Localities and biostratigraphy

2. Localities and Biostratigraphy

Many formations in Trinidad are highly fossiliferous, but the island is not blessed with good exposures of continuous geological sections. A great number of its limestone quarries carry larger foraminifera, but most of them are rootless slipmasses. A few Calyx wells provided useful information in this respect, but for many one had to rely on restricted exposures, test pits, roadcuts and building sites. Further on isolated boulders found mainly in river beds and along the coast, or brought to surface by the many mud volcaneous from unknown depths. Credit must be given to the field geologists and the paleontologists who by their conscienscious work have, from the scant observations, managed to lay the foundations for the stratigraphy of Trinidad as we know it today, and thus made it possible to construct a more or less continuous sequence of larger foraminifera in this part of the Caribbean region.

In the following Trinidad formations there occur intervals of shallow water facies that contain larger foraminifera:

Formation	*Facies*	*Age*
Manzanilla	Montserrat sands	Late Miocene
	San José silts	
Tamana	Guaracara limestone	Middle Miocene
	Tamana limestone	
Brasso	Quarries in the Central Range	Oligo-Miocene
	Ste. Croix Quarry	Early Miocene
Cipero	Morne Diablo Quarry	Early Miocene
	erratic blocks (Erin)	Late Oligocene
	Kapur Quarry	Middle to Late Oligocene
	Mejias Quarry	early Middle Oligocene
	Flat Rock tongue	Early Oligocene
San Fernando	Marabella marl	uppermost Late Eocene
	Vistabella marl	Late Eocene
	Mount Moriah glauconitic sandstone	pre-Late Eocene
Navet	Hospital Hill marl	Late Eocene
	Farallon limestone	uppermost Middle Eocene
	Dunmore Hill marl	late Middle Eocene
	Charuma silt	early Middle Eocene
Boca de Serpiente	erratic blocks	basal Middle Eocene
Lizard Springs	Lizard Springs marl erratics	Paleocene
Albian?	erratic blocks	Early Cretaceous

In the following are described the localities of larger foraminifera as they existed around 1940. Most of them are now obliterated by erosion, exploitation or bulldozing, and their description here is the last information we can document about the environment of our fossil species and their connections and age. The planktic zonation used is that of Bolli (1957). Localities 1 to 24 refer in the following text to the numbers on the Locality Map (Fig. 1).

The study of the Trinidad larger foraminifera is inseparably linked to that of Soldado Rock, the tiny islet situated between Trinidad's southwestern point and the Venezuelan coast (Kugler & Caudri 1975; Caudri 1975). It is recommended that these two publications be used alongside the present one.

Apart from the main fossil localities there are in our collection a great number of erratic blocks and boulders. Although their origin can not always be traced, they have in certain cases proved to be of great importance. Most of them are from the Late Eocene San Fernando Formation or from the Oligocene as we know it from the Mejias and Kapur quarries. Some are the only indications that certain formations, which are no longer found in situ, did exist in Trinidad as they do in other places in the Caribbean region. Examples are the solid *Ranikothalia* limestone of the Paleocene and the *Proporocyclina tobleri* limestone of the earliest Middle Eocene (Boca de Serpiente Formation), both known from the Soldado Rock section, and also the uppermost Oligocene *Spiroclypeus* limestone of which isolated blocks are all that remains.

Erratica are especially common in the southern part of Trinidad: Erin Point and Erin Bay, Tapara Point, Chagonary Point, Point Bontour, the Marac River, the Karamat mud volcanoes, the Lizard Springs and Navette River areas and Charuma. They are described there under the locality where they have been found; in the Distribution Chart (Fig. 7) they are entered according to their age.

3. Description of the larger foraminifera localities

List of localities in alphabetical order, with corresponding numbers on key map Fig. 1:

A.E.G.6616, Central Range, locality of *Miogypsinoides complanata*	22
Biche Village Quarry	12
Boussignac well-1, West of Biche	23
Brasso Quarry	8
Concord Quarry	7
Corozal Quarry	4
Dunmore Hill marl, type locality	13
Gasparillo Quarry	2
Hermitage Quarry	1
Kapur Quarry	20
Lizard Springs Formation, type locality (Mky. 102b III)	21
Machapure Quarry	10
Marac Quarry	17
Marac well 1	18
Martin Quarries	9
Mayo Quarry	3
Mejias Quarry	19
Morichal Quarry	5
Morne Diablo Quarry	16
Morne Roche Quarry	6
Nariva Quarry	11
Roussillac well-1, near Pitch Lake	15
Ste. Croix Quarry	14
Type section of Charuma silt	24