

Geography and climate

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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

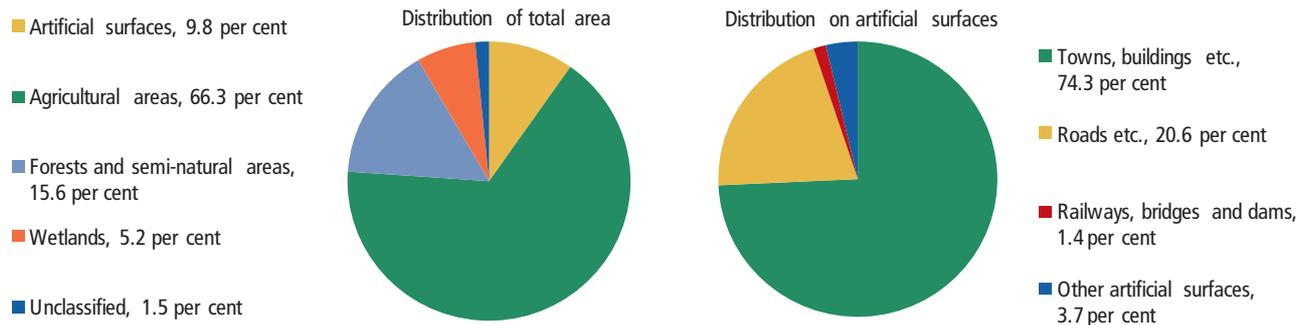


Table 4

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.

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Climate

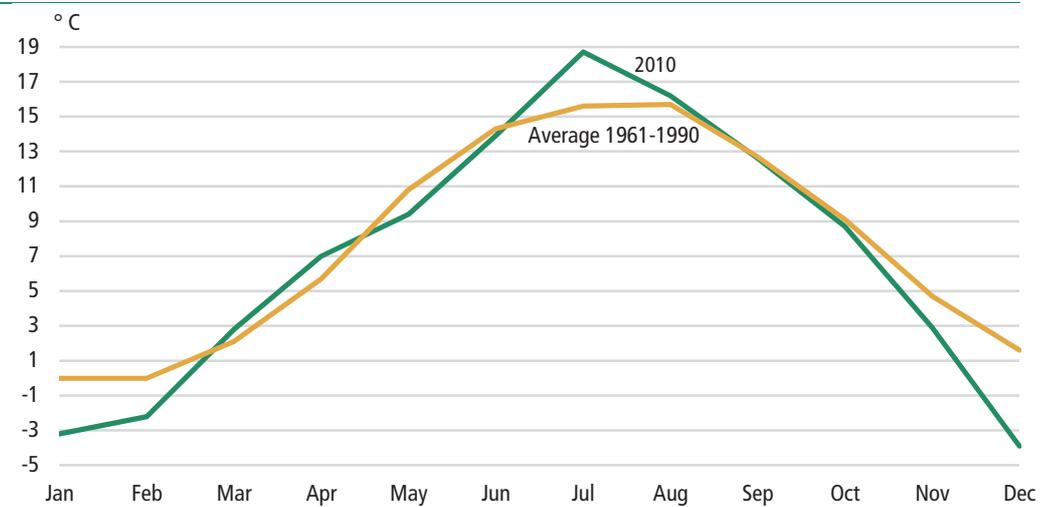
It rains or snows every second day

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	42 959.1	5 560 628	129.4	73	700	7 314
Provinces						
Copenhagen City	167.0	692 876	4 149.0	4	18	213
Copenhagen Suburban	342.1	516 751	1 510.5	-	...	...
Nordsjælland	1 448.8	447 864	309.1	2	80	248
Bornholm ¹	588.3	41 896	71.2	2	3	141
Østsjælland	807.8	235 519	291.6	-	7	154
Vest- og Sydsjælland	6 409.9	584 244	91.1	24	102	1 707
Fyn	3 544.4	484 969	136.8	17	26	1 130
Syddjælland	8 777.2	715 687	81.5	8	...	...²
Østjylland	5 841.7	834 113	142.8	7	...	...
Vestjylland	7 158.7	426 880	59.6	3	...	...
Nordjylland	7 873.2	579 829	73.6	6	...	...
Regions						
Hovedstaden	2 546.2	1 699 387	667.4	8	101	602
Sjælland	7 217.7	819 763	113.6	24	109	1 861
Syddanmark	12 321.6	1 200 656	97.4	25	...	...
Midtjylland	13 000.4	1 260 993	97.0	10	...	...
Nordjylland	7 873.2	579 829	73.6	6	...	...
Faroe Islandse	1 396.0	48 650³	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 Including 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. 2011

