

## A Crime Against Plants

A Botanical Crime Scene Investigation:  
Exploring how we can know events of the past

### Case Report of a Botanical Crime Scene: Case # 01-01-01

On the morning of March 18, 2002 an elderly man, out for his exercise, came across a horrible scene. Not more than fifteen feet from the road stood the signs of a long, lingering death. Shaken, but still able to summon enough courage, the man called the Ohio Division of the International Bureau of Botanical Investigation (OH,IBBI). A crew of investigators was immediately dispatched to the scene.

What follows is a description of their findings.

**Caution:** Due to the graphic nature of the photos and descriptions, children under the age of 6 months should not be permitted access to these files.

### The scene of the crime:

About 1/4th mile south of the intersection of Ohio Route 7 and Welton Rd. in Conneaut, Ohio  
15 ft. east of the north bound lanes of OH Route 7  
Shallow, rocky (shale) soil  
On approximately a 30 degree incline  
Surrounded by maple and ash saplings

### The victim:

Three meters in height  
Six cm. in diameter at the point of contact with the hub cap (wheel cover)  
Some patches of bark missing on trunk  
No lateral branches remain on the stem  
Scars of lateral branches located opposite to each other  
Some rotting of the outer 1 cm of woody tissue under bark  
Only about 25 cm of root remain intact, the rest is rotted away  
The outer layers of woody tissue have grown over the metal of the hub cap opening

### The evidence (see 6 photographs of the scene, the victim, and the hubcap):

An automobile hubcap was found encircling the base (at ground level) of the victim  
The hubcap was in an upside down position  
The words Pontiac Motor Division are stamped in the inner rim of the hubcap  
There is no paint remaining on the hub cap  
The hubcap has no visible dents or damage

### Photographic evidence file:

Photo 01: The victim as it was found on the roadside.  
Photo 02: The victim removed from discovery site.  
Photo 03: "Ventral" view of the victim.  
Photo 04: The site of the victim's wounds.  
Photo 05: Cross-section through victim (10x).  
Photo 06: A close up view of the point of contact between the victim and the hubcap. Stem tissue (above) metal of hubcap (below) [10X].

### Your Task

Write a report explaining the situation described above. Your report should include the following:

1. a probable time line of the events described.
2. a reasonable scenario explaining how the sapling and the hubcap came to be together.
3. a probable cause of death for the victim (the sapling).

Suggested web sites:

[www.hubcaps.com](http://www.hubcaps.com)

<http://www.cnr.vt.edu/dendro/forsite/howdoes.htm>

Search online for "How Trees Grow" and "Age of trees by tree-ring dating" - eg.,

<http://textastreed.tamu.edu/content/howTreesGrow/>

<http://waynesword.palomar.edu/treedate.htm>