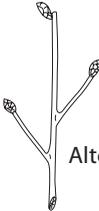
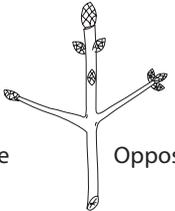
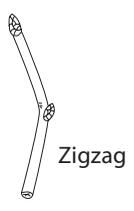
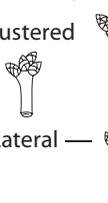


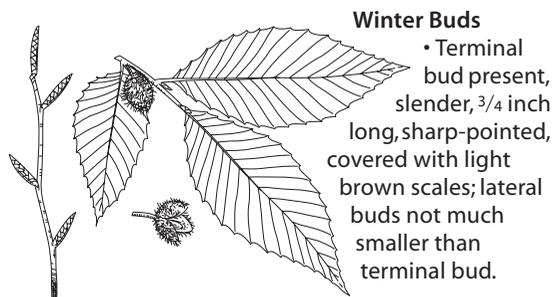
## Winter Tree Identification

Arrangement	
 Alternate	 Opposite
 Zigzag	
Size	Pith
 Stout	 Chamber
 Slender	 Solid
 Star	
Buds	Bud Scales
Terminal	Not Terminal
 Terminal	 Clustered
 Not Terminal	 Many
 Lateral	 Two
	 One

### BEECH • *Fagus grandifolia*

**Bark** • Smooth, close, steel gray in color, easily recognized by this character.

**Twigs** • Slender, zigzag, smooth, shining reddish brown in color becoming gray on older twigs.



#### Winter Buds

• Terminal bud present, slender,  $\frac{3}{4}$  inch long, sharp-pointed, covered with light brown scales; lateral buds not much smaller than terminal bud.

### BLACK WALNUT • *Juglans nigra*

• *Juglans nigra*

**Bark** • Thick, dark, deeply furrowed with rounded ridges between; grayish brown in color; inner bark dark chocolate brown in color.

**Twigs** • At first hairy, later smooth, stout, brittle, orange brown in color, cream-colored chambered pith.

**Winter Buds** • Terminal bud pale, downy, scarcely longer than broad, blunt-pointed, less than  $\frac{1}{3}$  inch long; lateral buds less than  $\frac{1}{6}$  inch long.



### SASSAFRAS • *Sassafras albidum*

**Bark** • Reddish brown in color, deeply furrowed even in young trees, with flat-topped ridges crossed by horizontal cracks; inner layers bright cinnamon red in color.



**Twigs** • Slender, brittle, spicy to smell, at first light yellowish green in color, later becoming reddish brown.

**Winter Buds** • Terminal bud present, from  $\frac{1}{3}$  to  $\frac{3}{5}$  inch long, pointed, greenish in color; lateral buds much smaller.

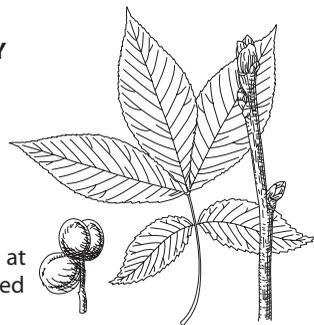
### SHAGBARK HICKORY • *Carya ovata*

• *Carya ovata*

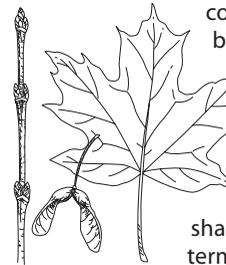
**Bark** • Light gray in color, smooth and seamy, becoming shaggy with age and peeling off into long strips which are loose at both ends and attached in the middle.

**Twigs** • Covered with numerous light dots, extremely tough and pliable, reddish brown to gray in color.

**Winter Buds** • Large, ovate, blunt-pointed, with papery, dark brown, loose bud scales, the outer scales much darker, persistent through the winter; terminal bud usually more than  $\frac{1}{2}$  inch long.



### SUGAR MAPLE • *Acer saccharum*



**Bark** • On young trees dark gray in color, close, smooth, and firm, becoming furrowed into long irregular plates lifting along one edge.

**Twigs** • Slender, shining, the color of maple sugar.

**Winter Buds** • Very narrow, sharp-pointed, brown in color, the terminal buds much larger than the laterals.

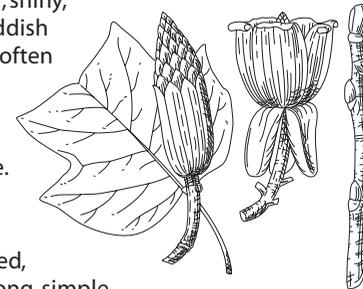
### TULIP TREE • *Liriodendron tulipifera*

**Bark** • On young trees, smooth, ashy gray or brown in color; on older trunks, light gray to brown, thick, distinctly and regularly furrowed and ridged.

**Twigs** • Smooth, shiny, rather stout, reddish brown in color, often branching the first year, aromatic odor, very bitter taste.

#### Winter Buds

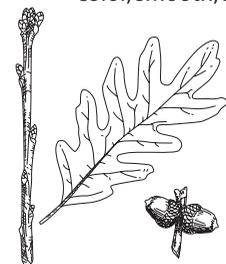
• Terminal bud smooth, flattened, about  $\frac{1}{4}$  inch long, simple, blunt, covered by two reddish brown bud scales giving the appearance of a mitten; lateral buds similar but much smaller.



### WHITE OAK • *Quercus albas*

**Bark** • Ashy gray in color, broken by shallow furrows into long, irregular, thin scales which readily flake off; on old trunks furrows frequently become deep.

