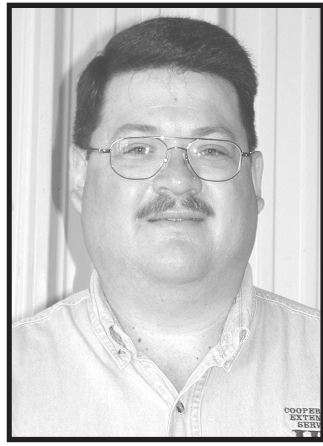


White Oak Genetics and Tree Improvement Project



Eric Baker
Estill County Extension Agent for Agriculture & Natural Resources

The goal of the white oak genetics and tree improvement project (www.whiteoakgenetics.org) is to collaborate with forest, wood, and distilling industries and forestry, conservation, and wildlife agencies and organizations to quantify genetic variation in white oak and improve traits that

have economic and ecological value. The project supports the goals of the White Oak Initiative and will help white oak users by (1) providing a sustainable supply of high quality, improved white oak seedlings via a tree improvement program to meet current and future demands, (2) improving our ability to conserve and restore white oak in the forest to achieve a variety of ecological, conservation and economic goals at regional and national levels, and (3) providing genetic resources for academic and industrial research and development.

The project has three phases: (1) collecting and archiving white oak genetic material from throughout the entire geographic range of white oak, (2) progeny

testing to evaluate individual performance in a variety of traits, and (3) creating seed orchards using superior individuals based on progeny test performance. Despite a really poor acorn crop in 2019, they collected acorns from 91 parent trees from 9 states. The acorns (17,000+) are being grown in the Kentucky Division of Forestry State Morgan County nursery and will be out-planted into the progeny tests. A grafted clone bank using twigs collected from the parent trees is being created to store genetic material that can be used for many purposes including eventual creation of the seed orchards.

The UK Department of Forestry and Natural Resources is working on creating a supply of high quality white oak seed-

lings that will be available to woodland owners in the future. To access the instructions on how to collect white oak acorns and send them to UK, go to our office webpage <http://estill.ca.uky.edu/>, click on Ag & Natural Resources, then select white oak genetics and tree improvement program. The link will take you to the instructions on how you can help by collecting acorns for the research project. Laura E. DeWald, Adjunct Professor and Tree Improvement Specialist, is heading up the collection project. Call 859-257-7596 if you have questions about the white oak genetics project.

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Wishing Well®

8	2	8	5	4	3	2	4	5	3	2	3	5
P	L	L	R	F	N	A	R	E	O	D	R	P
4	7	6	7	2	4	3	4	5	4	2	5	7
I	A	A	D	Y	E	A	N	U	D	L	T	A
2	4	8	7	3	4	7	5	2	5	8	4	6
U	L	E	Y	I	Y	T	A	C	T	A	A	T
2	3	4	8	7	4	5	2	7	5	7	6	2
K	N	S	S	O	S	I	S	R	O	E	I	M
4	2	6	8	7	4	6	8	6	5	4	5	4
I	I	D	A	M	S	Y	N	S	N	T	A	A
2	8	7	8	4	7	4	6	4	7	2	8	6
L	T	E	D	N	M	C	U	E	B	E	R	M
2	8	5	8	5	7	5	7	5	8	5	8	5
S	E	D	A	M	E	I	R	R	M	E	S	D

HERE IS A PLEASANT LITTLE GAME that will give you a message every day. It's a numerical puzzle designed to spell out your fortune. Count the letters in your first name. If the number of letters is 6 or more, subtract 4. If the number is less than 6, add 3. The result is your key number. Start at the upper left-hand corner and check one of your key numbers, left to right. Then read the message the letters under the checked figures give you.

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CryptoQuip

This is a simple substitution cipher in which each letter used stands for another. If you think that X equals O, it will equal O throughout the puzzle. Solution is accomplished by trial and error.

Clue: G equals L

KTHHFVKVMY UM VMKAJQ XUK

KVMYVMY XVQE JGFKAC GVHK,

PVYEQ VQ IA JUGGAC U ETPITY?

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CryptoQuote

AXYDLBAAXR is LONGFELLOW

One letter stands for another. In this sample, A is used for the three L's, X for the two O's, etc. Single letters, apostrophes, the length and formation of the words are all hints. Each week the code letters are different.

UN XIK AKMX CNT SGW TWXPV

CNT YWNQ AKXXKH. XIKW QIKW

CNT YWNQ AKXXKH, UN AKXXKH.

— OGCG GWFKVNT

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The Garden Bug Japanese anemone

These perennial plants tolerate a range of light conditions and soil types, growing 2-4 feet tall. They feature delicate, showy white or pink blooms on slender stems that come out in August and can continue to show into the autumn months. Anemone can become rather invasive, forming a thick ground cover; it may require regular attention to keep it from taking over. — Brenda Weaver

Sources: www.amateurgardening.com, www.rootwell.com



Night Owls

Nocturnal birds serve their purpose. They add to the ambiance of the night. What would an orchestra of crickets be without the steady call of a whip-poor-will? I will climb out of sleep to listen to a barred owl. Day or night, birds are great!

