

THE OUTDOOR RECREATION POTENTIAL  
OF THE GARDEN ROUTE AREA

A study of the demand for outdoor recreation in  
a mobile population and evaluation of the Garden  
Route Area as a supplier of this demand

by

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## A C K N O W L E D G E M E N T S

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THE OUTDOOR RECREATION  
POTENTIAL OF THE GARDEN ROUTE AREA

1. INTRODUCTION

1.1 Motivation

1.1.1 Recent newspaper headlines announced: "Coastal plot prices up 500 per cent - SOUTHERN CAPE LAND SCRAMBLE" and reference was made to the big demand for plots at coastal resorts between Mossel Bay and Knysna, and the holiday trade's interest in such big hotel deals as R400,000 at The Wilderness. "Local authorities and businessmen feel the upsurge in demand for property, may indicate that the Southern Cape is set to take over<sup>as</sup> the "holiday mecca of the country".<sup>(1)</sup>

1.1.2 While the echo of these super cents in the till is deadening even the sound of the sea to some, other's concern is sending a chill down the spine. Many, during their active lives, craved for a slower pace of living. Many found it here, and called it Hunter's Home, and Leisure Isle. Now they see man's restlessness give a new scale to his pursuit of leisure.

1.1.3 In these parts, which less than two centuries ago, was virtually cut off from the outside world, they experience the benefits of modern transportation, when they see today's date on the daily paper brought from 300 miles away. They have not feared the floodtide of the sea and built their houses near the water's edge. But the new floodtide? They have heard what it has done elsewhere.

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(1) The Cape Argus. June 27, 1968 - p. 6.

The tourist inundation - "these mass movements ... like a floodtide .... they are creating a wear and tear never known before. Probably hardest hit is the coastline. All over the world it is being developed and disfigured, primarily to cater for holiday-makers. In England, Wales and Northern Ireland, only about one quarter of the 3250 miles of coast remains free from development. In continental Europe, many believe it to be too late to save the coasts of Italy, Spain and Portugal."<sup>(1)</sup> "And in South Africa? He hears that Natal "became alarmed at the possibility of the North Coast being lined with empty and redundant 'townships', as the South Coast was after the boom in speculation in 1940 and 1950."<sup>(2)</sup>

- 1.1.4 Other experts in South Africa predict that the present demand for outdoor recreation will quadruple by the end of the present century. One reason being "in a plateau country like South Africa, the annual holiday to the sea is not a conventional pilgrimage, or a luxury, but a physiological necessity with profound effect on the physical fitness of inland labour resources".<sup>(3)</sup>
- 1.1.5 Is this the cause of the land scramble in the South Cape? It has no other valuable resources. There was a scramble here for gold many years ago, but the golden beaches, the blue sea, the green hills and mountains - these great outdoor assets are the sought after nuggets today. This study, which sets out to assess the potential for outdoor recreation in the Garden Route Area, is pertinent only if

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(1) Robert Arvill: Man and Environment. Penguin Books 1967 -p.20  
 (2) G. C. Scully in: Natal North Coast Survey. p. vii.  
 (3) T.C. Robertson: Recreation in South Africa at Present and by the end of the century"- S.A. Nature Union Conference Paper. Pretoria. April, 1968.

there is a proven demand, or a potential demand for such facilities and if the data collected from this survey would serve the optimisation of benefits derived from this use or alternative uses of the available resources.

- 1.1.6 This study could in its scope serve as a pilot survey to pinpoint the areas, or fields, requiring intensive full-scale investigation if a valid development plan or policy is to be derived. Such a development plan could ensure that principles are established by which opportunities could be assured for all our people to enjoy the benefits and beauties of this unique stretch of our country, the Southern Cape, Garden Route Area.
- 1.1.7 This study must thus also consider the human aspect - not only that of the visitor whose time allows him the transient enjoyment of its beauties, but those who have retired here and the local residents earning their living from the land, the forests, industry and services. On the present population's initiative and far-sightedness to strike the balance between exploitation and conservation of resources, and on the visitors' satisfaction, will the success of any scheme depend on the first and last resort.
- 1.1.8 All spheres of human activity have been subjected to intense study, specialization, and now programming - planning par excellence. Many a visitor, yes the bigger proportion, is seeking an area where he can spend his leisure free from such regimentation. The planner will therefore see to it, that his planning, which requires assessment of facts, identification of problems, selection of priorities and aims, does not obtrude on the visitors' natural spontaneous

exploration of a great outdoor recreational opportunity.

1.1.9 Both the visitor-consumer and the resident-supplier can benefit from such a study. To date, very little scientific work has been published on the regional development of this area. Without proper research into problems, needs and desires, provision of facilities may be arbitrary and fragmentary. People's expressed desires often differ from the subconscious motivation and this has to be borne in mind.

1.1.10 Furthermore, the exact benefits derived, and to be derived from the recreation resources, should be identified to ensure that exploitation does not deplete or completely destroy the supply.

## 1.2 Method

1.2.1 The study covers a wide field and as such is merely a reconnaissance of the area which could be used to indicate the most urgent sphere requiring intenser study. No specific problem will be solved but rather some light cast on the whole field.

1.2.2 The tools to be used are: the knowledge and experience of the writer through professional practice for 18 years as a Land Surveyor in the area, the extraction of data from available sources, further personal purposeful investigation of the area, and interviews with local authority administrators and information supplied by them on questionnaires.

1.2.3 For a valid development plan to be derived, it will also be necessary to test consumer demand - both on site and outside. For the latter it was hoped to use the services of a motoring journal. However the request could unfortunately not be granted due to lack of space. Recourse must therefore be had to other national recreation surveys. A full-scale visitor survey in the area is beyond the scope of this limited study, and in any case the real visitor influx only occurs at the end of the year. Therefore only small pilot surveys were done at just two resorts in the area: Hartenbosstrand, Mossel Bay and Warmbad near Calitzdorp. The results of these are of limited value since there were only a few, ex-season-type visitors. The collection of information could also not be personally supervised thus exposing it to bias.

### 1.3 Aim

- 1.3.1 The aim of this study is therefore to assess what possible demands could be generated for outdoor recreation in general, considering present day use and national and international factors of growth.
- 1.3.2 Further the outdoor resources of the area are to be investigated and compared with those available elsewhere. This potential will have to be weighted against the distance that the area is away from the great metropolitan concentrations of population.
- 1.3.3 The use of these resources for outdoor recreation purposes will have to be compared with possible alternate uses. Authorities are concerned about the economic state of the

area: "An analysis of demographic and economic conditions clearly shows that the South Western Districts are backward and that drastic steps are needed to afford the indigenous ethnic groups a stable livelihood. The main causes of this economic stagnation appear to be the comparative deficiency and costliness of transport services. The establishment of a deep sea harbour at Mossel Bay and other transport facilities and the drafting of a plan for development are recommended." Further recommendations were for investigation into agriculture and the possibility of a pulp industry.<sup>(1)</sup>

- 1.3.4 The present use of outdoor facilities in the area is to be determined, and the possible future demand assessed in the light of factors mentioned above.
- 1.3.5 In conclusion a statement of policy is to be made as to how optimum benefit and optimum satisfaction is to be achieved.

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(1) S.P. Calliers: Summary of Report of Regional Survey of the Western Cape by Natural Resources Development Council.

## 2. OUTDOOR RECREATION - WHY AND HOW?

### 2.1 What is outdoor recreation.

2.1.1 South Africans have traditionally been people who loved the outdoor life. To them, the farmers whose daily living consists of battling with the natural elements, outdoor recreation starts with the sound of rain on the parched land. For the farmer's wife, who still does her share of manual work on the farm, the best recreation might be a telephone call to the neighbour's wife - or a trip to town. However, the majority of us have come to live in the towns and the cities over the last half century. We yearn to get back to the outdoors, and we need to. As the Prime Minister, Mr. B. J. Vorster said in 1961, speaking then as Minister of Arts, Education and Science: "recreation (in nature) is absolutely essential in our complex modern way of life, in fact we must recognise that public recreation is as basic as public health, education or social services." (1)

2.1.2 The wording "outdoor recreation" is comparatively new, though as has been said, it has unconsciously been part of the South African way of life. Already in 1923, a tourist publication had the title: "South Africa: Land of Outdoor Life". But of course it goes much further back. Outdoor recreation is very much linked with movement, travelling or tourism and the thought was expressed by Prof. E.W.N. Mallows in a lecture that man seems to

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(1) Quoted by J.P. Kriel: *The Planning of Public Recreation*, S.A. Nature Union 1968.

have a built-in urge to move - "man has been stationary, only due to the necessity of growing food".

2.1.3 For a definition of outdoor recreation, that used by J.A. van der Merwe would be apt: "open air or outdoor recreation is the utilization of the outdoors environment for pleasure and welfare".<sup>(1)</sup>

## 2.2. What Makes Up The Actual Recreation Experience.

Marion Clawson maintains that five distinct phases can be identified.<sup>(2)</sup>

2.2.1 There is first of all, the planning and preparation stage. Since one particular form of recreation often becomes to a man or a family, the dominating one, it takes up an important part of their living. This anticipation period may occupy as much time, and provide as much satisfaction, as the recreation activity itself. It has also been found that of the total expenditure for all purposes, the outdoor recreationalist spends half in his home community, i.e. buying equipment, petrol for the journey, and laying up groceries, etc.<sup>(3)</sup>

2.2.2 The second phase is the travel to the site. This of course varies greatly - in time and cost, from the short run to the beach, to the long trip to a distant park with perhaps a few overnight stays. In enjoyment it varies from the negative frustrating blood and ear-boiling crawl, to the very enjoyable drive, which is very often the first or only

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(1) Quoted by Dr. P.S. Rautenbach in Paper at Convergence of S.A. Nature Union, 1968.

(2) Marion Clawson: Land and Water for Recreation - p. 41

(3) ibid - p. 111.

reason for the outdoor trip. Whether it is a desire to get there, or just a force driving one to get away from it, as suggested by an investigation in the U.S.A., which found that most people from flats or single-quarters do not choose to spend their spare time there, the fact is, that driving is done for pleasure. In S.A. the share or so called "other" trips per week by car are 33.5%, compared to 45.7% for commuting, and 20.8% for shopping and in the U.S.A. the figures are: 38% for pleasure or social trips, 45% for commuting and 17% for shopping. Because of our long distances, and the fact that our roads are not yet too crowded, it is also found in S.A. that approximately 20% of the total mileage of motor-cars is on trips of more than 500 miles. (1)

2.2.2.1 We know that the expenditure on our road construction is very high, but I do not think the road designers have actually weighed that third contribution that the recreation users make to its upkeep, and are consequently not giving him his money's worth in ensuring that the drive will also be a pleasurable experience. That is definitely an aspect to be considered in the future. With modern machines at his disposal, it is now possible for a designer to get from aerial photographs, the view of the landscape that the motorist will one day see when the road along any projected route is finished.

2.2.2.2 This is a new tool which may be used to ensure that driving along our future expressways, will exploit the full pleasure that our countryside, and man's improvements on it, can offer to the

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(1) P.J. Welgemoed: Some Aspects of the Use and Ownership of Motor Vehicles in South Africa - p. 72-76.

passing motorist. An added benefit will be the increased safety of travel on them. The authors of "Man-made America" Christopher Tunnard and Boris Pushkarev (Yale University Press) put a rating on certain highways according to their aesthetic character. They found almost without fail, that as these values decreased from excellent to monotonous, the highways showed a proportionate increase in road fatalities from 1.15 to 7.00 per 100 million vehicle miles for 1957-1958.

2.2.2.3 Total expenditure en route, has been found to be about one fourth the cost of the whole trip, (1) i.e. for trips of more than one day duration.

2.2.3 The third phase of the recreation experience is that which is actually received on site. This of course is most varied and may actually comprise in one trip many different activities. If the trip is extended to more than one day, it may take in visits to more than one area. A survey of outdoor recreational activities in California gave the following figures for 1958. (2)

2.2.3.1 Picnicking a total of 48 million visitor days (a visitor day is the attendance of one person at a picnic ground on one day).

2.2.3.2 Camping: 13 million camper days (i.e. a camper-day is where a night is spent in the outdoor area).

2.2.3.3 Riding and Hiking -  $4\frac{1}{2}$  million man-days of use on the 17,000 miles of combined riding and hiking trails.

2.2.3.4 Swimming: 70,000 pools were available and an estimated 230,000 feet of effective sea-shore. For 1980 it is estimated that 700,000 feet of sea-shore will be required.

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(1) Marion Clawson op. cit p. 111.

(2) California Public Outdoor Recreation Plan. p. 31-65.

- 2.2.3.5 Boating is measured by access units. In 1958 there were 15.3 boats per thousand population and 1275 access units were available. (75 boats will operate from one access unit on the peak day and 50 on an optimum day, at this standard 1,925 access units were actually required).
- 2.2.3.6 Fishing: The total of ocean shore fishing was about 4,000,000 days with similar figures for the fresh water lakes and reservoirs and another  $3\frac{1}{2}$  million days for deep sea fishing.
- 2.2.3.7 Hunting: 650,000 hunting licenses were sold.
- 2.2.3.8 Snow skiing: Accounted for 1 million visitors and snow sight-seeing for another 1.2 million.
- 2.2.3.9 All these and many other related activities represent the total of the 3rd phase of the recreation experience.
- 2.2.3.10 No comparative figures for total number of partakers is available for South Africa. However a recent study reveals that the recreation pattern here is very much the same as California, where in 1958, a study of passenger-miles logged on one-day round trips, which was about half the total recreation trips, gave the following figures<sup>(1)</sup>.

<u>Table 1</u> <u>Purpose of Trip</u>	<u>Passenger Miles</u> <u>Million</u>	<u>Percent.</u> <u>of Total.</u>
Sight-seeing & Study	11.5	47.8
Swimming & Acquatics	4.4	18.3
Picnicking	1.7	7.0
Hunting & Fishing	1.2	5.0
Boating	1.0	4.3
Winter Activities	0.7	3.0
Riding & Hiking	0.2	.8
Other	3.3	13.8
	<u>24.0</u>	<u>100.0</u>

(1) California Public Outdoor Recreation Plan. P.29.

2.2.3.11 For Johannesburg, the following figures, which agreed very closely with the figures for the whole Pretoria, Witwatersrand, Vereeniging complex, were found: (1)

Table 2  
Percentage participation in Outdoor Activities:

	<u>Percentage</u>	<u>Reduced* Percentage</u>
Pleasure Trips & Bird Watching	34.8	43.6
Swimming	21.8	27.4
Picnicking	12.0	15.0
Fishing	2.4	3.0
Camping	2.5	
Boating	1.5	2.0
Mountaineering	0.7	1.0
Hiking	6.3	8.0
Sport	18.0	
	<hr/>	<hr/>
Total	100.0	100.0
Total without Camping & Sport	79.5	

\* Reduced percentages are derived by taking the proportion of the total without camping and sport (i.e. 79.5%) to make it comparable with the California study from the above table.

	<u>California</u>	<u>P.W.V.</u>
	<u>%</u>	<u>%</u>
Sightseeing	47.8	43.6
Swimming	18.3	27.4
Picnicking	7.0	15.0
Fishing	5.0	3.0
Boating	4.3	2.0
Hiking & Mountaineering	0.8	9.0

2.2.3.12 The figures are of course not strictly comparable. For example, the California study measured, as mentioned, only about half the recreation activities e.g. hiking from the home would not be measured. However, it is sufficient to show trends. Generally it is recognised that 70 to 80 per cent of outdoor

recreation nowadays is oriented towards available open water surfaces and water edges and that driving for pleasure is the most popular single activity.

2.2.4 The fourth phase of the activity, the trip home, is in some respects the same as the third i.e. spent in travel, but now the attitude of the user is different, the children perhaps more irritable and restless. The wise recreationist will plan his travel back so that it also adds to the sum total of his enjoyment and does not by frustration during overcrowded periods of travel, destroy the benefits of his trip.

2.2.5 The final phase, that of recollection, can also contribute considerably to the total. Reviewing the outing when proudly showing your pictures to friends, or relating your own mishaps, may give you some enjoyment which the actual event did not have. "No small part of the payoff of the whole experience takes place here." (1)

### 2.3 Present Use and Projected Demand for Outdoor Recreation Resources.

2.3.1 We have seen above some of the figures of user demand in different activities at outdoor recreation areas in the state of California. Figures for the whole United States, show a demand growing at almost 10% per year - one of the fastest rates of growth for basic resources. In a study: "Resources in America's future", the expected rates of growth are given for various resources based on medium

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(1) Marion Clawon. op. cit. p43.

projections. The use of metals is expected to increase by 3.4 per cent, energy 2.9 per cent, farm products 1.5 per cent, timber 2.8%, water 1.5% but visits to National Parks and National Forests etc. by 6.6% per year. (1)

2.3.2 The factors affecting growth in outdoor recreation have been studied by many and it is generally agreed that the main components apart from growth of population, are included in the so-called "TIM-factor" i.e. time, income and mobility increases. Marion Clawson noted in 1960 (1) that over the previous 40 - 50 years, the annual population, total leisure available and gross national product per capita each grew at an average 2 per cent. per annum but travel per capita had grown at 4.5 per cent.

2.3.2.1 In South Africa the total population increase from 1904 to 1960 is equivalent to an average growth rate of 2.3 per cent per year.

The total leisure available has not been measured here but an equivalent growth to the United States can be assumed.

For income, an average annual growth rate of 5.2% a year expressed in real terms has been calculated by Dr. H.J. van Eck (2) while the Economic Development Programme has projected an annual growth rate of 2.6 per cent in the per capita consumption. (3) Apart from the absolute increase there will be an additional relative increase in expenditure on non-essentials, the income elastic items of which recreation is an important one.

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(1) Land and Water for Recreation p. 34-36.

(2) STATS - Oct. 31, 1967.

(3) SA Statistical Year Book 1966 p. 3.

To arrive at the total increase in mobility, calculations will have to be done using the increase in all the means of transport. Otherwise an estimate could be derived from a consumer survey. There are however trends which can be noted here:

A car ownership survey in S.A. showed that the average yearly increase in total mileage of motor vehicles amounted to 9.7% for 1956-1961 and 8.7% for 1961 - 1965. (1)

Passenger journeys by train (other than suburban journeys) increased from 25.237 in 1965 to 29.958 million in 1967, (2) i.e. a growth rate of 9.5% per year.

Passengers by road motor services increased from 9.281 to 10.247 million in 1965 to 1967 (3) i.e. a growth rate of 4.7 per cent per year.

Passengers flown by S.A. Airways on Regional Services increased from 52,065 to 69,923 and passenger-miles from 25.920 to 35.121 million in the years 1965 to 1967 (4) i.e. growth rates of 15% and 16½% respectively.

2.3.2.2 A further factor that has not been considered, is the change in population structure. The elements here are:

A greater percentage of young people who are not yet working,

An increasing percentage of older retired people who need recreation, and

The emergence of a new middle-class amongst the non-white races. Sociologists have found that with them, ownership of motor-cars, radio-grams etc. will suggest status, particularly when

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(1) P.J. Welgemoed - Some Aspects of the Use and Ownership of Motor Vehicles in South Africa.  
 (2) Bulletin of Statistics - June 1968 - p. 139.  
 (3) ibid p.140.  
 (4) ibid p.145.

they are appendages to leisure. Since the status cannot readily be manifested by the area they live in, it is done by the car that is owned.

A calculation has been done which shows that by equating the spending power of other races in South Africa to a proportion of spending by Whites, according to the population of 1962, a total spending level of 4,982,000 "equivalent Whites" was found. "If and when the standard of living of our Non-White population starts rising, our current "equivalent Whites" population of 5 million will climb to its true figure of 17 million - a potential increase in the market of over 300 per cent."<sup>(1)</sup>

2.3.2.3 And lastly, the pressure of urban living must be mentioned. It is well-known that urbanites are subjected to stresses such as produced by polluted air, overcrowding and lack of physical activity. All these are relieved by recreation in the outdoors of Nature. Furthermore, in his work he is caught up in the mechanisation, automation process and suffers an alienation from the product he is making. The resulting feeling of inability to affect the situation around him, may be the biggest force drawing him to his car where, once he is behind the wheel, he does feel master and can at least drive away from his battery existence. At the time of its formation, our new Department of Sport and Recreation declared its main task to be "to save South Africans from the dangers of monotony and boredom".

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(1) Mr. W. Langschmidt: Paper at Conference of the National Development and Management Foundation of S.A. Feb. 1965.

2.3.2.4 The multiplied effect of all the factors have found to produce the earlier mentioned annual increase in demand of 10% in outdoor recreation in America <sup>(1)</sup>. For South Africa an estimate will be made in the Section on Tourism (Chapter 3).

#### 2.4 Recreation Demands on Land.

2.4.1 According to the scene and nature of the activity, different demands are placed on the land for outdoor recreation activities.

2.4.2 American studies have considered recreation areas to fall in four zones according to their distance from the user's dwelling: <sup>(2)</sup>

Zone 1: These are areas within the community's daily work and residential areas. Here playing fields, parks, swimmingpools and nearby beaches are important.

Zone 2: The recreation sites that are within approximately 40 miles from the dwelling and that would thus be used for one day outings.

Zone 3: An area within approximately 250 miles where week-end or week-long vacations could be spent.

Zone 4: The area beyond this zone where longer vacations would be spent and which could therefore also include international travel.

2.4.3 Marion Clawson considers that outdoor recreation areas are basically of three types according to their situation with respect to the users: <sup>(3)</sup>

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(1) Mentioned in 2.3.1 from: Marion Clawson - op. cit. p.36.  
 (2) California Public Outdoor Recreation Plan Part I p. 17.  
 (3) Land and Water for Recreation ibid p.15.

- 2.4.3.1 The user-oriented areas are the parks etc. of Zone 1. Within the community, these are most heavily used and activities dominate while site characteristics are less important.
- 2.4.3.2 Intermediate areas to which users are generally prepared to drive up to 100 miles and more favourable sites are therefore selected though the activities to be performed there are still important. Beaches and other water areas therefore feature largely in this category and these areas are generally bigger in size.
- 2.4.3.3 Resource-based sites owe their attraction to some unique characteristic which may not be available in the home area and thus draws the users over long distances. Some of these are: a different climate, a coastal resort for inland residents, a game reserve, national parks and features of cultural or scientific interest. The characteristic here determines the size, from the few square feet occupied by a national monument, the subterranean extent of caves (if these can be classed as "outdoor" areas?) to the 200<sup>0</sup> square miles or more of a national park or game reserve.
- 2.4.4 The Garden Route Area is situated outside the day-trip range of large urban concentrations and it is therefore, except for the small proportion of local residents, a resource-based area. Since travel to the site is therefore an essential part of the experience, and as has been mentioned, outdoor recreation demand is found to agree closely with the amount of travelling, the next chapter will deal with this aspect of tourism, as it is popularly called.

### 3. TOURISM AND ITS GROWTH

#### 3.1 General

3.1.1 Tourism today is no longer regarded as in the 19th Century when "tourist" was often used contemptuously. As tourists today, all people are included who visit a country, while planning to return home after a short time. The money they spend is also derived from home, and as such forms an item in the foreign exchange earned by the host country. In this concept of tourism, are therefore included, not only holidaymakers, but religious pilgrims, business visitors, students, diplomats and visitors for health reasons.

3.1.2 Our South African Department of Tourism classifies overseas tourists as holiday, business or educational visitors, though no doubt most of the businessmen, and all the students, will also spend some time in leisure and thus use our recreational facilities. The number of overseas visitors for the last 5 years, according to purpose of visit, is as follows: (1)

TABLE 3

	Holidays	%	Business	%	Study	%	Total
1963	186 004	85.7	20 581	9.5	10,420	4.8	217,005
1964	190 965	83.3	26 544	11.6	11,743	5.1	229,252
1965	184 546	81.3	30 686	13.5	11,667	5.1	226,899
1966	212 549	82.7	31 401	12.2	13,058	5.1	257,008
1967	225 839	82.0	34 294	12.5	15,405	5.6	275,538
Average Annual Growth		5%		15%		10%	5½%

3.1.3 The South African Tourist Corporation (SATOUR) views with

(1) Satour Annual Report 1967 and Dept. of Tourism Statistical News Release.

satisfaction the achievement of the  $\frac{1}{4}$  million mark during 1966 and considers that its own contribution towards the promotion of tourism has caused a substantial share of this growth. In an SABC review, the full factor of growth was thought to be formed by the following contributing causes:<sup>(1)</sup>

"Improved and cheaper means of transport,  
New Road links,  
Package tours,  
Tourist class fares by air and shipping lines, and  
more economic ways of living in host countries."

3.1.4 However, as has been mentioned in 2.3.2, there are other potent factors such as increase in income and available leisure time, which contribute to the growth. These factors have of course not only affected South Africa, but most countries of the world which are alive to the potential value, and can offer tourist resources in a peaceful and stable political climate. Nigeria for instance, built up a tourist flow from 6,000 to 136,000 in the three years 1962-5. However, as a result of the Civil War, it was doubted whether the 1967 figure would reach four figures,<sup>(2)</sup>

3.1.5 The Director of the London Office of the Zambian National Tourist Bureau, forecast that if the Government spent K4 million a year on tourism, it could be certain of K20 million a year in 5 years time.<sup>(3)</sup> (1 Rand = .9797 Kwacha)  
Other African countries like Kenya are thriving on a healthy foreign and economic policy geared to attract tourists. And so do many European countries:

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(1) South African Broadcasting Corporation: Current Affairs.  
(2) Business Efficiency, Cape Town, Feb. 1968 (p. 32).  
(3) Standard Bank Review - August 1968.

3.1.5.1 "In Austria, roughly 40 million overnight visitors contributed 12,854 million Austrian Schillings during the period November 1963 to October 1964 and this figure covered the foreign trade deficit for that year.

3.1.5.2 "In Spain, 10 million American tourists spent approximately 600 million American dollars during 1962. In 1964, Spain gained 866 million dollars from 14 million foreign visitors. No wonder that Spain is regarded as the centre of the tourist industry of the world." (4)

In world tourism, mainly the United States, Germany and Britain are the losers to the advantage of Spain, Austria, Italy and France. The IUOTC (International Union of Official Travel Organisations)<sup>(5)</sup> has calculated that in 1963, twelve countries only accounted for 82% of all tourist expenditure, that between 1950 and 1963, receipts from international tourism increased by 331% (R1,550 million in 1950 to R6,661 million in 1963, i.e. an average annual growth of 12%) while during the same period, world tourist arrivals increased by 259% (from 25 to 91 million i.e. and average annual growth of 10%). The South African Tourist Corporation put the figures for 1965 as R8,000 million and 117.7 million international travellers i.e. increases of 7% and 12% over 1964).<sup>(6)</sup>

3.1.6 To a larger or smaller extent, the national economies of several countries are thus dependent on the foreign currency earned by the tourist trade. The IUOTO considers that the tourist receipts of 24 out of 60 countries were among the top three items of currency earnings in 1963, and that

(4) M.C.T. Schultz-Paper on Tourism for Conference of National Development and Management Foundation of S.A. Cape Town, June '65

(5) Barclays Trade Review, March 1967.

(6) Barclays Trade Review, March 1967 - p. 10.

tourism as a single enterprise, has taken first place in world trade.

- 3.1.7 But since there are still many adverse factors hampering expansion of the industry, the Economic and Social Council of the United Nation's Organisation, unanimously requested that 1967 should be International Tourist Year.

It was of course realised that tourism is not only good business, but goes a long way towards improvement of international relationships by the stimulation of closer contact between people of different countries, and the resulting mutual appreciation of each other's culture.

- 3.1.8 Due to the political and economic state of many countries, the ideals of international tourism cannot always be pursued to the full. In fact, in 1965 the United States, because it was losing so many dollars through the pockets of American tourists, announced that travel restriction would be imposed. Travelling abroad is however one thing that the American traveller is not prepared to forego. Now we hear that Germany is surpassing the United States - its people are already spending on tourism, more per head of population than the Americans.

- 3.1.9 The prospects for the future are that international travel will increase steadily as it comes within the ambit of more and more people.

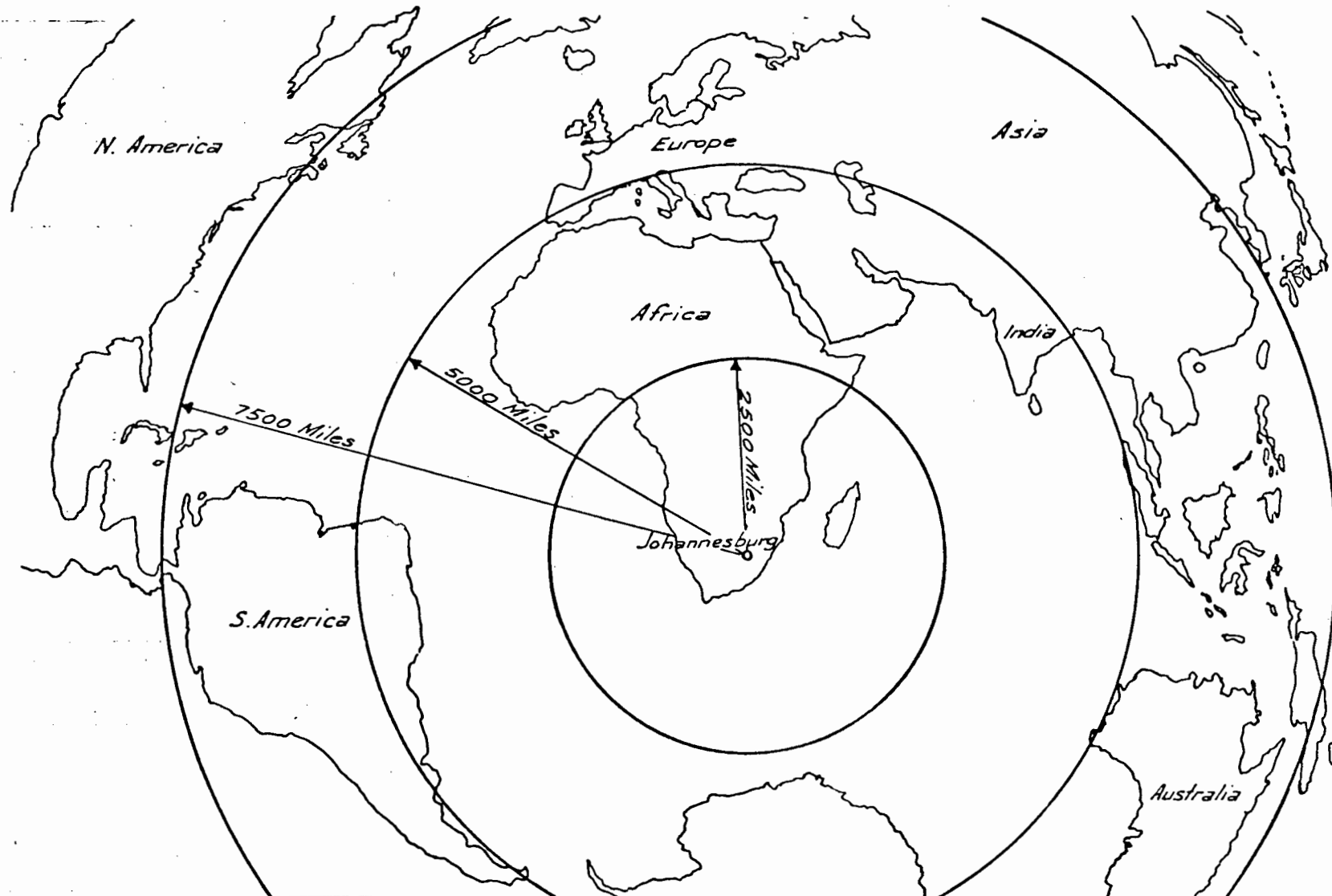
- 3.1.9.1 Travel is no longer for the rich alone - it is estimated that already one fifth of all continental bookings made by Britons are by families earning less than £80 per month. Furthermore, as income rises, relatively more money is available

to spend on luxury and semi-luxury discretionary articles. In the U.S.A. the proportion was estimated at  $33\frac{1}{3}\%$  of income in 1960 and estimated to rise to 50% by 1970.

- 3.1.9.2 In France a government survey showed that only 7% of the population took a foreign holiday in 1963.
- 3.1.9.3 In America 60% of the population has never spent a night in a hotel or motel and 50% has never been more than 200 miles from home.
- 3.1.9.4 Air transport is already having a marked impact on travel (see later) and is bound to have much more in future. Experts forecast that if air transport maintains the same growth rate, approximately 770 million persons will make use of air transport by 1980. South Africa, which to date must have been regarded by many as "way-out", will benefit comparatively more from future shorter travel time, than other areas which are already close in to the important "generating areas" for travel. See Figure 1 for South Africa's air distance from world capitals.

## 3.2. South Africa and Tourism

- 3.2.1 What is South Africa's present share of international travellers and their money and what can we expect in future? We have seen above (paragraphs 3.1.2 and 3.1.5) that we received in 1965 nearly one quarter million and that is from a potential of 117.7 million, i.e. 0.2%. Proportionately this would have given us only R16 million of the estimated revenue. It must have been more however, since due to our distance from the tourist generating areas, they spend on an average a longer time here than in the European tourist areas. The actual figure spent



**SOUTH AFRICA IN THE WORLD**  
GREAT CIRCLE DISTANCES FROM JOHANNESBURG.

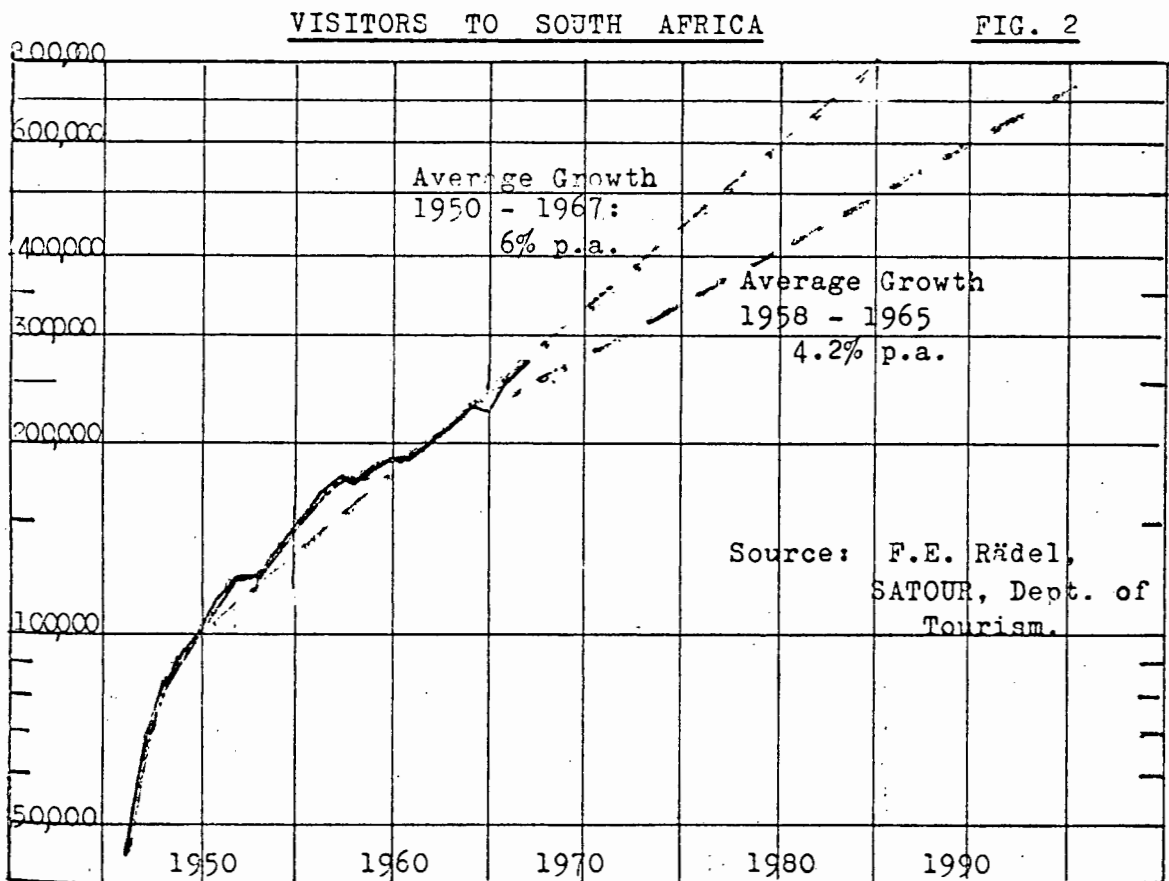
"SCALE" :- 1" = 2000 MILES.

Fig. 1

by inward tourists in South Africa is difficult to derive, as it is for all types of tourism. For 1963, S.A.T.O.U.R. estimated a R75 million revenue from in-tourism, but the Reserve Bank's figure was about half of that. Today it is estimated at between R50 and R90 million per year <sup>(1)</sup> - a government spokesman gives it as 6% of the foreign exchange annually earned by South Africa. <sup>(2)</sup>

### 3.2.2 Numbers of Intourists

The figures of number of visitors are however available. These have been plotted in the histogram (Fig. 3) and the graph on logarithmic scale (Fig. 2) to show annual growth.



