We bury a huge amount of food scraps and other organic rubbish in landfill every day. This waste breaks down in anaerobic conditions producing methane, a gas that is over 20 times more harmful to the environment than carbon dioxide. All organic food waste collected by Globalworming is vermicomposted (fed to worms) - an aerobic process which produces one of the best known organic fertilisers.

# Report on organic waste collection from the Living Green Festival 2017

**1st October 2017**

On Sunday the 1st October 2017, the organisers of the Living Green Festival (LGF) arranged for Global worming to provide wheelie bins at the waste stations to collect all organic waste from the event in Canberra. These bins were made available to festival attendees and were also used by several operators of food outlets to collect organic waste such as food scraps, coffee grinds, orange peel and pulp, tea bags, bread and paper plates. This waste was subsequently fed to worms to be recycled into an organic fertiliser—a process which is called vermicomposting. In 2016 and 2017 all organics collected from the Living Green Festival was fed to newly established worm farms at Dairy Flat (Fyshwick) which is only a few kilometres from the festival site.

## Number of bins and capacity at the LGF in 2017

At the festival a total of 23 wheelie bins were made available with a total standing capacity of 4,680 litres. This is more wheelie bins than in previous years reflecting the growth in the festival.

**Table 1: Number of bins and capacity, LGF, 1st October 2017**

| | Waste stations (3) |
|---|---|
| **Number of bins** | |
| - 120 litre wheelie bins | 7 |
| - 240 litre wheelie bins | 16 |
| Total | 23 |
| Total capacity of bins (Litres) | 4,680 |

## Volume and weight of waste collected at LGF

Global worming keeps detailed records of the weight of waste that is collected and any contaminants that are found in organic waste bins (inorganic material such as straws, plastic bottles and aluminium cans). Additionally, the volume of waste was estimated based on how full the bins were.

## Total organic waste collected at LGF

Over **393 kilograms of organic waste** was collected on the 1st October 2017 at the LGF with an uncompressed volume of **2940 litres** (Table 2). The volume of this organic waste was estimated uncompressed (or natural compression) prior to weighing.

The majority of the weight of organic waste collected was from the peel and pulp of oranges and other fruit along with coffee grinds. The majority of the volume of organic waste collected was from the compostable plates and cups.

**Table 2: Organic waste collected, Sunday the 1st October 2017**

| Source | Total weight | Approximate volume[(a)] (uncompressed) |
|---|---|---|
| Global worming bins | | |
| - organic | 393.9 kg | 2960 litres |
| - inorganic | 0.8 kg | 20 litres |
| **TOTAL ORGANIC WASTE** | **393.1 kg** | **2940 litres** |

(a) Estimate of the uncompressed volume - the volume that the organic waste takes up in the bins at the time of the collection where there has only been natural compression of the organic waste.

**Contaminants**

In 2017 the waste stations were again managed by volunteers from 'Wastebusters'. The overall contamination level was estimated to be less than 0.5%. Some inorganic contaminants found included:

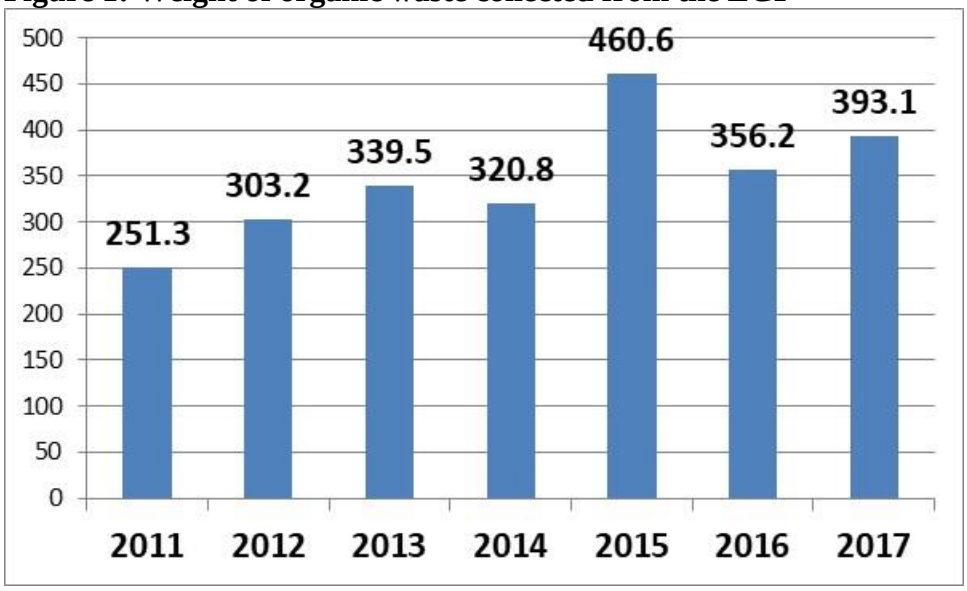
- Plastic knives and plastic spoons
- Plastic bottles and aluminium cans (which were not sold on site at the LGF)
- Soft plastics and black plastic straws

Overall the collection worked very well and the volunteers from 'Wastebusters' did an excellent job ensuring that there were few contaminants in the organic waste.

## Organic waste collection for LGF in 2017 compared with previous years

There was a 10.3% increase in the weight of organic waste collected in 2017 compared with 2016 and also an increase in the volume of organic waste collected (Figure 1).

**Figure 1: Weight of organic waste collected from the LGF**




## Why collect organic waste?

**Reduces waste going to landfill**

In Australia well over half of the waste that is buried in landfills is organic. It is becoming increasingly expensive to dispose of waste in this way.

**Reduces methane production**

As organic waste breaks down in anaerobic conditions (like in landfill) it produces methane, a gas that is over 20 times more harmful to the environment than carbon dioxide. Vermicomposting is an aerobic process.

**Recycles organic waste into a natural fertiliser and long term carbon sink**

When organic waste is buried in landfills, the nutrients are lost. This seems bizarre given the reliance of Australian farmers on chemical fertilisers (largely a by-product of the petrochemical industry) and the very low carbon stores in Australian soils. Vermicaste is a complete soil conditioner that greatly improves the structure of soil and is a long term carbon sink.

**FURTHER ENQUIRIES:**

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