

**CYPRUS** 

# ANNUAL REPORT OF THE FOREST DEPARTMENT FOR THE YEAR 1956

NICOSIA

PRINTED AT THE CYPRUS GOVERNMENT PRINTING OFFICE

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ANNUAL REPORT
of the

FOREST DEPARTMENT
for the year

1956.

# CONVERSION FACTORS.

1	donum	=	0.33 acres
1	acre	=	3.025 donums
1	donum	=	0.134 hectares
1	hectare	=	7.475 donums
1	square mile	=	1,936 donums
1	square kilometer	=	747.5 donums

1 oke (weight) = 2.8 lbs. or 1.273 kilograms

1 gross matches = 0.714 cubic feet (r) U.B.

Factors for the conversion of sawn timber, veneers and plywood and pulp and paper used in this report are the same as those adopted by F.A.O. and published in the Year Book of Forest Products Statistics.

# WEIGHTS, MEASURES AND CURRENCY

WEIGHT:	400 drams 1 oke 44 okes 180 okes 800 okes	= 1 oke. = 2.8 lbs. = kantar. = 1 Aleppo Kantar (carobs). = 1 ton.
CAPACITY:	1 Cyprus litre	= 2.8 quarts.
	1 kile	= 1 bushel.
	1 kouza	= 9 quarts } wine.
	16 kouzas	= 1 load }
LENGTH:	1 pic	= 2 feet.
AREA:	1 evlek	= 3,600 sq.feet.
	1 donum	= 14,400 sq.feet or 4 evleks.
CURRENCY:	1,000 mils	= £1 (£1 Cyprus = £1 Sterling)

All round timber is measured in terms of true volume.

# CONTENTS

	Page
I INTRODUCTION	5
(1) Policy	5
Administration (3) General	5 6
II CONFERENCES AND VISITS	7
III THE FOREST ESTATE	7
(1) Forest Areas	7 8
IV CLIMATE	8
V FOREST PROTECTION	14
<ul><li>(1) Damage by Natural Causes</li><li>(2) Damage by man</li><li>(3) Private Forests</li></ul>	14 14 18
VI FOREST MANAGEMENT	18
VII FOREST UTILIZATION	20
(1) Out-turn from the forests (2) Imports, Exports and Consumption (3) Minor Products (4) Extraction (5) Sawmilling and Forest Industries (6) Oil Conversion	20 21 21 21 23 24
VIII FOREST ENGINEERING	
(1) Forest Roads (2) Buildings (3) Telecommunications (4) Machinery and Plant	24 25 25 25
IXAFFORESTATION	26
X FOREST EDUCATION	27
(1) The Forestry College (2) Other Training Courses (3) Publications (4) Forest Extension (5) Library	27 27 28 29 29
XI FOREST RESEARCH	30
XII GAME PRESERVATION	31
<ul><li>(1) Moufflon</li><li>(2) Trout</li><li>(3) Shooting in General</li></ul>	31 31 32
XIII FOREST STAFF	
XIV FINANCIAL	34
XV ACKNOWLEDGEMENT	35

# XVI. - APPENDICES:-

1.	Classification of Forest Area 3	36
2.	Statement of Progress in Forest Reservation and Demarcation during the year ended 31st December, 1956	37
3.	Statement of Progress made in Working Plans	<b>3</b> 8
4.	Forest Communications	<b>3</b> 9
5.	Summary of Forest Offences ,	40
6.	Out-turn of Timber and Fuel	1/1
7.	Out-turn of Minor Forest Produce	<b>4</b> 5
8.	Wood and Wood Products: Imports and Exports	46
9.	Statement of the Incidence of Forest Grazing in Main State Forests	48
10.	Statement of Fire Protection Works and Fire Incidence	49
11.	Statement of Revenue collected in 1955 and 1956	50
12.	Statement of Expenditure during 1955 and 1956	52
13.	Development Schemes, Five-Year Plan 1956-1960	57
14.	Comparative Financial Statement for the 10 years ended 31st December, 1956	58
15.	Forest Staff on 31st December, 1956	<b>5</b> 9
16.	Senior Forest Staff on 31st December 1956	60
17.	Cyprus Forestry College Report for 1956	61

CYPRUS FOREST MAP.

# REPORT OF THE FOREST SERVICE IN CYPRUS FOR THE YEAR 1956.

#### I. - INTRODUCTION.

#### (1) POLICY

The Forest Policy of the Cyprus Government is laid down in a Statement published in 1950. The need is recognised to reserve in perpetuity sufficient land, particularly the high level catchment areas and submarginal agricultural lands, to ensure a prudent balance between agriculture and forestry. Stress is laid on the soil and water conservation role of the forests, as well as their amenity and recreation values. The Forest Department is charged with the duty of applying the principle of sustained yield to the management of all forests, with the primary object of providing wood and other forest products to meet as many of the Island's requirements as possible, and at the same time securing for the community the maximum revenue obtainable within the framework of the declared policy. Specific mention is also made of the necessity to promote research and education in all branches of forestry.

# (2) ORGANISATION OF THE FOREST ADMINISTRATION.

- 2. The State Forests of Cyprus are divided in accordance with the Forest Law into two categories the Main State Forests and the Minor State Forests. Minor State Forests may be declared village fuel or grazing areas under the control of Village Authorities and where this has been done a third category of Communal Forest comes into being. Areas of privately—owned natural forest with a steadily growing area of small-holder plantations make a fourth wood-land category.
- 3. The Main State Forests, comprising 79.56 per cent of the total forest area, are managed by the Forest Department, which is also responsible for the development of Communal Forests. The Minor State Forests are administered by the District Commissioners.
- 4. The headquarters of the Forest Department is in Nicosia.
- 5. The Main State Forests are grouped into four territorial divisions, namely:

Paphos Division (H.Q. Stavros Psokas) comprising the Paphos and Akamas group of Forests (258.613 sq.miles).

Troodos Division (H.Q. Platania) comprising the Troodos, Adelphi, Machera, Stavrovouni, Aetomouti and Limassol Forests and the lowland plantations near Limassol town and salt lake (150.851 sq. miles).

Northern Range Division (H.Q. Halevga) comprising the Dhiorios-Ayia Erini group and all the Main Forests situated along the Northern Range mountains and the Karpass peninsula (117.579 sq. miles).

E Copies may be obtained from the Government Printer,
Nicosia.

Plains Division (H.Q. Nicosia) comprising the lowland main forest plantations at Athalassa, Salamis and the Fresh Water Lake, Famagusta, and the Village Fuel Areas. (5.570 sq.miles of plantations and 8.03 sq. miles of communal forest).

In addition to these there are four specialist divisions:

- (i) Forest Research (H.Q. Nicosia)
- (ii) Forestry Education (H.Q. Prodhromos) Forestry College).
- (iii) Forest Management and Survey Division (H.Q. Nicosia), comprising the Forest Survey and Working Plans sections.
  - (iv) Forest Engineering Division (H.Q.Nicosia) comprising five sections responsible for Roads and Buildings, Telecommunications, Machinery, Vehicles and Plant, Utilization and the Central Forest Store.

Forestry extension and publicity activities are carried out by a small section in Nicosia.

#### (3) GENERAL.

- 6. The Forest service was able to operate in all parts of the island, in spite of the disturbed political situation. Relations with the public remained amicable, although at the official level contact and co-operation was reduced.
- 7. The most outstanding event of the year was the series of fires which ravaged large areas of forest during the summer months. A total of 29.28 square miles were burnt over and some 6.038.000 cubic feet of standing timber were destroyed. This series of disastrous fires placed a heavy strain on all ranks of the Department, particularly those in the field. Seen against the background of the disturbed political situation and the continued umpredictable restrictions on movement and communications imposed by curfews and other security operations, the tireless efforts of the staff to save the forests from fires merited great praise. The Department was particularly honoured by the immediate award by Her Majesty the Queen of the M.B.E. to Assistant Forest Officer Mr. Haralambos Middleton in recognition of his selfless devotion to duty in conducting fire fighting operations in the field in Paphos Forest.
- 8. The whole Department was saddened and horrified when Forester Costas Zavros was murdered by terrorists in Spilia village on the evening of February 14th.
- 9. Special acknowledgement must be made of the numerous occasions on which assistance in fighting forest fires was received from the Security Forces. Particular mention must be made of the assistance received from the R.A.F. Mountain Air Rescue Team who provided ground radio communication so promptly and effectively during some of the larger fires.

- 10. The year under review saw the commencement of the 2nd Development Plan in which provision is made for the expenditure of £204,000 on Forest Development over a five-year period.
- 11. During the year the Research and Education Divisions were separated. The posts of Director of Research and Education and Silviculturalist were abolished. Research activities were placed under the newly created post of Research Officer and Education activities under the Principal of the Forestry College.

#### II. - CONFERENCES AND VISITS.

- 12. Mr. D.F. Davidson, Conservator of Forests, attended the World Eucalyptus Conference held in Rome from 17th to 30th October.
- 13. Mr. J.A.N. Burra, Assistant Conservator of Forests, visited the Wyssen Company in Switzerland in September to study the latest modifications in the Wyssen W.30 yarding equipment recently acquired by the Department.
- 14. Mr. A. Polycarpou, Assistant Conservator of Forests, while undergoing his post-graduate course at Oxford, attended the 12th Congress of the International Union of Forest Research Organizations at Oxford from 9th to 13th July.
- 15. Visitors to the Department during the course of the year included Mr. G.W. Nye, Deputy Agricultural Adviser to the Secretary of State.

#### III. - THE FOREST ESTATE.

#### (1) FOREST AREAS.

- 16. (a) The area of the Main State Forests remained at 532.61 sq.miles.
  - (b) The area of the Minor State Forests remained at 76.56 sq. miles.
  - (c) The area of communal forests which are Minor State Forests allocated as Village Fuel Areas remained at 8.03 sq.miles.
  - (d) The area of privately owned forests and plantations was assumed to be 52.3 sq.miles.
- 17. The total forest area of the Island amounts to 669.50 sq. miles, which is equivalent to 18.74% of the total land area. Further details of forest areas are given in Appendices 1 and 2.
- 18. An area of 2,213 donums of Main State Forest land together with 2,618 fruit trees was leased for cultivation during the year. £309.793 mils was received from the rents of these lands and trees.

- 19. In the Minor State Forests 11,016 donums of land and 6,543 fruit trees were leased for cultivation. For these the rents collected amounted to £1,240.850 mils.
- 20. Fifty-eight forest springs were used for piped water supplies for domestic consumption. Six of these were leased at an annual rent of £6.150 mils. The remainder were enjoyed rent free by villages under schemes approved by the Water Development Department. Thirty-two small forest springs were leased for irrigation in private lands adjacent to the forest for a total rental of £9.650 mils.

#### (2) FOREST BOUNDARIES.

21. A sum of £44.120 mils was spent on maintaining the concrete cairns which mark the boundaries of the Main State Forests. No changes were made in the boundaries during the year.

#### IV. - CLIMATE.

- 22. The network of Forest Meteorological Stations was maintained throughout 1956. The daily radio broadcasts of "fire hazard" were continued from June until the 11th October.
- The meteorological data of the nine stations is set out in tables 1 to 5, the first three being concerned with rainfall, mean max. and min. temperatures, and mean relative humidities observed at 8 a.m. and 2 p.m. local time (06.00 and 12.00 G.M.T.). Table 4 gives further observations from the Forestry College, Prodhromos, including soil temperatures, solar and terrestrial radiations, sunshine hours, and evaporation as measured by the Piche Evaporimeter. Table 5 summarizes the Fire Hazard broadcasts by expressing the number of days, on which each degree (Low, Moderate, High, etc.) occurred, as a percentage of the whole period of June to September.
- 24. The annual precipitation was a little higher than in the previous year, but the summer was exceptionally dry. In the majority of forest areas, there was little or no rainfall during the period June October.
- 25. The average temperatures during the summer tended to be above normal and the relative humidity was exceptionally low for long periods.
- 26. The fire hazard during the summer was very much more serious than in the previous year.
- 27. This year a Wind Index was added to the "Fire Hazard" figure derived from the saturation deficit, as calculated from the 2 p.m. (local time) readings of the wet and dry bulb thermometers. The Wind Index was determined from the Wind Force (vide Beaufort Scale) at 2 p.m., as follows:-

Force 0 - 1 = +0% Force 4 - 5 = +10%

Force 2 - 3 = +5% Force 6 - 7 = +20%

Force 8 - 9 = +30%

Table 1.

MONTHLY RAINFALL IN INCHES.

