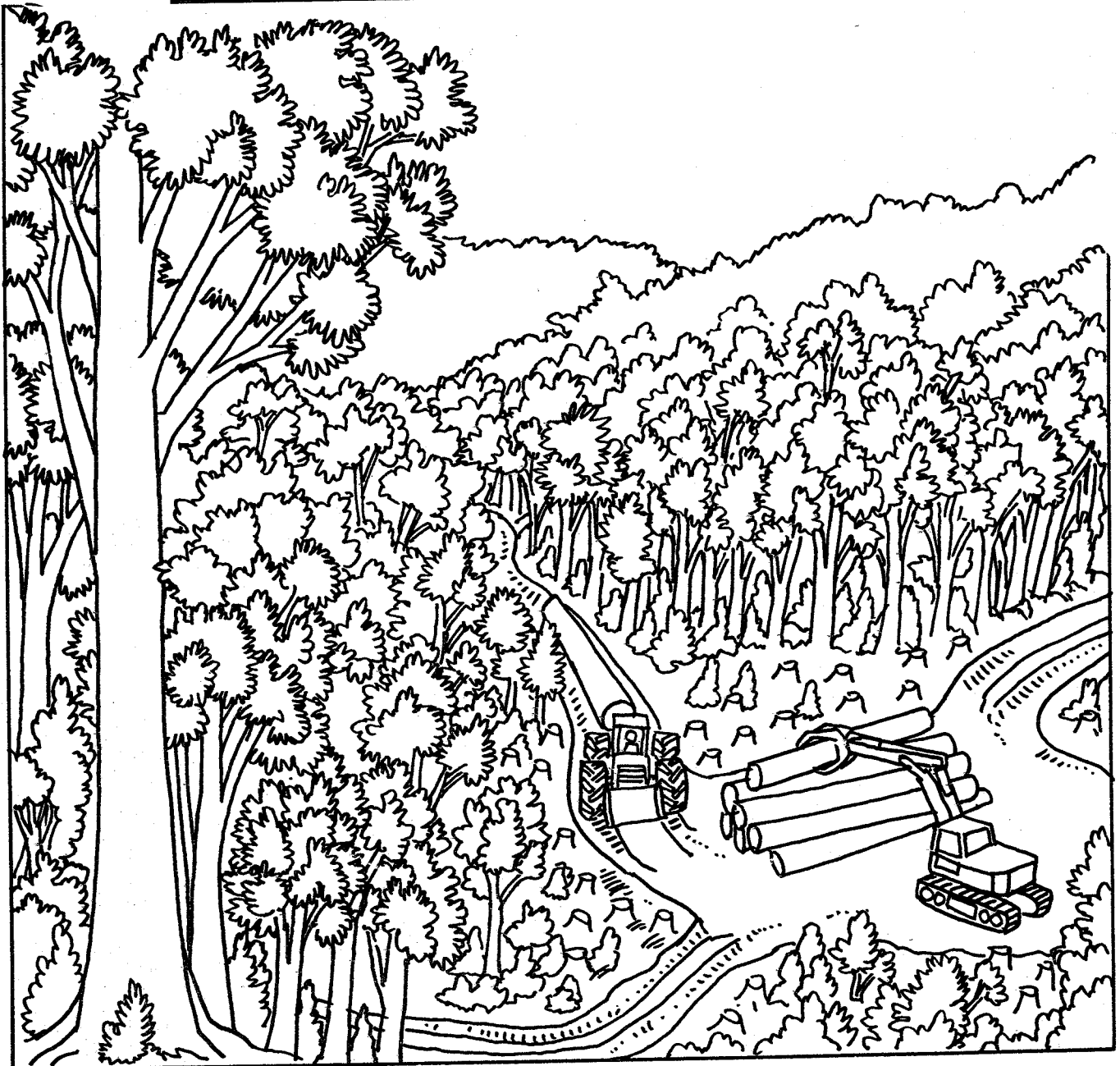




ANNUAL REPORT 1989-90

FOREST PRACTICES UNIT



CONTENTS

	page
<i>Introduction</i>	5
<i>Highlights of year</i>	7
<i>Summary of main aspects requiring attention</i>	8
1. Forest Practices Legislation	10
2. Private Timber Reserves	10
3. Timber Harvesting Plans	10
4. Three Year Plans	12
5. Forest Practices Code	13
5.1 Baseline survey	13
5.2 Main aspects requiring attention	13
5.3 Review	16
6. Forest Practices Tribunal	17
7. Staff	17
8. Training and Education	18
8.1 FPOs	18
8.2 Forest Technology Course	19
8.3 Contractors	19
8.4 Operators	19
9. Standards and enforcement	19
10. Forest Practices Specialists	22
11. Publications	26
12. Expenditure	27

INTRODUCTION

Forest activities, like farming or any other activities, have an impact on the environment. The purpose of the Forest Practices Legislation is to reduce this impact to environmentally and socially acceptable levels.

