

# APPENDIX A

## Soils

<b>Class III</b>	<b>Soils</b>	<b>Slope Category</b>
AeC	Allegheny gravelly loam	(3-8% slopes) a
AeC2	Allegheny gravelly loam, eroded	(3-8% slopes) a
AIC2	Allen loam, eroded	(3-8% slopes) a
ApC2	Apison loam, eroded	(3-8% slopes) a
AsC2	Apison gravelly loam, eroded	(3-8% slopes) a
BaC	Baxter cherty silt loam	(3-8% slopes) a
CaC	Captina silt loam	(3-6% slopes) a
CaC2	Captina silt loam, eroded	(3-6% slopes) a
Cr	Cleora fine sandy loam	(0-3% slopes) a
FaC2	Fayetteville fine sandy loam, eroded	(3-8% slopes) a
JaC	Jay silt loam	(3-8% slopes) a
Jo	Johnsburg silt loam	(0-2% slopes) a
LkC2	Linker loam, eroded	(3-8% slopes) a
LnC2	Linker gravelly loam, eroded	(3-8% slopes) a
NaC	Nixa cherty silt loam,	(3-8% slopes) a
PeC2	Pembroke silt loam, eroded	(3-6% slopes) a
PgC2	Pembroke gravelly silt loam, eroded	(3-8% slopes) a
PkC2	Pickwick gravelly loam, eroded	(3-8% slopes) a
PsC2	Pickwick silt loam, eroded	(3-8% slopes) a
Sa	Samba silt loam	(0-1% slopes) a
SfC2	Savannah fine sandy loam, eroded	(3-8% slopes) a
Sp	Summit complex, mounded	(0-1% slopes) a
SsA	Summit silty clay	(0-1% slopes) a
SsC2	Summit silty clay, eroded	(3-8% slopes) a
ToA	Taloka silt loam	(0-1% slopes) a

<b>Class IV</b>	<b>Soils</b>	<b>Slope Category</b>
AeD2	Allegheny gravelly loam, eroded	(8-12% slopes) a
AgD	Allegheny stony loam	(8-12% slopes) a
AID2	Allen loam, eroded	(8-12% slopes) a
BaD	Baxter cherty silt loam	(8-12% slopes) a
Ch	Cherokee silt loam	(0-2% slopes) a
Ck	Cherokee complex, mounded	(0-1% slopes) a
EnC	Enders gravelly loam	(3-8% slopes) a
EnC2	Enders gravelly loam, eroded	(3-8% slopes) a
FaD2	Fayetteville fine sandy loam, eroded	(8-12% slopes) a
GuC	Guin cherty silt loam	(3-8% slopes) a
HmC	Hector-Mountainburg gravelly fine sandy loam	(3-8% slopes) a
Js	Johnsburg complex, mounded	(0-1% slopes) a
Le	Leaf silt loam	(0-1% slopes) a
Lf	Leaf complex, mounded	(0-1% slopes) a
LnD	Linker gravelly loam	(8-12% slopes) a

NaD	Nixa cherty silt loam	(8-12% slopes) a
PkD2	Pickwick gravelly loam, eroded	(8-12% slopes) a
Sb	Samba complex, mounded	(0-1% slopes) a
SsD2	Summit silty clay, eroded	(8-12% slopes) a
Ta	Taloka complex, mounded	(0-1% slopes) a

<b>Class V</b>	<b>Soils</b>	<b>Slope Category</b>
Ec	Elsah cobbly soils	(0-3% slopes) a
Eg	Elsah gravelly soils	(0-3% slopes) a

<b>Class VI</b>	<b>Soils</b>	<b>Slope Category</b>
AIE2	Allen loam, eroded	(12-20% slopes) b
AnE	Allen soils	(8-20% slopes) a,b
BaE	Baxter cherty silt loam	(12-20% slopes) b
EnD	Enders gravelly loam	(8-12% slopes) a
EnD2	Enders gravelly loam, eroded	(8-12% slopes) a
EoD	Enders stony loam	(3-12% slopes) a
FaE2	Fayetteville fine sandy loam, eroded	(12-20% slopes) b
HmD	Hector-Mountainburg gravelly fine sandy loam	(8-12% slopes) a
MoD	Montevallo soils	(3-12% slopes) a
StD2	Summit stony silty clay, eroded	(3-12% slopes) a

