

5. THE COLOMBIAN EXCHANGE (2/19/04)

(Students present reports on organisms they have chosen to study.)

For each crop, animal species, weed, or illness, one has to consider: How did it spread? with or without human help? What was its specific value or contribution or impact? by itself? in combination with others? How did it fit with species already there? with other new species? How did human desires/intentions/preferences/ideas influence its spread and impact, if at all?

New World to Old World crop transfers: maize corn, beans, squash, peanuts, potatoes, sweet potatoes, pumpkin, tomatoes, chiles, chocolate, manioc, tobacco, tropical fruits. etc.

Old World to New: wheat, grapes, olives, sugar, bananas, apples, etc.

Transfer of domestic animals very one-sided, Old to New: cows, pigs, horses, sheep, goats

Many inadvertent, unplanned, especially Old World weeds: in animal hoofs, feed, etc.

Diseases, extremely important, both directions

Specific transfers

Corn: spread everywhere in world. Much spread by Ottoman Empire. Not as nourishing as some other crops and hard on soil, but short growing season, high yield, halfway between rice and wheat in water requirements. Became almost universal peasant food.

Beans: tremendous variety, has become great source of cheap protein around the world. Makes up for dietary deficiencies of corn.

Sweet potato and manioc: seldom first preference, but will grow almost anywhere, important survival food and staple in areas with tough conditions.

Potatoes: similar story, only for temperate zone: grow in small plots almost anywhere. famous story in Ireland, peasant food, then with 19th century blight, famine, emigration.

Bananas: easy to grow, only problem wind damage. Subsistence staple, green "plantains". Late 19th century development of commercial trade in ripe fruit, tremendous impact on economies and politics of central America, etc.

In other direction: wheat, grapes, olives, spread insistently by conquerors of New World, determined to recreate diet they accustomed to, planted wherever possible. Alfred Crosby.

Sugar, Old World, though little known there earlier. Huge effect on whole world, development of plantation economy, with African slavery, triangle trade, huge change in European diet. See classic book by Sidney Mintz, listed on assignment sheet.

Tobacco New World: similar in some ways, plantation economy, world addiction. Chocolate.

European livestock: transported on purpose but escaped human control, spread widely. Huge wild herds of horses, cows, pigs. Indigenous adoption of horses, transformation of lives.

Crosby shows that wherever possible in temperate zones, such as Argentine, Chile, U.S. etc., European colonists tried to recreate whole economy and ecology from Europe.

On the other hand, many things totally unplanned, unwanted. Weeds, uncontrolled animals. Still going on today.

Also diseases. Old World epidemic diseases made huge impact on New World populations, we will consider in course. Yellow fever and malaria became endemic in New World, drastically altered adaptation to tropics. Syphilis debated origins.

Colombian transfer brought about tremendous population loss in New World, and over longer period, contributed to tremendous population growth in Europe. With immigration, impact back on Americas.