

ANNUAL REPORT OF THE FORESTRY DEPARTMENT

FOR THE YEAR 1985

INTRODUCTION - SUMMARY

General

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

Expenditure.

With a view to achieve the above targets £1,820,901.00 and £1,307,902.00 were approved in the Ordinary and Development Budgets respectively. The total amount spent out of both Budgets was £2,995,949.00 (i.e. about 96%).

REVENUE.

Apart from the indirect benefits of the forests, which cannot be calculated in terms of money, an amount of £1,154,608.00 was collected by the Forestry Department as revenue in 1985. An additional amount of £146,306.00 representing forest products sold 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 Forestry Service. The following fire protection

measures were taken during the year under review :-

- a) Among other activities for the International Year of the Forest (1985) a "Save our Forests Week" was celebrated.
- b) 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.
- c) During the summer months ten Fire Look-Out Stations, found on high peaks in the Forest were manned on a 24-hour basis, in order to detect and report forest fires.
- d) About 1,020 kms of forest roads were constructed and 3,300 kms were widened. In addition 8,550 kms of vehicle tracks and 19,850kms of extraction roads were constructed, which serve also as fire traces.
- e) Two water tanks of 20,000 gallons each, one at Stremmata (Kambos Division) and one at Argaki tou Mala (Adelphi Division), as well as one water tank of 1,500 gallons at Aspres (Limassol Division) were constructed during the year under review. In addition two water tanks of 20,000 gallons each were constructed, the one at locality "Spitoudhia" Stavrovouni area for the Game and Fauna Service and the other within the Troodos Improvement Board camping site at Troodos, financed by the Limassol District Office and the Cyprus Tourist Organisation. Both will be used by the Forestry Department in the event of a fire. Three hydrants one at Stremmata (Kambos Division), one at Argaki tou Mala (Adelphi Division), and one at Troodos camping site of the Cyprus Tourist Organisation were 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.

- f) Daily mobile patrols in the forest, but especially along the delimitation line, were carried out throughout the summer months, warning and advising villagers and others against forest fires.
- g) 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.
- h) The mechanisation which was initiated in 1978 with the acquisition of fire fighting vehicles and fire pumps for the extinction of Forest fires, proved very successful. At present the Department has at its disposal seven fire engines and 36 fire pumps of various types.
- i) In spite of the measures taken in 1985, fifteen forest fires broke out and burnt a forest area of 46 ha (344 dons). The volume burnt was 346 m³ R.O.B. It is worth mentioning that the year under review was the 10th best year as regards area burnt, since 1886. The area burnt in 1984 was 160 Ha (1,196 donums). All fires were put under control almost immediately after they broke out; the largest of them, which burnt an area of 38 Ha (284 dons), started from private lands in the neutral zone and due to favourable conditions expanded very rapidly.

The usual protection measures were taken against illicit grazing and other offences, which were limited.

Spraying from the air which was initiated in 1980, was continued during the year under review against the pine Prosessionary caterpillar, using Baccillus thurigiensis.

REFORESTATION.

An area of 561 Ha (4,196 donums) was reforested, while an area of 108 Ha (804 donums) which was cultivated will be sown or planted in 1986. The total amount spent on reforestation was £307,207.- and it was less than that of the

previous year by £35,085.- Reforestation was not only carried out in Paphos, Troodos, Adelphi, Limassol and Macheras forests but also in other bare areas such as Randi, Aspromoutti, Larnaca Airport C, Sotira, Larnaca Salt Lake, Ayii Saranta, Ay. Napa, Xylophagou, Moutti tou Ziou, Karris II, V, VI, XI, XIII, XVII, Paedagogical Academy Forest, Kakoradjia A and Athalassa.

Fourteen bulldozers were employed almost continuously for ground preparation, three of which were Menzi-Muck suitable for climbing and working on steep slopes. A big number of labourers were also employed for planting and sowing. The Menzi Mucks are used to construct small catastrips where the use of bulldozers was impossible or not indicated for environmental purposes.

FOREST EXPANSION.

During 1985, the work of the Expansion Division was fruitfully continued. Thus an area of 441.8 Ha (3,302 donums) found at Alambra, Louroutjina Lympia, Petrophani, Afdellero, Kornos, Kofinou, Larnaca, Pyrga, Pserdas, Voroclini, Kelia and P. Lefkara was declared as Main State Forest. Namely the following were declared as Main State Forests: Alambra, Vounari tou Atiou I & II, Astrofegia I-V, Vouyies, Stavrovouni, Airport C, Chorteri, Voroclini, Scouros and Dhipotamos I & II.