Stations	Akradhes	Ayios Merkourios	Kornos	Panayia Bridge	Halevga	Stavros	Pano Panayia	Platania	Prodhromos
Stations	N. Range 580 ft. ASL.	Paphos Forest 800 ft. ASL.	Troodos For. 1,100 ft. ASL.	Troodos For. 1,800 ft. ASL.	N. Range 2,500 ft. ASL.	Paphos Forest 2,600 ft. ASL.		Troodos For. 3,600 ft. ASL.	For. College 4,500 ft. ASL.
Month	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall	Rainfall
January	3.06	5.13	4.17	2.61	4.52	6.95	3.66	9,12	5,53
February	3.83	6.10	2.17	2.87	2.34	9,12	7,91	8,39	9,26
March	1.86	3.12	0.60	2.61	2.37	5.43	3.17	4,16	3.45
April	0.54	0.50	1.44	0.27	0.65	0.42	0.48	1.18	0.69
May	2.80	0.94	1,11	1,61	2.03	2,35	1.68	1,72	2.60
June			_		0.60		_		
July	_		_	_	_		_		<del></del>
August	_			_		0.03		_	0.21
September			_		_				
October	0.04	1.02		p.40 <u>m</u>	(many	0.35	0.08	0.02	0.05
November	0.53	0.43	0.40	0.33	0.10	0.60	0.47	1,05	0.70
December	3.94	4.79	4.32	4.37	3.20	6.29	4,18	4.79	3.90
Totals	16.60	22.03	14.21	14.67	15.81	31.54	21.63	30.43	26,39

9

'l'arle 2,
MAXIMUM AND MINIMUM TEMPERATURES (°I'.).
MONTHLY AVERAGES.

Stations		Akradhes			Ayios Merkourios		Kornos		Panayia Bridge		Halevga		Stavros		Pano Panayia		Platania		Prodhromos	
		N. Range 580 ft. ASL.				est Troodos For. 1,100 ft. ASL						Paphos Forest 2,600 ft. ASL.		Paphos Forest 2,800 ft. ASL.		Troodos For. 3,600 ft. ASL.		For. College 4,500 ft. ASL.		
Month		Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.	Min.	
January		61.0	44,0	60.0	44.0	59.0	45.0	57.0	37.0	54.0	42.0	53.0	40.0	52.0	42.0	47.0	35.0	44.0	35.0	
February		61.0	44.0	61.0	44.0	59.0	45.0	58.0	39.0	55.0	42.0	53.0	40.0	55.0	39.0	49.0	36.0	46,0	35.0	
March		61.0	41.0	59.0	43.0	58.0	43,0	57.0	36.0	540	39.0	52.0	38.0	51.0	37.0	48.0	34.0	44.0	32.0	
April		70.0	49.0	71.0	48.0	71.0	51.0	71.0	44.0	67.0	48.0	67.0	46.0	64.0	48,0	62.0	45.0	60.0	45.0	
May		76.0	55,0	77.0	54.0	78.0	57.0	77.0	49.0	71.0	55.0	72.0	50.0	69.0	52.0	67.0	50.0	63,0	49.0	
June		86.0	64.0	88.0	62.0	88.0	67.0	87.0	58.0	83.0	63.0	83.0	54.0	80.0	58.0	78.0	59.0	76.0	60.0	
July		94.0	70.0	96.0	67.0	94.0	73.0	95.0	64,0	91.0	71.0	91.0	56.0	88.0	59.0	84.0	66.0	81.0	66,0	
August		93.0	70.0	94.0	67.0	95.0	72.0	96.0	64.0	91.0	69.0	92.0	57,0	88.0	61.0	87.0	68.0	84.0	69.0	
September		88.0	66.0	89.0	62.0	88.0	68.0	88.0	57.0	81.0	64.0	85.0	49.0	80.0	54.0	76.0	59.0	74.0	59.0	
October		78.0	55.0	78.0	55.0	79.0	59.0	79.0	48.0	74.0	57.0	74.0	45.0	71.0	50.0	67.0	51.0	65,0	51.0	
November	• •	69.0	50.0	69.0	48,0	70.0	52.0	69.0	43.0	69.0	50.0	65.0	37.0	63.0	45.0	59.0	45.0	57.0	45.0	
December		58.0	45.0	61.0	44.0	57.0	44.0	56.0	38.0	48.0	39.0	58.0	35.0	51.0	40.0	46.0	35.0	43.0	34.0	

10

TABLE 3.

RELATIVE HUMIDITY PER CENT.

MONTHLY AVERAGES.

Named and company as a second order or company or compa	i			1		I				<del></del>		1		Ī		1	-	i		
Stations		Akradhes		Ay Merke	ios ourios	Kornos			iayia dge	I-Tal	I-Ialevga		Stavros		Pano Panayia		Platania		Prodhromos	
		N. Range 580 ft. ASL.					Troodos For. 1,100 ft. ASL.				N. Range 2,500 ft. ASL.		Paphos For. 2,600 ft. ASL.		Paphos For. 2,800 ft. ASL.		Troodos For. 3,600 ft. ASL.		For. College 4,500 ft. ASL.	
Month		Local	Time	Local	Local Time		Time	Local	Local Time		Local Time		Local Time		Time	Local	Time	Local	Time	
ivionth		08.00	14.00	08.00	14.00	08.00	14.00	08.00	14.00	08.00	14.00	08.00	14.00	08.00	14.00	08.00	14.00	08.00	14.00	
January		80	66	78	60	78	75	89	68	80	78	86	69	76	71	80	85	78	81	
February		71	61	70	55	78	75	75	58	72	70	83	76	67	68	72	73	68	76	
March		63	52	66	56	65	64	67	55	71	70	81	77	71	69	69	72	77	79	
April		70	54	59	50	58	54	51	44	66	59	52	49	60	61	43	48	43	47	
May		69	57	45	42	42	42	39	42	58	54	55	49	70	64	41	48	48	54	
June	• •	59	+7	40	35	47	41	36	33	50	41	38	35	50	41	35	42	34	41	
July		67	42	36	33	33	30	30	23	53	32	29	23	28	24	23	25	27	30	
August		67	49	42	41	45	36	42	38	58	47	36	36	33	38	21	37	27	41	
September		56	40	40	35	39	36	35	25	46	37	41	35	33	33	26	33	35	38	
October		61	48	53	41	45	40	39	35	50	51	49	40	45	41	33	42	40	45	
November		68	48	57	50	60	50	54	51	48	50	55	48	58	49	44	51	49	51	
December		66	58	74	54	69	63	80	63	70	68	79	74	75	68	76	76	80	83	

1

12

# Table 4. FORESTRY COLLEGE, PRODHROMOS.

#### OTHER OBSERVATIONS.

Month		Mean Air Temp. (in Screen) 06.00hrs. GMT	Mean Grass Min.Temp. 06.00 hrs. GMT	Mean Soil 'Γemp. at 4 ins. 06.00 hrs. GMT	Mean Soil Temp. at 8 ins. 06.00 hrs. GMT	Mean Soil Temp. at 1 foot 06.00 hrs. GMT.	Mean Soil Temp. at 4 feet 06.00 hrs. GMT.	Mean Solar   Max. Temp.   (in Vacuum)   15.00 hrs.   GMT.	Mean Solar Max. Temp. in (air) 15.00 hrs. GMT.	Mean Sunshine Hours per day	Mean Evapora- tion (Piche) per day.
January		37.9°F.	30.0°F.	36.2°F.	39.4°F.	40.0°F.	48.0°F.	100.0°F.	58.0°F.	4.3 hrs.	1.7 c.c.
February		39.3	31.0	35.1	38.3	38.9	44.6	110.0	60.0	4.7	3.3
March		36.9	29.0	Broken	40.2	41.0	44.9	110.0	60.0	5.5	2.1
April		51.3	41.0	Broken	52.9	52.8	48.4	130.0	77.0	9.5	6.3
May		55.9	46.0	67.9	63.0	61.7	57.2	136.0	81.0	11.2	6.1
June		67.2	55.4	71.7	75.7	75.0	66.2	146.8	93.3	12.8	9.6
July		73.3	62.4	77.3	82.0	80.9	72.4	150.1	98.2	13.2	12.9
August		75.9	64.1	77.5	83.3	82.6	76.2	150.5	101.2	12.1	11.5
September		65.1	54.4	68.3	75.1	74.9	74.9	141.9	89.7	10.8	10.6
October		56.1	45.4	56.9	63.6	63.5	68.4	133.6	80.9	9.3	7.2
November	-	49.3	39.6	47.2	51.7	52.8	60.9	120.2	69.4	6.7	5.3
December		37.5	30.5	38.0	40.5	42.0	53.1	102.5	53.9	3.6	1.8

Total number of Ground Frost days 24 (Jan.-April and Nov.-Dec.) (i.e. Grass Temperature 30.4°F. or less.)

TABLE 5. FOREST FIRE HAZARD, JUNE-SEPTEMBER, 1956.

Station	Low	1	Moderat	е		High	Very	High	Extreme	Danger
Akradhes 580 ft. ASL	15.6%	(of Period)	49.2% (	of Period)	19.7%	(of Period)	12.3%	(of Period)	3.2(of	the period
Ayios Mercurios, 800 ft.	5.8	11	35.2	11	31.1	11	24.6	11	3.3	11
Kornos, 1,100 ft. ASL	4.2	11	34.0	11	37.3	11	20.3	11	4.2	11
Panayia Bridge,1,800 ft. ASL	1.6	11	22.2	11	33.6	11	35.2	11	7.4	11
Halevga, 2,500 ft. ASL	33.6	11	19.7	11	32.0	11	13.1	11	1.6	11
Stavros, 2,600 ft. ASL	13.9	11	24.6	11	36.9	11	21.3	11	3.3	11
Pano Panayia, 2,800 ft. ASL	18.0	11	34.4	11	32.8	11	14.8	11	Nil	11
Platania, 3,600 ft. ASL	28.7	11	29.5	11	32.8	tt	9.0	11	Nil	tt
Prodhromos, 4,500 ft;ASL	36.1	11	36.1	37	21.3	11	6.5	11	Nil	11

(Low = up to 35% (Moderate = 36 - 50 % (High = 51 - 70% (Very High = 71 - 100% (Extreme danger = Over 100% Degrees of Hazard

Period = 122 days, June 1st to September 30th. (Exception for Kormos 118 days on account of Stavrovouni Fire).

28. As proposed in 1955, the saturation deficit corresponding to maximum fire hazard was raised from 35 to 40 grams per cubic metre. In spite of this, the 100% figure was exceeded on 15 occasions, excluding the Wind Index. It was, however, an exceptionally dry year and it is therefore not proposed to raise the figure for saturation deficit until further experience has been gained with the present one. The use of the "Low" degree of hazard was discontinued for broadcasting, on psychological grounds. Adjustments to the degrees of hazard may be necessary in the light of further experience.

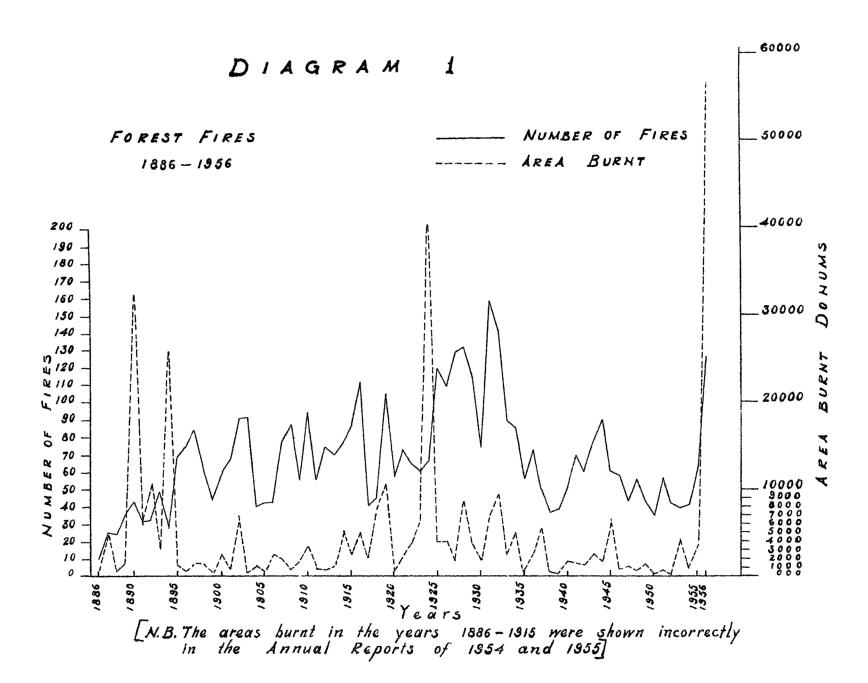
#### V. - FOREST PROTECTION.

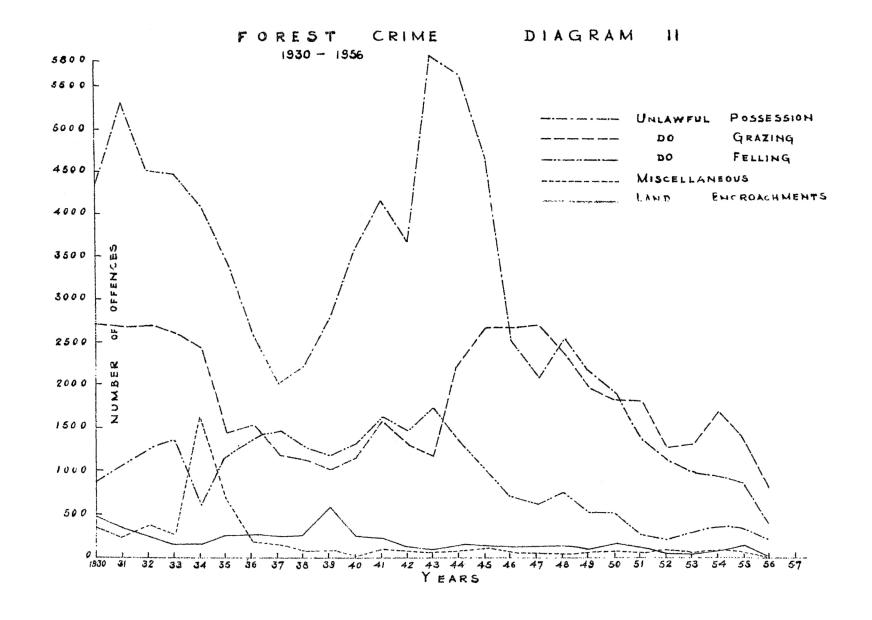
#### (1) DAMAGE BY NATURAL CAUSES.