This Annual Report focuses on achievements and problems encountered during the year in implementing the legislation from the perspective of the Forest Practices Unit and provides relevant statistics.

While this report has tended to emphasise the problem areas, good progress has been made in many directions.

Judging from comments made in the media it appears that the general public is now becoming more aware of the Forest Practices Legislation and Code.

What must be clearly understood however, is that the implementation of the Forest Practices Code will not make forest harvesting or reforestation activities invisible.

Forestry is a vital part of the Tasmanian economy and forestry activities take place in many locations throughout the State. Given the mountainous or hilly nature of Tasmania it is obvious such activities generally cannot be and should not be hidden from view. However, proper landscape management can soften the impact.

It is also worth noting that while legal enforcement of the Act has been and will be pursued where justified, the main emphasis on implementing the Forest Practices Code will need to remain focused on training, co-operation and commitment.

Bert Witte
Chief Forest Practices Officer
Phone: (002) 30 7451

HIGHLIGHTS OF THE YEAR

Review of the Forest Practices Code

- After nearly two years operation an amended draft Code based on public submissions, research findings and experience gained, was issued in July 1989 for further public input. Of the 40 submissions received, approximately half suggested a weakening of several provisions of the Code, the other half a strengthening of many of the same provisions. Finalisation of the amended Code has been delayed pending the outcome of the Forest and Forest Industry Strategy.

Timber Harvesting Plans

- Some 702 Timber Harvesting Plans were approved by Forest Practices Officers in 1989-90 relating to both private property and State forest.

Resource Manuals

- Fauna and geomorphology manuals have been printed and widely distributed. The manuals explain and expand on the prescriptions of the Forest Practices Code and assist forest officers and planners in applying the Code in the field. A construction and rehabilitation manual was produced by the Division of Silviculture. Manuals for archaeology, botany and soils are in preparation.

Forest Practices Specialists (Fauna, Flora, Archaeology, Geomorphology)

- Some 45 per cent of specialists' time has been spent on forest practices related research or on the supervision of such research. Research is generally funded by the Tasmanian Forest Research Council and supervised by the Division of Silviculture. However, additionally, a number of forest practices related research projects have been funded by the National Estate Grants Programme, the National Soil Conservation Programme and the Australian National Parks and Wildlife Service.

Monitoring

- A major survey of application of forest practices was again completed by four senior technical field staff covering a sample of about 15 per cent of all operations on Crown lands and private property.

SUMMARY OF MAIN ASPECTS REQUIRING ATTENTION

Implementation of the Forest Practices Act

- **The Forest Practices Act (with possible minor amendments) potentially forms a sound, cost effective and generally socially acceptable basis for obtaining a reasonable balance between economic production forestry and environmental protection on an operational level in Tasmania.**
- For this potential to be fully realised in practice several requirements need to be met:
 - a) The Forest Practices Code must be based on sound environmental principles and periodically reviewed.
 - b) People affected by the Act and Code, particularly on private property, must have the opportunity to provide input in the review process. They must also be convinced of the necessity for a Code.
 - c) There must be a practical commitment by all sections and at all levels of the forest industry and forest owners to putting the Code into effect.
 - d) **There must be sufficient funding by government and industry** to allow for education, training, monitoring, maintenance of standards and enforcement where required on both Crown and private lands.
- The review of the Code started in this financial year will need to be completed as soon as possible. The principles on which the original Code was based have not been questioned in the review submissions received.
- Some submissions call for an easing of some restrictions in the Code while others call for a substantial tightening of the same practices. These sometimes conflicting requests will need to be balanced in the revised Code. Few submissions were backed by sound scientific evidence.
- While many people affected by the Act and Code commented and most people accept the need for a Code, some non-industrial private forest owners, particularly where clearing for agriculture is involved, view the Forest Practices Act and Forest Practices Code as a bureaucratic imposition.

However, the main areas of concern appear to lie in c) and d):

- The lukewarm or lack of commitment of some sections of the forest industry or individuals at various levels within the industry is reflected in the standard of some operations. Of particular concern are some private property contractors and operators not supplying pulpwood to those major pulpwood companies with FPOs on their staff, some 'independent' sawmilling companies or sawmillers, suppliers to 'satellite' chippers, industrial fuelwood operators and some land owners doubling as the contractors in land clearing operations. Too many of these operations are of poor standard.
- **The need for agreement between industry and government on how approval, inspection, training and enforcement for non-pulpwood company private property operations will be funded must be finalised. While this is outstanding difficulty in raising the standards of many of these private property operations will be experienced.**

- The lack of awareness of forest practices requirements amongst some of the operators working in the forest.

OTHER MATTERS TO BE ADDRESSED

- Potential erosion problems on steeper areas considered for windrowing and cultivation for plantation forestry.
- Visual considerations and streamside reserve protection in areas proposed for cable logging.
- Compatibility of safe regeneration burning boundaries and other forest practices requirements.
- Appropriate compensation mechanisms to apply when preserving significant environmental features on private property.

