

Population Projections for National Parks in Wales, 2006-based

Introduction

This statistical release analyses the results from the 2006-based population projections for the three National Parks in Wales: Brecon Beacons, Snowdonia and Pembrokeshire. These projections are based on a similar methodology as was used to produce the 2006-based local authority population projections for Wales.

These projections provide estimates of the size of the future population, and are based on assumptions about births, deaths and migration. The assumptions are generally based on past trends. Projections done in this way do not make allowances for the effects of local or central government policies on future population levels, distribution and change.

The quality information at the end of the release provides further information on the methodology used to produce these projections. A statistical article exploring population projections for National Park areas using an apportionment methodology was published in 2009. A comparison with the apportionment method is set out in the quality information section.

2008-based population projections for the National Parks will be published in early 2011.

Key results

- The populations of both Pembrokeshire and Snowdonia National Parks are projected to decrease between 2006 and 2031, while the population of Brecon Beacons National Park is projected to remain relatively constant.
- Brecon Beacons' population is projected to initially increase, to a high of 33,600 in 2019 before subsequently decreasing. The population in 2031 is projected to be the same as 2006, standing at 33,000.
- Pembrokeshire's population is projected to decline throughout the period, from 22,300 in 2006 to 19,600 in 2031 (a 12.2 per cent decrease).
- Snowdonia's population is projected to remain relatively constant between 2006 and 2014. The population is then projected to decrease from 25,700 in 2014 to 24,600 in 2031.
- The decrease in the projected population in the National Parks is driven by an ageing population, leading to more deaths and less births. This is offset in the Brecon Beacons by migration from other parts of the UK.
- All the National Parks are projected to see a significant increase in the population aged 65 and over.

The following sections analyse the projection by age groups. Population pyramids for each National Park are also published towards the end of the release.

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Next Update: January 2011 (provisional)



All ages

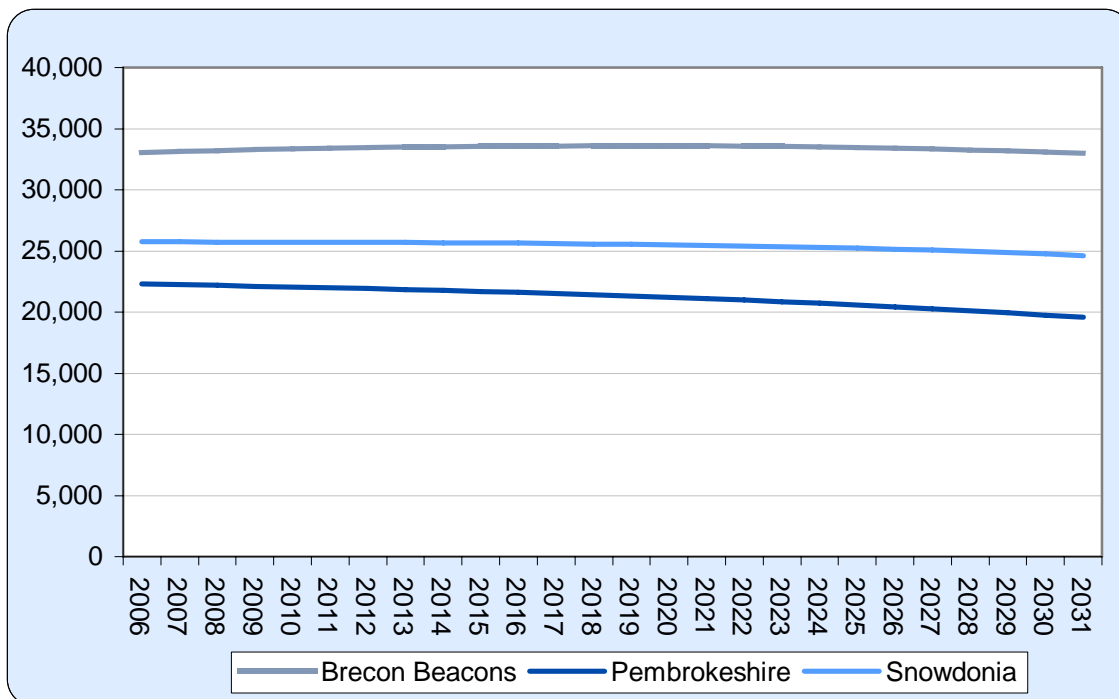
Table 1: Population projections, National Park areas, selected years.

	Population levels (thousands)				
	Actual	Projected			
	2006	2011	2016	2021	2031
Brecon Beacons	33.0	33.4	33.6	33.6	33.0
Pembrokeshire	22.3	22.0	21.6	21.1	19.6
Snowdonia	25.7	25.7	25.6	25.5	24.6

Table 2: Projected population change, National Park areas, selected years.

	Percentage change			
	2006-2011	2006-2016	2006-2021	2006-2031
	Brecon Beacons	1.1	1.6	1.7
Pembrokeshire	-1.3	-3.1	-5.3	-12.2
Snowdonia	-0.1	-0.4	-1.1	-4.4

Chart 1: Projected population for National Parks, 2006 to 2031.



