

*Plastic Entanglements: Ecology, Aesthetics, Materials*

# Educator's Guide

Glossary of terms



**awareness** To be acquainted with an issue or fact.

**biodegradable** A process by which microorganisms (bacteria) break materials down into compounds that can be reused in the environment.

**buoyant** Capable of floating in water.

**camphor** is a terpene (organic compound) that's commonly used in creams, ointments, and lotions. Camphor oil is the oil extracted from the wood of camphor trees and processed by steam distillation. It can be used topically to relieve pain, irritation, and itching. Camphor is also used to relieve chest congestion and inflammatory conditions.

**debris** Discarded items; trash and litter; man-made materials and solid wastes that are released accidentally or intentionally into the environment.

**degradable** Capable of being broken down into smaller pieces by natural forces. See biodegradable and photodegradable.

**disposal** The permanent storage or removal of trash from the environment.

**ecosystem** A natural community composed of biotic (living) creatures that live in connection with each other and abiotic (non-living) elements like sun, soil, and water. An ecosystem can be as big as a planet or as small as a puddle.

**entanglement** The looping of a piece of debris around part of an animal's body. Entanglement may impair swimming and feeding, cause suffocation, decrease ability to elude predators, and cause open wounds.

**estuary** A body of water at the lower end of a river which is connected to the ocean and semi-enclosed by land. In an estuary, sea water is measurably diluted by freshwater from the land.

**foamed plastic** A type of plastic that is generally made from polystyrene and consists of small spheres that are fused together. Foamed plastic is very light and easily breaks into smaller pieces. It is frequently used in disposable cups for hot beverages.

**food chain** A series of animals and plants, each depending on the next for food. A food chain usually forms part of a much larger, more complex food web.

**food web** A network of living things that depend on each other for food.  
**garbage:** Spoiled or waste food that is thrown away, generally defined as food waste. It is also a general term for all products discarded.

**gyre** A circular pattern of currents in an ocean basin.

**ingestion** The consumption of a piece of debris by an animal. Ingestion may cause blockages in the digestive tract, suffocation, or a false feeling of fullness that can lead to malnutrition or starvation.

**litter** Improperly discarded wastes; see debris.

**marine** Relating to the ocean.

**marine debris** Any man-made object discarded, disposed of, or abandoned that enters the coastal or marine environment.

**microbeads** are tiny pieces of polyethylene plastic added to health and beauty products, such as some cleansers and toothpastes.

**microfibers** are a type of microplastic. They include small fibers that enter the water from washing clothing made of synthetic materials, like polyester or nylon.

**microplastics** are small plastic pieces less than five millimeters long which can be harmful to our ocean and aquatic life.

**mitigation** is a term used to describe projects or programs intended to offset known impacts to an existing historic or natural resource such as a stream, wetland, endangered species, archeological site, paleontological site or historic structure.

**municipal solid waste** Garbage or refuse that is generated by households, commercial establishments, and industrial offices; includes durable goods, non-durable goods, containers and packaging, food wastes, and yard trimmings.

**nondegradable** Incapable of being broken down into simple compounds or components.

**Nurdle** a very small pellet of plastic which serves as raw material in the manufacture of plastic products.

**persistent** In the environment this refers to the ability of a substance or material to remain in the environment for long periods of time without being broken into smaller components.

**photodegradable** The ability to degrade due to exposure to ultraviolet radiation where the chemical bonds or links in the polymer or chemical structure of a plastic are broken.

**plastic resins** Material used in making plastics; usually petrochemical-based.

**plastic resin pellets** Small, round pellets that are produced as the raw form of plastic. Resin pellets are melted down and used to form plastic products. During plastic resin pellet production, transportation, and processing, some resin pellets can be released into the environment. The pellets resemble fish eggs, and can be mistaken for food by marine animals and sea birds.

**recycling** The collection and reprocessing of materials so they can be used again in a similar or different form.

**solid waste** Any solid, semi-solid, liquid, or contained gaseous materials discarded from industrial, commercial, mining, or agricultural operations, and from community activities. Solid waste includes garbage, construction debris, commercial refuse, sludge from water supply or waste treatment plants, or air pollution control facilities, and other discarded materials.

**trash** Materials that have been made or used by people and discarded. Also referred to as waste, garbage, and solid waste.

All educator materials related to teaching about the art and science of plastics through the *Plastic Entanglements* exhibition can be found <http://go.wisc.edu/artscienceplastic>

For any questions about these activities, please feel free to contact Anne Moser at the UW Madison, Wisconsin Water Library. She can be reached at [akmoser@aqu.wisc.edu](mailto:akmoser@aqu.wisc.edu) or (608) 262-3069.