

Part 9

Vegetative Surface Cover

**Standards for 1:24,000-Scale
Digital Line Graphs and
Quadrangle Maps**

Standards for 1:24,000-Scale Digital Line Graphs and Quadrangle Maps
Part 9: Vegetative Surface Cover

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Standards for 1:24,000-Scale Digital Line Graphs and Quadrangle Maps
Part 9: Vegetative Surface Cover

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CULTIVATED CROPLAND - Land that has been plowed or otherwise cultivated for crop production.

ATTRIBUTE/ATTRIBUTE VALUE LIST

Cultivation Type	The distinctive cultivation practice.
Cranberry Bog	Plantings of cranberries in flooded fields.
Orchard/Grove	Planting of evenly spaced trees that bear fruit or nuts
Vines/Bushes	Planting of grapevines, or other cultivated climbing plants, such as berry vines and hops, usually supported and arranged evenly in rows

DELINEATION

The limit of **CULTIVATED CROPLAND** is the extent of the area under production. When **CULTIVATED CROPLAND** is a planting of trees, the edge is defined as the center line of the bounding row. When **CULTIVATED CROPLAND** is a planting of cranberries, the edge is defined by the outermost ditch or embankment surrounding the planting.

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT
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Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If CULTIVATED CROPLAND is ≥ 0.1 " along the shortest axis,
Then capture.

Attribute Information

Source Interpretation Guidelines

All

The minimum size for non-linear clearings within CULTIVATED CROPLAND is 0.1" along the shortest axis.

Do not capture CULTIVATED CROPLAND for linear clearings that are ≥ 0.05 " along the shortest axis, whether there is another linear feature or not.

Do not capture CULTIVATED CROPLAND for linear clearings, if the clearings are ≥ 0.02 " along the shortest axis and < 0.05 " along the shortest axis and do not coincide with another linear feature that meets capture conditions.

Where CULTIVATED CROPLAND has an intricate outline, the outline should be generalized.

Do not capture nurseries or Christmas tree farms as CULTIVATED CROPLAND. See TREES (Vegetative Surface Cover theme) and/or RESERVATION (Boundaries theme).

Do not capture CULTIVATED CROPLAND if the area meets capture conditions for BUILT-UP AREA.

Rice fields are not captured.

Graphic

Revision - General

Revision - Standard

Revision - Limited

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

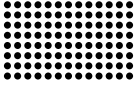
Symbolization

Symbol#: CULTIVATED_CROPLAND_A001
 Dimension: 2



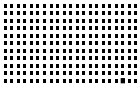
<u>Attribute</u>	<u>Value</u>	<u>Symbol Specs</u>	<u>Type Specs</u>
Cultivation Type	Cranberry Bog	<u>Area Perimeter</u> Color: Blue Lineweight: 0.004"	Label: Color: Black Style: UL CAPS or C/lc Size: 7-10 Spacing: 0-1

Symbol#: CULTIVATED_CROPLAND_A002
 Dimension: 2



<u>Attribute</u>	<u>Value</u>	<u>Symbol Specs</u>	<u>Type Specs</u>
Cultivation Type	Orchard/Grove	<u>Area Fill</u> Color: Green Screen: 40%, 120-line at 75° Pattern: USGS 26A <u>Symbol Orientation</u> Orientation: parallel to south projection line	N/A

Symbol#: CULTIVATED_CROPLAND_A003
 Dimension: 2



<u>Attribute</u>	<u>Value</u>	<u>Symbol Specs</u>	<u>Type Specs</u>
Cultivation Type	Vines/Bushes	<u>Area Fill</u> Color: Green Screen: 40%, 120-line at 75° Pattern: USGS 7A <u>Symbol Orientation</u> Orientation: parallel to south projection line	N/A

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

If edge of CULTIVATED CROPLAND is < 0.025" from RAILWAY, ROAD, or STREAM/RIVER, Then extend CULTIVATED CROPLAND symbol to the edge of the other feature symbol.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Albany West, GA (Orchards)
Atsion, NJ (Cranberry bogs)
Indian Mills, NJ (Cranberry bogs)
Napa, CA (Orchards and vineyards)
Selah, WA (Orchards)
Yountville, CA (Orchards and vineyards)

SHRUBLAND - Area covered with plants that have persistent woody stems and a relatively low growth habit, and that generally produce several basal shoots instead of a single shoot.

