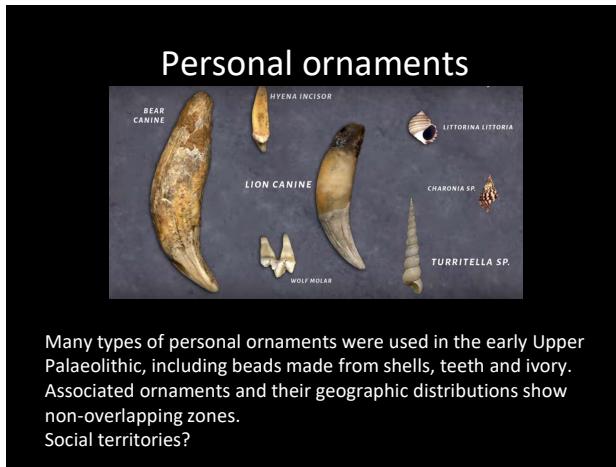
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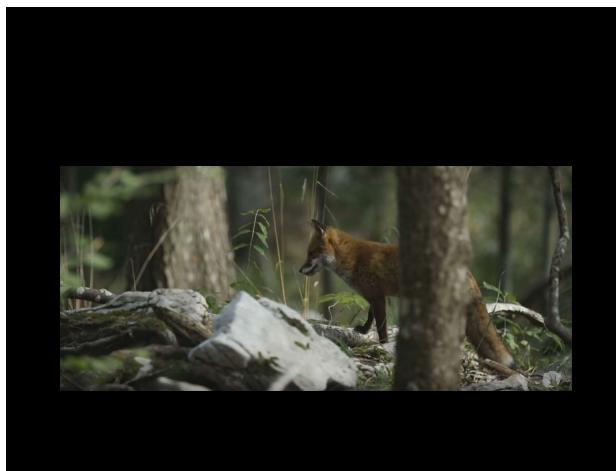
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Upper Paleolithic Burials

- Burials do not appear until the Gravettian period
- Because some Gravettian burials are found with rich ornamentation, questions arise about social inequality
 - Burials of young children with a wealth of objects indicates that some people were born with high status

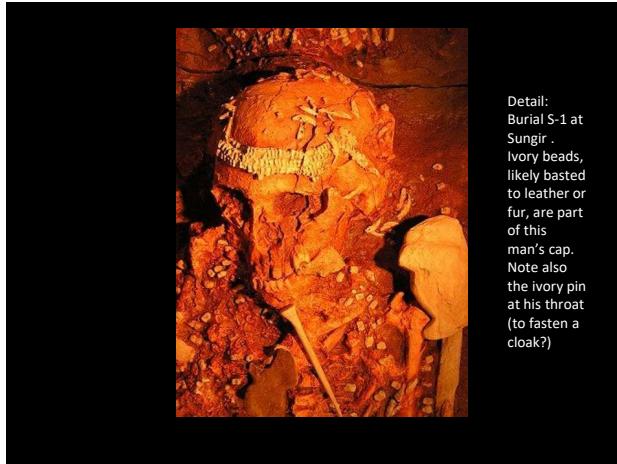
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Triple burial at Dolní Věstonice, Czech Republic

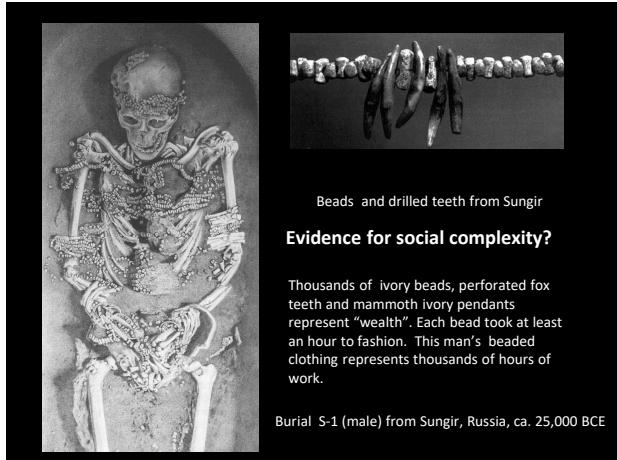


Two young males, wearing elaborate headdresses, are buried on either side of an older male at Dolní Věstonice. Until 2016, the central male was mistakenly identified as female. The head of the male on the right is smashed in; the male on the left has a piece of wood piercing his pelvis. They were covered with spruce branches and red ochre was sprinkled on their heads and on the ground around them.

