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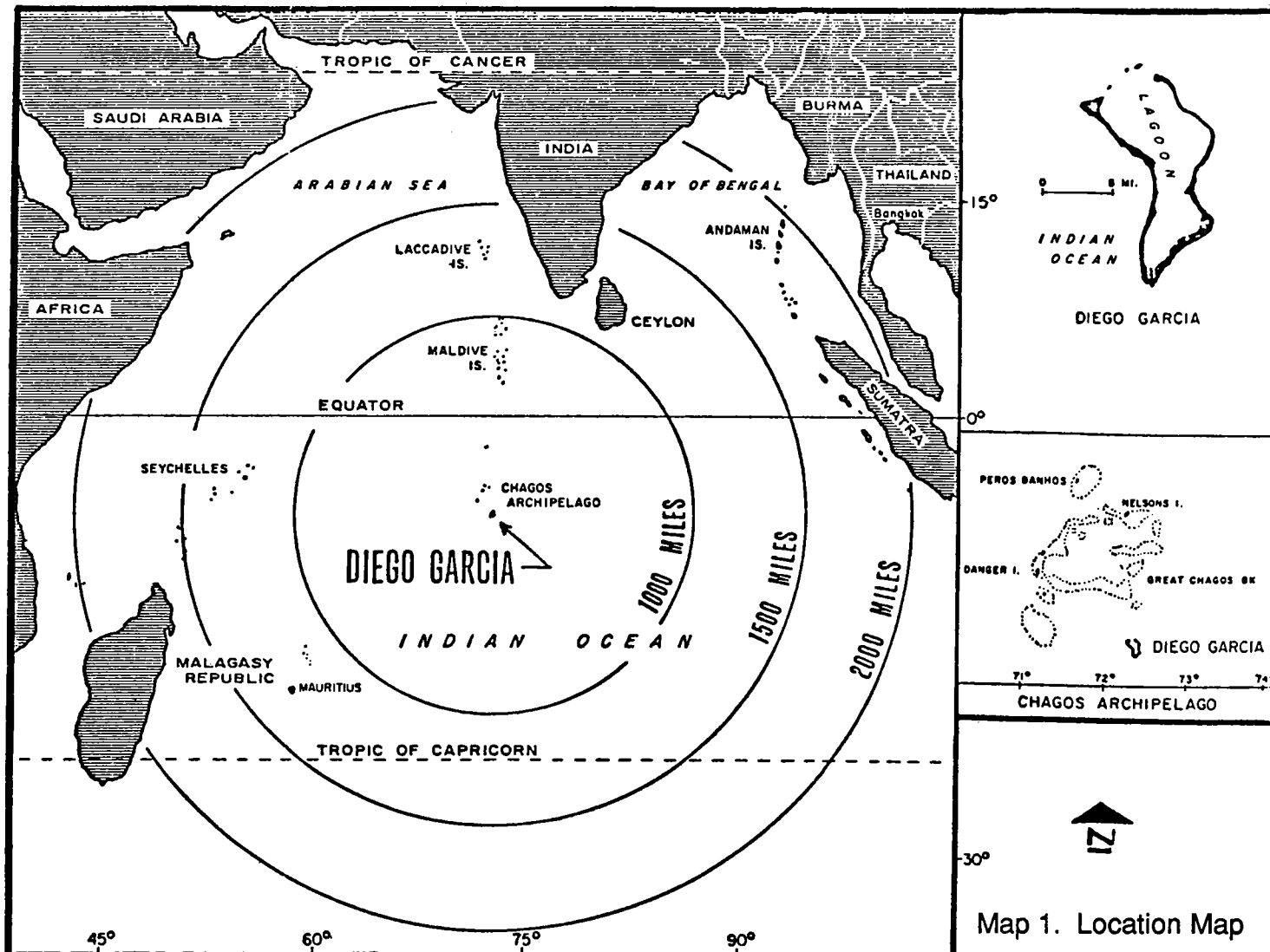
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**AN ANNOTATED CHECK LIST OF THE FLORA OF DIEGO GARCIA,  
BRITISH OCEAN TERRITORY**

**BY**

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**ISSUED BY  
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Map 1. Location Map

**AN ANNOTATED CHECK LIST OF THE  
FLORA OF DIEGO GARCIA**

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**BRITISH INDIAN OCEAN TERRITORY**

**by J. M. W. Topp\***

**ACKNOWLEDGEMENTS**

It would clearly be impossible for a simple sailor and a very amateur botanist to have produced this annotated check list of the flora without the aid of professional experts. I am most grateful to the Royal Botanic Gardens, Kew for all the guidance and expertise they have most generously provided, and in particular Mr. Steve A. Renvoize and his colleagues. He and they have not only identified all the difficult species but have given me invaluable encouragement and support. Dr. A. Clive Jermy and his colleague Josephine Camus have identified the ferns. Dr. Tang and Mr. Ali Ibrahim of the Singapore Botanic Gardens have kindly helped. Dr. Charles R. C. Sheppard has provided me with lists of the flora found in the northern Chagos by D. A. Dutton and A. Field during the 1978/9 Joint Services expedition there and Commander A. J. Ryan RN generously sent me copies of the Joint Service Chagos reports for the expeditions of 1975 and 1978/9. A. M. (Tony) Hutson now of the Flora and Flora Preservation Society, gave me his 1971 botanical notes before I left London. Dr. Alan C. Leslie sent me some botanical descriptions I lacked. Use was made of the 1967 botanical survey by C. F. Rhyne of the Smithsonian and Dr. D. R. Stoddart of Cambridge University as reported in Atoll Research Bulletin No. 149 and I enjoyed reading Dr David Bellamy's book 'Half of Paradise'. It will be seen therefore that this check list is as much the product of others as myself. Nonetheless I accept full responsibility for all omissions and inaccuracies.