Brecon Beacons' population is projected to initially increase, to a high of 33,600 in 2019 before subsequently decreasing. The population in 2031 is projected to be the same as in 2006, standing at around 33,000. The Brecon Beacons is projected to have a positive net migration of 230 persons each year. Natural change is projected to be negative throughout the projection period. Until 2019, net in-migration outweighs the negative natural change and therefore the population is projected to rise. However a subsequent increase in the number of deaths caused by an ageing population and a decrease in the number of births leads to a projected population decrease from 2019 onwards.

Pembrokeshire's population is projected to decline throughout the projection period, from 22,300 in 2006 to 19,600 in 2031 (a 12.2 per cent decrease). The rate of decline is also projected to increase through the projection period. This is due to a widening gap between deaths and births (negative natural change) caused by an ageing population and a decrease in the number of births.

Snowdonia's population is projected to remain relatively constant between 2006 and 2014. The population is projected to decrease from 25,700 in 2014 to 24,600 in 2031. Snowdonia is projected to have a positive net migration of 90 persons each year. Until 2014, natural change is around -90 (i.e. around 90 more deaths than births), therefore the population will remain relatively constant. Natural change becomes increasingly negative after 2014, driven as in the other Natural Parks, by an ageing population and an increase in the number of deaths. This causes Snowdonia's population to fall from 2014 onwards.

By comparison Wales' population is projected to increase by 11.1 per cent between 2006 and 2031.

Under 16

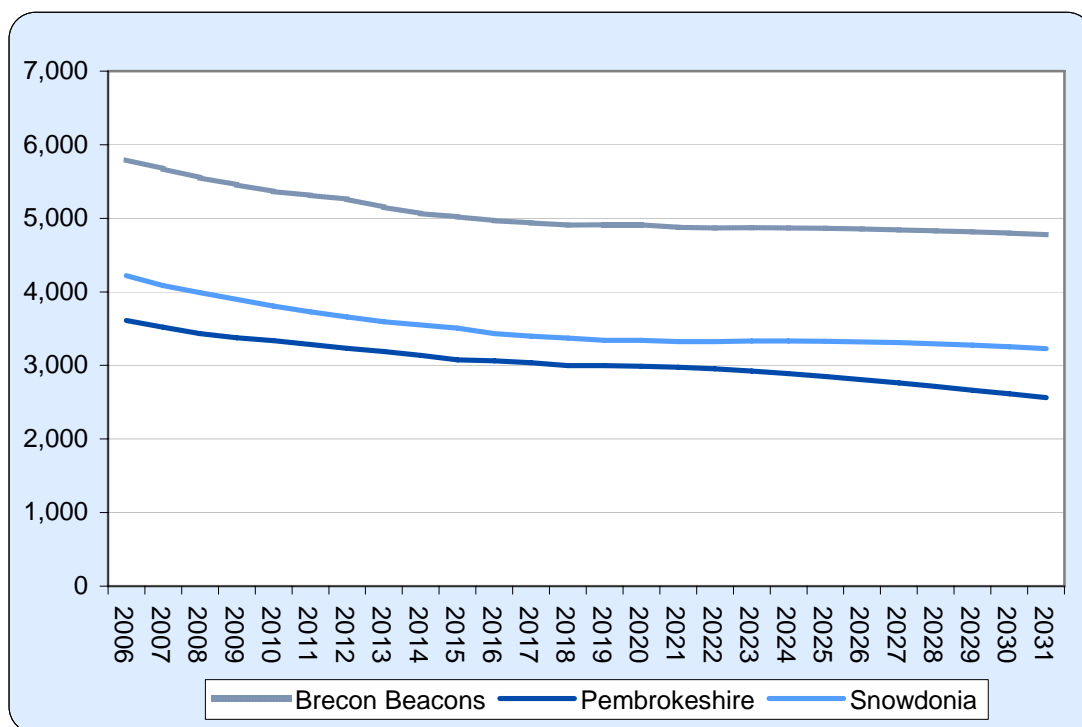
Table 3: Population projections for persons aged under 16, National Park areas, selected years.

	Population levels (thousands)				
	Actual	Projected			
	2006	2011	2016	2021	2031
Brecon Beacons	5.8	5.3	5.0	4.9	4.8
Pembrokeshire	3.6	3.3	3.1	3.0	2.6
Snowdonia	4.2	3.7	3.4	3.3	3.2

Table 4: Projected population change for persons aged under 16, National Park areas, selected years.

	Percentage change			
	2006-2011	2006-2016	2006-2021	2006-2031
Brecon Beacons	-8.3	-14.3	-15.8	-17.5
Pembrokeshire	-9.0	-15.2	-17.7	-29.1
Snowdonia	-11.7	-18.7	-21.3	-23.5

Chart 2: Projected population for National Parks, for persons aged under 16, 2006 to 2031.



The population aged under 16 is projected to decrease throughout the projection period in each National Park. This contrasts with Wales's national projection for those aged under 16, which is projected to increase by 0.7 per cent between 2006 and 2031.

The population aged under 16 in the Brecon Brecons is projected to initially decrease until 2018 when it will stand at 4,900 before remaining relatively constant in the early-2020s, and then decreasing again until 2031. The population is projected to decrease from 5,800 in 2006 to 4,800 in 2031 (a decrease of 17.5 per cent).

Pembrokeshire's population aged under 16 is projected to decrease throughout the projection period from 3,600 in 2006 to 2,600 in 2031, a decrease of almost a third (29.1 per cent).

