

## Quantification of Tumor Severity and Hematology in Green Turtles Afflicted with Fibropapillomatosis in the Hawaiian Islands

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In this study hematologic status was related to the severity of tumor affliction in green turtles (*Chelonia mydas*) with fibropapillomatosis (FP). In July 1997 and July 1998, 108 free-ranging green turtles were captured and bled at Palaau, a coastal foraging area on the island of Molokai where FP is endemic (Balazs *et al.*, 1998). Blood was analyzed for hematocrit, estimated total solids, total white count and differential (Work *et al.*, 1998). Based on earlier work (Balazs, 1991), each turtle was assigned a subjective tumor score indicating the severity of FP as follows: TS0 - no visible external tumors, TS1 - lightly tumored, TS2 - moderately tumored, and TS3 - heavily tumored. Individual tumors were graded into four size classes (A=<1cm, B=1-4cm, C=>4-10cm, D=>10cm) and tumor scores were assigned based on the number of tumors in each class.

There was a progressive increase in monocytes and a decrease in all other hematologic parameters except heterophils and total white counts as tumor score increased. These data indicate that tumor score can relate to physiologic status of green turtles afflicted with FP and is a

useful field tool for monitoring and reporting the severity of the disease in this species.

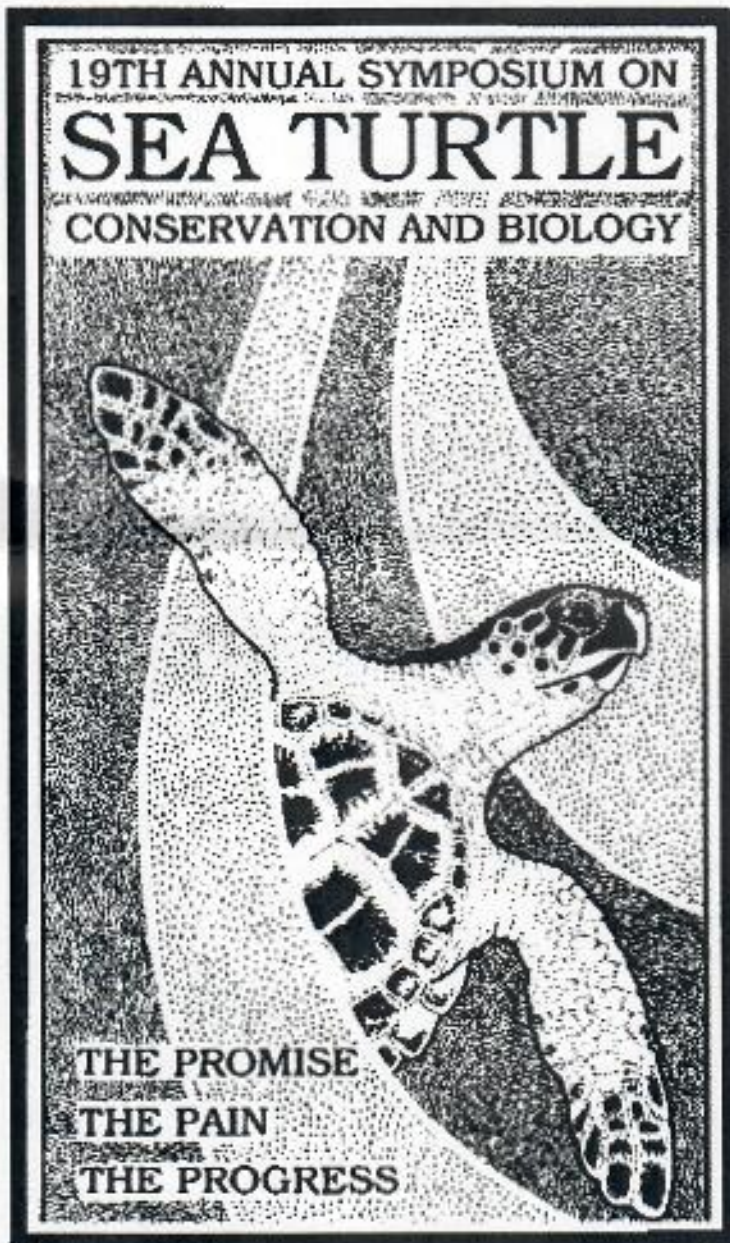
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