



How we converted the UN FAO soil map of Predio el Jabali in Mexico to a US style soil survey



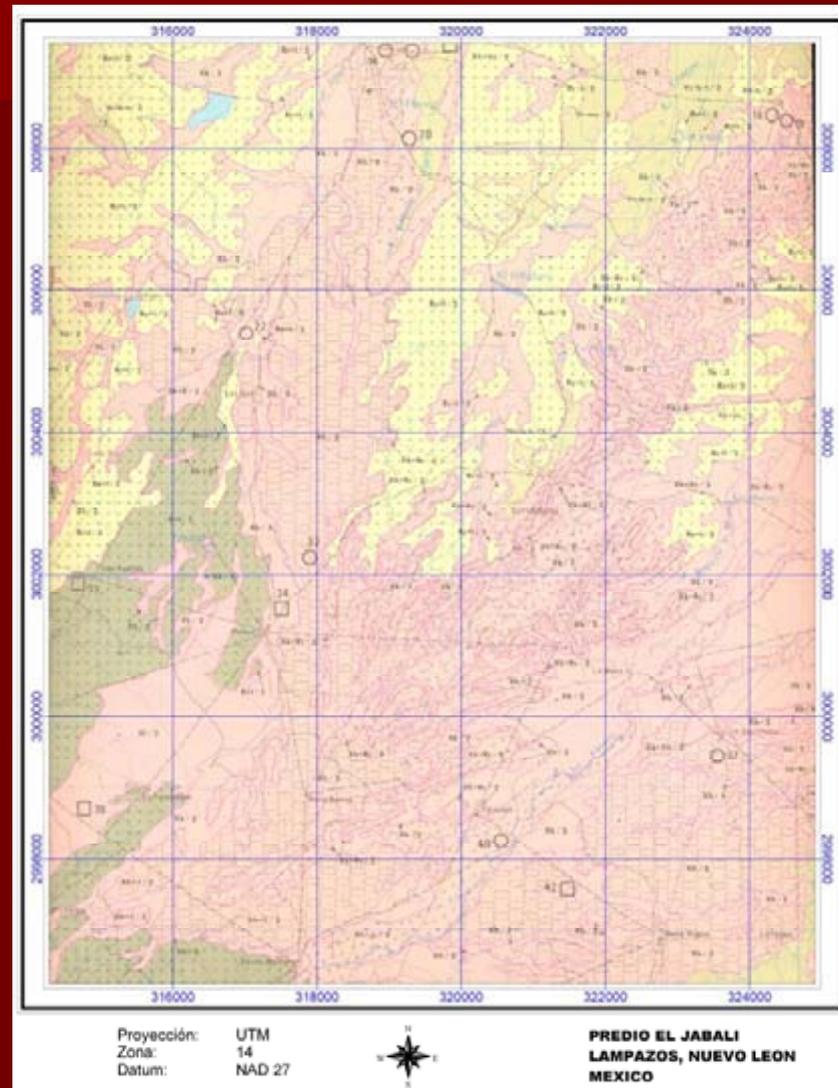


The Team in DC

March 30 to April 3, 2009



The FAO map we transformed



The FAO Legend for el Jabali

S I M B O L O G I A

UNIDADES DE SUELO					
ACRISOL FERRICO GLEYPICO HUMICO PLINTICO	A Af Ag Ah Ap				
ANDOSOL HUMICO MOLICO OCRIDO VITRICO	T Th Tm To Tv				
ARENOSOL ALBICO CAMBICO FERRALICO LUVICO	Q Qe Qc Qf Qi				
CAMBISOL CALCICO CROMICO DISTRICO EUTRICO FERRALICO GELICO GLEYPICO HUMICO VERTICO	B Bk Bc Bd Be Bf Bx Bg Bh Bv				
CASTAÑOZEM CALCICO HAPLICO LUVICO	K Kk Kh Kl				
CHERNOZEM CALCICO HAPLICO LUVICO	C Cc Ch Cl				
FEOZEM CALCARICO GLEYPICO HAPLICO LUVICO	H Hc Hg Hh Hi				
FERRALSOL ACRICO HUMICO ORTICO PLINTICO RÓDICO XANTICO	F Fh Fo Fp Fr Fx				
FLUVISOL CALCARICO DISTRICO EUTRICO GLEYPICO TÍONICO	J Jc Jd Je Jg Jt				
GLEYSOL CALCARICO DISTRICO EUTRICO HUMICO MOLICO PLINTICO VERTICO	G Gc Gd Ge Gh Gm Gp Gv				
HISTOSOL DISTRICO EUTRICO	O Oe Of				
LITOSOL	I				
LUVISOL ALBICO CALCICO CROMICO FERRICO GLEYPICO ORTICO	L Lc Lk Ll Ll Lg Le Lv				
NITOSOL DISTRICO EUTRICO HUMICO	N Nd Ne Nh				
PLANOSOL DISTRICO EUTRICO HUMICO MOLICO SOLODICO	W Wd We Wh Wm Ws				
PODZOL GLEYPICO HUMICO ORTICO PLACICO	P Pg Ph Ps Pp				
PODZOLUVISOL DISTRICO EUTRICO GLEYPICO	D Dd De Dg				
RANKER	U				
REGOSOL CALCARICO DISTRICO EUTRICO GELICO	R Rc Rd Rx				
RENDZINA	E				
SOLOCHAK GLEYPICO MOLICO ORTICO TAKIRICO	Z Zg Zm Zs Zt				
SOLONETZ ALBICO GLEYPICO MOLICO ORTICO	S Sa Sg Sm So				
VERTISOL CROMICO FELICO	V Vc Vp				
XEROSOL CALCICO GYPSICO HAPLICO LUVICO	X Xk Xg Xh Xi				
