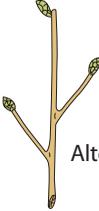
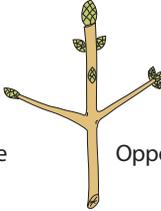
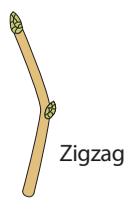


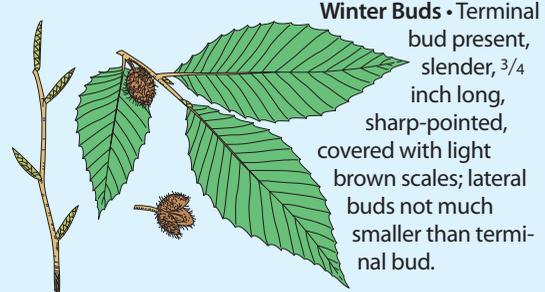
# Winter Tree Identification

| ARRANGEMENT   |  |
|---|--|
|  Alternate      |  Opposite |
|  Zigzag        |  |
| SIZE  | PITH   |
|  Stout          |  Chamber  |
|  Slender       |  Solid    |
|   |  Star     |
| BUDS  | BUD SCALES   |
|  Terminal      |  Many     |
|  Not Terminal |  Two      |
|  Clustered     |  One      |
|  Lateral       |  |

## 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.



## BLACK WALNUT • *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.

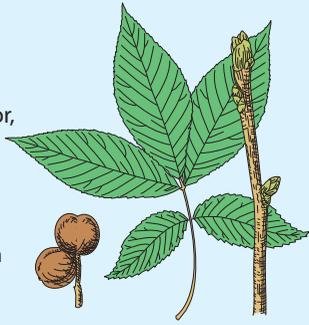
**Winter Buds** • Terminal bud present, from  $\frac{1}{3}$  to  $\frac{3}{5}$  of an inch long, pointed, greenish in color; lateral buds much smaller.

## SHAGBARK HICKORY • *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.

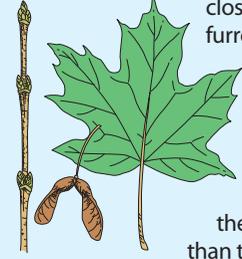


## SUGAR MAPLE • *Acer saccharum*

**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.

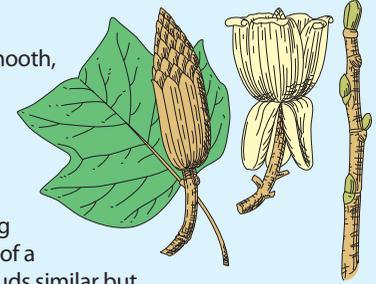


## TULIP TREE • *Liriodendron tulipifera*

**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.

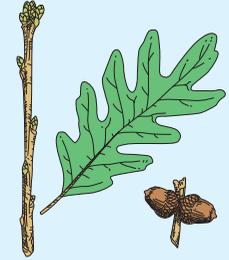


## WHITE OAK • *Quercus albas*

**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)

# Louisville Parks and Recreation Winter Tree and Animal Track Identification Guide



# Louisville's Most Common Animal Tracks

| TRACK PATTERN   |                |                 |                |          |                 |                |                 |            |                 |            |                   |
|-----------------|----------------|-----------------|----------------|----------|-----------------|----------------|-----------------|------------|-----------------|------------|-------------------|
| FRONT<br>1 3/4" | HIND<br>1 3/4" | FRONT<br>2 1/2" | HIND<br>2 1/4" | 2 1/4-4" | FRONT<br>1 1/2" | HIND<br>1 1/4" | FRONT<br>1 1/8" | HIND<br>1" | FRONT<br>2 1/4" | HIND<br>2" | 2 3/4"            |
|                 |                |                 |                |          |                 |                |                 |            |                 |            |                   |
| BOBCAT          |                | COYOTE          |                | DOG      | GRAY FOX        |                | HOUSE CAT       |            | RED FOX         |            | WHITE-TAILED DEER |

## TRACK PATTERN

|                 |            |                 |                |             |            |                 |            |             |            |               |            |               |                |             |                |
|-----------------|------------|-----------------|----------------|-------------|------------|-----------------|------------|-------------|------------|---------------|------------|---------------|----------------|-------------|----------------|
| FRONT<br>3 1/2" | HIND<br>7" | FRONT<br>1 3/4" | HIND<br>1 3/4" | FRONT<br>1" | HIND<br>2" | FRONT<br>1 1/2" | HIND<br>2" | FRONT<br>2" | HIND<br>3" | FRONT<br>1/2" | HIND<br>1" | FRONT<br>1"   | HIND<br>1 1/2" | FRONT<br>2" | HIND<br>2 1/2" |
|                 |            |                 |                |             |            |                 |            |             |            |               |            |               |                |             |                |
| BEAVER          |            | CHIPMUNK        |                | MUSKRAT     |            | OPOSSUM         |            | RACCOON     |            | RAT           |            | STRIPED SKUNK |                | WOODCHUCK   |                |

## TRACK PATTERN

|             |                |                 |            |                     |                |
|-------------|----------------|-----------------|------------|---------------------|----------------|
| FRONT<br>1" | HIND<br>1 1/4" | FRONT<br>2 1/2" | HIND<br>3" | FRONT<br>3/8-1 1/2" | HIND<br>1/2-1" |
|             |                |                 |            |                     |                |
| MINK        |                | OTTER           |            | WEASEL              |                |

## MISCELLANEOUS

|            |              |      |             |       |
|------------|--------------|------|-------------|-------|
| 8"         | 5"           | 3"   | 4"          | 5-6"  |
|            |              |      |             |       |
| BLUE HERON | CANADA GOOSE | CROW | WILD TURKEY | HORSE |

## TRACK PATTERN

|                   |                |                     |                  |                    |              |
|-------------------|----------------|---------------------|------------------|--------------------|--------------|
| FRONT<br>1"       | HIND<br>2 1/2" | FRONT<br>1 1/2"     | HIND<br>2 1/2-3" | FRONT<br>1/4"      | HIND<br>3/8" |
|                   |                |                     |                  |                    |              |
| COTTONTAIL RABBIT |                | GRAY & FOX SQUIRREL |                  | WHITE-FOOTED MOUSE |              |

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 Memorial Forest staff, or the Kentucky Department of Fish and Wildlife's Louisville office.

Located just 20 minutes from downtown, Jefferson Memorial Forest boasts almost 7,000 acres of urban forest, with 30 miles of marked hiking trails and a fishing lake with handicapped-accessible trail and pier. Forest staff conducts weekend public hikes and nature programs, along with education and adventure programs for school and community groups throughout the year.

**Jefferson Memorial Forest**  
11311 Mitchell Hill Road  
Fairdale KY 40118  
tel 502/368-5404 • fax 502/368-6517  
web memorialforest.com  
bestparksever.com  
email forest@louisvilleky.gov

**Kentucky Department of Fish and Wildlife**  
1 Game Farm Road  
Frankfort KY 40601  
tel 502/564-4336  
1-800/858-1549  
web fw.ky.gov

# Preserving Tracks

Find level ground with soft, fine soil - places to try are near water or on well-worn trails. Smooth it over, and come back later to see what has been there! Large animals will use open areas, while a spot the size of your hand may reward you with many different tracks. Tracks can be preserved by making casts of them.

### MATERIALS

Plaster of paris, containers, 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 from 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 almost 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 (as before).
- 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 pieces 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 cast.

