Paul Busse
GARDEN RAILWAY

CHOOSE A TOPIC TO EXPLORE:

• ABOUT PAUL BUSSE
• G SCALE MODEL TRAINS
• EXHIBITION FUN FACTS
• EUROPEAN TRAVELS
• WILD WEST TOWN
  • PLANTS
  • HOMES
• WHO LIVES HERE?
  • PLANTS
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• FAIRYTALE LAND
  • PLANTS
  • HOMES
• MODEL TRAIN HISTORY
• TRAIN CAR IDENTIFICATION
• TRAIN FUN FACTS
• TRAIN TALK
• TRAIN HISTORY
Paul Busse had a big break at AmeriFlora ’92, an international horticultural exposition hosted here at Franklin Park. Busse and his team at Applied Imagination designed a train display in AmeriFlora’s German-themed garden.

Made of dried plant material, Busse’s display recreated a small German town inspired from photographs. It included an amazing king post bridge made of bent grape vine that continued to grow, despite being cut at both ends.
The magic of *Paul Busse’s Garden Railway* comes to life with model trains whizzing overhead and through the plant-based structures. This display would not be possible without Busse’s discovery of the G scale model trains in a Baltimore hobby shop in 1975.

Unlike previous model trains, G scale model trains have the size and durability to be used outdoors. Busse’s discovery of the G scale model train allowed him to combine his passions for landscape architecture and model trains to create the dynamic outdoor display we experience today.
Some interesting details about the exhibit to consider as you explore the miniature worlds.

LENGTH OF TRAIN TRACK: 1,122 FEET

STRUCTURES CREATED BY PAUL BUSSE & APPLIED IMAGINATION: 51

BOTANICAL MODELS DONATED BY THE JOHN F. WOLFE ESTATE: 20

G SCALE TRAIN SETS: 9

UNIQUE BOTANICAL THEMES: 4

WATERFALLS: 2

BUBBLING BROOK: 1

ENCHANTED CHILDREN’S TREE COVE: 1

THE YEAR PAUL BUSSE GRADUATED THE OHIO STATE UNIVERSITY: 1972

THE YEAR APPLIED IMAGINATION WAS FOUNDED: 1991

THE YEAR APPLIED IMAGINATION PARTICIPATED IN AMERIFLORA: 1992
The Homes & Features of European Travels

German House

French Manor

Lighthouse

Small Lighthouse

German Bakery

Trains were relatively new in the United States but made a significant impact on the Wild West, c. 1865-1895. The railroads opened up the country and allowed people to migrate from the East and settle in the undeveloped territory, the West West.

The year 1895 marked the end of the Wild West era and the beginning of a new phase for the train industry, as electric locomotives were introduced.
Do these wide open spaces with trees few and far between resemble a prairie? The effect was created using the following plants.

**LIME TWISTER STONECROP**

*Sedum* ‘Lime Twister’

SunSparkler® Lime Twister Stonecrop foliage with creamy-colored edges will turn red in the cool seasons and produce rose-pink blooms from August to October.

**RED CARPET STONECROP**

*Sedum ochroleucum* ‘Red Wiggle’

The needle-like leaves of the Red Carpet Stonecrop create a low mat with green new growth on burgundy foliage. This mounding perennial prefers a sunny site with well-drained soil. It can be used in rock gardens or as erosion control.

**WHITE STONECROP**

*Sedum album* subsp. *teretifolium* ‘Murale’

White Stonecrop, an evergreen perennial with a creeping mat habit, has bead-like leaves that turn reddish green in the fall. The common name comes from the star-shaped white flowers that cover the plant from late spring to early summer.
THE HOMES & FEATURES OF

WILD WEST TOWN

LAND OFFICE

WELLS FARGO
WESTERN BUILDING

HOTEL

MISS KITTY’S SALOON

WESTERN DRY GOODS STORE

WESTERN SCHOOLHOUSE

All of the homes and features in the Wild West collection were donated to Franklin Park Conservatory and Botanical Gardens in memory of John F. Wolfe.
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THE ART OF WHO LIVES HERE?

This wonderful collection is on loan from Paul Busse’s studio, Applied Imagination. The distinct artistic process used by this studio has been honed over the course of about three decades.

Plant materials are sustainably sourced in local forests. Bits of tree bark can be roof shingles, baby acorns make good doorknobs, and vines become railings. The plant material is glued to the structure, which is then covered in a water-based varnish to keep the plant material from breaking down.
THE PLANTS OF WHO LIVES HERE?

LACELEAF JAPANESE MAPLE
*Acer palmatum var. dissectum* ‘Viridis’
The Giraffe House resident has been nibbling in the landscape! Even the Giraffe’s long neck cannot reach all of the bright green leaves of the Laceleaf Japanese Maple, which will turn vivid shades of yellow and red in the fall.

TICKSEED
*Coreopsis UPTICK™* Gold & Bronze ‘Baluptgonz’
With its tidy mounding habit and long summer blooms, Tickseed attracts birds, butterflies and other pollinators. Ticks are a tasty snack for possums, making tickseed a natural fit at the Possum House.

PINCUSHION FLOWER
*Scabiosa columbaria* ‘Pink Mist’
These beautiful pink flowers resemble a pin cushion with stamens that poke out from the flower’s head like sewing pins. Pincushion Flower also mimics the sharp quills of a porcupine.

SILVER THYME
*Thymus argenteus*
Silver Thyme has silvery-white edges that capture the moonlight and a bright, lemony fragrance that could help mask the stench of a skunk on a nighttime stroll.
THE HOMES AND FEATURES OF WHO LIVES HERE?

