



AUSTRALIAN FOREST RESOURCES



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The Australian Bureau of Agricultural and Resource Economics is a professionally independent research organisation attached to the Department of Primary Industries and Energy.

Foreword

Australian Forest Resources is an annual publication compiled by the Economic Statistics Section of the Bureau. It contains statistical tables showing data on Australian forest resources; production, consumption and trade in forest products; values of production, sales, imports and exports of timber products; and employment in the forest industries.

Unless otherwise indicated, statistics are based on financial years. The most recent data presented in this edition relate to the year ended 30 June 1988.

Comments or queries relating to data presented in this issue should be addressed to the Economic Statistics Section. Telephone queries can be made to the Economic Statistics Section on (06) 2469655.

BRIAN FISHER
Executive Director
Australian Bureau of
Agricultural and Resource Economics

March 1990

Abbreviations and symbols

ABARE	Australian Bureau of Agricultural and Resource Economics
ABS	Australian Bureau of Statistics
GRWE	gross roundwood equivalent volume: round measure, true volume under bark
ha	hectares
m ³	cubic metres
na	not available
n.e.c.	not elsewhere classified
(r)	revised
t	tonnes

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I Resource base

1 Land areas: by vegetation cover: at 30 June 1988

Classification	NSW	Vic.	Qld	WA	SA	Tas.	NT	ACT	Total
	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha	'000 ha
Forest	14 959(a) (18.7)	5 257 (23.1)	11 796 (6.8)	2 655 (1.1)	- (0.0)	2 844 (42.0)	3 266 (2.4)	51 (21.3)	40 828 (5.3)
Woodland	3 300 (4.1)	3 010(b) (13.2)	28 200 (16.3)	20 520 (8.1)	900 (0.9)	1 051 (15.5)	7 000 (5.2)	5 (2.1)	63 986 (8.3)
Plantation	241 (0.3)	218 (1.0)	188 (0.1)	92 -	94 (0.1)	89 (1.3)	4 -	14 (5.8)	942 (0.1)
Total land area	80 160	22 760	172 720	252 550	98 400	6 780	134 620	240	768 230

(a) Based on limited updating of 1971 survey. (b) Subdivided into woodland (946 000 ha), which is vegetation dominated by trees with top height exceeding 5 metres, usually with a single stem, with tree crown cover in the range 10-30 per cent of the land area occupied; and shrubland (2 064 000 ha), which is vegetation with top height 2-8 metres containing shrubs, often multi-stemmed, and including mallee type eucalypts.

Note: With the exception of Victoria, forest and woodland are defined as follows: forest includes native forest with existing or potential stand height of 20 metres or more and cypress pine forest in commercial use regardless of stand height, but does not include plantations. Woodland is approximately defined as vegetation having a top stratum of trees 10 metres or more in height and crown cover in the range 10-30 per cent of the land area occupied. For Victoria, forest is predominantly composed of single-stemmed trees with existing or potential stand top height exceeding 5 metres and with tree crown cover exceeding 30 per cent of the land area.

Figures in parenthesis are percentages of total land area for each state or territory.

Sources: State and territory forest services.

2 Native forest areas: by forest type and ownership: by state: at 30 June 1988

Item	NSW	Vic.	Qld	WA	SA	Tas.	NT	ACT	Total
	'000 ha								

CLASSIFIED BY FOREST TYPE GROUPS

Forest type

Rainforest	265	13	1 237	-	-	499	38	-	2 052
Eucalypt productivity class I (a)	1 207	527	205	178	-	442	-	-	2 559
Eucalypt productivity class II (a)	3 659	4 255	1 290	2 477	-	1 903	-	51	13 635
Eucalypt productivity class III (a)	8 009	455	3 300	-	-	-	-	-	11 764
Tropical eucalypt and paperbark (b)	-	-	4 078	-	-	-	2 450	-	6 528
Cypress pine	1 819	7	1 686	-	-	-	778	-	4 290
Total	14 959	5 257	11 796	2 655	-	2 844	3 266	51	40 828

CLASSIFIED BY OWNERSHIP

Ownership category

Public	9 759	4 652	10 304	2 153	-	2 177	839	51	29 935
- category 1	3 222	2 688	3 182	1 863	-	1 391	0	0	12 346
- category 2	4 390	447	6 412	52	-	461	524	9	12 295
- category 3	2 147	1 517	710	238	-	325	315	42	5 294
Private	5 200	605	1 492	502	-	667	2 427	-	10 893
Total	14 959	5 257	11 796	2 655	-	2 844	3 266	51	40 828

(a) Eucalypt forests are grouped into productivity classes in descending order of productivity. No specific indexes of productivity have been developed for these classes and there can be some overlap, especially between states, in the relative productivity levels used to assign particular forest types to productivity classes. (b) Includes tropical eucalypt and paperbark species not in commercial use.

Note:

Public 1: Forest land managed for multiple use including wood production.

Public 2: Crown land either vacant or occupied under lease on which wood harvesting is carried out under government control but is not reserved and managed for that purpose.

Public 3: Land on which wood production is excluded (National Parks etc.).

3 Plantation areas: by ownership: by species: by state: at 31 March 1988

Species	NSW(a)	Vic.	Qld	WA	SA	Tas.	NT(b)	ACT	Total
	ha	ha	ha	ha	ha	ha	ha	ha	ha
PUBLIC OWNERSHIP									
<u>Coniferous</u>									
Pinus radiata	159 606	98 365	2 281	36 708	63 822	38 469	-	13 940	413 191
Pinus elliottii	na	-	66 255	290	-	-	-	-	66 545
Pinus pinaster	na	-	-	28 474	3 324	-	-	-	31 798
Pinus caribaea	na	-	43 540	-	-	-	-	-	43 540
Araucaria	1 582	-	44 479	-	-	-	-	-	46 061
Other	12 586	3 236	6 523	808	370	323	-	514	24 360
Total	173 774	101 601	163 078	66 280	67 516	38 792	-	14 454	625 495
<u>Broadleaved</u>									
Eucalyptus	-	7 992	1 298	8 300	1 200	3 947	-	-	22 737
Populus	-	-	-	-	-	-	-	-	-
Other	-	16	496	-	-	65	-	-	577
Total	-	8 008	1 794	8 300	1 200	4 012	-	-	23 314
Total	173 774	109 609	164 872	74 580	68 716	42 804	-	14 454	648 809
PRIVATE OWNERSHIP									
<u>Coniferous</u>									
Pinus radiata	63 208	101 008	983	15 197	24 800	29 911	-	-	235 107
Pinus elliottii	-	-	22 000	-	-	-	-	-	22 000
Pinus pinaster	-	-	-	197	-	-	-	-	197
Pinus caribaea	-	-	325	-	-	-	2 470	-	2 795
Araucaria	-	-	114	-	-	-	-	-	114
Other	1 385	964	-	-	-	11	1 801	-	4 161
Total	64 593	101 972	23 422	15 394	24 800	29 922	4 271	-	264 374
<u>Broadleaved</u>									
Eucalyptus	1 238	6 625	-	2 088	-	14 110	-	-	24 061
Populus	1 835	215	-	-	-	-	-	-	2 050
Other	34	-	-	-	-	2 631	-	-	2 665
Total	3 107	6 840	-	2 088	-	16 741	-	-	28 776
Total	67 700	108 812	23 422	17 482	24 800	46 663	4 271	-	293 150
PUBLIC AND PRIVATE OWNERSHIP									
<u>Coniferous</u>									
Pinus radiata	222 814	199 373	3 264	51 905	88 622	68 380	-	13 940	648 298
Pinus elliottii	na	-	88 255	290	-	-	-	-	88 545
Pinus pinaster	na	-	-	28 671	3 324	-	-	-	31 995
Pinus caribaea	na	-	43 865	-	-	-	2 470	-	46 335
Araucaria	1 582	-	44 593	-	-	-	-	-	46 175
Other	13 971	4 200	6 523	808	370	334	1 801	514	28 521
Total	238 367	203 573	186 500	81 674	92 316	68 714	4 271	14 454	889 869
<u>Broadleaved</u>									
Eucalyptus	1 238	14 617	1 298	10 388	1 200	18 057	-	-	46 798
Populus	1 835	215	-	-	-	-	-	-	2 050
Other	34	16	496	-	-	2 696	-	-	3 242
Total	3 107	14 848	1 794	10 388	1 200	20 753	-	-	52 090
Total	241 474	218 421	188 294	92 062	93 516	89 467	4 271	14 454	941 959

(a) Native broadleaved species on public land are not identified separately from native forest areas. Other coniferous includes Pinus pinaster and P. caribaea. (b) Since 31 March 1986, plantations on Aboriginal land have been transferred to private ownership and publicly owned plantations are no longer managed for wood production.