The population aged under 16 in Snowdonia is projected to decrease until 2022 (3,300) before remaining relatively constant in the 2020s and decreasing again in the last few years of the projection period. Overall, the population aged 16 and under in Snowdonia is projected to decrease by 23.5 per cent between 2006 and 2031.

The trend in the population aged under 16 is driven by the number of births and migration trends. The number of births is projected to fall in each National Park. This is caused by a net out-migration of young people aged 15-19 which in turn leads to fewer births and a decline in the population aged under 16.

Aged 16-64

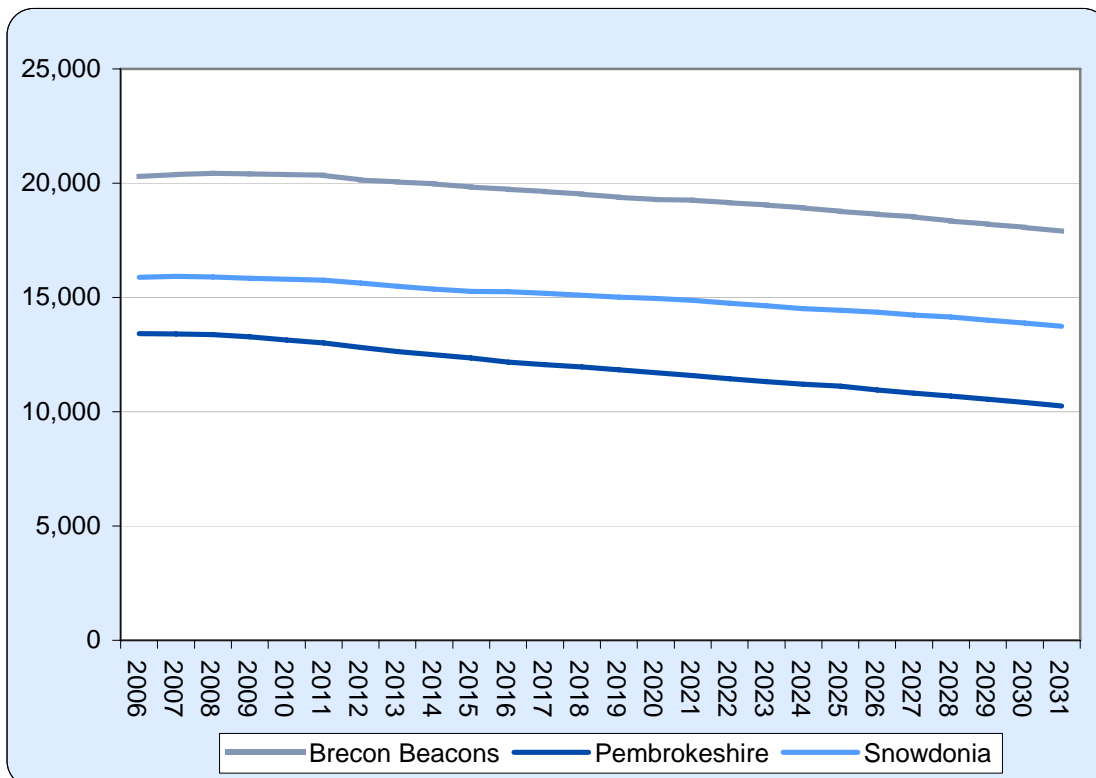
Table 5: Population projections for persons aged 16-64, National Park areas, selected years.

	Population levels (thousands)				
	Actual 2006	Projected			
		2011	2016	2021	2031
Brecon Beacons	20.3	20.3	19.7	19.3	17.9
Pembrokeshire	13.4	13.0	12.2	11.6	10.3
Snowdonia	15.9	15.8	15.2	14.9	13.7

Table 6: Projected population change for persons aged 16-64, National Park areas, selected years.

	Percentage change			
	2006- 2011	2006- 2016	2006- 2021	2006- 2031
Brecon Beacons	0.3	-2.8	-5.1	-11.8
Pembrokeshire	-3.0	-9.3	-13.7	-23.5
Snowdonia	-0.8	-4.0	-6.3	-13.5

Chart 3: Projected population for National Parks, for persons aged 16-64, 2006 to 2031.



Brecon Beacons' population aged 16-64 is projected to remain constant in the first few years of the projection period before decreasing from 2009 onwards. Between 2006 and 2031, the population aged 16-64 in the Brecon Beacons is projected to decrease by 11.8 per cent. Brecon Beacons' population aged 16-64 is projected to decrease less than the other National Parks due to a larger inflow of migrants in the 20-64 age group.

The population aged 16-64 in Pembrokeshire is projected to decrease throughout the projection period from 13,400 in 2006 to 10,300 in 2031 (a 23.5 per cent decrease).

The population aged 16-64 in Snowdonia is projected to follow a similar pattern to the Brecon Beacons' population aged 16-64, remaining relatively constant in the first few years of the projection period before decreasing from around 2009 onwards. However, the magnitude of the decrease is slightly greater in Snowdonia, where the population aged 16-64 declines from 15,900 in 2006 to 13,700 in 2031 (a 13.5 per cent decrease).

