

Information topic	Details
Indicator name	<b>Number and density of livestock in New Zealand, by type</b>
Domain and topic	Recreational water quality: Livestock
Indicator definition	<ul style="list-style-type: none"> <li>- Number of livestock by type (sheep, dairy, cattle, beef cattle and deer)</li> <li>- Livestock density (in number per square kilometre) by type, regional council and territorial authority (TA)</li> </ul>
Data source	<ul style="list-style-type: none"> <li>- Statistics New Zealand. Annual Agricultural Production Survey. Available from <a href="http://www.stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry/info-releases.aspx">http://www.stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry/info-releases.aspx</a> (accessed March 2017)</li> <li>- Statistics New Zealand. Agricultural Census. Available from <a href="http://www.stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry.aspx">http://www.stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry.aspx</a> (accessed March 2017)</li> <li>- Statistics New Zealand. Geographic boundary files. Available from <a href="http://stats.govt.nz/browse_for_stats/Maps_and_geography/Geographic-areas/digital-boundary-files.aspx">http://stats.govt.nz/browse_for_stats/Maps_and_geography/Geographic-areas/digital-boundary-files.aspx</a> (accessed March 2017)</li> </ul>
Numerator	(for livestock density) Number of livestock, by type, regional council and by TA
Denominator	(for livestock density) Area (in square kilometres), by regional council and by TA
Methodology	Information on area (in square kilometres) of regional councils and TAs is taken from annual boundary files (i.e. ESRI geodatabase from Statistics New Zealand)
Time period and time scale	<ul style="list-style-type: none"> <li>- Annual Agricultural Production Survey: year to 30 June; from 2002 onwards</li> <li>- Agricultural Census: 5-yearly; from 2002 onwards</li> </ul>
Spatial coverage	national
Measures of frequency	<ul style="list-style-type: none"> <li>- Number of livestock by type (sheep, dairy cattle, beef cattle, deer and total of these)</li> <li>- Livestock density by type, national average</li> <li>- Livestock density by regional council</li> <li>- Livestock density by TA</li> </ul>
Limitations of indicator	Livestock data for density calculations at TA level is available every 5 years with the Agricultural Census. The Annual Agricultural Production Survey allows livestock density calculations only to regional council level.

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Limitations of data source	<ul style="list-style-type: none"> <li>- Data based on the agricultural production survey can be subject to sample bias and sample error.</li> <li>- Deer figures for 2004 onwards are not directly comparable with 2002 and 2003 figures as improvements have been made to the survey questions about deer in 2004 and 2005.</li> <li>- Population for the 2002 Agricultural Production Census and subsequent surveys differs from that of previous agricultural censuses and surveys. Figures from 2002 onwards may not be directly comparable with previous years.</li> </ul>
Created by	Statistics New Zealand
Related indicators	<ul style="list-style-type: none"> <li>- Number and density of dairy cattle in New Zealand, by TA</li> <li>- Notifications of campylobacteriosis, cryptosporidiosis and giardiasis with recreational water as a risk factor</li> </ul>
For more information	Statistics New Zealand. Agriculture, horticulture, and forestry <a href="http://www.stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry.aspx">http://www.stats.govt.nz/browse_for_stats/industry_sectors/agriculture-horticulture-forestry.aspx</a> (accessed March 2017)