ANNUAL REPORT 1989-90: DETAILS

1. Forest Practices Legislation

- There were no amendments made to the Forest Practices Act 1985, nor were any regulations proclaimed thereunder during the financial year.

2. Private Timber Reserves

- Dealt with by the Private Forestry Division.

3. Timber Harvesting Plans

- 3.1** The Act requires that with minor exceptions, all commercial timber harvesting operations on private property and Crown land be subject to approved Timber Harvesting Plans (THPs). Each THP so approved must list the forest practice requirements of a particular operation in accordance with the Forest Practices Code and is signed by the main parties involved. This provides an opportunity for all these parties to know what is required before operations start. Harvesting includes roading, logging and reforestation where applicable.

3.2 Statistics

THPs approved 1989-90								
	Roads Only	Hardwood PP	CL, SF	Softwoods PP	CL, SF	Total	%	(88/89) %
By industry FPOs	39	218	11	42	2	312	44	(41)
By FC FPOs	29	46	197	9	88	369	53	(53)
By Consulting FPOs	—	21	—	—	—	21	3	(6)
TOTAL	68	285	208	51	90	702	100	(100)
Percent	10	40	30	7	13	100		
(Percent 88/89	10	45	30	5	10	100)		

Percentage of Operations by Harvesting Method, Future Land use and Tenure (Eucalypt forests only)

Tenure	Clearfelling				Non clear- felling**	Total
	for sown regeneration	for plantation Euc	Pine	for agriculture		
Crown lands	43%	2%	8%	—	47%	100
Private property	8%	27%	1%	22%	42%	100

(*)regrowth retention, shelterwood, selective logging etc)

3.3 Preparation and Implementation

Further progress was made during the year. Aspects requiring attention are:

Standards of preparation

- Presentation of THPs is generally good for plans prepared by forestry consultants, Forestry Commission or industry staff, but often poor for independent private operators.
- Wording is still ambiguous at times. THP provisions should be clear and simply stated.

Input in preparation

- The contractor is responsible for the provisions of the THP being carried out. It is therefore essential that the contractor has sufficient input in the preparation of relevant sections of the THP and is thoroughly familiar with its requirements. As some THPs are drawn up well in advance of operations before the contractor is known, there has been a tendency for a lack of contractor involvement in their preparation.
- The THP is put into effect by field operators with or without the presence of the contractor. It follows that the operators need to know basic Forest Practices Code requirements and what is set forth in the THP so far as it affects them. At times operators are not sufficiently aware of the THPs requirements, cannot follow the THP or do not have a copy of the THP on the job to refer to. This matter is being addressed with industry and contractors.
- The THP is the key to achieving sound forest practices. A good plan may take time to prepare. Senior staff should ensure that enough field staff and time is made available for proper THP preparation. Some THP preparation sometimes appears to have been rushed.

Approval and Inspection

- On State forest, Forestry Commission Forest Practices Officers approve THPs and inspect THP operations. On the whole the Plans and Forest Practices Code requirements are reasonably well adhered to although further improvements are still needed and problem areas still exist (see section on Forest Practices Code).
- The same applies to industrial freehold or private property operators supplying pulpwood to the major companies with Forest Practices Officers on their staff and where these companies accept responsibility for approving THPs and inspecting operations. Commitment varies between companies and individuals.
- **There has been no improvement in defining responsibilities for approving and particularly inspecting other independent private property operations (supplying wood to independent private sawmills, pallet mills, satellite chippers, industrial fuel wood users etc). While some of these operations are conducted reasonably well, standards of many are poor and**

have deteriorated during the year. Despite a lack of industry agreement on funding the Forestry Commission has gone ahead with plans to review private property operations and report on the extent of the problems and options to improve forest operations.

The volumes affected by these operations are probably less than 10 per cent of the total state cut but they appear to have a disproportionate adverse effect owing to any or all of the following factors:

- The lack of commitment to sound forest practices by a number of smaller operators and private landowners.
- The short term, often intermittent, nature of a number of these operations.
- The lack of appreciation for or training in forest practices requirements by the operators. There is difficulty in communicating with all members of this section of the industry as many are not affiliated to any industry organisation.
- The lack of suitable operational equipment and the often poor standards of road construction while continuing to log and cart in wet weather.
- That most of these sub-standard operations tend to occur close to the more populated areas of the state.
- The lack of proper regeneration treatment or poor selective logging practices where areas are to be retained for forest production.

Many of these operations reflect badly on the forest industry as a whole and because they generally occur near the more populated areas, they tend to determine the views the community at large have of how forest practices are being applied.

The appointment of one experienced Forest Practices Officer in each region for an initial period of one year to deal with 'independent' operations has been proposed but agreement has not been reached on funding of this from the Forest Industry. As an interim measure the Commission will appoint one officer for six months to draw up a detailed report on this matter.

