

USE OF INFORMATION TECHNOLOGY ON FARMS

AUSTRALIA

EMBARGO: 11.30AM (CANBERRA TIME) MON 6 SEP 2004

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- For further information about these and related statistics, contact the National Information and Referral Service on 1300 135 070 or Phil Nolen on Canberra (02) 6252 5096.

NOTES

ABOUT THIS PUBLICATION	This publication presents statistics on the use of computers and the Internet on farms in Australia. The data were obtained from questions included in the 2002–03 Agricultural Survey conducted by the Australian Bureau of Statistics (ABS). Information obtained was in respect of the year ended 30 June 2003. Some comparisons with data collected in the 2001–2002 Agricultural Survey have been included.
ABOUT THE SURVEY	The statistics in this publication relate to farms in scope of the 2002–03 Agricultural Survey, that is, farms with an estimated value of agricultural operations (EVAO) of \$5,000 or more. The 2002–03 survey consisted of a sample of approximately 28,000 farms (21% of all farms) operating in Australia at the end of June 2003.
OTHER ABS INFORMATION TECHNOLOGY STATISTICS	Details of other ABS activities in the field of information technology statistics are available from the Information Technology Statistics theme page on the ABS web site < http://www.abs.gov.au >. To access the theme page, select <i>Themes</i> from the menu on the home page. Details of other ABS publications relating to the production and use of information technologies in Australia can be found in paragraph 12 of the Explanatory Notes.
COMMENTS ON THIS PUBLICATION	The ABS welcomes comments and suggestions on data items for inclusion in future surveys. Please contact Phil Nolen, Innovation and Technology National Statistics Centre, Australian Bureau of Statistics, PO Box 10, Belconnen ACT 2616, or phone Canberra (02) 6252 5096.

Dennis Trewin
Australian Statistician

CHAPTER 1

MAIN FINDINGS

AUSTRALIA

For the year ended 30 June 2003, 54% (or 71,936) of the 132,983 Australian farms with an estimated value of agricultural operations (EVAO) of \$5,000 or more used a computer as part of their business operations. This was an increase of 1 percentage point since the year ended 30 June 2002. During the period 2002–03 an estimated 46% (or 60,459) of farms in Australia used the Internet as part of their business operations, an increase of 3 percentage points since the period 2001–02.

REGIONAL DATA

Western Australia reported the highest proportion of farms using a computer for business operations (67%) and the highest proportion using the Internet for business operations (59%). Victoria reported both the lowest proportion of farms using a computer (49%) and the lowest proportion of farms using the Internet (40%).

Across non-capital city Statistical Divisions throughout Australia the proportion of farms using a computer ranged from 37% to 80%. The proportions of farms using the Internet ranged from 30% to 73%.

FARM INDUSTRY

The Horticulture and Fruit Growing, Dairy Cattle Farming and Other Crop Growing industries reported the highest proportion of farms using a computer (59%) and the Grain, Sheep and Beef Cattle Farming industry the lowest proportion (52%). The highest proportion of Internet use was reported in the Horticulture and Fruit Growing, Poultry Farming and Other Crop Growing industries (51%), with the lowest use in the Grain, Sheep and Beef Cattle Farming and Dairy Cattle Farming industries (both 44%).

FARM SIZE

There was a strong relationship between farm size, as measured by the estimated value of agricultural operations (EVAO), and the use of a computer and the Internet. As farm size increased so did the proportion of farms using a computer and the Internet.

CHAPTER 2

FARM USE OF COMPUTERS AND THE INTERNET, SUMMARY

USE OF COMPUTERS AND THE INTERNET

During the year to 30 June 2003, 54% of farms used a computer and 46% used the Internet as part of their business operations. Western Australia reported the highest proportion of farms using computers (67%) and the Internet (59%) while Victoria reported the lowest proportion of farms using computers (49%) and the Internet (40%).

Of those farms that used computers as part of their business operations, more than four in five also used the Internet.

Comparing data collected in the year to 30 June 2003 to data collected during the year to 30 June 2002 shows the largest increases in computer usage being experienced by the Australian Capital Territory (6 percentage points), Western Australia (4 percentage points) and Northern Territory (4 percentage points).

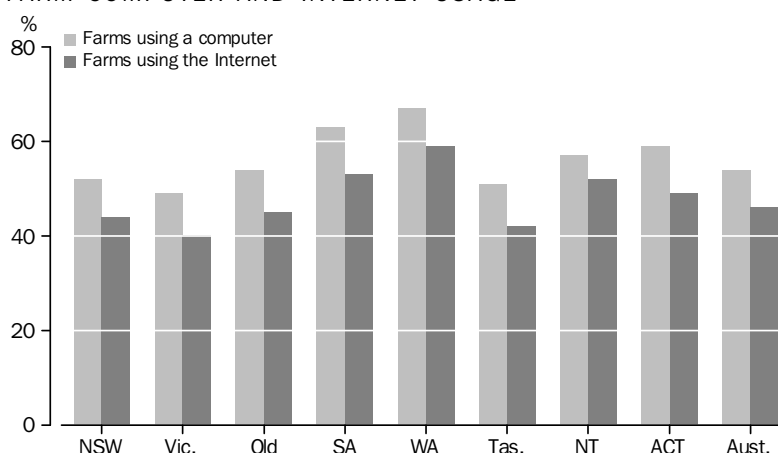
For the same periods, the largest increases in Internet usage were Northern Territory (7 percentage points), Western Australia (5 percentage points) and Queensland (4 percentage points).