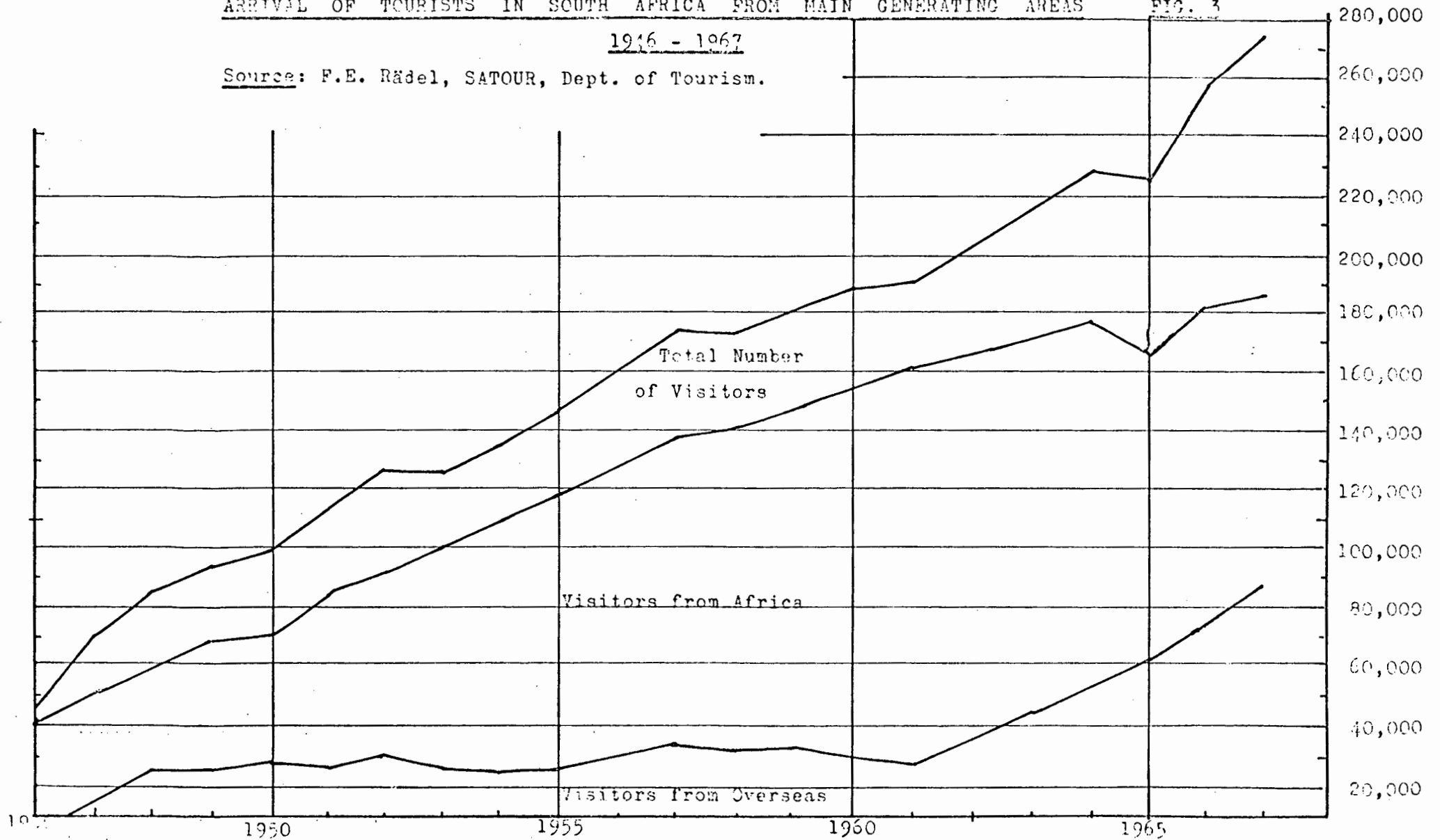
- (1) State of South Africa Yearbook 1968, Da Gama Publishers, Johannesburg.
- (2) P. Bekker M.P.C. - Oudtshoorn Courant. August 31, 1968.

ARRIVAL OF TOURISTS IN SOUTH AFRICA FROM MAIN GENERATING AREAS

FIG. 3

1946 - 1967

Source: F.E. Radel, SATOUR, Dept. of Tourism.





3.2.4.2 Though these figures give the total frontier traffic, i.e. includes outtourism and migration, they will to some extent explain the phenomenal growth in overseas visitors mentioned in 3.2.3.3 above. It can be seen that the amount of travel by sea and rail has actually slightly declined, the road traffic has increased by 60% but the air traffic by 250% from 1956 to 1965. (The latter represents an average growth rate of 12%.) The total increase over the period is 45% i.e. an average growth rate of 4%.

3.2.4.3 It is also clear from Figure 6 that the amount of air travel is fairly evenly spread throughout the year - the maximum variation being 33% but that road travel gives a peak month of 270% above the minimum.

### 3.2.5 Nature of Visits and Family Structure

3.2.5.1 The purpose of visits given by overseas tourists is shown in the Table in paragraph 3.1.2 at the outset of this chapter. Though the "holiday visitor" proportion of the annual total has decreased from 85.7% to 82.0%, the number of holiday visitors still shows an average increase of 5% over the five years 1963 to 1967.

3.2.5.2 For planning accommodation and other facilities, it is useful to know the average visiting family size. The 1965 statistics give the following picture of family structure.<sup>(1)</sup>

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(1) Statistical Yearbook 1966 - page B.7.

Table 4.

Family Structure of Foreign Visitors  
to the R. S. A.

	<u>Groups</u>	<u>Number</u>
Unaccompanied	107,118	107,118
Husband & Wife	21,261	42,522
"    "    "    & 1 Child	6,131	18,393
"    "    "    & 2	5,664	22,656
"    "    "    & 3	2,689	13,445
"    "    "    & 4	856	5,136
"    "    "    & 5	226	1,582
Husband or Wife & 1 Child	3,400	6,880
"    "    "    & 2	1,778	5,334
"    "    "    & 3	645	2,580
"    "    "    & 4	169	845
"    "    "    & 5	51	306
Others		102
Total	150,028	226,899

### 3.2.6 The Future

3.2.6.1 It was said at the outset of this section that the value of intourist spending is uncertain, but whatever the figures are, South Africa is getting ready for what has been called the new gold rush. Recent headlines have referred to "R4 million plan for Tourist Playground" which was to be a tourist-resort for the Drakensberg; "R2 million Lion Inn at Phalaborwa Gate of the Kruger National Park". "This complex and others like it, caters on a grand scale for those people who wish to make day sorties into the Kruger National Park but like their creature comforts." This is in spite of the fact that the "National Parks' Board is also spending in the region of R1 million a year on keeping 12 comfortable restcamps with modern amenities spotlessly clean".<sup>(1)</sup> (Actually many South Africans are saying that the Park itself is becoming too "civilised" or "comfortable")

(1) Die Burger. 3 April, 1968.

## 3.2.6 cont.

3.2.6.2 From the authorities we hear that South African Airways has ordered three "jumbo jets" for delivery in 1971 and this year in Parliament a far-seeing M.P. advocated that the Republic should get the co-operation of other states in Southern Africa to do joint publicity overseas on the assumption that tourists would more readily come the distance if there are a variety of countries to visit. South Africa's beaches would be contrasted by Lesotho's rugged mountains and hunting in Botswana or Angola. Such a joint tourist effort could lead to the start of a common market of Southern Africa. (1)

3.2.6.3 Botswana is already expecting R100,000 revenue from hunting licences and an additional R500,000 to be spent by the tourists in 1968. Over 30,000 square miles, or one seventh of Botswana, have been declared as areas for wildlife conservation. (2)

3.2.6.4 Once the tourist has travelled the distance, the additional distance between centres on the sub-continent becomes marginal.

3.2.6.5 Several hotel groups have also announced that they are going to cater for package tours. This will follow the European pattern where travel agencies guarantee to take a certain proportion of a hotel's accommodation for the season at a reduced rate. This, with the use of chartered aircraft, bus services etc., allows the agency to offer package holidays at greatly reduced prices (Figures 4 and 5) reveals that the decision to invest in air transport is very wise.

### 3.3 Domestic Tourism in South Africa

3.3.1 Figures for tourism by the citizens of a country within its own borders, are not so readily ascertained. More accurate determinations for S.A. will no doubt be avail-

(1) Die Burger. 3 April, 1968.

(2) Barclays Trade Review, June 1968 - p. 38.

able when the Department of Tourism has completed its research programme announced in its 1967 Report <sup>(1)</sup> and which is at present being planned by trial surveys. At present we shall have to use the results of overseas surveys, local private surveys and note the tendencies at some tourist attractions in this country.

### 3.3.2 Overseas Surveys

3.3.2.1 In 1960 in the U.S.A. it was estimated that 12% (45 billion) of personal income was spent on recreation in general. A quarter of this, or 3% was spent on domestic tourism <sup>(2)</sup>. To my knowledge no similar breakdown exists for South Africa.

3.3.2.2 However, using the results of a Government survey of family expenditure <sup>(3)</sup> and a survey of car usage in South Africa <sup>(4)</sup> the following is found:

Expenditure on transport and communication (weighted average of 12 urban areas) is 13.5% of personal income. Approximately 20% of the total mileage of motor-cars is on trips of more than 500 miles and this would therefore represent 2.7% of personal income being spent on such trips. It is realised that not necessarily all such trips are regarded as tourism but then again many shorter trips would be. To this may be added a proportion of the personal expenditure on recreation, amusement and sport which was 2.2% for the above mentioned survey <sup>(3)</sup>. How big a proportion is questionable, but added to the 2.7% it could also give a figure of between 3 and 4%. If the American figure of 3% is applied to the private consumption expenditure of very nearly R5,000 million for 1965 <sup>(5)</sup>, a figure of R150 million

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- (1) Report of the Department of Tourism. 15 May 1963 to 31 March 1967.
  - (2) F.E. Rädcl, quoting Leisure Activities in Brief, The Chase Manhattan Bank, No. 39, 1961.
  - (3) Bureau of Stats.: Survey of Family Expenditure, Nov. 1966 - Report 11-06-01.
  - (4) P.J. Welgemoed - Some Aspects of the Use & Ownership of Motor Vehicles in S.A. - Transport Research centre, Stellenbosch.
  - (5) Statistical Year Book 1966 - page W-3.

for domestic tourism in S.A. is found.

### 3.3.3. A local survey of holiday habits.

3.3.3.1 Market Research Africa recently carried out a sample survey of the holiday habits of 2,000 families in South Africa. The actual report is not available, but the following extracts from it are quoted in the Sunday Times and Die Burger<sup>(1)</sup>:

3.3.3.2 750,000 families (79% of all households - presumably white, though not stated) averaged one holiday every 13 months,  
6950,000 families (73%) spent their last holiday in South Africa,  
28,500 families (3%) went overseas,  
and 28,500 families (3%) went to other parts of Africa.

3.3.3.3 Preferences for holidays revealed:

Durban = 19%, Cape Town = 14%, East  
London = 4.1%, George-Wilderness Area = 3.9%  
and Kruger National Park = 3.5%.

3.3.3.4 Types of accommodation used:

Private homes, cottages or flats	63%
Camp or caravan	12
Licensed hotels	17
Private hotels	5
Unspecified	3
	100%

3.3.3.5 Mode of travel:

Car	85%
Train	12
Air	2½
Bus & Sea	½
	100%

3.3.4 Some check of this last-mentioned survey can be found by comparing the number of outward tourists with the frontier

(1) Sunday Times - 30 June, 1968, and Die Burger - 23 July, 1968.

statistics. By a calculation similar to that for intourism in 2.5.2, the average holiday family departing i.e. apart from business and student tourists, is found to be 1.68 (1). In 3.2.2. it was stated that in 13 months 57,000 families travelled out. At 1.68 per family there would be 88,400 travelling out per 12 months.

The actual figures for 1967 were: (2)

On Business	34,600
Holiday	229,641
Study	1,532
	<hr/>
Total	265,773
	<hr/>

There is a considerable discrepancy between the figures of 88,400 and 229,641. Part of this may be accounted for the survey mentioned being of "households" i.e. apparently persons living on their own were not considered.

3.3.5 A further check is the information supplied by the Durban Publicity Association as gathered from its tourist surveys (3)

	<u>1966</u>	<u>1967</u>	<u>Aim for 1970</u>
Total Holiday Influx	275,000	280,000	300,000
Value of Holiday Trade	R 29 m.	R31 m.	

i.e. anticipated growth of 2.2% p.a. but present growth is stated to be 4% per year.

3.3.5.1 On average, the length of stay is 14 days. Our own visitors (34% of total) spend R162 while families spend R250. The average family group being 3.9. The visitor-occupation is 65% in 15,290 beds available in licensed and private hotels and holiday flats.

(1) Statistical Year Book 1966 - p. B.7.

(2) Statistical News Release - Dept. of Tourism. 19 April, 1968.

(3) Durban Publicity Association - Annual Reports 1965, 1966, 1967.

3.3.5.2 73% of the visitors are domestic tourists, i.e. 45% from Southern Transvaal, 9% rest of Transvaal, O.F.S. 7%, Cape 7% and other 5%. The 27% of in-tourists are 14% from Rhodesia, 6% from Zambia and 7% from overseas.

And the mode of travel is:

	<u>On Own</u>	<u>Family Groups</u>
By Car	46%	68%
Rail	25%	16%
Air	22%	11%
Sea	6%	3%
Motor Coach	1%	2%
	<u>100%</u>	<u>100%</u>

3.3.5.3 The survey mentioned indicated a preference of 19% of South Africans for Durban. Applied to the 1967 census estimate of 3,800,000 Whites, this would bring 720,000 to Durban every 13 months or 665,000 every year. This number is much bigger than the actual 280,000 found in Durban and may indicate that the sample survey was not truly representative.

3.3.6 An indication of the increase in tourism in the Republic is given by the Automobile Association bookings of Hotel accommodation for its members.

3.3.6.1 The figures are as follows: <sup>(1)</sup>

1962	58,426
1963	60,858
1964	69,015
1965	79,519
1966	98,360
1967	123,816

These figures do not accurately reflect the growth

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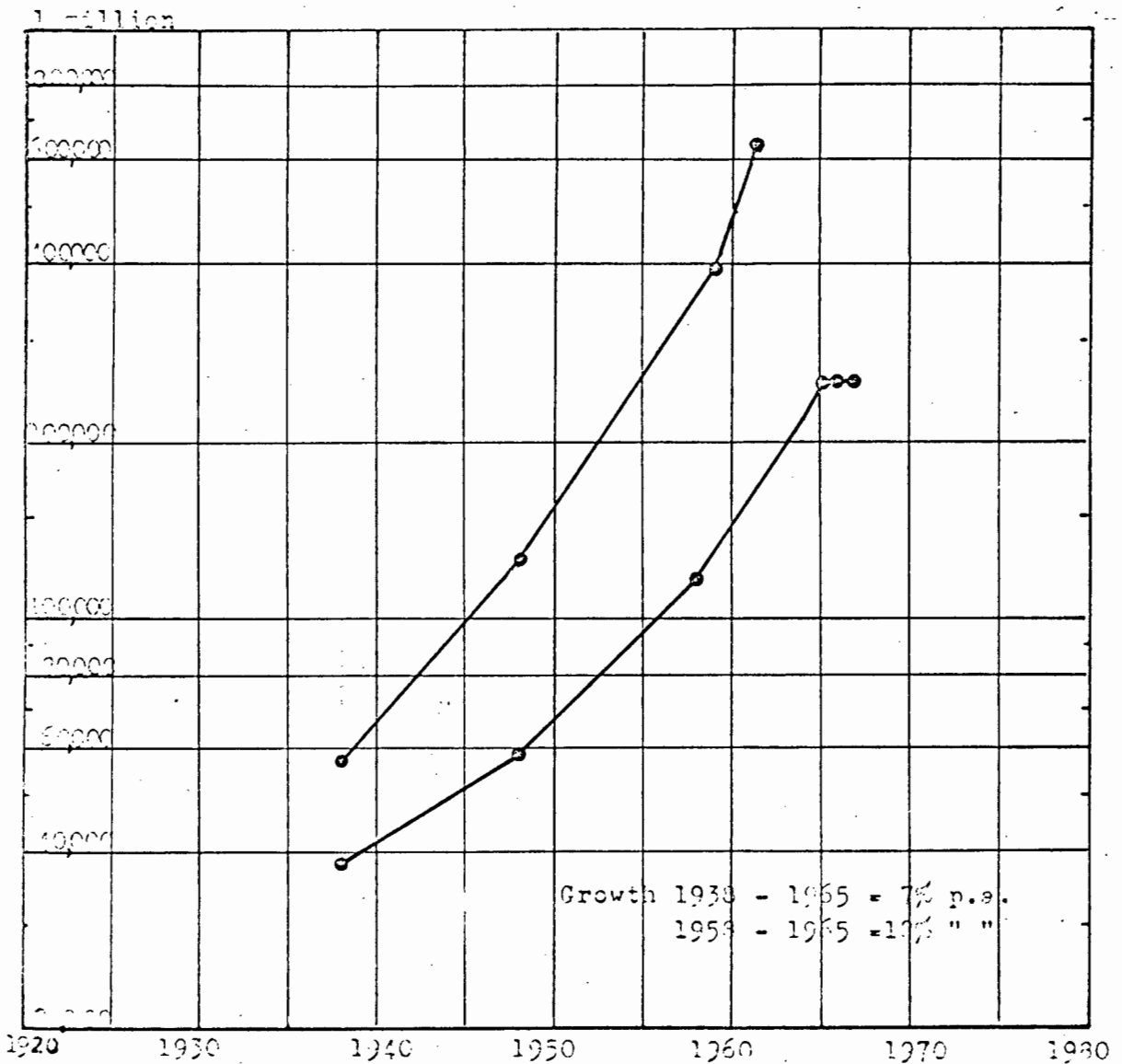
(1) Letter from Secretary, A.A. Johannesburg.

of tourism - other travel associations have gone and come. They show a yearly growth of 15% from 1962 to 1967 but it would be more realistic to take the growth from 1962-1965 (the year the main rival, the R.A.C. was disbanded). This rate is 10%. Their bookings are an average of four per family.

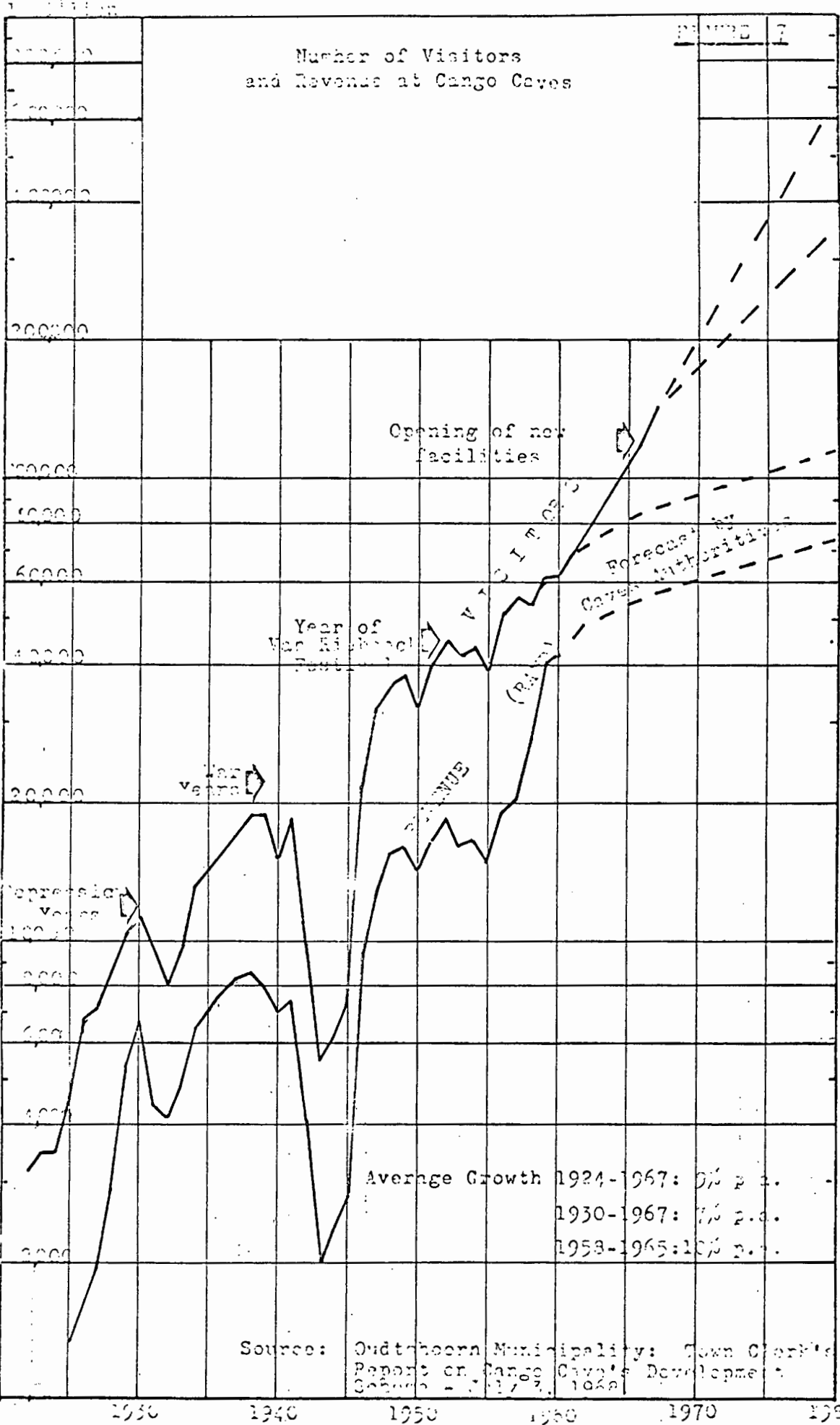
### 3.4 Visitors at South African Resorts.

3.4.1 Other indications of domestic tourism must be obtained from the number of visitors at South African resorts. The available figures for the two most popular tourist attractions in South Africa, the Kruger National Park and the Cango Caves, are plotted on Logarithmic scale in figures 6 and 7.

NUMBER OF VISITORS AT THE KRUGER NATIONAL PARK FIG.6.



Source: Data supplied by National Parks Board for years marked.



3.4.2 The visitors at South African resorts of course include overseas tourists as well. The National Parks Board has not been willing to work out a breakdown of the Geographical origin of visitors but states that it was "established a year or two ago that per capita per Province, an equal percentage of visitors are drawn from Transvaal and Cape, followed by Free State and Natal in that order. (This % is number of visitors per number of inhabitants of the Province.) It was also found that visitors from other countries beyond our borders came as follows:

1. Congo
2. Zambia
3. Mozambique
4. Rhodesia
5. South West Africa - in this order." (1)

3.4.3 The Board also gave the following visitor figures at other parks: (2)

TABLE 5

	<u>1966</u>	<u>1967</u>
Addo Elephant National Park - 7996 mg.	34405	33260
Augrabies Falls Park	-	26932 (March-Dec.)
Mountain Zebra Park, Cradock Est. 1937                      7628 mg.	6038	6318
Bontebak Park Est. Swellendam 1960 - 3251 mg.	12645	12994
Golden Gate Highlands Est. Bethlehem 1963 - 5137 mg.	23617	29491
Kalahari Gemsbok Park Est. 1931                      - 1,119,273 mg.	7703	8791
Tsitsikamma Forest Park Est. 1964                      557 mg.	10199	44226
Tsitsikamma Coastal Park	-	22898
Kruger National Park Est. 1926                      2,273,930 mg.	226754	253310

The drop in Addo was due to excessive heat but in the

(1) Director, National Parks Board in letter 3.5 - 1968.

(2) *ibid*

case of the Kruger because of a Malaria outbreak in the Lowveld.

The average stay per person in the Kruger Park works out at  $3\frac{1}{2}$  - 4 days. (Visitors are limited to 5 days in a camp and 10 days in the Park.)

3.4.4 From the National Parks Board's Annual Report, figures for earlier years are:

TABLE 6

	<u>Visitors</u>	<u>Motor Cars</u>	<u>No. per Car</u>
Kruger National Park			
62-63	175,289	45,278	3.87
63-64	216,680	56,686	3.83
64-65	247,967	65,089	3.80
Other Parks			
62-63	49,932	8,718	4.92
63-64	61,331	17,127	3.57
64-65	102,612	25,255	4.08
Total 64-65	<u>350,579</u>	<u>90,344</u>	<u>3.88</u>

3.4.5 During 1967 the Etosha Pans were visited by: <sup>(1)</sup>

<u>Tourists</u>	<u>Vehicles</u>	<u>Caravans</u>	<u>Aircraft</u>
39,192	9,555	220	71

The number of tourists is a 9.8% increase over 1966 and the occupancy rate is 4.0 per vehicle.

### 3.5 Tourism in the Southern Cape

3.5.1 To determine whether this area gets its share of visitors according to the preference indicated in 3.2 above, reference will be made to a useful survey that was done at the Cango Caves during some off-peak months from 1964 to 1967. The result of this sample survey was made available to me by the Town Clerk Oudtshoorn and it can be

(1) Barclays Trade Review. Aug. 1968 - p.39.

summarised as follows:

TABLE 7

Republic of South Africa

Province	Visitors Sample	Visitor % of R.S.A. Total	Province Population % of R.S.A. Total
(According to 1960 Census)			
Cape: Western	1140		
North Western	128		
Central	188		
Eastern	600		
Southern	396		
	2452	39.1	32.5
Transvaal: Rand	1330		
Rest	1265		
	2595	41.5	47.5
Natal	705	11.2	11.0
Orange Free State	512	8.2	9.0
<b>Total R.S.A.</b>	<b>6264</b>	<b>100.0</b>	<b>100.0</b>

TABLE 8

Overseas Visitors to:

From	Cango Caves		South Africa	
	Sample	%	(A)	%
Rhodesia/Zambia/Malawi	327	34.2	557,338	56.2
Mozambique	15	1.6	123,125	12.5
East Africa	31	3.2	10,102	1.0
Britain & Ireland	288	29.9	123,120	12.5
Rest of Europe	135	14.1	84,349	8.6
U.S.A & Canada	102	10.6	49,312	5.0
Australia	24	2.5	14,208	1.4
Other	39	4.0	27,143	2.8
<b>Total</b>	<b>961</b>	<b>100.0</b>	<b>988,697</b>	<b>100.0</b>

(A) Total of 1964-1967 from SATOUR and Dept. of Tourism.

3.5.2 The above figures i.e. 961 "overseas" and 6264 South African are from a sample total of 7433 which therefore has a further 108 for S.W.A. and territories such as Lesotho. The total visitors during the months in which the samples were taken was 27,000.

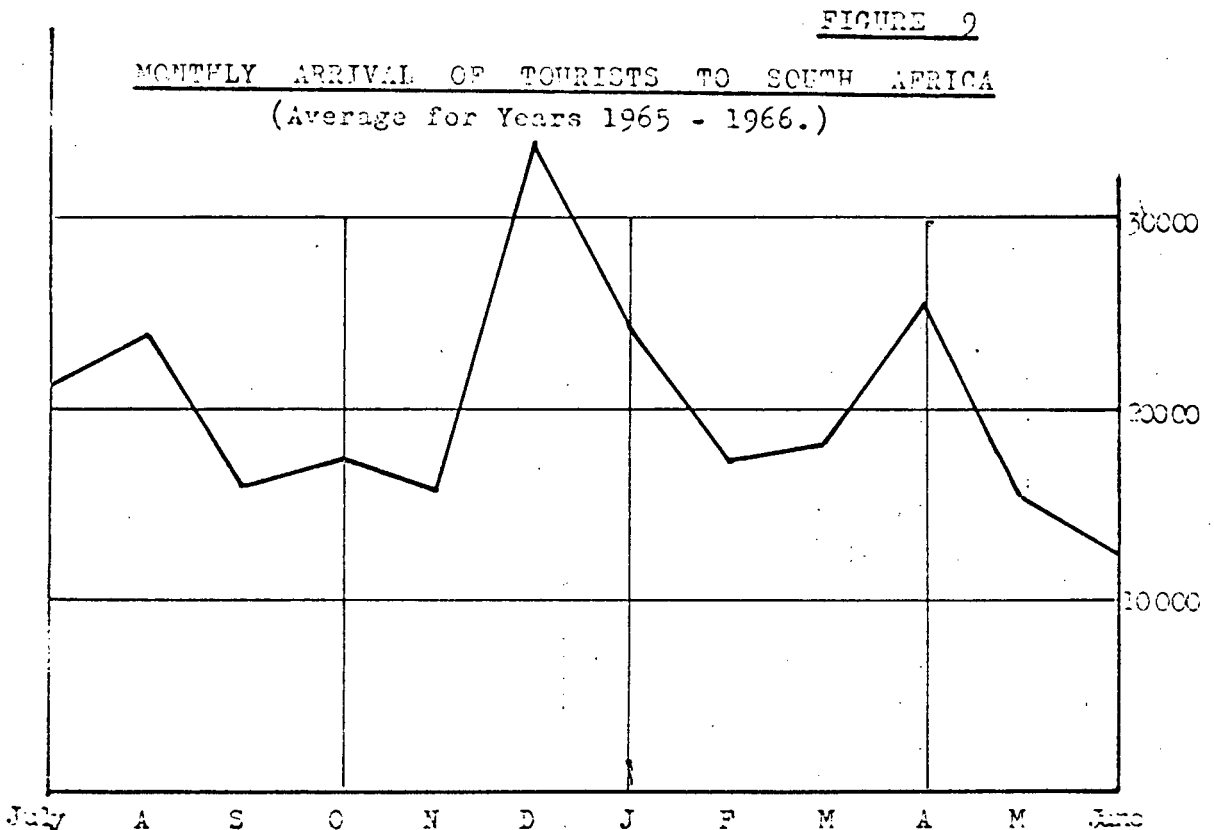
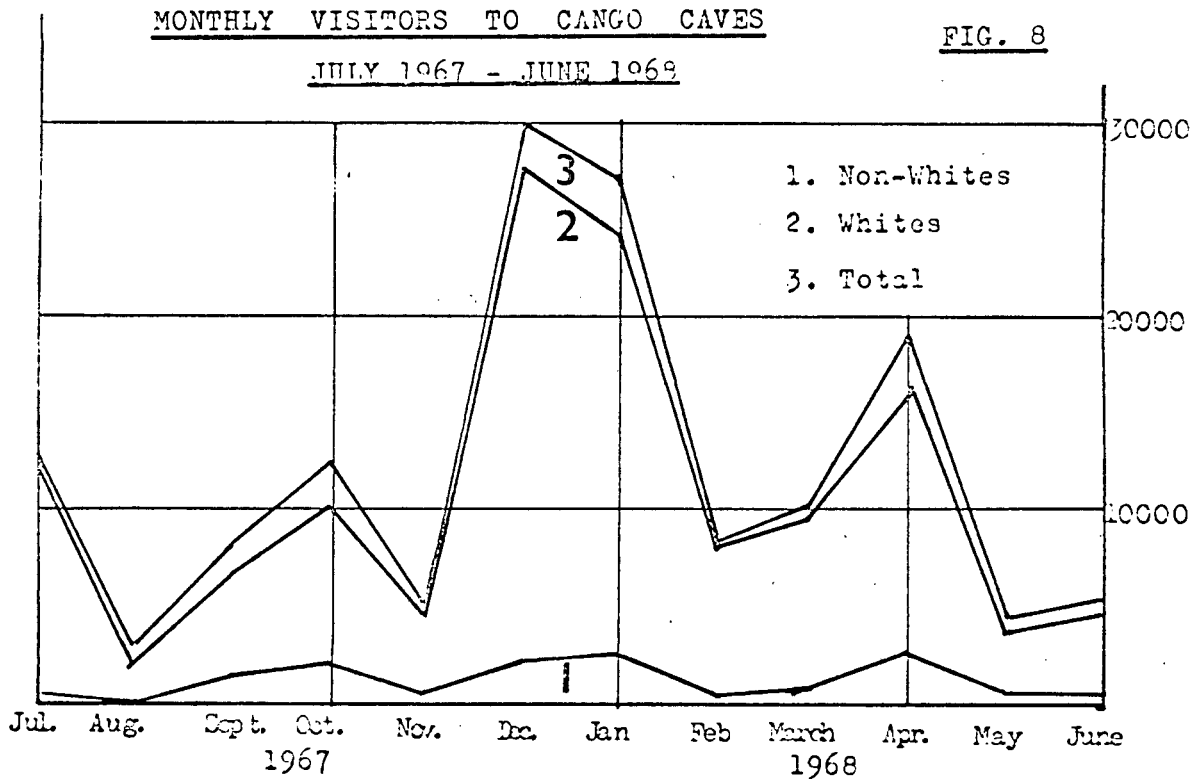
The 961 and 6264 represents 12.9% and 84.2% of 7433. The 1965 and 1967 total visitors at the Caves may therefore be split:

	<u>Overseas</u>	<u>R.S.A.</u>	<u>Other</u>	<u>Total</u>
	<u>12.9%</u>	<u>84.2%</u>	<u>2.9%</u>	<u>100%</u>
1965	14,300*	93,000	3,200	110,500
1967	18,800	123,000	4,200	146,000

(\* These figures are 5.9% and 6.8% resp. of the total overseas visitors to S.A. for these years.)

3.5.5 The survey referred to in 3.2 maintains that 3.9% of South African households prefer the "George-Wilderness Area" for a holiday. If this figure is applied to the 1967 census estimate of White population of 3,800,000 this area should receive 148,000 holiday visitors every 13 months i.e. 137,000 per year. Not necessarily all of them would come to the Cango Caves i.e. the 123,000 that came is actually a very good share or it may indicate that many other visitors come here only to see the Caves and not necessarily to holiday in the area. This is actually a salient feature of the tourist picture in the whole region or Garden Route as it is called. Is not this name inducive to such thinking i.e. it is a place for passing through? Part of the restlessness of holiday makers as described by one observer, may stem from such a preconceived idea. But the concept of the region and what it constitutes, will be discussed in the next chapter.

3.6 This chapter is concluded by showing in Figures 8 and 9 the monthly fluctuations of visitors to the Congo Caves and the close resemblance it has to the monthly fluctuation of intourism to South Africa and no doubt will have to other resorts which experience the sharp fluctuations of holiday seasons.



#### 4. WHAT IS THE REGION.

##### 4.1 Local Viewpoints

- 4.1.1 In the title of this study and in the discussion on tourism, reference is made to the Garden Route Area. In an effort to get local opinion on the boundaries, if any, of the area, in my questionnaire to local authorities and others concerned in tourism and recreation, I asked:
1. "Apart from the Mossel Bay, George, Knysna, Oudtshoorn and Calitzdorp Districts, are there any areas which I should also consider as part of the Garden Route Area?"
  2. "Any parts of the above Districts that may be excluded?"
  3. "Is there any other name for this area, which is generally used now? ..... Any other name which you consider more suitable?"
- 4.1.2 Practically half of the respondents were satisfied with my delimitation and name of the area. Many considered that Calitzdorp should be excluded. I was even accused of being overpatriotic, it being my home town! My reasons for including it will become apparent later. In George one respondent said that Oudtshoorn also does not belong, though tourist promoters there are generally prepared to include it, realising the strength of this drawback. Most tourist brochures consulted show the Garden Route as the coastal strip from Mossel Bay to Storms River with Oudtshoorn included. Some take in the Langkloof as well.
- 4.1.3 The dissentient replies to Question 1 would stretch the area: one to Riversdale in the west, quite a few to

Stormsriver, others to Humansdorp and Jeffreys Bay and one even to Port Elizabeth in the east.

4.1.4 "More suitable" names provided were Cape Riviera and Southern Cape (though admitting that this includes a wider area - for the Cape Provincial Administration tourist area of this name, see later). The most pointed comment was from an architect practising in this area. His idea, i.e. that Route suggests a passing through and not a place to have a restful stay over, was mentioned in the previous chapter. He suggested "Garden Coast/Tuinkus".

4.1.5 More appropriate could be "Garden Cape/Tuinkaap" to include Oudtshoorn - if parochial jealousies in other parts of the area would not say that it stems from the Oudtshoorn car registration, CG. Such jealousies do exist, and in fact may be a very strong factor holding this area back from united development action.

## 4.2 Some Official Regional Demarcations

For Planning, Tourist Promotion and other purposes, various authorities have demarcated "regions" which include the study area (see Fig. 10).

### 4.2.1 South Western Districts

4.2.1.1 In 1962, the Bureau for Economic Research of Stellenbosch University did a feasibility study of a potential deep-sea harbour at Mossel Bay. Their report <sup>(1)</sup> included in the South

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(1) "Enkele Aspekte van die Ekonomiese Ontwikkeling van die Suidwestelike Distrikte met Spesifieke verwysing na die wenslikheid van 'n diep see-hawe Mosselbaai" - Bureau for Economic Research, Stellenbosch University.

Western Districts the magisterial districts of Calitzdorp, George, Knysna, Ladismith, Mossel Bay, Oudtshoorn, Prince Albert, Riversdale and Uniondale <sup>(1)</sup>. This demarcation was also followed by the National Resources Development Council which incorporated the findings of the above report in a study of the wider area, the Western Cape <sup>(2)</sup>. Neither of these give any particular reason for the choice of boundaries.

4.2.1.2 The first report however made certain recommendations regarding the area that could be served by a deep-sea harbour at Mossel Bay. This hinterland (see Fig.10) is dependent on the further establishment of a wool market at Mossel Bay and favourable road transport rates. If a rail link could be established from Oudtshoorn to Beaufort West, the hinterland would be extended further. The Department of Transport has however only recently again informed local interests that it is not building any new lines (and the required one will be very costly having to traverse the Swartberg) unless the resulting traffic will economically justify it.

4.2.2 In 1964 the "Regional Development Plan" of the Department of Tourism came into operation.

4.2.2.1 This was as a result of an amendment to the Tourist Act <sup>(3)</sup> under which powers to promote tourism were delegated to the Provincial Administrators. This plan divided the Republic into 22 tourist regions and the "Southern Cape, Suid-Kaapland" is one of the seven in the Cape Province.

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(1) Note Uniondale now split into Uniondale and Joubertina.  
 (2) Regional Survey of the Western Cape, Natural Resources Development Council, Department of Planning. September, 1964.  
 (3) The South African Tourist Corporation Act, 1947 (No.54 of 1947)



"In each region a Regional Committee was established with the following basic functions:

- (a) To conduct continual surveys of the nature and standard of the facilities and attractions in their regions
- (b) To encourage and to stimulate the improvement of existing tourist attractions and facilities and the development and provision of new and additional facilities and attractions.
- (c) To advertise and publicise these attractions and facilities as widely as possible within the Republic. <sup>(1)</sup>

4.2.2.2 This plan also envisaged Provincial Advisory Boards and a Central Coordinating Committee. However, due to financial difficulties, it could not develop fully and as from March 31, 1967, the delegation of powers to Administrators was withdrawn and the Department of Tourism resumed full responsibility for the promotion of tourism within the Republic (1) and (2).