YERMOSOL CALCICO GYPSICO HAPLICO LUVICO TAKIRICO	Y Yk Yg Yh Yl Yt				

CLASE TEXTURAL
(EN LOS 30 cm. SUPERFICIALES DEL SUELO)

GRUESA _____ 1 MEDIA _____ 2 FINA _____ 3

FASES FISICAS

CONCRECIONARIA _____		LITICA PROFUNDA _____	
DURICA _____		PEDREGOSA _____	
DURICA PROFUNDA _____		PETROCALCICA _____	
FRAGICA _____		PETROCALCICA PROFUNDA _____	
GRAVOSA _____		PETROGYPSICA _____	
LITICA _____		PETROGYPSICA PROFUNDA _____	

FASES QUIMICAS
(PRESENTES A MENOS DE 125 cm. DE PROFUNDIDAD)

SUELO LIGERAMENTE SALINO (4 a 8 mmhos/cm A 25°C) _____ fs

SUELO MODERADAMENTE SALINO (8 a 16 mmhos/cm A 25°C) _____ ms

SUELO FUERTEMENTE SALINO (>= 16 mmhos/cm A 25°C) _____ fs

SODICA (>= 15% DE SATURACION DE SODIO INTERCAMBIABLE) _____ n

LIMITE ENTRE UNIDADES _____

SUELO PREDOMINANTE + SUELO SECUNDARIO - FASE SALINA - SODICA / CLASE TEXTURAL DE LA UNIDAD CARTOGRAFICA _____ Je - Be - ms - n / 2

UNIDAD DE CLASIFICACION FAO/UNESCO 1970 MODIFICADA POR CETENAL

PUNTOS DE VERIFICACION

PERFIL CON DESCRIPCION Y ANALISIS DETALLADO _____

PUNTO COMPLEMENTARIO _____

VIAS TERRESTRES

CARRERA DE MAS DE DOS CARRILES. CASETA DE PAGO _____ \$

CARRERA PAVIMENTADA _____

NUMERACION DE RUTA: FEDERAL, ESTATAL _____

TERRESTRE TRANSITABLE EN TODO TIEMPO _____



Our Mission-- To produce a modern soil survey of Predio el Jabali





Soil profiles descriptions, pictures, and a geology map



Samuel Garcia, Soil Scientist with Conafor in Mexico



Starting with a symbol on a map we built a legend in NASIS

File Edit View Options Help

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Unchanged Wayne G's Site Administration