Source: State and territory forest services.

4 Plantations established during year ended 31 March 1988: by ownership: by species group: by state

Species	NSW	Vic.	Qld	WA	SA	Tas.	NT	ACT	Total
	ha	ha	ha	ha	ha	ha	ha	ha	ha
PUBLIC OWNERSHIP									
<u>Coniferous</u>									
Pinus radiata	7 105	2 682	54	2 180	2 619	492	-	1 112	16 244
Pinus elliottii	467	-	4	-	-	-	-	-	471
Pinus pinaster	-	-	-	708	-	-	-	-	708
Pinus caribaea	-	-	3 774	-	-	-	-	-	3 774
Araucaria	-	-	588	-	-	-	-	-	588
Other	-	-	3	1 304	393	-	-	-	1 700
Total	7 572	2 685	5 724	3 281	2 619	492	-	1 112	23 485
<u>Broadleaved</u>									
Eucalyptus	-	590	6	-	-	457	-	-	1 053
Populus	-	-	-	-	-	-	-	-	-
Other	-	-	38	-	-	-	-	-	38
Total	(a)	590	44	-	-	457	-	-	1 091
Total	7 572	3 275	5 768	3 281	2 619	949	-	1 112	24 576
PRIVATE OWNERSHIP									
<u>Coniferous</u>									
Pinus radiata	3 728	2 101	-	940	712	2 921	-	-	10 402
Pinus elliottii	-	-	-	-	-	-	-	-	-
Pinus pinaster	-	-	-	-	-	-	-	-	-
Pinus caribaea	-	-	-	-	-	-	-	70	70
Araucaria	-	-	-	-	-	-	-	-	-
Other	5	-	-	-	-	-	-	-	5
Total	3 733	2 101	-	940	712	2 921	-	70	10 477
<u>Broadleaved</u>									
Eucalyptus	1	371	-	918	-	2 495	-	-	3 785
Populus	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	33	-	-	33
Total	1	371	-	918	-	2 528	-	-	3 818
Total	3 734	2 472	(b)	1 858	712	5 449	-	70	14 295
PUBLIC AND PRIVATE OWNERSHIP									
<u>Coniferous</u>									
Pinus radiata	10 833	4 783	54	3 120	3 331	3 413	-	1 112	26 646
Pinus elliottii	467	-	4	-	-	-	-	-	471
Pinus pinaster	-	-	-	708	-	-	-	-	708
Pinus caribaea	-	-	3 774	-	-	-	-	70	3 844
Araucaria	-	-	588	-	-	-	-	-	588
Other	5	3	1 304	393	-	-	-	-	1 705
Total	11 305	4 786	5 724	4 221	3 331	3 413	-	1 182	33 962
<u>Broadleaved</u>									
Eucalyptus	1	961	6	918	-	2 952	-	-	4 838
Populus	-	-	-	-	-	-	-	-	-
Other	-	-	38	-	-	33	-	-	71
Total	1	961	44	918	-	2 985	-	-	4 909
Total	11 306	5 747	5 768	5 139	3 331	6 398	-	1 182	38 871

(a) Separate statistics are no longer maintained by the New South Wales Forestry Commission.

(b) Private planting in Queensland is not commercially significant.

Sources: State and territory forest services.

II Roundwood

5 Logs consumed: by species group: by category

Item	1982-83 '000 m ³	1983-84 '000 m ³	1984-85 '000 m ³	1985-86 '000 m ³	1986-87 r '000 m ³	1987-88 '000 m ³
Broadleaved						
Sawnwood and veneer	4 515	5 357	5 614	5 541	5 187	5 046
Sleepers	455	381	369	466	465	361
Hardboard	98	143	148	139	141	103
Particleboard	3	2	1	0	1	-
Paper and paperboard	1 105	1 497	1 902	1 848	1 391	1 944
Other	426	470	560	529	474	456
Total	6 602	7 850	8 594	8 523	7 659	7 910
Coniferous						
Sawnwood and veneer	4 102	4 850	6 199	6 064	5 462	6 163
Sleepers	3	3	8	6	-	-
Softboard	-	-	-	-	-	-
Hardboard	5	3	5	3	-	-
Particleboard	559(a)	608(a)	670(a)	701(a)	719(a)	852(a)
Paper and paperboard	2 811	3 068	3 625	3 563	3 238	4 131
Other	65	114	155	154	148	145
Total	7 545	8 646	10 662	10 491	9 567	11 291
Broadleaved and coniferous						
Sawnwood and veneer	8 617	10 207	11 813	11 605	10 649	11 209
Sleepers	458	384	377	472	465	361
Wood-based panel products(b)	665	756	824	843	861	955
Paper and paperboard	3 916	4 565	5 527	5 411	4 629	6 075
Other	491	584	715	683	622	601
Total(c)	14 147	16 496	19 256	19 014	17 226	19 201
	m ³	m ³				
Apparent consumption per person	0.93	1.07	1.23	1.20	1.07	1.17

(a) Includes medium density fibreboard. (b) Wood-based panel products comprise hardboard, softboard, particleboard and medium density fibreboard. (c) Excludes fuelwood obtained from logs.

Note: Figures in this table are expressed in GRWE (see p. iv). Data are derived by taking forest removals figures from table 6, adding the GRWE of imports and subtracting the GRWE of exports of forest products.

Sources: Australian Bureau of Statistics; state and territory forest services; ABARE estimates and private industry sources.

6 Estimated removals of roundwood from the forest: by species group: by category

Item	1982-83 '000 m ³	1983-84 '000 m ³	1984-85 '000 m ³	1985-86 '000 m ³	1986-87 '000 m ³	1987-88 '000 m ³
Broadleaved						
Saw and veneer logs	4 004	4 635	4 751	4 798	4 496	4 311
Sleeper logs	483	408	385	467	449	364
Pulpwood						
- for hardboard	102	149	152	144	159	115
- for particleboard	3	2	1	-	1	-
- for paper and paperboard	4 166	4 869	5 067	5 017	5 613	5 882
Fencing	102	88	142	107	94	85
Mining	135	136	110	100	102	62
Poles and piles	167	182	222	217	182	172
Other	55	68	89	99	88	112
Total(a)	9 217	10 537	10 919	10 949	11 184	11 103
Coniferous						
Saw and veneer logs	2 493	2 796	3 403	3 487	3 331	3 557
Sleeper logs	3	3	8	6	-	-
Pulpwood						
- for softboard	-	-	-	-	-	-
- for hardboard	5	3	5	3	7	1
- for particleboard(b)	578	615	671	686	716	807
- for paper and paperboard	1 295	1 152	1 523	1 622	1 314	1 289
Other	68	120	158	154	148	145
Total(a)	4 442	4 689	5 768	5 958	5 516	5 799
Broadleaved and coniferous						
Saw and veneer logs	6 497	7 431	8 154	8 285	7 827	7 868
Sleeper logs	486	411	393	473	449	364
Pulpwood	6 149	6 790	7 419	7 472	7 810	8 094
Other	527	594	721	677	614	576
Total(a)	13 659	15 226	16 687	16 907	16 700	16 934

(a) Excludes fuelwood obtained from logs. (b) Includes medium density fibreboard.

