**By 2050, our oceans will hold more plastic than fish**

**(NEWSER) – Use of plastic has increased 20-fold in the past half-century; production of the ubiquitous material is expected to double again in the next 20 years (and nearly quadruple over the next 50). And, nearly a third of all plastic packaging "escapes collection systems."**

**As for where the rest goes, more than 8 million tons of plastics end up entering our oceans each year, where the pieces can survive for hundreds of years. There are believed to be 165 million tons of it in the ocean right now. We're dumping the equivalent of one garbage truck's worth into the ocean per minute; that's projected to jump to four per minute by 2050, according to that report has an ominous warning: We're on track to have more plastic than fish, by weight,**[**in the world's oceans**](http://www.newser.com/story/211777/pacific-garbage-patch-a-ticking-time-bomb.html)**by 2050. (Right now, the ratio is about 1:5, plastics to fish.)**

**And the discarded plastic that doesn't end up in the ocean is likely be put in a landfill; those two resting places end up holding about 70% of our plastic. 5% of plastics are effectively recycled. It's not just a problem of pollution.**

**"After a short first-use cycle, 95% of plastic packaging material value, or $80 to $120 billion annually, is lost to the economy," the report says.**

**The solution? A "new plastics economy," that includes more recycling, reusable packaging, and compostable plastic packaging. After-use plastics could, with**[**circular economy**](http://www.ellenmacarthurfoundation.org/circular-economy/overview/principles)**thinking, be turned into valuable feedstock.**

**Tiny Animal May Solve a Big Pollution Problem**

The humble mealworm can live on styrofoam

**Humanity's heroes, ladies and gentlemen.**

**(NEWSER) – A bunch of tiny worms may have just solved a problem that's plagued scientists and environmentalists for years: what to do with the 30 million tons of plastics that end up in US landfills annually. Researchers at Stanford University and China's Beihang University fed Styrofoam—long assumed to be non-biodegradable—to 100 mealworms. Not only did the mealworms stay healthy on an all-plastic diet, their excretions were biodegradable and appeared safe to use as manure,**[**Science Alert**](http://www.sciencealert.com/scientists-find-worms-can-safely-eat-the-plastic-in-our-garbage)**reports. "The findings are revolutionary, this is one of the biggest breakthroughs in environmental science in the past 10 years." While other insects have been known to eat plastics, this is the first time an animal has been observed biodegrading it.**

**The mealworms' secret is the bacteria living in their guts. Researchers hope further study could help develop new enzymes for breaking down plastics. "Our findings have opened a new door to solve the global plastic pollution problem," That's important because the mealworms ate less than 40 milligrams of Styrofoam per day, which would hardly put a dent in even just the 2.5 billion Styrofoam cups Americans throw away every year. Researchers are also hoping to find the marine equivalent of the mealworm since so many plastics end up in the ocean.**