

AGRICULTURAL REVOLUTION IN THE AMERICAS

(BY 7000 BC)



A 5700 year old corn cob shares more genetic similarity to modern maize than to the wild Teosinte plant, from which domesticated maize came from.

The Agricultural Revolution involved the **domestication of plants and animals**

- a. Much higher concentrations of plants and animals in one area (than would naturally occur in the wild)
- b. While some animals were domesticated in the Americas, they were not beasts of burden, and thus incapable of farm work; nor were they very large (thus incapable of providing much meat for people).
- c. Comparing the genetic variation between ancient and modern teosinte plants, as well as modern maize, scientists have estimated that ancient maize broke off from the line of teosinte plants, and was domesticated some time around 7000 BC; documented domestication of squash family goes back no later than 6000 BC; beans were domesticated some time around 2000 BC.

The Agricultural Revolution had a dramatic impact:

1. **greater population density:** Anywhere from 10 to 100 times the number of people, per square kilometer, can be supported by agriculture (than with hunting and gathering)
2. **expanding population**
 - a. often primitive farming techniques drain the soil of nutrients within a few years, so farming communities need to move to a new area
 - b. Because of the increase in food supply, more people can be supported. This increasing population at some point will need to bring more land under cultivation
3. **exposure to animal germs (this happened only in the Old World, not in the New World)**
 - a. Many human sicknesses can be traced to animal germs (measles, smallpox, tuberculosis, flu, and malaria)
 - b. In the short run, such exposure is bad, but in the long run, it helps develop a more immune population; populations that did not domesticate animals did not develop these immunities

Some 80% of the Amerindian population at the time of contact with the Europeans around 1500 AD, lived in two areas: central Mexico and the Andes mountains in South America. These were the regions that had thoroughly domesticated those three crops.