4. Three Year Plans

- The Forest Practices Act 1985 provides for the production of three year plans for private property operations showing their location and the carting routes for the timber produced. Such plans are to be produced for any future operations by companies harvesting or causing to be harvested more than 100 000t in the preceding year. Hence, all operations from which pulpwood is supplied to these companies should appear on a three year plan. This should be of the order of 90 per cent of all logging operations on private property and State forest.
- By collating the private property cut and carting routes with those on State forest, a comprehensive picture of logging operations in the State can be obtained.

- Three year plans produced by the relevant companies have been collated by the Commission. Standard 1:100 000 scale computer maps showing the location of operations were produced on the G.I.S. and maps and computer printouts showing volumes and carting routes were sent to all relevant Councils.
- Comments from Councils were invited. Few comments were received. Maps were checked for excessive concentration of operations in any one area.

5. Forest Practices Code

5.1 *Baseline Survey*

- A pre-Code survey was carried out before the Code came into effect.
- Follow up surveys were carried out in 1988-89 and 1989-90 by Forestry Commission Senior Technical Foresters, covering Crown and private forests.
- Some 40 questions were scored for each coupe on a scale of 1 to 5 involving some 15 per cent of all operations, randomly selected, on a state wide basis.
- A significant improvement in forest practices one year after the introduction of the Code was evident following the 1988-89 survey. The 1989-90 survey is still being analysed. (See table 1.)
- The 1988-89 figures show there is still considerable room for improvement.
- A preliminary analysis of the 1989-90 figures shows that practices on 'independent' private property operations are generally poor. Company and Commission operations show further improvement but some problem areas remain.

5.2 *Main Aspects Requiring Attention*

- **The increasing area of private land being put under plantation** creates a potential for environmental problems generally not encountered in conventional forestry. This is because:
 - increased competition for private land tends to force plantations onto steeper slopes and more marginal soils.
 - shorter rotations, windrowing and complete cultivation coupled to steep slopes and marginal soils may create erosion problems unless suitable measures are taken to combat them.
 - The requirements for fertilizers, herbicides, insecticides and browsing animal control in this capital-intensive area of forestry needs to be carefully controlled.

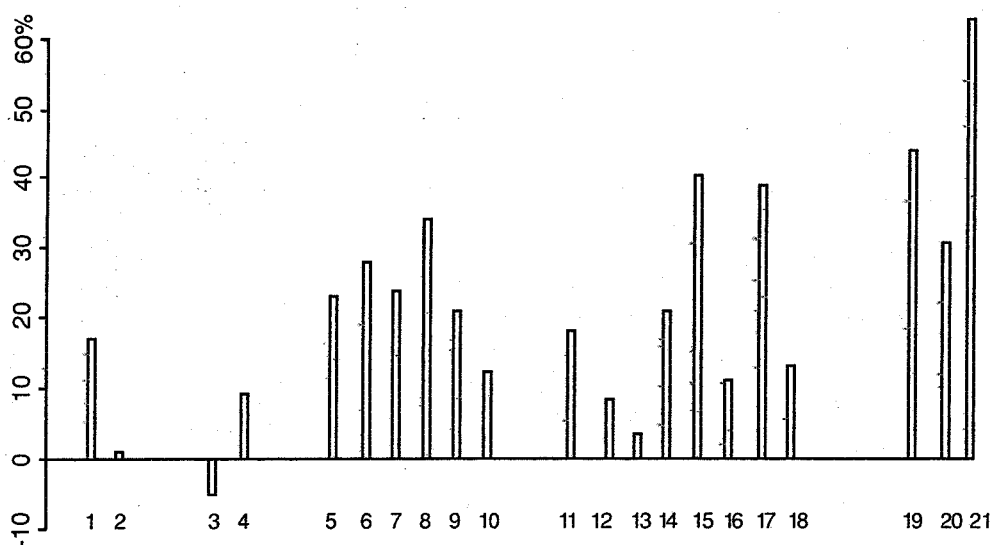
It is anticipated that these aspects will be more fully dealt with in the revised Code.

Comparison of Pre and Post Forest Practices Code Implementation Surveys

Percentage change of yes responses to key questions in the post Forest Practices Code survey compared to the pre Forest Practices Code survey for all tenures.

Table 1

Forest Practices Code Monitoring



Key:

Road Construction

1. Is drainage diverted 50m before stream crossing?
2. Is culvert size and spacing correct?

Harvesting

3. 15 years between aggregates?
4. One year between coupes?

Snig Tracks

5. Are stream crossings minimised?
6. Were temporary log crossings used?
7. Have snig tracks been drained?
8. Is drain spacing as per Code/TPH?
9. Is drain spacing adequate (no erosion)?
10. No evidence of machine rutting?

Landings

11. Are landings on elevated areas?
12. Are landings >40m from streamside reserves?
13. Do snig tracks approach landings from below?
14. Are landings corded (wet landings)?
15. Minimal rutting and erosion of landings?
16. Having landings been drained?
17. Has water flowing towards landing been diverted?
18. Has rubbish been removed?

