



Oh Christmas Tree



Oh Christmas Tree; Focal Point

- The Christmas Tree has played an important role in celebrating all that is Christmas since the mid 1500's
- Its only natural that Tree's, in all manner of style, sizes and design have been incorporated into our outdoor Displays!

And....

- That it's become the *primary* element/focal point of *BOTH* our indoor decorations and outdoor displays



Oh Christmas Tree; Disclaimer

- This is not a How-To:
 - [LINKS](#) are provided where applicable for research or info
 - Forums, FaceBook, Google
- Historic look at this iconic Display Feature
- Except where noted, all Light Technology available today, can be incorporated into Tree elements:
 - Incandescent, LED, Rope, RGB Pixels
- Intent is to be fun and informative and spawn creativity
- Instructor's best understanding from legacy, historic, and expertise, not meant to slight or offend anyone.
- If I missed something, please let me know...



Oh Christmas Tree; Mini Tree

- [Carson Williams](#) and [Planet Christmas](#) put these on the decorating map
- Structure - 2ft to 5ft
- Constructed of primarily Wreath Easel, [Tomato Cage\(s\)](#), Wireframe, and Coro
- Bare frame or embellish with garland...
- Used as fillers, outline for drive/walkways
- Best known for [animated chases](#)

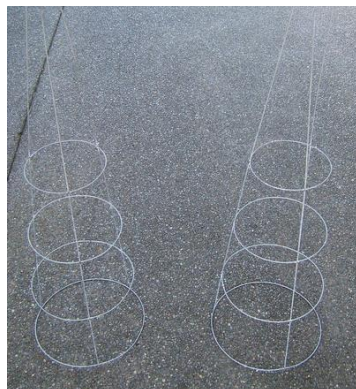


Oh Christmas Tree - Mini Tree

Wreath Easel



Tomato Cages



Wireframe



[3G Lighting Creations](#)



Coro



[Boscoyo Studios](#)

[Holiday Coro](#)

Oh Christmas Tree: Small Spiral

- Pre-bought frames from just about any vendor
- Use "out of the box" OR.....
- Strip Light strings off and replace with **RGB** Bullet Pixels
- Single stand-alone tree, or incorporated into a vignette



Oh Christmas Tree: Small Stick

- Pre-bought frames from just about any vendor
- Use "out of the box" OR.....
- Strip Light strings off and replace with Pixels (RGB), or add multiple-colored strings
- Single stand-alone tree, or incorporated into a vignette
- Create chase line
- Who can forget the Grand Slam [Holdman](#) had with these in 2007!



Oh Christmas Tree: Wireframe

- $\frac{1}{4}$ " Steel Rod Wireframes
- Standalone or vignette
- Vendor bought
 - Purchase with or without lights on frame
- Do It Yourself (DIY)



[Lori's Lighted D'Lites](#)

Oh Christmas Tree: Mega Tree

- Centerpiece / focal point of most Displays
- Mainly 3 Mega Tree categories (frame types)
 - Center Pole Trees
 - Frame or Barrel Trees (hollow center)
 - Flat / 2D / Ribbon
- PVC Mega Tree kits (10'-20') range
- Metal Mega Tree Kits
- Any light technology can be incorporated
 - Mainly LED (M5/M6/C6), Incandescent (Mini) and Rope
- Use your imagination
- Massive data on Forums and FB pages



Oh Christmas Tree: Mega Tree

Structure / Center Pole

- 10' and beyond!
- Cone shaped 180/270/360
- Center pole implementation
 - Metal Pipe, EMT, [Monkhouse ASAP](#), [Titan](#), Flagpole
 - Hook head atop pole for light string, **RGB** Pixel Strip attach, and Star
 - *It is recommended to stay away from PVC or thin wall material as a center post*
- Mega Tree Base
 - Embedded in ground receiver (concrete and sleeve)
 - [Monkhouse Portable Hole](#)
 - 5 way threaded cross (4 legs and center pole)



Oh Christmas Tree: Mega Tree

Structure / Center Pole

• Base Ring

- Base ring; gives the tree "shape"; Diameter to Height aspect ratio typically 2:1
- *In most cases*, the lights attach to the Basing
- Bent PVC
- Bent EMT
- Professionally Bent Aluminum
- Used trampoline frame
- Lights staked into ground



Oh Christmas Tree: Mega Tree Structure / Center Pole



5 way cross/center pole
Professionally bent
aluminum Base Ring



Hook Head Examples



[Portable Hole](#)