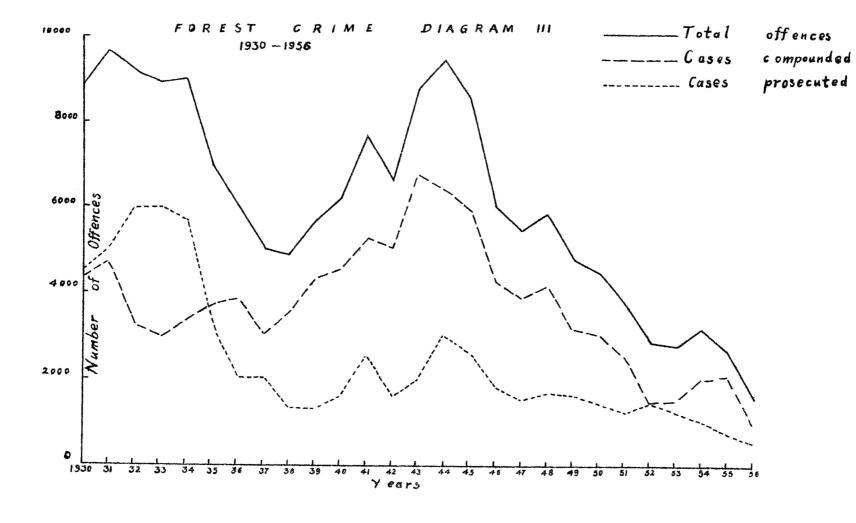
- 29. The increase in the damage to young plantations of <u>Eucalyptus camaldulensis</u> and <u>E. gomphocephala</u> by the beetle <u>Phoracantha semipunctata</u> noted last year continued. Wherever possible strict control measures were taken by removing affected trees and burning them.
- 30. A tremendous increase in the population of longhorn borers and other beetles living on dead and dying trees was noted in the large areas of burnt forest. So far, there is no indication that this great build up in populations has had any effect on living trees outside the burnt areas.

#### (2) DAMAGE BY MAN.

- 31. Fire: As has already been mentioned, disastrous fires occurred throughout the forests this summer. Weather conditions were more extreme than usual. High temperatures combined with low atmospheric humidities and turbulent winds persisted for long periods, and coincided with anti-terrorist operations in the mountain forests, in the course of which numerous fires broke out. 126 outbreaks were recorded and 56,681 donums of forest was burnt.
- 32. One fire alone, in the Limnitis, Fleyia and Katouris valleys of Paphos forest destroyed 26,864 donums in three days. In Paphos forest other large fires, each exceeding 2 square miles in extent, occurred in the Varishia, Ay. Mercurios and Lazaridhes areas.
- afforestation work recently carried out at Stavrovouni was completely burnt out, while in the Northern range a fire which started near Mount Olympos burnt through all the forest on the southern side of the range as far as the Loumata pass above Mandres village. This same fire extended as far south as the Ipsarovouno Minor State Forest, and at one time threatened the village of Mandres itself.
- offences in the forest reported for the year continued to be less than in previous years. This however did not reflect a real comparative reduction in grazing incidence. Because of the general atmosphere of law-lessness which prevailed, and because of the risk of being arrested by Security Forces, the patrolling staff was reluctant to spend as much time as usual in the remoter parts of the forest, particularly during the hours of darkness.







As a result much illicit goat grazing went on unchecked in certain areas. especially at night.

- 35. Autumn and winter grazing in lowland forests and village fuel areas was again permitted. Late autumn rains again caused a great demand for grazing in the forests which, where sheep were involved, was met wherever possible.
- 36. During the course of the year one village (Chrysiliou) closed its lands to free range goat grazing by a free ballot under the Goats (Exclusion) Law.
- ness was evident as a result of the disturbed political situation. Because of the conditions of full employment, however, and the fact that there were constant curfews and security operations in the forests, the overall incidence of crime was less than in previous years. As has already been mentioned above, certain types of forest crime remained undetected as a result of the understandable reluctance of the patrolling staff in certain areas to spend as much time as usual in the remoter parts of the forest. The total number of forest offences during the year was 2,058, (involving 2387 individuals), compared with 2742 in the previous year. These figures represent a 25% decrease on the previous year's totals. Out of these forest offences, 1476 cases concerned the Main Forests and 582 the Minor Forests, representing an incidence of 2.8 and 6.9 cases per square mile respectively. Of the total offences reported 28% (588 cases) were tried before the courts, the remainder being compounded. Diagrams 2 and 3 illustrate the course of forest crime during the period in the Main and Minor Forests. A detailed analysis of forest crime in 1956 is given at Appendix 5.

# (3) PRIVATE FORESTS.

- 38. During the course of the year 15 private forest estates, with a total area of 2.83 square miles were taken under the protection of the Forest Department on payment of prescribed fees by their owners.
- 39. Felling of privately owned forest tree species continued to be controlled by the Forest Department. During the course of the year 1,826 licences were issued for the felling of 66,610 such trees.

#### VI. - FOREST MANAGEMENT.

- 40. The Working Plans Officer was absent from the Colony until August completing his post-graduate course at the Imperial Forestry Institute. Field work undertaken by the Working Plans Section was restricted by his absence and by the necessity for the staff of the section to assist at the abnormal number of fires occurring in the year.
- 41. The collection of enumeration data for Kambos Felling Series in Paphos Forest was completed and computation of the field data for Kambos and Stavros felling series was continued. The classification of crop types from air photos for the next four felling series to be dealt with was begun.

- 42. In order to prepare sales notices for the salvaging of timber burnt in the 1956 fires, enumeration data were collected on a sampling basis over some 27 sq. miles of burnt forest in Paphos and Kantara Forests and a 100% enumeration was made of a small fire in Buffavento Forest. From these enumerations volume estimates were computed for the timber burnt.
- 43. The Volume Tables prepared in the previous year for <u>Eucalyptus camaldulensis</u> were tested in the field against data obtained from trees growing in plantations and in rows and were found to give satisfactory estimates. The tables are now available in published form. (Forest Department Technical Pamphlet No.23).
- 44. The Survey Section was kept fully occupied on field survey and map, plan and sunprint preparation. Additional work was undertaken in the mapping of all the major 1956 fires and in active assistance in extinguishing the fires themselves.
- 45. Towards the end of the year a reconnaissance survey of the Minor State Forests, which are at present the responsibility of the District Administration, was begun, with the object of making recommendations to Government for the best form of land use to which these areas could be put. It is intended that in due course those areas which are to be used for forestry will be placed under the direct control of the Forest Department.
- 46. It is felt that control over plans of operations previously prepared is not fully satisfactory. With this in mind, all Divisional thinning programmes were carefully checked and certain amendments introduced. Master maps were started to record separately the progress of salvaging burnt timber, major green coniferous fellings, and treatment by cleaning and thinning. A separate map record will cover afforestation works.
- 47. Because of the large volume of timber burnt in the 1956 fires, almost the equivalent of five years' normal outturn, all planned major coniferous fellings have been suspended for a provisional period of two years by which time it is estimated that the salvage of the burnt trees will have been completed. The main purpose of this step is to avoid creating conditions of competition for labour and markets for the contractors who are working out and selling the burnt timber.
- 48. The Working Plans Officer completed his investigations while at Oxford and his findings have been recorded in a report entitled "Forest Inventory Investigations in the <u>Pinus brutia</u> Forests". The future inventory procedure has been prepared in detail and will be published soon.
- 49. The use of 1 foot girth classes in the collection of enumeration data and computation has been reintroduced. It was found that, although the use of 6 inch girth classes increased precision, the method slowed up computation time to a degree which was impracticable.
- 50. The investigation laid down in Paphos Forest in 1954 to test the practical application of the recommendation made by Dr. Hummel in his report "Proposals on some aspects of Forest Management in Cyprus", that heavier

fellings of large-sized and overmature trees followed by artificial regeneration were justified for reasons of management, silviculture and economics, was continued. Although it is yet too early to draw final conclusions from the trial, the fact that fairly extensive beating up of the artificial regeneration was required for the second time in 1956 shows that difficulty is experienced with the methods of regeneration used. Thus, although it is generally agreed that Dr. Hummel's recommendation is sound and fully justified on the face of the arguments he uses, some successful method of artificially establishing regeneration in poorly stocked forest has yet to be demonstrated before it can be seriously adopted.

#### VII. - FOREST UTILIZATION.

# (1) OUT-TURN FROM THE FORESTS.

- (N.B. All volumes of yield refer to measurement "Round-wood under bark" (R.U.B.)).
- 51. Details of the out-turn of timber and fire-wood from the State Forests are given in Appendix 6. No figures are available for the out-turn from private woodlands and plantations from which the yield of timber and roundwood is not large. Yields of firewood from private forests, scrub covered crown land and from orchards probably contribute a further volume amounting to some 40% of the out-turn for this class of product from the main forests.
- 52. Yields of timber from the Main State Forests in 1956 amounted to 742,658 cu.ft. (see columns 1 3 of Appendix 6). Softwood yields contributed 661,939 cu.ft. or 89% of this total. Of this softwood yield 384,767 cu.ft. was extracted from burnt areas and the balance from sales of live trees. The remainder of the yield was composed of hardwood, mainly plane and alder from riverine fellings.
- 53. Due to the very serious forest fires which occurred during the summer a complete revision of the softwood cut was carried out. No new sales of fresh standing trees were made as soon as it became apparent that several years permissible yield had been destroyed (see para 47 above).
- 54. The whole area of burnt forest in the Paphos Division amounting to 5,694,000 cu.ft., distributed in three main areas totalling 24.8 sq.miles, was put out to tender in one lot. Advertisement of this considerable sale was carried out through the office of the Cyprus Commissioner in London, the Timber Trades Federation and the Local Trade Committees and Press.
- 55. The tender submitted by Messrs. Costi Demetri and others for £215,000 was accepted on 30th November, 1956, and work started before the end of the year. The contract is to run for two years.

# (2) IMPORTS. EXPORTS AND CONSUMPTION.

- products are given in Appendix 8. Cyprus imports two-thirds of her needs, and exports under licence are not normally allowed. A proportion of both imported and local timber is exported as fruit boxes and packing cases. As these articles are considered to be manufactured goods connected with a specific export business, details concerning them are not included in the data given.
- 57. In table 6 net imports and local production are combined to show total island consumption.
- 58. The total population at the end of 1956 was estimated to be 524,000, so that the per caput consumption amounted to:

	Cubic ft. 1	cound volume
	1955	1956
Timber	7,50	9.36
Fuel	1.09	1.00
Pulp products	1.01	0.94
Other products	0,65	0.87
	40.05	40.47
	10.25	12.17

#### (3) MINOR PRODUCTS.

- 59. Sales of Minor Forest produce (see Appendix 7) were valued at £3,236, the major items being sales of Nursery stock (£1,463) and seeds and fruits (£1,273).
- 60. The policy of issuing olive and carob stocks from the Forest was continued. A total of 16,562 stocks was issued free of charge.

#### (4) EXTRACTION.

- 61. All sales of green timber were carried out, as in previous years, by sale of standing trees, mainly by tender.
- 62. The dead trees in the area burnt at Kapoura in 1954 were logged, cleared to roadside and transported to Morphou Saw Mill by contract. Good quality logs were sawn in the mill and the product was sold at fixed rates or by auction. Short length or second quality logs were sold by auction at the mill. All poles, branchwood, pit props and some very short logs suitable for box making were disposed of at roadside in the coupe.

(Expressed in thousands of cubic feet round volume underbark)

Round Fire-wood Plywoods Paper Semi-Sawn TOTAL Kinds timber charcoal Matches Pulp manufactured timber Veneers Products goods Net Imports (a) 4,998 3,772 274 180 68 493 211 Local Production (b) 764 97 528 1,389 6,387 4.536 371 180 493 Total Consumption 528 68 211 4,907 Local production as 21.7 26.1 percentage of total 16.8 100 17.5 Percentage of 100 Grand Total 71.0 5.8 8.3 2.8 7.7 1.1 3.3

<sup>(</sup>a) Re-exports have been deducted. (b) Excludes production of timber and fire-wood from non-forests.

- 63. The thinning and cleaning programme suffered as a result of staff being removed for forest fire protection and timber salvage operations.
- 64. Mechanical Equipment purchased with the object of reducing extraction costs now consists of
  - (i) 3 Wyssen W.30 yarders
  - (ii) 2 Unipower Tractors with small jibs.

The suitability of this equipment for local conditions has not yet been fully established. Trials which were in progress were interrupted by the fires and the subsequent decision to stop normal fellings.

