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2016- Shell Coloration Change in Captive-Reared Juvenile Green Turtles from Sea Life Park Hawaii by Drs. Joe Herzog and Bob Morris.

From: Robert Morris <morrisr005@hawaii.rr.com>

Sent: Saturday, February 27, 2016 7:13 PM

To: George Balazs < itsahonuworldinhawaii@hotmail.com >; Joe Herzog < JHerzogDVM@yahoo.com >

**Subject:** Fwd: shell coloration

Joe: Don't have an answer for the color change. Probably not due to diet or cleaning of shell. Genetics may be a possibility (natural change with growth). Don't know any studies on light. I remember George and I discussed some pictures of a Chinese turtle raised inside that had a very light colored shell. There is a great variation in shell color patterns in the green turtle. I will forward this to George (the great guru) for his comments. Glad you are keeping the Mauna Lani!! Bob

---- Forwarded Message -----

From: Joe Herzog < <u>JHerzogDVM@yahoo.com</u>>
To: Bob Morris < <u>morrisr005@hawaii.rr.com</u>>
Sent: Friday, February 26, 2016 6:08 PM

Subject: shell coloration

Aloha Bob.

Just before 7/4/15, Jeff sent two turtles, that he had had in reserve, to ML. Both were about 1 year old. Both had a very light, remarkably wonderful shell pattern as you can see in the attached photo.

Now, 7 months later, their shells are considerably darker. Do you think this is a response to being in the direct sun at ML, versus indirect lighting at SLP?

I wonder if other factors are at play. The third photo is of a SLP turtle that is on display; it gets full sun exposure each day but is not as dark as the turtles at ML. Water? Algae?

Maybe the color of the shell changes because Pi'i and his team scrub the shells to remove algae each month.

(You can see that it is the same turtle that has the irregular scutes on the carapace. First photo is from 7/4/15 at ML. Next photo is from 2/19/16 at ML. Third photo is from SLP - a different turtle that I photographed a year or so ago while at SLP.)









