

READING THE FORESTED LANDSCAPE



USING FOREST FORENSICS TO
DISCOVER WHAT HAPPENED TO A SITE
BEFORE YOU CAME ALONG

**Richard
King
Mellon
Foundation**



DISTURBANCES TO LAND



TYPICALLY FALL UNDER ONE OF THE
FOLLOWING CATEGORIES:

- AGRICULTURE
- OLD GROWTH AND WIND
- LOGGING AND FIRE
- SETTLEMENT

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Agriculture



- Crop fields
- Hay fields
- Pasture





Agriculture

- Lay of the land

Is the ground flat and smooth?

Is there a slope?

What is the composition of the soil?

Sandy? Solid clay? Glacial till?



Agriculture

- Lay of the land
- Pillows and cradles



Photo courtesy of Tom Wessels



Agriculture

- Lay of the land
- Pillows and cradles
- Stone walls and stone piles



Photo courtesy of Tom Wessels

Are soil levels the same on both sides?

What size are the rocks?

Photo courtesy of Tom Wessels





Agriculture

- Lay of the land
- Pillows and cradles
- Stone walls and stone piles
- Troughs and terraces



Photo courtesy of Tom Wessels

Indicators of
annual
plowing



Agriculture

- Lay of the land
- Pillows and cradles
- Stone walls and stone piles
- Troughs and terraces
- Open-grown trees



Trees left to provide shade for livestock



Agriculture

- Lay of the land
- Pillows and cradles
- Stone walls and stone piles
- Troughs and terraces
- Open-grown trees
- Wire fencing

Barbed?
Smooth?
Border trees?



Photo courtesy of Tom Wessels



Photo courtesy of Tom Wessels



Old Growth and Wind

-Coarse bark

Younger



Photos courtesy of Tom Wessels



Older



Old Growth and Wind

- Coarse bark
- Deformed canopy





Old Growth and Wind

- Coarse bark
- Deformed canopy
- Live-snapped trees





Old Growth and Wind

- Coarse bark
- Deformed canopy
- Live-snapped trees
- Wind-tipped trees





Old Growth and Wind

- Coarse bark
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Old Growth and Wind

- Coarse bark
- Deformed canopy
- Live-snapped trees
- Wind-tipped trees
- Orientation of
downed trees or
pillows and cradles





Old Growth and Wind

- Coarse bark
- Deformed canopy
- Live-snapped trees
- Wind-tipped trees
- Orientation of downed trees or pillows and cradles

W  Thunderstorm/microburst?

SE  Hurricane?

N  High pressure gale?



Logging or Fire

-Stumps w/out an
associated down
trunk



Photo courtesy of Tom Wessels



Photo courtesy of Tom Wessels



Logging or Fire

-Stumps w/out an associated down trunk

-Multiple-trunked tree, w/ or w/out original dead trunk



Photo courtesy of Tom Wessels



Logging or Fire

- Stumps w/out an associated down trunk
- Multiple-trunked tree, w/ or w/out original dead trunk
- Basal scars



Photo courtesy of Tom Wessels



Logging or Fire

- Stumps w/out an associated down trunk
- Multiple-trunked tree, w/ or w/out original dead trunk
- Basal scars
- Rot resistant snags**





Logging or Fire

- Stumps w/ out an associated down trunk
- Multiple-trunked tree, w/ or w/ out original dead trunk
- Basal scars
- Rot resistant snags
- Charcoal





Human Settlement

-Old structures or
foundations





Human Settlement

- Old structures or foundations
- Cemeteries





Human Settlement

- Old structures or foundations
- Cemeteries
- Ornamental or garden variety plants



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Human Settlement

- Old structures or foundations
- Cemeteries
- Ornamental or garden variety plants
- Roads



Photo courtesy of Tom Wessels

GPS Locations:



Destination point #1:

N 39.90603

W079.46378

Destination point #2:

N 39.90843

W079.46707

Destination point #3:

N 39.90742

W079.47016

Destination point #4:

N 39.90384

W079.47328

Trails and Soils of Bear Run



Map Code	Soil Name	Percent Slope		Drainage	Drainage Class
CaB	Cavode silt loam	3	- 8	Somewhat poorly drained	C/D
ErB	Ernest silt loam	3	- 8	Moderately well drained	C/D
ErC		8	- 15		
GwB	Gilpin-Weikert channery silt loams	3	- 8	Well drained	C
GwC		8	- 15		
GwD		15	- 25		
GwF		25	- 60		
McF	Macove-Gilpin channery silt	35	- 70	Well drained	B
WgC	Wharton-Gilpin silt loams	8	- 15	Moderately well drained	C
WgD		15	- 25		
WwB	Wharton silt loam	3	- 8	Moderately well drained	C/D
WwC		8	- 15		
WwB		0	- 8		C
WwD		8	- 25		

Legend

Soils outlines **WPC Bear Run Trails**

Soil outline symbol **Other Bear Run Trails** (Red line)

State Road (Thick black line) **Peninsula** (Yellow line)

State Road symbol **Tissue Lane** (Green line)