Wales' population aged 16-64 is projected to fluctuate between 2006 and 2031 but remain relatively constant over the whole period, increasing by only 0.3 per cent between 2006 and 2031. This contrasts with the National Parks which are all projected to see their population aged 16-64 decrease. This decrease is caused by two factors, firstly all the National Parks are projected to have a negative natural change (more deaths than births). Secondly all National Parks are projected to have a large net out-migration of young people aged 15-19, which in time causes the working age population to fall in the National Parks.

Aged 65 and Over

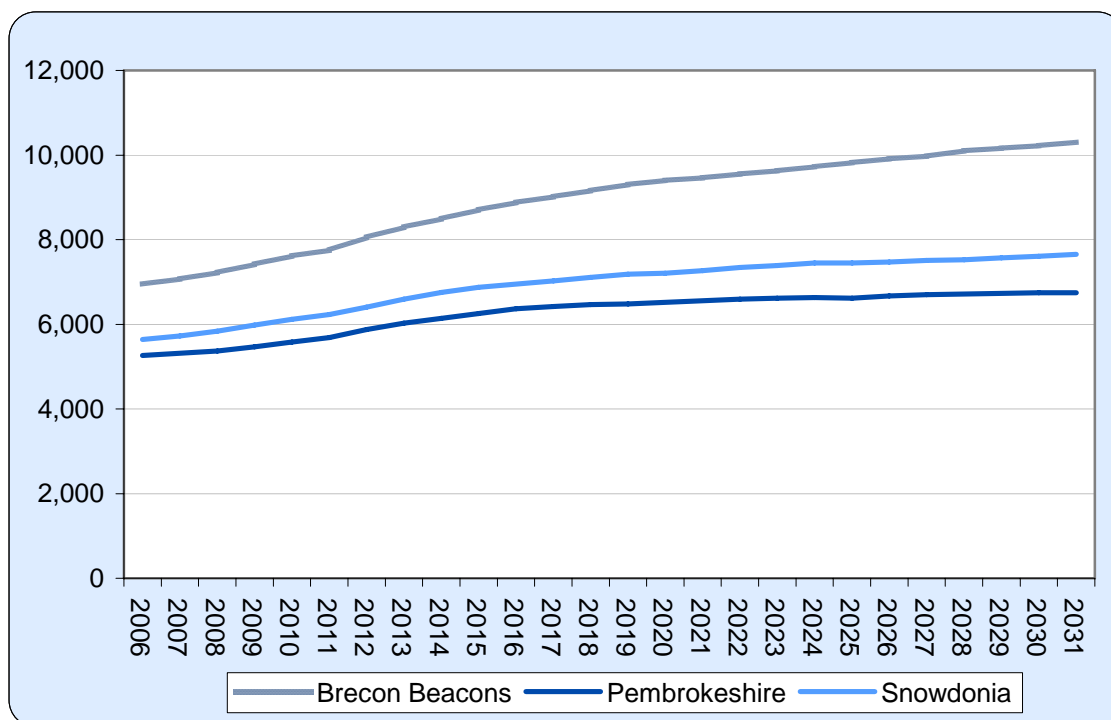
Table 7: Population projections for persons aged 65 and over, National Park areas, selected years.

	Population levels (thousands)				
	Actual	Projected			
	2006	2011	2016	2021	2031
Brecon Beacons	6.9	7.8	8.9	9.5	10.3
Pembrokeshire	5.3	5.7	6.4	6.6	6.7
Snowdonia	5.6	6.2	6.9	7.3	7.7

Table 8: Projected population change for persons aged 65 and over, National Park areas, selected years.

	Percentage change			
	2006-2011	2006-2016	2006-2021	2006-2031
Brecon Beacons	11.6	27.7	36.1	48.3
Pembrokeshire	8.2	21.0	24.6	28.3
Snowdonia	10.5	23.2	28.7	35.7

Chart 4: Projected population for National Parks, for persons aged 65 and over, 2006 to 2031.



The population aged 65 and over is projected to increase considerably in each National Park between 2006 and 2031, though not as much as the projected increase in the number aged 65 and over for Wales as a whole. Wales' population aged 65 and over is projected to increase by 61.1 per cent over the same period.

The largest projected increase is in the Brecon Beacons. Its population aged 65 and over is projected to increase throughout the projection period from 6,900 in 2006 to 10,300 in 2031 (an increase of 48.3 per cent).

The population aged 65 and over in Pembrokeshire is projected to increase throughout the projection period from 5,300 in 2006 to 6,700 in 2031 (an increase of 28.3 per cent).

The population in Snowdonia aged 65 and over is also projected to increase throughout the projection period from 5,600 in 2006 to 7,700 in 2031 (an increase of 35.7 per cent).

The increase in the population aged 65 and over is due to increased life expectancy and is also due to the cohort of post-war baby boomers reaching pension age.

Natural Change and Migration

Natural Change

Table 9: Number of Births, Deaths and Natural Change by National Park, selected years. (a)

	Brecon Beacons	Pembrokeshire	Snowdonia
2006/07			
Births	260	180	190
Deaths	390	290	290
Natural Change	-140	-110	-100
2010/11			
Births	260	180	200
Deaths	430	300	300
Natural Change	-170	-120	-100
2020/21			
Births	260	160	200
Deaths	500	330	340
Natural Change	-230	-170	-140
2030/31			
Births	240	120	170
Deaths	570	360	390
Natural Change	-330	-250	-220

(a) Figures rounded to the nearest 10

Natural change (number of births minus the number of deaths) is projected to be negative for all the National Parks throughout the projection period. Natural change is also projected to become more negative for all the National Parks over time.