#### (5) SAWMILLING AND FOREST INDUSTRIES.

- 65. During the year there were 5 breakdown sawmills in operation, four in private hands and one owned by Government.
- 66. The quality of sawn timber turned out from the private mills remained far from satisfactory. The prices for local green sawn timber remained at between 350 and 500 mils per cubic foot. The demand for sawn timber continued to be so great that there was no incentive for timber dealers to season or grade locally produced timber.
- 67. The box shook industry continued to supply a proportion of exporters needs. Little progress was made in upgrading the output and quality of shooks because the staff of the Utilisation Section were prececupied with other work connected with the summer fires.
- 68. The Forest Utilisation Centre at Morphou was modified to increase output. The present machinery consists of
  - 1 Stenner 48" Band Rack
  - 1 Stenner 42" Push Bench
  - 1 Stenner 42" Automatic feed re-saw
  - 1 Crosscut saw
  - 1 Circular saw for slabwood conversion.
- 69. The highest output attained with the above equipment was 1,200 cu.ft. in one eight hour day. The average output for all working days was 95 cu.ft. per hour. Custom sawing, once again, comprised the bulk of the work and the average output would have been higher had customers been able to sustain a higher rate of log delivery. Hire of the mill was based on a cubic foot rate of 60 mils. The profit on the year's working was £8,583 taking into account running expenses (including the cost of logs at current royalty rates sawn into timber for Government use), depreciation and the value of timber in stock at the end of the year.

- 70. Additional plant at the Utilization Centre includes one seasoning kiln (Bachrich type) one pole dressing machine and one fork lift truck. The seasoning kiln has been used very little as the Forest Engineer was preoccupied with duties connected with the fires for a large part of the year. The pole dressing machine was also idle for most of the summer as a result of disorganization of normal work. The fork lift truck, however, has been in operation and has resulted in considerable economy and ease in moving materials, especially in the log yard.
- 71. Seasoning of freshly sawn timber at the mill is now becoming very much easier with the provision of covered space and proper seasoning foundations. A stock of 55,000 cu.ft. was sawn, seasoned and held for Government use. The reception received by this timber was favourable and the opinion is growing that properly sawn, seasoned and selected Cyprus softwoods compare most favourably with most of the qualities of imported timber offered locally.
- 72. The creosoting plant was moved from the Forest Engineering H.Q. Nicosia to the Morphou site, during the year.

#### (6) OIL CONVERSION.

73. No change on the situation in the previous years is to be reported. The price of wood fuel remained relatively steady and supplies of wood fuel were adequate to meet the demand.

74.

#### VIII. - FOREST ENGINEERING.

The forest road system maintained by the

#### (1) FOREST ROADS.

Department totalled 480 miles at the beginning of the year. The increase in mileage for 1956 is shown below	
Graded roads built at the expense of the purchasers of coupes	<u>Miles</u> 1.06
Roads constructed from Government funds	3.10
Other road construction (Yerani-Kantara)	5.00
Roads taken over from other authorities	-
Roads handed over to other authorities (Yerani-Kantara)	5.00
Total increased mileage	4.16

- 75. All Forest Roads and bridges were maintained. 37 miles of road were widened.
- 76. Road construction and widening was hampered severely by a restriction on the use of explosives so that the full year's planned programme was not completed.

77. Damage due to increased military traffic has resulted in a marked deterioration of surface conditions on many roads.

#### (2) BUILDINGS.

- 78. The replacement of old dwellings by new buildings has resulted in greatly improved living conditions for a number of the staff. The most important replacements were:-
  - (a) Married quarter at Kapoura
  - (b) Two married quarters at Boghaz of Kyrenia
  - (c) Married quarter at Stavros
  - (d) Two rooms at the labour lines at Stavros.

#### (3) TELECOMMUNICATIONS.

- 79. The Forest Department operates its own telephone service which links the forest District Head-quarters with all forest stations, fire look-outs and the main forest villages. Full co-operation with the Cyprus Inland Telecommunications Authority was maintained.
- 80. By the end of the year the forest telephone system consisted of 413 miles of route (totalling 1,109 miles of wire) and 13 exchanges serving 253 instruments. The total capital value of the system, including stores, is estimated to be about £54,347. During the year 108,790 calls were recorded of which 104,846 were free departmental calls. The cost of operation and maintenance, including personal emoluments, transport and other charges, amounted to £9,669. Net revenue earned on private calls and other services amounted to £1,913, to which may be added a further £8,056 being the nominal value of free departmental calls.
- 81. Tests with very high frequency radio continued and orders have been placed for equipment to link Nicosia H.Q. with each Divisional H.Q. and to link certain other points with Stavros and Troodos H.Q. stations. Mobile equipment for use mounted on vehicles together with walkie-talkie equipment for fire fighting control has also been ordered.

#### (4) MACHINERY AND PLANT.

- 82. The Department's fleet of vehicles (10 trucks; 1 bus; 8 cars and 10 motor-cycles) was maintained in the Departmental Workshops. In addition, major repairs to other machinery (2 Angle dozers D6, 2 tractors D2, 1 Ferguson Tractor, 3 Compressors, and ancillary equipment such as electric generators and pumping equipment) were also carried out in these workshops.
- 83. The earth moving machinery continued to be operated on a self balancing account. Due to the discreganisation caused by fires, curfews and other security operations this machinery did not operate full time. Costs of operation were £5,226 and receipts were £7,686.

#### IX. - AFFORESTATION.

- 84. Afforestation in the mountain forests continued under the new Development Plan. A total area of 4,531 donums was treated for an expenditure of £10.480.
- 85. In the lowland forests 139 donums of new plantations were created and 42 donums were sown with Acacia cvanophylla. Work started on the afforestation of certain areas burnt in the course of the summer's fires.
- 86. Because of the extremely hot dry summer and late autumn rains, casualties in the areas reafforested in recent years were high. Tending and cleaning operations in the young crops established in preceding years did not continue according to plan because of the disorganisation caused by the fires.
- 87. Afforestation work at the Ay. Irini sand drifts continued.
- 88. Communal Forests. The number of Village Fuel Areas in existence remained at 97, with a total area of 8.03 square miles. One more Village Fuel Area was handed over to a Village Authority for management under an approved Working Plan.
- 89. Forest Nurseries: Two nurseries continued to operate in the lowlands and two in the mountains. The main production of seedlings was again concentrated at Morphou. The Athalassa Nursery was operated by the Research Section for experimental purposes, particularly for the production of the new Eucalyptus species required for the trials which have been commenced. Stavros Nursery produced very few seedlings, while at Platania production also was cut down.

Total production figures for nursery stock were as follows:-

Stock carried over from previous year New seedlings raised during the year	
Total	634,360
Issues during the year for departmental use	29,581 33,663 70,858 117,998 382,260.

90. Forest Seed Collection. A total quantity of 6.24 tons of seed was collected in the course of the year, mainly Pinus brutia and Cupressus sempervirens. Of this a small quantity was exported and the remainder used in afforestation operations and for the production of planting stock in the nurseries.

#### X. - FOREST EDUCATION.

#### (1) THE FORESTRY COLLEGE.

- 91. The College completed its fifth academic year and its fourth full two-year course at the end of July. Of the 36 students in residence, all 19 Seniors secured their Firal Certificates and 16 Juniors their Preliminary Certificates. The total complement of students comprised 21 from the Cyprus Forest Department, 5 from Libya, 4 from Iraq, 2 from British Honduras, 2 from Iran, 1 from British Somaliland and 1 from Syria.
- 92. The sixth academic year opened in October with a reduced complement of 28 students (first and second year), 20 from Cyprus and 8 from abroad. Five additional overseas students arrived during the term, bringing the numbers of the new intake up to 17. Included in the latter were 11 Cypriots and 6 Overseas students, 3 of them from Iraq, 2 from Lebanon and 1 from British Somaliland.
- 93. The College moved on December 20th, to its new Winter Quarters at the ex-RAF camp in Dhiorios Forest, near the Forest Station. Dhiorios provides a good centre for forest tours to the Divisions and for visits to timber yards, etc. in Nicosia. It is also convenient for projects and practical work at the Departmental nursery and sawmill at Morphou.
- 94. Further details of College activities will be found in the Principal's Report, given at Appendix 17.

#### (2) OTHER TRAINING COURSES.

- 95. Mr. A. Polycarpou, Assistant Conservator of Forests, completed the one year post-graduate course at the Imperial Forestry Institute. Oxford University.
- 96. The four Forestry Scholars continued their studies at Aberdeen University. Mr. Halouk Hilmi completed his third and final year and graduated in July. Messrs L.I. Leontiades and E.D. Michaelides successfully completed their first year and commenced the second year in October. It was found necessary to terminate the Scholarship of Mr. Fuad Ahmed in September.
- 97. Forest Ranger L. Papadakis attended a six month course in Silvicultural Research from July to December at the Forestry Commission Research Station, Alice Holt, Surrey. His training covered research techniques, silvicultural and nursery experiments, genetics, seed-testing and some studies of poplar cultivation techniques.
- 98. Forester E. Anaxagoras received training in Forest Entomology at Bangor University and the Forestry Commission Research Station, between January and June. This training was recommended by the late Dr. R.N. Chrystal, after his work in Cyprus. It consisted of two terms at Bangor University under the supervision of Mr. J. Hobart, Head of the Agricultural Zoology Department, and a month's fieldwork under the supervision of Dr.Myles Crooke. Forest Entomologist of the Forestry Commission.

- 99. Forester A. Marouchos, who is in charge of the Morphou Central Nursery, was sent to Israel in October for three weeks training in nursery management. He paid particular attention to the procedure adopted there for raising large numbers of seedlings and transplants in pots and beds, in view of the urgent plant requirements for reafforesting the burnt areas in Cyprus.
- 100. Forest Guard George M. Tsangarides, the Departmental Photographer, attended a three month course in photography in England, between May and August, arranged by the Films Adviser to the Colonial Office. The course included training in colour photography, semi-micro photography for biological research and the production of film strips and slides.
- 101. It is worth recording that all the students who underwent the above special courses earned very favourable reports on their work.
- 102. The generous co-operation of the British Forestry Commission, Bangor University and the Israel Forest Service in connection with these courses is greatly appreciated.

# (3) PUBLICATIONS.

- 103. The following Technical Pamphlets were issued during the year in cyclostyled form:-
  - (a) Research Record No.1.

Progress Report on Work on Eucalypts 1954-56. (Technical Pamphlet No.18) By J.V. Thirgood.

- (b) Research Record No.2.
  - (1) Recording Procedures & Organisational Techniques.
  - (2) Miscellaneous Investigations 1954-56.
  - (3) Proposals for future Research. By J.V. Thirgood. (Technical Pamphlet No.19).
- (c) Research Record No.4.
  - A Cyprus Forest Bibliography 1879-1956 (Technical Pamphlet No.21) By J.V. Thirgood and A.G. Nigogossian
- (d) Volume Tables for Eucalyptus Camaldulensis in Cyprus, 1956. (Technical Pamphlet No.23)

  By J.N.R. Jeffers and

  Ch. Gavrielides, Forester.

  Reports were also prepared for limited circulation (in typed form) as follows:-

- (a) Joint Sub-Commission on Mediterranean Forestry Problems, Eucalyptus Working Party, 2nd Session, Nice, May, 1956.

  By, D.F. Davidson
- (b) Diseases in Eucalyptus Plantations By W.R. Day
- (c) Report on forests of Lebanon, Syria and Jordan

Py G.M. Seraphim.

### (4) FOREST EXTENSION.

- 104. The work of the Forest Extension Section, under the direction of a Forest Officer, was curtailed during the year, due to the political situation. Nevertheless, activities instituted in previous years were continued, including articles and talks on Forestry featured by the Cyprus Press and Radio and the monthly section on Forestry in the "countryman" magazine, published by the Government Information Service. Articles were also included in the quarterly magazine "Cooperation in Cyprus" and in "Forest Treasures". Lectures and information were given to various sections of the public and advisory work was carried out, particularly on the choice of species for planting.
- 105. Five new branches of the Cyprus Forestry Association in the villages of Asproyia, Drynia, Phyti and Panayia (Paphos District) and Neon Livadhi (Nicosia District) were established.
- 106. The "Tree Planting Week" was organised during the month of January. A number of trees were planted by Clubs, Schools, Societies, Municipalities, Villages and Private land-owners throughout the Island.
- 107. The "Save our Forests Week" devoted to anti-forest fire propaganda was organised in June.

#### (5) LIBRARY.

- of a large number of organisations which regularly send publications free of charge, it was thought proper to offer a regular exchange service. Some 90 circulars were sent out to possibly interested organisations, enclosing a list of publications which could be made available free of charge, on application, so far as stocks would allow. About 30 requests were received to be supplied with copies of available publications and to be placed on the free distribution list for future publications.
- 109. During the year the Library acquired 30 books, and about 400 periodicals and 200 separates. Some 250 volumes were issued within the Department, during the year.