4.2.2.3 This is related here fairly fully because of an interesting corollary. As a result of this re-organisation, the Department of Tourism wanted to split the Southern Cape region into two under two of its regional offices, Cape Town and Port Elizabeth. These are two of seven such offices established for the Republic.

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(1) Report of the Department of Tourism for the period 15 May 1963 to 31 March 1967. Government Printer R/P No. 18/1968.

(2) Durban Publicity Association 45th Annual Report 1967.

"The Southern Cape refused to have anything to do with either office and finally the Department decided to 're-unite' the region and place it under control of its Cape Town office." (1)

4.2.2.4 This violent reaction which actually went on to claim that the region's interests were too wide to be controlled from Cape Town, is interesting and shows that there is a coherence of some unit here, although the boundaries of it may not be very strongly defined.

#### 4.3 Theories for Defining the Region

For planning outdoor recreation purposes one can endeavour to determine whether there are geographic boundaries which satisfy all or some of the generally accepted criteria of a region, as for instance:

4.3.1 The State Division of California (2): "For park and recreation planning purposes, a region is defined as a large geographic area which by reason of topography or urban development or mutual interest or combination of the three, logically supports intercity, countrywide, or intercountry planning and services".

4.3.2 Charles Abrams (3) refers to the "dictionary definition:

1. a more or less defined portion of the earth's surface, especially as distinguished by certain natural features or climatic conditions; or

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(1) Oudtshoorn Courant - December 23, 1967.

(2) Guide for Planning Recreation Parks in California. - p. 68.

(3) Paper in Taming Megalopolis Vol. II.- p. 1030.

2. an area, space, or place of more or less definite extent or character; or
3. an administrative division of a city or district".

He goes on to name nine types of region which may confront the planner: (1.a.)

4. group of smaller municipalities whose solution to common problem is sought in a regional plan
5. section of country whose physiological features make regional planning desirable,
6. an existing city with undeveloped land stirring at its periphery, and
7. a number of rural areas concerned with flood control, water transportation, or some other common problem.

4.3.3 R. McNee (1): "A region to a geographer, is an area of the earth's surface which is unified and cohesive in identifiable measurable ways. Unified and cohesive, that is the key. We geographers do not call just any study area a region. To call it a region, we must be satisfied that it has a high degree of internal unity and cohesion and there is a spatial discontinuity between it and surrounding areas."

4.3.4 "When the need is to frame a policy, I would agree with Fisher that "the purpose of the policy, and its effective translation into action, is more important for delineating the region, or set of regions, than any scheme of regions established for data or analytical purposes." (2)

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(1) R. McNee in *Megalopolis on the Move*, edited by Jean Gottmann and Robert A. Harper; Wiley 1967 p. 180.  
 (2) J. L. Fisher - *Regional Science Association Papers XVIII*, Vienna Congress 1966.

4.3.5 The same idea was expressed by C. J. Viljoen who considers "that a planning region is a meaningless concept and the aim should be to delineate 'development regions for planning purposes'". (1)

4.3.5.1 After discussing Friedman's fourfold division into Metropolitan Areas, Development Axes, Frontier Regions and Depressed Regions as useful to classify regions but not to delineate them, he develops the idea of development regions based on the functional interrelationship of human activities. For instance the highest number of outgoing trunk telephone calls from each town was plotted and this automatically divided the country into a few major regions with sub-regions. This plot for 1961 linked the towns Ladismith, Oudtshoorn, Uniondale, Knysna, George, Mossel Bay, Albertinia and Riversdale. In the similar survey for 1963, Uniondale was found to have a stronger link with Joubertina and Riversdale with Cape Town.

4.3.5.2 Mr. Viljoen further stresses the importance of development regions to be "organised around dominant towns so that travelling time from the periphery to the centre will not be excessive (2)- generally one hour or less. His proposal for development regions (66 in the Republic) is shown on Figure 10 for the study area. In this division, Prince Albert, Willowmore, Uniondale and Joubertina is linked to economic region 0206 whereas Heidelberg and Riversdale is linked to 0207.

4.3.6 This division may be more realistic for agriculture and other interests but the tourist factor has established a very strong link of Oudtshoorn with the other coastal area and it is my opinion that this link will become

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(1) C. J. Viljoen: Planning Machinery at Regional Level. Minutes of the Symposium on Regional Development and Planning - 17, 18 October, 1966. Dept. of Planning - p. 136.

(2) op. cit. p. 139

stronger as increased leisure, mobility etc. increase the importance of this sector.

#### 4.3.7 A Greek Theory for Tourist Regions

4.3.7.1 John Piperoglou has developed a very promising method for the identification of tourist regions<sup>(1)</sup>. He saw it as having a triple task:

- a. "To reduce phenomena of aesthetic or cultural significance to quantifiable magnitudes for purposes of comparative evaluation.
- b. To develop a set of technical and engineering proposals.
- c. To present the economic repercussions of such proposals so that investments and returns from the tourist sector could be evaluated in terms of overall objectives".

4.3.7.2 Their tourist attractions were classified in three categories of "Ancient Greece", "The Sun and the Sea", "Picturesque Villages and Islands". A visitor sample survey ranked them in this order and weights<sup>were</sup> assigned to each according to the percentage preference. By drawing circles with diameters proportional to these weights, around identified attractions, tourist regions were identified where two or more circles overlap. By testing tourists' reaction to distance it was found that in a radius of 80 km. (50 miles) visitors would comfortably travel to a point of interest and back in a day. This therefore gave

(1) "Identification and Definition of Regions in Greek Tourist Planning" - John Piperoglou, Reg. Science Association Papers.

some basis for the size of a tourist area within which he also assumed that there should be an urban settlement of 50,000 or more to provide essential services. He regarded the "facilities and services provided by an urban settlement, regardless of other tourist values, important enough either to enhance an already high priority of a region or, conversely, partly to make up for relative deficiencies". This fourth "resource" was also assigned a weight and plotted like the others.

4.3.7.3 In an unpublished South African Study, this concept of the value of an urban settlement was expanded as indicative of the level of services available to the tourist. (This is a planners report submitted to the Provincial Administration to justify the establishment of a new beach resort.) The 16 tourist regions used by the Bureau of Statistics for a survey of licensed hotels, was ranked firstly as to the population density per square mile and secondly as to the tourist bed-nights sold per square mile. A marked correlation in the ranking was found.

#### 4.4 Boundaries of "South Cape" Region for Analytical Purposes

4.4.1 In our case, before the tourist region, if any, can be isolated, an analysis of the natural and cultural features of the area and the interaction between different parts thereof as pertaining to tourism and outdoor recreation use, is necessary. For the time being, the "study area"

will generally comprise the districts mentioned at the outset of this section i.e. the magisterial districts in the economic regions 0206 (old 07) and 0207 (old 05) and will be referred to as South Cape.

## 5. SOUTH CAPE: ANALYSIS OF THE REGION

### 5.1 Physical Description

#### 5.1.1 Climate

- 5.1.1.1 Of all the factors determining natural regions and the resultant land use, climate is the most important. This is even more relevant where outdoor recreation use is concerned. The prime climatic factors are rainfall and temperature and the variation of these through the year.
- 5.1.1.2 Southern Africa, has the three rainfall zones of winter, summer and all-seasons rains. (See Figure 12). The South-western Cape is known as one of the Mediterranean Regions of the world (Fig. 11). They generally have hot and dry summers with mild winters, the chief feature being that the rain falls almost entirely in the winter months. For this fact, the study area would not be in the Mediterranean region. However, Mediterranean vegetation of evergreen trees and shrubs with sheep-rearing veld along the coast, especially west of Mossel Bay and plants like the protea and aloe<sup>that</sup> resist summer transpiration, occur along the coast and in the drier inland respectively.
- 5.1.1.3 This area, in common with the whole southern part of the continent, has a general absence of mining industries typical of other Mediterranean Regions (see Figure 13 for chief mineral resources of South Africa).
- 5.1.1.4 Between the Winter Rain Region and the East Coast Summer Rainfall Region where the summer rainfall is a maximum, is the transitional belt. It receives rain like the former region while the summer rains are due to the same causes as those in the latter, i.e. oceanic air-streams entering the interior from east coast highs. Here there are two distinct subdivisions, the coastal belt

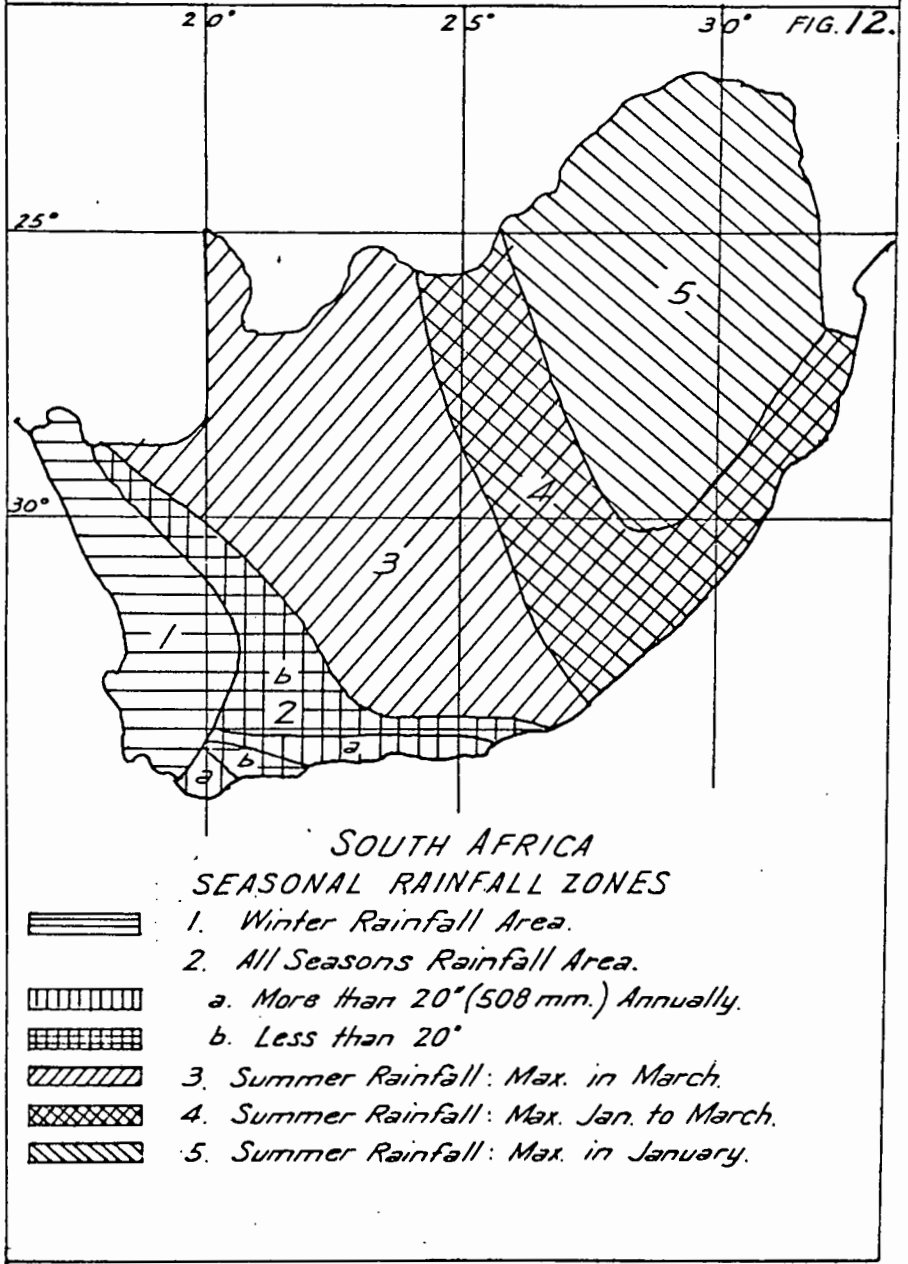
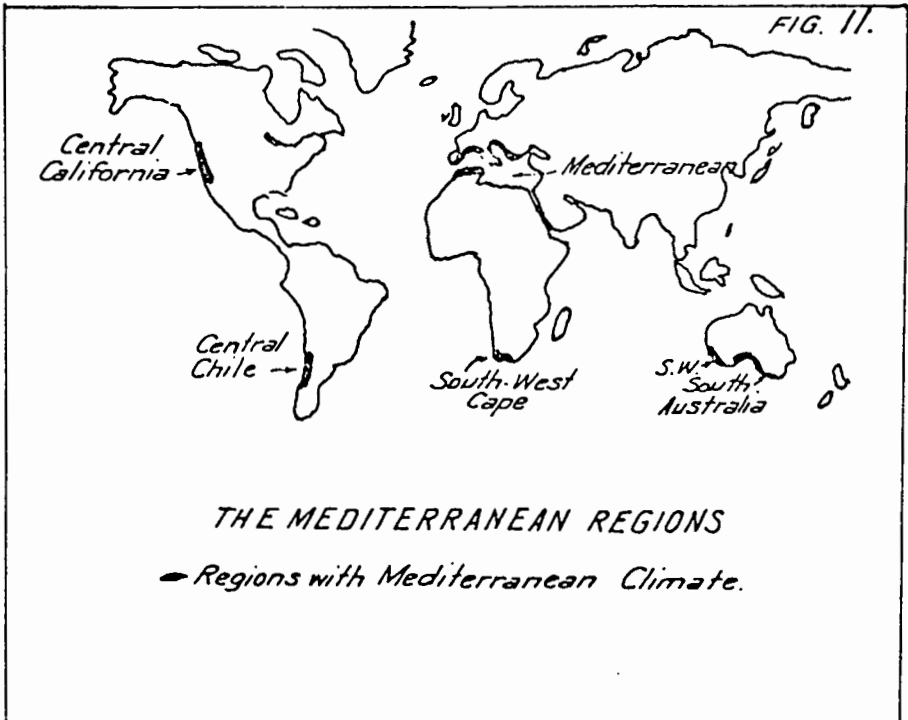
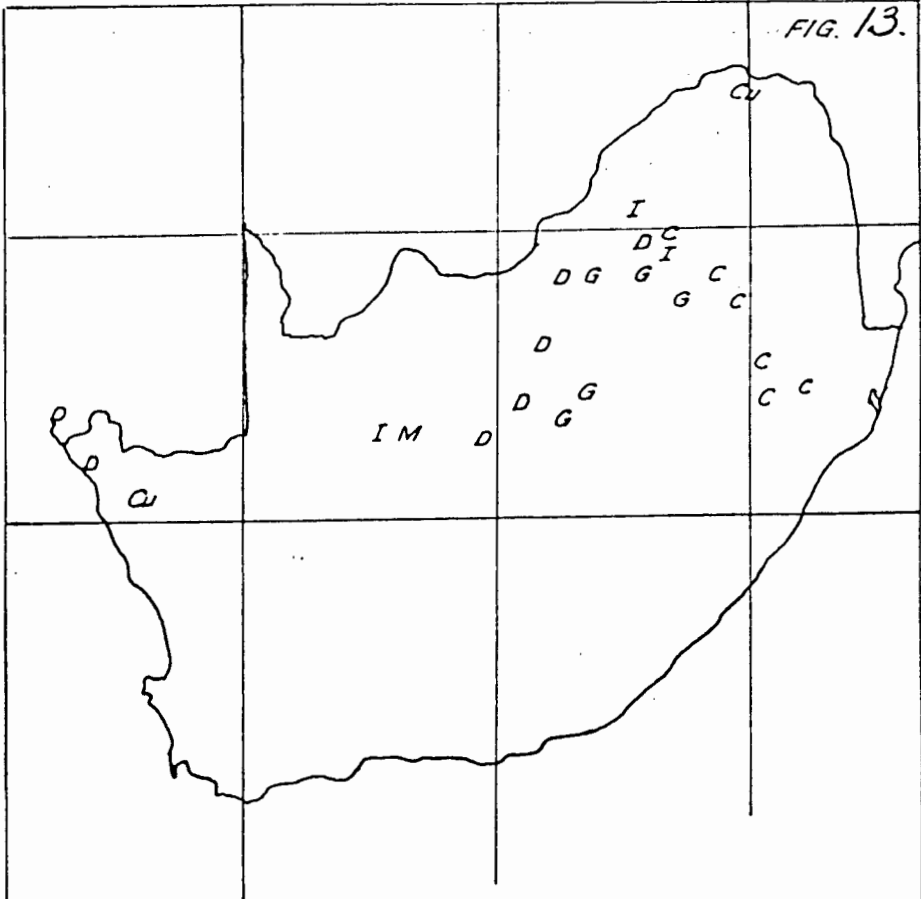


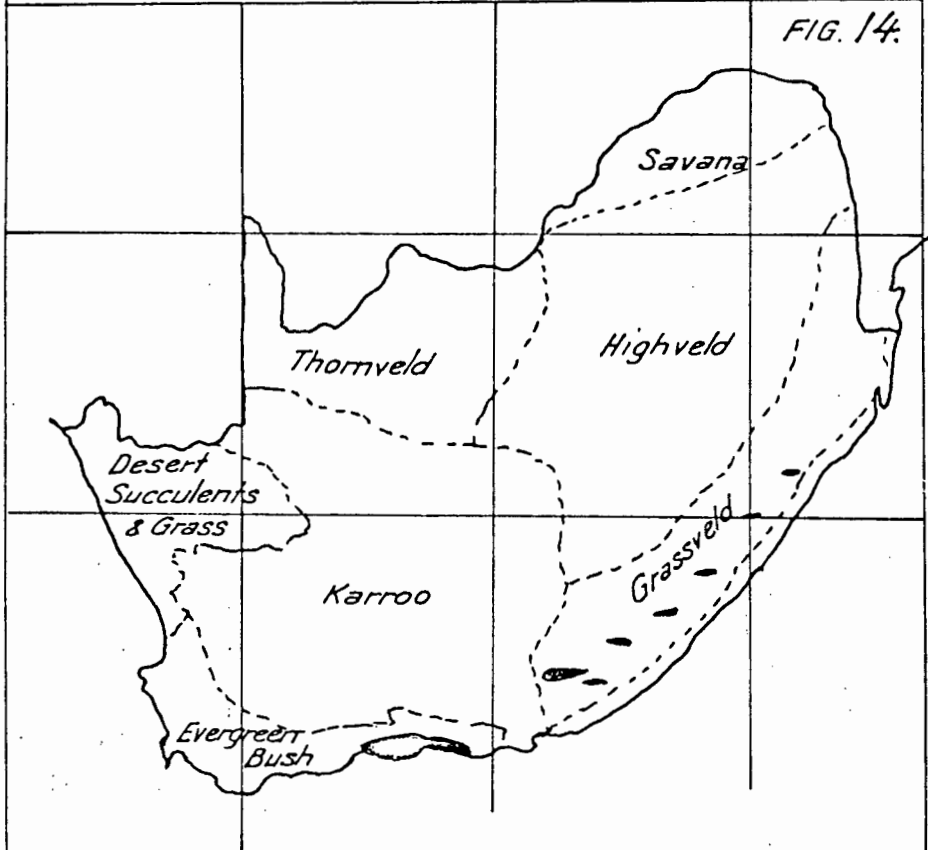
FIG. 13.




*MINERAL RESOURCES OF SOUTH AFRICA*

- G. - Gold.*
- Cu. - Copper.*
- C. - Coal.*
- D. - Diamonds.*
- I. - Iron Ore.*
- M. - Manganese.*

FIG. 14.



*NATURAL VEGETATION OF SOUTH AFRICA*

 *Temperate Evergreen Forest.*

in which there is generally rainfall during each month of the year, e.g. at Knysna with a mean annual rainfall of 28" and an average of more than 2 inches in each month and the drier inland area where the rainfall may vary from 10" as at Oudtshoorn, to 2" along the Orange River. Authorities have noticed that the eastward and westward oscillation of the winter and summer rainfall boundaries is considerable. Once in 84 years of records studies, (1900-1901) summer rainfall conditions spread to the west coast while the eastward oscillation is more frequent-about once in twelve years winter influences spread east of the 60% summer rainfall line. (1)

5.1.1.5 Most of the rainfall along the southern coast appears to be orographic, and this accounts for the fact that there is such a long transitional stretch on the coast. This coastal stretch has less distinct boundaries to the winter and summer rainfall regions than there is to the drier inland part of the all-seasons rainfall area. On Fig. 16 it can be seen how the Outeniqua Mountains with extensions to the west and east, forms a barrier which distinctly changes the climate, vegetation and resultant land use either side of it.

5.1.1.6 In Annexures 1 to 6 the following data are given:

Annexure 1: Average Annual Rainfall

Annexure 2: Average Annual Frequency of Days with Thunderstorm

Annexure 3: Average Annual Frequency of Days with Hail

Annexure 4: Mean Daily Maximum and Minimum Temperatures at 1. Heidelberg, 2. Knysna, 3. Clarkson (near Storms River), 4. George, 5. Deep Walls (Forest Station near Knysna) and 6. Oudtshoorn as well as the average days with cloud at 4, 5 and 6.

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(1) After J.H. Wellington: Southern Africa - A Geographical Study, Vol. I.

Annexures 5 and 6: Average Rainfall - Number of Days with Rain at 1. Riversdale, 2 Mossel Bay, 3. Great Brak, 4. Knysna, 5 Plettenberg Bay, 6. Clarkson, 7. Humansdorp, 8. Jeffery's Bay,

5.1.1.7 These show clearly the higher rainfall along the coast though there are certain areas between George and Knysna and west of George where the rainfall declines.

Further it is clear that there is a bigger variation in the temperature inland with a lower average minimum and a higher maximum.

5.1.1.8 The average cloud amount shows an interesting pattern - at George the winter months have a much lower cloud average than in summer. The inland Little Karroo with its drier climate is therefore a favourite winter resort for people from the wetter Cape Peninsula.

5.1.1.9 The wind amount has not been plotted but it is a well known fact that Mossel Bay along the coast is one of the most windless harbours and in general this area gets relatively little wind.

5.1.1.10 Along the coast the wind usually blows parallel to the mountain ranges in summer, i.e. generally east to southeast. In winter the wind is usually north to northwest and often warm - the so-called bergwind.

5.1.1.11 It is of course known that coastal areas have a milder climate than inland. Mossel Bay moreover is known as having the most equable climate of all places along the South African coast.

## 5.1.2 Vegetation

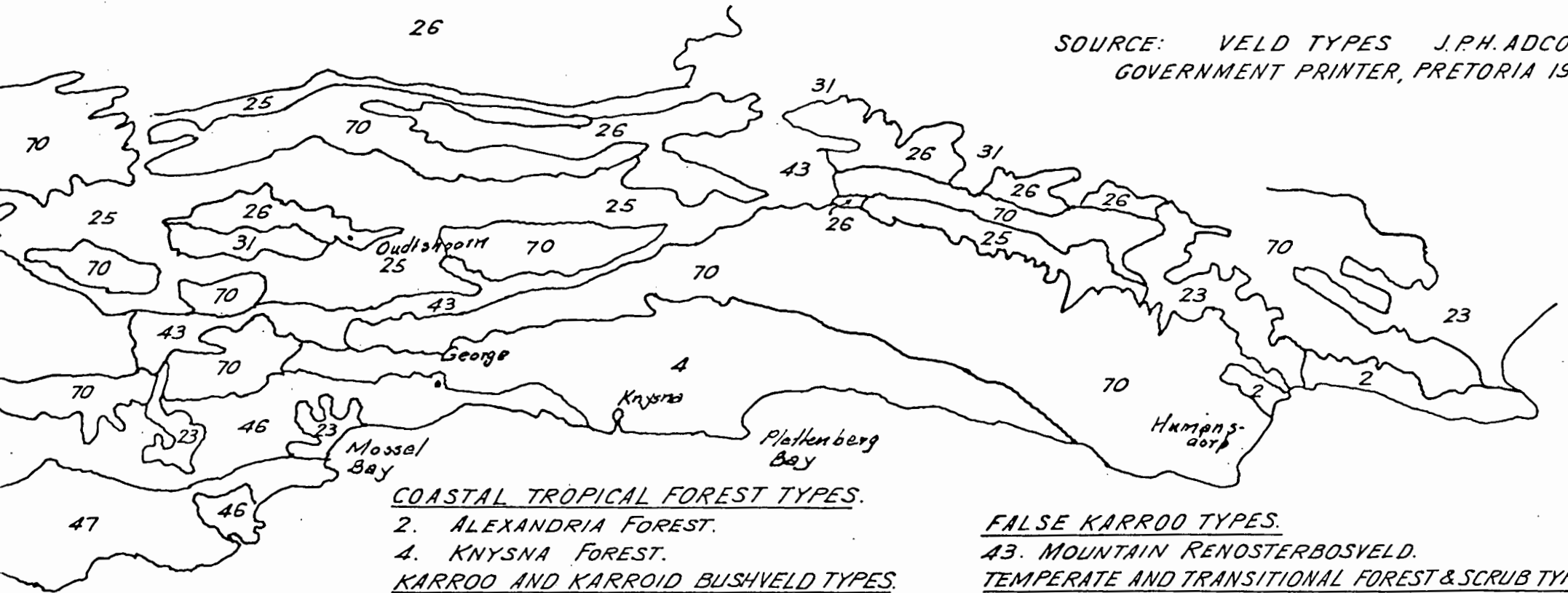
5.1.2.1 In the South African vegetation pattern, the rainfall is the important factor. Because of the

SOUTHERN CAPE

VELD TYPES

Scale 1:1,500,000

SOURCE: VELD TYPES J.P.H. ADCOCK  
GOVERNMENT PRINTER, PRETORIA 1951



COASTAL TROPICAL FOREST TYPES.

2. ALEXANDRIA FOREST.

4. KNYSNA FOREST.

KARROO AND KARROID BUSHVELD TYPES.

23. VALLEY BUSHVELD.

25. SUCCULENT MOUNTAIN SCRUB (SPEKBOOMVELD).

26. KARROO BROKEN VELD.

31. SUCCULENT KARROO.

FALSE KARROO TYPES.

43. MOUNTAIN RENOSTERBOSVELD.

TEMPERATE AND TRANSITIONAL FOREST & SCRUB TYPES.

46. COASTAL RENOSTERBOSVELD.

47. COASTAL MACCHIA (FYNBOS).

FALSE SCLEROPHYLLOUS BUSH TYPES.

70. FALSE MACCHIA.

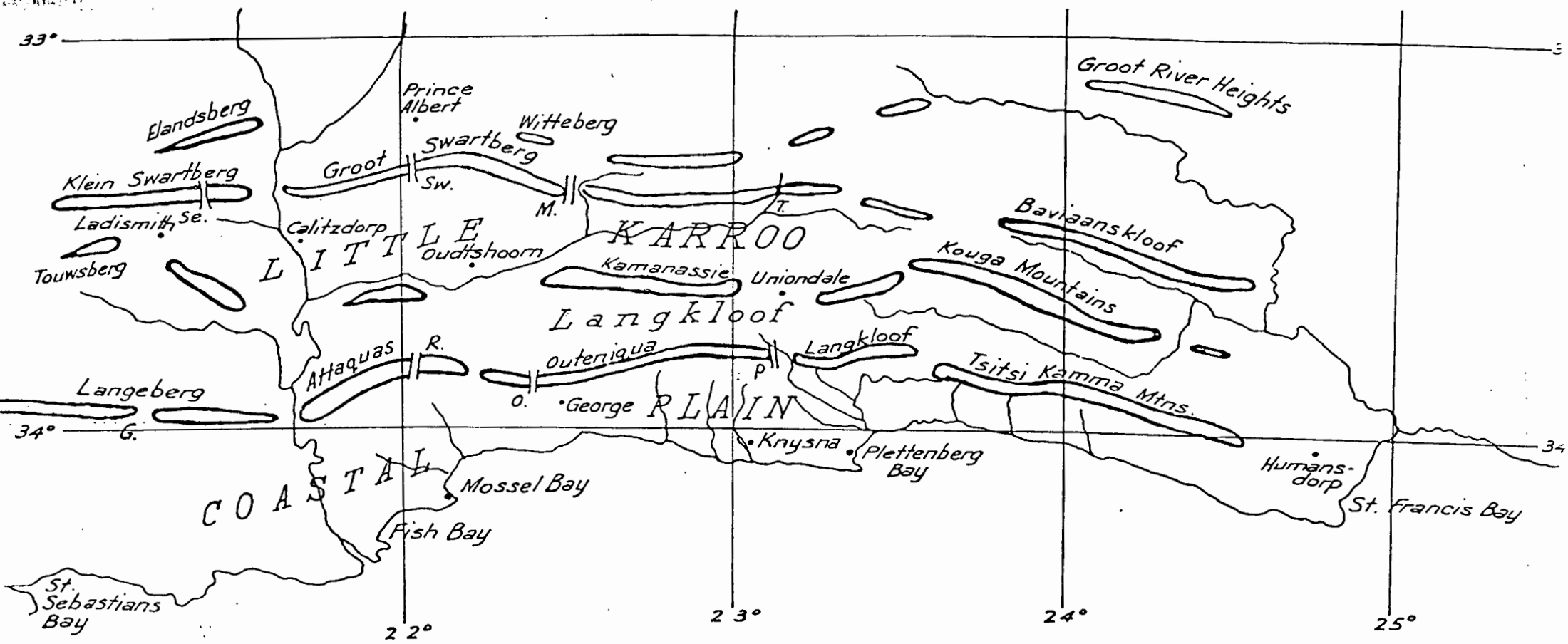
general low rainfall and the small area receiving rain throughout the year, the forest land in the subcontinent is of small extent, estimated at only about one per cent of the country's surface<sup>(1)</sup>. "The most clearly defined zones of natural forest in Southern Africa are the Knysna forests in the southern Cape Province, the eastern border zone of Southern Rhodesia, the Vipya and Nyika Plateau areas in Nyassaland and the Poronto Mountains in Southern Tanganyika."<sup>(2)</sup> (Fig. 14)

- 5.1.2.2 "The temperate evergreen forest occurs on the eastern and southern sides of mountains exposed to the ocean, chiefly in areas where the rainfall exceeds 30". The most extensive area in South Africa is along the Southern slopes of the Outeniqua and Langkloof mountains. The most useful trees are the coniferous yellowwoods, which yield valuable timber and sometimes attain a height of 150 feet."<sup>(3)</sup>
- 5.1.2.3 The only other place, west of Mossel Bay, where large indigenous trees are found, is at Grootvadersbosch, in the mountains near Swellendam.
- 5.1.2.4 It is clear from Fig.15 that the Forest Vegetation starting east of Witte Els River stretches almost continuously between the coast and the mountains. There are areas where this forest has been cleared - especially around Plettenberg Bay a number of farms were granted. The ravaging fire of 1869 also destroyed a large part of the natural forest east of Knysna. West of Knysna, corresponding to a lower rainfall along the coast, the forest retreats towards the plateau and the lower slopes of the mountains. Along the coast recently formed sand dunes carry scrub vegetation with stretches of denudation where reclamation planting had to be done to check wind erosion.

(1) South Africa Digest, Dept. of Information - January 6, 1967.

(2) J.H. Wellington - p.113.

(3) The World - J.H. Stemberge & J.E. Goss, Oxford UNIV. Press 1965.



MOUNTAIN PASSES

- |                        |                          |
|------------------------|--------------------------|
| Se. Seven Weeks Poort. | G. Garcias Pass.         |
| Sw. Swartberg Pass.    | R. Robinson Pass.        |
| M. Meirings Poort.     | O. Outeniqua &           |
| T. Toverwater Poort.   | Montagu Passes.          |
| (Rail)                 | P. Prince Alfred's Pass. |

**SOUTHERN CAPE**  
SHOWING  
**OROGRAPHIC LINES.**

Source: Partly J. H. Wellington,  
South Africa 1955.

FIG. 16

### 5.1.3 Physiographic Regions

- 5.1.3.1 J. H. Wellington <sup>(1)</sup> describes the four main lines of ranges dominating the Southern Cape. See Figure 16. The first is the Langeberg range stretching continuously for 300 miles as it goes into the Attaquas, Outeniqua, Langkloof and steadily lowers to end in the Tsitsikamma Mountain near Humansdorp.
- 5.1.3.2 The second orographic line formed of discontinuous TMS Ridges, includes the Towsberg and Rooiberg and is continued again in Kamanassie where its greatest peak of 6092 feet is reached. On the east, the dissection of its continuation the Konga Mountain and the Baviaanskloof by the Konga River produces a maze of gorges of astonishing complexity and ruggedness.
- 5.1.3.3 The third line, the Swartberg is the highest, reaching 7632 in the Seven Weeks Poort Peak. At the Swartberg Pass, the range has a width of 4 to 5 miles at the top but narrows to the Baviaanskloof though maintaining its ruggedness.
- 5.1.3.4 The fourth line, the Witteberg, runs parallel to and north of the Swartberg. In places it has rugged ridges of quartzite dipping northward. Its surface also declines eastward reaching the level of the coastal plain west of the Great Fish River mouth.
- 5.1.3.5 Lester King notices that "the southern shoreline is not parallel to the ranges of the Folded Belt. These areas are gently concave to the south, whereas the coastline is a broad convex in that direction. Thus the mountain ranges meet the coast one by one, are truncated in order and passed. Neverthe-

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(1) J. H. Wellington: Southern Africa - p. 108-110

less, they modify the outline by projecting boldly seaward and shutting off bays on their northern sides. The chief embayments produced are St. Sebastian's Bay, Fish Bay, Mossel Bay, Plettenberg's Bay, St. Francis Bay and Algoa Bay<sup>(1)</sup>.

5.1.3.6 King also describes the wide terrace or coastal plain that fringes the southern side of the Langeberg-Outeniqua. This terrace varies in height but is generally between 600 and 800 feet. "Following elevation of the coastal terrace, the rivers have incised deep gorges (Keurbooms, Kaaibans) or valley-plains (Sout, Brak). The mouths of the gorges have all subsequently been drowned, and then partly filled in (Bitou River, Knysna Harbour) and the chain<sup>of</sup>/lakes along the Wilderness." (2)

5.1.3.7 The mountains are important determinants in the land use pattern. Though some of them formed formidable obstacles to movement in older days, they can now be crossed by passes, some with modern high speed roads. The rivers too, ages ago, cut through the mountains and created poorts or transverse valleys. Seven Weeks Poort and Meirings Poort have been used for roads and Toverwater Poort for the railway through the Swartberg. Though the mountains are no longer the barrier to intercommunication, the Outeniqua still forms the barrier which causes the big difference in rainfall between the wet coastal plain and the dry Little Karroo. For instance, Oudtshoorn with barely 10" per annum lies only 30 miles inland from George with 30" or more per year.

5.1.3.8 The mountains have however another function. Their perennial springs drew the first settlers to their feet. Now they are however being drawn

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(1) Lester C. King: South African Scenery, p. 263.

(2) L.C. King ibid p. 266.

more and more into the economic structure of the whole region as important water reservoirs.

- 5.1.3.9 This applies particularly in the Little Karroo where the prevailing aridity and thin, rocky soils caused cultivation and consequently human settlement to be concentrated along the river valleys. This is immediately apparent from the population density map which shows typical linear settlement in the Little Karroo compared to scattered living in the coastal area.

## 5.2 History of Development

### 5.2.1 First European contact

- 5.2.1.1 This area has the distinction of receiving the first known contact of Europeans with South African soil. Diaz landed at Mossel Bay in 1488 calling it "Angra dos Vaqueiros" (bay of cowherds). In 1497 Vasco da Gama carried out the first commercial transaction at "Angra de Sac Bras" as he called it when he bought a bull from the Hottentots. A milkwood tree in Mossel Bay is known as the first "Post Office". Here in 1501, Joao da Nova found a letter in a shoe left by an earlier vessel. He is also believed to have built the first church in South Africa at Mossel Bay.

- 5.2.1.2 The interior remained unexplored for nearly two more centuries. The first known contact of white men with the Oudtshoorn district was Schryver's Expedition in 1989.

### 5.2.2 European Settlement

- 5.2.2.1 It is known that by 1730 farms had been occupied as far east as George. By 1750 the mountains were crossed and in 1752 two settlements occurred, one in the Congo area and another along the banks of the Olifants River. In 1754 there were settlers at Assegai Bosch and on the Cabeljauws

River near the present Humansdorp.

- 5.2.2.2 The second Drostdy to be established after the British occupation of the Cape, was at George in 1811. The village of Oudtshoorn was founded in 1849 when the first sale of **erwen** took place.
- 5.2.2.3 Perhaps the most interesting settlement was that of the royal descendant George Rex. In 1804, with a cavalcade of 16 coaches and wagons, he penetrated the forests and started his empire at "The Huysna", the harbour amongst the beautiful forests. Here he was visited by many distinguished guests who came to enjoy the elephant and buffalo hunts.

### 5.2.3 Coloured Settlement

- 5.2.3.1 There are some coloured settlements in this area notably at Zoar near Ladismith, Dysselsdorp near Oudtshoorn and Pacaltsdorp near George. The Moravian missionary, Mr. Pacalt, started work here in 1813 among the remnants of the Outeniqua tribe.

### 5.2.4 Communications and Trade

- 5.2.4.1 Shipping was already handled at Mossel Bay in 1788 when wheat was shipped for the Dutch East India Company. However no harbour was built, and till the end of the next century, the bay served largely as a fishing centre. Passengers were lowered by baskets as is still done today.
- 5.2.4.2 The first ostrich feather boom in 1860 to 1885 spurred development in this area and when the second boom came during 1900 to 1913, the railroad was connected from Cape Town to Mossel Bay in 1905. In 1907 the link to the north and east through Oudtshoorn was completed and in 1912 a breakwater and jetty were built.

- 5.2.4.3 At Knysna, George Rex urged the authorities to use the harbour. In 1817 the first naval vessel, the Emu entered but it was promptly wrecked. Another 11 ships suffered the same fate during the next 97 years though the Admiralty established a pilot station here. The "Knysna" was built of stinkwood by Rex in the Knysna River and sailed with its first cargo on July 26, 1831 doing a profitable trade up the coast. However the port traffic has been decreasing so that in 1954 the harbour was officially closed and the services of the port pilot withdrawn.
- 5.2.4.4 At Plettenberg Bay in 1787, the Dutch East India Company also established a port of call to collect timber. The ruins of the old shed where the timber was stored, are still there today.
- 5.2.4.5 Land connection to the east was only established in 1885 when the road was opened through the forests to Humansdorp. The denuding of the forests and improvement in overland connections, also brought the sea connection at Plettenberg Bay to an end. For a brief period from 1912 to 1920 it was again used as a whaling station.