Note: Figures in this table are expressed in GRWE (see p. iv). The figures exclude firewood removals, sawmill residues used in manufacturing processes or exported in the form of woodchips and wastepaper recycled. Sawmill residues were estimated at 1.4 million m³ and collected wastepaper at 690 kt for the year ended 30 June 1988.

Sources: Australian Bureau of Statistics; state and territory forest services; ABARE estimates and private industry sources.

7 Gross volume of saw, veneer and sleeper logs obtained from Crown and private land: by state

Item	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
	'000 m ³					
<u>Crown land</u>						
New South Wales	1 413	1 743	1 836	1 851	1 803	1 820
Victoria	1 174	1 454	1 453	1 523	1 461	1 410
Queensland	593	689	720	790	807	879
Western Australia	679	740	855	900	880	842
South Australia	673(a)	837(a)	957(a)	953(a)	779(a)	660(a)
Tasmania	583	649	713	707	637(r)	641
Northern Territory	-	-	-	-	-	-
Australian Capital Territory	150	156	172	158	153	150
Total	5 265	6 268	6 706	6 882	6 520(r)	6 402
<u>Private land</u>						
New South Wales	609	571	564	645	553	524
Victoria	147	146	421	386	313	412
Queensland	434	473	413	421	411	412
Western Australia	144	128	86	69	68	75
South Australia	291(a)	118(a)	206(a)	204(a)	206(a)	215(a)
Tasmania	93	138	151	151	205	192
Northern Territory	-	-	-	-	-	-
Australian Capital Territory	-	-	-	-	-	-
Total	1 718	1 574	1 841	1 876	1 756	1 830
<u>Crown and private land</u>						
New South Wales	2 022	2 314	2 400	2 496	2 356	2 344
Victoria	1 321	1 600	1 874	1 909	1 774	1 822
Queensland	1 027	1 162	1 133	1 211	1 218	1 291
Western Australia	823	868	941	969	948	917
South Australia	964(a)	955(a)	1 163(a)	1 157(a)	985(a)	875(a)
Tasmania	676	787	864	858	842(r)	833
Northern Territory	-	-	-	-	-	-
Australian Capital Territory	150	156	172	158	153	150
Total	6 983	7 842	8 547	8 758	8 276(r)	8 232
	%	%	%	%	%	%
<u>Crown land as percentage of total</u>						
New South Wales	69.9	75.3	76.5	74.2	76.5	77.6
Victoria	88.9	90.9	77.5	79.8	82.4	77.4
Queensland	57.8	59.3	63.5	65.2	66.3	68.1
Western Australia	82.4	85.3	90.9	92.9	92.8	91.8
South Australia	69.8	87.6	82.3	82.4	79.1	75.4
Tasmania	86.2	82.5	82.5	82.4	75.7(r)	77.0
Australian Capital Territory	100.0	100.0	100.0	100.0	100.0	100.0
Average	75.4	79.9	78.5	78.6	78.8(r)	77.8

(a) These figures exclude net removals into log storage in South Australia of 350 000m³ in 1982-83 and 592 000m³ in 1983-84, and include removals from storage of 293 000m³ in 1984-85, 271 000m³ in 1985-86, 209 000m³ in 1986-87 and 58 000m³ in 1987-88.

Note: Figures expressed in GRWE (see p. iv).

Sources: Australian Bureau of Statistics; state and territory forest services.

8 Australian imports of sawlogs and veneer logs: by species group: by state(a)

Year	NSW m ³	Vic. m ³	Qld m ³	WA m ³	SA m ³	Tas. m ³	Total m ³
BROADLEAVED							
1982-83	75	48	664	46	-	-	833
1983-84	44	5	129	-	-	-	178
1984-85	147	36	-	1	-	-	184
1985-86	1	433	416	-	-	-	850
1986-87	20	525	111	-	-	-	656
1987-88	416	589	1 088	264	-	154	2 511
CONIFEROUS							
1982-83	138	-	80	-	-	607	825
1983-84	2	-	-	2	-	315	319
1984-85	-	1	15	-	-	290	306
1985-86	-	-	-	-	-	187	187
1986-87	-	110	201	-	-	-	311
1987-88	41	54	171	16	66	-	348
BROADLEAVED AND CONIFEROUS							
1982-83	213	48	744	46	-	607	1 658
1983-84	46	5	130	2	-	314	497
1984-85	147	37	15	1	-	290	490
1985-86	1	433	416	-	-	187	1 037
1986-87	20	635	312	-	-	-	967
1987-88(a)	499	199	601	31(b)	17	162	1 510

(a) Includes pulplogs from 1 January 1988. (b) Includes NT.

Note: Figures expressed in GRWE (see p. iv).

Source: Australian Bureau of Statistics.

9 Australian exports of pulpwood(a)

Item	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
	t	t	t	t	t	t
Total	3 688 552	4 443 077	4 565 004	4 447 243	5 019 908	5 108 000

(a) Pulpwood is exported predominantly in the form of woodchips, recorded in green tonnes.

Source: Forestry Branch, Department of Primary Industries and Energy.

III Sawnwood (excluding railway sleepers)

10 Production of sawnwood(a): by species group: by state

Species group	NSW m ³	Vic. m ³	Qld m ³	WA m ³	SA m ³	Tas. m ³	NT m ³	ACT m ³	Total m ³
<u>1982-83</u>									
Plantation conifers	204 702	173 475	71 272	12 314	329 861	61 180	-	79 980	932 784
Native forest timbers									
Cypress pine	39 767	-	48 407	-	-	-	170	-	88 344
Other conifers	-	-	17 454	-	-	3 220	-	-	20 674
Eucalypts	507 599	463 856	157 401	218 487	-	158 015	90	-	1 505 448
Other broadleaved	9 423	-	35 328	-	-	6 002	-	-	50 753
Total	556 789	463 856	258 590	218 487	-	167 237	260	-	1 665 219
Total	761 491	637 331	329 862	230 801	329 861	228 417	260	79 980	2 598 003
<u>1983-84</u>									
Plantation conifers	256 522	214 346	81 282	13 739	283 525	62 354	-	65 196	976 964
Native forest timbers									
Cypress pine	41 150	-	54 994	-	-	-	170	-	96 314
Hoop bunya kauri	-	-	20 798	-	-	-	-	-	20 798
Tasmanian conifers	-	-	-	-	-	2 246	-	-	2 246
Eucalypts	544 539	519 015	145 559	230 487	513	212 192	90	-	1 652 395
Brushwoods	7 767	-	-	-	-	-	-	-	7 767
Cabinet woods	-	-	37 464	-	-	-	-	-	37 464
Tasmanian other broadleaved	-	-	-	-	-	9 020	-	-	9 020
Total	593 456	519 015	258 815	230 487	513	223 458	260	-	1 826 004
Total	849 978	733 361	340 097	244 226	284 038	285 812	260	65 196	2 802 968
<u>1984-85</u>									
Plantation conifers	271 881	277 007	100 873	20 359	238 840	78 667	-	99 248	1 086 875
Native forest timbers									
Cypress pine	41 794	-	67 228	-	-	-	170	-	109 192
Hoop bunya kauri	-	-	19 969	-	-	-	-	-	19 969
Tasmanian conifers	-	-	-	-	-	2 433	-	-	2 433
Eucalypts	565 249	549 892	159 488	256 672	196	221 997	90	-	1 753 584
Brushwoods	7 782	-	-	-	-	-	-	-	7 782
Cabinet woods	-	-	31 694	-	-	-	-	-	31 694
Tasmanian other broadleaved	-	-	-	-	-	9 340	-	-	9 340
Total	614 825	549 892	278 379	256 672	196	233 770	260	-	1 933 994
Total	886 706	826 899	379 252	277 031	239 036	312 437	260	99 248	3 020 869

