Dis-Eur-Paleo-Gravettian

**Formal Label:**

**Accession Number:**

**Date or Time Horizon:**

**Geographical Area:**

**Cultural Affiliation:**

**Medium:**

**Dimensions:**

**Weight:**

**Provenance:**

**Condition:**

**Discussion:**

**References:**

The [**Gravettian**](https://en.wikipedia.org/wiki/Gravettian) **period** occurred in [Europe](https://en.wikipedia.org/wiki/Europe) between 30,000 and 22,000 years ago (during the [Upper Paleolithic](https://en.wikipedia.org/wiki/Upper_Paleolithic)). Gravettian lifestyle was shaped by the climate. Pleniglacial environmental changes forced early humans to adapt. West and Central Europe were extremely cold during this period. Gravettian culture thrived on their ability to hunt animals. They utilized a variety of tools and hunting strategies. Compared to theorized hunting techniques of [Neanderthals](https://en.wikipedia.org/wiki/Neanderthals) and earlier human groups, Gravettian hunting culture appears much more mobile and complex.

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**Acquiring the animals**

In order to use animals as a source of food, tools, and decorations, prey first needed to be caught. The Gravettian period saw hunting techniques emerge in both the use of topography and the use of nets.

**Weapons**

Clubs, stones, and sticks were the primary hunting tools during the Upper Paleolithic period, including the Gravettian period. Bone, antler, and ivory points have all been found at sites in [France](https://en.wikipedia.org/wiki/France); but proper stone arrowheads and throwing spears did not appear until the [Solutrean](https://en.wikipedia.org/wiki/Solutrean) period (~20,000 [Before Present](https://en.wikipedia.org/wiki/Before_Present)). Due to the primitive tools, many animals were hunted at close range.[[1]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Straus-1)

**Use of topography**

Settlers in the Gravettian period experienced more efficient hunting by placing settlements in areas that pooled migrating prey, thus taking advantage of the topographical features that surrounded them.[[1]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Straus-1) Examples found through discoveries in Gr. La Gala, a site in Southern [Italy](https://en.wikipedia.org/wiki/Italy), show a strategic settlement based in a small valley.[[2]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Mussi-2) As the settlers became more aware of the migration patterns of animals like [red deer](https://en.wikipedia.org/wiki/Red_deer), the prey would ultimately herd through the settlements in the valley thereby allowing the hunters to avoid travelling long distances for food. Specifically in Gr. La Gala, the glacial topography forced the deer to pass through the areas in the valley occupied by humans.[[2]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Mussi-2) Additional evidence of making settlements strategic to animal migrations can be found at sites like Klithi in [Greece](https://en.wikipedia.org/wiki/Greece), where settlements were also strategically placed to intercept migrating species of prey.[[3]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Bogucki-3)

**Use of nets**

Discoveries in the [Czech Republic](https://en.wikipedia.org/wiki/Czech_Republic) suggest that nets were first used as a hunting device during the Gravettian period. These nets were used to catch large numbers of small game in a short period of time. This offered a consistent food supply, an alternative to experiencing the feast/famine pattern of large game hunters. Evidence for this theory comes in the form of 4 mm thick rope imprints on clay which was then preserved accidentally.[[4]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Net-4) Research suggests that although no large net imprints have been discovered, there would be little reason for them not to be made as there is no more knowledge needed to create them.[[4]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Net-4) Research on the manner of deployment of the nets came in the form of examination of the [aboriginal](https://en.wikipedia.org/wiki/Indigenous_peoples) use and technique.[[4]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Net-4) The production of the nets was also a communal task, relying on the work of both women and children to do the weaving.[[4]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Net-4)

**Food, prey, and diet**

Animals were a primary food source for early humans of the Gravettian period. In addition to animal carcasses and remains, carbon and [nitrogen dating](https://en.wikipedia.org/wiki/Nitrogen_dating) confirm the animal contribution to the diets.[[5]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Schulting-5) Since Europe was extremely cold during this time period, food sources needed to be high in energy and fat content. Testing comparisons among various human remains reveal that populations at higher latitudes placed greater dietary emphasis on meat.

A defining trait that distinguished the Gravettian people was their ease of mobility compared to their Neanderthal counterparts. Modern humans developed the technology and social organization that enabled them to migrate with their food source whereas Neanderthals were not adept at travelling, even with relatively sedentary herds.[[6]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Holden-6)

With their ability to move with the herds, Gravettian diets incorporated a huge variety of animal prey. The main factor for which animal was hunted at a particular time was based on age and size. For example, first year deer offered the best hides, while fourth year deer offered the most flesh for consumption.[[3]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Bogucki-3) Mammoths were a prime food source for the people of [Central Europe](https://en.wikipedia.org/wiki/Central_Europe). It is believed that human exploitation, in this manner, has led to their extinction.[[7]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Svoboda-7) Gravettian diets also consisted of hyenas, wolves and reindeer. Herds and packs that lived within close proximity to them often served as part of the food source.[[5]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Schulting-5) More common meat sources were [hares](https://en.wikipedia.org/wiki/Hare) and [foxes](https://en.wikipedia.org/wiki/Fox), captured communally with nets.[[4]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Net-4) This time period is classified by the strong emphasis on meat consumption because agriculture had not been fully introduced nor utilized. In addition, the climate was not favorable to stable crop cultivation.[[5]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Schulting-5)