**INTRODUCTION**

**DIEGO GARCIA - Physical Description**

Diego Garcia is the largest and southernmost of the atolls, which with some 50 odd other islands, form the Chagos Archipelago. It lies approximately 7° 20' South 72° 27' East, (see Map 1) and has a continuous land rim of some 60 kilometres enclosing a lagoon 21 kilometres long and up to 11 kilometres wide. There are three small islands at the entrance to the lagoon. The land area is 30 sq kilometres. (6,720 acres or about 10.5 square miles). The average height is a little under 2 metres. (See Map 2). A detailed description of the island, its geomorphology and climate is given by D. R. Stoddart in Atoll Research Bulletin No. 149 of 27 August 1971. Annual rainfall averages just over 2600 mm. Humidity is high. Temperatures by day are generally about 30's C falling to the mid 20's by night.

**DIEGO GARCIA - Botanical Description.**

The island is heavily vegetated. Historically and botanically the significant events were discovery by the Portuguese in the early 16th century but little thereafter until the 18th century when the English and French made voyages of discovery to the Chagos. The first attempt to settle was by the English in

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\* 20 Lupus Street, London SW1, England

1786 who brought six shiploads of soil from Bombay but later withdrew. The French started plantations in the late 1780's and these became well established in the mid 1790's. The islands were ceded to the English in 1814 and have remained British since but the plantations continued mainly under French cultural influence even when the English abolished slave labour in 1839. Experiments to use Diego Garcia as a coaling station were conducted in the 1880's and guano mining was carried out for a brief period but the prime activity until modern times continued to be production of coconut, and its derivatives. These various human activities and visitations from many lands added to the original native species and formed the flora as recorded by Rhyne and Stoddart in their 1967 survey.

Significant events occurred with the formation of the British Indian Ocean Territory, the 1966 Exchange of Notes between UK and USA (Cmnd. 3231) and 1976 Exchange of Notes between the UK and USA (Cmnd. 6413) which have allowed the United States to construct a number of facilities in the specific area of Diego Garcia. This has added further species. In 1971, when construction started, the coconut plantations were abandoned and in the specific area made way for building. Strenuous and effective measures are taken to protect the environment. The restricted area is now effectively a nature reserve and in the future it is likely that some of the original native flora will find additional room there.

It is still too early to rewrite the authoritative and comprehensive report on the Land Vegetation of Diego Garcia by D.R. Stoddart, Chapter 11 of Atoll Research Bulletin No.149 but very minor amendments are already apparent. For example *Intsia bijuga* is present in the vicinity of Beacon No.2 (See Map 2) and spreading (this species is making an even more obvious comeback in I. Anglaise of the Salomon group to the north). The seaward beach-crest vegetation of the Southeast rim is abundant with *Suriana maritima* amongst which at least two large specimens of *Pemphis acidula* exist. *Premna serratifolia*, *Neisosperma oppositifolia* and several other species are much more common than indicated. The annotated check list which follows brings out some of these and other points. There are some 65 species recorded in this survey which were not reported in Atoll Research Bulletin No. 149. They are marked with an asterisk. They represent one third of the total number of species.

The water lenses and aquifers have been developed with about 100 wells to provide a continuous supply of 3,000 to 3,800 cubic metres a day (about 700,000 gallons) at present and possibly up to 4,700 cubic metres a day with daily peak demands of 8,500 cubic metres a day in the future except in periods of drought. This yield is sustained under a cleverly engineered and very carefully monitored scheme and where as only perhaps 30% of rainfall is recoverable, the discharge of ground water to the sea is likely to be reduced and perhaps a minor lowering of the water table will occur. Other agencies may also be at work. On 30 November 1983 there was an earthquake measuring 7.6 on the Richter scale and between that date and 1 August 1984 70 tremors of which 37 were 5.0 or more. This activity has now died down but it is possible that subtle changes of level have occurred thereby giving advantage to some species over others. These and other developments have produced a dynamic state of change over the last 15 years in Diego Garcia and the long term effect on the flora will be interesting to observe.

This current annotated check list was completed in April 1986. It is the product of 2 years occasional botanising while the BIOT Commissioners Representative. My official duties as Magistrate, Coroner, Civil Status Officer, Controller of Customs, Principal Immigration Officer, Commander British Forces Diego Garcia, Royal Navy Liaison Officer and probably some other responsibilities have not allowed much time in this busy island to botanise though I kept an official watch on the fauna and flora in my capacity as de facto conservation officer. Thus, and given my own botanical limitations, the list is far from perfect - but it has been enormous fun producing it and I renew my thanks to all those professionals who have made it possible.

## PSILOTACEAE

*Psilotum nudum* (L.) Beauv.

Common and widespread. Frequently grows at base of palm trees and old rotting tree stumps in damper places under shade and inland.

## POLYPODIACEAE

*Amphineuron opulentum* (Kaulf.) Holttum.

Occasional and scattered, mainly on the east side of the island.

*Asplenium longissimum* Bl.

Frequent and widespread. Fronds can reach 5 feet. Often on rotting heaps of old coconut husks and rotten tree trunks on wetter, marshier, richer ground inland often in association with *Cylosorus interruptus*.

*Asplenium macrophyllum* Sw.

Occasional but widespread. Associates often with *A. nidus* on more stony, drier, less fertile ground nearer the ocean.

*Asplenium nidus* L.

Common and widespread. Profuse on the ground over wide areas especially under old woodland of *Hernandia sonora* and *Cocos*. Frequently grows as an epiphyte along the whole length of tree trunks and on branches. Fronds often reach height of 5 feet

*Cylosorus interruptus* (Willd.) Ito

Common and profuse to the point of dominance in wet areas without shade and dryer areas with shade.

*Pteris tripartita* Sw.

Common and widespread. Fronds often reach 5 feet in shade or partial shade.

## ARAUCARIACEAE

*\*Araucaria columnaris* (Forst.f.) Hook. ?

One tree in East Point Settlement garden reported (Stoddart) not found. Seed re-introduced by author in 1986 at the request of the Institute of Pacific Island Forestry, US Forest Service, USDA, Honolulu, who supplied the seed to investigate viability. Germination has been highly successful and seedlings will be planted out for landscaping when current construction in the specific area is complete.

## PHYTOLACCACEAE

*Rivina humilis* L.

Common and widespread in woodland.

## PORTULACACEAE

*Portulaca oleracea* L.

