

TABLE 22.—General characteristics of soils of the southern section of the Shelterbelt Zone (Texas and Oklahoma)

Soil	Principal occurrence	Approximate percentage of area in States of southern section	Physiography and drainage	Native vegetation	Approximate minimum depth of water table
Abilene (fine-textured types)	Rolling plains of Texas and Oklahoma.	Oklahoma, 10.00; Texas, 6.00.	Nearly level to undulating well-drained upland.	Short grasses.	Feet 100
Abilene (sandy types)	do	Oklahoma, 2.04; Texas, 0.57.	Nearly level to rolling well-drained upland.	Bunch, short, and mixed grasses; mesquite, shin oak, shrubs.	100
Amarillo (fine-textured types)	High plains of southern Panhandle of Texas.	(1)	Undulating to rolling well-drained upland.	Short grasses and smaller bunch grasses.	100
Amarillo (sandy types)	do	(1)	Rolling to hummocky well-drained upland.	Bunch, short, and mixed grasses; mesquite, catclaw, shrubs.	100
Calumet	Rolling plains of Texas and Oklahoma.	(1)	Nearly level terrace; surface drainage and under-drainage slow.	Short and salt grasses.	50-100
Enterprise (dune phase)	Chiefly rolling plains of Texas and Oklahoma.	Oklahoma, 7.65; Texas, 3.71.	Hilly; underdrainage good to excessive.	Bunch grasses; shin oak, sand sage, yucca.	15-50
Foard	Rolling plains of Texas and Oklahoma.	Oklahoma, 5.00; Texas, 3.00.	Nearly level upland; slow surface drainage and underdrainage.	Short grasses.	100
Hollister	do	Oklahoma, 2.26; Texas, 1.65.	Nearly level to undulating upland; slow surface drainage and underdrainage.	do	100
Lincoln	Texas and Oklahoma	Oklahoma, 2.00; Texas, 0.01.	Nearly level bottom lands; drainage variable.	Tall grasses; trees and shrubs.	5-15
Miles Enterprise (sandy types)	Rolling plains of Texas and Oklahoma.	Oklahoma, 8.59; Texas, 28.58.	Rolling to strongly rolling, well-drained upland.	Bunch, short, and mixed grasses; shin oak, sand sage.	50-100
Miller	Texas and Oklahoma	Oklahoma, 1.00; Texas, 0.01.	Nearly level bottom lands; drainage variable.	Tall grasses; trees and shrubs.	5-15
Mutual ²	Rolling plains of Texas and Oklahoma.	Oklahoma, 7.00; Texas, 1.40.	Nearly level to undulating well-drained upland.	Bunch and short grasses.	100
Potter	High plains and margins in Texas and Oklahoma.	Oklahoma, 3.00; Texas, 1.50.	Rolling to steeply sloping upland; surface drainage excessive.	Bunch, short, and mixed grasses.	100
Pratt	Oklahoma and Kansas.	Oklahoma, 3.96.	Nearly level to hummocky or dune-like upland; underdrainage good.	do	5-130
Pullman	High plains of Texas, Oklahoma, and Kansas.	Oklahoma, 1; Texas, 0.15.	Nearly level to gently undulating uplands; surface drainage good to slow.	Short grasses.	30-100

¹Not stated.
²Provisional correlation.

Soil	Principal occurrence	Approximate percentage of area in States of southern section	Physiography and drainage	Native vegetation	Approximate minimum depth of water table
Randall	High plains of Texas and Oklahoma.	Oklahoma, 1; Texas, 0.02.	Poorly drained hard land basins.	Short grasses.	Feet 100
Richfield (fine-textured types)	High plains of Texas, Oklahoma, and Kansas.	Oklahoma, 0.05; Texas, 1.	Nearly level or slightly depressed to gently rolling lands; surface drainage good to slow.	Bunch and short grasses.	30-100
Rough broken land	Texas and Oklahoma.	Oklahoma, 15.72; Texas, 21.22.	Severely eroded upland.	Bunch and short grasses; some shrubs.	30-100
Spur	Texas.	Texas, 0.02.	Nearly level bottom lands; drainage variable.	Tall grasses; trees and shrubs.	5-150
St. Paul	Rolling plains of Texas and Oklahoma.	Oklahoma, 1; Texas, 1.00.	Undulating to rolling well-drained upland.	Short grasses.	100
Summit	Rolling plains of Oklahoma and Kansas.	(1)	Nearly level to hilly, well to excessively drained upland.	Tall and mixed grasses.	50-100
Tillman	Rolling plains of Texas and Oklahoma.	Oklahoma, 4.00; Texas, 2.00.	Undulating to rolling upland; slow underdrainage.	Short grasses.	100
Vernon	Rolling plains of Texas, Oklahoma, and Kansas.	Oklahoma, 19.81; Texas, 28.00.	Rolling to hilly, well to excessively drained upland.	Bunch and short grasses.	100
Woodward ²	Rolling plains of Oklahoma and Kansas.	Oklahoma, 6.00.	Nearly level to undulating well-drained upland.	do	100
Yahola	Texas and Oklahoma.	Oklahoma, 0.59; Texas, 0.01.	Nearly level bottom lands; drainage variable.	Tall grasses; trees and shrubs.	5-115
Zita	High plains and margins in Texas and Oklahoma.	Oklahoma, 1.93; Texas, 0.55.	Undulating to rolling upland; surface drainage good to excessive.	Bunch and short grasses.	100