(Continued on next page)

10 (continued)

Species group	NSW	Vic.	Qld	WA	SA	Tas.	NT	ACT	Total
	3 m	3 m	3 m	3 m	3 m	3 m	3 m	3 m	3 m
<u>1985-86</u>									
Plantation conifers	279 745	271 691	126 679	34 723	225 883	92 656	-	70 921	1 102 298
Native forest timbers									
Cypress pine	38 553	-	62 265	-	-	-	170	-	100 988
Hoop bunya kauri	-	-	23 934	-	-	-	-	-	23 934
Tasmanian conifers	-	-	-	-	-	2 866	-	-	2 866
Eucalypts	581 150	547 577	135 763	265 511	211	198 200	90	-	1 728 502
Brushwoods	3 160	-	-	-	-	-	-	-	3 160
Cabinet woods	-	-	29 088	-	-	-	-	-	29 088
Tasmanian other broadleaved	-	-	-	-	-	10 855	-	-	10 855
Total	622 863	547 577	251 050	265 511	211	211 921	260	-	1 899 393
Total	902 608	819 268	377 729	300 234	226 094	304 577	260	70 921	3 001 691
<u>1986-87</u>									
Plantation conifers(r)	287 381	255 149	156 496	36 116	223 397	93 896	-	69 001	1 121 436
Native forest timbers									
Cypress pine	36 306	-	56 339	-	-	-	170	-	92 815
Hoop bunya kauri	-	-	23 276	-	-	-	-	-	23 276
Tasmanian conifers	-	-	-	-	-	2 904	-	-	2 904
Eucalypts	576 942	505 658	144 819	248 727	149	193 406	90	-	1 669 791
Brushwoods	3 050	-	-	-	-	-	-	-	3 050
Cabinet woods	-	-	26 085	-	-	-	-	-	26 085
Tasmanian other broadleaved	-	-	-	-	-	9 122	-	-	9 122
Total	616 298	505 658	250 519	248 727	149	205 432	260	-	1 827 043
Total(r)	903 679	760 807	407 015	284 843	223 54	299 328	260	60 001	2 948 479
<u>1987-88</u>									
Plantation conifers	312 964	320 435	207 236	47 929	254 453	97 087	-	64 455	1 304 559
Native forest timbers									
Cypress pine	43 018	-	63 755	-	-	-	155	-	106 928
Hoop bunya kauri	-	-	24 207	-	-	-	-	-	24 207
Tasmanian conifers	-	-	-	-	-	4 268	-	-	4 268
Eucalypts	560 432	500 219	181 043	245 732	192 816	90	-	1 680 332	
Brushwoods	2 110	-	-	-	-	-	-	-	2 110
Cabinet woods	-	-	19 270	-	-	-	-	-	19 270
Tasmanian other broadleaved	-	-	-	-	-	9 085	-	-	9 085
Total	605 560	500 219	288 275	245 732	-	206 169	245	-	1 846 200
Total	918 524	820 654	495 511	293 661	254 453	303 256	245	64 455	3 150 759

(a) Includes sawn equivalent of plywood and veneer.

Sources: Australian Bureau of Statistics; state and territory forest services.

11 Australian imports of sawnwood: by category: by state

Year	NSW	Vic.	Qld	WA	SA	Tas.	NT	Total
	m ³							
LOGS (sawn equivalent)								
1982-83	130	29	454	28	-	370	-	1 011
1983-84	28	3	79	1	-	192	-	303
1984-85	90	23	9	1	-	177	-	300
1985-86	1	264	254	-	-	114	-	633
1986-87	12	388	190	-	-	-	-	590
1987-88	305	121	367	16	10	99	3	921
ROUGH SAWN								
1982-83	315 656	193 519	68 084	17 742	63 184	31	1 275	659 491
1983-84	410 740	268 244	79 603	12 464	88 562	-	4 765	864 378
1984-85	449 085	326 801	108 783	19 350	111 563	1 063	4 942	1 021 587
1985-86	446 172	314 239	99 115	21 792	93 035	1 924	9 916	986 193
1986-87	390 756	297 010	74 183	30 302	66 210	4 119	5 415	867 995
1987-88	458 577	329 782	102 441	40 697	75 201	4 819	8 367	1 019 884
DRESSED								
1982-83	87 012	38 851	28 339	2 810	4 436	98	5 323	166 869
1983-84	114 155	50 133	24 938	1 942	6 911	146	5 322	203 547
1984-85	201 380	105 286	35 490	6 449	16 433	49	7 557	372 644
1985-86	138 367	76 873	35 650	2 969	6 710	110	8 692	269 371
1986-87	103 149	67 093	16 417	3 405	5 794	0	3 313	199 171
1987-88	138 534	67 260	25 468	4 358	4 305	20	4 039	243 984
BOXBOARDS								
1982-83	5	2	23	-	84	-	-	114
1983-84	-	-	-	-	-	-	-	-
1984-85	11	60	-	-	-	-	-	71
1985-86	-	-	-	-	-	-	-	-
1986-87	-	-	-	-	-	-	-	-
1987-88	-	-	-	-	-	-	-	-
TOTAL								
1982-83	402 803	232 401	96 900	20 580	67 704	499	6 598	827 485
1983-84	524 923	318 380	104 620	14 407	95 473	338	10 087	1 068 228
1984-85	650 566	432 170	144 282	25 800	127 996	1 289	12 499	1 394 602
1985-86	584 540	391 376	135 019	24 761	99 745	2 148	18 608	1 256 197
1986-87	493 917	364 491	90 790	33 707	72 004	4 119	8 728	1 067 756
1987-88	597 416	397 163	128 276	45 071	79 516	4 938	12 409	1 264 789

Source: Australian Bureau of Statistics.

12 Australian imports of sawnwood: by finish: by species group: by source

1987-88

Country of origin	Total 1986-87	Total m ³	Logs (sawnwood equivalent) m ³	Sawnwood			
				Rough sawn	Dressed timber	Broad-leaved	Coniferous
<u>Europe</u>							
Denmark	181	283	-	272	-	11	-
Finland	4 630	7 078	-	131	564	612	5 771
Germany, F.R.	-	36	-	36	-	-	-
Italy	4	10	-	10	-	-	-
Netherlands	13	31	-	-	-	-	31
Sweden	701	1 078	20	67	47	379	565
United Kingdom	630	317	1	134	49	1	132
Other	-	206	188	1	-	-	-
<u>North America</u>							
Canada	256 045	334 602	193	464	331 807	107	2 031
United States	368 825	413 810	-	4 624	404 006	139	5 041
<u>South America</u>							
Brazil	751	1 348	-	1 196	121	26	5
Chile	633	610	-	610	-	-	-
Ecuador	186	260	-	-	-	233	27
<u>Africa</u>							
Ghana	-	40	-	40	-	-	-
Ivory Coast	33	54	-	54	-	-	-
Swaziland	-	30	-	3	0	-	-
<u>Asia</u>							
Burma	193	380	-	363	17	-	-
Hong Kong	-	95	-	95	-	-	-
Indonesia	12 765	7 264	10	6 961	320	565	8
Japan	38	360	1	19	-	330	10
Malaysia	173 508	195 007	-	14 734	1 377	45 368	528
Philippines	10 140	8 450	19	6 882	-	1 549	-
Singapore	16 343	12 768	-	11 212	310	1 246	-
Taiwan	4	152	-	135	-	15	2
Thailand	262	105	-	105	-	-	-
Other	-	48	16	32	-	-	-
<u>Pacific area</u>							
Fiji	2 051	11 066	43	3 570	5 611	31	1 811
New Zealand	214 243	263 442	152	2 570	83 488	1 890	175 342
Papua New Guinea	1 891	3 385	266	2 200	790	129	-
Solomon Islands	691	1 729	12	1613	94	10	-
Vanuatu	88	87	-	87	-	-	-
Western Samoa	852	-	-	-	-	-	-
Other countries	1 465	58	-	11	8	5	34
Total	1 256 197	1 264 789	921	191 275	828 609	52 646	191 338

Source: Australian Bureau of Statistics.

