

**What is Archaeology?**

**Source: https://www.saa.org/about-archaeology/what-is-archaeology**

**Archaeology is the study of the ancient and recent human past through material remains**. Archaeologists might study the million-year-old fossils of our earliest human ancestors in Africa. Or they might study 20th-century buildings in present-day New York City. Archaeology analyzes the physical remains of the past in pursuit of a broad and comprehensive understanding of human culture.

**Types of Archaeology**

Archaeology is a diverse field of study. Most archaeologists focus on a particular region of the world or a specific topic of study. Specialization allows an archaeologist to develop expertise on a particular issue. Some archaeologists study human remains (bioarchaeology), animals (zooarchaeology), ancient plants (paleoethnobotany), stone tools (lithics), etc. Some archaeologists specialize in technologies that find, map, or analyze archaeological sites. Underwater archaeologists study the remains of human activity that lie beneath the surface of water or on coasts. Cultural Resource Management, known as "CRM," refers to the work archaeologists do to follow federal and state laws.

Around the world, archaeological methods are similar. But archaeology in the Americas is a subfield of anthropology—the study of humans. In other parts of the world, archaeology is an independent field of study or part of historical research.

**Archaeological Sites**

An archaeological site is any place where there are physical remains of past human activities. There are many types of archaeological sites. Prehistoric archaeological sites are those without a written record. They may include villages or cities, stone quarries, rock art, ancient cemeteries, campsites, and megalithic stone monuments. A site can be as small as a pile of chipped stone tools left by a prehistoric hunter. Or a site can be as large and complex as the prehistoric settlements of Chaco Canyon in the American southwest. Historical archaeology sites are those where archaeologists can use writing to aid their research. Those could include densely populated modern cities, or areas far below the surface of a river, or the sea. The wide variety of historical archaeological sites include shipwrecks, battlefields, slave quarters, cemeteries, mills, and factories.

**Artifacts, Features, and Ecofacts**

Even the smallest archaeological site may contain a wealth of important information. Artifacts are objects made, modified, or used by humans. Archaeologists analyze artifacts to learn about the people who made and used them. Non-portable artifacts called features are also important sources of information at archaeological sites. Features include things like soil stains that show where storage pits, structures, or fences once existed. Ecofacts are natural remains related to human activity. Plant and animal remains can help archaeologists understand diet and subsistence patterns.

**Context**

Context in archaeology refers to the relationship that artifacts have to each other and to their surroundings. Every artifact found on an archaeological site has a defined location. Archaeologists record the exact spot where they find an artifact before removing it from that location. In the 1920s, archaeologists found a stone spear point lodged between the ribs of a species of a North American bison that went extinct at the end of the last Ice Age. It settled an argument that had gone on for decades. The spear point established once and for all that people had inhabited North America since the late Pleistocene. It is the context or association between the bison skeleton and the artifact that proved this. When people remove an artifact without recording its precise location, we lose that context forever. At that point, the artifact has little or no scientific value. Context is what allows archaeologists to understand the relationships between artifacts and between archaeological sites. It is how we understand how people in the past lived their daily lives.

**Do Archaeologists Study Dinosaurs?**

In short, no. Scientists who study dinosaur bones (or fossils) are paleontologists. Paleontology is the study of the history of life on Earth as based on fossils. That includes dinosaurs, other ancient animals, plants, and even bacteria. Paleontologists have a lot in common with archaeologists. Both excavate and study physical remains. The key difference is that archaeologists study the human past. Some archaeologists study animals or plants too, looking at the relationships that people had with them in the past.

The last of the dinosaurs died out about 65 million years ago. Our earliest hominid (human-like) ancestors didn’t arise until about 5 million years ago. So, people and dinosaurs never lived on our planet at the same time! Dinosaur fossils help paleontologists study the history of life on earth. But dinosaur bones aren’t helpful to archaeologists, who want to understand human history.