#### XI. - FOREST RESEARCH.

- any expansion of research work but work continued on projects undertaken during the past two years. With the arrival of the new Research Officer, the opportunity will be taken to review past work and an up-to-date statement on Research policy, priority of work and procedure will be published in 1957.
- 111. <u>Silviculture</u> (1) Special appreciation must be expressed for the technical achievements of the temporary Silviculturist, whose contract expired early in the year, in setting up and organising the recording procedure of this part of the Research Section. He left behind him many annotated pamphlets and personal memoranda which have been of great use to the new Research Officer.
- (2) The two main trends of research started in previous years were continued. Species trials to discover suitable species for the afforestation of the semi-arid lowlands now consist of over 1,000 individual plots on twenty three different sites. In the majority of these trials Eucalyptus species are being used nearly 50 species of this genus are involved. A progress report on these trials is included in the year's publications (Research Record No.1 Progress Report on Work on Eucalyptus 1954-1956 by J.V. Thirgood).
- (3) In the coniferous mountain forests, assessments were made of the observation plots laid down to observe the progress of natural seedling survival throughout the year and of seedling survivals from sowings with various site treatments. The lay-out of the plots involved a large number of sites, randomised throughout the main state forests. The results show that the position for natural regeneration is far from satisfactory.
- (4) Investigations into the patch sowing of <u>Cupressus Sempervirens</u> were continued. It was tentatively suggested that the correct depth of soil coverage is the greatest single factor influencing germination of this species. It was also noted that a period of dormancy may occur in seed of <u>C. sempervirens</u>.
- (5) A report on other miscellaneous silvicultural investigations is included in this year's publications (Research Circular No. 2 Miscellaneous Investigations, 1954-56 by J.V. Thirgood).
- 112. Entomology (1) The Forester (entomology) was in the United Kingdom for the first six months of the year. On his return to Cyprus, investigations were started on the relation of fire injury of Pinus brutia to borer and bark beetle attack in the areas burned during the year.
- (2) With the advice of Mr. Day, the temporary Forest Pathologist, the relationship between <u>Eucalyptus</u> bark splitting and attack by <u>Phoracentha semipunctata</u>, the Eucalyptus borer, was investigated; it was established that the cause of splitting was pathological and that borer attack followed afterwards.

- (3) The general distribution of the Eucalyptus borer was investigated and its presence was recorded in several new areas.
- (4) Work continued on studies of the life cycle and distribution of the processionary caterpillar, Thaumatapoea wilkinsoni. Methods of controlling attacks by this insect are also being investigated.
- 113. Pathology (1) Mr. W.R. Day of the Imperial Forestry Institute, Oxford, studied forest pathological problems during the latter half of the year. The main subjects of Mr. Day's investigations were as follows:-
  - (a) Natural regeneration, the development of heart rot and canopy development in <u>Pinus</u> <u>brutia</u> forest.
  - (b) Root development and growth of P. brutia seedlings.
  - (c) Variations within stand density in Paphos Forests.
  - (d) The regeneration of Cedrus brevifolia.
  - (e) Diseases of Poplars.
  - (f) The "die-back" of pines in the Southern Mountains.
  - (g) Disease in <u>Eucalyptus</u> plantations.
- (2) Mr. Day showed a number of slides and gave a lecture concerning his findings to the students of the Forestry College. He will submit his final report in 1957. He was assisted throughout his work by Forester Hj. Yiannis.
- 114. Photography. The Department now has a fully trained photographer attached to the Research Section. His services will be particularly useful to those engaged on experimental work and also for preparing photographs, filmstrips and slides to illustrate lectures given at the Forestry College.

#### XII. - GAME PRESERVATION.

#### (1) MOUFFLON.

115. The Moufflon population in Paphos Forest Game Reserve continued to increase and more complaints were lodged by the owners of vineyards and rose-gardens at Milikouri village where damage continued to occur. The fence erected two years ago continued to be satisfactory for that area of the private properties it protected.

#### (2) TROUT.

116. The brown trout introduced in 1950 are breeding successfully in certain mountain streams in Paphos Forest. In the course of continued security operations in the area a number of fish appear to have been removed from the water so that the breeding population has been reduced.

# (3) SHOOTING IN GENERAL.

117. There was no shooting during the year because all sporting guns had been called in by the authorities as a security measure. This step has given an opportunity to the greatly reduced partridge and francolin population to recover. Coveys were strong although not particularly numerous. The beneficial effect of the cessation of shooting on the game population should become apparent in the next breeding season.

#### XIII - FOREST STAFF.

118. <u>Forest Staff</u>. A statement of the Forest Staff is given in Appendices 15 and 16 and a summary of the staff is given in Table 7 below:

# TABLE 7. - FORESTRY STAFF ON 31st DECEMBER. 1956.

#### Permanent Establishment:

Senior Staff	 ••	• •	 13
Subordinate Staff	 		 238

#### Temporary Establishment:

Senior Staff	 ••	• •		4
Subordinate Staff	 	• •	• •	30

Total Technical and Administrative Staff . . . . . 285

#### Clerical Establishment:

Principal Clerk		1
Accounting Officer,1st Grade	••	1
Clerks,1st Grade		2
Clerks, 2nd Grade		2
Clerical Assistant		1
Temporary Clerical Staff		7
Messengers	• •	Ż
Total all Staff		301

- 119. Mr. J.C. Mouskos, Administrative Officer, was seconded for duties to the Forest Department, with effect from 1st May, 1956.
- 120. Mr. J.V. Thirgood left the Colony on the 30th May, 1956, to take leave prior to the expiration of his two-year contract as Silviculturist on 31st August, 1956.
- 121. Mr. W.R. Day of the Imperial Forestry Institute, Oxford, came to Cyprus on 14th July, 1956, to advise on forest pathological problems. He left the Colony soon after the new year and his final report will be furnished in due course.
- 122. Mr. A.Polycarpou, Assistant Conservator of Forests, completed a one-year post-graduate course at Oxford University and returned to the Colony on the 13th August.1956.

- 123. Mr. J.D. Leefe, Education Officer in the Forestry Commission of the United Kingdom, was appointed as Assistant Conservator of Forests as from October 19th 1956 on two years temporary transfer as Principal of the Prodhromos Forestry College.
- 124. Mr. G.M. Seraphim, Assistant Conservator of Forests, left Cyprus on the 31st October, 1956, to attend a post-graduate course at the Imperial Forestry Institute, Oxford.
- 125. Mr. J.A.N. Burra, Assistant Conservator of Forests, left Cyprus on the 9th November, 1956, to take up the post of Conservator of Forests. Jamaica.
- 126. Mr. H. Hilmi successfully completed his studies at Aberdeen University and on his return to Cyprus on the 14th November, 1956, was appointed to the post of Assistant Conservator of Forests.
- 127. Mr. R.J. Streets, Senior Assistant Conservator of Forests, proceeded on leave on 5th December, 1956, prior to a two-year secondment for duty in Iran.
- 128. Mr. A.J. Browning was transferred from Sierra Leone and assumed the duties of Senior Assistant Conservator of Forests, on the 11th December, 1956.
- 129. Mr. E.C. Clarke was transferred from British Guiana and assumed the duties of Assistant Conservator of Forests (Research), on the 18th December, 1956.
- 130. <u>Forest Labour</u>. The following table shows the employment provided by Forestry and Forest Industries. Labour employed amounted to a total of about 478,000 mandays.

TABLE 8. - FOREST EMPLOYMENT.

	No. of Industrial units. (2)	No. of persons employed annually.	Quantities of wood including fuel used. Thousands of cubic feet. (4)	Value of minor products used in £ Sterling.
A FORESTRY:  (i) Management, Silviculture and Protection  (ii) Extraction	Main Forests	549 (a) ) 926 (b) }	1,389	
B INDUSTRIAL  (i) Primary:  Sawmills  Essential Oils  (ii) Secondary	5 - N.A.	120 - 4 <b>,417</b> (c)	N.A. - N.A.	N.A. - N.A.

- (a) Labourers regularly employed in the Forest Service.
- (b) Estimated on the basis of 5 cubic feet (r) per man-day and 300 working days to the year.
- (c) Extract from the 1946 Census Report.

#### N.A. = Not available.

131. As in the previous year the demand for labour both skilled and unskilled was in excess of the supply with the result that wages increased and the cost of timber remained stable with a slight tendency to rise. Such minor labour disputes as have arisen during the year have been satisfactorily settled by negotiation.

#### XIV. - FINANCIAL.

132. Details of Forest expenditure and revenue are given in Appendices Nos. 11,12,13 and 14. A summary of these is given in the following table:

#### TABLE 9. - FINANCIAL SUMMARY.

1955	1956
Personal Emoluments	127,534 205,486
Total230,177	333,020
Forest Revenue	133,904
Deficit Balance 100,221	199,116
Development Expenditure:	
(a) Personal Emoluments 5,173 (b) Other charges 14.075	57.068
Total 19,248	57,068
Development Revenue	57 <b>,</b> 068
Department from other votes 7,066 Other Revenue collected by	9,635
Forest Department	1,453 399,723 135,357
Total gross turn over 388,664	535,080

<sup>133.</sup> The above expenditure and revenue figures concern only the Main State Forests, with the exception of Village Fuel Areas, which are classified as Minor (Communal) Forests, but are at present under the direct control of the Forest Department. Revenue and expenditure relating to the other Minor State Forests are brought to account in District Forestry Funds under the control of the Commissioners.

- 134. As a result of abnormal pre-occupation with fire fighting and the constant interruptions in normal working caused by curfews and other Security Forcesoperations, the level of revenue was lower than had been estimated. The decision to suspend further sales of fresh standing trees until the burnt areas can be worked out also had the effect of reducing revenue considerably.
- 135. The deficit between revenue and expenditure was further greatly increased on account of large sums of money spent on forest fire fighting and fire protection measures during the summer months.

#### XV. - ACKNOWLEDGEMENT.

ment suffered by the staff during the course of the last summers fires the forest administration continued to function effectively. Although subjected to great strain, morale never broke. The writer acknowledges with pride this devotion to duty, and pays tribute to all ranks of the Department for their loyal support and hard work throughout a most difficult and disheartening period.

D.F. DAVIDSON Conservator of Forests.

APPENDIX 1.

CLASSIFICATION OF FOREST AREA IN SQUARE MILES 1956.

_	State F	orests	Comm	unal Forests	Private	Forests	Total	% of Total	~
Class of forest	Main	Minor	Reserved	Unreserved	Protected+	Others	10641	Forest Area	
A. Exploitable:									
(i) Softwoods	450.55	-	_	-	2.43	31.97	484.95	72.45	
(ii) Mixedwoods	73.22	76.56	-			- 6.30 156.0		23.30	
(iii) Hardwoods	8.84	-	8.03	-	0.40	11.20	28.47	4.25	_
Total	532.61	76.56	8.03		2.83	49 <b>.47</b>	669.50	100. 00	- 장
B. Potentially Exploitable		-	-	-	-	-	_	-	I
C. Other land classed as forest	-	-	-	-	_	-	<u></u>	-	-
Grand Total	532.61	76.56 84	8 <b>.03</b>	<del>-</del>	2.83 52.30	49.47	669.50	_	_
Percentage of total forest area	79.56	11.43	1.20	conp	0.42	7.39	100.00	-	

<sup>+</sup> Under the protection and management of the Forest Department

APPENDIX 2.

STATEMENT IN SQUARE MILES OF PROGRESS IN FOREST RESERVATION AND DEMARCATION DURING THE YEAR ENDED 31st DECEMBER, 1956.

G. L	Reserves Const	ituted and Demarca	ted	O 74-4 D
Category of Forest Reserve	On 1st January,1956	Added during the year	Excluded during the year.	On 31st December, 1956.
Main State Forests	532.61	-	-	532.61
Minor State Forests	76.56	<u> </u>	-	76.56
Communal Forests	8.03	-	-	8.03
Total	617.20	-	-	617.20

APPENDIX 3.

### STATEMENT IN SQUARE MILES OF PROGRESS MADE IN WORKING PLANS DURING THE YEAR ENDED 31st DECEMBER, 1956.

		Area U	nder Working	Plans	Area not under	Total	Area for which Working Plans	
Territorial Unit	On 1st January 1956.	Added during the year	Excluded during the year	On 31st December 1956.	Working Plan on 31st Decembe 1956	Area	working Plans were revised during the year	
Main State Forests	481.00	-	-	481.00	51.61	532.61	-	
Minor State Forests	-	-	-	-	76.56	76.56	-	
Communal Forests	3 <b>.7</b> 0	-	-	3.70	4.33	8.03	-	
Total	484.70	_	-	484.70	132.50	617.20	_	

APPENDIX 4.

#### RECORD IN MILES OF FOREST COMMUNICATIONS FOR THE YEAR ENDED 31st DECEMBER, 1956.

		Forest Roads	
Category of Forest Land	Added	Abandoned	Total at the end of the year
Main State Forests Minor State Forests	4.16 -		484.38 14.00
Total	4.16	<b>-</b>	498 <b>.</b> 38

APPENDIX 5.

