

## THE PLASTIC STRAW

by Clarissa Jock

Although a seemingly more recent invention, the drinking straw's existence was uncovered in societies as early as over 5000 years ago. Archeologists' uncovered gold and lapis lazuli straws in the ruins of Sumerian cities and tombs; one of the first known societies to brew beer. These devices likely filtered sediment from the drinkable brew within fermentation vessels. Civilizations prior to this time may have used more simple designs.

Rye grass straw use became popular in the early 1800s followed by the invention of the first model of the modern drinking straw in 1888 by Marvin C. Stone. This version consisted of paper, coated with a thin glue layer. Implementation of automated manufacturing processes took hold liquid resistant glues became available for use.

In 1937, Joseph Friedman created the fun, "bendy" straw. Hospitals were integral in promoting bendable straw use as it allowed patients to drink while lying in bed; allowing a more comfortable care alternative. The combination of increased hospital use and an increase of straw use for soda and milkshake consumption in the restaurant industry laid the path for the prolific straw use that we see today. Manufacturing increases in other trendy plastic straws followed during the 1960s when plastic became more readily available. More than 50% of all plastic made has been produced since 2004.

There are an estimated 500 million straws used daily, most making their way into landfills, waterways and oceans. Approximately 83 million straws wash up on our beaches although they comprise only 0.025% of the 8 million tons of plastic that makes it to our oceans. Polypropylene straws are rarely recycled and they do not bio-degrade, but they do degrade slowly into micro-plastics, which are impossible to eliminate from the environment. Straws that do get recycled often do not make it through the mechanical sorter due to their small size and weight. In the end, the straws contaminate recycling loads or get disposed of as garbage. Ingested plastic or exposure to leached toxins from broken and degraded straws negatively affects wild- and aquatic life. Chris Wilcox et. al., estimate that as many as 70% of seabirds and 30% of turtles have ingested plastic from the ocean. Micro-plastics, considered toxins themselves can also absorb other environmental toxins, increasing their toxicological threat.

In July of 2018 Seattle banned plastic straws. Starbucks plans to phase out plastic straw by 2020 and McDonalds is following suit at its UK and Ireland restaurants. Bon Appetit management and Alaska Airlines are also following suit according to a recent article. No plans to ban straw use are announced in the US to date.

How can we help? Choose to use straws made of paper, silicone, glass or stainless steel. Silicone, glass and stainless steel products are re-useable and easy to clean; many come with their own straw brush to keep them clean and ready to use. Moreover, use your favorite essential oils while ingesting infused water. A dishwasher or, if you are not lucky to own one, a

soak in a basic dish soap and hot water solution, will keep your multi-use straw clean and ready to use! For those who prefer the option of utilizing essential oils, soak your straws in a water and essential oil solution to sanitize. Some favorites are thyme, lemongrass, lemon or peppermint.