

ANNUAL REPORT OF THE FORESTRY DEPARTMENT FOR THE YEAR 2001

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 forests, especially against fires.
- Reforestation of burnt and other bare areas.
- Conservation and protection of nature, especially in forest areas.
- Production of timber and other forest products, seeds and seedlings.
- Tending of forest stands.
- Rational management of the forests.
- Forest education.
- Forest research.
- Improved and more effective management and protection of the forests through the following engineering activities:
 - Maintenance, improvement and expansion of forest roads, telecommunications and buildings.
 - Purchase of new machinery and equipment and maintenance of the existing ones.
- Expansion of computerised methods in data recording and processing.
- Public recreation through the creation of National Forest Parks and the establishment, expansion and maintenance of picnic and camping sites.
- Establishment and maintenance of Nature Trails.
- Protection of flora and fauna.
- Conservation of Nature Monuments.
- Provision of employment to the inhabitants of forest villages.
- Harmonisation with Acquis Communautaire.

2. EXPENDITURE

With a view to achieve the above targets £13.119.695 were approved in the Budget for the year 2001. In the budget there was a provision for £175.000 concerning the implementation of a project entitled "Protection of forests against fires" that it would have been funded by United Nations Office for Project Services (UNOPS). However, the agreement has not been signed and the project has not been implemented. The total amount spent out of the Budget was £10.227.239 (i.e. about 77,95%).

3. REVENUE

The amount collected by the Department of Forests as revenue in 2001 was £ 1.041.927. The uncollected amount representing leases of forest land was £29.233. However, it should be noted that the value of indirect benefits by far exceeds the revenue value.

4. FOREST PROTECTION

I. Protection against fires

The protection of existing forests against fires, especially during the prolonged dry and hot summers, is the principal concern of the Department of Forests. For the prevention and control of forest fires the following measures were taken:

- a) Recruitment of the Fire Fighting Task Force consisting of 140 firefighters. Its members were employed on various forest operations at strategic points in the forest, being at the same time on call through radio telephone.
- b) During the summer months fourteen Fire Look-Out Stations, found on high peaks in the forests, were manned in order to detect and report forest fires.
- c) About 3,08 km of forest roads were constructed and 22,36 km were widened or improved. In addition 15,02 km of vehicle tracks and 15,47 km of extraction roads were constructed, which serve also as fire traces.
- d) About 163 km of fire traces were constructed and 1 022 km were maintained.
- e) Two water tanks, one at Troodos Division and one at Pafos Division were constructed and four new hydrants were installed on pipes passing through the forest and on water tanks, to supply water in the event of a fire, to the Departmental fire engines.
- f) Mobile patrols in the forest, especially along the delimitation line, were carried out throughout the summer months, for prevention, detection and rapid intervention.
- g) The "Save our Forests Week" which was initiated in 1985 was celebrated again in May 2001. In addition a "Save the Forests Day" was celebrated in all schools of Cyprus, in co-operation with the Ministry of Education and Culture.
- h) 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.
- i) The mechanisation for the extinction of forest fires, was successfully continued. At present, the Department has at its disposal 35 fire engines, 20 fire patrolling vehicles and 108 fire pumps of various types.

j) In spite of the measures taken in 2001, 23 forest fires broke out and burnt a forest area of 380 ha. Most of the fires were put under control almost immediately after they broke out; the largest of them occurred near Lythrodontas village (Machairas Forest) and burnt an area of 277 ha.

The Forestry Department has also participated in the fighting of 82 fires occurred in private and government lands adjacent to the state forest, which burnt an area of about 3 609 hectares.

The causes of these fires were as follows :

Agricultural operations 18%, Campers/visitors/travelers 13%, Houses 8%, Malicious 7%, Refuse burning 6%, Natural causes (lighting) 4%, Military operations 3%, Forest operations 1% and other causes such as use of electric equipment, electricity line, throwing of unextinguished cigarette-ends and matches, children etc. 16%. The percentage of unknown causes was significant closed to 24%.

Furthermore the Forestry Department completed the Fire Protection Plan for rural areas. The preparation of this Plan started in 2000. The Plan includes Prevention, Detection and Presuppression measures and its implementation is estimated to cost £2.500.000.

II. Protection against insects

Spraying from the air was continued during the year under review against the pine Processionary caterpillar, using Bacillus thurigiensis and Dimilin.

5. REFORESTATION

An area of 671 ha was reforested, while an additional area of 75 ha was cultivated to be reforested in 2002. The burned area reforested just by sowing and without any ground preparation was 158 ha. This is in line with the newly adopted practice aiming at the support of natural regeneration. According to this practice we wait for 5 to 7 years giving a chance to natural regeneration before proceeding with artificial reforestation using mechanical means.