In-Ground Center Pole
Receiver

Oh Christmas Tree: Mega Tree

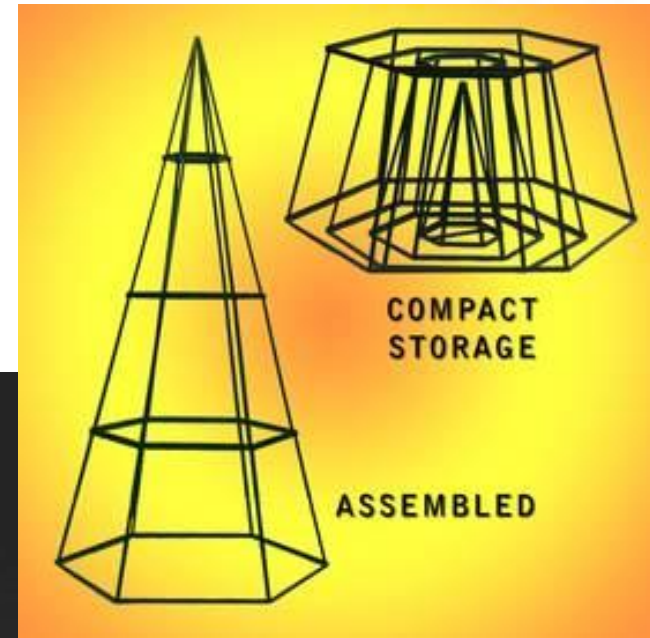
Structure / Frame - Barrel

- Stacked concentric tiers
 - "Typically," Octagon in Shape
 - Custom welded structure or PVC
- DIY PVC "vertical post" frame
 - 6'-8'-10'-and up
- Garland typically used to enhance the look



Oh Christmas Tree: Mega Tree

Structure / Barrel/Frames



Oh Christmas Tree: Mega Tree

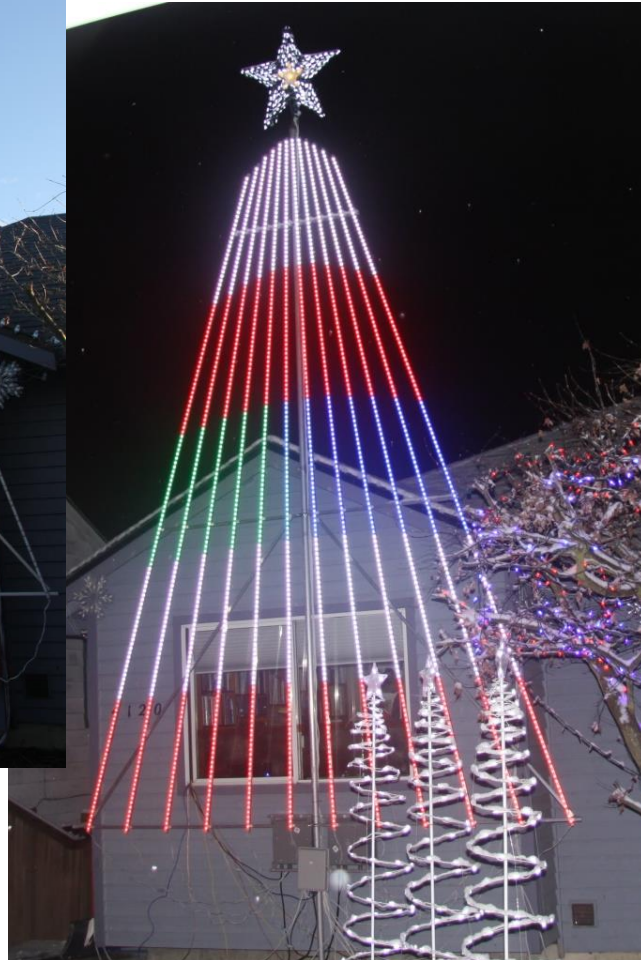
FLAT / 2D / Ribbon

- Flat 2D structure
- Can be used when space is a factor
- Typically same technology and consideration as the **RGB** Tree, but any lighting can be used
 - **RGB** strip/ribbon pixels is very common
- A flat "carrier" can be used to attach nodes
 - Aluminum straps
 - **RGB** pixels pushed into Mounting Strips
- Can also be staked directly in ground
- 12 risers seems to be the norm
- DIY custom frames
- Can be scaled to any height easily



Oh Christmas Tree: Mega Tree

FLAT / 2D / Ribbon



Oh Christmas Tree: Mega Tree

With the **Mega Tree**, there are a few well known types of implementation.