Paleontologists, archaeologists, and other scientists such as geologists, chemists, and biologists often work together to better understand ancient environments. For example, research teams at Olduvai Gorge in Tanzania are made up of archaeologists, paleontologists, and more. Olduvai Gorge is home to some of the earliest hominid fossils.

**What do Archaeologists do?**

**Source: https://www.saa.org/about-archaeology/what-do-archaeologists-do**

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| [Historical Research Techniques](https://www.saa.org/about-archaeology/what-do-archaeologists-do#historical) | [Preparing for the Field](https://www.saa.org/about-archaeology/what-do-archaeologists-do#field) | [Data Recovery](https://www.saa.org/about-archaeology/what-do-archaeologists-do#data) | [In the Lab](https://www.saa.org/about-archaeology/what-do-archaeologists-do#lab) | [Preserving Collections](https://www.saa.org/about-archaeology/what-do-archaeologists-do#preserving) |

The methods used by archaeologists to gather data can apply to any time period, including the recent past. One archaeologist in the U.S. has become known for his study of the garbage discarded by the people of Tuscon, Arizona in the 1970s! This "garbology" project proved that even recent artifacts can reveal a lot about the people who used and discarded them.

Over the past 150 years, archaeologists have developed effective methods and techniques for studying the past. Archaeologists also rely on methods from other fields such as history, botany, geology, and soil science.

**Historical Research Techniques**

**Archival research**

Archival research is often the first step in archaeology. This research uncovers the written records associated with the study area. If people lived in the area when there were written records, the archaeologist will look for associated primary historical documents. This archival research may take the archaeologist to public or university libraries, the local historical society or courthouse—or even into people’s homes! Primary documents could include: maps and/or photographs of the area, newspapers, land and tax records, and diaries or letters.

In addition to primary historical documents, archaeologists will look for site reports that other archaeologists have written about this area. These reports will describe what the archaeologist found in this area during any previous investigations. These older site reports can help guide the new research. The State Historic Preservation Office maintains documentation files for all the recorded archaeological sites in each state. This will include previous archaeological research reports about sites in the state.

**Oral History**

Oral history is another research method that archaeologists and historians may use to gather information. It includes information passed down by word of mouth. Stories passed down about your family history and traditions that your family observes are oral history.

Archaeologists today collaborate with descendants to better understand the cultural traditions of their pasts. Archaeologists working on the 19th-century Levi Jordan Plantation in Texas interviewed descendants. They included both descendants of the plantation owners (ιδιοκτήτες φυτειών) and of the enslaved plantation workers as part of their research. These archaeologists wanted to include the voices and perspectives of all the past peoples who lived and worked there. At Castle Rock Pueblo in southwestern Colorado, archaeologists used oral history. Through the oral traditions of modern Puebl**oan** people, they learned about the past culture of their Anasazi ancestors.

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**Preparing for the Field**

While historians and archaeologists both use written documents to learn about the past, only archaeologists interpret archaeological sites. That involves unique field work.

**Tools of the Trade**

You may think of shovels (φτυάρια) when you think of digging, but the most important piece of equipment in the archaeologist’s toolkit (εργαλειοθήκη) is the trowel (μυστρί). Archaeologists use trowels to scrape away (απομακρύνω) thin layers of soil from test units, or holes in the ground. Of course, archaeologists use many other tools in the field and lab. They need equipment to dig, sift (κόσκινο), measure, and analyze artifacts. Some, like Scanning Electron Microscopes (SEM) are very specialized. Others, like tape measures, toothbrushes, and dustpans (φαράσια), are everyday objects!

**How Do You Find Sites?**

Archaeologists use different methods to find sites—surveying the ground, using satellites, or sometimes by accident! An observant beach walker discovered the prehistoric burials at Low Hauxley on the coast of England. A stone box had been sticking out of a sand dune after a storm. Construction workers discovered a burial ground with remains of more than 400 17th and 18th-century Africans during construction in New York City. The African Burial Ground is now a National Monument because of its significance in American history.