COMPUTER AND INTERNET ACTIVITIES UNDERTAKEN AS PART OF BUSINESS OPERATIONS

Email was the most common Internet activity undertaken by farms, (39% of all farms), with obtaining weather information the next most common Internet activity (35%). It is estimated that 11% of Australian farms purchased or ordered goods or services via the Internet.

The most common activity for farms using a computer was managing farm finances (44%) with 31% of farms having used a computer for keeping farm records.

FARM COMPUTER AND INTERNET USAGE



2.1**FARM USE OF COMPUTERS(a), by state/territory**

	2001–2002			2002–2003		
	<i>All farms</i>	<i>Farms using a computer for business operations(b)</i>		<i>All farms</i>	<i>Farms using a computer for business operations(b)</i>	
	<i>no.</i>	<i>no.</i>	<i>%</i>	<i>no.</i>	<i>no.</i>	<i>%</i>
New South Wales	41 651	21 452	52	41 093	21 207	52
Victoria	33 581	16 471	49	33 212	16 375	49
Queensland	28 104	14 332	51	27 688	14 853	54
South Australia	14 824	8 870	60	14 262	8 930	63
Western Australia	12 688	8 048	63	12 270	8 271	67
Tasmania	4 027	2 023	50	3 969	2 020	51
Northern Territory	406	215	53	397	226	57
Australian Capital Territory	96	51	53	91	54	59
Australia	135 377	71 461	53	132 983	71 936	54

(a) Percentages are of all farms.

(b) Computer and Internet usage are derived items. See paragraphs 4 and 5 of Explanatory Notes for derivation methodology.

2.2**FARM USE OF THE INTERNET (a), by state/territory**

	2001–2002			2002–2003		
	<i>All farms</i>	<i>Farms using the Internet for business operations(b)</i>		<i>All farms</i>	<i>Farms using the Internet for business operations(b)</i>	
	<i>no.</i>	<i>no.</i>	<i>%</i>	<i>no.</i>	<i>no.</i>	<i>%</i>
New South Wales	41 651	17 800	43	41 093	17 950	44
Victoria	33 581	12 977	39	33 212	13 162	40
Queensland	28 104	11 589	41	27 688	12 545	45
South Australia	14 824	7 525	51	14 262	7 612	53
Western Australia	12 688	6 883	54	12 270	7 260	59
Tasmania	4 027	1 592	40	3 969	1 679	42
Northern Territory	406	183	45	397	206	52
Australian Capital Territory	96	46	48	91	46	51
Australia	135 377	58 595	43	132 983	60 459	46

(a) Percentages are of all farms.

(b) Computer and Internet usage are derived items. See paragraphs 4 and 5 of Explanatory Notes for derivation methodology.

2.3**FARM USE OF COMPUTERS AND THE INTERNET (a), by state/territory, by type of activity—2002–03**

	<i>NSW</i>	<i>Vic.</i>	<i>Qld</i>	<i>SA</i>	<i>WA</i>	<i>Tas.</i>	<i>NT</i>	<i>ACT</i>	<i>Aust.</i>
	%	%	%	%	%	%	%	%	%
Internet only									
Obtained weather information	35	28	33	41	51	27	37	30	35
Obtained market information	25	16	24	30	39	17	27	23	24
Availability or cost of goods or services	26	22	27	31	33	24	29	26	26
Purchased or ordered goods or services	11	9	11	13	16	11	19	19	11
Accessed government websites	22	16	23	22	28	19	25	32	21
Paid bills via the Internet	20	19	19	24	33	19	25	29	21
Email	37	32	38	46	53	37	49	44	39
Computer only									
Managed farm finances	42	39	43	52	58	39	42	43	44
Farm record keeping	30	27	29	37	42	30	29	27	31
Other computer or Internet activities									
Other	5	4	6	6	6	4	12	8	5

(a) Percentages are of all farms.

CHAPTER **3**

**FARM USE OF COMPUTERS AND THE INTERNET,
BY REGION**

USE OF COMPUTERS

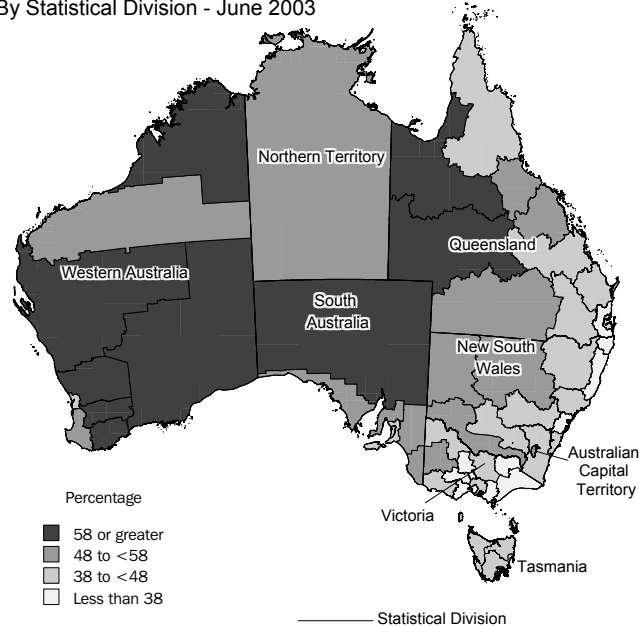
At the Statistical Division level (other than capital city Statistical Divisions), the proportion of farms using a computer during the financial year ended 30 June 2003 varied from 37% (Mid-North Coast in NSW) to 80% (North West in Queensland).