Common and widespread on sandy, poor soils. A constituent of the beach crest vegetation. A

pioneer plant on the fill of coralline material, dredged from the lagoon, used for construction foundations and surrounds.

*Portulaca mauritiensis* v. Poelln.

Not positively identified during this survey.

#### GUTTIFERAE

*Calophyllum inophyllum* L.

Frequent and widespread. Main concentrations are along the lagoon shore especially from Minni Minni and south but there are many magnificent specimens to 30 metres at inhabited or formerly inhabited sites and elsewhere throughout the island.

#### TILIACEAE

*Triumfetta procumbens* Forst.

Common and widespread. A component of the beach crest vegetation and occasionally further inland.

#### MALVACEAE

*Abutilon indicum* (L.) Sweet

Reported East Point, Wiehe in 1939. Not found in this survey.

*Gossypium hirsutum* L.

Occasional and scattered. Several specimens near Beacon No. 2 between Leconte Point and Cust Point. One specimen found SW of island near main road at 7° 25' South. Grown from seed to seed by author near BOQ 3 and now established as ornamental in town.

*Hibiscus rosa-sinensis* L

Frequent in town and widely cultivated for ornament.

*Hibiscus tiliaceus* L.

Frequent and widespread especially in th East Point area where it does great damage to abandoned buildings. Occasional elsewhere on the lagoon shore and inland.

*Malvastrum coromandelianum* (L.) Garcke

Reported East Point, Wiehe in 1939. Not found in this survey.

*Sida acuta* Burm. f.

Frequent in ruins of Point Marianne village and occasional at East Point plantation.

*Sida pusilla* Cav.

Common and widespread on open ground inland or beach crest. Grows in poor soil or even sand. A component of mown lawn areas. Usually prostrate, will grow in shade or where supported by taller grass to 30 cms. Leaf very variable depending on growing conditons.

#### BOMBACACEAE

*Ceiba pentandra* (L.) Gaertn.

A few mature trees behind the old Manager's House at East Point plantation.

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STERCULIACEAE

*Melochia pyramidata* L.

Rare and only at East Point settlement.

\**Waltheria indica* L.

One flourishing specimen found in well fields between 'R' and 'C' sites October 1984.

CRUCIFERAE

\*Several *Brassica* and *Raphanus* species have been cultivated in the 1980s privately, on a very small scale and with varying degrees of success.

OXALIDACEAE

*Averrhoa bilimbi* L.

Frequent and scattered throughout the island but concentrated near former habitation sites and more common on the eastern side of the island.

RUTACEAE

\**Citrus aurantium* L.

East Point area .

*Citrus aurantiifolia* (Christm.) Swingle.

East Point area and very occasionally elsewhere.

\**Triphasia trifolia* (Burm.f.) P. Wils.

Occasional and scattered mainly on east side of the island at East Point and north but also between town and Splendidville.

SURIANACEAE

*Suriana maritima* L.

Common and widespread along ocean rim and on sandy lagoon inlets. Occasionally grown for ornament.

ANACARDIACEAE

*Mangifera indica* L.

Occasional, mainly at East Point behind the old Manager's house; also Point Marianne and modern habitation areas where the occasional young tree is growing.

LEGUMINOSAE

*Albizia lebbbeck* (L.) Benth.

Several mature trees in East Point area where it has naturalized. One tree transplanted by author to town area.

*Canavalia cathartica* Thou.

Occasional and scattered in old woodland and along lagoon shore.

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*\*Caesalpinia bonduc* (L.) Roxb.

Rare; only at East Point.

*\*Cassia occidentalis* L.

Common but localised to former habitation sites: frequent at East Point and occasional elsewhere..

*\*Delonix regia* (Boj. ex Hook.) Raf.

Occasional. One mature tree at East Point. Reintroduced (1984) by author with seed from Boddam, Salomons and raised for ornamental planting. Further seed introduced (1985) by author from Institute of Pacific Island Forestry, US Forest Service, USDA, Honolulu.

*\*Enterolobium cyclocarpum* Griseb.

Seed introduced by author at request of and from Institute of Pacific Island Forestry, US Forest Service, USDA in 1985 for ornamental planting, landscaping and to investigate viability.

*\*Erythrina variegata* var. *orientalis* (L.) Merr.

Seed introduced by author from Institute of Pacific Island Forestry, US Forest Service, USDA in 1985 for ornamental planting, landscaping and to investigate viability.

*Intsia bijuga* (Colebr.) O. Ktze.

Occasional and localised to East Point and northwards and to area of Beacon No. 2.

*Leucaena leucocephala* (Lam.) de Wit

Common but localized to former habitation sites: profuse among Point Marianne village ruins where ground extensively disturbed in 1984 when it became dominant (1985). Occasional elsewhere and sometimes grown for ornament.

*Mimosa pudica* L.

Rare and found only at East Point on shore near pier.

*\*Pithecellobium saman* (Jacq.) Benth.

Seed introduced by author at request of and from Institute of Pacific Island Forestry, US Forest Service, USDA in 1985 for ornamental planting, landscaping and to investigate viability.

*\*Pithecellobium unguis-cati* (L.) Benth.

Several mature trees at East Point. Grown from seed by author for ornament in town.

*\*Sesbania grandiflora* Pers.

One mature tree 5 m high and two younger specimens at south end of camp just north of North Power Plant.

*\*Vigna marina* (Burm.) Merr.

Seed introduced from I. du Coin, Peros Banhos by author in 1985 and planted in town at BOQ 3 for ornament. This species has achieved complete dominance in the old plantation at I. du Coin. Planted BOQ 7 for ground cover.



\*Note. Several legumes for private cultivation have been recently introduced.

#### CRASSULACEAE

*Kalanchoe pinnata* (Lam.) Pers.

Common and widespread in clearings or partial shade of woodlands.

#### COMBRETACEAE

*Terminalia catappa* L.

Occasional and widespread, more frequent in former habitation areas and grown also for ornament in town.

#### LECITHIDACEAE

*Barringtonia asiatica* (L.) Kurz

Frequent and widespread but mainly in area between East Point and Minni Minni with a much smaller number on the opposite side of the lagoon between the SE end of the runway and for a mile south. Otherwise only very occasional. Grown in town for landscaping.

