

tpo_35_passage_2

For most of human history, we have foraged (hunted, fished, and collected wild plants) for food. Small nomadic groups could easily supply the necessities for their families. No one needed more, and providing for more than one's needs made little sense. The organization of such societies could be rather simple, revolving around age and gender categories. Such societies likely were largely egalitarian; beyond distinctions based on age and gender, virtually all people had equivalent rights, status, and access to resources. Archaeologist Donald Henry suggests that the combination of a rich habitat and sedentism (permanent, year-round settlement) led to a dramatic increase in human population. In his view, nomadic, simple foragers have relatively low levels of fertility. Their high-protein, low-carbohydrate diets result in low body-fat levels, which are commonly associated with low fertility in women. High levels of physical activity and long periods of nursing, which are common among modern simple foragers, probably also contributed to low levels of female fertility if they were likewise common among ancient foragers. In Henry's view, the adoption of a more settled existence in areas with abundant food resources would have contributed to higher fertility levels among the sedentary foragers. A diet higher in wild cereals produces proportionally more body fat, leading to higher fertility among women. Cereals, which are easy to digest, would have supplemented and then replaced mother's milk as the primary food for older infants. Since women are less fertile when they are breast-feeding, substituting cereals for mother's milk would have resulted in closer spacing of births and the potential for a greater number of live births for each woman. A more sedentary existence may also have lowered infant mortality and perhaps increased longevity among the aged. These more vulnerable members of society could safely stay in a fixed village rather than be forced regularly to move great distances as part of a nomadic existence, with its greater risk of accidents and trauma. All of these factors may have resulted in a trend of increasing size among some local human populations in the Holocene (since 9600 B.C.E.). Given sufficient time, even in very rich habitats, human population size can reach carrying capacity, the maximum population an area can sustain within the context of a given subsistence system. And human population growth is like a runaway train: once it picks up speed, it is difficult to control. So even after reaching an area's carrying capacity, Holocene human populations probably continued to grow in food-rich regions, overshooting the ability of the territory to feed the population, again within the context of the same subsistence strategy. In some areas, small changes in climate or minor changes in plant characteristics may have further destabilized local economies. One possible response to surpassing the carrying capacity of a region is for a group to exploit adjoining land. However, good land may itself be limited—for example, to within the confines of a river valley. Where neighbors are in the same position, having filled up the whole of the desirable habitat available in their home territories, expansion is also problematic. Impinging on the neighbors' territory can lead to conflict, especially when they too are up against the capacity of the land to provide enough food. Another option is to stay in the same area but to shift and intensify the food quest there. The impulse to produce more food to feed a growing population was satisfied in some areas by the development of more-complex subsistence strategies involving intensive labor and requiring more cooperation and greater coordination among the increasing numbers of people. This development resulted in a change in the social and economic equations that defined those societies. Hierarchies that did not exist in earlier

foraging groups but that were helpful in structuring cooperative labor and in organizing more-complex technologies probably became established, even before domestication and agriculture, as pre-Neolithic societies (before the tenth millennium B.C.E.) reacted to the population increase.

question 1

Which of the following is NOT mentioned in paragraph 1 as a characteristic of early nomadic foraging societies?

- A Organization by age or gender
- B Collection of surplus food
- C Equal access to resources
- D Lack of status divisions

question 2

Why does the author mention "modern simple foragers" ?

- A To contrast the diets of modern simple foragers with those of ancient simple foragers
- B To illustrate the effects of low levels of female fertility on foraging populations
- C To help support the claim that ancient foragers may have had low levels of fertility
- D To argue for a link between nursing practices and fertility levels

question 3

Which of the following can be inferred from paragraphs 2 and 3 about sedentary foragers?

- A Their diet did not include as much wild cereal as that of nomadic foragers.
- B Their diet relied less on protein than did the diet of nomadic foragers.
- C They were more physically active than nomadic foragers.
- D They were more likely to breast-feed their infants than nomadic foragers were.

question 4

Select the TWO answer choices that, according to paragraph 3, were probable effects of a more sedentary existence among foragers. To receive credit you must select TWO answer choices.

- A More people were available to care for infants and the aged.
- B The frequency of infant mortality decreased.
- C Women no longer participated regularly in foraging activities.
- D The life span of older people lengthened.

question 5

It can be inferred from paragraph 3 that, compared with simple foragers, sedentary foragers

- A stopped breast-feeding earlier
- B had lower levels of body fat
- C ate a limited variety of wild cereals
- D had less access to easily digested foods

question 6

According to paragraph 4, all of the following factors could have destabilized local economies among Holocene populations EXCEPT

- A population growth beyond carrying capacity
- B changes in local climate
- C changes in plant characteristics
- D political conflict within a given population

question 7

According to paragraph 5, what is one possible response for a society that has surpassed the carrying capacity of its land?

