Number and density of livestock in New Zealand

This report presents statistics on the numbers and densities of livestock (sheep, dairy and beef cattle, and deer) in Aotearoa New Zealand, from New Zealand Agricultural Production Statistics. Livestock plays a crucial role in New Zealand's economy; however, poorly managed livestock production can have a major impact on water quality, including that of recreational water bodies. Nelson has been excluded from this analysis due to a data quality issue identified by Stats NZ (see "Data for this indicator" for further details).

Key facts

- Overall, livestock numbers declined by around 34% between 2002 and 2024.
- Dairy cattle were the only livestock type whose numbers increased between 2002 and 2024, although their number appear to be in decline in recent years.
- The overall decline in livestock numbers was driven primarily by a decline in sheep numbers. Despite this, sheep remained the most numerous livestock type in 2024.
- In 2024, livestock density varied widely by region, ranging from fewer than 10 animals per km² on the West Coast to over 240 per km² in Manawatū-Whanganui.

From pasture to public health: How livestock affect freshwater safety

Livestock can negatively impact freshwater quality through pugging damage and the release of excretions into the water, with direct consequences for public health (Bunyaga et al 2023). Livestock access to waterways increases the input of faecal contamination, nutrients, and pathogens, such as *Campylobacter*, *Cryptosporidium*, *E. coli*, and *Giardia*, into rivers and streams through direct deposition and runoff during rainfall events. These microbial contaminants are associated with waterborne illnesses, including gastroenteritis and other serious infections. Outbreaks of campylobacteriosis and cryptosporidiosis have been linked to areas with higher densities of dairy cattle, suggesting that environmental exposure routes, such as contaminated drinking or recreational water, are important risk factors for local populations (Wilson et al 2019).

Livestock numbers have declined by over 17 million since 2002

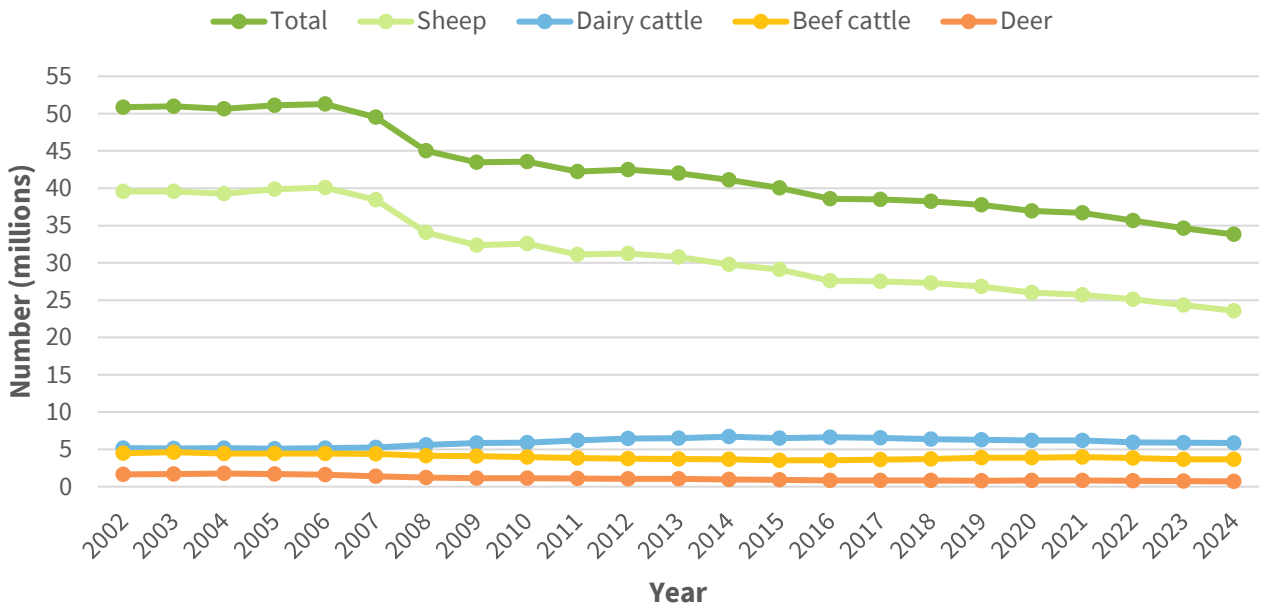
Between 2002 and 2024, New Zealand's total livestock population declined sharply from 50.9 million to 33.8 million, driven mainly by a decrease in sheep numbers. The sheep population declined from 39.6 million in 2002 to 23.6 million in 2024, resulting in a reduction of their share of total livestock from 77.8% to 69.8% (Figure 1).

