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**EXPLORING THE CONVERSION PROCESS IN  
ORGANIC DAIRY FARMS:**

**The case study of organic dairy farmers  
in New Zealand**

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**2005**

**EXPLORING THE CONVERSION PROCESS IN ORGANIC DAIRY FARMS:  
THE CASE OF ORGANIC DAIRY FARMERS IN NEW ZEALAND**

A thesis presented in partial fulfilment of the requirements for the degree of Master  
Applied Science in Natural Resource Management at Massey University, New  
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Carolina Schweikart Vial  
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Errata sheet for:

*Exploring the Conversion Process in Organic Dairy Farms: the case study of organic dairy farmers in New Zealand*, by Carolina Schweikart Vial

- p.12 line 7 of the last paragraph: should read "1 million litres **per day** at the peak of the season."
- p. 38 line 3 of paragraph 2: should read: "whereas **no** nitrogen was applied..."
- p. 42 line 6 of the third paragraph: should read "yield **after** 305 days **lactation** was..."
- p. 52 line 11 of paragraph 3: should read "ammonium-N, nitrate-N or mineralizable-**N**, but..."
- p. 106 line 1: should read "we maybe **gross** \$300,000..." and line 2: should read "Our premium based on **50,000** kgMS..."

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## ABSTRACT

This research explores how organic dairy farmers manage the process of conversion. In particular, it identifies the main problems that dairy farmers face during conversion and the strategies that they employ to overcome them. Further, this research examines farmers' perceptions of the implications of conversion for the social, environmental, and financial performance of the farm. An initial mail survey was sent to 65 certified and uncertified organic dairy farmers to provide a general picture of the impacts of conversion at the farm level and to generate an initial description of organic dairy systems in New Zealand. Secondly, semi-structured interviews were conducted with eight respondents of the survey in order to investigate in more depth their experiences with conversion and capture their practical knowledge of the conversion process. Interviewees were selected based on a range of criteria (e.g., diversity of location, stage in the conversion process, and farming system characteristics), with the intention of increasing the applicability of the findings. Results suggest that organic dairy farmers conceive of conversion as a learning process, in which by capturing information and then by building experience, farmers are able to utilize external information sources for the development of personal skills and effective management practices that aim at preventing potential problems. In particular, observation of the cows' appearance and behaviour, together with providing a favourable environment for the animals appears fundamental in preventing animal health problems. Analyses of the survey indicated that sourcing organic inputs is the only significantly important problem for organic dairy farmers. However, mastitis, feed shortfalls and weed control are also concerns expressed in the interviews. Common recommendations for managing conversion include applying organic fertilisers in advance, having extra supplements on hand, increasing the rotation length, delaying calving dates, and reducing stocking rates. Organic dairy farms are mostly grass, spring calving and self contained operations. Milk production per cow in organic systems appears to be similar to the average values for the district. However, milk production per hectare on organic farms was significantly lower than average values for the respective district ( $p < 0.1$ ). This probably resulted from a decline in pasture production requiring farmers to reduce their stocking rates. In general, milk production, both per cow and per hectare, declined in early stages of conversion but rebounded as conversion progressed. Finally, it is expected that New Zealand pastoral-based seasonal dairy systems to follow a relatively easy transition to organic farming, without experiencing as much of a reduction in productivity.

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