# The Life Cycle of Trash

Garbage can be found everywhere. The EPA estimates that a typical person generates 4.3 pounds of waste a day. The amount of time that waste products take to fully decompose is a significant environmental concern that continues to grow. The length of time that certain products take to decompose can be shocking. Let's take a thorough look at how long it takes for different waste categories to decompose in landfills.

#### **Aluminum Cans**

Aluminum is a sustainable (able to be maintained at a certain rate or level) metal that can be recycled over and over again. It is actually considered the most sustainable beverage container. The average can contains 70% of metal that's been recycled. In spite of these facts, many aluminum cans make it into landfills where they take 80-200 years to completely decompose.

- Aluminum Facts
- Recycling Sustainability Facts

## **Plastic Waste**

Plastic is a synthetic and highly malleable material made from a broad range of organic polymers. Enough plastic is thrown away each year to completely circle the earth four times. On average, an American throws away an estimated amount of 185 pounds of plastic annually. Plastic is one of the types of waste that takes the longest to decompose. On average, it takes plastic items up to 1000 years to break down fully. Although certain plastics take less time, it still takes everyday plastic bags 10-20 years to break down. A plastic bottle can take up to 450 years to finally decompose.

- EPA Plastic
- Quick Facts About Plastic Pollution

#### **Glass**

Glass is 100% recyclable and can be recycled over and over again without loss of quality. We can produce new glass products by simply breaking and melting down old glass. Despite how recyclable glass is, it still manages to make its way into landfills. The most shocking aspect of this is the sole fact that glass takes a million years to decompose. According to some sources, it might not actually break down at all.

- Glass Recycling Facts
- Recycling Glass How it Helps Environment

## **Paper Waste**

Based on volume, paper is the largest element of American landfills. On average, paper products take 2-6 weeks to fully decompose within a landfill. If we recycle paper

products, we save room in landfills and use far less energy and water than if we used virgin raw materials. When paper products are sent to landfills, it rots and produces methane, a powerful greenhouse gas. Recycling can help reduce greenhouse gas emissions.

- Paper Recycling Facts
- Paper Shredding & Recycling

#### **Food Waste**

In the United States, 30-40% of the food supply is wasted alone and an estimated one third of the world's food produced for human consumption gets lost or wasted annually. Over 97% of food waste created ends up in a landfill. When food decomposes in a landfill, it produces methane, a greenhouse gas 21 times more potent than CO2. Landfills account for over 34% of all the methane released into the environment, making them the largest source of methane. The rate of decomposition in food depends on the type. A banana peel can take 3-4 weeks to decompose; while an apple core takes up to 2 months and an orange peel 6 months.

- Food Waste Facts
- UNEP Food Waste Facts
- America Revealed Food Waste in Landfills

## **Disposable Diapers**

An estimated 90-95% of American babies use disposable diapers. This creates 7.6 billion pounds of non-biodegradable garbage each year. This is enough garbage to stretch to the moon and back nine times every single year. Disposable diapers take appropriately 500 years to decompose completely in landfills.

- Diaper Facts
- Diapers and Solid Waste Disposal

#### **Cigarette Butts**

Over 4.5 trillion cigarettes are littered throughout the entire world each year. This is striking when given a weight value; 176 million pounds of cigarette butts are discarded annually in the United States alone. They are the most littered item worldwide. Every discarded cigarette butt takes 1 to 5 years to decompose, but that doesn't account for the plastic components. Those components can take 2 to 25 years to break down.

- Prevent Cigarette Litter
- Cigarette Litter Statistics

### **Time Taken By Other Waste Items to Decompose**

Monofilament Fishing Line - 600 years

Foamed Plastic Cups - 50 years

Plastic Film Container - 20-30 years

Rubber-Boot Sole - 50-80 years

Leather - 50 years

Tin Cans - 50 years

Wool Sock - 1-5 years

Nylon Fabric - 30-40 years

Plywood- 1-3 years

Waxed Milk Carton - 3 months

- What goes Into the Landfill
- Recycling Facts & Stats