

Geography and climate

1

Geography

The long Danish coastline

Denmark is a small country, compared to its closest neighbours. Sweden and Germany are ten times and eight times larger respectively than Denmark, which has an area of more than 43,000 km². On the other hand, Denmark's coastline is extraordinarily long for a country of this size. Denmark stretches along a coast of more than 7,300 km, which is longer than the Chinese Wall. It corresponds to almost one and a half metre of coast per inhabitant.

One characteristic of Denmark's geography is the many islands, a total of 407. The largest islands are, by order of mention, Sjælland, Vendsyssel-Thy, Fyn, Lolland and Bornholm. Jutland (including Vendsyssel-Thy) account for 70 per cent of Denmark's total area.

In addition to Denmark, the Kingdom of Denmark includes the self-governing areas of Greenland and the Faroe Islands. The ice-free part of Greenland is almost ten times larger than Denmark.

Denmark's nature is characterized by agriculture and forests

For thousands of years, Denmark has been an agricultural country, and this has largely characterized Danish landscapes. Consequently, two thirds of the landscape consists of man-made agricultural areas. However, forests are also evident in the landscape in the form of, among other types, deciduous forest and coniferous forest. Rold Forest and Grib Forest are the largest forests.

Figure 1

Distribution of Denmark's area by type of area

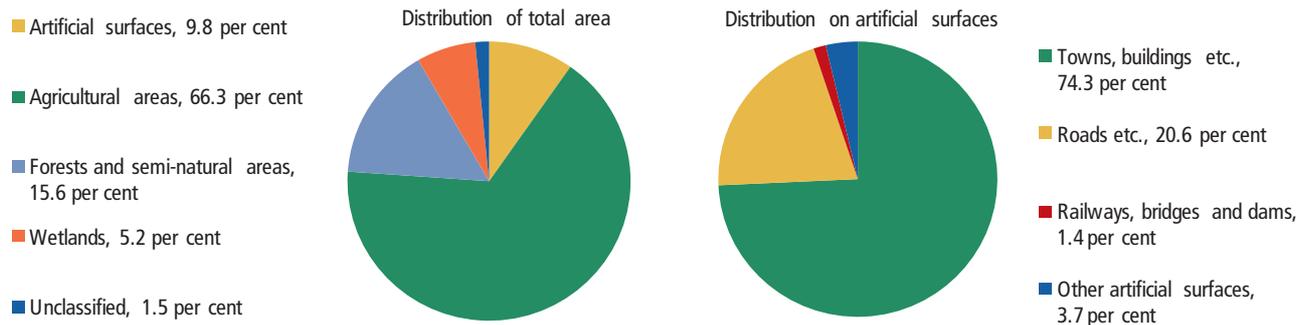


Table 4

Man-made infrastructure and buildings characterize the landscape

Cities, roads, railroads, bridges and other types of man-made surfaces cover a total of 10 per cent of Denmark's area, corresponding to three times the area of the Faroe Islands – or 56 per cent of Sjælland. Urban centres, such as residential neighbourhoods and industrial districts, dominate and account for three-fourths of the man-made surfaces.