At the same time the procedure of bringing under forestry more lands, covering an approximate area of 498 Ha (3,722 donums) in the village boundaries of Kokkinotrimithia, Ayios Epifanios Orinis, Prastio Kellakiou, Anafotia, Tersefanou, Alethrico, Klavdia, Kivisily, Ora, Psematismenos, Ayia Anna, Aglisidhes, P. Lakatamia, K. Dheftera, P. Dheftera, Anayia, Ergates, Aredhiou, Malounta, Pera Orinis, Klirou, Polático, Yeri, Ayii Vavatsinias, Aradippou, Afdellero, Koshi and Asgata. is nearing completion. These areas are derelict and dry and will be afforested as soon as possible, for purposes inter alia of recreation, amenity and environmental amelioration. A further area of 1,300 Ha (9,715 donums) is under study for declaration into Main State Forests.

TIMBER PRODUCTION AND DISPOSAL.

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

A volume of 54,561 m³ R.O.B. of green timber was 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 5,634 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 £747,387.- In addition timber valued at £146,306.- was sold to the Cyprus Forest Industries Co. Ltd., on credit.

During 1985 the operation of Platania Sawmill continued at intervals and 47 m³ of sawn timber were produced. Part of the sawn timber was used Departmentally for the construction and maintenance of Forest buildings and part was sold or given free of charge to various Departments.

The Forestry Department issued 59 sawmill permits during 1985.

During the same year the net value of imported timber and timber products amounted to £24,064,691.- as against £28,683,752.- in 1984 i.e. a decrease of 16.11% 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 for silviculture were spent for this purpose. An area of about 1,142 Ha (8,536 donums) was treated silviculturally at a cost of £54,620.-

Although the year under review was not a good seed year, the collection of the year with the stock of seed from last year, was adequate to cover the Departmental needs and requests for export. A quantity of about 1,963 kgs of seed was collected at a total cost of £8,387.- A quantity of 2.20 kgs was exported at a revenue of £24.00 cents.

The production of seedlings in the Departmental nurseries was adequate. A number of 387,551 seedlings were raised compared to 420,796 in 1984. The seedlings produced in 1985 plus the stock of 1984 reached 778,553 including 5,940 seedlings taken over from the Agricultural Department. Out of the total quantity 101,333 were used Departmentally, 280,992 were sold to the public or other Government Departments, and 34,222 were issued free of charge to schools, village authorities and other organizations and institutions for planting on public or communal lands. Also, 14,531 plants were issued free of charge to private individuals for forestation of privately owned.

FOREST MANAGEMENT.

- a) The inventory of Pinus nigra which was initiated in 1984, was successfully completed in 1985. The inventory method used is the "Two Stage Sampling". A total of 207 sample-plots of 0.2 Ha each were measured at Troodos Forest. The results derived are the following :
The total volume on 4,642 Ha (34,699 donums) enumerated was estimated to about 492,259 m³ R.O.B. The mean volume per hectare was estimated to about 106 m³ R.O.B. The sampling error is $\pm 10.59\%$. On the basis of the inventory results was initiated the preparation of equations for determining the volume of Pinus nigra.
- b) During 1985, a total of 25 permanent sample plots in young plantations of Pinus brutia found at Paphos and Adelphi Forests were re-measured for growth studies. With the help of an electronic calculator were estimated the total volume both R.U.B. and R.O.B. of each sample plot, the mean diameter, the mean height e.t.c.
- c) During 1985 a Management Plan was prepared for the development of Limassol Main State Forest to a "Wild Life Park" and the creation of an "Environmental Center". The Yermasoyia dam was also included in the Management Plan. The main aims of the plan are the protection of the environment, environmental education and public recreation.

The Management plan is divided into two main parts. The "Descriptive Part" where the present situation, management e.t.c. are described and the "Prescriptive Part" where the objective aims are set and suggestions are made for achieving them. The plan was submitted to the Ministry of Agriculture and Natural Resources for consideration and further action.

- d) During the year, 1,248 Ha (9,329 dons) of forest land were leased for Agricultural and Animal husbandry purposes. Five prospecting permits, twelve quarry licences and two mining licences were issued in State Forests.

FORESTRY EDUCATION.

The Cyprus Forestry College completed in 1985 its 34rd Academic year. Eight Cypriot students, two from Gambia, two from Fiji Islands, one from Uganda, one from Ethiopia, one from Belize and one from the Sudan, obtained their Diploma. Two six-month post-diploma courses were also organised and seven candidates from abroad obtained the Higher Diploma in Forestry. The 35th Academic year began on the 2nd October, 1985 with a complement of 31 students out of whom 16 were Cypriots and 15 from other countries.