E-mail: birdingbits@cfl.rr.com
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Pine needle drop is common in fall

Many are seeing normal fall pine needle drop. Some may be confusing it with some disease or insect attack. The most noticeable is the white pine, a pine easily identified by close examination of a branch and seeing the five needles in a bundle.

Normal needle fall of a white pine, as well as most other pines, will have the inner most needles of the limbs, closest to the main stem of the tree, turning brown. Normally the needles will change to a brownish-yellow first, and then abruptly brown. Early in the winter the needles will fall to the ground, again leaving the tree uniformly green for the spring. This occurrence helps the tree prepare for winter.

Cause for alarm for any pine, as well as hardwoods, would be seeing foliage turning from green to brown on the exterior of any limb while still green on the interior. If this condition should develop, the tree could have other serious problems.

Contact Eric Baker at the Estill Extension Office at 723-4557 for more information.

ELITE BRED HEIFER SALE

The Bourbon County Livestock Improvement Association will hold their 30th Annual Elite Bred Heifer Sale on Monday, November 2, 2020 at the Paris Stockyards, located at US Hwy 68 North in Paris. Inspection will be held from 1:00-5:00 p.m. with the sale to begin at 6:00 p.m. A virtual sale option will be available and information is located on the website at www.eliteheifer.com where a link for required paperwork to be completed prior to the sale in order to bid online. Contact the Bourbon County Extension office at 859-987-1895 for more information.

Stickeler's Answer

Stickelers Answer

Milepost 900. To solve this problem, recall that rate x time = distance. Let "x" be the time it takes the Seneca Streamer to reach the milepost. Then:

$$60(x+3) = 75x$$

$$60x + 180 = 75x$$

$$15x = 180$$

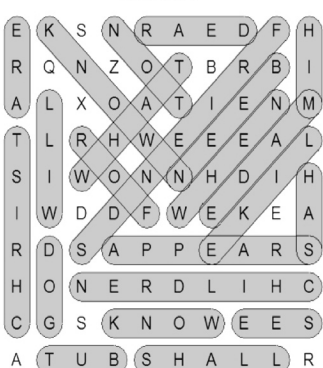
$$x = 12$$

$$75 \times 12 = 900 \text{ miles}$$

Stickeler's Puzzle on Page 7

Puzzle Answers

BIBLE WORD SEARCH Answers



Do the best you can until you know better. Then when you know better, do better. — Maya Angelou

Supposing an insect was singing with closed lips? it might be called a humbug?

Bible Word Search on Page 7

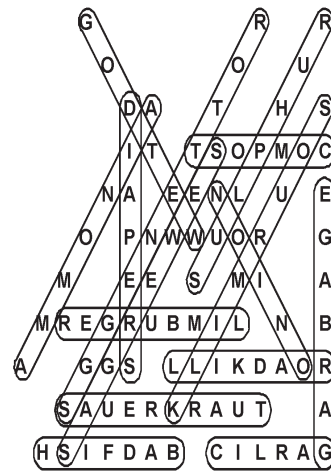
Puzzle Answers October 28, 2020

Puzzles4Kids Answer

Why are jack-o'-lanterns smart?

The candle makes them bright.

WHAT'S THAT SMELL?



Letter Box Solution

W	I	N	B	Y	A	L	O	T
L	O	T	N	I	W	Y	A	B
A	B	Y	O	L	T	N	I	W
Y	N	W	T	O	I	A	B	L
O	T	I	L	A	B	W	N	Y
B	L	A	Y	W	O	T	I	
I	Y	L	A	B	O	T	W	N
N	A	B	W	I	Y	I	L	O
T	W	O	I	N	L	B	Y	A

FEAR & KNIGHT answer

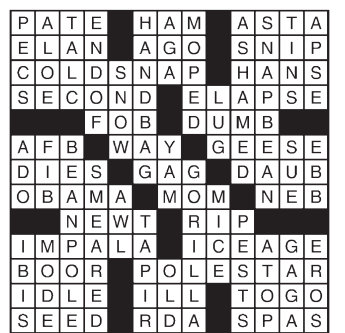


Even Exchange answers

- Auger, Anger
- Change, Charge
- Expel, Excel
- Grease, Crease
- Noise, Norse
- Garnet, Garret
- Grass, Glass
- Cruet, Crust
- Barge, Badge
- Sundae, Sunday

King Crossword Answers

Solution time: 25 mins.



Weekly SUDOKU Answer

8	1	3	4	6	7	9	5	2
7	5	6	9	1	2	4	3	8
9	2	4	5	3	8	6	7	1
5	8	9	1	2	6	3	4	7
4	6	2	3	7	9	8	1	5
1	3	7	8	4	5	2	6	9
2	4	5	6	9	1	7	8	3
3	7	1	2	8	4	5	9	6
6	9	8	7	5	3	1	2	4

Bible Trivia Answers

ANSWERS 1 Neither; (2) Nahum; (6) 666
7; (3) Exodus; (4) Saul; (5) Exodus; (6) 666



"You fatten up nicely."