- The increased negativity of the natural change is caused by increasing deaths and decreasing births over the projection period.
- Deaths are projected to increase in each National Park between 2006/07 and 2030/31: in Brecon Beacons from 390 to 570; in Pembrokeshire for 290 to 360 and in Snowdonia from 290 to 390. This is caused by an ageing population and therefore a higher proportion of people in the older age groups.
- Births are projected to decrease, particularly in Pembrokeshire from 180 in 2006/07 to 120 in 2030/31, a 34 per cent decrease. This decrease in births is due to young people migrating out of the National Park resulting in a decrease in the number of women of a child-bearing age.

Migration

A constant level of migration has been assumed for both in and out migration for each National Park, based on each National Parks' in and out migration over the last 5 years.

Table 10: Annual migration flows in and out of the National Parks (a)

	Brecon Beacons	Pembrokeshire	Snowdonia
Total Migration			
In	1,770	1,230	1,220
Out	1,550	1,170	1,130
Net	230	60	90

(a) Figures rounded to the nearest 10

Total Migration includes both internal migration (migration to and from other parts of the UK) and international migration (migration to and from non-UK parts of the world). However, international migration figures for each National Park are very small.

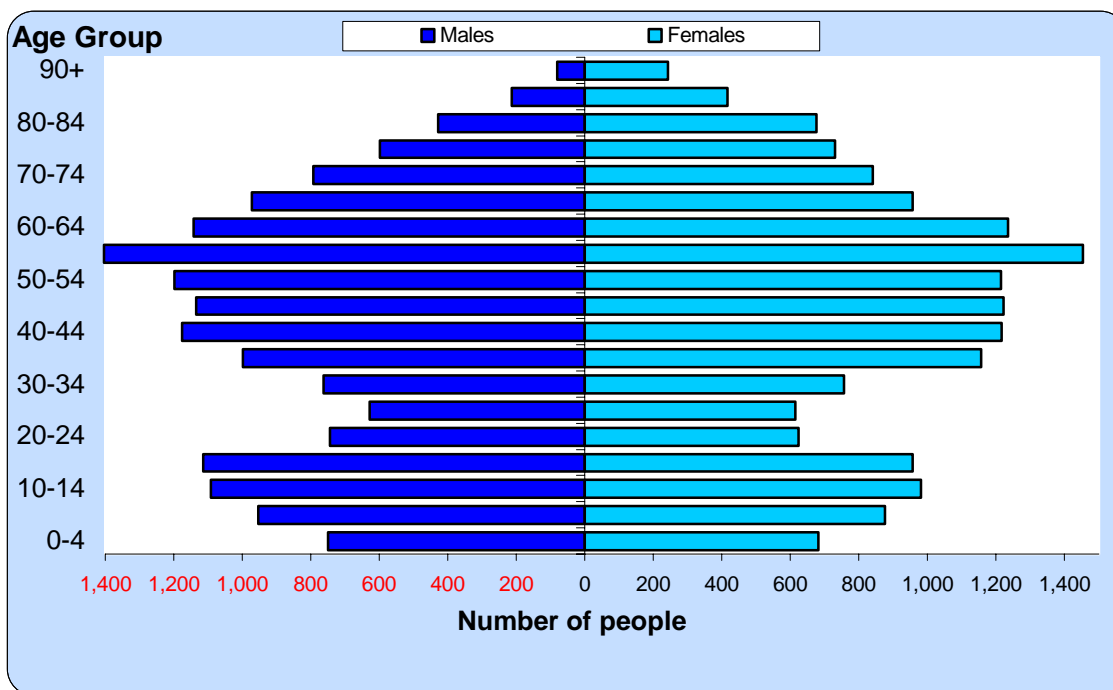
In each year of the projection period it is projected that all the National Parks will experience more people moving in than moving out: Brecon Beacons has a net migration of +230; Pembrokeshire has a net migration of +60 and Snowdonia has a net migration of +90.