<b>Class VII</b>	<b>Soils</b>	<b>Slope Category</b>
AgF	Allegheny stony loam	(12-40% slopes) b,c,d
AhF	Allen-Hector complex	(20-40% slopes) c,d
AhG	Allen-Hector complex	(40-50% slopes) e
AoF	Allen stony loam	(12-35% slopes) b,c,d
BaF	Baxter cherty silt loam	(20-45% slopes) c,d,e
CIG	Clarksville cherty silt loam	(12-60% slopes) b-f
ErE	Enders-Allegheny complex	(8-20% slopes) a,b
ErF	Enders-Allegheny complex	(20-40% slopes) c-e
FeF	Fayetteville stony fine sandy loam	(12-35% slopes) b,c,d
FhF	Fayetteville-Hector complex	(20-40% slopes) c,d,e
HoF	Hector-Mountainburg stony fine sandy loam	(3-40% slopes) a-e
MoE	Montevallo soils	(12-25% slopes) b-d
Ro	Rock land	-
So	Sogn rocky silt loam	(3-12% slopes) a
StE2	Summit stony silty clay, eroded	(12-25% slopes) b-c

# APPENDIX A Soils

## Class III

**Capability Unit IIIe-1** Soils in this Capability Unit include (CaC) Captina silt loam, 3 to 6 percent slopes; (CaC2) Captina silt loam, 3 to 6 percent slopes, eroded; (JaC) Jay silt loam, 3 to 8 percent slopes; (SfC2) Savannah fine sandy loam, 3 to 8 percent slopes, eroded. They are moderately well-drained and well-drained soils on uplands and stream terraces. Slopes range from 3 to 8 percent. Erosion hazard is severe and permeability is slow.

**Capability Unit IIIe-2** Soils in this Capability Unit include (AeC) Allegheny gravelly loam, 3 to 8 percent slopes; (AeC2) Allegheny gravelly loam, 3 to 8 percent slopes, eroded; (AIC2) Allen loam, 3 to 8 percent slopes, eroded; (PeC2) Pembroke silt loam, 3 to 6 percent slopes, eroded; (PgC2) Pembroke gravelly silt loam, 3 to 8 percent slopes, eroded; (PkC2) Pickwick gravelly loam, 3 to 8 percent slopes, eroded; (PsC2) Pickwick silt loam, 3 to 8 percent slopes, eroded. They are characterized by deep, well-drained soils on uplands and stream terraces. The slope range is 3 to 8 percent.

**Capability Unit IIIe-3** Soils in this Capability Unit include (BaC) Baxter cherty silt loam, 3 to 8 percent slopes. Erosion hazard is severe and permeability moderate.

**Capability Unit IIIe-4** Soils in this Capability Unit include (ApC2) Apison loam, 3 to 8 percent slopes, eroded; (AsC2) Apison gravelly loam, 3 to 8 percent slopes, eroded; (FaC2) Fayetteville fine sandy loam, 3 to 8 percent slopes, eroded; (LkC2) Linker loam, 3 to 8 percent slopes, eroded; (LnC2) Linker gravelly loam, 3 to 8 percent slopes, eroded. The slope range is 3 to 8 percent. Permeability is moderate and erosion hazard is severe.

**Capability Unit IIIe-5** Soils in this Capability Unit include (SsC2) Summit silty clay, 3 to 8 percent slopes, eroded. This is a deep, moderately well-drained soil found on uplands. Shrink and swell potential is high. Permeability is very slow due to high clay content. Erosion hazard is severe.

**Capability Unit IIIw-1** Soils in this Capability Unit include (Sa) Samba silt loam, 0 to 1 percent slopes; (ToA) Taloka silt loam, 0 to 1 percent slopes. The slope range is 0-1 percent. There are poorly drained soils on uplands and stream terraces. Permeability is slow to very slow, run-off is slow to very slow, and wetness is a severe hazard.

**Capability Unit IIIw-2** Soils in this Capability Unit include (Jo) Johnsborg silt loam, 0 to 2 percent slopes. This is a deep, poorly drained soil on uplands and stream terraces. The slope range is 0-2 percent. Permeability is slow and erosion potential only slight.

**Capability Unit IIIw-3** Soils in this Capability Unit include (Cr) Cleora fine sandy loam, 0 to 3 percent slopes. The slope range is 0-3 percent. The soil is moderately permeable.

**Capability Unit IIIw-4** Soils in this Capability Unit include (Sp) Summit complex, 0 to 1 percent slopes, mounded; (SsA) Summit silty clay, 0 to 1 percent slopes. Most areas are level. Permeability is very slow because of the high clay content. These soils shrink and crack when dry and swell when wet.