13 Australian exports of sawnwood: by state(a)

Year	NSW	Vic.	Qld	WA	SA	Tas.	NT	Total
	m ³							
1982-83	6 477	1 233	159	4	6 446	19 683	-	34 002
1983-84	4 875	1 036	1 389	972	8 338	13 844	-	30 454
1984-85	3 720	3 320	358	15 196	723	5 532	-	28 849
1985-86	3 327	808	1 936	18 931	95	6 914	-	32 011
1986-87	4 086	972	1 547	8 497	140	8 815	-	24 057
1987-88	3 305	3 296	1 970	5 370	126	9 969	-	24 036

(a) Includes sawn equivalent of sawlog exports: 534 m³ in 1982-83; and 1806 m³ in 1983-84; 715 m³ in 1984-85; 892 m³ in 1985-86; 1561 m³ in 1986-87 and 1622 in 1987-88.

Source: Australian Bureau of Statistics.

14 Australian exports of sawnwood: by destination

Country of destination	1987-88						
	1983-84	1984-85	1985-86	1986-87	Rough sawn	Dressed	Total
	m ³						
<u>Europe</u>							
Belgium and Luxembourg	6 249	2 568	1 806	2 943	4 470	-	4 470
Denmark	98	45	122	215	63	-	63
France	1 258	726	435	138	66	-	66
Germany, F.R.	1 860	580	409	411	1 611	28	1 639
Greece	94	30	55	110	213	-	213
Ireland	17	20	-	-	-	-	-
Italy	5	-	-	48	69	-	69
Netherlands	3 686	1 345	2 574	3 704	2 706	-	2 706
Norway	111	214	140	118	409	-	409
Sweden	-	25	-	35	-	-	-
United Kingdom	5 733	12 039	16 151	6 872	3 156	146	3 302
Total	19 111	17 592	21 692	14 594	12 763	174	12 937
<u>North America</u>							
Canada	84	284	136	155	104	-	104
United States	858	1 514	2 764	2 751	3 242	214	3 456
Total	942	1 798	2 900	2 906	3 346	214	3 560
<u>Africa</u>							
South Africa	803	527	742	846	326	-	326
<u>Asia</u>							
Bahrain	5	5	12	7	6	-	6
Indonesia	-	158	974	239	25	306	331
Japan	154	1 544	24	181	216	3	219
Singapore	1 457	1 111	161	248	147	-	147
Taiwan	110	330	290	-	158	60	218
Thailand	-	-	-	221	16	5	21
Total	1 726	3 148	1 461	896	568	374	942
<u>Pacific area</u>							
Christmas Island	262	-	79	14	-	-	-
Cocos Islands	66	5	-	-	-	-	-
Fiji	128	-	-	-	-	-	-
Kiribati	26	18	47	147	65	35	100
Nauru	36	474	224	169	567	32	599
New Zealand	4 730	3 832	3 889	3 623	3 092	234	3 326
Papua New Guinea	6	13	9	-	5	160	165
Polynesia Fr.	25	-	20	-	-	21	21
Solomon Islands	1	-	-	-	-	-	-
Tonga	6	-	7	-	-	-	-
Total	5 286	4 342	4 275	3 953	3 729	482	4 211
Other countries	2 586	1 442	941	862	386	52	438
Total	30 454	28 849	32 011	24 057	21 118	1 296	22 414

Source: Australian Bureau of Statistics.

15 Apparent supply of sawnwood: by species group and state

Item	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
	m ³					
<u>Broadleaved</u>						
Production	1 556 201	1 706 646	1 802 400	1 771 605	1 708 048	1 710 797
Imports	195 755	261 357	297 463	249 720	230 372	243 921
Exports	31 855	27 299	25 523	29 807	21 676	20 839
Apparent supply	1 720 101	1 940 704	2 074 340	1 991 518	1 916 744	1 933 879
<u>Coniferous</u>						
Production	1 041 802	1 096 322	1 218 469	1 230 086	1 219 654	1 439 962
Imports	631 730	806 871	1 097 139	1 006 477	836 794	1 019 947
Exports	2 147	3 155	3 326	2 204	820	1 575
Apparent supply	1 671 385	1 900 038	2 312 282	2 234 359	2 055 628	2 458 334
<u>Broadleaved and coniferous</u>						
Production	2 598 003	2 802 968	3 020 869	3 001 691	2 927 702	3 150 759
Imports	827 485	1 068 228	1 394 602	1 256 197	1 067 166	1 263 868
Exports	34 002	30 454	28 849	32 011	22 496	22 414
Apparent supply	3 391 486	3 840 742	4 386 622	4 225 877	3 972 372	4 392 213
<u>Apparent supply, by state (a)</u>						
New South Wales(b)	1 237 662	1 435 006	1 632 800	1 554 765	1 462 550	1 576 785
Victoria	868 468	1 050 804	1 255 997	1 209 572	1 124 067	1 214 649
Queensland	426 126	444 530	523 260	511 287	497 213	622 709
Western Australia	244 907	250 384	287 634	306 064	310 063	333 369
South Australia	397 477	378 539	366 440	325 837	274 696	333 924
Tasmania	209 397	272 624	308 073	299 743	294 795	298 126
Northern Territory	6 858	10 347	12 759	18 868	8 988	12 651
Total	3 390 895	3 842 234	4 386 966	4 226 136	3 972 372	4 392 213

(a) In the calculation of apparent supply, by state, details of sawlogs and boxboards imported and exported have been excluded for reasons of data confidentiality.

Production figures include the sawn equivalent of veneer logs extracted from Crown land.

(b) Includes the Australian Capital Territory.

Sources: Australian Bureau of Statistics; state and territory forest services.

16 Apparent supply of sawnwood: by species group: by state: 1987-88

Item	NSW(a)	Vic.	Qld	WA	SA	Tas.	NT	Total
	m ³							
<u>Production(b)</u>								
Broadleaved	562 542	500 219	200 313	245 732	-	201 901	90	1 710 797
Coniferous	420 437	320 435	295 198	47 929	254 453	101 355	155	1 439 962
<u>Imports</u>								
Broadleaved								
Undressed	58 519	45 092	22 973	32 402	23 990	82	8 217	191 275
Dressed	12 066	19 962	9 665	3 008	3 886	20	4 039	52 646
Coniferous								
Undressed	400 058	284 690	79 468	8 295	51 211	4 737	150	828 609
Dressed	126 468	47 298	15 803	1 350	419	-	-	191 338
<u>Exports</u>								
Broadleaved								
Undressed	2 235	2 788	20	5 196	-	9 907	-	20 146
Dressed	273	55	185	148	-	32	-	693
Coniferous								
Undressed	634	167	131	3	35	2	-	972
Dressed	163	37	375	-	-	28	-	603
<u>Apparent supply(c)</u>								
Broadleaved	630 619	562 430	232 746	275 798	27 876	192 064	12 346	1 933 879
Coniferous	946 166	652 219	389 963	57 571	306 048	106 062	305	2 458 334
Total	1 576 785	1 214 649	622 709	333 369	333 924	298 126	12 651	4 392 213

(a) Includes the Australian Capital Territory. Production figures are shown separately in table 10. (b) Includes sawn equivalent of plywood and veneer. (c) In the calculation of apparent supply, by state, details of logs and boxboards imported and exported by states have been excluded. For details of logs see table 11 for imports and table 13 for exports.