- A Sharing resources with neighbors
- B Making use of additional lands nearby
- C Moving to better land in areas such as river valleys
- D Exploiting less desirable resources in their home territory

question 8

Which of the sentences below best expresses the essential information in the highlighted sentence in the passage? Incorrect choices change the meaning in important ways or leave out essential information.

- A The appearance of domestication and agriculture brought about the need for more hierarchically organized systems of labor and technologies among pre-Neolithic foraging societies.
- B The formation of social hierarchies meant that domestication and agriculture became less important than labor and technical development to the growth of pre-Neolithic societies.
- C Population increases among pre-Neolithic societies, even before domestication and agriculture, probably resulted in social hierarchies that helped organize labor and technologies.
- D Hierarchies that developed among foraging groups helped pre-Neolithic societies respond to later population increases caused by domestication and agriculture.

question 9

Look at the four squares [] that indicate where the following sentence could be added to the passage.

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made little sense. The organization of such societies could be rather simple, revolving around age and gender categories. Such societies likely were largely egalitarian; beyond distinctions based on age and gender, virtually all people had equivalent rights, status, and access to resources. Archaeologist Donald Henry suggests that the combination of a rich habitat and sedentism (permanent, year-round settlement) led to a dramatic increase in human population. In his view, nomadic, simple foragers have relatively low levels of fertility. Their high-protein, low-carbohydrate diets result in low body-fat levels, which are commonly associated with low fertility in women. High levels of physical activity and long periods of nursing, which are common among modern simple foragers, probably also contributed to low levels of female fertility if they were likewise common among ancient foragers. In Henry's view, the adoption of a more settled existence in areas with abundant food resources would have contributed to higher fertility levels among the sedentary foragers. A diet higher in wild cereals produces proportionally more body fat, leading to higher fertility among women. Cereals, which are easy to digest, would have supplemented and then replaced mother's milk as the primary food for older infants. Since women are less fertile when they are breast-feeding, substituting cereals for mother's milk would have resulted in closer spacing of births and the potential for a greater number of live births for each woman. A more sedentary existence may also have lowered infant mortality and perhaps increased longevity among the aged. These more vulnerable members of society could safely stay in a fixed village rather than be forced regularly to move great distances as part of a nomadic existence, with its greater risk of accidents and trauma. All of these factors may have resulted in a trend of increasing size among some local human populations in the Holocene (since 9600 B.C.E.). [] Given sufficient time, even in very rich habitats, human population size can reach carrying capacity, the maximum population an area can sustain within the context of a given subsistence system. [] And human population growth is like a runaway train: once it picks up speed, it is difficult to control. [] So even after reaching an area's carrying capacity, Holocene human populations probably continued to grow in food-rich regions, overshooting the ability of the territory to feed the population, again within the context of the same subsistence strategy. [] In some areas, small changes in climate or minor changes in plant characteristics may have further destabilized local economies. One possible response to surpassing the carrying capacity of a region is for a group to exploit adjoining land. However, good land may itself be limited—for example, to within the confines of a river valley. Where neighbors are in the same position, having filled up the whole of the desirable habitat available in their home territories, expansion is also problematic. Impinging on the neighbors' territory can lead to conflict, especially when they too are up against the capacity of the land to provide enough food. Another option is to stay in the same area but to shift and intensify the food quest there. The impulse to produce more food to feed a growing population was satisfied in some areas by the development of more-complex subsistence strategies involving intensive labor and requiring more cooperation and greater coordination among the increasing numbers of people. This development resulted in a change in the social and economic equations that defined those societies. Hierarchies that did not exist in earlier foraging groups but that were helpful in structuring cooperative labor and in organizing more-complex technologies probably became established, even before domestication and agriculture, as pre-Neolithic societies (before the tenth millennium B.C.E.) reacted to the population increase.

question 10

Directions: An introductory sentence for a brief summary of the passage is provided below. Complete the summary by selecting the THREE answer choices that express the most important ideas in the passage. Some sentences do not belong in the summary because they express ideas that are not presented in the passage or are minor ideas in the passage. This question is worth 2 points.

- A. The shift to sedentism did not occur in rich habitats, where groups were able to maintain nomadic, foraging lifestyles because of easy access to food sources.
- B. Changes in diet and activity associated with a sedentary life may have resulted in higher fertility levels and better chances of survival.
- C. In general, the higher the proportion of protein to carbohydrate in a female individual's diet, the higher the level of that individual's fertility.
- D. As human populations increased during the Holocene period, they began to exceed the number of people that could be sustained by the local environment.
- E. The carrying capacities of certain types of regions such as river valleys were limited by the presence of neighbors competing for the same resources.
- F. Societies responded to the limitations of their environment by developing more complex social and technological strategies that enabled them to produce more food within the same area.