### SUMMARY OF FOREST OFFENCES FOR THE YEAR ENDED 31st DECEMBER, 1956. MAIN STATE FORESTS.

			Case	es taken to Court				<u> </u>	
Category of Offence	Imprisonment without option of fine		Fined		Cau- tioned and Disch.	Acquit- ted or with- drawn	Bound over	Total	
	Cases Cases Fine					Cases	Cases	Cases	Persons
Damage to forest by fire Unauthorized Possession Forest Produce Unauthorized Fellings Unauthorized Grazing Land Encroachments Oil Conversion Miscellaneous	f	77 22 304 13 —	4.000 90.300 29.600 440.300 8.650 — 45.200	51.060 14.700 213.785 1.300 —	2 8 1	5 3 1 1 —	3 — 1 26 — —	5 84 26 339 15 16	5 90 31 378 15 15 28
Total		434	618.050	290,965	11	10	30	485	547

#### SUMMARY OF FOREST OFFENCES FOR THE YEAR ENDED 31st DECEMBER, 1956.

#### MAIN STATE FORESTS.—continued.

	Cases	dealt with o	lepartme	entally				Offenders		Total all		fiscated	Cases pending from	Cases Out- standing
Category of Offence	Comp	pounded	Warn- ed	Can- celled			Unknown (Undetected)		Offences		sold or released		previous years	at the end of the year
	Cases	Amount	Cases	Cases	Cases	Per-	Cases	Esti- mated Loss	Cases	Per-	Cases	Amount	No.	No.
Damage to forest by fire Unauthorized Possession	2	1.500	2	-	4	4		-	9	9	-	_	4	2
of Forest Produce	302	173.650	9	1	312	338			396	428	18	6,025	74	38
Unauthorized Fellings	187	115.600	2	1	190	204	<b>—</b>	i	216	235	' _	i —	13	28
Unauthorized Grazing	452	550.875	10	· —	462	665	-		801	1,043	4	1.150	172	163
Land Encroachments [	4 [	2.750	_		4	4		l —	19	19			4	1
Oil Conversion	15	11.430	3	1	19	21	=	=	35	49	_	_	18	21
Total	962	855.805	26	3	991	1,236	_		1,476	1,783	12	7.175	285	253

APPENDIX 5-contd.

### SUMMARY OF FOREST OFFENCES FOR THE YEAR ENDED 31st DECEMBER, 1956. MINOR STATE FORESTS.

	1			(	Cases	taken to Court	-				44.4		
Category of Offence	son wit op	mpri- ment thout otion of fine		Fi	ned		Cau- tioned and Disch.	Acquit- ted or with- drawn	Bound over	Total			
	C	Cases	Cases	Fine £ r	nils	Compensation for damage	Cases	Cases	Cases	Cases	Persons		
Unauthorized Possession Forest Produce Unauthorized Fellings	of	_	12 1 24	8.3 0.4 38.5	00	3.900 0.250 17,200	_		_ _ _	12 1 24	13 1 36		
Land Encroachments	$\cdot$		60 1	91.9		14.450	=	2 1	2		——————————————————————————————————————		
Total	·		98	139.2	00	35.800	_	3	2	103	125		
Total Main State Forests Total Minor State Forests	:	=	434 98	618.0 139.2		290,965 35,800	11	10	30 2	485 103	547 125		
Grand Total .			532	757.2	50	326.765	11	13	32	588	672		

### SUMMARY OF FOREST OFFENCES FOR THE YEAR ENDED 31st DECEMBER, 1956. MINOR STATE FORESTS.—continued.

Category of Offence		s dealt with	departme	Can-	Total		Offenders Unknown (Undetected)		Total all Offences		Confiscated Property sold or released		Cases pending from previous years	Cases Out- standing at the end of the year
	Cases	Amount	Cases	Cases	Cases	Per-	Cases	Esti- mated Loss	Cases	Per-	Cases	Amount	No.	No.
Damage to forest by fire Unauthorized Possession of Forest Produce Unauthorized Fellings Unauthorized Grazing Land Encroachments Oil Conversion Miscellaneous		46.500 10.850 132.575 326.325 7.150		2	70 14 143 245 — 7 479	70 14 143 245 - 7 479			82 15 167 309 — 9	83 15 179 318 — 9			10 12 52 29 —	8 2 8 73 —
Total Main State Forests Total Minor State Forests	962 477	855.805 523.400	26	3 2	991 479	1,236 479		_	1,476 582	1,783 604	12	7.175	285 103	253 91
Grand Total	1,439	1,379.205	26	5	1,470	1,715		_	2,058	2,387	12	7.175	388	344

#### APPENDIX 6.

#### OUT-TURN IN SOLID CUBIC FEET (UNDER BARK) OF TIMBER AND FUEL

#### FOR THE YEAR ENDED 31st DECEMBER, 1956.

Territorial Un	it		Lumber	Round-timber	Hewn timber	Firewood	Charcoal (c.ft. of timber equivalent) (5)	Total volume equivalent in round timber (6)	Total value
Main State Forests— Softwoods Hardwoods	::	::	719,867 44,387	60,200 29,472	408 6,860	371,525 142,079	3,018 7,140	1,155,018 229,938	81,177 9,005
Total			764,254	89,672	7,268	513,604*	10,158	1,384,956	90,182
Minor State Forests— Softwoods Hardwoods	::	.:				1,990 1,700		1,990 1,700	25 128
Total			_	1 —	1	3,690	1 —	3,690	153
Total Softwood Total Hardwoo		::	719,867 44,387	60,200 29,472	408 6,860	373,515 143,779	3,018 7,140	1,157,008 231,638	81,202 9,133
Grand Tot	al	!	764,254	89,672	7,268	517,294	10,158	1,388,646	90,335

<sup>\*</sup> Includes 174,500 cub. ft. solid being the estimated quantity of dry firewood collected by 165 scheduled villages privileged to collect dry fuel free of charge from the Forests.

Note:—Data for the out-turn from private woodlands or from other scrub covered vacant Crown lands are not available.

#### APPENDIX 7.

#### OUT-TURN OF MINOR FOREST PRODUCE, 1956.

		(1)	(2	)	(3	3)	(4	<b>4</b> )	(	5)
Territorial Unit	Origa: Plai		hay, vetcl	ider, grass, h and aves	Miscella (stones ear	and	Miscella (fruit	and	Miscellaneous (cones)	
	Tons Value		Tons Value		Tons	Value £	Tons	Value £	Tons	Value £
Main State Forests		_	12	106	6,302	207	63	1,111	29	21
Minor State Forests	-	_	-	-			20	162		_
Total			12	106	6,302	207	83	1,273	29	21

		(6)	)	(7)		(	8)	(	9)		(10)	(11)
Territorial Unit		(olive and no	Miscellaneous (olive trees and nursery stock)		s	Saw	dust Pine		Pine-Bark		laneous material)	Total
		No.	Value £	No.	Value £	Tons	Value £	Tons	Value £	Tons	Value £	Value £
Main State Forests		109,208	1,168	1,600	2	154	161	_	_	2	3	2,779
Minor State Forests		38,593	295	_	_	-	-	-		_	_	457
Total		147,801	1,463	1,600		154	161				3	3,236

45

## WOOD AND WOOD PRODUCTS: IMPORTS AND EXPORTS FOR THE YEAR 1956.\* Volume in Thousands of Cubic Feet in the Equivalent of Round Timber in True Measure Under Bark, and Value in £ Sterling.

APPENDIX 8.

	Gross	Imports	Gross E	xports	Net imports(+)	or exports (—)
Category	Thousands of	C.I.F. value	Thousands of	F.O.B value	Thousands of	Value
(1)	cubic feet (2)	£ sterling (3)	cubic feet (4)	£ sterling (5)	cubic feet (6)	£ sterling (7)
PRIMARY PRODUCTS: Softwood (conifers)— Logs Sleepers (sawn and hewn) Other sawn and hewn Timber	2 701	1,140,181	_ 9 9	2,303		
Total Softwood Timber	2 791	1,140,181	9	2,303	+3,772	+1,137,878
Roundwood	=	101,412 — — —			+274  	+101,412
Total Softwood	274	101,412	-		+274	+101,412
Hardwood (broadleaved)—  Logs	-		=			
Total Hardwood Timber				_		

<sup>\*</sup> The figures refer to the twelve months November, 1955 to October, 1956, since full details for the calendar year were not available when the report was issued.

APPENDIX 8 .- contd.

WOOD AND WOOD PRODUCTS: IMPORTS AND EXPORTS FOR THE YEAR 1956.\*-contd.

VOLUME IN THOUSANDS OF CUBIC FEET IN THE EQUIVALENT OF ROUND TIMBER IN TRUE MEASURE UNDER BARK, AND VALUE IN & STERLING.

	Gross Imports		Gross Exports		Net imports(+) or exports(	
Category (1)	Thousands of cubic feet (2)	C.I.F. value £ sterling (3)	Thousands of cubic feet (4)	F.O.B. value £, sterling (5)	Thousands of cubic feet (6)	Value L sterling (7)
PRIMARY PRODUCTS.—contd.  Roundwood Pulpwood Firewood Other sorts of wood	  	=	=		_ _ _	
Total Hardwood		4			_	
Total Primary Products	4,055	1,241,593	9	2,303	4,046	· <del>-</del> 1,239,290
Derivative Products:— Veneers, plywood and other veneer products excluding matches Matches Pulp Paper and Pulp products Furniture and cabinet ware Other wooden ware and builder's woodwork Charcoal Total Derivative Products	180 -68 -7 494 24 188 -7 954	86,417 39,416 603,709 53,317 422,827	1 1 2	1,538 2,756 437	+180 +68  +493 +23 +188 	+86,417 +39,416 +602,171 +50,561 +422,390
				4,731	+952	+1,200,955
Grand Total	5,009	2,447,279	11	7,034	+4,998	+2,440,245

<sup>\*</sup> The figures refer to the twelve months November, 1955 to October, 1956, since full details for the calendar year were not available when the report was issued.

APPENDIX 9.

## STATEMENT OF THE INCIDENCE OF FOREST GRAZING IN MAIN STATE FORESTS (a) GRAZING PERMITS ISSUED.

	}	Free		On Payment		Total	
	1955	1956	1955	1956	1955	1956	_
1. Number of Permits	42	49	374	491	416	540	_
2. Number of Animals:-							
(a) Goats	2,595	2,453	889	663	3,484	3,116	
(ъ) Sheep	990	425	15,675	2 <b>3,</b> 075	16,665	23,500	
(c) Other Animals	210	244	234	204	11/1/1	448	
(d) Total Number of Animals	3,795	3,122	16,798	23,942	20,593	27,064	
3. Fees Collected			<b>£27</b> 8.628	£ 354,350			

#### (b) GRAZING STATISTICS.

		<u> 1955</u>	<u> 1956</u>
2. 3. 4.	Area of Main State Forests grazed oven lawfully, in square miles	449.79 173,052	82.82 449.79 157,863 3,116
6. 7.	percentage of total number of goats Total number of sheep in the island counted for taxation Number of sheep allowed to graze in the Main State Forests Number of sheep allowed to graze in the Main State Forests, expressed as percentage of total number of sheep	16,665	1.97% 385,214 23,500 6.10%

APPENDIX	10	_
		•

## STATEMENT OF FIRE PROTECTIVE WORKS AND FIRE INCIDENCE FOR THE YEAR 1956. (a) FIRE TRACES.

2.	Fire traces existing on 1st January, 1956	<u> </u>	3
	(b) TELEPHONES.		
	Length No. of	No. of	e o h

	miles	instruments	switch boards	
1. Existing telephone lines and instruments on 1.1.56	389.96	238	14	
17.58 miles and 5 instruments and 1.switch board absolscent)	+23.54	+15	-1	
Total	413.50	253	13	1
(c) FIRE PROTECT  1. Fire watchers 2. Fire watchers huts on 31st December, 1956 3. Huts repaired during the year			No. 53 13	1 64

#### (d) FIRE INCIDENCE.

<u>Year</u>	No. of Fires	Area burned sq. miles	Assessed damage	Cost of extinction	<u>Cause</u>
1956	1 26	29.28	£617 <b>,</b> 982 <b>+</b>	£52,611	104 accidental 8 intentional 14 unknown

<sup>+</sup> This figure refers to the value of standing trees and bushes burned and does not include any estimate of the costs of reclamation or other forms of indirect damage resulting from the fires. Burned trees are salvaged whenever possible.

# STATEMENT OF FOREST REVENUE COLLECTED IN 1955 and 1956. HEAD 4. - FORESTS.

Thomas of Domestic	4055	1056
Item, of Revenue	<u>1955</u>	<u> 1956</u>
	${\mathfrak L}$ mils	${f \pounds}$ mils
1. Sale of :-		
Standing trees Timber Fuel Charcoal Bark and Stones Seeds Minor Forest Produce Confiscations	80,240.344 19,042.867 3,745.233 367.119 235.995 1,542.031 579.277 87.274	39,867.145 44,581.045 4,289.093 204.475 209.641 811.942 689.854 13.660
Total Sales	105,840.140	90,666.855
2. Permit Fees:-		
Fuel Permits Charcoal Permits Grazing Permits Gypsum and Pottery Permits Bricks and Tiles Permits Kiln Permits	23.205 285.182  14.000	386.220 12.050 352.822 4.050 49.100
Total Permits	1,054.834	786.242
3. Other Revenue:-		
Rent of Water etc Rent of Sawmills Other Revenue Telephone charges Protection Fees Impounding Fees	7,031.331 1,049.470 197.757 66.836	370.201 75.967 591.822 3,125.192+ 57.665 1.635
Total other Revenue	8,523.553	4,222.482
4. Maintenance and operation of Earth Moving Machinery	8,409.784	8,269.898
5. Forest Nurseries	1,387.215	1,671.683
6. Forest College:-		
Foreign Students Cypriot Students Other	2,190.630	4,036.449 1,309.500 151.435
Total Forest College	4,739.647	5,497.384
. 0. 777 001		

<sup>+ £1377.284</sup> ought to have been adjusted for 1955 from Deposits.