#### 5.2.5 Present Settlements

The pattern of urban settlement in this area has developed very much according to the general pattern of service centres for South Africa, as observed by D. Page<sup>(1)</sup>:

"Their service radius of approximately sixteen miles has a direct relationship with travelling time of two hours by horse-cart" ... "With increase in population these towns, roughly 30 to 35 miles apart, grew in importance as the sites of schools, post offices, churches and shops and in time became district capitals".

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(1) A strategy for the Regional adDevelopment of South Africa. Third South african National survey conference, Johannesburg, Jan. 1967. Conference Paper 12/56.

His further observation is "that the historical sequence of Provincial capitals, coastal cities and district towns has now been replaced by a new order of megalopolis tied functionally to the coastal cities and a second tier of isolated district towns, some of which are showing some growth where they are emerging as functional centres at distances of roughly 150 miles apart. This distance appears to have some relationship with a convenient travelling time by automobile to specialist shopping centres and centres of higher institutional and technical services".

5.2.5.1 It is clear from the following table (Table 9) that none of the main towns yet ranks as the functional centre for this area. With increasing mobility, and the factor of sprawl also evident along the coast, the present tendency appears to be developing, stretching from Mossel Bay to Plettenberg Bay. Oudtshoorn, with its stronger agricultural sector and strong tourist attractions is developing apace.

Table 9

Population of Magisterial Districts.

<u>Oudtshoorn</u>	<u>Total</u>	<u>European</u>	<u>Coloured</u>	<u>Asiatic</u>	<u>Bantu</u>
Total	43441	12696	27768	3	2974
Rural	18945	3251	14769	0	925
Oudtshoorn	22229	8952	11287	3	1987
De Rust	1043	459	584	0	0
Dysselsdorp	1224	34	1128	0	62
<u>George</u>					
Total	38676	13967	21806	10	2893
Rural	19121	4669	12491	2	1959
George	14759	8504	5400	8	847
Pacaltsdorp	2025	10	2008	0	7
Blanco	2398	557	1834	0	7
Wilderness	373	227	73	0	73

Table 9 (continued)

<u>Mossel Bay</u>	<u>Total</u>	<u>European</u>	<u>Coloured</u>	<u>Asiatic</u>	<u>Bantu</u>
Total	24949	8032	14606	7	2304
Rural	9864	2835	6582	0	447
Mossel Bay	12225	4364	6082	7	1772
Herbertsdale	508	156	352	0	0
Groot Brak	2352	677	1590	0	85
<u>Knysna (Total)</u>	25919	7749	14942	12	3216
Rural	13606	4065	8271	5	1265
Knysna	11045	3028	6237	7	1773
Leisure Isle	288	213	52	0	23
Plet. Bay	717	289	287	0	141
Sedgefield	195	103	84	0	8
The Heads	68	51	11	0	6
<u>Ladismith</u>					
Total	11411	3061	7689	2	659
Rural	6775	1619	4619	0	537
Ladismith	2342	1122	1105	2	113
van Wyksdorp	621	320	292	0	9
Zoar	1673	0	1673	0	0
<u>Calitzdorp</u>					
Total	6670	1961	4461	0	248
Rural	4366	999	3133	0	234
Calitzdorp	2304	962	1328	0	14

Source: Population Census, 6 Sept., 1960.

### 5.3 Population and Economic Condition

- 5.3.1 A detailed study of the population structure and growth is incorporated in the Report for the South Western Districts Development Association.<sup>(1)</sup> As has previously been mentioned, (4.2.1.1) the districts of Prince Albert, Uniondale, Joubertina and Riversdale, in addition to the Economic Regions 0206 and 0207, are included in their area.
- 5.3.2 They found that scarcity of employment had forced 5,500 Whites out during the nine year period from 1951-1960 and that this decline in population would continue. The Coloured population had also grown less here than for the Republic, in other words some of them had also left. In contrast the Bantu population had increased dramatically. The latter trend has of course been reversed by new government policy.
- 5.3.3 The population structure and change for the regions 0206 and 0207 compared with the Cape Province and the Republic, are shown in Table
- From this it can be seen that Region 0206 decreased 5.9% and 0207, 7.4% in White population while Coloureds grew by 25.7% and 25.5% respectively. The figures for the Republic and Cape Province are: Whites grew by 16.5% and 7.3% and Coloureds grew by 36.8% and 35.5% respectively.

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(1) University of Stellenbosch: Bureau for Economic Research.

Table 10

## POPULATION COMPOSITION AND CHANGE 1951 - 1960

Area		Total	White	Non-White	Coloureds	Asiatics	Bantu
Republic	1951	12,671,452	2,641,689	10,029,763	1,103,016	366,664	8,560,083
	1960	16,002,797	3,088,492	12,914,305	1,509,258	477,125	10,927,922
	Change 1951-1960 Percentage Change	+3,321,345 +26.2%	+ 436,803 16.5%	+2,884,542 + 28.7%	+ 406,242 + 36.8%	+110,461 +30.2%	+2,367,839 +27.7%
Cape Province	1951	4,426,726	935,085	3,491,641	981,802	17,818	2,492,021
	1960	5,362,853	1,003,207	4,359,646	1,330,089	18,477	3,011,080
	Change 1951-1960 Percentage Change	+ 936,127 +21.1%	+ 68,122 + 7.3%	+ 868,005 + 24.8%	+ 348,287 +35.5%	+ 659 +3.7%	+ 519,059 +20.8%
<b>Ec. Region 0206 (Old 07)</b>							
Calitzdorp	1951	6,372	2,539		3,698	-	135
	Ladismith	9,183	3,466		5,595	3	119
	Oudtshoorn	37,081	12,816		22,476	23	1,766
Total	"	52,636	18,821	33,815	31,769	26	2,020
Calitzdorp	1960	6,670	1,961		4,461		248
	Ladismith	11,411	3,061		7,689	2	659
	Oudtshoorn	43,441	12,696		27,768	3	2,974
Total	"	61,522	17,718	43,804	39,918	5	3,881
0206 Change 1951-1960 Percentage Change		+8,886 +16.8%	-1,103 -5.9%	+9,989 +29.4%	+8,149 +25.7%	-21	1,861 +92%
<b>Ec. Region 0207 (Old 05)</b>							
1951	George	34,535	15,183		17,512	12	1,828
	Knysna	22,085	8,572		11,622	13	1,878
	Mossel Bay	21,107	8,368		11,757	15	967
Total	"	77,727	32,123	45,604	40,891	40	4,673
1960	George	38,676	13,967		21,806	10	2,893
	Knysna	25,919	7,749		14,942	12	3,216
	Mossel Bay	24,949	8,032		14,606	7	2,304
Total	"	89,544	29,748	59,796	51,354	29	8,413
0207 Change 1960 Percentage Change		11,817 +15.3%	-2,375 - 7.4%	+14,192 + 31.1%	+10,463 +25.5%	-11	+3,740 80%

Source: Population Census 6 September 1960 - Bureau of Statistics.

5.3.4 According to a population estimate in 1967, there is however a change in that Whites have started to increase again:

Population Change 1960 - 1967 (Estimates) (1)  
(in 1,000's and percentage change for 1960-1967)

	Whites 1967	%Change	Coloureds 1967	%Change	Bantu 1967	%Change	Total 1967	%Change
0206	19.3	+10.3	45.4	+14.1	4.0	+ 5.3	68.7	+11.9
0207	33.3	+12.5	66.4	+29.4	10.0	+20.5	109.7	+22.7
RSA	3679.8	+19.2	1836.2	+22.0	2717.9	+16.0	18799.7	+17.5

On what basis these estimates were done or how reliable they are, is unfortunately not known but apparently the growth trend in population has been reversed though it is not yet at the level of the Republic for Whites.

5.3.5 This publication has also an interesting comparison of languages used:(2)

Percentage Using English as Their Home Language.

0206	Calitzdorp	1
	Ladismith	2
	Oudtshoorn	10
0207	George	13
	Knysna	18
	Mossel Bay	15.

5.3.6 The relative decline of population numbers in this area is of course to be expected since its main source of income is from agriculture. It is of course a known law that as the economy of a country grows, a relatively smaller proportion of consumer expenditure is on

(1) Stats - October 31, 1967.  
(2) STATS - June 15, 1968.

agricultural products. This is evident from the following comparison:

Percentage Distribution of Gross Domestic Product at Factor Cost by Kind of Economic Activity:

	1960	1961	1962	1963	1964
Agriculture, Forestry and Fishing	12.3	12.7	11.9	11.4	9.9
Manufacturing	18.5	18.9	19.5	20.0	21.1

The population growth has therefore to be absorbed to a larger and larger proportion by the other sectors of employment.

5.3.7 This area has lagged in industrial development, as has the whole of the Western Cape to a lesser extent. There may however be a turning point. It is now recognised that "amenities have become the prime force in the localization of economic activity in our society"<sup>(2)</sup>. Of course urban amenities are important but natural amenities are being considered more and more and fortunate are those areas where "attractions given by nature have not been obliterated by past economic development"<sup>(3)</sup>. Other writers in considering growth also mention "the persistence of some resource orientation, whether it be the old ones of minerals and agriculture or the newer role of resort climate".<sup>(4)</sup>

(1) STATS June 30, 1966.

(2) and (3) Jean Gottman in Taming Megalopolis. Vol. II - p.1117.

(4) E.L. Ullman ibid Vol. I, p. 76.

GROSS GEOGRAPHICAL INCOME (R1,000)

Area	Ec. Region 0207			Ec. Region 0206			"Western Cape"			R.S.A. Total = 100%
	Percentage of R.S.A. Total	0	0.5	1.0	0	0.5	1.0	0	1.0	
Agriculture and Forestry	1	4893	10.94	3143	0.6	126,503	24.41			518,260
	2	4672	0.89	2555	0.49	123,347	23.78			518,684
	3	4016	0.70	3598	0.63	119,576	20.78			567,025
Fisheries	1	14	.21	-	-	6,151	22	90.0		6,833
	2	16	.21	-	-	6,756	22	90.0		7,504
	3	18	.22	-	-	7,476	22	90.0		8,203
Mines and Quarries	1	1	) less than	-	) less than	5.40	(23039)			424,397
	2	27	) 0.10%	12	) 0.01%	3.45	(19009)			549,961
	3	23	)	14	)	3.63	(22239)			613,345
*Manufacturing etc.	1	2044	.24	12	(1044)	152,146	18.03			843,571
	2	4124	.38	15	(1577)	194,904	18.17			1,072,400
	3	4551	.40	13	(1547)	206,830	18.09			1,141,749
Commerce (Incl. Motor Trade)	1	2360	.44	1321	.25	103,647	19.50			531,350
	2	3014	.50	1440	.24	119,180	19.81			601,396
	3	3203	.50	1530	.24	126,396	19.75			639,825
Financial Institutions Priv. & Public	1	395	.34	258	.22	23,019	19.5			117,768
	2	513	.33	323	.20	30,963	19.5			158,232
	3	586	.32	369	.21	35,923	20.5			175,379
Ownership of Residential Buildings	1	909	.76	632	.53	30,816	25.86			119,154
	2	1141	.74	805	.52	36,086	23.30			154,874
	3	1151	.71	816	.50	37,602	23.32			161,177
Central Government	1	1228	.95	497	.37	20,173	15.59			129,818
	2	1536	.92	753	.45	24,986	14.92			167,415
	3	1784	.99	844	.47	27,179	15.19			180,054
	Total	White		Total	White		Total	White		
	0.56	0.96		0.38	0.57		12.4	20.4		

TABLE II

	Ec. Region 0207			Ec. Region 0206		Western Cape		R.S.A. Total
	0	0.5	1.0	0.5	1.0	10	20	
j) Provincial Administration	1	1023	.90	874	.78	27,702	24.92	111,146
	2	1379	.90	1142	.74	37,763	24.62	153,404
	3	1498	.90	1238	.74	40,915	24.53	166,811
k) Local Authorities (Administrative)	1	323	.47	323	.47	15,421	22.51	68,487
	2	529	.56	504	.53	20,984	22.35	93,883
	3	553	.56	558	.57	22,953	23.34	98,361
l) Local Management (Commercial Section)	1	107	.19	104	.18	6,609	11.68	56,568
	2	236	.33	171	.24	8,837	12.29	71,848
	3	263	.33	168	.22	9,811	12.62	77,919
m) Private Services	1	1569	.44	1430	.41	71,476	20.28	352,457
	2	2078	.46	1866	.41	92,099	20.31	453,543
	3	2879	.61	1772	.37	95,280	20.12	473,499
n) Transport, Storage, Communications	1	1726	.49	978	.28	70,599	20.12	350,867
	2	2134	.49	1221	.28	86,193	20.00	430,840
	3	2345	.52	1377	.31	94,034	20.94	447,987
o) Total	1	16592	.46	10604	.29	677,301	18.65	3,630,670
	2	21399	.47	12369	.27	801,107	17.95	4,460,714
	3	22870	.48	13831	.29	846,244	17.80	4,752,336
Percentages of Total R.S.A. Population 1960		Total	White	Total	White	Total	White	
		0.56	0.96	0.38	0.57	12.4	20.4	

Note: Horizontal Bars are Regions' Percentages of Total R.S.A. Gross Geographical Income with Actual Amounts inside Bars (in R1,000's), for years 1. 1954-1955, 2. 1958-1959, 3. 1959-1960

\* Manufacturing, Industry, Construction, Electricity and Water.

Source: Regional Survey of the Western Cape, N.R.D.C.

TABLE II  
(continued)

5.3.8 It is too early to say whether this factor is having a definite effect. A study of the economic situation up to 1960 revealed that this area was lagging behind in all sectors but that region 0207 was showing a slight relative increase from 1954 to 1960 compared to a decrease for the whole "Western Cape". (See column 0 in Table 11). In this table the values for the regions 0206, 0207 and the "Western Cape" are plotted by scale, according to the percentage that each sector contributed towards the Gross National Income. To show the shortfall that these regions suffer, their population percentages are also shown graphically. Region 0207, for instance, has 0.56% of the total population and 0.96% of the White population of the Republic (1960 Census). When it is realised that economic production is largely associated with the White section, it can be seen that region 0207 is short in all sectors, whereas region 0206 has an excess over its percentage of Whites only in Agriculture and Forestry and in Provincial Administration. The Western Cape showed above the average only in:

- a. Agriculture and Forestry (but declining)
- b. Fisheries (90% i.e. practically all the country's output.
- g. Ownership of residential buildings.
- j. Provincial Administration.
- k. Local Authorities and
- n. A small excess in transport etc.

5.3.9 Comparable statistics for the ensuing years are not available but some further indications are plotted in the following table.

COMPARISON OF REGIONS

Table 12.

	Economic Region 0207			Economic Region 0206			Total for R.S.A.
Area.	0	0.5	1.0	0	0.5	1.0	
	2510			3,187		sq. miles	
			Population:				
			1960				
Whites	29,748			17,718			
Non-White	59,796			43,804			
Total	89,544			61522			
			Population:				
			1967 (Estimated)				
White	33,300			19,300			
Non-White	46,400			49,400			
Total	109,700			68700			
			INCOME TAX				
Income Assessed	14,818			8,392			2,577,301
Number Assessed	8,918			4,912			1,221,226
			Commercial Activity:1960-1961				
			Wholesalers				
Number	28			10			5,486
Total Sales	12,468			202			2,095,107
Recreation Requirements Sales R1000)	22			-			17,365
			Retail Distributive Trade				
Number	360			219			36,330
Total Sales	10,945			7259			1,500,879
			Fixed Property Transactions				
Number	1,369			480			107,349
			Building Plans Passed in Private Sector R1,000				
1964	1397			961			346,900
1965	1675			741			394,849
1966	1783			580			347,423

Note: Horizontal Bars as in previous Table.

Source: STATS (Various Issues)

In the above table, the "reference lines" are the White population's proportions for 1967 (estimated).

5.3.10 Some interesting conclusions from the resort resource point of view are:

- 5.3.10.1 Sales of recreation requirements are minimal. This is a field that could surely be developed though it must be borne in mind that recreation requirements are often bought in the home town.
- 5.3.10.2 Retail trade has an advantage in both regions whereas fixed property transactions show a considerable excess in region 0207. From personal experience, this would be attributed to purchasers wanting to settle but changing their plans later. To my mind this tendency will be reversed when better specialist services and urban facilities become available here.
- 5.3.10.3 Building plans passed showed not only a steady relative increase, but also an absolute increase of 6.4% when the Republic showed a decrease of 12% from 1965 to 1966.

#### 5.4 Water Resources

5.4.1 It is generally recognised that South Africa's water resources are limited and because of the climatic conditions only about 8 million of the total 20 million morgen-feet per annum that reaches our rivers can be beneficially used. "Of this about 40 per cent is used already and at the present rate of growth, the full quantity available will be required shortly after the end of this century." (1) It may very well be sooner.

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(1) J.P. Kriel: "The Planning of Public Recreation." op. cit.

Other authorities state that the domestic, industrial and mining consumption will double in 10 years at the present rate of growth.<sup>(1)</sup>

5.4.1.1 In their report to the Southern Cape Development Association, Shand's firm divides the area into 5 regions:

- i. Coastal Area: Breede River to Hartenbosch.
- ii. Coastal Area: Little Brak to Blaauwkrantz.
- iii Little Karroo West of Kamanassie Mountain
- iv. Uniondale, Joubertina and southern part of Willowmore
- v. Great Karroo.

It was estimated that these regions had available for further exploitation in morgen-feet per year:

I. 51,000    II. 147,000    III. 11,000  
IV. 10,000    V. 17,000

The coastal area therefore had more than 80% and the George-Knysna area more than 60% of the potential for water-consumptive development of the whole area.<sup>(2)</sup>

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(1) Ninham Shand & Partners: "Memorandum oor die Waterbronne van Suid Kaapland."

(2) Ninham Shand & Partners: *ibid.*

5.4.1.2 The existing dams serving my study area are the following: (1)

Existing Dams in South Cape

Table 13

	River	Capacity	Area Irrigated	Assured Yield 1 in 10 years drought
		mg - ft	morg.	mg.ft/year
D1 Hartebeeskuil*	Hartenbos	2200	300 + Domestic	1140
D2 E. Robertson	Great Brak	160	Domestic	990
D3 Swart dam	Swart	280	Domestic	785
D4 Verkeerdevlei	Touws	2120	615	
D5 Glebe	Glebe	50	Domestic	-
D6 Prins River	Prins	1090	420	756
D7 Bellair	Brak	4276	35	950
D8 Gamkapoort*	Gamka	22500	1688	(7500)
D9 Floriskraal	Buffels	26050	2185	9800
D10 Calitzdorp	Nels	1909	610 + Domestic	2120
D11 Kamanassie	Kamanassie	12592)	14600	(9550)
D12 Strompdrift	Olifants	23000)		11300
D13 Melville	Klein Le Roux	95	Domestic	

\* Being built. ( ) Old figures that do not take present upstream use into account.

5.4.1.3 The report comes to the conclusion that in Regions III and IV and V, little water is available for extending agricultural schemes and that further water storage should be applied to augment the existing ones.

Since then, approval has in fact been obtained for the construction of a new dam below the Melville Dam with an additional capacity of 3,500 morgen-feet. This will be applied for Oudtshoorn's

domestic use and irrigation in the Grobbelaars River valley which has up to the present been dependent on private schemes or seasonal floods.

5.4.1.4 The potential in Region I and especially Region II is however considerable. In Region I a 700 ft. long 150 high wall in the Gouritz River could yield 20,000 morgan-feet per year. Other promising sites are in rivers further eastward.

5.4.1.5 In Region II, the climatic and topographic characteristics have produced a number of streams in deep valleys. These have a fairly constant flow but as yet very little of the storage potential is used. These streams, rising mostly in the mountains, are considered to carry water suitable for drinking and irrigation purposes.<sup>(1)</sup>

5.4.2 The Department of Water Affairs has supplied data from a recently completed survey of the run-off in this area and Annex 7 has been compiled from this data.

5.4.2.1 The report of Shand & Partners was apparently based on prior information. For this region it lists some possible sites with the reservoir characteristics summarised in Annex 8.

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(1) Chief Hydrologist, Dept. of Water Affairs Letter, Aug. 27, 1968.

- 5.4.3 Since so little use is made of these waters at present, it is no wonder that the drier inland areas have started investigating the feasibility of diverting some of it. However the report <sup>(1)</sup> states that deviation of water from the coastal rivers for inland irrigation use will be very costly, since water will have to be brought together from a number of sources to be pumped to a higher altitude from where it could gravitate through a tunnel. Unit cost will be far in excess of normally accepted agricultural usage.
- 5.4.4 On the other hand, this water could be applied for irrigation in the coastal area where a high annual rainfall, evenly distributed throughout the year, requires only a small supplemental amount during the few dry periods. (7" per year as compared to 30-40" per year in the Karroo areas are required.) The marginal benefit per unit of water supplied will consequently be much higher here. It is estimated in the report that the present production of R6.40 per morgen in this coastal area could increase to nearer the R18.50 obtained in the Paarl, Ceres, Montagu area if this was done.
- 5.4.5 The report lists the present domestic use of the main towns as follows:

	<u>Mil. gal per year.</u>
Oudtshoorn	570
George	280
Mossel Bay	275
Knysna	80
Great Brak	18
Blanco	15
Ladismith	55
Calitzdorp	25
	<u>1318</u>

- 5.4.5.1 In addition, the coastal resorts of Plettenberg Bay, Wilderness, Hartenbos etc. use a further half a million daily through the season. For a 30 day period this would need another 15 Million gallons.
- 5.4.5.2 The resort use has shown great increases lately - Wilderness doubled in four years and Plettenberg quadrupled in twelve years. It is also considered that the Mossel Bay, Oudtshoorn, Knysna triangle may experience above average growth in domestic use and it is estimated that 3,000 million gallons (or 5,200 morgen-feet) per year will be required by the towns in this group by AD 2000. It is however clear from Tables 2 and 3 above that the water potential of this area is much more and will therefore become more and more important in the picture of the country's total available supply as the existing sources near present metropolitan centres reach full utilization.
- 5.4.5.3 Thus the water supply could be a strong factor in applying the government's decentralisation policy to stimulate growth in this area.
- 5.4.6 Due to the proximity of wonderful beaches and the natural lakes, the recreational use of reservoirs may never be a big factor in this area except perhaps where it is at or near another tourist attraction or an urban concentration. There is a demand for swimming facilities at the camping spots near the Caves for instance. The Stroomdrift Dam

however was originally used by the Oudtshoorn Yacht Club but now they have transferred to the Lakes near the Wilderness. The other amenities at or near the Lakes are of course attractive to the families of yachtsmen when they do not sail themselves.

5.4.7 The possibility of future use of the reservoirs must however always be borne in mind. From the aspect of change of climate, the Little Karroo area for instance is very desirable for the coastal Port Elizabeth and Cape Town metropolitan areas. A well-developed resort at a water resource in this area, will therefore satisfy their need.

## 5.5 Communications

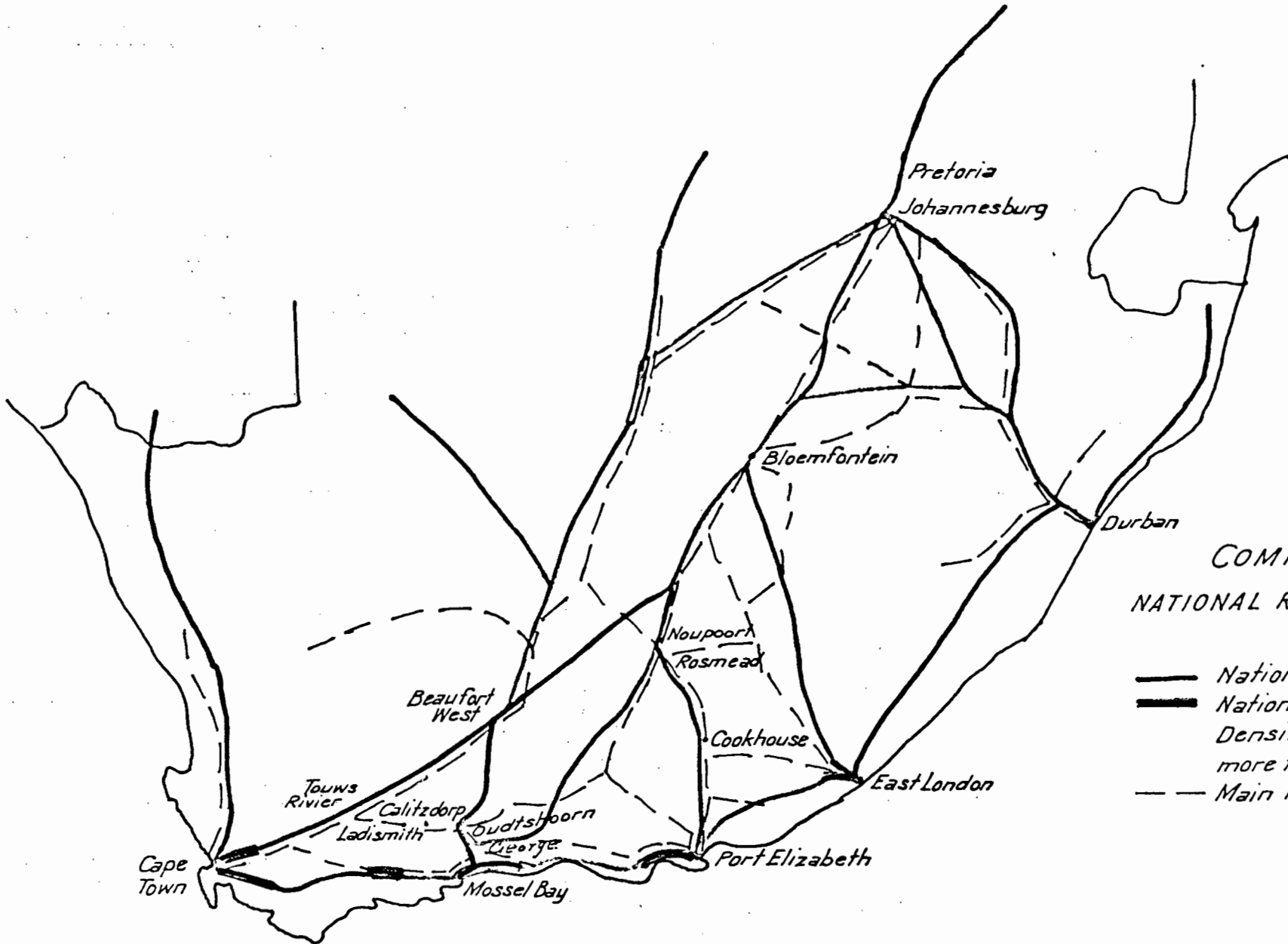
5.5.1 This area is well served as far as tarred roads are concerned. (See Fig 17,18).

5.5.1.1 National Road N2 passes through the coastal area and this has been a considerable factor in opening up resorts, some of which were previously only reached after tortuous journeys.

5.5.1.2 N1 is the national road connection from George to the Free State and Transvaal, through Uniondale, Willowmore and Graaf Reinet.

5.5.1.3 N3 branches off this road again to link with the Cape Town - Transvaal national road at Beaufort West. It passes through Oudtshoorn where a branch goes as far as the Cape Caves.

5.5.1.4 Trunk Road 31 has been constructed from Oudtshoorn



*COMMUNICATIONS: I*  
*NATIONAL ROADS & RAILWAYS*

- National Roads*
- National Roads with Traffic Density in Cape Province of more than 1000 E. V. U. per 24 hrs.*
- - Main Railways.*

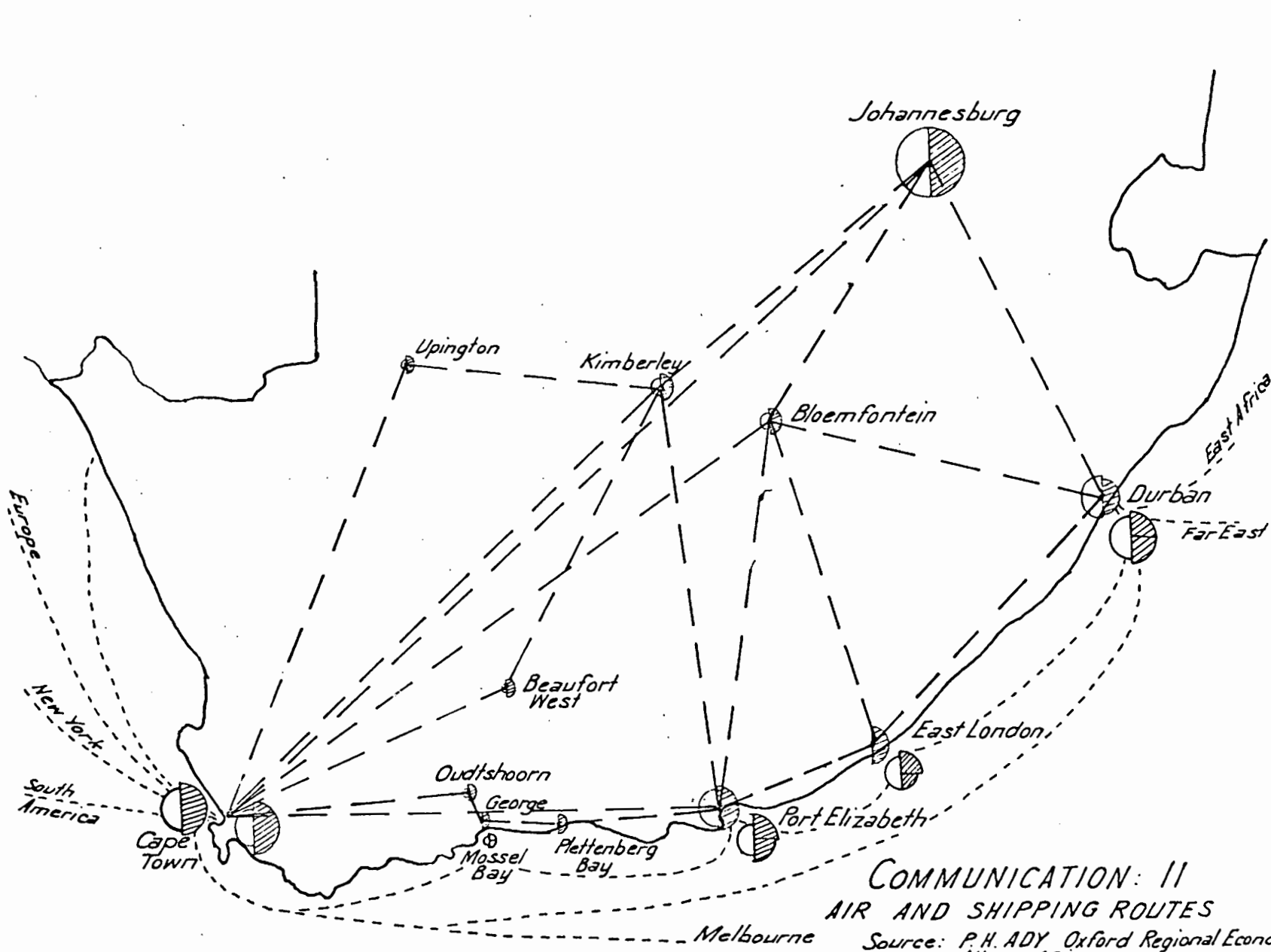
*FIG. 17.*

to Cape Town through Calitzdorp, Ladismith etc. and Trunk Road 33 from Oudtshoorn to Mossel Bay.

- 5.5.1.5 Trunk Road 44 connects N1 with Port Elizabeth through the Langkloof.
- 5.5.1.6 All the above are "black-topped" except for a portion of N12 between De Rust and Beaufort West through Meirings Poort.
- 5.5.1.7 In addition, the Main Road from the Caves to Prince Albert is being tarred and presentations are being made to tar Prince Alfreds Pass and some other main roads in these areas too. Quite a number of branch roads to coastal resorts are already, or are going to be tarred as well.

## 5.5.2 Rail

- 5.5.2.1 The lack of a rail connection to the hinterland has already been mentioned. The mountain ranges are now readily surmounted by roads but rail connections are still very difficult.
- 5.5.2.2 The existing railway from Cape Town to Port Elizabeth is very slow. It takes passenger trains approximately 24 hours from Oudtshoorn to Cape Town and 16 hours to Port Elizabeth. Motor cars do the journeys in a third of the time or less. Rail transportation is therefore losing out to road transportation and of course to a small extent to air transportation.



**PORTS**

Total passengers arriving ('000). less than 1	Total cargo ente leave. ('000 tons) less than 1
1-2	15-49
3-4	50-99
5-9	100-495
10-50	500-1,000
Over 50	Over 1,000

----- Sea Routes

**AIRPORTS**

1953	Return Flights per week	1963
0	1-9	0
1/2	10-24	1/2
2/3	25-49	2/3
3/4	50-74	3/4
4/5	75-99	4/5
5/6	100-149	5/6
6/7	150-199	6/7
7/8	Over 200	7/8

----- Air Routes

**COMMUNICATION: II**  
**AIR AND SHIPPING ROUTES**  
 Source: P.H. ADY, Oxford Regional Economic Atlas: Africa 1965.

### 5.5.3 Airways (See Fig. 18)

5.5.3.1 Local airports are in operation at Oudtshoorn, George and Plettenberg Bay, there being a twice or three times a week service from Cape Town to Port Elizabeth and back which lands at these ports.

5.5.3.2 Local interests have long worked for an all-weather regional airport. This would probably have been established already but for the fact that both Oudtshoorn and George fought to have the airport. Now it is learned that the Transport Commission has decided to build a regional airport between George and Mossel Bay.

5.5.3.3 If a direct air-service is established with the interior, the air traffic will be considerably increased.

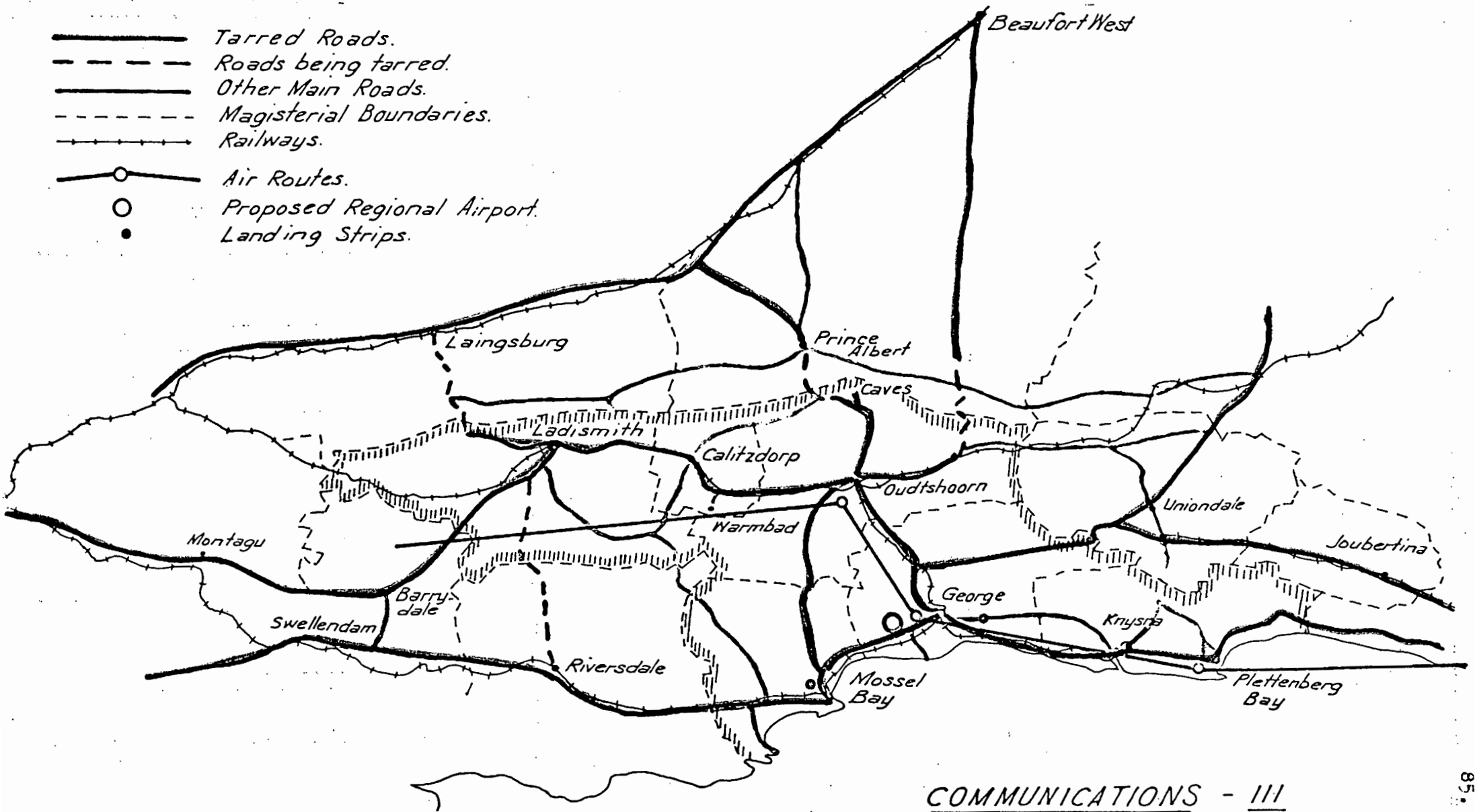
5.5.3.4 There are also smaller landing strips at Mossel Bay, Wilderness and Knysna which are often used by private planes.

### 5.5.4 Sea Traffic (See Fig. 18)

5.5.4.1 The port traffic at Mossel Bay has been steadily declining. Up till a few years ago, passenger liners still anchored in the bay but now this has been discontinued.