ATTRIBUTE/ATTRIBUTE VALUE LIST

N/A

DELINEATION

The limit of SHRUBLAND is the extent of the area covered with the low growing shrubs.

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT
---------------	----------------------------	-------------

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If SHRUBLAND is ≥ 0.1 " along the shortest axis, and has a crown density $\geq 20\%$,
 Then capture.

Attribute Information

N/A

Source Interpretation Guidelines

All

Do not capture immature or stunted trees as SHRUBLAND. See TREES. Examples of SHRUBLAND are cactus, mesquite, sagebrush, and thick brush found in wet and mountainous areas.

The minimum size for non-linear clearings within SHRUBLAND is 0.1" along the shortest axis.

Do not capture SHRUBLAND for linear clearings that are ≥ 0.05 " along the shortest axis, whether there is another linear feature or not.

Do not capture SHRUBLAND for linear clearings if the clearings are ≥ 0.02 " along the shortest axis and < 0.05 " along the shortest axis, and do not coincide with another linear feature that meets capture conditions.

Where SHRUBLAND has an intricate outline, the outline should be generalized.

Do not capture SHRUBLAND if the area meets capture conditions for BUILT-UP AREA.

Graphic

Revision - General

Revision - Standard

Revision - Limited

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

Symbol#: SHRUBLAND_A001
 Dimension: 2



<u>Attribute</u>	<u>Value</u>	<u>Symbol Specs</u>	<u>Type Specs</u>
N/A	N/A	<u>Area Fill</u> Color: Green Screen: 40%, 120-line at 75° Pattern: USGS 20A	N/A

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

If edge of SHRUBLAND is < 0.025" from RAILWAY, ROAD, or STREAM/RIVER,
 Then extend SHRUBLAND symbol to the edge of the other feature symbol.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Anacacho, TX
Annville, TX
Art, TX

TREE - A woody perennial plant having a self supporting main stem or trunk and a definite crown.

ATTRIBUTE/ATTRIBUTE VALUE LIST

Name	Proper name, specific term, or expression
(Alphanumeric)	Length Value: 99

DELINEATION

The limit of TREE is the extent of the crown.

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT
---------------	----------------------------	-------------

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional		> 0	
1-dimensional			
2-dimensional			

Special Conditions:

DATA EXTRACTION

Capture Conditions

If TREE is named and is of unique cultural and historical significance,
Then capture.

Attribute Information

Source Interpretation Guidelines

All

Fallen trees are collected as TREE if capture conditions are met.

Graphic

Revision - General

Revision - Standard

Revision - Limited

Do not revise. Delete existing features.

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

Symbolization

- NAM

Symbol#: TREE_P001
 Dimension: 0

<u>Attribute</u>	<u>Value</u>	<u>Symbol Specs</u>	<u>Type Specs</u>
Name	(Alphanumeric)	<u>Circle</u> Color: Black Lineweight: 0.003" Diameter: 0.04" <u>Dot</u> Color: Black Diameter: 0.006" Positioning: centered in circle <u>Symbol Orientation</u> Origin: center of symbol	Name: Color: Black Style: UL C/lc Size: 7 Spacing: 0

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Selection

TBD

Placement

TBD

EXAMPLES

Mariposa Grove, CA (Tunnel TREE, Grizzly Giant)
Ackerson Mountain, CA (Tunnel TREE)
General Grant Grove, CA (General Grant Tree, Hart Tree, Fallen Goliath)
Giant Forest, CA (General Sherman Tree, Tunnel log)
Lodgepole, CA (Tharps Log)
15' Oregon Caves, OR (Big Tree)
Big Butte Springs, OR (Doug Ingram Tree)
Sweeney Pass, CA (Carrizo Palms)
Butler Butte, OR (World's Tallest Sugarpine)
Austin West, TX (Treaty Oak - historical)
Inferno Cone, ID (Lava TREES, TREE molds, both shown with located object symbols)

TREES - An extensive area of land covered with woody perennial plants having a self-supporting main stem or trunk, a definite crown and usually reaching a mature height of more than 6 feet.

ATTRIBUTE/ATTRIBUTE VALUE LIST

Crown Density	Percentage of area covered by tree crowns
Scattered Trees	≥ 25% and < 50%
Unspecified	The value is not known and is not required
Woodland	≥ 50%
Vegetation Characteristics	Distinctive properties of the vegetation
Mangrove	Tropical trees with aerial roots found only in coastal areas
Unspecified	The value is not known and is not required

DELINEATION

The limit of TREES is the extent of the treed area. The limit is the center of the outermost trees, not the edge of their crowns.

