

Victorian Year-Book, 1930-31.

INTRODUCTION.

GEOGRAPHICAL POSITION, AREA, AND CLIMATE.

Area of
Victoria.

Victoria is situated at the south-eastern extremity of the Australian continent, of which it occupies about a thirty-fourth part, and it contains about 87,884 square miles, or 56,245,760 acres. It is bounded on the north and north-east by New South Wales, from which it is separated by the River Murray, and by a straight line running in a south-easterly direction from a place near the head-waters of that stream, called The Springs, on Forest Hill, to Cape Howe. On the west it is bounded by South Australia, the dividing line being about 242 geographical miles in length, approximating to the position of the 141st meridian of east longitude, and extending from the River Murray to the sea. On the south and south-east its shores are washed by the Southern Ocean, Bass Strait, and the Pacific Ocean. It lies between the 34th and 39th parallels of south latitude and the 141st and 150th meridians of east longitude. Its extreme length from east to west is about 420, its greatest breadth about 250, and its extent of coast-line nearly 600 geographical miles. Great Britain, exclusive of the islands in the British Seas, contains 88,756 square miles, and is therefore slightly larger than Victoria.

The southernmost point in Victoria, and in the whole of the Australian continent, is Wilson's Promontory, which lies in latitude 39 deg. 8 min. S., longitude 146 deg. 26 min. E.; the northernmost point is the place where the western boundary of the State meets the Murray, latitude 34 deg. 2 min. S., longitude 140 deg. 58 min. E.; the point furthest east is Cape Howe, situated in latitude 37 deg. 31 min. S., longitude 149 deg. 59 min. E.; the most westerly point is the line of the whole western frontier, which, according to the latest correction, lies upon the meridian 140 deg. 58 min. E., and extends from latitude 34 deg. 2 min. S. to latitude 38 deg. 4 min. S., a distance of 242 geographical miles:

Climate. From its geographical position, Victoria enjoys a climate more suitable to the European constitution than any other State upon the Continent of Australia. In the seventy-five years ended with 1930 the maximum temperature in the shade recorded at the Melbourne Observatory and the Weather Bureau was 111.2 deg. Fahr., on the 14th January, 1862; the minimum was 27 deg., on the 21st July, 1869; and the mean was 58.5 deg. Upon the average, on only four days during the year does the thermometer rise above 100 deg. in the shade, and on twenty days the temperature reaches 90 deg. or over; generally, on about two nights during the year it falls below freezing point. Sultry nights are of rare occurrence. It is only occasionally that a high minimum is recorded. The minimum reading approximates to 70 deg. on an average on only two nights in any one year. The maximum temperature in the sun ever recorded (i.e., since 1859) was 178.5 deg., on the 14th January, 1862. The mean atmospheric pressure noted, first at the Observatory 91 feet above the sea level, and later at the Weather Bureau 115 feet above sea level, was, during the seventy-three years ended with 1930, 30.012 inches; the average number of days on which rain fell each year was 138, and the average yearly rainfall was 25.49 inches. The mean relative humidity of the atmosphere is 68 per cent.; on very warm days it is often 12 per cent., and it has been as low as 2 per cent. The severity of the heat is not felt so much as it would be if there were a relatively high wet bulb, as the temperature by such bulb seldom exceeds 75 deg. The average number of hours of sunshine daily is 6.2, and fogs occur, on an average, on only 20 days in the year.

MOUNTAINS AND HILLS, RIVERS AND LAKES.