USE OF THE INTERNET

As for computer use, there was considerable variation in the proportion of farms using the Internet at the Statistical Division level. This varied from 30% (Ovens-Murray in Victoria) to 73% (North West in Queensland). Within each state, the proportions ranged from:

- Murray (53%) to Mid-North Coast (32%) in New South Wales
- Wimmera (49%) to Ovens-Murray (30%) in Victoria
- North West (73%) to Moreton (37%) in Queensland
- Yorke and Lower North (65%) to Outer Adelaide (47%) in South Australia
- Kimberely (72%) to South West (48%) in Western Australia
- Southern (47%), to Northern (39%) in Tasmania.

PROPORTION OF FARMS USING THE INTERNET,
By Statistical Division - June 2003



REFERENCE MAP

For identification of individual Statistical Divisions, please see the Reference Map on page 22 of this publication.

3.1**FARM USE OF COMPUTERS AND THE INTERNET, by Statistical Division—2002–03**

	All farms no.	Farms using a computer for business operations(a) no.	%	Farms using the Internet for business operations(a) no.	%
New South Wales					
Sydney	1 786	838	47	654	37
Hunter	3 011	1 379	46	1 158	39
Illawarra	953	491	52	416	44
Richmond-Tweed	2 997	1 270	42	1 009	34
Mid-North Coast	2 920	1 088	37	943	32
Northern	6 264	3 436	55	2 960	47
North Western	4 337	2 567	59	2 120	49
Central West	5 468	3 002	55	2 549	47
South Eastern	4 373	2 180	50	1 747	40
Murrumbidgee	4 665	2 429	52	2 130	46
Murray	4 016	2 357	59	2 107	53
Far West	305	171	56	158	52
<i>Total</i>	<i>41 093</i>	<i>21 207</i>	<i>52</i>	<i>17 950</i>	<i>44</i>
Victoria					
Melbourne	2 594	1 384	53	1 165	45
Barwon	1 785	817	46	591	33
Western District	4 305	2 137	50	1 624	38
Central Highlands	1 971	820	42	686	35
Wimmera	2 806	1 549	55	1 384	49
Mallee	4 097	2 027	50	1 846	45
Loddon	2 035	849	42	690	34
Goulburn	5 781	3 222	56	2 572	45
Ovens-Murray	2 132	973	46	638	30
East Gippsland	2 364	1 014	43	803	34
Gippsland	3 343	1 584	47	1 165	35
<i>Total</i>	<i>33 212</i>	<i>16 375</i>	<i>49</i>	<i>13 162</i>	<i>40</i>
Queensland					
Brisbane	908	447	49	365	40
Moreton	3 400	1 487	44	1 254	37
Wide Bay-Burnett	5 115	2 912	57	2 239	44
Darling Downs	6 007	3 042	51	2 640	44
South West	1 615	1 011	63	887	55
Fitzroy	2 760	1 247	45	1 048	38
Central West	661	422	64	413	63
Mackay	2 058	1 296	63	1 114	54
Northern	1 816	1 078	59	975	54
Far North	2 907	1 557	54	1 285	44
North West	443	356	80	325	73
<i>Total</i>	<i>27 688</i>	<i>14 853</i>	<i>54</i>	<i>12 545</i>	<i>45</i>
South Australia					
Adelaide	911	479	53	374	41
Outer Adelaide	2 738	1 565	57	1 286	47
Yorke and Lower					
North	2 049	1 548	76	1 321	65
Murray Lands	3 344	2 083	62	1 855	56
South East	2 534	1 522	60	1 299	51
Eyre	1 490	964	65	780	52
Northern	1 196	770	64	698	58
<i>Total</i>	<i>14 262</i>	<i>8 930</i>	<i>63</i>	<i>7 612</i>	<i>53</i>

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Computer and Internet usage are derived items. See paragraphs 4 and 5 of Explanatory Notes for derivation methodology.

3.1**FARM USE OF COMPUTERS AND THE INTERNET, by Statistical Division—2002–03***continued*

	All farms	Farms using a computer for business operations(a)		Farms using the Internet for business operations(a)	
	no.	no.	%	no.	%
Western Australia					
Perth	1 113	622	56	519	47
South West	2 548	1 520	60	1 212	48
Lower Great					
Southern	2 027	1 334	66	1 197	59
Upper Great					
Southern	1 650	1 173	71	1 029	62
Midlands	2 906	2 149	74	1 953	67
South Eastern	618	458	74	419	68
Central	1 205	874	73	797	66
Pilbara	58	^ 34	^ 59	^ 30	^ 51
Kimberley	145	^ 109	^ 75	^ 104	^ 72
<i>Total</i>	12 270	8 271	67	7 260	59
Tasmania					
Greater Hobart	^ 237	^ 107	^ 45	^ 97	^ 41
Southern	807	420	52	382	47
Northern	1 426	723	51	558	39
Mersey-Lyell	1 499	770	51	642	43
<i>Total</i>	3 969	2 020	51	1 679	42
Northern Territory					
<i>Total</i>	397	226	57	206	52
Australian Capital Territory					
<i>Total</i>	91	54	59	46	51
Australia	132 983	71 936	54	60 459	46

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Computer and Internet usage are derived items. See paragraphs 4 and 5 of Explanatory Notes for derivation methodology.

CHAPTER 4

FARM USE OF COMPUTERS AND THE INTERNET, BY INDUSTRY

INDUSTRY COMPARISONS

The proportions of farms using computers and the Internet varied across industries and within broad industry groups across states. The Northern Territory and the Australian Capital Territory were excluded from these comparisons due to the small number of farms in these territories in some of the broad industry groups.