The next few slides will review some of them.

Oh Christmas Tree: Mega Tree

Vertical

- “Traditional” and “Original” Mega Tree
- “Typically,” Pole/Frame implementation
- Tree is divided up into vertical slices
- Lights strung up/down between Basing or lowest tree structure, and Hook head on top
- Many light string options to be considered;
 - Individual color strings **R-G-B-W**
 - Super strings (individual colors wrapped together in a bundle)
 - Rope Light
 - **RGB** Smart or dumb pixels



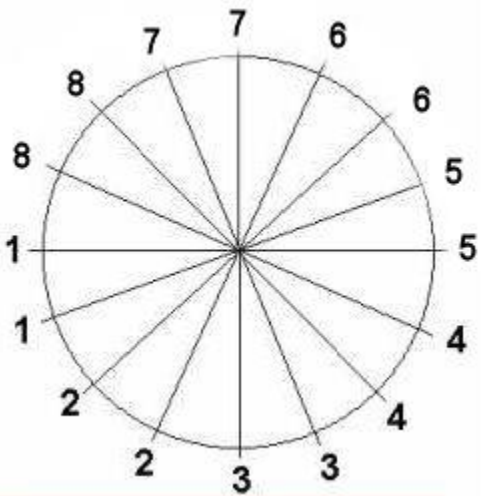
Oh Christmas Tree: Mega Tree Verticle



Photo courtesy of [Christmas in Kent](#)



Photo's courtesy of [Woodinville Wonderland](#)



Oh Christmas Tree: Mega Tree

Z-tree (Horizontal)

- Made famous by our own, Mike Ziemkowski!
- Any conical structure frame could work
- Traditional frame is concentric Barrel Frame, either metal or PVC
- Embellished with Garland
- Lights are strung in a horizontal orientation
 - 7 to 8 sections is the norm
- Access in back of tree



Oh Christmas Tree: Mega Tree

Z-tree (Horizontal)



Oh Christmas Tree: Mega Tree

Spiral - Helix - Weber

- Scott Weber generally gets credit for the first sticky [Spiral Tree](#) in 2009. *He was asked to join Planet Christmas. On Jan 4, 2010, he joined. Due to the pissing contest of who came up with this idea, he dropped his membership 9 days later....*
- Aircraft wire added to Center Pole/Hook head for shape
 - Hook head to base ring to provide conical shape and allow lights to rest on wire. Light can be zip tied to the wire for integrity
- PVC frame structure as a less expensive alternative....
- [Multiple turn/length formulas'](#)
 - [Downloadable Spreadsheet](#)
- Single or dual directional spiral of light strings
- Single color of light, Super Strings of lights, multi-color light strings, etc....



Oh Christmas Tree: Mega Tree

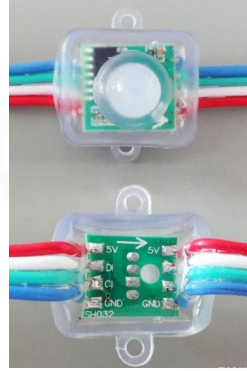
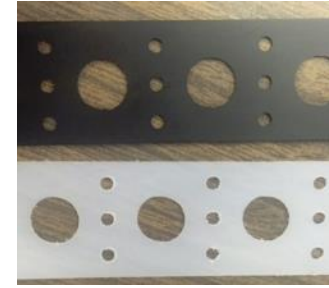
Spiral - Helix - Weber



Oh Christmas Tree: Mega Tree

RGB/Pixel

- High Tech version of the Original Mega Tree
- Cone shaped wide ratio T.V. screen
- Uses DMX/E1.31 RGB Pixels and Controllers (bullet or square nodes), inserted into [mounting strip](#)
- Allows all colors to be displayed with single strings
- Can be "easier" to program for sequencing
- Allows text, video, GIFs and patterns to be displayed
- It can virtually replace all the other Mega Trees because you can display those effects and MORE!
- Moreso than with any other tree, viewing distance comes into play, for height, aspect ration and pixel intensity settings...
- [Calculator & Simulator](#)



Oh Christmas Tree: Mega Tree

RGB/Pixel



Walter and Jackie Monkhouse
[Magic Christmas](#)