Streamside Reserves

19. Is retained vegetation intact?
20. Has equipment been excluded from streamside reserves?
21. No evidence of sediment in streams?

- The increasing number of cable logging yarders which now probably accounting for at least 10 per cent of the total statewide volume cut.

Because of its potential low soil impact, cable logging can environmentally be preferable over logging with ground based equipment in many situations, given proper planning and control. However, it also has a number of limitations which need to be taken into account and may exclude logging in some situations:

- Trials in logging economically across streamside reserves while maintaining those reserves reasonably intact have been conducted and have generally not been successful to date.
- Although cable yarders can operate on flatter terrain, they were basically introduced to cope with the steeper slopes where conventional equipment is likely to cause unacceptable erosion and soil disturbance. The economics of cable logging clearly favour a clearfelling system (selective or strip logging has not really been tried in the State). As a result, the operations tend to be more apparent, particularly where prominent side cut roads in steep country are required. **However, it is not practicable for logging to be hidden completely in a state as mountainous as Tasmania where forestry plays a key role in the economy.** Hence, close attention to road location, landings, coupe size, shape and boundaries are important. In highly visible, foreground, or highly scenic areas (classified in the Visual Management System for inevident alteration only), clearfelling should be excluded.
- In both cable and conventional logging, the steeper the area, the higher the potential for soil erosion. Funding for experimental work on this problem is likely to be available in 1990-91. Non-burning options, smaller coupes, and streamside reserve need to be carefully considered for logging of steeper, erosion prone areas.
- Where partial stand cutting is required for successful regeneration, cable logging may need to be excluded or carried out only in such a way that regeneration requirements may be satisfied.

Some good and some poor examples of cable planning were noted during the year.

It is anticipated these aspects will also be dealt with in the revised Code.

- The lack of a suitable **mechanism to provide appropriate compensation to private property owners when significant protection is to be provided** for major, flora, fauna, archaeological or geomorphological features.
- Considerable progress has been made in attempting to cope with **wet weather logging** particularly in the Geeveston and Smithton districts. Better initial planning, extensive cording of snig tracks and landings, in-coupe roading, frequent wet weather shut-downs,

increased stockpiling, etc, have improved the situation. However, it remains a difficult area particularly in regard to 'independent' operations.

Most of the forest industry still has holiday shut downs in the driest part of the year. Stockpiling to any extent is the exception rather than the rule. Suitable wet weather areas are becoming scarcer and the loss of State forest to other land tenures has reduced the alternatives available.

- In some areas **commercial firewood** operators (who are not covered by the Forest Practices Act) cause adverse impact on the forest environment.
- The application of **visual management principles** to **private property** logging, particularly the softening of any adverse visual impact from major or tourist roads.
- The striking of a reasonable balance between **safe burning boundaries** and other forest practice requirements.
- Lack of a basic **code of agricultural** (or mining) **practices** to ensure protection of streamside reserves independently of timber harvesting operations.
- **Poor regeneration** in some of the more marginal non- industrial private property areas being logged.
- The shortage of funds for **maintenance of established road networks** (cleaning of culverts, table drains, etc). Failure to maintain these road networks properly may cause blockages and consequent problems.
- Improved attention is required to **progressively grip, drain or rehabilitate** snig tracks (when completing a coupe section or leaving an area for any length of time).

5.3 Review

- The Forest Practices Act makes provisions for the review of the Forest Practices Code. The Code was to have been reviewed one year after its inception. Submissions were in fact called in late 1988. Following receipt of some 46 submissions, and in the light of practical experience gained since the first Forest Practices Code was introduced, as well as research carried out, a draft amended Code was issued in July 1989.

The main proposed amendments provide for:

- **Improved protection for more erodible soils, of steeper areas to be converted to plantations and of wet weather logging areas.**
- **Improved maintenance of long term site productivity and stream water quality.**
- **More consultation with Municipal Councils particularly in relation to harvesting in water supply catchments.**

- More appropriate management of streamside reserves on flatter areas with soil of low erodibility.
- A more comprehensive approach to cable logging, plantation reforestation and fire management.
- Improved integration of forest archaeology, geomorphology and flora and fauna protection with production forestry.

Issue of the amended Code has been delayed pending the outcome of the Forest and Forest Industry Strategy.

6. Forest Practices Tribunal

- There were no appeals to the Tribunal in 1988-89. The Vice-Chairman, Mr. R. Bailey, was elected as a member of the Legislative Council and resigned from the Tribunal.

7. Staff

7.1 Forest Practices Officers

- Training of twenty four Forest Practices Officers was started during the year with appointments to be made early in 1990-91. Seven Forest Practices Officers retired or resigned. Category and source of Forest Practices Officers as at 30th June 1990 are shown below.