OPOSSUM HOUSE

GIRAFFE HOUSE

ZEBRA HOUSE

MONKEY HOUSE

TIGER HOUSE

All of the homes and features in the Who Lives Here collection are on loan from Applied Imagination.
THE HOMES AND FEATURES OF WHO LIVES HERE?

SKUNK HOUSE

PORCUPINE HOUSE

OWL’S CRITTER CONDO

TURTLE HOUSE

SNAKE HOUSE

SQUIRREL HOUSE

PEACOCK HOUSE

All of the homes and features in the Who Lives Here collection are on loan from Applied Imagination.
Talk about horticulture whimsy!
Notice the small “trees” in Fairytale Land. Those are not actually trees but very finely trimmed Littleleaf Boxwood (*Buxus microphylla* ‘Golden Dream’).

Littleleaf Boxwood are beautiful, round, broad-leaved evergreens. These slow-growing, low-mounding miniatures are great for sculpting topiaries or training into a bonsai.

Can you spot Snow White’s orchard?
The apple trees in the orchard were created with Creeping Cotoneaster (*Cotoneaster apiculatus* ‘Tom Thumb’). These low-growing, compact shrubs present charming tiny green leaves that change to red-orange in the fall.

Small white flowers are followed by bright red berries.
Cinderella's Carriage

Rapunzel's Tower

Three Little Kittens

Goldilocks & The Three Bears

Cinderella's Castle

Cinderella's Carriage

Jack & The Beanstalk
The homes and features of Fairytale Land:

- Dragon's Castle
- Pinnochio's House
- Peter Rabbit's House
- Snow White
- Old Lady in the Shoe

On loan from Applied Imagination.
MODEL TRAIN HISTORY

1891  Marklin, a toy company, makes the first mass-market model train.

1896  Carlisle and Finch, headquartered in Cincinnati, Ohio, invents electric model trains.

1920  The “Golden Age” of model trains.

1930s  HO and O scale model trains are introduced. The scale of the train model is its relative size in proportion to real trains. HO scale models are 1/87th the size of real trains.

1942-1945  Production of model trains stops during World War II.

EARLY 1950  Toy trains are the number one toy for boys.

MID 1950  Plastic replaces metal as the primary material used to make model trains.

1968  G scale trains are introduced by Lehmann Gross Bahn. G scale trains are suitable for use both indoors and outdoors and are a favorite of Paul Busse.
ELECTRIC LOCOMOTIVE
Or diesel for short, provide the motive power for a train.

OPEN-TOP HOPPER
Carries bulk freight such as gravel or coal.

COVERED HOPPER
Carries dry bulk commodities that need weather protection.

REFRIGERATOR CAR
Transports perishable items.

FLATCAR
Holds extra heavy or extra large loads.

DOUBLE STACK CAR
Retains two layers of shipping containers.

BOX CAR
Also known as a railroad car, is enclosed and generally used to carry freight.

TANK CAR
Transports liquids or gaseous commodities.

COACH CAR
Has seats for passengers.

SLEEPER CAR
Is equipped with berths for sleeping.

DINING CAR
Serves meals in the manner of a full-service, sit-down restaurant.

DOME CAR
Has a glass dome on the top of the car for a better viewing experience.

TRAIN WHEELS
Rims on the inside edge of the wheels that keep the car on the track.

RAIL
Two parallel steel beams set a fixed distance apart.

GAUGE
The fixed distance between the two rails. The standard gauge is 4 feet 8.5 inches.

SPIKE
A large nail that is used to secure the track.

TIE
Connects the two parallel rails. Typically made of wood or concrete.

BALLAST
Typically consisting of crushed stone, it forms the trackbed upon which railroad ties are laid.
Early locomotives were essentially boilers on wheels, powered by steam and moving as fast as 18 mph.

The United States has the most miles of track at 248,000 miles. That is enough track to go around the world more than eight times.

The first female train engineer in the United States was Ida Hewitt. She worked for a small freight railroad company in West Virginia in the 1870s.

At 13 miles, the longest mainland railroad tunnel goes through the Alps between Italy and Switzerland.

A railroad bridge near Boone, Iowa is named after Kate Shelley for her heroism saving a train crew at the age of 15.

The world’s longest train route, 5,800 miles long, runs across Siberia.
<table>
<thead>
<tr>
<th>Term</th>
<th>Description</th>
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<tbody>
<tr>
<td>BULL</td>
<td>Railroad police officer.</td>
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<tr>
<td>CAR</td>
<td>Railroad car repair person. The term is derived from a worker who knocks on railroad equipment to check its soundness.</td>
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<tr>
<td>KNOCKER</td>
<td>Passenger train with no passengers.</td>
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<tr>
<td>DEADHEAD</td>
<td>Term used to wish train crews a safe journey. The number eight represents the highest power setting on modern locomotives and sand is what is applied to wheels to prevent slipping.</td>
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<tr>
<td>SAND</td>
<td>Defunct railroad, having either merged or discontinued operations.</td>
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<td>Year</td>
<td>Event</td>
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<tr>
<td>1804</td>
<td>Richard Trevithick invents the world’s first successful locomotive in England.</td>
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<td>1833</td>
<td>Andrew Jackson is the first American president to ride on a train. He travels on the Baltimore &amp; Ohio Railroad, the first public railroad in the United States.</td>
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<td>1886</td>
<td>Railroad companies agree to standardize the gauge (the distance between the rails) to 4 feet 8.5 inches.</td>
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<tr>
<td>1895</td>
<td>Electric locomotives are introduced in the United States.</td>
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<td>1897</td>
<td>Rudolf Diesel invents the diesel engine, which uses less energy than a steam engine.</td>
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<td>1970</td>
<td>The government creates the National Railroad Passenger Corporation (Amtrak) to operate a nationwide passenger rail system at a time when many railroad companies are in bad financial condition.</td>
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