Galveston, Texas, seawall, 2007 (Photo: Wikimedia)

Seawalls as typically constructed are smooth, vertical structures, beautiful to an engineer's eye but unappealing to tidal creatures looking for the more complex physical structure typical of a rocky shore. A <a href="new paper">new paper</a> (Oecologia, subscription required) out of the University of Sydney shows that engineering and ecology need not be at odds, however. The authors describe an experiment in which engineers and ecologists, working together, designed a sea wall which incorporated crevices and rock pools capable of holding water as the tide retreated. They found that their experimental seawall supported a greater diversity of algae and animals than a standard flat wall. They suggest more generally that it may be possible to engineer much built infrastructure to more closely mimic natural habitat conditions at relatively low cost and without compromising functionality for human purposes. (Hat tip: <a href="EcoTone">EcoTone</a>.)

