

Note on Evidence of Human Interference on South Island, Aldabra

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Note on evidence of human interference on South Island, Aldabra

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1. TORTOISE ENCLOSURES

Low enclosures built of limestone flags are found mostly in the permanent reservoir areas on South Island. It seems to be an open question as to whether they were built to keep tortoises in or to keep them out. What is undisputed, however, is that such enclosures are very numerous in the reservoir areas and that some at least were there in 1895 because Voeltzkow mentions them in his journal.

During phase III many enclosures, in some cases carefully constructed, were seen near Anse Cèdres, Frigate Pool, Bassin Flamant, Cinq Cases, Coco, as well as in several spots off the regularly used trails in the Cinq Cases reservoir area; and the same holds for the surroundings of Takamaka and its nearby pools.

We know that exploitation of the Aldabra giant tortoise preceded the first lesseeship and that around the turn of the century several contemporary journals agreed on a general scarcity of the beasts. Yet the Italian Expedition of the 1950s estimated about 50000 tortoises on Aldabra and the latest (phase III) counts came to about double this. It seems likely that human predators kept the population relatively small before the lessees were installed and that it is only since 1888 that the tortoise population has been allowed to develop naturally. The rate of this development is a pointer to heavy regular or irregular depredations before 1888.

2. TRAILS

There is a network of more or less well-used tracks and trails on South Island, again concentrated in the reservoir areas or else around the favoured turtling beaches such as that at Dune Jean-Louis.

Sometimes, such tracks can be dated fairly confidently as post-settlement. An example is the badly overgrown trail which runs from near Dune Jean-Louis northeastwards to a clump of very tall mangroves. I followed this trail for some hundreds of metres on 18 and 19 February and concluded that it probably was used by mangrove-cutters during the lesseeships but had been disused for a few decades past since it was not known even by repute to any of our Seychellois. On this trail, I passed a large saline pool (2715, 0475) full of 'lebine', a prized fish, which might have served to provide fare for the mangrove-cutters.

Other trails, however, could pre-date the lesseeships. An example is the almost due N to S

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trail, also badly overgrown which runs from southeast of Anse Cèdres (3740, 0965) to pool X (3740, 0765) and beyond. In parts, this trail is still plain and its trace shows up well on the aerial photographs. Once again, none of our Seychellois knew of it although if reopened it would save a lot of time on the journey between Anse Cèdres and Cinq Cases.

3. COVERED ROCKHOLES

On South Island and elsewhere numerous small rockholes were found which were covered over by stones to conserve potable water. These were usually concentrated around the turtling beaches (Anse Cèdres, Dune Cinq Cases, Dune Jean-Louis) and some are still used regularly, for example the covered rockhole behind Dune Cinq Cases (3955, 0580). But the great majority of such rockholes in the Dune Jean-Louis area have been long forgotten by the Seychellois and none of them were marked by stone cairns as are the larger open rockbasins around Settlement and at Passe Gionnet.

Some covered rockholes in regular use had entomostracan species not previously recorded from Aldabra and which do not occur elsewhere on the Atoll in the present state of knowledge. I believe that these records indicate a degree of human contamination of the local niches.

4. SHELL MIDDENS

Most accumulations of shells on Aldabra are very recent and can be linked with current exploitation of green snail, mother-of-pearl and cowries. But one such midden, which was found well inland by A. Graham, may pre-date the present phase of shell collecting since it occurs near the now disused N to S trail mentioned earlier. This midden consisted of a hundred or so green snail operculi and near it were two tortoise enclosures.

5. BALLAST STONES

Ballast stones and other artefacts are found at several places on the coasts of South Island, e.g. at the campsite facing Camp Frigate, but such indicators of man's presence are rare inland. Only two instances were recorded during phase III.

On 13 March I found artefacts on the west shore of the pool (3340, 0590) about 450 m NNW of Takamaka Pool. These consisted of several angular hand-sized pieces of basalt (scrapers?), half a flat basalt boulder (about 25 cm wide) which I think may have been a ballast stone or grinding stone; several pieces of bone and of pumice and a piece of thick black glass which looked as though it came from a 10 cm wide square-bottomed bottle.

On 23 March I saw a ballast stone (or grinding stone?) of pinkish brown granite which A. Graham had found earlier near pool X when he worked there with P. Grubb on 2 February.

Conclusions

There is thus a variety of evidence pertaining to human interference on South Island and some of it is so widespread, e.g. the tortoise enclosures and old trails, that it cannot fully be accounted for by the activity of the lessees.

This interference needs to be recorded in much more detail than the very sketchy treatment used here. A chronology of interference is needed before realistic estimates can be made of the significance of the biogeography of many important elements in the Aldabra fauna and flora.