#### MYRTACEAE

*Eugenia javanica* Lam.

Rare, only a few specimens at East Point. Singapore Botanic Gardens identified fruit as *E. aquea*.

#### LYTHRACEAE

\**Pemphis acidula* Forst.

Rare and only two specimens found: on ocean shore approximately 1.5 and 2.5 kilometres respectively SW of Horsburgh Point amongst an extensive shore line of *Suriana maritima*. This species is more common in the most northern islands of the Chagos, notably I. Anglaise in the Salomons and the northern isles of Peros Banhos.

#### TURNERACEAE

*Turnera ulmifolia* L.

Common and widespread especially in cultivated ground.

#### PASSIFLORACEAE

*Passiflora suberosa* L.

Common and widespread usually in wooded areas. Leaves very variable in shape.

#### CARIACACEAE

*Carica papaya* L.

Occasional and scattered, usually open ground around where planted and increasingly in the specific area around modern habitation. Also on East Island.

## UMBELLIFERAE

*\*Centella asiatica (L.) Urb.*

Found in early 1986 in ruins of Point Marianne village where ground was cleared to bare earth in mid 1984 and subsequently left to revegetate.

*\*Hydrocotyle bonariensis Lam.*

One patch 15 x 15 metres found between old Meteorological Station building at East Point in 1984. Subsequently grown in BOQ 3. In 1985 in response to a request for "a low growing plant that needs no maintenance and can tolerate very poor soil in full sunlight and provide uniform ground cover". It was planted behind BOQ 7 in town.

## CUCURBITACEAE

*Cucumis melo L.*

Occasional and scattered on rough, dry, open ground.

*Cucurbita mosohata (Duch. ex Lam.) Poir.*

Very occasional on rough, dry, open ground. Other members of the gourd family have been introduced for private cultivation.

## RUBIACEAE

*\*Dentella repens J.R. & G. Forst.*

Frequent but localised to a few areas starting from just south of the runway and working north. The main area is about 400 yards north of Splendidville. It forms mats up to a foot wide on flat, sandy open, ground which has been disturbed, levelled and flattened and where there is not much competition from other species.

*Guettarda speciosa L.*

Common and widespread. A main tree constituent of the beach crest vegetation usually just inland from ocean shore with *Scaevola sericea* and *Tournefortia argentea*. Also frequent inland. The dominant natural fragrance.

*\*Ixora sp.*

Planted in town area for ornament.

*Morinda citrifolia L.*

Common and widespread on all terrains inland.

*\*Oldenlandia corymbosa L.*

Frequent in sandy soil on open ground and as a constituent of lawns in the town area.

*\*Spermacoce assurgens R. & P.*

Common and widespread on all sorts of open ground from hard and stony to mown lawn and cultivated land.

## CAMPANULACAEAE

*Hippobroma longiflora (L.) G. Don.*

Frequent and widespread in the East Point area, with a few specimens at Point Marianne and the town (BOQ 3) where planted for ornament.

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### COMPOSITAE

*Ageratum conyzoides* L.

Occasional and confined to former habitation areas such as Point Marianne and East Point.

\**Bidens pilosa* L.

Frequent and widespread in specific areas especially at edges of woodland. During the last 2 years it has been reduced through "tidying" of the vegetation by the US Navy.

\**Conyza canadensis* (L.) Cronquist

Common and widespread.

\**Eclipta prostrata* (L.) L.

Common and widespread. An early coloniser.

*Melanthera biflora* (L.) Wild

Common and widespread on open rough ground especially in the specific area, often forming belts along roads and trails.

*Mikania micrantha* Kunth.

Profuse where it occurs but localised to former habitation areas at East Point and Point Marianne, SE and SW of the runway.

*Synedrella nodiflora* (L.) Gaertn.

Occasional on disturbed or cultivated ground mainly in the town area.

\**Tagetes* sp.

Cultivated for ornament.

*Tridax procumbens* L.

Common and widespread on all sorts of open ground.

*Vernonia cinerea* (L.) Less.

Common and widespread on all sorts of open ground.

\**Vernonia grandis* (DC.) J.Humb.

Occasional and usually at former habitation sites or where ground is disturbed; mainly in vicinity of runway and largely on the west side of the island. Increasing.

### GOODENIACEAE

*Scaevola sericea* Vahl

Very common indeed throughout the island inland and on the shore where it forms almost impenetrable barriers up to 100 yds deep. Branches overhang the high water mark to make passage at high water impossible except by wading. An early pioneer of sandy shores. Known throughout the island as 'scavvy' which term is used by the layman to describe all the vegetation of Diego Garcia.

## SAPOTACEAE

*Mimusops coriacea* (DC.) Miq.

Some 50 specimens in and around the East Point settlement area. Many specimens are young although some quite small trees have already borne fruit. May be *M. commersonii*.

## APOCYNACEAE

*Catharanthus roseus* (L.) G. Don

Frequent; grown for ornament; naturalised in some places, notably in East Point area.

*Cerbera odollam* Gaertn.

Reported by Lambrecht, m.s. WHO Rept., 1969 but not found by author. However, one fruit (identified Kew) found on the shore line 1985. Lambrecht correctly reported *Mimusops*. It is possible *Persea americana* was taken for *Cerbera odollam*.

*\*Neisosperma oppositifolia* (Lam.) Fosb. & Sacht

Common and widespread

*\*Nerium oleander* L.

Introduced 1985 and 3 plants flourishing in camp just north of North power plant.

*Plumeria* sp.

One small tree discovered in flower at the old settlement in Boddam I., Salomons, possibly introduced by visiting yacht. Listed here as likely to be introduced to Diego Garcia for ornament.

## ASCLEPIADACEAE

*Asclepias curassavica* L.

Frequent in the East Point area where it is naturalised. Grown by author for ornament in town area.

## BORAGINACEAE

*Cordia subcordata* Lam.

Common and widespread inland and on lagoon shore. Planted for landscaping in town area.

*\*Heliotropium ovalifolium* Forsk.

