In '1493,' Columbus Shaped A World To Be

This is FRESH AIR. I'm Terry Gross.

I just read a book that made me see the world differently. It's about an environmental upheaval that I never realized existed, and it dates back to Christopher Columbus.

I knew his voyage was the start of an era that brought slavery, smallpox and syphilis to the Americas. What I didn't realize was that the ships carrying the European explorers, traders and colonizers also brought to the Americas plants, animals, insects and other infectious diseases that permanently changed the biosphere.

Directions: Use Close Reading strategies while reading
1. Underline or highlight passages that are important to understanding
2. Annotate in the margins…things you wonder….questions you have
3. Highlight a few words you do not understand.

This article is about ________________________________________________________________

And when those Europeans returned to their own countries with plants, birds, insects and microorganisms from the Americas, it altered the environmental makeup of Europe.

Mr. CHARLES MANN (Author, "1493: Uncovering the New World Columbus Created"): Well, if you think about it, you know, there's been a tendency in textbooks now to kind of downplay Columbus because they say he was a bad guy, and he mistreated Indians, and he discovered the Americas by accident and so forth.

But to ecologists, he was this super-important figure, and the reason is that 200 million years ago, as you remember learning in school, the world was a single, giant land mass they call Pangaea, and geological forces broke it up, creating the continents we know today. And over time, they developed completely different suites of plants and animals.

Discuss what have you highlighted so far?

I wonder: _______________________________________________________________________
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And what Columbus did was bring the continents back together. He recreated Pangaea, in effect, and as
a result, huge numbers and plants and animals from over there came over here, and huge numbers of plants and animals from over here came over there, and there was a tremendous ecological convulsion, the greatest event in the history of life since the death of the dinosaurs.

And this underlies a huge amount of the history learned in school: the industrial revolution, the agricultural revolution, the rise of the West, the collapse of China - all of these were tied in what's been called the Columbian exchange. The term was invented by this wonderful historian, Alfred Crosby. The Columbian exchange sort of underlies them all.

I wonder: ____________________________

GROSS: I love the moment when you're describing being at a local nursery, and you're about to criticize them for not having more local plants when you realize - well, tell us what you realized.

Mr. MANN: I realized that every one of the garden plants that I'm about to buy to stick in my own garden are in fact not local, either, and that there's absolutely nothing in my garden that originated within 1,000 miles of my house.

And I feel sort of foolish that here I am, supposedly this, you know, hip, locally aware guy, and what I'm doing is planting this enormous bed of exotic species.

GROSS: Such as?

Mr. MANN: Well, tomatoes to begin with, which originated in Mexico. You know, the plants around it, like basil, which came from Italy, onions, which came from Europe. You know, the whole - everything in there is - I live in Massachusetts. There's absolutely nothing in there from New England.

Annotate in the margin about something you wonder…

GROSS: So is there just - like, list some of the things that Columbus brought to the Americas.

Mr. MANN: Well, Columbus started off, he brought wheat. He brought cattle. He brought horses. He brought all kinds of, you know, plants that are in our gardens today. But almost as important, or even - and in some cases more important, were the things that he brought over and didn't realize.

He brought over a whole plethora of diseases, he and his followers. I shouldn't say Columbus, just, you know, the Spaniards who came after him brought all these diseases that didn't exist in the Americas. And they brought all kinds of insects. The list is just absolutely enormous.

One of the things that they brought over were plantains, or bananas, which are, you know, basically the same species. And they planted them because they - the Spaniards liked them. And they didn't realize it, but as the entomologist Edward O. Wilson, this famous entomologist, has postulated, they brought over some of the plantain's pests, which are these tiny little insects called scale insects that live on the roots of the plantains.

And when they planted these big, you know, banana plantations all over Hispaniola, which is what the Dominican Republic and Haiti, the Spanish colony, it was - led to this huge boom in the population of these scale insects.
Now on this island, already, was an ant, a fire ant, Solenopsis geminata, and it turns out to really, really like scale insects - particular the excrement of them, which is very sugary. And it led to this huge population boom of the fire ants, which in turn led to something out of Gabriel Garcia Marquez, where there's this ant plague that drives Spaniards effectively off the island, and the few remaining are, you know, praying to the various saints to drive them away, and they're, you know, living on top of the roofs of their houses because their places are swarming.

Annotate in the margin about something you wonder…

And this is the kind of ecological convulsion that I'm talking about, you know, magnified 100-fold and spread across the world that's created and set off by Columbus.

GROSS: It sounds like a movie that William Shatner could have starred in after that spider movie.

(Soundbite of laughter)

Mr. MANN: You know, the histories, you read about these, you know, this in the Spanish chronicles, and basically they're saying in, you know, sort of dignified 16th-century Spanish, oh my God, you know, just over and over again at these strange results.