Reforestation was not only carried out in Pafos, Troodos, Adelfoi, Limassol and Machairas forests but also in other bare areas such as Agia Napa, Sotira, Makroullos, Zonias, Megali Moutti, Moutti tou Ziou, Kato Lakkos, Rizoelia, Agios Nikandros III, Xylotymvou, Asbestos Mine, Larkona and Larknona I, Profali I and II, Strofiggas, Tala, Akapnou, Kissonerga, Tremithousa, Koronia III, Kato Moni, Asgata, Polemidia, Alexigros and Xylofagou.

Nine bulldozers were employed almost continuously for ground preparation, one of which was Menzi-Muck suitable for climbing and working on steep slopes and a big number of labourers were also employed for planting and sowing.

6. TIMBER PRODUCTION AND DISPOSAL

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

A volume of 10 999 m³ R.O.B. of timber was extracted from the state forests and sold to private individuals, for the production of constructional timber, box-shooks etc. It is worth mentioning that as from 2001, the Forestry Department stopped the sale of any timber to the Cyprus Forest Industries Co. Ltd., after a relevant decision of the Council of Ministers to close down the particleboard manufacturing unit. The revenue of the Department from timber sales was about £158.819.

In addition to the above, timber equivalent to 7 124 m³ R.O.B. was extracted as firewood from the state forests and an amount of £62.099 was collected.

The Forestry Department issued 30 sawmill permits during 2001.

7. FOREST MANAGEMENT

- a) The Forestry Department with the assistance of FAO experts completed in 1999, the preparation of a "National Forest Programme" for Cyprus Forests which covers the ten year period, 2000-2009.

During 2001, the Committee of Representatives from various Ministries and Governmental Organisations appointed by the Council of Ministers in 2000, for further study/evaluation of the National Forest Programme continued it's work. It is expected that by the beginning of 2002 the Committee will submit it's conclusions/suggestions for final approval by the Council of Ministers.

The main objectives of the Programme are :

- The forest development,
- The forest management on a sustainable basis,
- The rational and prudent multiple use of forests and
- The harmonization of Forest Policy with that of European Union.

The Programme consists of the following three parts :

I. The Strategy.

II. The Projects and Activities

III. The New National Forest Policy Statement which will replace the previous official policy statement.

- b) During the year under review, the Department of Forests started the works for the third consecutive continuous forest Inventory of Adelphoi, Machairas, Troodos, and Pafos Main State Forests to estimate *Pinus brutia*'s growing stock, increment and yield.

Machairas, Troodos and Adelphoi forests were considered as one Management Unit and Pafos forest as another one. In the former unit were laid out 810 and in the latter 1 040 permanent sample plots.

After the completion of the preliminary work, the enumeration of permanent sample plots was started and by the end of 2001 it was completed the work for 280 in Machairas, Troodos and Adelphoi forests. It is estimated that the new inventory will be completed by the end of 2002.

- c) In 2001, another twelve computers were received. At the end of the year the Department had at its disposal seventy five computers as well as a sufficient number of programs used effectively in a different number of applications.
- d) During the year, 1 164 ha of forest land were leased for Agricultural and Animal husbandry purposes. By the end of the year twenty four quarry licenses and two mining licenses were in force in state forests.

8. SILVICULTURE

During the year under review, emphasis was given to the watering and other silvicultural treatments of plants planted on an area of 108 ha, especially in the plains, spending a significant amount from the funds available for silviculture. Silvicultural operations (thinning, cleanings, etc.) were carried out in an additional area of about 720 ha.

The seed collected during the year, together with the stock from last year, was adequate to cover both the Departmental needs and requests for export. A total quantity of about 2 226 kg of seed was collected. A quantity of 14,50 kg was exported at a revenue of £250.

The production of seedlings in the Departmental nurseries was adequate. A number of 322 235 seedlings were raised compared to 384 737 in 2000. The seedlings produced in 2001 plus the stock of 2000 amounted to 1 097 648. Out of the total quantity, 118 344 were used Departmentally, 200 359 were sold to the public or other Government Departments, and 66 781 were issued free of charge to schools, village authorities and other organizations and institutions for planting on public or communal lands. Also, 23 194 plants were issued free of charge to private individuals for forestation of privately owned properties.

9. FORESTRY EDUCATION

The Cyprus Forestry College completed in 2001 its 50th Academic year. Four Cypriot and three foreign students, obtained their Diploma in Forestry. The six-month Post-Diploma course was not organised because there were no candidates from abroad.