REPRESENTATION RULES

Feature Object Representation, Composition, and Relationship Table

RELATIONSHIPS	INSTANCES (CARDINALITY)	WITH OBJECT
---------------	----------------------------	-------------

Representation Conditions

KIND OF FEATURE OBJECT	AREA	SHORTEST	LONGEST
0-dimensional			
1-dimensional			
2-dimensional	> 0		

Special Conditions:

DATA EXTRACTION

Capture Conditions

If TREES is ≥ 0.1 " along the shortest axis and has a crown density $\geq 25\%$,

Or

If TREES has a crown density $\geq 25\%$ and forms a shelter belt (windbreak) ≥ 0.02 " along the shortest axis,

Or

If TREES has a crown density $\geq 25\%$, is ≥ 0.02 " along the shortest axis, and is in an arid or semi-arid region,

Then capture.

Attribute Information

If Crown Density = Scattered Trees or Woodland,

Then Vegetation Characteristics = Unspecified.

If Vegetation Characteristics = Mangrove,

Then Crown Density = Unspecified.

Source Interpretation Guidelines

All

TREES, except mangrove, can coincide with LAKE/POND and/or SWAMP/MARSH.

Forested areas that have been clear-cut, and which are expected to be reforested are captured as TREES.

The minimum size for non-linear clearings within TREES is 0.1" along the shortest axis.

Do not capture TREES for linear clearings that are ≥ 0.05 " along the shortest axis, whether there is another linear feature or not.

Do not capture TREES for linear clearings if the clearings are ≥ 0.02 " along the shortest axis and < 0.05 " along the shortest axis, and do not coincide with another linear feature that meets capture conditions.

Where TREES has an intricate outline, the outline should be generalized.

Do not capture TREES if the area meets capture conditions for BUILT-UP AREA.

Crown density can be estimated by comparing the diameter of the crowns to the distance between crowns. For example, if the average open space distance between crowns is equal to the average crown diameter, the crown density is 20%. If the average open space distance between crowns is $1/2$

the average crown diameter, the density is 35%.

Graphic

Revision - General

Revision - Standard

Revision - Limited

DATA EXTRACTION OR PRODUCT GENERATION at 1:24,000 scale

Inclusion Conditions

All required

Generalization

PRODUCT GENERATION at 1:24,000 scale

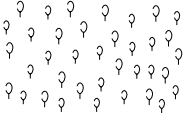
Symbolization

Symbol#: TREES_A001
 Dimension: 2



<u>Attribute</u>	<u>Value</u>	<u>Symbol Specs</u>	<u>Type Specs</u>
Crown Density	Unspecified	<u>Area Fill</u> Color: Blue	N/A
Vegetation Characteristics	Mangrove	Pattern: USGS 25 <u>Symbol Orientation</u> Orientation: parallel to south projection line <u>Background Fill</u> Color: Green Screen: 40%, 120-line at 75°	

Symbol#: TREES_A002
 Dimension: 2



<u>Attribute</u>	<u>Value</u>	<u>Symbol Specs</u>	<u>Type Specs</u>
Crown Density	Scattered Trees	<u>Area Fill</u> Color: Green Pattern: AP 44	N/A
Vegetation Characteristics	Unspecified	<u>Symbol Orientation</u> Orientation: parallel to south projection line	

Symbol#: TREES_A003
 Dimension: 2



<u>Attribute</u>	<u>Value</u>	<u>Symbol Specs</u>	<u>Type Specs</u>
Crown Density	Woodland	<u>Area Fill</u> Color: Green	N/A
Vegetation Characteristics	Unspecified	Screen: 40%, 120-line at 75°	

Conflict Detection and Resolution

Conflict detection and resolution rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

If edge of TREES is < 0.025" from RAILWAY, ROAD, or STREAM/RIVER,
 Then extend TREES symbol to the edge of the other feature symbol.

Names and Labels

Selection and placement rules are being developed. Additions and modifications to the rule set will continue until all features are completed.

Standards for 1:24,000-Scale Digital Line Graphs and Quadrangle Maps
Part 9: Vegetative Surface Cover

TREES

Selection

TBD

Placement

TBD

EXAMPLES

Cocodrie Lake, FL (Submerged TREES)
Columbia, LA
Sanibel, FL (Mangrove, unspecified TREES)