

## Digging is good for the environment

**DID YOU KNOW...** that wombats are good for the environment because they dig burrows?

Despite once being described as common, mammals have been lost across the Australian landscape over the last 200 years. The impact has been particularly severe on Australia's digging mammals, including iconic species like echidnas, bilbies, bandicoots and wombats. New research shows that the decline is not just bad for mammals, but for Australia's ecosystems too.

Wombats can break through hard soils, which would otherwise be impenetrable to plant seedlings. For example, wombats burrow through thick layers of very hard soils called [calcrete](#). Digging by mammals can provide sites for water to enter soil. Some species dig deep; others stay closer to the surface. The critically endangered Northern Hairy-Nosed wombat can turn over dramatically more soil (or they would if there were more of them). The burrowing Bettong prefer to build warrens inside hard, red soil. All of it matters, given that Australian soil is fairly low in nutrients and needs the turnover to absorb new organic material from falling leaves and other plants, fungi and animal faeces.

Before European settlement, when digging mammals were numerous and widely distributed across the Australian landscape, the soil turnover would have been very considerable. The almost total removal of these mammals from the landscape must be affecting ecosystem function.

**Digging mammals improve soil health by turnover and mixing organic matter. Soil turnover brings deep soils and their nutrients to the surface. Their diggings also trap organic matter and other materials, increasing nutrient turnover. Digging mammals can also reduce the amount of combustible plant material within a landscape, possibly altering fire regimes.**

Read more: <http://blogs.scientificamerican.com/extinction-countdown/dig-this-decline-of-australian-digging-mammals-impacts-entire-ecosystems/>



---