The 51st Academic year began on the 1st October, 2001 with a complement of 15 students out of whom 11 were Cypriots and 4 from other countries.

A number of officers of the Department participated in various international conferences, Seminars etc. and another number of officers attended educational programmes both in Cyprus and abroad.

Also the Department organized at the Cyprus Forestry College Refresher Courses on various topics for the training of the Forestry Department Staff and a large number of officers participated. Furthermore eight Cypriot foresters under the European Union Programme "Leonardo da Vinci" participated in a three month study visit to U.K. .

10. FORESTRY RESEARCH

Forest Research and Publicity were continued on the same lines as in past years.

In summary, research dealt with the production of genetically improved seed of Brutia pine, the maintenance and improvement of the Arboretum and Tree Bank, and with protection of forests against insects and diseases.

11. NATURE CONSERVATION

The Department of Forests during 2001 contributed greatly towards the effort undertaken by the Ministry of Agriculture, Natural Resources and Environment 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) During the year under review the construction work for Athalassa Environmental Information Center was continued. As regards the Troodos Environmental Information Center the Department continued the work concerning the purchase of the necessary equipment and the preparation of exhibits. This Center is expected to start functioning next year.
- c) The effort for the study, protection and systematic recording of the Cyprus indigenous and endemic plant species which was initiated in 1987 was continued. The collection of specimens for the completion of the Botanical Collection in the Department was also continued.

- d) The efforts to spot, protect and maintain Tree Monuments were intensified.
- e) During 2001, the effort for the systematic recording of the Cyprus indigenous and endemic mushrooms as well as the collection of specimens for the creation of a mushroom herbarium in the Department initiated in 1998, was continued.
- f) In July 2001, an area of 349 ha at “Petra tou Romiou”, Ranti State Forest was declared by the Council of Ministers as a National Forest Park.
- g) The Forestry Department has actively participated in the “LIFE” project aiming at the harmonization with European Union Directive 92/43 and more specifically with the inventory/mapping of the areas that would be proposed to be included in the European Network of Protected Areas “Natura 2000”.
- h) The effective protection of the Cyprus moufflon (Ovis gmelini ophion) continued and the animal remains on the increase.

12. FOREST RECREATION

The works for the creation, improvement, extension, maintenance, and cleaning of picnic and camping places within the forests were continued.

During the year the works for the creation of two new picnic places, one at Pyknopeftzieri (Adelphoi Forest) and one at Agios Antonios (Sotira Forest) were started. Also, the work for the creation of a picnic place at Kalonomati (Pafos Forest) initiated in 2000 was continued.

Also, during the year under review, the works for the establishment, development and maintenance of all National Forest Parks namely Athalassa, Paedagogical Academy, Troodos, Polemidia, Rizoelia and Kavio Gkreko were continued.

The works related to Nature Trails and Paths include :

- a) Works financed from Departmental funds,
 - Construction of a path of a length of 1,20 km at Stavrovouni Forest, locality “Marmaras”.
 - Completion of the path at Machairas Forest, locality “Kakotzefalos” by creating another 2,00 km.
- b) Works financed by the Cyprus Tourism Organisation,
 - Construction of a new Nature Trail of a length of 1,30 km at Pafos Forest locality “Selladi tou Petrou” and one path of a length of 0,15 km at Troodos Environmental Information Center.
 - Completion of the Nature Trails at Madari (Selladi Karamanly) and Kionia by creating another 3,50 and 1,50 km respectively.

- Construction of a section of a length of 0,60 km at Stavropefkos (Stavrovouni forest) and maintenance of 24,10 km of the European Long Distance – Path No. 4 and
- Maintenance of the path for paraplegic persons at “Kampos tou Livadiou”.

Furthermore, the works for the maintenance and improvement of Nature Trails and Paths constructed in state forests were continued.

All the Nature Trails and paths constructed by the Department of Forests within and outside the State Forests attracted the interest of many walkers from Cyprus and overseas.

13. FOREST ENGINEERING

a) Forest Roads

The construction of new forest roads and the 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 new roads and tracks were constructed:

- 3,08 km of forest roads,
- 15,02 km of vehicle tracks and
- 15,47 km of extraction roads.

Furthermore 22,36 km of road widening or improvement was carried out.

The total length of the asphalted forest roads by the end of the year was 69,58 km.

In addition 1 425 km of roads, 848 km of vehicle tracks and 1 140 km of extraction roads were maintained.