Sources: Australian Bureau of Statistics; state and territory forest services; ABARE estimates.

IV Railway sleepers

17 Apparent production of railway sleepers

Year	Purchases	Imports	Exports	Apparent production
	m ³	m ³	m ³	'000 m ³
1982-83	196 462	-	11 120	185 342
1983-84	174 388	-	10 895	163 493
1984-85	175 391	278	6 971	168 698
1985-86	216 642	3	2 540	214 105
1986-87	194 738	6271	7	201 002
1987-88	150 020	-	1 276	148 744

Sources: Australian National Railways; State railway authorities; Forests Department of Western Australia; Emu Bay Railway; BHP; Australian Iron and Steel; Queensland Sugar Growers Association.

18 Purchases of railway sleepers: by state

Year	NSW	Vic.	Qld	WA	SA	Tas.	Total
	m ³						
1982-83	31 859	36 572	84 287	26 575	9 112	8 057	196 462
1983-84	34 118	33 956	75 270	20 369	6 387	4 288	174 388
1984-85	50 583	34 454	54 421	26 740	7 030	2 163	175 391
1985-86	60 413	41 747	76 648	25 516	10 627	1 691	216 642
1986-87	55 502	39 451	64 302	24 574	10 747	162	194 738
1987-88	43 356	33 579	41 254	23 491	8 340	-	150 020

Sources: Australian National Railways; State Railway Authorities; Forests Department of Western Australia; Emu Bay Railway; BHP; Australian Iron and Steel; Queensland Sugar Growers Association.

19 Australian exports of railway sleepers: by state of shipment and destination

Year	State of shipment						Destination					
	NSW			WA			Europe			Pacific area		
	m ³	m ³	m ³	m ³	m ³	m ³	m ³	m ³	m ³	m ³	m ³	m ³
1982-83	-	-	-	11 112	8	-	11 120	11 024	-	88	8	-
1983-84	-	-	-	10 895	-	-	10 895	8 825	-	1 810	-	260
1984-85	1	54	-	6 916	-	-	6 971	6 902	-	1	54	14
1985-86	-	-	-	2 540	-	-	2 540	2 533	-	-	7	-
1986-87	-	-	-	7	-	-	7	7	-	-	-	-
1987-88	na	na	na	na	na	na	1 276	1 171	-	-	105	-

Source: Australian Bureau of Statistics.

20 Interstate movement of railway sleepers: by destination: by state of origin

Destination	Origin	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
		m ³					
Victoria	New South Wales	22 087	22 322	24 201	28 657	27 896	23 956
	Western Australia	-	-	-	32	-	-
South Australia	New South Wales	6 458	4 143	4 159	7 589	7 593	4 065
	Victoria	2 081	1 036	2 393	2 367	2 554	2 208
	Western Australia	105	123	311	533	410	1 811
Total		30 731	27 624	31 064	39 178	38 453	32 040

Source: State railway authorities.

V Wood and wood-based panels

(A) Plywood and veneer

21 Production, trade and supply of plywood

Item	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
	m ³					
Production	71 493	82 448	89 112	95 895	97 237	111 157
Imports	55 757	70 315	72 719	81 662	68 555	70 768
Exports	95	101	87	93	179	788
Total apparent supply	127 155	152 662	161 744	177 464	165 613	181 137
Apparent supply per 1000 persons	8.32	9.87	10.35	11.16	10.26	11.05

Sources: Plywood Association of Australia; Australian Bureau of Statistics and various individual plywood companies.

22 Apparent consumption of plywood: by state(a)

Year	NSW(b)	Vic.	Qld	SA	WA	Tas.	NT	Total
	m ³							
TOTAL APPARENT CONSUMPTION								
1982-83	46 059	33 841	25 850	8 224	8 075	1 386	1 474	124 909
1983-84	53 226	44 216	31 172	10 195	10 265	1 425	1 560	152 059
1984-85	52 228	50 345	33 612	10 541	10 184	1 737	3 149	161 796
1985-86	61 923	50 955	37 029	9 696	13 450	2 006	2 472	177 531
1986-87	61 541	52 018	34 931	9 544	12 428	1 297	2 569	174 328
1987-88	61 516	50 549	39 768	10 406	13 005	1 758	3 553	180 555
APPARENT CONSUMPTION PER 1000 PERSONS								
1982-83	8.27	8.43	10.56	6.16	5.98	3.29	11.22	8.18
1983-84	9.47	10.91	12.53	7.57	7.47	3.28	11.40	9.83
1984-85	9.19	12.29	13.31	7.76	7.30	3.95	22.30	10.35
1985-86	10.70	12.30	14.26	7.04	9.36	4.51	16.23	11.17
1986-87	10.55	12.43	13.18	6.88	8.40	2.90	16.48	10.80
1987-88	10.37	11.94	14.69	7.43	8.55	3.92	22.65	11.01

(a) Figures, by state, show the volumes of plywood sold in each state as provided by Australian manufacturers plus the volume imported from overseas into each state. The Australia totals thus differ slightly from those in table 21 which show production rather than sales and includes the volume of stock held by manufacturers. (b) Includes Australian Capital Territory.

23 Production of plywood: by type

Year	Interior	Sliced and random grooved	Marine	Overlaid	Tongue and groove flooring	Structural	Exterior and other commercial	Total
		m ³			m ³		m ³	
1982-83	10 724	715	2 860	21 448	7 149	22 163	6 434	71 493
1983-84	13 109	742	2 144	18 798	8 904	31 001	7 750	82 448
1984-85	8 287	1 515	2 584	24 595	9 624	35 111	7 396	89 112
1985-86	8 723	1 437	2 637	27 001	9 659	34 949	11 489	95 895
1986-87	7 908	917	2 208	30 169	7 829	39 534	8 672	97 237
1987-88	8 326	928	2 382	37 242	9 028	44 249	9 002	111 157

Sources: Plywood Association of Australia; Australian Bureau of Statistics; various individual plywood companies; ABARE estimates.

24 Australian imports of plywood, veneer and blockboard: by source

Country of origin	1986-87			1987-88		
	Plywood m ³	Veneer m ³	Blockboard m ³	Plywood m ³	Veneer m ³	Blockboard m ³
<u>Europe</u>						
Belgium and Luxembourg	-	93	-	-	83	na
Denmark	-	26	71	29	-	na
France	-	15	-	3	-	na
Finland	73	285	-	169	-	na
Germany, F.R.	-	-	235	-	1 351	na
Italy	1	-	212	10	1 219	na
Netherlands	-	62	-	-	-	na
United Kingdom	98	109	7	21	136	na
Total	172	590	525	232	2 789	na
<u>America</u>						
Brazil	-	20	12	551	-	na
Canada	594	163	-	26	-	na
United States	31	1 348	46	27	1 287	na
Total	625	1 531	58	604	1 287	na
<u>Africa</u>						
South Africa	-	8	-	-	-	na
Ivory Coast	-	123	-	-	-	na
Zaire	-	102	-	-	-	na
Total	-	233	-	-	-	na
<u>Asia</u>						
Indonesia	9 060	1 502	858	11 841	1 984	na
Japan	5	6	-	23	-	na
Korea, Rep. of	-	-	-	82	-	na
Malaysia	4 621	1 402	486	4 512	1 518	na
Philippines	1 762	4 453	2	2 317	6 099	na
Singapore	15 204	3 817	707	16 059	3 632	na
Taiwan	19 139	-	5	16 275	-	na
Thailand	2	566	-	-	362	na
Total	49 793	11 746	2 058	51 109	13 595	na
<u>Pacific Area</u>						
Fiji	1 908	236	-	2 206	489	na
New Zealand	15 518	859	1 263	15 073	3 555	na
Papua New Guinea	4	-	-	-	-	na
Total	17 430	1 095	1 263	17 279	4 044	na
Other countries	535	1 897	284	1 544	4 054(a)	na
Total	68 555	17 092	4 188	70 768	28 710	na

(a) Now includes all peeled veneer below 1mm thickness, for which no country details are available.