An archaeological predictive model is a tool that indicates the probability that an archaeological site exists in a certain area. It helps determine where archaeologists look for sites based on factors like distance from water, ground steepness, soil type, and other factors that influence where people settle or perform certain tasks. The methods, used to find sites, will depend on the kind of research questions that the archaeologist is trying to answer. If there are plans for highway or housing construction, archaeologists may need to know of any archaeological sites on the property. First, they will check if there were any previous surveys in the area and, if so, what the results were. If there are no previously recorded sites, the archaeologist will conduct an archaeological survey.

If there are sites, the archaeologist will want to know how many, their locations, and how the sites relate to each other. Usually, to save time and money, the archaeologists only test a sample of the area.

**Surface Surveys**

A surface survey is a systematic examination of the land. A team of archaeologists will walk in straight lines back and forth across the study area. As they walk, they look for evidence of past human activity, including walls or foundations, artifacts, or color changes in the soil that may indicate features. They will use a compass and long tape measure to make sure they walk in a straight line and will record the exact location of all evidence they find. They collect any artifacts and put them in bags with a label of their exact location. Features on the surface, which they cannot remove, are photographed and drawn.

**Shovel Test Pits**

Shovel test pits (or STPs) are a series of narrow holes dug in an area that archaeologists believe to be a potential site, revealing artifacts or features. Archaeologists usually dig test pits where the ground has not been farmed or plowed and it contains a lot of surface vegetation. They may screen (sift-κοσκινίζω) the soil to recover small artifacts and often draw profiles of the test pits to record what the soil looks like in each hole.

**Geophysical Surveys**

There are non-invasive techn**i**ques archaeologists can use to find sites without digging. Examples of geophysical surveys that do not disturb the soil include magnetometry, resistivity, and ground-penetrating radar.

**Evaluating Site Significance**

After conducting a survey, archaeologists will have enough information to det**e**rmine if any significant archaeological sites are in the study area. They may or may not find a site. Or, the sites may or may not be "significant" as defined by the law in [the National Historic Preservation Act](https://www.nps.gov/subjects/historicpreservation/national-historic-preservation-act.htm)\*. Regardless1, the archaeologist will write and file2 a site report with the State Historic Preservation Office, which describes their research. If they found significant sites, they might plan further excavations.

\*Νόμος Διατήρησης Εθνικών Μνημείων

1. regardless: ανεξάρτητα

2. file: αρχειοθετώ// (file for: κάνω αίτηση)

**Data Recovery (Ανάκτηση Δεδομένων)**

Believe it or not archaeologists rarely excavate (=dig) entire sites! Archaeology is a destructive science—meaning that once a site is excavated, it is gone forever. The art**i**facts and information gathered remain, but the site itself can never be recreated. Excavating sites is also costly and time-consuming. Once the dig is done, archaeologists have a professional responsibility to analyze all the artifacts and information obtained, to report on their research, and to curate\* the collections. For these reasons, archaeologists generally excavate only when there is a thr**ea**t of destruction or, when they may reveal vital information about past c**u**ltures. And they usually excavate only a small part of any site.

Although archaeologists work on all kinds of environments around the world, they follow the same basic process when planning an excavation.

\*curate: have the care and superintendence of s.th. (+ one in charge of a museum, zoo, or other place of exhibit) – φροντίζω και επιτηρώ - επιμελούμαι

**Research Design (Σχέδιο Έρευνας)**

Before an excavation begins, archaeologists write a research design. This outlines (=delineate/περιγράφω) the "who, what, where, when, how, and why" of the fieldwork. Archaeologists must submit (υποβάλλω) this important document for review before gaining permission (άδεια) to excavate a site. In the U.S., the State Historic Preservation Office reviews (ελέγχω, εξετάζω) this plan. If an American archaeologist wants to work in a f**o**reign country, permission must be granted (δίνομαι) by the appropriate agency (υπηρεσία/ γραφείο) in that government. Tribal (American Indian) lands in the U.S. have their own review process**es** (διαδικασίες ελέγχου/θεώρησης), and some tribes have their own archaeology programs that control access (πρόσβαση) to sites on tribal lands. Once a research design (σχέδιο) rec**ei**ves (δέχομαι) approval (έγκριση/αποδοχή) and p**e**rmits (άδειες), a team gathers the necessary people and tools.

