Ecological Footprint of Japanese Tourists in New Zealand

A thesis presented in partial fulfilment for the degree of
Master of Science in Conservation Biology
at Massey University, Palmerston North, New Zealand

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2006

I. ABSTRACT

Ecological Footprint Analysis (EFA) was employed to assess the ecological sustainability of Japanese tourists in New Zealand. To gather information, survey questionnaires were delivered to the Japanese travellers at Auckland International Airport. Furthermore, an extensive literature review, a pilot study, and participation in a full-day tour were undertaken for more information.

The average daily EF of Japanese travellers in New Zealand was ten times larger than global biocapacity and slightly larger than the bioproductivity of New Zealand. The average daily EF of Japanese travellers was larger than the EF of Japanese residents, which indicated their lifestyle and behaviour was different during their travel and that they consume more resources (in particular for transport, housing and activities). Japanese travellers had larger EFs in every consumption category but transport, housing and services components made their footprints considerably larger than that of New Zealand residents. The transportation sector is the main concern for sustainability as it was the largest source of the EF and 50 times larger than average transport footprint of a New Zealand resident. Energy land, cropland and built-up land were also larger than New Zealand residents' EF.

The size of the overall EF did not indicate clear differentiations among the segments, but different segments seemed to have different impacts. In general, school excursion and educational travellers appeared to be the most ecologically sustainable. The size of EF was also likely to correlate with the age of travellers and the length of stay. Younger Japanese travellers tended to have smaller EF than elderly travellers, especially for transport and overall energy consumption. The length of stay and the size of EF also appeared to have some correlations as the size of EFs had a tendency to become smaller with longer stays.

Japanese travellers are different from many other travellers. They tend to have larger housing footprints as the most popular accommodation types were hotels and farm/home-stay, which were the most energy intensive accommodation types. Japanese travellers were more efficient than others in some points, as many Japanese travellers prefer travelling as a group and use coaches. However, generally Japanese tended to be the very energy intensive travellers.

This study illustrated the lack of ecological sustainability of Japanese

travellers in New Zealand and suggested they could reconsider their travel behaviour to become more ecologically sustainable. Some management practices were suggested to reduce the size of EF with the future predictions about Japanese outbound tourism.

II. ACKNOWLEDGEMENTS

First of all, I thank my supervisors Associate Professor John Holland and Dr. Mike Joy for their support during my thesis research. Particularly John's creativity helped me to plan and design the survey instrument. Mike helped me a lot for organising survey at Auckland airport, analysing the results, and editing/ proofreading the draft. I appreciate help from Denise Stewart, a secretary at INR at Massey University, for dealing with the financial part of my research and for arranging the international free postage envelops when she was extremely busy.

I would like to show my appreciation to David Adamson from the Auckland Airport company for letting me conduct the survey at the airport and also arranging the contacts with Air New Zealand and Japan Air line. I appreciate all the support from Debbie McKeown (Air New Zealand), Tania Nienhuis (Japan Airlines), the ground crews from both airlines, in particular Naomi Suzuki (Air New Zealand) and Shoko Cooper (JAL), for being very kind and supportive while I was at the airport. Also I would like to thank all the Japanese travellers who completed the survey, and tour operators/guides who let me approach their tour members.

During the trip with 14 Japanese tourists I was very fortunate to have two very helpful and friendly bus drivers, Peter Murphy from Ritchies Coach Lines in Christchurch and Terry Hohepa from Tranzit. They provided me very good advice.

I also thank my parents (especially my mom) for all their supports and helping organising a trip with their friends (a group of 14 Japanese) as well as the financial support. At last but not least, I want to express gratitude to my partner, Tom, for all his support and patience during the study including the technical suggestions in designing questionnaire.

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