COMPUTER USE

For the financial year ending 30 June 2003, the Horticulture and Fruit Growing, Dairy Cattle Farming and Other Crop Growing industries reported the highest proportion of farms using a computer (59%), and the Grain, Sheep and Beef Cattle Farming industry reported the lowest proportion of farms using a computer (52%). At a finer industry level, Cotton Growing had the highest use of computers (91%) and Beef Cattle Farming the lowest (41%).

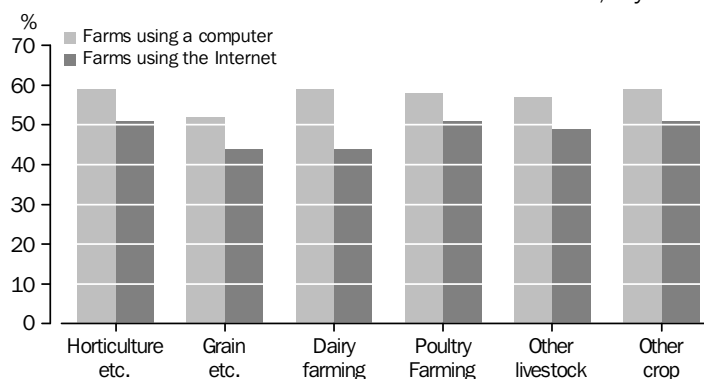
The greatest variation in the proportions of farms using a computer across the states was in Other Livestock Farming, with a difference of 34 percentage points between Western Australia (71%) and Tasmania (37%). The smallest variation was in Horticulture and Fruit Growing, for which the range was 12 percentage points between Western Australia (65%) and New South Wales (53%).

INTERNET USE

Use of the Internet for the year to 30 June 2003 was highest in the Horticultural and Fruit Growing, Poultry Farming and Other Crop Growing industries (51%) and lowest in the Grain, Sheep and Beef Cattle Farming and Dairy Cattle Farming industries (both 44%). As with computer use, at a finer industry level Cotton Growing had the highest use of the Internet (89%) and Beef Cattle Farming the lowest (33%).

Within broad industry groups, the greatest variation in the proportions of farms using the Internet across states was in Poultry Farming, with a difference of 34 percentage points between Tasmania (78%) and New South Wales (44%). The smallest variation was in Horticulture and Fruit Growing, for which the range was 10 percentage points between Tasmania (57%) and New South Wales (47%).

FARMS USING A COMPUTER OR THE INTERNET, by industry



4.1**FARM USE OF COMPUTERS AND THE INTERNET, by industry—2002–03**

	All farms.....	Farms using a computer for business operations(a).....		Farms using the Internet for business operations(a).....	
	no.	no.	%	no.	%
Horticulture and fruit growing					
Plant Nurseries	1 974	1 406	71	1 223	62
Cut Flower and Flower Seed Growing	833	529	64	466	56
Vegetable Growing	4 391	2 293	52	1 835	42
Grape Growing	6 377	4 013	63	3 533	55
Apple and Pear Growing	891	^ 600	^ 67	^ 527	^ 59
Stone Fruit Growing	1 309	660	50	518	40
Kiwi Fruit Growing	*48	*38	*81	*38	*81
Fruit Growing n.e.c.	5 390	3 016	56	2 648	49
Total	21 213	12 555	59	10 787	51
Grain, sheep and beef cattle farming					
Grain Growing	11 960	8 092	68	7 296	61
Grain-Sheep and Grain-Beef Cattle Farming	17 104	11 242	66	9 886	58
Sheep-Beef Cattle Farming	10 097	4 911	49	4 083	40
Sheep Farming	13 250	6 655	50	5 376	41
Beef Cattle Farming	36 208	14 846	41	11 920	33
Total	88 619	45 747	52	38 561	44
Dairy cattle farming					
Total	11 003	6 473	59	4 866	44
Poultry farming					
Poultry Farming (Meat)	735	481	66	419	57
Poultry Farming (Eggs)	^ 457	210	46	186	41
Total	1 192	691	58	605	51
Other livestock farming					
Pig Farming	1 009	624	62	531	53
Other	^ 1 636	^ 870	^ 53	^ 759	^ 46
Total	2 644	1 495	57	1 290	49
Other crop growing					
Sugar Cane Growing	4 762	2 755	58	2 297	48
Cotton Growing	520	475	91	465	89
Crop and Plant Growing n.e.c.	1 655	880	53	800	48
Total	6 937	4 111	59	3 562	51
Other(b)					
Total	1 374	^ 866	^ 63	^ 788	^ 57
Total	132 983	71 936	54	60 459	46

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Computer and Internet usage are derived items. See paragraphs 4 and 5 of Explanatory Notes for derivation methodology.

(b) Relates to establishments with an EVAO of \$5,000 or more but which are classified to a non-Agriculture ANZSIC class.