	Municipalities	Parishes	Customs and tax regions	Constituencies ¹	
				Counties and large constituencies	Constituencies
Total	98	2 187	37	10	92
The Islands	56	903	20	6	48
Jutland	42	1 284	17	4	44
Region Hovedstaden	29	248	8	4	28
København by	4	81	2	1	12
Københavns omegn	13	56	1	1	8
Nordsjælland	11	89	4	1	6
Bornholm	1	22	1	1	2
Region Sjælland	17	424	8	1	12
Østsjælland	5	60	2	}	3
Vest- og Sydsjælland	12	364	6		1	9
Region Syddanmark	22	519	9	2	21
Fyn	10	231	4	1	8
Syddjylland	12	288	5	1	13
Region Midtjylland	19	639	8	2	22
Østjylland	11	357	5	1	11
Vestjylland	8	282	3	1	11
Nordjylland	11	357	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. Regions and inhabited islands

Municipality code	Area in km ²	Population 1 January 2011	Municipality code	Area in km ²	Population 1 January 2011
All Denmark	42 959.1	5 560 628			
Zealand, Lolland, Falster	9 175.6	2 477 254	430 Bjørnø	1.5	37
Province Byen København	167.0	692 876	420 Bågø	6.2	34
Amager	95.7	174 179	479 Drejø	4.3	65
185 Saltholm	16.7	4	410 Fænø	3.9	2
101 Slotsholmen	0.2	14	479 Hjortø	0.9	8
101 Trekroner	-	1	482 Langeland	283.5	13 090
Province Københavns omegn	342.1	516 751	430 Lyø	6.2	98
Province Nordsjælland	1 448.8	447 864	482 Siø	1.4	16
250 Eskilsø	1.4	6	479 Skarø	2.0	36
190 Klaus Nars Holm	...	2	482 Strynø	4.9	216
Province Bornholm	588.3	41 896	479 Thurø	7.6	3 682
400 Bornholm	588.0	41 802	440 Tornø	0.2	4
411 Christiansø + Frederiksø ¹	0.3	94	479 Tåsinge	70.0	6 194
Province Østsjælland	807.8	235 519	492 Ærø	87.5	6 653
Province Vest- og Sydsjælland	6 409.9	584 244	Jutland	29 650.8	2 556 509
330 Agersø	8.1	203	Province Sydjylland	8 777.2	715 687
360 Askø	2.8	37	540 Als	311.4	51 166
390 Bogø	14.4	1 135	580 Barsø	2.7	22
370 Dybsø	1.4	1	563 Fanø	59.6	3 213
370 Enø	3.5	296	580 Kalvø	0.2	14
376 Falster	514.0	43 244	561 Mandø	8.5	44
390 Farø	...	5	550 Rømø	86.6	650
360 Fejø ²	16.0	526	580 Store Okseø	0.1	4
360 Femø	11.4	145	510 Årø	5.9	163
370 Gavnø	5.7	38	Province Østjylland	5 841.7	834 113
330 Glæne	...	53	727 Alrø	7.7	164
390 Langø	1.3	3	707 Anholt	21.8	154
360 Lilleø	0.8	5	615 Endelave	13.2	185
390 Lindholm	0.1	1	766 Hjarnø	3.2	98
360 Lolland	1 245.0	64 730	741 Samsø	112.3	3 885
390 Masnedø	1.7	128	727 Tunø	3.6	117
390 Møn	218.3	9 777	615 Vorsø	0.6	1
326 Nekselø	2.2	20	Province Vestjylland	7 158.7	426 880
390 Nyord	5.6	41	779 Fur	22.0	855
330 Omø	4.5	167	671 Jegindø	7.8	485
316 Orø	15.0	867	671 Venø	6.4	185
326 Sejerø	12.5	366	Province Nordjylland	7 873.2	579 829
390 Tærø	1.7	1	773 Agerø	3.5	32
360 Vejrhø	1.6	7	851 Egholm	...	49
Province Funen	3 544.4	484 969	813 Hirsholm	0.2	3
430 Avernakø	5.7	104	820 Livø	3.3	9
492 Birkholm	0.9	10	825 Læsø	112.9	1 949
			773 Morsø	360.4	21 568
			Vendsyssel-Thy ³	4 674.2	300 177