2

Climate

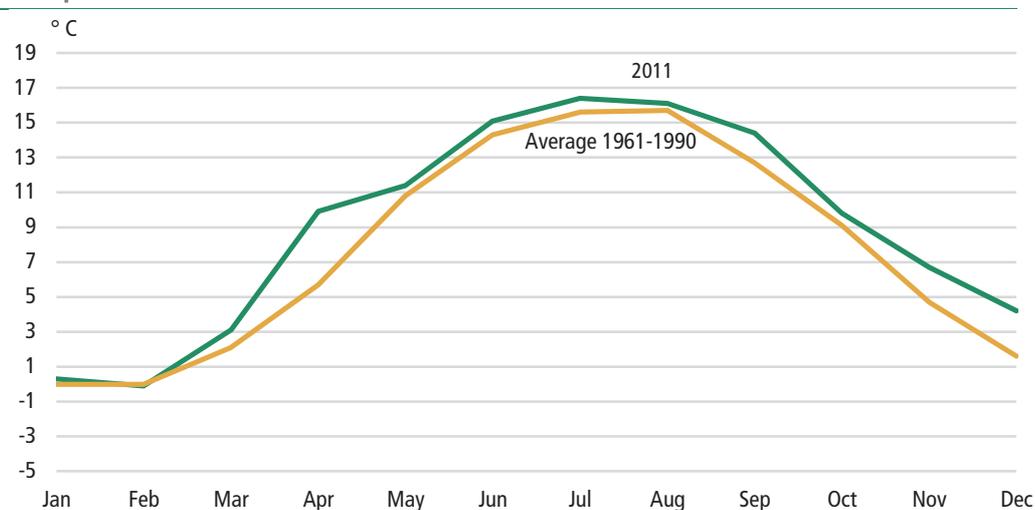
It rains or snows every second day

The Danish weather is known for being variable. It is a fact that it rains or snows every second day in Denmark, since a year has an average of 171 days of precipitation.

Snow seven days a month during the wintertime

Denmark has mild winters without large amounts of snow, but with much rain. On average, it snows seven days every month in December, January and February. This decreases to five days of snow in March, and April has an average of three days of snow.

Figure 2 Temperatures in Denmark



Source: www.dmi.dk

Temperature variations of 16 °C during a year

In a year, the average temperature generally varies from 0 °C in January to 16 °C in August. Great variations occur in relation to the average. The coldest day in more than 100 years was a January day in 1982 with temperatures of -31 °C, and the warmest day was an August day in 1975 with temperatures of 36 °C.

"... and it will be overcast again today"

A natural feature of everyday life in Denmark is overcast days and many clouds in the sky are. The clouds cover an average of two thirds of the sky in a year, but the summer is the least cloudy season with an average cloudiness of 60 per cent.

Not many days of sunshine in a year

Denmark is a country where the total hours of sunshine a year gives occasion to enjoy the sun while it is out. There is an average of four hours of sunshine a day, naturally primarily during the spring and summertime. From May to August, there are more than six hours of sunshine a day.

Table 1 Area, population and coastline

	Land and inland water area km ²	Population 1 January 2011	Density of population per km ²	Number of islands	Inland water area 1959 km ²	Coastline 1959 km
All Denmark	42 894.8	5 580 516	130.1	391	700	7 314
Provinces						
Copenhagen City	167.1	704 108	4 213.7	13	18	213
Copenhagen Suburban	342.1	520 784	1 522.3	1	...	...
Nordsjælland	1 449.0	448 291	309.4	22	80	248
Bornholm ¹	588.1	41 406	70.4	6	3	141
Østsjælland	807.8	236 429	292.7	15	7	154
Vest- og Sydsjælland	6 410.0	581 478	90.7	103	102	1 707
Fyn	3 478.7	485 190	139.5	96	26	1 130
Syddjælland	8 777.8	716 152	81.6	23	...	...²
Østjylland	5 841.8	839 710	143.7	49	...	...
Vestjylland	7 158.4	426 972	59.6	25	...	...
Nordjylland	7 874.0	579 996	73.7	38	...	...
Regions						
Hovedstaden	2 546.3	1 714 589	673.4	42	101	602
Sjælland	7 217.8	817 907	113.3	118	109	1 861
Syddanmark	12 256.5	1 201 342	98.0	119	...	...
Midtjylland	13 000.2	1 266 682	97.4	74	...	...
Nordjylland	7 874.0	579 996	73.7	38	...	...
Faroe Islands	1 396.0	48 574³	34.8	17	...	1 117⁴
Greenland	410 449.0⁵	56 615	0.1	...	...	...

Note: Due to different compilation methods figures deviate from figures in table 4. The most southern point in Denmark is Gedserodde on Falster, the most northerly point is near Skagen, the most westerly point is Blåvandshuk, and the most easterly point is Christiansø (Østerskær).

¹ Incl. Christiansø. ² The border with Germany was measured as 67.7 km. In length. ³ 1 January 2010.

⁴ Measured in 1955. ⁵ Only the part of Greenland free of ice is included. The total area of Greenland is 2,166,086 km², of which 81 per cent is covered by inland ice.