A number of officers of the Department participated at various international Conferences, Seminars etc.

FORESTRY RESEARCH.

Forest Research and Publicity were continued on the same lines as in past years, against an expenditure of £4,588.-

In summary, Research dealt with the enriching of the Cyprus flora through introduction and trial of exotics, with forest genetics for production of good quality seed through the establishment of Seed Orchards, with Tree Banks and Arboreta and with forest protection against insects and fungi.

FOREST ENGINEERING.

a) 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 :

- 1.020 kms of forest road at a cost of £5,967.-
- 8.550 kms of Vehicle tracks at a cost of £12,539.-
- 19.850 kms of extraction roads at a cost of £79,959.-
- 3.300 kms of road widening at a cost of £4,999.-
- Construction of one pipe culvert at Xyliatos Dam at a cost of £796.-

In addition the Department undertook the construction of 1.200 kms road at Chromion on behalf of the Cyprus Telecommunication Authority at a cost of £3,114.-

In addition 1,332 kms of roads, 618 kms of vehicle tracks and 515 kms of extraction roads, were maintained at a cost of £53,334.-

The total mileage of forest roads by the end of 1985 was 1,332.630 kms of forest roads, 626.870 kms of vehicle tracks and 534.545 kms of extraction roads.

b) Forest Telecommunications.

The Forestry Department maintains a well-organised telecommunication network for proper forest protection and management. An amount of £33,251.- was spent for its maintenance and an amount of £2,481.- was spent for its extension and improvement. This telecommunication system at the end of 1985 consisted of the following:-

- 406.710 kms of telephone lines
- 387 telephone instruments
- 9 telephone switch-boards
- 8 V.H.F. radio links (16 sets)
- 4 V.H.F. control stations
- 156 mobile radio telephones
- 134 portable radiotelephones
- 11 loudspeakers (fixed on vehicles)
- 7 loud hailer (portable)
- 3 radiotelephone repeaters

c) Forest Buildings

During 1985 a new storey was built at Vouni Fire Look-out Station. Also additional works were carried out on Kakomallis Fire Look-out Station and on two houses, one at Kakomallis and one at Yefiri tis Panayias, against a total expenditure of £6,092.-

The Cyprus Tourist Organisation financed major improvements to the Troodos Improvement Board camping site at a cost of £9,740.-

Major improvements were carried out at Yialia, and Starvos Psokas Rest House as well as usual repairs to other forest buildings at a cost of £14,852.- Equipment for various forest stations was purchased at a cost of £3,142.-

d) Machinery and Plant.

During 1985 minor machinery and equipment of a value of £2,994.- was purchased. For the running and maintenance of all Machinery and Vehicle (including fuel and lubricants but excluding the wages of drivers) an amount of £234,223.- was spent.

NATURE CONSERVATION AND FOREST RECREATION.

The Department of Forests during 1985 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.
- b) The effective protection of the Cyprus moufflon (Ovis ammon orientalis Cyprius) continued and the animal is now on the increase.
- c) One of the fallow deer (Dama-dama) introduced by the Department in 1981 and kept at Platania Forest Station died at the end of 1985. The three fallow deer

(two female and one male) which were donated to the Forestry Department by the Swiss Government in 1983 and are kept at Stavros Forest Station, next to the moufflon enclosure have given birth to one young female . So now, together with the young male borned in 1984, there is a female young.

- d) An amount of £21,289.- was spent for improvement and/ or extension of the picnic places. In addition £21,288.- were spent for the maintenance and cleaning of the picnic places within the forests.
- e) The Forestry Department established a Nature Trail at Akamas Forest of a length of 5.2 kms.
The cost £6,094.- was defrayed by the Cyprus Tourist Organisation. Another Nature Trail was established at Kavo Greco of a length of 1.3 kms at a total cost of £1,241.- again financed by the same organisation.
The four Nature Trails at Troodos and the two new trails attract many walkers from both Cyprus and abroad.
- f) The council of Ministers in June 1985 declared an area of 357 Ha (2,670 dons) in Athalassa Main State Forest into a National Forest Park.

PROVISION OF EMPLOYMENT TO FOREST VILLAGES.

Under 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 434,720 working hours, against an expenditure of £808,896.- Besides the labourers employed directly by the Forestry 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.

ACKNOWLEDGEMENT.

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 Cyprus Telecommunications Authority, the Boy-Scouts, the Girl Guides, the Cyprus Forestry Association, the Interministerial Youth Committee and to all other Organisations and individuals for their kind assistance to the Department of Forests. Last but not least, warm thanks are expressed to all the Forestry Staff, 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 could have been achieved.

