

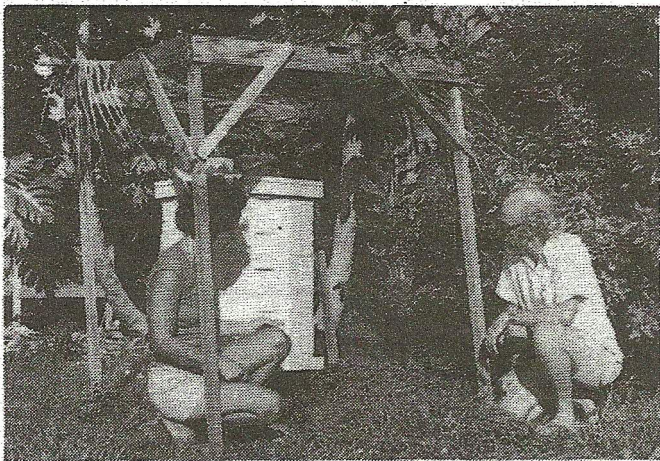
# Hydroponics and Honey Bees . . .

## SECRETS TO SUCCESSFUL KWAJ. GARDENING

*In each issue of the Pacific Echo, we try to present information pertaining to Kentron employees involved in activities which benefit the overall Kwajalein community. One such person is Mike Brogden of the Kentron Photo Lab, who, for the past seven years, has devoted many hours of his spare time to the sciences of Hydroponic gardening and Beekeeping here on Kwajalein. The following article explores the science of Hydroponics and provides some insight into the many fascinating projects Mike is involved with here on Kwajalein. . .*

HYDROPONICS is the science of growing plants in nutrient solutions, with or without sand, gravel or other inert medium to provide mechanical support to the plant. It differs from regular organic gardening in that it requires a controlled temperature and humidity, and does not require soil for the plants to thrive. Here on Kwajalein, where good soil is so difficult to come by, Hydroponic gardening provides an alternate way for Kwaj. people to grow their own favorite garden vegetables.

The Hydroponic Garden was begun in 1973 by Martin-Zachary Constructors, as an experimental garden to be run by and for the Kwajalein community. At that time, there were two greenhouses built, 26' x 100' each, with their own lens well and



MIKE BROGDEN and his wife, Julia, beside one of their honey bee hives.



MIKE ATTENDS to his cucumber vines inside the greenhouse of the Hydroponic Garden.

water storage tanks. The produce from the garden was to be sold at Surfway, and the proceeds from these sales were to be used to replenish the funds used to purchase seeds and nutrients for the garden. In the summer of 1974, M-Z abandoned the project, and Mike Brogden took over the operation, along with John Gilmer of Global Associates. John left island nine months later, and since that time Mike has been the one to keep the garden in operation, volunteering his time on a daily basis after work and on weekends. Assisting Mike presently are his wife, Julia, and Nelson Young of Global Associates.

Mike pointed out that in all the time since he began, the Hydroponic Garden has operated in the black, financially, partly because it is a volunteer effort. Nobody who works there gets paid, including Mike, himself. Presently, about 120 manhours a month are spent keeping up the gardens, and all the profits that

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