Source: National Survey and Cadastra
www.statbank.dk/folk1 and are207

Table 2 Administrative division of Denmark. 2012

	Municipalities	Parishes	Customs and tax regions	Constituencies ¹	
				Counties and large constituencies	Constituencies
Total	98	2 192	37	10	92
The Islands	56	904	20	6	48
Jutland	42	1 288	17	4	44
Region Hovedstaden	29	250	8	4	28
København by	4	81	2	1	12
Københavns omegn	13	56	1	1	8
Nordsjælland	11	91	4	1	6
Bornholm	1	22	1	1	2
Region Sjælland	17	422	8	1	12
Østsjælland	5	60	2	}	3
Vest- og Sydsjælland	12	362	6		1	9
Region Syddanmark	22	520	9	2	21
Fyn	10	232	4	1	8
Syddjylland	12	288	5	1	13
Region Midtjylland	19	640	8	2	22
Østjylland	11	357	5	1	11
Vestjylland	8	283	3	1	11
Nordjylland	11	360	4	1	9

¹ In accordance with Act no. 1292 of 8 December 2006 on elections to the Danish Parliament.

Table 3 Area and population on islands

Municipality code	Population 1 January 2012	Area in km ²	Municipality code	Population 1 January 2012	Area in km ²
All Denmark	5 580 516	43 059.62		485 190	3 489.80
Zealand and its islands	2 383 936	7 473.16	Funen and its islands		
330 Agersø	191	8.08	430 Avernakø	106	5.74
Flere Amager	176 904	96.28	492 Birkholm	11	0.91
390 Bogø	1 105	14.40	430 Bjørnø	33	1.48
370 Dybsø	1	1.38	420 Bågå	33	6.19
370 Enø	297	3.53	479 Drejø	66	4.28
250 Eskilsø	6	1.40	Flere Fyn	455 236	2 988.62
390 Farø	5	...	410 Fænø	2	3.90
370 Gavnø	35	5.65	479 Hjortø	8	0.91
330 Glæno	54	...	482 Langeland ³	12 858	283.54
190 Klaus Nars holm	2	0.00	430 Lyø	100	6.21
390 Langø	2	1.32	482 Siø	15	1.43
390 Lindholm	3	0.06	479 Frederikso	2	0.06
390 Masnedø	116	1.71	479 Skarø	32	1.96
390 Møn	9 648	218.31	482 Strynø	221	4.92
326 Nekselø	19	2.23	479 Thurø	3 628	7.58
390 Nyord	42	5.57	440 Tornø	4	0.24
330 Omø	162	4.45	479 Tåsinge	6 210	69.99
316 Orø	831	15.03	492 Ærø	6 625	87.51
185 Saltholm	1	16.72			
326 Sejerø	358	12.50			
Flere Sjælland	2 194 138	7 049.27	Jutland and its islands	2 562 830	29 710.03
101 Slotsholmen	14	0.21	773 Agerø	36	3.49
101 Trekroner	1	0.02	727 Alrø	154	7.70
390 Tærø	1	1.71	540 Als	51 007	311.39
81 named and uninhabited islands	•	13.31	707 Anholt	151	21.75
			580 Barsø	22	2.66
Lolland-Falster and their islands	107 154	1 796.96	851 Egholm	48	6.06
360 Askø	37	2.80	615 Endelave	177	13.23
376 Falster	42 808	513.99	563 Fanø	3 251	59.60
360 Fejø ²	489	17.04	779 Fur	842	21.95
360 Femø	131	11.40	813 Hirsholm	3	0.17
360 Lilleø	6	0.84	766 Hjarnø	104	3.23
Flere Lolland	63 678	1 244.97	671 Jegindø	482	7.77
360 Vejro	5	1.60	Flere Jyske halvø	2 178 962	23 861.05
43 named and uninhabited islands	•	4.33	580 Kalvø	12	0.19
			820 Livø	9	3.32
Bornholm and its islands	41 406	589.68	825 Læsø	1 897	112.86
400 Bornholm	41 303	589.32	561 Mandø	41	8.54
411 Christiansø + Frederikso ¹	103	0.21	773 Mors	21 438	360.46
4 named and uninhabited islands	•	0.14	550 Rømø	647	86.56
			741 Samsø	3 889	112.26
			580 Store Okseø	3	0.08
			727 Tunø	112	3.56
			Flere Vendsyssel-Thy	299 198	4 674.24
			671 Venø	183	6.35
			615 Vorsø	1	0.59
			510 Årø	161	5.88
			111 named and uninhabited islands	•	15.11

Note.: The area is based on map10 of the National Survey and Cadastre. In relation to the area in table 1, non-registered areas are also included here, e.g. lakes and roads.

www.statbank.dk/bef4 and are207

¹ Not included in the division of municipalities, administered by the Ministry of Defence. ² Incl. Skalø. ³ Incl. Lindø.