**Gridding the Site**

Archaeologists must rec**o**rd the exact location of all artifacts and features on a site. Before removing (απομακρύνω/μετακινώ) any soil or artifacts from a site, they create a site grid (πλέγμα/matrix, net, network). They establish a datum point\*, or fixed reference point for all m**ea**surements. Then they superimpose (υπερθέτω, θέτω επάνω) a rectangular grid over the whole site. They measure each square in the grid and assign (βάζω, ορίζω/αναθέτω) it a number. These squares are often ref**e**rred to as units. This system allows the archaeologist to create a precise map and to rec**o**rd the exact location of all the features and artifacts on the site.

\*datum point: Any reference point of known or assumed coordinates from which calculation or measurements may be taken. [See: <https://www.shutterstock.com/search/datum+point>] – σημείο αναφοράς από όπου γίνονται μετρήσεις

**Excavating a Unit**

Archaeologists use a statistical sampling method (μέθοδος στατιστικής δειγματοληψίας) to select which squares or units they will excavate. To begin, they will collect surface artifacts, then remove any ground vegetation (βλάστηση). Archaeologists screen (κοσκινίζω) all soil removed from a unit, to recover small artifacts and ecofacts. They record exact location, both horizontally and vertically, of all materials recovered. They store artifacts from each unit in secure bags labeled with the site and excavation unit numbers and level. The unit may be dug in arbitrary (τυχαίος) levels (such as every 10 cm) or by following the natural stratigraphy (στρωματογραφία *(αρχαιολογία)*//διαστρωμάτωση//layers) of the soil.

**Stratigraphy**

Stratigraphy is the study of geological or soil layers. Over time both natural processes, like the decay of organic matter and cultural processes (caused by humans), create soil layers. The cross section (διατομή) of these soil layers resembles a layer (στρώση) cake. The oldest layers are on the bottom and the most recent layers are on the top. This is called the Law of Superposition (Νόμος της Υπέρθεσης) and is one of the most important principles in archaeology. Archaeologists can use stratigraphy to determine (καθορίζω/προσδιορίζω) the relative age of each layer and its contents.

**In the Lab**

Archaeologists spend much more of their time in the laboratory analyzing artifacts and data than they do in the field. Archaeologists analyze artifacts, features, and other information recovered in the field to help answer their research questions. During the investigative process, they might seek to learn when people occupied the site, the purpose of the objects recovered, what the people ate, the kinds of structures they built, with whom they traded, and much more. They may also look at how the site they are analyzing relates to other sites. The analysis will depend on the archaeologist's research questions from the beginning of the project.

**How Old Is It?**

There is a variety of techniques for determining the age of an artifact or archaeological site. Stratigraphy can determine the relative age of soil layers and artifacts and can help us understand the order of events. But if an artifact of known age (such as a coin with a mint date = ημερομηνία κοπής νομίσματος) is found in a soil layer it can tell us when something occurred. Tree-ring dating, or dendrochronology, is one of the oldest dating methods used by archaeologists. It is based on the principle that trees produce growth rings each year and the size of the rings will vary depending upon rainfall received each year. Archaeologists have built up long sequences of rings from tree trunks that extend back centuries. In the American Southwest, tree ring dating goes back to 59 BC. Radiocarbon (C14) dating (ραδιοχρονολόγηση με άνθρακα) is the most popular method to date objects made of organic matter. Potassium-argon dating\* can date ancient objects—up to 100,000 years old. Obsidian (οψιδιανός) hydration (ενυδάτωση) can date artifacts made from volcanic glass (ηφαιστειακό γυαλί). This is only a sample of the many physical and chemical dating methods that archaeologists use to date archaeological sites and artifacts.

