UMWELTATLAS

Berlin

Soil Associations

Near-natural Soil Associations

	1	luvisol - arenic cambisol ground moraine flat upland areas of boulder marl
	8	podzoluvisol - arenic dystric cambisol - dystric cambisol dunes on ground moraine flat upland areas of boulder marl
	2	dystric cambisol - luvisol - colluvial cambisol moraine (hill) of detrital sand, usually over marl
	2a	*dystric cambisol - luvisol - colluvium/luvisol* *sandy sink fill on flat upland areas and valley sand on marl*
	2b	*dystric cambisol - luvisol - eutric histosol* *sandy sink fill on flat upland areas and valley sand on marl with peat*
	11	stagnic gleysol - stagno-gleyic luvisol - stagno-gleyed luvisol clayey sink fill
	3	dystric cambisol - colluvial cambisol moraine (hill) of detrital sand, partially on marl
	6	dystric cambisol - colluvial cambisol (outwash plain on) moraine surface of detrital sand
	6b	*dystric cambisol - colluvial cambisol* *sandy sink fill, partially on marl*
	4	dystric cambisol - regosolic cambisol - colluvial cambisol end or push moraine of detrital sand
	5	dystric cambisol - regosol - colluvial cambisol / gleysol end or push moraine and flat upland area slope of sand
	7	dystric cambisol - chromic cambisol - colluvial cambisol fluvioglacial meltwater channel of detrital sand
	17	dystric cambisol - dystric gleysol - calcaro-dystric histosol end or push moraine of detrital sand with interbedded marl
	72	podzol - regosolic cambisol - colluvial cambisol end or push moraine of detrital sand
	12	luvisol - arenic dystric cambisol (sometimes influenced by groundwater) ground moraine flat upland area of boulder marl
	12a	*gleyic luvisol - gleyo-arenic dystric cambisol* (currently used sewage farm) ground moraine flat upland area of boulder marl
	13	residual eutro-gleyic cambisol (cambisol with gley characteristics) moraine (hill) of detrital sand, usually on marl
	13a	dystric cambisol - eutro-gleyic cambisol (currently used sewage farm) moraine (hill) of detrital sand, usually on marl
	CSA 9,10	podzol - dystric cambisol- colluvial dystric cambisol (collective soil association of dunes without bordering bog) dunes of fine sand
	9	spodo-dystric cambisol - podzol - colluvial dystric cambisol dunes of fine sand
	10	spodo-dystric cambisol - dystric cambisol - colluvial dystric cambisol dunes of fine sand
	18	spodo-dystric cambisol - stagno-gleyed dystric cambisol drift sand on valley sand areas
	19	dystric cambisol - dystric gleysol - oligotrophic eutric histosol deflation basin in valley sand with dunes
	20	dystric cambisol - stagno-gleyed dystric cambisol - eutro-gleyic dystric cambisol valley sand with dunes
	14	eutro-gleyic cambisol - calcaric eutro-gleyic cambisol - calcaro-gleyic cambisol valley sand of medium and fine sands
	15	dystric cambisol - stagno-gleyed cambisol - eutro-gleyic cambisol valley sand of medium and fine sands
	15d	*stagno-gleyed cambisol - gleysol - eutric histosol* valley sand of medium and fine sands
	16	eutro-gleyic cambisol - gleysol - histo-humic gleysol basin in valley sand
	21	dystric gleysol - calcaric dystric gleysol - calcaric gleysol flat valley sand channels of medium and fine sands
	22	dystric cambisol - stagnic gleysol - histo-humic gleysol meltwater channels in valley sand with dunes
	22a	*eutro-gleyic cambisol - gleysol - eutric histosol* meltwater channels in valley sand without dunes
	23	stagno-gleyed dystric cambisol - calcic gleysol - eutrophic histosol lowland in valley sand with valley bog turf
	25	dystric gleysol - histo-humic gleysol - mesotrophic histosol dead ice kettle in valley sand
	26	dried fluvi-eutric histosol - fluvic calcic-eutro histosol (river) lowland with meadow lime and valley bog turf in valley sand
	27	dried fluvi-eutric histosol - dried histo-humic gleysol - gleysol fluvioglacial meltwater channel of sand (in boulder marl flat upland area) with lower bog turf
	28	eutrophic fluvi-eutric histosol - fluvic histo-humic gleysol - eutro-gleyic dystric cambisol fluvioglacial channel of and with lower bog turf
	29	dystric cambisol - colluvium/residual gleysol - dried eutric histosol fluvioglacial meltwater channel of detrital sand
	30	dystric cambisol - stagnic gleysol / eutric histosol - dried eutric histosol fluvioglacial meltwater channel of detrital sand
	CSA 24,32, 35,36	fluvic gleysol - fluvi-eutric histosol (collective soil association of river lea with turf) river lea of layered sands
	24	fluvic gleysol - fluvi-stagno gleysol - eutrophic fluvi-eutric histosol river lowlands in valley sand with valley bog turf
	32	colluvial cambisol - eutrophic fluvi-eutric histosol - calcic fluvisol slope-influenced river lea of layered sands
	35	dystric cambisol - dystric fluvisol - mesotrophic fluvi-eutric histosol river lea of layered sands
	36	fluvisol - fluvi-stagnic gleysol - mesotrophic fluvi-eutric histosol river lea of layered sands
	31	calcaric regosol - calcaro-gleyic regosol - calcaric gleysol dried fluvisol (lea) with lime rhud over sand
	CSA 33,34	calcic fluvisol - fluvic gleysol (collective soil association of river lea without turf) river lea of layered sands
	33	dystric cambisol - fluvic gleysol - calcic fluvisol slope-influenced river lea of layered sands
	34	fluvisol - calcaric fluvi-mollic gleysol - raw fluvisol river lea of layered sands
	37	colluvial cambisol - raw fluvisol - submerged raw fluvisol river lea of layered sands