Table 4	Land cover	
	Km ²	Per cent
Total area	43 560.76	100.00
Artificial surfaces	4 246.46	9.75
Urban fabric, industrial and commercial units ¹	3 154.63	7.24
Motorway	43.96	0.10
Expressway	9.10	0.02
Road broader than 6 metres	269.02	0.62
Road 3 – 6 metres	551.58	1.27
Railway	58.22	0.13
Bridge	0.02	0.00
Embankment	2.64	0.01
Runway	3.31	0.01
Mineral extraction sites	19.94	0.05
Technical sites	17.46	0.04
Cemeteries	6.96	0.02
Sport facilities	52.18	0.12
Leisure facilities	57.44	0.13
Agricultural areas	28 897.85	66.34
Arable land	28 615.01	65.69
Market garden	33.87	0.08
Pastures	155.18	0.36
Pastures in urban areas	93.72	0.22
Land principally occupied by agriculture, with significant areas of natural vegetation	0.07	0.00
Forests and semi-natural areas	6 788.32	15.58
Forest	1 829.48	4.20
Broad-leaved forest	1 309.40	3.01
Coniferous forest	2 147.34	4.93
Mixed forest	7.98	0.02
Natural grassland	391.92	0.90
Moors and heath land	981.76	2.25
Beaches, dunes and sand plains	51.21	0.12
Sparsely vegetated areas	69.23	0.16
Wetlands	2 274.89	5.22
Meadows	808.89	1.86
Inland wetlands	205.66	0.47
Peat bogs	875.60	2.01
Salt marshes	384.74	0.88
Water bodies	670.59	1.54
Lakes	616.49	1.42
Stream width 8-12 metres	49.42	0.11
Reeds	0.34	0.00
Fish farms	4.34	0.01
Unclassified	682.65	1.57

Note: The figures are based on different primary data covering the period from the end of the 1980s to the middle of the 1990s. Due to different compilation methods figures deviate from figures in table 1. The Primary data are the *land use map; Area Information System* (The Ministry of Environment). Further information can be obtained from: www.dmu.dk. The figures are a revision (not an update) of the collected data. The National Environmental Research Institute conducted the revision in 2001. The classification is based on the three-digit *CORINE land cover nomenclature*, as a fourth number is added for national purposes.

Source: National Environmental Research Institute

www.dmu.dk

¹ Include city centres, human locality areas with low buildings, human locality areas with high buildings, built-up areas in rural areas and industrial areas. Roads are excluded.

Table 5 Denmark's largest lakes . correction

Lake's name	Province	1999-2002	2012	Lake's name	Province	1999-2002	2012
km ²				km ²			
Arresø	Sjælland	39.5	39.7	Søndersø	Lolland	8.4	8.0
Esrum Lake	Sjælland	17.4	17.4	Tystrup sø	Sjælland	6.7	6.7
Mossø	Østjylland	16.6	16.5	Tømmerby Fjord	Nordjylland	6.0	5.7
Stadil Fjord ¹	Vestjylland	17.3	16.2	Julsø	Østjylland	5.8	5.6
Saltbæk Vig ¹	Sjælland	16.1	15.9	Ulvedybet	Nordjylland	5.9	5.5
Tissø	Sjælland	12.7	12.5	Tange sø	Østjylland	5.5	5.4
Furesø	Sjælland	9.3	9.4	Lund Fjord	Nordjylland	5.1	5.1
Skanderborg Lake	Østjylland	8.6	8.5				

Note: The basis of measurement covers revised historical maps, where the degree of revision is unknown, for photogrammetric maps newly measured. The designated lakes are named on the ordnance maps.

Source: Kort- og Matrikelstyrelsen

www.kms.dk

¹ Area of brackish water.