B.C. = Before Christ // BCE = Before Christ’s Era – π.Χ.

A.D. = Anno Domini = After the year Christ was born – μ.Χ.

\*Potassium-argon dating: a [technique](https://www.collinsdictionary.com/dictionary/english/technique) for [determining](https://www.collinsdictionary.com/dictionary/english/determine) the [age](https://www.collinsdictionary.com/dictionary/english/age) of minerals based on the [occurrence](https://www.collinsdictionary.com/dictionary/english/occurrence) (ύπαρξη/εμφάνιση) in natural [potassium](https://www.collinsdictionary.com/dictionary/english/potassium) (κάλιο/**K**) of a small [fixed](https://www.collinsdictionary.com/dictionary/english/fix) (σταθερός) amount (ποσότητα) of [radioisotope](https://www.collinsdictionary.com/dictionary/english/radioisotope) 40 [K](https://www.collinsdictionary.com/dictionary/english/k) that [decays](https://www.collinsdictionary.com/dictionary/english/decay) to the [stable](https://www.collinsdictionary.com/dictionary/english/stable) [argon](https://www.collinsdictionary.com/dictionary/english/argon) [isotope](https://www.collinsdictionary.com/dictionary/english/isotope) 40Ar with a [half-life](https://www.collinsdictionary.com/dictionary/english/half-life) of 1.28 × 109 years. [Measurement](https://www.collinsdictionary.com/dictionary/english/measurement) of the [ratio](https://www.collinsdictionary.com/dictionary/english/ratio) (αναλογία/δείκτης τιμής) of these isotopes [thus](https://www.collinsdictionary.com/dictionary/english/thus) gives the age of the mineral (ορυκτό). [online dictionary]

\*argon: αργόν (**Ar**/gas)

**Analyzing Artifacts**

Artifacts are important sources of information for archaeologists. Artifacts can tell us about the diet, tools, weapons, dress, and living structures of people who made and used them. Archaeologists wash, sort, catalog, and store recovered artifacts after bringing them back from the field. They analyze individual artifacts, but also may sort (ταξινομώ, κατατάσσω) them into groups to see patterns. For example, they might weigh all the oyster shells (όστρακα/κελύφη στρειδιών) together or count all the nails and consider them as one unit. The locations of artifacts on the site provide clues (ενδείξεις, ίχνη) to the kinds of activities that occurred. The type of material the artifact is made of is another important piece of information. It can inform whether past people obtained the materials locally or by trading with another group. Artifacts provide a window into the lives of peoples who lived before.

**Analyzing Features**

A feature represents human activity but, unlike most artifacts, it cannot be removed from the archaeological site. A feature might be a stain in the soil that is evidence of a former fence post (πάσσαλος φράχτη). Photographs, drawings, and soil samples of the fence post-hole collected by the archaeologist are part of the scientific record of that feature. Those documents and samples are just as important as the artifacts found nearby. Features like soil stains can reveal the outlines (περιγράμματα/βασικά σημεία) of prehistoric or historic structures such as houses, barns (αχυρώνας, κοτέτσι, αποθήκη), longhouses (μακρύ κοινοτικό οίκημα), and earthen (χωμάτινος, πήλινος) lodges (οίκημα, ξενώνας). Other types of features include hearths (fire pits - εστίες), storage pits\*(αποθηκευτικοί χώροι), and middens (refuse heap, dunghill - σκουπιδότοποι) — what archaeologists call garbage dumps! Privies (outhouses, outside toilets - αποχωρητήρια) are important features in historical archaeology sites, because people used to dump (dispose of/ πετάω) their garbage into them.

