

Fish at home on subsea oil and gas pipelines

December 7 2018, by Jess Reid



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A research project carried out by The University of Western Australia on a BHP subsea oil and gas pipeline off the north-west coast of Australia has found the pipeline has two to three times more the commercial value of fish than surrounding areas in deep waters.

The project team led by UWA in collaboration with BHP used specialised baited cameras to compare fish diversity, abundance and size along the 42.3km subsea [pipeline](#) with surrounding habitats.

Published in the open source journal *PLOS One*, the study "The influence of depth and a subsea pipeline on fish assemblages and commercially fished species" found that the pipeline which extends from the shallows to depths of greater than 140 meters had 131 species recorded on it, including the critically endangered Green Sawfish.

In depths beyond 80 meters, the pipeline had two to three times the value of commercial fish species than surrounding habitats with [fish species](#) such as Goldband Snapper, Saddletail Snapper and Moses' Snapper recorded in high numbers.

In depths less than 40 metres, fish numbers were similar on the pipeline to those observed off the pipeline.

UWA lead author and PhD student Todd Bond said the study showed that depth of the pipeline and availability of habitat in adjacent areas are important features defining differences in the fish community.

"We see a greater difference in the [fish](#) on and off the pipeline in deeper water, where their naturally occurring complex habitat becomes limited," Mr Bond said.

"It is important we understand the interaction between pipelines and local fisheries to inform future decisions around how they are managed.

"Hundreds of offshore oil and gas fields in the Asia Pacific will reach the end of their productive life over the next decade. Knowledge of the ecosystems supported by subsea infrastructure will help ensure that these assets are decommissioned in the way that maximises the benefit to the

community and environment."

More information: Todd Bond et al. The influence of depth and a subsea pipeline on fish assemblages and commercially fished species, *PLOS ONE* (2018). [DOI: 10.1371/journal.pone.0207703](https://doi.org/10.1371/journal.pone.0207703)

Provided by University of Western Australia

Citation: Fish at home on subsea oil and gas pipelines (2018, December 7) retrieved 17 April 2024 from <https://phys.org/news/2018-12-fish-home-subsea-oil-gas.html>

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