GROSS: So you mentioned that these ants were on Hispaniola, the island that has the Dominican Republic and Haiti. It was that island that Columbus first tried to colonize. This was in - he founded La Isabela, named after the queen, who was funding him, in January 2nd of 1494. This was supposed to be, you say, a permanent bastion in the heart of Asia.

(Soundbite of laughter)

GROSS: A headquarters for exploration and trade for Spain. So describe what actually happened when Columbus got to La Isabela.

Mr. MANN: Well, it was kind of a catastrophe. I mean, it only lasted for a few years. He set up this whole town, and he forced everybody to build a big mansion for himself and, you know, plant it with all kinds of European crops. And then he sent everybody off to discover the gold that he was absolutely sure was in the hills. And meanwhile, he went off to find China.

And they didn't find much gold, and they of course, didn't find China, and the whole thing dissolved into squabbling and Indian wars. And it would've been pretty much a thorough failure except that about that time, the Spaniards accidentally imported diseases, particularly smallpox.

And these kind of didn't exist at all in the Americas. This whole range of what they call crowd diseases - diseases that can be spread from person to person - didn't exist in the Americas at all by a quirk of history. And the reason is that when the continents broke up and various other things happened, there was no domesticable animals in the Americas. There were no, you know, horses. There were no cows. There were no sheep. There were no goats. There were no ducks.

And one of the things that happened in Europe and Asia was that people lived, for thousands and thousands of years, right next to these domesticated animals, you know, the cows and the horses and so forth. And every now and then, an animal disease can do what scientists call jump the species barrier and become a human disease.
And so the most recent example would be bird flu, which everybody knows is a disease that, you know, started in some kind of bird and has now become a human disease.

Well, all of the great diseases, you know, from smallpox to measles to influenza, are this kind of disease, and none of them existed in the Americas because they didn't have any domesticated animals.

And so when the Europeans came over, started by Columbus, it was as if all the deaths over the millennia that have been caused by these diseases were compressed into 150 years in the Americas. And the result was to wipe out, you know, somewhere between two-thirds and 90 percent of the people in the Americas.

And this had just, in addition to enormous human effects - I mean, it was the worst demographic catastrophe in history - it had enormous ecological effects, because these people had been tending the landscape, managing the landscape, and suddenly it reverted into wilderness.

One of the ironies of this is that, you know, I think we learn in school that Europeans came over to the Americas and sort of wrecked the wilderness. And what they in fact did was, in the most awful way possible, they created it. And this is part of the ecological convulsion of the Columbian exchange.

GROSS: That's such a different way of looking at things. When did historians start seeing the explorers bringing these epidemics, which destroyed populations and thereby created wilderness?

Mr. MANN: Well, it's the Spanish accounts and the English accounts and the colonial accounts. If you read, you know, William Bradford's account of Plymouth, you know, the first colony in New England, he talks about how just before they arrived, there was a huge epidemic that swept away the people and made room for them.

So if you look in there, it's quite clearly in those accounts; they were aware of it. It sort of got forgotten, and then in the 1960s and 1970s, the knowledge kind of got resurrected again. And there was a couple of historians, there's a guy named Henry Dobyns, there's a guy, Alfred Crosby, that I mentioned, who really brought it to attention.

And when you start adding up everything that we know, it becomes very evident that there was just an enormous catastrophe that took place. And a lot of it took place outside of European eyes because Native people didn't have these kind of diseases. They didn't have the idea of quarantine.

And back before there was antibiotics, what happened if you had a contagious disease, you were kind of fenced off, right. So the people in plagues, you know, like in Boccaccio, would, you know, would hide away from this.

None of that happened in the Americas. So somebody would get smallpox, and the whole village would come around and try to comfort that person. They would all get sick, they'd flee in panic, they'd run to the next village. They'd spread it there. And so these diseases exploded like chains of firecrackers across the landscape.

GROSS: So in North America, when the settlers were fighting wars with the Indians, the Indians that they were fighting with, the Native Americans they were fighting with, were survivors of these plagues?

Mr. MANN: Yes, they were, by and large, people, you know, who were in a state of complete cultural
shock because, you know, two-thirds of the people that they knew had died. And there is just no culture that can resist foreign invasion, even by small bands of people like the Europeans were, when you've just had this enormous, shattering experience.

Alfred Crosby pointed out in "The Columbian Exchange," that if Genghis Khan had arrived right after the Black Plague, you and I would not be speaking a European language. He would have just swept in.

(Break)

I wonder: __________________________________________

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Question from teacher:

Student: Write a question you have here:

Reflection:

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