12 specimens found in a small mown area in the corner of where the main road meets the 'C' site road. Several specimens successfully transplanted to BOQ 3. Also found ocean side of sewage lagoon 0.8 km north of runway northern over run.

*Tournefortia argentea* L. f.

Common and widespread inland and on ocean and lagoon shores where it is a main constituent of the beach crest vegetation. Also grown for landscaping in the town.

## CONVOLVULACEAE

*\*Ipomoea aquatica* Forsk.

Rare. Well established in two permanently wet areas north and south ends of runway. Also occurs

behind Splendidville in a small cleared area of water.

*Ipomoea batatas* (L.) Lam.

Very occasionally cultivated.

*Ipomoea macrantha* Roem. & Schult.

Common and widespread in woodland from inland to shores of both lagoon and ocean. Climbs over shrubs and low trees. Sometimes spreads over low ground.

*Ipomoea pes-caprae* (L.) Sweet

Common and widespread especially on sandy shores where it will extend to the high water mark, and on open ground. A smaller leafed variety occurs in a wet peaty area of I. du Coin, Peros Banhos.

#### SOLANACEAE

\**Capsicum annum* L.

Cultivated.

*Capsicum frutescens* L.

Cultivated.

\**Lycopersicum esculentum* Mill.

Cultivated and occasionally naturalised.

*Solanum nigrum* L.

Rare and found only at East Point.

\**Solanum melongena* L.

Cultivated.

\**Solanum tuberosum* L.

Cultivated.

#### SCROPHULARIACEAE

*Bacopa monnieri* (L.) Wettst.

Common and widespread in permanently or semi-permanently wet places.

*Striga asiatica* (L.) Kuntze

Common and widespread parasitizing on various grasses including *Dactyloctenium ctenoides*, *Stenotaphrum dimidiatum* and increasing with great enthusiasm on the recently US introduced *Cynodon dactylon*; once seen on *Paspalum nutans*.

#### ACANTHACEAE

*Hemigraphis alternata* (Burm. f.) T. Anders.

Several well established patches at East Point behind the old managers house. Also grown for ornament in the town area.

#### PLANTAGINACEAE

*\*Plantago major* L.

Rare and confined to the town area. Found between BEQ 9 and BEQ 11 in 1985 and 1986.  
Possibly introduced with grass seed.

## BIGNONIACEAE

*\*Tabebuia heterophyllum* (DC) Britton

Common and widespread in the East Point area and planted for landscaping in the town.

## VERBENACEAE

*Lippia nodiflora* L.

Common and widespread especially on open ground, poor soil and the shore.

*Premna serratifolia* L.

Frequent and widespread especially in the north west of the island.

*Stachytarpheta jamaicensis* (L.) Vahl

Common and widespread on open ground.

*\*Stachytarpheta urticaefolia* Sims

Confined to East Point area.

## NYCTAGINACEAE

*Boerhavia repens* L.

Common and widespread on open ground; a constituent of the beach crest vegetation. Only the white form is found in Diego Garcia; the pink form occurs more often in other islands of the Chagos.

*\*Bougainvillea* sp.

Grown for ornament in the town.

*Pisonia grandis* L.

Rare and scattered. This interesting tree is undoubtedly native. It has become rare in Diego Garcia. There is one specimen just north of the incinerator site and 5 specimens in the southernmost Barachois. Half a dozen exist just inland from Horsburgh Point and 3 on East Island. The main concentration of some dozen is along the main road between the Donkey Gate and the South Point of the island (power poles: 1 between power poles 166 and 168, 2 between 182 and 184, 6 between 184 and 122, 1 at 198 and 1 at 210 on the ocean side, and on the lagoon side 1 at 192, and one each, just north of the incinerator, at 83, 99 and 109.)

In 1985 a second power line was constructed on the west side of the road and several trees were lost or trimmed for this purpose. I issued a Public Notice under the Wildlife legislation of BIOT to reduce further deprecation. In the specific area the trunks of the trees up to some six feet above the ground appear as if gnawed and the soft trunks are almost ringed. It is not clear what causes this effect. It may be rats, possible crabs and even possibly donkeys of which there are about 200; alternatively it may be a disease that rots the base of the trunks.

Where the tree exists in Diego Garcia the land is poor, often of broken coral rock and in all cases where the island is very narrow and close to both ocean and lagoon. Indeed it may not be fanciful to suggest that these sites were perhaps the original dividing points of the islands of Diego Garcia before

the whole island became a continuous rim of nearly 80 kilometres; but this is speculation. However what is an observable fact is an apparent affinity, in the 55 odd islands of the Chagos Archipelego, namely that where there are no rats, there are birds breeding in profusion and also *Pisonia grandis*. This may of course be coincidental rather than causal. If causal it is reasonable to speculate that originally, before man and thus rat, birds bred far more profusely in Diego Garcia and *Pisonia grandis* was much more common; that since man and rat it has declined, is declining and ultimately will become extinct in Diego Garcia except on East Island which is free of rats and rarely visited by man. The fact that dispersal of *P. grandis* is by the adhesion of fruit to the plumage of birds may lend weight to the speculation.

#### AMARANTHACEAE

*Achyranthes aspera* var. *velutina* (Hook. and Arn.) C.C. Townsend

Occasional and scattered usually on borders of woodland or in partially shaded woodland, sometimes as beach crest vegetation. More common on East Island as it is in other 'bird' islands (see entry under *Pisonia grandis*).

*Aerva lanata* Juss.

Rare and found only on mown grassland at 'R' site.

*Amaranthus viridis* L.

Not found but reported by Stoddart as seen by Wiehe in 1939.

\**Lagresia micrantha* (Bak.) Schinz.

Rare and found only at Simpson Point and near GEODSS site.

#### LAURACEAE

*Cassytha filiformis* L.

Common and widespread, parasitic on *Scaevola*.

\**Persea americana* Mill.

One mature fruiting tree at East Point. Cultivation started in new habitation areas.

#### HERNANDIACEAE

*Hernandia sonora* L.

Common and widespread often dominant in woodland but otherwise well distributed in mixed woodland, sometimes on the lagoon shore. Outer translucent fruit case usually white but sometimes pink.