Source: Australian Bureau of Statistics.

25 Australian exports of plywood and veneer: by destination

Country of destination	1986-87		1987-88	
	Plywood m ³	Veneer m ³	Plywood m ³	Veneer m ³
Cocos Islands	1	-	-	-
Germany, F.R.	-	35	-	20
Hong Kong	11	-	-	-
Indonesia	-	-	-	-
Kiribati	-	7	-	-
New Zealand	134	131	505	152
Papua New Guinea	4	3	60	7
Singapore	1	453	14	20
United States	12	94	-	134
Other countries	16	-	209	192
Total	179	723	788	525

Source: Australian Bureau of Statistics.

(B) Particleboard

26 Production, trade and supply of particleboard

Item	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
	m ³					
Production	536 280	631 589	669 876	684 935	667 889	715 503
Imports	1 380	2 744	5 890	7 706	2 017	3 118
Exports	14 999	7 193	6 591	7 630	1 097	-
Total apparent supply	522 661	627 140	669 175	685 011	668 809	718 621
Apparent supply per 1000 persons	34.21	40.60	42.80	43.31	41.44	43.82

Sources: Australian Bureau of Statistics; particleboard manufacturers.

27 Apparent consumption of particleboard: by state(a)

Year	NSW(b)	Vic.	Qld	WA	SA	Tas.	NT	Total
	m ³							
TOTAL APPARENT CONSUMPTION								
1982-83	203 951	143 053	82 263	40 426	56 535	8 494	278	535 000
1983-84	235 797	160 792	90 492	47 085	64 640	11 904	395	611 105
1984-85	233 422	192 746	92 567	54 955	75 527	11 667	92	660 976
1985-86	244 642	211 208	95 687	59 860	66 265	10 161	61	687 884
1986-87	224 526	205 310	93 234	59 964	58 024	11 196	11	652 265
1987-88	225 557	228 264	115 334	63 882	64 367	11 188	-	738 592
APPARENT CONSUMPTION PER 1000 PERSONS								
1982-83	36.64	35.64	33.60	29.92	42.37	20.19	2.12	35.02
1983-84	41.97	39.66	36.37	34.28	47.98	27.39	2.89	39.55
1984-85	41.03	47.02	36.64	39.42	55.60	26.54	0.65	42.24
1985-86	42.53	51.01	36.84	41.66	48.13	22.85	0.40	43.26
1986-87	38.48	49.08	35.19	40.53	41.80	25.02	0.07	40.42
1987-88	43.08	53.91	42.61	42.02	45.93	24.98	-	45.04

(a) Figures by state show the volume of particleboard sold in each state as provided by the Australian manufacturers, plus the volume imported from overseas into each state. The difference between sales and the production volume shown in table 26 is due mainly to the volume of stocks held by manufacturers. (b) Includes the Australian Capital Territory.

(C) Fibreboard

28 Production, trade and apparent consumption of hardboard

Item	1982-83	1983-84	1984-85(r)	1985-86	1986-87	1987-88
	m ³					
Production	86 060	90 324	104 153	111 345	115 874	113 469
Imports	1 393	2 203	3 033	4 285	2 530	4 561
Exports	3 172	4 943	4 913	6 512	10 104	12 131
Apparent consumption	84 281	87 584	102 273	109 118	108 300	105 899
Apparent consumption per 1000 persons	5.55	5.66	6.54	6.86	6.71	6.46

Sources: Australian Bureau of Statistics; Hardboards (Aust.) Limited.

29 Production, trade and apparent consumption of softboard

Item	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
	m ³					
Production	12 006	12 109	12 528	13 056	12 145	10 814
Imports	812	531	317	532	336	2 758
Exports	148	470	1 064	635	1 190	169
Apparent consumption	12 670	12 170	11 781	12 953	11 291	13 403
Apparent consumption per 1000 persons	0.84	0.79	0.75	0.81	0.70	0.82

Sources: Australian Bureau of Statistics; Hardboards (Aust.) Limited.

VI Woodpulp and paper products

30 Apparent consumption of woodpulp, paper and paper products

Item	1982-83	1983-84	1984-85	1985-86	1986-87(r)	1987-88
	t	t	t	t	t	t
WOODPULP						
<u>Production</u>						
Mechanical	321 000	363 000	357 000	361 000	371 089	414 297
Chemical	430 000	471 000	530 000	517 000	534 629	580 192
Total	751 000	834 000	887 000	878 000	905 718	994 489
<u>Imports</u>						
Mechanical	2 838	5 313	2 938	2 694	3 705	8 976
Chemical	208 188	224 964	193 417	219 879	257 422	271 491
Total	211 026	230 277	196 355	222 573	261 127	280 467
<u>Exports</u>						
Total	6 877	5 461	11 154	20 118	48 449	56 532
<u>Apparent consumption</u>	955 149	1 058 816	1 072 201	1 080 455	1 118 678	1 218 424
PAPER AND PAPER PRODUCTS						
<u>Production</u>						
Newspaper	375 727	378 091	371 857	362 954	386 320	401 066
Printing and writing	178 748	222 014	228 054	255 034	262 258	266 800
Other paper	440 713	480 603	477 548	504 698	560 908)	
Paperboard	434 788	438 768	475 060	472 609	497 400)	1 124 300
Total	1 429 976	1 519 476	1 552 519	1 595 295	1 706 886	1 792 166
<u>Imports</u>						
Newspaper	134 571	193 522	301 988	256 598	232 051	264 274
Printing and writing	185 072	200 360	249 886	206 102	257 514	299 600
Other paper	170 079	204 466	209 619	195 878	192 958)	
Paperboard	31 563	52 029	52 769	50 927	53 405)	368 800
Total	521 285	650 377	814 262	709 505	735 928	932 674
<u>Exports</u>						
Newspaper	10 075	3 748	4 273	4 080	1 670	895
Printing and writing	11 928	15 260	13 555	20 977	14 166)	
Other paper	45 388	32 412	57 475	56 787	87 835)	81 400
Paperboard	5 307	5 540	6 792	4 995	10 640)	
Total	72 698	56 960	82 095	86 839	114 311	82 295
<u>Apparent consumption</u>						
Newspaper	500 223	567 865	669 572	615 472	616 701	664 445
Printing and writing	351 892	407 114	464 385	440 159	505 606)	
Other paper	565 404	652 657	629 692	643 789	666 031)	1 978 100
Paperboard	461 044	485 257	521 037	518 541	540 165)	
Total	1 878 563	2 112 893	2 284 686	2 217 961	2 328 503	2 642 545
<u>Apparent consumption per 1000 persons</u>						
Total	122.9	136.6	146.1	139.5	144.3	161.1

Sources: Australian Bureau of Statistics; pulp and paper manufacturers.