Anthric Soil Associations

	60	regosol + dystric-eutric regosol + gleyic regosol flat-graded sewage farm on glacial sand
	62	regosol + luvic regosol flat-graded sewage farm on boulder marl
	63	regosol + dystric-eutric regosol + gleyic regosol flat-graded sewage farm on valley sand/outwash plain sand
	38	necrosol + cambic hortisol + luvisol cemetery on ground moraine flat upland area of boulder marl
	39	necrosol + cambic hortisol + dystric cambisol cemetery on ground moraine flat upland area of detrital sands
	40	necrosol + cambic hortisol + spodo-dystric cambisol cemetery on drift sand area of fine sands
	41	necrosol + gleyo-cambic hortisol + gleysol cemetery on valley sand of medium and fine sands
	42	loose lithosols + cambisol/dystric cambisol + gleysol military practice area on valley sand area (with dunes)
	43	loose lithosols + cambisol/dystric cambisol + dystric cambisol military practice area on (glacial outwash plain) moraine area of detrital sand
	47	loose lithosols surface mining on kames or (glacial outwash plain) moraine sands
	48	loose lithosols + loose lithic gleysol + submerged raw fluvisol surface mining on valley sand
	49	lithosol + calcic regosol + calcaric regosol railway tracks on aggraded and eroded surfaces
	49a	*(loose) lithosols + calcaric regosol + horisol* allotment garden on aggraded and eroded areas
	50	regosol + calcaric regosol + hortisol settlements, partially on aggraded surfaces
	50a	*calcaric regosol + loose lithosols + regosol* settlements, partially on aggraded surfaces
	50aR	*calcaric regosol + loose lithosols + regosol* settlements on areas once used for sewage farms, partially on aggraded surfaces
	51	loose lithosols + humic regosol + calcaric regosol dense inner city construction, not destroyed in war, on aggraded areas
	52	loose lithosols + regosol + calcaric regosol inner city, on aggraded surfaces
	53	calcaric regosol + calcic regosol + loose lithosols war debris hills, construction debris site and landfill
	55	reductosol + loose lithosols + regosol waste disposal site, primarily domestic waste
	57	loose lithosols + regosol + calcaric regosol industrial area on aggraded or eroded surfaces
	58	humic regosol/eutro-gleyic cambisol + hortisol/gleysol + calcaric regosol/fluvisols aggradation on river bank areas and in channels

