



The Environmental State of Beekeeping in The Solomon Islands

Andrew Hogan



Current Beekeeping Projects

While there are few beekeepers currently in operation in the Solomon Islands, there is significant support from the Taiwanese and Australian Governments. Ten new farms have begun operations in Honiara alone since 2021. St. Joseph's School has four hives with 172 student keepers, who learn beekeeping and increase school income. The school hopes to give hives to graduates who hold a particular interest in beekeeping, proliferating apiculture around the country and bolstering economic opportunities. While hives were ravaged by invasive Asian Honeybees and Varroa, there is still opportunity for growth in the industry. Pictured below are two hives in Honiara and Tenaru, respectively.



Monique Jacques, National Geographic

Environmental Problems

Logging and mining harm both people and the environment in the Solomon Islands. Corruption is very common, making legal loopholes difficult to control. Logging companies pay a fraction of the value for land and do not pay all residents, with money going almost entirely to village leaders. This gives most villagers no control over their environment. Logging has damaged water quality, hurt crop production, and interferes with the activities of native animals, making life in the islands more difficult, especially in rural areas.

Uses for Beekeeping

The tropical climate of the Solomon Islands could serve as the ideal ecosystem for honey production. Honey is currently imported and sells for \$0.06/mL, showing the viability of beekeeping. The industry could replace some of the income of logging or mining, while being more sustainable and bring income to villagers rather than foreign companies. Bees can also help repair some of the damage done by logging, making farms more productive and increasing biodiversity, and reducing the effects of erosion. 80% of Solomon Islanders are farmers, making the rehabilitation of their environment vital to life, and showing the importance of bees.

Acknowledgements

I want to thank the Smith Fellowship Committee and Bob Pfunder for the opportunity to study in the Solomon Islands. Thank you to Katie Ditrano and Sophia Anderson for joining me, and to Charlie Hergott for his support. Additionally, I'd like to thank Archbishop Christopher Cardone O.P. for welcoming me so graciously to the Solomons. Thank you to Matilda Hoeai Maneniaru, Sr. Hilda, Peter Daka, Daisy Kariame, Laurence Blattner, Sr. Antonia Leoa, Alick Apuapuri, Dr. Jeffrey Markert and Dr. Rachael Bonoan for helping with my research. Finally, I need to thank Fr. Mark, Peter, Joe, Selwyn, Harry, Billy, Jeffrey, Everesto, Mikey, James and the DMI Sisters for helping me adjust to the Solomon Islands.



PP-528 [Beekeeping for Rural Development]

The Environmental State of Beekeeping in The Solomon Islands

Andrew Kevin Hogan

Providence College, Providence, Rhode Island, United States of America

The purpose of this experiment is to analyze beekeeping in the Solomon Islands, given the recent introduction of Asian honey bees, *Apis cerana*, and elimination of European honey bees, *Apis mellifera*. Since their introduction in 2003, Asian honey bees have eliminated European honey bees and thus, prevented honey production in most of the country. There are, however, some subsisting European honey bee colonies remaining. In this project, I will interview beekeepers in the Solomon Islands, and gather data regarding hive numbers, the population of each hive, and the history of their beekeeping operations. Because of the large loss of European honey bees, there is no systematic data of this kind, and the beekeeping operations that remain have little to work from. I will also study the lifestyle of beekeepers on the islands, looking into their motivations, history, and changes in practice to combat environmental changes and challenges regarding managing their bees. These data will inform the future of beekeeping on the islands, and lead to research-based suggestions on the most effective way for beekeepers to cope with environmental issues, such as logging or invasive species proliferation. These data can then be applied en masse to beekeepers outside of the Solomon Islands, focusing on highlighting which environmental factors are the most influential and making note of the best practices for resisting challenging environmental factors. By coordinating beekeeping practices with the needs of the environment, beekeepers can make their operations more effective and of a higher value, requiring lower maintenance and operating more consistently.