Oh Christmas Tree: Mega Tree Combo

- As depicted, the combination of 2 physical Mega Tree types
- Typically one over top of the other
 - I.e. RGB over top of Z Tree
- It can also be lights on top of lights over the same conical frame
 - Spiral overlaid on top of Vertical



Oh Christmas Tree: Mega Tree Combo

ZTree



RGB Tree



Photos courtesy of
[Mike Ziemkowski](#)
[Lights on Display](#)

Oh Christmas Tree: Mega Tree

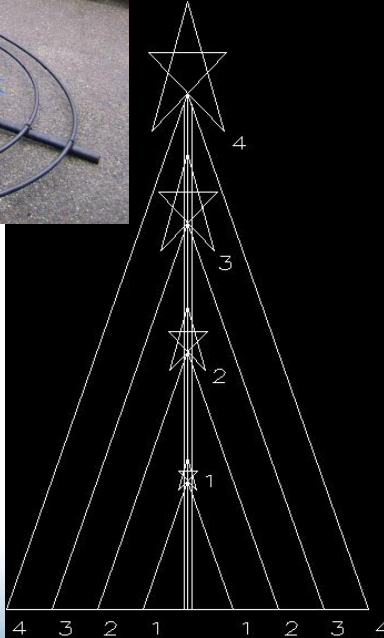
Tree w/in Tree / Concentric

- Effectively multiple trees on the same frame of different heights
 - I.e. 6'-8'-10'-12'
- Each "Tree" can be different colors
- Frame leverages multiple section Center Poles connected to multiple Hook heads



Oh Christmas Tree: Mega Tree

Tree w/in Tree / Concentric



Oh Christmas Tree: Mega Tree

Natural

- Light strings using the natural trees in yard
- Stringing requires poles, ladders, lifts, monkey's etc...
- [Light string calculator](#)



Oh Christmas Tree: Mega Tree Natural



Oh Christmas Tree:

Creativity, and originality give us the next looks at the **Christmas Tree**.

Oh Christmas Tree: Unique

Bubble Trees

- First seen as a GE Project in 1958, exposed by Jeff Carter, Christmas Craftsman
- Combo of wood, PVC and acrylic
- Single Tree or multiple
- Planet Christmas Thread



Oh Christmas Tree: Unique Wood Cutouts

- DIY for full creativity
- [Purchase plans](#)
- Google "Pallet Tree"
- [1967 Popular Mechanics](#)
- Use any and all lights



Oh Christmas Tree: Unique Whimsical

- Custom welded stackable structure
- 2 days to set up 7500 pixels 6 controllers with dual power supplies



[See it in action](#)



Photos courtesy of
Darren Huffty and
Holiday Technologies



Oh Christmas Tree: Unique & Whimsical Beer Bottle Tree

- Found as Facebook post at Tito's Taco's in Riverside, CA



Oh Christmas Tree: Unique Icicle - Tier - Wedding Cake Tree

- Center Pole/Portable Hole
- Custom pulley system and winch system
- Commercially bent aluminum hoops
- Guide Wire at top of CP, and bottom light ring for stability
- Any light technology can be incorporated
 - LED Superstrings



