

Plastics in the environment | Factsheet No 7

Littering

- > In Switzerland, littering (that is, casually throwing away or leaving behind small quantities of residential waste without using the waste bins or collecting points intended for such waste) is one of the biggest sources of macroplastics in the environment.
- > Littering is a form of illegal waste disposal and is unfortunately widespread.
- > The most frequently found items of litter in the environment are cigarette ends (the filters contain plastics) and packaging.

More than half the waste on the banks of lakes and rivers is plastic

In Switzerland, littering and other improperly discarded waste are among the largest sources of macroplastics in the environment.

In a study¹ of the banks of lakes and rivers in Switzerland, the main items found were cigarette ends and remains of packaging as well as undefined plastic items (see "Plastic packaging" factsheet). 65% of all waste items found were made of plastic.

The plastic items found also derive from other waste that is not properly disposed of. For example, cotton buds wrongly discarded in toilets as well as films and polystyrene items from a very wide variety of industries can be found in the environment.

Breakdown of the waste items found on lake and river banks

Cigarette ends	garette ends		Crisp and confectionery packaging	Pieces or scraps of paper	
			Bottle tops, ring-pulls		items
		Plastic items 2.5–50cm	Plastic films, industrial packaging	Other metal items	Con- struc- tion ma- terials: bricks, cement, pipes
Others (79 categories)					
Plastic articles	Articles made of other materials	Non-defined mate	rials		

Littering is expensive

According to a FOEN study², dealing with litter costs Switzerland around CHF 200 million a year — CHF 150 million of this is accounted for by municipalities, CHF 50 million by public transport. A large proportion is collected when public spaces are cleaned — at considerable cost to the community. This means that the estimated amount of litter that enters the environment in Switzerland is lower than in other countries. One study³ estimates that around 2,700 tonnes of plastics a year (e.g. packaging, plastic bags, drinks bottles) still end up in soil and in surface waters due to littering. The costs incurred by private individuals and businesses, particularly farms, are not included here.

Impact of littering on the environment

Plastics degrade gradually into microplastics in the environment, but barely decompose. According to estimates microplastics, in turn, remain in the environment for several decades to centuries, particularly in soil and sediments. These plastics may harm living organisms, e.g.

through entanglement, damage to the gastrointestinal tract or poisoning. At present, there are no indications that aquatic organisms are under threat from the concentrations of microplastics measured to date in Swiss waters. However, microplastic pollution is underestimated, since analysis techniques to date have been unable to detect smaller particles. Little data in relation to soil is available. Further research is therefore needed in order to estimate the risk to humans and animals more accurately. For more information see the "Humans and animals", "Rivers and lakes", "Soil" and "Oceans" factsheets.

Littering is a social problem

Littering stems from a wide variety of causes. These include, for example, changing consumption and nutritional habits, mobility, and also our behaviour in leisure pursuits. Littering is therefore a social problem and can only be solved together with all those involved. Switzerland does a great deal to combat littering. Nevertheless, it is important to keep up the measures against littering and to optimise them continuously.

Possible measures

The following measures may help to ensure that less plastic enters the environment through littering:

- · Dispose of plastic waste properly: recycle it in an environmentally friendly manner or incinerate it.
- Set up and manage an appropriate disposal infrastructure in public spaces, e.g. by positioning the right size of waste bins optimally and emptying them frequently.
- Clean public spaces: the municipal authorities' work can be supported by clean-up campaigns by civil organisations. Private individuals may also participate in these, e.g. as part of "site/area sponsorship".
- Give preference to environmentally friendly product designs, e.g. using reusable rather than single-use products.
- Raise awareness and provide information, e.g. in the context of campaigns such as the Clean-Up Day.
- · Provide environmental education on littering, e.g. teaching materials for basic education.
- Put more positive and negative incentives in place, e.g. introduce reusable packaging and charge deposits at events, impose fines for littering.
- 1 WWF/STOPPP 2018: Swiss Litter Report (in German including summary in English)
- 2 FOEN 2011: Litter-dropping costs money (summary)
- ${\small 3\>\> Press\> release\> Empa,\> 12.07.2019: Model\> calculation\> of\> plastics\> in\> Switzerland}$

Further information

- FOEN information for specialists on littering (in German, French and Italian)
- Zero littering a guide to a litter-free environment (brochure in German, French and Italian)
- Littering Toolbox: Wits against waste (in German, French and Italian)