NOMENCLATURE

The nomenclature is systematic. Names of soil orders end in "sol" (L. *solum*, soil), for example, Alfisol, and contain a formative element used as the final syllable in names of taxa in suborders, great groups, and subgroups. These formative elements are shown in the legend.

Names of suborders consist of two syllables, for example, Aqualf. Formative elements in the legend are as follows:

and—modified from Ando soils; soils from vitreous parent materials
aqu—L. *aqua*, water; soils that are wet for long periods
arg—modified from L. *argilla*, clay; soils with a horizon of clay accumulation
bor—Gr. *boreas*, northern; cool
fluv—L. *fluvius*, river; soils formed in alluvium
ochr—Gr. base of *ochros*, pale; soils with little organic matter
orth—Gr. *orthos*, true; the common or typical
psamm—Gr. *psammos*, sand; sandy soils
trop—modified from Gr. *tropikos*, of the solstice; of tropical regions
ud—L. *udus*, humid; of humid climates
umbr—L. *umbra*, shade; dark colors reflecting much organic matter
ust—L. *ustus*, burnt; of dry climates with summer rains
xer—Gr. *xeros*, dry; of dry climates with winter rains

Names of great groups consist of more than two syllables and are formed by adding a prefix to the suborder name, for example, Albaqualf. Formative elements that appear in the legend are as follows:

cry—Gr. *kryos*, icy cold; cold soils.
dystr—modified from Gr. *dys*, ill; infertile.
eutr—modified from Gr. *eu*, good; fertile.
frag—modified from L. *fragilis*, brittle; a brittle pan.
hapl—Gr. *haplous*, simple; the least advanced horizons.
quartz—Ger. *quarz*, quartz; soils with very high content of quartz.
torr—L. *torridus*, hot and dry; soils of very dry climates.

ISRIC - WAGENINGEN
country : USA
subject : Soils
scale : 1:7 500 000
map ref. : US 2.
libr. ref. :

ALFISOLS: Soils with gray to brown surface horizon, medium to high base supply, and subsurface horizons of clay accumulation
Formative element: alf

ARIDISOLS: Soils with pedogenic horizons, low in organic matter, usually dry
Formative element: id

ENTISOLS: Soils without pedogenic horizons
Formative element: ent

HISTOSOLS: Organic (peat and muck) soils
Formative element: ist

INCEPTISOLS: Soils with weakly differentiated horizons showing alteration of parent materials
Formative element: ept

MOLLISOLS: Soils with nearly black, organic-rich surface horizon and high base supply
Formative element: oll

OXISOLS: Soils that are mixtures principally of kaolin, hydrated oxides, and quartz
Formative element: ox

SPODOSOLS: Soils that have accumulation of amorphous materials in subsurface horizons
Formative element: od

ULTISOLS: Soils with horizons of clay accumulation and low base supply
Formative element: ult

VERTISOLS: Cracking clay soils
Formative element: ert

Miscellaneous land types: Bare rock, salt flats, ice fields, and some included soils

MOIST SOILS: Usually not saturated with water but for long periods have enough moisture for plant growth

WET SOILS: Seasonally or permanently saturated with water

DRY SOILS: Lack moisture for plant growth for long periods

The letter-number symbols below are abbreviated from those on the map to the letter and number that precede the hyphen. The dot pattern on the map indicates soils with textures of loamy fine sand or coarser. For complete legend, see other side; for complete definition of the soils, see *Soil Classification, A Comprehensive System, 7th Approximation*, 1960, and *Supplement*, March 1967, USDA, Soil Conservation Service.

	WARM SOILS (Mean annual soil temperature higher than about 47°F)			COOL SOILS (Mean annual soil temperature lower than about 47°)	
	MOIST	WET	DRY	MOIST	WET
ALFISOLS	Udalfs A6[1] A7[1] A8	Aqualfs A1 A2	Ustalfs A9 A10 Xeralfs A11 A12 A13	Boralfs A3 A4 A5	
ARIDISOLS			Argids D1 D2 D3 D4 Orthids D5 D6		
ENTISOLS	Psamments Quartzipsamments E10 Udipsamments E12[1]	Aquents E1	Fluvents E2 Orthents E3 E4 E5 E6 E7 E8 Psamments Torripsamments E11 Ustipsamments E13 Xeropsamments E14	Psamments Cryopsamments E9	
HISTOSOLS		H2			H1
INCEPTISOLS	Andepts Dystrandepts I2 Ochrepts Dystrochrepts I8 Eutrochrepts I9 Fragiochrepts I10 Tropepts I12 Umbrepts Haplumbrepts I14	Aquepts Haplaquepts I5 Humaquepts I6	Andepts Eutrandepts I3 Ochrepts Ustochrepts I11	Andepts Cryandepts I1 Ochrepts Cryochrepts I7 Umbrepts Crumbrepts I13	Aquepts Cryaquepts I4
MOLLISOLS	Udolls M6 M7 M8	Aquolls M1 M2[1]	Ustolls M9 M10 M11 M12 M13 M14 Xerolls M15 M16	Borolls M3 M4 M5	
OXISOLS	Orthox O1		Ustox O2		
SPODOSOLS		Aquods S1		Orthods S2 S3 S4[2]	
ULTISOLS	Humults U2 U3 Udults U4 U5 U6	Aquults U1	Xerults U7		
VERTISOLS	Uderts V1 V2		Usterts V3 V4 Xererts V5		
Misc. land types	X2 X4		X1 X5	X3	

[1]Includes some soils that are cool

[2]Includes some soils that are warm

PRINCIPAL KINDS OF SOILS
ORDERS, SUBORDERS AND GREAT GROUPS

National Cooperative Soil Survey Classification of 1967

Compiled by the Soil Conservation Service,
U. S. Department of Agriculture, 1967
Reviewed 1985

Albers Equal Area Projection

SCALE 1:7,500,000

0 100 200 300 400 MILES
0 100 200 300 400 500 600 700 KILOMETERS

HAWAII
(Principal Islands)
SCALE 1:7,500,000

ALASKA
SCALE 1:17,000,000
0 100 200 300 400 MILES
0 200 400 600 KILOMETERS

Southern boundary of discontinuous permafrost. No permafrost south of this boundary

Southern boundary of continuous permafrost

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