# Ten Real-Life Examples of the Tragedy of the Commons

The phrase tragedy of the commons, first described by biologist Garrett Hardin in 1968, describes how shared environmental resources are overused and eventually depleted. He compared shared resources to a common grazing pasture; in this scenario, everyone with rights to the pasture grazes as many animals as possible, acting in self-interest for the greatest short-term personal gain. Eventually, they use up all the grass in the pasture; the shared resource is depleted and no longer useful.

Here are ten examples of the tragedy of the commons.

1. **Grand Banks fisheries**

The Grand Banks are fishing grounds off the coast of Newfoundland. For centuries, explorers and fishermen described this region as home to an endless supply of cod fish. In the 1960s and 1970s, advances in fishing technology allowed huge catches of cod. Following a few dramatically large seasons, the fish populations dropped, forcing Canadian fishermen to sail farther to maintain large catch sizes each season.

By the 1990s, cod populations were so low that the Grand Banks fishing industry collapsed. It was too late for regulation and management; the cod stocks had been irreparably damaged. Since then, the cod populations have remained low, and some scientists doubt the Grand Banks ecosystem will ever recover.

1. **Bluefin Tuna**

Currently the bluefin tuna populations in the Atlantic Ocean and Mediterranean face a similar fate as that of the Grand Banks cod. In the 1960s, fishermen realized the tuna populations were in danger, and an International Convention for the Conservation of Atlantic Tuna (ICCAT) formed in an effort to manage fish harvesting more sustainably.

Unfortunately, not every nation is a member of the ICCAT or follows the convention’s guidelines. Instead, many nations continue to seek profit from large bluefin tuna catches every year without regard for conservation. Bluefin tuna have already been fished to extinction in the Black Sea and Caspian Sea, and perhaps the Atlantic bluefin tuna will follow.

1. **Passenger pigeons**

When Europeans arrived in North America, passenger pigeons migrated across the sky in huge numbers. As settlers spread farther into the continent, they began to clear the forests that passenger pigeons inhabited (destroying the birds’ habitat) and eventually began to hunt the pigeons for food. In the mid-1800s, they caught massive numbers of pigeons in nets and sold the birds in cities as a food resource.

By 1870, nearly all the passenger pigeons had been killed; hunting limits were enacted in the 1890s, but by that time, the passenger pigeon population couldn’t recover. The last known passenger pigeon (held in captivity at a zoo) died in 1914, completing the extinction of a species because of unsustainable hunting practices.

1. **Ocean garbage gyres**

The ocean is an excellent example of a shared resource that can easily be abused and degraded because it’s shared by many different nations. No single authority has the power to pass laws that protect the entire ocean. Instead, each nation manages and protects the ocean resources along its coastlines, leaving the shared common space beyond any particular jurisdiction vulnerable to pollution.

Throughout the world’s oceans, garbage has begun to accumulate in the center of circular currents, or *gyres*. These giant patches of ocean garbage occur because many different countries allow solid waste to enter the oceans from land or ships. Destruction of ocean ecosystems because of garbage, especially plastic pollutants, is likely to affect every person on the planet as these pollutants cycle through the food chain.

1. **Earth’s atmosphere**

Earth’s atmosphere is another resource that everyone on the planet uses and abuses. Air pollution and greenhouse gases from various industries and transportation increasingly damage this valuable, shared resource.

As an example of a tragedy of the commons, the atmosphere offers some hope for a solution: More than once, international agreements have recognized the importance of taking care of the atmosphere. One example is the Kyoto Protocol, which attempted to bring nations together in reducing greenhouse gas emissions and slowing global climate warming.

Multiple nations recognized that everyone had an interest in preserving this common resource for the future and agreed to look beyond short-term gain and immediate self-interest to a sustainable future.

1. **Gulf of Mexico dead zone**

Thousands of farms are located along the Mississippi River and its tributaries through the central U.S. As water washes into the river after a heavy rain, it brings with it nutrients from fertilizers added to farmland. These materials flow downriver and eventually enter the Gulf of Mexico, where they create conditions for a *dead zone* — a region of the ecosystem that can’t support any living creatures.

The Gulf of Mexico has a dead zone because everyone along the Mississippi River shares the waterway without considering how each small contribution of nutrient and chemical pollution adds up to have dramatic results.

1. **Traffic congestion**

Public roads are an excellent example of common property shared by many people. Each of these people has his or her own interest in mind — typically, how to get to work as quickly and easily as possible. But when everyone decides that public roads are the best way to meet traveling needs, the roads jam up and slow down overall traffic movement, filling the air with pollutants from idling cars.

Turning public roads into private roads or toll roads creates a different scenario. With a toll to pay (especially if the toll is higher during peak-use hours such as rush hour), drivers may consider a less-direct route or choose to drive to work at a different time.

1. **Groundwater in Los Angeles**

Landowners around Los Angeles each have rights to use the water pumped up from wells on their land. This water is part of a regional groundwater aquifer, so each landowner is ultimately pulling water from the same pool. As the city grew in the 1930s and 1940s, the amount of water drawn from the underground aquifer increased each year to meet the needs of the growing population.

Eventually, residents drew so much water from the aquifer that the supply reached levels that left the aquifer vulnerable to saltwater intrusion from the nearby Pacific Ocean. Facing potential water shortages and possible destruction of the renewable water resource they depended on, the water users created a voluntary organization to discuss how to manage and conserve the groundwater for the future.

1. **Unregulated logging**

The tropical rainforests are a common resource that everyone in the world benefits from. In some parts of the world, vast expanses of dense rainforests aren’t governed or owned in a way that allows effective management for resource extraction. Timber producers are driven to remove as much timber as possible as cheaply as possible. The result is that logging irreparably damages acres of rainforest each year.

Although some laws protect these forests from destructive logging practices, illegal logging continues — particularly along boundaries between countries, where the laws may be different on each side of the border.

1. **Population growth**

Some scientists consider the exponential growth of the human population to be an example of a tragedy of the commons. In this case, the common resource is the planet Earth and all its shared resources. The world’s population has reached a whopping 7 billion individuals.

Examining population growth as a tragedy of the commons illustrates that the depletion of common resources isn’t always the result of greed. Just by existing, each person uses water, air, land, and food resources; splitting those resources among 7 billion people (and counting) tends to stretch them pretty thin.