5.5.4.2 A major development has however been the building of the oil terminal which has facilitated the discharge of petroleum through the submarine pipe line.

- Tarred Roads.
- - - - Roads being tarred.
- Other Main Roads.
- - - - Magisterial Boundaries.
- +———— Railways.
- ——— Air Routes.
- Proposed Regional Airport.
- Landing Strips.



COMMUNICATIONS - III

## 6. RECREATIONAL RESOURCES

### 6.1 The Coast

#### 6.1.1 The Coastal Waters

Nobody can remain in doubt about the importance of water, and especially the sea, in the recreation-holiday picture after he has studied the close association of resorts to the coastline and other water-land edges. It applies in this area as every-where else. A study of the factors determining successful beaches is therefore important.

6.1.1.1 For Natal beaches, the results of fairly detailed studies have been published (1). Though of course not all relevant to the beaches in this area, it does contain information about the coast in general and can also serve as a guide to studies that should be undertaken for the selection of new beaches. In addition, scientists of the CSIR's National Institute for Water Research are now able to predict the extent to which effluents will disperse if they are discharged at specific points. This is important both to tourism and public health in general. (2)

6.1.1.2 A CSIR report describes the section of coast at the Wilderness as marked by the cusp formation (gullies bounded by sand spits) and the characteristic "complex cross-currents which vary almost continually and it is thought that this is the result of varying energy in the incident waves

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(1) C.S.I.R. Symposium. S2 Marine Studies off the Natal Coast.

(2) CSIR Press Release - August 5, 1968.

and of discontinuities in the wave crest along this exposed coast". (1)

6.1.1.3 The currents affecting the off-shore waters of the South African coast are described by Commander J.K. Mallory S.A.N. (2) "The westerly winds of the cyclonic depressions passing to the south of the continent increase the Southern Ocean drift, banks up the Agulhas Current on the Agulhas Bank .. with the result that some of it is deflected towards the coast in the neighbourhood of Mossel Bay, from whence it flows as a counter current up the coast inside the Agulhas Current . . . This counter current is cold because, not only does a certain amount of cold Atlantic water flow in past Cape Agulhas, but upwelling water along the coast reaches the surface once the warm Agulhas current is displaced by the westerly wind and counter current." "As the depression moves eastward ... the counter current in the vicinity of Mossel Bay decreases to nothing ... and southeasterly winds bring Agulhas water back .. thus warming up the coastal waters again."

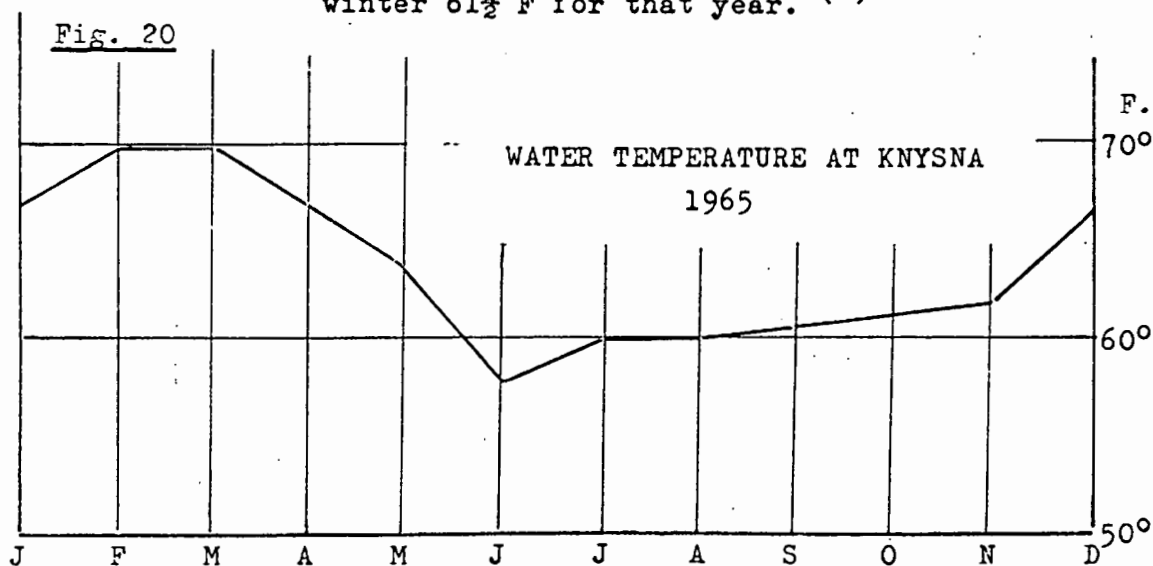
6.1.1.4 The ocean surface temperature has at different times been measured by the Division of Sea Fisheries Off Plettenberg Bay the following values are recorded: (3)

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- (1) CSIR Special Report (unpublished): The Deterioration of the Wilderness Lakes System. App. p.1.
  - (2) J.K. Mallory: Bathymetric & Hydrographic Aspects of Marine Studies off the Natal Coast. CSIR Symposium. op. cit. p. 37 and 36.
  - (3) L.V. Shannon: Hydrology of the South & West Coasts of South Africa.

	$^{\circ}\text{C}$	$^{\circ}\text{F}$
April 1960	17	63
July "	18	64
October "	17	63
January 1961	20	68
April "	18	64
January 1963	19	66
July "	15	59
January 1964	22	72

6.1.1.5 For Durban it is stated that "the mean temperature of the sea varies between  $68^{\circ}\text{F}$  in July and  $76^{\circ}\text{F}$  in January". In other words the temperature at Plettenberg Bay is on average  $6^{\circ}\text{F}$  lower than at Durban. This certainly adds a bracing effect to the waters in this area. Added to the fact that it is clearer than Natal waters, makes it more desirable in summer at least.

6.1.1.6 Water temperatures were recorded by fishermen at Knysna in 1965. The results, plotted in Fig. 20 show an average summer temperature of  $66^{\circ}\text{F}$  and winter  $61\frac{1}{2}^{\circ}\text{F}$  for that year. (1)



(1) Knysna Angling Club Hon. Secretary in: "Tight Lines" - December 1967, p. 31.

## 6.1.2 The Coastline

6.1.2.1 The coastline itself shows many variations. The many sandy beaches have been formed by the sea-currents from the east meeting the Table Mountain sandstone or enon quartzite layers, being deflected and causing circulatory action into the less resistant material and thus forming bays like Mossel Bay, Plettenberg Bay etc.<sup>(1)</sup> Some of the "widely curving bays have been greatly smoothed out by long bay-bars which swing from Keurboomstrand to Plettenberg and from Plettenberg to Robberg while the cliffs have in many places been cut back, e.g. Knysna Heads".<sup>(2)</sup>

6.1.2.2 There have been considerable subsidences and upheavals of geological importance. West of Robberg are sea formed caves which are now 60 feet above sea-level. In general it is considered that the high plain next to the coast is due to a recent fault. Some of the rivers therefore have not carved through and waterfalls are found near the coast. On the other hand again, there are other valleys which are now submerged. Blaauwkrans, Keurbooms and Kaaimans are well-known examples and form gorges of considerable scenic grandeur.<sup>(3)</sup> Keurbooms gorge has a depth of 60 ft. of water in some places and "according to Schwartz, recent shelly sands are found in the river bed to a depth

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(1) M.S. Taljaard: "Oor Berge en Vlakke" p. 86.  
 (2) Lester C. King: South African Scenery - p. 159.  
 (3) L.C. King op. cit. p. 158.

of 110 feet. The river has thus cut into the tertiary peneplain to a depth of over 700 ft, and although the present floor of the valley is 60 feet below sea level, the mouth is almost closed by coastal sand accumulations". (1)

The chain of lakes near the Wilderness is also due to the filling in of a partly drowned gorge.

- 6.1.2.3 On the coastline itself, the sandy beaches are important but it must be noticed that the main resorts are all at or near the junction of stretches of beach with stretches of rock or actual rock and cliff promontories. In some places such as Herald's Bay, the beach ends abruptly against the cliffs which drop from a height more than 300 feet into the sea. Fishermen have with great ingenuity made ladder bridges to get to fishing rocks.
- 6.1.2.4 The rocks are of course important not only to the fishermen. The shelter they provide from wind and current is very necessary for bathing beaches and in fact forms bays as has been described. Where the rocks are exposed in the tidal area, pools are formed which provide interesting marine life and of course fishing bait. Furthermore at the rock promontories, the mainland has been stabilized and the mature indigenous vegetation at these places brings the scenic attractions right down to the coastline. Again

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(1) J.H. Wellington. Op. cit. p. 166.

Herolds Bay for example has only about 300 yards of beach yet it has 30 homes and 50 holiday homes plus an hotel packed against the hillside above the beach. On the other hand, there are long stretches of clear beach, e.g.  $\pm$  4 miles between Great Brak and Glentana, 5 miles between Klein Krantz and Gericke Point which have no resorts.

6.1.2.5 Mossel Bay district has 39 miles of coastline of which 17 miles are cliffs or rocky. (The measurements given here are approximate only.) George has 37 miles with 16 miles of cliff and Knysna district a total of 65 miles of sandy coast with low, rocky stretches along the Goukamma Nature Reserve and at Buffels Bay whereas the 27 miles from Brenton on Sea to Robberg are practically completely taken over by steep cliffs except for small beaches such as Coney Glen, Sparreboos (inaccessible by road) and Noetzie. Then follows the 3 miles of beach to Beacon Island and the Plettenberg Bay beach itself with some fishing rocks again. To the east there is an interesting stretch of 2 miles opposite the Bitou-Keurbooms River Lagoon. The mouth of this lagoon has in the past changed to open right near to Plettenberg Bay, broken through at the eastern end and now appears to be wandering back again towards the bay. This stretch is used by caravanners on the mainland, who have to cross by foot-bridge.

6.1.2.6 Another  $3\frac{1}{2}$  miles of beach follows, which is only used by hotel guests at Keurbooms River and a few holiday homes on the sand dunes. At Keurboomstrand rocks are again encountered and here another resort has developed. The archaeological caves and Arch Rock at the mouth of the Matjes River, are well-known spots. The rest of the 11 miles to the Knysna boundary are rocks and cliffs except the 2 miles beach at Natures Valley which has also spurred the establishment of a holiday resort.

6.1.2.7 To the east of Natures Valley "the Table Mountain Sandstone cliffs rise to heights of over 600 feet in the Storms River mouth area, forming the highest line of sea-cliffs in South Africa".<sup>(1)</sup> Along this stretch the Tsitsikamma National Park was proclaimed in 1964.

6.1.2.8 There are therefore in total 68 miles of sandy beach along the coast of these three districts. Of this, roughly half would be suitable for resort development. The other stretches are either on open sections too exposed to strong lateral currents, have too many rocks below the water for comfortable swimming or fall inside the nature reserve.

6.1.2.9 There is of course the possibility of erecting structures on the beach to create new edges or what would be more applicable, especially in this

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(1) J.H. Wellington: Southern Africa Vol. I - p. 165.

area of good rainfall, is to establish plant growth to form strips of bush leading down to the sea. For example, see Mamaia Beach, Romania. (1)

### 6.1.3 Knysna Lagoon

6.1.3.1 A further feature of this coastline is the lagoon or estuary at Knysna. South Africa is not liberally endowed with natural harbours and Knysna, though not one of the more useful ones due to the dangerous entry at The Heads, is no doubt the most beautiful. Sir John Barrow said to be often critical, wrote 170 years ago: "The arms of the Knysna stretch into the deep valleys at the feet of the mountains and are there lost in impenetrable forests. The whole country's boldly marked and most magnificently clothed, and may be considered, beyond comparison, as the grandest and most beautiful part of southern Africa." (2)

6.1.3.2 The lagoon is about 4000 acres in extent but large parts of it are very shallow or exposes land at low tide. The harbour has now lost official status but the bay is extensively used for yachting, boating and fishing.

## 6.2 The Lakes (3): (See Fig. 23)

6.2.1 Between the Knysna Lagoon and Wilderness there are a further series of lakes of different character as they

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(1) Lufthansa Revue No. 6 1967/68 - p. 24  
 (2) Jose Burman - The Garden Route - p. 75  
 (3) Information for this section from maps. by Government Printer.

are not washed by tides. They are however very important in the recreational picture, each one having a different atmosphere with different amenities.

6.2.1.1 The filling in of originally larger bays as has already been described is also believed to be the origin of these lakes. Apparently the sea level was at first about 25 feet higher than at present, then receded during which time the sand dunes were formed and cemented. The sea level probably went 100 feet lower than at present till it started to rise again, depositing more material and finally receded again to the present level when the lakes were completely or partly sealed off.

6.2.1.2 The lake surfaces are all at, or very nearly at sea level but not all of them drain into the sea. Groenvlei, the nearest to Knysna has no outlet and no stream feeding it but remains filled with fresh water. It has been said that underground streams feed it but it is probably balanced by the general water table and the sea through the porous underground.

6.2.1.3 Groenvlei is 3 miles long with an average width of half a mile - 900 acres in extent. It is being developed as a nature reserve with the area towards the coast and the Goukamma River and is known as one of the best spots for fresh-water angling, having been stocked by black bass

and sunfish which still populate the lake without replenishment.

- 6.2.1.4 On the northern bank private property adjoins the lake. Uncontrolled development here may detract from the natural beauty as it is set between the green hills.
- 6.2.1.5 The next lake is Swartvlei; the biggest in the chain with a surface area of approximately 2700 acres. Karatara Lake, an eastern extension, is a further 200 acres. It is fed by the Karatara River, and then with the Hoogekraal River, enters the Swartvlei which is also fed at the western end by the Diep River joining in with the Wolwe River. The mouth is usually closed and only opens with a big flood or when a pilot channel has been dug to induce opening so that a big flood may be avoided. The water has actually already risen by about 8 feet at times of heavy rainfall. Some authorities feel that the water should be allowed to bank up before breaking its own way to the sea. It is contended that this would have a better scouring effect and also keep the mouth open for a longer time after the flood season, i.e. till the spawning season when fish want to come in from the sea. This however conflicts with the interests of landowners along the banks. Lands get flooded and some buildings are threatened. As a result the landowners demand opening of the mouth before it has built up

sufficiently to have a proper scouring effect.

6.2.1.6 The other lakes are all linked. Rondevlei (350 acres) at the end is only separated by a 400 yard wide, 150 feet high isthmus from Swartvlei and there have already been suggestions that a canal be built here to link them. Rondevlei has no major streams feeding it and the water rises and falls through the link with the next lake, Langvlei (550 acres). This is fed by streams from the hills and it is again linked by a canal which is often dry, with Island Lake or Onder-Langvlei (350 acres). The Duiwe River feeds this vlei which is again linked to the Touw River by the Serpentine. The latter is an interesting canal as it winds all of its way in ten half circles through the flat surrounding land. It is negotiable by small boats.

6.2.1.7 The mouth of the Touw River is, like the Swartvlei, usually closed thus forming a lagoon. When open, the tide rises for about 3 miles upstream. All of this is between picturesque hills and boating is popular here. Sea water has even risen to Island Lake but the salinity stays well below that of the sea.

6.2.1.8 Rondevlei has been mentioned as ideal for fish-farming on a commercial basis and the Department of Nature Conservation is planning to establish a research station here. Rondevlei and Swartvlei are bird sanctuaries.

6.2.1.9 All the lakes have abundant growth surrounding them and in fact, in many places the reeds are intruding to such an extent into the waters that it is being investigated as a possible threat to future use.

### 6.3 The Rivers

6.3.1. Some of the rivers have been mentioned in the discussion on Lakes and the water shortage potential in the more important ones have also been covered. Some of these have however also a considerable potential for recreation purposes. In fact all the rivers, even the smaller ones that have a constant flow or forms a lagoon at the mouth, provide very interesting entertainment.

The more important ones will be briefly mentioned:

6.3.1.1. Storms River to the east of Knysna boundary, is the centre of the Tsitsikama National Park and the site of the well-known Paul Sauer Bridge. Many consider Storms River to be the eastern boundary of the "Garden Route".

6.3.1.2. Groot River forms a small lagoon at Nature's Valley where a camping site is run by the Forest Department.

6.3.1.3. Keurbooms River is largely on State Land, within the Forest Reserve. It has thus the largest unexploited potential for outdoor recreation within the study area. The formation of the river has already been described. At the

National Roads bridge which crosses the river at the ebb<sup>&</sup>flow, the river is some 300 yards wide. From there it gradually narrows upstream being navigable for 6 miles. Downstream it joins the Bitou River to form a wide tidal lagoon. Both river and lagoon (± 500 acres water surface) afford plenty opportunity for swimming, boating, fishing, etc.

- 6.3.1.4. In a survey of possible recreation activities in 81 Forest Reserves,<sup>(1)</sup> it was found that the Keurbooms River Reserve offered participation in 12 activities out of a total of 14 that were listed. The 12 were swimming, fishing, boating, and under-water swimming all in fresh water and sea water, mountaineering, water-skiing, walking and camping. The 81 reserves averaged 5.2 activities each, Keurbooms River having the highest number.
- 6.3.1.5. Hartenbos, Great Brak and Little Brak Rivers, near Mossel Bay, all form lagoons behind closed sand bar mouths and are used for local boating activities.

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(1) M.E. Jooste & J.D. Venter: The Open-Air Potential of Certain Government Ground in the Republic of South Africa.

#### 6.4. The Forests

- 6.4.1. A review of the forests, their present production and potential, is important, because not only do they occupy a big proportion of the land in the study area, (see below) but the state has now also accepted the concept of multiple-use of the forest estate, as has been practised in many overseas countries. The state has actually already in the past applied this principle to some extent in that the forest-reserves were seen not only as having to be economically viable, but serving other ends as well.
- 6.4.2. The achievement of independence overseas supplies, for instance, is important. When our indigenous forests were practically exhausted, the establishment of plantations became urgent. Private enterprise invested largely in the wattle bark industry to establish the timber growing plantations. Today the man-made forests of South Africa meet 100 per cent of the requirements for wooden containers, poles, mining timber, fibre board, dissolving pulp and firewood, ± 95% of structural timber, 35% of hardwood for furniture, 70% of paper and paperboard and 20% of plywood and veneers (1).
- 6.4.3. Furthermore the establishment of plantations served as a means of employment to many people who had no education to seek alternatives and whose livelihood was lost when the natural forests became depleted and were closed to

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(1) Minister of Forestry: Senate Motion No. 16/1968.

private felling, In fact the Department has been criticised of subsidising inefficiency in employing these white people. However it has been regarded as a non-recurring problem, the young people being forced out by compulsory education.

6.4.4. Another aspect of the Forest Reserves in the past have been to serve as veld fire control areas and concomitantly, the conservation of ground water resources and wild life protection. As such for instance the mountain catchment areas have been preserved and the 10 or 12 elephants remaining in the forests are protected.

6.4.5 A new facet has however recently been introduced when it was realised that the forests have considerable value as outdoor recreation areas. In the survey <sup>(1)</sup> of the open-air potential of Government ground in the Republic, 81 areas were covered. Of these, only 11 did not fall under the Department of Forestry. Some of these, like the area at Storms River has been set aside as Nature Reserves (see 6.5) while others, e.g. Keurbooms River, (see 5.5.3) are to be developed as Pleasure Resorts. These are being transferred from Forest Department authority to National Parks Board and Provincial Administration respectively. However there are other forest areas which the Department will develop itself as recreation areas or nature reserves (see Forest Act: No. 72/1968.).

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(1) M.E. Jooste & J.D. Venter: Op. Cit.

6.4.6. The Minister of Forestry has therefore announced a five-year plan for the development of recreational facilities<sup>(1)</sup> R29,000 has been set aside for the current year and of this, R1000 is to be spent in the George-Knysna area.

6.4.7. The George-Knysna Forest Area is administered, together with the reserves in Humansdorp District, by the Chief Regional Forest Officer at Knysna. He is also responsible for State Saw Mills in the area and the State Land in the Little Karroo where fire prevention and water conservation functions are fulfilled.

The main forest reserves are:<sup>(2)</sup> See Fig.24.

Mossel Bay: Ruitersbos;

George: Jonkersberg, Geelhoutboomberg, Saasveld, Kleinplaas, Bergplaas, Woodville;

Knysna: Karatara, Goudveld, Buffelsnek, Gouna, Concordia, Deep Walls, Kaffirskop, Kruisfontein, Harkerville, Keurbooms River and Bloukrans; and

Humansdorp: Lottering, Storms River and Witelsbos.

6.4.8 The relevant data that follows are for this region<sup>(3)</sup>.

6.4.8.1 The main indigenous forests of the Republic cover only about 700,000 acres i.e. about 0.2% of the Republic's 471,445 sq. miles. In the Knysna region are some 120,000 acres which

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(1) Minister of Forestry: Senate Motion No. 16/1968.  
 (2) From Trigonometrical Survey Office: Topo-Cadastral Sheets.  
 (3) Compiled from information from:

a) Statistical Year Book 1966 - p. J17.  
 b) Population Census 1960 Tables 1,6.  
 c) South African Digest, Jan 6, 1967 - p. 8,9,15.  
 d) Regional Forest Office Knysna.  
 e) Research & District Forest Officer, Indigenous Forests, George.

represent the largest compact area, i.e. 17% of the total of natural forest in the Republic. The others are either negligible, are already, or will be included in Bantu Homelands. Therefore this area will be the only of its kind left in the rest of the Republic. A separate forest district has recently been created for the intensive management of these forests.

6.4.8.2 Furthermore there are some 2.3 million acres of man-made forests or "plantations" as we call them in South Africa. These largely consist of conifers from Europe and America and eucalyptus and wattle from Australia. The Department of Forestry controls 550,000 acres, 132,000 acres, i.e. 24%, being in the Knysna region. The growth in acreage and production is shown in the following table.

TABLE 14  
PLANTATIONS IN KNYSNA REGION

	<u>Year</u>	<u>Area Planted</u> <u>Acres</u>	<u>Logwood Sold</u> <u>Mil. Cu. Ft.</u>
Coniferous (1)	1959	104,000	6.2
	1968	112,000	7.0
Broad Leaf (2)	1959	14,000	0.54
	1968	20,000	0.66
Indigenous (3)	1959	104,000	0.095
	1968	104,000	0.065

132,000 acres is 4.6% and 104,000 is 3.6% of the total area (4,461 sq. miles) of the four districts mentioned.

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- (1) Mainly *Pinus radiata*, *Pinus Pinaster*, *Pinus elliottii*, *Pinus toeda*.  
 (2) Mainly *Eucalyptus*.  
 (3) Mainly: Blackwood (an exotic introduced into indigenous forests), Yellowwood, Stinkwood, Ironwood, Cape Beach, White Pear, Candlewood, Hard Pear,

6.4.8.3 In 1959 there were 2076 people employed and in 1968, 2387 in the State Forests and Saw Mills. An estimated 3000 is employed by private enterprise. The sale of seedlings which are grown by the Department to encourage private afforestation, has also decreased in these years from 2,087,600 to 1,061,700.

6.4.8.4 It must be noticed that the sale from indigenous forests is less than 1% of the total, it has actually decreased but the area is nearly the same as that of the plantations. These forests were of course denuded by previous generations - in 1913 there were still 1196 registered foresters earning some living therefrom. Thereafter their numbers had to be gradually reduced by having a lottery system for felling trees. The policy is now "that certain indigenous forests should not only be protected against destructive agencies, ... but should be managed according to sound silvicultural principles with the purpose of obtaining from these forests the best financial returns on a continuous basis".<sup>(1)</sup>

6.4.8.5 In view of the fact that the Minister had also quoted an authoritative estimate that if the whole of the suitable unforested 210,000 acres still held by the Department (12,000 acres in Knysna region) is planted, the annual timber yield will be 30 million cubic feet. But by

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(1) Minister of Forestry op. cit.

the turn of the century there will be a shortage of 548 million cubic of roundwood in South Africa. In the light of this, and the present low production of the indigenous forests, their existence is threatened by the demand for softwoods. And though the man-planted forests have their own brand of beauty, compared to the beauty of terraced contours and orderly planted crops of farmlands, it is to the natural forests that the visitor is attracted. The development of the recreational aspects of these forests may therefore be the strongest factor ensuring their preservation as such.

(See Figure 25)

#### 6.4.9 Recreational Use of Forests

6.4.9.1 Up to recently there were one or two Big Trees (Yellowwood - some 137 ft. high, 26 ft. in girth and estimated 2000 years old) and the "Garden of Eden" with marked trees that were set tourist attractions.

6.4.9.2 Under the new policy however, extensive development is taking place.<sup>(1)</sup> "In the last two years the following initial work has been done in the Knysna Forest District:

"a) 10 picnic spots laid out - each has 2 - 6 picnic units (a picnic unit consists of fire place, table with benches, litter box, parking space) 1 - 2 latrines and, if no natural water

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(1) Research & District Forest Officer. op. cit.

supply is available, with a water tank." (The Department's "litter box" by the way is a real example of the aesthetic touch - made of wood with a pitched roof, it could be the domain of the gnome that one expects to peep round the next tree when you enter these primeval series forests.)

"b) 4 scenic spots have been laid out, each with several benches, tables and litter boxes

"c) 8 miles of major forest drives, 1 mile scenic drive and a large number of forest walks, cliff walks and mountain footpaths have been constructed.

"d) 5 Big Trees have been opened up.

"e) A major orientation board has been set up at every picnic and scenic spot.

"f) Several thousands of indigenous trees at picnic and scenic spots and along forest walks have been labelled with national tree numbers for easy identification." (The list supplied to visitors actually includes more than 50 named species from the famous Stinkwood to Wild Pomegranate and Monkey Plum.)

"g) About 60 signboards have been set up for the direction of visitors to the recreational facilities.

"During this year an additional 10 miles of forest drives are under construction. Along these roads, 5 more picnic spots with altogether 15 picnic units will be laid out. At Woodville picnic spot about 1.5 miles new forest walks will be constructed and an additional Big Tree will be opened up there. The scenic spot at Brackenhill Falls will be improved by the construction of a cliff walk and the removal of exotic trees.

"During the next two or three years the develop-

ment work will extend into the Tsitsikamma region, where at least another 12 picnic and scenic spots will be laid out.

"The Development of the Karatara - Farleigh areas as forest recreation resort for coloured people is under consideration.

"Depending on available funds, it is also planned to develop in a more distant future the Swartberg and Baviaanskloof forest reserves by the construction of scenic drives and other recreation facilities."

6.4.9.3 These facilities are being provided at no charge to visitors and it is hoped that the Department experiences the same satisfactory response from the public as has been found elsewhere. In New Zealand for instance the Chairman of the National Parks Authority has stated:<sup>(1)</sup> "The traditional Forest Service policy arising from earlier unfortunate experiences with damaging fires, of controlling public entry into State forests by permits, made satisfaction of these demands unduly cumbersome. It was, therefore, decided not only to relax this requirement but also to take positive steps to improve facilities for visitors. Confidence in their responsible behaviour has not been misplaced."

6.4.10 With regard to camping out, however, our Forest Department's policy, contrary to that overseas and in our own

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(1) National Parks Authority of New Zealand - letter from Chairman 20.6.1968.

National Parks, is to leave its provision to private enterprise outside the reserves. An exception is the camping site at Groot River (Nature's Valley) where further extensions are planned. Control of the Keuirbooms River site is being passed to the Department of Nature Conservation and presumably the Harkerville, and Lottering sites (1) will be treated similarly when these are ripe for development. New Zealand National Parks (2) "encourages the provision by private enterprise of commercial accommodation, of all grades, particularly by motel units, transport facilities, tourist amenities such as ski tours, chair-lifts, restaurants and shops, if it can be established that there is a demand for such amenities". No freehold is granted but satisfactory leases are arranged for these to be provided in the forests.

6.4.11 In America the U.S. Department of Agriculture manages some 154 national forests on 182 million acres. In these are 14 million acres of wilderness area, 100,000 miles of trails and 194,000 miles of forest development roads for motorists. Campgrounds, hotels and lodges on national forest land are able to accommodate more than 350,000 overnight visitors at one time. A large part of their Department's work is to meet "the challenge of fitting man's activities and needs harmoniously into his total environment .... About half of the Department's staff works in some phase of conservation to preserve the scenic splendour of our mountaintops and our other

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(1) M.E. Jooste & J.D. Venter op.cit.

(2) National Parks Authority of New Zealand - letter from Chairman 24.4.1968.

natural resources while getting the most use from them. These 50,000 U.S.D.A'ers are busy helping to develop our forests and wood sources; helping to develop watersheds and river basins, fish-stocked lakes and ponds for swimming and boating as well as storing water; helping to develop farms that besides growing crops, offer good hunting, fishing and other recreation".<sup>(1)</sup>

## 6.5 National Parks and Provincial Nature Reserves

### 6.5.1 Tsitsikamma

6.5.1.1 There is one National Park - Tsitsikamma Forest and Coastal Park within the area. It really consists of two portions - the indigenous forest section near the Paul Sauer Bridge (1200 acres) and the 35 mile stretch of coast stretching half a mile into the sea. This is the only park of its kind in South Africa, the aim being to conserve the life in the sea and along the coast. Fishing is allowed, though bait may only be taken off by the Park Officials. Some authorities feel that there should be a stretch along South Africa's 1600 miles of coast where nature is left completely undisturbed. This could no doubt still come here or elsewhere along the Knysna coast. The Tsitsikamma was only proclaimed in 1964, yet in 1967 already the Forest Park had 44,226 visitors and the Coastal Park 22,898 visitors.<sup>(2)</sup>

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- (1) Orville L. Freeman: Secretary of Agriculture in "Outdoors U.S.A." 1967, in Foreword.  
(2) National Parks Board of Trustees - letter May 3, 1968.

Of all the National Parks, this number is exceeded only at the Kruger National Park.

#### 6.5.2 Goukamma (including Groenvlei)

6.5.2.1 Goukamma is the largest Nature Reserve (±5,000 acres) administered by the Provincial Department of Nature Conservation in this area. It is established on ground largely reclaimed from driftsand by the Forest Department. Groenvlei is within this reserve and the dark waters of the Goukamma River enters the sea within its bounds too. Access is provided by the tarred road to Buffels Bay, a holiday resort on Divisional Council land and the National Road which skirts the lake. Fishing by permit is allowed on the lake where motorboats have been prohibited and a camping site is being established between the road and the river. 25 Caravan sites and 6 bungalows are to be provided during the first stage and this number can be trebled later.

6.5.2.2 A footbridge from here leads to the largest part of the reserve on the west of the river. Here large tracts of Rooikrans, formerly planted to stabilise the sand, are now being cleared and replaced by indigenous trees, primarily berry producing species, attractive to birds. "The Reserve, particularly the Groenvlei area, has a rich and varied avifauna and every effort is being made to improve the habitat for the birds."<sup>(1)</sup>

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(1) Department of Nature Conservation Report No. 21-1964 - p. 56.

Mute Swans have been released here in 1963 and have already established themselves though they are threatened by otters. Bushbuck, Grysbeck and Bluebuck are found in the reserve.

### 6.5.3 Keurbooms River

6.5.3.1 The possibilities at Keurbooms River has already been mentioned. Here the Provincial Authorities are planning a Pleasure Resort with bathing, boating and water-ski facilities. With its picturesque setting between the 500 ft. high hills dropping straight down to the water and covered with verdant bush, one can visualise the attraction it will be to overseas visitors to be taken up by launch and view the campers' colourful tents and rondavels along the bank of the river.

### 6.5.4 Robberg

6.5.4.1 Robberg is quite different. Here the rugged rock formations are unique and exposed due to a much lower rainfall. The whole peninsula is a reserve under control of the Divisional Council of Knysna who has appointed a ranger to ensure that baiting regulations are enforced. "The Peninsula is remarkable on account of the diversity of animal habitats contained in so small an area ... the rich inter-tidal life provides food for a variety of birds." (1)

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(1) Department of Nature Conservation Report No. 22 - 1965, p. 36.

6.5.4.2 This is a popular place for fishermen and two fishermen's huts, accommodating approximately 8 each, are in the reserve. Otherwise the reserve can be regarded as a Wilderness Area with only footpaths leading to the fishing spots. Archaeologists have already investigated the caves believed to have been inhabited by former strandlopers. Bones of a 10 year old child of an estimated 2,600 years ago have been found.

#### 6.5.5 Ebb&Flow Reserve

6.5.5.1 At Ebb and Flow Reserve the George Divisional Council is again providing facilities for visitors. The popularity has grown rapidly. In 1964, when the first 10 rondavels were built complete with electric light and sanitation, up to 300 visitors per day were recorded. In 1967 five more rondavels had to be added as the number of overnight visitors in rondavels and camping, had already risen to 600 on occasions. (1)

6.5.5.2 The Knysna Loerie and a large variety of other wild birds can be seen here and boating is very popular.

#### 6.6. Warmbad, Calitzdorp

6.6.1 This resort has been established by the Divisional Council on the right reserved by the old grant: "That from this Grant be reserved for the use of the public the hot springs together with six morgen of land sur-

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(1) Dept. of Nature Conservation Reports 1964-1966.

rounding the same for the accommodation of such persons who shall make use of the said spring, in order to pitch tents or keep their waggons there ...."

6.6.1.1 The present facilities have gradually accrued, starting with original huts of reed and thatch which were sometimes swept away by the floodwaters, the spring being in the flood plain of the Olifants River. With more and more intensive upstream cultivation and Kamanassie and Stompdrift storage schemes, the likelihood of this happening again, is considerably reduced.

6.6.1.2 There are now 38 bungalow-huts erected by private owners and a cement swimming-pool has been made by the Council. The facilities were accepted by past generations but better accommodation, bath and toilet arrangements are now desired although many of the present visitors have expressed the wish that improvements should be kept to a minimum as this is still one resort where lower income people can go. Many go here for health reasons.

6.6.1.3 The qualities of the water have been analysed and an extract from this is enclosed with a report to the Divisional Council as to the development possibilities of the spring.<sup>(1)</sup> The spring delivers 144,500 gallons per day at a temperature of 122 - 124°F and except for the

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(1) M.C.T. Schultz "Voorgestelde Ontwikkeling van Warmwaterfontein te Warmbad". Unpublished Report to Divisional Council, Calitzdorp.

former hot spring at Swartkops (Port Elizabeth) (130°F) it is the hottest source of ferrous waters in the Cape Province.

6.6.1.4 The Divisional Council is now embarking on a scheme to develop the resort in conjunction with a nature reserve on the Karroo hills next to it. This is to be subsidised by the Provincial Council.

## 6.7 Cango Caves

6.7.1 The Caves, <sup>strictly speaking</sup> though not one of the outdoor recreation facilities, certainly requires active recreation, walking, climbing and sliding to enjoy all its chambers, chimneys, etc. and is definitely part of the outdoor recreation complex in the way it is linked with tourism, camping and the necessary drive to get there.

6.7.1.1 The Caves were discovered in 1780 but it is only during this century that they are being developed by the Oudtshoorn Municipality as a tourist attraction. Recently expenditure to the tune of R400,000 has been incurred to provide modern tourist facilities. The tourist numbers have already been mentioned and active steps are being taken to popularise it even more. The holding of a big cultural festival in its Van Zyl's Chamber which can seat 2,500 people during the 1972 Republic festival is mooted. An invitation is also to be extended for the next International Speleological Conference to be held here.

6.7.1.2 The history, geology, mineralogy, meteorology and animal life of the Caves have been described by a South African team who made extensive investigations there. (1) Contrary to the general belief of visitors that the Caves were eroded by an underground stream "caverns of this type are more usually the result of the phreatic waters filling permanently all the rock-spaces beneath the water-table and moving through the rock-mass only with extreme slowness". (2)

#### 6.8 Swartberg Mountain Proposed Reserve

6.8.1 The Oudtshoorn and Prince Albert Divisional Councils are embarking on a joint scheme to transform some 170,000 acres of the forest reserve on the Swartberg into a nature reserve. This will stretch from the Swartberg Pass to Meiringspoort in the east.

6.8.1.1 It will be unique in many respects, for South Africa at least, in that a large part of it is sometimes snow-covered in winter. With artificial augmentation, it should be possible to have snow-skiing here for some days in winter. Mountain-eering will of course be a great attraction, wildlife will be encouraged and the well-known Gamkaskloof (alias Die Hel) is reached by a precipitous road from the top of the mountain. This road, which has only recently been constructed, is the first vehicular access to the community living in isolation here.

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(1) "Cango Caves" - Members of the South African Speleological Ass.  
 (2) L.C. King. *ibid* p. 43.

6.8.1.2 The Swartberg Pass is 5500 ft. above sea level (Oudtshoorn  $\pm$  1000 ft.) with the peaks 6000-7000 ft. and, having an average rainfall of more than 30" a year, a completely different climate to the surrounding Karroo exists<sup>here</sup>. With the height, this may very well prove to be a healthy climate for certain ailments during some parts of the year. One also thinks of the possibility of a Mountain Research Station comparable with the Rocky Mountain Biological Laboratory which has become the summer house for thousands of students and teachers. It was established by the foresight of Dr. Johnson who "was convinced that the Nation should have a special place of beauty for high altitude field trips and study". (1)

6.8.1.3 In the Open-Air Study previously mentioned, the conclusion was reached that this can be "considered as a 'Wilderness Area' in which man's abilities are measured against the ruggedness of the environment, should he desire to enter it". (2) However, there are already roads along the mountain so that it is no longer 'Wilderness' in the inaccessible sense.

The stretch of Langeberg Mountain from Swellendam to Robinson Pass is now being investigated as a possible Wilderness Area. instead.

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(1) Outdoors U.S.A. op. cit p. 296

(2) M.E. Jooste & J.D. Venter. op. cit p. 204.

## 6.9. Wildlife

6.9.1 The animal, bird and fishlife has been partly mentioned in connection with the lakes, Nature Reserves etc.

6.9.1.1 Since it is known that in former times the area teemed with wildlife such as elephant, buffalo, hartebeest and beautiful birds, the possibility was investigated in the beginning of this study of establishing a big game reserve here. In the 1860's it is said that 6000 buffalo roamed around Knysna. In 1885 the buffalo herds were extinguished and about 400 to 500 elephants remained.<sup>(1)</sup> By 50 years ago they were reduced to about a dozen. Is it not feasible to re-establish them here?

