

reen sea turtles on mainland (fwd)

Subject: Hawaiian green sea turtles on mainland (fwd)
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Date: Sat, 28 Feb 2004 13:39:13 -1000
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Subject: Hawaiian green sea turtles on mainland

Attached you will find Sea Life Park Hawaii's recommendation for the
11
Hawaiian green sea turtles currently housed on the mainland. We
appreciate the
input that each of you have had thus far in the development of our
recommendation
and would like your response, one last time, before we take the
next,
necessary steps to implement this recommendation.

Thank you for your continued cooperation and agreement that the
health of the
wild Hawaiian green sea turtles is our foremost concern.

Brian E. Joseph, DVM
Sea Life Park Hawaii
(515) 515-2001

Recommendations Concerning Hawaiian Green Sea Turtles on Loan
To U.S. Mainland Zoos & Aquaria

1. Health of Mainland Hawaiian Green Sea Turtles
 - Comprehensive health records on the 11 Hawaiian green sea turtles currently held on the mainland were summarized in a report by Brian Joseph, DVM, Sea Life Park Hawaii Veterinarian dated August 16, 2003 and distributed to Sea Life Park Hawaii's informal program advisors (George Balasz, Dr. Joseph Flanagan, Dr. Robert Morris and Dr. Thierry Work) for their review.
 - Their input has been considered in preparation of this recommendation.
 - A single turtle located at the Dallas World Aquarium, has had a possibly significant health challenge. This turtle was maintained on calcium: phosphorus imbalanced diet for an extended period placing the turtle at risk. This diet has been corrected and the turtle's serum calcium: phosphorous ratio is approaching normalcy.
 - Within the abilities of our present knowledge of disease processes that might affect wild Hawaiian green sea turtles, none of the 11 turtles appears to be affected by a disease process that would pose a risk to the wild population through introduction to the wild.
 - None of the 11 turtles have been housed with or exposed to other reptiles or sea turtles.

2. Health Risk of Reintroduction of Mainland Hawaiian Green Sea Turtles to Hawaiian Native Population
 - Our primary goal is to prevent the introduction of novel pathogens into the native Hawaiian green sea turtle population.
 - It is recognized that there may be pathogens that are currently beyond the limits of detection. Thus, it is not possible to guarantee that the mainland turtles may have been inadvertently exposed to pathogens that might affect the wild population.
 - It is our belief that the risk of introduction of a novel pathogen through introduction of the 11 Hawaiian green sea turtles currently on the mainland is very minute.
 - We know that in the over 10 years of program operation none of the turtles sent to the mainland died during their time on the

mainland from any disease process that might have seemed likely to introduce a novel disease process to Hawaii.

- We also know that of no examples of turtles that have been returned to Hawaii from the mainland for release that, upon their return or release, displayed novel disease processes.

3. Option One: Leave All Hawaiian Green Sea Turtles on Mainland

- The safest, most conservative strategy that will guarantee the avoidance of introduction of a novel pathogen is to leave all 11 Hawaiian green sea turtles on the mainland.
- This results in the opportunity to educate a large, mainland population about Hawaiian conservation issues through the use of a living, dynamic Hawaiian icon.
- However, there are compelling reasons not to leave the turtles on the mainland.
- First of all, at the onset of the loan program it was agreed by all constituents that this was a "loan" program and that the turtles would be returned to Hawaii for introduction after a finite period of time. Thus, some local constituents might maintain that this agreement should be fulfilled and that the turtles should be returned to Hawaii for release.
- Second, the turtles are very large, not small and cute. Some zoos and aquaria may not find permanent housing of the Hawaiian green sea turtles appealing or may not have the resources necessary.
- Third, some mainland facilities might not be judged as competent to permanently maintain Hawaiian green sea turtles under their care.
- This option has been considered and it is our recommendation that it not be implemented.

4. Option Two: Return All Hawaiian Green Sea Turtles on Mainland to Sea Life Park

- An intermediate course of action might be to return all 11 Hawaiian green sea turtles to Sea Life Park Hawaii.
- This would allow the turtles to return to Hawaiian waters, to the community and to contribute their genetic material to hatchlings destined for release.

