

Amazon Rainforest



Location: The Amazon is a vast region that spans across eight rapidly developing countries: Brazil, Bolivia, Peru, Ecuador, Colombia, Venezuela, Guyana, Suriname and French Guiana.

When was it built? The rainforest likely appeared following a global reduction of tropical temperatures when the Atlantic Ocean had widened sufficiently to provide a warm, moist climate to the Amazon basin. The rainforest has been in existence for at least 55 million years, and most of the region remained free of savanna-type biomes at least until the current ice age when the climate was drier and savanna more widespread.

Why was it built? The landscape contains one in ten known species on Earth, 1.4 billion acres of dense forests, half of the planet's remaining tropical forests, 4,100 miles of winding rivers. There is a clear link between the health of the Amazon and the health of the planet. The rain forests, which contain 90-140 billion metric tons of carbon, help stabilize local and global climate. Deforestation may release significant amounts of this carbon, which could have catastrophic consequences around the world.

Christ the Redeemer



Location: Christ the Redeemer, or *Cristo Redentor* as it's known in its native Portuguese, is situated atop Mount Corcovado in Rio de Janeiro, Brazil.

When was it built? The statue is made of reinforced concrete and soapstone, and was constructed between 1922 and 1931. Engineer Heitor Da Silva Costa commissioned Paul Landowski, a French-Polish sculptor who fashioned the 98-foot tall sculpture in Paris, which were then shipped to Brazil. Reinforced concrete, which had just recently been developed, was one of the few materials strong enough to support the statue and its wide-wingspan design. But Da Silva Costa chose soapstone to craft the tiles that create the contoured lines of Christ's features. In 2007, more than 100 million people voted the Christ the Redeemer statue as one of the new Seven Wonders of the World, along with the Great Wall of China, Machu Picchu, and the Roman Colosseum.

Why was it built? Following the creation of the Brazilian republic in 1889, which separated church and state, fear began to grow amongst Catholics that the nation was headed toward a total rejection of religion. After World War I, followers felt they needed a symbol to counteract what they saw as increasing "godlessness" throughout the country. In 1920, they selected da Silva Costa's design of an Art-Deco style, arms-wide-open Christ that overlooked the city.

Catedral Metropolitana



Location: *Plaza de la Constitución* (Zócalo district), Mexico City, Mexico. It serves as the seat of the Catholic Diocese of Mexico. The Archbishop of Mexico celebrates Mass there every Sunday.

When was it built? The cathedral was built between 1573 and 1813 after the Spanish conquest of Tenochtitlan. It remained a work in progress during the entire colonial period, thus displaying a catalog of architectural styles, with successive generations of builders striving to incorporate the innovations of the day. There are many artistic treasures housed in the cathedral, including the gilded *Altar de Perdón* (Altar of Forgiveness) in the entry and the *Altar de los Reyes* (Altar of the Kings), which sits behind the main altar and dates from the 18th century. Fourteen richly decorated chapels line the two sides of the building. Enormous panels by colonial master painters Juan Correa and Cristóbal de Villalpando cover the walls of the sacristy, the first component of the cathedral to be built.

Why was it built? After the Spanish conquest of the Aztec Empire, Hernan Cortes and the conquistadors decided to build a church on the site of the Templo Mayor of the Aztec City of Tenochtitlan in order to consolidate Spanish power over the newly conquered territory. The architect Martín de Sepúlveda was the first director of the project between 1524 and 1532. For the construction, they used the stones of the destroyed temple of the god Huītzilōpōchtli, god of war and principal deity of the Aztecs.