Mountains and Hills. The highest mountain in Victoria is Mount Bogong,* situated in the county of the same name, 6,509 feet above the sea-level; the next highest peaks are—Mount Feathertop, 6,306 feet; Mount Nelson, 6,170 feet; Mount Fainter, 6,160 feet; Mount Hotham, 6,100 feet; Mount McKay, 6,030 feet; and Mount Cope, 6,027 feet; all situated in the same county; also the Cobboras, 6,030 feet, situated between the counties of Benambra and Tambo. These, so far as is known, are the only peaks which exceed 6,000 feet in height; but, according to a list which appears in the *Year-Book* for 1915-16, there are 39 peaks between 5,000 and 6,000 feet high, and 40 between 4,000 and 5,000 feet high; it is known, moreover, that there are many peaks rising to upwards of 4,000 feet above the level of the sea whose actual heights have not yet been determined.

* The highest mountain on the Australian Continent is Mount Kosciusko, in New South Wales, one peak of which is 7,328 feet high.

Rivers. With the exception of the Yarra, on the banks of which the metropolis is situated; the Murray; the Goulburn, which empties itself into the Murray about eight miles to the eastward of Echuca; and the La Trobe and the Mitchell, with, perhaps, a few other of the Gippsland streams, the rivers of Victoria are not navigable. They, however, drain the watershed of large areas of country, and many of the streams are used as feeders to permanent reservoirs for irrigation and water supply purposes. The Murray, which forms the northern boundary of the State, is the largest river in Australia. Its total length is 1,520 miles, for 1,200 of which it flows along the Victorian border. Several of the rivers in the north-western portion of the State have no outlet, but are gradually lost in the absorbent tertiary flat country through which they pass.

Lakes. Victoria contains numerous salt and fresh-water lakes and lagoons; but many of these are nothing more than swamps during dry seasons. Some of them are craters of extinct volcanoes. Lake Corangamite, the largest inland lake in Victoria, covers 90 square miles, and is quite salt, notwithstanding that it receives the flood waters of several fresh-water streams. It has no visible outlet. Lake Colac, only a few miles distant from Lake Corangamite, is a beautiful sheet of water, $10\frac{1}{2}$ square miles in extent, and quite fresh. The Gippsland lakes—Victoria, King, and Reeve—are situated close to the coast, and are separated from the sea by only a narrow belt of sand. Lake Wellington, the largest of the Gippsland lakes, lies to the westward of Lakes Victoria and King, and is united to the first-named by a narrow channel. South-east of Geelong is Lake Connewarre, which is connected with the sea at Point Flinders.

A list of mountains and hills, rivers and lakes in Victoria appears in the *Victorian Year-Book* for 1915-16. This was revised by the late Surveyor-General, Mr. A. B. Lang, and contains information in regard to heights, lengths, and areas respectively.

FLORA OF VICTORIA.

An article on the "Flora of Victoria," by J. W. Audas, Esq., F.L.S., F.R.M.S. (National Herbarium, Melbourne), appeared in the *Year-Book*, 1927-28, on pages 3 to 19, and further addenda thereto appeared in the *Year-Books* of 1928-29 and 1929-30.

PHYSICAL GEOGRAPHY AND GEOLOGY OF VICTORIA.

An article on the "Physical Geography and Geology of Victoria," by W. Baragwanath, Esq., Director of Victorian Geological Survey, appeared in the *Year-Book* for 1927-28 on pages 20 to 30.

ADDENDUM TO THE ABOVE ARTICLE.

Boring operations in the vicinity of Lakes Entrance, Gippsland, have revealed small quantities of mineral oil associated with artesian water in a glauconite bed of Tertiary age immediately overlying the bedrock. Three bores, ranging from 1,150 to 1,400 feet in depth, over a distance of 5 miles, have proved the bed to dip towards the west. The amount of oil is small (approximately 1 pint daily), but is of interest as affording the first evidence of the presence of crude mineral oil in the State. Further boring in search of oil in the vicinity of Lakes Entrance, Gippsland, has been carried out and a quantity of oil is now being obtained at the base of the Tertiary series. As the bed is bored into, the yield is increasing, and it is interesting to note the absence of artesian water in the No. 2 bore of the South Australian Oil Wells some 60 chains north-west of No. 2 bore of the Lakes Entrance Company, where the artesian flow was 1,500 gallons of water per day containing a pint of oil. In the No. 2 bore of the South Australian Oil Wells the oil has risen over 100 feet above the level where struck and the yield is estimated at 200 gallons per day. This is the first instance in the continent of Australia of free mineral oil being struck in any quantity and adds additional interest to the problem of oil production.