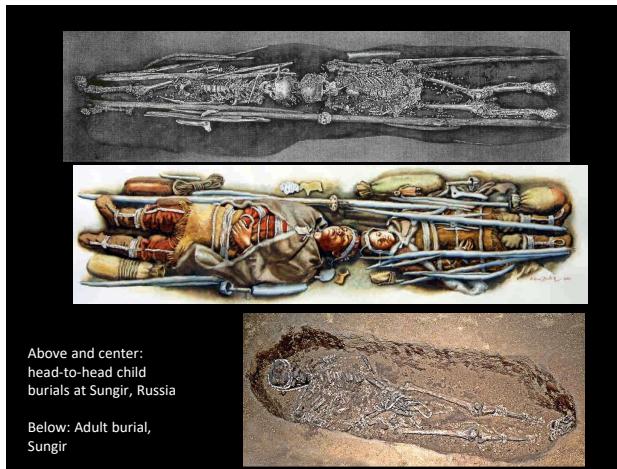
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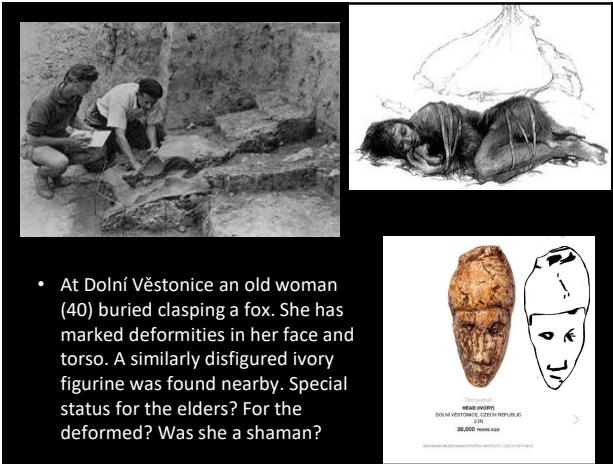
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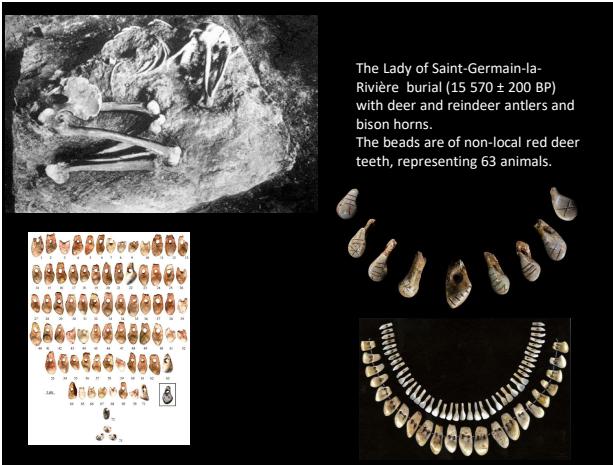
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- At Dolní Věstonice an old woman (40) buried clasping a fox. She has marked deformities in her face and torso. A similarly disfigured ivory figurine was found nearby. Special status for the elders? For the deformed? Was she a shaman?



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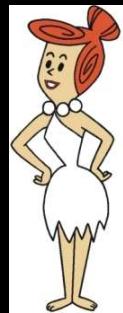
The Lady of Saint-Germain-la-Rivière burial ($15\ 570 \pm 200$ BP) with deer and reindeer antlers and bison horns.
The beads are of non-local red deer antler.

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Why bury “wealth”

- After-life beliefs
 - Inheritance
 - Wealth destruction
 - Demonstration or assertion of status
 - Keeping wealth out of the hands of anyone who might ask for it?
 - Demonstration or assertion of status

Ice Age women



85



86



- Hats or hair?
 - The heads of the female figurines may not have the most interesting faces (if they have faces at all), but their creators spent time and attention crafting what appeared on top. Some interpret these marks simply as hairstyles, while others see them as adornments, hairnets, and hats. The markings on the Venus of Willendorf and the Venus of Brassempouy, pictured here, have been interpreted as headdresses. Whatever the artists' intentions, the markings have helped modern scholars understand that during the Paleolithic period, humans were using ornamentation.

87

Bandeaux and belts



Figurines in marl, Kostenki I (Gravettian)

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Skirts

"Venus" of Lespugue,
Gravettian period, ca. 26000
BC. Rideaux Cave, Lespugue.

Carved from a piece of tusk ivory, damaged during excavation.

H. 10.4 cm



Rear view

Fractieën van
restantgedigfigure

89



Pulcinella, one of the 13 Grimaldi Venuses, is made of soapstone and is about 24,000 years old.

- The function and meaning of the Stone Age Venus figures have long been debated, and a new hypothesis has entered the fray. Rather than seeing the figurines as deities or embodying aspects of sexuality and fertility, researchers are looking at them as emblems of survival. Many of these figures were created during the Last Glacial Maximum, a time in which temperatures plummeted, glaciers expanded, and food resources became scarce.
 - A recent study of the Venus figurines notes that more voluptuous artworks with prominent fat deposits on the hips, buttocks, and bellies were found closer to glaciers. The farther away a population lived from an ice mass, the more proportions decreased. This suggests that fuller-figured Venus figures served as symbols of survival in harsh, frigid conditions because the bodies of these "overnourished" women could withstand food shortages during the long winter.

90



Net hunting
and its
implications
