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Natural Reclaiming

Using a "Natural Perspective" to address important changes in our waste stream

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Abstract:

The natural world is comprised of ecosystems that feed off one another and create sustainable closed loops. Our human ecosystem is different from those found in nature because often our human practices are inefficient and lead to waste. A series of explorations exploring human systems that are connected and disconnected from the natural environment has found that it is possible to use nature's ecosystems as precedents to improve and change our perspective on what waste is.

This research studies how natural ecosystems can change our perspective on organic waste and allow us to make steps towards a closed loop ecosystem. In nature, organic matter is always reused in the continuous cycle of life and death. Our current organic waste stream however does not follow this pattern. Composting, which has been a widely know method of recycling for hundreds of years is hardly used. Instead our organic waste joins all our other waste in landfills across the United States.

The reasons behind this disconnection with nature can be traced back to our complex society and environment. This thesis explores the different scales of urban environments present in our society and waste resources they produce. In conjunction with these environments it explores the different methods that are used to recycle organic waste in nature and the human systems that have been developed from them. With this knowledge it provides insight into method that can be used to create a closed loop organic waste stream is small and medium sized urban environments.

One important note is that these closed loop systems are not economically sustainable without government incentives. Because of this fact the thesis hopes to introduce a solution to gradually prepare these smaller and medium sized environments to be included in the closed loop organic waste stream.