

## Number and density of dairy cattle in New Zealand

**HIGHLIGHTS:**

- Extensive irrigation is a necessity of dairy farming
- In 2016, there were 6.6 million dairy cattle in New Zealand, a dairy cattle density of 25 animals per km<sup>2</sup>
- Waikato and Taranaki were the regions with the highest dairy cattle density in 2016.
- Matamata-Piako and Waipa District were the Territorial Authorities (TA) with the highest dairy cattle density in 2012.



**Agricultural use of the land has a major effect on the environment**

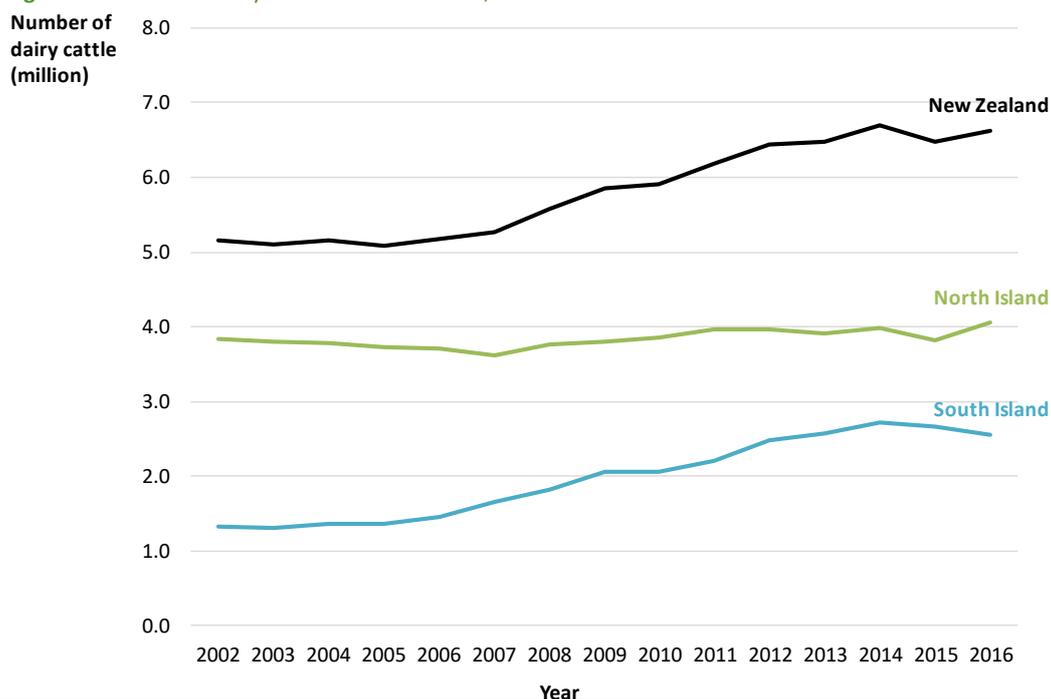
Extensive irrigation is a necessity of dairy farming. It is estimated that dairy farming requires 420 litres of water per day per hectare, as compared to 95 litres for intensive livestock and dairy support, 60 litres for lifestyle land use, and 21 litres for non-irrigated hill country (Morgan et al., 2002). As a result of dairy farming, irrigation and the run-off of nitrates used to fertilise the grass, the water supply levels and quality can be affected.

**In 2016, there were 6.6 million dairy cattle in New Zealand**

In 2016, there were over 6.6 million dairy cattle in New Zealand (Figure 1). After a decrease in 2015, dairy cattle numbers increased by over 2% in 2016. This increase is due to larger dairy cattle numbers in the North Island, whereas numbers in the South Island decreased in 2016.

Between 2002 and 2016, dairy cattle numbers in New Zealand increased by more than a quarter, from 5.2 million in 2002 to 6.6 million. In the South Island, dairy cattle numbers increased by over 90% between 2002 and 2016 (from 1.3 million to 2.6 million), although numbers are decreasing since 2014. In the North Island, dairy cattle numbers increased by almost 6% between 2002 and 2016, from 3.8 million to 4.1 million.