Oh Christmas Tree: Unique Icicle Tree

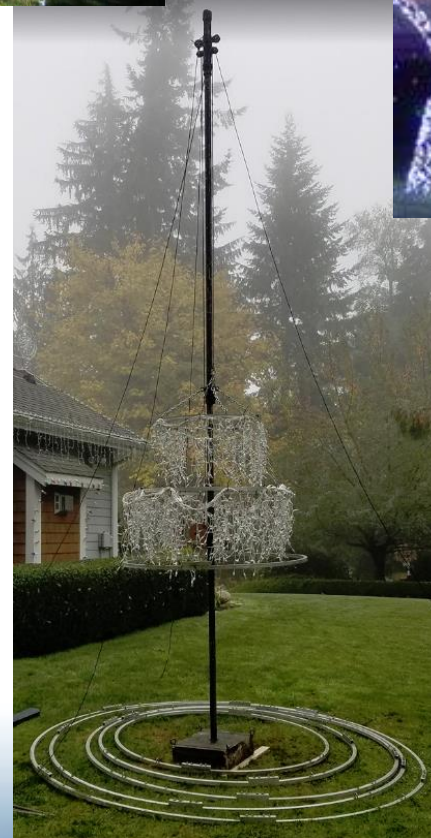
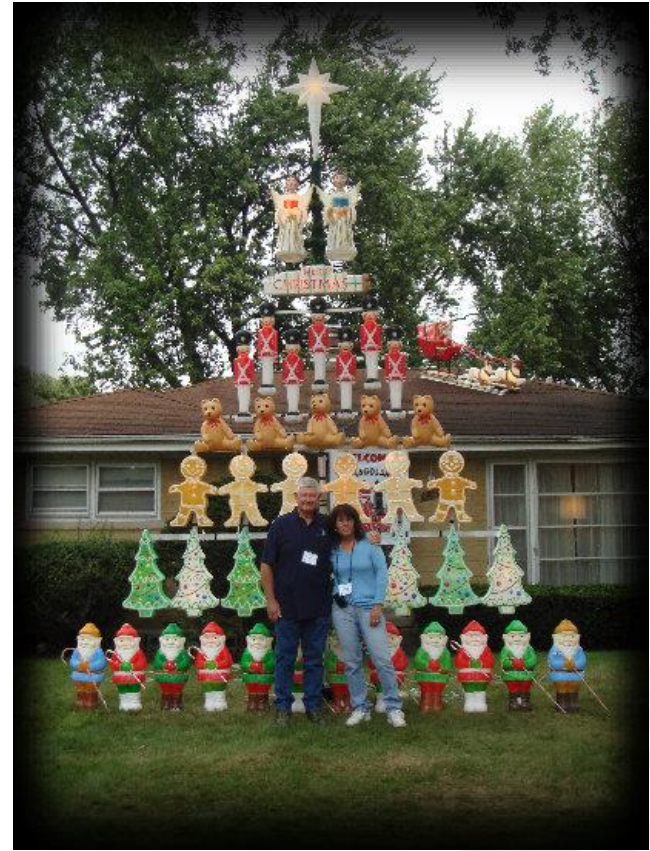


Photo courtesy
Ron Lister
[Christmas Wonders](#)

Oh Christmas Tree: Unique Blow Mold Mega Tree

- Carrie Sansing collaborated with Walter Monkhouse to create this truly one of a kind, unique Blow Mold Mega Tree



Oh Christmas Tree: Unique Snowman Blow Mold Tree

- Another unique example of creativity blending decorating elements



Oh Christmas Tree: Unique Really Big Lights (RBL) / Ornament

- RBL's are a pre-purchased item, getting harder to find.
- Use as is, or **R****G****B** conversion
- Custom DIY frame



Photo's courtesy
[JingleLights](#)



Photo courtesy
[Maple Valley Lights](#)

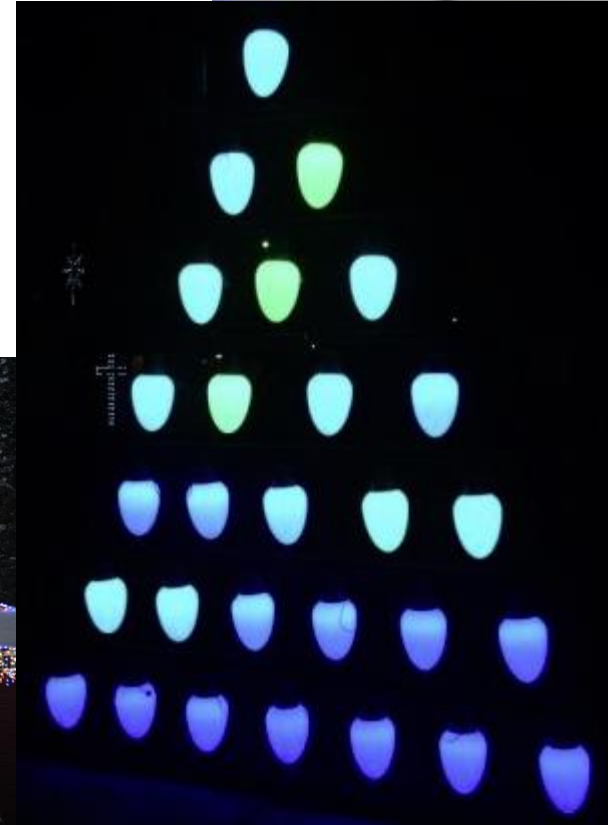


Photo courtesy
[High Country Lights](#)