7.	Item of Revenue  Operation of Forest Utilization Centre, Morphou		
	DEVELOPMENT REVEN	WE.	
	HEAD 11 OTHER DEVE	LOPMENT REVI	enue.
s.	H. Sale of Baradji lands	176	
	REVENUE - OTHER THAN I	FOREST REVE	NUE.
	(Collected or related to	the Forest	Department)
3.	Fees of Court, etc.:-	£ Mils	£ Mils
	1. Fines and Forfeitures	1,608.634	855.805
6.	Rents and Royalties:-		
	1. Rent	399.769	529.878
8.	Miscellaneous Receipts:-		
	1. Sale of Stores,	32.117	67.661
	Total	2,040.520	1,453.344

#### APPENDIX 12.

STATEMENT OF EXPENDITURE FROM FOREST DEPARTMENT VOTES DURING 1955 AND 1956.

Head 29A.—FORESTS.	1955	1956	
Sub-head.	£ mils £ mils	£ mils £ mils	
I. Personal Emoluments	107,275.106	127,533.638	
2. Travelling	10,929.737	12,902.201	
3. Maintenance of Plant, Machinery and Vehicles :-			
(i) Maintenance and operation of Motor Transport	4,225.611	8,865.353	
(ii) Maintenance of Plant and Machinery (iii) Replacement of Batteries for Stavros and Halevga	1,159.760	935.381	
Électricity Plants		1,584.945	
(iv) Maintenance and Operation of Earth Moving Machinery	9,792.965	7,159.239	
	15,178.336	18,544.918	
4. Maintenance of Forest Communications:—	. 00	60	20
(i) Maintenance of Roads and Buildings	14,885.302	17,687.277	
(ii) Telephones	6,149.947	6,350.165	
5. Maintenance of Forest Buildings etc.:-	21,035.249	24,03/.442	
(i) Maintenance and Equipment of Buildings	3,280.432	3,933.214	
(ii) Water Supplies	506.867	547.706	
(iii) Rent	862.039	752.572	
(iv) Lighting, Heating and Electric Power	349.088	474-945	
	4,998.426	5,708.437	
6. Forest Protection:—		0.444	
(i) Fire Protection	6,653.866	13,528.666	
(ii) Fire Fighting	9,931.498	54,284.740	
(iii) Delimitation	389.769	384.120	
(iv) Rewards (v) Upkeep and Protection of Railway Line Plantation	234.680	<del>_</del>	
(v) Upkeep and Protection of Railway Line Plantation	17,209.813		
	1/,209.013	00,19/.540	

HEAD 29A.—FORESTS—contd.				1955		10	56	
Sub-head.				£ mils	£ mils	f, mils	£ mils	
7. Forest Utilization					19,210.686		37,219.467	
8. Silviculture and Forest Management:  (i) Silviculture  (ii) Collection and purchase of Seed  (iii) Forest Nurseries  (iv) Forest Survey and Working Plan  (v) Free Seedlings			·· ·· ··	4,773.858 1,071.462 4,327.684 658.172 65.877	10,897.053	6,058.293 596.928 4,217.798 — 144.435	11,017.454	53
<ol> <li>Forestry College:—         <ul> <li>(i) Maintenance and Operation of In</li> <li>(ii) Food, Wages and Miscellaneous</li> <li>(iii) Lighting, Heating and Electric P</li> </ul> </li> </ol>	s	Equipme ••	ent	206.806 3,823.576 1,164.146	5,194.528	214.580 4,626.477 1,279.069	6,120.126	w
ro. Office Expenses:  (i) Library  (ii) Refunds  (iii) Forestry Exhibitions  (iv) Incidentals   II. Forest Uniforms				81.044 12.250 145.075 227.656	466.025 3,196.053	99.660  163.407 301.473	564.540 3,526.672	
12. Forest Utilization Centre, Morphou							8,636.865	

HEAD 29A.—FORESTS.—contd.	1955	1956
Sub-head.	L mils L mils	£ mils £ mils
Special Expenditure :		
13. Overseas Training	306.909	
14. Purchase of Motor Vehicles	491.700	4,795.833
15. Purchase of Typewriters	159.000	_
16. Forest Buildings, Major Repairs to		
17. Resin Tapping	32.277	18.886
18. New Bridges	205.303	392.757
19. Purchase of Bark Peeling Machine	_	— 5 <u>4</u>
20. Water Supply for Salamis and Yialia Forest Stations		
21. Introduction of Black Bass		_
22. Forest Research	457.725	277-753
23. Rehabilitation, Paphos Forest Fires	<del>-</del>	3,524.629
— Morphou Saw Mill	3,859.467	
- Equipment and Plant	7,090.909	
— New Buildings	987.263	
— Purchase of Refrigerators	75.300	,
- Widening Kykko-Pedhoulas Road	827.376	
	230,084.241	333,019.144
		NA ANDREWS AND ADDRESS OF THE PARTY OF THE P

### STATEMEN'I OF EXPENDITURE FROM FOREST DEPARTMENT VOTES DURING 1955 AND 1956 UNDER DEVELOPMENT.

Head 29d-FC	ORES'	rs.							1955 £ mils	1956 £ mils	
Mountain Forests			 	 	 		 		14,120.429		
Lowland Forests			 	 	 		 		3,517.776	Barbara .	
Village Fuel Areas			 	 	 		 		1,372.966		
Forest Roads			 	 	 		 		2.531	2,768.225	
Removal of Forest Settle Removal of Livadhi			 	 	 		 		111.281	Second 2	អូ
Forest Nurseries			 	 	 		 		114.034		
Forest Buildings			 	 	 		 		8.000	9,237.593	
Afforestation			 	 	 		 		_	16,308.896	
Telecommunication			 .,	 	 	٠.	 			1,132.749	
Machinery and Plant			 	 	 		 	, .		26,339.09 <b>7</b>	
Training and Study To	ours		 	 	 		 • •			1,003.703	
Purchase of Equipment	t		 	 	 		 			277.101	
					Тота	AL.,	 	• •	£19,247.017	£57,067.364	

#### EXPENDITURE INCURRED BY FOREST DEPARTMENT FROM OTHER VOTES.

Head No				Sub-head.	1955 £ mils	1956 L. mils	
in Est	imates		_		£ mils	<i>t</i> <sub>0</sub>	
19	955	19	56				
4	31(iii)			Community Development	134.870		
20	24	24A	23	Protection of Game and Wild Birds	328.951	243.231	
20	39	24A	37	Hospitality	30.000	17.500	
26	II	•		Plant Protection	30.861		
32	6	34A	6	Conservancy of Office	50.000	35.386	
		36	12	Uniforms		239.500	
36	21	J		Removal of Forest Hut Salamis	2,643.046		
40	1			Maintenance of Main and Secondary Roads	299.105	}	ž
40	15	42A	16	Meteorological Service	- 48.000	192.000	
41	16́(в)	43E	1	Akamas Road	3,239.268	1,767-359	
41	48`	43E	39	Security Measures	137.266	2,771.952	
Dep	osits —			District Deposits, Famagusta (Reafforestation work at Topju Keuy			
-				Minor Forests)	66.733		
do	) <b>.</b>			District Deposits, Paphos (Paphos-Polis Road Side Trees)	58.871	_	
		4A	13	Maintenance of Roads	to report	38.500	
		4D	10	Community Development (Sinking of Pit Latrines at Ay. Napa).	_	838.253	
		4D	13	New Roads (Kantara-Yerani)		2,838.489	
		38D	5(ii)	Access Road, Kantara	bassed	97.644	
		43E	37	Fencing and Protective Measures, Government Buildings		112.684	
		43E	41	Works for Service Department		45.000	
		43E	90	Move of Forestry College		397.808	
				Total	£7,066.971	£9,635.306	

#### APPENDIX 13.

## CURRENT DEVELOPMENT SCHEMES, FIVE YEARS PLAN 1956-1960.

### (b) COLONY SCHEMES

D. HODEGE			mated al cost		al nditure 1.12.56		
erad 25	D FORESTS.	£	mils	£	mils	£	mils
1.	Afforestation	60,0	000 +	16,3	08.896	43,691	104
2.	Forest Roads	25,0	000 -	2,7	68.225	22,231	.775
3.	Telecommunication	10,0	000 -	1,1	32 <b>.7</b> 49	8,867	. 251
4.	Forest Buildings	30,0	000 -	9,2	37.593	20,762	407
5.	Machinery and Plant	55,0	000 -	26,3	39.097	28,660	903
6.	Training and Study Tours	3,0	000 -	1,0	03.703	1,996	.297
7.	Amenities and Publicit	y 1,0	000 -	-		1,000	~
8.	Purchase of Equipment	1,0	000 -	2	77.101	722	899
9.	Minor Forests	14,0	000 -	_		14,000	
10.	Forest Research	5,0	000 -	<u>-</u>		5,000	-
	Total Forests D	204,0	000 -	57 <b>,</b> 0	67.364	146,932	.636

APPENDIX 14.

COMPARATIVE FINANCIAL STATEMENT FOR THE 10 YEARS ENDED 31st DECEMBER, 1956.

Year	Forest Revenue	Forest Expenditure	Surplus	Deficit	Expenditure under C:D.F.	Expenditure under L.S. Account	Expenditure under Development	Grand total of Expenditu	?e
1947	42 <b>,</b> 748	86 <b>,</b> 943	-	44 <b>,</b> 195	48,205	18,095	5 <b>,</b> 880	159,123	
1948	40,153	101 <b>,</b> 762	-	61,609	32 <b>,</b> 435	32 <b>,</b> 800	8,358	175,355	
1949	32,023	92 <b>,</b> 58 <b>3</b>	-	60,560	24,135	-	64,873	181,591	
1950	<b>35,</b> 942	91 <b>,</b> 430	-	55 <b>,</b> 488	15,188	-	62,121	168,739	
1951	51,391	106,845	-	55 <b>,</b> 454	9,324	-	85,266	201,435	l Un
1952	102,113	134,374	-	32 <b>,</b> 261	1,063	~	86,745	222,182	58 1
1953	122,564	175 <b>,</b> 267	-	52 <b>,</b> 703	-	-	59,532	234,799	
1954	128,089	207,039	-	<b>7</b> 8 <b>,</b> 950	-	-	24,006	231,045	
1955	129,956	230 <b>,</b> 184	-	100,228	-	-	19,248	249,433	
1956	133,904	333 <b>,</b> 020	-	199,116	-	-	57,068	390,088	
Total	818,813	1,559,447	-	<b>7</b> 40 <b>,</b> 564	130,350	50,895	473,097	2,213,790	

APPENDIX 15.

STRENGTH OF FOREST STAFF ON 31st DECEMBER, 1956.

and the state of t	Senior St	aff	18 - Carlo de la carlo de l	Subor	dina	te,	Field	l and	Tec	hnic	al Sta	ff								
Territorial Unit	Colonial Forest Service	Others	Total	Assistant Forest Officers	3 t	Foresters/ F. Guards	Tractor Drivers/	Lorry- Drivers	Mechanical Superintendents	Mechanical Assistarts	Assistant Forest Surveyors	secut	Store-keepers	re	Cooks	Domestic Orderlies	Total	Mess- engers	Cle- rical Staff	Perma- nent Labour Force
Cyprus	6	11	17	8	23	213	1	10	1	4	1	3	1	1	1	1	268	2	14	127

#### SENIOR STAFF LIST AS AT 31st DECEMBER, 1956.

#### Conservator of Forests

D.F. DAVIDSON, B.Sc. (Aberdeen)

Headquarters, Nicosia.

#### Senior Assistant Conservator of Forests

A.J. BROWNING, M.A.(Oxon.)

Headquarters. Nicosia.

R.J. STREETS, M.A. (Oxon.)

Seconded for service in Iran.

#### Assistant Conservator of Forests

I. SIDKI, B.Sc. (Edin.)

Divisional Forest Officer, Platania.

J. D. LEEFE, B.Sc. (Aberdeen)

Principal Forestry College. Prodhromos.

H. MICHAELIDES, DIP. FOR.

Divisional Forest Officer. Halevga.

E. C. CLARKE, B.Sc. (Aberdeen)

Research Officer, Nicosia.

A. POLYCARPOU, B.Sc. (Aberdeen)

Divisional Forest Officer, Stavros.

G.M. SERAPHIM, B.Sc. (Aberdeen)

Post graduate Course -Oxford.

D. BRIERTON. B.Sc. (Edin.)

Working Plans Officer.

H. Hilmi, B.Sc. (Aberdeen)

Supernumerary. Stavros.

#### Forest Officers

S. KAMMITSIS. DIP. FOR.

In charge Plains Division.

Nicosia.

D. COUPPIS

In charge Engineering Section, Nicosia.

J.N. GEORGHIADES, DIP. FOR.

Publicity Officer, Nicosia.

#### Secretariat and Accounting Staff

J. CHR. MOUSKOS, DIP. FOR., D.P.A. (Oxon.) Headquarters, Nicosia.

M. Hj. GEORGHIOU, Principal Clerk

Headquarters, Nicosia.

