

Summary of the Forest Department Annual Report of
the Ministry of Agriculture and Natural Resources
for the year 1981.

Progress in forest development continued at a high rate during the year under review. All the targets set for the year, the main of which were the following were achieved:

Protection of the forests, especially against fires; reforestation of burnt and other bare areas; production of timber, other forest products, seeds and seedlings; tending of forest crops; management of forests; forest education; forest research; application of Forest Engineering with a view to (a) maintain, improve and expand the forest roads, forest telecommunications and forest buildings and (b) secure new machinery and equipment and maintain the existing ones; conservation of nature in forest areas, establishment, expansion and maintenance of picnic sites; provision of employment to forest villagers.

In 1981 Nicosia Division was divided into two separate Divisions (ie) the Nicosia Division and the Larnaca Division. Larnaca Division covers also the forests found in the free part of Famagusta District.

Expenditure.

With a view to achieve the above targets £1246,756.000 mils and £1,146,499.000 mils were approved in the Ordinary and Development Budgets respectively. The total amount spent out of both Budgets was £2,193,794.000 mils.

Revenue.

Apart from the indirect benefits of the forests, which cannot be calculated in terms of money, an amount of £603,434.000 mils was collected by the Forest Department as revenue in 1981. An additional amount of £169,311.000 mils representing forest products on credit is still to be collected.

Forest Protection.

As emphasised in the Annual Reports of recent years, the protection of existing forests against fires, especially during the prolonged dry and hot summers, is the principal concern of the Forest Service. The following preventive and fire fighting measures were taken against forest fires during the year under review:-

- (i) A Fire Fighting Task Force consisting of 58 members was in operation. Its members were employed on various forest operations at strategic points in the forest being at the same time on call at any time through radio telephone.
- (ii) During the summer months 10 Fire Look-Out Stations, found on various high peaks in the Forest were manned on a 24-hour basis, in order to detect and report forest fires.
- (iii) About 0.93 kms of forest roads were constructed and 9.00 kms were widened. In addition 7.33 kms of vehicle tracks and 45.72 kms of extraction roads were constructed, which serve also as fire traces.
- (iv) One water tank of 20,000 gallons at Asprous locality (Adelphi-forest) was constructed during the year under review. Two hydrants at locality "Kaloushi" and "Chrysopateritissa" (Papho-forest) and one at "Saittas" have been installed on pipes which pass-through the forest and on water tanks, to supply water in the event of a fire to the Departmental fire engines. Another hydrant installed at Triniklini Dam has also been repaired.
- (v) Daily mobile patrols in the forest, but especially along the delimitation line, warning and advising villagers and others not to start a fire, were carried out through-out the summer months.
- (vi) Lectures on the prevention and suppression of forest fires were given to the National Guard, the Police and the public. Also extensive publicity was made through the various mass media.
- (vii) The mechanisation which was initiated in 1978 with the acquisition of fire vehicles and fire pumps for the extinction of Forest fires, proved very successful efficient and encouraging. At present the Department has at its disposal for fire fighting 6 fire engine lorries and 43 fire pumps.
- (viii) Foam was used on a trial basis for the first time against forest fires. The results were very encouraging and similar trials are therefore planned next year.

In spite of the measures taken in 1981, 23 forest fires broke out and burnt a forest area of 15 hectares (113 dons) compared to an area of about 97 hectares (700 donums) burnt in 1980. It's worth mentioning that the year under review

was the best year i.e. with the smallest area burnt since records are kept i.e. 1885. The above fires were put out soon after they started & this is the reason the area burnt is so limited.

Most of the fires started from private lands where the owners unfortunately do not take all precautionary measures and the necessary permit to burn the stubble, weeds or other material found in their fields near the forest.

The Forest Department takes all precautionary measures against fires and tries its best to eliminate or reduce forest fires to an absolute minimum, but this is not possible without the co-operation and help of the general public. Hence our efforts to enlighten the public and especially the forest villagers and picnickers and prosecute the offenders continued with intensity.

Mobile patrols in the forest but especially along the delimitation line, warning and advising villagers and others not to start a fire, were carried out throughout the summer months.

The following tables give the best 10 years as well as, the worst 10 years as regards forest area burnt, during the last century.

TABLE I.

Forest Fires For the Best 10 Years as regards
Area Burnt, Since 1885.

Year	Number of fires in State Forests	Area burnt Hectares(Donums)	Remarks
1981	23	15 = (113)	1st best year
1950	35	26 = (193)	2nd -do-
1952	41	26 = (193)	3rd -do-
1965	40	38 = (282)	4th -do-
1976	20	41 = (306)	5th -do-
1939	38	49 = (368)	6th -do-
1980	23	97 = (725)	7th -do-
1972	61	99 = (745)	8th -do-
1951	57	101 = (755)	9th -do-
1912	90	102 = (760)	10th -do-

TABLE II.