*Gyrocarpus americanus* Jacq.

Reported by Stoddart as seen by Wiehe in 1939 but not found during this survey.

#### EUPHORBIACEAE

*Acalypha indica* L.

Rare and found only in old habitation sites: Point Marianne and East Point.

*Breynia disticha* Forst.

Frequent but localised to the East Point area mainly near the cemetery.

*Codiaeum variegatum* (L.) Bl.

Cultivated for ornament in town area.

*Euphorbia cyathophora* Murr.

Frequent on borders of woodland and disturbed mounds of soil. Cultivated for ornament. Red patches on leaves sometimes replaced with white.

*Euphorbia hirta* L.

Common and widespread. A persistent weed in cultivated ground.

*Euphorbia prostrata* Ait.

Frequent and widespread especially on disturbed soil, paths and in the cracks of concrete.

\**Euphorbia rubicunda* Steud.

Very occasional on sandy coral ground in town area and north of the runway.

\**Pedilanthus tithymaloides* (L.) Poit.

Grown for ornament usually as a hedge. Never seems to flower.

*Phyllanthus amarus* Schum.

Common and widespread on open ground and a weed of cultivation.

*Phyllanthus maderaspatensis* L.

Common and widespread on open ground and a weed of cultivation.

*Phyllanthus* sp.

Occasional and confined to former habitation sites (East Point and Point Marianne) and BOQ 3.

\**Ricinus communis* L.

Rare and confined to area half a mile south of runway.

#### URTICACEAE

*Pilea microphylla* (L.) Liebm.

Common and widespread in lightly wooded areas and on the borders of woodland.

*Pipturus argenteus* (Forst. f.) Wedd.

Common and widespread. Mainly in former plantation areas.

#### MORACEAE

*Artocarpus altilis* (Park.) Fosb.

Occasional and mainly at East Point where there are a dozen mature trees.

*Ficus benghalensis* L.

Frequent and scattered, usually near former habitation sites.

*Ficus religiosa* L.



7 trees in a row at the north end of East Point near the old Meteorological station accommodation.

#### CASUARINACEAE

*Casuarina equisetifolia* L.

Common and widespread. An early coloniser of disturbed ground and sandy shores.

#### CUPRESSACEAE

\**Thuja orientalis* L.

Some thirty specimens in the town area and Beach House Park; imported 1980.

#### ORCHIDACEAE

\**Vanilla planifolia* Andr.

Several acres a little south east of Minni Minni and a small area behind Splendidville. Occasionally grown for ornament in town.

\*A number of cultivated orchid were brought in.

#### MUSACEAE

*Musa sapientum* L.

Occasional and scattered. Cultivated in modern habitation areas.

#### LILIACEAE

*Allium* sp.

Introduced recently for private cultivation.

\**Crinum asiaticum* L.

Frequent; grown for ornament.

*Crinum latifolium* L.

Frequent; grown for ornament.

*Haemanthus multiflorus* Martyn.

Frequent; grown for ornament.

\**Hippeastrum equestre* Herb.

Occasional in current or former habitation sites.

*Hymenocallis littoralis* (Jacq.) Salisb.

Reported by Stoddart but not found this survey.

\**Sansevieria trifasciata* Hort. ex Prain

Planted for ornament.

*Zephyranthes rosea* (Spr.) Lindl.

Common and widespread; mainly in habitation or former habitation sites where it was originally planted for ornament, but widely naturalised.

#### ZINGIBERACEAE

\**Zingiber spectabile* Grif.  
Occasionally cultivated.

#### COMMELINACEAE

*Commelina benghalensis* L.

Frequent and widespread on open ground, in permanently or semipermanently wet areas and dry ground especially mounds of soil and rubbish tips. Distribution has been increased by development in the specific area where vast quantities of soil have been moved around.

\**Zebrina pendula* Schnizl.

Found in old graveyard half a mile east of former settlement at I. du Coin, Peros Banhos, whence cuttings taken by author in 1984 for propagation in town area of Diego Garcia where it flourishes as an ornamental plant.

#### PALMAE

*Cocos nucifera* L.

Common and widespread throughout the island, in plantations, naturally, and on both lagoon and ocean shores.

*Hyphaene* sp.

One fan palm tree grows behind the old Manager's house at East Point.

*Phoenix* sp.

One mature tree with 3 large trunks at East Point between old Manager's house and former hospital just to the south.

\**Roystonea elata* (Bartr.) Harper (?).

3 young trees (imported 1980 ?) flourishing beside the town swimming pool; a further two just west between the pool and the gymnasium., and two more outside the gymnasium.

#### PANDANACEAE

*Pandanus tectorius* Park.

Two old trees at Point Marianne but also widely planted in the town for ornament.

#### POTAMOGETONACEAE.

*Thalassodendron ciliatum* (Forsk.) den Hart.

Abundant in the lagoon.

#### POACEAE (GRAMINEAE)

\**Andropogon bicornis* L.

Occasional and largely confined to a small area (of artificially created land made up of dredged lagoon bottom and now compacted coral/shell/sand) just north of the Small Boat Basin.

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*Bambusa vulgaris* Schrad. ex Wendl.

One large growth behind Manager's house East Point plantation.

\**Bothriochloa bladhii* (Retz.) Blake.

Occasional in town area.

\**Cenchrus echinata* L.

Rare; found in lawn between BEQs 9 and 11; possibly introduced with grass seed.

\**Chloris inflata* Link

Frequent but largely localised to an area of several hundred acres of reclaimed land fill of coralline material dredged from the lagoon; dominant in silt but less successful on drier, higher dredged material.

\**Cynodon dactylon* (L.) Pers.

3,665 pounds have been sown, mainly in the runway area and north. Common in mown areas and lawns. So far holding its own against longer established grasses. Already parasitized by *Striga asiatica*.

\**Dactyloctenium ctenoides* (Steud.) Bosser

Common and widespread. An early pioneer of the shore and where coral silt and sand have been recently distributed or redistributed.

*Digitaria horizontalis* Willd.

Frequent and widespread usually on rougher, natural, sandy soil.

