



RAISING RED ROOFS: CONSERVATION AT SOUTH END SETTLEMENT

BY CHRISTINA FRIBERG

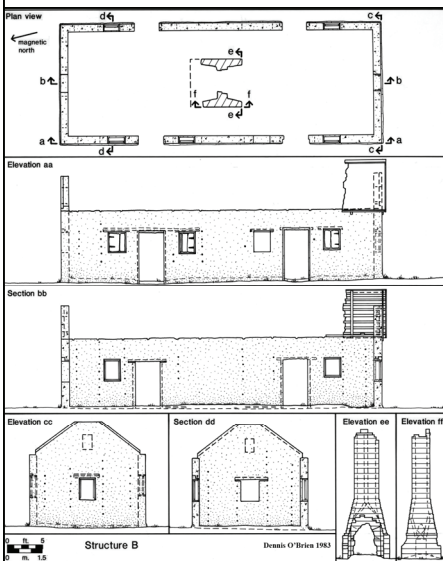
All work on St. Catherines Island is guided by the principles of Research, Education and Conservation. Archaeologists from the American Museum of Natural History (AMNH) have honored those principles through the 36 years of research on the Island and upheld them by assisting in the conservation of the South End Settlement.



In the 1980s, a conservation effort was begun

at South End to construct protective roofs over the deteriorating tabby structures. The project began again this October to continue the protection of the historic buildings. Archaeologists Deborah Mayer O'Brien and Dennis O'Brien, then of the AMNH, mitigated the project in 1984 and 1988 by archaeologically excavating postholes for the new structures. Now the structures have become

iconic, with the red roofs one sees as they come upon South End Settlement. The two archaeologists took detailed notes and measurements of the buildings. Dennis produced scale drawings of the buildings showing the projected original dimensions and the effect of erosion over time. Their efforts helped preserve the plantation era site and conserve the artifacts found in the areas impacted by the construction.



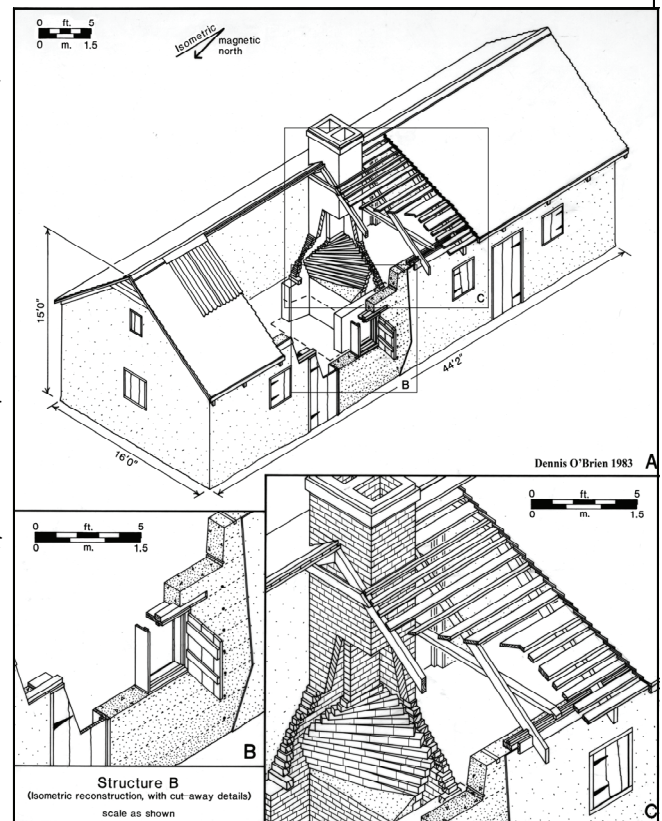
In early October, a small crew from the AMNH came to SCI to assist in continuing the conservation effort. Two additional buildings were cleared by the SCIF staff and measured for posthole placement. The holes were dug with a motorized auger and the soil was screened for artifacts. Archaeologists recovered mostly historic period artifacts such as glass (including some bottle necks and bases), kaolin pipe stems, metal nails and scrap, and historic ceramics with many different types of decoration.