	As at 30.6.89	Left/ Retired during year	Changed FC to Industry	New Appoint.	As at 30.6.90	%
FPO (Planning)						
- Industry	24	-5	+1	-	20	16
- Independent Consultants	5	-	-	-	5	4
- FC	36	-	-1		35	27
	65	-5	0		60	47
FPO (Inspecting)						
- Industry	32	-1	+1		32	25
- Independent Consultants	-	-	-	-	-	-
- FC	39	-1	-1	-	37	28
	71	-2	0		69	53
TOTAL	136	-7	0	-	129	100

Left/Retired:

K. Cartwright, B. Tuor, G. Reid, D. Toyne (APPM); S. Worley (ANM); R. Kuiper (For Res); M. Pearson (FC); P. Stelling was temporarily transferred to the mainland. Some 6 FPOs (planning) are now employed in sections of the FC or Industry where they are not likely to be called upon to approve plans.

The high standard work done by Forest Practices Officers during the year, often under great pressure, has been greatly appreciated.

7.2 Forest Practices Unit Staff

as at 31/6/89.

Bert Witte	BSc (For), Dip.For.	Chief Forest Practices Officer
Paul Wilkinson	B.Nat.Res.	Environmental Officer
Sheryl Wolfe		Clerk/Typist, Registrar for the Forest Practices Tribunal
Dr. Kevin Kiernan	PhD Geomorphology	Geomorphologist
Fred Duncan	BSc	Botanist
Anne McConnell	B.Sc (Geol, Anthropol.) M.Sc.(Geology)	Archaeologist
Dr. R. Taylor	PhD Zoology	Zoologist
Rolan Eberhard	BA	Technical Officer, (geom.) (temp)

The services of R. Smith and B. Manning occasionally checking private property operations during the latter part of the year and of Ross Andrewartha have been greatly appreciated. Ross (temporary with the FPU) transferred to another section of the Commission.

8. Forest Practices Training, Education

8.1 Forest Practices Officers

- A pre-requisite qualification of Forest Practices Officers is for a good forestry and general environmental background. In addition, staff nominated for FPOs attend a training course consisting of a number of formal teaching sessions, field trips and practical exercises in various parts of the state. Part of the four teaching sessions of two to three days duration attended by twenty-six industry and Forestry Commission staff and one sawmiller's representative were held in 1989-90, with the balance to be completed and appointments to be made in 1990-91.
- Additional training sessions have been organised by the Forest Practices Specialists in archaeology, botany and wildlife management.
- Two refresher courses each of two days duration, were attended by some seventy-five FPOs appointed in 1987.

8.2 Forest Technology Course - Devonport Technical College

- As part of the Forest Technology Course for trainee technical foresters with the Commission and Industry, a Forest Practices module consisting of a number of formal teaching sessions, field trips and a Timber Harvesting Plan exercise was organised and run by the Unit.

8.3 Contractors

- Training of company contractors is a responsibility of the companies concerned. However, intensity of training has varied between companies.
- A number of meetings with contractors organised by the pulpwood companies were attended.
- The problem with 'independent' contractors remains until the responsibility for approving, inspection and training in this area has been settled.

8.4 Operators

Operators training appears to remain a weak link in improving forest practices.

- The T.F.I.T.C. is proposing to include forest practices training as part of its operator or faller certification courses but, if implemented, will take a considerable time to cover all operators.
- Generally, Forestry Commission operators are trained by Forestry Commission FPOs. Company operators are trained by company FPOs and contractors.
- Reaching 'independent' operators is again a major problem.
- Some F.C. districts have run open forest practices field days to which company staff, contractors and operators are invited.

9. Standards

9.1 Field Visits

- During the year a considerable number of requests were received for interpretation of the Code. Some 53 visits to various operations in the State were made by the Chief Forest Practices Officer and/or the Environmental Officer as per table below.

1989-90 Forest Practices Visits

State Forest (SF)	H'wd	Pine	Total
Smithton District	4		4
Burnie District	2	1	3
Devonport District	3	2	5
Launceston District	4		4
Deloraine District	3		3
Scottsdale District	-	2	2
Fingal District	3	1	4
Triabunna District	2		2
Geeveston District	2		2
Queenstown District	-		-
Norfolk	1		1
ANM State Forest (Norfolk)	4		2
TOTAL	28	6	34

Private Property (PP)	H'wd	Pine	Total
ANM PP	1		1
APM PP	-		-
TPFH PP	2		2
APPM (Tamar) PP	4		4
Forest Resources PP	4		4
APPM (Burnie) PP	1	1	2
Consulting FPOs	2		2
Independent Operators			
Devonport	1		1
Launceston	4		4
Norfolk	4		4
Deloraine	1		1
Burnie	2		2
Fingal	1	1	1
TOTAL PP	27	2	29
GRAND TOTAL	55	8	63

9.2 Baseline Survey

- A comprehensive survey of some 15 per cent of THPs approved for the year was done by Senior Technical Foresters J. Cunningham, G. Richardson, R. Williams and G. Siely, seconded from the regions. Their efforts are greatly appreciated. See Section 5.1.
- Prevalent problems with districts or company operations shown up in the survey were discussed by the survey team with districts and company staff in some cases. It is intended to extend this discussion to all districts and as many companies as practicable next year.