VII Value of foreign trade

32 Value of imports of forest products(a)

Item	1982-83	1982-84	1984-85	1985-86	1986-87	1987-88
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<u>Roundwood</u>						
Sawlogs and veneer logs	252	89	113	307	391	511(b)
Poles, piles, posts	67	115	155	160	146	(c)
<u>Sawnwood, sleepers, cork</u>						
Sawnwood	171 368	226 409	320 747	328 701	292 189	365 877
Sleepers	-	-	51	1	2 571	1
Cork	235	499	572	453	597	256
<u>Processed wood other than sawnwood</u>						
Plywood (including blockboard)	26 624	31 383	34 259	40 345	40 650	43 575
Veneer	10 656	13 620	14 683	18 298	15 278	20 948
Particleboard	265	451	1 230	1 804	667	1 231
Boxboard	25	9	75	-	-	-
Other wood manufactures(d)	37 280	57 049	76 577	86 120	93 563	101 064
Cork manufacturers	9 191	11 622	13 935	16 905	19 351	24 229
<u>Wood pulp and pulp products</u>						
Hardboard	360	629	964	1 722	957	2 369
Softboard (including medium density fibreboard)	842	1 185	1 259	8 028	9 339	13 147
Pulp and waste paper	80 774	97 585	100 215	102 609	170 928	225 746
Paper and paperboard	400 620	484 009	666 174	691 220	835 507	997 228
Paper manufactures(e)	72 256	92 556	99 973	128 032	151 786	172 938
<u>Minor forest products</u>	13 000	15 000	17 000	20 000	21 000	21 000
Total imports all forest products	823 815	1 032 210	1 347 982	1 444 705	1 654 920	1 990 120

(a) Values are value for duty / customs value. (b) Includes poles, piles, posts. (c) Included with sawlogs and veneer logs. (d) Includes bobbins, tool handles, wicker and bamboo, casks and vats, etc. but excludes furniture. (e) Includes such items as boxes, bags, letter trays, etc.

Sources: Australian Bureau of Statistics; ABARE estimates.

33 Value of exports of forest products(a)

Product	1982-83	1983-84	1984-85	1985-86	1986-87	1987-88
	\$'000	\$'000	\$'000	\$'000	\$'000	\$'000
<u>Roundwood</u>						
Logs	106	221	293	213	1 516	1 320
Poles, piles, posts	2 826	1 792	1 225	1 623	718	2 372
<u>Sawnwood and sleepers</u>						
Sawnwood	10 476	10 080	10 727	12 860	11 442	13 526
Sleepers	2 935	2 686	2 013	796	4	419
<u>Process wood</u>						
Plywood (including blockboard)	1 684	1 813	1 137	1 757	3 035	1 435
Veneer	392	295	249	335	1 049	1 048
Particleboard	1 991	1 213	1 175	1 458	219	1
Other wood manufactures(b)	1 609	1 806	2 185	2 389	3 282	3 471
Cork manufactures	977	1 046	779	1 028	562	391
<u>Woodpulp and pulp products</u>						
Hardboard	663	919	862	1 170	2 507	2 635
Softboard	14	50	113	114	138	57
Pulp and waste paper	3 150	4 110	10 380	14 306	17 712	31 469
Paper and paperboard	68 409	34 487	48 387	53 312	66 409	56 024
Paper manufactures(c)	9 914	12 893	13 591	15 324	17 223	19 284
<u>Minor forest products(d)</u>						
	3 200	1 599	2 174	2 400	2 600	2 750
<u>Woodchips</u>	152 463	191 152	215 572	238 679	300 488	345 264
Total	260 809	266 162	310 862	347 764	428 904	481 466

(a) Values are f.o.b. from Australian ports. (b) Includes manufactured articles of wood, but excludes furniture. (c) Includes such items as boxes, bags, letter trays. (d) Includes only minor forest products in the raw state.

Source: Australian Bureau of Statistics.

VIII Forest industry structure

34 Number of sawmills reporting an output(a)

Output	Intake from Crown land (b)		Intake from private property (b)		Total	
	1986-87	1987-88	1986-87	1987-88	1986-87	1987-88
Hardwood	524	n.a.	756	n.a.	1 280	1 213
Softwood	129	n.a.	51	n.a.	180	162
Total	753	n.a.	807	n.a.	1 460	1 375

(a) Does not include veneer. (b) Sawmills that draw their log intake from both Crown lands and private property are recorded in the Crown land total.

Source: Australian Bureau of Statistics; state and territory forest services.

35 Number of sawmills: by log intake

Log intake	Hardwood		Softwood	
	1986-87	1987-88	1986-87	1987-88
Less than 3 000 m ³ a year	972	927	80	62
3 000 to less than 15 000 m ³ a year	263	225	61	60
15 000 to less than 45 000 m ³ a year	39	53	22	21
45 000 to less than 75 000 m ³ a year	4	6	6	7
75 000 to less than 100 000 m ³ a year	2	2	3	2
Over 100 000 m ³ a year	0	0	8	10

Source: Australian Bureau of Statistics; state and territory forest services.

36 Value of turnover in chief wood-using industries(a)

Product	1982-83	1983-84	1984-85	1985-86(b)	1986-87	1987-88
	\$m	\$m	\$m	\$m	\$m	\$m
<u>Wood and wood products</u>						
Log sawmilling	533	620	673	na	738	837
Resawn and dressed timber	495	555	620	na	584	595
Plywood and manufactured boards	390	442	542	na	605	765
Wooden doors	81	96	127	na	134	178
Joinery and wooden structural fittings n.e.c.	792	831	945	na	1 190	1 467
Wooden containers	84	85	102	na	83	95
Woodchips	153	188	204	na	298	330
Wood and wood products n.e.c.	139	138	145	na	167	211
Total	2 667	2 955	3 357	na	3 799	4 478
<u>Paper and paper products</u>						
Pulp, paper and paperboard	934	1 009	1 103	na	1 622	1 772
Paper bags including textile bags	150	122	150	na	128	168
Solid fibreboard containers	285	309	395	na	376	435
Corrugated fibreboard containers	604	630	673	na	851	983
Paper products n.e.c.	368	389	399	na	578	634
Total	2 341	2 459	2 720	na	3 555	3 992
Total value of turnover all industries	5 008	5 414	6 077	na	7 354	8 470

(a) Turnover is defined as follows: sales of goods whether produced by the establishment or not, plus transfers out of goods to other establishments of the same enterprise, plus bounties and subsidies on production, plus all other operating revenue from outside the enterprise (such as commission, repair and service revenue), plus capital work done for own use, or for rental or lease. Receipts from rent, leasing, interest (other than hire purchase), royalties and the sale of fixed tangible assets are excluded. (b) The ABS did not conduct a census of manufacturing in respect of 1985-86.

Source: Australian Bureau of Statistics.

37 Employment in forest product industries

Item	1982-83	1983-84	1984-85	1985-86(b)	1986-87	1987-88
<u>Wood and wood products</u>						
Log sawmilling	11 780	10 700	11 100	na	11 200	11 801
Resawn and dressed timber	7 559	7 300	7 300	na	6 100	5 772
Plywood and manufactured boards	4 715	4 600	5 300	na	5 200	5 330
Wooden doors	1 191	1 100	1 500	na	1 500	1 635
Joinery and wooden structural fittings	16 931	14 200	15 000	na	17 100	19 836
Wooden containers	1 490	1 200	1 400	na	1 200	1 375
Hardwood Wood chips	700	700	700	na	800	814
Wood, cork, etc. products n.e.c.	3 878	2 800	2 700	na	2 800	4 034
Total	48 251(a)	46 388(a)	48 320(a)	na	45 900	50 597
<u>Paper and paper products</u>						
Pulp, paper and paperboard	8 302	7 900	8 300	na	7 500	7 937
Paper bags including textile bags	1 717	1 400	1 500	na	1 100	1 214
Solid fibreboard containers	3 068	3 100	3 600	na	3 000	3 200
Corrugated fibreboard containers	5 947	5 700	5 500	na	5 500	5 874
Paper products n.e.c.	4 311	4 100	4 200	na	4 200	4 274
Total	23 345(a)	22 269(a)	23 172(a)	na	21 300	22 499
Total forest product industries	78 967(a)	71 596(a)	68 657(a)	na	67 200	73 096

(a) Total includes persons working in establishments employing less than four persons, but figures above exclude them. (b) The ABS did not conduct a census of manufacturing in respect of 1985-86.

Sources: Australian Bureau of Statistics.

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