

Seabird and pinniped shape soil bacterial communities of their settlements in Cape Shirreff, Antarctica

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© 2019 Ramírez-Fernández et al. This is an open access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited. Seabirds and pinnipeds play an important role in biogeochemical cycling by transferring nutrients from aquatic to terrestrial environments. Indeed, soils rich in animal depositions have generally high organic carbon, nitrogen and phosphorus contents. Several studies have assessed bacterial diversity in Antarctic soils influenced by marine animals; however most have been conducted in areas with significant human impact. Thus, we chose Cape Shirreff, Livingston Island, an Antarctic Specially Protected Area designated mainly to protect the diversity of marine vertebrate fauna, and selected sampling sites with different types of animals coexisting in a relatively small space, and where human presence and impact are negligible.