Table 6	Meteorological conditions												
	Jan.	Feb.	Marts	April	Maj	Juni	Juli	Aug.	Sept.	Okt.	Nov.	Dec.	Året
°C													
Mean temperature													
Normal (1961-1990)	0.0	0.0	2.1	5.7	10.8	14.3	15.6	15.7	12.7	9.1	4.7	1.6	7.7
2011	0.3	-0.1	3.1	9.9	11.4	15.1	16.4	16.1	14.1	9.8	6.7	4.2	9.0
Average daily temperature													
Normal (1961-1990)	2.0	2.2	4.9	9.6	15.0	18.7	19.8	20.0	16.4	12.1	7.0	3.7	10.9
2011	2.4	1.6	6.1	14.5	15.6	19.2	20.1	19.8	17.5	13.0	8.5	6.1	12.1
Average nightly temperature													
Normal (1961-1990)	-2.9	-2.8	-0.8	2.1	6.5	9.9	11.5	11.3	9.1	6.1	2.3	-0.7	4.3
2011	-2.1	-2.2	0.2	5.5	7.3	11.1	13.0	12.9	10.8	6.2	4.6	1.9	5.8
Maximum temperature													
1874-2011 Temp.	12.4	15.8	22.2	28.6	32.8	35.5	35.3	36.4	32.3	26.9	18.5	14.5	36.4
Measured during the years	2005	1990	1990	1993	1892	1947	1941	1975	1906	2011	1968	1953	1975
2011	9.8	9.6	15.3	22.5	26.2	28.2	27.1	27.6	25.9	26.9	14.6	11.3	28.2
Minimum temperature													
1874-2011 Temp.	-31.2	-29.0	-27.0	-19.0	-8.0	-3.5	-0.9	-2.0	-5.6	-11.9	-21.3	-25.6	-31.2
Measured during the years	1982	1942	1888	1922	1900	1936	1903	1885	1886	1880	1973	1981	1982
2011	-12.4	-16.5	-7.6	-1.6	-3.2	2.6	6.2	4.9	3.8	-2.6	-3.9	-5.1	-16.5
degree-days													
Degree-days													
Normal (1961-1990)	522	491	461	337	198	84	43	47	128	243	361	469	3 382
2011	517	479	430	213	175	65	28	43	91	222	309	397	2 970
mm.													
Precipitation													
Normal (1961-1990)	57	38	46	41	48	55	66	67	73	76	79	68	712
2011	46	40	31	16	54	76	113	132	92	61	18	99	779
hours													
Bright sunshine, all DK													
Normal (1961-1990)	43	69	110	162	209	209	196	186	128	87	54	43	1 495
2011	72	52	143	253	239	252	171	150	135	130	37	50	1 683
days													
Summer days (max. >25°)													
Normal (1961-1990)	0.0	0.0	0.0	0.0	0.2	1.9	2.6	2.3	0.1	0.0	0.0	0.0	7.2
2011	0.0	0.0	0.0	0.0	<	1.2	1.3	1.2	<	<	0.0	0.0	3.9
Frost days (min. <0°)													
Normal (1961-1990)	19.0	19.0	15.0	6.6	0.7	<	0.0	0.0	0.2	1.8	7.3	15.0	84.0
2011	22.3	18.5	13.5	0.4	0.9	0.0	0.0	0.0	0.0	0.7	2.5	5.4	64.2
Ice days (max. <0°)													
Normal (1961-1990)	8.6	7.5	2.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	4.0	23.0
2011	3.7	11.5	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3
Precipitation days (R ³ 0.1 mm)													
Normal (1961-1990)	17.0	13.0	14.0	12.0	12.0	12.0	13.0	13.0	15.0	16.0	18.0	17.0	171.0
2011	15.4	12.5	8.8	7.4	16.0	13.3	17.9	22.5	17.9	16.6	9.1	27.0	184.3
Days with snow													
Normal (1961-1990)	7.6	6.4	5.3	2.6	0.2	0.0	0.0	0.0	0.0	0.1	2.3	5.8	30.0
2011	5.6	3.5	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	12.9

Note 1: *Degree days* are used as a measurement for heating needs in the heating season (1 September - 31 May). Degree days are shade-temperature days.

Source: Danmarks Meteorologiske Institut

www.dmi.dk

Note 2: < means less than 0.1, but greater than 0.0.