\*pits: φρεάτια/λάκκοι

**Preserving Collections**

Archaeologists have both ethical and legal (νομικές) obligations (υποχρεώσεις) to preserve all the data they collect for the benefit (όφελος) of future generations. This includes not just the artifacts recovered (ανακτώ), but also the associated (σχετική, συναφής, συνεταιριστική) information and **re**cords. This includes soil samples, field notes, maps, photographs, drawings (σχέδιο, σκαρίφημα), and related (συναφής, σχετικός) historical documents. Archaeologists follow strict guidelines (αυστηρές οδηγίες) and procedures for cleaning, labeling (ετικετοποίηση/χρήση ετικέτας), cataloguing (καταλογογράφηση), and storing (αποθήκευση) objects.

**Where are Collections Stored?**

Each state has a responsibility to store the millions of artifacts recovered from surface collections or excavations within its boundaries. Finding space for these collections is a major challenge. While some collections are stored in many locations around the state, other states have created centralized (συγκεντρωτικός) archaeology storage facilities (εγκαταστάσεις).

Universities and museums also sponsor (χορηγώ/χορηγός) archaeology projects and are responsible for preservation and storage. Archaeologists working at museums or universities may store their collections there. [The University of Pennsylvania Museum of Anthropology and Archaeology in Philadelphia](https://www.penn.museum/) is an example of a museum with important archaeology collections, which it stores, displays, and loans to other institutions (ιδρύματα) for exhibitions (εκθέσεις). These collections are also studied by scholars from all over the world. At the [Smithsonian Institution’s Department of Anthropology](https://naturalhistory.si.edu/research/anthropology), located in the National Museum of Natural History, archaeologists store their collections at the museum on the National Mall\* and nearby storage facility (εγκαταστάσεις αποθήκευσης).

\*National Mall: landscaped park - The term "mall" originally meant a place where people played pall-mall, a game similar to croquet. By the mid 1700s it had come to mean a tree-lined park where people went to walk and socialize. In the 1790s, the Commissioners of the District of Columbia and Andrew Ellicott used the term to refer to L'Enfant's planned "Grand Avenue" between the Capitol and the Potomac. During the 1800s, it was sometimes called a "mall" but also just "the public grounds." The term "Mall" became the accepted name in the 1900s. In 1902, the McMillan plan officially described it as "The National Mall."

**Why Are Collections Preserved?**

We preserve collections for both scientific research and public education. The application of new technologies and dating techniques to old collections yields (αποφέρω, δίνω) valuable new information that may lead to new understandings about our human past. For instance, neutron activation analysis (ανάλυση ενεργοποίησης νετρονίων) now allows us to trace (ανιχνεύω) the origin of the raw materials (πρώτες ύλες) used in Maya ceramic pots, collected over a hundred years ago. Both DNA analysis and atomic mass spectrometry (AMS) (φασματομετρία ατομικής μάζας) radiocarbon dating are being applied to plant and animal remains to study the origins of domestication (εξημέρωση).

Archaeological collections are also preserved for use in museum exhibits so that the public may benefit from the archaeological research that unearthed them. This way, we can all connect to the work that archaeologists do.

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**GLOSSARY.**

**\*Cultural resource(s) management -** Μετάφραση από αγγλικά –

Με την ευρύτερη έννοια, η διαχείριση των πολιτιστικών πόρων είναι η κατεύθυνση και η πρακτική της διαχείρισης πολιτιστικών πόρων, όπως οι τέχνες και η κληρονομιά. Ενσωματώνει τη Διαχείριση Πολιτιστικής Κληρονομιάς που ασχολείται με τον παραδοσιακό και ιστορικό πολιτισμό. [Wikipedia (Αγγλικά)](https://en.wikipedia.org/wiki/Cultural_resource_management)

**quarries –** large, deep places from which stones or other materials are extracted – λατομεία

**pits** –large holes in the ground – λάκκοι, σκάμματα

**fences** –railing - φράχτης

**subsistence** - the action or fact of maintaining or supporting oneself, especially at a minimal level – συντήρηση, ύπαρξη

A **Subsistence Pattern** – alternatively known as a subsistence strategy – is the means by which a [society](https://en.wikipedia.org/wiki/Society) satisfies its basic needs for survival. This encompasses the attainment of nutrition, water, and shelter. The five broad categories of subsistence patterns are foraging, horticulture, pastoralism, agriculture, and industrial food production.