The total mileage of the forest road network by the end of 2001 was 1 427,86 km of forest roads (including asphalted roads), 862,66 km of vehicle tracks and 1155,91 km of extraction roads.

b) Forest Telecommunications

The Forestry Department maintains a well-organised telecommunication network for proper forest protection and management. This telecommunication system at the end of 2001 included the following:

- 365,74 km of telephone lines
- 356 telephone instruments
- 15 cellular telephones
- 5 telephone switch-boards
- 20 V.H.F. radio links
- 1 V.H.F. control station
- 386 mobile radiotelephones
- 478 portable radiotelephones
- 5 radiotelephone repeaters.

c) Forest Buildings

During the year under review, a new store at Forestry College was built and three latrines, one at Athalassa Forest Nursery, one at “Pasia Livadi” and one at “Marathos” picnic places were constructed. Furthermore, one store and one garage at Forestry College were converted respectively to herbarium and recreational rooms. Also, major improvements were carried out at Kampos, Gefyri Panagias and Kapoura Forest Stations, at the main building of the Forestry College, at the canteen and the rest house of Stavros tis Psokas as well as on various fire look-out stations.

In addition, usual repairs and maintenance were carried out to various forest buildings and the necessary equipment for various forest stations was purchased.

d) Machinery and Plant

During 2001, the operation of the workshop at Athalassa for the maintenance of motor vehicles and machinery was continued.

The Forestry Department received during the year a new bulldozer, three fire engines and thirty nine vehicles.

Also, various minor machinery, equipment, tools and instruments were purchased including one mechanical air sprayer, twenty five power chainsaws and twenty one grass mowers.

14. PROVISION OF EMPLOYMENT TO FOREST VILLAGES

Under the socio-economic policy of the Government, which is implemented also through the activities of the Department of Forests, employment was provided to the inhabitants of forest villages. The total employment offered to both casual and regular employees was 97 760 work days against a total expenditure of £3.256.304.

Besides the labourers employed directly by the Forestry Department, an additional number of labourers were self-employed through tenders or otherwise, in felling and transport of raw-material from the forests to various forest industries, at a total of about 3 625 work days.

Furthermore a large number of technicians and labourers were self-employed through the policy for tenders for the execution of various forest works such as, construction of forest roads, maintenance of forest buildings, establishment and maintenance of roadside plantations, maintenance and cleaning of picnic and camping places etc.

15. HARMONISATION WITH ACQUIS COMMUNAUTAIRE

During the year under review the progress made towards harmonisation with acquis communautaire was significant particularly as regards preparatory work. The most important measures were :

a) Classification of the wood in the rough (Directive 68/89)

The office of the Attorney General continued the legal vetting of a draft Law to transpose Directive 68/89 on the classification of the wood in the rough.

b) Marketing of forest reproductive material (Directive 99/105)

A Regulation to transpose Directive 99/105 on the marketing of forest reproductive material has been drafted and sent to the Office of the Attorney General for legal vetting.

c) Protection of forests against atmospheric pollution (Regulation 3528/86)

The work to establish the fifteen Level I plots was completed and the data for 2001 were made available to European Commission.

The preparatory work to establish the Level II plots was continued, too.

d) Protection of forests against fires (Regulation 2158/92)

The work to prepare the forest-fire protection Plan in accordance with the requirements of Regulation 2158/92 was continued.

e) Protective measures against the introduction into the Community of organisms harmful to plants or plants products and against their spread within the Community (Directive 2000/29/EC)

Twenty two plots have been established to verify the absence of *Seiridium cardinale* and *Ips* spp. aiming to support Cyprus' position to be considered as protected zone for these harmful organisms.

16. FOREIGN AID

During the year under review an agreement was signed with UNOPS to fund the project entitled "Reforestation and Silviculture". The total amount of assistance was £97.650 and its implementation schedule 1 October 2001 – 31 October 2002. The amount spent during 2001 was £ 77.651 and the executed works have been included in the relevant chapters.

17. ACKNOWLEDGEMENT

Warm thanks are expressed to all Ministries and Government Departments for their close co-operation and to the Fire Service, the Police, the National Guard, the U.N. Force in Cyprus, the British Military Bases, the Cyprus Telecommunications Authority, the Boy-Scouts, 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 United Nations Office for Project Services (UNOPS) for its assistance in financing the project entitled «Reforestation and Silviculture».

Also warm thanks are extended to the Government of Greece and the Commonwealth Secretariat for the scholarships awarded to overseas students to study at the Cyprus Forestry College as well as to forest officials to study abroad. 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.