A few lithic flakes were recovered, but the most notable prehistoric artifact found was a piece of Late Archaic pottery (about three to five thousand years old). Its presence

at South End Settlement suggests that either the structural tabby was mined from a Late Archaic shell midden elsewhere on the Island, or that there is a Late Archaic site under the buildings. Only artifacts from the postholes were saved while surface observations were left alone.

With the posts in place for two new roof structures, the conservation of

South End Settlement is under way again. Two additional buildings will be protected from further erosion and the artifacts in the ground impacted by the construction have been conserved. On St. Catherines Island, architectural conservation and archaeological conservation go hand in hand.

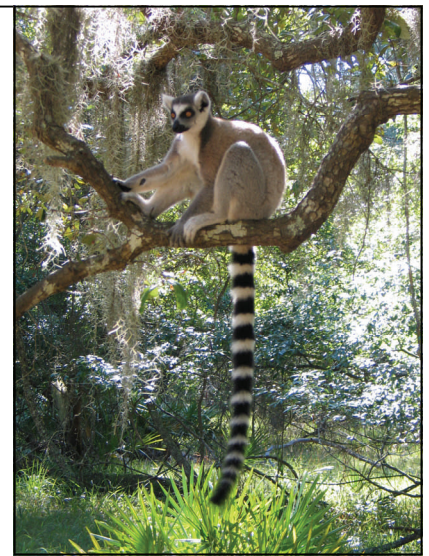




Male lemurs on the move

By Joyce Parga

Like their wild counterparts in Madagascar, male ring-tailed lemurs (*Lemur catta*) on St. Catherines Island move between social groups, whereas females remain in their groups of birth for their entire lives. Males are therefore said to provide "gene flow" within ring-tailed lemur populations. St. Catherines Island provides a unique benefit when studying male lemur dispersal: it is possible to follow the movement of males consistently from group to group across several years without losing tabs on particular individuals. This is because it is a closed population where all the adult lemurs are radio-collared. In contrast, in the wild, male lemurs often cannot be followed across more than just a handful of years due to their tendency to transfer out of study areas and reserves. St. Catherines Island is therefore a perfect location to study the relationship between male lemur dispersal and mating behavior.



In a recent journal article published in *Folia Primatologica*, Joyce Parga (University of Toronto) analyzed data on male lemur dispersal on St. Catherines across a multi-

year period, and found several trends. For one, male lemurs don't return to the group they are born into (their "natal" group). They may transfer from group to group several times in their lives, but after they initially leave their natal group on St. Catherines Island, they actively avoid this group, which will contain their mother and other close female relatives. This helps to cut down on inbreeding. Secondly, it appears that transferring between groups is a mating strategy that is practiced by males both young and old. Males who were followed in a mating season before and after a transfer had higher mating success in their new group as compared to their old group, and overall, males who have just entered a group as new immigrants tend to have higher mating success than males who have already been group residents for a while.

One of the most interesting findings of the study is that males – even those that have high mating success – choose to leave their groups of residence. This means that even a lot of "romance" (lemur-style) is not enough to keep a male interested in staying in his group – he will look to go elsewhere eventually. This tendency to roam from group to group likely results in male lemurs having a more genetically diverse set



of offspring across their lifetimes than if they remained in the same social group with one set of females for their entire adult lives. This strategy of moving on after one or more years may also help males to avoid mating with any daughters they might have sired in a group.



The study also found that males pay attention to the numbers of males in each of their potential groups of entry when deciding where to disperse. Dispersing male lemurs on St. Catherines Island tended to join groups having fewer males than in their previous group of residence, which suggests that males are avoiding groups in which there will be more intense male-male competition over females during the following breeding season. Who knew male lemurs were so smart?!

If you're interested in reading more about these findings, see the following article: Parga, J.A. 2010. Evaluation of male inter-troop transfer as a mating strategy in ring-tailed lemurs on St. Catherines Island, USA. *Folia Primatologica* 81(3): 146-162. Please feel free to email Joyce at j.parga@utoronto.ca or jparga@aol.com if you are interested in receiving a copy!