- At the same time, housing the turtles at Sea Life Park Hawaii would permit long term health monitoring.
 - Unfortunately, Sea Life Park Hawaii does not have the necessary facilities to accept the return of all 11 turtles from the mainland.
 - It is not our recommendation to implement this option.
5. Option Three: Return All Hawaiian Green Sea Turtles on Mainland to Hawaii for Release
- The third course of action is to return all 11 turtles to Hawaii for release, fulfilling the original agreement.
 - This course of action will provide some risk, although very slight, of the introduction of a novel pathogen to the wild population.
 - It will also fulfill the conditions of the original agreement.
 - It is not our recommendation to implement this option.
- X 6. Option Four: Return All Hawaiian Green Sea turtles on Mainland to Hawaii
- The fourth course of action is to return all 11 turtles to Hawaii and initially maintain them for observation and appropriate testing for a one month period at Sea Life Park Hawaii.
 - Only 2 to 3 turtles could be held from the mainland at one time.
 - During their month at Sea Life Park they would be under close observation for the development of any signs of illness.
 - In addition, complete blood counts and serum chemical analyses will be performed.
 - Up to 7 of the turtles that remained in good health over the course of this month at Sea Life Park will be released.
 - Four or more turtles will remain at Sea Life Park Hawaii permanently to bolster the population.
 - Turtles that will be released will be available for transmitter attachment by NMFS prior to release.
 - Thus, under this option all mainland turtles will return to their native Hawaiian waters and sand and will have the opportunity to contribute their genetic material to the wild population through the future introduction of descendent hatchlings.
 - This option is the recommendation of Sea Life Park Hawaii.

7. Next Steps

- Provide recommendations to informal advisors for their review;
- Consider comparison of dna from Sea Life Park's colony and the mainland turtles to discover if certain mainland turtles might be more desirable to remain at Sea Life Park;
- Upon approval, develop detailed implementation plan which will also be discussed with informal program advisors and amended as necessary;
- Implement plan.

Thank you for your input and support. Please provide further input concerning this proposed plan of action.

SEA LIFE PARK HAWAII

HAWAIIAN GREEN SEA TURTLE *Chelonia mydas*

LOCATION: Brookfield Zoo
NAME: Neptune
ACCESSION#: 990024
HATCH DATE: 2/25/98

SEA LIFE PARK HAWAII

HAWAIIAN GREEN SEA TURTLE *Chelonia mydas*

LOCATION: Brookfield Zoo
NAME: Triton
ACCESSION#: 990023
HATCH DATE: 6/27/98

SEA LIFE PARK HAWAII

HAWAIIAN GREEN SEA TURTLE *Chelonia mydas*

LOCATION: Brookfield Zoo
NAME: Santiago
ACCESSION#: 76
HATCH DATE: 9/29/98

SEA LIFE PARK HAWAII

HAWAIIAN GREEN SEA TURTLE *Chelonia mydas*

LOCATION: Brookfield Zoo
NAME: Bartolomi
ACCESSION#: 77
HATCH DATE: 9/29/98

SEA LIFE PARK HAWAII

HAWAIIAN GREEN SEA TURTLE *Chelonia mydas*

LOCATION:	Minnesota Zoo
NAME:	Three Dot
ACCESSION#:	9254
HATCH DATE:	7/96

SEA LIFE PARK HAWAII

HAWAIIAN GREEN SEA TURTLE *Chelonia mydas*

LOCATION: Minnesota Zoo
NAME: Two Dot
ACCESSION#: 9255
HATCH DATE: 7/96

SEA LIFE PARK HAWAII

HAWAIIAN GREEN SEA TURTLE *Chelonia mydas*

LOCATION: Oklahoma City Zoo
NAME: E952
ACCESSION#: 756508
HATCH DATE: 8/01/98

Date	Name + Number	Specimens	Location	Received
9/28/04	Green Sea Turtle 756508 (OK)	Serum 3.6cc	Freezer	②
	Green Sea Turtle 756507 (OK)	Serum 5.4cc	Freezer	③
	Green Sea Turtle 925407 (MN)	Serum 2.7cc	Freezer	②
	Green Sea Turtle 925504 (MN)	Serum 1.8cc	Freezer	①
	Green Sea Turtle Neptune (IL)	Serum 3.4cc	Freezer	②
	Green Sea Turtle Triton (IL)	Serum 2.8cc	Freezer	②
	Green Sea Turtle Santiago (IL)	Serum 2.7cc	Freezer	②
	Green Sea Turtle Bartolomi (IL)	Serum 1.8cc	Freezer	①

→ taken to AZ ultralab on 9/30/04 and placed in
 ziplock labeled "SLP Captives Blood Serum Collected
 9/28/04"