**Capability Unit IIIs-1** Soils in this Capability Unit include (NaC) Nixa cherty silt loam, 3 to 8 percent slopes. This is a deep moderately well-drained upland soil. Permeability is very slow. Run-off is medium.

## Class IV

**Capability Unit IVe-1** Soils in this Capability Unit include (AeD2) Allegheny gravelly loam, 8 to 12 percent slopes, eroded; (AID2) Allen loam, 8 to 12 percent slopes, eroded; (FaD2) Fayetteville fine sandy loam, 8 to 12 percent slopes, eroded; (LnD) Linker gravelly loam, 8 to 12 percent slopes; (PkD2) Pickwick gravelly loam, 8 to 12 percent slopes, eroded. They are deep, well-drained soils on slopes ranging between 8 to 12 percent. Erosion hazard is extremely severe and permeability quite slow.

**Capability Unit IVe-2** Soils in this Capability Unit include (BaD) Baxter cherty silt loam, 8 to 12 percent slopes. This is a deep, well-drained soil found on uplands. Permeability is moderate and erosion potential very severe.

**Capability Unit IVe-3** Soils in this Capability Unit include (AgD) Allegheny stony loam, 8 to 12 percent slopes. Permeability is moderate. Run-off can be rapid and erosion severity is high.

**Capability Unit IVe-4** Soils in this Capability Unit include (HmC) Hector-Mountainburg gravelly fine sandy loam, 3 to 8 percent slopes. These are shallow, well-drained soils ranging in slope from 3 to 8 percent. Permeability is rapid and erosion hazard very severe.

**Capability Unit IVe-5** Soils in this Capability Unit include (AIE2) Allen loam, 12 to 20 percent, eroded; (AnE) Allen soils, 8 to 20 percent slopes; (FaE2) Fayetteville fine sandy loam, 12 to 20 percent slopes, eroded. Soils in this Capability Unit include (EnC) Enders gravelly loam, 3 to 8 percent slopes; (EnC2) Enders gravelly loam, 3 to 8 percent slopes, eroded. These soils are deep, moderately drained, gravelly soils on uplands. The slopes range from 3 to 8 percent. Permeability is slow due to plastic clay subsoil which resists percolation of water. Erosion hazard is severe with these soils.

**Capability Unit IVe-6** Soils in this Capability Unit include (SsD2) Summit silty clay, 8 to 12 percent slopes, eroded. Erosion hazard is very severe on these soils.

**Capability Unit IVw-1** Soils in this Capability Unit include (Ch) Cherokee silt loam, 0 to 2 percent slopes; (Ck) Cherokee complex, 0 to 1 percent slopes, mounded; (Js) Johnsborg complex, 0 to 1 percent slopes, mounded; (Le) Leaf silt loam, 0 to 1 percent slopes; (Lf) Leaf complex, 0 to 1 percent slopes, mounded; (Sb) Samba complex, 0 to 1 percent slopes, mounded; (Ta) Taloka complex, 0 to 1 percent slopes, mounded. There are poorly drained and somewhat poorly drained soils on uplands and stream terraces. Permeability is slow and erosion hazard high.

**Capability Unit IVs-1** Soils in this Capability Unit include (NaD) Nixa cherty silt loam, 8 to 12 percent slopes. This is a deep, moderately well-drained soil. Permeability is slow due to the fragipan, which restricts water and root movement.

**Capability Unit IVs-2** Soils in this Capability Unit include (GuC) Guin cherty loam, 3 to 8 percent slopes. It is a well-drained soil on alluvial fans and foot slopes. Permeability is rapid. Run-off is slow.

**Class V**

**Capability Unit Vw-1** Soils in this Capability Unit include (Ec) Elsah cobbly soils, 0 to 3 percent slopes; (Eg) Elsah gravelly soils, 0 to 3 percent slopes. There are deep, somewhat excessively drained to excessively drained soils. Permeability is fairly rapid. Run-off is slow, however; a severe overflow hazard is the major limitation.

**Class VI**

**Capability Unit Vle-1** Soils in this Capability Unit include (AIE2) Allen loam, 12 to 20 percent, eroded; (AnE) Allen soils, 8 to 20 percent slopes; (FaE2) Fayetteville fine sandy loam, 12 to 20 percent slopes, eroded. There are deep, well-drained soils on uplands slope range is 8 to 12 percent. Erosion hazard is severe and permeability moderate.

**Capability Unit Vle-2** Soils in this Capability Unit include (BaE) Baxter cherty silt loam, 12 to 20 percent slopes. This is a deep, well-drained soil. Permeability is moderate; run-off is fairly rapid while erosion hazard is severe.

