

ICS rescues Turtle nest site

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Turtle mamas face many challenges during the nesting period as she tries to find the perfect beach to safely lay her eggs. Beaches are dynamic week after week, just walking up shore - she can encounter changes in beach profile structure; a once smooth and flat beach, can give way to tracks of sharp granitic and limestone rock or a significant change in beach crest, meters high. Further to that, the bush itself can be thick and gnarly with heavy branched scaevola bushes or deep roots of a casuarina tree, blocking the way of a perfect nest chamber. Since there is no maternal care after she lays her eggs, nest position, egg laying, and nest camouflage are important aspects to ensure survival of her offspring. Turtle mamas overcome challenges with admirable tenacity and strength that demonstrates

why they have survived for millions of years.

However, sometimes dynamic weather systems can cause sea turtle embryo mortality in nests, often as a result from erosion and infiltration of seawater. However, on Silhouette erosion happened from freshwater streams. Recent storms and plentiful rain have resulted in many fresh water streams making their way to the sea shore all around the island. Although the rain has

been a welcome relief after the drought, the fresh water streams have inadvertently begun eroding away parts of the beach. The staff found eggs lying exposed on Anse Cimitiere, the team acted swiftly to translocate the eggs to a safer beach, before the crabs or birds predated upon it. Erosion of nests like this, has not been witness before by ICS staff member who has lived on the island for 5 years. A specific protocol is followed when translocating eggs. The team placed the

eggs in 5x30 egg cartons, equaling 123 in total. They used gloves and the eggs were kept upright - in the same axial orientation as they were when they were laid to aid in the translocation process and to prevent mechanical shocks. The clutch was reburied in a hand-dug cavity that resembled in-situ nests in terms of shape, size and sand characteristics. The chamber was measured to ensure the nest was dug at the same depth, 60 cm which represents the average nest-depth for this population. To increase hatching success of these endangered species, nest translocation to hatcheries is a common management tool in some cases.

Did you know? the sex of hatchlings is determined by the temperature of the nest. If the nest is colder, then there will be more male hatchlings, with the opposite effect producing more females. With climate change, turtle sexes have been skewed - producing greater numbers of female turtles in recent years. This

could lead to a population collapse for species such as the critically endangered hawksbill turtle and further complicate the struggle to prevent extinction. On a more positive note, it has

been suggested that 'natural selection regarding the mother's choice of nesting site may mitigate the challenges of a warmer climate and ensure that an equilibrium between the two sexes can be found.'