The glauconite bed has been determined on fossil evidence by Mr. F. Chapman, A.L.S., Federal Palaeontologist, to be of Oligocene age.

THE FAUNA OF VICTORIA.

An article on the "Fauna of Victoria," by the late T. S. Hall M.A., D.Sc. (University of Melbourne), and J. A. Kershaw, Esq., F.Z.S., Curator of the National Museum, Melbourne, appeared in the *Year-Book* for 1916-17, and addenda thereto by Mr. Kershaw in the *Year-Book* for 1918-19 and 1920-21.

THE HISTORY OF VICTORIA.

An article on this subject contributed by Ernest Scott, Professor of History in the University of Melbourne, appeared in the *Year-Book* for 1916-17, pages 1 to 31.

CHRONOLOGICAL TABLE OF LEADING EVENTS.

The *Year-Book* for 1916-17 contained, on pages 31 to 50, a chronological table of leading events in Victorian history for the years 1770 to 1900 inclusive, and of leading events in Victoria and other history for the years 1901 to 1916 inclusive. The leading events in the thirteen years 1917 to 1929 were given in the volumes relating to those years.

Some of the principal events in Victorian and Australian history during 1930 were as follows:—

1930—6th January	..	The seaplane, Widgeon II., nose-dived into Port Phillip Bay. The three occupants—Capt. Hon. Hugh Grosvenor, A.D.C. to His Excellency the Governor of South Australia, Flight-Lieut. F. A. Briggs, and Leading Aircraftsman E. D. Ewen—were killed. Their bodies were not subsequently recovered.
12th February	..	Spencer-street Bridge, Melbourne, opened.
27th February	..	Final Report of the Metropolitan Town Planning Commission (Melbourne) published.
29th March	..	A vote of electors taken under the provisions of the <i>Licensing Act</i> 1928 of Victoria on the resolution—That licences shall be abolished—418,902 votes were recorded for abolition and 552,339 votes against.
24th May	..	Miss Amy Johnson, the first woman to fly solo from England to Australia landed at Darwin. During the flight, which occupied twenty days, Miss Johnson revealed remarkable courage, endurance, and resource.
20th October	..	Captain Kingsford Smith flying solo arrived at Darwin, having flown from England in record time of 10½ days.
3rd December	..	Announcement of the appointment of the first Australian born Governor-General of the Commonwealth—The Right Hon. Sir Isaac Alfred Isaacs, P.C., K.C.M.G., Chief Justice of the High Court of Australia.

PROGRESS OF STATE SINCE 1850.

The following table has been prepared to illustrate the advance made by the State since 1850—the year immediately preceding the separation of the Colony from New South Wales. The subsequent years are census years except the last:—

STATISTICS OF VICTORIAN PROGRESS, 1850 TO 1930.