Forest Fires For The Worst 10 Years
As regards Area Burnt Since, 1885.

Year	Number of fires in State Forests	Area burnt Hectares (Donums)	Remarks
1974	42	25,897= (193,600)	1st Worst year
1956	126	7,583= (56,686)	2nd -do-
1924	63	5,618= (42,000)	3rd -do-
1890	40	4,414= (33,000)	4th -do-
1894	32	3,344= (25,000)	5th -do-
1964	65	2,706= (20,231)	6th -do-
1958	128	2,289= (17,114)	7th -do-
1919	102	1,338= (10,000)	8th -do-
1892	46	1,338= (10,000)	9th -do-
1932	140	1,314= (9,825)	10th -do-

Usual protection measures were taken against illicit grazing and other offences which were rather limited.

An aeroplane was used for a second time for trial spraying against the Professionary caterpillar attacking pine, using *Baccillus thurigiensis*, along tourist roads and popular forest areas. The results were very encouraging, mortality being practically 100%. As with such biological control of the pest no environmental pollution is caused, similar sprayings by air are planned for the future.

Reforestation.

The reforestation of the burnt areas of Paphos Forest continued at a high speed. Extensive reforestation was not only carried out in the burnt areas of Paphos Forest, where about two thirds of the year's reforestation budget were spent, but also in other bare areas such as Kakos Anemos (Adelphi forest) Listovounos (Limassol forest), Fasouri, Troodos, Stavrovouni, Fikardou, Randi, Akamas, Macheras, Sotira and Ay. Varvara (near Ayia Napa), Kylophagou Forest, Athalassa, Pipis, Misiscopos, Rousamoutti, Karydhes, Palio-mandra, Lefkarides, Neroudhia, Megali Moutti, Tafi Oiedhon, Kofinarka, Larnaca Airport (B), Kakoskala and Ahnarka. The area reforested was 10,935 donums (1463 ha) whereas an area of 2,240 donums (299 ha) which was cultivated will be completed,

by sowing or planting in 1982. The total amount spent on reforestation was £349,615.- and it was less than that of the previous year by £50,499.-

As it can be seen from the above figures although the area reforested is more than the previous year, yet the amount spent is less. This is due to the fact that more than half of the area reforested was cultivated in previous years mainly in 1980.

Twenty two tractors were employed continuously for ground preparation three of which were special ones (Menzi Muck) suitable for climbing and working on steep slopes. A big number of labourers were also employed for planting, sowing and construction of small hand made gradoni. Small catastrips were also constructed with the abovementioned special tractors; these small catastrips as well as the hand made gradoni were done where the use of bulldozers was impossible or not indicated.

The Schlich Memorial Award for 1981, was bestowed to the Cyprus Forest Department, through the Commonwealth Forestry Association, in token of its excellent work being done to make good the damage caused by military disturbances in recent years.

Forest Expansion.

During 1981, the work of the newly established Expansion Division was continued. Thus an area of 100.19 hectares (749 donums) found at Aradippou, Goshi, Nisou, Pera-Chorion and Pera Orinis was declared as Main State Forest. At the same time the procedure of bringing under forestry more lands covering an approximate area of 1859 ha (13,900 donums) especially in the vicinity of Goshi, Pano and Kato Lefkara, Lymbia, Alambra, Mari, Dhali, Psevdas, Louroudjina, Oroklini, Pyla, Pera Chorion, Kato Koutrafas and Kornos is nearing completion. These areas are derelict and dry and will be afforested as soon as possible for purposes inter alia of recreation and amenity.

Timber Production and Disposal.

During the year under review timber extraction and supply to local wood-working industries continued in a very satisfactory way.

53,242 cu.m. R.O.B. of green timber were extracted from various State forests and sold to the Cyprus Forest Industries Co. Ltd., and to private individuals, for the production of constructional timber, chipboard, box-shooks etc.

An amount of 5,351 m³ R.O.B. of branchwood, delivered to C.F.I. for particle board is included in the above figure. The revenue of the Department from timber sales was about £453,526.- In addition timber valued at £169,311.- was sold to the Cyprus Forest Industries Co. Ltd., on credit.

During 1981 the operation of Platania Sawmill continued and 12 cu.m. of sawn timber were produced. All timber was used Departmentally for the construction and maintenance of Forest buildings.

The Department issued 57 sawmill permits during 1981.

During the same year the value of imported timber and timber products amounted to £28,814,876.- as against £31,256,919.- in 1980 i.e. a decrease of 7.8% was observed.

Silviculture.

During the year under review, among other silvicultural treatments, attention was given to the watering of plants especially in the plains and most of the funds were spent for this purpose. An area of about 1235 hectares (9,232 donums) was treated silviculturally at a cost of £39,537.-

Seed production and collection was good and adequate with available stocks in meeting the increased Departmental needs and requests for export. A quantity of about 4,336.60 kgs of seed was collected at a total cost of £14,581.- A quantity of 79.25 kgs was exported at a revenue of £1,199.400 mils.

