DNA Analysis and Behavioral Studies of the Palpigrade *Prokoenenia wheeleri*

Report of research conducted by Kilgore College and the University of Michigan at the Travis County Parks System

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Submitted to:

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INTRODUCTION

The purpose of this project is to collect specimens of the palpigrade *Prokoenenia wheeleri* for nucleic acid (DNA and RNA) molecular analysis and behavioral studies. The Order Palpigradi is one of the least understood of the arachnid groups. No nucleic acid analysis of the genus *Prokoenenia* has been carried out due to the limited distribution of the group. Behavioral studies of the group are even more arduous due to the difficulty collecting and maintaining populations of palpigrades in a laboratory setting. Behavior such as feeding and reproduction are unknown in the group. In the spring of 2011 an attempt was made to collect specimens of *Prokoenia wheeleri* in the Travis County Park System, but no collections were made due to drought conditions in Texas throughout 2011. Palpigrades move deep into the soil as the ground dries and rock turning is not effective.

MATERIALS AND METHODS

Attempts were made to collecting specimens by turning rocks at parks in the Travis County Park System. In years when the soil retains moisture this is the preferred methods for obtaining living specimens.

RESULTS

No collections for 2011.

Table 1. Travis County's BCP sites used for collections of the palpigrade *Prokoenia wheeleri*, January- 2011

Property Name	Collection Date	Specimens Collected
Cypress Creek Park	3-3	0 specimens
Mansfield Dam Park	3-3	0 specimens
Cypress Creek Park	6-11	0 specimens
Cypress Creek Park	9-17	0 specimens
		Total 11 specimens

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