6.9.1.2 Consultation with officials revealed that recent studies have been made and a symposium organized by the Wildlife Protection and Conservation Society to discuss plans for the conservation of the Knysna elephants. From these studies<sup>(2)</sup> and subsequent correspondence with the Research and District Forest Officer, Indigenous Forests, the following conclusions have been reached.

6.9.1.3 The number survived only because they adopted the abnormal habit of hiding in the forests. Big game normally do not live in the dense forests. Apparently there are enormous quantities of small game - in the absence of leopards - and they

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(1) W. Tapson: Timber and Tides  
 (2) B.G. Kinloch: A Short Survey of the Elephant Population of the Knysna Forests. Unpublished Report on Survey Feb. 1968.

destroy a lot of seedlings of valuable tree species. Yet due to the dense growth one seldom sees them when travelling along the roads.

6.9.1.4 It has been suggested that the elephants should be encamped to enable tourists to see them and also to stop the nuisance value they have to people living next to the 200 sq. miles natural forest where they are now roaming. However it is estimated that an 8 mile perimeter fence would cost not less than R150,000. The small area of 2 square miles thus enclosed would not produce enough vegetation for the herd's feed, an elephant consuming up to 400 lbs. of vegetable matter a day. Feeding costs would therefore be considerable and the encampment scheme seems unrealistic.

6.9.1.5 It is also considered that there is no available evidence to support the notion that the Knysna elephants are a giant sub-species, bigger than any found elsewhere in Africa. The elephants wander around not as a herd, but in groups of 3 or 4. One lone bull, known as "Aftand", wanders on his own and is terrorising the forest labourers. H.V. Morton says he heard at Oudtshoorn several stories of fatal attacks by ostriches "but the Knysna elephants do not apparently kill people, or if they do, it is kept very dark; instead they appear suddenly

and terrify them out of their wits". (1)

6.9.1.6 The conclusion reached seemed to indicate that the elephants are best left alone - their very presence in a free state in the forests being worth more, i.e. to bring home the immensity of these forests than they would be if encamped. The Department of Forestry and private adjoining timber firms allow the elephants in their forests but take no responsibility for damage done by elephants - they regard them merely as protected game (protected by Sect. 16 (b) of the Forest Act No. 13 of 1964).

#### 6.9.2 Other Wildlife

6.9.2.1 The forests contain apart from elephants, bush-buck, duiker, bushpig, vervet monkeys, baboons and a variety of birds (including the Knysna Lourie). Under the new Nature Conservation Ordinance, it is now possible for landowners to have private game reserves. A start has already been made in this direction near Sedgefield and it may very well be that the best way of handling game in this area <sup>is</sup> in such private game farms. It is for instance now possible in some parts of South Africa with game farming, to produce more per unit of land than with domestic animals (2). And what is of more recreational value, is to allow hunting on the farm.

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(1) H.V. Morton: In Search of South Africa p. 124  
 (2) Farmer's Weekly, March 20, 1968.

- 6.9.2.1. cont. In parts of the United States, 20 dollars per day is paid by a hunter to the farmer for this privilege. In other parts, bow-hunting, where odds favour the quarry, is gaining in popularity.
- 6.9.3 The same applies to fish-farming. In the U.S.A. it has been found practicable on small farms unsuitable for other uses. On a 20 acre farm run by one man with extra help at harvest time, with a capital outlay of \$16,500 and annual cost of \$5,800, a yield of 31,000 lbs. catfish with a gross turnover of \$10,850, was obtained.<sup>(1)</sup>
- 6.9.4 Or of course the whole farm is run as a recreational enterprise, or "dude-ranch". The U.S.A. Department of Agriculture is arranging paid visits by townsmen to farms. "The awakening of communities and individuals to the potential of income-producing outdoor enterprises, all have combined to underscore fun on the range for everyone."<sup>(2)</sup> Visitors partake, if they wish, in activities of milking, horseback-riding, hunting, hiking, boating and fishing.

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(1) Outdoors U.S.A. op. cit. p. 188.

(2) Outdoors U.S.A. op. cit. p. 286.

## 7. RECREATION, RESOURCE, USE AND STANDARDS.

### 7.1. Swimming

#### 7.1.1 Beaches

The crisp, white sand and rolling breakers provide beaches, which here as elsewhere, are the pivot of visitor attraction.

7.1.1.1 All those mentioned in 6.1.2.7 are Mossel Bay: 22 miles, George: 21 and Knysna: 25, i.e. a total of 68 miles. If half of this is taken as suitable, the three districts will provide 34 miles suitable for bathing beach development.

7.1.1.2 In California it is considered that "a typical summer day, 10 effective feet of shoreline can be used by 60 persons using a turnover rate of 3 per day".<sup>(1)</sup> One effective foot is defined as one lineal foot of shore with 100 ft. wide band of water suitable for swimming, 200 ft. beach for sunbathing etc., a further 100 ft. of utilities and an additional 265 ft. for parking where all attendances are by car.

7.1.1.3 In the Greek tourist study, it was found that "A maximum of about 50% of the tourists in a region are likely to use the beaches on a peak summer day"<sup>(2)</sup>. Combining this with the California standard (Greek standards relating to square meters of small beaches are not applicable to long stretches) it is found that 1 mile of effective shoreline could cope with 6,350 tourists

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(1) California Public Outdoor Recreation Plan op. cit. p. 47.  
(2) Piperoglou op. cit. p. 174.

in the area. ( $= 60 \times \frac{5280}{10} \times 2$ ) 34 miles of beach would therefore be sufficient for 216,000 tourists or at an "optimum daily utilization capacity"<sup>(1)</sup> a maximum of 430,000 tourists.

7.1.1.4 Of course in this area, as elsewhere, swimmers congregate at the select spots and though no exact local measurements are available, it has been observed for instance that the more than 10,000 visitors at Hartenbos, only use about 400 yards of beach.

#### 7.1.2 Lakes

The lakes, lagoons and rivers have many miles of suitable swimming front which are becoming more and more popular especially for toddlers. However the numbers here would be small compared with the beaches. It is however due to increase as boating becomes more popular.

7.1.3 Surfing is also becoming popular and surfers find excellent waves especially in bays as Buffalo and Plettenberg Bay.

7.1.4 At the Poort, Mossel Bay there is a unique natural swimming pool between the rocks, continuously washed by the waves spilling over at one end. Small beach pools have also been built at Herolds Bay and Knysna.

7.1.5 In the Karroo where the sea is not so accessible, swimming-pools are important. Oudtshoorn already has one olympic size pool, one other public swimming-pool and two further pools at institutions. Calitzdorp has one Municipal pool and a warm water pool at Warmbad. At the camping sites, near the Caves, pools are planned for Whites and non-Whites.

(1) Pipareglou op. cit p. 174.

## 7.2. Fishing

7.2.1 Fishermen often come to the beaches in the evening after the bathers have left, but their main haunts would be the rocks.

7.2.1.1 Probably half of the 40 mile rocky coast would be suitable for this too but of course the fishermen have their favourite spots. In the Mossel Bay district some are (see Fig. 24):

1. Kanon, 2. Vleesbaai, 3. Blind River, 4, The Poort, Tunnel Cave, Groot Kloof, Platbos etc. and 5. Hartenbos, Deep-sea fishing is very popular at Mossel Bay and the record blue marlin of 720 lbs was caught here in 1955.

7.2.1.2 In George well-known fishing spots are at 6. Kleinbrak, 7. Great Brak, 8. Glentana (1½ miles of rocks with interspersed beaches), 9. Herolds Bay, 10. Victoria Bay, 11. Leentjiesklip (Wilderness) and Flat Rock, and 12. Gericke Point (Swartvlei). Knysna has 13. Sedgefield, 14. Buffalo Bay, 15. Brenton-on-Sea, 16. The Heads, 17. Noetzie, 18. Harkerville, 19. Robbeberg, 20. Plettenberg Bay, 21, Keurboomstrand, 22. Nature's Valley, 23. Storms River, is in the district of Humansdorp.

7.2.1.3 Fish caught at all or most of these places are Mussel cracker, White and Red Steenbras, Kabeljou, Elf Garrick (Leervis), Galjoen, Hotnot, Red Roman and Blacktail.

7.2.1.4 Spear-fishing is becoming increasingly popular in the bays where the water is clear.

7.2.2 Lake fishing is important in the area between George and Knysna.

7.2.2.1 Black Bass and Blue Gill are caught at Groenvlei. Leervis and Kabeljou give good sport in Swartvlei from boats. The possibility of fish farming on Rondevlei has been mentioned. In Knysna Lagoon, where Garrick and Elf are mainly taken, the following catches have been recorded by a fisherman<sup>(1)</sup>,

1953: January 15 outings: 148 lbs.  
 February 17 outings: 239½ lbs.  
 March 13 outings: 189½ lbs.

and annual average: 11½ lbs per outing.

1954: January 10 outings: 172 lbs.  
 February 10 outings: 151 lbs.  
 March 11 outings: 158 lbs.

and annual average 17.9 lbs. per outing.

Another fisherman made 110 outings in 1965 (greater number of outings made during winter) in which he caught 560 fish at an average of 14.4 lbs. per outing.

7.2.2.2 Angling Club memberships are given to be approximately: Knysna 300, Tsitsikamma 300, George 100, Plettenberg Bay 100 and Humansdorp 100, and the average catch as 1 lb. per man per day.<sup>(2)</sup> (From this average and the figures given above, it is of course clear that not all angling club members are keen fishermen!)

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(1) Knysna Angling Club Hon. Secretary in "Tight Lines" - Dec. '67.  
 (2) Knysna Angling Club Hon. Secretary - letter Aug. 2, 1968.

7.2.2.3 A "threat" to angling is the net fishing by commercial concerns. This will have to be clearly investigated from the point of view of benefit to the region. If such net fishing depletes the stock of fish for anglers, and shortens or cancels their visit, it is a loss to this area. One netting fish can supply a lot of recreation to many anglers and as such is of more benefit.

### 7.3 Boating and Yachting

7.3.1 The Lakes and Lagoons provide the following areas of water:

Knysna	4000	acres
Groenvlei	900	
Swartvlei	2900	
Rondevlei	350	
Langvlei	550	
Island Lake	350	
Keurbooms	500	
Total	<u>9550</u>	

7.3.2 The rivers would add approximately a further 1000 acres giving a total of say 11,000 acres. If all of these were used at the standard of 5 acres for 2000 people, they would suffice for a population of 4 million! (using standards of Carbon Country)<sup>(1)</sup>

7.3.2.1 That is of course for an ordinary resident population. Considering the series of lakes to be one of the main resources attracting people here, a completely different standard will apply. It is proved by the fact that there are already many conflicting demands on the lakes and control has to be applied. Visitor participation can only

(1) USA Dept. of the Interior: "Outdoor Recreation Space Standards"- p.24.

be determined by a local demand survey as the same water resource importance is not evidenced elsewhere. Yachting is very popular here. It is no coincidence that the world-winner, the Voortrekker, was built in Knysna. The Knysna Yacht Club has 187 active members. Empirical standards have evolved and the Secretary here supplies the following information (approximates):

7.3.2.2 Knysna Lagoon can accommodate 200 yachts, Groenvlei 100 and Swartvlei 150. The Knysna Estuary is ideally sheltered from the severe winds and tidal conditions make for interesting sailing. Groenvlei is also very sheltered while Swartvlei is more exposed. The weather is considered to be suitable for sailing 5 days out of seven during the normal sailing season from October to March. During the other months there is no regular sailing, though there is no reason why there should not be.

7.3.3 The problem with boating and yachting is of course the increasing popularity of power-boating and water-skiing. These users are considered inimical to yachting, angling and very dangerous to swimmers. For this reason, separate areas have to be proclaimed when the different users clash. The Provincial Administration is considering applying this principal to the Swartvlei-Wilderness lake system. At Groenvlei, speed-boating has already been prohibited as it has been found to be disturbing to the nature conservation aspect and breed of fish.

7.3.3.1 Speed-boaters, like surf-riders, are a gregarious group and opportunities should be provided for them, where the prime purpose is not conservation of nature and its enjoyment by man. The best places on the lakes and lagoons where speed-boating can be allowed without interference, must be marked out.

7.3.3.2 Knysna Municipality is also considering the application of regulations for the control of boating on the lagoon. The draft regulations cover such aspects as safety lights at night (night fishing being very popular on the quiet waters of the Lagoon), rights of way, overtaking, meeting, crossing, aqua-planing, direction of circuits, etc.<sup>(1)</sup>

7.3.3.4 The bays have not been included in the surface waters listed above though considerable boating and yachting is already taking place there. Mossel Bay in particular has earned a reputation for yachting and a business concern is interested in spending a quarter million rand to build a modern yacht basin in the bay where the Portugese first set foot on South African soil.

7.3.5 A futuristic, space-age aspect is entering the lakes scene - hovercraft are to be built and tested at Knysna. Whether this added "tourist-attraction" of being able to skim across the lakes, will add to the total benefit, will have to be closely watched. Fortunately, it appears

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(1) Knysna Municipality Draft Regulations.

that the forests will not allow invasion by these "creatures"

7.3.6 Another development on the lagoon, that the restful-atmosphere minded are apprehensive about, is the proposed development by a Johannesburg company, which has successfully converted mine-dumps into a flat-township, of Rex Island (alias Little Venice) from the low-tide marshes. It is proposed to dredge these to give marina-like fronts to about 400 building plots which will also have access to roads linked by bridges. Artificial beaches with artificial wave-making machinery are being visualised. Government heads have already intimated approval of the scheme. It is not known however if the Hydraulics Research Laboratory of the CSIR has tested it. This aspect is of course important.

#### 7.4 Sight-Seeing

7.4.1. The scenic attractions of this area are multiple and eloquently described in many tourist publications and travel books.

7.4.1.1 A few well-known inland scenic attractions are shown in Fig.24 .

1. Seven Weeks Poort
2. Cango Caves
3. Rust en Vrede Waterfall
4. Meiringspoort Waterfall.

Practically the whole coastal area can be regarded as scenically attractive.

7.4.1.2 It is no longer as hazardous to get to places as Thompson found the road to "Kayman's-Gat" to be:

"the banks on either side descend with an abruptness almost perpendicular for 300 feet; and altogether with its grim precipitous environs, shaded with gloomy woods, and its black stygian waters, winding deep below, it seemed to me one of the most frightful-looking spots I ever beheld."<sup>(1)</sup>

The road through to Humansdorp was only opened near the end of the last century. More recently, in my own youth, part of the yearly expedition to the beach cottage was to cut away the trees and fill in the dongas washed in the road leading to it. Now tarred roads are being constructed to beach resorts. The Knysna Divisional Council has just decided to borrow a further R150,000 for tarring roads to Brenton on lakes. Other beaches already have tarred access roads.

7.4.1.3 Altogether there are already more than 400 miles of tarred roads in the six districts of this study area. This is nearly 4% of the length of tarred roads in the Republic, and practically all of it, plus many miles of gravel roads, qualify for the S.A. Development Atlas classification of "scenic routes".<sup>(2)</sup>

7.4.1.4 Whether new freeways are to qualify as well, is an aspect of planning very relevant to this area and requiring urgent attention. A new freeway is planned which will skirt many of the lakes. Is this going to add to the sum of enjoyment oppor-

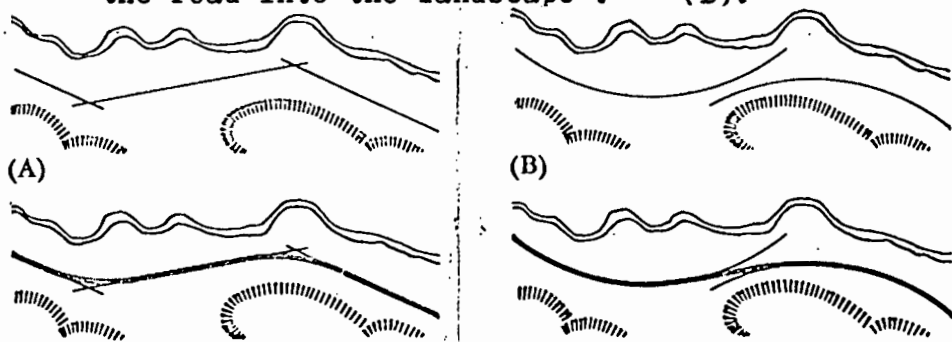
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(1) G. Thompson: "Travels & Adventures in Southern Africa."

p. 5.

(2) Dept. of Planning - Development Atlas Map 2.5 Government Printer 1968.

tunities, or is it just another throughway for the hurried traveller who wants to notch up another area that he had done? The concept of aesthetically pleasant roads, mentioned in paragraph 2.2.2.2 must persistently be applied in this area. It has been found that the traditional plan of straight lines between location controls connected by circular curves, are foreign to the landscape (A). If "following curves with short tangents or spirals are used, we can fit the road into the landscape".<sup>(2)</sup> (B).



7.4.1.5 Present Traffic density on roads and road status is shown in Fig. 21.

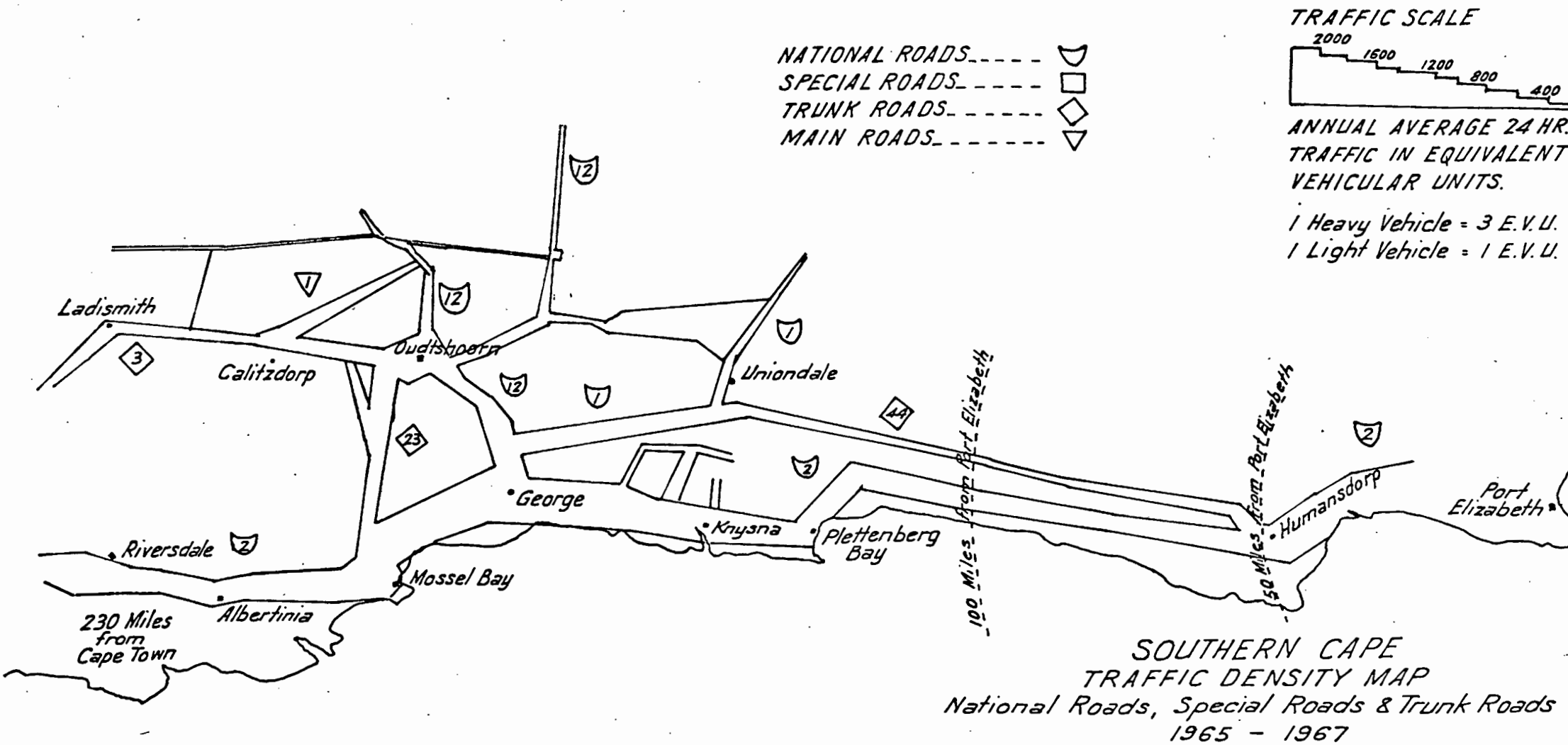
#### 7.5 Camping, Caravaning, Hiking and Mountaineering.

7.5.1 There is without doubt, no other area in South Africa as ideal for these pursuits. In "Caravaning in South Africa" by Oliver Knaggs, 8 out of 16 scenic spots are from the South Cape Area. Jose Burman in "Gone Camping" has 6 out of 16 pictures from here. This area has 5.8% of the number of caravan parks and 10.9% of the number of stands in parks in South Africa.<sup>(3)</sup>

7.5.2 For the caravaner who wants to be on the move and taste different waters, there are 30 camps in the 150 miles

(2) Myles R. Howlett: "Roads that fit our Environment" Outdoors USA p. 222

(3) From data in "Caravan Park Guide" by Shell Company.



**TRAFFIC SCALE**

2000  
1500  
1200  
800  
400

ANNUAL AVERAGE 24 HR. TRAFFIC IN EQUIVALENT VEHICULAR UNITS.

1 Heavy Vehicle = 3 E.V.U.  
1 Light Vehicle = 1 E.V.U.

**SOUTHERN CAPE  
TRAFFIC DENSITY MAP**  
National Roads, Special Roads & Trunk Roads  
1965 - 1967

SOURCE: CAPE PROVINCIAL ROADS DEPARTMENT.

FIG. 21.

between Gouritz River and Tsitisikamma, whereas those that prefer to stay put, have plenty to do at all these places. The rapid growth in camping and caravanning that has been experienced elsewhere (e.g. America where an estimated 40 million went camping last year) is also evidenced in South Africa where it is claimed that 2,000 caravans are sold per year. South Africa must have a large percentage of "the individualistic types who want to travel and stop for as long as they like anywhere at anytime". (1)

7.5.3 Camping for groups is very popular in this area. Veld and Vlei Adventure School for instance, hold two camps at Sedgefield every year. This is one of three camps in the country, at each of which 72 young people are taken at a time for three weeks. "The course consists of Physical Training, Map Reading, Mountaineering, Sailing, First Aid, Rescue Work, Commando Training, all with the object of building character .... The Knysna area is very suitable for all types of training such as above as it has mountains, lakes, forests and much open and difficult country to traverse." (2) Schools and Varsities and other bodies have Christian Youth Camps also at Sedgefield at regular intervals.

7.5.4 To date, the Land Service Movement which has camps of 300 to 400, has not moved in here but it is only a matter of time - and staff. Through lack of organizers, they now only have 3% as against the desirable 10% of possible

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(1) Cape Argus, April 20, 1968 - p. 42.

(2) Veld & Vlei Committee Knysna - letter August 27, 1968.

youth members. Their aim of developing leadership, responsibility, love of the land and the soil can ideally be cultivated here.

7.5.5 For the more rugged vacationer who prefers the romantic mountain world in the interior, or the unbeaten trail along the coast, there is scope too. The mountaineers prefer the small groups - and sometimes there is no room for more: the ascent of Toverkop (7,225 ft.) (No. 1 on Fig. 24) has been a challenge to mountaineers since Gustav Nefdt, a young farmer from the Ladismith district, first climbed its 500 ft. vertical cliffs in 1885. It is recognised as one of the prime mountaineering feats of this country. His route has never been used since, though the peak has again been ascended, and till this day is a strong challenge since in contrast to other peaks in South Africa, it has no alternative to a rock face ascent.<sup>(1)</sup> However, parties have to be small. At the overnight stop, the cave has a waterdrip only sufficient for 4 or 5 campers.

7.5.6 Members of the Cape Town Mountain Club (which has approximately half of the 2,000 club members of S.A.) frequently go for other climbs in the mountains of the South Cape - particularly the Swartberg between Toverkop and Seven Weeks Poort (No. 3). There are prominent high peaks, beautiful vegetation and little or no penetration by hakea. Hakea has already infested the mountain ranges along the coast. Apparently here they grow into impenetrable forests of 20 ft. trees. In Australia, where they originate, their

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(1) M. Versfeld and W.A. de Klerk: Die Berge van die Boland.

natural enemies keep them down to single plants of 3 or 4 feet. This is a serious hazard to our wilderness areas which requires urgent action.

7.5.7 Other peaks in the area, that are favourite climbs are: (See Fig.24) 4. Ossenberg, 5. Spitzkop, 6. Kamanassieberg, 7. Buffelsberg, 8. Mannetjiesberg, 9. Jonkersberg and 10. Cradockberg. Formosa Peak (12) is impressive from the south but readily accessible from the north.

7.5.8 There are favourite hiking routes in the area. The Berg-en-Toer-Klub of Stellenbosch has regular hiking trips through this area and they are the most popular of all long hikes undertaken by this club. <sup>(1)</sup> Parties generally number about one hundred students who are taken by bus to the starting point. From there the programme is a daily hike of 10 to 20 miles, preferably not along main roads. Every night is at a new stop to which lorries can transport food and bedding - sleeping is out in the open though.

7.5.9 The tours are along a variety of routes. Once every four years, in April or September a tour is arranged from George through Knysna, the Big Forest and Prince Alfreds Pass. Once every two years in summer a beach hike takes place. This is either from Glentana to Gouritz River or Victoria Bay to Keurbooms River, hugging paths along the top of the cliffs where possible when the coast becomes impassable. Once every six years an inland tour is organised from Gankaskloof to Cango Caves, then by bus to Ruiterbos from where the hike is continued to Herbertsdale

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(1) Information by Dr. B Muller, Stellenbosch, who organizes tours for Berg-en-Toer Klub.

and Riversdale. A new long week-end, cliff-scanning hike from Buffels Bay to Noetzie has recently been developed. A tremendous amount of sea-bird life is encountered here. Swimming and boating is of course popular where possible at overnight stops.

#### 7.6 Visits to Places of Scientific, Historic or Cultural Interest.

The Commission for the Preservation of Natural and Historical Monuments, Relics and Antiques has proclaimed a number of monuments in this area (1).

##### 7.6.1 Proclaimed Historical Monuments

Mossel Bay: Post Office Tree - near the fountains where the Portuguese navigators regularly drew water in Aguada de Sao Bras from 1488 onwards. Message was placed in old shoe and tied to a tree in 1501.

George: van der Graaf's Beacon.

Knysna: Old St. George's Church.

Plettenberg Bay: 1. Timber House, stone building for storage of timber awaiting shipment. 2. Van Plettenberg's Beacon. 3. St. Andrew's Church.

Oudtshoorn: 1. Suspension Bridge over Grobbelaars River. 2. Pinehurst - house from Ostrich feather boom time. 3. Boys School - said to have finest stonework in this country.

##### 7.6.2 Proclaimed Scientific and Natural Monuments

George: Oak Tree.

Keurboomstrand: Matjes River Cave

Oudtshoorn: Cango Caves.

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(1) Reports of the Commission for the Preservation of Natural & Historical Monuments, Relics and Antiques. Nos. 30 - 1965, 32 - 1967.

### 7.6.3 Bronze Inscriptions on Unproclaimed Sites

Knysna: George Rex Slipway - Stinkwood slipway where George Rex built 140 ton brig "Knysna" in 1826.

Ladismith: Birthplace of C.J. Langenhoven (born Aug. 12, 1873).

### 7.6.4 Museums and Other Places of Historic Interest

Mossel Bay: 1. Museum opened 1963, had 3,562 visitors in 1965. 2. ATKV Museum at Hartenbos

George: Museum opened 1968. 800 visitors in first five weeks.

Oudtshoorn: C.P. Nel Museum. Visitors in 1966: 7750 of which 1079 during January alone. Arbeidsgenot - home of C.J. Langenhoven - visitors 1960: 4838 (December 1353, Jan. 679), 1967: 8810 (December 1488, Jan. 1145).

Knysna: Millwood - scene of old gold-diggings.

### 7.6.5 Bushman Paintings on Farms

	<u>No. of Sites</u>
Mossel Bay	2
Knysna	2
George	12
Oudtshoorn	30
Calitzdorp	1

There may be more but the above farms were listed on the replies to questionnaires sent out by the Archaeological Survey of the Department of Education in 1952. These sites still have to be investigated scientifically and mapped.

## 8. FUTURE DEVELOPMENT AND POLICY

### 8.1 Outdoor Recreation

8.1.1 From the available data that has been examined, no reliable deductions can be made as to demand for outdoor recreation in the South Cape. Present growth factors, and future projections will therefore depend on surveys that must be done on leisure and holiday habits in this area itself.

8.1.2 Similar surveys in other areas will indicate the trends and fields, such as concentrations at water surfaces both at the sea and at the lakes which require particular attention. However these other surveys cannot give a representative picture of the situation here.

8.1.2.1 The P.W.V. survey<sup>(1)</sup> for instance, is measuring the demand from a surrounding resident population i.e. in the field of user-oriented and intermediate recreation facilities. Moreover, there are no beaches, angling sites, or comparable natural lakes and forests.

8.1.2.2 Durban has more facilities like those provided in the South Cape, though there is also a large resident population with the city night-life, commercial entertainment on the beaches, etc. These are no doubt wanted and used by the visitors whose demands in this respect seem insatiable as witnessed by answers in a recent visitor survey there: Asked what improvements they could suggest, some people replied: "Music over public-address system; amusement centre needed; licenced bars

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(1) Department of Planning op. cit.

on beach, tea-room right on sand" etc.<sup>(1)</sup> And that is Durban, where the whole beach is already one commercial hive.

8.1.3 Whether the South Cape should compete with these demands is questionable.

8.1.3.1 Durban will always have an edge on it and besides, it is nearer the large inland urban concentrations. Admittedly some other attractions must be provided and are quite rightly being done, e.g. Drive-in Cinemas are being constructed at Mossel Bay, Sedgefield and Plettenberg Bay.

8.1.3.2 Furthermore alternative indoor recreation facilities should be available at holiday concentrations to occupy children on rainy days. The facilities in the drier and warmer Karroo, i.e. the Caves and the projected development at Warmbad, with a possible covered swimming-pool, will have an important function in this respect.

8.1.4 However, to stress the attractions of nature, commercialisation will have to be strictly watched.

8.1.4.1 The present urban concentrations can be allowed to develop to their fullest potential and so provide commercial entertainment and luxury accommodation which many prefer to return to at night after they have spent the day in the open. Urban growth and agglomeration will provide economic sanction for specialised services and

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(1) R.A. Pistorius: "The Role of the Province in Providing for Public Recreation" - paper at S.A. Nature Union Conference.

industrial development. This will ensure stable economic growth not entirely dependent on tourism and recreation. These urban concentrations will have their own user-oriented recreational areas, but cities must not penetrate too deeply into the natural areas. For the most desirable area, or areas of forest, lakes and coast that are as yet uncommitted, some nature area proclamation must be found.

8.1.4.2 This does not imply that humans are not allowed in. It may even include areas of human settlement which are committed to tone in with nature.

8.1.4.3 In other areas of course, human settlement will have to be discouraged. It may even have to be reversed by offering owners an exchange of land elsewhere. The surrounds of the lakes and lagoons for instance need to be preserved and kept accessible. Here man must come and picnic and camp and enjoy, but permanent residential development must be restricted. Camp accommodation can be comfortable though designed to tune in with nature. And apparently customers want comfort and company. According to the Director of the National Parks Board in a recent broadcast, only 5% of the visitors at the Kruger Park go for the secluded "primitive" where modern facilities are kept to a minimum.

## 8.2 SETTLEMENT IN THE AREA

8.2.1 Up to the present, this study has largely dwelt on the outdoor recreation facilities of the area, and visitors' use of them. Mention has been made of bottlenecks and conflicting demands. Little has however been said of the other demands on land and this of course is for the twofold reason, i.e. the purpose of the study and the fact that outdoor recreation outpaces the total of all other demands on land.

8.2.2 The demands of other users must however be related. Those that settle or retire here, probably first came as visitors, liked the area, and decided to come again to stay. Their preferences are therefore similar to those of the visitors, though now their demand will change. It has been shown that the participation in angling for instance, is much smaller by the resident than by the visitor. In other words the visitor, once he settles, wants something else to do.

8.2.2.1 Since the beauties of the area drew them, they should be encouraged to contribute towards its continuance. There is much land here on which a struggling existence is made from farming. This land could in many instances contribute towards enhancing the scenic attractions of the area. To achieve this, landowners will have to be compensated to some extent. One way would be to allow smaller subdivisions, subject to landscape control.

- 8.2.2.2 At present, if a landowner wishes to subdivide his land for sale, he must either lay out a full "township" in terms of the Townships Ordinance, or he must sell off portions bigger than 25 morgen. And even the latter may be stopped by the Surveyor General and the Townships Board if they are of the opinion that "the Townships Ordinance is being evaded" (1) i.e. when it is apparent that the subdivisions are not economic farming units and are for residential purposes.
- 8.2.2.3 But a landowner should be allowed to subdivide smaller portions which are made subject to control by call it a "Landscape Board" similar to present control of subdivisions by the Transport Commission. These portions could be say 5 acres or larger and purchasers would be bound to develop the land by the planting of indigenous trees, discreet building, etc. to enhance the scenic attractiveness of the area. Due to the nature of the terrain, the good rainfall, mountain backdrop, etc., These portions would qualify for a new concept of "control of ribbon development". If they became ribbons, they would be very beautiful winding ribbons, along which it would be a pleasure to move.
- 8.2.2.4 The faster roads will of course not be hampered like this. The new coastal freeway will have limited access and the present national road and

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(1) Townships Ordinance, No. 33 of 1934.

and some other main roads necessary as collectors for the freeway, will also have to retain subdivision limitations.

### 8.3. Holiday Homes

8.3.1 Only brief mention has been made of the second home movement. The growth of this has been spurred by the same factors of outdoor recreation demand of the new "footloose" generation. "Many are searching for a second home - a different place, where recreation and relaxation are major objectives; a place where the family can regain a familiarity with forest and pond." (1)

8.3.1.1 Fortunately space is not premium yet in this country as for instance in Holland, but the same danger exists here that "if the trend were allowed to develop freely, all lake banks, borders of woods, briefly all beauty spots would in time be crowded with private cottages". (2)

8.3.1.2 There are already such cottage concentrations at for instance Hartenbosstrand: 560, Little Brak: 100, Sedgefield: 100 holiday homes and others, where the Provincial Administration has stopped further development. At Die Bakke at Mossel Bay, 180 bungalow owners are strenuously resisting council efforts to enforce a relayout providing only 70 larger plots.

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(1) "Outdoors U.S.A." U.S. Department of Agriculture Yearbook for 1967 - p. 195. (My underlining)

(2) C. de Cler "Dutch National Land Use Planning" in Taming Megalopolis Vol. II, p. 1155.

8.3.2 A solution must be found whereby holiday homes will be allowed which are a "different place". At present the only way of avoiding a future Die Bakke is for the Townships Board to enforce full Township Development. This is entirely unrealistic to have large areas set aside for schools and other endowments amongst holiday cottages where the owners only want a place for next year's leave near the sea. Die Bakke owners feel very distressed at the prospect of being disturbed from their unique "Afrikaner holiday resort". Should purchase be contemplated for eventual retirement, it is another matter - but these sites need not be so near the sea. As has been mentioned, the retired want other pursuits.

#### 8.4 Active Resident Population

8.4.1. Brief mention has been made (8.1.4.1) of the need of strong resident communities. All indications are that as this area is one of the few in the Cape Province with relatively large uncommitted sources of water<sup>(1)</sup> it will receive increasing attention from the central government as a possible growth centre in its decentralisation policy. Development would be at the existing urban centres where the necessary infrastructure exists. Growth will be towards such nodes as for instance industries of vegetable and fruit canning at George and Mossel Bay and the transportation nodes of the new regional airport and a possible expanded harbour; industries relating to these must be sited with the least possible disturbance to the nature area.

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(1) Ninham Shand & Partners op. cit. p. 18.

8.4.2 The agricultural sector will stay the strongest in the more fertile Little Karroo area, where there is also not the demand for holiday and retirement settlement as at the coast. With possible water schemes that have been mentioned, agriculture in the coastal area can however expect a considerable intensification of existing cultivated lands.

8.4.3 Mention has already been made of the intrusions of human settlement into "nature reserve" areas (8.1:4.1).

8.4.3.1 Overseas it has been noticed that intrusion of urban living into rural agricultural areas can also be very successful. A new term, agropolis has been coined for this bringing together of town and country, where "every home has the town at its front door and the country at its back". "The agropolitan American's appreciative conservation of the natural ecology is one of the most outstanding qualities of the environment. Behind and around the homes are agricultural and forest areas." "Agropolis is very permissive in the sense of encouraging the fullest measure of individual taste and preference."<sup>(1)</sup> Coupled with this it is found that "a new use of land has emerged: recreational farming, the provision of farmer-owned picnic and camping areas, golf courses and game reserves."<sup>(2)</sup>

8.4.3.2 Other overseas rural developments should also be studied. It is known for instance that <sup>in</sup> rural Switzerland, nobody is allowed to remove a tree

(1) Lionel March "Towards a Garden of Cities" in The Listener, March 21, 1968. p. 367

(2) Lionel March op. cit.

without permission. Holland has its "Natuur-  
beschermingswet" and "Welstandscommissies". The  
latter are advisory to local authorities on  
aesthetic aspects of development.

8.4.3.3 Thus South Africa will be able to learn from the  
experience of others and avoid costly mistakes.

## 8.5. Conclusion

### 8.5.1 Present Planning Control

8.5.1.1 The present planning control is vested in local  
authorities consisting of the following:

Divisional Councils (Ord. No. 15/1952) coinciding  
with the six magisterial comprising the regions  
0206, 0207.

Municipalities (Ord. No. 19/1951) at the same six  
towns as well as in Plettenberg Bay.