The production of seedlings in the Departmental nurseries was adequate. 683,507 seedlings were raised compared to 540,987 in 1980, the seedlings produced in 1981 plus the stock of previous years' production reached 1,169,207. Out of this number 264,057 were used Departmentally, 218,942 were sold to the public or other Government Departments and 47,349 were given free of charge to schools, village authorities and other organisations and institutions for planting on public or communal lands.

Forest Management.

A new forest Inventory of Adelphi, Macheras, Troodos and Paphos Main State Forests for estimation of Growing Stock, Increment and Yield, was initiated. This was one of the significant projects undertaken during the year under review. In 1981 preliminary work was carried out as follows:

- (i) Working out various data with the Government computer and selection of suitable mathematical equations for volume estimation of standing trees.
- (ii) Classification of the productive Main State Forests and selection of the areas to be inventoried.
- (iii) Selection of Inventory method, preparation of a relevant study and detailed Inventory procedure.
- (iv) Selection and supply of indispensable instruments and equipment to be used for Inventory work.
- (v) Training of staff for proper collection of field data.
- (vi) Selection of sample plots to be enumerated.
- (vii) Organization of gangs for collection of field data.

After the above preliminary work, the enumeration of sample plots, i.e. the main Inventory job, started in September. By the end of 1981 the enumeration of Macheras and Troodos forests was completed and work started in Adelphi forest. 250 permanent sample plots out of 1150 which were selected for enumeration were completed. It is estimated that by the end of 1982 the new Inventory will be completed.

During 1981 1,300 hectares (9718 dons) of forest land were leased for Agricultural and Animal husbandry purposes. An amount of £8089.- has been collected during the year under review and £6,105.- will be collected in January 1982. 23 prospecting permits, 10 quarry licences and 2 mining licences were issued or renewed in State Forests.

Forest Education.

The Cyprus Forestry College completed in 1981 its 30th Academic year. Seven Cypriot students, five from Tanzania, 2 from Sudan and one from Botswana obtained their diploma. The 31st Academic year began on the 2nd October, 1981 with a complement of 31 students out of whom 25 were Cypriots and 6 from other countries.

A generous donation was made during the year under review by the British Council of 45 valuable books costing £636, for enrichment of the College library.

During 1981 a forestry course was organised for a fortnight for German experts serving in Syria and Jordan and their counterparts. The course consisted mainly of field demonstrations and 8 persons participated in all. All expenses were paid by the Government of the Federal Republic of Germany.

During the year under review one forester (University graduate) who was a scholar under British Technical Aid

returned to Cyprus having completed his post graduate studies in the United Kingdom.

Other officers participated at various international Conferences, Seminars etc.

Forest Research.

Forest Research and Publicity were continued on the same lines as in past years and intensified, against an expenditure of £3,982.-

Analytically Research dealt with problems of enriching the Cyprus flora through introduction and trial of exotics, forest genetics for production of good quality seed through the establishment of Seed Orchards, Tree Banks and Arboreta, and forest protection against insects and fungi. Forest Bee-keeping was continued during the year under review with very satisfactory results against an expenditure of £1323.- By the end of September 1981, Forest Bee-keeping was handed over to the Ministry of Agriculture and Natural Resources and so thyme-honey was not collected by the Forest Department. Only the orange-honey was collected with a revenue of £1370.-

8. Forest Engineering.

(i) Forest Roads.

The construction of new forest roads and improvement of existing ones, constitutes an important aspect of the work of the Department, as roads serve on the one hand forest protection, tending and exploitation and on the other hand tourism and communication between forest villages.

During the year under review the following work was carried out by the Forest Department:-

- (a) 0.93 km of forest road at a cost of £3,987.-
- (b) 7.33 km of Vehicle tracks at a cost of £15,310.-
- (c) 45.72 km of extraction roads at a cost of £105,442.-
- (d) 3.30 km of road widening at a cost of £3,999.-
- (e) Construction of a bridge at Mylos-Karterouni forest road for restoration of a nearby destroyed irrigation system at a cost of £1000.-

In addition the Department undertook the following work on behalf of the Cyprus Telecommunication Authority:-

- (a) Construction of five culverts along Macheria-Kionia forest road at a cost of £1749.-

- (b) Widening of 5.70 kms of the same road from 14 to 24ft. at a cost of £62,863.- on behalf of CYTA.

The British Bases constructed for the Forest Department free of charge 3 kms of Forest Road from Kakomallis to Dierona-Akrounda road valued at about £8,000.-

In addition 1323 kms of roads, 593 kms of vehicle tracks, and 369 kms of extraction roads, were maintained at a cost of £43,138.-

The total mileage of forest roads by the end of 1981, was 1327 kms of forest roads, 600 kms of vehicle tracks and 415 kms of extraction roads.