J.Z. GAZI. Accounting Officer

Headquarters, Nicosia.

CYPRUS FORESTRY COLLEGE ANNUAL REPORT FOR 1956.

#### (1) COURSES.

The College re-opened for the Second Term of the fifth academic year on the 9th January with a full complement of 36 students, divided into two courses of 19 Seniors and 17 Juniors. Of these 36 students, 21 were Cypriot Forest Guards and 15 from Overseas, including 5 from Libya, 4 from Iraq, 2 from British Honduras, 2 from Iran, 1 from British Somaliland and 1 from Syria, drawn mainly from the Forest Services of these countries.

The fifth academic year (fourth full two-year course) was completed at the end of July. All 19 Seniors secured their Final Certificates, eight of them with Honours. 16 Juniors obtained their Preliminary Certificates. The pass mark for both Final and Preliminary Certificates was fixed at 50%, while the Honours mark for the Final Certificate was 80% of the total marks allotted in the Final Examinations. Prize day was held on the 27th July, when the Certificates and 24 Prizes were presented by Dr. A.H. Unwin, O.B.E. to a limited gathering of members of the Forest Service and friends. The prizes included the Governor's medal for the best all-round student of the Senior Course, P. Papadopoullos; the Conservator's medal for the best all-round student of the Junior Course, H.C. Flowers (British Honduras); 16 books and two money-prizes given by Dr. Unwin for the best performances in individual theory subjects and essays; two money prizes given by Mr. R.J. Streets, Research and Education Officer for the best performances in practical work in the field and two money prizes given by Mr. D.F. Davidson and Mr. J. Jacouris A.F.O. Troodos Division for good performances in individual theory subjects.

The preliminary and Final Examinations were again set and marked by an External Examining Board, consisting of the Conservator of Forests, the Director of Forest Research and Education, an Assistant Conservator of Forests and the Principal of the College. In addition to the written examination, a Practical Examination in the field was held to serve as a complement to the Practical Assessment, made by the College Instructors on the whole year's practical work. The Certificates were awarded on the basis of 200 marks for the written examination and 100 marks for the practical assessment and examination combined. An oral examination was again held, in order to consider borderline cases. Character and suitability for the job were assessed in Personal Reports.

After Prize Day, all the graduates left the College. 10 of the Cypriots went back to the Divisions as Beat Officers, while one was posted to the Research Section Nicosia and another to the Roads and Buildings Section of the Forest Engineering Division. The Overseas students (2 from Iraq, 2 from Libya, 1 from Syria, 1 from British Somaliland and 1 from British Honduras) returned to their countries, except the two students from British Somaliland and Syria, who remained for one month's extension course in Circular Saw and Tractor maintenance, and Nursery Management, respectively. 1 Libyan graduate toured the forest areas of Turkey, Syria and Jordan on his

way home. The Junior Course commenced their Vacation Tour, part of which was spent in Troodos Forest and part in the Northern Range, stationed at Halevga. A road alignment and construction project and a silvicultural project were carried out, together with the opening of fire-breaks and fire fighting in the Northern Range. Forest tours were made to Karpass and Kantara Forests, Laccovounara plantation and to Fire Lookout stations.

The sixth academic year began on the 2nd of October with a complement of 28 students, 20 from Cyprus and 8 from abroad. During the term five new Overseas students arrived, 3 from Iraq and 2 from Lebanon. A new student from Libya arrived in Cairo on October 30th, but was not allowed to leave for Cyprus, due to the political situation. He eventually returned to Libya and it is hoped that he will join the College in the next academic year. It was planned for two Cadets to join the Junior Course, but unfortunately no appointments were made, as none of the applicants for the Scholarships to Aberdeen University was suitably qualified. Finally the new intake consisted of 11 Cypriot Forest Guards and 6 Overseas students, 3 of them from Iraq, 2 from Lebanon and 1 from British Somaliland. After the usual terminal examinations, the College moved to Dhiorios Winter Station (see below) on the 20th December, the term ending the next day.

#### (2) DHIORIOS WINTER STATION.

In the past few years it has become customary for the College to move, for a period of up to six weeks, to Dhiorios Forest for practical work and tours during the winter months. This has happened because it was found that fieldwork was severely curtailed around the College during the winter. One of the difficulties attached to the move, however, was the provision of suitable accommodation in Dhiorios Village. The offer of an ex-RAF camp in Dhiorios Forest was therefore a good opportunity for the College to overcome this difficulty. It was therefore purchased in November, intact except for the generators, cooking range, and electric water pump including cable and piping, which were removed by the RAF.

Due to the political situation prevailing in the Troodos area during the latter part of 1956, it was considered wise for the College to move to this camp as soon as it could be prepared for habitation. This move took place in December as stated previously.

#### (3) CURRICULUM.

The same course of studies has been continued from previous years and has included lectures and practical work in forestry and allied subjects, combined with field inspection trips, in order to study different types of forests and their management.

The instruction given has been more-or-less divided equally between lectures and demonstrations, with a bias in favour of practical work for the 1st year course, and of project work for the 2nd year course.

The projects have included afforestation, management, mensuration, nursery, silvicultural and soil

conservation problems. Fieldwork has covered a wide range of forest operations, from planting the sand-dunes at Ayia Irene to reforestation of burnt areas in Troodos Forest. Instructional tours and demonstrations were mainly arranged during the vacation term and the winter visit to Dhiorios. These included visits to various forests in the three Divisions and to sawmills, timber stores and wood-utilising factories.

Fire-fighting has been a marked feature of student training during 1956. In the summer months, the College rendered valuable assistance at nine forest fires and set a good example of perseverance on a number of occasions. In the winter term, the College was asked by the army to check two fires in the Troodos Division, each within an operational area. This work, which involved a certain amount of danger and hardship, was cheerfully carried out by both Cypriot and Overseas students. Reconnaissanceof one fire was carried out by Helicopter, the Principal and Mr. Th. Michaelides being rlown over the area.

This year all theoretical instruction was given by the College teaching staff. It should be recorded, that in spite of many difficulties caused through forest fires, curfews, military operations etc, a high standard of instruction and study was maintained by staff and students alike, throughout the year.

Messrs. Constantinides and Vrahimis of the Mitsis School, Lemythou, continued the voluntary Evening Classes in English and Mathematics.

A tabular analysis of all instruction given under the College Syllabus during the year is attached (See Appendix 17A.)

Two College Qualifying Examinations, one in March and one in August, were held during the year. Of the 29 candidates (all Junior Officers of the Forest Department) 12 were successful and qualified for the College waiting list.

A short course for Beat Officers, in Greek, was held during the period 9th - 16th May. No lectures were given in the classrooms, as previously, teaching being carried out through field demonstrations, followed by practical work, students taking notes as required. It was felt that this method was more successful.

#### (4) VISITORS.

The number of visitors to the College this year was greatly reduced as a result of the political situation. Those who came included Major P.B.H. Wall M.C.M.P. Chairman of the Mediterranean Group of the Conservative M.P.'s Commonwealth Council and Mr. W.R. Day, lecturer in Forest Pathology at Oxford University.

His Excellency the Governor visited a short course for Agricultural Extension Workers held at the College during August.

Prize Day celebrations were kindly recorded by the Cyprus Broadcasting Service.

#### (5) ACTIVITIES.

Research work was continued by the College, students carrying out much of the work. Investigations were continued into the following:-

- (i) The artificial regeneration of Troodos pine (Pinus nigra var. caramanica)
- (ii) The collection of seed, storage and testing at the College laboratory.
- (iii)Climatology and the forest fire hazard using records made at the College Meteorological Station.
- (iv) Soil conservation, torrent control and re-afforestation works at Asprokremmos.

Due to the political situation, the traditional Foresters' Race was not held.

The Students' Association has continued its activities, including the organization of games and film shows and the running of the College Library.

#### (6) STAFF.

The Principal changed in October when Mr. G.M. Seraphim left for England and was replaced by Mr. J.D. Leefe. Otherwise the teaching staff remained the same, Mr. D. Jacovides being promoted to the rank of Assistant Forest Officer.

Forest Guard A. Ibrahim was replaced as Clerk in January, by Forest Foreman P. Kezos. Subsequently he was replaced by Forest Guard S. Georghiou in October.

There were no changes in the domestic staff.

#### (7) BUILDINGS. EQUIPMENT, ETC.

No additions were made in 1956. Repairs were carried out to the College and the Principal's house.

#### (8) ACKNOWLEDGEMENTS.

The work of the College has been greatly facilitated due to the interest and the encouragement of the Conservator and the Research and Education Officer. The loyalty and hard work of the College staff, both Instructional and Domestic, in such difficult times is much appreciated. Members of the Forest Department and of the Mitsis School, Lemythou have given valuable assistance in various ways. The co-operation of all the sponsoring authorities of overseas students has been most helpful and is greatly valued. The sustained generosity and interest of Dr. Unwin is a source of inspiration to the College. Likewise, it is pleasant

to acknowledge the generosity of Mr. J. Jacouris, one of the original instructors of the College in offering a prize.

(J.D. LEEFE)

Principal Forestry College.

#### CYPRUS FORESTRY COLLEGE.

#### ANALYSIS OF ALL INSTRUCTION.

(1) Spring and Summer Terms	Ja	nuary	<u>r – Ju</u>	ly.	1955-	-56 <b>-</b> 5	7 Cot	rses
<u>Subjects</u>	2nd	Year	Cour	se	1st	Year	Cour	rse
Botany and Forest Botany Ecology	19 15	perio	ds (1	½ hrs	) 27	peri	ods (	(1½ hrs)
Engineering (Roads & Buildings)	20		11 13		27		11 11	
Forest Management Geology and Soils	9 <b>7</b>		11		9		11	
Forest Policy Mensuration and Costings	7 10		11		19 44		11 11	
Meteorology and Climate	-		11 11		7		11 11	
Nursery Management Silviculture	13 36		11		11 49		11	
Surveying (including Field work)	30		11		22		1†	
Timber identification	10		11				11	
Utilization and Protection Private Study & Revision	47 31		17		44 35		11 11	
Essays and Tutorials	14		17		14		11	
Examinations & Return of papers	40	•	11		40		11	
Theory Totals	308	= 77	days		348	= 87	day	S.
Anti-erosion Project		4	" }			-	11 11	}
Ecology Project Nursery Project		4 5 5 6	11 }			_	11	}
Working Plan Project Preparation of ground for		6	" }		tical rk	l -	11	<pre>{Pract- {ical</pre>
Afforestation		2	" {	78 d		1	11	\work
Planting and Beating up Weeding and Cleaning		2 4 3 9 10	" }			12	11 11	<b>68</b>
Thinning, Felling, Coppicing		9	" }			5	11	days.
Nursery Operations Seed Collection and Extract		10	" }			15	11	<b>S</b>
Tools and Store Maintenance		4 2 3 8	" }			7554238	tt	}
Roadwork		3	" }			3	11 11	}
Fire Fighting Tours and Demonstrations		13	" }			11	11	}
			- deve		•			,
Total Theory and Practice		199	days			155	oays	
				•	******			
(2) <u>Vacation Tour, August</u> <u>Field work</u>						<u>56 Co</u> ear C		
Road alignment and Construc	tion	Proje		oodos		B	d 0 17 (	'e\
Silvicultural Project - Nor Opening of Fire-breaks-Nort Fire-Fighting - Northern Ra Tours and Demonstrations Tool Maintenance and Store	hern nge.	Range	ge •	••••	• • • •	. 4	day ( " " "	.6)
							•	

N.B. Only 10 days were spent in Troodos Forest.

Tour Total ..... 28 days

	<b>-</b> 67 <b>-</b>	
(3) Winter Term. October	- December 195	6-57-58 Courses
Subjects	2nd Year Course	1st Year Course
Botany and Forest Botany Engineering (Roads &		
Buildings) Geology and Soils Mensuration & Costings Meteorology and Climate Nursery Management Surveying (including Field work)	26 " 17 " 9 "	9 " 10 " 18 " 2 " 15 "
Silviculture Utilization & Protection Private Study & Revision Examinations	13 " 12 "	14 " 26 " 11 " 12 "
Theory Totals 1	28 = 32 days	152 = 38 days
Anti-erosion Work Nursery Operations Preparation of ground for Afforestation Roadwork Thinning Project Tools and Store Maintenar Tours and Demonstrations Sports	10 " } 38 day	TEST ( II )
Total Theory and Pract	tice 70 days	70 days
Summary of Total Working	time.	
<ul> <li>(1) Total of Theory and I during the Spring and terms</li> <li>(2) Vacation Tour</li> <li>(3) Total of Theory and I during the Winter Term</li> </ul>	d Summer 155 days 28 " Practice	- days - " 70 "
Total Working time in 1956	e 253 days 	70 days
(4) <u>Short Course for Beat Officers in Greek</u>	<u>t</u>	
Per	iod 9th - 16th of Ma	v.1956
Brashing and Cleaning Felling and Logging Map Reading Measurement of Timber Thinning of Troodos Pine Tour and Demonstrations	1 " } 1 " } 1 " } 3 " }	Practical work with demonstrations in the field
Short Course Tot	al 9 da <b>ys '</b>	

(J. D. Leefe)
Principal Forestry College.