**Foraging**

*Main article:*[*Foraging*](https://en.wikipedia.org/wiki/Foraging)

Foraging is the oldest subsistence pattern, with all human societies relying on it until approximately 10,000 years ago.[[2]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-Conformity-2) **Foraging societies obtain the majority of their resources directly from the environment without cultivation**. Also known as [Hunter-gatherers](https://en.wikipedia.org/wiki/Hunter-gatherers), foragers may subsist through collecting wild plants, [hunting](https://en.wikipedia.org/wiki/Hunting), or [fishing](https://en.wikipedia.org/wiki/Fishing).[[1]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-Human_Challenge-1) Hunter-gatherer communities are frequently small and mobile, with [egalitarian](https://en.wikipedia.org/wiki/Egalitarian) social structures.[[2]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-Conformity-2) Contrary to the common perception of hunter-gatherer life as precarious and nutrient-deficient, Canadian [anthropologist](https://en.wikipedia.org/wiki/Anthropologist) [Richard Borshay Lee](https://en.wikipedia.org/wiki/Richard_Borshay_Lee) found that "with few conspicuous exceptions, the hunter-gatherer subsistence base is at least routine and reliable and at best surprisingly abundant."[[3]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-3)

**Horticulture**

*Main article:*[*Horticulture*](https://en.wikipedia.org/wiki/Horticulture)

**Horticultural societies typically engage in small-scale gardening with simple tools**. These methods allow for higher [population densities](https://en.wikipedia.org/wiki/Population_densities), but still depend on the availability of plentiful, undeveloped land.[[2]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-Conformity-2) A common type of horticulture is [slash-and-burn](https://en.wikipedia.org/wiki/Slash-and-burn) cultivation, wherein regions of wild foliage are cut and burnt, producing nutrient-rich [biochar](https://en.wikipedia.org/wiki/Biochar" \o "Biochar) in which to grow crops. Traditional, small-scale slash-and-burn cultivation – such as that practiced by the [Guaraní people](https://en.wikipedia.org/wiki/Guaran%C3%AD_people) in South America – can be efficient and sustainable, with the natural environment eventually reclaiming and reintegrating old garden plots.[[4]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-4)

**Pastoralism**

*Main article:*[*Pastoralism*](https://en.wikipedia.org/wiki/Pastoralism)

**Pastoralism is the herding and breeding of**[**domestic animals**](https://en.wikipedia.org/wiki/Domestic_animals). Pastoralism is common in arid geographic regions, or those with inconstant and fluctuating rainfall. In such places, raising [herbivores](https://en.wikipedia.org/wiki/Herbivores) is often a more reliable lifestyle than farming, and the [livestock](https://en.wikipedia.org/wiki/Livestock) convert wild vegetation that is indigestible to humans into meat and dairy products.[[5]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-5) Pastoral communities are generally [nomadic](https://en.wikipedia.org/wiki/Nomadic) to accommodate for the needs of their herds as the seasons and the availability of pasture changes. Pastoralism remains fairly popular today, with 21 million pastoralists in [Africa](https://en.wikipedia.org/wiki/Africa) and [Asia](https://en.wikipedia.org/wiki/Asia) alone.[[1]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-Human_Challenge-1)

**Agriculture**

*Main article:*[*Agriculture*](https://en.wikipedia.org/wiki/Agriculture)