(ii) Forest Telecommunications.

The Forest Department maintains a well-organised telecommunication network for proper forest protection and management. An amount of £18,888.- was spent for its maintenance and an amount of £7,400.- was spent for its extension and improvement. The telecommunication system in the free part of Cyprus by the end of 1981 consisted of the following:-

- (a) 410 kms of telephone lines
- (b) 384 telephone instruments
- (c) 9 telephone switch-boards
- (d) 6 V.H.F. radio links (12 sets)
- (e) 4 V.H.F. control stations
- (f) 143 mobile radio telephones
- (g) 116 portable radiotelephones
- (h) 7 loud speakers (fixed on vehicles)
- (i) 7 loud hailers (portable)

(iii) Forest Buildings.

During the year under review a wooden Fire Look Out Station was constructed on Kolladjia peak (Paphos Forest) at a cost of £4,628.- Improvements to various forest stations were also carried out at a cost of £10,562.- Equipment for various Forest Stations was purchased at a cost of £1,877.- Conversion of a building at Fasouri to be used as a dwelling house for forest officials was carried out at a cost of £3,150.- In January 1981 the offices of the Divisional Forest Officer Nicosia were transferred to his newly built Headquarters at Athalassa Forest.

(iv) Machinery and Plant.

During 1981 the number of machinery was increased with the donation of two Menzi-Muck special tractors valued at £34,752.- by the Federal Republic of Germany. During 1981

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minor machinery and equipment of a value of £2867.- was purchased. For the running and Maintenance of all Machinery and Vehicles (including fuel and lubricants but excluding the wages of drivers) an amount of £254,476.- was spent.

Nature Conservation and Forest Recreation.

The Department of Forests during 1981 contributed greatly towards the effort undertaken by the Ministry of Agriculture and Natural Resources for Nature Conservation, through various activities, the main ones being the following:-

- (a) The Department intensified its efforts through the organisation of lectures, voluntary work, ceremonies and speeches through radio and T.V. for expansion of tree planting and protection of Nature. The effective protection of the Cyprus moufflon (ovis ammon Cyprius) continued and the animal is now on the increase.
- (b) The pair of fallow deer (Dama-dama), introduced by this Department last year, which are still kept in captivity at Platania Forest Station, have not unfortunately so far given birth to any young ones. They attract a lot of interest by the Cyprus public.
- (c) An amount of £9,916.- was spent for the improvement and/or extension of the picnic places at Kerargaka, Platania, Pashia-Livadhi, Mesapotamos, Trooditissa, Kambin tou Kaloyirou, Dashoudhi, Kionia, Mandra tou Kambiou, Kornos and Pareklisoudhi. In addition to this amount £7,925.- was spent for the maintenance of Mandra tou Kambiou, Stavros tis Psokas, Ayia, Trooditissa, Cedar Valley, Marathos, Platania and Xerokolymbos picnic places.

The Forest Department established^a Nature Trail along an existing path situated around Mount Olympus. The trail starts from Troodos Post Office, it has a length of 9.6 km and ends at Chromio. The cost which was £2,481 was defrayed by the Cyprus Tourist Organisation.

- (d) Ayia Napa Improvement Board gave an amount of £23,700.- to the Forest Department for establishment of a camping site in the Communal Forest of that village which is found near the seashore. The whole work was undertaken by the Forest Department, and part of the camping site will be put into operation in the coming summer.

Provision of employment to the inhabitants of forest villages.

With the socio-economic policy of the Government, which is expressed also through the Department of Forests, employment was provided to the inhabitants of forest villages. The total

employment offered to both casual and regular employees was 580,000 working hours against an expenditure of £575,243.- Besides the labourers employed directly by the Forest Department, an additional number of woodcutters was also self-employed through tenders or otherwise in felling and transport of raw-material from the forests to various forest industries.

Acknowledgment.

Warm thanks are expressed to the Ministry of Agriculture and Natural Resources for its significant and effective help in the execution of the work of the Department. Thanks are also due to all Ministries and Government Departments for their close co-operation and to the Police, The National Guard, the U.N. Force in Cyprus, the British Bases, The British Council, the Cyprus Telecommunication Authority, the BoyScouts, the Girl Guides, The Cyprus Forestry Association and to all other Organisations and individuals for their kind assistance to the Department of Forests. Warm thanks are also expressed to the Government of the Federal Republic of Germany for the donation of two special tractors (Menzi-Muck) to the Forest Department. Last but not least, warm thanks are expressed to all the Forest Staff, senior and junior, for their hard-work, zeal and devotion to duty and for their close co-operation without which none of the targets and objectives of the Department would have been achieved.