Population structure

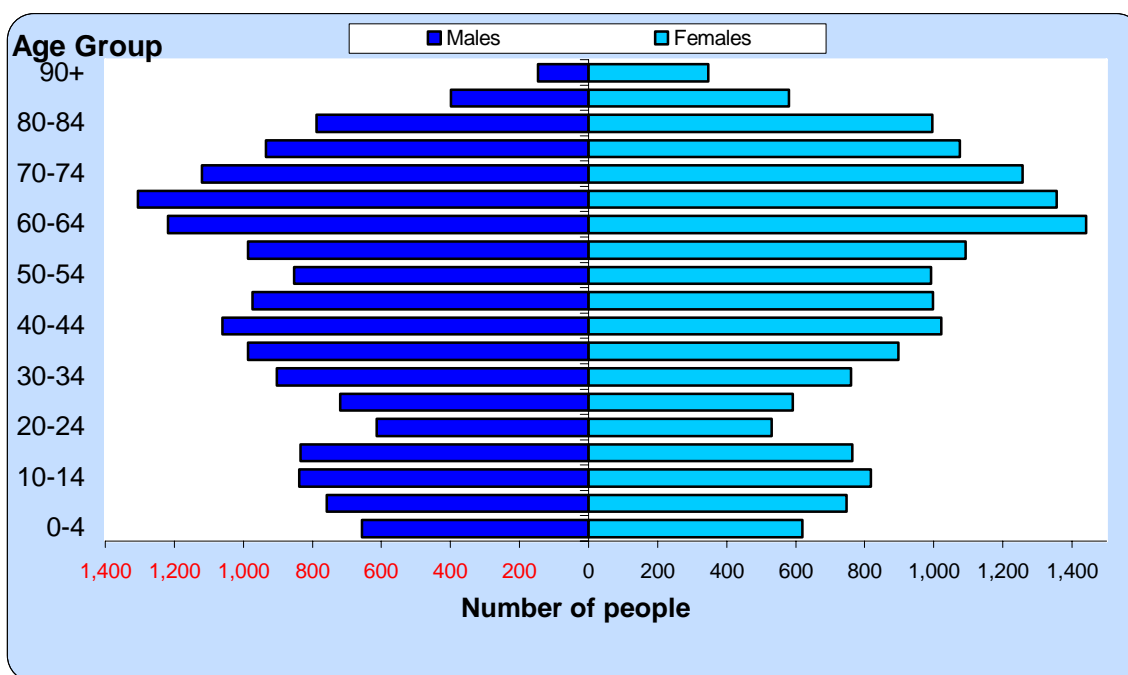
The following pyramids show the population in each National Park in 2006 and the projected population in 2031.