Village Management Boards (Ord. No. 10/19 ) at  
Herbertsdale (Mossel Bay), Pacaltsdorp (Coloured  
Settlement near George), Sedgfield (Knysna) and  
Van Wyksdorp (Ladismith).

Local Boards (Ord. No. 11/1921) at Blanco (George)  
and Great Brak River (Mossel Bay and George).

Local Area (through Divisional Councils: Section  
6(1)(1) of Ord. No. 15/1952):

Mossel Bay: Hartenbos, Little Brak River, Rheeboek,  
Tergniet.

George: Herolds Bay, Hoekwil, Hooge Kraal, van  
Rooyensrus, Wilderness, Wildernishoogte.

Knysna: Buffalo Bay, Keurboomstrand, Nature's  
Valley.

- 8.5.1.2 The Provincial Council through the Administrator and/or Townships Board has to approve of all Township development as already mentioned. In addition local authorities may embark on a Joint Town Planning Scheme. Around Mossel Bay such a scheme has been initiated but it has not brought any planning proposals into being.
- 8.5.1.3 Furthermore, the Provincial Council has passed a number of Ordinances by which outdoor areas are administered. There are the Nature Conservation Ordinance No. 26 of 1965 which replaces the old Inland Fisheries Ordinance and others. "The Public Resorts Ordinance (No. 29/1964) passed by the Provincial Council provides for the declaration of places of public resort or recreation or historical or scientific interest as public resorts, for the control, management and development of such resorts, and for matters incidental thereto. The object of the ordinance is to empower the Administrator to establish resorts on state land."<sup>(1)</sup>
- 8.5.1.4 Other authorities that have a stake in outdoor recreation are:
- The Department of Water Affairs, by Regulations No. 654/1964, can control recreation activities and nature conservation in a "Water Storage Area".
- The Department of Sea Fisheries exercises control over sea life in the Knysna Estuary while the Knysna Municipality is going to enforce regulations

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(1) Department of Nature Conservation Report No. 21, 1964  
p. 22.

to control boating on it.

The Department of Lands issues permits for landing quays in the estuary.

The Department of Forestry (Forest Act No. 72/1968) is developing recreation areas in forest reserve property as described.

The Commission for the Preservation of Natural and Historical Monuments, Relics and Antiques may recommend to the Minister of the Interior to proclaim by Section 8 of Act No. 4/1934 "to be a monument, any area of land having a distinctive or beautiful scenery or geological formation; any area of land containing a rare or distinctive or beautiful flora or fauna; any area of land containing objects of historical or scientific interest; any waterfall, cave, grotto, avenue of trees, old tree or old building (whether natural or constructed by man) of aesthetic, historical or scientific value or interest".

- 8.5.1.5 In his paper at the S.A. Nature Union Conference earlier this year, Mr. R. A. Pistorius said that the "responsibility for providing a physical setting for public recreation rests four-square on the provinces". "The interest and participation of all other authorities, with the exception of the municipalities and certain statutory bodies like the National Parks Board, is either incidental (as in the case of Water Affairs and Forestry) or peripheral (as in the case of Tourism), or coordinating and advisory (as in the case of Sport and

recreation)."(1)

8.5.1.6 The Director of Nature Conservation of the Cape Province has confirmed that the same relationship applies here. This Department is the equivalent of the Natal Parks Board and handles the above mentioned Nature Conservation and other related Ordinances.

#### 8.5.2 Future Policy.

8.5.2.1 The interaction of all the demands and controls already mentioned, clearly indicates that a new concept of planning is required here. The present overall planning machinery allows only for specific townships or resorts, without there being a broad policy to ensure proper development, combined with conservation of this "nature area".

8.5.2.2 Some local move has already been made when Knysna Divisional Council called a firm of Town Planners to draw a development plan for the strip between the national road and the coast. But this is not sufficient - Knysna Division stops at the edge of Swartvlei while the waters are in the George Division.

8.5.2.3 It has been shown that there is in the South Cape an interaction between different centres that transgresses divisional boundaries. It is clearly necessary that where it is seen that the main planning problems are around the beaches, lakes, camping and holiday resorts, and scenic drives,

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(1) R.A. Pistorius: "The Role of the Province in Providing for Recreation".

that a development region should be delineated to encompass these.

8.5.2.4 Sufficient data has not been found to do it at this stage though it is clear that it must be a wider area than that at present demarcated for Group Areas Control (See Fig, 23). This is a start around the lakes and is necessary so that a resort area can also be set aside for the Coloured Community.

8.5.2.5 However a much wider Nature Resource Area must be envisaged. An advisory planning consortium must be formed where all the diverse desires can be tied together ... working for a better environment. (1)

8.5.2.6 If the initiative for this can come from local development associations or local authorities, so much the better. Otherwise the Provincial Administration, as the central tier of our triple government control, will have to draw together:

1. The authorities concerned with conservation, recreation, tourism and economic development,
2. the recreation movement and the nature conservation movement in the private sector,
3. the business community who will realise the best return from this asset is that which ensures its continuous growth,
4. the planners of towns and urban services, and not least,
5. the citizens who, in the final analysis, are going

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(1) National Recreation and Parks Association - "Parks & Recreation" April 1968 - p. 28

to be contributors and the beneficiaries. This will be as individuals, but also through welfare and service organisations, sports and recreation clubs. Here, as elsewhere, it will be found that common concern can overcome conflicts.

8.5.2.7 It will be necessary to strengthen this planning body by giving it executive, in addition to advisory powers. Once a plan has been formed that will cover all the public agencies spending money here, some of the executive powers at present performed at central government or provincial level, can be transferred to this local body. The frustration of adding yet another authority to which plans must be referred, will thus be avoided.

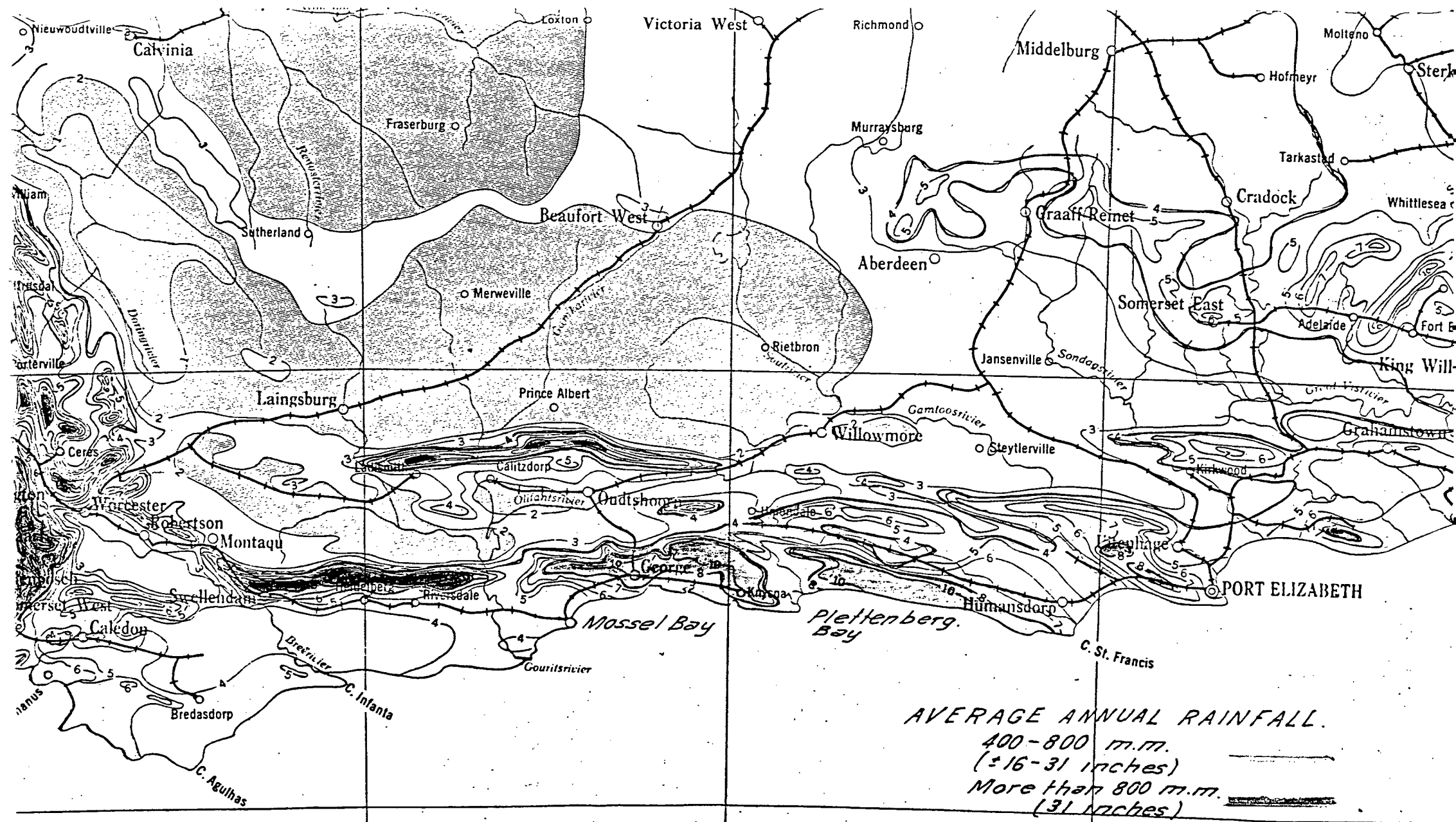
8.5.2.8 This may be the start of a new structure of intermediate government which, while retaining local and central government authority, permits more effective regional administration, suited to local conditions.

### 8.5.3 The Recreation Potential

The development for outdoor recreation in the South Cape region is larger than the area itself. The "grass roots" of the region are both within and without it. The people who use this natural resource come from all over. Central Government participation in planning must represent their and their successors' interest. Active participation by

an enthusiastic community will ensure that distinctive local characteristics are ingrained in every development plan. Full stock must be taken of all recreational assets, so that essential development will be channelled where it will enhance the overall potential. Areas which need more protection, or acquisition from private ownership, must be reserved.

The natural amenity, the resource of the area, cannot be exported like other resources. The people who use it, come from elsewhere and contribute to the local economic welfare by what they spend here. They can take away only so much as they have received into their souls and their bodies - to the extent that they have been re-created here.



AVERAGE ANNUAL RAINFALL.  
 400-800 m.m. (16-31 inches) —————  
 More than 800 m.m. (31 inches) —————

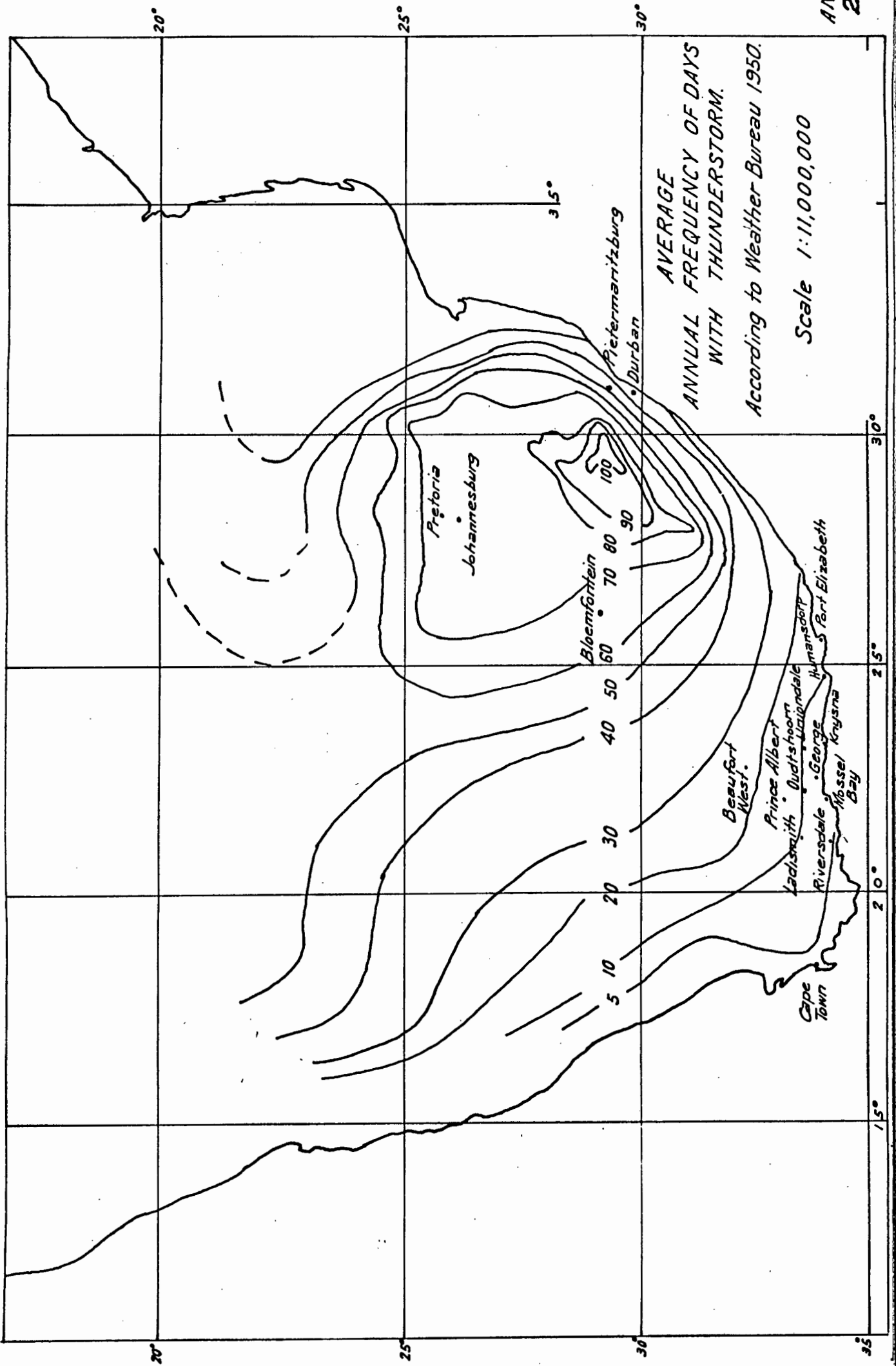
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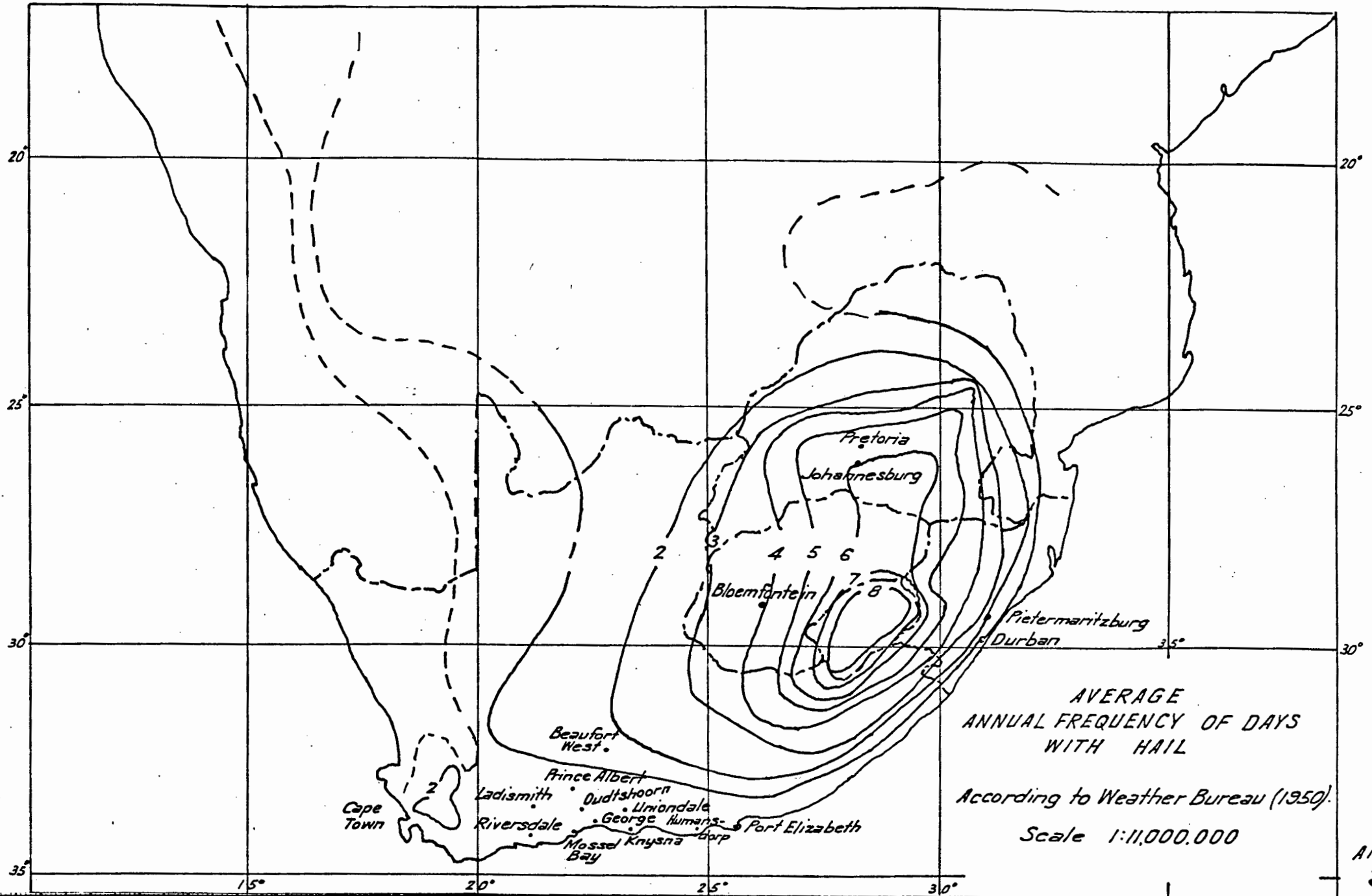
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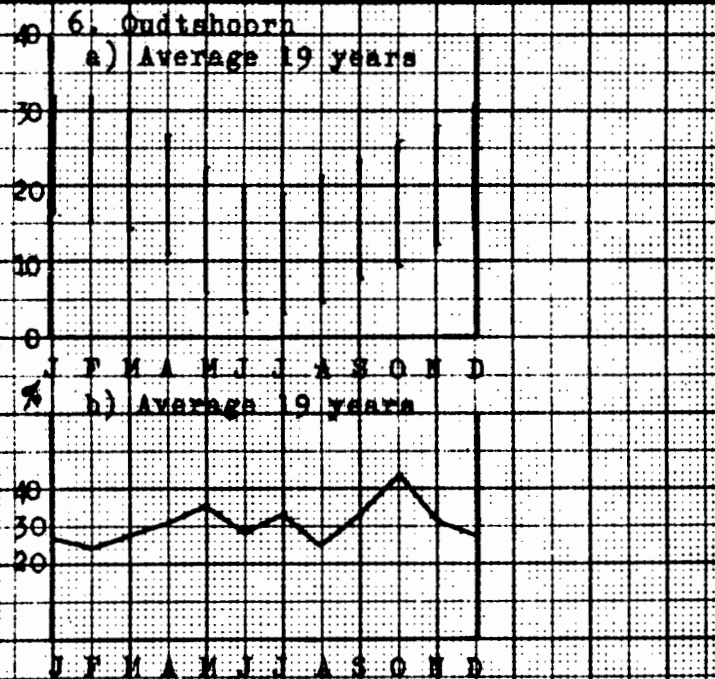
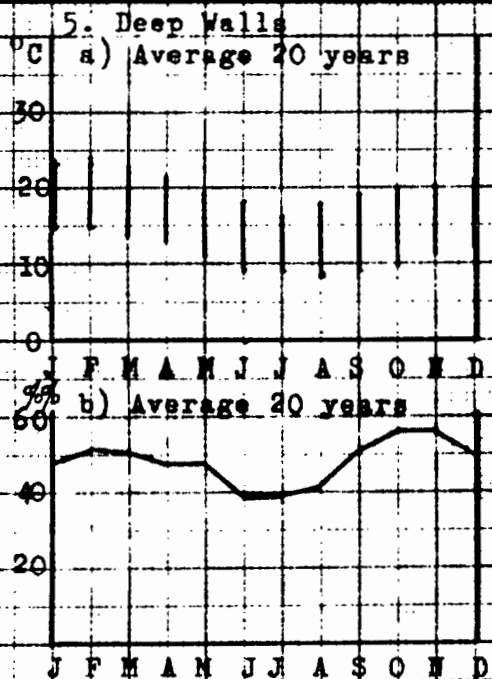
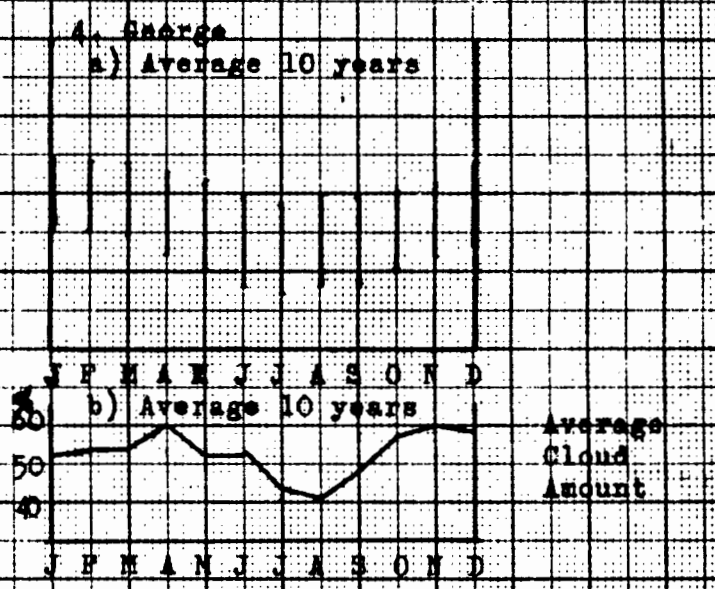
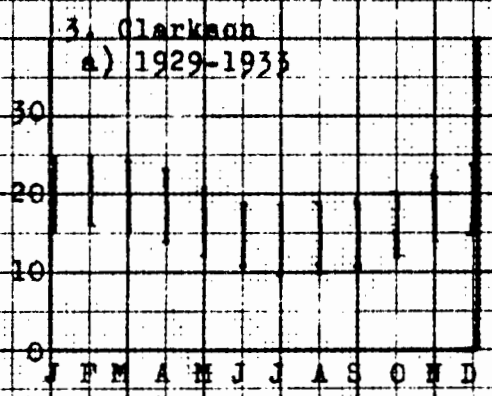
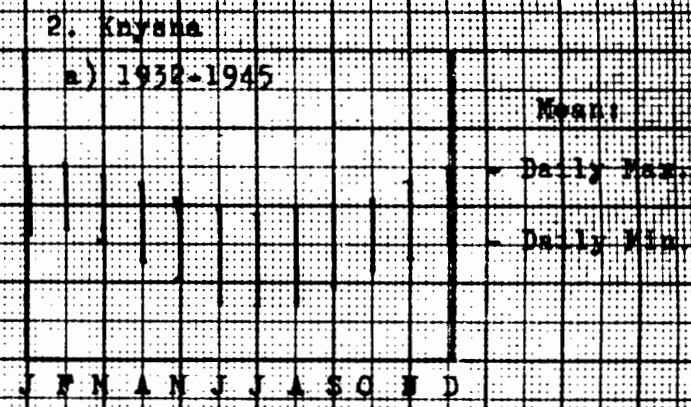
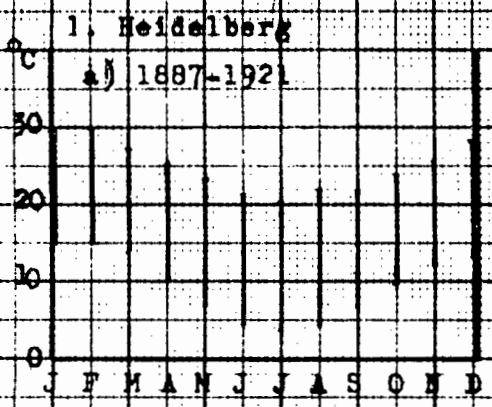




AVERAGE  
ANNUAL FREQUENCY OF DAYS  
WITH HAIL  
According to Weather Bureau (1950).  
Scale 1:11,000,000

a) MEAN DAILY MAXIMUM AND MINIMUM TEMPERATURE - °C

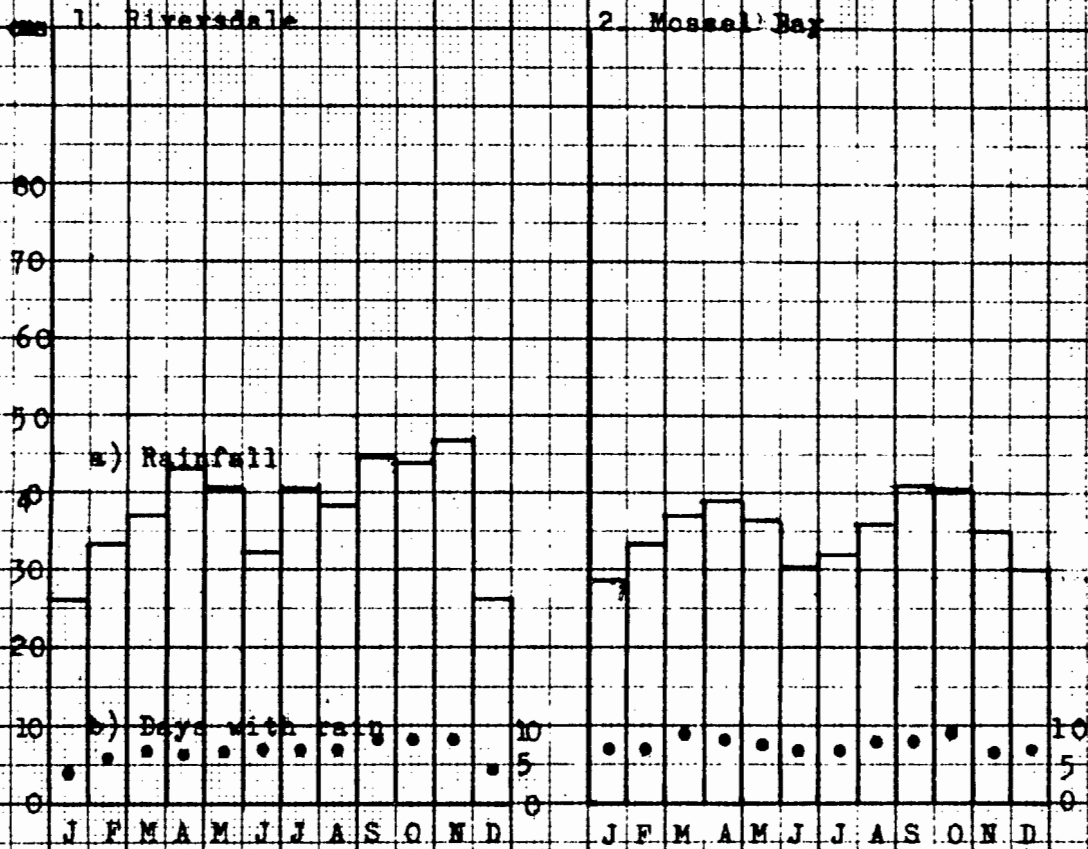
b) AVERAGE CLOUD AMOUNT - Percentage



Note: Average Cloud Amount not available for 1,2,3.

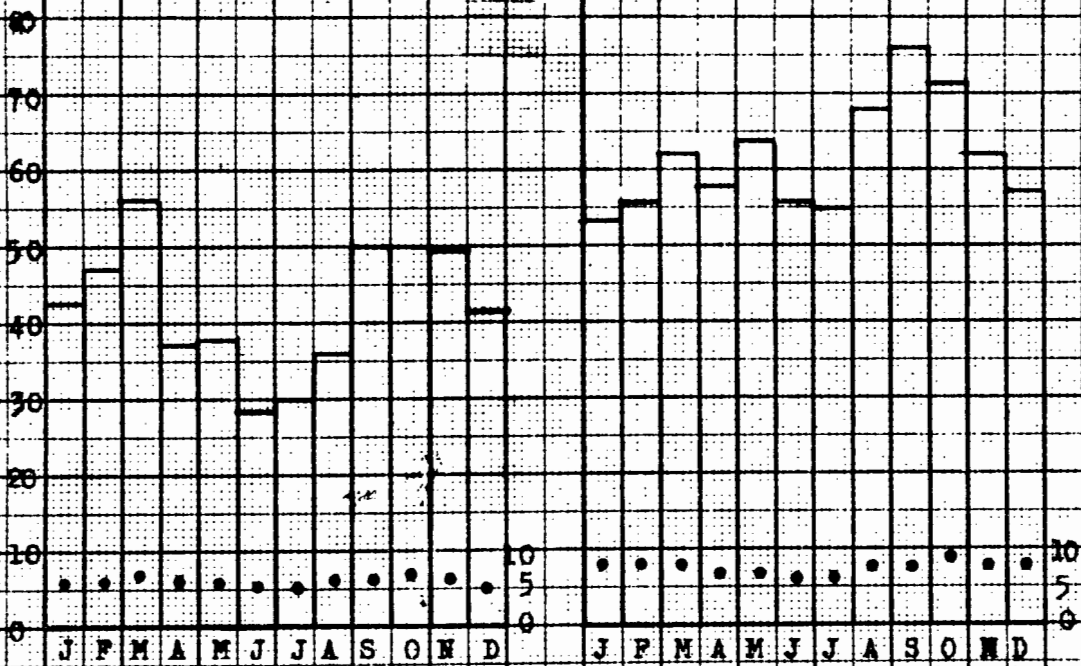
Source: Weather Bureau. W.E.12. Climate of South Africa, Part I.

5) AVERAGE NO. OF DAYS WITH RAIN.



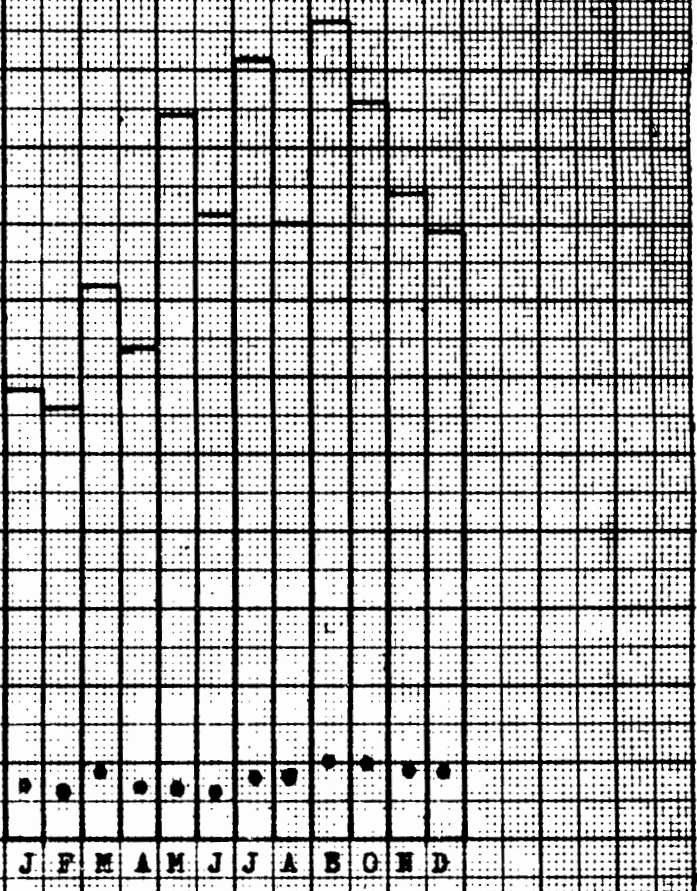
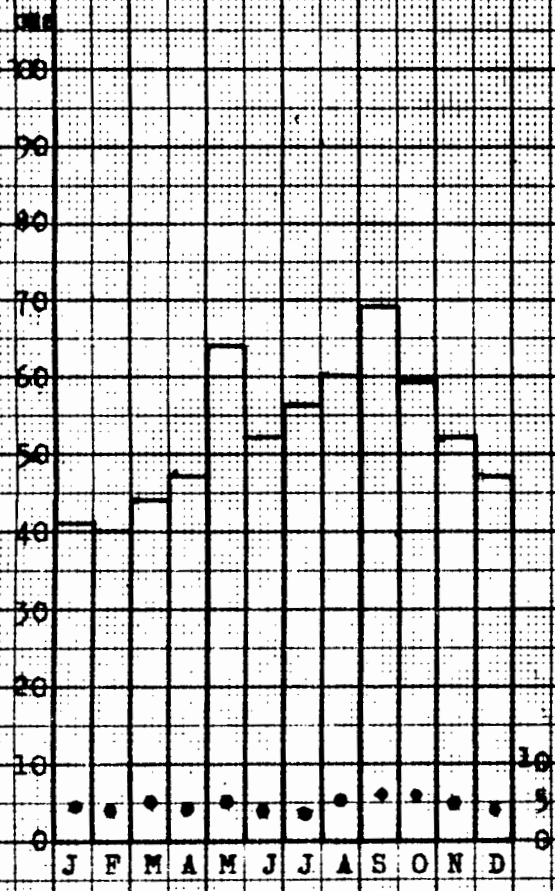
3. Groof Brak

4. Kuyena



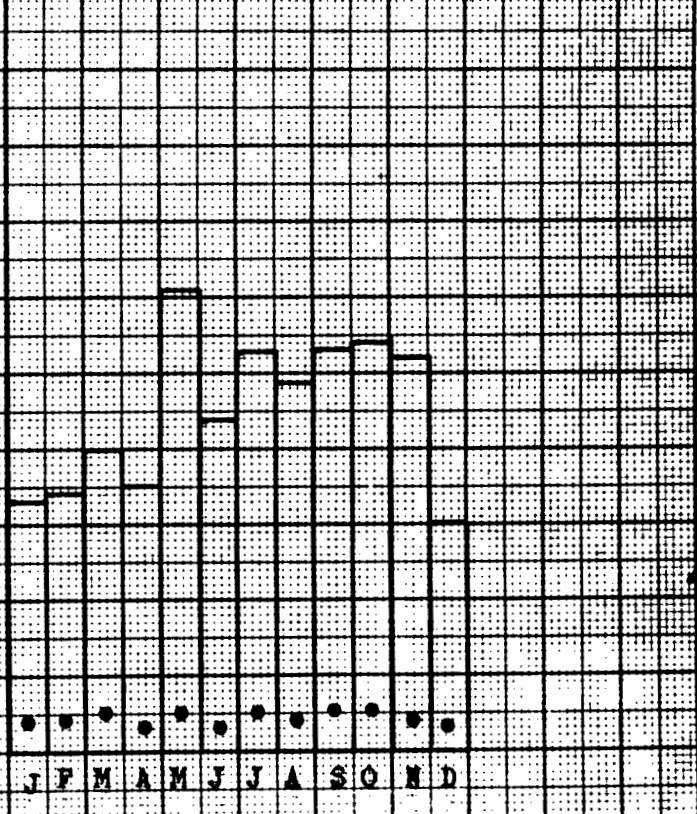
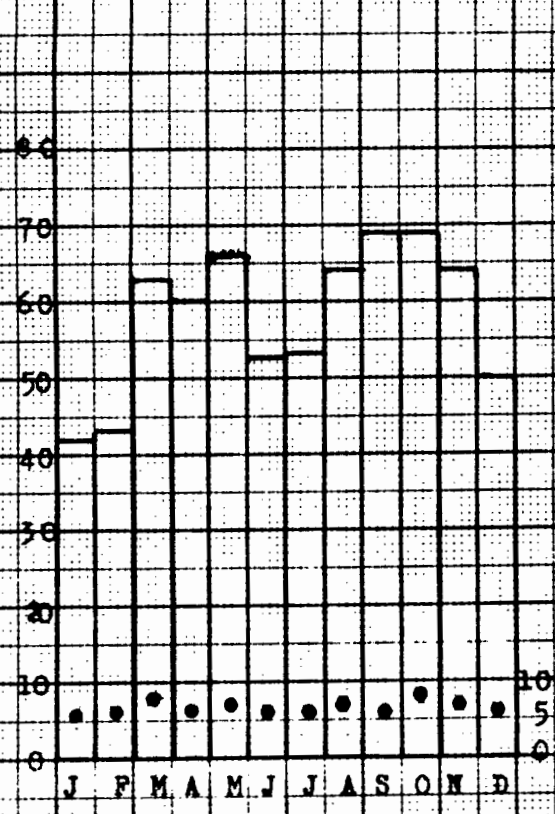
5. Riettenberg Bay

6. Clarkson



7. Humansdorp

8. Jeffreys Bay



MEAN ANNUAL RUN-OFF AND STORAGEREQUIRED IN CERTAIN RIVERS

(See Fig. 22)

ANNEX 7

Possible Dam Site.	Average Rainfall Annually	Catchment Area	Nat. MAR* - Upstream - Nett MAR	Nett Probable Annual Draft	Capacity Required.
No. (see fig.)	Mean/ Max/ Min	sq. mile	mg. ft.	mg. ft	mg. ft.
1 Groot Brak	41.8/47.2/33.4	17.70	6700 - 2320 4380	4300	3500
2 Vasing	38.4/47.2/30.7	4.91	1500 - v.l 1500	1450	1260
3 Witels	41.7/47.2/29.9	11.27	6450 -(+200) 6250	{6200}	6200
4 Witels	38.2/47.2/27.1	15.01	6900 -(+400) 6500	6400	6500
5 Malgas	39.9/47.2/34.2	10.63	6610 - 0 6610	6400	6600
6 Malgas	38.0/47.6/31.4	13.72	7350 -(+ 50) 7300	7200	7300
7 Diep	40.2/47.2/33.9	23.18	4280 - 0 4280	4150	4300
8 Karutara	43.4/47.2/35.4	16.17	7700 - 200 7500	7400	7500
9 Plaat	43.6/47.2/35.4	6.94	3340 - 3340	3300	3350
10 Hontini	44.4/47.2/37.0	25.75	12970 - 12970	{12500}	12500
11 Hontini	44.1/47.2/36.6	28.21	14040 14040	14000	14100
12 Moeras	41.2/47.2/31.4	6.62	3680 - 3680	3600	3700

Total

58,200i.e. excluding alternate measure-  
ments on two rivers ( )

\*Natural Mean Annual Run-off less Estimated Upstream Annual Usage

- Nett M.A.R.

v.l - insignificant

RESERVOIR SITES IN REGION II (See Figure 22)

River Site No.	Capacity of Dam		Size of Dam Required		Gross Assured Annual Draft
	% of Average Annual Run- off	mg. ft.	Length of Crown	Height ft.	
Great Brak	30%	1950	400	400	5000
(1)	15%	975	310	110	3700
3 Witels	10%	625	320	105	3000
5 Malgas	30%	540	370	110	1500
	15%	270	260	80	1100
13 Laaimans	30%	1920	320	210	4700
	15%	960	240	165	3600
7a Swart or Diep	30%	1820	625	160	3100
	15%	910	470	125	2100
10 Houtini	30%	740	380	120	2000
	15%	370	310	90	1500
10a Goukama	30%	2680	270	80	7000
	15%	1340	220	60	5300
14 Knysna Site 1	30%	3080	440	160	( 8000 )
	15%	1540	350	125	( 6000 )
14a Knysna Site 2	30%	5000	340	130	13000
	15%	2500	290	100	10000
15 Gouna	30%	1380	410	125	4000
	15%	690	270	90	3200
16 Keurbooms Site 1	30%	1350	900	80	( 1900 )
	15%	675	530	65	( 1100 )
16a Site 2	30%	4170	350	125	5800
	15%	2080	300	95	3300
16b Site 3	30%	12200	700	175	17000
	15%	6100	570	130	9800
			Total	30%	60,300
			Total	15%	43,300

i.e. excluding alternative sites.

