Food Items Identified from One Green Turtle Fecal Sample, July 15, 2000 From Dennis J. Russell

To: George Balazs

07-01-0 Mauna Lani Fishpond, fecal pellet from Green Turtle held at Mauna Lani Fishpond for >12 years.

Yellow encrusting sponge 100%

The mass of the fecal pellet was not made of algal material, but of sponge. I have included drawings of all the various spicules, scales and other silicaceous structures found in the sample. This drawing can be used by a zoologist to help identify which species of sponge this might be. The sponge consisted mainly of dense clusters of simple needle-like spicules held together by a thin protein matrix. Eating sponge is like eating fiberglass.

Wiry gelidium-like red Trace (definitely the dominant alga in the sample)

Cladophora sp. A Trace
Cladophora sp. B Trace
Polysiphonia sp. Trace
Ulva fasciata Trace

Dark Brown terrestrial plant material

Many different species of pennate diatoms were present

One mite (400 µm diameter)

I have drawings completed of the wiry gelidium-like species, but will have to do more work to find a species name for it. All the macroalgae identified here were living on, attached to, the sponge.

Cladophora A & B were present in minute amounts and were extremely small, fine filaments (30-60 µm diameter and less than 10 mm long).

Polysiphonia sp. was a single small branch.

Ulva fasciata was found as three tiny pieces, each piece being about 10 mm2.

Sponge material has been found in a lot of samples in the past, but this is the first fecal pellet that was "entirely" sponge. I understand that certain species of sponges are chemically irritating and some are mildly poisonous.

Dinnis

