EXAMINATION AND COMPARISON OF MANDIBLES AND GASTRIC MILL TEETH IN TWO SPECIES OF CRAYFISH, Procambarus alleni (FAZEN) AND Procambarus fallax (HAGEN) THAT INHABIT EVERGLADES WETLANDS

**Introduction**

Crayfish are considered to be the most important group of freshwater invertibrates found in aquatic environments, where they serve in trophic and spatial arenas as important ecosystem engineers. In southern Florida, Procambarus fallax and Procambarus alleni are the most common species, and have been studied extensively. Procambarus fallax has been considered a keystone species in Everglades wetlands, while Procambarus alleni has been considered a keystone species in Slough wetlands. The mandibles and gastric mill teeth of Procambarus fallax were studied by Foose (1992) and showed significant differences between the two species. Similarly, the mandibles and gastric mill teeth of Procambarus alleni were studied by Chiska and Kozaka (2003), and showed significant differences between the two species. However, little research has been conducted on the feeding habits of Procambarus alleni crayfish. In this study, the feeding habits of Procambarus alleni crayfish were examined by examining the mandibles and gastric mill teeth of the species.

**Materials and Methods**

Crayfish were collected, using minnow traps and crayfish traps and nets, from November 2002 to March 2003 in the Everglades National Park, Grassy Waters Nature Preserve, and FWS staff Grassy Waters Nature Preserve. Crayfish were collected from different areas in the Everglades and Slough, and their feeding habits were examined.

**Results**

Table 1 shows results of statistical tests that showed significant differences between Everglades and Slough crayfish with regard to these characteristics. The lateral teeth plates are wider on Everglades than Slough crayfish. Within a species, the number of lateral teeth is significantly different on right and left mandibles.

**Discussion**

The results of this study show that the mandibles and gastric mill teeth of Procambarus alleni are significantly different from those of Procambarus fallax. These differences suggest that the two species may have different feeding habits and diets. Further research is needed to confirm these findings.

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**References**


**Summary and Conclusions**

In summary, the results of this study show that the mandibles and gastric mill teeth of Procambarus alleni are significantly different from those of Procambarus fallax. These differences suggest that the two species may have different feeding habits and diets. Further research is needed to confirm these findings.