9.3 Investigation of Public Enquiries/Concerns

Some forty two enquiries/concerns about forest practices were received from adjoining landowners, the general public, industry or Forestry Commission staff. The enquiries related to the following tenures:

		%
State Forest	8	19
Company Freehold	2	5
Other Private Property	32	76
	<hr/> 42	<hr/> 100

The following action was taken.

- All enquiries were followed up in the field where necessary.
- Some of the concerns were based on a misreading or a lack of knowledge of the Forest Practices Legislation or Code. The provisions were explained.
- Some of the concerns proved to be marginal breaches of the Code, often resulting from independent operators not being aware of forest practices requirements. By talking to these operators and giving first warnings, practices will hopefully improve in future. (The difficulty of training and education of operators not associated with an industry organisation was dealt with in Section 3.)
- Other enquiries resulted or will result in formal legal complaints being laid. See Section 9.4.

9.4 Prosecutions

The initial emphasis for achieving improvements in forest practices was on education, training, co-operation and commitment to sound forest practices.

While this emphasis remains, formal legal complaints will be laid when substantial deliberate breaches knowingly committed and provable in court occur after fair warning.

- Formal legal complaints were laid in one case. The court hearing has been adjourned twice and will now be heard in 1990-91.
- Two more complaints are in progress.
- After a private property contractor failed to comply with a notice under Section 41 of the Forest Practices Act, a contractor was engaged to carry out required rehabilitation work on a private property operation. Costs were recovered from the private property contractor (\$1,235).
- Proposals for amendments to the Act are being considered to facilitate the proof of complaints.

10. Forest Practices Specialists

10.1 Works division

The work of the specialists in 1989-90 was divided between forest practices (60 per cent) and research (40 per cent). Research is supervised by the Division of Silviculture and Tasmanian Forest Research Council. (See also the Div. of Silv. Annual Report).

10.2 Training

Training input was provided by the specialists as follows:

	F.P.O. Training Course input	F.P.O. Refresher Course	General Courses For F.C. & Industry	Local Courses for F.C. & Industry
Flora				
	Integration with prod- uction forestry	Resource Manual use	Koonya 5 five day botany course	Two day district trial course held in Smithton
Fauna				
	Integration with prod- uction forestry	Resource Manual use	1 statewide seminar on fauna management	Seminars in Smithton, Devonport, Triabunna, AFH & Burnie re implemen- tation of wildlife management.
Geomorphology				
	Integration with prod- uction forestry	Resource Manual use	—	—
Archaeology				
	Integration with prod- uction forestry	Resource Manual use	4 day state wide course on C.R. Manage- ment, field surveys and site recording techniques.	—

10.3 Resource Manuals

- The Forest Practices Code sets out the principles and basic approaches to forest practices. The Resource Manuals provide background and further details to aid Forest Practices Officers and other planning staff. The manuals are in various stages of completion.

Fauna:	printed and distributed
Geomorphology:	printed and distributed
Archaeology:	in print
Botany:	still in preparation

A Soils Resource Manual is also in preparation (Div. of Silviculture: Graeme Brown).

10.4 Surveys and Inspections

Flora	Fauna	Geomorphology	Archaeology
SF/CL			
Tooms	Teepookana	Cluan Tier	Weilangta
Weilangta		Snow Hill	Tooms
Tyne	Golconda	Weilangta	Bruny Island
Boco	(effect of	(pot. land-	Leith Bridge
Lisdillon	logging on	slip)	(tramway)
Snow Hill	wildlife)	Mt Crips	Picton
(R.A.P.)	East Coast	(cave inventory)	(house)
Mt Walter		Upper Scamander	Dol coath
Sandspit R.	Beekeepers	Mole Creek	Star of West
Dogs Head Hill		Lilydale	(mining)
Mersey Flats		E. Picton	Corinna
Boobyalla		Gunn's Plains	(mining)
(R.A.P.)		Grey Mountain	Blue Tier
Pipers River		(L. clips)	(mining)
Meander		Lune River	Mt Stonach
Freer Farm		Boco Road (slip)	(engravings)
Barnes Hill		Gunns Plains	Camden Rd
Sheffield		(cave)	(sawmills)
(farm school)		Weegeena	Gunns Plains
Bruny Island		(slip)	(caves)
Gunns Plains		Branchs Creek	Surrey Hills
Duck Hole		(river bank	Ledgerwood
Lagoon		erosion)	Rd(sawmill)}
Hellyer		Nugent	Freer farm
(supervision)		(landslide)	Meredith Rd
Newdegate		Mt Crips	(sawmills &
(supervision)			tramways)