4.2**FARM USE OF COMPUTERS AND THE INTERNET, by broad industry, by state/territory—2002–03**

	All farms	Farms using a computer for business operations(a)		Farms using the Internet for business operations(a)	
	no.	no.	%	no.	%
Horticulture and fruit growing					
New South Wales	5 518	2 923	53	2 568	47
Victoria	4 593	2 754	60	2 347	51
Queensland	4 324	2 567	59	2 163	50
South Australia	3 706	2 349	63	2 000	54
Western Australia	2 002	1 293	65	1 111	56
Tasmania	907	584	64	521	57
Northern Territory	154	77	50	70	46
Australian Capital Territory	10	9	90	9	90
Total	21 213	12 555	59	10 787	51
Grain, sheep and beef cattle farming					
New South Wales	31 215	15 676	50	13 159	42
Victoria	20 388	8 884	44	7 191	35
Queensland	15 837	7 935	50	6 776	43
South Australia	9 382	5 865	63	4 954	53
Western Australia	9 329	6 322	68	5 592	60
Tasmania	2 188	897	41	738	34
Northern Territory	207	127	61	119	58
Australian Capital Territory	73	40	55	32	44
Total	88 619	45 747	52	38 561	44
Dairy cattle farming					
New South Wales	1 602	908	57	^ 705	^ 44
Victoria	6 615	3 853	58	2 841	43
Queensland	1 258	^ 694	^ 55	^ 498	^ 40
South Australia	591	^ 363	^ 61	^ 336	^ 57
Western Australia	360	^ 266	^ 74	^ 206	^ 57
Tasmania	np	np	np	np	np
Northern Territory	np	np	np	np	np
Australian Capital Territory	np	np	np	np	np
Total	11 003	6 473	59	4 866	44
Poultry farming					
New South Wales	453	234	52	200	44
Victoria	^ 288	^ 160	^ 56	^ 151	^ 53
Queensland	191	126	66	105	55
South Australia	95	66	70	58	61
Western Australia	126	75	60	63	50
Tasmania	^ 32	^ 26	^ 81	^ 25	^ 78
Northern Territory	np	np	np	np	np
Australian Capital Territory	np	np	np	np	np
Total	1 192	691	58	605	51

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Computer and Internet usage are derived items. See paragraphs 4 and 5 of Explanatory Notes for derivation methodology.

4.2**FARM USE OF COMPUTERS AND THE INTERNET, by broad industry, by****state/territory—2002–03 *continued***

	All farms	Farms using a computer for business operations(a)		Farms using the Internet for business operations(a)	
	no.	no.	%	no.	%
Other livestock farming					
New South Wales	^ 822	^ 477	^ 58	^ 424	^ 52
Victoria	^ 615	^ 301	^ 49	^ 241	^ 39
Queensland	^ 698	^ 401	^ 57	^ 348	^ 50
South Australia	^ 215	^ 129	^ 60	^ 116	^ 54
Western Australia	^ 227	^ 162	^ 71	^ 139	^ 61
Tasmania	^ 58	^ 22	^ 37	*18	*31
Northern Territory	np	np	np	np	np
Australian Capital Territory	np	np	np	np	np
<i>Total</i>	2 644	1 495	57	1 290	49
Other crop growing					
New South Wales	985	694	71	633	64
Victoria	^ 449	^ 238	^ 53	^ 224	^ 50
Queensland	5 195	3 003	58	2 537	49
South Australia	^ 120	*63	*52	*61	*50
Western Australia	*63	*41	*65	**np	**np
Tasmania	112	^ 65	^ 58	^ 63	^ 56
Northern Territory	12	7	58	5	42
Australian Capital Territory	—	—	—	—	—
<i>Total</i>	6 937	4 111	59	3 562	51

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

** estimate has a relative standard error greater than 50% and is considered too unreliable for general use

— nil or rounded to zero (including null cells)

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Computer and Internet usage are derived items. See paragraphs 4 and 5 of Explanatory Notes for derivation methodology.

CHAPTER 5

FARM USE OF COMPUTERS AND THE INTERNET, BY FARM SIZE

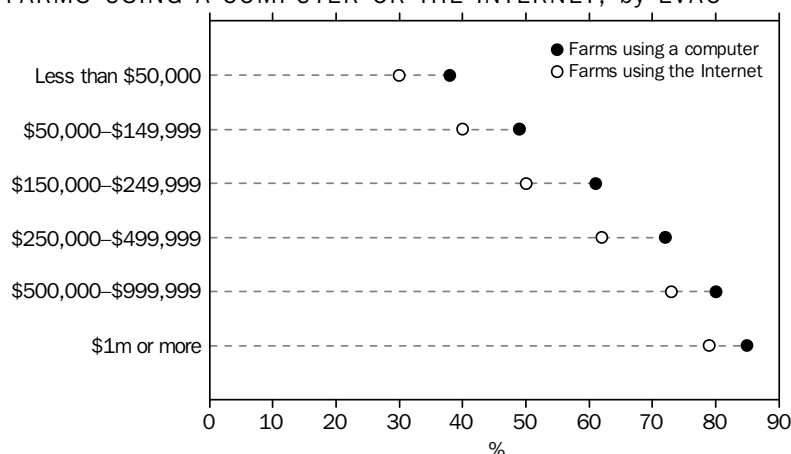
FARM SIZE AND USE OF INFORMATION TECHNOLOGY

For the year ended 30 June 2003, there was a strong relationship between the proportion of farms using computers and the Internet and the estimated value of agricultural operations (EVAO). As the graph below shows, the proportion of farms using computers and the Internet increased with farm size.

Within broad industries a similar size pattern was shown, however the increase across farm sizes differed for each industry. For example, across farm sizes Internet use ranged from 42% to 72% in the Other Livestock Farming industry compared with a range of between 30% and 80% in Dairy Cattle Farming.

A 50% Internet usage rate was achieved for the broad industry Poultry Farming in the EVAO range of \$50,000–\$149,999. The broad industries of Grain, Sheep and Beef Cattle Farming and Other Crop Growing required an EVAO range of \$150,000–\$249,999 to achieve this usage rate. Other broad industries were in higher EVAO ranges, Horticulture and Fruit Growing and Other Livestock Farming \$250,000–\$499,999 and Dairy Cattle Farming \$500,000–\$999,999 before achieving a 50% Internet usage rate.