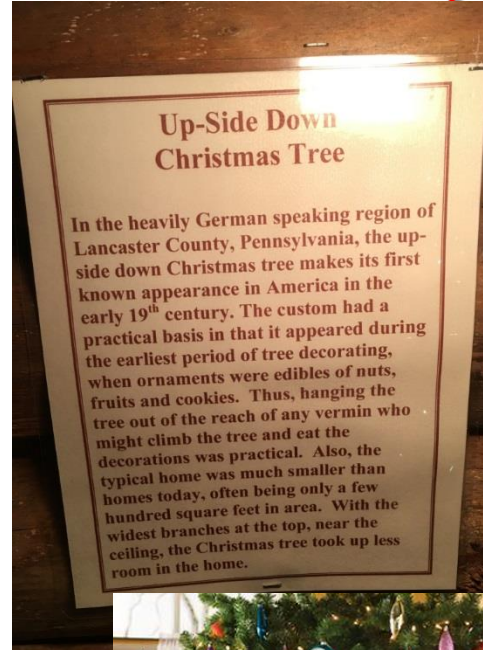
Oh Christmas Tree: Unique Through Roof

- An old idea resurrecting itself in recent years. Another [Christmas Craftsman](#) find, GE in 1965.



Oh Christmas Tree: Unique Upside Down Tree

- To date, no known existence has been created as an outdoor display item.



Oh Christmas Tree:

What you will see next, it truly a
Mega, MEGA Christmas Tree!

Oh Christmas Tree: Mega Tree

Wooh BABY!.....Mega Mega Tree

- Jeff Holmes - Former residential decorator.
 - Now of S4 Lights
 - Assisted Matt Phipps, [Livermore Lights](#), TGCLF
- To date, this is the biggest Mega Tree done by someone from our community (there are a few bigger Trees in the world)
- [Gallo Christmas Tree](#) is in Guatemala
 - Largest "foliage" tree in the world
 - 115' tall - 15' Star - 55' Basing
 - 21 - 5' sections (Barrel frame)
 - 3 weeks to construct and connect
 - 131 channels - 45 LOR controllers
 - Staggering 1.5M lights! **R** - **G** - **WW** plus strobes



Oh Christmas Tree: Mega Tree

Mega Mega Tree



Oh Christmas Tree; Summary

- Tree elements have been backbone of outdoor displays for decades
- Think outside the box and go beyond the “me too” syndrome
 - Use your imagination and get a display element named after you!
- Create what works for you, and your display
- Follow Forums and FB pages for plethora of info and ideas
- All [underlined](#) text are active links



Materials found at Woodinville Wonderland

Consider attending my other classes;

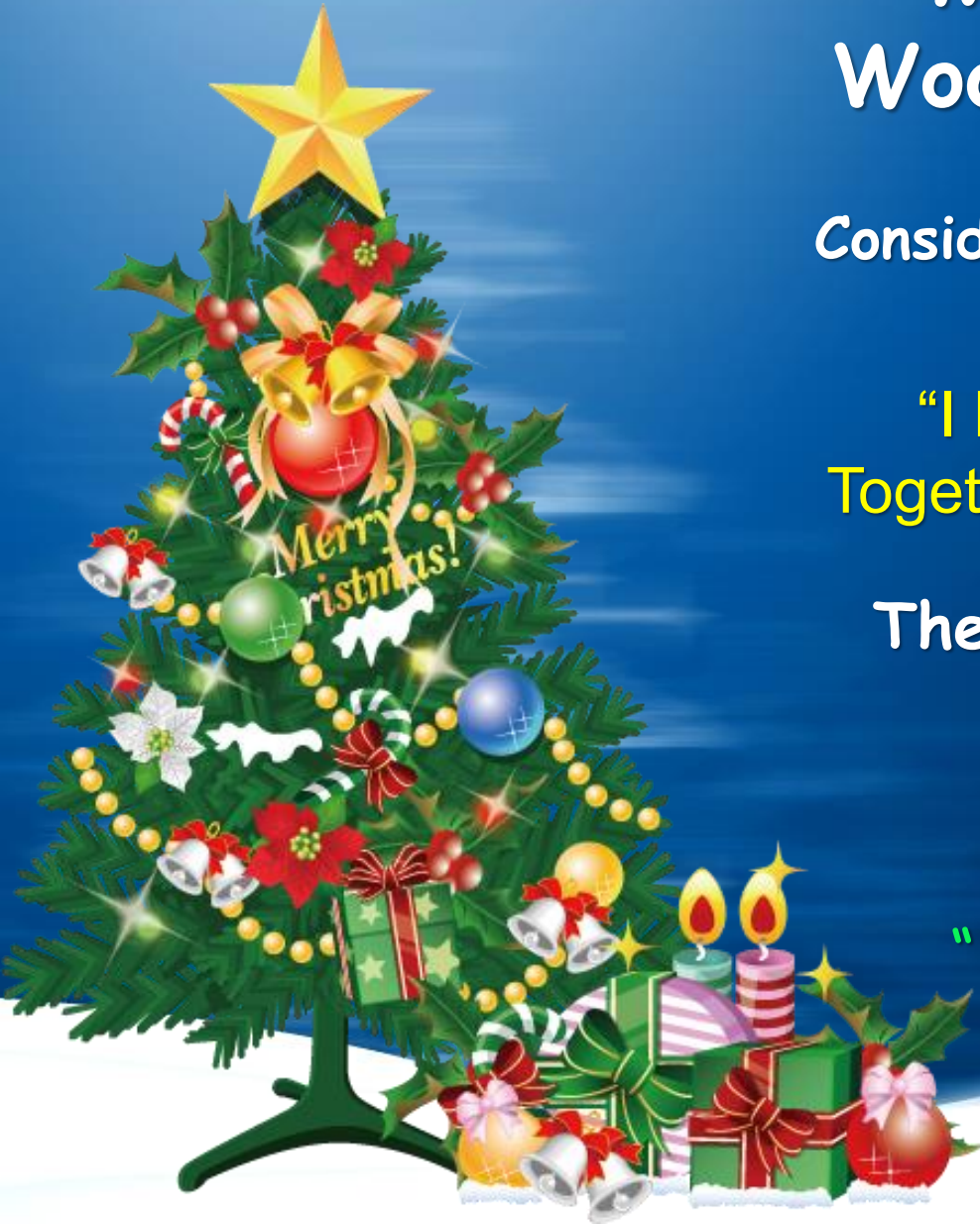
“I Love it When a Plan Comes
Together” Displays the A-Team Way

