



Soil organic nitrogen is poorly understood. We know some organic nitrogen compounds are critical for plant nutrition and soil fertility, but not the processes that control their production and consumption. This is particularly true in grasslands, where grazing animals move large proportions of nitrogen to create spatially complex landscapes with disconnected nitrogen supply and demand. This work will use New Zealand's natural soil development chronosequences to investigate how urine deposition from grazing animals affects the production, bioavailability, and loss of organic nitrogen from ecosystems.

The PhD position will involve field work in potentially remote locations, as well as glass house and laboratory experiments. Candidates will be based at [Lincoln University near Christchurch, New Zealand](#), and work under the direct supervision of Prof Tim Clough (Lincoln University), along with Dr Naomi Wells (Lincoln University) and Prof Charles Warren (University of Sydney).

Applicants must have an Honours or Masters degree in a related field such as biogeochemistry, soil science, environmental chemistry, biochemistry, or closely related science, and demonstrate significant English writing experience (e.g., degree undertaken in English). The project will involve periods of intensive field measurements, laboratory work, and data processing. Experience with organic chemistry techniques (e.g., GC-MS) and the nitrogen cycle will be viewed favourably.

Scholarships will provide a generous tax-free annual stipend of \$33,000 for three years, and tuition fees are waived. Interested applicants should send a CV and short (< 1 page) statement that highlights their research background (with respect to the criteria above) and motivation for applying for the position to Dr Naomi Wells (naomi.wells@lincoln.ac.nz). Only short-listed applicants will be notified. Closing date July 23, 2022. Starting date is preferably by January 2023. The position is open to both international and local applicants.