FARMS USING A COMPUTER OR THE INTERNET, by EVAO



5.1**FARM USE OF COMPUTERS AND THE INTERNET, by broad industry, by****EVAO—2002–03**

	All farms	Farms using a computer for business operations(a).....		Farms using the Internet for business operations(a).....	
	no.	no.	%	no.	%
Horticulture and fruit growing					
Less than \$50,000	5 972	2 858	48	2 434	41
\$50,000–\$149,000	6 859	3 877	57	3 363	49
\$150,000–\$249,999	2 761	1 692	61	1 349	49
\$250,000–\$499,999	2 659	1 809	68	1 526	57
\$500,000–\$999,999	1 696	1 255	74	1 141	67
\$1m or more	1 266	1 064	84	974	77
<i>Total</i>	21 213	12 555	59	10 787	51
Grain, sheep and beef cattle farming					
Less than \$50,000	31 354	10 773	34	8 453	27
\$50,000–\$149,000	25 261	11 878	47	9 609	38
\$150,000–\$249,999	11 897	7 311	62	6 121	52
\$250,000–\$499,999	12 282	9 195	75	8 173	67
\$500,000–\$999,999	5 793	4 836	84	4 529	78
\$1m or more	2 033	1 754	86	1 676	83
<i>Total</i>	88 619	45 747	52	38 561	44
Dairy cattle farming					
Less than \$50,000	^ 648	*357	*55	*194	*30
\$50,000–\$149,000	2 294	^ 911	^ 40	^ 705	^ 31
\$150,000–\$249,999	2 885	^ 1 642	^ 57	^ 1 203	^ 42
\$250,000–\$499,999	3 655	2 426	66	^ 1 774	^ 49
\$500,000–\$999,999	1 186	^ 836	^ 71	^ 722	^ 61
\$1m or more	^ 336	^ 302	^ 90	^ 270	^ 80
<i>Total</i>	11 003	6 473	59	4 866	44
Poultry farming					
Less than \$50,000	*148	*28	*19	*26	*17
\$50,000–\$149,000	^ 129	^ 71	^ 55	^ 66	^ 51
\$150,000–\$249,999	^ 93	^ 56	^ 61	^ 48	^ 52
\$250,000–\$499,999	258	^ 147	^ 57	^ 131	^ 51
\$500,000–\$999,999	308	203	66	171	56
\$1m or more	256	186	73	163	64
<i>Total</i>	1 192	691	58	605	51
Other livestock farming					
Less than \$50,000	1 529	^ 785	^ 51	^ 693	^ 45
\$50,000–\$149,000	^ 364	^ 190	^ 52	^ 153	^ 42
\$150,000–\$249,999	^ 160	*77	*48	*70	*44
\$250,000–\$499,999	^ 249	^ 151	^ 61	^ 130	^ 52
\$500,000–\$999,999	^ 159	^ 134	^ 84	^ 112	^ 71
\$1m or more	183	157	86	132	72
<i>Total</i>	2 644	1 495	57	1 290	49

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

* estimate has a relative standard error of 25% to 50% and should be used with caution

(a) Computer and Internet usage are derived items. See paragraphs 4 and 5 of Explanatory Notes for derivation methodology.

5.1 FARM USE OF COMPUTERS AND THE INTERNET, by broad industry, by EVAO—2002–03 *continued*

	All farms	Farms using a computer for business operations(a)		Farms using the Internet for business operations(a)	
	no.	no.	%	no.	%
.....					
Other crop growing					
Less than \$50,000	^ 1 105	^ 505	^ 46	^ 415	^ 38
\$50,000–\$149,000	2 257	^ 1 158	^ 51	^ 923	^ 41
\$150,000–\$249,999	1 406	^ 876	^ 62	^ 737	^ 52
\$250,000–\$499,999	1 311	850	65	^ 792	^ 60
\$500,000–\$999,999	^ 481	^ 395	^ 82	^ 379	^ 79
\$1m or more	377	328	87	316	84
<i>Total</i>	6 937	4 111	59	3 562	51
Total Industry(b)					
Less than \$50,000	41 405	15 610	38	12 482	30
\$50,000–\$149,000	37 537	18 368	49	15 068	40
\$150,000–\$249,999	19 325	11 738	61	9 611	50
\$250,000–\$499,999	20 545	14 689	72	12 633	62
\$500,000–\$999,999	9 687	7 716	80	7 112	73
\$1m or more	4 484	3 816	85	3 553	79
Total	132 983	71 936	54	60 459	46

^ estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Computer and Internet usage are derived items. See paragraphs 4 and 5 of Explanatory Notes for derivation methodology.

(b) Other industries is included in Total industry, but excluded from the table.