CSA = Collective Soil Association
italic Concept Soil

1. The Concept Map of Soil Associations is based on the current and updated Soil Association Map for West Berlin, first published in 1985, and the extension of this map for East Berlin based on analogue conclusions.
   The map as a whole is thus a concept map and is only for unsealed soils.
2. The bases for the Concept Map of Soil Associations are excavations and drill-corings made in forest plantations and agricultural areas, primarily in the western part of Berlin, and in settlements, under consideration of land use categories. The map has been confirmed for areas where single maps and profiles exist. The map is partially confirmed for areas where soil associations were defined on the basis of comparable natural conditions. Studies were made of some individual sites of soils anthropogenically altered by settlements, industrial use, and military sites, etc. Results were carried over by analogy for areas of comparable use. The map is a concept map for these areas.
3. A portrayal of the distribution of individual soils is only somewhat possible in a map with a scale of 1 : 50,000. This is why soil associations were grouped together from several characteristic soil types. Near-natural soils have a clear relationship to the original material of soil formation, and to the current natural conditions. Near-natural soil associations are related by interactive structures and they also formed in dependance on each other. Soil associations were named using the interactive structures that characterize these soils. The beginning and final soils of the association are given. Anthric soil associations (associations of anthropogenically altered soils) are grouped only according to their common occurence within an area of single use. They are not linked.
4. Soil associations are divided according to type and range of human influences. The soil associations begin with near-natural soils (with a dash between individual soils). The associations end with anthrosols; these are listed with a plus symbol.
5. Soil associations have three categories:
   - Soil Associations - These have been described and confirmed on the basis of maps and test samples.
   - Concept Soil Associations - These combinations of use and geomorphology have not yet been detected in or do not exist in West Berlin. Confirmation by soil studies has not yet been made.
   - Collective Soil Associations - These are groupings of soil associations in East Berlin which cannot be classified in the manner given by Grenzius (1987) because of the current status of the data base.

Scale: 1 : 50 000

0 1 2 3 4 5 6 7 8 9 10 km

Published by: **Berlin Department of Urban Development, Environmental Protection and Technology**

Public relations

Conception:	Gruppe III A 3 (Ökologische Planungsgrundlagen)
Text Concept:	III A 3
Text:	III A 3, Heiner Deja
Data:	UIS Berlin
Cartographic Editing:	III A 3
Colour scheme:	III A 3
Reproduktion:	CAdMAp Raumbezogene Informationssysteme GmbH,
Print:	ZIMMERMANN & CO.
Data Processing and Map Production:	Dr. W. Aey, U. Claußen, Dr. R. Grenzius, G. Metzlaff unter Verwendung des UIS Berlin
Data from:	West-Berlin February 1995, Ost-Berlin March 1994
Based on the Map:	Digitale Arbeitskarte 1 : 50 000 des UIS Berlin,

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Extended and revised edition 1998

Source:	Kulturbuch-Verlag GmbH Postfach 47 04 49, 12313 Berlin, Sprosserweg 3, 12351 Berlin, Tel.: (030) 611 84 84, Fax: 661 78 28
Source of the digital environmental atlas:	J.F. Lehmanns Fachbuchhandlung Hardenbergstraße 11, 10623 Berlin, Bestellservice telephonisch: 0130 - 4372, Fax: (030) 661 50 15
Internet-Address:	http://www.stadtentwicklung.berlin.de