In contrast, dairy cattle increased their percentage of the national herd, rising from around 10% (5.2 million)

in 2002 to over 17% (5.8 million) in 2024, despite peaking at 6.7 million in 2014 before gradually declining. Beef cattle numbers decreased from 4.5 million (under 9% of livestock) in 2002 to 3.7 million (nearly 11%) in 2024. Deer numbers also saw a marked decline, dropping by more than half over the same period.

While overall livestock numbers have fallen, sheep still outnumber all other types combined, and the composition of New Zealand's livestock sector has shifted toward a greater share of dairy and beef cattle.

Figure 1: Livestock numbers, by type, 2002-2024



Source: Stats NZ, 2024. The data for 2002, 2017, 2012, and 2022 were collected from Agricultural Production Census data, whereas in between years were collected from Agricultural Production Statistics surveys.

Total livestock numbers have decreased by 2.4% from 2023 to 2024

Between 2023 and 2024, the total number of livestock decreased by 2.4%, from 34.6 million to 33.8 million. This decline was driven mainly by a reduction in sheep (down 3.2%) and deer (down 4.4%). Dairy cattle numbers also fell slightly (down 0.8%), while beef cattle numbers increased marginally (up 0.7%) (Table 1).

Table 1: Livestock numbers (millions), and percentage change by livestock type, 2023–24

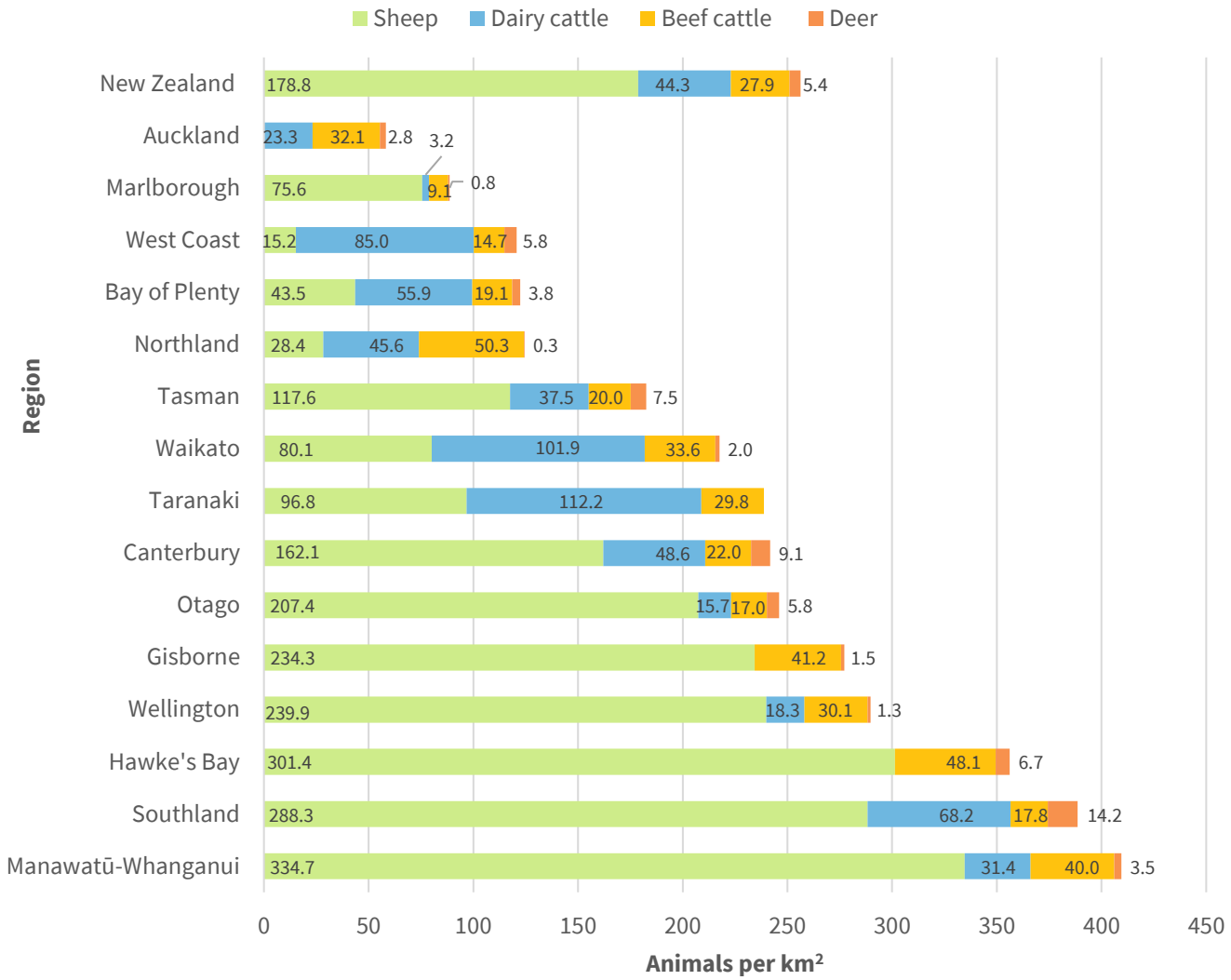
Livestock type	2023 (millions)	2024 (millions)	Percent change (2023-2024)
Sheep	24.4	23.6	-3.2%
Dairy cattle	5.9	5.8	-0.8%
Beef cattle	3.65	3.68	0.7
Deer	0.74	0.71	-4.4
Total	34.6	33.8	-2.4