5.2**FARM USE OF COMPUTERS AND THE INTERNET, by state/territory, by****EVAO—2002–03**

	All farms.....	Farms using a computer for business operations(a).....		Farms using the Internet for business operations(a).....	
	no.	no.	%	no.	%
New South Wales					
Less than \$50,000	15 036	5 706	38	4 494	30
\$50,000–\$149,000	12 270	6 200	51	5 255	43
\$150,000–\$249,999	5 963	3 571	60	2 980	50
\$250,000–\$499,999	5 050	3 535	70	3 190	63
\$500,000–\$999,999	1 898	1 482	78	1 346	71
\$1m or more	877	713	81	685	78
<i>Total</i>	41 093	21 207	52	17 950	44
Victoria					
Less than \$50,000	10 055	3 327	33	2 566	26
\$50,000–\$149,000	9 513	4 201	44	3 315	35
\$150,000–\$249,999	5 449	3 061	56	2 457	45
\$250,000–\$499,999	5 377	3 615	67	2 827	53
\$500,000–\$999,999	1 940	1 420	73	1 302	67
\$1m or more	880	751	85	696	79
<i>Total</i>	33 212	16 375	49	13 162	40
Queensland					
Less than \$50,000	8 966	3 444	38	2 897	32
\$50,000–\$149,000	8 449	4 099	49	3 322	39
\$150,000–\$249,999	3 384	2 177	64	1 744	52
\$250,000–\$499,999	3 838	2 707	71	2 356	61
\$500,000–\$999,999	1 825	1 394	76	1 288	71
\$1m or more	1 226	1 032	84	937	76
<i>Total</i>	27 688	14 853	54	12 545	45
South Australia					
Less than \$50,000	3 085	1 312	43	[^] 1 018	[^] 33
\$50,000–\$149,000	3 753	2 024	54	1 644	44
\$150,000–\$249,999	2 467	1 609	65	1 361	55
\$250,000–\$499,999	3 021	2 335	77	2 080	69
\$500,000–\$999,999	1 392	1 162	83	1 060	76
\$1m or more	545	488	90	449	83
<i>Total</i>	14 262	8 930	63	7 612	53
Western Australia					
Less than \$50,000	2 571	1 171	46	[^] 956	[^] 37
\$50,000–\$149,000	2 505	1 414	56	1 195	48
\$150,000–\$249,999	1 499	991	66	801	53
\$250,000–\$499,999	2 657	2 053	77	1 801	68
\$500,000–\$999,999	2 286	1 986	87	1 878	82
\$1m or more	752	657	87	630	84
<i>Total</i>	12 270	8 271	67	7 260	59
Tasmania					
Less than \$50,000	1 552	[^] 581	[^] 37	[^] 490	[^] 32
\$50,000–\$149,000	945	[^] 392	[^] 42	[^] 305	[^] 32
\$150,000–\$249,999	518	[^] 301	[^] 58	[^] 242	[^] 47
\$250,000–\$499,999	538	404	75	339	63
\$500,000–\$999,999	287	230	80	203	71
\$1m or more	129	113	87	[^] 99	[^] 77
<i>Total</i>	3 969	2 020	51	1 679	42

[^] estimate has a relative standard error of 10% to less than 25% and should be used with caution

(a) Computer and Internet usage are derived items. See paragraphs 4 and 5 of Explanatory Notes for derivation methodology.

5.2 FARM USE OF COMPUTERS AND THE INTERNET, by state/territory, by EVAO—2002–03 *continued*

	All farms	Farms using a computer for business operations(a).....		Farms using the Internet for business operations(a).....	
	no.	no.	%	no.	%
Northern Territory					
Less than \$50,000	90	41	46	37	41
\$50,000–\$149,000	79	28	35	24	30
\$150,000–\$249,999	np	np	np	np	np
\$250,000–\$499,999	np	np	np	np	np
\$500,000–\$999,999	np	np	np	np	np
\$1m or more	np	np	np	np	np
<i>Total</i>	397	226	57	206	52
Australian Capital Territory					
Less than \$50,000	51	28	55	24	47
\$50,000–\$149,000	23	11	48	8	35
\$150,000–\$249,999	np	np	np	np	np
\$250,000–\$499,999	np	np	np	np	np
\$500,000–\$999,999	np	np	np	np	np
\$1m or more	np	np	np	np	np
<i>Total</i>	91	54	59	46	51
Australia					
Less than \$50,000	41 405	15 610	38	12 482	30
\$50,000–\$149,000	37 537	18 368	49	15 068	40
\$150,000–\$249,999	19 325	11 738	61	9 611	50
\$250,000–\$499,999	20 545	14 689	72	12 633	62
\$500,000–\$999,999	9 687	7 716	80	7 112	73
\$1m or more	4 484	3 816	85	3 553	79
Total	132 983	71 936	54	60 459	46

np not available for publication but included in totals where applicable, unless otherwise indicated

(a) Computer and Internet usage are derived items. See paragraphs 4 and 5 of Explanatory Notes for derivation methodology.