Soil	Upper portion of soil profile	Lower portion of soil profile	Parent material	General feasibility for trees
Abilene (fine-textured types)	Brown to chocolate brown; friable, loamy to sandy, 8 to 14 inches thick.	Brown to pale reddish brown; friable, loamy to clayey, 20 to 30 inches thick.	Tertiary and Quaternary silts and clays.	Fair to difficult.
Abilene (sandy types)	Brown to chocolate brown; coherent to moderately loose, sandy, 10 to 16 inches thick.	Yellowish to pale reddish brown; friable, loamy to sandy, 22 to 36 inches thick.	Tertiary and Quaternary sands.	Fair to good.
Amarillo (fine-textured types)	Chocolate to reddish brown; friable, loamy to clayey, 4 to 10 inches thick.	Red; crumbly, clayey, 10 to 20 inches thick.	Tertiary and Quaternary silts and clays.	Difficult.
Amarillo (sandy types)	Reddish brown; friable to moderately loose, loamy to clayey, 10 to 18 inches thick.	Red or reddish brown; friable sandy clay, 15 to 25 inches thick.	Tertiary and Quaternary sands.	Fair to difficult.
Calumet	Light brown; moderately compact, silty to clayey, 4 to 10 inches thick.	Brown to very dark brown; dense clay (claypan), 15 to 25 inches thick.	Reworked silts and clays.	Difficult to unsuited.
Enterprise (dune phase)	Light-brown incoherent sand, 1/2 to 5 inches thick.	Yellowish brown or reddish yellow incoherent sand, 10 to 15 inches thick.	Wind-blown sand.	Fair to difficult.
Foard	Dark to very dark brown compact clay, 6 to 8 inches thick.	Very dark brown to nearly black dense clay (claypan), 20 to 25 inches thick.	Permian and Triassic "Red Beds."	Difficult.
Hollister	Dark brown; friable, silty to loamy, 8 to 10 inches thick.	Dark brown, compact semiclaypan, 25 to 30 inches thick.	do	Fair to difficult.
Lincoln	Brown; coherent to moderately loose, loamy to sandy, 10 to 15 inches thick.	Light gray brown; moderately loose to coherent, sandy, 24 to 30 inches thick.	Recent sands and sand-silt mixtures.	Good.
Miles Enterprise (sandy types)	Grayish brown to reddish brown; coherent to moderately loose, loamy to sandy, 10 to 15 inches thick.	Red to reddish brown; friable sandy clay, 25 to 40 inches thick.	Tertiary and Quaternary sands and sandy clays.	Do.
Miller	Dark chocolate red; friable to moderately compact; texture and thickness variable.	Chocolate red; moderately compact, loamy to sandy, 20 to 30 inches thick.	Recent "Red Beds" sediments.	Do.
Mutual ²	Brown; friable, loamy to sandy, 10 to 16 inches thick.	Dark brown; friable, clayey, 16 to 40 inches thick.	Permian and Triassic "Red Beds."	Do.
Potter	Brown to grayish brown; friable, loamy to clayey, 4 to 8 inches thick.	Grayish brown to light yellowish brown; friable, clayey, 6 to 12 inches thick.	Tertiary silts and clays.	Difficult.
Pratt	Brown; loose to moderately coherent, loamy to sandy, 10 to 18 inches thick.	Light brown to reddish or yellowish brown; friable, loamy to sandy, 18 to 24 inches thick.	Tertiary and Quaternary sands and gravels.	Fair to good.
Pullman	Brown; friable, loamy to clayey, 10 to 18 inches thick.	Dark brown to brown crumbly clay over reddish-brown crumbly clay; 18 to 40 inches thick.	Tertiary silts and clays.	Difficult.
Randall	Dark brown to black compact clay, 4 to 10 inches thick.	Gray to bluish-gray dense clay (claypan), 30 to 48 inches thick.	Silts and clays (lacustrine).	Unsuited.
Richfield (fine-textured types)	Brown to dark brown; friable, loamy to clayey, 10 to 18 inches thick.	Dark brown to brown crumbly clay to clay loam, 18 to 40 inches thick.	Tertiary silts and clays.	Fair to difficult.
Rough broken land	(1)	(1)	Variable.	Variable.
Spur	Light brown to dark, chocolate brown; friable; texture and thickness variable.	Light brown to light chocolate brown; friable; texture and thickness variable.	Recent sand, silt, and clay sediments.	Good.
St. Paul	Brown; friable, silty to clayey, 10 to 14 inches thick.	Brown; moderately compact, clayey, 35 to 40 inches thick.	Permian and Triassic clays and sandy clays.	Fair to good.
Summit	Black; silty to clayey, friable, 10 to 14 inches thick.	Very dark grayish-brown to black moderately compact clay, underlain by yellowish-brown friable clay; 20 to 35 inches thick.	Limestone.	Good.
Tillman	Brown; friable, silty to loamy, 8 to 12 inches thick.	Reddish brown; moderately compact, clayey, 30 to 35 inches thick.	Permian and Triassic clays and sandy clays ("Red Beds").	Fair to difficult.
Vernon	Red to reddish brown; friable, loamy to sandy, 2 to 10 inches thick.	Red; friable, loamy to sandy clay, 10 to 14 inches thick.	do	Good to difficult.
Woodward ²	Red to reddish brown; friable, loamy to sandy, 8 to 12 inches thick.	Red to brown red; loamy, 14 to 20 inches thick.	do	Good.
Yahola	Chocolate red to red; friable, loamy to sandy; thickness variable.	Red; moderately loose to incoherent, sandy, 20 to 30 inches thick.	Recent "Red Beds" sediments.	Do.
Zita	Brown; friable, loamy to sandy, 7 to 12 inches thick.	Brown to yellowish brown; friable, clayey, 12 to 18 inches thick.	Tertiary silts and clays.	Fair to difficult.

¹Not stated.
²Provisional correlation.