\**Digitaria longiflora* (Retz.) Pers.

Frequent and widespread. An increasing component of mown areas. Dominant on Ball Field 2 in town. Makes a good lawn.

\**Digitaria setigera* Roth

Frequent and widespread usually in more recently developed areas.

*Eleusine indica* (L.) Gaertn.

Common and widespread.

*Eragrostis tenella* (L.) P. Beauv. var *insularis* Hubb.

Common and widespread. Dominant in mown areas at 'R' site.

\**Lolium perenne* L.

Large patch discovered March 1986 at west entrance to new gym; almost certainly introduced with grass seed.

\**Leptochloa uninervia* (Presl) H.& C.

Frequent but largely confined to about a 100 acres of former lagoon sand and coral flat which has been cut off from the sea just north of POL pier; a few specimens on boundary vegetation NW of runway.

*Lepturus repens* (G. Forst.) R. Br.

Frequent and widespread usually on rougher, natural, sandy soil.

\**Panicum maximum* Jacq.

Introduced from Boddam, Salomon Islands by author in 1985 and established at BOQ 3.

\**Paspalum nutans* Lam.

Occasional and scattered. Prefers drier ground than *P. vaginatum*. Is increasing in town area.

*Paspalum vaginatum* Sw.

Common and widespread especially in semi-permanently wet places. The only grass in tidal inlets. Dominant in some places.

*Pennisetum polystachion* (L.) Schult.

Reported (Stoddart 1971) Northwest Foint and Foint Marianne but not found this survey possibly because of extensive development at the two reported sites.

*Stenotaphrum dimidiatum* (L.) Brong.

Common and widespread especially in richer ground. Makes a good lawn.

*Stenotaphrum micranthum* (Desv.) C.E. Hubb.

Frequent and widespread especially on sandy shores.

\**Sorghum halepense* Pers.

Several specimens discovered April 1986 at incinerator site between Runway and South power plant

*Zea mays* L.

Cultivated with little success.

#### TYPHACEAE

\**Typha domingensis* Pers.

A large patch near the North power plant may have been introduced from Louisiana USA in ca. 1979. Development threatens this site and the author has therefore re-established with seed in water run-off draining ditch just east of Airport Terminal building.

#### CYPERACEAE

\**Cyperus* c.f. *aromaticus* (Ridl.) Mattf. et Kük.

Occasional and confined to a small area just south of where POL pier meets DOL road.

\**Cyperus difformis* L.

Occasional and localised to town area just west of BEQ 13, and just NE of runway.

*Cyperus dubius* Rottb.

Common and widespread. A frequent component of mown lawn areas.

\**Cyperus iria* L.

Occasional and localised to just NE of runway.

*Cyperus kyllingia* Endl. [Kyllingia colorata (L.) Druce]

Occasional and localised mainly at Point Marianne where it is plentiful, East Point, just NE of runway and just west of BEQ 13 in the town area.

*Cyperus ligularis* L.

Common and widespread. Open ground. Component of beach crest vegetation. Often on poor soil in dry places.

\**Cyperus polystachyos* Rottb.

Common and widespread especially in damp places.

*Cyperus rotundus* L.

Occasional and localised to main track of East Point Plantation.

*Cyperus sphacelatus* Rottb.

Occasional and localised. East Point, town area.

\**Cyperus surinamensis* Rottb.

Occasional and localised. Several specimens found vicinity POL pier/DG 1 road and SW of runway where it is increasing, and NE of runway. Also in town area just West of BEQ 13.

*Eleocharis geniculata* (L.) R. and S.

Common and often dominant on permanently or semi-permanently wet open ground throughout the island

*Fimbristylis cymosa* R.Br.

Common, widespread, on usually open ground varying from almost pure sand on the beach crest to wet places inland. A pioneer of naturally or humanly disturbed soil. Very variable in habit depending on soil and wetness of ground.