Brecon Beacons

Pyramid showing the population in Brecon Beacons in 2006

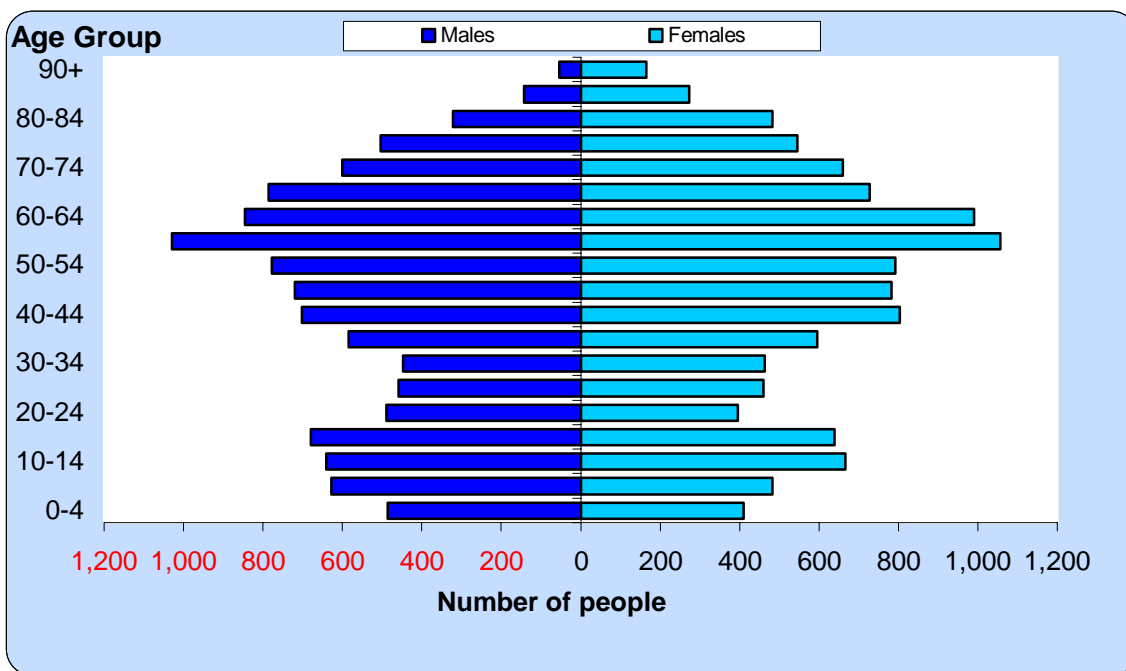


Pyramid showing the projected population in Brecon Beacons in 2031

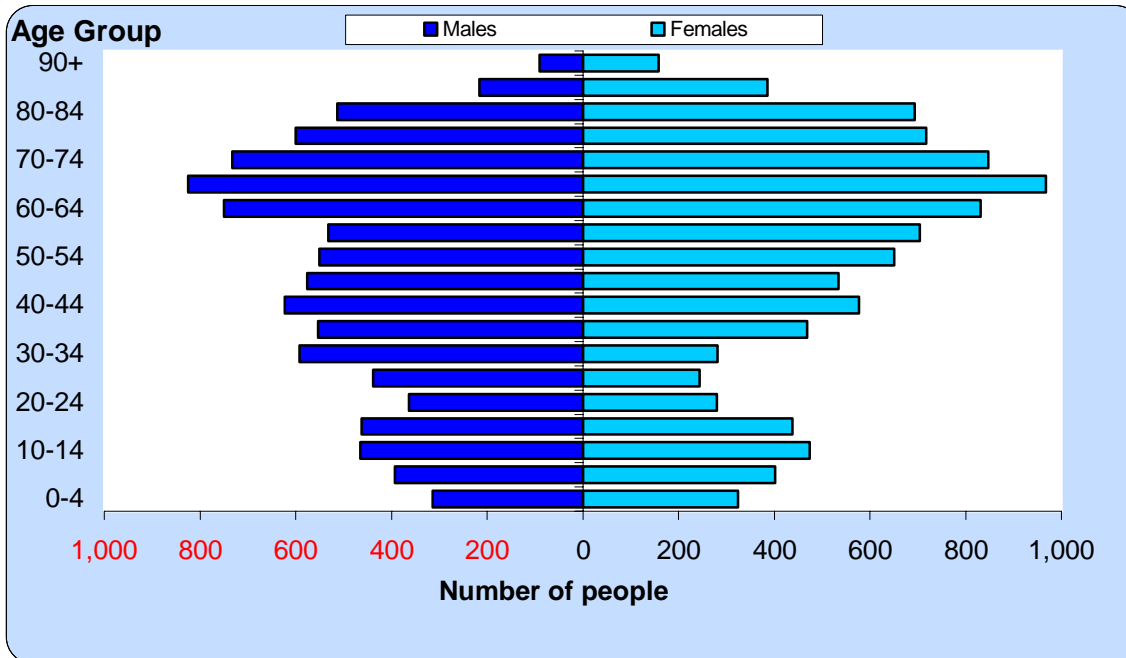


Pembrokeshire

Pyramid showing the population in Pembrokeshire in 2006

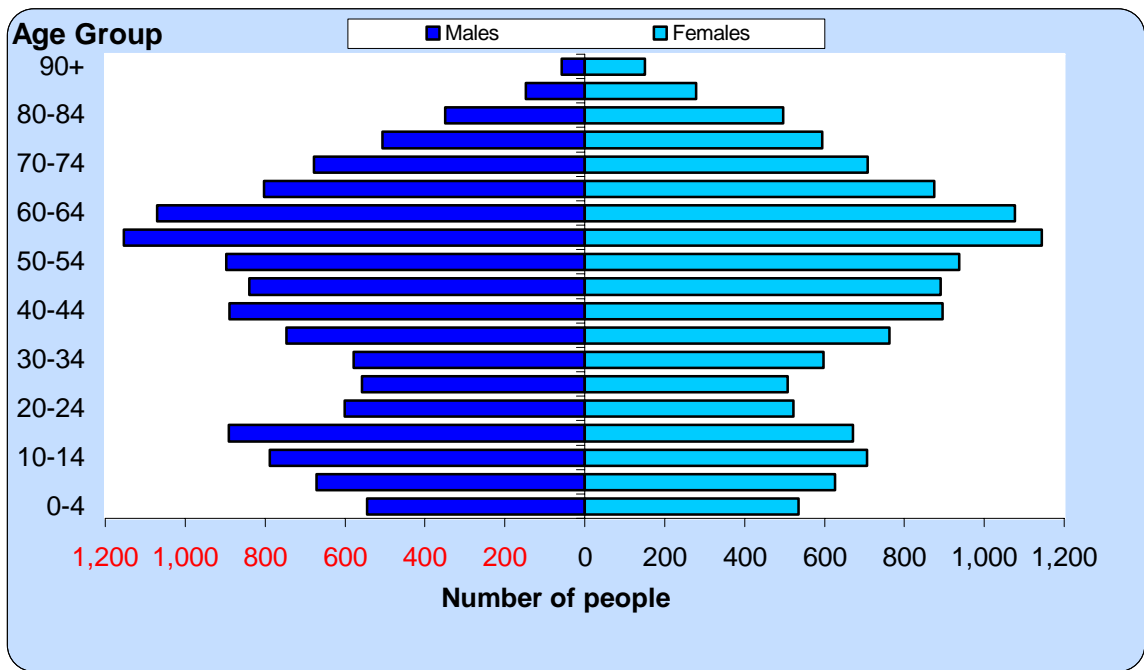


Pyramid showing the projected population in Pembrokeshire in 2031

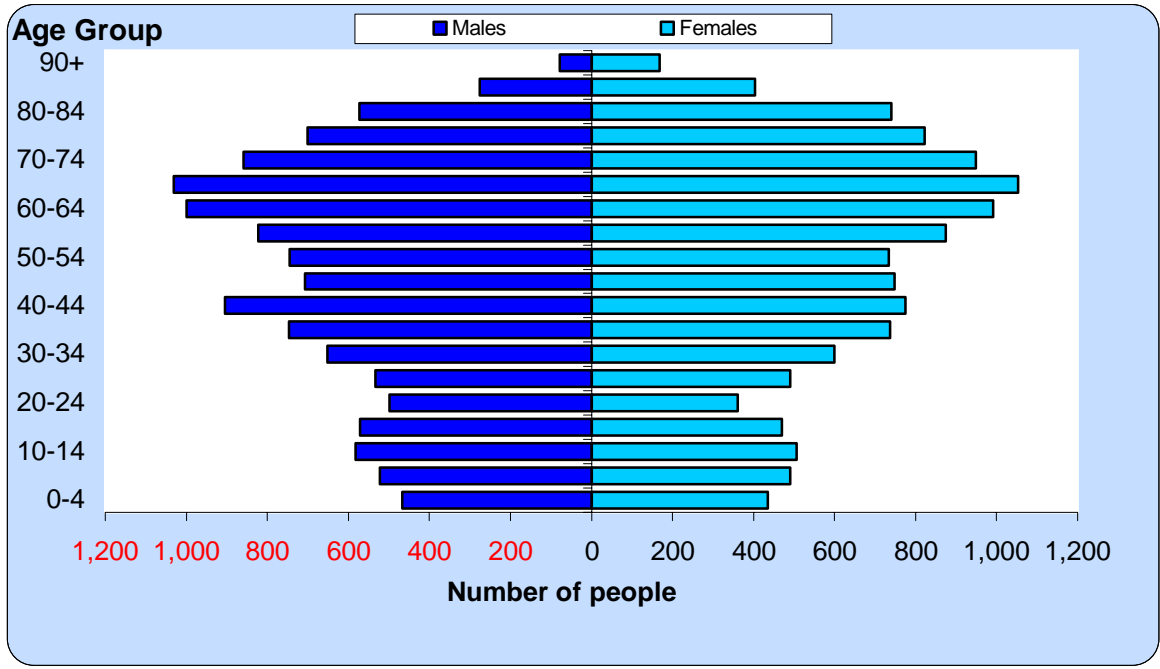


Snowdonia

Pyramid showing the population in Snowdonia in 2006



Pyramid showing the projected population in Snowdonia in 2031



- All the National Parks are projected to see an increase in the number of older people between 2006 and 2031. This is shown by the pyramids becoming more top heavy in 2031.
- The proportion of population aged 65 and over is projected to increase significantly in each National Park between 2006 and 2031, Brecon Beacons from 21 per cent to 31.2 per cent , Pembrokeshire from 23.6 per cent to 34.5 per cent and Snowdonia from 21.9 per cent to 31.1 per cent.

Quality Information

Data Source

Population projections provide estimates of the size of the future population, and are based on assumptions about births, deaths and migration. The assumptions are based on past trends. Projections only indicate what may happen should the recent trends continue. Projections done in this way do not make allowances for the effects of local or central government policies on future population levels, distribution and change.

Base population

These National Park Population projections are based on the mid-2006 population estimates for National Parks.

These estimates are available on the following website.

<http://www.statistics.gov.uk/statbase/Product.asp?vlnk=15094>

Full guidance on the methodology used by the ONS to produce the population estimates can be accessed at:

http://www.statistics.gov.uk/about/methodology_by_theme/sape/default.asp

Revisions

ONS is undertaking a significant programme of work to improve the population and migration statistics it produces. As announced in February 2009, a package of improvements for mid-year population estimates for England and Wales has been identified and these will be implemented in May 2010, when revised population estimates for local authorities in England and Wales for mid-2002 to mid-2008 will be published. Revised population estimates for National Parks will be published later in 2008.

Methodology

These projections are based on the same methodology as the 2006-based Local Authority projections. Detailed information on this methodology is given in the associated technical report:

[Welsh Assembly Government | 2006-based Local Authority Population Projections: Technical Report](#)