10.5 Input in Management Plans, Reviews, N Estate, Reports etc.

Flora	Fauna	Geomorphology	Archaeology
ANM W. Plan	ditto	ditto	ditto
W Vale W. Plan	ditto	ditto	ditto
Tasman, Forestier MP	ditto	ditto	ditto
Southern Forests MP	ditto	ditto	ditto
Central Highlands & Midlands Strategy Plan	ditto	ditto	ditto
TRMPA strat. plan	ditto	ditto	ditto
F.P. Code review	ditto	ditto	ditto
Resource Ass'mnt	ditto	ditto	ditto
Comm	ditto	ditto	ditto
FFIS	ditto	ditto	ditto
W.Tiers N.P. proposal	ditto	ditto	ditto
Epping Forest PP	ditto	—	—
Tooms Lake Cons Area	—	ditto	ditto
Mt Maurice FR	ditto	—	—
Mt Victoria FR	—	—	ditto
Snow Hill Nat. Est	—	ditto	ditto
Tooms Lake N.E.	—	—	ditto
Lune River N.E.	ditto	—	—
W. Tiers F.R. M.P.	—	—	ditto
Buckland Military Training area	Teepookana MP	ditto	ditto
Douglas Apsley M.P.	Sumac FR MP	—	ditto
W. Tasm ext of N.E.	Civic Head MP	ANM LWCP, GIS	ditto
N.E. Highlands N.E.	Blackwood WC	steep country	ditto
	Clarence Wild	harvesting rept.	Golconda Reserve
	Dog NE	Croesus Cake MP	proposal
	Navarke	Dog Head Hill MP	Winterbrook FR
	Plains NE	Wargati Mina MP	Blue Tier MP
	Beech Creek	Montague Caves	Sandspit Rainforest
	NE	Caveside SF	walk
	Dismal Swamp	Upper Derwent NE	Millers Bluff
	NE	Henty NE	Central Plateau FMP
		Lake Ina	Forest Recreation
			Facility Report
			Hastings Cockle
			Creek NE

10.6 Research

The following Forest Practices related research projects are in progress or have been completed:

	Forest Practices Specialists:	Funding
Botany		
Predictive modelling of occurrence of rare species in E. Tiers	Fred Duncan	FC
Predictive modelling of rare species and Fred Duncan	Kirsten Williams	FC
Distribution of Nothofagus Gunnii I. Robertson and Others	Fred Duncan NRCP	
* Dry sclerophyll conservation study	Kristen Williams	FC
RAPs (assistance)	Fred Duncan	FC
Regional requirements for conservation of rainforest, wet eucalypt and dry sclerophyll communities (input and assistance)	Fred Duncan	FC
Recovery of dry sclerophyll species after logging	Fred Duncan	FC
Archaeology		
* Eastern Tasmanian Sandstone Shelter Project (Aboriginal shelters).	Betty Ross	TFRC
* Historic Inventory Project (compiling a list of all known historic sites in wood production forests)	NW Lindy Scripps NE Denise Gaughwin	Nat. Est. grants programme
* Temma chert survey	Ian Thomas	FC
* Teepookana Aboriginal & Historic Site Survey	David Bannear	DLPW/ FC
Fauna		
* The Value of Wildlife Corridors in Production Forests	Peter Cale (also Alex Dudley Bob Mesibov)	TFRC & FC
* Comparison of effectiveness of habitat trees as isolates or in clumps.	R Taylor, Murray Hassler Brett Warren	M A Ingram Trust
Distribution of Helicarion subicundus (rare snail)	R Taylor	FC

Collation of distribution records of Tasmanian native mammals	R Taylor	FC
Geomorphology		
*Impact of logging on limestone caves	Rolan Eberhard	Aust.NPWS
Landslide inventory	Kevin Kiernan	FC/Industry
Tasmanian Karst Atlas	Kevin Kiernan	TFRC
* Lune River	Arthur Clark	TFRC
* Hastings/Creekton	Phil Jackson	TFRC
* Croesus Cave	Phil Jackson	TFRC
* Mill Creek	Northern	
*	Caverneers Inc	TFRC
(*Supervised by Specialists)		
Division of Silviculture		
Soils, hydrology		
Effects of mechanised forest operations on site productivity and soil degrade	John Williams	TFRC, FC, NSCP
Assessment of forest erosion vulner- ability (developing guidelines for operations on highly erodible soils)	Graeme Brown	FC Industry
Erosion of dolerite sites	K. Kiernan	TFRC

11. PUBLICATIONS

Forest Practices:

Forest Fauna Manual	R Taylor	FPU
Forest Geomorphology Manual	K. Kiernan	FPU
Rehabilitation Guidelines for Forest Construction	T Duckett	Div. of Silv.

Research:

See Annual Report Div. of Silviculture

12. Total Expenditure:

Expenditure for the year FPU:

		89/90 % Funding	88/89 % Funding
Forestry Commission	302 411	75	70
Tasm. Forest Research Council contribution to specialists (Industry)	101 462	25	30
TOTAL	\$ 403 873	100	100

Initial funding of the Forest Practices Specialists Research Officers was
60:40 Forest Industry:Commission.