1. Both hunter/gatherers and early agriculturalists engaged in activities that affected the life cycle and reproduction of plants and animals (for example, weeding, selecting to slaughter animals at specific ages, etc.). If hunter/gatherer and early agriculturalists engaged in similar kinds of subsistence activities, how can archaeologists identify when agriculture began? Describe two characteristics/patterns archaeologists can identify in plant and/or animal remains that are considered indicative of agricultural subsistence activities. Explain why each of these characteristics/patterns in plant and/or animal remains is a product of human influence.

2. Although usually no longer considered exclusive to agricultural societies, agriculture did result in significant social changes in many ancient societies. Discuss two social (not biological) or demographic changes that arose in many areas after agriculture emerged. How are these changes linked to the adoption of agriculture? Use examples from the course in your answer.

how can archaeologists identify when agriculture began?

One of the most direct sources of informtion are people’s teeth and bones. A significant indicator of dietary changeis the degree of tooth wear and illness the shift to soft, porridge-like, cereal-based meals instead of the hunting and gathering diet was generally associated with less wear but more illness, alaong with vitamin deficiency symptoms(Hillson 1999). Food waste left behind by prehistoric foragers and farmers—fragments of animal bones and plant remains—is another important source of information, even though domestication only records a developed stage of the interaction between people and animals or plants, not it’s beggining(Barker, 2009). Furthermore, material culture, which includes stone tools, pottery, settlement buildings, and more, has historically been the primary source for the study of early farming. All these sources together are used to try and identify when agriculture began.

Studies of modern and ancient DNA can be used to infer may be used to determine how many times a plant or animal was domesticated because of the degrees of genetic diversity in modern species.

Describe two characteristics/patterns archaeologists can identify in plant and/or animal remains that are considered indicative of agricultural subsistence activities. Explain why each of these characteristics/patterns in plant and/or animal remains is a product of human influence.

I. Genetic modications to the Canarium tree before the end of the Pleistocene probably resulted from human intervention, from activities such as grouping trees with valuable edible fruits or nuts together in preferred locations, preparing ground for them, and clearing away competitor plants. Striations on sickles at Abu Hureyra, likely to have been caused by contact with loose soil attached to plants near the ground, indicate some form of tillage: the consensus is that, while people may not have been cultivating cereals systematically they were probably tending them, for example by removing competitor plants and transplanting seeds in the manner of some recent foragers.

Before the end of the Pleistocene, genetic modifications to the Canarium tree most likely arose through human involvement, through actions like gathering trees with important edible fruits or nuts together in favoured sites, preparing land for them, and eradicating rival plants (Cosgrove 1996). At Abu Hueyra striations were found on sickles indicating that even if people weren’t growing grains in a systematic way, they were probably still taking care of them. For instance, they may have taken out competing plants (Barker, 2009). This is a common pattern seen in many domesticated plants where their seed sizes increase or germination process gets sped up due to this human intervention.

Ii. Mortality profiles dominated by young animals and reduced tusk sizes indicate that pig domestication, characterized by selective culling and herd management, goes back to at least the beginnings of the Holocene. i.e they were selectively culling male migs for game management as they were the ones w the small tusks

Domestication of pigs is evident from the mortality profiles, which are dominated by young animals, and the smaller tusk sizes (Barker, 2009). Male pigs usually have smaller tucks so this could indicate selective culling of male pigs for game management from the start of the Holocene period (Price & Hongo, 2019). This human intervention regulates the reproduction of these animals and like in pigs, decreased body size and aggressiveness can be seen in many domesticated animals. Another example would be the Early Natuan foragers at Abu Hureyra who domesticated the wolf, presumably for use in hunting (Barker, 2009).

2. Although usually no longer considered exclusive to agricultural societies, agriculture did result in significant social changes in many ancient societies. Discuss two social (not biological) or demographic changes that arose in many areas after agriculture emerged. How are these changes linked to the adoption of agriculture? Use examples from the course in your answer.