**Twigs** • Medium in thickness, greenish red to gray in color, smooth, sometimes covered with a bloom.



**Winter Buds** • Clustered at end of twigs, blunt, reddish brown in color,  $\frac{1}{8}$  inch long.

Tree I.D. information courtesy  
The Resource Center of  
Cornell Cooperative Extension.  
[www.cce.cornell.edu/store](http://www.cce.cornell.edu/store)

# Jefferson County Memorial Forest

## Animal Tracks and Winter Tree Identification Guide



**METRO  
Parks**

<b>Animal Tracks Found in Louisville/Jefferson County</b>	Track Pattern									
	Front 1 3/4"    Hind 1 3/4"  <b>BOBCAT</b>	Front 2 1/2"    Hind 2 1/4"  <b>COYOTE</b>	2 1/4"-4"  <b>DOG</b>	Front 1 1/2"    Hind 1 1/4"  <b>GRAY FOX</b>	Front 1 1/8"    Hind 1"  <b>HOUSE CAT</b>	Front 2 1/4"    Hind 2"  <b>RED FOX</b>	2 3/4"  <b>WHITE-TAILED DEER</b>			

Track Pattern									
Front 3 1/2"    Hind 7"  <b>BEAVER</b>	Front 1 3/4"    Hind 1 3/4"  <b>CHIPMUNK</b>	Front 1"    Hind 2"  <b>MUSKRAT</b>	Front 1 1/2"    Hind 2"  <b>OPOSSUM</b>	Front 2"    Hind 3"  <b>RACCOON</b>	Front 1/2"    Hind 1"  <b>RAT</b>	Front 1"    Hind 1 1/2"  <b>STRIPED SKUNK</b>	Front 2"    Hind 2 1/2"  <b>WOODCHUCK</b>		

Track Pattern			Miscellaneous						
Front 1"    Hind 1 1/4"  <b>MINK</b>	Front 2 1/2"    Hind 3"  <b>OTTER</b>	Front 3/8-1/2"    Hind 1/2-1"  <b>WEASEL</b>	8"  <b>BLUE HERON</b>	5"  <b>CANADA GOOSE</b>	3"  <b>CROW</b>	4"  <b>WILD TURKEY</b>	5-6"  <b>HORSE</b>		

Track Pattern		
Front 1"    Hind 2 1/2"  <b>COTTONTAIL RABBIT</b>	Front 1 1/2"    Hind 2 1/2-3"  <b>GRAY &amp; FOX SQUIRREL</b>	Front 1/4"    Hind 3/8"  <b>WHITE-FOOTED MOUSE</b>

Tracks are not to scale and track measurements are approximate, measured toe to heel. They will show considerable variation due to ground conditions (snow, mud, dust, etc.) and the animal's movements.

For more information on the habits and habitats of these animals, please contact Jefferson County Memorial Forest staff, or the Kentucky Department of Fish and Wildlife's Louisville office.

**Jefferson County Memorial Forest**  
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 email [jcmf@loukymetro.org](mailto:jcmf@loukymetro.org)

Just 20 minutes from downtown, Jefferson County Memorial Forest boasts more than 5,500 acres of urban forest, with 30 miles of marked hiking trails and a fishing lake with a handicapped-accessible pier. The forest's staff conducts weekend public hikes and nature programs, along with education and adventure programs for school and community groups throughout the year.

## Preserving Tracks

Track hunting is quite easy. Find some level ground with soft, fine soil. Smooth it over, and come back later to see what has been there! Obvious places to try are near water or on well-worn trails. Large animals will use more open areas, while a spot the size of your hand under some brush will reward you with many different little tracks.

Tracks can be preserved and collected by making casts of them. You might collect as many different kinds of tracks as you can find.

**Materials** • Plaster of Paris, containers for mixing, spray shellac or plastic, vaseline, cardboard, knives, sandpaper, ink or paint

### PROCEDURE

- Once a track is found, clean it of loose particles of soil, twigs, leaves and other litter.
- Spray the track with shellac or plastic if available.
- Make a two-inch tall ring of cardboard surrounding the track. Press firmly into the ground to give support, but allow at least one inch to form the edge of the mold. Square forms can be made by cutting out a cross-section of a milk carton.
- Mix two cups of plaster of Paris in a can or plastic bowl, adding water until it is as thick as heavy cream. Pour carefully into the mold until the plaster is about to the top. Allow plaster to harden at least 15 minutes before lifting it. If the soil is damp, hardening may take longer.
- When the cast is hardened, lift the cast out, remove the ring, and clean the cast by scraping it with a knife blade and washing it.
- At home, apply a thin coat of vaseline to the surface of the cast. Place it on a flat surface and surround the casting with a two-inch strip of cardboard or tin as before. Make certain the top of the strip is level and will hold your plaster.
- Mix plaster of Paris and pour into the mold. Allow two hours for the plaster to harden.
- Carefully remove the mold when the plaster is dry. Separate the layers and wipe any excess vaseline from them. Smooth rough places with a knife or fine sandpaper, and wash the cast.
- When the cast is thoroughly dry, you can paint the track with ink or paint. A coat of shellac or plastic will protect and preserve your casting.

**Kentucky Department of Fish and Wildlife**  
 1 Game Farm Road  
 Frankfort KY 40601

tel 502/564-4336 • toll free 1-800/858-1549  
 web [www.fw.ky.gov](http://www.fw.ky.gov)