Coastal Gravettians incorporated another food source: marine protein. From several sources of remains found in Italy and [Wales](https://en.wikipedia.org/wiki/Wales), [carbon dating](https://en.wikipedia.org/wiki/Carbon_dating) reveals that 20-30% of Gravettian diets of coastal peoples consisted of sea animals.[[8]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Pettit-8)[[9]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Isotope-9) Populations of lower latitudes relied more on shell fish and fish while higher latitudes’ diets consisted of seals.[[9]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Isotope-9)

**Use of animal remains**

**Decorations and tools**

The following information on animal remains is based on an excavation that took place during the field seasons of 1954 and 1956 at a location known as Pavlov I in southern [Moravia](https://en.wikipedia.org/wiki/Moravia). The Gravettian era landscape is the most closely related to the landscape of present day Moravia. Pavlov I is also the most complete and complex Gravettian site to date, therefore making it a perfect model for which to reach a general understanding of Gravettian culture.

In many instances, animal remains point to both decorative and utilitarian purposes. In the case of the [Arctic fox](https://en.wikipedia.org/wiki/Arctic_fox), for example, incisors and [canines](https://en.wikipedia.org/wiki/Canine_tooth) for use as decoration as well as humeri and radii for tool creation were discovered. Very similarly, the remains of red foxes showed decorative incisors and canines as well as [ulnas](https://en.wikipedia.org/wiki/Ulna) for [awls](https://en.wikipedia.org/wiki/Stitching_awl) and [barbs](https://en.wikipedia.org/wiki/Fish_hook). Based on the quantity of the red fox remains discovered, it can be asserted that red fox bones were preferred over those of the Arctic fox. The reason for this has not been concluded.[[10]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Bones-10)

Mammoth remnants were also among the most popular due to the abundance of [tusks](https://en.wikipedia.org/wiki/Tusks). However, ribs, long bones, and [molars](https://en.wikipedia.org/wiki/Molars) were also documented. It is clear in this case as well, that some of the mammoth bones were also used for decorative purposes. Although not as popular in quantity as the mammoth, wolf remains were the most varied of all of the animals. Many parts of the wolf’s skeleton were used for tool production and decoration. These include the ribs, humeri, radii, ulnas, femurs, tibias, [fibulas](https://en.wikipedia.org/wiki/Fibulas), metapodia, and perforated teeth.[[10]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Bones-10)

Some animal bones were only used to create tools. Due to their shape, the ribs, fibulas, and metapodia of horses were good for awl and barb creation. In addition, the ribs were also implemented to create different types of smoothers for pelt preparation. The shapes of polar hare bones are also unique, and as a result, the ulnas were commonly used as awls and barbs. [Reindeer](https://en.wikipedia.org/wiki/Reindeer) [antlers](https://en.wikipedia.org/wiki/Antlers), ulnas, ribs, tibias, and teeth were utilized in addition to a rare documented case of a [phalanx](https://en.wikipedia.org/wiki/Phalanx_bones).[[10]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Bones-10)

As such, few animal remnants were solely used for decorative purposes. The perforated teeth, non-perforated canines, and metacarpals of brown bears, however, were utilized strictly for decoration. These bears were not a common source of bone usage, for they were not considered regular prey. Even less frequently employed were the discovered bone traces of perforated fish vertebra.[[10]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Bones-10)

**Blades and bladelets**

In order to make decorations and tools from animal remains, blades and bladelets were used. Sites such as CPM II, CPM III, Casal de Felipe, and Fonte Santa (all in Spain) have revealed evidence of blade and bladelet technology during the Gravettian Period. The tools were often made of quartz and rock crystals, and the blades varied in terms of platforms, abrasions, endscrapers, and burins. These [burins](https://en.wikipedia.org/wiki/Burins) were made by hammering bones and rocks until sharp shards were created, a process known as [lithic reduction](https://en.wikipedia.org/wiki/Lithic_reduction).[[11]](https://en.wikipedia.org/wiki/Use_of_animals_during_the_Gravettian_period#cite_note-Marks-11) Flint blades have also been found. These blades, like the "Noailles" burin, were used to carve and sharpen bones for use as tools. These tools were typically used to skin animals or to sharpen sticks.

**See also**

* [Gravettian](https://en.wikipedia.org/wiki/Gravettian)
* [Upper Paleolithic](https://en.wikipedia.org/wiki/Upper_Paleolithic)

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