CLEAR CANCEL Vertisol Cromico, Moderadamente Salino, Fina Cell Status

HELP ZOOM

Legend

ES	Area Type Name	Area Symbol	Area Name	Area Acres	MLRA Office	Legend Description
-	Non-MLRA Soil Survey Area	MXNL001	Predio El Jabali, parts of Lam	34733	temple, tx	Detailed Soil Map Legend

Mapunit

Seq	Mapunit Symbol	Mapunit Name	Kind	Status	Total Acres	Linear Feature Width
-	CaAC	Association de Catarina con pe	M association	approved	578	Low RV

Mapunit History

Seq	Date	Author	Correlation Kind	Correlation Event	Historical Name	Status
-	04/07/2009	Wayne J. Gabriel	symbol change	correlation team meeting		
-	04/01/2009	Wayne J. Gabriel	name change	correlation team meeting	Vertisol Cromico, Moderadament	
-	03/25/2009	Wayne J. Gabriel	name change	correlation team meeting	Vc-ms/3	

Starting with symbols on an FAO map we built a legend in NASIS

Report Name: MANU - Acreage and Proportionate Extent of the Soils

Predio El Jabali, parts of Lampazos de Naranjo, Nuevo Leon and Progreso, Coahuila Municipalities, Mexico
 Acreage and Proportionate Extent of the Soils

Print date: 05/08/2009

Map symbol	Soil name	Acres	Percent
CaAC	Association de Catarina con pendiente, de 0 a 5 por cento	578	1.7
CoAAB	Association de Coahuila-Acuna con pendiente, de 0 a 3 por cento	397	1.1
CoAC	Association de Cotulla con pendiente, de 0 a 5 por cento	902	2.6
DaZAB	Association de Darl-Zapata con pendiente, de 0 a 3 por cento	311	0.9
DeLAB	Association de Dev-Loire con pendiente, de 0 a 3 por cento, inundado por avenidas	786	2.3
DGAC	Association de Dilley-Goldfinch con pendiente, de 0 a 5 por cento	483	1.4
DLBC	Association de Doss-Langtry con pendiente, de 1 a 5 por cento	2,610	7.5
DuBC	Association de Duval con pendiente, de 1 a 5 por cento	143	0.4
DuDAB	Association de Duval-Dilley con pendiente, de 0 a 3 por cento	15	*
GAC	Association de Garceo con pendiente, de 0 a 5 por cento	104	0.3
KAC	Association de Knippa con pendiente, de 0 a 5 por cento	335	1.0
KTAB	Association de Knippa-Tobosa con pendiente, de 0 a 3 por cento	721	2.1
LAB	Association de Lattas con pendiente, de 0 a 3 por cento	180	0.5
MBE	Association de Mata con pendiente, de 1 a 12 por cento	1,106	3.2
MSAF	Association de Mata-Sanderson con pendiente, de 0 a 15 por cento	2,660	7.7
NOTCOM	Incompleto	268	0.8
OB	Association de Olmos con pendiente, de 1 a 8 por cento	7,291	21.0
SBC	Association de Sabenyo con pendiente, de 1 a 5 por cento	4,675	13.5
TBAB	Association de Tonio-Brystal con pendiente, de 0 a 3 por cento	423	1.2
VAC	Association de Valco con pendiente, de 0 a 5 por cento	229	0.7
VBE	Association de Verick con pendiente, de 1 a 12 por cento	473	1.4
VNBE	Association de Verick-Nido con pendiente, de 1 a 12 por cento	6,522	18.8
W	Agua	56	0.2
WeAC	Association de Webb con pendiente, de 0 a 5 por cento	1,169	3.4
WnAB	Association de Winterhaven con pendiente, de 0 a 3 por cento, frecuentemente inundado por avenidas	1,027	3.0
ZZBD	Association de Zapata-Zorra con pendiente, de 1 a 8 por cento	1,269	3.7
	Total	34,733	100.0

* Less than 0.1 percent.