**Agriculture is the intensive maintenance and cultivation of land for food production**. It is distinct from horticulture in its use of more diverse and complex technology to plant, [irrigate](https://en.wikipedia.org/wiki/Irrigate), plow, fertilize, and harvest from considerably larger tracts of land.[[1]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-Human_Challenge-1) Agriculture may also involve raising livestock, with variants ranging from [mixed farming](https://en.wikipedia.org/wiki/Mixed_farming) to exclusive [ranching](https://en.wikipedia.org/wiki/Ranching). [Agrarian societies](https://en.wikipedia.org/wiki/Agrarian_societies) are often larger and more complex than foraging, horticultural, or pastoral ones; the combination of high [carrying capacity](https://en.wikipedia.org/wiki/Carrying_capacity) and stationary farmsteads enables dense populations and the development of cities peopled with nonproducing specialists.[[1]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-Human_Challenge-1)[[2]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-Conformity-2)

**Industrial Food Production**

*Main article:*[*Food industry*](https://en.wikipedia.org/wiki/Food_industry)

**Industrial food production is a variation of agriculture common among**[**industrial societies**](https://en.wikipedia.org/wiki/Industrial_societies). It is characterized by even greater, energy intensive use of modern mechanical, chemical, and biological technologies to maximize production. Only a small fraction of people in industrial societies are [farmers](https://en.wikipedia.org/wiki/Farmers), the rest obtain money to buy their food by engaging in the complex business and service economy.[[1]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-Human_Challenge-1) A significant part of the energy cost of industrial food production arises from the packaging and shipping of products to the increasingly [urban](https://en.wikipedia.org/wiki/Urban_area) consumer base.[[6]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-industrial_evolution-6) The energy costs, [pesticide](https://en.wikipedia.org/wiki/Pesticide) use, and widespread [erosion](https://en.wikipedia.org/wiki/Erosion) implicit in many forms of industrial food production have led to concerns about its long-term sustainability as a pattern of subsistence.[[6]](https://en.wikipedia.org/wiki/Subsistence_pattern#cite_note-industrial_evolution-6)

**(Wikipedia)**

**context** – (archaeology):context is what allows archaeologists to understand the relationships between artifacts and between archaeological sites – πλαίσιο, συνάφεια

**settle an argument** –solve an argument –επιλύω μια διαφωνία, μια διένεξη

**hominid** - a primate of a family (*Hominidae*) which includes humans and their fossil ancestors and also (in recent schemes) at least some of the great apes - ανθρωποειδές

**primate** – a [member](https://dictionary.cambridge.org/dictionary/english/member) of the most developed and intelligent group of mammals, including humans, monkeys and apes (Cambridge) - πρωτεύον θηλαστικό (πίθηκος, λεμούριος)

**Chaco Canyon:** φαράγγι

**bed:** layer – υπόστρωμα

**Olduvai Gorge in Tanzania:** φαράγγι (μακρόστενο), χαράδρα

"**garbology**" – απορριματολογία, μελέτη απορριμάτων

**archival research** - αρχειακή έρευνα - έρευνα αρχείων

**associated** - συνδεόμενα, έχουν σχέση

**primary** - κύρια, βασικά

**primary sources** – βασικές πηγές

**documents** – έγγραφα

**site** – (αρχαιολογικός) τόπος

**State Historic Preservation Office** –Κρατικό Γραφείο Διατήρησης Ιστορικών μνημείων

**National Register** – Εθνικό Μητρώο

**plantation** – φυτεία

**shovel** – φτυάρι

**toolkit** – εργαλειοθήκη

**trowel** – μυστρί

**scrape away** – ξύνω για να απομακρύνω κάτι

**sift** – κόσκινο / κοσκινίζω

**Scanning Electron Microscopes (SEM)** – Ηλεκτρονικά Μικροσκόπια Σάρωσης

**tape measures** – μεζούρες

**dustpan** – φαράσι

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**N.B.:** **The rest of the Vocabulary is incorporated in the text!**