The *Art* and *Presentation* of a
Christmas Display:

The “Holy Grail”

“Fort Knox” Security for
your Display

Mark Zembruski
modec@frontier.com



Christmas Tree Trivia and Info Slides

The following pages were taken from the following, it has other fun info if you are further interested:

<https://extension.illinois.edu/trees/links.cfm>

Christmas Tree Trivia:

<http://www.christmastrivia.net/christmas-tree-trivia>



Great Moments in Christmas Tree History

- The use of evergreen trees to celebrate the winter season occurred before the birth of Christ.
- The first decorated Christmas tree was in Riga, Latvia in 1510.
- The first printed reference to Christmas trees appeared in Germany in 1531.
- Besides evergreens, other types of trees such as cherry and hawthorns were used as Christmas trees in the past.
- Using small candles to light a Christmas tree dates back to the middle of the 17th century.
- Thomas Edison's assistant, Edward Johnson, came up with the idea of electric lights for Christmas trees in 1882. Christmas tree lights were first mass-produced in 1890.
- In 1900, large stores started to erect big illuminated Christmas trees.
- The tradition of an official Chicago Christmas tree was initiated in 1913 when one was first lit by Mayor Carter H. Harrison in Grant Park.
- The official Christmas tree tradition at Rockefeller Center began in 1933. Since 2004 the tree has been topped with a 550-pound Swarovski Crystal star. And since 2007, the tree has been lit with 30,000 energy-efficient LED's which are powered by solar panels.
- Every year since 1947, the people of Oslo, Norway have given a Christmas tree to the city of Westminster, England. The gift is an expression of good will and gratitude for Britain's help to Norway during World War II.
- Since 1971, the Province of Nova Scotia has presented the Boston Christmas tree to the people of Boston, in gratitude for the relief supplies received from the citizens of Boston after a ship exploded in 1917 following a collision in the Halifax, Nova Scotia Harbor. Part of the city was leveled, killing and injuring thousands.



Presidential Christmas Trees

- In 1856 Franklin Pierce, the 14th President of the United States, was the first President to place a Christmas tree in the White House.
- President Coolidge started the National Christmas Tree Lighting Ceremony on the White House lawn in 1923.
- Teddy Roosevelt banned the Christmas tree from the White House for environmental reasons.
- From 1948 to 1951, President Truman spent Christmas at his home in Independence, Missouri, and lit the National Community Christmas Tree by remote control. Truman agreed to stay at the White House for Christmas 1952, and personally lit the tree.
- In 1963, the National Christmas Tree was not lit until December 22nd, because of a national 30-day period of mourning following the assassination of President Kennedy.
- Since 1966, the National Christmas Tree Association has given a Christmas tree to the President and first family for display in the Blue Room.
- In 1979, the National Christmas Tree was not lit except for the top ornament. This was done to honor the American hostages in Iran.
- In 1984, the National Christmas tree was lit on December 13th with temperatures in the 70's, making it one of the warmest tree lightings in history.