Populated NASIS component using existing components in NASIS

NASIS (7153) - MLRA09_Office

File Edit View Options Help

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CLEAR CANCEL 549729 Cell Status Protected ZOOM

Data Mapunit

ES	Rec ID	DMU Description	Interpretive Focus	Order of Mapping	Prod Index	DMU Certification Status	DMU Site
-	549729	NL001008				3	MLRA09_Office

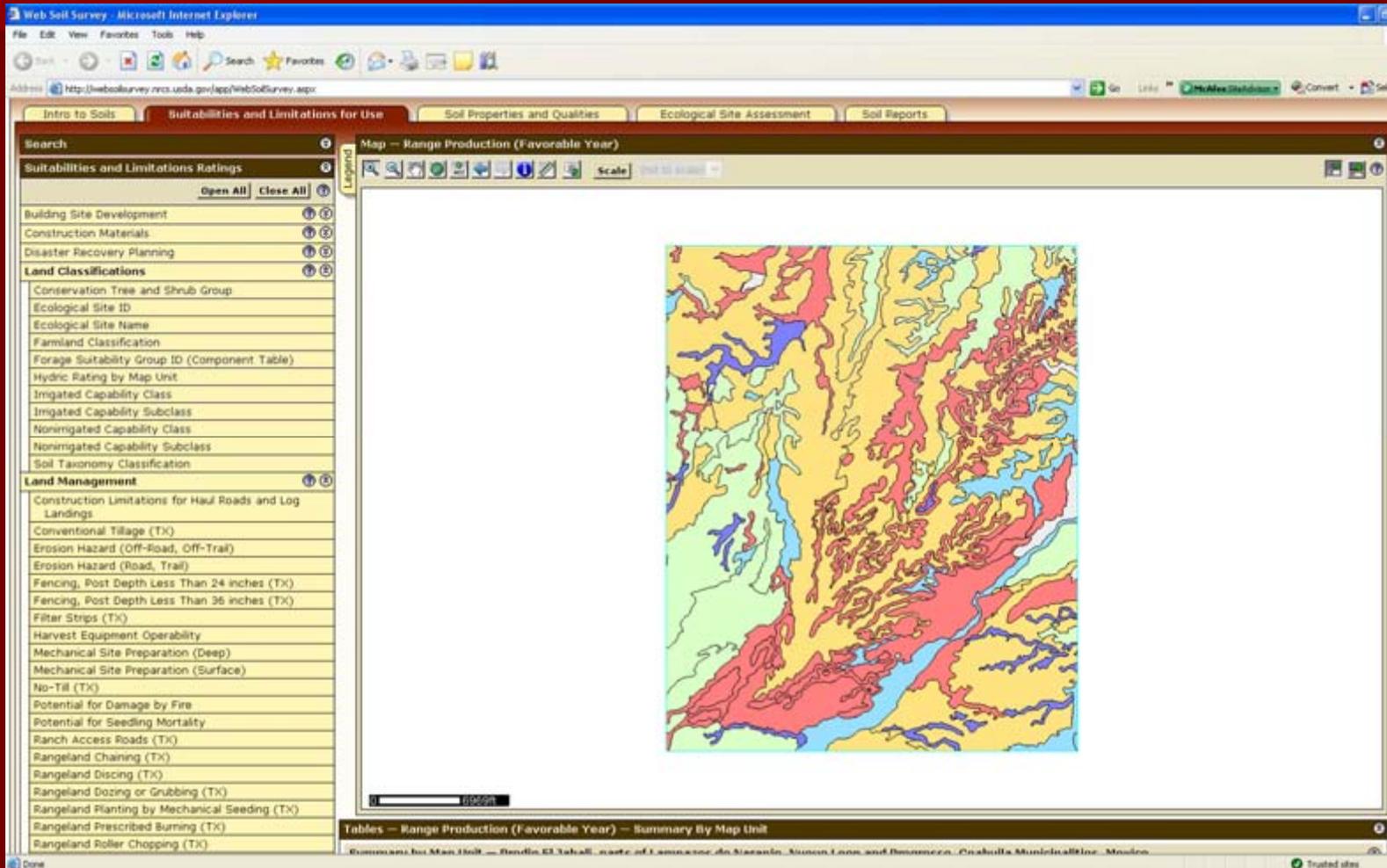
Component

ES	Component Name	Seq	Comp %		C	Kind	Major Component	SIR phase - obsolete	Local Ph
			Low	RV					
-	Winterhaven			85		C series	yes		

Component Month

	Seq	Month	Flooding Frequency	Flooding Duration	Ponding Frequency	Ponding Duration	Ponding Depth			Daily Precip		
							Low	RV	High	Low	RV	High
-		jan			none							
-		feb			none							
-		mar			none							
-		apr			none							
-		may	frequent	brief	none							
-		jun	frequent	brief	none							
-		jul	frequent	brief	none							
-		aug	frequent	brief	none							
-		sep	frequent	brief	none							
-		oct			none							
-		nov			none							
-		dec			none							

Exported and certified the SSURGO data and it is now on WSS and SDM





The soil survey of Predio el Jabali, parts of Lampazos de Naranjo, Nuevo Leon and Progreso, Coahuila Municipalities, Mexico

Accomplishments

- Soil survey demonstration project for Mexico.
- Demonstrates how FAO soil surveys can be transformed into the US system using Soil Taxonomy, soil series concepts, soil interpretations, and our delivery methods.
- The landowner Roberto Zambrano is using the Web Soil Survey legend, descriptions, tables, reports, maps, and soil interpretations for conservation planning of ecological restoration in Predio el Jabali.