Source: Stats NZ, 2024. The data for 2002, 2017, 2012, and 2022 were collected from Agricultural Production Census data, whereas in between years were collected from Agricultural Production Statistics surveys.

The Manawatū-Whanganui region had the greatest density of livestock

In 2024, the regions with the highest livestock densities were the Manawatū-Whanganui region (409.5 animals per km^2), Southland (388.5), and Hawke's Bay (356.2) (Figure 2). Sheep dominate livestock density in most regions, while dairy cattle densities are highest in Taranaki and Waikato. Northland, Hawke's Bay, and Gisborne were the regions with the highest density for beef cattle. Concentrations of deer were highest in Southland, Canterbury, Tasman, and Hawke's Bay.

Figure 2: Livestock density, by regional council and livestock type, 2024



Source: Stats NZ, 2024. The data were collected from the Agricultural Production Statistics survey for: year to June 2024
Note: For confidentiality reasons, stock numbers were suppressed for some livestock types. Consequently, livestock density couldn't be calculated for those regions. Nelson region has been excluded from the analysis due to a data error (see "data for this indicator" and metabata).

Data for this indicator

This indicator provides data from New Zealand Agricultural Production Statistics, which contain the results of the Agricultural Production Censuses and Agricultural Production Surveys conducted since 2002. Nelson was excluded from the analysis due to a data quality issue identified by Stats NZ. Specifically, an anomaly in Nelson's 2022 total land area was traced to a forestry response that was incorrectly assigned to a Nelson farm. To preserve the integrity and comparability of the analysis across regions and over time, Nelson was therefore excluded from this indicator.

For additional information, see the Metadata sheet.

References

Bunyaga, A., Corner-Thomas, R., Draganova, I., Kenyon, P. and Burkitt, L., 2023. The behaviour of sheep around a natural waterway and impact on water quality during winter in New Zealand. *Animals*, *13*(9), p.1461.

Wilson, N., Grout, L., Wilson, M., Mizdrak, A., Shoemack, P. and Baker, M., 2019. Protecting Fresh Waterways in Aotearoa/NZ: The Strong Public Health Case. *Public Health Expert Blog. University of Otago*.

Stats NZ. 2024. *Agricultural Production Statistics: Year to June 2024 (final).* Data available from https://www.stats.govt.nz/information-releases/agricultural-production-statistics-year-to-june-2024-final/ (accessed May 2025).

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