

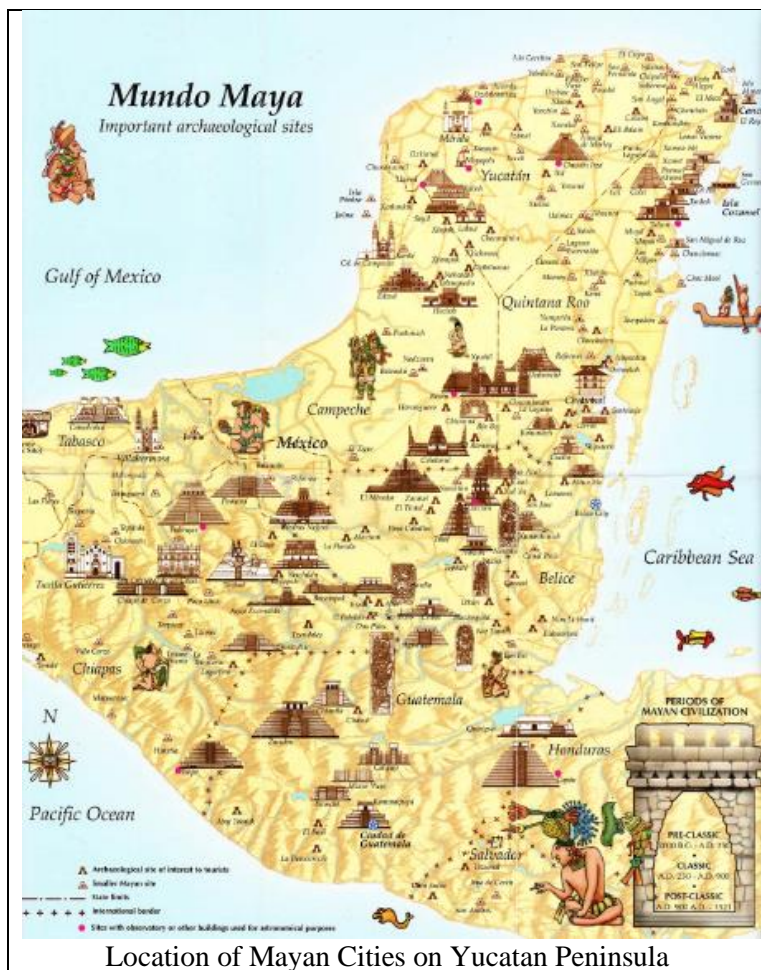
### 18.3 Why did the Mayan Civilization Collapse?

**Source:** <https://www.smithsonianmag.com/science-nature/why-did-the-mayan-civilization-collapse-a-new-study-points-to-deforestation-and-climate-change-30863026/>

**Background:** The Mayans, a sophisticated urban civilization on the Yucatan peninsula in present day Mexico and Central America, with more than 19 million people, collapsed relatively rapidly during the 8th or 9th centuries. A possible reason is prolonged drought that lowered underground water tables and contributed to deforestation, food shortages, and wars between city-states. Researchers from Arizona State University, analyzing archaeological data, found reductions in rainfall were coupled with a rapid rate of deforestation. As their land became less productive, the Mayans chopped down and burned large tracks of forest to clear new land for agricultural production. The cleared land may have exacerbated the water shortage because less water evaporated from its surface, making clouds and rainfall even scarcer. The agricultural shortages disrupted on trade and weakened the hold of elites over location populations. To escape starvation, much of the population migrated away from declining urban centers. One lesson from research on the Mayans is that reshaping the environment can have unintended consequences. As with the Mayans, contemporary societies may not recognize the problem and respond before too late.

#### Questions

1. Why did Mayan civilization collapse?
2. Why is an understanding of what happened to Mayan civilization important for understanding climate change today?



Location of Mayan Cities on Yucatan Peninsula



Frederick Catherwood's drawings show lowering water table in limestone cenotes near Mayan cities.