¹ Not included in the division of municipalities, administered by the Ministry of Defence. ² Inkl. Kaldø. ³ Vendsyssel-Thy are divided into province Vestjylland and Nordjylland.

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

Lake's name	Location	1999-2002 2006-2010		Lake's name	Location	1999-2002 2006-2010	
		km ²				km ²	
Arresø	Sjælland	39.5	39.6	Søndersø	Lolland	8.4	8.0
Esrum Lake	Sjælland	17.4	17.4	Tystrup Lake	Sjælland	6.7	6.7
Mossø	Østjylland	16.6	16.5	Julso	Østjylland	5.8	5.6
Stadil Fjord ¹	Vestjylland	17.3	16.2	Tømmerby Fjord	Nordjylland	6.0	5.7
Saltbæk Vig ¹	Sjælland	16.1	15.9	Ulvedybet	Nordjylland	5.9	5.5
Tissø	Sjælland	12.7	12.5	Tange Lake	Vestjylland	5.5	5.4
Furesø	Sjælland	9.3	9.4	Lund Fjord	Nordjylland	5.1	5.1
Skanderborg Lake	Østjylland	8.6	8.5				

¹ Area of brackish water.

www.kms.dk

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
2010	-3.2	-2.2	2.8	7.0	9.4	13.9	18.7	16.2	12.6	8.7	2.9	-3.9	7.0
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
2010	-1.3	-0.4	5.7	10.9	13.0	18.0	23.3	20.1	16.2	11.6	4.9	-1.2	10.1
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
2010	-5.6	-4.7	-0.5	3.4	6.0	9.8	14.3	12.4	9.0	5.2	0.7	-7.6	3.6
Maximum temperature													
1874-2010 Temp.	12.4	15.8	22.2	28.6	32.8	35.5	35.3	36.4	32.3	24.1	18.5	14.5	36.4
Measured during the years	2005	1990	1990	1993	1892	1947	1941	1975	1906	1978	1968	1953	1975
2010	4.9	7.2	17.7	22.4	24.9	28.3	34.1	26.4	22.2	20.1	13.5	7.6	34.1
Minimum temperature													
1874-2010 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
2010	-18.0	-16.5	-19.1	-4.5	-3.1	2.2	5.6	3.6	0.1	-4.4	-11.8	-23.0	-23.0
degree-days													
Degree-days													
Normal (1961-1990)	522	491	461	337	198	84	43	47	128	243	361	469	3 382
2010	625	537	441	300	236	97	6	39	131	259	423	648	3 742
mm.													
Precipitation													
Normal (1961-1990)	57	38	46	41	48	55	66	67	73	76	79	68	712
2010	29	41	33	27	64	52	69	124	73	85	91	40	726
hours													
Bright sunshine, all DK													
Normal (1961-1990)	43	69	110	162	209	209	196	186	128	87	54	43	1 495
2010	62	52	127	198	189	248	247	151	146	109	58	81	1 669
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
2010	0.0	0.0	0.0	0.0	0.0	0.9	7.9	0.7	0.0	0.0	0.0	0.0	9.5
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
2010	30.8	24.3	14.1	2.5	0.5	0.0	0.0	0.0	0.0	3.1	12.4	30.7	118.4
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
2010	22.0	15.8	2.2	0.1	0.0	0.0	0.0	0.0	0.0	0.0	5.8	19.8	65.6
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
2010	12.2	14.8	11.9	10.5	13.3	9.8	13.9	18.8	14.9	16.3	21.5	19.1	177.0
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
2010	10.6	10.6	2.6	0.0	0.0	0.0	0.0	0.0	0.0	0.2	7.1	12.0	43.0

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.

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

Source: Danmarks Meteorologiske Institut

www.dmi.dk