**Figure 1: Number of dairy cattle in New Zealand, 2002 - 2016**



Source: Statistics New Zealand, 2017  
\* year to 30 June

## Number and density of dairy cattle in New Zealand

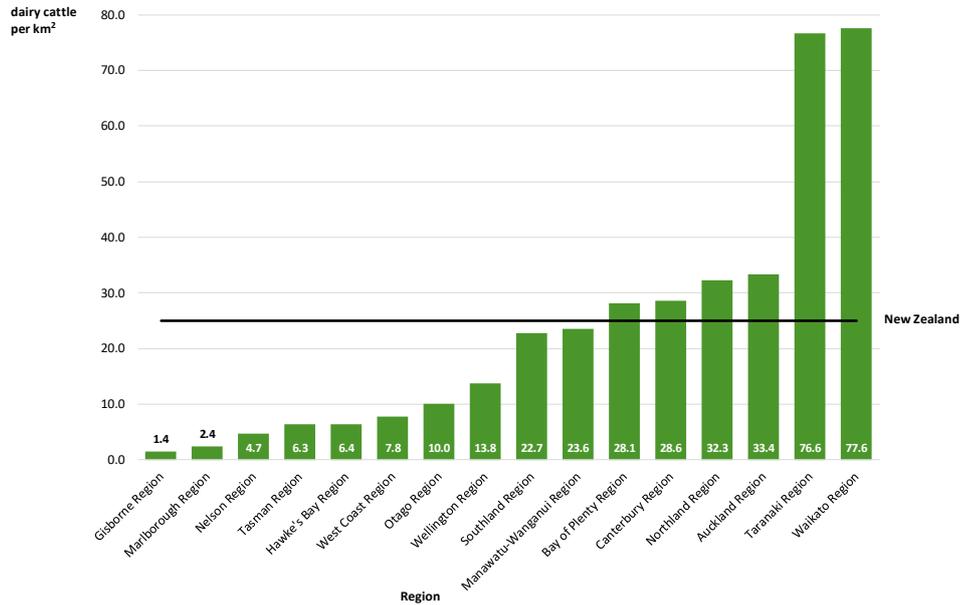
### Dairy cattle density by region

In 2016, New Zealand had an average dairy cattle density of 25 animals per km<sup>2</sup> (Figure 2).

In the North Island, Waikato (78 animals per km<sup>2</sup>) and Taranaki Region (77 animals per km<sup>2</sup>) had the highest density of dairy cattle in 2016.

In the South Island, Canterbury (29 animals per km<sup>2</sup>) and Southland Region (23 animals per km<sup>2</sup>) had the highest density of dairy cattle in 2016.

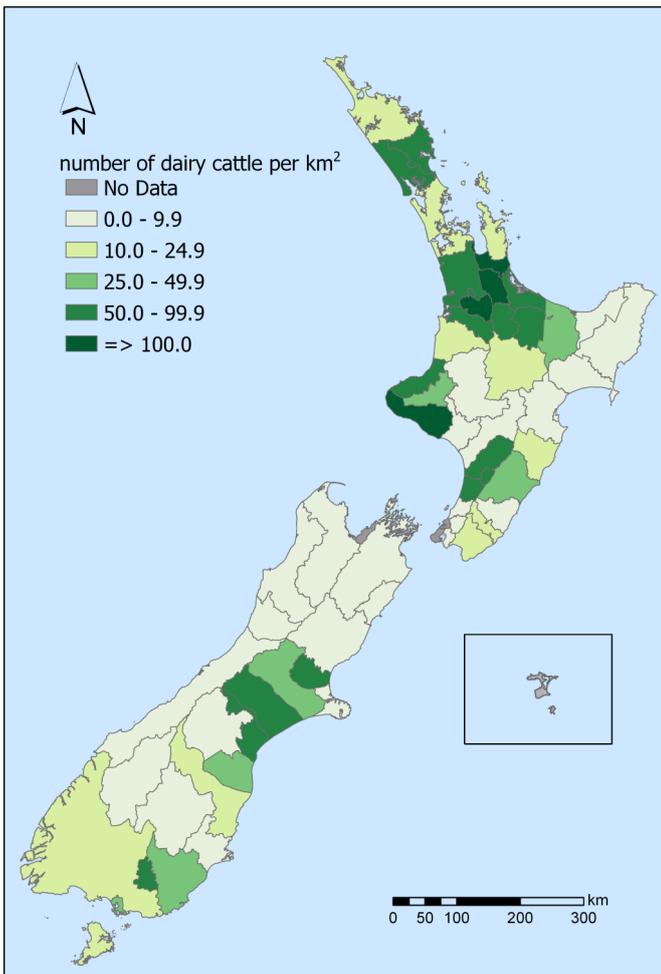
Figure 2: Density of dairy cattle by region in New Zealand, 2016\*



Source: Statistics New Zealand, 2017

\* year to 30 June

Figure 3: Density of dairy cattle by TA in New Zealand, 2012\*



### Dairy cattle density by Territorial Authority (TA)

In 2012, New Zealand had an average dairy cattle density of 24 animals per km<sup>2</sup> (Figure 3).

In the North Island, Matamata-Piako District (208 animals per km<sup>2</sup>) and Waipa District (180 animals per km<sup>2</sup>) had the highest dairy cattle density.

In the South Island, Ashburton District (70 animals per km<sup>2</sup>) and Gore District (59 animals per km<sup>2</sup>) had the highest dairy cattle density.

\* The following territorial authorities had dairy cattle data that was reported as confidential or suppressed by Statistics New Zealand: Tauranga City, Kawerau District, Porirua City, Wellington City, Nelson City, Chatham Islands Territory

\* year to 30 June

Source: Statistics New Zealand, 2013

**Note:** 2002, 2007 and 2012 data based on Agricultural Census. 2003-2006, 2008-2010, 2013-2016 data based on Agricultural Production Survey

#### REFERENCES

Morgan, M., Bidwell, V., Bright J. et al., (2002). *Canterbury Strategic Water Study*. Christchurch: Lincoln Environmental.

Statistics New Zealand. (2017). *Agricultural Production Statistics: June 2016 (final)*. Data available from <http://nzdotstat.stats.govt.nz/wbos/index.aspx> (accessed May 2017).

Statistics New Zealand. (2013). 2012 Agricultural Census tables. Data available from [http://stats.govt.nz/browse\\_for\\_stats/industry\\_sectors/agriculture-horticulture-forestry/2012-agricultural-census-tables.aspx](http://stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry/2012-agricultural-census-tables.aspx) (accessed May 2017).

For more information, please contact Carolin Haenfling on [ehnz@massey.ac.nz](mailto:ehnz@massey.ac.nz)