- Used every trick in the book including using dem's to calculate slope ranges and a Google earth fly over to view the soil map and terrain simultaneously.



Soil survey is based on good map, pedon descriptions, transects, and lab data



A--0 to 10 inches; pale brown (10YR 6/3) sand, dark brown (10YR 4/3) moist; single grained; loose; common fine roots; neutral; clear smooth boundary. (7 to 20 inches thick)

E--10 to 46 inches; pink (7.5YR 8/4) sand, light brown (7.5YR 6/4) moist; single grained; loose; few fine roots; slightly acid; abrupt wavy boundary. (22 to 54 inches thick)

Bt1--46 to 54 inches; reddish yellow (5YR 6/6) sandy clay loam, yellowish red (5YR 5/6) moist; many medium and coarse prominent mottles of red and pink; weak medium and coarse subangular blocky structure; hard, firm; patchy clay films on faces of peds; very strongly acid; gradual wavy boundary. (6 to 30 inches thick)

Bt2--54 to 62 inches; red (10R 4/6) sandy clay, dark red (10R 3/6) moist; many medium and coarse prominent mottles of light gray and few fine distinct mottles of reddish yellow; weak medium and coarse subangular blocky structure; hard, firm; patchy clay films on faces of peds; few fragments of ironstone in upper part; very strongly acid; gradual wavy boundary. (0 to 30 inches thick)

BC--62 to 80 inches; red (2.5YR 5/8) sandy clay loam, red (2.5YR 4/8) moist; few medium prominent light gray mottles; weak medium and coarse subangular blocky structure; hard, friable; clay bridges sand grains; extremely acid.



Field investigation needed to improve this survey