One detailed study of the skeletal remains of a shing and foraging community of Khok Phanom Di in Thailand indicated that, as rice cultivation was incorporated into subsistence, a decline in the demands for canoeing (a consequence of less shing) resulted in a decline in male upper body development, whereas women developed stronger muscles, perhaps related to potting. In the light of the increasing richness of the female burials, the excavators argued that in this example women acquired increasing status with agriculture, as men's roles as shermen and traders declined (Higham et al. 1992).

After the emergence of agriculture, deep sedentism, which is essentially permanently living in groups in one place for long periods of time, became popular. Since agriculture required a lot of labour especially during the harvest seasons it encouraged formalisation of larger social groups and people started building more long lasting houses with substantial archetecture to lay down roots. An example of a large community is Çatalhöyük, a town in central Turkey that consisted of 8,000 people and 2,000 houses. Another example to show the way complex societies formed due to the rise of agriculture is Kaua’i, Hawai’i. Community farmers produced taro and other crops from extremely productive fields, feeding a significant number of commoners and funding the mainly superstructure. Commoners were hesitant to give up the benefits of those fields that had been constructed on the finest soils of the islands but in return for these benefits, the konohiki of a village put his people to work creating new irrigation systems, building temples and roads, and generally providing labor for the chiefs' many projects. Therefore we can see how specialization and long term archeticture developed in these complex societies.

From improved, highly productive fields, community farmers harvested taro and other crops, which fed a sizable commoner population and financed the chiefly superstructure. The common farmers' harder work produced the surplus to support the ruling chiefs. The high productivity and substantial investment of the agricultural facilities held the farmers on their land. Commoners were reluctant to forgo the advantages of those fields that had been built on the islands' best soils. In exchange for those advantages, a community's konohiki put his people to work building new irrigation systems, farming fields set aside for the chiefs, obtaining feathers for the chiefly cloaks, building the temples and roads - generally supplying labor for diverse initiatives of the chiefs.

It is implied that males dominated a series of roles such as producing tools, grinding grain, baking, and running a household by the pictures of feasting rituals but this male dominance was challenged when, plant cultivation and agriculture started to take a more significant role in communal life. Further study of Çatalhöyük was done to see how womens roles in early agricultural societies changed. It was thought that men and women would have dietary discrepancies if they led significantly different lives but no discrepancies were found. Furthermore, they found that people appear to have performed quite comparable duties throughout their lifetimes by examining the patterns of wear and tear on the bones. They saw very few signs of highly gendered everyday life or specialized tasks for the sexes. This alludes to a society in which gender plays a relatively minor role in establishing social positions.

An increase in farming intensity coincided with a growth in the local population in the Upper Mantaro Valley in Peru. There's no direct link between population density and the frequency of battle, but as populations grew, notably during the Wanka era, intensification was necessary and was made possible by agricultural advancements. Facilities that would have been the focus of invasions and the center of defenses were built via the construction of terraced fields, drained fields, and irrigated farmland. Thus, it can be seen that the rise of agricultural allowed for grater

The secondary source of power was the economy. The growth of local populations corresponded with an intensification of farming. There was certainly no direct correlation between population density and warfare, but increasing populations, especially during the Wanka period, required intensification that was facilitated by agricultural improvements. The development of drained fields, terraces, and irri gated lands created the facilities that would have been the targets for conquest and the heart of defenses. The cinchekona as war leaders could quite easily have controlled access to improved lands; lands seized in battle were the chief's to hold or distribute. The members of a community were obliged to work the lands of the cinche for his support. The surpluses from these lands should have provided the staples to finance an expanding base for the chiefly power strategy. But the polities did not expand laterally.

The shift to herding may thus have been geared toward production of export goods for an international trade

and also made it easier for emergent leaders to control this sector of the economy.

Encourages formalisation of social group and their size

Start building houses that will last linger and are bigger as bigger families.

Agriculture is kinda risky on a g year is v g bad year v bad so more sstroing crops

If u got more peole to share w then risk reduces

More substantial architechture, that outlast lives

Instead of living w a few chata where thousands are there these chnages are not diff in kind but freq changes

We see more evidence for sm bigger than a house, much bigger socila group, corporation and labout that goes w that