EXPLANATORY NOTES

- INTRODUCTION**
- 1** This publication contains final estimates for the computer and Internet use indicators collected in the 2002–03 Agricultural Survey. Some comparable data from the 2001–2002 Agricultural Survey have also been included.
- SCOPE AND COVERAGE**
- 2** The estimates are based on information obtained from the Agricultural Survey in respect of the year ended 30 June 2003. The scope of the 2002–03 Agricultural Survey was farms with an estimated value of agricultural operations (EVAO) of \$5,000 or more. The 2001–02 Agricultural Survey had a total sample of approximately 35,000 farms. For the 2002–2003 Agriculture Survey, a sub-sample of 28,000 farms from the 2001–2002 selection was used.
- GEOGRAPHICAL, INDUSTRY AND SIZE CLASSIFICATIONS**
- 3** The data contained in tables in this publication have, where appropriate, been classified on a geographical, industry and farm size basis by classifying farms:
- to Statistical Divisions (SD) within States and Territories, as set out in the *Australian Standard Geographical Classification (ASGC)* (cat. no. 1216.0)
 - to industry according to the methodology described in *Australia and New Zealand Standard Industrial Classification (ANZSIC)* (cat. no. 1292.0)
 - to EVAO ranges according to the estimated value of agricultural operations (or activity) undertaken by a farm.
- DERIVATION OF COMPUTER AND INTERNET USE**
- 4** The 2002–03 Agricultural Survey collected information on whether the farm used either a computer or the Internet as part of its business operations during the year ended 30 June 2003, that is, computer and Internet use were not separately collected. A split between computer use and Internet use was derived by considering the computer and Internet activities undertaken as part of the farm's business operations.
- 5** All computer or Internet activities were considered to involve the use of a computer. A farm was considered to have used the Internet if they undertook any of the following computer or Internet activities: obtained weather information; obtained market information; searched for the availability or cost of goods or services; purchased or ordered goods or services; accessed government web sites; paid bills via the Internet; or used e-mail. A farm was not considered to have used the Internet if the only activities recorded were: managed farm finances, farm record keeping or 'other computer or Internet activities'. Managing farm finances and farm record keeping were considered to be overwhelmingly computer only activities. While it was not possible to split the 'other computer and Internet activities' category, it is highly unlikely that a farm recording other Internet activity under this category would not have also recorded another Internet-related activity. Therefore, very little undercounting of Internet use will have occurred by excluding this category.
- SAMPLE ERROR**
- 6** The estimates in this publication are based on information obtained from a sample drawn from the total farm population in scope of the collection, and are subject to sampling variability; that is, they may differ from the figures that would have been produced if all farms had been included in the Agricultural Survey. One measure of the likely difference is given by the standard error (SE), which indicates the extent to which an estimate might have varied by chance because only a sample was taken. There are about two chances in three that a sample estimate will differ by less than one SE from

SAMPLE ERROR *continued*

the figure that would have been obtained if all farms had responded, and about nineteen chances in twenty that the difference will be less than two SEs.

7 In this publication, 'sampling' variability of the estimates is measured by the relative standard error (RSE) which is obtained by expressing the SE as a percentage of the estimate to which it refers.

8 Most published estimates have RSEs less than 5%. Estimates that have an estimated relative standard error between 10% and 25% are annotated with the symbol '^'. These estimates should be used with caution as they are subject to sampling variability too high for some purposes. Estimates with an RSE between 25% and 50% are annotated with the symbol '*', indicating that the estimate should be used with caution as it is subject to sampling variability too high for most practical purposes. Estimates with an RSE greater than 50% are annotated with the symbol '**', indicating that the sampling variability causes the estimate to be considered too unreliable for general use and is not published.

SAMPLE ERROR *continued*

RELATIVE STANDARD ERRORS FOR SELECTED INDICATORS

	Farms Using a computer	Farms using the Internet
	%	%
State		
New South Wales	2	2
Victoria	3	3
Queensland	3	3
South Australia	2	3
Western Australia	2	2
Tasmania	4	4
Northern Territory	—	—
Australian Capital Territory	—	—
Australia	1	1
Industry		
Horticulture and Fruit		
Growing	2	2
Grain, Sheep and Beef		
Cattle Farming	1	2
Dairy Cattle Farming	5	6
Poultry Farming	4	5
Other Livestock Farming	7	8
Other Crop Growing	4	5
Farm size		
Less than \$50,000	4	4
\$50,000–\$149,999	3	3
\$150,000–\$249,999	3	3
\$250,000–\$499,999	2	3
\$500,000–\$999,000	2	3
\$1m or more	3	3

— nil or rounded to zero (including null cells)

9 Note that in tables with cross classifications, (e.g. State by Industry), the resultant RSEs may be considerably greater than the RSEs shown in this table.

10 Proportions formed from the ratio of two estimates are also subject to sampling error. The size of the error depends on the accuracy of both the numerator and the denominator. In this publication the RSEs for proportions could not be calculated separately and have been set to be the same as the numerator. This will generally result in a conservatively higher estimate of the RSE of the proportion.

ACKNOWLEDGMENT

11 ABS publications draw extensively on information provided freely by individuals, businesses, governments and other organisations. Their continued cooperation is very much appreciated; without it, the wide range of statistics published by the ABS would not be available. Information received by the ABS is treated in strict confidence as required by the *Census and Statistics Act 1905*.

RELATED PUBLICATIONS

12 The most recent issue of other ABS publications on the use and production of information technology and telecommunication goods and services in Australia are listed below:

Business Use of Information Technology, Australia, 2002–03 (cat. no. 8129.0)
Government Use of Information Technology, 2002–2003 (cat. no. 8119.0)
Household Use of Information Technology, Australia, 2001–02 (cat. no. 8146.0)
Information Technology, Australia, 2000–01 (cat. no. 8126.0)
Internet Activity, Australia, March 2004 (cat. no. 8153.0)
Use of Information Technology on Farms, June 2002 (cat. no. 8150.0)

ABS DATA AVAILABLE ON REQUEST

13 As well as statistics included in this and related publications, the ABS may have other relevant data available on request. Inquiries should be made to Phil Nolen, Canberra, (02) 6252 5096 or the National Information Referral Service on 1300 135 070.

ABBREVIATIONS AND SYMBOLS

14 The following abbreviations and symbols have been used in this publication:

ABS	Australian Bureau of Statistics
ANZSIC	Australian and New Zealand Standard Industrial Classification
EVAO	estimated value of agricultural operations
np	not available for publication but included in totals where applicable
RSE	relative standard error
SE	standard error

15 Where figures have been rounded, discrepancies may occur between sums of the component items and totals.

STATISTICAL DIVISIONS - July 2001



This map does not show Statistical Divisions of Other Territory

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