Source: Nixham Shand & Partners op. cit.



C.S.I.R. Press Release: PR9/68, August 5, 1968.

C.S.I.R. Special Reports: MEG 306 (unpublished) The Deterioration of the Wilderness Lakes System. Pretoria - March 1964.

C.S.I.R. Symposium: S2 Marine Studies off the Natal Coast. Council for Scientific and Industrial Research Pretoria, March 1961.

Da Gama Publishers: State of South Africa Year Book, 1968. Da Gama Publishers, Johannesburg.

De Cler, C: "Dutch National Land Use Planning" - Taming Megalopolis Vol. II - ed. H.W. Eldredge, Doubleday Anchor, 1967.

Department of Forestry:

- (1) Motion by Minister of Forestry in Senate, June 1968. Adopted by Senate Motion No. 16/1968.
- (2) Information supplied by District Forest Officer.
- (3) Information supplied by Research and District Forest Officer, Indigenous Forests, George.

Department of Information: "South African Digest" - January 6, 1967. South African Panorama, November, 1967.

Department of Nature Conservation: (Cape Province) Annual Reports No's. 21 of 1964, 22 of 1965, 23 of 1966.

Department of Planning: "Regional Survey of the Western Cape" by Natural Resources Development Council - September, 1964.

Department of Planning: "Outdoor Recreation and Tourism" - Map 2.5 of Development Atlas. Govt. Printer 1968.

Department of Planning: Minutes of the proceedings at the Symposium on Regional Development and Planning held at Pretoria, 17, 18 Oct. 1966.

Department of Planning: Opelugontspanning vir blankes in die Pretoria - Witwatersrand - Vereeniging Streek, 1967.

Department of Tourism: Report for the period 15 May, 1963 to 31 March 1967. Government Printer R/P No. 18/1968.

Department of Tourism: Statistical News Release, April, 19, 1968.

Durban Publicity Association: 43rd, 44th, 45th Annual Reports 1965, 1966, 1967.

Freeman, OL: Outdoors U.S.A. The Yearbook of Agriculture 1967, The United States Department of Agriculture.

Gottman, Jean: "State Development Planning in a Federal Economic System" Paper in Taming Megalopolis Vol. II ed. H.W. Eldredge, Doubleday Anchor, 1967.

Gottman, Jean: "The Rising Demand for Urban Amenities" in Planning for a Nation of Cities, ed. S.B. Warner (Jr.) Massachusetts Institute of Technology, 1966.

- Green, Lawrence G: Karoo. Howard Timmins, Cape Town. 1955.
- Herber, Lewis: - Crisis in Our Cities. Prentice-Hall, 1965.
- Howlett, Myles R: "Roads that fit our environment" - in: Outdoors U.S.A. - Department of Agriculture Yearbook 1967.
- Ireland, Government: Planning for Awenity and Tourism - An Foras Forbartha, Dublin, Ireland. August 1966.
- Jooste, M.E. and Venter, J.D.: The Open-Air Potential of Certain Government Ground in the Republic of South Africa. Department of Education, Arts and Science, 1965.
- King, L.C.: South African Scenery. Oliver and Boyd Third Edition 1963.
- King, L.C.: "Geology of the Congo Caves" in: Congo, Maskew Miller, Cape Town 1960.
- Kinloch, B.G: A Short Survey of the Elephant Population of the Knysna Forests - Unpublished Report, Feb. 1968.
- Knysna Angling Club Hon. Secretary: Letter in "Tight Lines" - December 1967.
- Knaggs, Oliver: "Caravanning in South Africa". Human & Rousseau, 1965.
- Kriel, J.P.: "The Planning of Public Recreation, The Department of Water Affairs and Public Recreation" - Paper at National Conference of S.A. Nature Union, 1968.
- Langschmidt, W: Paper at Conference of the National Development and Management Foundation of S.A. 1968
- Lufthansa Revue: Number 6 1967/68. Burda Druck und Verlag GMBH, Offenburg.
- Mallory, J.K.: Bathymetric and Hydrographic Aspects of Marine Studies off the Natal Coast. C.S.I.R. Symposium. Pretoria, March 1961.
- March, Lionel: "Towards a Garden of Cities" - The Listener, March 21, 1968.
- Myers, S.B: "Site Planning Standards for Residential Layouts" The Second National Conference of South African Surveyors - Feb. 1964.
- Morton, H.V: In Search of South Africa. Methuen & Co. London 1949.
- National Recreation and Park Association (U.S.A.) Parks and Recreation April 1968.
- National Parks Board, S.A.: Annual Reports 37 - 1962, 39 - 1964, 40 - 1965.
- Nel, A and van Zyl, J.A.: "Stad en Dorp" Universiteits-Uitgewers en Boekhandelaars, Stellenbosch/Grahamstad. 1962.

New Zealand National Parks Authority: National Parks of New Zealand. R.E. Owen, Government Printer, Wellington, New Zealand. 1965.

Ninham Shand & Partners: "Memorandum oor die Waterbronne van Suid-Kaapland" "Suid-Kaaplandse Ontwikkelingsvereniging" September 1967.

Natal, Town and Regional Planning Commission: Natal North Coast Survey. City Printing Works (Pty.) Ltd., Pietermaritzburg. 1962.

Page, D: A strategy for the Regional Development of South Africa. Third South African National Survey Conference, Johannesburg, January 1967. Conference Paper 12/56.

Piperoglou, J: "Identification and Definition of Regions in Greek Tourist Planning" - Reg. Science Association Papers, XVIII, Vienna Congress, 1966.

Pistorius, R.A.: "The Role of the Provinces in Providing for Public Recreation" - paper at S.A. Nature Union Conference, Pretoria, 1968.

Provincial Administration (Cape): Unpublished Report: "Ontwikkeling van Visserye in Vlei geleë in die Kusstrook in die Afdelings George en Knysna."

Rüdel, F.E.: "Verslag oor 'n Onderzoek na die Toeriste Potensiaal van Swakopmund vir die Komitee vir die Ontwikkeling van Swakopmund as Strandoord". November 1965.

Rautenbach, Dr. P.S.: "Openbare ontspanning en die Departement van Beplanning". Conference papers - South African Nature Union, Pretoria. 1968.

Robertson, T.C.: "Recreation in South Africa at present and by the end of the Century". Conference Papers - South African Nature Union, Pretoria, 1968.

Schultz, M.C.T.: "Voorgestelde Ontwikkeling van Warmwaterfontein te Warmbad, Calitzdorp". Unpublished Report to Divisional Council, Calitzdorp. November 1966.

Schultz, M.C.T.: "Tourism" Paper: National Development and Management Foundation of South Africa.- Conference, June 1965, Cape Town.

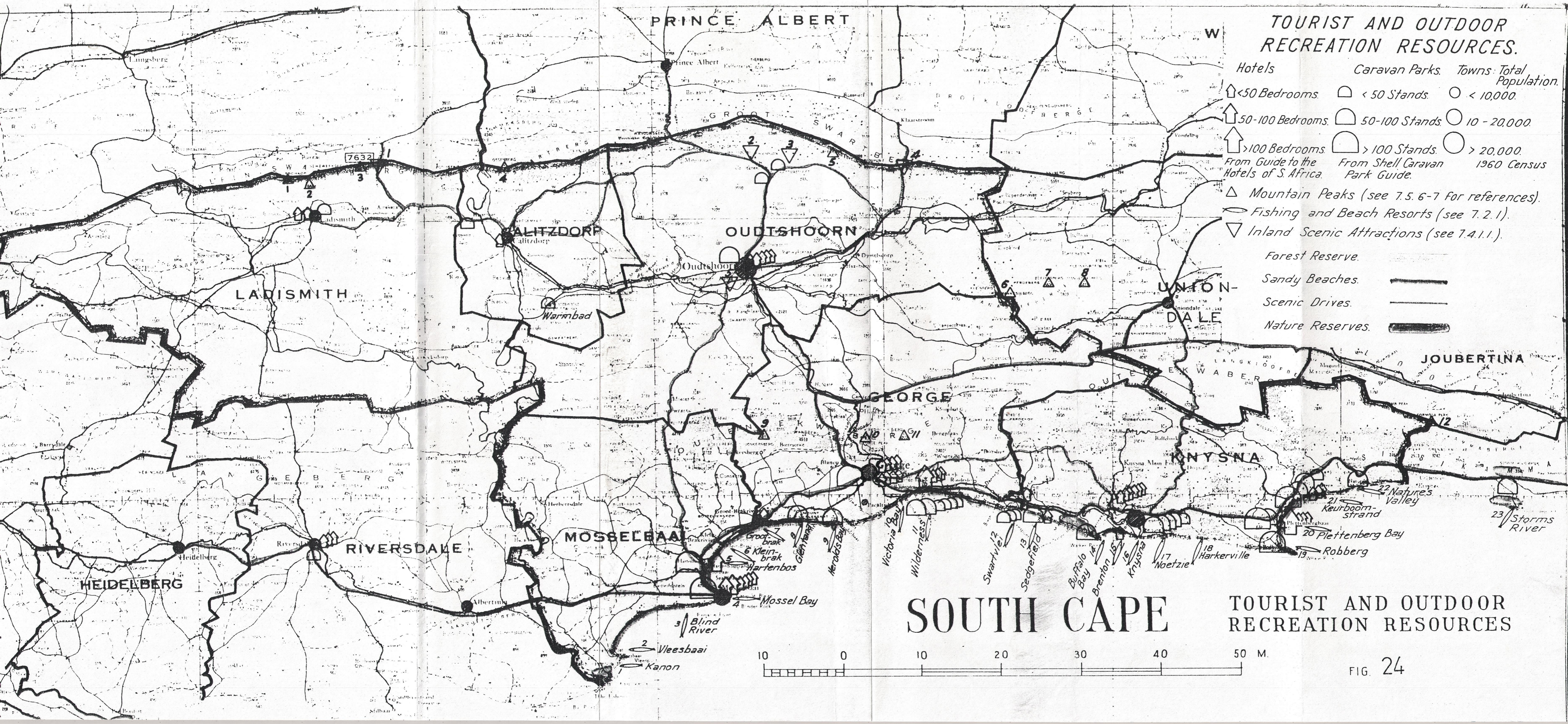
Scully, G.C.: Foreword in: Natal North Coast Survey. The Town and Regional Planning Commission, Pietermaritzburg, Natal, 1962.

Shannon, L.V.: Hydrology of the South and West Coast of South Africa. Division of Sea Fisheries Investigational Report No. 58-1966.

Shell Company of S.A.: "Caravan Park Guide" - 1968.

Smith, G.H.: Conservation of National Resources, Willy & Sons, Inc. Capman and Hall, Ltd. - New York and London 1950.

South African Railways and Harbours: Annual Report, 1965-1966. Government Printer, Pretoria.



**TOURIST AND OUTDOOR RECREATION RESOURCES.**

- Hotels      Caravan Parks      Towns: Total Population.
- ↑ < 50 Bedrooms      ◻ < 50 Stands      ○ < 10,000.
  - ↑ 50-100 Bedrooms      ◻ 50-100 Stands      ○ 10 - 20,000.
  - ↑ > 100 Bedrooms      ◻ > 100 Stands      ○ > 20,000.
- From Guide to the Hotels of S. Africa.*      *From Shell Caravan Park Guide.*      *1960 Census*
- △ Mountain Peaks (see 7.5.6-7 for references).
  - ◡ Fishing and Beach Resorts (see 7.2.1).
  - ▽ Inland Scenic Attractions (see 7.4.1.1).
- Forest Reserve. ————
  - Sandy Beaches. ————
  - Scenic Drives. ————
  - Nature Reserves. ————

**SOUTH CAPE**

**TOURIST AND OUTDOOR RECREATION RESOURCES**

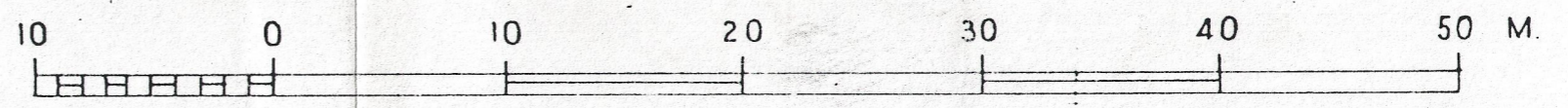
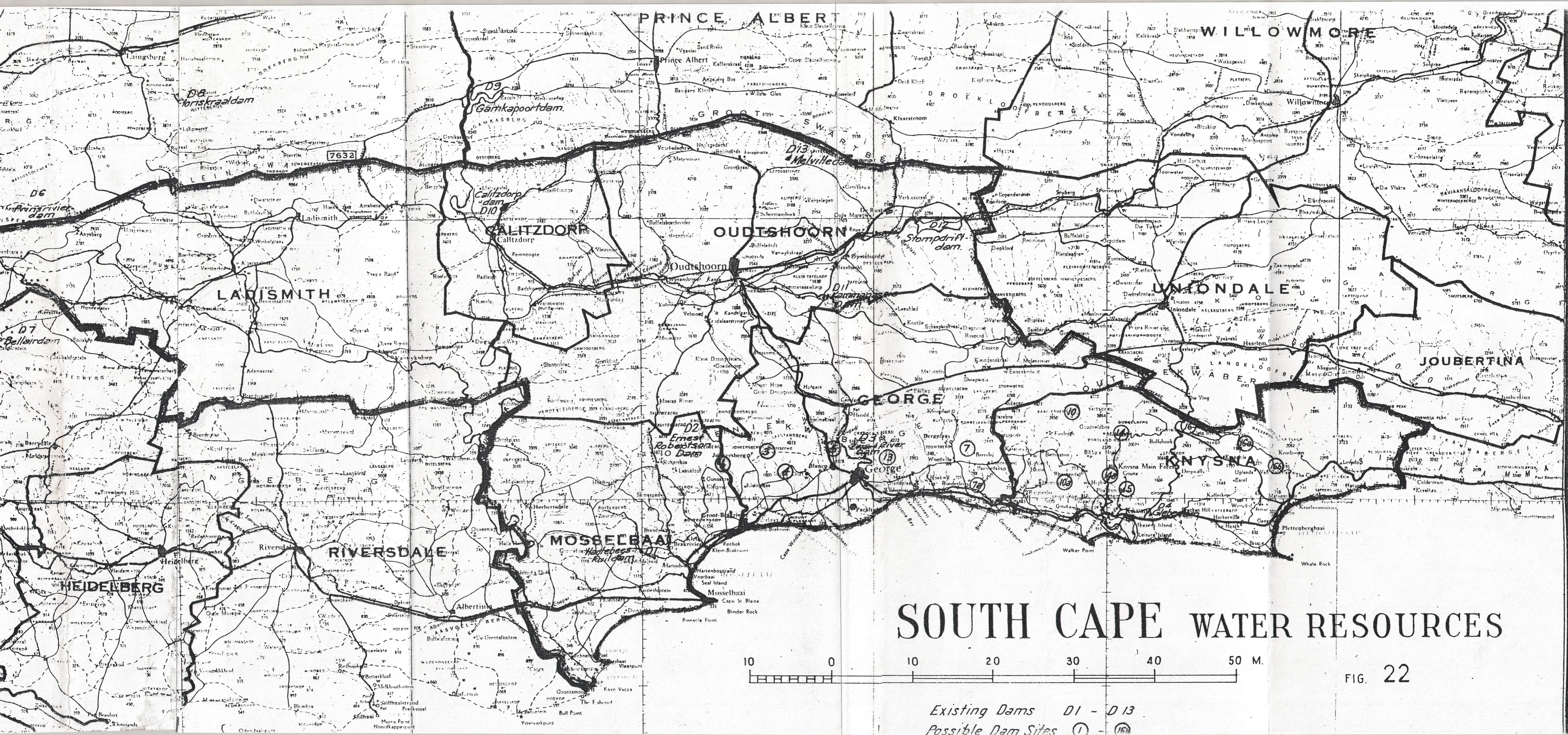


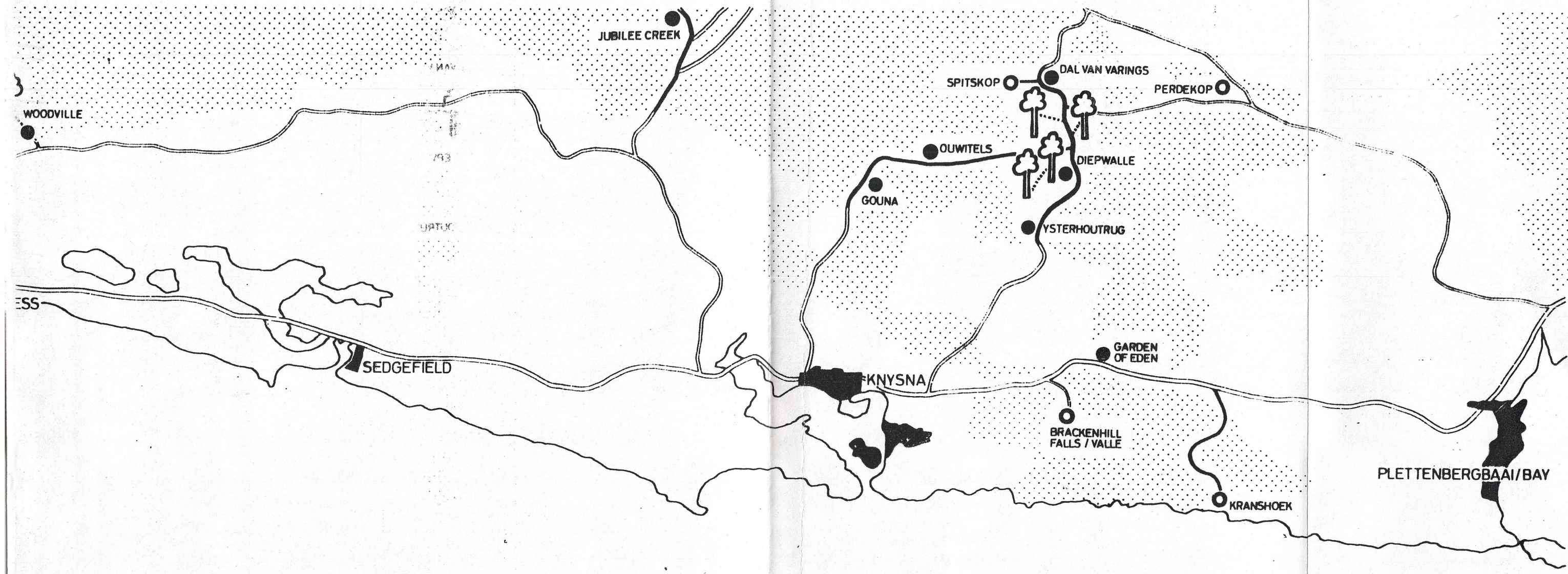
FIG. 24



● Picnic Spots  
○ Scenic Spots

Grootbome Big Trees

Staatsbosse State Forests  
Bosryweë Forest Drives

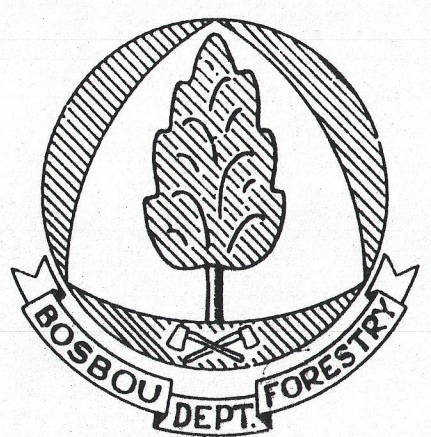


E BOSSE - BODEM VAN BAIE GEBRUIKE  
FAUNA - EDELHOUT - ONTSPANNING

INDIGENOUS FORESTS - NATIONAL FORESTS - LANDS OF MANY USES  
WATER - SOIL - FLORA - FAUNA - HIGH-GRADE TIMBER - RECREATION

E B L I E F

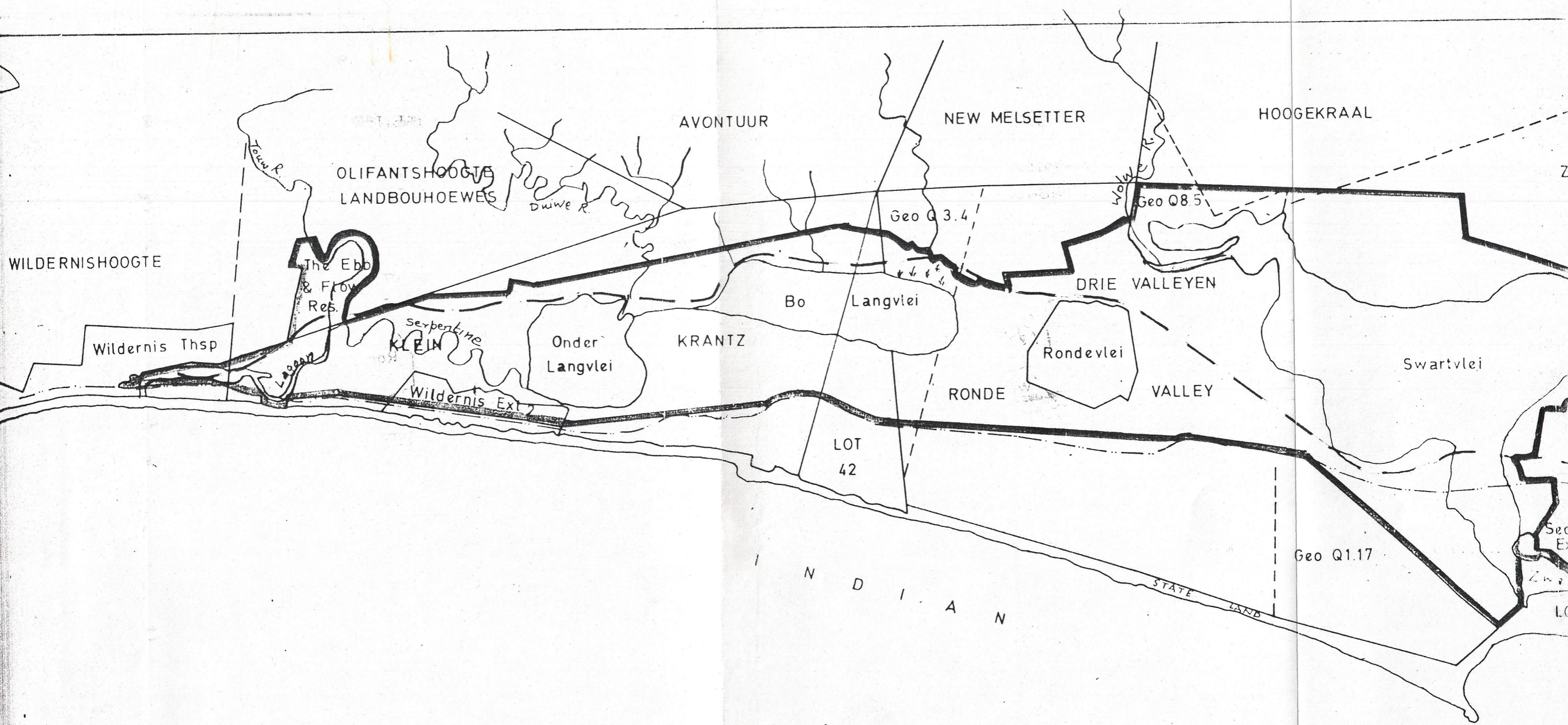
o die paai  
m bosbrande  
e voorsiene vuurmaakplekke  
n uitsigplekke skoon  
seiendom kampeer nie  
e beskadig nie



P L E A S E

keep to the roads  
prevent forest fires  
use only the fireplaces provided  
keep picnic and scenic spots clean  
don't camp on the forest estate  
don't damage trees

FIG. 25



DIE MEREKOMPLEKS DISTRIKTE

GEORGE EN KNYSNA

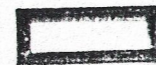
SKAAL 1:50,000

Prok No: 204/1968

G G No: 2130

Ged 19.7.1968

Omskrewende Gebiede



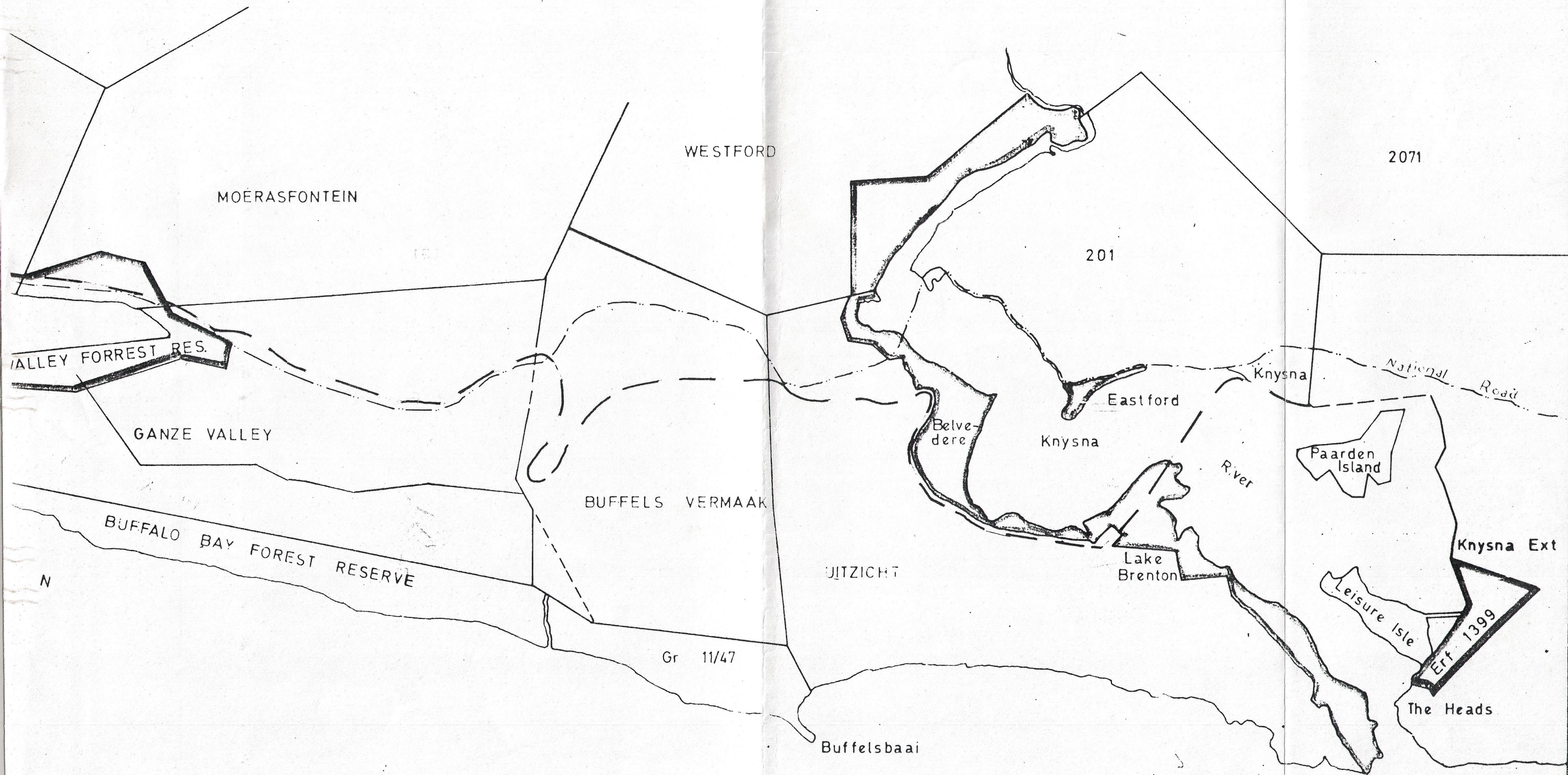
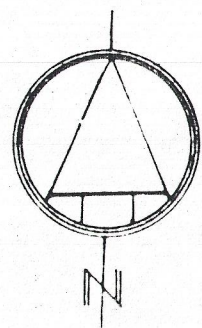
Defined Area

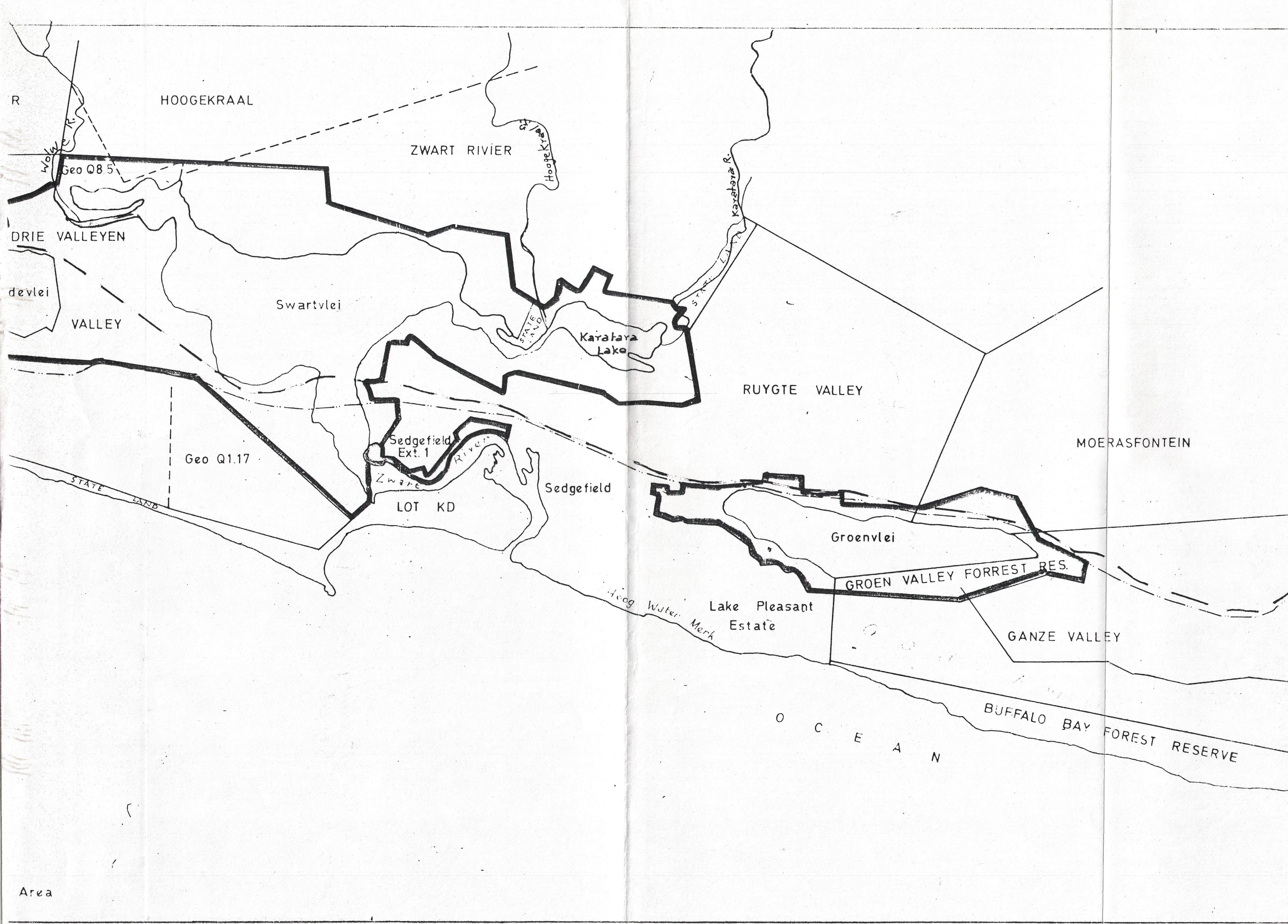
# LAKES AREA

FIG. 23

"DEFINED" GROUP AREA: PROCL. 204/1968

Scale - 1: 50,000





HOOGEKRAAL

ZWART RIVIER

R

Geo Q85

DRIE VALLEYEN

devlei

VALLEY

Swartvlei

Karatara Lake

RUYGTE VALLEY

MOERASFONTEIN

Geo Q1.17

Sedgefield Ext. 1

Sedgefield

LOT KD

Groenvlei

GROEN VALLEY FORREST RES.

Lake Pleasant Estate

GANZE VALLEY

BUFFALO BAY FOREST RESERVE

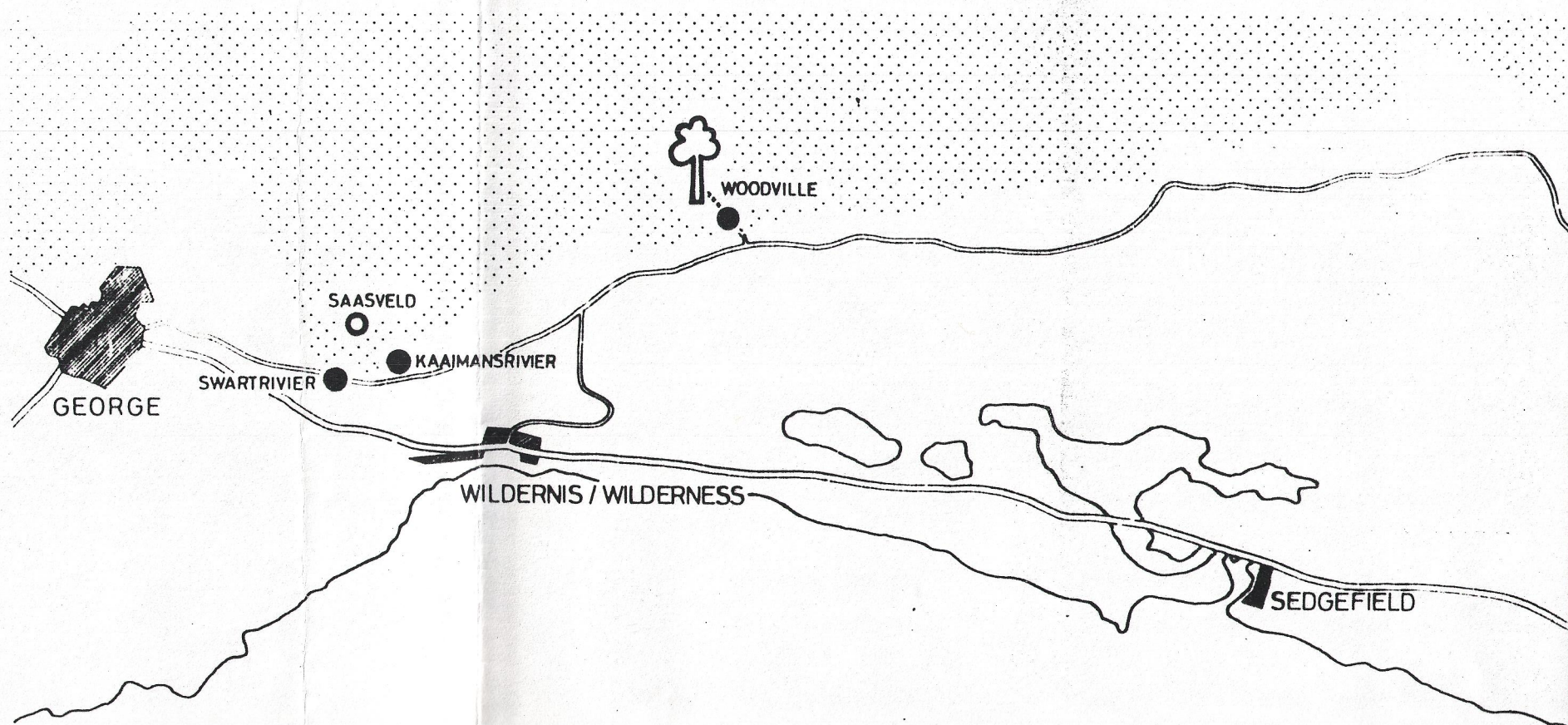
O C E A N

Area

Piekniekplekke ● Picnic Spots

Uitsigplekke ○ Scenic Spots

Grootbome



INHEEMSE BOSSE

WATER - GROND

NASIONALE BOSSE

FLORA - FAUNA

BODEM VAN BAIE GEBRUIKE

EDELHOUT - ONTSPANNING

A S S E B L I E F

bly op die paaie

voorkom bosbrande

gebruik alleenlik die voorsiene vuurmaakplekke

hou piekniek- en uitsigplekke skoon

moenie op die bouseiendom kampeer nie

moenie bome beskadig nie