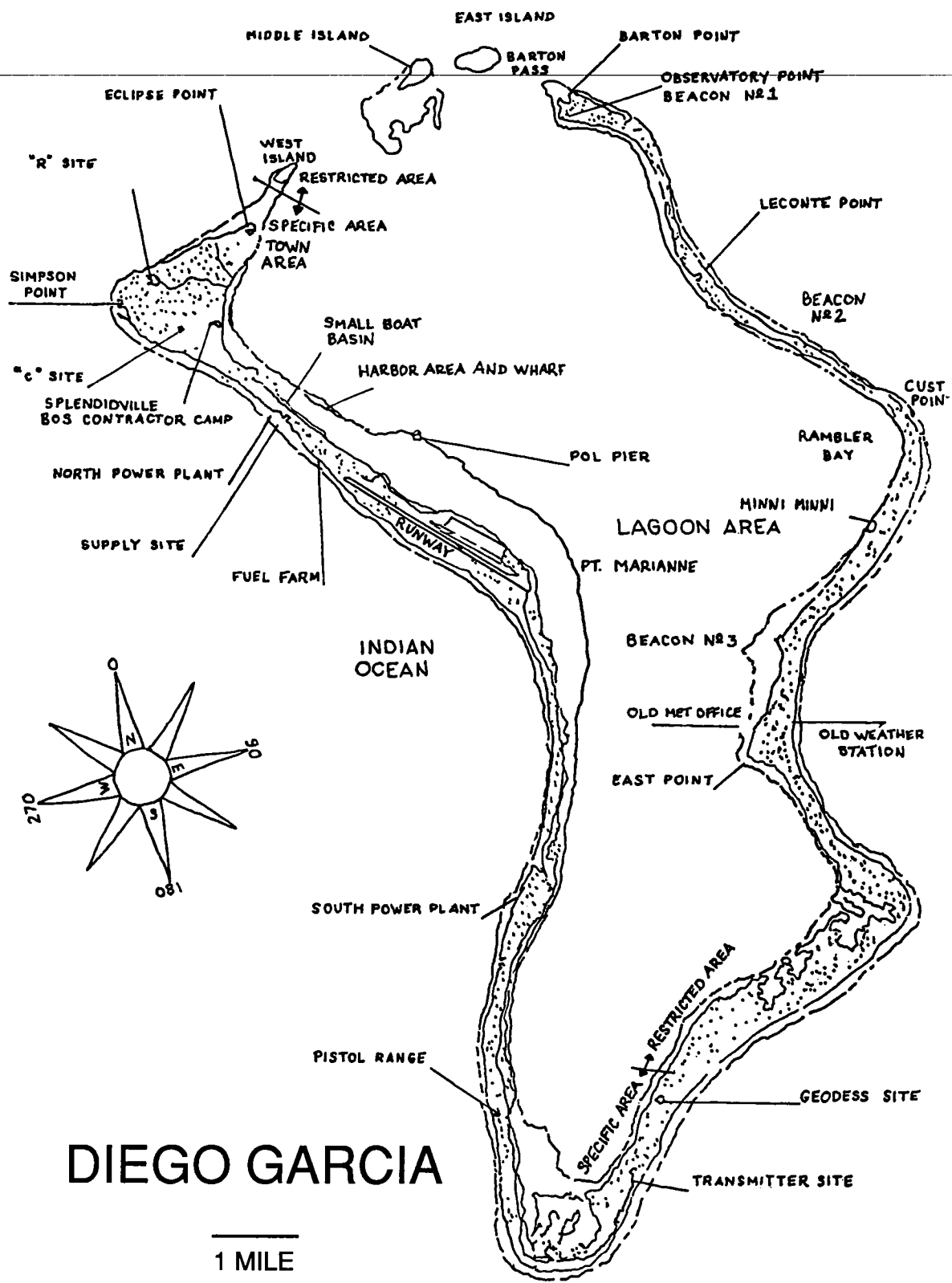
## ARACEAE

*Alocasia macrorrhiza* (L.) Schott.

Frequent and widespread especially near former habitation sites at East Point, Minni Minni and Point Marianne. Also grown in modern habitation sites and in town for ornament.

*Alocasia plumbea* van Houtte.

Less common than *A. macrorrhiza* but with a similar distribution. Also in permanently wet area between 'C' site, 'R' site and behind Splendidville, and just NE of runway.

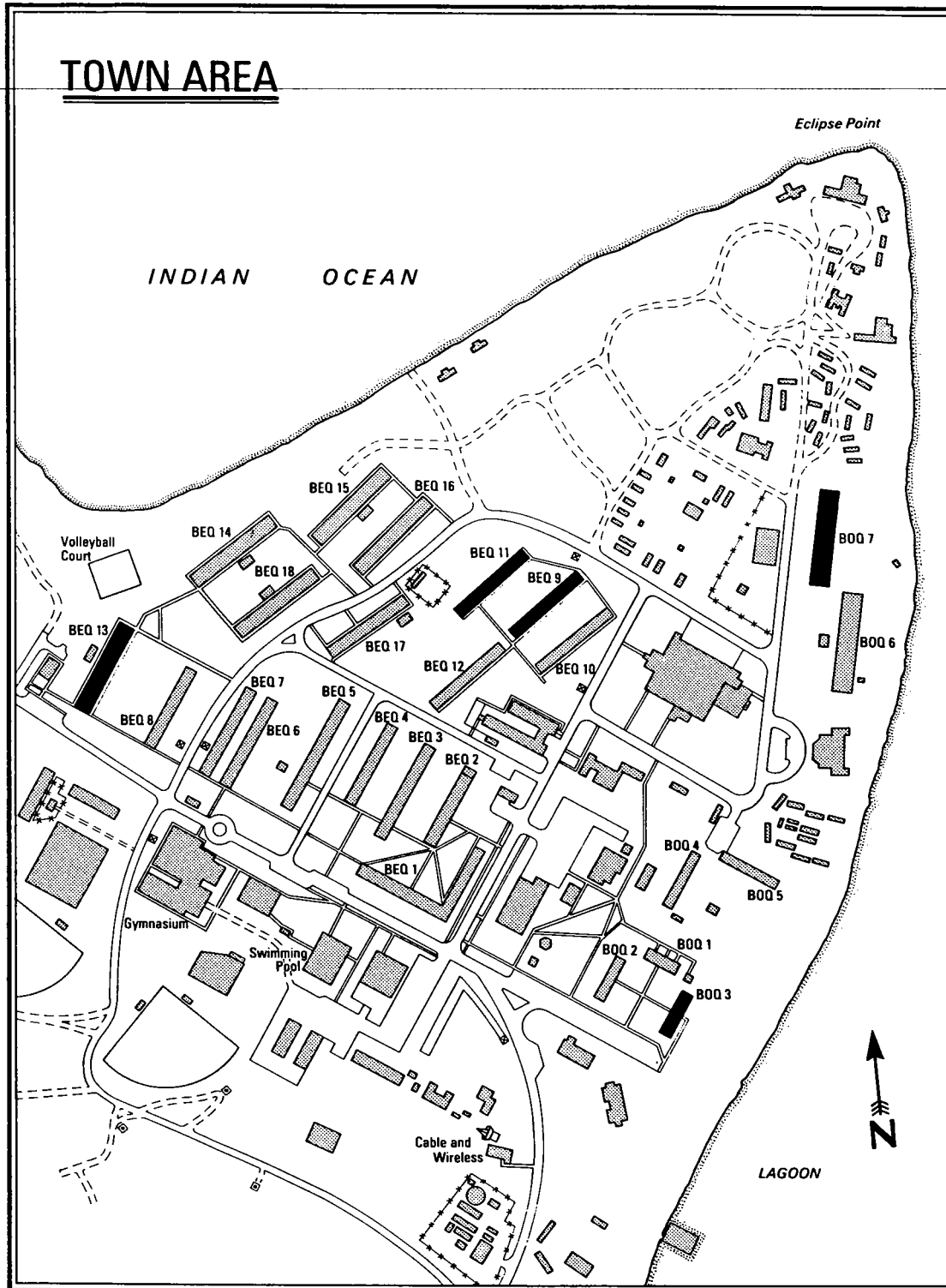


# DIEGO GARCIA

1 MILE

Map 2. Detail of the Atoll

# TOWN AREA



Map 3. Detail of Town Area