**Capability Unit Vle-3** Soils in this Capability Unit include (HmD) Hector-Mountainburg gravelly fine sandy loams, 8 to 12 percent slopes; (MoD) Montevallo soils, 3 to 12 percent slopes. This unit consists primarily of the soils of the Hector-Mountainburg and Montevallo series. There are shallow, gravelly and stony, well-drained to excessively drained soils on uplands. Slopes range from 3 to 12 percent. Permeability is moderate to rapid, erosion hazard is severe.

**Capability Unit Vle-4** Soils in this Capability Unit include (EnD) Enders gravelly loam, 8 to 12 percent slopes; (EnD2) Enders gravelly loam, 8 to 12 percent slopes, eroded; (StD2) Summit stony silty clay, 3 to 12 percent slopes, eroded. This unit consists entirely of soils of the Enders series. These are deep, moderately well-drained gravelly soils on uplands. Due to plastic clay subsoil, permeability is very slow, run-off is rapid and erosion hazard severe.

**Capability Unit Vls-1** Soils in this Capability Unit include (EoD) Enders stony loam, 3 to 12 percent slopes; (StD2) Summit stony silty clay, 3 to 12 percent slopes, eroded. These are deep, moderately well-drained, stony soils in uplands. Slopes range from 3 to 12 percent. Permeability is very slow due to clay subsoil.

**Class VII**

**Capability Unit Vlle-1** Soils in this Capability Unit include (AgF) Allegheny stony loam, 12 to 40 percent slopes; (AhF) Allen-Hector complex 20 to 40 percent slopes; (AhG) Allen-Hector complex, 40 to 50 percent slopes; (AoF) Allen stony loam, 12 to 35 percent slopes; (ErE) Enders-Allegheny complex, 8 to 20 percent slopes; (ErF) Enders-Allegheny complex, 20 to 40 percent slopes; (FeF) Fayetteville stony fine sandy loam, 12 to 35 percent slopes; (FhF) Fayetteville-Hector complex, 20 to 40 percent slopes. They are deep, well-drained stony soils on uplands. Slopes range from 8 to 55 percent. Permeability is moderate. Run-off is fairly rapid and erosion hazard, severe.

**Capability Unit Vlle-2** Soils in this Capability Unit include (BaF) Baxter cherty silt loam, 20 to 45 percent slopes. This is a deep, well-drained soil on uplands. Permeability is only moderate and the erodibility of the soil is very severe.

**Capability Unit Vlls-1** Soils in this Capability Unit include (CIG) Clarksville cherty silt loam, 12 to 60 percent slopes. This is an excessively drained soil on uplands. Permeability is rapid. It is 50 to 90 percent chert which limits its water capacity.

**Capability Unit Vlls-2** There are shallow, well-drained to somewhat excessively drained stony soils on uplands. Slopes range from 3 to 55 percent. Depth to bedrock is 8 to 20 inches and water capacity is low due to shallowness and stoniness. Permeability is moderate to rapid. Soils in this Capability Unit include: (AhF) Allen-Hector complex, 20 to 40 percent slopes; (AhG) Allen-Hector complex, 40 to 50 percent slopes; (FhF) Fayetteville-Hector complex, 20 to 40 percent slopes; (HoF) Hector-Mountainburg stony fine sand loam, 3 to 40 percent slopes; (MoE) Montevallo soils, 12 to 25 percent slopes. There are shallow, well-drained to somewhat excessively drained stony soils on uplands. Slopes range from 3 to 55 percent. Depth to bedrock is 8 to 20 inches and water capacity is low due to shallowness and stoniness. Permeability is moderate to rapid.

**Capability Unit Vlls-3** Soils in this Capability Unit include (Ro) Rock land; Sogn rocky silt loam, 3 to 12 percent slopes. Both are shallow and excessively drained with slopes ranging from 3 to 60 percent. Permeability is moderate to rapid yet water capacity is low due to shallowness and rockiness.

**Capability Unit Vlls-4** Soils in this Capability Unit include (ErE) Enders-Allegheny complex, 8 to 20 percent slopes; (ErF) Enders-Allegheny complex, 20 to 40 percent slopes; (StE2) Summit stony silty clay, 12 to 25 percent slopes, eroded. There are deep, moderately well-drained, stony soils on uplands. Slopes range from 8 to 40 percent. Permeability is slow due to clay sub-soil. Run-off can be extremely rapid.

Source: Soil Survey, Washington County, Arkansas,  
USDA, Soil Conservation Service, March, 1969

APPENDIX A  
Soils