For the National Park projections, fertility, mortality and migration data was obtained from the Office for National Statistics for the three National Parks and used to form assumptions. The methodology only differed when the required data was not available at a National Park level. The only special population group included in the National Park population projections were the home armed forces.

Frequency

This is the first time this output has been produced. It is intended that National Park population projections will be produced every two years from now on.

Comparison with the apportionment method

Last year the Welsh Assembly Government published National Park projections based on an apportionment method. These projections were experimental statistics and were published as a Statistical Article. These were developed by apportioning the 2006-based Local Authority projections to the National Parks according to the proportion of the local authority population that resides in each National Park. This table sets out a comparison with the previous published projections based on an apportionment method.

Table A: Comparison of the 2006-based National Park population projection with the previously published National Park population projections based on an apportionment methodology.

	Population levels (thousands)				
	Actual	Projected			
	2006	2011	2016	2021	2031
2006-based National Parks Projections					
Brecon Beacons	33.0	33.4	33.6	33.6	33.0
Pembrokeshire	22.3	22.0	21.6	21.1	19.6
Snowdonia	25.7	25.7	25.6	25.5	24.6
Apportionment method projections					
Brecon Beacons	33.0	34.3	35.5	36.8	38.7
Pembrokeshire	22.3	23.1	24.0	24.9	26.2
Snowdonia	25.7	26.4	27.1	27.9	29.0

Table B: Comparison of the projected population change in 2006-based National Park population projection and the previously published National Park population projections based on an apportionment methodology.

	Percentage change			
	2006-2011	2006-2016	2006-2021	2006-2031
2006-based National Parks Projections				
Brecon Beacons	1.1	1.6	1.7	-0.2
Pembrokeshire	-1.3	-3.1	-5.3	-12.2
Snowdonia	-0.1	-0.4	-1.1	-4.4
Apportionment method projections				
Brecon Beacons	3.8	7.6	11.3	17.2
Pembrokeshire	3.8	7.9	11.7	17.3
Snowdonia	2.5	5.3	8.4	12.8

The apportionment method projects a much larger increase in the population of each National Park between 2006 and 2031. These increases are closer in magnitude to the projected population growth for Wales (11.1 per cent) than the projections set out in this release. This is because projections derived through an apportionment method do not take into account recent National Park trends in fertility, mortality and migration and are heavily weighted towards the projections of the local authorities that make up the National Park.