	1850.	1861.	1871.	1881.	1891.	1901.	1911.	1921.	1930.
Population, 31st December ..	76,162	541,800	747,412	879,886	1,157,678	1,209,900	1,339,893	1,550,086	1,790,817
Revenue .. £	259,433	2,592,101	3,734,422	5,186,011	8,343,588	7,712,099	9,372,637	19,054,475	27,323,842
Expenditure from Revenue £	196,440	3,092,021	3,659,534	5,108,642	9,128,699	7,672,780	9,362,291	18,941,698	28,496,712
Public Debt .. £	..	6,835,060	12,134,800	22,944,602	43,610,265	53,072,275	57,983,764	97,317,831	162,288,994
Gold produced .. oz.	..	1,987,453	1,355,477	858,850	576,400	789,562	542,072	114,602	24,119
Wool produced .. lbs.	16,345,468	22,640,745	37,177,646	45,970,560	76,503,635	73,235,138	101,803,644	90,250,571	133,433,650
Butter produced ..	..	..	..	..	16,703,786	46,857,672	86,500,474	64,938,458	90,639,652
Agriculture—									
Land in cultivation .. acres	52,341	427,241	793,918	1,582,998	2,512,593	3,647,459	5,386,247	6,425,250	8,061,920
Wheat .. bushels	556,167	3,607,727	4,500,795	8,714,377	13,679,268	12,127,382	34,813,019	39,468,625	53,814,369
Oats ..	99,535	2,136,430	3,299,889	3,612,111	4,455,551	6,724,900	9,699,127	10,907,191	6,893,827
Wine .. gallons	4,621	47,568	713,589	539,191	1,554,130	1,981,475	1,362,420	2,222,305	1,363,575
Live Stock—Horses .. No.	21,219	84,057	181,643	278,195	440,696	392,237	472,080	487,503	379,872
“ Cattie ..	378,806	628,092	799,509	1,286,677	1,812,104	1,602,384	1,547,569	1,575,159	1,429,920
“ Sheep ..	6,032,783	6,239,258	10,002,381	10,267,265	12,928,148	10,841,790	12,882,665	12,171,084	16,477,995
“ Pigs ..	9,260	43,480	177,447	239,926	286,780	350,370	333,281	175,275	281,245
Imports, Oversea—Value .. £	..	10,991,377	9,201,942	11,481,567	13,802,598	12,686,880	21,850,963	57,608,777	41,881,524
Exports .. £	..	12,209,794	12,843,451	12,318,128	11,403,922	13,075,259	18,915,716	34,871,961	36,499,943
Shipping .. tonnage	195,117	1,090,002	1,355,025	2,411,902	4,715,109	6,715,191	9,907,046	9,314,944	13,788,466
Railways—Receipts .. £	..	291,382	401,389	1,065,209	3,298,567	3,337,797	4,909,062	9,851,908	12,088,013
Savings Banks—Accounts } No.	1,426	12,001	15,819	107,282	300,787	393,026	595,424	1,072,554	1,619,940
“ Deposits ..	52,697	582,796	1,117,761	2,569,488	5,715,681	9,662,006	17,274,423	48,970,989	69,367,253
Factories—									
Number of ..	..	531	1,740	2,488	3,141	3,249	4,873	6,532	8,195
Hands employed ..	..	4,395	19,468	43,209	52,225	66,529	102,176	140,743	151,009
Value of machinery, plant, land, and buildings .. £	..	..	4,725,125	8,044,296	16,472,859	12,298,500	16,613,348	35,492,735	72,011,020
Value of articles produced .. £	..	..	..	13,370,836	22,390,251	19,478,780	36,660,854	106,098,294	122,811,099
State Education—									
Number of Primary schools ..	61	671	988	1,757	2,233	1,967	2,059	2,334	2,601
Expenditure on Education .. £	..	162,547	274,384	546,285	726,711	701,034	1,052,418	2,117,151	3,346,947*
Total value of rateable property in municipalities .. £	..	29,638,091	50,166,078	87,642,459	203,351,360	185,101,993	265,083,727	399,502,745	679,539,071
Friendly Societies—									
Average number of members ..	..	7,166	35,706	47,908	89,269	101,045	145,439	143,421	164,603
Total funds .. £	..	..	213,004	475,954	961,933	1,370,804	2,246,396	3,375,050	5,120,417

NOTE.—In a few instances in the earlier years, where it is not possible to give figures for the exact date or period shown, those for the nearest dates or periods are given. Gold was discovered in 1851, in which year the return was 145,137 oz. Butter figures were not collected prior to 1891.

* Excluding interest paid by the State on loans for educational purposes, particulars of which are not available.