Easter Island Statues (Moai)



Location: Rapa Nui/ Easter Island (Isla de Pascua), Valparaíso, Chile

When was it built? The moai are monolithic statues, their minimalist style related to forms found throughout Polynesia. The statues were carved by the Polynesian colonizers of Rapa Nui, or Easter Island, mostly between circa 1250 C.E. (after Year 0) and 1500 C.E. Moai are carved in relatively flat planes, outlined in rock first. Though moai are whole-body statues, they are often referred to as "Easter Island heads" in some popular literature. The over-large heads (a three-to-five ratio between the head and the trunk, a sculptural trait that demonstrates the Polynesian belief in the sanctity of the chiefly head) have heavy brows and elongated noses with a distinctive fish-hook-shaped curl of the nostrils. The average height of the moai is about 13 feet, with the average width at the base around 5 feet. These massive creations usually weigh around 13.8 tons each.

Why was it built? In addition to representing deceased ancestors, the moai may also have been regarded as the embodiment of powerful living or former chiefs and important lineage status symbols. All but 53 of the more than 900 moai known to date were carved from tuff (a compressed volcanic ash) from the Rano Raraku quarry, where 394 moai in varying states of completion are still visible today. There are also 13 moai carved from basalt, 22 from trachyte and 17 from fragile red scoria. At the end of carving, the builders would rub the statue with pumice to smooth their finish.

Angel Falls



Location: Canaima National Park, Bolivar, Venezuela

How old is it? Known in Venezuela as *El Salto Angel* or *Kerekupai-Meru* in the native Pemon language, Angel Falls is the world's highest uninterrupted waterfall, 19 times the height of Niagara Falls. The mighty cascade is named after Jimmy Angel, an American pilot who landed on top of Auyantepui in 1937 while searching for gold. Formed more than 2 billion years ago, the tepuis (flat, table-top mountains over which the water flows) are massive and shrouded in clouds, with steep drops that make navigation seem impossible. The falls were the inspiration for Paradise Falls in Disney's *Up*.

How was it made? Lying within the Canaima National Park, Angel Falls is part of the plateau that underlies the lands located in Venezuela to the south of the Orinoco River. The geographic region in Venezuela, known as the Guyanese Shield, formed as a great plain at an elevation roughly about 6500 to 9800 feet. After the formation of the great plain, during a long period of time—approximately 400 to 200 million years ago—a series of climate-related phenomena caused collisions in the geography of the Guyanese Shield and created the tepuis.

Panama Canal



Location: Isthmus of Panama, between Atlantic and Pacific Oceans

When was it built? France began work on the canal in 1881, but stopped due to engineering problems and a high worker mortality rate. The United States took over the project in 1904 and opened the canal on August 15, 1914. A third waterway was constructed between September 2007 and May 2016.

Why was it built? France was the first country to attempt the task of creating a water passage across the isthmus of Panama to link the Atlantic and Pacific Oceans. Led by Count Ferdinand de Lesseps, the builder of the Suez Canal in Egypt, the construction team broke ground on a planned sea-level canal in 1880. De Lesseps belatedly realized the rocky terrain was too difficult to excavate for a sea-level canal and reorganized efforts toward a lock canal, which would use the force of water to lift ships through the canal passageways, but funding was pulled from the project in 1888. The United States purchased the French assets in the canal zone for \$40 million in 1902. The project officially commenced on May 4, 1904, with chief engineer Lt. Col. George Washington Goethals focusing efforts on the excavation of Culebra Cut; powered by electricity, two steam shovels working from opposite directions met in the center in May 1913. In October 1913, President Woodrow Wilson operated a telegraph at the White House that triggered the explosion of Gamboa dike, flooding the final stretch of dry passageway at Culebra Cut. The Panama Canal officially opened on August 15, 1914. Completed at a cost of more than \$350 million, it was the most expensive construction project in U.S. history to that point. The transition to local oversight began with a 1977 treaty signed by U.S. President Jimmy Carter and Panama leader Omar Torrijos, with the Panama Canal Authority assuming full control on December 31, 1999. Recognized by the American Society of Civil Engineers as one of the seven wonders of the modern world in 1994, the canal hosted its 1 millionth passing ship in September 2010.