A Tree Grows in Brooklyn and Elsewhere

- Nineteenth century Americans cut their trees in nearby forests. Today most real Christmas trees are grown on farms as sustainable crops like corn or pumpkins.
- 98 percent of all Christmas trees are grown on farms, while only 2% are cut from the wild.
- To ensure enough trees for harvest, growers plant one to three seedlings for every tree harvested.
- In 2012, 46 million Christmas tree seedlings were planted by U.S. growers.
- More than 2,000 trees are usually planted per acre. On average 1,000-1,500 of these trees will survive. In the northern part of the country, perhaps 750 trees will remain.
- Almost all trees require shearing to attain the Christmas tree shape. At six to seven feet, trees are ready for harvest.
- It takes six to ten years of fighting heavy rain, wind, hail and drought to get a mature tree.
- Most Christmas trees are cut weeks before they get to a retail outlet. It is important to keep them watered thoroughly when they reach your home. In the first week, a Christmas tree in your home will consume as much as a quart of water per day.



To Market, To Market

- Live Christmas trees have been sold commercially in the United States since about 1850.
- The first Christmas tree retail lot in the United States was started by Mark Carr in New York, in 1851.
- From 1887-1933 a fishing schooner called the "Christmas Ship" would tie up at the Clark Street Bridge in Chicago and sell spruce trees from Michigan to Chicagoans.
- In 2012, 35% of real Christmas trees sold were from chain stores or garden centers/nursery, 24% from cut and harvest farms, 15% from retail tree lots, and 15% from non-profit groups.
- In 2012, 85% of the Christmas trees purchased were pre-cut, and 14% were cut-your-own.
- An estimated 175,000 real Christmas trees are sold via e-commerce or catalogue and shipped mail order.
- The most popular Christmas trees are: Scotch pine, Douglas fir, noble fir, Fraser fir, balsam fir, Virginia pine and white pine.
- Christmas trees are baled to protect the branches from damage during shipping.
- Helicopters help to lift harvested Christmas trees from farms.



The United States of Trees

- In the United States, there are more than 15,000 Christmas tree farms.
- There are approximately 350 million Christmas trees growing on U.S. farms.
- Approximately 100,000 people are employed full or part-time in the Christmas tree industry.
- 24.5 million farm-grown Christmas trees were purchased in the United States in 2012, with a real market value of \$1.01 billion.
- The mean average purchase price of a live tree in 2012 was \$41.30.
- Oregon, North Carolina, Michigan, Pennsylvania, Wisconsin, Washington, New York, and Virginia are the top Christmas tree producing states.
- 350,000 acres of land in the United States are in production for growing Christmas trees.
- Christmas trees are grown and harvested in all 50 states.
- Michigan ranks third among all states in the production of real Christmas trees, but grows a larger variety of Christmas trees than any other state.



Make Your Christmas Green

- 93% of real Christmas tree consumers recycle their tree in community recycling programs, their garden or backyard.
- In the United States, there are more than 4,000 Christmas tree recycling programs.
- Recycled real Christmas trees have been used to make sand and soil erosion barriers and been placed in ponds for fish shelter.
- Growing Christmas trees provides a habitat for wildlife.
- Christmas trees can remove dust and pollen from the air.
- Cook County, IL uses old Christmas trees to rebuild housing structures for natural wildlife that has been destroyed through development.
- Artificial trees will last for six years in your home, but for centuries in a landfill.
- An acre of Christmas trees provides the daily oxygen requirements of 18 people.
- You should not burn your Christmas tree in the fireplace; it can contribute to creosote buildup.
- Live Christmas trees are involved in less than one-tenth of one percent of residential fires, and mostly when ignited by some external ignition sources. The major factors involved in Christmas tree fires are electrical problems, decorative lights, candles, and a heat source too close to the tree.
- In 1971 the government concluded that Christmas tree tinsel made of lead was a health risk and convinced manufacturers to voluntarily stop producing lead tinsel. It is now made of plastic.

